

IN THE MATTER OF the *National Energy Board Act*, RSC 1985, c. N-7, as amended, and the regulations made thereunder;

AND IN THE MATTER OF THE *Canadian Environmental Assessment Act*, 2012, S.C., c. 19, s. 52, as amended, and the Regulations made thereunder;

AND IN THE MATTER OF an application by Trans Mountain Pipeline ULC as General Partner of Trans Mountain Pipeline L.P. (collectively "Trans Mountain") for a Certificate of Public Convenience and Necessity and other related approvals pursuant to Part III of the *National Energy Board Act*.

WRITTEN ARGUMENT-IN-CHIEF

OF THE CITY OF SURREY

JANUARY 12, 2016

To: The Secretary
National Energy Board
517 Tenth Avenue SW
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From: Anthony Capuccinello
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WRITTEN ARGUMENT-IN-CHIEF OF THE CITY OF SURREY

1.0 Resolutions Adopted by the Council of the City of Surrey

The Council of the City of Surrey has resolved that:

- (i) The City of Surrey in principle does not support any expansion of Kinder Morgan's Trans Mountain pipeline system through the City of Surrey that negatively impacts the City of Surrey;
- (ii) Legal counsel and staff representing the City of Surrey at the NEB Hearing request the NEB to impose terms and conditions on any approval of Trans Mountain's Expansion Project that it may grant that require Kinder Morgan/Trans Mountain to eliminate, or minimize and mitigate the negative impacts of the Project on the City of Surrey; and
- (iii) Legal counsel and staff representing the City of Surrey at the NEB Hearing request the NEB to require Kinder Morgan/Trans Mountain to decommission and remove that portion of the existing pipeline in Surrey as a condition of any approval it may grant.

2.0 Utility Impact Issues including Highway Occupation and Highway Crossing Issues

Evidence Relied Upon:

Affidavits and Reports

- (i) Exhibits C76-9-14 ([A4L9T7](#)), C76-9-15 ([A4L9T8](#)), C76-9-16 ([A4L9T9](#)) and C76-9-17 ([A4L9U0](#)), Affidavit of Larry Martin sworn May 25, 2015 including all exhibits thereto;
- (ii) Exhibits C76-10-6 ([A4Q0Q0](#)), C76-10-7 ([A4Q0Q1](#)) and C76-10-8 ([A4Q0Q3](#)), Report entitled “*Cost Impacts of the TransMountain Expansion on Lower Mainland Municipalities*” dated May 2015 and prepared by Larry Martin, P. Eng.;
- (iii) Exhibits C76-9-23 ([A4L9U6](#)) and C76-9-24 ([A4L9U7](#)) Affidavit of Kenneth D. Zondervan sworn May 26, 2015 including all exhibits thereto;
- (iv) Exhibit C76-16-2 ([A4W0I1](#)) Affidavit #3 of Kenneth D. Zondervan sworn December 1, 2015;
- (v) Exhibit C76-14-5 ([A4S3C6](#)) – Affidavit #3 of Larry Martin sworn on July 29, 2015;
- (vi) Exhibit C76-14-3 ([A4S3C4](#)) - Affidavit of Kenneth D. Zondervan sworn July 27, 2015;

Information Requests and Responses to Information Requests

- (vii) Exhibit C76-11-1 ([A3W6E6-A4Q0V5](#)) City of Surrey Information Request No. 1 filed May 7, 2014 (previously filed as C76-1-1);
- (viii) Exhibit C76-11-2 ([A3X6A5 - A4Q0V6](#)) Trans Mountain Response to City of Surrey Information Request No. 1 filed June 4, 2014 (previously filed as B52-1 by Trans Mountain);
- (ix) Exhibit C76-11-3 ([A3Z4S8 - A4Q0V7](#)) Trans Mountain Follow up Response to City of Surrey Information Request No. 1 filed July 21, 2014 (previously filed as B239-2);
- (x) Exhibit C76-11-4 ([A4D3G2\(2\) - A4Q0V8](#)) Trans Mountain Follow up Response to National Energy Board Ruling 33 filed October 17, 2014, pages 178 to 181 with respect to City of Surrey Information Requests (previously filed as B280-3);
- (xi) Exhibit C76-11-5 ([A4G5L6 - A4Q0V9](#)) City of Surrey Information Request No. 2 filed January 15, 2015 (previously filed as C76-6-2);
- (xii) Exhibit C76-11-6 ([A4H8I8 - A4Q0W0](#)) Trans Mountain Response to City of Surrey Information Request No. 2 filed February 18, 2015 (previously filed as B314-45).

2.1 Jurisdiction of NEB to Impose Conditions related to Utilities including Highway Occupation and Highway Crossing Issues

1. The jurisdiction of the NEB to impose conditions related to impacted utilities including highway occupation and highway crossing issues is set out in s. 108 of the *National Energy Board Act*, RSC 1985, c. N-7. This is in addition to the broad and plenary jurisdiction set out in s. 52 of the *National Energy Board Act*:

Section 108

Construction - utility

108. (1) Subject to subsection (4), **no company shall construct a pipeline that passes on, over, along or under a utility unless a certificate has been issued, or an order has been made under section 58, in respect of the pipeline, and**

(a) **the certificate or order contains a term or condition relating to that utility;**

(b) *the company has been granted leave under subsection (2); or*

(c) *the company is constructing the pipeline in circumstances specified in an order or regulation made under subsection (4).*

Authority to grant leave

(2) *The Board may, by order, on application, grant a company leave to construct a pipeline that passes on, over, along or under a utility. It may require from the applicant any plans, profiles and other information that it considers necessary to deal with the application.*

Terms and conditions

(3) **The leave may be granted in whole or in part and be subject to terms and conditions.**

Circumstances

(4) *The Board may make orders or regulations specifying circumstances for the purposes of para-graph (1)(c).*

Leave in emergency cases

(5) *The Board may grant leave under subsection (2) after construction of the proposed work has commenced if it is satisfied that the work was urgently required and, before the commencement of construction, it was notified of the company's intention to proceed with the proposed work.*

Definition of "utility"

(6) *In this section, **"utility" means a highway**, an irrigation ditch, a publicly owned or operated drainage system, sewer or dike, an underground telegraph or telephone line or a line for the trans-mission of hydrocarbons, electricity or any other substance.*

Book of Authorities, Tab 6

2.2 Leave of NEB is required to construct facilities across pipelines whether located in highway or not

2. Except in those limited circumstances prescribed in the *National Energy Board Pipeline Crossing Regulations*, Part I (SOR/88-528), after a pipeline has been constructed on, over, along or across a utility which includes a highway, leave must be obtained from the NEB pursuant to s. 112 of the *National Energy Board Act* prior to constructing a facility across a pipeline. The process for seeking leave is set out in the *National Energy Board Pipeline Crossing Regulations*, Part I (SOR/88-528) and in the *National Energy Board Pipeline Crossing Regulations*, Part II (SOR/88-529).

Construction of facilities across pipelines

*112. (1) Subject to subsection (5), **no person shall, unless leave is first obtained from the Board, construct a facility across, on, along or under a pipeline or excavate using power-operated equipment or explosives within thirty metres of a pipeline.***

Use of vehicles and mobile equipment

(2) *Subject to subsection (5), no person shall operate a vehicle or mobile equipment across a pipeline unless leave is first obtained from the company or the vehicle or mobile equipment is operated within the travelled portion of a highway or public road.*

Terms and conditions

(3) The Board may, on granting an application for leave under this section, impose such terms and conditions as it considers proper.

Directions

(4) The Board may direct the owner of a facility constructed across, on, along or under a pipeline in contravention of this Act or the Board's orders or regulations to do such things as the Board considers necessary for the safety or security of the pipeline and may, if the Board considers that the facility may impair the safety or security of the operation of the pipeline, direct the owner to reconstruct, alter or remove the facility.

Exception

(5) The Board may make orders or regulations governing

(a) the design, construction, operation and abandonment of facilities constructed across, on, along or under pipelines;

(b) the measures to be taken by any person in relation to

(i) the construction of facilities across, on, along or under pipelines,

(ii) the construction of pipelines across, on, along or under facilities, other than railways, and

(iii) excavations within thirty metres of a pipeline; and

(c) the circumstances in which or conditions under which leave under subsection (1) or (2) is not necessary.

Temporary prohibition on excavating

(5.1) Without limiting the generality of paragraph (5)(c), orders or regulations made under that paragraph may provide for the prohibiting of excavations in an area situated in the vicinity of a pipe-line, which area may extend beyond thirty metres of the pipeline, during the period that starts when a request is made to a pipeline company to locate its pipeline and ends

(a) at the end of the third working day after the day on which the request is made; or

(b) at any later time that is agreed to between the pipeline company and the person making the request.

Exemptions

(6) The Board may, by order made on any terms and conditions that the Board considers appropriate, exempt any person from the application of an order or regulation made under subsection (5).

Inspection officers

(7) The provisions of sections 49 to 51.3 relating to inspection officers apply for the purpose of ensuring compliance with orders and regulations made under subsection (5).

Offence

(8) Every person who contravenes subsection (1) or (2), a direction made under subsection (4) or an order or regulation made under subsection (5) is guilty of an offence and liable

(a) on summary conviction, to a fine not exceeding one hundred thousand dollars or to imprisonment for a term not exceeding one year or to both; or

(b) on conviction on indictment, to a fine not exceeding one million dollars or to imprisonment for a term not exceeding five years or to both.

Application of subsections 121(2) to (5)

(9) Subsections 121(2) to (5) apply, with any modifications that the circumstances require, to an offence under subsection (8).

Book of Authorities, Tab 6

3. For the purposes of s. 112 of the *National Energy Board Act* and the associated *National Energy Board Pipeline Crossing Regulations, Part I and Part II*, “facility” is defined in the *National Energy Board Pipeline Crossing Regulations, Part I* (SOR/88-528):

“facility” means

(a) any structure that is constructed or placed on the right-of-way of a pipeline, and

(b) any highway, private road, railway, irrigation ditch, drain, drainage system, sewer, dike, telegraph, telephone line or line for the transmission of hydrocarbons, power or any other substance that is or is to be carried across, along, upon or under any pipeline;

Book of Authorities, Tab 7

2.3 Limited prescribed circumstances where leave of the NEB is not required under s. 112 of the Act prior to construction of a facility

4. The *National Energy Board Pipeline Crossing Regulations*, Part I (SOR/88-528) provides that leave is not required under certain limited circumstances. These limited circumstances are set out in s. 3, 4, 5, 6 and 7 of said Regulation and, except in cases involving “overhead lines”, require either **written permission or consent of the pipeline company and acceptance of the pipeline company’s terms including compliance with instructions (s. 4(b), s.6(b)) and s.7)**, or involve activities (other than the construction or installation of a “facility”) that disturbs less than three tenths of a meter of ground below the initial grade and do not reduce the total cover over the pipe (s. 3(b)).

“overhead line” means an above-ground telephone, telegraph, telecommunication or electric power line or any combination thereof;

4. Leave of the Board is not required for any construction or installation of a facility, other than the installation of an overhead line referred to in section 5, if

(b) the facility owner obtains written permission from the pipeline company prior to the construction or installation of the facility and accepts any conditions set out in the permission;

6. Leave of the Board is not required for an excavation, other than an excavation referred to in section 7, if

(b) the excavator obtains written permission from the pipeline company prior to the excavation and accepts any conditions set out in the permission;

7. Leave of the Board is not required for an excavation required for the maintenance of an existing facility if the circumstances and conditions set out in paragraphs 6(f) to (p) are met.

Book of Authorities, Tab 7

2.4 Non-Interference with utilities which include highways

5. In addition to the jurisdiction to approve pipelines being constructed within or across highways and the provisions in the Regulations related to crossing pipelines, s. 22 of the

National Energy Board Onshore Pipeline Regulations (SOR/99-294) also provides that when a pipeline is constructed across a utility (which includes a highway) the pipeline company shall ensure that there is no undue interference with the use of the utility.

CROSSING A UTILITY OR PRIVATE ROAD

22. When a pipeline is constructed across a utility or private road, **the company constructing the pipeline shall ensure that there is no undue interference with the use of the utility** or road during construction.

Book of Authorities, Tab 8

2.5 Make No Mistake - Municipalities and others whose utilities are impacted and who have jurisdiction over highways will incur present and future costs as a consequence of the proposed pipeline impacting their utilities and as a consequence of the proposed pipeline occupying or crossing highways

6. Municipalities and others having jurisdiction over highways will incur present and future costs as a consequence of the proposed pipeline impacting their utilities and as a consequence of the proposed pipeline occupying or crossing highways.

2.5.1 These costs are substantial and have been quantified by an expert jointly retained by several municipalities in the Lower Mainland of British Columbia;

7. These costs are substantial and have been quantified in a report prepared by Larry Martin, Professional Engineer and Senior Engineer at Associated Engineering (B.C.) Ltd. who was jointly retained by several municipalities in the Lower Mainland of British Columbia.

8. The participating municipalities include **the City of Surrey, the City of Burnaby, the City of Abbotsford, the City of Coquitlam and the Township of Langley**, all of which are intervenors in this proceeding.

9. The report is entitled “*Cost Impacts of the TransMountain Expansion on Lower Mainland Municipalities*” dated May 2015 and for the purposes of this Argument is referred to as the “Associated Engineering Cost Impacts Report”.

10. The Associated Engineering Cost Impacts Report was separately filed as evidence by the City of Surrey as Exhibit Nos. C76-10-6 ([A4Q0Q0](#)), C76-10-7 ([A4Q0Q1](#)) and C76-10-8 ([A4Q0Q3](#)) and has been filed as evidence by each of the participating municipalities. The Associated Engineering Cost Impacts Report also forms part of the Affidavit of Larry Martin sworn May 25, 2015 which was filed as Exhibits C76-9-14 ([A4L9T7](#)), C76-9-15 ([A4L9T8](#)), C76-9-16 ([A4L9T9](#)) and C76-9-17 ([A4L9U0](#)).

11. The objective and terms of reference of the Associated Engineering Cost Impacts Report are set out on p. 1-1 of the report:

1 Introduction

The Trans Mountain Pipeline (TMP), owned and operated by Kinder Morgan (KM), carries petrochemicals from Alberta to the Pacific west coast. In 2013, KM applied to the National Energy Board (NEB) for approval to construct an expansion to the Trans Mountain Pipeline system.

The existing TMP was constructed in the early 1950’s, and the communities along its route have grown and developed around it. The proposed expansion includes the installation of a 900 mm diameter pipeline, the Trans Mountain Expansion (TMX). The pipeline path will follow the existing pipeline for approximately 70% of its length however, in more urban areas, KM has generally proposed a new route for the expansion due to the urbanization around the TMP.

While KM has acknowledged that there will be a disruption to municipal infrastructure during construction of the proposed TMX pipeline, there has not yet been acknowledgement of the long term cost impacts to municipalities for operation, maintenance and construction of municipal infrastructure around the proposed expansion.

1.1 STUDY OBJECTIVE

In October 2014, the cities of Surrey, Burnaby, Coquitlam, Abbotsford and the Township of Langley retained Associated Engineering to complete an assessment of additional costs incurred by each municipality to operate, maintain and construct municipal infrastructure impacted by KM’s TMP and TMX. The

objective of the work was to:

1. Identify whether or not municipalities will incur additional costs to develop, maintain and construct their own municipal infrastructure as a direct and/or indirect result of the proposed TMX.
2. Quantify the present and estimated future additional costs that each subject municipality would incur as a result of the proposed pipeline operating within the vicinity of existing and future municipal infrastructure.
3. Suggest mitigation opportunities KM could undertake in respect of the proposed TMX to reduce future costs that would otherwise be incurred by the subject municipalities.

(Exhibits C76-9-14 ([A4L9T7](#)), C76-9-15 ([A4L9T8](#)), C76-9-16 ([A4L9T9](#)) and C76-9-17 ([A4L9U0](#)), Affidavit of Larry Martin sworn May 25th, 2015 including all exhibits thereto)

(Exhibits C76-10-6 ([A4Q0Q0](#)), C76-10-7 ([A4Q0Q1](#)) and C76-10-8 ([A4Q0Q3](#)), Report entitled “*Cost Impacts of the TransMountain Expansion on Lower Mainland Municipalities*” dated May 2015 and prepared by Larry Martin, P. Eng.)

12. The Associated Engineering Cost Impacts Report concluded that the projected additional costs that the subject municipalities will incur as a result of the proposed pipeline projected over 50 years exceeds **\$93,000,000 (NINETY-THREE MILLION DOLLARS)**. This is summarized on p. i in the Executive Summary and in Table 1-2 on p. iv of the report.

Executive Summary

In October 2014, the cities of Surrey, Burnaby, Coquitlam, Abbotsford and the Township of Langley retained Associated Engineering to complete an assessment of additional costs incurred by each municipality to operate, maintain and construct municipal infrastructure impacted by Kinder Morgan’s (KM) existing and proposed TransMountain Pipelines (TMP and TMX, respectively). The objective of the work was to:

1. Identify whether or not municipalities will incur additional costs to develop, maintain and construct their own municipal infrastructure as a direct and/or indirect result of the proposed TMX.
2. Quantify the present and estimated future additional costs that each subject municipality would incur as a result of the proposed pipeline operating within the

vicinity of existing and future municipal infrastructure.

3. Suggest mitigation opportunities KM could undertake in respect of the proposed TMX to reduce future costs that would otherwise be incurred by the subject municipalities.

The projected additional costs that the subject municipalities will incur as a result of the proposed TMX projected over 50 years exceeds \$93,000,000 as set out in Table 1-2.

**Table 1-2
Summary of Additional Costs to be incurred by the Municipalities over 50 years**

| Municipality | TMX | Future Expected Projects | Totals |
|---------------------|---------------------|--------------------------|---------------------|
| Burnaby | \$11,700,000 | \$5,900,000 | \$17,600,000 |
| Coquitlam | \$21,600,000 | \$6,900,000 | \$28,500,000 |
| Surrey | \$16,000,000 | \$1,100,000 | \$17,100,000 |
| Township of Langley | \$12,800,000 | N/A | \$12,800,000 |
| Abbotsford | \$16,800,000 | \$200,000 | \$17,000,000 |
| Totals | \$78,900,000 | \$14,100,000 | \$93,000,000 |

(Exhibits C76-9-14 ([A4L9T7](#)), C76-9-15 ([A4L9T8](#)), C76-9-16 ([A4L9T9](#)) and C76-9-17 ([A4L9U0](#)), Affidavit of Larry Martin sworn May 25th, 2015 including all exhibits thereto)

(Exhibits C76-10-6 ([A4Q0Q0](#)), C76-10-7 ([A4Q0Q1](#)) and C76-10-8 ([A4Q0Q3](#)), Report entitled “*Cost Impacts of the TransMountain Expansion on Lower Mainland Municipalities*” dated May 2015 and prepared by Larry Martin, P. Eng.)

13. The Associated Engineering Cost Impacts Report in Table 1-3 on p. v provides a summary of some of the likely future sources of additional costs.

**Table 1-3
Estimated Additional Cost for Future Construction Projects**

| Proposed Project | Estimated Total Additional Cost |
|--|--|
| Small Water Main in Urban Setting <ul style="list-style-type: none"> · perpendicular crossing of TMX · TMX does not require relocation | \$41,000 |
| Small Water Main in Urban Setting <ul style="list-style-type: none"> · perpendicular crossing of TMX · TMX must be raised/lowered due to water main alignment, for a length of 20 m | \$ 371,000 |
| Storm Trunk Main in Urban Setting <ul style="list-style-type: none"> · perpendicular crossing of TMX · TMX does not require relocation | \$ 53,000 |
| Storm Trunk Main in Urban Setting <ul style="list-style-type: none"> · perpendicular crossing of TMX · additional infrastructure required to modify storm trunk alignment (pump house, retention pond, etc. | \$ 4,917,000 |
| 2 Lane Road Widening (to 4 lane) in Urban Setting <ul style="list-style-type: none"> · perpendicular crossing of TMX · TMX does not require relocation | \$ 112,000 |
| 2 Lane Road Widening (to 4 lane) in Urban Setting <ul style="list-style-type: none"> · perpendicular crossing of TMX · TMX requires lowering | \$ 706,000 |
| 2 Lane Road Widening (to 4 lane) in Urban Setting <ul style="list-style-type: none"> · TMX runs parallel to existing road and will be covered by road surface · TMX requires lowering and re-bedding for 1000 m of pipe | \$ 4,349,000 |
| Underpass/Overpass Construction in Urban Setting <ul style="list-style-type: none"> · perpendicular crossing of TMX · TMX requires lowering | \$ 1,490,000 |

(Exhibits C76-9-14 ([A4L9T7](#)), C76-9-15 ([A4L9T8](#)), C76-9-16 ([A4L9T9](#)) and C76-9-17 ([A4L9U0](#)), Affidavit of Larry Martin sworn May 25th, 2015 including all exhibits thereto)

(Exhibits C76-10-6 ([A4Q0Q0](#)), C76-10-7 ([A4Q0Q1](#)) and C76-10-8 ([A4Q0Q3](#)), Report entitled “*Cost Impacts of the TransMountain Expansion on Lower Mainland Municipalities*” dated May 2015 and prepared by Larry Martin, P. Eng.)

14. On p. vi of the Associated Engineering Cost Impacts Report the report describes the results as demonstrating the following:

The results in Tables 1-1 through 1-3 demonstrate:

- The presence of the existing TransMountain Pipeline (TMP) results in \$5.0M annually of additional costs to the five Lower Mainland municipalities to operate, maintain and replace infrastructure they already have in place:
 - \$577K (including administration costs and contingencies) of this are additional costs for simple routine maintenance and repair work;
 - \$4.4M of additional funds are spent annually replacing or rehabilitating municipal assets to KM permit standards.
- In the next 50 years, the subject Lower Mainland municipalities will spend an estimated \$221M in additional costs when replacing their infrastructure at the end of its useful life as a result of the TMP
- The presence of the future TransMountain Expansion Pipeline (TMX) will result in \$1.6M of additional annual costs to the five Lower Mainland municipalities to operate, maintain and replace existing infrastructure;
 - \$350K (including Administration and contingencies) of this are additional costs for routine maintenance and repair work around the TMP;
 - \$1.3M of additional funds will be needed to replace or rehabilitate aging municipal assets.
- In the next 50 years, the subject Lower Mainland municipalities will spend an estimated \$61.4M in additional costs to replace their infrastructure at the end of its useful life as a result of the TMX.
- Costs to municipalities will increase as new infrastructure is constructed around the TMX.

The subject Lower Mainland municipalities will inevitably expand as population grows over the next 50 years. These municipalities will require new and higher capacity infrastructure to meet these needs. Municipalities are already considering projects that either move or avoid the existing TMP, and these costs will be significant. The municipalities do not have 50 year plans, and therefore we have estimated that each municipality will need to spend money to move or accommodate the proposed TMX into the future. These future cost impacts are derived using values in Table 1-3 and summarized by municipality in Table 1-2.

(Exhibits C76-9-14 ([A4L9T7](#)), C76-9-15 ([A4L9T8](#)), C76-9-16 ([A4L9T9](#)) and C76-9-17 ([A4L9U0](#)), Affidavit of Larry Martin sworn May 25th, 2015 including all exhibits thereto)

(Exhibits C76-10-6 ([A4Q0Q0](#)), C76-10-7 ([A4Q0Q1](#)) and C76-10-8 ([A4Q0Q3](#)), Report entitled “*Cost Impacts of the TransMountain Expansion on Lower Mainland Municipalities*” dated May 2015 and prepared by Larry Martin, P. Eng.)

2.5.2 Surrey has first-hand experience of these costs and has filed evidence of such through Exhibits C76-9-23 ([A4L9U6](#)) and C76-9-24 ([A4L9U7](#)) being the Affidavit of Kenneth D. Zondervan

15. In further support of the findings of the Associated Engineering Cost Impacts Report, the City of Surrey has filed affidavit evidence (through the Affidavits of Kenneth D. Zondervan sworn May 26, 2015 and filed as Exhibits C76-9-23 and C76-9-24 providing evidence of recent examples of actual projects in the City of Surrey where the City of Surrey incurred substantial costs as a result of Kinder Morgan’s/Trans Mountain’s existing pipeline which traverses Surrey.

16. These additional costs related to the 156 Street Underpass of Highway 1 Project, the Trans Mountain Support Structure Reinforcement Project and the South Fraser Perimeter Road Project and were substantial ranging in magnitude from **\$387,120.42 to \$1,767,682.59**.

2.5.3 While acknowledging that municipalities will incur present and future costs, Kinder Morgan/Trans Mountain refuses to reimburse or indemnify municipalities for these costs

17. While acknowledging that municipalities will incur present and future costs, Kinder Morgan/Trans Mountain refuses to reimburse or indemnify municipalities for these costs. This was confirmed by Trans Mountain in its response to the City of Surrey’s Information Requests No. 1 filed as evidence in this proceeding.

Request:

Present and future costs arising as a consequence of the pipeline occupying or crossing highways/roads

a) Please confirm whether or not Trans Mountain will agree to pay all present and future costs that will be incurred by the City of Surrey, other municipalities and the Province as a result of the location of: (i) the proposed Line 2 pipeline in highways or roads under their respective jurisdiction, or (ii) as a result of any future highway/road construction, widening or improvement project that occurs over or in the vicinity of the pipeline that might disturb the pipeline and that occurs within the existing or future boundaries of said highway/road, including, but not limited to:

- (i) costs to realign, raise or lower the pipeline;
- (ii) costs to excavate material from around the pipeline;
- (iii) costs to add casing or other appurtenances for the protection of the pipeline;
- (iv) costs of all pipeline work required as a result of the construction, widening or carrying of highway or road across the pipeline which might disturb the pipeline or which necessitates realigning, raising or lowering the pipeline or excavating material from, over or around it, or adding casings or other appurtenances deemed necessary by Trans Mountain for the protection of the pipeline; and
- (v) costs necessary to accommodate any future widening or improvement of the highway or road that occurs over or in the vicinity of the pipeline;

b) if Trans Mountain is not prepared to agree to pay all or some of the present and future costs described in paragraph a) above, then please identify which costs Trans Mountain is not prepared to pay and explain in detail why not. Please also identify and describe in detail which of the present and future costs described in paragraph a) Trans Mountain is prepared to agree to pay and under what circumstances it would agree to pay them;

c) having regard to section 108 of the *National Energy Board Act* and the jurisdiction of the NEB, please confirm whether or not Trans Mountain is prepared to consent to including as a condition or term of any certificate or CPCN issued approving Trans Mountain's Application that Trans Mountain shall pay all or some of the costs described in paragraph (a) above, and if not, please provide a detailed explanation as to why not;

Response:

a) Trans Mountain believes that historical practice provides a reasonable approach respecting cost sharing and cost recovery for past, current and future infrastructure development. In general, Trans Mountain believes it is reasonable for the project to reimburse municipalities for any modifications to their existing infrastructure required to accommodate the Project. In the planning and design of the Project, Trans Mountain is willing to work with municipalities to accommodate reasonably foreseeable plans for municipal infrastructure including roads and utilities in the design and placement of the pipeline. **Once the Project is in operation, any subsequent design and development of municipal infrastructure would be completed with the pipeline in place and should modifications or relocations of the pipeline be required to accommodate new municipal infrastructure, Trans Mountain would look to the municipality for reimbursement.**

Trans Mountain is committed to working cooperatively with municipalities in the development of the Project. More specifically, Trans Mountain is prepared to:

- work with municipalities in the planning and engineering, and detailed design to accommodate future growth and minimize potential future impacts to existing infrastructure;
- pay for reasonable costs to inspect, relocate if needed, and protect their infrastructure during pipeline construction;
- work with the municipalities to fulfill federal requirements for pipeline protection including ground disturbance measures imbedded in the NEB crossing regulations; and
- construct the Project, and operate it and the existing pipeline in accordance with practices and procedures that are consistent with all other utility service and development infrastructure.

There are established rules and protocols that must be met for the protection of the pipeline and municipal infrastructure, including formalized crossing agreements between infrastructure owners. TMPL expects these rules and protocols will not be different than the processes currently used for the protection of the existing operating pipeline and for municipal development in proximity and directly over/under the pipeline.

With the installation of the proposed pipeline, all reasonable costs associated with construction and associated infrastructure changes would be borne by the project, but costs for operations following installation would be in accordance with currently accepted practice and formalized in crossing agreements between infrastructure owners.

b) Please see response to City Surrey IR No. 1.3a.

c) Trans Mountain believes that any agreement between the City of Surrey and the company are private contractual arrangements and not the subject of a condition to the CPCN.

(Exhibit C76-11-1 [\(A3W6E6-A4Q0V5\)](#)- City of Surrey Information Request No. 1 filed May 7, 2014 (previously filed as C76-1-1))

(Exhibit C76-11-2 [\(A3X6A5 - A4Q0V6\)](#) - Response to City of Surrey Information Request No. 1 filed June 4, 2014 (previously filed as B52-1))

18. In addition to the evidence set out in Trans Mountain's Response to the City of Surrey's Information Request No. 1, the Affidavits of Kenneth D. Zondervan filed by the City of Surrey as Exhibits C76-9-23, C76-9-24 and C76-16-2, provides further supporting evidence.

19. As a Professional Engineer and as the former Manager of the Design & Construction Section of the City of Surrey, Mr. Kenneth D. Zondervan's sworn evidence not only deposes to the significant costs, but also to the fact that Kinder Morgan/Trans Mountain refuses to undertake pipeline work or grant permission to cross its pipeline unless the City agrees in advance to pay all these costs.

The 156 Street Underpass of Highway 1 Project

9. *The 156 Street Underpass of Highway 1 Project required and involved lowering of Kinder Morgan Canada Inc.'s existing Trans Mountain pipeline which crosses 156 Street in Surrey and which in these proceedings before the National Energy Board has been referred to as the existing Trans Mountain Pipeline or "TMP".*

10. *The existing Trans Mountain pipeline crosses 156th Street on the north side of Highway No. 1. Attached as Exhibit "1" to this my Affidavit is a copy of a map which shows the location of the existing Trans Mountain pipeline crossing of 156th Street in Surrey.*

11. *Construction of the 156th Street underpass of Highway No. 1 required that the existing Trans Mountain pipeline be lowered across 156 Street to allow 156 Street to pass under Highway No. 1.*

12. Unless Surrey agreed to the terms of Kinder Morgan Canada Inc.'s Facility Crossing Agreement, Kinder Morgan Canada Inc. would not undertake the required pipeline lowering to accommodate the 156 Street Underpass of Highway 1 Project.

13. Kinder Morgan Canada Inc. would only agree to lower the affected portion of the existing Trans Mountain pipeline if Surrey agreed to pay all associated costs as set out in the Facility Crossing Agreement. Attached as Exhibit "2" to this my Affidavit is a copy of the Facility Crossing Agreement dated April 02, 2007 that Kinder Morgan Canada Inc. required the City of Surrey to sign before Surrey proceeded with the 156 Street Underpass of Highway 1 Project.

14. The actual costs that Kinder Morgan Canada Inc. invoiced Surrey and that Surrey paid totaled \$1,767,682.59. Attached collectively as Exhibit "3" to this my Affidavit are copies of the Kinder Morgan Canada Inc. invoices that were paid by the City of Surrey.

The Trans Mountain Support Structure Reinforcement Project

15. The existing Trans Mountain pipeline crossing under King Road, near 139th Street in Surrey is a suspended-form timber piled support structure. The structure was constructed by the City of Surrey when King Road was established, to minimize pipe settlement, as there was an existing Metro Vancouver concrete sanitary sewer siphon located below the existing Trans Mountain pipeline and adjacent to King Road. Attached collectively as Exhibit "4" to this my Affidavit are copies of extracts from a report prepared by Associated Engineering Ltd. in August 2012 which identify the structure.

16. In or about 2011, significant settlement was observed of the existing Trans Mountain pipeline resulting from the failure of several support structure brackets. Kinder Morgan Canada Inc. required that Surrey pay all costs associated with reinstating the existing support structure totaling approximately \$387,120.42. These additional costs could have been avoided if the existing Trans Mountain pipeline had been designed to accommodate a future road above it and future utilities in proximity to it. Attached collectively as Exhibit "5" to this my Affidavit are invoices related to reinstating the existing Trans Mountain support structure that were paid by the City of Surrey.

The South Fraser Perimeter Road Project

17. During design discussions of the South Fraser Perimeter Road in Surrey, the City of Surrey was advised by the design engineering consultant that the existing Trans Mountain pipeline crossing of the South Fraser Perimeter Road

required the construction of a bridge structure over the pipeline and approximately an additional one million dollars (\$1,000,000.00) of lightweight fill and associated design costs to avoid settlement on the pipe.

(Exhibits C76-9-23 [\(A4L9U6\)](#) and C76-9-24 [\(A4L9U7\)](#) - Affidavit of Kenneth D. Zondervan sworn May 26, 2015)

20. Attached to Exhibits C76-9-23 and C76-9-24 being the Affidavit of Kenneth D. Zondervan sworn May 26, 2015, are letters and agreements from Kinder Morgan/Trans Mountain in respect of the projects in the City of Surrey setting out these demands and other demands which are described elsewhere in these submissions. These letters and agreements appear as Exhibits 2, 8, 14, 20, 24 and 28 to Kenneth D. Zondervan's Affidavit.

21. Having regard to the reality of highway infrastructure projects and the potential costs of delay which include claims from third parties, municipalities are left with no option but to agree to these terms.

22. The Affidavit of Kenneth D. Zondervan provides direct uncontested evidence of this.

20. Unless Surrey agrees to pay all pipeline related costs that would be incurred to accommodate a highway infrastructure project, then Surrey projects would be delayed and Surrey would not be able to proceed with its projects without incurring costs of litigation and without facing potential delay claims by third party contractors.

21. In the case of significant highway infrastructure projects, it is not unusual for delay claims resulting from the delay of third party utility works being altered and/or relocated, to be quantified in the millions of dollars.

(Exhibits C76-9-23 [\(A4L9U6\)](#) and C76-9-24 [\(A4L9U7\)](#) - Affidavit of Kenneth D. Zondervan sworn May 26, 2015)

2.5.4 Kinder Morgan/Trans Mountain does not have agreements in place related to impacted utilities or highway occupation and crossings for its existing pipeline

23. Trans Mountain in its Application has stated that it would enter into agreements with municipalities either in the form of permits or licence agreements. This is set out in document A3S0R0, Volume 2 – Project Overview, Economics and General Information, Section 5.0 Land

Relations, Rights and Acquisitions, Section 5.3 Land Rights, Section 5.4 Lands Acquisition Process, Section 5.4.1 Process, Section 5.5 Land Acquisition Agreements (PDF pages 2-59 to 2-62, PDF pages 2-64 to 2-70).

24. This was additionally confirmed in Trans Mountain's Response to Information Request No. 1 of the City of Surrey filed as Exhibit C76-11-2 .

Request:

Terms of licence agreements and permits existing and contemplated in the City of Surrey

- a) please provide a copy(ies) of the proposed form(s) of licence agreement(s) that Trans Mountain contemplates entering into with the Province and with the City of Surrey and with other municipalities in BC related to the proposed Line 2 pipeline occupying highways or roads or occupying the South Fraser Perimeter Road corridor or occupying the Golden Ears Connector corridor;
- b) please confirm whether or not Trans Mountain has existing agreements and permits in relation to existing highway or road crossings in the City of Surrey by the existing Trans Mountain pipeline (whether those highways or roads are under the jurisdiction of City of Surrey or the Province). If so, please provide copies of all such agreements and permits and please also identify the dates of each;
- c) please provide a copy(ies) of the proposed licence agreement(s) and permits that Trans Mountain contemplates entering into with the Province and with the City of Surrey and with other municipalities in relation to proposed highway and road crossings by the proposed Line 2 pipeline in the City of Surrey;
- d) having regard to s. 112 of the National Energy Board Act and the jurisdiction of the NEB, please provide a copy of the form of permit that Trans Mountain contemplates the City of Surrey and other municipalities in BC would require to obtain from Trans Mountain before performing any work in existing highway or road to be occupied by the proposed Line 2 pipeline;
- e) please confirm whether or not Trans Mountain is prepared to pay the City of Surrey and other municipalities in BC compensation in the form of an annual fee for crossing and occupying highways or roads under municipal jurisdiction and if so, an explanation of how the compensation would be determined and if not, an explanation as to why not;
- f) please provide a detailed summary of the consultations made and the

findings regarding the statutory process Trans Mountain expects to follow in attempting to acquire land tenure in dedicated park. Please also provide an explanation of how compensation payable to the authority having ownership of the dedicated park will be determined;

Response:

- a) **Currently, Trans Mountain has no licenses or other permits with municipalities for the existing federally regulated Trans Mountain Pipeline system.** However, Trans Mountain is aware that the City of Surrey and other municipalities are interested in negotiating such agreements, and has begun working on a form of protocol agreement to reasonably address any issues of concern to the municipalities. There has been one informal meeting held to date on May 16, 2014 between Trans Mountain and the City of Surrey to discuss this issue. Trans Mountain would welcome the opportunity to discuss this issue further with the City of Surrey and work towards a mutually acceptable protocol agreement.
- b) Please see response to City Surrey IR No. 1.30.
- c) Please see response to City Surrey IR No. 1.30.
- d) Please see the response to City Surrey IR No. 1.30. Trans Mountain anticipates the form of permit for crossings of the pipeline would be a point of discussion during engagement around development of overall crossing agreements.
- e) Trans Mountain does not anticipate annual fees for the Project. Trans Mountain anticipates that discussion regarding compensation would be included within the overall discussion of crossing agreements.

Trans Mountain believes that historical practice provides a reasonable approach respecting cost sharing and cost recovery for past, current and future infrastructure development. In general, Trans Mountain believes it is reasonable for the project to reimburse municipalities for any modifications to their existing infrastructure required to accommodate the Project. In the planning and design of the Project, Trans Mountain is willing to work with municipalities to accommodate reasonably foreseeable plans for municipal infrastructure including roads and utilities in the design and placement of the pipeline. Once the Project is in place, any subsequent design and development of municipal infrastructure would be completed with the pipeline in place and should modifications or relocations of the pipeline be required to accommodate new municipal infrastructure, Trans Mountain would look to the municipality for reimbursement.

Trans Mountain is committed to working cooperatively with municipalities in the development of the Project. More specifically, Trans Mountain is prepared to:

- work with municipalities in the planning and engineering, and detailed design to accommodate future growth and minimize potential future impacts to existing infrastructure;
- pay for reasonable costs to inspect, relocate if needed, and protect their infrastructure during pipeline construction;
- work with the municipalities to fulfill federal requirements for pipeline protection including ground disturbance measures imbedded in the NEB crossing regulations; and
- construct the Project, and operate it and the existing pipeline in accordance with practices and procedures that are consistent with all other utility service and development infrastructure.
- There are established rules and protocols that must be met for the protection of the pipeline and municipal infrastructure, including formalized crossing agreements between infrastructure owners. Trans Mountain expects these rules and protocols will not be different than the processes currently used for the protection of the existing operating pipeline and for municipal development in proximity and directly over/under the pipeline.

With the installation of the proposed pipeline, all reasonable costs associated with construction and associated infrastructure changes would be borne by the Project, but costs for operations following installation would be in accordance with currently accepted practice and formalized in crossing agreements between infrastructure owner.

f) Legislative requirements respecting land acquisition for the Trans Mountain Expansion Project are set out within the NEB Act. Those provisions of the NEB Act apply specifically to directly affected parties and include:

- Under NEB Act, Section 75, “A company shall, in the exercise of the powers granted by this Act or a Special Act, do as little damage as possible, and shall make full compensation in the manner provided in this Act and in a Special Act, to all persons interested, for all damage sustained by them by reason of the exercise of those powers.”
- Under the NEB Act Section 86, when a company acquires lands for its operations, they are responsible for any damages directly related to and caused by the acquisition of lands, construction of the pipeline, and inspection, maintenance or repair of the pipeline. Under that Section, compensation related to the installation of a pipeline includes compensation for the acquisition of lands, compensation for damages, and indemnification of land owners from all liabilities related to the company’s operations. These requirements would apply to the Trans Mountain Expansion Project.

- Under Section 97, factors an arbitration committee would consider in a determination of compensation include the market value of the lands taken both for permanent easement and temporary working space, loss of use of the lands by the owner, damages caused by construction and, noise and inconvenience that can reasonably be expected to arise from the construction. Trans Mountain is incorporating these factors in the compensation framework being developed for the Trans Mountain Expansion Project. Additional information respecting Trans Mountain Expansion Project compensation framework for directly affected landowners can be found in responses to NEB IR No. 1.29 and CGLAP IR No. 1.7b.

Trans Mountain anticipates it will negotiate agreements with each municipality where it is proposing to place the pipeline within roadways or on other municipal lands, including Parks, in accordance with these NEB Act requirements.

(Exhibit C76-11-1 - [\(A3W6E6-A4Q0V5\)](#) City of Surrey Information Request No. 1 filed May 7, 2014 (previously filed as C76-1-1))

(Exhibit C76-11-2 - [\(A3X6A5 - A4Q0V6\)](#) Response to City of Surrey Information Request No. 1 filed June 4, 2014 (previously filed as B52-1))

25. Unless ordered by the NEB there is no prospect of such agreements being entered into with respect to the proposed pipeline. Kinder Morgan/Trans Mountain has no incentive to do so. In the absence of agreements with affected municipalities and as set out in the evidence filed by the City of Surrey, Kinder Morgan/Trans Mountain has been able to leverage its position and make the demands it has when municipalities wish to cross its pipeline.

26. Contrary to what Trans Mountain would have the NEB believe, the evidence of Trans Mountain is that it does not in fact have any agreements with municipalities related to its existing pipeline. This is set out in Trans Mountain's Response to Information Requests No. 1 of the City of Surrey filed as evidence as Exhibit C76-11-2:

Request:

Terms of licence agreements and permits existing and contemplated in the City of Surrey

- g) please provide a copy(ies) of the proposed form(s) of licence agreement(s) that Trans Mountain contemplates entering into with the Province and with the City of Surrey and with other municipalities in BC related to the proposed Line 2 pipeline occupying highways or roads or occupying the South Fraser Perimeter Road corridor or occupying the Golden Ears Connector corridor;
- h) please confirm whether or not Trans Mountain has existing agreements and permits in relation to existing highway or road crossings in the City of Surrey by the existing Trans Mountain pipeline (whether those highways or roads are under the jurisdiction of City of Surrey or the Province). If so, please provide copies of all such agreements and permits and please also identify the dates of each;
- i) please provide a copy(ies) of the proposed licence agreement(s) and permits that Trans Mountain contemplates entering into with the Province and with the City of Surrey and with other municipalities in relation to proposed highway and road crossings by the proposed Line 2 pipeline in the City of Surrey;
- j) having regard to s. 112 of the National Energy Board Act and the jurisdiction of the NEB, please provide a copy of the form of permit that Trans Mountain contemplates the City of Surrey and other municipalities in BC would require to obtain from Trans Mountain before performing any work in existing highway or road to be occupied by the proposed Line 2 pipeline;
- k) please confirm whether or not Trans Mountain is prepared to pay the City of Surrey and other municipalities in BC compensation in the form of an annual fee for crossing and occupying highways or roads under municipal jurisdiction and if so, an explanation of how the compensation would be determined and if not, an explanation as to why not;
- l) please provide a detailed summary of the consultations made and the findings regarding the statutory process Trans Mountain expects to follow in attempting to acquire land tenure in dedicated park. Please also provide an explanation of how compensation payable to the authority having ownership of the dedicated park will be determined;

Response:

g) **Currently, Trans Mountain has no licenses or other permits with municipalities for the existing federally regulated Trans Mountain Pipeline system.** However, Trans Mountain is aware that the City of Surrey and other municipalities are interested in negotiating such agreements, and has begun working on a form of protocol agreement to reasonably address any issues of

concern to the municipalities. There has been one informal meeting held to date on May 16, 2014 between Trans Mountain and the City of Surrey to discuss this issue. Trans Mountain would welcome the opportunity to discuss this issue further with the City of Surrey and work towards a mutually acceptable protocol agreement.

- h) Please see response to City Surrey IR No. 1.30.
- i) Please see response to City Surrey IR No. 1.30.
- j) Please see the response to City Surrey IR No. 1.30. Trans Mountain anticipates the form of permit for crossings of the pipeline would be a point of discussion during engagement around development of overall crossing agreements.
- k) Trans Mountain does not anticipate annual fees for the Project. Trans Mountain anticipates that discussion regarding compensation would be included within the overall discussion of crossing agreements.

Trans Mountain believes that historical practice provides a reasonable approach respecting cost sharing and cost recovery for past, current and future infrastructure development. In general, Trans Mountain believes it is reasonable for the project to reimburse municipalities for any modifications to their existing infrastructure required to accommodate the Project. In the planning and design of the Project, Trans Mountain is willing to work with municipalities to accommodate reasonably foreseeable plans for municipal infrastructure including roads and utilities in the design and placement of the pipeline. Once the Project is in place, any subsequent design and development of municipal infrastructure would be completed with the pipeline in place and should modifications or relocations of the pipeline be required to accommodate new municipal infrastructure, Trans Mountain would look to the municipality for reimbursement.

Trans Mountain is committed to working cooperatively with municipalities in the development of the Project. More specifically, Trans Mountain is prepared to:

- work with municipalities in the planning and engineering, and detailed design to accommodate future growth and minimize potential future impacts to existing infrastructure;
- pay for reasonable costs to inspect, relocate if needed, and protect their infrastructure during pipeline construction;
- work with the municipalities to fulfill federal requirements for pipeline protection including ground disturbance measures imbedded in the NEB crossing regulations; and
- construct the Project, and operate it and the existing pipeline in accordance with practices and procedures that are consistent with all other utility

service and development infrastructure.

- There are established rules and protocols that must be met for the protection of the pipeline and municipal infrastructure, including formalized crossing agreements between infrastructure owners. Trans Mountain expects these rules and protocols will not be different than the processes currently used for the protection of the existing operating pipeline and for municipal development in proximity and directly over/under the pipeline.

With the installation of the proposed pipeline, all reasonable costs associated with construction and associated infrastructure changes would be borne by the Project, but costs for operations following installation would be in accordance with currently accepted practice and formalized in crossing agreements between infrastructure owner.

l) Legislative requirements respecting land acquisition for the Trans Mountain Expansion Project are set out within the NEB Act. Those provisions of the NEB Act apply specifically to directly affected parties and include:

- Under NEB Act, Section 75, “A company shall, in the exercise of the powers granted by this Act or a Special Act, do as little damage as possible, and shall make full compensation in the manner provided in this Act and in a Special Act, to all persons interested, for all damage sustained by them by reason of the exercise of those powers.”
- Under the NEB Act Section 86, when a company acquires lands for its operations, they are responsible for any damages directly related to and caused by the acquisition of lands, construction of the pipeline, and inspection, maintenance or repair of the pipeline. Under that Section, compensation related to the installation of a pipeline includes compensation for the acquisition of lands, compensation for damages, and indemnification of land owners from all liabilities related to the company’s operations. These requirements would apply to the Trans Mountain Expansion Project.
- Under Section 97, factors an arbitration committee would consider in a determination of compensation include the market value of the lands taken both for permanent easement and temporary working space, loss of use of the lands by the owner, damages caused by construction and, noise and inconvenience that can reasonably be expected to arise from the construction. Trans Mountain is incorporating these factors in the compensation framework being developed for the Trans Mountain Expansion Project. Additional information respecting Trans Mountain Expansion Project compensation framework for directly affected landowners can be found in responses to NEB IR No. 1.29 and CGLAP IR No. 1.7b.

Trans Mountain anticipates it will negotiate agreements with each municipality where it is proposing to place the pipeline within roadways or on other municipal lands, including Parks, in accordance with these NEB Act requirements.

(Exhibit C76-11-1 - [\(A3W6E6-A4Q0V5\)](#) City of Surrey Information Request No. 1 filed May 7, 2014 (previously filed as C76-1-1))

(Exhibit C76-11-2 - [\(A3X6A5 - A4Q0V6\)](#) Response to City of Surrey Information Request No. 1 filed June 4, 2014 (previously filed as B52-1))

27. The City of Surrey in the Affidavit of Kenneth D. Zondervan has provided additional evidence that the City of Surrey has no agreement in place related to the existing Trans Mountain pipeline.

Neither Kinder Morgan nor Trans Mountain Have An Agreement with Surrey for the Existing Trans Mountain Pipeline Occupying and/or Crossing Surrey Highways

18. The City of Surrey does not have an agreement with any entity establishing terms of occupation and/or crossing of highways under the jurisdiction of the City of Surrey for the existing Trans Mountain pipeline.

19. None of Kinder Morgan Canada Inc., Trans Mountain Pipeline ULC, Trans Mountain Pipeline L.P., Trans Mountain Pipe Line Company Ltd. or Trans Mountain Pipeline Inc. has an agreement with Surrey for the existing Trans Mountain pipeline which traverses Surrey and which occupies and/or crosses highways under the jurisdiction of Surrey.

(Exhibits C76-9-23 [\(A4L9U6\)](#) and C76-9-24 [\(A4L9U7\)](#) - Affidavit of Kenneth D. Zondervan sworn May 26, 2015)

2.6 Municipalities have jurisdiction over highways in BC

28. In 2003, by virtue of legislative change with the introduction of the *Community Charter*, S.B.C. 2003, c. 26, as amended, the soil and freehold of highways within a municipality are vested in the municipality. A municipality's jurisdiction over highways changed from having a right of possession to a right of ownership.

Division 5 - Highways

Ownership and possession of highways

35 (1) Subject to this section,

(a) **the soil and freehold of every highway in a municipality is vested in the municipality**, and

(b) in the case of a highway in a municipality that is not vested under paragraph (a), the right of possession of the highway is vested in the municipality.

(2) Subsection (1) (a) does not apply to the following:

(a) Provincial arterial highways, including the intersection between a Provincial arterial highway and another highway and any interchange between a Provincial arterial highway and another highway;

(b) highways referred to in section 23 (1) of the *South Coast British Columbia Transportation Authority Act*;

(c) highways in a park, conservancy, recreation area or ecological reserve established under the *Park Act*, the *Ecological Reserve Act* or the *Protected Areas of British Columbia Act* or an area to which an order under section 7 (1) of the *Environment and Land Use Act* applies;

(d) highways in a regional park;

(e) a regional trail, other than a regional trail that is part of the road system regularly used by vehicle traffic;

(f) land, including the improvements on it, on which Provincial works such as ferry terminals, gravel pits, weigh scales and maintenance yards are located;

(g) roads referred to in section 24 of the *Forest and Range Practices Act* that have not been declared to be public highways;

(h) highways vested in the federal government;

(i) in relation to a reserve as defined in the *Indian Act* (Canada), highways in the reserve or that pass through the reserve;

(j) public rights of way on private land.

(3) Subsection (1) (b) does not apply to highways referred to in subsection (2) (a) to (h).

(4) The vesting under subsection (1) (a) and the right of possession under subsection (1) (b)

(a) are not adversely affected or derogated from by prescription in favour of any other occupier, and

(b) are subject to any rights reserved by the persons who laid out the highway.

(5) The vesting under subsection (1) (a) includes the vesting of all statutory rights of way and other easements owned by the Provincial government solely for purposes relating to the drainage of a highway that is vested under that subsection, and the interest of the Provincial government under those easements is transferred to the municipality and the municipality assumes the rights and obligations of the Provincial government in relation to those easements.

(6) The minister responsible for the *Transportation Act* may file with the land title office an application satisfactory to the registrar of land titles that identifies an easement referred to in subsection (5) and, on filing, the registrar must register ownership of the easement in the name of the municipality.

(7) The vesting under subsection (1) (a) is subject to the following:

(a) the right of resumption under subsection (8);

(b) the limits referred to in section 23 (2) of the *Land Title Act*;

(c) the exceptions described in section 50 (1) (a) (ii) to (iv) and (b) of the *Land Act*, as if the vesting were made by Crown grant under that Act;

(d) the exceptions described in section 107 (1) (d) of the *Land Title Act*, as if the vesting were under that section.

(8) The Provincial government may, by order of the Lieutenant Governor in Council, resume the property or interest vested in a municipality under subsection (1) (a), if the Lieutenant Governor in Council considers that this is required

(a) for the purpose of or in relation to a Provincial arterial highway,

(b) for any other transportation purpose, or

(c) for the purpose of or in relation to a park, conservancy, recreation area or ecological reserve established or proposed to be established under the *Park Act*, the *Ecological Reserve Act* or the *Protected Areas of British Columbia Act* or an area to which an order under section 7 (1) of the *Environment and Land Use Act* applies.

(9) An order under subsection (8) (a) or (b) may only be made on the recommendation of the minister responsible for the *Transportation Act*, and an order under subsection (8) (c) may only be made on the recommendation of the minister responsible for the applicable Act referred to in that subsection.

(10) The minister responsible for the *Transportation Act*, after consultation with the minister responsible for this Act, may

(a) by order, cancel the Provincial government's right of resumption under subsection (8) in relation to a specified highway or in relation to highways within a specified area, or

(b) by regulation, specify circumstances in which the Provincial government's right of resumption is cancelled without a specific order.

(11) For certainty, a council may grant a licence of occupation or an easement, or permit an encroachment, in respect of a highway that is vested in the municipality under subsection (1) (a).

(12) This section does not apply to a highway for which the municipality has purchased or taken the land and for which title is registered in the name of the municipality.

Book of Authorities, Tab 2

29. With the enactment of the *Community Charter* came the authority to grant others a licence of occupation of highway that is vested in the municipality under s. 35(11) of the *Community Charter*. Prior to s. 35 of the Charter a municipality could not grant a licence of occupation as the holder of the “soil and freehold” of highways. Such a licence would have had to be granted by the Provincial Crown and would have taken the form of a permit under the *Transportation Act*, SBC 2004, c 44, previously under the *Highway Act*, RSBC 1996, c 188.

Division 5 - Highways

Ownership and possession of highways

35 (11) For certainty, a council may grant a licence of occupation or an easement, or permit an encroachment, in respect of a highway that is vested in the municipality under subsection (1) (a).

30. The British Columbia Court of Appeal in *MacDougall v. Lake Country* (District) 2012 Carswell BC 3171, 2012 BCCA 408, 4 M.P.L.R. (5th) 10, 38 B.C.L.R. (5th) 235, also confirmed that by virtue of s. 29 and s. 35 of the *Community Charter*, municipalities are the successor in title to the Crown in respect of any highway or park.

Groberman J.A. (orally):

1 In this action, the MacDougall plaintiffs seek a declaration that they hold title to a strip of land lying between Okanagan Lake and certain surveyed lots created by subdivision of a tract of land in 1914.

2 This is not the first time that title to this strip of land has come before the courts. In 1963, the MacDougalls' predecessor in title sought a declaration under the Quieting Titles Act, R.S.B.C. 1960, c. 282 that the strip formed part of her lands. The judge who heard the application found that it did not, holding that the filing of the subdivision plan in the land registry resulted in the dedication of the strip of land for public purposes. Accordingly, he found that the land belonged to the Provincial Crown.

3 In light of that earlier litigation, the trial judge in this action found that the doctrine of res judicata applied, and dismissed the present action. The plaintiffs appeal, arguing that the doctrine of res judicata is inapplicable on the facts of this case. In the alternative, they argue that applying the doctrine would work an injustice, and that the court ought therefore to have exercised its discretion to refuse to apply it.

4 For reasons that follow, I agree with the trial judge's determination that this case falls squarely within the doctrine of res judicata. The Supreme Court's 1963 judgment unequivocally held that the land in question was not within the applicant's title. The parties to this proceeding are privies of the parties to the 1963 proceedings — the MacDougalls are successors in title to the applicant in the 1963 proceedings, and the District of Lake Country is, by virtue of ss. 29 and 35 of the Community Charter, S.B.C. 2003, c. 26, the successor in title to the Crown in respect of any park or highway that has been dedicated through the deposit of a subdivision plan. No appeal was taken from the 1963 judgment, and there is no basis for finding that it would be unjust to refuse to re-open the matter.

Book of Authorities, Tab 28

2.7 It is the norm, not the exception, that terms related to the occupation and crossing of highways and other public property such as parks, including the allocation of present and future costs are established prior to construction. This is borne out in both Provincial legislation and in Federal legislation that contemplates infrastructure occupying or crossing highways and other public property.

31. It is the norm, not the exception, that terms related to the occupation and crossing of highways and other public property such as parks, including the allocation of present and future costs are **established prior to construction**. This is borne out in both Provincial legislation and in Federal legislation that contemplates infrastructure occupying or crossing highways and other public property. This is apparent from a review of the *Oil and Gas Activities Act*, SBC 2008, Chapter 36, the *Utilities Commission Act*, RSBC 1996, Chapter 473 and the federal *Telecommunications Act* SC 1993, c. 38.

2.7.1 Provincially Regulated Pipelines under the *Oil and Gas Activities Act* (the "OGAA") and previously under the now repealed *Pipeline Act*, RSBC 1996, c 364

32. In the case of Provincially regulated natural gas pipelines, the British Columbia Legislature has legislated a cost allocation formula which was first introduced in the 1950s with the introduction of natural gas in the Province of British Columbia.

33. The cost allocation formula is set out in the *Pipeline Crossings Regulation*, B.C. Reg.. 147/2012 discussed below.

34. The OGAA also requires the pipeline company to perform required pipeline work to accommodate pipeline crossings and provides that a pipeline company must not prevent access or use of a highway.

35. In order to construct a pipeline in or across a highway, the *OGAA* in s. 34(2)(b) also requires the pipeline company to obtain the authorization of the municipality or authority having jurisdiction over the highway.

Required ownership, interest or authorization

34 (1) In this section:

"entry agreement" means an agreement

- (a) that is between
 - (i) a specified permit holder, and
 - (ii) a land owner of an area of land, and
- (b) that authorizes the specified permit holder to enter, occupy or use the land owner's area of land for the purposes of constructing and operating a pipeline other than a flow line;

"specified permit holder" means a pipeline permit holder who holds a permit respecting a pipeline other than a flow line.

(2) Subject to sections 23 and 39 and subsection (3) of this section, **a permit holder must not begin or carry out an oil and gas activity on or under an area of land unless the permit holder,**

(a) if the area of land is not a highway, either is the owner in fee simple of the area of land or has acquired the area of land or the necessary interests in the area of land in accordance with

- (i) the [Land Act](#),
- (ii) Part 16 or 17 of the [Petroleum and Natural Gas Act](#), or
- (iii) subsection (3) of this section, or

(b) if the area of land is a highway, has obtained an authorization required under an enactment to enter, occupy or use the area of land.

(3) Subject to subsection (4), if a specified permit holder has failed to obtain an entry agreement, the specified permit holder may expropriate, in accordance with the [Expropriation Act](#), as much of the land or interests in it of any person as may be necessary for constructing and operating the pipeline authorized by the permit.

(4) The land that may be expropriated under subsection (3) must not exceed 18 m in breadth.

(5) On application by a specified permit holder, the commission may authorize, on any conditions the commission considers appropriate, an expropriation, in accordance with the [Expropriation Act](#), that exceeds the breadth specified in subsection (4).

36. For the purposes of s. 34(2)(b) an authorization under an *enactment* includes a permit/authorization under a municipal by-law or a licence of occupation granted under s. 35(11) of the *Community Charter*.

Division 5 - Highways

Ownership and possession of highways

35 (11) For certainty, a council may grant a licence of occupation or an easement, or permit an encroachment, in respect of a highway that is vested in the municipality under subsection (1) (a).

Book of Authorities, Tab 2

37. Under s. 34 of the OGAA, “enactment” includes the *Community Charter* as well as municipal by-laws.

Under s. 1 of the *Interpretation Act*:

"enactment" means an Act or a regulation or a portion of an Act or regulation;

"regulation" means a regulation, order, rule, form, tariff of costs or fees, proclamation, letters patent, commission, warrant, bylaw or other instrument enacted

(a) in execution of a power conferred under an Act, or

(b) by or under the authority of the Lieutenant Governor in Council,

but does not include an order of a court made in the course of an action or an order made by a public officer or administrative tribunal in a dispute between 2 or more persons;

Book of Authorities, Tab 3B

38. In the case of *Comox (Town) v. Newson*, [1987] B.C.J. No. 1442 at page 4, it was confirmed that “enactment” includes municipal by-laws.

It was the conclusion of my brother Cashman J.C.C., in *R. v. Lum* [1982] 3 W.W.R. 694 that the definition of "regulation" includes a municipal bylaw and so the Interpretation Act applies. I concur with that reasoning and find the provisions of S. 8 of the Interpretation Act apply to municipal bylaws. The definition of "enactment" to include "bylaw" it was first included in that legislation in the

Interpretation Act of 1974, and which fortifies the conclusion reached by Drake C.C.J. in *Re Township of Esquimalt and Wood* (supra)

Book of Authorities, Tab 26

39. Moreover, the imperative of not to interfere with municipal and provincial highways is underscored by s. 35(2) of OGAA.

Obligations in carrying out oil and gas activities

35 (1) In carrying out oil and gas activities and related activities, a permit holder or a person entering land under section 23 must minimize

(a) damage and disturbance to the sites of those activities, and

(b) waste.

(2) A pipeline permit holder must make reasonable efforts to ensure that its oil and gas activities do not prevent access to or use of a highway, road, railway or public place.

(3) A pipeline permit holder, as soon as reasonably possible after constructing a pipeline, must restore, in accordance with the regulations, if any, the land and surface disturbed by the construction.

Book of Authorities, Tab 12

(a) Obligations in respect of Pipeline Costs and Pipeline Work and Non-Interference with highways under the *Oil and Gas Activities Act*

40. As the NEB is aware, FortisBC Energy Inc. (“Fortis”) is the natural gas provider in British Columbia.

41. The legal framework and statutory scheme dictate the rights and obligations of the parties including the allocation of pipeline costs and obligations related to the performance of pipeline work.

42. Compliance with the *OGAA* and formerly the *Pipeline Act* and their Regulations is a required precondition to Fortis' operation of its pipelines.

43. Under the *Oil and Gas Activities Act* and its Regulations, the statutory obligations regarding the allocation of the pipeline costs and the performance of the pipeline work are clear.

44. Similarly, under the now repealed *Pipeline Act* and *Pipeline Regulation*, the statutory obligations regarding the allocation of the pipeline costs and the performance of the pipeline work were also equally clear.

(i) The Legal Framework and Statutory Scheme from October 4, 2010 to Present: Fortis' Statutory Obligations Under the *Oil and Gas Activities Act* and the Pipeline Crossings Regulation

45. Section 21 of the *Oil and Gas Activities Act* mandates that Fortis comply with the Act and its Regulations. These Regulations include the provisions with respect to cost allocation set out in s. 3 of the *Pipeline Crossing Regulation 147/2012* and immediately prior to B.C. Reg.. 147/2012 in s. 12 of the *Oil and Gas Activities Act General Regulation*.

46. Section 21 of the *OGAA* reads as follows:

Permit required

21 Subject to section 23, a person **must not** carry out **an oil and gas activity** unless

(a) either

(i) the person holds a permit that gives the person permission to carry out that oil and gas activity, or

(ii) the person is required to carry out that oil and gas activity by an order issued under section 49, **and**

(b) the person carries out the oil and gas activity in compliance with

(i) this Act and the regulations,

(ii) a permit issued to the person, if any, and

(iii) an order issued to the person, if any.

47. An “oil and gas activity” is defined in s.1 of the *OGAA* to include the operation of the Pipeline:

"oil and gas activity" means

- (a) geophysical exploration,
- (b) the exploration for and development of petroleum, natural gas or both,
- (c) the production, gathering, processing, storage or disposal of petroleum, natural gas or both,
- (d) the operation or use of a storage reservoir,
- (e) the construction or operation of a pipeline,
- (f) the construction, use or operation of a prescribed road, and
- (g) the activities prescribed by regulation;

Book of Authorities, Tab 12

Pipeline Crossings: s. 76 of *Oil and Gas Activities Act*

48. Under the current legislation the starting point for understanding the allocation of pipeline costs incurred as a result of construction being undertaken “along, over or under or within a prescribed distance of a pipeline” in highways or elsewhere is s. 76 of the *Oil and Gas Activities Act*.

49. Section 76 of the *Oil and Gas Activities Act*, as amended by the *Energy and Mines Statutes Amendment Act*, 2012, reads as follows (emphasis added):

Pipeline crossings

76 (1) Subject to subsection (3), a person must not

(a) construct

(i) a highway, road or railway,

(ii) an underground communication or power line, or

(iii) any other prescribed work, or

(b) carry out a prescribed activity

along, over or under a pipeline or within a prescribed distance of a pipeline unless

(c) the pipeline permit holder agrees in writing to the construction or the carrying out of the prescribed activity, either specifically or by reference to a class of construction projects or activities,

(d) the commission, by order issued under subsection (2), approves the construction or the carrying out of the prescribed activity, either specifically or by reference to a class of construction projects or activities, or

(e) the construction or prescribed activity is carried out in accordance with the regulations.

(2) The commission, on application by a person referred to in subsection (1), may issue an order for the purposes of subsection (1) (d) and in doing so may impose any conditions that the commission considers necessary to protect the pipeline.

(3) The commission **must approve**

(a) the construction referred to in subsection (1) (a), and

(b) the carrying out of a prescribed activity under subsection (1) (b)

by the government **or a municipality, but** may impose conditions referred to in subsection (2) in the order issued under that subsection.

(4) The commission, for the purposes of deciding whether to issue an order under subsection (1) or impose conditions under subsection (2), may require a pipeline permit holder to submit information regarding the pipeline permit holder's pipeline.

(5) The commission may order a pipeline permit holder whose pipeline is the subject of an order issued under subsection (2) to do one or both of the following:

(a) with the approval of the Lieutenant Governor in Council, relocate the pipeline to facilitate the construction or prescribed activity approved by the order issued under subsection (2);

(b) take the actions specified in the order that the commission considers necessary to protect the pipeline.

(6) In relation to an order of the commission referred to in subsection (5), the Lieutenant Governor in Council

(a) may order that a person other than the pipeline permit holder must pay the costs, or a portion of the costs, incurred in carrying out the commission's order, or

(b) may approve the payment of any of those costs from the consolidated revenue fund.

(7) If there is an inconsistency between an order or an approval made under subsection (6) and a regulation made under section 99 (1)(m.1), the order or approval prevails to the extent of the inconsistency.

Book of Authorities, Tab 12

Pipeline Costs Under the *Oil and Gas Activities Act* and its *Pipeline Crossings Regulation*, B.C. Reg. 147/2012

50. The allocation of pipeline costs is governed by the *Pipeline Crossings Regulation* B.C. Reg. 147/2012.

PIPELINE CROSSINGS REGULATION

Definitions

1. In this regulation:

“**Act**” means the *Oil and Gas Activities Act*;

“**enabled action**” means the construction or activity that may be carried out by an enabled person;

“**enabled person**” means a person who, under Section 76 (1) (c), (d) or (e) of the Act, may do anything referred to in subsection (1) (a) or (b) of that section;

“**ground activity**” means any work, operation or activity that results in a disturbance of the earth, including a mining activity as defined in section 1 of the Mines Act, but not including:

(a) cultivation to a depth of less than 45 cm below the surface of the ground,
or

(b) a disturbance, other than cultivation referred to in paragraph (a), of the earth to a depth of less than 30 cm;

“**specified enabled person**” means an enabled person that is the government, a municipality or the British Columbia Railway Company.

Cost allocation for pipeline crossings

3 (1) Subject to subsections (3) to (5), an enabled person is responsible for all costs incurred by the enabled person in carrying out an enabled action.

(2) Subject to subsections (3) to (6), an enabled person is responsible for any costs incurred by a pipeline permit holder as a result of the enabled person's carrying out of an enabled action, including, without limitation, costs:

- (a) to realign, raise or lower the pipeline,
- (b) to excavate material from around the pipeline, and
- (c) to add casing or other appurtenances that an official considers necessary for the protection of the pipeline.

(3) Subject to an order issued under section 76 (6) of the Act and to subsections (4) to (6) of this section, **a specified enabled person is not responsible for any costs incurred by a pipeline permit holder as a result of the carrying out of an enabled action.**

(4) **The costs referred to in subsection (3) must be shared equally** between the specified enabled person and the pipeline permit holder **if**:

- (a) the specified enabled person is a municipality, and
- (b) the enabled action is the construction of a new highway within the boundaries of that municipality on either an existing right of way or a newly dedicated right of way.

(5) The costs incurred by a pipeline permit holder as the result of the carrying out of an enabled action must be shared equally between the enabled person and the pipeline permit holder if the enabled action is the construction of a new road for a subdivision within a municipality.

(6) The cost allocation rules set out in subsections (2) to (5) may be varied by agreement between the parties.

Book of Authorities, Tab 14

51. Immediately before the making of *Pipeline Crossings Regulation*, B.C. Reg. 147/2012, the allocation of costs for pipeline work was set out in s. 12 of the *Oil and Gas Activities Act General Regulation*, specifically s. 12(4), which reads as follows:

Cost allocation for pipeline crossings

12 (1) In this section:

"**approval holder**" means a person to whom an approval under section 76 (1) (d) of the Act has been given;

"**approved action**" means the construction or activity approved by an order issued under section 76 (1) (d) of the Act;

"**specified approval holder**" means an approval holder that is the government, a municipality, or the British Columbia Railway Company.

(2) Subject to subsections (4) to (6), an approval holder is responsible for all costs incurred by the approval holder in carrying out an approved action.

(3) Subject to subsections (4) to (6), an approval holder is responsible for any costs incurred by a pipeline permit holder as a result of the approval holder's carrying out of an approved action, including, without limitation, costs

(a) to realign, raise or lower the pipeline;

(b) to excavate material from around the pipeline, and

(c) to add casing or other appurtenances that an official considers necessary for the protection of the pipeline.

(4) Subject to an order issued under section 76 (6) of the Act and to subsection (5) of this section, **a specified approval holder is not responsible for any costs incurred by a pipeline permit holder as a result of the carrying out of an approved action.**

(5) **The costs referred to in subsection (4) must be shared equally between the specified approval holder and the pipeline permit holder if**

(a) the specified approval holder is a municipality, and

(b) the approved action is the construction of a new highway within the boundaries of that municipality on either an existing right of way or on a newly dedicated right of way.

(6) The costs incurred by a pipeline permit holder as the result of the carrying out of an approved action must be shared equally between the approval holder and the pipeline permit holder if the approved action is the construction of a new road for a subdivision within a municipality.

Pipeline Work Under the *Oil and Gas Activities Act* and its *Regulations*

52. The requirement to perform necessary pipeline work to accommodate a highway or utility crossing a pipeline is also set out in the Regulations under the *Oil and Gas Activities Act*. These include ss. 3 and 6 of the *Pipeline and Liquefied Natural Gas Facility Regulation*, B.C. Reg. 281/2010.

53. This was confirmed in a decision and order of the Oil and Gas Commission dated February 4, 2011 involving a pipeline crossing application in Surrey:

The Commission notes that Terasen is obligated through regulation to ensure that their pipeline is designed, constructed, operated and maintained in a manner which assures its continued safe and environmentally responsible operation. Such requirements are found within sections 3 and 6 of the *Pipeline and Liquefied Natural Gas Facility Regulations* (PLNGFR). Section 3 of the PLNGFR requires Terasen to adhere to *CSA Z662 Oil and Gas Pipeline Systems* (CSA Z662) in the design, construction, operation and maintenance of their pipeline. Clause 10.7.2 of CSA Z662 requires that Terasen undertake necessary upgrades to accommodate the work proposed by Surrey or to perform a detailed engineering assessment to determine what (if any) upgrades are required for the protection of the pipeline in light of the work proposed by Surrey.

The Commission further notes that section 6 of the PLNGFR requires Terasen to take all reasonable steps so as not to endanger public safety or the environment when a pipeline is being constructed across, along, over or under a highway or public place.

Book of Authorities, Tab 23

Standards

3 (1) Subject to subsection (2), a pipeline permit holder must not design, construct, operate or maintain any of the following except in accordance with CSA Z662:

(a) the pipeline that is the subject of the permit; (b) a pumping station or compressor station associated with the pipeline; (c) an oil storage tank associated with the pipeline.

(2) A pipeline permit holder who constructs a pipeline under agricultural land must ensure the pipeline has a minimum cover of 0.8 metres.

(3) A LNG facility permit holder must not design, construct, operate or maintain a liquefied natural gas facility except in accordance with CSA Z276, unless otherwise specified in this regulation.

Pipeline crossings

6 (1) If a pipeline is being or has been constructed across, along, over or under a public place or the right of way of a highway, road, railway, underground communication or power line or other pipeline, the pipeline permit holder must

(a) take all reasonable steps so as not to endanger public safety or the environment, and (b) restore, to the extent reasonable in the circumstances, any infrastructure damaged or removed during the construction of the pipeline.

(2) A pipeline permit holder must give notice in accordance with subsection (3) before beginning any work of construction, maintenance or repair of a pipeline along, over or under a public place or the right of way of a highway, road, railway, underground communication or power line or other pipeline.

(3) A notice under subsection (2) must

(a) be given to the owner of or authority responsible for the public place, highway, road, railway, underground communication line, power line or pipeline, and (b) subsection to subsection (4), be given at least 5 days before beginning the work, unless the pipeline permit holder and the owner or authority have agreed that the notice is to be provided by another time, in which case the notice must be provided by that other time.

(4) In the case of emergency, work referred to in subsection (1) may be begun immediately after giving notice under subsection (2).

Book of Authorities, Tab 15

Non-Interference with highways

54. It is also noteworthy that s. 35 of the *Oil and Gas Activities Act* stipulates that the pipeline company must not prevent access to or use of a highway.

Obligations in carrying out oil and gas activities

35 (1) In carrying out oil and gas activities and related activities, a permit holder or a person entering land under section 23 must minimize

(a) damage and disturbance to the sites of those activities, and

(b) waste.

(2) A pipeline permit holder must make reasonable efforts to ensure that its oil and gas activities do not prevent access to or use of a highway, road, railway or public place.

(3) A pipeline permit holder, as soon as reasonably possible after constructing a pipeline, must restore, in accordance with the regulations, if any, the land and surface disturbed by the construction.

Book of Authorities, Tab 12

(ii) The Legal Framework and Statutory Scheme Immediately Prior to October 4, 2010: Fortis' Statutory Obligations Under the Now Repealed *Pipeline Act* and the Pipeline Regulation 360/98

Pipeline Costs Under the now repealed *Pipeline Regulation*

55. Subsection 9(c) of the *Pipeline Regulation*, B.C. Reg. 360/98 immediately before its repeal read as follows:

Pipeline crossings

9(c) subject to the approval of the commission with respect to the crossing of a pipeline by a railway or a highway, **in no case will** the Province of British Columbia, a **municipality** within the Province, nor the British Columbia Railway be liable for any costs incurred in the actual installation, removal, realigning, strengthening, casing, raising or lowering of a pipe and appurtenances thereto, except that when a new highway is built within a municipality by the municipality on an existing right of way or on a newly dedicated right of way, the costs must be shared equally by the municipality and the pipeline company; [emphasis added]

Book of Authorities, Tab 16

56. Also, under ss. 8(f) and (g) of the now repealed *Pipeline Regulation*, Fortis was obligated to perform all work in connection with the construction, maintenance, renewal and repair of its pipelines and was responsible for maintaining its pipelines so they did not interfere with the full use and enjoyment of a highway, utility line or other pipeline, all at its cost.

Pipeline and highway crossings

8 The following provisions apply to the crossing by a pipeline of any highway, utility line or other pipeline:

(f) all work in connection with the construction, maintenance, renewal and repair of the pipeline, and the continued supervision of it, must be performed by the pipeline company and, unless the renewal or repair is made necessary by reason of the negligence of others, all costs and expenses of such work must be borne and paid by the pipeline company and no work at any time will be done in such a manner as to unduly obstruct, delay or interfere with the operation of any highway, utility line or other pipeline;

(g) the pipeline company at all times is responsible for maintaining the pipeline in good working order and conditions, so that at no time will there be

(i) damage to,

(ii) impairment of the usefulness or safety of, or

(iii) interference with the full use and enjoyment of

any highway, utility line or other pipeline;

Book of Authorities, Tab 16

Pipeline Work Under the now repealed *Pipeline Regulation*

57. Immediately prior to the repeal of the *Pipeline Regulation*, Fortis was similarly statutorily obligated to perform the pipeline work. This statutory obligation is set out in section 9 of the *Pipeline Regulation*, B.C. Reg. 360/98, in particular subsections 9(b) and 9(g) and is triggered by the leave granted to a municipality under s. 31 of the *Pipeline Act*:

9. The following provisions of the *Pipeline Act* and the *Pipeline Regulation* apply to the crossing of pipelines by any highway, private road, railway, utility line, drain or other company pipeline: ...

(b) no work will at any time be done in such a manner as to unduly obstruct, delay or interfere with the operation of the pipeline, but all work which might disturb the pipe and which necessitates realigning, raising or lowering the pipe or excavating material from over or around it, or the additions of casing or other appurtenances thereto deemed necessary by the pipeline company for the protection of the pipeline being crossed, must be performed by the pipeline company whose line is being crossed,

(g) before any work of construction, maintenance, renewal or repair of any crossing of a pipeline is begun, the authority having control over such crossing or the party making, owning or operating such crossing, as the case may be, must give to the pipeline company at least 48 hours notice in writing, to enable the pipeline company to appoint an inspector to see that the work is performed in such a manner as will in all respects comply with this regulation; and in cases of emergency the pipeline company must be notified immediately;

Book of Authorities, Tab 16

58. Section 31 of the now repealed *Pipeline Act* read as follows:

Crossing pipeline

31 (1) A highway, private road, railway, irrigation ditch, drain, telegraph, telephone or electric power line or a pipeline may, by leave of the commission, be carried across a pipeline, and for that purpose may be constructed on, along or under or across the pipeline.

(2) On application for leave, the commission may grant the application in whole or in part, or on the terms considered appropriate.

Book of Authorities, Tab 13

59. Subsection 9(b) obligated Fortis to perform the pipeline work. This pipeline work had to occur in advance of a municipality entering the lands after providing Fortis 48 hours' notice in accordance with subsection 9(g) and pursuant to the leave granted under s. 31 of the *Pipeline Act*.

60. Moreover, under ss. 8(f) and (g) of the *Pipeline Regulation*, Fortis was further obligated to perform the pipeline work. Fortis was obligated to perform all work in connection with the construction, maintenance, renewal and repair of its pipelines and is responsible for maintaining its pipelines so they do not interfere with the full use and enjoyment of a highway, all at its cost:

Pipeline and highway crossings

8 The following provisions apply to the crossing by a pipeline of any highway, utility line or other pipeline:

(f) all work in connection with the construction, maintenance, renewal and repair of the pipeline, and the continued supervision of it, must be performed by the pipeline company and, unless the renewal or repair is made necessary by reason of the negligence of others, all costs and expenses of such work must be borne and paid by the pipeline company and no work at any time will be done in such a manner as to unduly obstruct, delay or interfere with the operation of any highway, utility line or other pipeline;

(g) the pipeline company at all times is responsible for maintaining the pipeline in good working order and conditions, so that at no time will there be

(i) damage to,

(ii) impairment of the usefulness or safety of, or

(iii) interference with the full use and enjoyment of

any highway, utility line or other pipeline;

Book of Authorities, Tab 16

(iii) In addition to the Legal Framework and Statutory Scheme, the Decisions of the Court and of the Oil and Gas Commission confirmed the obligations of the pipeline company to perform pipeline work

61. Justice Crawford held that the Commission made it clear that Terasen (now renamed FortisBC Energy Inc.) would be obliged to commence the work once it was given 48 hours' notice that the municipality intended to proceed with highway construction:

... Terasen took the position it was not ordered to perform the work or be found liable for the cost of preserving the integrity of the pipelines. In my view that is an incorrect reading. The Commission has made it plain that Terasen would be obliged to commence the work once it was given 48 hours notice that the municipality intended to proceed with the highway construction and that, if given, should trigger the construction. ... [emphasis added]

Reasons for Judgment of the Honourable Mr. Justice Crawford dated April 4, 2008, para. 38
Book of Authorities, Tab 25

62. Justice Crawford also held that the Commission also made it clear that if Terasen failed to abide by the spirit of the decision, the Commission would be obliged to take action:

[27] I should note there is a letter of the Commission's of February 8, 2008, where the Commission made it clear that if Terasen failed to abide by the spirit of the decision, the Commission would then be obliged to take action. If I may say so, the Commission is expecting two large statutory bodies to behave in a sensible and cooperative fashion. [Emphasis added]

Reasons for Judgment of the Honourable Mr. Justice Crawford dated April 4, 2008, para. 27
Book of Authorities, Tab 25

Decision letter of the Commission dated February 8, 2008
Book of Authorities, Tab 32

63. It has been made clear in past decisions made by the Commission in respect of the Fraser Highway Widening Project in Surrey, that Fortis is obligated to perform the pipeline work:

...Section 9 of the Pipeline Regulation requires the work must be performed by the pipeline company whose line is being crossed. The Commission will not be directing the Pipeline Owner to perform the necessary pipeline work; it is an obligation of the Pipeline Owner to ensure the integrity of the pipeline. The Commission will be informing the Pipeline Owner of their obligation in this matter...

Decision letter of the Commission dated January 14, 2008
Book of Authorities, Tab 31

...Section 9 of the Pipeline Regulation requires the company responsible for the pipeline to perform any necessary work to be undertaken to ensure the integrity of the pipeline being crossed: ...

Decision letter of the Commission dated January 14, 2008
Book of Authorities, Tab 31

.....Section 9 of the Pipeline Regulation requires the work must be performed by the pipeline company whose line is being crossed.

The Commission fully expects that the Pipeline Owner will work with the Applicant to ensure that any work related to the pipeline affected by the Applicant's leave to construct is undertaken in a manner that ensures the integrity and safety of the pipeline.

The Commission will establish an inspection program for this project, consistent with the Applicant and Pipeline Owner's construction schedules, and will provide it to both the Applicant and Pipeline Owner.

Further, in the meeting of August 29th, 2007, in which legal and engineering representatives of both the Applicant and Pipeline Owner attended, the Pipeline Owner stated they were prepared to perform the necessary work.

The Commission will not be directing the Pipeline Owner to perform the necessary pipeline work. It is an obligation of the Pipeline Owner to ensure the integrity of the pipeline.

Decision letter of the Commission dated January 14, 2008
Book of Authorities, Tab 31

Regarding the issue of ordering the Pipeline Owner to perform the work; neither the *Pipeline Act* nor the Pipeline Regulation gives the Commission the authority to direct the Pipeline Owner to perform the necessary work. Section 9 of the Pipeline Regulation requires the work must be performed by the pipeline company whose line is being crossed. The Commission will not be directing the Pipeline Owner to perform the necessary pipeline work. It is an obligation of the Pipeline Owner to ensure the integrity of the pipeline.

Decision letter of the Commission dated January 14, 2008
Book of Authorities, Tab 31

It is incumbent upon the Pipeline Owner to ensure the safety, maintenance, and integrity of their pipeline prior, during, and post crossing construction. Given the minimum requirements for the Applicant to notify the Pipeline Owner of the crossing construction schedule as per regulation 9(g) below, the Commission fully expects the Pipeline Owner to ensure the integrity of the pipeline as per all applicable Acts, regulations, standards and codes, at the time of the crossing.

Pipeline Regulation 9 (g):

(g) before any work of construction, maintenance, renewal or repair of any crossing of a pipeline is begun, the authority having control over such crossing or the party making, owning or operating such crossing, as the case may be, must give to the pipeline company at least 48 hours' notice in writing, to enable the pipeline company to appoint an inspector to see that the work is performed in such a manner as will in all respects comply with this regulation; and in cases of emergency the pipeline company must be notified immediately;

The Commission fully expects the Pipeline Owner to perform the necessary pipeline improvements as per the technical information provided to the Applicant

by the Pipeline Owner and subsequently submitted to the Commission September 11th, 2007. It is up to the Applicant and Pipeline Owner to resolve any outstanding issues related to cost allocations.

Decision letter of the Commission dated January 14, 2008
Book of Authorities, Tab 31

64. The Commission reaffirmed that it is Terasen's statutory obligation to perform the pipeline work and that issues of pipeline safety would be monitored by the Commission through the process established by the Commission:

Pursuant to s. 31 of the *Pipeline Act*, the Commission granted leave to the City of Surrey ("Surrey") to cross Terasen's pipe. The Commission takes no position regarding the construction schedule that has been put forward by Surrey in its notice of construction. The timing of that schedule is something that only Surrey can determine for its own purposes. Under section 9 of the Pipeline Regulation, Surrey is obliged to give Terasen 48 hours notice before commencing work that may affect the pipeline; Surrey has done so. Terasen is the only party that has the authority to do any work involving its pipeline.

As Surrey has given notice that it intends to place preload over the pipeline on July 1, 2008, and the Terasen pipeline upgrade has yet to be done, the Commission intends to be on site on July 1, 2008 to monitor the situation. In the event that Surrey's work on this project results in a condition that the Commission determines to be dangerous to the safety of workers or the public, the Commission is obligated to order Terasen's pipeline out of service under section 19 of the Pipeline Regulation. [Emphasis added]

Decision letter of the Commission dated June 27, 2008
Book of Authorities, Tab 34

65. The Commission repeatedly made it clear that if Terasen did not perform the work the pipeline would be ordered out of service:

I am writing further to the judgment of the Honourable Mr. Justice Crawford on April 4, 2008 with respect to the dispute between Terasen Gas Inc. (Terasen) and the City of Surrey (Surrey) over the widening of the Fraser Highway.

Surrey has indicated that it plans to commence activities affecting Terasen's pipeline on July 1, 2008. As you are aware, under section 9 of the Pipeline Regulation and further to the judgment of the court, Surrey is required to give Terasen 48 hours notice before commencing any work affecting the pipeline and

Terasen is required to perform any work that affects the pipeline. It is the Commission's hope that Surrey and Terasen will be able to resolve any issues between them that are affecting this project and that the two parties will work together in order to get the required work completed in accordance with the applicable legislation and Commission orders.

The Commission's primary concern is ensuring the integrity of the pipeline and public safety. Should work on this project result in a condition that the Commission considers is dangerous to the safety of workers or the public, the Commission is obligated to order the pipeline out of service under section 19 of the Pipeline Regulation. Hopefully such an order will not be necessary if Terasen is involved in performing the work relating to the pipeline as required by the Regulation.

We look forward to hearing that the parties have reached a satisfactory agreement with respect to the work required by each of them in relation to this project. [Emphasis added]

Decision letter of the Commission dated May 16, 2008
Book of Authorities, Tab 33

Pursuant to s. 31 of the *Pipeline Act*, the Commission granted leave to the City of Surrey ("Surrey") to cross Terasen's pipe. The Commission takes no position regarding the construction schedule that has been put forward by Surrey in its notice of construction. The timing of that schedule is something that only Surrey can determine for its own purposes. Under section 9 of the Pipeline Regulation, Surrey is obliged to give Terasen 48 hours notice before commencing work that may affect the pipeline; Surrey has done so. Terasen is the only party that has the authority to do any work involving its pipeline.

As Surrey has given notice that it intends to place preload over the pipeline on July 1, 2008, and the Terasen pipeline upgrade has yet to be done, the Commission intends to be on site on July 1, 2008 to monitor the situation. In the event that Surrey's work on this project results in a condition that the Commission determines to be dangerous to the safety of workers or the public, the Commission is obligated to order Terasen's pipeline out of service under section 19 of the Pipeline Regulation. [Emphasis added]

Decision letter of the Commission dated June 27, 2008
Book of Authorities, Tab 34

(iv) Origins of the Cost Allocation Formula

66. The cost allocation formula dates back to the introduction of natural gas in British Columbia in the 1950s. Provisions related to the allocation of pipeline costs and obligations to indemnify were first introduced in 1959 with the enactment of *B.C. Reg. 451/59* which read:

9. The following regulations shall apply to the crossing of pipe-lines by any highway, private road, railway, utility line, drain, or other company pipe-line:

(a) Except as hereunder provided, all work in connection with the construction, maintenance, renewal, and repair of any crossing of a pipe-line by any highway, private road, railway, utility line, drain, or other pipe-line, and the continued supervision of the same, shall be performed by the authority having control over such highway, railway, utility line, drain, or other pipe-line, or the owner of such private road, railway, utility line, drain, or other pipe-line, as the case may be, at its own cost and expense, unless the removal or repair is made necessary by the negligence of others. No work shall at any time be done in such a manner as to unduly obstruct, delay, or interfere with the operation of the pipe-line. Notwithstanding the foregoing, all work which might disturb the pipe and which necessitates realigning, raising, or lowering the pipe or excavating material from over or around it, or the additions of casing or other appurtenances thereto deemed necessary by the pipe-line company for the protection of the pipe-line being crossed, shall be performed by the pipe-line company whose line is being crossed, and, except as provided in subsection (b) hereof, all costs and expenses of such work shall be borne and paid by the authority having control over the highway, railway, utility line, drain, or other pipe-line, or the owner of the private road, railway, utility line, drain, or other pipe-line, as the case may be:

(b) Subject to the approval of the Lieutenant-Governor in Council with respect to the crossing of a pipe-line by a railway or highway, neither the Pacific Great Eastern Railway Company nor the Province shall be liable for any costs incurred in the actual removing, realigning, raising, or lowering of a pipe and appurtenances thereto. The construction of the crossing shall be carried out expeditiously and with all reasonable care and diligence; provided, however, that in no case shall the Pacific Great Eastern Railway Company or the Province be liable for losses incurred through the discontinuance of operation of the pipe-line:

(c) The authority having control over any highway, railway, utility line, drain, or other pipe-line, or the owner of any private road, railway, utility line, drain or other pipe-line crossing a pipe-line, shall at all times maintain such crossing in good working order and condition, so that at no time shall any damage be caused

to the pipe-line, the usefulness or safety thereof be impaired, or the full use and enjoyment thereof be in any way interfered with:

(d) *Before any work of construction, maintenance, renewal, or repair of any crossing of a pipe-line is begun, the authority having control over such crossing or the party making, owning, or operating such crossing, as the case may be, shall give to the pipe-line company at least forty-eight hours' notice in writing, to enable the pipe-line company to appoint an inspector to see that the work is performed in such a manner as shall in all respects comply with these regulations; and in cases of emergency the pipe-line company shall be notified immediately. Except as provided in subsection (e) hereof, the amount of the wages and expenses of such inspector shall be paid by the authority having control over such highway, railway, utility line, drain, or other pipe-line, or the owner of such private road, railway, utility line, drain, or other pipe-line, as the case may be, upon receipt from the pipe-line company of a statement showing in reasonable detail the particulars of such wages and expenses:*

(e) *In no case shall the Pacific Great Eastern Railway Company or the Province be liable for any of the costs or expenses referred to in subsection (d):*

(f) *The pipe-line company shall at all times wholly indemnify the authority having control over the highway, railway, private road, utility line, drain, or other pipe-line, or the owner of the highway, railway, private road, utility line, drain, or other pipe-line, as the case may be, from and against all loss, costs, damage, injury, and expense to which the authority or owner may be put by reason of any damage or injury to persons or property caused by the construction, maintenance, renewal, repair, or operation of the company pipe-line, or any other works herein provided for, as well as against any damage or injury resulting from the imprudence, neglect, or want of skill of the employees or agents of the pipe-line company in connection with the construction, operation, maintenance, renewal, or repair of the pipe-line, or any other works herein provided for, unless the cause of such loss, costs, damage, injury, and expense can be traced elsewhere.*

*B.C. Reg. 451/59
Book of Authorities, Tab 17*

67. In 1969 the allocation formula was amended to expressly provide cost immunity to municipalities:

2. *By striking out subparagraph (b) of Rule 9 and substituting therefor the following:*

“(b) Subject to the approval of the Lieutenant-Governor in Council with respect to the crossing of a pipe-line by a railway or a highway, **in no case shall the Province of British Columbia, a municipality within the Province, nor the Pacific Great Eastern Railway be liable for any costs incurred in the actual installation, removal, realigning, strengthening, casing, raising, or lowering of a pipe and appurtenances thereto, except when a new highway is built within a municipality by the municipality on an existing right-of-way or on a newly dedicated right-of-way, the costs shall be shared equally by the municipality and the pipe-line company.** In the case of a new subdivision road within a municipality, the subdivider and the pipe-line company shall share the cost equally. The construction of the crossing shall be carried out expeditiously and with all reasonable care and diligence; provided, however, that in no case shall the Province of British Columbia or a municipality within the Province or the Pacific Great Eastern Railway Company be liable for losses incurred through the discontinuance of operation of the pipe-line.”

B.C. Reg. 105/69
Book of Authorities, Tab 18

2.7.2 Provincially Regulated Public Utilities under the *Utilities Commission Act*

68. In the case of public utilities governed by the *Utilities Commission Act*, RSBC 1996, c. 473, this legislation similarly requires that terms of access (which include terms related to cost allocation) be negotiated between the parties or be determined by the Utilities Commission, **in advance of any construction.**

69. This is set out in s. 32 of the *Utilities Commission Act*.

Use of municipal thoroughfares

32 (1) This section applies if a public utility

(a) has the right to enter a municipality to place its distribution equipment on, along, across, over or under a public street, lane, square, park, public place, bridge, viaduct, subway or watercourse, and

(b) **cannot come to an agreement with the municipality on the use of the street or other place or on the terms of the use.**

(2) On application and after any inquiry it considers advisable, the commission may, by order, allow the use of the street or other place by the public utility for that purpose and specify the manner and terms of use.

Book of Authorities, Tab 22

70. In a recent decision of the Utilities Commission in the matter of an application by FortisBC Energy Inc. for Approval of Operating Terms Between the District of Coldstream and FortisBC Energy Inc. made pursuant to s. 32 of the *Utilities Commission Act*, the Commission established terms pursuant to which FortisBC Energy Inc. could occupy highways and other public places in the District and held in its Reasons for Decision on page 8, in section 9.0 that FortisBC Energy Inc. was bound by the Cost Allocation formula under the *Oil and Gas Activities Act*:

Oil and Gas Activities Act

Section 8.1 of the Revised FEI Operating Terms deals with requests by FEI when they require Municipal Facilities to be altered, changed or relocated. Section 8.2 deals with requests by the Municipality when they require the same of FEI's Company Facilities. Both Section 8.1 and 8.2 require that the party making the request pay for all of the costs. **The Municipality has noted in several submissions that the requirement in Section 8.2 that the Municipality "...agrees to pay for all of the costs for changes to the affected Company Facilities" forces them to abandon their rights under the Oil and Gas Activities Act (the OAGA Act). The Oil and Gas Activities Act General Regulation provides the opportunity for cost sharing between specific parties when particular conditions are met. In the Commission's view, the Municipality does not abandon its rights under the OAGA Act, given that Section 5.1 of the Revised FEI Operating Terms requires FEI to comply with "all Federal and Provincial laws, regulations and codes."**

BC Utilities Commission Order No. G-113-12 dated August 23, 2012 and
Reasons for Decision dated August 29, 2012
Book of Authorities, Tab 24

71. In that decision the Commission also held that the municipality was not only entitled to the benefit of the cost allocation formula under the *Oil and Gas Activities Act*, **but was also entitled to a 3% operating fee on gross revenues** of FortisBC Energy Inc. **The municipality**

was also entitled to payments in lieu of property taxes which FortisBC Energy Inc. is required to pay under s. 644 of the *Local Government Act*.

Specific Terms in Dispute

The Commission has reviewed submissions from both parties and has included its determination on each of the Specific Terms in Dispute in Appendix A.1.

The Commission approves the Revised FEI Operating Terms, as amended by the Commission and set out in the attached Appendix A.1 and Appendix B.

The Commission considers that a term of twenty years is appropriate for the new Operating Agreement and is effective from July 1, 2012.

FEI and the Municipality are to file with the Commission an endorsed Operating Agreement in accordance with the terms approved by the Order accompanying the Reasons for Decision and consistent with Appendix B.

The terms of the Operating Agreement may be reviewed, upon application by FEI or the Municipality, should the Commission determine that a significant revision is required.

The amendments to the Operating Agreement, as directed by the Commission and set out in the attached Appendix A.1 and Appendix B, are to be incorporated into future operating agreements between FEI and municipalities.

.....

11. Operating Fee

Fee Calculation

FortisBC agrees to pay to the Municipality **a fee of three percent (3%) of the gross revenues (excluding taxes) received by FortisBC for provision and distribution of all gas consumed within the Boundary Limits of the Municipality.** Such amount will not include any amount received by FortisBC for gas supplied or sold for resale.

The Municipality will provide FortisBC with thirty (30) days prior written notice of any boundary expansion so that new customers can be included as a part of the annual payment fee.

FortisBC will be responsible for adding those new customers within the new Municipal boundary upon receipt of such notice from the Municipality and the

revised calculation of the fee will commence effective the date that is the later of the date of actual boundary change or thirty (30) days after the notification under section 11.1.2.

Payment Date and Period

Payments by FortisBC to the Municipality will be made on the first day of March of each year of the Agreement in respect of the amount received by FortisBC during that portion of the term of these terms which is in the immediately preceding calendar year. By way of example only, payment made on November 1, 2012 will be the amount received during the 2011 calendar year.

BCUC Decision or Provincial Legislation

In the event that a decision by the BCUC, other than periodic rate changes as a result of commodity, delivery or margin increases or decreases, or new legislation by the Provincial Government, impacts the operating fee being paid to the Municipality so as to increase it or decrease it by more than 5% annually at the time of the decision or in subsequent years, the parties shall negotiate a new operating fee formula which best reflects the revenue stream received by the Municipality under these terms. For greater certainty, the parties acknowledge that a change to the BCUC's decision that FortisBC shall provide the agency billing and collections service for marketers on a mandatory basis, as set out in the "Business Rules for Commodity Unbundling dated June 5, 2003 as set out in Appendix A to Letter No. L-25-03, may impact the operating fee being paid to the Municipality.

Book of Authorities, Tab 24

72. The requirement for utility companies, including FortisBC Energy Inc., to make payments in lieu of property taxes is set out in s. 644 of the *Local Government Act* which reads:

Taxation of utility company property

644 (1) In this section:

"specified improvement" means an improvement of a utility company that is

(a) a pole line, cable, tower, pole, wire, transformer, equipment, machinery, exchange equipment, main, pipe line or structure, other than a building,

(b) erected or placed in, on or affixed to

(i) land in a municipality, or

- (ii) a building, fixture or other structure in or on land in a municipality, and
- (c) used solely in the municipality or a group of adjoining municipalities by the company for local generation, transmission, distribution, manufacture or transportation of electricity, telephonic communication, water, gas or closed circuit television;

"utility company" means an electric light, electric power, telephone, water, gas or closed circuit television company.

(2) A utility company that is carrying on business in a municipality in which it has specified improvements must be taxed annually by the municipality at the rate of 1% as follows:

(a) for a telephone or closed circuit television company, on the gross rentals received in the 2nd preceding year from its subscribers for telephone or television service located in the municipality, including telephone interexchange tolls for calls between exchanges in the municipality;

(b) for any other utility company, on the amount received in the 2nd preceding year by the company for electric light, electric power, water or gas consumed in the municipality, other than amounts received for

(i) light, power or water supplied for resale,

(ii) gas supplied for the operation of motor vehicles fueled by natural gas, or

(iii) gas supplied to any gas utility company, other than a government corporation as defined in the *Financial Administration Act* or a subsidiary of a government corporation.

(3) Tax under subsection (2) is subject to the same remedies and penalties as taxes under Part 7 [*Municipal Revenue*] of the *Community Charter*.

(4) A utility company liable to tax under subsection (2) must

(a) by October 31 in each year, for the purpose of determining the tax payable in the next year, file with the collector a return of the revenue referred to in that subsection that was received in the preceding year, and

(b) pay the tax imposed under subsection (2) in accordance with Division 10 [*Property Tax Due Dates and Tax Notices*] of Part 7 of the *Community Charter*.

(5) As an exception to subsections (2) and (4), in the case of a company to which this section applies for the first time in the municipality,

(a) the company must pay the tax imposed under subsection (2) in the 2nd year of its operation on the basis of revenue earned in the first year, and

(b) the report of revenue earned in the first year must be filed before May 8 of the 2nd year of operation.

(6) Tax imposed on a utility company under subsection (2) is in place of tax that might otherwise be imposed on the specified improvements under section 197 (1) (a) [municipal property taxes] of the Community Charter, and taxes may not be imposed under that provision on the specified improvements although they may be imposed on those improvements under section 197 (1) (b) [property taxes for other bodies] of the Community Charter.

(7) For certainty, all land and improvements of a utility company in a municipality, other than specified improvements, are subject to tax under section 197 [annual property tax bylaw] of the Community Charter.

Book of Authorities, Tab 5

73. The Utilities Commission in the Coldstream decision also held that the amendments to the Operating Agreement, as directed by the Commission and set out in the attached Appendix A.1 and Appendix B to the decision, are to be incorporated into future operating agreements between FEI (FortisBC Energy Inc.) and municipalities.

The amendments to the Operating Agreement, as directed by the Commission and set out in the attached Appendix A.1 and Appendix B, are to be incorporated into future operating agreements between FEI and municipalities.

Book of Authorities, Tab 24

2.7.3 Federally Regulated Telecommunications Companies under the *Telecommunications Act*

74. In the case of telecommunications under the federal regime, the *Telecommunications Act*, SC 1993, c.38 also requires that terms of access (which include terms related to cost allocation) be negotiated between the parties or be determined by the CRTC **in advance of any construction.**

75. This is set out in s. 43 of the *Telecommunications Act*:

Definition

43. (1) In this section and section 44, “distribution undertaking” has the same meaning as in subsection 2(1) of the Broadcasting Act.

Entry on public property

(2) Subject to subsections (3) and (4) and section 44, a Canadian carrier or distribution undertaking may enter on and break up any highway or other public place for the purpose of constructing, maintaining or operating its transmission lines and may remain there for as long as is necessary for that purpose, but shall not unduly interfere with the public use and enjoyment of the highway or other public place.

Consent of municipality

(3) **No Canadian carrier or distribution undertaking shall construct a transmission line on, over, under or along a highway or other public place without the consent of the municipality or other public authority having jurisdiction over the highway or other public place.**

Application by carrier

(4) **Where a Canadian carrier or distribution undertaking cannot, on terms acceptable to it, obtain the consent of the municipality or other public authority to construct a transmission line, the carrier or distribution undertaking may apply to the Commission for permission to construct it and the Commission may, having due regard to the use and enjoyment of the highway or other public place by others, grant the permission subject to any conditions that the Commission determines.**

Applications by municipalities and other authorities

44. On application by a municipality or other public authority, the Commission may

(a) order a Canadian carrier or distribution undertaking, subject to any conditions that the Commission determines, to bury or alter the route of any transmission line situated or proposed to be situated within the jurisdiction of the municipality or public authority; or

(b) prohibit the construction, maintenance or operation by a Canadian carrier or distribution undertaking of any such transmission line except as directed by the Commission.

Book of Authorities, Tab 20

76. In a recent case of *MTS Allstream v. Vancouver*, Telecom Decision CRTC 2009-50 involving the determination of terms pursuant to s. 43 of the *Telecommunications Act*, the CRTC held on the issue of cost allocations that in addition to other costs, Vancouver was entitled to workaround costs and relocation costs on a sliding scale.

Relocation costs

74. The City proposed a sliding scale for its share of the relocation costs for a City-initiated requirement to relocate MTS Allstream facility. The City noted that it is unusual for it to request facilities to be relocated within the first five years of construction, as it attempts to plan ahead of the City's current three-year capital plan cycle.

75. MTS Allstream proposed a revised sliding scale, noting that the City typically works within a five-year planning horizon, and submitted that its proposed schedule provided a strong incentive for the City to plan effectively within that horizon. MTS Allstream requested that, consistent with Telecom Decision [2007-100](#), relocations for beautification, aesthetics, or other similar purposes should be borne 100 percent by the City.

76. The City opposed this revision to the sliding scale, noting that its capital planning cycle is three years. The City also disagreed with MTS Allstream's request that relocation costs required for beautification, aesthetics, or other similar reasons be borne by the City. The City requested that if MTS Allstream's sliding scale proposal is accepted by the Commission, depreciation, salvage, and betterment costs should be deducted from the costs charged to the City.

77. The Commission notes that both the City and MTS Allstream agreed that a sliding scale for the sharing of relocation costs is appropriate, but they did not agree on what this sliding scale should be. The Commission considers that there is some merit in MTS Allstream's cost sharing proposal as it provides a strong incentive for the City to plan effectively. However, the Commission notes the City's submission that it is required by provincial legislation to follow a three-year capital planning cycle. The Commission also notes the City's comment that it is unusual for it to require relocations within the first five years of facility installation. The Commission is of the view that within the three-year capital planning period the City should generally be aware of which streets will be

subject to relocation activities. The Commission, therefore, considers it appropriate for the City to bear 100 percent of any relocation costs incurred within the first three years of a facility installation.

78. The Commission considers that past the initial three-year planning period, there may be increasing uncertainty as to the City's future project requirements. At the same time it will take a period of time for MTS Allstream to recoup its investment in the installed transmission facilities. The Commission is of the view that it would be reasonable for MTS Allstream to be able to recover its investment within a 10-year time frame. The Commission, therefore, considers it appropriate to use a sliding scale that ends after 10 years from the time of the facility installation.

79. The Commission is also of the view that costs associated with relocation for beautification, aesthetics, or other similar purposes should be the sole responsibility of the City as it is within the City's discretion to conduct projects of this nature.

80. The Commission considers that depreciation, salvage, and betterment costs are part of the transmission facilities investment made by MTS Allstream and should, therefore, be included in the relocation costs.

81. **Accordingly, the Commission determines that in the case of a City-initiated requirement to relocate an MTS Allstream facility, the relocation costs must include the depreciation, betterment, and salvage costs and that the schedule to be used for MTS Allstream facilities in Vancouver, which does not apply to relocations for beautification, aesthetics, or other similar purposes, is as follows:**

| Year | Percent of Cost Borne by the City |
|------|-----------------------------------|
| 1 | 100 |
| 2 | 100 |
| 3 | 100 |
| 4 | 90 |
| 5 | 80 |
| 6 | 65 |
| 7 | 50 |
| 8 | 35 |
| 9 | 20 |
| 10 | 10 |
| 11 | 0 |

77. It is also noteworthy that on the issue of indemnification, recognizing that it would not be appropriate to expose municipalities to liability for consequential losses or damages, the CRTC, a federal tribunal having similar powers as the NEB, has limited municipal liability in the context of utilities crossing highways. In *Telecom Decision CRTC 2013-618*, the Canadian Radio and Television Commission adopted a Model Municipal Access Agreement which included terms which were formed by a consensus of stakeholders and also terms for which no consensus was reached. The CRTC approved the consensus terms for the Model Agreement. From this endeavour a consensus clause dealing with the liability of both host and occupier was approved:

*11.3. No liability, both Parties. Notwithstanding anything else in this Agreement, **neither Party shall be liable to any person in any way for special, incidental, indirect, consequential, exemplary or punitive damages, including damages for pure economic loss or for failure to realize expected profits, howsoever caused or contributed to, in connection with this Agreement and the performance or non-performance of its obligations hereunder.***

Book of Authorities, Tab 35

2.7.4 Reimbursement for costs incurred by the Province and municipalities under the *Railway Safety Act*, RSC 1985, c. 32 (4th Supp.)

Amendments to Railway Safety Act – Cost Recovery

78. On the issue of cost recovery, it is also noteworthy that the *Railway Safety Act* was recently amended to provide relief to the province and municipalities in respect of costs incurred in responding to fire which was the result of a railway company's operations.

POWERS OF AGENCY — FIRE

Application to Agency

23.(1) If a province or municipality is of the opinion that a fire to which it responded was the result of a railway company's railway operations, it may apply to the Agency to have **the costs that it incurred in responding to the fire reimbursed by the railway company.**

Form of application

(2) The application shall be in the form prescribed by regulations made under subsection (5), and it shall be accompanied by the information prescribed by those regulations.

Further information

(3) The Agency may, by notice sent to the province, municipality or railway company, require the province, municipality or railway company to provide it with any further information that it specifies relating to the application, within the period specified in the notice.

Agency's determination

(4) If the Agency determines that the fire was the result of the railway company's railway operations, it shall make an order directing the railway company to reimburse the province or municipality the costs that the Agency determines were reasonably incurred in responding to the fire.

Regulations

(5) The Agency may, with the Governor in Council's approval, make regulations

- (a) prescribing the form of the application referred to in this section; and
- (b) prescribing the information that must accompany that application.

Interpretation

(6) Despite this section, this Act is not deemed to be administered in whole or in part by the Agency for the purpose of section 37 of the [Canada Transportation Act](#).

Book of Authorities, Tab 19

79. While not specific or limited to infrastructure or relocation costs, this recent amendment highlights the need to deal with the allocation and recovery of costs in advance of construction.

2.7.5 Leaving the onus on municipalities to seek an allocation of costs by making repeated applications under s. 112 of the *National Energy Board Act* is unfair and allows Kinder Morgan/Trans Mountain to leverage its position knowing that the Province and municipalities face delay costs and delay claims and project timing and funding deadlines

80. In the absence of binding provisions related to costs, municipalities and other highway authorities such as the Province will have no option but to proceed with applications for leave under s. 112 of the *National Energy Board Act* which inevitably will lead to project delays and costs to municipalities and the Province.

81. Imposing terms and conditions will ensure certainty and avoid litigation and will avoid municipalities and highway authorities being held to ransom when federal and/or provincial project funding is time sensitive and is often tied to stringent time deadlines.

82. In the absence of cost allocation provisions, Kinder Morgan/Trans Mountain has been able to leverage its position with municipalities requiring them to pay 100% of all costs and make other unreasonable demands.

83. Surrey has direct first-hand experience in this and has filed evidence of this in the form of the Affidavit of Kenneth D. Zondervan filed as Exhibits C76-9-23 and C76-9-24 in this proceeding.

20. Unless Surrey agrees to pay all pipeline related costs that would be incurred to accommodate a highway infrastructure project, then Surrey projects would be delayed and Surrey would not be able to proceed with its projects without incurring costs of litigation and without facing potential delay claims by third party contractors.

21. In the case of significant highway infrastructure projects, it is not unusual for delay claims resulting from the delay of third party utility works being altered and/or relocated, to be quantified in the millions of dollars.

(Exhibits C76-9-23 [\(A4L9U6\)](#) and C76-9-24 [\(A4L9U7\)](#) - Affidavit of Kenneth D. Zondervan sworn May 26, 2015)

The 156 Street Underpass of Highway 1 Project

9. The 156 Street Underpass of Highway 1 Project required and involved lowering of Kinder Morgan Canada Inc.'s existing Trans Mountain pipeline which crosses 156 Street in Surrey and which in these proceedings before the National Energy Board has been referred to as the existing Trans Mountain Pipeline or "TMP".

10. The existing Trans Mountain pipeline crosses 156th Street on the north side of Highway No. 1. Attached as Exhibit "1" to this my Affidavit is a copy of a map which shows the location of the existing Trans Mountain pipeline crossing of 156th Street in Surrey.

11. Construction of the 156th Street underpass of Highway No. 1 required that the existing Trans Mountain pipeline be lowered across 156 Street to allow 156 Street to pass under Highway No. 1.

12. **Unless Surrey agreed to the terms of Kinder Morgan Canada Inc.'s Facility Crossing Agreement, Kinder Morgan Canada Inc. would not undertake the required pipeline lowering to accommodate the 156 Street Underpass of Highway 1 Project.**

13. **Kinder Morgan Canada Inc. would only agree to lower the affected portion of the existing Trans Mountain pipeline if Surrey agreed to pay all associated costs as set out in the Facility Crossing Agreement.** Attached as Exhibit "2" to this my Affidavit is a copy of the Facility Crossing Agreement dated April 02, 2007 that Kinder Morgan Canada Inc. required the City of Surrey to sign before Surrey proceeded with the 156 Street Underpass of Highway 1 Project.

14. **The actual costs that Kinder Morgan Canada Inc. invoiced Surrey and that Surrey paid totaled \$1,767,682.59.** Attached collectively as Exhibit "3" to this my Affidavit are copies of the Kinder Morgan Canada Inc. invoices that were paid by the City of Surrey.

The Trans Mountain Support Structure Reinforcement Project

15. The existing Trans Mountain pipeline crossing under King Road, near 139th Street in Surrey is a suspended-form timber piled support structure. The structure was constructed by the City of Surrey when King Road was established, to minimize pipe settlement, as there was an existing Metro Vancouver concrete sanitary sewer siphon located below the existing Trans Mountain pipeline and adjacent to King Road. Attached collectively as Exhibit "4" to this my Affidavit are copies of extracts from a report prepared by Associated Engineering Ltd. in August 2012 which identify the structure.

16. In or about 2011, significant settlement was observed of the existing Trans Mountain pipeline resulting from the failure of several support structure brackets. **Kinder Morgan Canada Inc. required that Surrey pay all costs associated with reinstating the existing support structure totaling approximately \$387,120.42. These additional costs could have been avoided if the existing Trans Mountain pipeline had been designed to accommodate a future road above it and future utilities in proximity to it.** Attached collectively as Exhibit "5" to this my

Affidavit are invoices related to reinstating the existing Trans Mountain support structure that were paid by the City of Surrey.

The South Fraser Perimeter Road Project

17. During design discussions of the South Fraser Perimeter Road in Surrey, the City of Surrey was advised by the design engineering consultant that the existing Trans Mountain pipeline crossing of the South Fraser Perimeter Road required the construction of a bridge structure over the pipeline and approximately an additional one million dollars (\$1,000,000.00) of lightweight fill and associated design costs to avoid settlement on the pipe.

(Exhibits C76-9-23 [\(A4L9U6\)](#) and C76-9-24 [\(A4L9U7\)](#) - Affidavit of Kenneth D. Zondervan sworn May 26, 2015)

84. This “leveraging” and opportunistic behaviour has also been the subject matter of litigation in the Provincial context. In the case of *FortisBC Energy Inc. v. City of Surrey et al*, 2013 B.C.S.C. 2382, Justice Pearlman in finding that FortisBC Energy Inc. had terminated the 1956 Trunk Line Agreement related to the transmission of natural gas found that FortisBC Energy Inc. had fundamentally breached and repudiated the agreement by its conduct. **In making this decision, Justice Pearlman relied on evidence that FortisBC Energy Inc. had been leveraging its position to make Surrey and the Ministry of Transportation pay 100% of its pipeline relocation costs:**

[332] On July 24, 2008, officials of Terasen Gas met to review the plaintiff’s policy respecting highway crossings of its transmission pipelines. Mr. Chris Coady, Terasen Gas’ manager of realty services, made a power point presentation which summarized the problems Terasen Gas sought to address, the interests it sought to protect, and possible strategies.

[333] Under the heading “Problem Definition” at pages 9 and 10, Mr. Coady noted that:

- Rights contained within Terasen SRW are protective and integral to ongoing operations requirements.
- Road authorities “require” that all existing registered interests be extinguished on creation/improvement of roads.
- How can Terasen protect operational flexibility if SRW is extinguished?

- By virtue of LTO registered SRW, Terasen can reduce/eliminate cost responsibility for pipeline [relocation / reinstatement] when road authority proceeds under Expropriation Act.
- By virtue of Pipeline Regulation 9 (c), province and municipalities are not required to pay pipeline re/re costs.
- Terasen says Pipeline Regs *ultra vires*, road authorities disagree.
- Recipe for litigation.

[334] At page 11, Mr. Coady described the plaintiff's "Official Position" as:

[335]

- Terasen requires road authorities to pay 100% of relocation/reinstatement costs
- Terasen will not extinguish its Statutory Rights-of-Way
- ... unless compensated

[336] The "Decision Drivers" identified by Mr. Coady included the plaintiff's legal position, future operating requirements, ratepayer protection, shareholder protection, the strength of the road authorities' position and defensibility.

[337] The plaintiff's legal position was described as follows:

- Pipeline Regulations (9 c) are not applicable - *ultra vires*.
- SRW interests mean certain cost protection is available should subject land be expropriated.
- Question of equal expropriation powers.
- Terasen has been unsuccessful in persuading road authorities of compelling nature of argument
- Strength of position can only be determined in court

[338] **At page 20, Mr. Coady discussed the plaintiff's "Leverage":**

- **Terasen can withhold issuing construction permit unless road authority agrees to 100% cost responsibility and creation of utility lots.**
- **Risk of delaying high profile politically driven improvement projects**
- Stand the heat?

[339] Mr. Coady discussed "Timing" at page 23:

- **We have MoTH attention by virtue of Gateway and Highway 15**
- **We have Surrey's attention by virtue of Fraser Highway (and some others)**
- **Issue has been out there for 15 years**

[340] In cross-examination, Mr. Coady agreed that “shareholder protection”, one of the “Decision Drivers” that he had identified, meant maximizing profits, and that “ratepayer protection” meant minimizing the impact on the plaintiff’s customers.

[341] Mr. Coady also gave this evidence in cross-examination:

324 Q Now, Mr. Coady, I would like you to turn to page 20. “Leverage”, do you see that, “Leverage”.

A Yes sir.

325 Q And it reads “Risk delaying” -- I’m sorry: Terasen can withhold issuing construction permit unless road authority agrees to 100 percent cost responsibility and creation of utility lots. That’s exactly what happened here, isn’t it?

A That’s where -- yes, yep.

326 Q And not only that, Terasen risked delaying a high profile politically driven improvement project, correct?

A Yes, sir.

327 Q And that project would be City of Surrey Fraser Highway widening project?

A This document does not speak specifically to Fraser Highway. At the same time we had issues with the Ministry of Transportation in other municipalities.

328 Q Let’s explore that a little bit, shall we?

A Sure.

329 Q My first question is could Terasen stand the heat?

A We had until now.

330 Q Sure, of course. And let’s go to page 23, “Timing”. It says “We have Surrey’s attention by virtue of Fraser Highway and some others.” Well, you certainly did, didn’t you?

A Yes, sir.

MR. URQUHART: I’m sorry, yes.

MR. CAPUCCINELLO:

331 Q And not only Surrey’s attention, you also had Ministry of Transportation attention as well with the Highway 15 project?

A And Gateway.

332 Q And Gateway. So it is essentially withhold construction and wait until people cave in, it’s leverage, isn’t it? Isn’t this what this is all about?

A Sure.

[342] **I find that Terasen Gas was prepared to delay performance of the work required to protect the Pipeline and facilitate its crossing by the defendant's highway project in order to exert "leverage" or pressure on Surrey to either create the utility lot sought by the plaintiff or pay the full cost of the work in exchange for the plaintiff's consent to the dedication of the SRW land as road.**

Findings on Fundamental Breach

357 A remarkable feature of this case is that before Ms. Fung produced a copy of the TLA on June 14, 2007, there was no history of performance of that contract by either Terasen Gas or Surrey. When Mr. Sandstrom informed Surrey on September 6, 2005 that Terasen Gas would not begin work until the plaintiff had the defendant's binding assurance that it would pay the whole of the plaintiff's costs for the Pipeline upgrade work, he did so without reference to the TLA. Mr. Sandstrom was not aware of the existence of the TLA until on or about June 14, 2007. Again, when Terasen Gas responded to Surrey's request of December 21, 2005 for the plaintiff's consent to the dedication of road over the SRW on the Angus Land by asserting that it would not consent until Surrey made a commitment to pay for all of the Pipeline upgrade work, it did so without referring to the TLA.

358 Until June 14 2007, Terasen Gas asserted its corporate policy without reference to the TLA, and without any suggestion that the TLA applied to the Pipeline and the sharing of costs for the Pipeline upgrade work necessary to accommodate Surrey's Fraser Highway expansion project.

359 Before and after June 14, 2007, Terasen Gas has informed Surrey and others that it opposed the dedication of land charged with its rights of way because it wished to preserve assets that have benefitted its shareholders and ratepayers. The plaintiff has also declared that it wished to retain the right to control activities on and around the Pipeline in order to maintain the integrity of its operations and to protect public safety. However, the plaintiff's concerns respecting the preservation of its assets and the protection of public safety were not immutable. Terasen Gas was prepared to consent to the extinguishment of its SRW if it received full compensation for the cost of the work required to facilitate the crossing of the Pipeline.

360 **The plaintiff's corporate policy of withholding its consent to the dedication of public roads or highways over its SRWs, of demanding the creation of fee simple utility lots to protect the rights granted under its SRWs, and of refusing to extinguish its SRW on the Angus Land unless Surrey paid 100% of the cost of the Pipeline upgrade work is inconsistent with the plaintiff's obligation under s. 4 of the TLA to not unreasonably**

withhold its consent to the dedication of private property as public property for the opening up of streets, roads or highways.

361 Moreover, as Mr. Coady acknowledged in cross-examination, the plaintiff was also prepared to withhold its consent to the dedication of road over its SRW as a means of exerting leverage through delay of major public projects, including the Fraser Highway widening project. By invoking its corporate policy, and by withholding its consent to the dedication of road over its SRW in attempt to compel Surrey to accede to its position of the City either create a fee simple utility lot or bear all of the costs of the Pipeline upgrade, Terasen Gas has demonstrated a clear and unequivocal intention not to be bound by the TLA.

362 The plaintiff's refusal to perform the upgrade work until Surrey accepted its position did not constitute a reasonable withholding of consent to road dedication. The commercial value of the TLA to Surrey lay in having the Pipeline upgrade work completed without delay so as to permit the timely construction of the Fraser Highway widening project. By refusing to consent to the dedication of the SRW lands as highway unless Surrey either agreed to create a fee simple lot over the portion of the highway crossing the Pipeline, or paid all of the cost of the Pipeline upgrade work, the plaintiff deprived Surrey of substantially the whole of the commercial benefit of the TLA and committed a breach which went to the root of that contract.

363 I reach this conclusion taking into account the evidence that factors other than the failure of Terasen Gas to perform the Pipeline upgrade work until July 2008 also contributed to delay of the Fraser Highway expansion project. For example, in cross-examination Mr. Zondervan acknowledged that in April 2007 Surrey's engineering department anticipated that final completion of the Fraser Highway expansion between 168th Street and the 17900 block would extend into 2010, about three years later than originally anticipated, and that the delay was largely attributable to poor soil conditions that resulted in the need to slow down the pre-loading of soils along the highway right of way.

364 Poor soil conditions were a factor beyond the ambit of the TLA. The intended benefit of the TLA for Surrey was that Terasen Gas would perform the Pipeline upgrade work within a reasonable time of Surrey's request that it do so and that the plaintiff would not unreasonably withhold its consent to the dedication of the SRW land as highway. In cross-examination, Mr. Jamer acknowledged that he knew in early August 2006 that Surrey regarded the resolution of the parties' differences concerning payment for and performance of the Pipeline upgrade work as urgent. Mr. Jamer also understood that there were potentially adverse impacts for Surrey if the project was delayed. Similarly, Ms. Marie-France Leroi, one of the in-house solicitors advising Terasen Gas, admitted in cross-examination that she was aware as early as September 6, 2005 that if the plaintiff refused to move its Pipeline it might mean delays for Surrey. In all of the

circumstances of this case, the delay by Terasen Gas in performing the Pipeline upgrade work until July 2008 was a fundamental breach of its obligation under paragraph 4 to carry out the work with "reasonable speed" when requested to do so by Surrey.

365 I find that Surrey accepted the repudiation by Terasen Gas of the TLA when on August 7, 2007 the City delivered its statement of claim and application to the OGC for permission to cross the Pipeline, and for an order requiring the plaintiff to perform the Pipeline upgrade work. Surrey confirmed its acceptance of the plaintiff's repudiation of the TLA on October 3, 2007, when it applied for a determination by the OGC that Terasen Gas was responsible for the costs of all of the work required for the crossing of the Pipeline by the Fraser Highway expansion project. When Surrey accepted the plaintiff's repudiation of the TLA, that agreement was terminated and ceased to bind the parties.

366 Accordingly, it is necessary to determine whether, upon Surrey's acceptance of the repudiation by Terasen Gas of the TLA, s. 9(c) of the *Pipeline Regulation* applied to the allocation of costs for the work required to facilitate the crossing of the Pipeline by the Fraser Highway expansion project.

Book of Authorities, Tab 27

85. Unless the NEB includes terms and conditions establishing a cost allocation formula in any certificate it may grant, municipalities and the Province will be victims of Kinder Morgan's/Trans Mountain's continuing efforts to leverage its position and force municipalities and the Province to pay 100% of its relocation and pipeline work costs and to comply with Kinder Morgan's/Trans Mountain's other unreasonable demands, including the demands for "Lot "X"s" or "Utility lots" described below which frustrate municipal and Provincial efforts to widen or establish highways.

2.8 Without conditions being imposed, municipal and Provincial efforts to widen or establish highways will be frustrated by the proposed pipeline occupying or crossing highways

86. The current crossing provisions are deficient in that they do not provide the necessary authority to compel Trans Mountain to extinguish statutory rights of way it has acquired to allow for highways to be widened or established.

87. Under legislation in British Columbia there is no indefeasible title to highway, park or public square. This is set out in s. 107 of the *Land Title Act*, RSBC 1996, c 250.

88. To create highway, indefeasible title is extinguished through the registration and filing of a s. 107 Road Dedication Plan or through the filing and registration of a subdivision plan which dedicates certain areas as highway. In order to be able to accomplish this, any person having an interest in the land to be dedicated as highway must consent to the dedication. Absent consent, highway can only be created through expropriation which in the case of federal undertakings such as the proposed and existing pipelines is arguably unavailable.

Dedication and vesting

107 (1) The deposit of a subdivision, reference or explanatory plan showing a portion of the land

(a) **as a highway, park or public square**, that is not designated on the plan to be of a private nature, or

(b) as covered by water and as lying immediately adjacent to a lake, river, stream or other body of water not within the land covered by the plan, and designated on the plan to be returned to the government, operates

(c) **as an immediate and conclusive dedication by the owner to the public of that portion of land shown as a highway, park or public square**, or to be returned to the government, for the purpose indicated on or to be inferred from the words or markings on the plan,

(d) to vest in the Crown in right of the Province, subject to any other enactment, title to the highway, park or public square, or to the portion to be returned to the government, except any of the following that are registered in the name of a person other than the owner:

(i) minerals and placer minerals as defined in the *Mineral Tenure Act*;

(ii) coal;

(iii) petroleum as defined in the *Petroleum and Natural Gas Act*;

(iv) gas or gases, and

(e) to extinguish the owner's common law property, if any, in the portion of land referred to in subsection (1) (a) or (b).

(2) If the Crown in right of Canada, in trust for a band, as defined in the *Indian Act* (Canada), is the owner of the subdivided land, the Lieutenant Governor in Council may limit, in whole or in part, and subject to the terms and conditions the Lieutenant Governor in Council considers necessary, the operation of subsection (1).

(3) An indefeasible title must not be registered for a highway, park or public square dedicated and vested under this section.

(4) A public street, road, square, lane, bridge or other highway that vests in the City of New Westminster under section 204 of the *New Westminster Act, 1888* vests subject to the exceptions referred to in subsection (1) (d) of this section.

Book of Authorities, Tab 4

89. Without the ability to expropriate and without a provision similar to s. 2(1.3) of the *Expropriation Act*, RSBC 1996, c 125 of British Columbia which provides that the cost allocation formula applies despite any provision in an enactment to the contrary, municipalities and the Province will be unable to extinguish Trans Mountain's statutory rights of way or the registered interests of mortgagees of Trans Mountain's statutory rights of way.

Application

2 (1) If an expropriating authority proposes to expropriate land, this Act applies to the expropriation, and, if there is an inconsistency between any of the provisions of this Act and any other enactment respecting the expropriation, the provisions of this Act apply.

(1.1) Despite subsection (1), if there is an inconsistency between any of the provisions of this Act and the Nisga'a Final Agreement, as defined in the Nisga'a Final Agreement Act, the Nisga'a Final Agreement applies.

(1.2) Despite subsection (1), if there is an inconsistency between a provision of this Act and a provision of a final agreement, the provision of the final agreement applies.

(1.3) Despite subsection (1), if there is an inconsistency between a provision of this Act and a provision of either a regulation under section 99 (1) (m.1) of the Oil and Gas Activities Act or an order under section 76 (6) of that Act, the provision of the regulation or order prevails.

Book of Authorities, Tab 3

90. Referring to the expropriation of pipeline statutory rights of way in the Provincial context, mortgagees of FortisBC Energy Inc.'s statutory rights of way were part of the expropriation proceedings and their mortgage interests were extinguished. These mortgagees

included Inland Energy Corp. and CIBC Mellon Trust Company. This is clear from exhibits 33 to 37 (being Notices of Expropriation and Vesting Notices filed by the City of Surrey and the Ministry of Transportation) to the Affidavits of Kenneth D. Zondervan sworn May 26, 2015 and December 1, 2015 and filed by the City of Surrey as Exhibits C76-9- 23, C76-9-24 and C76-16-2 in this proceeding.

91. As the NEB is aware, s. 114 of the *National Energy Board Act* allows a pipeline company to mortgage its statutory right of way interest.

Assets of company subject to executions, etc.

114. (1) It is hereby declared that nothing in this Act restricts or prohibits any of the following transactions:

- (a) the sale under execution of any property of a company; or
- (b) **the creation of any lien, mortgage, hypothec, charge or other security on the property of the company, or of any prior claim or right of retention within the meaning of the *Civil Code of Québec* or any other statute of the Province of Quebec with respect to property of the company;**
- (c) the sale, elsewhere than in the Province of Quebec, under an order of a court of any property of the company to enforce or realize on any lien, mortgage, charge or other security on the property of the company;
- (d) the sale, in the Province of Quebec, under an order of a court or by judicial authority, of any property of the company to enforce or realize on any hypothec, charge or other security on the property of the company; and
- (e) the exercise of remedies for the enforcement and realization of any prior claim referred to in paragraph (b) or the exercise of any right of retention referred to in that paragraph.

Application of provincial law

(2) It is hereby declared **that a transaction mentioned in subsection (1) in respect of any property of a company is subject to the same laws to which it would be subject if the work and undertaking of the company were a local work or undertaking in the province in which that property is situated.**

Book of Authorities, Tab 6

92. Section 111.4 (1)(b) also allows a pipeline company to mortgage or create a security interest in that portion of its pipeline that crosses or occupies highway.

111.4 (1) Despite this Act or any other general or Special Act or law to the contrary, if any section or part of a pipeline passes on, over, along or under a utility, as defined in subsection 108(6)-or passes in, on, over or under a navigable water and that section or part of the pipeline has been affixed to any real property or immovable in any of the circumstances referred to in subsection (2),

(a) that section or part of the pipeline remains subject to the rights of the company and remains the property of the company as fully as it was before being so affixed and does not become part of the real property or immovable of any person other than the company unless otherwise agreed by the company in writing and unless notice of the agreement in writing has been filed with the Secretary; and

(b) subject to the provisions of this Act, the company may create a lien, mortgage, charge or other security, or the company may constitute a hypothec, on that section or part of the pipeline.

(2) The following are the circumstances for the purposes of subsection (1):

(a) in the case of the pipeline:

(i) leave has been obtained under subsection 108(2) or (5) in respect of the pipeline,

(ii) the certificate issued, or the order made under section 58, in respect of the pipeline contains a term or condition relating to the utility,

(iii) the pipeline has been constructed in circumstances specified in an order or regulation made under subsection 108(4),

(iv) a certificate has been issued, or an order has been made under section 58, in respect of the pipeline and the pipeline passes in, on, over or under a navigable water, and

(v) leave has been obtained under section 108 in respect of the pipeline at any time before the coming into force of this subsection, as that section read from time to time before the coming into force of this subsection; and

(b) in the case of the power line to which this section applies by reason of section 58.27,

- (i) leave has been obtained under subsection 58.28(2) or (5) in respect of the power line,
- (ii) the permit referred to in section 58.11, or the certificate, issued in respect of the power line contains a term or condition relating to that utility,
- (iii) the power line has been constructed in circumstances specified in an order or regulation made under subsection 58.28(4),
- (iv) a permit referred to in section 58.11, or a certificate, has been issued in respect of the power line and the power line passes in, on, over or under a navigable water, and
- (v) leave has been obtained under section 108 in respect of the power line at any time before the coming into force of this subsection, as that section read from time to time before the coming into force of this subsection.

Book of Authorities, Tab 6

93. It is only through imposing terms and conditions in a certificate pursuant to s. 108 of the *National Energy Board Act* and/or s. 52 of the Act stipulating that statutory rights of way interests in favour of Trans Mountain must be extinguished for the purposes of highway dedication will third party mortgagees have notice of and be bound by said terms and conditions. In effect, terms and conditions in a certificate approving the crossing or occupation of highways, serve as notice to any mortgagee that subsequently takes a security interest in Trans Mountain's statutory right of way or pipeline. Having a condition(s) imposed in the certificate issued under s. 108 and/or s. 52 of the *National Energy Board Act* would ensure that Trans Mountain and the mortgagees do not prevent the dedication of those lands required for highway when a portion of the statutory right of way (over which a mortgagee has a mortgage) must be extinguished for highway purposes.

94. Under the Provincial scheme in British Columbia the legislation clearly contemplates municipalities and the Province expropriating from pipeline companies. In fact, in s. 2(1.3) of the *Expropriation Act* it expressly provides the cost allocation formula provisions in the *Pipeline Crossings Regulation* apply despite the provisions of the *Expropriation Act* which would otherwise require the expropriating authority under s. 34 of the *Expropriation Act* to pay reasonable costs, expenses and financial losses that are directly attributable to the disturbance

caused to the owner (“owner” under s. 1 of the Act includes mortgagees having a security interest in a statutory right of way) by the expropriation.

Application

2 (1) *If an expropriating authority proposes to expropriate land, this Act applies to the expropriation, and, if there is an inconsistency between any of the provisions of this Act and any other enactment respecting the expropriation, the provisions of this Act apply.*

(1.1) *Despite subsection (1), if there is an inconsistency between any of the provisions of this Act and the Nisga'a Final Agreement, as defined in the Nisga'a Final Agreement Act, the Nisga'a Final Agreement applies.*

(1.2) *Despite subsection (1), if there is an inconsistency between a provision of this Act and a provision of a final agreement, the provision of the final agreement applies.*

(1.3) *Despite subsection (1), if there is an inconsistency between a provision of this Act and a provision of either a regulation under section 99 (1) (m.1) of the Oil and Gas Activities Act or an order under section 76 (6) of that Act, the provision of the regulation or order prevails.*

Disturbance damages generally

34 (1) *An **owner** whose land is expropriated is entitled to disturbance damages consisting of the following:*

(a) **reasonable costs, expenses and financial losses that are directly attributable to the disturbance caused to the owner by the expropriation;**

(b) *reasonable costs of relocating on other land, including reasonable moving, legal and survey costs that are necessarily incurred in acquiring a similar interest or estate in the other land.*

(2) *If a cost, expense or loss is claimed as a disturbance damage and that cost, expense or loss has not yet been incurred, either the claimant or the expropriating authority may, with the consent of the court, elect to have the cost, expense or loss determined at the time, not more than 6 months after the date of expropriation, that the cost, expense or loss is incurred.*

(3) *If an owner whose land is expropriated carried on a business on that land at the date of expropriation and, after the date of expropriation, relocates the business to and operates it from other land, reasonable business losses directly attributable to the expropriation must not, unless that person and the expropriating authority otherwise agree, be determined until the earlier of*

- (a) 6 months after the owner has operated the business from the other land, and
 - (b) one year after the date of the expropriation.
- (4) If the court determines that it is not feasible for an owner to relocate his or her business, there may be included in the compensation that is otherwise payable, an additional amount not exceeding the value of the goodwill of the business.

Definitions

I In this Act:

"owner", in relation to land, means

(a) a person who has an estate, **interest**, right or title in or to the land including a person who holds a subsisting judgment or builder's lien,

(b) a committee under the *Patients Property Act*,

(b.1) an attorney under Part 2 of the *Power of Attorney Act*,

(b.2) a guardian, executor, administrator or trustee in whom land is vested, or

(c) a person who is in legal possession or occupation of land, other than a person who leases residential premises under an agreement that has a term of less than one year;

"security interest" means a charge on land, including a claim of lien filed under the *Builders Lien Act*, which charge is owned or held by a person as security for the payment of money.

Book of Authorities, Tab 3

95. When land is expropriated in the Provincial context for highway purposes indefeasible title is extinguished as are any registered interests including statutory rights of way in favour of pipeline companies and mortgages of those statutory rights of way interests.

Vesting and possession

23 (1) The expropriating authority must, within 30 days after it has complied with section 20 (1) or an order under section 20 (6), file in the land title office, in accordance with the requirements of the *Land Title Act*, a vesting notice in the prescribed form, and, on filing the notice, the authority must serve a copy of it on the owner.

(2) If a fee simple interest is expropriated, the registrar must file the vesting notice, and, on filing, the land expropriated vests in the expropriating

authority free and clear of all charges, as defined in the *Land Title Act*, that are registered or endorsed against the lands covered by the order or notice filed under section 7 (1) other than

(a) the subsisting conditions, provisos, restrictions, exceptions and reservations, including royalties, contained in the original grant or contained in any other grant or disposition from the government,

(b) a registered charge in respect of an interest in

(i) minerals, as defined in the *Mineral Tenure Act*,

(ii) coal,

(iii) petroleum, as defined in the *Petroleum and Natural Gas Act*, and

(iv) gas or gases, and

(c) a charge, specified in the vesting notice, that the expropriating authority directs the registrar not to cancel.

(3) If an estate, right, title or interest less than the fee simple is expropriated,

(a) the estate, right, title or interest in the land covered by the order or notice filed under section 7 (1) vests in the expropriating authority with priority over all charges, as defined in the *Land Title Act*, that are registered or endorsed against the land, and

(b) the registrar must register the estate, right, title or interest of the expropriating authority against the land that is affected by it.

(4) If the order or notice filed under section 7 (1) refers to land that is intended to become a highway, an indefeasible title must not be registered for the land covered by the order or notice, and the title to that land ceases to be registered under the *Land Title Act*.

(5) If the order or notice filed under section 7 (1) refers to land that is intended to become a park or a public square, subsection (4) applies unless the expropriating authority requests subsection (2) to apply.

(6) Subject to an agreement between the owner and the authority, if subsection (2) or (3) has been complied with, the expropriating authority is entitled to possession of the land, whether or not it has served a copy of the vesting notice on the owner.

(7) Despite subsection (6), the court may,

(a) on application by the expropriating authority made after it has complied with section 6 (1), or

(b) on the application of an owner made at any time after he or she is notified under section 5 (4) or 18 but before the 30 day period in subsection (1) has expired,

grant possession of land expropriated to the authority at a time and subject to the conditions that the court considers appropriate.

(8) If the expropriating authority is entitled to possession under this section and the owner of the land denies possession to the expropriating authority, the authority may apply to the court for an order for possession.

Book of Authorities, Tab 3

96. In fact, both Surrey and the Province (through the Ministry of Transportation and Infrastructure) have had to exercise their respective powers of expropriation against FortisBC Energy Inc. in order to establish highway. Evidence in support of this is set out in the Affidavit of Kenneth D. Zondervan sworn May 26, 2015 filed as Exhibits C76-9-23 and C76-9-24 in this proceeding which include as exhibits 33 to 37 of said affidavit actual expropriation notices and vesting notices filed.

Terasen's Corporate Policy

48. *Similar to Trans Mountain Pipeline Inc. and/or Trans Mountain Pipe Line Company Ltd., a provincially regulated natural gas pipeline company, BC Gas Utility Ltd., now known as FortisBC Energy Inc. and previously known as Terasen Gas Inc. ("Terasen"), adopted a practice of refusing to endorse a subdivision plan which consents to dedication of a new roadway over an area charged by a B.C. Gas statutory right-of-way.*

49. *On or before February 15, 2000, BC Gas Utility Ltd., informed Surrey that it adopted a corporate policy. According to the policy, effective March 1, 1999, B.C. Gas Utility Ltd. ("B.C. Gas") will not endorse a subdivision plan which consents to dedication of a new roadway over an area presently charged by a B.C. Gas statutory right of way. The policy applies to transmission pipelines only, operating in excess of 2069 kPa. The policy requires that a fee simple lot be created over the right of—way which is to become road. The new lot must be assigned a lot number and registered with the Land Title Office. Attached as Exhibit "30" to this my Affidavit is a copy of the letter dated February 5, 2000 from B.C. Gas to Surrey outlining the corporate policy.*

50. *On or about April 15, 2002, Surrey City Council adopted a general policy to not support the creation of fee simple lots in those locations where proposed subdivision roads cross existing pipeline statutory rights of way. Attached as Exhibit "31" to this my Affidavit is a copy of Surrey's policy.*

51. *In response to Terasen's corporate policy, Surrey presented a resolution to the Union of British Columbia Municipalities ("UBCM") in 2003. Attached*

hereto as Exhibit "32" to this my Affidavit is a copy of Surrey's resolution to UBCM.

52. Since the adoption of Terasen's corporate policy, Surrey or the Ministry of Transportation has exercised its power of expropriation to acquire highway dedications on at least five occasions. Attached as Exhibits "33" to "37" respectively to this my Affidavit are copies of the five Expropriation Notices together with copies of their corresponding Vesting Notices and the LMP Plans referred to in said Expropriation Notices..

53. The expropriations referred to in paragraph 52 of this my affidavit are in respect of the high pressure transmission pipeline. The five expropriations are described in Expropriation Notices registered in the Land Title Office as BB536997, BB587161, BB587163, BB0817526 and BB1690464 which are attached as Exhibits "33" to "37" to this my Affidavit.

(Exhibits C76-9-23 ([A4L9U6](#)) and C76-9-24 ([A4L9U7](#)) - Affidavit of Kenneth D. Zondervan sworn May 26, 2015)

97. Justice Pearlman in the case of *FortisBC Energy Inc. v. City of Surrey et al*, 2013 B.C.S.C. 2382, also made reference to both the City of Surrey and the Ministry of Transportation resorting to their respective expropriation powers to extinguish pipeline statutory rights of way in favour of FortisBC Energy Inc. in order to establish highway.

308 Terasen Gas has invoked its corporate policy in response to requests from both Surrey and the province for road or highway dedications. For example, on June 11, 2007, Surrey requested that Terasen Gas execute a subdivision plan for the East Clayton property on 68th Avenue, to consent to the dedication of road over the Pipeline SRW, which bisected the subdivision lands. Terasen Gas refused to do so and on June 14, 2007, informed Surrey that it was not prepared to sign the developer's subdivision plan unless Surrey agreed to create two lot "Xs" in order to protect its rights under the SRW. **Surrey responded by expropriating the road dedications over the Pipeline.**

309 Earlier, Terasen Gas had taken a similar position in its dealings with the Province where Highway 15 crossed the Pipeline near the Fraser Highway crossing. The Highway 15 construction project required the construction of a temporary pipeline bypass where the highway crossed the pipeline. On December 16, 2005, Terasen Gas informed the Ministry of Transportation and Highways that it was not prepared to consent to the extinguishment of its rights by road dedication or to begin any work on Pipeline reinstatement until it had the Ministry's binding assurance that it would pay for the whole of the cost of the Pipeline reinstatement, estimated at about \$400,000. **By insisting that the**

Province pay the full cost of the work, Terasen Gas took the same position with the Ministry as it did with Surrey in the case of the Fraser Highway crossing. The Ministry responded by expropriating the right of way it required for the Highway 15 crossing.

Book of Authorities, Tab 27

98. In order to create a new highway or widen existing highways by acquiring lands over which a Trans Mountain statutory right of way is registered, Trans Mountain must agree to the extinguishment of its statutory right of way over the area of land required for highway purposes. This requires Trans Mountain and mortgagees of Trans Mountain statutory rights of way to sign a s. 107 road dedication plan or a subdivision plan which when registered in the Land Title Office creates highway.

Execution of plan by owner

103 Unless the application of this section is dispensed with by the registrar, a reference or an explanatory plan **must be**

- (a) **signed by each owner of the land dealt with by the plan**, and
- (b) witnessed in the same manner as is required by section 72 (2).

Definitions

1 In this Act:

"charge" means an estate or interest in land less than the fee simple and includes

- (a) an estate or interest registered as a charge under section 179, and
- (b) an encumbrance;

"owner" means a person registered in the records as owner of land **or of a charge on land**, whether entitled to it in the person's own right or in a representative capacity or otherwise, and includes a registered owner;

Book of Authorities, Tab 4

99. Kinder Morgan/Trans Mountain has through its opportunistic behaviour “leveraged” and taken advantage of a municipality’s inability to compel consent and required municipalities to create fee simple lots in areas that should be dedicated highway. These have been referred to as

Lot “X”s. or “utility lots” in the Affidavits of Kenneth D. Zondervan filed as Exhibits C76-9-23, C76-9-24 and C76-16-2 in this proceeding and were referred to as such by Justice Pearlman in the case of *FortisBC Energy Inc. v. City of Surrey et al*, 2013 B.C.S.C. 2382.

Kinder Morgan/Trans Mountain will not agree to the Establishment of Highways

22. *In circumstances where Surrey has undertaken highway widening projects in locations where the existing Trans Mountain pipeline occupies and/or crosses Surrey highways, Trans Mountain Pipeline Inc. and/or Trans Mountain Pipe Line Company Ltd. has refused to sign subdivision plans and/or road dedication plans which consent to the dedication of new highway over those areas required for highway or highway widening that are charged with statutory right-of-way in favour of Trans Mountain Pipeline Inc. Trans Mountain Pipeline Inc. and/or Trans Mountain Pipe Line Company Ltd. has refused to extinguish its statutory right-of-way over those areas required for highway or highway widening and has required instead that a fee simple lot be created. As a result, Surrey has not been able to establish or widen its highways in these locations.*

23. *Locations where Trans Mountain Pipeline Inc. and/or Trans Mountain Pipe Line Company Ltd. has refused to consent to the establishment of a highway or to a highway widening include, but are not necessarily limited to, the following locations:*

- (a) *9956 Barnston Drive East (Lot 6 Plan LMP 46765);*
- (b) *10024-176 Street (Lot 4 Plan LMP 38539);*
- (c) *17688 Barnston Drive East (Lot 5 Plan LMP 38539)*
- (d) *9860-180A Street (Lot 37 Plan LMP 14011);*
- (e) *9870-181 Street (Lot 38 Plan LMP 14011)*
- (f) *16680- 102 Avenue (Lot 25 Plan LMP 19984); and*
- (g) *9830-182 Street (Lot 10 Plan LMP 28743).*

Location: 9956 Barnston Drive East (Lot 6 Plan LMP 46765)

24. *Attached collectively as Exhibit “6” to this my Affidavit is a certified copy of Plan LMP 46765 registered in the Land Title Office of British Columbia and a uncertified copy of Plan LMP 46765 which identifies Lot 6 highlighted in yellow. Lot 6 is the fee simple lot that Trans Mountain Pipeline Inc. and/or Trans Mountain Pipe Line Company Ltd. required to be created. The existing Trans Mountain pipeline is located within Lot 6 and crosses Highway 15 in Surrey.*

25. *Attached as Exhibit “7” to this my Affidavit is an aerial photo from Surrey’s online mapping system which identifies Lot 6 in red.*

26. *Surrey as part of a rezoning and subdivision development application in or about 1997 required that the area of land identified as Lot 6 on Plan LMP 46765 be dedicated as highway in order to widen Barnston Drive East in Surrey. On or about July 28th, 1997 Trans Mountain Pipe Line Company Ltd. informed Surrey that it would not agree to sign the subdivision plan and consent to the dedication of roadway over the area charged by the statutory right-of-way in its favour. Attached as Exhibit “8” to this my Affidavit is a copy of Trans Mountain Pipe Line Company Ltd.’s letter of July 28th, 1997.*

27. *Attached as Exhibit “9” to this my Affidavit is a certified copy of a State of Title Certificate for Lot 6 Plan LMP 46765 and a certified copy of the registered statutory right-of-way identified therein.*

Locations: 10024-176 Street (Lot 4 Plan LMP 38539) & 17688 Barnston Drive East (Lot 5 Plan LMP 38539)

28. *Attached collectively as Exhibit “10” to this my Affidavit is a certified copy of Plan LMP 38539 registered in the Land Title Office in British Columbia and an uncertified copy Plan LMP 38539 which identifies Lot 4 highlighted in yellow. Lot 4 is the fee simple lot that Trans Mountain Pipeline Inc. and/or Trans Mountain Pipe Line Company Ltd. required to be created. The existing Trans Mountain pipeline is located within Lot 4 which crosses Highway 15 in Surrey.*

29. *Attached as Exhibit “11” to this my Affidavit is an aerial photo from Surrey’s online mapping system which identifies Lot 4 in red.*

30. *Attached collectively as Exhibit “12” to this my Affidavit is a certified copy of Plan LMP 38539 registered in the Land Title Office in British Columbia and an uncertified copy of Plan LMP 38539 which identifies Lot 5 highlighted in yellow. Lot 5 is the fee simple lot that Trans Mountain Pipeline Inc. and/or Trans Mountain Pipe Line Company Ltd. required to be created. The existing Trans Mountain pipeline is located within Lot 5 which crosses Barnston Drive East in Surrey.*

31. *Attached as Exhibit “13” to this my Affidavit is an aerial photo from Surrey’s online mapping system which identifies Lot 5 in red.*

32. *Surrey as part of a rezoning and subdivision development application in or about 1996 required that the area of land identified as Lot 4 and Lot 5 on Plan LMP 38539 be dedicated as highway in order to widen Highway 15 and Barnston Drive East in Surrey. On or about November 7th, 1996 Trans Mountain Pipe Line Company Ltd. informed Surrey that it would not agree to sign the subdivision plan and consent to the dedication of roadway over the area charged by the statutory right-of-way in its favour. Attached as Exhibit “14” to this my*

Affidavit is a copy of Trans Mountain Pipe Line Company Ltd.'s letter of November 7th, 1996.

33. Attached collectively as Exhibit "15" to this my Affidavit are certified copies of State of Title Certificates for Lots 4 and 5 of Plan LMP 38539 and certified copies of the registered statutory rights of way identified therein.

9860-180A Street (Lot 37 Plan LMP 14011) & 9870-181 Street (Lot 38 Plan LMP 14011)

34. Attached collectively as Exhibit "16" to this my Affidavit is a certified copy of Plan LMP 14011 registered in the Land Title Office in British Columbia and an uncertified copy of Plan LMP 14011 which identifies Lot 37 highlighted in yellow. Lot 37 is the fee simple lot that Trans Mountain Pipeline Inc. and/or Trans Mountain Pipe Line Company Ltd. required to be created. The existing Trans Mountain pipeline is located within Lot 37 which segments 180A Street in Surrey.

35. Attached as Exhibit "17" to this my Affidavit is an aerial photo from Surrey's online mapping system which identifies Lot 37 in red.

36. Attached collectively as Exhibit "18" to this my Affidavit is a certified copy of Plan LMP 14011 registered in the Land Title Office of British Columbia and an uncertified copy of Plan LMP 14011 which identifies Lot 38 highlighted in yellow. Lot 38 is the fee simple lot that Trans Mountain Pipeline Inc. and/or Trans Mountain Pipe Line Company Ltd. required to be created. The existing Trans Mountain pipeline is located within Lot 38 which crosses 181 Street in Surrey.

37. Attached as Exhibit "19" to this my Affidavit is an aerial photo from Surrey's online mapping system which identifies Lot 38 in red.

38. Surrey as part of a rezoning and subdivision development application in or about 1992 required that the area of land identified as Lot 37 and Lot 38 on Plan LMP 14011 be dedicated as highway in order to widen 181 Street and to establish a continuous 180A Street in Surrey. On or about December 21st, 1992 Trans Mountain Pipe Line Company Ltd. informed Surrey that it would not agree to sign the subdivision plan and consent to the dedication of roadway over the areas charged by the statutory right-of-way in its favour. Attached as Exhibit "20" to this my Affidavit is a copy of Trans Mountain Pipe Line Company Ltd.'s letter of December 21, 1992.

39. Attached collectively as Exhibit "21" to this my Affidavit are copies of State of Title Certificates for Lots 37 and 38 of Plan LMP 14011 and a certified copy of the registered statutory right-of-way identified therein.

Location: 16680- 102 Avenue (Lot 25 Plan LMP 19984)

40. Attached collectively as Exhibit “22” to this my Affidavit is a certified copy of Plan LMP 19984 registered in the Land Title Office of British Columbia and an uncertified copy of Plan LMP 19984 which identifies Lot 25 highlighted in yellow. Lot 25 is the fee simple lot that Trans Mountain Pipeline Inc. and/or Trans Mountain Pipe Line Company Ltd. required be created. The existing Trans Mountain pipeline is located within Lot 25 which segments 102 Avenue in Surrey.

41. Attached as Exhibit “23” to this my Affidavit is an aerial photo from Surrey’s online mapping system which identifies Lot 25 in red.

42. Surrey as part of a development application in or about 1993 required that the area of land identified as Lot 25 on Plan LMP 19984 be dedicated as highway in order to establish a continuous extension of 102 Avenue. On or about June 25th, 1993 Trans Mountain Pipe Line Company Ltd. informed Surrey that it would not agree to sign the subdivision plan and consent to the dedication of roadway over the area charged by the statutory right-of-way in its favour. Attached as Exhibit “24” to this my Affidavit is a copy of Trans Mountain Pipe Line Company Ltd.’s letter of June 25th, 1993.

43. Attached collectively as Exhibit “25” to this my Affidavit is a certified copy of a State of Title Certificate for Lot 25 Plan LMP 19984 and a certified copy of the registered statutory right-of-way identified therein.

Location: 9830-182 Street (Lot 10 Plan LMP 28743)

44. Attached collectively as Exhibit “26” to this my Affidavit is a certified copy of Plan LMP 28743 registered in the Land Title Office of British Columbia and an uncertified copy of Plan LMP 28743 which identifies Lot 10 highlighted in yellow. Lot 10 is the fee simple lot that Trans Mountain Pipeline Inc. and/or Trans Mountain Pipe Line Company Ltd. required to be created. The existing Trans Mountain pipeline is located within Lot 10 which segments 182 Street in Surrey.

45. Attached as Exhibit “27” to this my Affidavit is an aerial photo from Surrey’s online mapping system which identifies Lot 10 in red.

46. Surrey as part of a development application in 1993 required that the area of land identified as Lot 10 on Plan LMP 28743 be dedicated as highway in order to establish a continuous extension of 182 Street. On or about May 4, 1993 Trans Mountain Pipe Line Company Ltd. informed Surrey that it would not agree to sign the subdivision plan and consent to the dedication of roadway over the area charged by the statutory right-of-way in its favour. Attached as Exhibit “28” to

this my Affidavit is a copy of Trans Mountain Pipe Line Company Ltd.'s letter of May 4, 1993.

47. Attached collectively as Exhibit "29" to this my Affidavit is a certified copy of a State of Title Certificate for Lot 10 Plan LMP 28743 and a certified copy of the registered statutory right-of-way identified therein.

(Exhibits C76-9-23 ([A4L9U6](#)) and C76-9-24 ([A4L9U7](#)) - Affidavit of Kenneth D. Zondervan sworn May 26, 2015)

(Exhibit C76-16-2 ([A4W011](#)) - Affidavit #3 of Kenneth D. Zondervan sworn December 1, 2015)

100. In the Provincial context, Surrey and the Province have been able to exercise their respective powers of expropriation to defeat similar demands made by Fortis in the past.

101. It is also noteworthy that Fortis' demand for the creation of Lot "X"s or "Utility lots" was found by Justice Pearlman to amount to fundamental breach and repudiation of an agreement that was entered into in 1956 before the cost allocation provisions related to pipeline work costs were introduced in 1959 as discussed above.

304 Effective March 1, 1999, Terasen Gas' predecessor, BC Gas, had adopted a corporate policy by which it would not endorse a subdivision plan consenting to the dedication of a new roadway over an area charged by a BC Gas statutory right of way. BC Gas required that a lot be created over the right of way which was to become a road and that the new lot be assigned a lot number and be registered in the Land Title Office in the name of the road authority. This would permit BC Gas to register a charge against title to the lot held by the road authority to protect the rights granted by its statutory right of way. The lot to be registered in the name of the road authority was referred to as a "utility lot", or "lot X". The policy applied to transmission pipelines only operating in excess of 2,069 kPa.

305 BC Gas informed Surrey of its corporate policy on February 15, 2000, and advised the City again on July 16, 2002 that it would not dedicate statutory rights of way for its transmission pipelines for roads.

306 Terasen Gas continued that policy.

307 The Pipeline operates at a pressure in excess of 2,069 kPa, and is a transmission pipeline falling within the corporate policy adopted by BC Gas and continued by Terasen Gas.

308 Terasen Gas has invoked its corporate policy in response to requests from both Surrey and the province for road or highway dedications. For example, on June 11, 2007, Surrey requested that Terasen Gas execute a subdivision plan for the East Clayton property on 68th Avenue, to consent to the dedication of road over the Pipeline SRW, which bisected the subdivision lands. Terasen Gas refused to do so and on June 14, 2007, informed Surrey that it was not prepared to sign the developer's subdivision plan unless Surrey agreed to create two lot "X"s in order to protect its rights under the SRW. Surrey responded by expropriating the road dedications over the Pipeline.

309 Earlier, Terasen Gas had taken a similar position in its dealings with the Province where Highway 15 crossed the Pipeline near the Fraser Highway crossing. The Highway 15 construction project required the construction of a temporary pipeline bypass where the highway crossed the pipeline. On December 16, 2005, Terasen Gas informed the Ministry of Transportation and Highways that it was not prepared to consent to the extinguishment of its rights by road dedication or to begin any work on Pipeline reinstatement until it had the Ministry's binding assurance that it would pay for the whole of the cost of the Pipeline reinstatement, estimated at about \$400,000. By insisting that the Province pay the full cost of the work, Terasen Gas took the same position with the Ministry as it did with Surrey in the case of the Fraser Highway crossing. The Ministry responded by expropriating the right of way it required for the Highway 15 crossing.

314 Surrey opposed the creation of a utility lot on various grounds. First, the defendant was concerned that if it owned and occupied a fee simple lot where the highway crossed the Pipeline right of way, it would owe an occupier's duty of care for the safety of persons and property on that lot. As the occupier of a public highway, Surrey was not exposed to that liability. Section 8(2) of the *Occupiers Liability Act*, R.S.B.C. 1996, c. 337 provides that the *Act* does not apply to a municipality as the occupier of a public highway. Surrey was also concerned that the creation of a utility lot subject to the plaintiff's SRW would result in some loss of the City's flexibility to use and control the highway where it crossed the utility lot.

317 I find that on November 21, 2006, and again on December 15, 2006, Terasen Gas, in response to Surrey's request that it consent to the dedication of roadway over the SRW lands, invoked its corporate policy of not extinguishing SRW's for its transmission pipelines without full compensation for the loss of the SRW and the cost of the Pipeline upgrade.

342 I find that Terasen Gas was prepared to delay performance of the work required to protect the Pipeline and facilitate its crossing by the defendant's

highway project in order to exert "leverage" or pressure on Surrey to either create the utility lot sought by the plaintiff or pay the full cost of the work in exchange for the plaintiff's consent to the dedication of the SRW land as road.

Findings on Fundamental Breach

357 A remarkable feature of this case is that before Ms. Fung produced a copy of the TLA on June 14, 2007, there was no history of performance of that contract by either Terasen Gas or Surrey. When Mr. Sandstrom informed Surrey on September 6, 2005 that Terasen Gas would not begin work until the plaintiff had the defendant's binding assurance that it would pay the whole of the plaintiff's costs for the Pipeline upgrade work, he did so without reference to the TLA. Mr. Sandstrom was not aware of the existence of the TLA until on or about June 14, 2007. Again, when Terasen Gas responded to Surrey's request of December 21, 2005 for the plaintiff's consent to the dedication of road over the SRW on the Angus Land by asserting that it would not consent until Surrey made a commitment to pay for all of the Pipeline upgrade work, it did so without referring to the TLA.

358 Until June 14 2007, Terasen Gas asserted its corporate policy without reference to the TLA, and without any suggestion that the TLA applied to the Pipeline and the sharing of costs for the Pipeline upgrade work necessary to accommodate Surrey's Fraser Highway expansion project.

359 Before and after June 14, 2007, Terasen Gas has informed Surrey and others that it opposed the dedication of land charged with its rights of way because it wished to preserve assets that have benefitted its shareholders and ratepayers. The plaintiff has also declared that it wished to retain the right to control activities on and around the Pipeline in order to maintain the integrity of its operations and to protect public safety. However, the plaintiff's concerns respecting the preservation of its assets and the protection of public safety were not immutable. Terasen Gas was prepared to consent to the extinguishment of its SRW if it received full compensation for the cost of the work required to facilitate the crossing of the Pipeline.

360 The plaintiff's corporate policy of withholding its consent to the dedication of public roads or highways over its SRWs, of demanding the creation of fee simple utility lots to protect the rights granted under its SRWs, and of refusing to extinguish its SRW on the Angus Land unless Surrey paid 100% of the cost of the Pipeline upgrade work is inconsistent with the plaintiff's obligation under s. 4 of the TLA to not unreasonably withhold its consent to the dedication of private property as public property for the opening up of streets, roads or highways.

361 Moreover, as Mr. Coady acknowledged in cross-examination, the plaintiff was also prepared to withhold its consent to the dedication of road over its SRW as a means of exerting leverage through delay of major public projects, including

the Fraser Highway widening project. By invoking its corporate policy, and by withholding its consent to the dedication of road over its SRW in attempt to compel Surrey to accede to its position of the City either create a fee simple utility lot or bear all of the costs of the Pipeline upgrade, Terasen Gas has demonstrated a clear and unequivocal intention not to be bound by the TLA.

362 The plaintiff's refusal to perform the upgrade work until Surrey accepted its position did not constitute a reasonable withholding of consent to road dedication. The commercial value of the TLA to Surrey lay in having the Pipeline upgrade work completed without delay so as to permit the timely construction of the Fraser Highway widening project. **By refusing to consent to the dedication of the SRW lands as highway unless Surrey either agreed to create a fee simple lot over the portion of the highway crossing the Pipeline, or paid all of the cost of the Pipeline upgrade work, the plaintiff deprived Surrey of substantially the whole of the commercial benefit of the TLA and committed a breach which went to the root of that contract.**

363 I reach this conclusion taking into account the evidence that factors other than the failure of Terasen Gas to perform the Pipeline upgrade work until July 2008 also contributed to delay of the Fraser Highway expansion project. For example, in cross-examination Mr. Zondervan acknowledged that in April 2007 Surrey's engineering department anticipated that final completion of the Fraser Highway expansion between 168th Street and the 17900 block would extend into 2010, about three years later than originally anticipated, and that the delay was largely attributable to poor soil conditions that resulted in the need to slow down the pre-loading of soils along the highway right of way.

364 Poor soil conditions were a factor beyond the ambit of the TLA. The intended benefit of the TLA for Surrey was that Terasen Gas would perform the Pipeline upgrade work within a reasonable time of Surrey's request that it do so and that the plaintiff would not unreasonably withhold its consent to the dedication of the SRW land as highway. In cross-examination, Mr. Jamer acknowledged that he knew in early August 2006 that Surrey regarded the resolution of the parties' differences concerning payment for and performance of the Pipeline upgrade work as urgent. Mr. Jamer also understood that there were potentially adverse impacts for Surrey if the project was delayed. Similarly, Ms. Marie-France Leroi, one of the in-house solicitors advising Terasen Gas, admitted in cross-examination that she was aware as early as September 6, 2005 that if the plaintiff refused to move its Pipeline it might mean delays for Surrey. In all of the circumstances of this case, the delay by Terasen Gas in performing the Pipeline upgrade work until July 2008 was a fundamental breach of its obligation under paragraph 4 to carry out the work with "reasonable speed" when requested to do so by Surrey.

365 I find that Surrey accepted the repudiation by Terasen Gas of the TLA when on August 7, 2007 the City delivered its statement of claim and application to the

OGC for permission to cross the Pipeline, and for an order requiring the plaintiff to perform the Pipeline upgrade work. Surrey confirmed its acceptance of the plaintiff's repudiation of the TLA on October 3, 2007, when it applied for a determination by the OGC that Terasen Gas was responsible for the costs of all of the work required for the crossing of the Pipeline by the Fraser Highway expansion project. When Surrey accepted the plaintiff's repudiation of the TLA, that agreement was terminated and ceased to bind the parties.

366 Accordingly, it is necessary to determine whether, upon Surrey's acceptance of the repudiation by Terasen Gas of the TLA, s. 9(c) of the *Pipeline Regulation* applied to the allocation of costs for the work required to facilitate the crossing of the Pipeline by the Fraser Highway expansion project.

FortisBC Energy Inc. v. City of Surrey et al, 2013 B.C.S.C. 2382
Book of Authorities, Tab 27

102. In the Provincial context and referring to the decision of Madame Justice C. Lynn Smith in *Terasen Gas Inc. v. Surrey (City)* [2011] B.C.J. No. 1290 (Book of Authorities, Tab 30). Terasen Gas Inc. (now renamed to FortisBC Energy Inc.) had gone so far as to commence legal proceedings against the owner of the land from whom the City of Surrey purchased the land required for highway widening. Unless a term or condition is imposed requiring Trans Mountain to dedicate necessary land for highway and agree to the extinguishment of its statutory right of way over that required portion of land, it is likely that Trans Mountain would similarly commence legal proceedings against cooperative land owners who enter into agreements with municipalities or the Province selling lands required for highway that are encumbered by a Trans Mountain statutory right of way.

103. What is also noteworthy and what is common knowledge is that at the time Terasen Gas Inc. (which was renamed to FortisBC Energy Inc.) refused to sign road dedication plans and demanded the creation of Lot "X"s or utility lots, which lead to the decision of Justice Pearlman in *FortisBC Energy Inc. v. City of Surrey et al*, 2013 B.C.S.C. 2382, **Terasen Gas Inc. was controlled by Kinder Morgan.**

104. Facing the uncertainties and inevitable costs and delays associated with attempting to expropriate from a federal undertaking such as Kinder Morgan/Trans Mountain and in the

absence of a similar provision to s. 2(1.3) of the Expropriation Act, **municipalities and the Province are left with no option but to accept Kinder Morgan's/Trans Mountain's Lot "X" demands and are not able to widen or establish highways.**

105. Trans Mountain has confirmed that it will continue this practice of refusing to consent to the dedication of highways. This is set out in responses to the City of Surrey's Information Requests No.1 filed as Exhibit C76-11-2 ([A3X6A5 - A4Q0V6](#)) and in the Affidavits of Kenneth D. Zondervan filed as Exhibits C76-9-23 ([A4L9U6](#)), C76-9-24 ([A4L9U7](#)) and C76-16-2 ([A4W0I1](#)) in this proceeding.

Request

Necessary consent from Trans Mountain and other interest holders in Trans Mountain's statutory right of way/easement to enable municipalities and the Province to dedicate required land for highway/road.

d) in respect of future widenings, expansions or improvements of the existing highways and roads that are proposed to be occupied by the pipeline, please confirm whether Trans Mountain is prepared to:

(i) consent (without conditions and without compensation) to the extinguishment of any statutory right of way or easement in favour of Trans Mountain over those portions of land required by the municipality or the Province to be dedicated as highway or road in order that those portions of land may be incorporated into and form part of the existing highway or road that is occupied by the pipeline;

(ii) obtain the consent (without conditions and without compensation) of any mortgagee or other person having an interest in the statutory right of way or easement to be extinguished over that portion of land to be dedicated as highway or road in order that those portions of land may be incorporated into and form part of the existing highway or road that is occupied by the pipeline; and

(iii) if Trans Mountain is not prepared to consent or obtain the consent described in paragraphs (d)(i) and (ii) without conditions and without compensation, then please provide a detailed explanation as to why not. Please also describe in detail under what circumstances Trans Mountain would be prepared to consent or obtain the consent described in paragraphs (d)(i) (ii);

e) having regard to section 108 of the *National Energy Board Act* and the jurisdiction of the NEB, please confirm whether or not Trans Mountain is

prepared to consent to including as a condition or term of any certificate or CPCN issued approving Trans Mountain's Application that Trans Mountain shall consent or obtain the consent (without conditions and without compensation) to the extinguishment of its statutory right of way or easement in those circumstances described in paragraph (d) above, and if not, please provide a detailed explanation as to why not;

f) in respect of creation of future dedicated highways and roads over the proposed pipeline that are approved or required by a municipality or imposed as a condition of development approval (whether as a condition of subdivision approval, rezoning, or other land development project approval and whether related to a land development project initiated by a private developer or by the municipality), please confirm whether Trans Mountain is prepared to:

(i) consent (without conditions and without compensation) to the extinguishment of any statutory right of way or easement in favour of Trans Mountain over that portion of land that is to be dedicated as highway or road;

(ii) obtain the consent (without conditions and without compensation) of any mortgagee or other person having an interest in the statutory right of way or easement to be extinguished over that portion of land that is to be dedicated as highway or road; and

(iii) if Trans Mountain is not prepared to consent or obtain the consent described in paragraphs (f)(i) and (ii) without conditions and without compensation, then please provide a detailed explanation as to why not. Please also describe in detail under what circumstances Trans Mountain would be prepared to consent or obtain the consent described in paragraphs (f)(i) and (ii);

g) having regard to section 108 of the *National Energy Board Act* and the jurisdiction of the NEB, please confirm whether or not Trans Mountain is prepared to consent to including as a condition or term of any certificate or CPCN issued approving Trans Mountain's Application that Trans Mountain shall consent or obtain the consent (without conditions and without compensation) to the extinguishment of its statutory right of way or easement in those circumstances described in paragraph (f) above, and if not, please provide an detailed explanation as to why not;

Response

d) (i) **Trans Mountain is prepared to allow extinguishment of the title over those parts of the Trans Mountain right-of-way for roadways crossing the pipeline at approximately 90 degrees that are deemed necessary by the municipality. No compensation is requested for the property right loss, although terms and conditions will be required with the municipality on a proximity permit from Trans Mountain, including agreement over costs**

incurred in undertaking any protective works, modification or re-location of the pipeline.

(ii) Trans Mountain does not anticipate the need to obtain the consent (without conditions and without compensation) of any mortgagee or other person having an interest in the statutory right of way or easement because no mortgages or other interest are registered on the title of properties that are attached to the Trans Mountain Pipeline right-of-way or pipeline on the property.

iii) Please see responses to i. and ii.

e) See the response to City Surrey IR No. 1.3c.

f) Please see response to City Surrey IR No. 1.3d.

g) See the response to City Surrey IR No. 1.3c.

(Exhibit C76-11-1 - [\(A3W6E6-A4Q0V5\)](#) - City of Surrey Information Request No. 1 filed May 7, 2014 (previously filed as C76-1-1))

(Exhibit C76-11-2 - [\(A3X6A5 - A4Q0V6\)](#) - Response to City of Surrey Information Request No. 1 filed June 4, 2014 (previously filed as B52-1))

106. Not only do Kinder Morgan's/Trans Mountain's Lot "X" demands frustrate the ability of the Province and municipalities to establish highways, it also exposes municipalities and the Province to other liabilities and potential costs.

107. These liabilities and potential costs were referred to by Justice Pearlman in *FortisBC Energy Inc. v. City of Surrey et al*, 2013 B.C.S.C. 2382:

304 Effective March 1, 1999, Terasen Gas' predecessor, BC Gas, had adopted a corporate policy by which it would not endorse a subdivision plan consenting to the dedication of a new roadway over an area charged by a BC Gas statutory right of way. BC Gas required that a lot be created over the right of way which was to become a road and that the new lot be assigned a lot number and be registered in the Land Title Office in the name of the road authority. This would permit BC Gas to register a charge against title to the lot held by the road authority to protect the rights granted by its statutory right of way. The lot to be registered in the name of the road authority was referred to as a "utility lot", or "lot X". The policy applied to transmission pipelines only operating in excess of 2,069 kPa.

305 BC Gas informed Surrey of its corporate policy on February 15, 2000, and advised the City again on July 16, 2002 that it would not dedicate statutory rights of way for its transmission pipelines for roads.

306 Terasen Gas continued that policy.

307 The Pipeline operates at a pressure in excess of 2,069 kPa, and is a transmission pipeline falling within the corporate policy adopted by BC Gas and continued by Terasen Gas.

308 Terasen Gas has invoked its corporate policy in response to requests from both Surrey and the province for road or highway dedications. For example, on June 11, 2007, Surrey requested that Terasen Gas execute a subdivision plan for the East Clayton property on 68th Avenue, to consent to the dedication of road over the Pipeline SRW, which bisected the subdivision lands. Terasen Gas refused to do so and on June 14, 2007, informed Surrey that it was not prepared to sign the developer's subdivision plan unless Surrey agreed to create two lot "X"s in order to protect its rights under the SRW. Surrey responded by expropriating the road dedications over the Pipeline.

309 Earlier, Terasen Gas had taken a similar position in its dealings with the Province where Highway 15 crossed the Pipeline near the Fraser Highway crossing. The Highway 15 construction project required the construction of a temporary pipeline bypass where the highway crossed the pipeline. On December 16, 2005, Terasen Gas informed the Ministry of Transportation and Highways that it was not prepared to consent to the extinguishment of its rights by road dedication or to begin any work on Pipeline reinstatement until it had the Ministry's binding assurance that it would pay for the whole of the cost of the Pipeline reinstatement, estimated at about \$400,000. By insisting that the Province pay the full cost of the work, Terasen Gas took the same position with the Ministry as it did with Surrey in the case of the Fraser Highway crossing. The Ministry responded by expropriating the right of way it required for the Highway 15 crossing....

314 Surrey opposed the creation of a utility lot on various grounds. First, the defendant was concerned that if it owned and occupied a fee simple lot where the highway crossed the Pipeline right of way, it would owe an occupier's duty of care for the safety of persons and property on that lot. As the occupier of a public highway, Surrey was not exposed to that liability. Section 8(2) of the *Occupiers Liability Act*, R.S.B.C. 1996, c. 337 provides that the *Act* does not apply to a municipality as the occupier of a public highway. Surrey was also concerned that the creation of a utility lot subject to the plaintiff's SRW would result in some loss of the City's flexibility to use and control the highway where it crossed the utility lot.

A Lot “X”/Utility Lot is not a highway dedication

108. In assessing the reasonableness of a demand for a Lot "X", one must not lose sight of the simple fact that a Lot “X” is a fee simple lot and is not a highway in law.

109. Moreover, there are numerous reasons why a municipality or the Province through the Ministry of Transportation and Infrastructure cannot accept a Lot “X” in place of highway dedication.

110. Pipeline safety and the need to preserve its right to operate its pipelines are the primary reasons advanced by Kinder Morgan/Trans Mountain in support of Lot "X". Neither of which, however, is convincing.

111. The issue of safety is adequately addressed through legislation; ie. the *National Energy Board Act* and its Regulations.

112. Existing evidence also does not support the arguments advanced by Kinder Morgan/Trans Mountain. Currently there exist hundreds (if not thousands) of locations, including major arterial roads, where Trans Mountain's existing pipeline crosses municipal and Provincial highways without a statutory right-of-way in place. At no time has there been any reason to question municipal or Provincial efforts regarding safety, nor has there been any issue raised regarding the right of Trans Mountain to continue its pipeline operations at these locations.

113. There are also numerous negative consequences which flow from permitting the creation of Lot "X"s.

A. Added Liability

(i) The *Occupiers Liability Act*, RSBC 1996, c 337

114. Added liability is a significant concern to municipalities. Under the *Occupiers Liability Act*, municipalities would be considered an "occupier" of a Lot "X":

"occupier" means a person who

(a) is in physical possession of premises, or

(b) has responsibility for, and control over, the condition of premises, the activities conducted on those premises and the persons allowed to enter those premises,

and, for this Act, there may be more than one occupier of the same premises;

Book of Authorities, Tab 10

115. As an occupier, municipalities owe a duty of care to ensure that all persons and property of persons, including Trans Mountain's pipeline, are safe in using the premises. This duty of care applies to the condition of the premises, activities on the premises or the conduct of third parties on the premises. This duty is set out s. 3(1) and s. 3(2) of the *Occupiers Liability Act*:

Occupiers' duty of care

3 (1) An occupier of premises owes a duty to take that care that in all the circumstances of the case is reasonable to see that a person, and the person's property, on the premises, and property on the premises of a person, whether or not that person personally enters on the premises, will be reasonably safe in using the premises.

(2) The duty of care referred to in subsection (1) applies in relation to the

(a) condition of the premises,

(b) activities on the premises, or

(c) conduct of third parties on the premises.

Book of Authorities, Tab 10

116. Under the current statutory scheme, municipalities do not have to worry about the liability the *Occupiers Liability Act* imposes because s. 8(2) provides that the Act does not apply

to a municipality as the occupier of a public highway or a public road. Should a municipality, however, choose or be forced to accept a fee simple lot in the form of a Lot "X" in place of a dedicated highway, then this exclusion no longer applies. This would mean that plaintiffs such as third parties in motor vehicle accidents and other third parties using Lot "X" including Kinder Morgan/Trans Mountain would be able to rely on the *Occupiers Liability Act* in advancing claims against municipalities.

Crown bound

8 (1) Except as otherwise provided in subsection (2), the Crown and its agencies are bound by this Act.

(2) Despite subsection (1), this Act **does not apply to** the government or to the Crown in right of Canada **or to a municipality** if the government, the Crown in right of Canada or the municipality is the occupier of

- (a) **a public highway**, other than a recreational trail referred to in section 3 (3.3)
- (c),
- (b) **a public road**,
- (c) a road under the *Forest Act*,
- (d) a private road as defined in section 2(1) of the *Motor Vehicle Act*, other than a private road referred to in section 3(3.3)(b)(iv) of this Act, or
- (e) an industrial road as defined in the *Industrial Roads Act*.

Book of Authorities, Tab 10

(ii) Breach of Contract as well as Tort of Negligence will Apply

117. Previously a municipality's exposure to liability in the event of an accident or catastrophe involving a pipeline, would be determined by the Courts in accordance with the law of negligence as it applies to municipalities. In a Lot "X" arrangement, liability may also take the form of a claim for breach of contract/statutory right of way. Under such circumstances the Courts will view a statutory right-of-way registered on the title of the Lot "X" as an agreement/contract between Trans Mountain and the City. Consequently, a breach of any of its terms including implied terms regarding, for example safety, may become the subject matter of a

claim for breach of the statutory right of way agreement. This likely will then expose municipalities to added liability.

(iii) Statutory Dispute Resolution and Crossing Benefits Lost

118. A further instance where uncertainty may be introduced is when a disagreement arises between a municipality and Trans Mountain over the scope of the terms of the statutory right-of-way. Under the existing statutory scheme set out in s 112 of the *National Energy Board Act*, statutory dispute resolution and crossing provisions are in place to address disputes and crossing applications between the municipality and the pipeline company. For example, the *National Energy Board Act* empowers the NEB to grant leave for a facility to cross a pipeline on terms it considers appropriate.

119. Under the Lot "X" arrangement and having regard to the fact that in British Columbia we have a Torrens land title system that under s. 23 of the *Land Title Act* guarantees title subject only to those encumbrances, charges and interests listed therein, an argument may be advanced by Trans Mountain that the National Energy Board, which oversee and regulates Trans Mountain, does not have jurisdiction to disregard the terms of an agreement the parties are bound to in the form of a statutory right-of-way. As a result, by being forced to agree to a Lot "X" arrangement, municipalities will have effectively contracted out of statutory dispute resolution mechanisms put in place to resolve disputes between a municipality and Trans Mountain.

Effect of indefeasible title

23 (1) In this section, "**court**" includes a person or statutory body having, by law or consent of parties, authority to hear, receive and examine evidence.

(2) An indefeasible title, as long as it remains in force and uncancelled, is conclusive evidence at law and in equity, as against the Crown and all other persons, that the person named in the title as registered owner is indefeasibly entitled to an estate in fee simple to the land described in the indefeasible title, subject to the following:

(a) the subsisting conditions, provisos, restrictions, exceptions and reservations, including royalties, contained in the original grant or contained in any other grant or disposition from the Crown;

(b) a federal or Provincial tax, rate or assessment at the date of the application for registration imposed or made a lien or that may after that date be imposed or made a lien on the land;

(c) a municipal charge, rate or assessment at the date of the application for registration imposed or that may after that date be imposed on the land, or which had before that date been imposed for local improvements or otherwise and that was not then due and payable, including a charge, rate or assessment imposed by a public body having taxing powers over an area in which the land is located;

(d) a lease or agreement for lease for a term not exceeding 3 years if there is actual occupation under the lease or agreement;

(e) a highway or public right of way, watercourse, right of water or other public easement;

(f) a right of expropriation or to an escheat under an Act;

(g) a caution, caveat, charge, claim of builder's lien, condition, entry, exception, judgment, notice, pending court proceeding, reservation, right of entry, transfer or other matter noted or endorsed on the title or that may be noted or endorsed after the date of the registration of the title;

(h) the right of a person to show that all or a portion of the land is, by wrong description of boundaries or parcels, improperly included in the title;

(i) the right of a person deprived of land to show fraud, including forgery, in which the registered owner has participated in any degree;

(j) a restrictive condition, right of reverter, or obligation imposed on the land by the *Forest Act*, that is endorsed on the title.

(3) After an indefeasible title is registered, a title adverse to or in derogation of the title of the registered owner is not acquired by length of possession.

(4) Despite subsection (3), in the case only of the first indefeasible title registered, it is void against the title of a person adversely in actual possession of and rightly entitled to the land included in the indefeasible title at the time registration was applied for and who continues in possession.

Book of Authorities, Tab 4

B. Loss of Flexibility and Control

120. As with any fee simple lot subject to a statutory right-of-way, a municipality's use of Lot "X" will ultimately be subject to the terms and provisions of the registered statutory right-of-way in favour of Trans Mountain. This results in a loss of a municipality's flexibility to use the "highway" (more accurately the travelled pavement) that traverses a Lot "X". For example, under the provisions of the existing statutory right-of-way registered over a developer's subdivision lands, a municipality would not have the unconditional right to use Lot "X" for highway purposes or for allowing other users to cross this lot. This loss of flexibility can, however, be lessened to some degree by revising the terms of the statutory right-of-way registered against Lot "X". Ultimately, however, a municipality's use of Lot "X" will always be restricted by the terms of the statutory right-of-way registered against it. Furthermore, as in any negotiation process, it can be expected that compromises will have to be made by the municipality when it comes to revising the terms of the registered right-of-way, particularly when the municipality has no real leverage or negotiating power in the negotiation process and is unable to avail itself of expropriation powers it would otherwise have in the Provincial context.

121. The municipality will also lose the many broad powers a municipality has to regulate its highways under the *Community Charter*, S.B.C. 2003, c. 26 and the *Local Government Act*, RSBC 2015, Chapter 1 which do not apply to fee simple lots, in this case to a Lot "X".

C. Other Utilities/Commercial Entities

122. If municipalities agree a Lot "X" arrangement, other utilities similarly circumstanced, such as telecommunication companies, will demand the same treatment. In doing so, they would likely claim they are being treated unfairly and make reference to Section 263(1)(c) and s. 273 of the *Local Government Act*, as amended:

Corporate powers

263 (1) Subject to the specific limitations and conditions established under this or another Act, the corporate powers of a board include the following:

- (a) to make agreements respecting
 - (i) the regional district's services, including agreements respecting the undertaking, provision and operation of those services, other than the exercise of the board's regulatory authority,
 - (ii) operation and enforcement in relation to the board's exercise of its regulatory authority, and
 - (iii) the management of property or an interest in property held by the regional district;
- (b) to make agreements with a public authority respecting
 - (i) activities, works or services within the powers of a party to the agreement, other than the exercise of regulatory authority, including agreements respecting the undertaking, provision and operation of activities, works and services,
 - (ii) operation and enforcement in relation to the exercise of regulatory authority within the powers of a party to the agreement, and
 - (iii) the management of property or an interest in property held by a party to the agreement;
- (c) to provide assistance for the purpose of benefiting the community or any aspect of the community;
- (d) to acquire, hold, manage and dispose of land, improvements, personal property or other property, and any interest or right in or with respect to that property;
- (e) to delegate its powers, duties and functions, in accordance with Division 7 [*Delegation of Board Authority*] of Part 6 [*Regional Districts: Governance and Procedures*];
- (f) to engage in commercial, industrial and business undertakings and incorporate a corporation or acquire shares in a corporation for that purpose;
- (g) to establish commissions to
 - (i) operate regional district services,

(ii) undertake operation and enforcement in relation to the board's exercise of its regulatory authority, and

(iii) manage property or an interest in property held by the regional district.

(2) In exercising its powers under subsection (1), a board may establish any terms and conditions it considers appropriate.

(3) The powers of a board under subsection (1) may be exercised outside the boundaries of the regional district.

Definition of "assistance"

271 For the purposes of section 263 (1) (c) [*assistance for community benefit*] and this Division, "**assistance**" means providing a grant, benefit, advantage or other form of assistance, including

(a) any form of assistance referred to in section 272 (1), and

(b) an exemption from a tax, fee or charge.

General prohibition against assistance to business

273 As a limitation on section 263 (1) (c) [*assistance for community benefit*], a board must not provide assistance to an industrial, commercial or business undertaking.

Book of Authorities, Tab 5

D. Negatively Affects the Establishment of Proper Highway Corridors

123. A municipality, as a custodian of its highways, has a responsibility to ensure that the rights of other entities who currently enjoy the legislative right to occupy highways are preserved and that adequate highway corridors are established through the subdivision and land development approval process. While these entities have the legislative right to occupy highways together with Trans Mountain, they do not have the legislative right to interfere with Trans Mountain's rights/interest in land secured on the title of Lot "X" in the form of a statutory right of way/easement. These entities include telecommunication companies, BC Hydro, cable providers, railways, etc. (Note: a statutory right of way is a form of easement without a dominant tenement).

E. Zoning and Administrative Considerations

124. There are also zoning and administrative considerations which would have to be addressed. Municipal zoning by-laws would have to be amended to ensure that Lot "X"s created conform to current zoning. Administrative procedures would also have to be implemented to ensure the location of all Lot "X"s are identified and that the terms of registered statutory rights-of-way registered over the Lot "X"s are reviewed prior to any work taking place within the Lot "X"s.

F. Environmental Liability

125. Under Environmental legislation municipalities are protected from remediation and clean up costs of highways contaminated by a third party. This same protection would not extend to Lot "X"s.

G. Control will be shifted to Trans Mountain and the Mortgagees of its statutory rights of way and Liens could also be registered on title of the Lot "X".

126. By holding a statutory right of way in priority to all other registered interests, anyone crossing the Lot "X" would require approval of Trans Mountain and of the registered interest holders of the mortgagees of its statutory right of way. Moreover, further complications would arise if lien claimants registered liens on title.

2.9 Without conditions being imposed establishing timelines for necessary pipeline work to be performed by Trans Mountain to accommodate utility infrastructure projects including highway construction, widening and improvement projects, substantial project delays will be incurred as well as potential liability arising from third party delay claims

127. In the absence of conditions being imposed that require Trans Mountain to undertake and complete pipeline work within a prescribed period of time that may only be varied by application to the NEB, Trans Mountain will be able to continue to delay projects unless municipalities and the Province agree to its terms, no matter how unreasonable those terms may be.

128. As set out in the Responses of Trans Mountain excerpted and relied upon above and as supported by the Affidavits of Kenneth D. Zondervan also excerpted and relied upon above, those demands include demands that the municipalities and the Province pay all costs and agree to the creation of Lot “X”s.

2.10 Conditions related to Indemnification, Liability and Reimbursement for certain costs should also be imposed

129. Just as land owners enjoy indemnification under s. 86 of the *National Energy Board Act* which is limited only in the case of **gross negligence**, municipalities and the Province should enjoy at a minimum this same level of indemnification particularly in light of the fact that municipalities have less control than fee simple land owners as to who occupies or enters its highways or public places including parks. Others that have the legislative right to occupy highways and other public places such as parks include public utilities, telecommunication companies, pipeline companies, railway companies to name a few.

ACQUISITION OF LANDS

Definition of “owner”

85. In sections 86 to 107, “owner” means any person who is entitled to compensation under section 75.

Methods of acquisition

86. (1) Subject to subsection (2), a company may acquire lands for a pipeline under a land acquisition agreement entered into between the company and the owner of the lands or, in the absence of such an agreement, in accordance with this Part.

Form of agreement

(2) A company may not acquire lands for a pipeline under a land acquisition agreement unless the agreement includes provision for

(a) compensation for the acquisition of lands to be made, at the option of the owner of the lands, by one lump sum payment or by annual or periodic payments of equal or different amounts over a period of time;

(b) review every five years of the amount of any compensation payable in respect of which annual or other periodic payments have been selected;

(c) compensation for all damages suffered as a result of the operations of the company;

(d) indemnification from all liabilities, damages, claims, suits and actions arising out of the operations of the company other than liabilities, damages, claims, suits and actions resulting from

(i) in the Province of Quebec, the gross or intentional fault of the owner of the lands, and

(ii) in any other province, the gross negligence or wilful misconduct of the owner of the lands;

(e) restricting the use of the lands to the line of pipe or other facility for which the lands are, by the agreement, specified to be required unless the owner of the lands consents to any proposed additional use at the time of the proposed additional use; and

(f) such additional matters as are, at the time the agreement is entered into, required to be included in a land acquisition agreement by any regulations made under paragraph 107(a).

Book of Authorities, Tab 6

130. It is also noteworthy that on the issue of indemnification, recognizing that it would not be appropriate to expose municipalities to liability for consequential losses or damages, the CRTC, a federal tribunal having similar powers as the NEB, has limited municipal liability in the context of utilities crossing highways. In *Telecom Decision CRTC 2013-618*, the Canadian Radio and Television Commission adopted a Model Municipal Access Agreement which included terms which were formed by a consensus of stakeholders and also terms for which no consensus was reached. The CRTC approved the consensus terms for the Model Agreement. From this endeavour a consensus clause dealing with the liability of both host and occupier was approved:

11.3. No liability, both Parties. Notwithstanding anything else in this Agreement, neither Party shall be liable to any person in any way for special, incidental, indirect, consequential, exemplary or punitive damages, including damages for pure economic loss or for failure to realize expected profits, howsoever caused or contributed to, in connection with this Agreement and the performance or non-performance of its obligations hereunder.

Book of Authorities, Tab 35

131. On the issue of indemnity and cost recovery, it is also noteworthy that the federal *Railway Safety Act* was recently amended to provide relief to the province and municipalities in respect of costs incurred in responding to fire which was the result of a railway company's operations.

POWERS OF AGENCY — FIRE

Application to Agency

23. (1) If a province or municipality is of the opinion that a fire to which it responded was the result of a railway company's railway operations, it may apply to the Agency to have **the costs that it incurred in responding to the fire reimbursed by the railway company.**

Form of application

(2) The application shall be in the form prescribed by regulations made under subsection (5), and it shall be accompanied by the information prescribed by those regulations.

Further information

(3) The Agency may, by notice sent to the province, municipality or railway company, require the province, municipality or railway company to provide it with any further information that it specifies relating to the application, within the period specified in the notice.

Agency's determination

(4) If the Agency determines that the fire was the result of the railway company's railway operations, it shall make an order directing the railway company **to reimburse the province or municipality the costs that the Agency determines were reasonably incurred in responding to the fire.**

Regulations

(5) The Agency may, with the Governor in Council's approval, make regulations

- (a) prescribing the form of the application referred to in this section; and
- (b) prescribing the information that must accompany that application.

Interpretation

(6) Despite this section, this Act is not deemed to be administered in whole or in part by the Agency for the purpose of section 37 of the [Canada Transportation Act](#).

Book of Authorities, Tab 19

132. This recent amendment highlights Parliaments recognition of the need to indemnify and hold municipalities harmless.

2.11 Conditions must be imposed that prohibit Trans Mountain from including provisions in its Crossing Permits issued under the *National Energy Board Pipeline Crossing Regulations* that commit municipalities to terms and conditions, including indemnities that they otherwise would not be subject to

133. Having regard to the “leveraging” and opportunistic behavior of Kinder Morgan/Trans Mountain described above and the provisions of the *National Energy Board Pipeline Crossing Regulation*, Part I, that commit a person wishing to carryout construction over a pipeline to agree to the terms and conditions imposed by Kinder Morgan/Trans Mountain no matter how outrageous they may be, the NEB must impose a condition to prevent this pattern of behavior from continuing.

4. Leave of the Board is not required for any construction or installation of a facility, other than the installation of an overhead line referred to in section 5, if

(b) the facility owner obtains written permission from the pipeline company prior to the construction or installation of the facility **and accepts any conditions set out in the permission;**

6. Leave of the Board is not required for an excavation, other than an excavation referred to in section 7, if

(b) the excavator obtains written permission from the pipeline company prior to the excavation **and accepts any conditions set out in the permission;**

Book of Authorities, Tab 7

134. Only by imposing a condition or term of approval prohibiting Trans Mountain from including provisions in its crossing permits or approvals issued pursuant to the Act and Regulations (including s. 112 of the Act and the provisions of the *National Energy Board Pipeline Crossing Regulations*, Part I and Part II), can municipalities and the Province be assured that they will not be leveraged into agreeing to terms that they would otherwise not be subject to.

2.12 A Condition(s) requiring Trans Mountain to enter into a Highway Licence and Crossing Agreement(s) related to impacted utilities including highway occupation and crossings with each affected municipality and affected Provincial highway authorities prior to construction must be imposed, failing which terms should be imposed by the NEB.

135. The existing National Energy Board Pipeline Crossing Regulations, Part I and Part II, do not reflect the reality of highway and utility infrastructure projects. As described above, they create an environment where Kinder Morgan/Trans Mountain will be able to leverage its position and require municipalities and other highway authorities to pay all costs and agree to Lot “X” demands or face project delays. This is an unacceptable outcome and in the absence of legislative change, can only be remedied through imposing terms and conditions in the Certificate.

136. A condition(s) requiring Trans Mountain to enter into a Highway Licence and Crossing Agreement(s) related to impacted utilities including highway occupation and crossings with each affected municipality and affected Provincial highway authorities, prior to construction must be imposed, failing which terms should be imposed by the NEB.

137. The fact that there are no agreement(s) or conditions of a certificate in place establishing terms and conditions related to occupying or crossing highways or to impacted utilities for the existing pipeline has resulted in the problems described above.

138. Moreover, as discussed above, the requirement to enter into an agreement prior to construction is common place under both federal and provincial legislation in respect of in other

regulated utilities. For example, s. 43 of the *Telecommunications Act*, s. 32 of the *Utilities Commission Act* and s. 34 of the *Oil and Gas Activities Act*.

139. Trans Mountain itself in its Application has impliedly agreed to such a condition. Trans Mountain in its Application has stated that it would enter into agreements with municipalities either in the form of permits or licence agreements. This is set out in document A3S0R0, Volume 2 – Project Overview, Economics and General Information, Section 5.0 Land Relations, Rights and Acquisitions, Section 5.3 Land Rights, Section 5.4 Lands Acquisition Process, Section 5.4.1 Process, Section 5.5 Land Acquisition Agreements (PDF pages 2-59 to 2-62, PDF pages 2-64 to 2-70).

140. This was additionally confirmed in Trans Mountain's Response to Information Request No. 1 of the City of Surrey filed as Exhibit C76-11-2 .

Request:

Terms of licence agreements and permits existing and contemplated in the City of Surrey

m) please provide a copy(ies) of the proposed form(s) of licence agreement(s) that Trans Mountain contemplates entering into with the Province and with the City of Surrey and with other municipalities in BC related to the proposed Line 2 pipeline occupying highways or roads or occupying the South Fraser Perimeter Road corridor or occupying the Golden Ears Connector corridor;

n) please confirm whether or not Trans Mountain has existing agreements and permits in relation to existing highway or road crossings in the City of Surrey by the existing Trans Mountain pipeline (whether those highways or roads are under the jurisdiction of City of Surrey or the Province). If so, please provide copies of all such agreements and permits and please also identify the dates of each;

o) please provide a copy(ies) of the proposed licence agreement(s) and permits that Trans Mountain contemplates entering into with the Province and with the City of Surrey and with other municipalities in relation to proposed highway and road crossings by the proposed Line 2 pipeline in the City of Surrey;

p) having regard to s. 112 of the National Energy Board Act and the jurisdiction of the NEB, please provide a copy of the form of permit that Trans

Mountain contemplates the City of Surrey and other municipalities in BC would require to obtain from Trans Mountain before performing any work in existing highway or road to be occupied by the proposed Line 2 pipeline;

q) please confirm whether or not Trans Mountain is prepared to pay the City of Surrey and other municipalities in BC compensation in the form of an annual fee for crossing and occupying highways or roads under municipal jurisdiction and if so, an explanation of how the compensation would be determined and if not, an explanation as to why not;

r) please provide a detailed summary of the consultations made and the findings regarding the statutory process Trans Mountain expects to follow in attempting to acquire land tenure in dedicated park. Please also provide an explanation of how compensation payable to the authority having ownership of the dedicated park will be determined;

Response:

m) **Currently, Trans Mountain has no licenses or other permits with municipalities for the existing federally regulated Trans Mountain Pipeline system.** However, Trans Mountain is aware that the City of Surrey and other municipalities are interested in negotiating such agreements, and has begun working on a form of protocol agreement to reasonably address any issues of concern to the municipalities. There has been one informal meeting held to date on May 16, 2014 between Trans Mountain and the City of Surrey to discuss this issue. Trans Mountain would welcome the opportunity to discuss this issue further with the City of Surrey and work towards a mutually acceptable protocol agreement.

n) Please see response to City Surrey IR No. 1.30.

o) Please see response to City Surrey IR No. 1.30.

p) Please see the response to City Surrey IR No. 1.30. Trans Mountain anticipates the form of permit for crossings of the pipeline would be a point of discussion during engagement around development of overall crossing agreements.

q) Trans Mountain does not anticipate annual fees for the Project. Trans Mountain anticipates that discussion regarding compensation would be included within the overall discussion of crossing agreements.

Trans Mountain believes that historical practice provides a reasonable approach respecting cost sharing and cost recovery for past, current and future

infrastructure development. In general, Trans Mountain believes it is reasonable for the project to reimburse municipalities for any modifications to their existing infrastructure required to accommodate the Project. In the planning and design of the Project, Trans Mountain is willing to work with municipalities to accommodate reasonably foreseeable plans for municipal infrastructure including roads and utilities in the design and placement of the pipeline. Once the Project is in place, any subsequent design and development of municipal infrastructure would be completed with the pipeline in place and should modifications or relocations of the pipeline be required to accommodate new municipal infrastructure, Trans Mountain would look to the municipality for reimbursement.

Trans Mountain is committed to working cooperatively with municipalities in the development of the Project. More specifically, Trans Mountain is prepared to:

- work with municipalities in the planning and engineering, and detailed design to accommodate future growth and minimize potential future impacts to existing infrastructure;
- pay for reasonable costs to inspect, relocate if needed, and protect their infrastructure during pipeline construction;
- work with the municipalities to fulfill federal requirements for pipeline protection including ground disturbance measures imbedded in the NEB crossing regulations; and
- construct the Project, and operate it and the existing pipeline in accordance with practices and procedures that are consistent with all other utility service and development infrastructure.
- There are established rules and protocols that must be met for the protection of the pipeline and municipal infrastructure, including formalized crossing agreements between infrastructure owners. Trans Mountain expects these rules and protocols will not be different than the processes currently used for the protection of the existing operating pipeline and for municipal development in proximity and directly over/under the pipeline.

With the installation of the proposed pipeline, all reasonable costs associated with construction and associated infrastructure changes would be borne by the Project, but costs for operations following installation would be in accordance with currently accepted practice and formalized in crossing agreements between infrastructure owner.

r) Legislative requirements respecting land acquisition for the Trans Mountain Expansion Project are set out within the NEB Act. Those provisions of the NEB Act apply specifically to directly affected parties and include:

- Under NEB Act, Section 75, “A company shall, in the exercise of the powers granted by this Act or a Special Act, do as little damage as possible,

and shall make full compensation in the manner provided in this Act and in a Special Act, to all persons interested, for all damage sustained by them by reason of the exercise of those powers.”

- Under the NEB Act Section 86, when a company acquires lands for its operations, they are responsible for any damages directly related to and caused by the acquisition of lands, construction of the pipeline, and inspection, maintenance or repair of the pipeline. Under that Section, compensation related to the installation of a pipeline includes compensation for the acquisition of lands, compensation for damages, and indemnification of land owners from all liabilities related to the company’s operations. These requirements would apply to the Trans Mountain Expansion Project.

- Under Section 97, factors an arbitration committee would consider in a determination of compensation include the market value of the lands taken both for permanent easement and temporary working space, loss of use of the lands by the owner, damages caused by construction and, noise and inconvenience that can reasonably be expected to arise from the construction. Trans Mountain is incorporating these factors in the compensation framework being developed for the Trans Mountain Expansion Project. Additional information respecting Trans Mountain Expansion Project compensation framework for directly affected landowners can be found in responses to NEB IR No. 1.29 and CGLAP IR No. 1.7b.

Trans Mountain anticipates it will negotiate agreements with each municipality where it is proposing to place the pipeline within roadways or on other municipal lands, including Parks, in accordance with these NEB Act requirements.

(Exhibit C76-11-1 - [\(A3W6E6-A4Q0V5\)](#) City of Surrey Information Request No. 1 filed May 7, 2014 (previously filed as C76-1-1))

(Exhibit C76-11-2 - [\(A3X6A5 - A4Q0V6\)](#) Response to City of Surrey Information Request No. 1 filed June 4, 2014 (previously filed as B52-1))

141. Parliament through s. 108 of the *National Energy Board Act* and through the broad jurisdiction of s. 52 of the Act has provided authority and direction to the NEB for this same approach and it is, therefore, incumbent on the NEB to recognize the need and imperative to impose such a condition.

142. In exercising the authority conferred under s. 108 of the Act, the NEB must also be mindful that the sections related to the Acquisition of Land in the Act (ss. 85 to 107) have no application to highways, parks and other public property for which no indefeasible title exists.

An interest in land cannot be acquired in highway, park and public square and it is precisely for this reason s. 108 was enacted by Parliament.

2.13 Terms and Conditions to be imposed on any Certificate Issued

143. Having regard to the above submissions in this section, it is submitted that the following terms and conditions should be imposed on any Certificate that may be issued. These terms and conditions should apply to the entire expanded pipeline system being both the proposed pipeline as well as the existing pipeline, or in the alternative to the proposed pipeline:

JOINT MUNICIPAL CONDITIONS

Present and future costs arising as a consequence of the pipeline occupying or crossing highways and impacting utilities

1. Trans Mountain shall be responsible for all present and future costs that will be incurred by the Municipality or others undertaking work in connection with a Municipality approved project or development (the "Approval Holder"), that the Municipality or Approval Holder would not have incurred but for the location, installation, construction and/or operation of the pipeline across, under, over or within the highway or in proximity to a municipal utility including, but not limited to:

- (i) costs to realign, raise or lower the pipeline;
- (ii) costs to excavate material from around the pipeline;
- (iii) costs to add casing or other appurtenances for the protection of the pipeline; and
- (iv) costs to accommodate future construction projects including, but not limited to, the construction, upgrading, maintenance, renewal, widening and/or replacement of any improvements, infrastructure, utilities and/or highway that occurs across, under, over or in proximity to the pipeline.

Necessary consent from Trans Mountain and other interest holders in Trans Mountain's statutory right of way/easement to enable municipalities and the Province to dedicate required land for highway/road.

2. Trans Mountain shall in respect of future widenings, expansions or improvements of the highway:

(i) consent (without conditions and without compensation) to the extinguishment of any statutory right of way or easement in favour of Trans Mountain over those portions of land required by the Municipality or the Province to be dedicated as highway or road in order that those portions of land may be incorporated into and form part of the existing highway that is occupied by the pipeline;

(ii) obtain the consent (without conditions and without compensation) of any mortgagee or other person having an interest in the statutory right of way or easement to be extinguished over that portion of land to be dedicated as highway or road in order that those portions of land may be incorporated into and form part of the existing highway that is occupied by the pipeline.

3. Trans Mountain shall in respect of creation of future dedicated highways and roads over the pipeline that are approved or required by a municipality or imposed as a condition of development approval (whether as a condition of subdivision approval, rezoning, or other land development project approval and whether related to a land development project initiated by a private developer or by the municipality):

(i) consent (without conditions and without compensation) to the extinguishment of any statutory right of way or easement in favour of Trans Mountain over that portion of land that is to be dedicated as highway or road;

(ii) obtain the consent (without conditions and without compensation) of any mortgagee or other person having an interest in the statutory right of way or easement to be extinguished over that portion of land that is to be dedicated as highway or road.

Fixed timing of pipeline work to be performed by Trans Mountain to accommodate highway, utility, infrastructure and improvement projects so as not to delay municipal projects

4. Trans Mountain shall perform all necessary pipeline related work within **90 days of being notified by the Municipality**, or within such period of time mutually agreed upon between the Municipality and Trans Mountain, or within such other time period as may be varied by Order of the Board so as not to delay any future highway, utility, infrastructure or improvement project that occurs across or in vicinity of the pipeline which might disturb the pipeline or which necessitates realigning, raising or lowering the pipeline or excavating material from, over or around it, or adding casings or other appurtenances deemed necessary by Trans Mountain for the protection of the pipeline.

Inconsistent Terms contained in Permits are Void

5. Unless otherwise ordered by the Board any permit issued by Trans Mountain pursuant to s. 112 of the *National Energy Board Act* or the *National Energy Board Pipeline Crossing*

Regulations (Part 1 and Part 2) shall be consistent with the terms of this Order and to the extent of any inconsistency such inconsistent terms are void.

Release and Indemnification in favour of Municipality

6. Trans Mountain shall indemnify and save the Municipality harmless from any and all liabilities, damages, claims, suits and actions arising out of Trans Mountain's operations and/or the construction, installation or placement of its infrastructure, including but not limited to, the pipeline, across, under, over or within the highway or in proximity to municipal utilities other than liabilities, damages, claims, suits and actions resulting the gross negligence or wilful misconduct of the Municipality.

7. Notwithstanding anything else in this Order, the Municipality shall not be liable to any person in any way for special, incidental, indirect, consequential, exemplary or punitive damages, including damages for pure economic loss or for failure to realize expected profits, howsoever caused or contributed to.

Requirement to Enter into Agreements with Affected Municipalities Prior to Construction

8. A Condition(s) requiring Trans Mountain to enter into a Highway Licence and Crossing Agreement(s) related to impacted utilities including highway occupation and crossings with each affected municipality and affected Provincial highway authorities prior to construction, failing which terms shall be imposed by the NEB.

Conditions Apply to Entire Expanded Pipeline System: To Both Existing and Proposed Pipelines

9. The above conditions 1 to 8 inclusive shall apply to the entire expanded pipeline system being both the existing and proposed pipelines.

3.0 Immediately Adjacent Alternative Corridors Avoid the Environmentally Sensitive and Environmentally Significant Areas including Surrey Bend Regional Park

Evidence Relied Upon:

Affidavits and Reports

- (i) Exhibits C76-9-18 ([A4L9U1](#)), C76-9-19 ([A4L9U2](#)), and C76-9-20 ([A4L9U3](#)) - Affidavit #2 of Larry Martin sworn May 26, 2015 including all exhibits thereto;
- (ii) Exhibit C76-10-9 ([A4Q0Q6](#)) - Report entitled “*TMP/TMX Routing Options and Feasibility of Abandoning the Existing Pipeline through the City of Surrey*” dated May, 2015 and prepared by Larry Martin, P. Eng;
- (iii) Exhibits C76-12-7 ([A4Q2K1](#)), C76-12-8 ([A4Q2K2](#)), C76-12-9 ([A4Q2K3](#)), C76-12-10 ([A4Q2K4](#)), C76-12-11 ([A4Q2K5](#)) and C76-12-12 ([A4Q2K6](#)) - Affidavit of Hugh Hamilton sworn May 22, 2015 including all exhibits thereto;
- (iv) Exhibits C76-12-2 ([A4Q2J6](#)), C76-12-3 ([A4Q2J7](#)), C76-12-4 ([A4Q2J8](#)), C76-12-5 ([A4Q2J9](#)) and C76-12-6 ([A4Q2K0](#)) - Report entitled “*Environmental Assessment of Pipeline Placement Options Within and Adjacent to Surrey Bend Regional Park*” dated May 2015 and prepared by Hugh Hamilton, Professional Agrologist;
- (v) Exhibits C76-9-9 ([A4L9T2](#)), C76-9-10 ([A4L9T3](#)), C76-9-11 ([A4L9T4](#)), C76-9-12 ([A4L9T5](#)) and C76-9-13 ([A4L9T6](#)) - Affidavit of David Hill sworn May 25th, 2015 including all exhibits thereto;
- (vi) Exhibits C76-10-1 ([A4Q0K5](#)), C76-10-2 ([A4Q0K8](#)), C76-10-3 ([A4Q0K9](#)) and C76-10-4 ([A4Q0L1](#)) - Report entitled “*Kinder Morgan Pipeline Alignment- Geotechnical Review Thornton Yards and Fraserview Areas, Surrey, BC*” dated May 21, 2015 and prepared by David Hill, P. Eng.;
- (vii) Exhibit C76-14-6 ([A4S3C7](#)) - Affidavit #4 of Larry Martin sworn on July 29, 2015;
- (viii) Exhibit C76-14-8 ([A4S3C9](#)) – Affidavit of Hugh Hamilton sworn August 17, 2015;
- (ix) Exhibit C76-14-7 ([A4S3C8](#)) – Affidavit of David Hill sworn on August 11, 2015;

Information Requests and Responses to Information Requests

- (x) Exhibit C76-11-1 ([A3W6E6-A4Q0V5](#)) - City of Surrey Information Request No. 1 filed May 7, 2014 (previously filed as C76-1-1);

- (xi) Exhibit C76-11-2 ([A3X6A5 - A4Q0V6](#)) - Response to City of Surrey Information Request No. 1 filed June 4, 2014 (previously filed as B52-1);
- (xii) Exhibit C76-11-3 ([A3Z4S8 - A4Q0V7](#)) - Follow up Response to City of Surrey Information Request No. 1 filed July 21, 2014 (previously filed as B239-2);
- (xiii) Exhibit C76-11-4 ([A4D3G2\(2\) - A4Q0V8](#)) - Follow up Response to National Energy Board Ruling 33 filed October 17, 2014, pages 178 to 181 with respect to City of Surrey Information Requests (previously filed as B280-3);
- (xiv) Exhibit C76-11-5 ([A4G5L6 - A4Q0V9](#)) - City of Surrey Information Request No. 2 filed January 15, 2015 (previously filed as C76-6-2);
- (xv) Exhibit C76-11-6 ([A4H8I8 - A4Q0W0](#)) - Response to City of Surrey Information Request No. 2 filed February 18, 2015 (previously filed as B314-45).

City of Surrey Adopted Documents

- (xvi) Exhibits C76-9-25 ([A4L9V1](#)) and C76-9-26 ([A4L9W1](#)) - City of Surrey Official Community Plan, By-law 18020 adopted October 20, 2014;
- (xvii) Exhibits C76-9-27 ([A4L9W2](#)) and C76-9-28 ([A4L9W3](#)) - City of Surrey Zoning By-law 12000, as amended;
- (xviii) Exhibits C76-9-29 ([A4L9W7](#)), C76-9-30 ([A4L9X3](#)), C76-9-31 ([A4L9X9](#)) and C76-9-32 ([A4L9Y2](#)) - Biodiversity Conservation Strategy dated January 2014 and adopted July 21, 2014;
- (xix) Exhibit C76-9-33 ([A4L9Y5](#)) and C76-9-34 ([A4L9Y7](#)) - Surrey Bend Regional Park Management Plan, June 2010;

3.1 Alternative Corridor(s) - There are feasible alternative corridor(s) available that are less impactful from an environmental assessment perspective, superior from a geotechnical perspective and that avoid Surrey Bend Regional Park.

144. There are feasible superior and less impactful alternative corridors that exist within the immediately adjacent corridor made up of the South Fraser Perimeter Road Corridor, the Golden Ears Connector Corridor and the CN Rail Corridor.

145. These feasible alternative corridor(s) available that are less impactful from an environmental assessment perspective, are superior from a geotechnical perspective, reduce costs for the City of Surrey and avoid Surrey Bend Regional Park.

146. The City of Surrey commissioned a report prepared by Larry Martin, Professional Engineer and Senior Engineer at Associated Engineering (B.C.) Ltd. which was filed as Exhibit C76-10-9 ([A4Q0Q6](#)). This report was included and formed part of the Affidavit of Larry Martin sworn May 26, 2015 and filed as Exhibits C76-9-18 ([A4L9U1](#)), C76-9-19 ([A4L9U2](#)), and C76-9-20 ([A4L9U3](#)).

147. The terms of reference for the report are set out on page 1 of the report and read as follows:

The City's Terms of Reference for this assignment are described below:

Terms of Reference, Part 1, dated December 18, 2014:

“For that portion of proposed pipeline corridor commencing at just east of AK 1160 and ending at AK 1166, please provide us with an assessment of the feasibility of locating the proposed pipeline within the corridor made up of the South Fraser Perimeter Road Corridor, the Golden Ears Connector Corridor and the CN Rail Corridor as an alternative to locating the pipeline within the proposed corridor between those two points”.

Exhibit C76-10-9 ([A4Q0Q6](#)) - Report entitled “*TMP/TMX Routing Options and Feasibility of Abandoning the Existing Pipeline through the City of Surrey*” dated May, 2015 and prepared by Larry Martin, P. Eng

Exhibits C76-9-18 ([A4L9U1](#)), C76-9-19 ([A4L9U2](#)), and C76-9-20 ([A4L9U3](#)) - Affidavit #2 of Larry Martin sworn May 26, 2015

148. As pointed out in the report the level of impact of the proposed Kinder Morgan Trans Mountain Expansion (TMX) on the City of Surrey is directly affected by the location at which the proposed pipeline is installed.

Option A and Option B are Feasible and are within the immediately adjacent corridor made up of South Fraser Perimeter Road Corridor, the Golden Ears Connector Corridor and the CN Rail Corridor.

Exhibit C76-10-9 ([A4Q0Q6](#)) - Report entitled “*TMP/TMX Routing Options and Feasibility of Abandoning the Existing Pipeline through the City of Surrey*” dated May, 2015 and prepared by Larry Martin, P. Eng

Exhibits C76-9-18 ([A4L9U1](#)), C76-9-19 ([A4L9U2](#)), and C76-9-20 ([A4L9U3](#)) - Affidavit #2 of Larry Martin sworn May 26, 2015

149. The report concluded that there are two feasible alternative pipeline routes that follow the South Fraser Perimeter Road Corridor, the Golden Ears Connector Corridor and the CN Rail Corridor.

2 Relocation of the TMX Corridor

The City of Surrey has recognized that the level of impact of the proposed Kinder Morgan TransMountain Expansion (TMX) on the City will be directly affected by the location at which the proposed pipeline is installed. At the time of this report, Kinder Morgan has proposed a pipeline corridor which travels along the CN Railway in northeast Surrey. The proposed route travels through the Surrey Bend Regional Park before crossing under the railway and South Fraser Perimeter Road, to travel along a bluff located directly behind a residential area. The City wanted AE to evaluate alternate routes that would reduce the impact to residential and environmentally sensitive areas.

This report concludes that there are two feasible alternative pipeline routes that follow the South Fraser Perimeter Road Corridor, the Golden Ears Connector Corridor and the CN Rail Corridor.

Exhibit C76-10-9 ([A4Q0Q6](#)) - Report entitled “*TMP/TMX Routing Options and Feasibility of Abandoning the Existing Pipeline through the City of Surrey*” dated May, 2015 and prepared by Larry Martin, P. Eng

Exhibits C76-9-18 ([A4L9U1](#)), C76-9-19 ([A4L9U2](#)), and C76-9-20 ([A4L9U3](#)) - Affidavit #2 of Larry Martin sworn May 26, 2015

150. The figures in Appendix A of the report illustrate the feasible routing options (Figures A1 to A3) as well as some cross sections in Figures A4 to A9. For convenience these have been reproduced at **Appendix "B"** of this Argument. These feasible alternative corridors are identified as “**Option A**” and “**Option B**”.

151. As set out in the report, Kinder Morgan/Trans Mountain in its application to the NEB identifies the goals of the pipeline route. These are summarized on p. 2 and 3 of the report:

2.1.1 Pipeline Corridor

In the initial application to the NEB, Kinder Morgan proposed a pipeline route through Surrey. Kinder Morgan's application to the NEB states that the goals of the pipeline route were as follows:

- Minimize the length of the TMX pipeline;
- Avoid areas that have significant environmental value or restrictions;
- Minimize routing through areas of extensive urban development;
- Be consistent with established land use planning;
- Avoid areas of potential geotechnical or geological hazards;
- Avoid areas of extremely rough terrain or areas that have limited access;
- Minimize the number of watercourse, highway, road, railway and utility crossings;
- Establish the crossing of watercourses at as close as is practical to right angles; and
- Minimize locating the pipeline within lands where limited rights are available.¹

In August 2014, KM submitted Technical Update #1, which involved a number of revisions to their proposed pipeline route, including a revision to the route through the City of Surrey. KM stated that the goal of reconfiguring the pipeline corridor was *“to improve constructability, avoid congestion in developed urban areas and reduce the length of pipeline corridor that encounters Surrey Bend Regional Park (SBRP) all while attempting to parallel existing linear facilities or keep the pipeline corridor in established transportation/utility corridors.”*² Copies of the drawings submitted showing the original, proposed and KM provided alternate routes are appended to this document.

Exhibit C76-10-9 ([A4Q0Q6](#)) - Report entitled *“TMP/TMX Routing Options and Feasibility of Abandoning the Existing Pipeline through the City of Surrey”* dated May, 2015 and prepared by Larry Martin, P. Eng

152. The report concluded that there are feasible alternative routes for the TMX that should be considered for pipeline routing to reduce the impact on the City of Surrey. These two viable alternative options for constructing the proposed TMX pipeline are within the corridor made up of the South Fraser Perimeter Corridor, the Golden Ears Connector Corridor and the CN Rail Corridor.

7 Conclusions

Based on the findings of this study, AE concludes that:

- There are feasible alternative routes for the TMX that should be considered for pipeline routing to reduce the impact on the City of Surrey.
- Twinning the TMX at the time of construction is feasible and would reduce the impact on the City of Surrey by removing the existing TMP from service.
- The TMP is at or near the end of its expected life, and planning for replacement of the TMP should begin immediately.

7.1 ALTERNATIVE ALIGNMENTS

AE investigated and determined that there are two viable alternative alignment options for constructing the proposed TMX pipeline within the corridor made up of the South Fraser Perimeter Road Corridor, the Golden Ears Connector Corridor and the CN Rail Corridor, to those routes currently proposed by Kinder Morgan.

Alignment Options A and B or a combination of both alignments for the proposed TMX can technically be constructed from AK 1160 to AK 1166. The two alternate routes have a number of advantages over the KM proposed route including the following:

1. They avoid the environmentally sensitive Surrey Bend Regional Park,
2. In the western section they are located further from the existing residential neighborhood,
3. They avoid construction on the relatively steep escarpment behind the residential neighborhood in the 16200 block of the SFPR.

4. They would be constructed in recently disturbed areas with minimal impact on the existing infrastructure.
5. They would provide reasonable access for operation and maintenance of the TMX.

Comparing the two proposed route options, Option A was found to encounter more restricted locations, particularly near the location shown in Section 5 (Drawing A8). Construction in these locations would require decreased construction footprint and additional site management during construction. Option B, like Option A, takes advantage of the existing corridor formed by CN rail and the highway projects, but provides additional flexibility for construction, with less restricted locations than Option A.

Exhibit C76-10-9 ([A4Q0Q6](#)) - Report entitled “*TMP/TMX Routing Options and Feasibility of Abandoning the Existing Pipeline through the City of Surrey*” dated May, 2015 and prepared by Larry Martin, P. Eng.

Exhibits C76-9-18 ([A4L9U1](#)), C76-9-19 ([A4L9U2](#)), and C76-9-20 ([A4L9U3](#)) - Affidavit #2 of Larry Martin sworn May 26, 2015

153. The report also concluded that these two alternative routes, being **Option A** and **Option B**, have a number of advantages over the Trans Mountain proposed route which are set out on p. 11 of the report as follows:

Alignment Options A and B or a combination of both alignments for the proposed TMX can technically be constructed from AK 1160 to AK 1166. The two alternate routes have a number of advantages over the KM proposed route including the following:

1. They avoid the environmentally sensitive Surrey Bend Regional Park,
2. In the western section they are located further from the existing residential neighborhood,
3. They avoid construction on the relatively steep escarpment behind the residential neighborhood in the 16200 block of the SFPR.
4. They would be constructed in recently disturbed areas with minimal impact on the existing infrastructure.
5. They would provide reasonable access for operation and maintenance of the TMX.

Exhibit C76-10-9 ([A4Q0Q6](#)) - Report entitled “*TMP/TMX Routing Options and Feasibility of Abandoning the Existing Pipeline through the City of Surrey*” dated May, 2015 and prepared by Larry Martin, P. Eng

Exhibits C76-9-18 ([A4L9U1](#)), C76-9-19 ([A4L9U2](#)), and C76-9-20 ([A4L9U3](#)) - Affidavit #2 of Larry Martin sworn May 26, 2015

3.1.1 Trans Mountain's Responses to City of Surrey Information Requests Support Option A and Option B as Alternative Alignments

154. In Round 1 of the Information Request Process, Trans Mountain when directly questioned on the availability of these proposed alternative corridors provided evidence that there are no impediments to using these corridors and that Trans Mountain abandoned consideration on the basis of the Ministry of Transportation and CN Rail merely objected.

Request:

b) please confirm whether or not Trans Mountain has conducted or obtained any feasibility studies, assessments, investigations or reports considering an alternative alignment of the proposed Line 2 corridor between RK u60 and n64 through the existing South Fraser Perimeter Road corridor and/or the CN right of way:

- (i) if any feasibility studies, assessments, investigations or reports have been conducted or obtained, please provide the City of Surrey with copies of all such studies, assessments, investigations and reports and please identify the date and author(s) of each;
- (ii) if Trans Mountain does not intend to conduct or obtain any such feasibility studies, assessments, investigations or reports, please provide an explanation as to why not;
- (iii) if there are any known or perceived impediments/obstacles to locating an alignment of the proposed Line 2 corridor between RK n60 and 1164 through the existing South Fraser Perimeter Road corridor and/or the CN right of way, please identify and describe in detail what those impediments/obstacles are, who identified them and what evidence was relied upon in determining that such impediments/obstacles actually exist. Please also indicate whether any assessment, review or investigation of these impediments/obstacles has been conducted or commissioned by Trans Mountain to ascertain whether they can be overcome or minimized; and

- (iv) if any such assessments, reviews or investigations described in paragraph (b)(iii) above have been undertaken, please provide the City with copies of them and please identify the date and author(s) of each. If such assessments, reviews or investigations have not been undertaken, please provide an explanation and as to why not;

Response:

b) i) No formal feasibility studies, assessments, investigations, or reports have been prepared considering the alternative alignment described in this request.

ii) As mentioned in response to City of Surrey IR No. 1.1a, Trans Mountain is continuing to consider improvements in the pipeline corridor. Trans Mountain will pursue discussions with appropriate landowners and stakeholders, including the City of Surrey, and provide an update in Technical Update No. 1 as described in response to City of Surrey IR No. 1.1a.

iii) **Trans Mountain was advised last fall that BC Ministry of Transportation and Infrastructure (MOTI) had plans for further development of the 104 Avenue interchange and preferred that the pipeline not be routed through this area. Trans Mountain did not require MOTI to show evidence as to whether this impediment actually exists.**

iv) See response to i) and ii) above.

Exhibit No. C76-11-1 ([A3W6E6-A4Q0V5](#)) City of Surrey Information Request No. 1 filed May 7, 2014 (previously filed as C76-1-1)

Exhibit No. C76-11-3 ([A3Z4S8 - A4Q0V7](#)) Trans Mountain Follow up Response to City of Surrey Information Request No. 1 filed July 21, 2014 (previously filed as B239-2)

3.1.2 Option A and Option B are not only feasible pipeline corridors but they are also less impactful from an environmental perspective

155. Having regard to feasibility of **Option A** and **Option B** as alternative pipeline corridors, the City of Surrey and Metro Vancouver jointly retained Hugh Hamilton, registered professional agrologist and director of Summit Environmental Consultants Inc., to prepare a report assessing the environmental impact of pipeline placement options within and adjacent to Surrey Bend

Regional Park. The report was filed as evidence by the City of Surrey as Exhibits C-76-12-2, C76-12-3, C76-12-4, C76-12-5 and C76-12-6 and was also separately filed by Metro Vancouver. The report was included and forms part of Hugh Hamilton's Affidavit sworn May 22, 2015 and filed as Exhibits C76-12-7 ([A4Q2K1](#)), C76-12-8 ([A4Q2K2](#)), C76-12-9 ([A4Q2K3](#)), C76-12-10 ([A4Q2K4](#)), C76-12-11 ([A4Q2K5](#)) and C76-12-12 ([A4Q2K6](#)).

156. The terms of reference of the report are described on p. i of the report:

Executive Summary

Trans Mountain Pipeline ULC (Trans Mountain), operated by Kinder Morgan Inc., is seeking approval for a Certificate of Public Convenience and Necessity from the National Energy Board to increase capacity of the Trans Mountain pipeline system from 47,690 m³/day of crude oil to 141,500 m³/day. Trans Mountain intends to install a second pipeline (Line 2) that will mainly run adjacent to the existing pipeline (Line 1) although some sections of Line 2 would follow a different right-of-way. The company's planned route positions the new pipeline within Surrey Bend Regional Park (SBRP), specifically between markers AK 1160.82 and AK 1162.66. SBRP is one of 22 Regional Parks in Metro Vancouver.

The City of Surrey and Metro Vancouver retained Associated Engineering to review the proposed pipeline alignment within the park (the Proposed Route) and two other options (Alternate Routes), and to provide an assessment of the following potential effect components:

1. Impacts to plant communities / permanent vegetation loss;
2. Impacts to wildlife and other fauna;
3. Impacts to species at risk;
4. Impacts to fisheries and fish habitat;
5. Impacts on the natural environment with respect to increased access for people and dogs, and invasive species;
6. Bog hydraulics and soil moisture regimes;
7. Environmental consequences of a pipeline rupture; and
8. Emergency response implications.

Exhibits C76-12-2 ([A4Q2J6](#)), C76-12-3 ([A4Q2J7](#)), C76-12-4 ([A4Q2J8](#)), C76-12-5 ([A4Q2J9](#)) and C76-12-6 ([A4Q2K0](#)) - Report entitled “*Environmental Assessment of Pipeline Placement Options Within and Adjacent to Surrey Bend Regional Park*” dated May 2015 and prepared by Hugh Hamilton, Professional Agrologist

Exhibits C76-12-7 ([A4Q2K1](#)), C76-12-8 ([A4Q2K2](#)), C76-12-9 ([A4Q2K3](#)), C76-12-10 ([A4Q2K4](#)), C76-12-11 ([A4Q2K5](#)) and C76-12-12 ([A4Q2K6](#)) - Affidavit of Hugh Hamilton sworn May 22, 2015

157. The environmental significance of Surrey Bend Regional Park ("SBRP") cannot be understated. The report properly identifies SBRP relative to other areas in the lower Fraser Valley as offering the greatest diversity of wetland types, one of the largest relatively undisturbed bogs, the largest grass-dominated marsh, and the largest floodplain swamp. Together these create unique habitats that host a wide range of vegetation communities, fish species and wildlife. In addition, SBRP is one of the few riparian areas in the Lower Mainland that is not diked.

Relative to other areas in the lower Fraser Valley, SBRP offers the greatest diversity of wetland types, one of the largest relatively undisturbed bogs, the largest grass-dominated marsh, and the largest floodplain swamp. Together these create unique habitats that host a wide range of vegetation communities, fish species and wildlife. In addition, SBRP is one of the few riparian areas in the Lower Mainland that is not diked. Constructing the pipeline in the Proposed Route will disrupt the bog hydrology and geochemistry to such a degree that successful restoration of the bog after the pipeline is installed is unlikely. Specific potential impacts for each of the effects components are summarized in Table E-1.

Exhibits C76-12-2 ([A4Q2J6](#)), C76-12-3 ([A4Q2J7](#)), C76-12-4 ([A4Q2J8](#)), C76-12-5 ([A4Q2J9](#)) and C76-12-6 ([A4Q2K0](#)) - Report entitled “*Environmental Assessment of Pipeline Placement Options Within and Adjacent to Surrey Bend Regional Park*” dated May 2015 and prepared by Hugh Hamilton, Professional Agrologist

Exhibits C76-12-7 ([A4Q2K1](#)), C76-12-8 ([A4Q2K2](#)), C76-12-9 ([A4Q2K3](#)), C76-12-10 ([A4Q2K4](#)), C76-12-11 ([A4Q2K5](#)) and C76-12-12 ([A4Q2K6](#)) - Affidavit of Hugh Hamilton sworn May 22, 2015

158. The environmental significance of SBRP is further described in Section 2.0 on pages 2-2 to 2-4 of the report:

2 Surrey Bend Regional Park

2.1 Location and Land Use

2.1.1 Overview

Surrey Bend Regional Park is situated on 348 ha in northeast Surrey and is one of only 22 Regional Parks in Metro Vancouver. Metro Vancouver owns 211 ha of SBRP and Surrey owns 137 ha; the portion owned by the City of Surrey is leased to Metro Vancouver Regional Parks.

The park is bordered by the Fraser River to the north and east (Parsons Channel) and by the CN Intermodal Yard and the SFPR to the south (Figure 2-1). Centre Creek traverses the middle of the park and drains to the northeast.

2.1.2 Park History

The history of SBRP and the surrounding area includes the following:

- The CN rail line was constructed in 1891 by the New Westminster Southern Railway, and resulted in significant disruption of park drainage and hydrology.
- The drainage ditch that runs along Pacific Trail was constructed in the 1930s to aid the drainage to the Fraser River (from what is now 104th Avenue).
- Areas east of Pacific Trail were cleared in the 1950s and 1960s for farmland and a slough.
- The area east of Pacific Trail was cleared for a proposed industrial development in the mid-1970s. The farms were removed and fill was placed on these areas.
- The Maple Ridge Forcemain was constructed in the early 1980s from east to west through the centre of the park.
- Most of the railway line adjacent to the park became the CN Intermodal Yard in the 1980s. During development, CN constructed culverts beneath the line to provide some connectivity of drainage and to permit salmon movement through Centre Creek.
- The Lower Mainland Legacy Program was implemented in 1995. This funded the land assembly that allowed Surrey Bend to be placed in a Public Park Reserve.

□ In 2014, TI Corp. completed created approximately 20,000 m² of aquatic habitat for salmonids east of Pacific Trail.

The park has remained largely undisturbed since the 1980s. Visitors walk along the gravel road that runs along the sewer main, but few visitors venture off the trail because of the boggy nature of the terrain and the thick brush. The park is currently closed for facility development, and is scheduled to open to the public in the latter part of 2015.

2.2 ECOLOGICAL CONTEXT

2.2.1 Previous Studies

The park's ecological and social significance has prompted several assessments of vegetation, wildlife, rare and endangered species, fish and fish habitat, and hydrology in the park. In addition, an extensive environmental impact assessment of the SFPR study area (which borders the CN Intermodal yard on the south) was conducted by the Ministry of Transportation and Infrastructure before it was constructed². This assessment included components on vegetation and wildlife, fish habitat, and water quality; all of which are relevant to our study areas. All previous studies reviewed for our assessment are listed in the References section of this report.

2.2.2 Biogeoclimatic Ecosystem Classification

Surrey Bend Regional Park and the surrounding area are located in a transition between the “dry maritime” and “very dry maritime” variants of the Coastal Western Hemlock biogeoclimatic zone (known as the CWHdm and CWHxm, respectively). Both variants have warm, relatively dry summers and moist, mild winters with little snowfall. Growing seasons are long, and feature water deficits on zonal sites (though only minor water deficits in the CWHdm variant) (Green and Klinka 1994).

In general, both variants are dominated by Douglas-fir (*Pseudotsuga menziesii*), with varying amounts of western red cedar (*Thuja plicata*) and western hemlock (*Tsuga heterophylla*). Common understorey species in the CWHdm include salal (*Gaultheria shallon*), red huckleberry (*Vaccinium parvifolium*), and mosses (*Hylocomium splendens*, *Kindbergia oregana*, *Rhytidiadelphus loreus*, and *Plagiothecium undulatum*). Common understorey species in the CWHxm include salal, dull Oregon grape (*Mahonia nervosa*), red huckleberry, and mosses (Green and Klinka 1994).

2.2.3 Ecological Significance of the Park

Surrey Bend Regional Park is one of the very few riparian areas in the lower Fraser Valley that has not been affected by diking. As such, the park's unique ecosystem reflects the history of periodic flooding from both the tidal cycle of the lower Fraser River and from spring freshet. Although the park hydrology (Section 4.5) has been modified with the development of the CN rail line, many areas in the park remain undisturbed.

The park's hydrology supports a complex of watercourses, wetland types, and terrestrial ecosystems that are increasingly rare in the lower Fraser River floodplain. Much of the park's shoreline, the bog and large areas of wetland habitats remain in undisturbed state, and invasive species are limited to the more open areas of the park. In the wider context of the Fraser Valley, SBRP is known for four key features (Metro Vancouver and City of Surrey 2010):

1. The greatest diversity of wetland types;
2. The third-largest relatively undisturbed bog;
3. The largest grass-dominated marsh; and
4. The largest floodplain swamp.

Given the above, SBRP is recognized as the largest habitat node within the City and, therefore, has been given high priority for habitat protection, conservation and enhancement (Metro Vancouver and City of Surrey 2010).

Because of the diversity and unique attributes of the ecosystems in SBRP, the park is a habitat reservoir for many resident and seasonal wildlife species. It supports a diversity of fish, mammal, bird, reptile, amphibian and invertebrate species. There are 37 provincially or federally listed rare and endangered species with the potential to occur within the park (29 animal and eight plant species), and nine of these (seven animal and two plant species) have been observed within the park or surrounding area (Appendix B).

The majority of SBRP is classified as a Conservation Zone or an Integrated Management Zone with a conservation focus under the Metro Vancouver Regional Parks zoning system, and this portion of the park is identified as a wetland sensitive ecosystem in the Sensitive Ecosystem Inventory (SEI). The Management Plan developed for SBRP (see Section 2.3) recognizes the ecological significance of these habitats and has prioritized the planned trail system to conserve habitat and reduce impacts on wildlife (Metro Vancouver and City of Surrey 2010).

2.3 Social and Community Context

Surrey Bend Regional Park is the largest publicly owned natural area in Surrey. Metro Vancouver and the City of Surrey developed a Management Plan for the park in 2010. This plan called for extensive public engagement and concluded that the park should be preserved in an undisturbed state, with development being restricted to a small trail network and parking area. These will be located east of PacificTrail (see Figure 2-1), thus preserving the less disturbed or undisturbed portions of the park. These developments will offer limited recreational opportunities, educational opportunities, and will encourage study of the site's ecology and natural value (Metro Vancouver and Surrey 2010).

Exhibits C76-12-2 ([A4Q2J6](#)), C76-12-3 ([A4Q2J7](#)), C76-12-4 ([A4Q2J8](#)), C76-12-5 ([A4Q2J9](#)) and C76-12-6 ([A4Q2K0](#)) - Report entitled “*Environmental Assessment of Pipeline Placement Options Within and Adjacent to Surrey Bend Regional Park*” dated May 2015 and prepared by Hugh Hamilton, Professional Agrologist

Exhibits C76-12-7 ([A4Q2K1](#)), C76-12-8 ([A4Q2K2](#)), C76-12-9 ([A4Q2K3](#)), C76-12-10 ([A4Q2K4](#)), C76-12-11 ([A4Q2K5](#)) and C76-12-12 ([A4Q2K6](#)) - Affidavit of Hugh Hamilton sworn May 22, 2015

159. The report states that constructing the pipeline in the proposed corridor will disrupt the bog hydrology and geochemistry to such a degree that successful restoration of the bog after the pipeline is installed is unlikely.

Relative to other areas in the lower Fraser Valley, SBRP offers the greatest diversity of wetland types, one of the largest relatively undisturbed bogs, the largest grass-dominated marsh, and the largest floodplain swamp. Together these create unique habitats that host a wide range of vegetation communities, fish species and wildlife. In addition, SBRP is one of the few riparian areas in the Lower Mainland that is not diked. **Constructing the pipeline in the Proposed Route will disrupt the bog hydrology and geochemistry to such a degree that successful restoration of the bog after the pipeline is installed is unlikely. Specific potential impacts for each of the effects components are summarized in Table E-1.**

Exhibits C76-12-2 ([A4Q2J6](#)), C76-12-3 ([A4Q2J7](#)), C76-12-4 ([A4Q2J8](#)), C76-12-5 ([A4Q2J9](#)) and C76-12-6 ([A4Q2K0](#)) - Report entitled “*Environmental Assessment of Pipeline Placement Options Within and Adjacent to Surrey Bend Regional Park*” dated May 2015 and prepared by Hugh Hamilton, Professional Agrologist at page i.

Exhibits C76-12-7 ([A4Q2K1](#)), C76-12-8 ([A4Q2K2](#)), C76-12-9 ([A4Q2K3](#)), C76-12-10 ([A4Q2K4](#)), C76-12-11 ([A4Q2K5](#)) and C76-12-12 ([A4Q2K6](#)) - Affidavit of Hugh Hamilton sworn May 22, 2015

160. After examining the two alternatives to the proposed corridor, those being **Option A** and **Option B** described above, Hugh Hamilton concluded that either of the alternative routes would be preferable to the proposed route, but Option A has less potential for environmental affects than Option B.

Two alternatives to the Proposed Route were examined: Alternate Route Options A and B. Alternate Route Option A traverses the corridor between the CN Railway Intermodal Yard and the South Fraser Perimeter Road. This area is already highly disturbed from previous construction activities. Much of it is covered in grasses from previous restoration activities, as well as juvenile trees and fish-bearing watercourses that are used for rearing, overwintering and migration but offer no spawning potential. Constructing the pipeline in this route would have a very low impact on vegetation, wildlife, species at risk, and fish and fish habitat. Specific impacts for each of the effects components are compared to Trans Mountain's proposed route in Table E1.

Alternate Route Option B runs adjacent to and south-west of the South Fraser Perimeter Road (SFPR). Approximately half of this route was significantly altered by construction of SFPR and the remaining portion was affected by construction of SFPR. This option is connected to some natural areas with fish-bearing watercourses that are used for rearing, overwintering and migration but offer no spawning potential. Constructing the pipeline in this route would have some impact on vegetation, wildlife, species at risk, and fish and fish habitat. Specific impacts for each of the key features are described in Table E1.

If an oil spill were to occur in the Proposed Route or either Alternative Route, Trans Mountain, CN Railway, the B.C. Ministry of Transportation and Infrastructure, the City of Surrey, and local emergency response personnel would likely be notified and involved in the containment. Trans Mountain would access the oil spill site from the Westridge Marine Terminal, which is approximately 40 minutes' drive away from SBRP. If the spill were to occur in the Proposed Route, oil would likely spill into the bog and could enter Centre Creek, a fish-bearing watercourse that flows into the Fraser River. Containment would be slowed by the difficult access within SBRP. Site clean-up in the bog areas would likely require removal of the peat layers. This would adversely affect bog hydrology and ecological function outside the area directly affected by the spill.

If the spill occurred in either one of the Alternate Routes, SFPR provides comparably easy access to contain any spill that occurs on site, and to minimize

the potential for oil to flow towards the Fraser River. Early containment reduces the likelihood of the spill entering the watercourses that ultimately flow through SBRP and into the Fraser River. Generally, much of the site clean-up would occur in areas that were previously impacted by human activities (i.e. areas adjacent to SFPR).

To summarize, the Proposed Route through SBRP could potential have serious adverse and irreversible effects on the bog and lagg ecosystems in the park. **Either of the Alternate Routes would be preferable to the Proposed Route, but Option A has less potential for environmental effects than Option B.** Although the probability of a pipeline rupture in the SBRP study area is low, the consequences of a release of crude oil along the Proposed Route would likely be significant because of the potential for the oil to be carried towards the Fraser River and because of the challenges of cleaning up an oil spill in the bog.

Exhibits C76-12-2 ([A4Q2J6](#)), C76-12-3 ([A4Q2J7](#)), C76-12-4 ([A4Q2J8](#)), C76-12-5 ([A4Q2J9](#)) and C76-12-6 ([A4Q2K0](#)) - Report entitled “*Environmental Assessment of Pipeline Placement Options Within and Adjacent to Surrey Bend Regional Park*” dated May 2015 and prepared by Hugh Hamilton, Professional Agrologist at pages i-ii.

Exhibits C76-12-7 ([A4Q2K1](#)), C76-12-8 ([A4Q2K2](#)), C76-12-9 ([A4Q2K3](#)), C76-12-10 ([A4Q2K4](#)), C76-12-11 ([A4Q2K5](#)) and C76-12-12 ([A4Q2K6](#)) - Affidavit of Hugh Hamilton sworn May 22, 2015

161. Alternative Route, Option A traverses the corridor between the CN Railway Intermodal Yard and the South Fraser Perimeter Road. This area was described by Hugh Hamilton as “*already highly disturbed from previous construction activities. Much of it is covered in grasses from previous restoration activities.*” The report concluded that constructing the pipeline in this route “*would have a very low impact on vegetation, wildlife, species at risk and fish and fish habitat.*”

Two alternatives to the Proposed Route were examined: Alternate Route Options A and B. Alternate Route Option A traverses the corridor between the CN Railway Intermodal Yard and the South Fraser Perimeter Road. **This area is already highly disturbed from previous construction activities. Much of it is covered in grasses from previous restoration activities, as well as juvenile trees and fish-bearing watercourses that are used for rearing, overwintering and migration but offer no spawning potential. Constructing the pipeline in this route would have a very low impact on vegetation, wildlife, species at risk, and fish and fish habitat.** Specific impacts for each of the effects components are compared to Trans Mountain’s proposed route in Table E1.

Exhibits C76-12-2 ([A4Q2J6](#)), C76-12-3 ([A4Q2J7](#)), C76-12-4 ([A4Q2J8](#)), C76-12-5 ([A4Q2J9](#)) and C76-12-6 ([A4Q2K0](#)) - Report entitled “*Environmental Assessment of Pipeline Placement Options Within and Adjacent to Surrey Bend Regional Park*” dated May 2015 and prepared by Hugh Hamilton, Professional Agrologist at pages i – ii.

Exhibits C76-12-7 ([A4Q2K1](#)), C76-12-8 ([A4Q2K2](#)), C76-12-9 ([A4Q2K3](#)), C76-12-10 ([A4Q2K4](#)), C76-12-11 ([A4Q2K5](#)) and C76-12-12 ([A4Q2K6](#)) - Affidavit of Hugh Hamilton sworn May 22, 2015

162. Alternative Route Option B runs adjacent to and southwest of the South Fraser Perimeter Road.

Alternate Route Option B runs adjacent to and south-west of the South Fraser Perimeter Road (SFPR). Approximately half of this route was significantly altered by construction of SFPR and the remaining portion was affected by construction of SFPR. This option is connected to some natural areas with fish-bearing watercourses that are used for rearing, overwintering and migration but offer no spawning potential. Constructing the pipeline in this route would have some impact on vegetation, wildlife, species at risk, and fish and fish habitat. Specific impacts for each of the key features are described in Table E1.

Exhibits C76-12-2 ([A4Q2J6](#)), C76-12-3 ([A4Q2J7](#)), C76-12-4 ([A4Q2J8](#)), C76-12-5 ([A4Q2J9](#)) and C76-12-6 ([A4Q2K0](#)) - Report entitled “*Environmental Assessment of Pipeline Placement Options Within and Adjacent to Surrey Bend Regional Park*” dated May 2015 and prepared by Hugh Hamilton, Professional Agrologist at page ii.

Exhibits C76-12-7 ([A4Q2K1](#)), C76-12-8 ([A4Q2K2](#)), C76-12-9 ([A4Q2K3](#)), C76-12-10 ([A4Q2K4](#)), C76-12-11 ([A4Q2K5](#)) and C76-12-12 ([A4Q2K6](#)) - Affidavit of Hugh Hamilton sworn May 22, 2015

163. Specific impacts for each of the effects components are compared to Trans Mountain’s proposed route in Table E1 of the report which for convenience has been reproduced and is found at **Appendix "C"** of this Argument.

164. The report also considers impact for each routing/corridor option in the event of a pipeline spill or rupture. If the spill were to occur in the proposed route, oil would likely spill into the bog and could enter Centre Creek, a fish-bearing watercourse that flows into the Fraser River. Containment would be slowed by difficult access with SBRP. Site clean-up in the bog

areas would likely require removal of the peat layers. This would adversely affect bog hydrology and ecological function outside the area directly affected by the spill.

If an oil spill were to occur in the Proposed Route or either Alternative Route, Trans Mountain, CN Railway, the B.C. Ministry of Transportation and Infrastructure, the City of Surrey, and local emergency response personnel would likely be notified and involved in the containment. Trans Mountain would access the oil spill site from the Westridge Marine Terminal, which is approximately 40 minutes' drive away from SBRP. If the spill were to occur in the Proposed Route, oil would likely spill into the bog and could enter Centre Creek, a fish-bearing watercourse that flows into the Fraser River. Containment would be slowed by the difficult access within SBRP. Site clean-up in the bog areas would likely require removal of the peat layers. This would adversely affect bog hydrology and ecological function outside the area directly affected by the spill.

Exhibits C76-12-2 ([A4Q2J6](#)), C76-12-3 ([A4Q2J7](#)), C76-12-4 ([A4Q2J8](#)), C76-12-5 ([A4Q2J9](#)) and C76-12-6 ([A4Q2K0](#)) - Report entitled "*Environmental Assessment of Pipeline Placement Options Within and Adjacent to Surrey Bend Regional Park*" dated May 2015 and prepared by Hugh Hamilton, Professional Agrologist at page ii.

Exhibits C76-12-7 ([A4Q2K1](#)), C76-12-8 ([A4Q2K2](#)), C76-12-9 ([A4Q2K3](#)), C76-12-10 ([A4Q2K4](#)), C76-12-11 ([A4Q2K5](#)) and C76-12-12 ([A4Q2K6](#)) - Affidavit of Hugh Hamilton sworn May 22, 2015

165. In contrast, if the spill or rupture occurred in either of the Alternative Routes, being Option A and Option B, the report provides that South Fraser Perimeter Road provides comparably easy access to contain any spill.

If the spill occurred in either one of the Alternate Routes, SFPR provides comparably easy access to contain any spill that occurs on site, and to minimize the potential for oil to flow towards the Fraser River. Early containment reduces the likelihood of the spill entering the watercourses that ultimately flow through SBRP and into the Fraser River. Generally, much of the site clean-up would occur in areas that were previously impacted by human activities (i.e. areas adjacent to SFPR).

Exhibits C76-12-2 ([A4Q2J6](#)), C76-12-3 ([A4Q2J7](#)), C76-12-4 ([A4Q2J8](#)), C76-12-5 ([A4Q2J9](#)) and C76-12-6 ([A4Q2K0](#)) - Report entitled "*Environmental Assessment of Pipeline Placement Options Within and Adjacent to Surrey Bend Regional Park*" dated May 2015 and prepared by Hugh Hamilton, Professional Agrologist at page ii.

Exhibits C76-12-7 ([A4Q2K1](#)), C76-12-8 ([A4Q2K2](#)), C76-12-9 ([A4Q2K3](#)), C76-12-10 ([A4Q2K4](#)), C76-12-11 ([A4Q2K5](#)) and C76-12-12 ([A4Q2K6](#)) - Affidavit of Hugh Hamilton sworn May 22, 2015

3.1.3 In addition to having less impact on the environmentally sensitive area of Surrey Bend Regional Park, the alternative corridors identified as Options A and B are in areas that are superior from a geotechnical perspective.

166. The City of Surrey commissioned David Hill, Professional Engineer and principal of Thurber Engineering Ltd. to complete a geotechnical review of the proposed Trans Mountain Expansion Project (TMEP) pipeline route between stationing RK 1159.80 and RK 1165.60, Surrey. The report was filed as evidence by the City of Surrey as Exhibits C76-10-1 ([A4Q0K5](#)), C76-10-2 ([A4Q0K8](#)), C76-10-3 ([A4Q0K9](#)) and C76-10-4 ([A4Q0L1](#)) in this proceeding. The report was included and forms part of the Affidavit of David Hill sworn May 25, 2015 and filed as Exhibits C76-9-9 ([A4L9T2](#)), C76-9-10 ([A4L9T3](#)), C76-9-11 ([A4L9T4](#)), C76-9-12 ([A4L9T5](#)) and C76-9-13 ([A4L9T6](#)).

167. The terms of reference and purpose of the report are described on p. 1:

1. INTRODUCTION

As requested by the City of Surrey (City), Thurber Engineering Ltd (Thurber) has completed a geotechnical review of the proposed Trans Mountain Expansion Project (TMEP) pipeline route between stationing RK 1159.80 and RK 1165.60, Surrey, BC.

It is a condition of this report that Thurber's performance of its professional services is subject to the attached Statement of Limitations and Conditions.

2. PROJECT UNDERSTANDING

2.1 General

Trans Mountain Pipeline ULC (Trans Mountain, December 2013), operated by Kinder Morgan Canada Inc. (KMC) and fully owned by Kinder Morgan Energy Partners, L.P. has applied to the National Energy Board (NEB) for approval of the Trans Mountain Expansion Project (TMEP), which will comprise an expansion to the existing Trans Mountain Pipeline (TMPL) system.

The proposed TMEP pipeline route and route corridor within the City is shown on Hatch Mott MacDonald (HMM) drawings 334890-PL-120-S0-0014 and -0015, both dated August 13, 2014. Of specific geotechnical concern to the City is the section of pipeline between Trigg Road and 103rd Avenue right of way (HMM Drawing RK 1160.50 approximately) and the eastern end of CN's marshalling yard on the east side of the Port Mann Bridge (RK 1165.60 approximately). Within this section of pipeline, there are three subsections which pose different geotechnical issues/concerns to the City as follows:

- North end of Trigg Road at 103th Avenue, where the proposed alignment follows an indirect route along existing paved City streets as opposed to a direct route through private property (AK1160.50 to AK1160.82)
- Along the northeast side of CN's Thornton Yard where the pipeline alignment is located over a thick deposit of peat (AK1160.82 to AK1162.66).
- Along the crest of the Fraser River valley slopes (AK1162.90 to AK1165.60).

The purpose of the assessment is to:

- determine the geotechnical related risks associated with these sections of alignment
- provide comments and document concerns regarding the proposed pipeline route
- identify and recommend alternative, superior routes along (i) the lowland section and (ii) at greater distance from the existing adjacent residences in the high ground section of alignment.

Exhibits C76-10-1 ([A4Q0K5](#)), C76-10-2 ([A4Q0K8](#)), C76-10-3 ([A4Q0K9](#)) and C76-10-4 ([A4Q0L1](#)) - Report entitled "*Kinder Morgan Pipeline Alignment- Geotechnical Review Thornton Yards and Fraserview Areas, Surrey, BC*" dated May 21, 2015 and prepared by David Hill, P. Eng.

Exhibits C76-9-9 ([A4L9T2](#)), C76-9-10 ([A4L9T3](#)), C76-9-11 ([A4L9T4](#)), C76-9-12 ([A4L9T5](#)) and C76-9-13 ([A4L9T6](#)) - Affidavit of David Hill sworn May 25, 2015

168. David Hill, P. Eng. determined that the proposed pipeline route was at high risk from future landslide events which have the potential to compromise the pipeline. He also determined that the pipeline route is in an area of high risk from differential settlements and/or seismic events which have the potential to compromise the pipeline. He expressed his opinion as follows on p.12 of the report:

7.3 Opinion

In our opinion **the proposed pipeline route between RK 1164.18 and RK 1165.39 is at high risk from future landslide events which have the potential to compromise the pipeline. Further, it is our opinion that between RK 1160.50 to RK 1162.75 and west of RK 1160.40 to the Port Mann bridge where the pipeline traverses peat and/or underlying seismically liquefiable soils, the pipeline route is a high risk from differential settlements and/or seismic events which have the potential to compromise the pipeline.**

We note that where BCG have identified deep seated landslides and seismically active zones, their recommended mitigation measure is to locate pipelines away from areas of deep seated landslides and away from areas of potential liquefaction. We concur with this recommendation.

Exhibits C76-10-1 ([A4Q0K5](#)), C76-10-2 ([A4Q0K8](#)), C76-10-3 ([A4Q0K9](#)) and C76-10-4 ([A4Q0L1](#)) - Report entitled “*Kinder Morgan Pipeline Alignment- Geotechnical Review Thornton Yards and Fraserview Areas, Surrey, BC*” dated May 21, 2015 and prepared by David Hill, P. Eng.

Exhibits C76-9-9 ([A4L9T2](#)), C76-9-10 ([A4L9T3](#)), C76-9-11 ([A4L9T4](#)), C76-9-12 ([A4L9T5](#)) and C76-9-13 ([A4L9T6](#)) - Affidavit of David Hill sworn May 25, 2015

169. In Section 8 of his report, David Hill, P. Eng., detailed his recommendations for alternative pipeline alignments that would serve to mitigate or reduce the risk of some of the geotechnical concerns. These were described as follows:

8. RECOMMENDATIONS

In Section 6 of this report, we detailed several geotechnical related concerns with the proposed route including landslide hazards, settlement and lateral ground movement due to seismic events. **Following are our recommendations for alternative pipeline alignments that would serve to mitigate or reduce the risk of some of the geotechnical concerns.**

8.1 Peat Lowlands

At the north end of Trigg Road, the proposed pipeline route follows an indirect route along existing paved City streets as opposed to a direct route through private property (AK1160.50 to AK1160.82). From a geotechnical perspective, the ground conditions are expected to be similar along both routes hence no geotechnical related advantage is gained from routing the pipe along the City streets. A shorter, more direct route would involve less excavation, shorter pipe

length, less trench backfilling and less disruption to traffic and to the public in general. Further, the bends in the pipeline will require thrust blocks to resist lateral forces at the bends. These blocks would not be required for a straight pipe alignment. Generating lateral resistance in peat and organic silts can be challenging due to the large strain displacement required to mobilize soil strength in soft soils.

To the north of AK1160.82, the proposed route traverses near-virgin, peat lowlands on the west side of the existing CN yard and SFPR embankments. Construction of a pipeline through a peat bog is challenging due to difficult surface ground access, trench wall instability and ground and pipe settlement, all of which would be expected in the peat lowlands. It is our opinion that construction of the pipeline would be significantly less challenging and the long term performance would be better if the pipeline is constructed in the relatively more stable soil conditions that would be expected to the east within the CN yard where the site was preloaded and surcharged and the permanent fill has been in place for many years and the settlement rate is significantly less than will occur in the virgin peat area. For similar reasons, constructing the pipeline within the SFPR alignment would also be geotechnically preferable as the soils within the depth of pipe bury are expected to comprise sand fill, which was placed over the peat and silt and then preloaded and surcharged.

8.2 Slope Crest Area

The proposed pipeline alignment west of about Sta. 1164.18 traverses the crest of the Fraser River Valley slopes. There are several landslide scars that extend back beyond the general line of the slope crest and the proposed alignment is very close to slide scarps at some locations and traverses across the backscarp of two of the landslide features. In one area, the southern limit of the proposed right-of-way is within a landslide scar such that moving the pipeline out of the slide area is not possible if it is to remain within the right-of-way. It is our opinion that there is a high risk of future landslide events in this area and that such an event would have the potential to compromise the pipeline.

Since it would not be prudent to move the pipeline towards the existing residences and, as noted above, the southern limit of the right of way in one area is still within a slide scar, we believe that the pipeline alignment be better located at the bottom of the slope, e.g. within the SFPR right-of- way or CN yard area, to reduce the risk of pipeline damage due to slope crest regression.

As a minimum, we recommend that detailed, site-specific slope stability analyses be carried out in this area of the alignment to quantify the current stability conditions and determine the risk of future instability and the impact on the pipeline integrity and the potential resultant effects on the adjacent residences.

Exhibits C76-10-1 ([A4Q0K5](#)), C76-10-2 ([A4Q0K8](#)), C76-10-3 ([A4Q0K9](#)) and C76-10-4 ([A4Q0L1](#)) - Report entitled “*Kinder Morgan Pipeline Alignment- Geotechnical Review Thornton Yards and Fraserview Areas, Surrey, BC*” dated May 21, 2015 and prepared by David Hill, P. Eng. at page 12.

Exhibits C76-9-9 ([A4L9T2](#)), C76-9-10 ([A4L9T3](#)), C76-9-11 ([A4L9T4](#)), C76-9-12 ([A4L9T5](#)) and C76-9-13 ([A4L9T6](#)) - Affidavit of David Hill sworn May 25, 2015

170. In support of the alternative corridors identified as **Option A** and **Option B** earlier in this Argument, David Hill, P. Eng., at p. 13 of his report expressed the opinion that it would be better from a geotechnical perspective if the pipeline is constructed in the relatively more stable soil conditions that would be expected to exist within the CN yard where the site was preloaded and surcharged and the permanent fill has been in place for many years and the settlement rate is significantly less than will occur in virgin peat area. For similar reasons, David Hill, P. Eng., also concluded that constructing the pipeline within the South Fraser Perimeter Road alignment would also be geotechnically preferable as the soils within the depth of the pipe bury are expected to comprise of sand fill, which was placed over the peat and silt and then preloaded and surcharged.

8.1 Peat Lowlands

At the north end of Trigg Road, the proposed pipeline route follows an indirect route along existing paved City streets as opposed to a direct route through private property (AK1160.50 to AK1160.82). From a geotechnical perspective, the ground conditions are expected to be similar along both routes hence no geotechnical related advantage is gained from routing the pipe along the City streets. A shorter, more direct route would involve less excavation, shorter pipe length, less trench backfilling and less disruption to traffic and to the public in general. Further, the bends in the pipeline will require thrust blocks to resist lateral forces at the bends. These blocks would not be required for a straight pipe alignment. Generating lateral resistance in peat and organic silts can be challenging due to the large strain displacement required to mobilize soil strength in soft soils.

To the north of AK1160.82, the proposed route traverses near-virgin, peat lowlands on the west side of the existing CN yard and SFPR embankments. Construction of a pipeline through a peat bog is challenging due to difficult surface ground access, trench wall instability and ground and pipe settlement, all

of which would be expected in the peat lowlands. **It is our opinion that construction of the pipeline would be significantly less challenging and the long term performance would be better if the pipeline is constructed in the relatively more stable soil conditions that would be expected to the east within the CN yard where the site was preloaded and surcharged and the permanent fill has been in place for many years and the settlement rate is significantly less than will occur in the virgin peat area. For similar reasons, constructing the pipeline within the SFPR alignment would also be geotechnically preferable as the soils within the depth of pipe bury are expected to comprise sand fill, which was placed over the peat and silt and then preloaded and surcharged.**

Exhibits C76-10-1 ([A4Q0K5](#)), C76-10-2 ([A4Q0K8](#)), C76-10-3 ([A4Q0K9](#)) and C76-10-4 ([A4Q0L1](#)) - Report entitled “*Kinder Morgan Pipeline Alignment- Geotechnical Review Thornton Yards and Fraserview Areas, Surrey, BC*” dated May 21, 2015 and prepared by David Hill, P. Eng. at pages 12 – 13.

Exhibits C76-9-9 ([A4L9T2](#)), C76-9-10 ([A4L9T3](#)), C76-9-11 ([A4L9T4](#)), C76-9-12 ([A4L9T5](#)) and C76-9-13 ([A4L9T6](#)) - Affidavit of David Hill sworn May 25, 2015

3.2 Fraser Valley Slope Crest Area to be Avoided - pipeline alignment better located at bottom of the slope within South Fraser Perimeter Road right of way or CN Yard area, to reduce risk of pipeline damage due to slope crest regression

171. The David Hill report also states that the proposed pipeline alignment west of about Sta. 1164.18 traverses the crest of the Fraser Valley slopes which is an area of high risk of future landslide events which would have the potential to compromise the pipeline and that the pipeline alignment would be better located at the bottom of the slope.

8.2 Slope Crest Area

The proposed pipeline alignment west of about Sta. 1164.18 traverses the crest of the Fraser River Valley slopes. There are several landslide scars that extend back beyond the general line of the slope crest and the proposed alignment is very close to slide scarps at some locations and traverses across the backscarp of two of the landslide features. In one area, the southern limit of the proposed right-of-way is within a landslide scar such that moving the pipeline out of the slide area is not possible if it is to remain within the right-of-way. **It is our opinion that there is a high risk of future landslide events in this area and that such an event would have the potential to compromise the pipeline.**

Since it would not be prudent to move the pipeline towards the existing residences and, as noted above, the southern limit of the right of way in one area is still within a slide scar, **we believe that the pipeline alignment be better located at the bottom of the slope, e.g. within the SFPR right-of- way or CN yard area, to reduce the risk of pipeline damage due to slope crest regression.**

As a minimum, we recommend that detailed, site-specific slope stability analyses be carried out in this area of the alignment to quantify the current stability conditions and determine the risk of future instability and the impact on the pipeline integrity and the potential resultant effects on the adjacent residences.

Exhibits C76-10-1 ([A4Q0K5](#)), C76-10-2 ([A4Q0K8](#)), C76-10-3 ([A4Q0K9](#)) and C76-10-4 ([A4Q0L1](#)) - Report entitled “*Kinder Morgan Pipeline Alignment- Geotechnical Review Thornton Yards and Fraserview Areas, Surrey, BC*” dated May 21, 2015 and prepared by David Hill, P. Eng. at page 13.

Exhibits C76-9-9 ([A4L9T2](#)), C76-9-10 ([A4L9T3](#)), C76-9-11 ([A4L9T4](#)), C76-9-12 ([A4L9T5](#)) and C76-9-13 ([A4L9T6](#)) - Affidavit of David Hill sworn May 25, 2015

Use of Triggs Road of No Geotechnical Advantage

172. Regarding the proposed use of Triggs Road, David Hill, P. Eng. concluded that from a geotechnical perspective the ground conditions are expected to be similar along both routes hence no geotechnical advantage is gained from routing the pipe along the City streets. In fact a shorter, more direct route would involve less excavation, shorter pipe length, less trench backfilling and less disruption.

8.1 Peat Lowlands

At the north end of Trigg Road, the proposed pipeline route follows an indirect route along existing paved City streets as opposed to a direct route through private property (AK1160.50 to AK1160.82). From a geotechnical perspective, the ground conditions are expected to be similar along both routes hence no geotechnical related advantage is gained from routing the pipe along the City streets. A shorter, more direct route would involve less excavation, shorter pipe length, less trench backfilling and less disruption to traffic and to the public in general. Further, the bends in the pipeline will require thrust blocks to resist lateral forces at the bends. These blocks would not be required for a straight pipe alignment. Generating lateral resistance in peat and organic silts can be challenging due to the large strain displacement required to mobilize soil strength in soft soils.

To the north of AK1160.82, the proposed route traverses near-virgin, peat lowlands on the west side of the existing CN yard and SFPR embankments. Construction of a pipeline through a peat bog is challenging due to difficult surface ground access, trench wall instability and ground and pipe settlement, all of which would be expected in the peat lowlands. It is our opinion that construction of the pipeline would be significantly less challenging and the long term performance would be better if the pipeline is constructed in the relatively more stable soil conditions that would be expected to the east within the CN yard where the site was preloaded and surcharged and the permanent fill has been in place for many years and the settlement rate is significantly less than will occur in the virgin peat area. For similar reasons, constructing the pipeline within the SFPR alignment would also be geotechnically preferable as the soils within the depth of pipe bury are expected to comprise sand fill, which was placed over the peat and silt and then preloaded and surcharged.

Exhibits C76-10-1 ([A4Q0K5](#)), C76-10-2 ([A4Q0K8](#)), C76-10-3 ([A4Q0K9](#)) and C76-10-4 ([A4Q0L1](#)) - Report entitled "*Kinder Morgan Pipeline Alignment- Geotechnical Review Thornton Yards and Fraserview Areas, Surrey, BC*" dated May 21, 2015 and prepared by David Hill, P. Eng. at pages 12 – 13.

Exhibits C76-9-9 ([A4L9T2](#)), C76-9-10 ([A4L9T3](#)), C76-9-11 ([A4L9T4](#)), C76-9-12 ([A4L9T5](#)) and C76-9-13 ([A4L9T6](#)) - Affidavit of David Hill sworn May 25, 2015

3.3 Terms and Conditions to be Imposed on any Certificate Issued

173. Having regard to the above submissions in this section, it is submitted that the following terms and conditions should be imposed on any Certificate that may be issued:

Relocation to Alternative Corridor Approximately between AK 1160 and AK 1166

1. That the proposed pipeline be located outside of Surrey Bend Regional Park to an immediately adjacent corridor made up of the South Fraser Perimeter Road Corridor, the Golden Ears Connector Corridor and the CN Rail Corridor.

2. That the proposed pipeline corridor commencing just east of AK 1160 and ending at AK 1166 in the City of Surrey be relocated to the corridor identified as Option B, or alternatively to the corridor identified as Option A in Exhibit C76-10-9 ([A4Q0Q6](#)) filed by the City of Surrey in this proceeding.

4.0 A Condition should be Imposed on any approval that a Portion of the Existing Pipeline Be Abandoned, Decommissioned and Removed in the City of Surrey

Evidence Relied Upon:

Affidavits and Reports

- (i) Exhibits C76-9-18 ([A4L9U1](#)), C76-9-19 ([A4L9U2](#)) and C76-19-20 ([A4L9U3](#)) - Affidavit of Larry Martin sworn May 26th, 2015 including all exhibits thereto;
- (ii) Exhibit C76-10-9 ([A4Q0Q6](#)) - Report entitled “*TMP/TMX Routing Options and Feasibility of Abandoning the Existing Pipeline through the City of Surrey*” dated May, 2015 and prepared by Larry Martin, P. Eng;
- (xx) Exhibits C76-12-7 ([A4Q2K1](#)), C76-12-8 ([A4Q2K2](#)), C76-12-9 ([A4Q2K3](#)), C76-12-10 ([A4Q2K4](#)), C76-12-11 ([A4Q2K5](#)) and C76-12-12 ([A4Q2K6](#)) - Affidavit of Hugh Hamilton sworn May 22, 2015 including all exhibits thereto;
- (iii) Exhibits C76-12-2 ([A4Q2J6](#)), C76-12-3 ([A4Q2J7](#)), C76-12-4 ([A4Q2J8](#)), C76-12-5 ([A4Q2J9](#)) and C76-12-6 ([A4Q2K0](#)) - Report entitled “*Environmental Assessment of Pipeline Placement Options Within and Adjacent to Surrey Bend Regional Park*” dated May 2015 and prepared by Hugh Hamilton, Professional Agrologist;
- (iv) Exhibits C76-9-9 ([A4L9T2](#)), C76-9-10 ([A4L9T3](#)), C76-9-11 ([A4L9T4](#)), C76-9-12 ([A4L9T5](#)) and C76-9-13 ([A4L9T6](#)) - Affidavit of David Hill sworn May 25th, 2015 including all exhibits thereto;
- (v) Exhibits C76-10-1 ([A4Q0K5](#)), C76-10-2 ([A4Q0K8](#)), C76-10-3 ([A4Q0K9](#)) and C76-10-4 ([A4Q0L1](#)) - Report entitled “*Kinder Morgan Pipeline Alignment- Geotechnical Review Thornton Yards and Fraserview Areas, Surrey, BC*” dated May 21, 2015 and prepared by David Hill, P. Eng.;
- (vi) Exhibit C76-14-6 ([A4S3C7](#)) - Affidavit #4 of Larry Martin sworn on July 29, 2015;
- (vii) Exhibit C76-14-8 ([A4S3C9](#)) – Affidavit of Hugh Hamilton sworn August 17, 2015;
- (viii) Exhibit C76-14-7 ([A4S3C8](#)) – Affidavit of David Hill sworn on August 11, 2015;

Information Requests and Responses to Information Requests

- (ix) Exhibit No. C76-11-1 ([A3W6E6-A4Q0V5](#)) City of Surrey Information Request No. 1 filed May 7, 2014 (previously filed as C76-1-1);

- (x) Exhibit No. C76-11-2 ([A3X6A5 - A4Q0V6](#)) Trans Mountain Response to City of Surrey Information Request No. 1 filed June 4, 2014 (previously filed as B52-1 by Trans Mountain);
- (xi) Exhibit No. C76-11-3 ([A3Z4S8 - A4Q0V7](#)) Trans Mountain Follow up Response to City of Surrey Information Request No. 1 filed July 21, 2014 (previously filed as B239-2);
- (xii) Exhibit No. C76-11-4 (A4D3G2(2) -_A4Q0V8) Trans Mountain Follow up Response to National Energy Board Ruling 33 filed October 17, 2014, pages 178 to 181 with respect to City of Surrey Information Requests (previously filed as B280-3);
- (xiii) Exhibit C76-11-5 ([A4G5L6 - A4Q0V9](#)) City of Surrey Information Request No. 2 filed January 15, 2015 (previously filed as C76-6-2);
- (xiv) Exhibit C76-11-6 ([A4H8I8 - A4Q0W0](#)) Trans Mountain Response to City of Surrey Information Request No. 2 filed February 18, 2015 (previously filed as B314-45).

City of Surrey Adopted Documents

- (xv) Exhibits C76-9-25 ([A4L9V1](#)) and C76-9-26 ([A4L9W1](#)) - City of Surrey Official Community Plan, By-law 18020 adopted October 20, 2014;
- (xvi) Exhibits C76-9-27 ([A4L9W2](#)) and C76-9-28 ([A4L9W3](#)) - City of Surrey Zoning By-law 12000, as amended;
- (xvii) Exhibits C76-9-29 ([A4L9W7](#)), C76-9-30 ([A4L9X3](#)), C76-9-31 ([A4L9X9](#)) and C76-9-32 ([A4L9Y2](#)) - Biodiversity Conservation Strategy dated January 2014 and adopted July 21, 2014;
- (xviii) Exhibit C76-9-33 ([A4L9Y5](#)) and C76-9-34 ([A4L9Y7](#)) - Surrey Bend Regional Park Management Plan, June 2010;

4.1 Feasibility of Abandoning and Decommissioning that Portion of Existing Pipeline in the City of Surrey

174. In assessing the application before it the jurisdiction of the NEB is broad and plenary.

175. This jurisdiction is set out in s. 52 of the *National Energy Board Act* and is further supported by s. 12 of the Federal *Interpretation Act* which provides that every enactment is

deemed remedial and shall be given such fair, large and liberal construction and interpretation as best ensures the attainment of its objects.

CERTIFICATES

52. (1) If the Board is of the opinion that an application for a certificate in respect of a pipeline is complete, it shall prepare and submit to the Minister, and make public, a report setting out

- (a) its recommendation as to whether or not the certificate should be issued for all or any portion of the pipeline, taking into account whether the pipeline is and will be required by the present and future public convenience and necessity, and the reasons for that recommendation; and
- (b) regardless of the recommendation that the Board makes, all the terms and conditions that it considers necessary or desirable in the public interest to which the certificate will be subject if the Governor in Council were to direct the Board to issue the certificate, including terms or conditions relating to when the certificate or portions or provisions of it are to come into force.

(2) In making its recommendation, the Board shall have regard to all considerations that appear to it to be directly related to the pipeline and to be relevant, and may have regard to the following:

- (a) the availability of oil, gas or any other commodity to the pipeline;
- (b) the existence of markets, actual or potential;
- (c) the economic feasibility of the pipeline;
- (d) the financial responsibility and financial structure of the applicant, the methods of financing the pipeline and the extent to which Canadians will have an opportunity to participate in the financing, engineering and construction of the pipeline; and
- (e) any public interest that in the Board's opinion may be affected by the issuance of the certificate or the dismissal of the application.

(3) If the application relates to a designated project within the meaning of section 2 of the [Canadian Environmental Assessment Act, 2012](#), the report must also set out the Board's environmental assessment prepared under that Act in respect of that project.

(4) The report must be submitted to the Minister within the time limit specified by the Chairperson. The specified time limit must be no longer than 15 months after the day on which the applicant has, in the Board's opinion, provided a complete application. The Board shall make the time limit public.

(5) If the Board requires the applicant to provide information or undertake a study with respect to the pipeline and the Board, with the Chairperson's approval, states publicly that this subsection applies, the period that is taken by the applicant to comply with the requirement is not included in the calculation of the time limit.

(6) The Board shall make public the dates of the beginning and ending of the period referred to in subsection (5) as soon as each of them is known.

(7) The Minister may, by order, extend the time limit by a maximum of three months. The Governor in Council may, on the recommendation of the Minister, by order, further extend the time limit by any additional period or periods of time.

(8) To ensure that the report is prepared and submitted in a timely manner, the Minister may, by order, issue a directive to the Chairperson that requires the Chairperson to

- (a) specify under subsection (4) a time limit that is the same as the one specified by the Minister in the order;
- (b) issue a directive under subsection 6(2.1), or take any measure under subsection 6(2.2), that is set out in the order; or
- (c) issue a directive under subsection 6(2.1) that addresses a matter set out in the order.

(9) Orders made under subsection (7) are binding on the Board and those made under subsection (8) are binding on the Chairperson.

(10) A copy of each order made under subsection (8) must be published in the [*Canada Gazette*](#) within 15 days after it is made.

(11) Subject to sections 53 and 54, the Board's report is final and conclusive.

Book of Authorities, Tab 6

Enactments deemed remedial

12 Every enactment is deemed remedial, and shall be given such fair, large and liberal construction and interpretation as best ensures the attainment of its objects.

Book of Authorities, Tab 3A

176. Within the scope of this broad jurisdiction is the power to impose as a condition of any approval of an expansion of the subject pipeline system, that a portion of the existing pipeline be abandoned, decommissioned and removed and be replaced through either twinning or incrementally upsizing the size/diameter of the proposed pipeline, such that said increase or

twinning could accommodate a total flow capacity equivalent to or greater than the flow capacity of that portion of the existing pipeline to be abandoned and decommissioned.

177. The City of Surrey commissioned a report prepared by Larry Martin, Professional Engineer and Senior Engineer at Associated Engineering (B.C.) Ltd. The report was filed as evidence as Exhibit C76-10-9 ([A4Q0Q6](#)) in this proceeding. This report was included and forms part of the Affidavit of Larry Martin sworn May 26, 2015 and filed as Exhibits C76-9-18 ([A4L9U1](#)), C76-9-19 ([A4L9U2](#)), and C76-9-20 ([A4L9U3](#)).

178. The terms of reference for the report are set out on page 1 of the report and read as follows:

Terms of Reference, Part 2 dated January 9, 2015:

1. “For that portion of proposed pipeline running through the City of Surrey, please provide us with an assessment of the feasibility of either incrementally increasing the size/diameter of the proposed pipeline or alternatively twinning the proposed pipeline such that such that said increase or twinning could accommodate a total flow capacity equivalent to or greater than the flow capacity of that portion of the existing Trans Mountain pipeline that runs through the City of Surrey; and

2. Provide us an opinion on the remaining life expectancy of the existing Trans Mountain pipeline that runs through the City of Surrey.”

Exhibit C76-10-9 ([A4Q0Q6](#)) - Report entitled “*TMP/TMX Routing Options and Feasibility of Abandoning the Existing Pipeline through the City of Surrey*” dated May, 2015 and prepared by Larry Martin, P. Eng

Exhibits C76-9-18 ([A4L9U1](#)), C76-9-19 ([A4L9U2](#)), and C76-9-20 ([A4L9U3](#)) - Affidavit #2 of Larry Martin sworn May 26, 2015

179. In addition to identifying feasible alternative corridors for the proposed pipeline which were determined and identified in the report as **Option A** and **Option B** discussed above, Larry Martin, P. Eng., also investigated the feasibility of abandoning and decommissioning a portion of the existing pipeline through either twinning or incrementally upsizing the size/diameter of the proposed pipeline, such that said increase or twinning could accommodate a total flow capacity

equivalent to or greater than the flow capacity of that portion of the existing pipeline to be abandoned and decommissioned.

180. In his report, Larry Martin, P. Eng. on p. 6 stated that relocation of the existing TMP pipeline through Surrey to the proposed TMX route could significantly reduce the costs of operating, maintaining and replacing infrastructure in the City. Larry Martin, P. Eng. noted that this can be attributed to the fact that the City of Surrey has grown around the existing TMP, and many municipal utilities and residential areas are impacted by its presence. The proposed TMX route is through a much more industrial area than the existing route.

3 Twinning of the TMX through Surrey

It has been previously identified that relocation of the existing TMP pipeline through Surrey to the proposed TMX route could significantly reduce the costs of operating, maintaining and replacing infrastructure in the City. This can be attributed to the fact that the City of Surrey has grown around the existing TMP, and many municipal utilities and residential areas are impacted by its presence. The proposed TMX route is through a much more industrial area than the existing route. For this reason, the City of Surrey sees great value in relocating both pipelines to the proposed route.

A twinning review was undertaken of the three routes examined above; Option A, Option B and the TMX Proposed route. Based on the construction area available and an assumed distance of 5 m between two pipelines, both Option B and the TMX Proposed route would be feasible for twinning. Due to the space restrictions at some points along Option A, twinning this route would be more difficult, therefore this option is seen as more challenging but still feasible. Option B and the TMX Proposed route are more feasible for twinning than Option A, and therefore these options were evaluated further.

To further the investigation into twinning, AE was asked to estimate the costs of twinning the currently proposed TMX pipeline route, thereby removing the existing TMP route through the middle of the City. To complete this task, AE chose to break the portion of the pipeline through Surrey into segments and assign costs based on documentation previously submitted to the NEB on behalf of KM. These segments are described further in Table 1.

Per metre pipeline costs were taken from the study completed by Hatch Mott MacDonald for installation of KM pipelines in the Burnaby area. Note that these costs were developed for installation of two 762 mm diameter NPS 30 lines, assuming that a second pipeline in a common trench will be 65% greater than a

single pipeline, and separate trenches will be 90% greater than a single pipeline.

The cost of the single crossing was obtained from Kinder Morgan's Technical Update #1 as part of the application to the NEB. AE has assumed that twinning of this crossing would result in cost increases of approximately 90% of the original cost, due to the logistics of constructing a trenchless river crossing. Estimates gathered from sources outside of AE have been reviewed and are considered a reasonable estimate of actual costs.

Exhibit C76-10-9 ([A4Q0Q6](#)) - Report entitled "*TMP/TMX Routing Options and Feasibility of Abandoning the Existing Pipeline through the City of Surrey*" dated May, 2015 and prepared by Larry Martin, P. Eng

Exhibits C76-9-18 ([A4L9U1](#)), C76-9-19 ([A4L9U2](#)), and C76-9-20 ([A4L9U3](#)) - Affidavit #2 of Larry Martin sworn May 26, 2015

181. These observations regarding the urbanization and development in proximity to the existing pipeline through Surrey are also evident from the aerial maps produced by Trans Mountain as part of this application and by the City of Surrey's Official Community Plan and Zoning By-law which have been filed as Exhibits C76-9-25 ([A4L9V1](#)), C76-9-26 ([A4L9W1](#)) and Exhibits C76-9-27 ([A4L9W2](#)) and C76-9-28 ([A4L9W3](#)) in this proceeding.

182. The stated objectives and goals in determining a proposed alignment also support the abandonment and decommissioning of that part of the existing pipeline through the City of Surrey. These objectives include avoiding urban and residential areas.

4.1.1 Twinning of the TMX through Surrey

183. A twinning review was undertaken of the three routes: **Option A**, **Option B** and the TMX Proposed Route.

3 Twinning of the TMX through Surrey

It has been previously identified that relocation of the existing TMP pipeline through Surrey to the proposed TMX route could significantly reduce the costs of operating, maintaining and replacing infrastructure in the City. This can be attributed to the fact that the City of Surrey has grown around the existing TMP,

and many municipal utilities and residential areas are impacted by its presence. The proposed TMX route is through a much more industrial area than the existing route. For this reason, the City of Surrey sees great value in relocating both pipelines to the proposed route.

A twinning review was undertaken of the three routes examined above; Option A, Option B and the TMX Proposed route. Based on the construction area available and an assumed distance of 5 m between two pipelines, both Option B and the TMX Proposed route would be feasible for twinning. Due to the space restrictions at some points along Option A, twinning this route would be more difficult, therefore this option is seen as more challenging but still feasible. Option B and the TMX Proposed route are more feasible for twinning than Option A, and therefore these options were evaluated further.

To further the investigation into twinning, AE was asked to estimate the costs of twinning the currently proposed TMX pipeline route, thereby removing the existing TMP route through the middle of the City. To complete this task, AE chose to break the portion of the pipeline through Surrey into segments and assign costs based on documentation previously submitted to the NEB on behalf of KM. These segments are described further in Table 1.

Per metre pipeline costs were taken from the study completed by Hatch Mott MacDonald for installation of KM pipelines in the Burnaby area. Note that these costs were developed for installation of two 762 mm diameter NPS 30 lines, assuming that a second pipeline in a common trench will be 65% greater than a single pipeline, and separate trenches will be 90% greater than a single pipeline.

The cost of the single crossing was obtained from Kinder Morgan's Technical Update #1 as part of the application to the NEB. AE has assumed that twinning of this crossing would result in cost increases of approximately 90% of the original cost, due to the logistics of constructing a trenchless river crossing. Estimates gathered from sources outside of AE have been reviewed and are considered a reasonable estimate of actual costs.

Exhibit C76-10-9 ([A4Q0Q6](#)) - Report entitled "*TMP/TMX Routing Options and Feasibility of Abandoning the Existing Pipeline through the City of Surrey*" dated May, 2015 and prepared by Larry Martin, P. Eng

Exhibits C76-9-18 ([A4L9U1](#)), C76-9-19 ([A4L9U2](#)), and C76-9-20 ([A4L9U3](#)) - Affidavit #2 of Larry Martin sworn May 26, 2015

184. The report also estimated the costs of twinning the currently proposed TMX pipeline route, thereby removing the existing TMP route through the middle of Surrey.

To further the investigation into twinning, AE was asked to estimate the costs of twinning the currently proposed TMX pipeline route, thereby removing the existing TMP route through the middle of the City. To complete this task, AE chose to break the portion of the pipeline through Surrey into segments and assign costs based on documentation previously submitted to the NEB on behalf of KM. These segments are described further in Table 1.

Exhibit C76-10-9 ([A4Q0Q6](#)) - Report entitled “*TMP/TMX Routing Options and Feasibility of Abandoning the Existing Pipeline through the City of Surrey*” dated May, 2015 and prepared by Larry Martin, P. Eng

Exhibits C76-9-18 ([A4L9U1](#)), C76-9-19 ([A4L9U2](#)), and C76-9-20 ([A4L9U3](#)) - Affidavit #2 of Larry Martin sworn May 26, 2015

185. The pipeline twinning segment descriptions and installation costs are summarized in Table 1 and Table 2 on p. 7 of the report which have been reproduced below:

Table 1
Pipeline Twinning: Segment Descriptions

| Segment | Description | Pipeline Configuration |
|-----------------------|---|--|
| SFPR | Departs from existing alignment and runs northwest along South Fraser Perimeter Road. | Dual pipes, 900 mm and 600 mm, in single trench or separate trenches. |
| Fraser River Crossing | Runs under Fraser River, from south side to north side of river, then continues west through Coquitlam residential areas. | Trenchless technology under river; dual pipes in single trench or separate trenches through residential areas. |

Table 2 provides the estimated incremental cost of twinning the proposed 900 mm TMX pipeline with a 600 mm pipeline.

Table 2
Pipeline Installation
Costs^{5,6}

| Segment | Pipeline Configuration | Estimated Cost |
|--------------|---|---|
| SFPR | Single pipe, 900 mm <ul style="list-style-type: none"> • Road – heavy arterial twin • Farm/rural | Cost per metre of pipe, installed \$5,200 - \$6,000 \$3,000 - \$3,800 |
| | Dual pipes, 900 mm and 600 mm, in a common installed ditch or separate ditches <ul style="list-style-type: none"> • Road – heavy arterial twin • Farm/rural | Cost per metre of pipe, \$8,600 - \$11,400 \$5,000 - \$6,300 |
| Fraser River | Single pipe (DN 900) under Fraser River and \$15.8 M Crossing through Coquitlam residential areas | |
| | Dual pipes (DN 900 and 600) under Fraser River and through Coquitlam residential areas | Additional 90% of original cost |

Exhibit C76-10-9 ([A4Q0Q6](#)) - Report entitled “*TMP/TMX Routing Options and Feasibility of Abandoning the Existing Pipeline through the City of Surrey*” dated May, 2015 and prepared by Larry Martin, P. Eng

Exhibits C76-9-18 ([A4L9U1](#)), C76-9-19 ([A4L9U2](#)), and C76-9-20 ([A4L9U3](#)) - Affidavit #2 of Larry Martin sworn May 26, 2015

186. Based on Tables 1 and 2 above, the report calculated the estimated costs for both the proposed single line installation and the twinning project. These costs are found in Table 3 found on p. 8 of the report which is reproduced here below:

Table 3
Estimated Additional Cost to Twin the TMX
pipeline (Current Proposed Route)

| Segment | Description | Length (km) | Unit Cost | Estimated Cost | Additional Cost |
|--------------------------------------|--|-------------|-----------|----------------|-----------------|
| SFPR | Proposed Single Pipeline • Rural installation | 8.85 | \$3,400 | \$30.1 M | |
| | Twinned Lines • Rural installation | | \$5,750 | \$51.8 M | \$20.7M |
| M Fraser Crossing | Proposed Single Pipeline | | - | \$15.8 | |
| | Twinned Lines | | - | \$30.0 M | \$14.2M |
| Total Additional Cost to Twin | | | | | \$35.9 M |

Exhibit C76-10-9 ([A4Q0Q6](#)) - Report entitled “*TMP/TMX Routing Options and Feasibility of Abandoning the Existing Pipeline through the City of Surrey*” dated May, 2015 and prepared by Larry Martin, P. Eng

Exhibits C76-9-18 ([A4L9U1](#)), C76-9-19 ([A4L9U2](#)), and C76-9-20 ([A4L9U3](#)) - Affidavit #2 of Larry Martin sworn May 26, 2015

187. The report estimated that twinning the proposed pipeline route through Surrey would cost KM an additional \$36 Million upfront capital costs. **However, the report also provided that this cost would be offset by the significant investment KM will spend in the foreseeable future when the existing TMP is scheduled for replacement due to its age.** The report also found that the linear cost per meter to twin the TMP with the TMX would likely be less than replacing the TMP in its current location through Surrey’s residential streets.

Based on cost estimates collected directly from KM documentation and studies, twinning the proposed pipeline route through Surrey would cost KM an additional \$36 Million upfront capital. However, this cost would be offset by the significant investment KM will spend in the foreseeable future when the existing TMP is scheduled for replacement due to its age. This would also bring the following benefits:

- Smaller footprint

- Less impact on existing utilities and infrastructure
- Relocation of the pipeline away from developed residential areas
- Less risk of failure of the existing line
- Less impact to residents when the TMP needs to be accessed for maintenance
- A newer pipeline asset for KM, compared to the 60 year old TMP
- Lower annual operational and maintenance costs for KM due to the newer pipeline.

The linear cost per meter to twin the TMP with the TMX would likely be less than replacing the TMP in its current location through Surrey's residential areas.

Exhibit C76-10-9 ([A4Q0Q6](#)) - Report entitled "*TMP/TMX Routing Options and Feasibility of Abandoning the Existing Pipeline through the City of Surrey*" dated May, 2015 and prepared by Larry Martin, P. Eng

Exhibits C76-9-18 ([A4L9U1](#)), C76-9-19 ([A4L9U2](#)), and C76-9-20 ([A4L9U3](#)) - Affidavit #2 of Larry Martin sworn May 26, 2015

188. The report on p. 8 also identified the following benefits that would result from abandoning and decommissioning a portion of the existing pipeline through Surrey:

Based on cost estimates collected directly from KM documentation and studies, twinning the proposed pipeline route through Surrey would cost KM an additional \$36 Million upfront capital. However, this cost would be offset by the significant investment KM will spend in the foreseeable future when the existing TMP is scheduled for replacement due to its age. **This would also bring the following benefits:**

- **Smaller footprint**
- **Less impact on existing utilities and infrastructure**
- **Relocation of the pipeline away from developed residential areas**
- **Less risk of failure of the existing line**
- **Less impact to residents when the TMP needs to be accessed for maintenance**

- **A newer pipeline asset for KM, compared to the 60 year old TMP**
- **Lower annual operational and maintenance costs for KM due to the newer pipeline.**

The linear cost per meter to twin the TMP with the TMX would likely be less than replacing the TMP in its current location through Surrey's residential areas.

Exhibit C76-10-9 ([A4Q0Q6](#)) - Report entitled "*TMP/TMX Routing Options and Feasibility of Abandoning the Existing Pipeline through the City of Surrey*" dated May, 2015 and prepared by Larry Martin, P. Eng.

Exhibits C76-9-18 ([A4L9U1](#)), C76-9-19 ([A4L9U2](#)), and C76-9-20 ([A4L9U3](#)) - Affidavit #2 of Larry Martin sworn May 26, 2015

4.1.2 Remaining TMP Life

189. The Larry Martin, P.Eng, report concludes that **the existing pipeline is at or near the end of its expected life.** The report also states that a pipeline designed to today's standard has a life expectancy of 50 to 75 years and as noted by Larry Martin, P. Eng. in his report the existing Kinder Morgan pipeline routed through the residential portion of Surrey was constructed over 60 years ago, around 1953.

4 Remaining TMP Life

A pipeline designed to today's standard has a life expectancy of 50 to 75 years. The Kinder Morgan pipeline (TMP) currently routed through the residential portion of Surrey was constructed over 60 years ago, around 1953. The pipeline is therefore at or near the end of its expected life.

Exhibit C76-10-9 ([A4Q0Q6](#)) - Report entitled "*TMP/TMX Routing Options and Feasibility of Abandoning the Existing Pipeline through the City of Surrey*" dated May, 2015 and prepared by Larry Martin, P. Eng

Exhibits C76-9-18 ([A4L9U1](#)), C76-9-19 ([A4L9U2](#)), and C76-9-20 ([A4L9U3](#)) - Affidavit #2 of Larry Martin sworn May 26, 2015

190. In consideration of technical and risk elements noted in the report, the report concludes that planning for replacement of the TMP **should begin immediately.**

From a technical standpoint,

- The pipeline is subjected to cyclical transients and pressure fluctuations associated with pressurized pipeline systems. The cyclical nature of these transients reduces the allowable hoop stress of the pipe wall material over time. The long term impact of these stresses is demonstrated in micro-failures at connections such as valves, couplers, expansion joints, welds and elbows. As these components deteriorate, the number of failures will increase over time.
- The interior of oil pipelines can be eroded as some petroleum products are known to be abrasive.
- Reportedly, KM takes the opportunity when the TMP is uncovered, to inspect and recoat (if necessary) that portion of the pipeline; however, in the long section through the residential area, the condition and effectiveness of exterior coating is likely unknown.
- KM has stated in the past that it performs regular inspections on the interior of the pipe using technologies available to them; however, the exterior condition of the pipe is typically estimated based on previous instances of excavation during construction or during KM's periodic testing.
- The pipeline constructed in the 1950's was not designed or constructed to today's standards.
- It is unlikely the TMP pipeline was designed to meet current seismic design standards.
- It is unlikely the TMP was designed to withstand the bending stresses induced by soft soils that are known to exist along the pipeline route through parts of the City. The impacts of soft soils are a significant design issue in Lower Mainland communities.

From a risk management standpoint,

- The probability of a failure occurring in the now predominantly residential area is significantly higher than it was 60 years ago.
- A major failure in this residential area would result in significant environmental, social and economic impacts, as well as increased risk to public safety.

In consideration of the additional technical and risk elements noted above, our initial assertion that the TMP is at the end of its expected life remains. Planning for replacement of the TMP should begin immediately.

Exhibit C76-10-9 ([A4Q0Q6](#)) - Report entitled "*TMP/TMX Routing Options and Feasibility of Abandoning the Existing Pipeline through the*

City of Surrey” dated May, 2015 and prepared by Larry Martin, P. Eng. at page 9.

Exhibits C76-9-18 ([A4L9U1](#)), C76-9-19 ([A4L9U2](#)), and C76-9-20 ([A4L9U3](#)) - Affidavit #2 of Larry Martin sworn May 26, 2015

191. Trans Mountain's feeble attempts to rebut this evidence are unconvincing and do not reflect reality and are unsupported by any credible evidence.

192. Trans Mountain would have the NEB believe that the existing pipeline would last forever and in its Responses to the City's Round No. 2 Information Requests filed as Exhibit C76-11-6 ([A4H8I8 - A4Q0W0](#)) drew ridiculous comparisons to the Brooklyn Bridge and the Flatiron Building.

193. It is also noteworthy that the design life expectancy of a pipeline to today’s standards is also supported by the accounting depreciation percentages used by Kinder Morgan in valuing its current pipeline assets:

Request:

1.3 Highway/Road Occupation and Crossing Issues and Agreements

k) for financial statement purposes and for tax return purposes what is anticipated to be the rate(s) of depreciation on a percentage basis that will be applied to calculate depreciation of the pipeline on an annual basis? What is the rate(s) of depreciation applied to calculate annual depreciation of the existing pipeline for financial statement purposes and for tax return purposes;

Response:

k) As part of the RH-001-2012 proceeding, Trans Mountain provided the following weighted average depreciation assumptions in Appendix 1 to the January 10, 2013 revised response to CAPP Information Request 1.3:

| | |
|---|-------|
| Accounting depreciation (base system) | 3.06% |
| Accounting depreciation (expanded system) | 2.66% |
| Accounting depreciation (dock system) | 2.83% |
| Tax depreciation (base system) | 8.30% |
| Tax depreciation (expanded system) | 9.50% |
| Tax depreciation (dock system) | 4.00% |

Exhibit No. C76-11-1 ([A3W6E6-A4Q0V5](#)) City of Surrey Information Request No. 1 filed May 7, 2014 (previously filed as C76-1-1)

Exhibit No. C76-11-2 ([A3X6A5 - A4Q0V6](#)) Trans Mountain Response to City of Surrey Information Request No. 1 filed June 4, 2014 (previously filed as B52-1 by Trans Mountain)

194. Despite its stated objectives and goals to avoid urban areas and residential areas and minimize impacts and despite being aware of the City of Surrey's desire to have a portion of the exiting pipeline abandoned, decommissioned and removed, it is also telling that Trans Mountain undertook no assessment of either twinning or upsizing options.

Request

1.3 Feasibility of Abandoning and Decommissioning Existing Pipeline through Surrey

a) Please confirm whether or not Trans Mountain has conducted or obtained a condition assessment, study, investigation or report or material sampling analysis of the existing Trans Mountain pipeline that runs through the City of Surrey to quantify the remaining lifespan of the pipeline before pipeline rehabilitation or replacement is required:

(i) if any assessments, studies, investigations, reports or analysis have been conducted or obtained, please provide the City of Surrey with copies of all such assessments, studies, investigations, reports and analysis and please identify the date and author(s) of each; and

(ii) if Trans Mountain does not intend to conduct or obtain any such assessments, studies, investigations, reports or analysis, please provide an explanation as to why not;

b) Please confirm the proposed design life of the proposed Trans Mountain pipeline and the design life of the existing Trans Mountain pipeline;

c) Please confirm whether or not Trans Mountain has conducted or obtained any feasibility studies, assessments, investigations or reports that consider an abandonment and/or decommissioning of some or all of that portion of the existing Trans Mountain pipeline that runs through the City of Surrey:

- (i) if any feasibility studies, assessments, investigations or reports have been conducted or obtained, please provide the City of Surrey with copies of all such studies, assessments, investigations and reports and please identify the date and author(s) of each;
- (ii) if Trans Mountain does not intend to conduct or obtain any such feasibility studies, assessments, investigations or reports, please provide an explanation as to why not;
- (iii) if there are any known or perceived impediments/obstacles to either abandoning or decommissioning some or all of that portion of the existing Trans Mountain pipeline that runs through the City of Surrey, please identify and describe in detail what those impediments/obstacles are, who identified them and what evidence was relied upon in determining that such impediments/obstacles actually exist. Please also indicate whether any assessment, review or investigation of these impediments/obstacles has been conducted or commissioned by Trans Mountain to ascertain whether they can be overcome or minimized; and
- (iv) if any such assessments, reviews or investigations described in paragraph (c)(iii) above have been undertaken, please provide the City with copies of them and please identify the date and author(s) of each. If such assessments, reviews or investigations have not been undertaken, please provide an explanation and as to why not;
- d) Having regard to the jurisdiction of the NEB to impose conditions on any approval of the proposed alignment, please confirm whether or not Trans Mountain is prepared to consent to including as a condition of approval of the proposed pipeline or as a term of any certificate or CPCN issued approving Trans Mountain's Application that Trans Mountain shall abandon and decommission some or all of that portion of the existing Trans Mountain pipeline through City of Surrey, and if not, please provide a detailed explanation as to why not; and
- e) If Trans Mountain is not prepared to consent to the imposition of the condition of approval described in paragraph (d) above, then please describe in detail under what circumstances Trans Mountain would be prepared to consent to such a condition;
- f) Please confirm whether or not Trans Mountain has conducted or obtained any feasibility studies, assessments, investigations or reports that consider either an increase in the size/diameter of the proposed pipeline or a twinning of the proposed pipeline that would offset any loss of capacity arising from an abandonment or decommissioning of all or some of that portion of the existing Trans Mountain pipeline in the City of Surrey:

(i) if any feasibility studies, assessments, investigations or reports have been conducted or obtained, please provide the City of Surrey with copies of all such studies, assessments, investigations and reports and please identify the date and author(s) of each;

(ii) if Trans Mountain does not intend to conduct or obtain any such feasibility studies, assessments, investigations or reports, please provide an explanation as to why not;

(iii) if there are any known or perceived impediments/obstacles to either incrementally increasing the size/diameter of the proposed pipeline or twinning the proposed pipeline through the City of Surrey, please identify and describe in detail what those impediments/obstacles are, who identified them and what evidence was relied upon in determining that such impediments/obstacles actually exist. Please also indicate whether any assessment, review or investigation of these impediments/obstacles has been conducted or commissioned by Trans Mountain to ascertain whether they can be overcome or minimized; and

(iv) if any such assessments, reviews or investigations described in paragraph (f)(iii) above have been undertaken, please provide the City with copies of them and please identify the date and author(s) of each. If such assessments, reviews or investigations have not been undertaken, please provide an explanation and as to why not.

Response:

a) As part of its Integrity Management Program, Trans Mountain conducts regular risk assessments that help prioritize and direct its regular assessment and maintenance programs on Line 1 (TMPL). As part of its response to Province of BC IR No. 1.24b, Trans Mountain provided the most recent risk assessment results for the entire alignment of TMPL (Filing IDs [A4A4E9](#) and [A4A4F0](#)).

The life of TMPL has not been defined. Because the fundamental material properties of steel do not change appreciably with time, steel pipelines are normally designed with an indefinite design life, and it is common for pipeline operators to manage their assets as such by implementing integrity programs to address time-dependent degradation mechanisms such as corrosion. This strategy of indefinite operating life span is not unique to steel pipelines, and similar operating philosophies are applied to other types of steel structures, such as bridges and buildings (for example, the Brooklyn Bridge and the Flatiron Building, both still in service in New York City are currently 132 and 113 years old, respectively).

- b) Please refer to response to City of Surrey IR No. 2.1.3a.
- c) Trans Mountain has no plans to decommission or abandon any portion of the existing Trans Mountain Pipeline (TMPL) within the City of Surrey. Refer to response to City of Surrey IR No. 2.1.3a.
- d) Trans Mountain has no plans to decommission or abandon any portion of the existing TMPL within the City of Surrey.

The TMEP application to the NEB is intended to add capacity to the existing TMPL system. Trans Mountain requires the capacity of both the existing TMPL and the TMEP to meet shipper requirements, and therefore, in the TMEP application, Trans Mountain is requesting approval for the new line 2 as an addition to the TMPL. Any condition in the NEB Section 52 approval respecting abandonment or decommissioning would be contrary to the Application submitted.

e) There are no such circumstances under which Trans Mountain would be prepared to consent to a condition of the approval of the Trans Mountain Expansion Project as described in the City of Surrey IR No. 2.1.3d. As Trans Mountain previously noted in the response to City of Surrey IR No. 2.1.3c, Trans Mountain has no plans to decommission or abandon any portion of the existing TMPL within the City of Surrey. If Trans Mountain proposes to decommission or abandon any pipeline under the jurisdiction of the National Energy Board (NEB), Trans Mountain would apply for approval to the NEB to undertake these activities.

f) Trans Mountain is not proposing to increase the diameter of the proposed Line 2 as part of the Trans Mountain Expansion Project or to twin the proposed Line 2 to offset the capacity in the TMPL that would be lost if a portion of TMPL was decommissioned or abandoned through the City of Surrey. Refer to responses to City of Surrey IR No. 2.1.3a and 2.1.3c.

Exhibit C76-11-5 ([A4G5L6 - A4Q0V9](#)) City of Surrey Information Request No. 2 filed January 15, 2015 (previously filed as C76-6-2)

Exhibit C76-11-6 ([A4H8I8 - A4Q0W0](#)) Trans Mountain Response to City of Surrey Information Request No. 2 filed February 18, 2015 (previously filed as B314-45)

4.1.3 Upsizing the TMX through Surrey

195. The Larry Martin P. Eng. report determined that it is possible to install a single larger diameter pipeline with the hydraulic capacity equivalent to the combined capacity of both the

TMP and the TMX. It is also feasible to install the larger diameter pipeline along the proposed alignments presented in this report, **those being the proposed alignment and Option A and Option B.** The upsizing option would be in consideration of replacing the existing TMP and routing this flow away from residential areas.

5 Upsizing of the TMX through Surrey

It was determined that it is possible to install a single larger diameter pipeline with the hydraulic capacity equivalent to the combined capacity of both the TMP and the TMX. It is also feasible to install the larger diameter pipeline along the proposed alignments presented in this report. This pipeline option would be in consideration of replacing the existing TMP (as discussed in Section 4 above), and routing this flow away from residential areas. This option was not evaluated in detail and there may be technical or operational issues that could make this option unfeasible.

It is our opinion that installing a larger diameter pipeline to increase the hydraulic capacity of the TMX, and abandoning the existing TMP through the City of Surrey, is feasible. By implementing this strategy, KM would be able to abandon the existing TMP and not have to invest significant capital to replace the aging TMP in the foreseeable future. Although Associated Engineering did not undertake a life cycle cost analysis on this option, this strategy would likely be more cost effective, and would have significantly less impact on the environment, residents, businesses and municipal operations in Surrey.

In the event there are technical reasons, not known to Associated Engineering at this time, that would prevent KM from combining the TMP and TMX into a common pipeline, the option of twinning the TMX through Surrey with a second pipeline, and abandoning the existing TMP, would also be more cost effective for KM in comparison to KM's current proposal of constructing the proposed TMX and replacing the TMP in the foreseeable future.

The City should request that KM either upsize or twin the TMX through the City of Surrey, and as part of that proposal, abandon the existing TMP.

Exhibit C76-10-9 ([A4Q0Q6](#)) - Report entitled "*TMP/TMX Routing Options and Feasibility of Abandoning the Existing Pipeline through the City of Surrey*" dated May, 2015 and prepared by Larry Martin, P. Engineering Department at page 10.

Exhibits C76-9-18 ([A4L9U1](#)), C76-9-19 ([A4L9U2](#)), and C76-9-20 ([A4L9U3](#)) - Affidavit #2 of Larry Martin sworn May 26, 2015

196. The report also concludes that in the event there are technical reasons, not known to Associated Engineering that would prevent KM from combining the TMP and TMX into a common pipeline, the option of twinning the TMX through Surrey with a second pipeline, and abandoning the existing TMP, would in any event be more cost effective for KM in comparison to KM's current proposal of constructing the proposed TMX and replacing the TMP in the foreseeable future.

In the event there are technical reasons, not known to Associated Engineering at this time, that would prevent KM from combining the TMP and TMX into a common pipeline, **the option of twinning the TMX through Surrey with a second pipeline, and abandoning the existing TMP, would also be more cost effective for KM in comparison to KM's current proposal of constructing the proposed TMX and replacing the TMP in the foreseeable future.**

The City should request that KM either upsize or twin the TMX through the City of Surrey, and as part of that proposal, abandon the existing TMP.

Exhibit C76-10-9 ([A4Q0Q6](#)) - Report entitled "*TMP/TMX Routing Options and Feasibility of Abandoning the Existing Pipeline through the City of Surrey*" dated May, 2015 and prepared by Larry Martin, P. Eng

Exhibits C76-9-18 ([A4L9U1](#)), C76-9-19 ([A4L9U2](#)), and C76-9-20 ([A4L9U3](#)) - Affidavit #2 of Larry Martin sworn May 26, 2015

4.1.4 Report's Conclusions Related to Upsizing or Twinning the TMX to Remove Existing Line from Operation and Report's Conclusions regarding Life Expectancy of the TMP

197. The report's conclusions related to Upsizing or Twinning the TMX to Remove Existing Line from Operation and the report's conclusions regarding Life Expectancy of the TMP are set out on p. 11 and 12 of the report and read as follows:

7 Conclusions

Based on the findings of this study, AE concludes that:

- There are feasible alternative routes for the TMX that should be considered for pipeline routing to reduce the impact on the City of Surrey.
- Twinning the TMX at the time of construction is feasible and would reduce

the impact on the City of Surrey by removing the existing TMP from service.

- The TMP is at or near the end of its expected life, and planning for replacement of the TMP should begin immediately.

7.1 ALTERNATIVE ALIGNMENTS

AE investigated and determined that there are two viable alternative alignment options for constructing the proposed TMX pipeline within the corridor made up of the South Fraser Perimeter Road Corridor, the Golden Ears Connector Corridor and the CN Rail Corridor, to those routes currently proposed by Kinder Morgan.

Alignment Options A and B or a combination of both alignments for the proposed TMX can technically be constructed from AK 1160 to AK 1166. The two alternate routes have a number of advantages over the KM proposed route including the following:

1. They avoid the environmentally sensitive Surrey Bend Regional Park,
2. In the western section they are located further from the existing residential neighborhood,
3. They avoid construction on the relatively steep escarpment behind the residential neighborhood in the 16200 block of the SFPR.
4. They would be constructed in recently disturbed areas with minimal impact on the existing infrastructure.
5. They would provide reasonable access for operation and maintenance of the TMX.

Comparing the two proposed route options, Option A was found to encounter more restricted locations, particularly near the location shown in Section 5 (Drawing A8). Construction in these locations would require decreased construction footprint and additional site management during construction. Option B, like Option A, takes advantage of the existing corridor formed by CN rail and the highway projects, but provides additional flexibility for construction, with less restricted locations than Option A.

7.2 UPSIZING OR TWINNING THE TMX TO REMOVE EXISTING LINE FROM OPERATION

Following the re-alignment study above, the study was expanded to examine either twinning or upsizing the pipeline to accommodate the capacity of a replaced TMP through the residential areas of Surrey.

It was determined that both upsizing the pipeline or twinning are possible along

both Option A and Option B. Twinning of the pipeline appears to be the most viable of the two solutions, as there may be technical or operational issues that could make this option unfeasible. A more thorough review of these alternatives would be required by KM.

The most feasible concept for twinning is Option B and the TMX Proposed route. Due to the reduced footprints required along some portions of Option A, this option would be a more challenging alternative.

Based on cost estimates collected directly from KM documentation and studies, twinning the proposed pipeline route through Surrey would cost approximately an additional \$36 M, and would bring the following benefits:

- Smaller footprint
- Less impact on existing utilities and infrastructure
- Relocation of the pipeline away from developed residential areas
- Less risk of failure of the existing line
- Less impact to residents when the TMP needs to be accessed for maintenance

The linear cost per meter to twin the TMP with the TMX would likely be less than replacing the TMP in its current location through Surrey's residential areas.

7.3 LIFE EXPECTANCY OF THE TMP

A pipeline designed to today's standard has a life expectancy of 50 to 75 years. The Kinder Morgan pipeline (TMP) currently routed through the residential portion of Surrey was constructed over 60 years ago, around 1953. The pipeline is therefore at or near the end of its expected life, and therefore planning for replacement of the TMP should begin immediately.

Exhibit C76-10-9 ([A4Q0Q6](#)) - Report entitled "*TMP/TMX Routing Options and Feasibility of Abandoning the Existing Pipeline through the City of Surrey*" dated May, 2015 and prepared by Larry Martin, P. Eng

Exhibits C76-9-18 ([A4L9U1](#)), C76-9-19 ([A4L9U2](#)), and C76-9-20 ([A4L9U3](#)) - Affidavit #2 of Larry Martin sworn May 26, 2015

4.2 Terms and Conditions to be Imposed on any Certificate Issued

198. Having regard to the above submissions in this section, it is submitted that the following terms and conditions should be imposed on any Certificate that may be issued:

Abandonment, Decommissioning and Removed of Portion of Existing Pipeline in the City of Surrey

1. The portion of the existing Trans Mountain pipeline in the City of Surrey identified in Exhibit C76-10-9 ([A4Q0Q6](#)) shall be abandoned, decommissioned and removed and be replaced either with a twinning of the proposed pipeline or with a pipeline incrementally increased in size/diameter such that the said twinning or increase could accommodate a total flow capacity equivalent to or greater than the flow capacity of that portion of the existing Trans Mountain pipeline that runs through the City of Surrey. The said twinning or increase shall be located within the alternative corridor identified as Option B, or alternatively within the corridor identified as Option A in Exhibit C76-10-9 ([A4Q0Q6](#)).

5.0 Emergency Response

Evidence Relied Upon:

Affidavits and Reports

- (i) Exhibits C76-9-3 ([A4L9S6](#)), C76-9-4 ([A4L9S7](#)) and C76-9-5 ([A4L9S8](#)) - Affidavit of Dr. Charles R. Jennings sworn May 22, 2015 including all exhibits thereto;
- (ii) Exhibit C76-9-21 ([A4L9U4](#)) and C76-9-22 ([A4L9U5](#)) - Affidavit of Len Garis affirmed May 26, 2015 including all exhibits thereto;
- (iii) Exhibit C76-14-4 ([A4S3C5](#)) - Affidavit of Dr. Charles R. Jennings sworn July 28, 2015;
- (iv) Exhibit C76-14-2 ([A4S3C3](#)) - Affidavit of Len Garis affirmed July 27, 2015;

Information Requests and Responses to Information Requests

- (v) Exhibit No. C76-11-1 ([A3W6E6-A4Q0V5](#)) City of Surrey Information Request No. 1 filed May 7, 2014 (previously filed as C76-1-1);
- (vi) Exhibit No. C76-11-2 ([A3X6A5 - A4Q0V6](#)) Trans Mountain Response to City of Surrey Information Request No. 1 filed June 4, 2014 (previously filed as B52-1 by Trans Mountain);
- (vii) Exhibit No. C76-11-3 ([A3Z4S8 - A4Q0V7](#)) Trans Mountain Follow up Response to City of Surrey Information Request No. 1 filed July 21, 2014 (previously filed as B239-2);
- (viii) Exhibit No. C76-11-4 ([A4D3G2\(2\) - A4Q0V8](#)) Trans Mountain Follow up Response to National Energy Board Ruling 33 filed October 17, 2014, pages 178 to 181 with respect to City of Surrey Information Requests (previously filed as B280-3);
- (ix) Exhibit C76-11-5 ([A4G5L6 - A4Q0V9](#)) City of Surrey Information Request No. 2 filed January 15, 2015 (previously filed as C76-6-2);
- (x) Exhibit C76-11-6 ([A4H8I8 - A4Q0W0](#)) Trans Mountain Response to City of Surrey Information Request No. 2 filed February 18, 2015 (previously filed as B314-45).

City of Surrey Adopted Documents

- (xi) Exhibits C76-9-25 ([A4L9V1](#)) and C76-9-26 ([A4L9W1](#)) - City of Surrey Official Community Plan, By-law 18020 adopted October 20, 2014;

- (xii) Exhibits C76-9-27 ([A4L9W2](#)) and C76-9-28 ([A4L9W3](#)) - City of Surrey Zoning By-law 12000, as amended;

5.1 Kinder Morgan/Trans Mountain's Existing and Proposed Emergency Response Plan is Inadequate

5.1.1 Affidavit of Len Garis, Fire Chief of the City of Surrey

199. The City of Surrey has undertaken a review of Kinder Morgan's/Trans Mountain's emergency response planning documents and material.

200. In the uncontested affidavit of Len Garis, Fire Chief of the City of Surrey and Adjunct Professor in the Centre for Criminal Justice Research of the University of the Fraser Valley, Chief Garis has deposed that Kinder Morgan/Trans Mountain has not implemented and does not have a comprehensive emergency response plan in place for the City of Surrey in the event of an emergency related to the proposed pipeline. As a result, residents and property in proximity to the proposed pipeline are exposed to significant and unnecessary risk. Fire Chief Len Garis' Affidavit was filed as evidence as Exhibits C76-9-21 and C76-9-22 in this proceeding.

7. Based on my review of Kinder Morgan's emergency response planning documents and material, it is my opinion that Kinder Morgan has not implemented nor to our knowledge has a comprehensive emergency response plan in place for the City of Surrey in the event of an emergency related to the proposed pipeline. As a result, residents and property in proximity to the proposed pipeline are exposed to significant and unnecessary risk.

Exhibit C76-9-21 ([A4L9U4](#)) and C76-9-22 ([A4L9U5](#)) - Affidavit of Len Garis affirmed May 26, 2015

201. Chief Garis further deposes that at a minimum, Kinder Morgan/Trans Mountain should be required to prepare and implement an emergency response plan that is consistent with and satisfies the recommended best practices contained within the report entitled "HMCRP Report

14: Guide for Communicating Emergency Response Information for Natural Gas and Hazardous Liquids Pipelines” which is attached as Exhibit “A” to his affidavit.

8. In my opinion Kinder Morgan, at a minimum, should be required to prepare and implement an emergency response plan that is consistent with and satisfies the recommended best practices contained within the report entitled "HMCRP Report 14: Guide for Communicating Emergency Response Information for Natural Gas and Hazardous Liquids Pipelines" which is attached and included as part of Exhibit "A" to this my affidavit.

Exhibit C76-9-21 ([A4L9U4](#)) and C76-9-22 ([A4L9U5](#)) - Affidavit of Len Garis affirmed May 26, 2015

5.1.2 Affidavit of Dr. Charles R. Jennings and the report he co-authored entitled “HMCRP Report 14: Guide for Communicating Emergency Response Information for Natural Gas and Hazardous Liquids Pipelines”

202. The City of Surrey relies on the uncontested affidavit of Dr. Charles R. Jennings, Associate Professor in the Department of Security, Fire and Emergency Management at John Jay College of Criminal Justice of the City of New York and Director of the Christian Regenhard Center for Emergency Response Studies. Dr. Charles R. Jennings' Affidavit was filed as evidence as Exhibits C76-9-3 ([A4L9S6](#)), C76-9-4 ([A4L9S7](#)) and C76-9-5 ([A4L9S8](#)) in this proceeding.

203. Dr. Jennings deposes that he lead a research project and co-authored a research report and guide entitled “*HMCRP Report 14: Guide for Communicating Emergency Response Information for Natural Gas and Hazardous Liquids Pipelines*” referred to in his affidavit and in this Argument below as the **“Guide”**.

3. I led a research project and co-authored a research report and guide entitled "HMCRP Report 14: Guide for Communicating Emergency Response Information for Natural Gas and Hazardous Liquids Pipelines" which provides pipeline operators and emergency responders with guidance on how to share appropriate information in advance of a pipeline emergency so that the response plan can be quickly and effectively put into operation with the assurance that the best steps are taken in correct sequence to bring optimum resolution to

the pipeline emergency. Attached as **Exhibit "B"** is a copy of the report entitled "HMCRP Report 14: Guide for Communicating Emergency Response Information for Natural Gas and Hazardous Liquids Pipelines" (the "Guide").

Exhibits C76-9-3 ([A4L9S6](#)), C76-9-4 ([A4L9S7](#)) and C76-9-5 ([A4L9S8](#)) - Affidavit of Dr. Charles R. Jennings sworn May 22, 2015

204. Paragraphs 3 to 9 inclusive of Dr. Charles R. Jennings Affidavit, which are set out here below and which the City relies upon, succinctly describe the significance, development, purpose and content of the Guide including, but not limited to, the appropriate emergency response content that pipeline operators should provide to emergency responders, effective means of disseminating this guidance by pipeline operators to recipient emergency response organizations and by those emergency response organizations to sub-units, and strategies for implementing and exercising response plans. Among other things, the Guide synthesized information on communication needs with a survey of experts to develop guidance for entities wishing to prepare for pipeline emergencies. It identifies best practices and presents a structured approach to engage affected parties under the auspices of local emergency management plans, to undertake **pre-event planning** for communications.

3. I led a research project and co-authored a research report and guide entitled "HMCRP Report 14: Guide for Communicating Emergency Response Information for Natural Gas and Hazardous Liquids Pipelines" which provides pipeline operators and emergency responders with guidance on how to share appropriate information in advance of a pipeline emergency so that the response plan can be quickly and effectively put into operation with the assurance that the best steps are taken in correct sequence to bring optimum resolution to the pipeline emergency. Attached as **Exhibit "B"** is a copy of the report entitled "HMCRP Report 14: Guide for Communicating Emergency Response Information for Natural Gas and Hazardous Liquids Pipelines" (the "Guide").

4. The Guide focusses on the appropriate emergency response content that pipeline operators should provide to emergency responders, effective means of disseminating this guidance by pipeline operators to recipient emergency response organizations and by those emergency response organizations to sub-units, and strategies for implementing and exercising response plans. The Guide was prepared with the participation of the major pipeline industry associations in the United States.

5. The research to produce the Guide included review of United States National Transportation Safety Board reports of major incidents pipeline incidents. Analysis of these major pipeline incidents revealed that deficiencies in communications between emergency responders and pipeline operators contributed to losses, as did lack of awareness of pipeline location among emergency responders, and inability to detect releases in a timely fashion. Specifically, the most common deficiencies were failure of to notify emergency responders by pipeline operators or the public and failure to notify the pipeline operator by emergency responders or the public (Table 2-3).

6. Pipeline releases can produce human casualties, property loss, and environmental damage. Environmental effects of pipeline releases can persist for years.

7. The Guide was based on identifying the role-based information needs of diverse groups that must work together effectively to mitigate a pipeline emergency. A technique for eliciting this information was identified and utilized by the Guide's authors. This process demonstrated that it is necessary to plan for communication needs, consisting of information content, timeliness, and mode of transferring information, before an event.

a. Typical Entities Who Fulfill Key Roles Include:

- i. Pipeline operator
- ii. Public emergency communications (9-1-1) Centres
- iii. Public emergency responders to include fire, emergency medical services, and law enforcement
- iv. Environmental officials
- v. Emergency Managers (Interagency Coordination)
- vi. Coast Guard

1. The Guide synthesized information on communication needs with a survey of experts to develop guidance for entities wishing to prepare for pipeline emergencies. These preparations should be incorporated into local emergency plans, and should be exercised regularly.

a. Examples of best practices illustrated in or needs identified by the Guide include:

- i. Developing procedures for 9-1-1 and dispatch facilities to recognize indicators of pipeline emergencies and make appropriate notifications.
- ii. Establish the location, routing, and product(s) carried in pipelines within a community.
- iii. Identify adjacent underground infrastructure such as other pipelines, electrical utilities, water, and wastewater that may share or cross the pipeline right-of- way.
- iv. Enforce compliance with "one-call" notification requirements for excavation.
- v. Establish procedures for key information needed to be shared between emergency responders and pipeline operators, including but not limited to: content of messages; means of communications; and needs for timeliness.
- vi. Public emergency services should have and maintain appropriate detection equipment to identify the products released into the environment and possible sources.
- vii. Public emergency services should have appropriate equipment, training, and procedures to undertake incipient stage mitigation of a pipeline release.
- viii. Local emergency plans should identify sources for timely provision of specialized equipment and materials in adequate quantities in the event of a significant release. Such needs may include the need to mitigate releases that cross municipal boundaries and affect waterways.

9. The planning process for pipeline emergency response should begin with communications. The Guide presents a structured approach to engage affected parties, under the auspices of local emergency management plans, to undertake pre-event planning for communications. This is a necessary but often overlooked component of pipeline emergency response, which should not be focused solely on firefighting, spill control, and other post-event activities.

Exhibits C76-9-3 ([A4L9S6](#)), C76-9-4 ([A4L9S7](#)) and C76-9-5 ([A4L9S8](#)) - Affidavit of Dr. Charles R. Jennings sworn May 22, 2015

205. As deposed to by Dr. R. Jennings in paragraph 5 of his affidavit, the research to produce the Guide included review of United States National Transportation Safety Board reports of major pipeline incidents. The analysis of these major incidents revealed that deficiencies in

communications between emergency responders and pipeline operators contributed to losses, as did lack of awareness of pipeline location among emergency responders, and inability to detect releases in a timely fashion.

206. With respect to conditions related to Emergency Response Planning, it is the City of Surrey's respectful submission, that it is incumbent on NEB to recognize and seize this opportunity to ensure that the public benefits from what is the most authoritative and relevant source available at this time on pre-event emergency response planning. Through the efforts of Dr. R. Jennings and his team, Canada should embrace this opportunity to learn from the misfortunes suffered and mistakes made by others and be grateful to our neighbours to the south who have prepared a Guide which if implemented by the NEB will prevent loss of life, property and damage to the environment.

207. As deposed to by Len Garis, Fire Chief of the City of Surrey, the NEB should at a minimum impose a condition(s) requiring Kinder Morgan/Trans Mountain to prepare and implement an emergency response plan that is consistent with and satisfies the recommended best practices contained within the report entitled "*HMCRP Report 14: Guide for Communicating Emergency Response Information for Natural Gas and Hazardous Liquids Pipelines*".

5.2 Reimbursement of Emergency Event/Incident Costs

208. On the issue of cost recovery, it is also noteworthy that the *Railway Safety Act* was recently amended to provide relief to the province and municipalities in respect of costs incurred in responding to fire which was the result of a railway company's operations.

POWERS OF AGENCY — FIRE

Application to Agency

23.(1) If a province or municipality is of the opinion that a fire to which it responded was the result of a railway company's railway operations, it may apply

to the Agency to have **the costs that it incurred in responding to the fire reimbursed by the railway company.**

Form of application

(2) The application shall be in the form prescribed by regulations made under subsection (5), and it shall be accompanied by the information prescribed by those regulations.

Further information

(3) The Agency may, by notice sent to the province, municipality or railway company, require the province, municipality or railway company to provide it with any further information that it specifies relating to the application, within the period specified in the notice.

Agency's determination

(4) **If the Agency determines that the fire was the result of the railway company's railway operations, it shall make an order directing the railway company to reimburse the province or municipality the costs that the Agency determines were reasonably incurred in responding to the fire.**

Regulations

(5) The Agency may, with the Governor in Council's approval, make regulations

- (a) prescribing the form of the application referred to in this section; and
- (b) prescribing the information that must accompany that application.

Interpretation

(6) Despite this section, this Act is not deemed to be administered in whole or in part by the Agency for the purpose of section 37 of the [Canada Transportation Act](#).

Book of Authorities, Tab 19

5.3 Terms and Conditions to be Imposed on any Certificate Issued

209. Having regard to the above submissions in this section, it is submitted that the following terms and conditions should be imposed on any Certificate that may be issued. These terms and

conditions should apply to the entire expanded pipeline system being both the proposed pipeline as well as the existing pipeline, or in the alternative to the proposed pipeline:

Emergency Response Plan

1. Trans Mountain shall implement an emergency response plan that is consistent with and satisfies the recommended best practices contained within the report entitled “*HMCRP Report 14: Guide for Communicating Emergency Response Information for Natural Gas and Hazardous Liquids Pipelines*” filed the by the City of Surrey and contained in Exhibits C76-9-3 ([A4L9S6](#)), C76-9-4 ([A4L9S7](#)) and C76-9-5 ([A4L9S8](#)).

Reimbursement of Emergency Event/Incident Costs

2. Trans Mountain shall reimburse the provinces and municipalities for all costs incurred in responding to emergency response events/incidents related to Trans Mountain's operations and/or pipeline.

6.0 Response to Trans Mountain's Submissions on Municipal Taxation

210. Contrary to Trans Mountain's submissions, the payment of municipal taxes does not confer the right to occupy or cross municipal highways or other public property including parks.

211. The City of Surrey adopts those submissions made by the City of Coquitlam that support the argument that there is no such connection or entitlement arising from the payment of municipal taxes. The City of Coquitlam's submissions on this point are contained in the attached excerpt from the City of Coquitlam's Argument which is attached as **Appendix "A"** to this Argument.

212. Also, the reply evidence submitted by Trans Mountain related to the amount of taxes paid is inaccurate. In the case of the City of Surrey (similar to all municipalities in British Columbia) only a portion of taxes collected by the City of Surrey are actually received by the City of Surrey:

| OWNER: TRANS MOUNTAIN PIPELINE | | | | |
|--|-------------------|-----------------|-----------------------|---------------------|
| Year : 2015 | 18901 96 Ave | 10868 142A St | 13841 Port Mann Shore | 8400 Trans Mtn Pipe |
| | Class 2 | Class 1 | Class 2 | Class 2 |
| Gross Taxes | 240,631.81 | 1,848.84 | 2,811.40 | 354,109.00 |
| Gross Utilities | - | 459.83 | - | - |
| Net Taxes | 240,631.81 | 2,308.67 | 2,811.40 | 354,109.00 |
| Gen. Assess: Class 2: Land | 3,182,000.00 | 313,000.00 | 24,700.00 | - |
| Gen. Assess: Class 2: Improvements | 1,533,000.00 | 16,600.00 | - | 6,953,000.00 |
| Gen. Assess: Class 2: Net | 4,715,000.00 | 329,600.00 | 24,700.00 | 6,953,000.00 |
| Tax Levy: CULTURAL & RECREATIONAL PARCEL | 1,300.00 | 100.00 | 1,300.00 | 1,300.00 |
| Tax Levy: DRAINAGE PARCEL TAX - OTHER | 259.00 | 213.00 | 259.00 | 259.00 |
| Tax Levy: GENERAL | 148,803.28 | 766.50 | 779.52 | 219,433.55 |
| Tax Levy: ROADS AND TRAFFIC SAFETY | 10,565.89 | 54.43 | 55.35 | 15,581.05 |
| UB Levy: GARBAGE - REGULAR | | 283.00 | | |
| UB Levy: WATER & SEWER | | 176.83 | | |
| Municipal Taxes & Services | 160,928.17 | 1,593.76 | 2,393.87 | 236,573.60 |
| Tax Levy: BCA | 2,371.65 | 19.64 | 12.42 | 3,497.36 |
| Tax Levy: GVTA | 12,293.42 | 104.58 | 64.40 | 18,128.56 |
| Tax Levy: MFA | 3.30 | 0.07 | 0.02 | 4.87 |
| Tax Levy: REGIONAL DISTRICT | 911.27 | 18.20 | 4.77 | 1,343.81 |
| Tax Levy: SCHOOL - NONRES | 64,124.00 | 572.42 | 335.92 | 94,560.80 |
| Taxes for Other Authorities | 79,703.64 | 714.91 | 417.53 | 117,535.40 |

7.0 Statement of Position of the City of Surrey

1. The City of Surrey in principle does not support any expansion of the Trans Mountain pipeline system through the City of Surrey that negatively impacts the City of Surrey;
2. The City of Surrey requests that terms and conditions be imposed on any approval of Trans Mountain's Expansion Project that may be issued requiring Trans Mountain to eliminate, or minimize and mitigate the negative impacts of the Project on the City of Surrey;
3. The City of Surrey requests that terms and conditions be imposed on any approval that may be issued requiring Trans Mountain to abandon, decommission and remove that portion of the existing pipeline in Surrey identified in Exhibit C76-10-9 ([A4Q0Q6](#)) filed by the City of Surrey in this proceeding; and
4. Having regard to the negative impacts and the feasible options and alternatives available that are discussed in this Argument and identified in evidence filed by the City of Surrey, the City of Surrey respectfully submits that the term and conditions set out below be imposed on any Certificate that may be issued approving the proposed pipeline.

Comments on Draft Conditions and Consolidation of Terms and Conditions to be Imposed on any Certificate Issued

213. This section contains a consolidation of all the terms and conditions that the City of Surrey seeks to be imposed on any Certificate that may be issued approving the proposed pipeline.

214. Also, with respect the draft terms and conditions prepared by the NEB, the City of Surrey respectfully submits that they are deficient and should be supplemented and revised to incorporate the following terms and conditions:

JOINT MUNICIPAL CONDITIONS

Present and future costs arising as a consequence of the pipeline occupying or crossing highways and impacting utilities

1. Trans Mountain shall be responsible for all present and future costs that will be incurred by the Municipality or others undertaking work in connection with a Municipality approved project or development (the “Approval Holder”), that the Municipality or Approval Holder would not have incurred but for the location, installation, construction and/or operation of the pipeline across, under, over or within the highway or in proximity to a municipal utility including, but not limited to:
 - (i) costs to realign, raise or lower the pipeline;
 - (ii) costs to excavate material from around the pipeline;
 - (iii) costs to add casing or other appurtenances for the protection of the pipeline; and
 - (iv) costs to accommodate future construction projects including, but not limited to, the construction, upgrading, maintenance, renewal, widening and/or replacement of any improvements, infrastructure, utilities and/or highway that occurs across, under, over or in proximity to the pipeline.

Necessary consent from Trans Mountain and other interest holders in Trans Mountain’s statutory right of way/easement to enable municipalities and the Province to dedicate required land for highway/road.

2. Trans Mountain shall in respect of future widenings, expansions or improvements of the highway:
 - (i) consent (without conditions and without compensation) to the extinguishment of any statutory right of way or easement in favour of Trans Mountain over those portions of land required by the Municipality or the Province to be dedicated as highway or road in order that those portions of land may be incorporated into and form part of the existing highway that is occupied by the pipeline;
 - (ii) obtain the consent (without conditions and without compensation) of any mortgagee or other person having an interest in the statutory right of way or easement to be extinguished over that portion of land to be dedicated as highway or road in order that those portions of land may be incorporated into and form part of the existing highway that is occupied by the pipeline.
3. Trans Mountain shall in respect of creation of future dedicated highways and roads over the pipeline that are approved or required by a municipality or imposed as a condition of

development approval (whether as a condition of subdivision approval, rezoning, or other land development project approval and whether related to a land development project initiated by a private developer or by the municipality):

- (i) consent (without conditions and without compensation) to the extinguishment of any statutory right of way or easement in favour of Trans Mountain over that portion of land that is to be dedicated as highway or road;
- (ii) obtain the consent (without conditions and without compensation) of any mortgagee or other person having an interest in the statutory right of way or easement to be extinguished over that portion of land that is to be dedicated as highway or road.

Fixed timing of pipeline work to be performed by Trans Mountain to accommodate highway, utility, infrastructure and improvement projects so as not to delay municipal projects

4. Trans Mountain shall perform all necessary pipeline related work within **90 days of being notified by the Municipality**, or within such period of time mutually agreed upon between the Municipality and Trans Mountain, or within such other time period as may be varied by Order of the Board so as not to delay any future highway, utility, infrastructure or improvement project that occurs across or in vicinity of the pipeline which might disturb the pipeline or which necessitates realigning, raising or lowering the pipeline or excavating material from, over or around it, or adding casings or other appurtenances deemed necessary by Trans Mountain for the protection of the pipeline.

Inconsistent Terms contained in Permits are Void

5. Unless otherwise ordered by the Board any permit issued by Trans Mountain pursuant to s. 112 of the *National Energy Board Act* or the *National Energy Board Pipeline Crossing Regulations (Part 1 and Part 2)* shall be consistent with the terms of this Order and to the extent of any inconsistency such inconsistent terms are void.

Release and Indemnification in favour of Municipality

6. Trans Mountain shall indemnify and save the Municipality harmless from any and all liabilities, damages, claims, suits and actions arising out of Trans Mountain's operations and/or the construction, installation or placement of its infrastructure, including but not limited to, the pipeline, across, under, over or within the highway or in proximity to municipal utilities other than liabilities, damages, claims, suits and actions resulting the gross negligence or wilful misconduct of the Municipality.
7. Notwithstanding anything else in this Order, the Municipality shall not be liable to any person in any way for special, incidental, indirect, consequential, exemplary or punitive

damages, including damages for pure economic loss or for failure to realize expected profits, howsoever caused or contributed to.

Requirement to Enter into Agreements with Affected Municipalities Prior to Construction

8. A Condition(s) requiring Trans Mountain to enter into a Highway Licence and Crossing Agreement(s) related to impacted utilities including highway occupation and crossings with each affected municipality and affected Provincial highway authorities prior to construction, failing which terms shall be imposed by the NEB.

Conditions Apply to Entire Expanded Pipeline System: To Both Existing and Proposed Pipelines

9. The above conditions 1 to 8 inclusive shall apply to the entire expanded pipeline system being both the existing and proposed pipelines.

ADDITIONAL CONDITIONS OF THE CITY OF SURREY

Relocation to Alternative Corridor Approximately between AK 1160 and AK 1166

10. That the proposed pipeline be located outside of Surrey Bend Regional Park to an immediately adjacent corridor made up of the South Fraser Perimeter Road Corridor, the Golden Ears Connector Corridor and the CN Rail Corridor.
11. That the proposed pipeline corridor commencing just east of AK 1160 and ending at AK 1166 in the City of Surrey be relocated to the corridor identified as Option B, or alternatively to the corridor identified as Option A in Exhibit C76-10-9 ([A4Q0Q6](#)) filed by the City of Surrey in this proceeding.

Abandonment, Decommissioning and Removed of Portion of Existing Pipeline in the City of Surrey

12. The portion of the existing Trans Mountain pipeline in the City of Surrey identified in Exhibit C76-10-9 ([A4Q0Q6](#)) shall be abandoned, decommissioned and removed and be replaced either with a twinning of the proposed pipeline or with a pipeline incrementally increased in size/diameter such that the said twinning or increase could accommodate a total flow capacity equivalent to or greater than the flow capacity of that portion of the existing Trans Mountain pipeline that runs through the City of Surrey. The said twinning or increase shall be located within the alternative corridor identified as Option B, or alternatively within the corridor identified as Option A in Exhibit C76-10-9 ([A4Q0Q6](#)).

Emergency Response Plan

13. Trans Mountain shall implement an emergency response plan that is consistent with and satisfies the recommended best practices contained within the report entitled “*HMCRP Report 14: Guide for Communicating Emergency Response Information for Natural Gas and Hazardous Liquids Pipelines*” filed the by the City of Surrey and contained in Exhibits C76-9-3 ([A4L9S6](#)), C76-9-4 ([A4L9S7](#)) and C76-9-5 ([A4L9S8](#)).

Reimbursement of Emergency Event/Incident Costs

14. Trans Mountain shall reimburse the provinces and municipalities for all costs incurred in responding to emergency response events/incidents related to Trans Mountain's operations and/or pipeline.

Conditions Apply to Entire Expanded Pipeline System: To Both Existing and Proposed Pipelines

15. Conditions 13 and 14 above shall apply to the entire expanded pipeline system being both the existing and proposed pipelines.

All of which is respectfully submitted this 12th day of January 2016.



Anthony Capuccinello
Assistant City Solicitor