

Non OGAA v 3.3

APPROVALS

RE: Determination of Application Area Number 100101506

Approval Holder: Trans Mountain Pipeline ULC

Date of Issuance: March 4, 2021 Effective Date: March 4, 2021 Amendment Date: August 8, 2018

Application Submitted Date: July 17, 2017 **Application Determination Number:** 100101506

CUTTING PERMITS

"Permit Area" means the areas described in condition 1 of Schedule A of the following Licence of Occupation

Tenure No.: 9000180

Document No.: 954899

but does not include any areas described above that are located within:

- A Community Forest Agreement, First Nations Woodland Licence, Tree Farm Licence, Timber Licence,
 Occupant Licence to Cut or Woodlot Licence unless there is an agreement with the Agreement or
 Licence holder to harvest the timber located within the Agreement or Licence area under the relevant
 Master Licence to Cut and associated cutting permit indicated below, or
- 2. A subsisting cutting permit issued to another party.

APPROVAL

Pursuant to section 47.4 of the *Forest Act*, and subject to the conditions of these permits the Commission hereby approves the removal of Crown timber from the Permit Area under the cutting permits associated with the Master Licences to Cut as follows:

Master Licence to Cut No.: M02363

Cutting Permit No.: 11

Timber Mark No.: MTC180

Total New Cut: 12.68 ha

Forest District: (DKA) Thompson Rivers Natural

Resource District
Region: Interior

Approval Holder: Trans Mountain Pipeline ULC

Application Submission Date: July 17, 2017

Application Determination Number: 100101506

Date Issued: March 4, 2021

Conditions

1. Timber harvesting under the above cutting permits must not commence until the Permit Holder has submitted the relevant appraisal documents to the Ministry of Forests, Lands and Natural Resource Operations and Rural Development and received confirmation of the stumpage rate.

- Stumpage for the cutting permits will be determined according to the Interior Appraisal Manual (Manual)
 as amended from time to time. In the current version of the Manual, stumpage will be determined in
 accordance with Table 6-3 (volume based).
- 3. Clearing must be confined to the areas approved in the spatial data referenced in condition 1 of Schedule A of the Licence of Occupation, and must not, without leave of the Commission, occur within:
 - a) an area containing a significant mineral lick, bear den, Trumpeter Swan nest, other nesting site, significant wallow, or Sharp-tailed Grouse Lek, unless it is not damaged by activities approved under this permit;
 - b) Old Growth Management Areas, other than those identified in conflict in the Old Growth Management Areas Mitigation and Replacement Plan for the Trans Mountain Pipeline ULC Trans Mountain Expansion Project NEB Condition 76, dated September 2016, unless the incursion is less than 0.1 ha; or
 - c) a Riparian Management Area, except as approved in the spatial data referenced above, unless the Riparian Management Area has been previously cleared.
- 4. Despite condition 3, the Approval Holder is permitted to fell any trees located on Crown land within 1.5 tree lengths of the Permit Area that are considered to be a worker safety hazard under applicable regulations and must be felled in order to eliminate the hazard. Trees or portions of these trees that can be accessed from the permit area without causing damage to standing timber may be harvested.
- 5. All harvested Crown Timber must be marked with the cutting permit's associated Timber Mark (identified above) in accordance with timber marking requirements of the *Forest Act*.
- 6. Any timber removed from the Permit Area must be scaled in accordance with scaling requirements of the Forest Act.
- The interior merchantability specifications identified in the Provincial Logging Residue and Waste Measurement Procedures Manual in place at the time the timber is harvested apply to these cutting permits.
- 8. The holder of the cutting permits must pay to the Province any waste billing determined in accordance with the Master Licence to Cut and the terms of this approval.

Termination

9. The cutting permits terminate upon the submission of the post construction plan required under the Licences of Occupation identified in the definition of Permit Area above or upon either the cancellation or expiry of those Licences.

Advisory Guidance

- 1. The Approval Holder should be aware that the approval under the *Forest Act* to harvest timber does not extend to harvesting within private land.
- The Approval Holder should be aware that impacts to recreation features, trails, recreation facilities, interpretative forest sites or recreation sites identified, authorized or established under the Forest and Range Practices Act are subject to additional authorizations by the Ministry of Forests, Lands and Natural Resource Operations.

Permitting and Authorizations Page 2 of 8 Telephone: (250) 794-5200 Physical Address: 6534 Airport Road, Fort St. John, BC Mailing Address: Bag 2, Fort St. John, BC V1J 2B0 Telephone: (250) 794-5200 24 Hour: (250) 794-5200

Approval Holder: Trans Mountain Pipeline ULC

Application Submission Date: July 17, 2017

Application Determination Number: 100101506

Date Issued: March 4, 2021

All pages included in this permit and any attached plan(s) form an integral part of this permit.

James O'Hanley

Vice President, Applications

Approval Holder: Trans Mountain Pipeline ULC

Application Determination Number: 100101506 Date Issued: March 4, 2021

Application Submission Date: July 17, 2017

CHANGES IN AND ABOUT A STREAM

APPROVAL

The Commission, pursuant to section 11 of the *Water Sustainability Act*, approves the changes in and about a stream, as detailed in the application, for construction and maintenance activities within the activity areas identified below, unless otherwise restricted or refused by this approval and to the conditions below.

| Changes in and about a Stream No.: 0004004 | As included in the application referenced herein, unless referenced in the Refused Activities table, below. | Tenure No.: N/A Document No.: N/A |
|--|---|------------------------------------|
|--|---|------------------------------------|

Conditions

- Unless a condition or its context suggests otherwise, terms used in the following conditions have the same meaning as the Environmental Protection and Management Regulation and the Oil and Gas Road Regulation under the Oil and Gas Activities Act.
- Subject to the provisions of this approval, crossings of streams must be constructed in accordance with the Vehicle Crossing Methods, as appropriate, that are specified in the document named 01-13283-S4-0000-EV-XGS-0003 R2.xlsx, uploaded 2017-09-08 14:59:56.0 that has been submitted to the satisfaction of the Commission.
- 3. Except with leave of the Commission, in-stream works must be carried out in accordance with the methods and any mitigations specified in the application.
- 4. A notice of maintenance activities must be submitted to OGC.ExternalNotifications@bcogc.ca, or such other address as indicated in a notice from the Commission, at least 21 working days prior to the commencement of any changes in or about a stream associated with maintenance activities.
- 5. At least 21 working days prior to the commencement of any changes in or about a stream associated with maintenance activities, the Approval Holder must provide a notice of works to any First Nation(s) who may have Aboriginal Interests identified, as per the BC First Nations Consultative Areas Database, within the area in which the works are to occur.
- Except with leave of the Commission, any bird nest site located within or adjacent to a stream, wetland or lake crossing must not be damaged by activities authorized under this approval.
- 7. (1) Except with leave of the Commission or where the stream is dry or frozen at the time, water quality must be monitored by a qualified professional in accordance with this condition, during construction or modification of a crossing on a fish bearing stream.
 - (2) In monitoring water quality under (1) the Approval Holder must:
 - a) monitor water in the stream upstream and downstream of the location of any physical disturbance associated with the project either in-stream or in the adjacent riparian areas identified above:
 - b) identify and document any exceedance of the *British Columbia Approved Water Quality Guideline:*Aquatic Life, Wildlife & Agriculture (March 2016 or as amended or replaced from time to time) (the "Water Quality Guidelines") caused by, or likely caused by the construction activities;
 - undertake and document measures to eliminate the cause of any exceedance identified under b)
 or, if the cause could not be eliminated, to minimize the duration and significance of any detrimental
 effects; and
 - d) make the information documented under b) and c) available to the Commission upon request.

Permitting and Authorizations
Page 4 of 8
Physical Address: 6534 Airport Road, Fort St. John, BC
Mailing Address: Bag 2, Fort St. John, BC V1J 2B0
Page 4 of 8
Facsimile: (250) 794-5200
Facsimile: (250) 794-5200
24 Hour: (250) 794-5200

Approval Holder: Trans Mountain Pipeline ULC

Application Submission Date: July 17, 2017

Application Determination Number: 100101506

Date Issued: March 4, 2021

- Activities under this Approval must not result in any deleterious materials being deposited into a stream, wetland or lake.
- 9. The Approval Holder must ensure all of the following for each crossing of a stream, wetland and lake:
 - a) the crossing is constructed and maintained at times and in a manner that is unlikely to harm fish or destroy, damage or harmfully alter fish habitat;
 - b) the crossing does not prevent the movement of fish, nor impede the movement of fish to the extent that it is harmful to the survival of the fish;
 - c) the side of the stream, lake or wetland is protected at the crossing; and
 - d) any disturbance to the stream channel and stream bank, wetland or lake bottom, as applicable, is mitigated.
- 10. In-stream activities within a fish bearing stream, lake or wetland must occur:
 - a) during the applicable reduced risk work windows as specified in the regional timing windows for respective regions through which the pipeline passes and within which the works will occur:
 - in accordance with alternative timing and associated mitigation recommended by a qualified professional and accepted by the National Energy Board and provided to the Commission; or
 - c) in accordance with an authorization from Fisheries and Oceans Canada (DFO) that is provided to the Commission, or in accordance with DFO's Measures to Avoid Causing Harm to Fish and Fish Habitat.
- 11. Mechanical stream crossings must be constructed, maintained and deactivated according to the following requirements, as applicable:
 - a) To facilitate construction of a crossing, a machine is permitted to ford the stream a maximum of one time in each direction at the crossing location;
 - b) Only bridges, culverts, ice bridges or snow fills may be constructed at stream crossings;
 - c) Notwithstanding, (b), matting or steel plates may be used to cross streams classified as NCD, S4 or S6;
 - d) The Approval Holder must ensure that permanent bridges are designed and fabricated in compliance with:
 - (i) the Canadian Standards Association Canadian Bridge Design Code, CAN/CSA-S6; and
 - (ii) soil property standards, as they apply to bridge piers and abutments; set out in the Canadian Foundation of Engineering Manual.
 - e) Except with leave of the Commission, the Approval Holder must ensure that:
 - (i) any culverts used are designed and fabricated in compliance with the applicable:
 - (a) Canadian Standards Association CSA G401, Corrugated Steel Pipe Products; or
 - (b) Canadian Standards Association Standard CSA B1800, Section B182.2, Plastic Nonpressure Pipe Compendium, or
 - (ii) Any pipe installed in lieu of a culvert is of at least equivalent standard and strength as any culvert as specified above.
 - f) Except with leave of the Commission, the Approval Holder must ensure that bridges and culverts meet the criteria set out in (i), (ii), or (iii) below:
 - (i) The bridge or culvert is designed to pass the highest peak flow of the stream that can reasonably be expected within the return periods set out in column 2 the table below for the period the Approval Holder anticipates the structure will remain on site, as set out in column 1 in the table below:

Permitting and Authorizations Page 5 of 8 Telephone: (250) 794-5200 Physical Address: 6534 Airport Road, Fort St. John, BC Facsimile: (250) 794-5379 Mailing Address: Bag 2, Fort St. John, BC V1J 2B0 24 Hour: (250) 794-5200

Application Submission Date: July 17, 2017

Date Issued: March 4, 2021

Approval Holder: Trans Mountain Pipeline ULC Application Determination Number: 100101506

| Column 1 Anticipated period crossing structure will remain on site | Column 2 Peak flow period |
|---|------------------------------|
| Bridge or culvert, 3 years or less | 10 years |
| Bridge other than a bridge within a community watershed, more than 3 years but less than 15 | 50 years |
| Bridge within a community watershed, more than 3 years | 100 years |
| Bridge, 15 years or more | 100 years |
| Culvert, more than 3 years | 100 years |

- (ii) The bridge, or any component of the bridge:
 - (a) is designed to pass expected flows during the period the bridge is anticipated to remain on the site:
 - (b) is constructed, installed and used only in a period of low flow; and
 - (c) is removed before any period of high flow begins.
- (iii) The culvert:
 - (a) is a temporary installation, and the Approval Holder does not expect to subsequently install a replacement culvert at that location;
 - (b) is not installed in a stream, when the stream contains fish;
 - (c) is sufficient to pass flows that occur during the period the culvert remains on the site;
 - (d) is installed during a period of low flow; and
 - (e) is removed before any period of high flow begins.
- g) Ice bridges on fish bearing streams may only be constructed where sufficient water depth and stream flows prevent the bridge structure from coming in contact with the stream bottom;
- h) Water applied to construct an ice bridge on a water body must be sourced in accordance with the *Water Sustainability Act* unless:
 - the water body is a stream with a stream channel width of at least 5 metres and is not designated as a sensitive stream under the Fish Protection Act, or has a riparian class of W1, W3, or L1;
 - the water is sourced from the same water body proximal to the location on which the ice bridge is constructed;
 - (iii) the water body is not within the boundaries of a public park;
 - (iv) pump intakes do not disturb beds of streams or wetlands and are screened with a maximum mesh size and approach velocity in accordance with the Fisheries and Oceans Canada Freshwater Intake End-of-Pipe Fish Screen Guideline; and
 - (a) where the water body is a stream, the flow of water in the stream at the time and location of pumping exceeds 60 litres per second and the instantaneous pumping rate does not exceed 1% of the water flowing in the water body at the time and location the pumping occurs, or
 - (b) where the water body is a lake or pond, the cumulative volume of water withdrawn does not exceed 10 cm of lake or pond depth, calculated as the product of lake or pond surface area x 10 cm.
- Records of water withdrawal and corresponding streamflow measurements are maintained by the Approval Holder and provided to the Commission upon request;
- Snow fills must consist of clean snow and may only be located on streams that are dry or frozen to the bottom during the period of construction, maintenance and use. Where periodic thaws are anticipated,

Permitting and Authorizations Physical Address: 6534 Airport Road, Fort St. John, BC Mailing Address: Bag 2, Fort St. John, BC V1J 2B0

24 Hour: (250) 794-5200

Approval Holder: Trans Mountain Pipeline ULC

Application Submission Date: July 17, 2017

Application Determination Number: 100101506

Date Issued: March 4, 2021

- culverts must be installed to allow meltwater to pass through. Snow fill and any installed culverts must be removed prior to spring snow melt;
- k) Bridge or culvert abutments, footings and scour protection must be located outside the natural stream channel and must not constrict the channel width:
- Equipment used for activities under this approval must not be situated in a stream channel unless it is
 dry or frozen to the bottom at the time of the activity, or if under flowing conditions, is carried out in
 accordance with DFO's Measures to Avoid Harm to Fish and Fish Habitat, and the advice of a qualified
 professional.
- 12. Following initial road construction, stream, lake and wetlands crossings are approved for necessary road maintenance activities except for:
 - a) works within the boundary of a provincial park;
 - b) stream bank or stream bed revetment works in a stream classified as S1, S2, S3, S4 or S5;
 - c) permanent alteration of a stream bank;
 - d) works within a Temperature Sensitive Stream established by order under s. 27 of the Environmental Protection and Management Regulation; or
 - e) works within a Fisheries Sensitive Watershed established by order under s. 28 of the Environmental Protection and Management Regulation.
- 13. (1) Before any in-stream maintenance works in or adjacent to a stream or wetland crossing occurs where any of the following are established in relation to the stream or wetland after construction of the road is complete:
 - Species identified as special concern, threatened, or endangered under the federal Species at Risk Act, or
 - b) Species identified by Order as a species at risk under the Forest and Range Practices Act or the Oil and Gas Activities Act.

the Approval Holder must submit a plan developed by a qualified professional, to the satisfaction of the Commission, that specifies measures to avoid or mitigate potential impacts to those species.

- (2) The Approval Holder must implement the plan when undertaking the maintenance works.
- 14. Construction and maintenance activities in and about wetlands including wetland crossings must be constructed, maintained and removed in accordance with the following:
 - a) minimize erosion or release of sediment within the wetland;
 - b) ensure the natural flow of water is reasonably maintained;
 - c) any padding materials must be placed on the wetland surface only and must not be used for infilling;
 - except with leave of the Commission, construction or maintenance works within a W1 wetland containing open water must either be isolated or utilize sediment curtains to minimize turbidity; and
 - e) any padding materials must be removed as soon as practicable following construction, considering weather and ground conditions.
- 15. The Approval Holder must place and maintain a sign, at a distance from each bridge sufficient to enable users to stop safely before reaching the bridge that states the maximum load capacity of the bridge.
- 16. The Approval Holder must ensure that each bridge or major culvert is regularly inspected by a qualified person. Records of inspections must be retained by the Approval Holder for at least one year after the bridge or major culvert is removed from the site or the Approval Holder's responsibility for the road ceases.
- 17. The Approval Holder must perform the maintenance and undertake modifications necessary to ensure that watercourse crossing structures and any other in-stream works associated with the road are functional and appropriate for the uses of the road.

Permitting and Authorizations Physical Address: 6534 Airport Road, Fort St. John, BC Mailing Address: Bag 2, Fort St. John, BC V1J 2B0

24 Hour: (250) 794-5200

Approval Holder: Trans Mountain Pipeline ULC Application Submission Date: July 17, 2017 Application Determination Number: 100101506

- 18. The Approval Holder must ensure that bridges and culverts on fish streams are constructed and maintained in a manner that does not prevent or impede the movement of fish.
- 19. The Approval Holder must prepare and maintain as-built drawings of any bridges or culverts exceeding 2000 mm in diameter or height that are constructed or modified by the Approval Holder. These drawings must be provided to the Commission upon request.

Advisory Guidance

- 1. Construction Plans are for the Approval Holder's internal reference only and were not reviewed as decision tools for this approval, nor do they form an integral part of this approval.
- 2. The Approval Holder should be aware that there may be First Nation's traditional, cultural, or spiritual activities occurring concurrently with maintenance activities, as well as cultural resources that overlap the activity area. All reasonable efforts should be made to minimize interference with those activities and resources while carrying out the maintenance.

All pages included in this approval and any attached plan(s) form an integral part of this approval.

James O'Hanley

Vice President, Applications

24 Hour: (250) 794-5200

Date Issued: March 4, 2021



Non OGAA v 3.3

APPROVALS

RE: Determination of Application Area Number 100111713

Approval Holder: Trans Mountain Pipeline ULC

Effective Date: December 16, 2020

Amendment Date of Issuance: December 16, 2020 Application Submitted Date: November 10, 2020 Application Determination Number: 100101506

CUTTING PERMITS

"Permit Area" means the areas described in condition 1 of Schedule A of the following Licence of Occupation

Tenure No.: 9000180

Document No.: 954899

APPROVAL

Pursuant to section 47.4 of the *Forest Act*, and subject to the conditions of these permits the Commission hereby approves the removal of Crown timber from the Permit Area under the cutting permits associated with the Master Licences to Cut as follows:

Master Licence to Cut No.: M02363

Cutting Permit No.: 11

Timber Mark No.: MTC180

Total New Cut: 13 hectares

Forest District: (DKA) Thompson Rivers Natural

Resource District
Region: Interior

Conditions

- 1. Timber harvesting under the above cutting permits must not commence until the Permit Holder has submitted the relevant appraisal documents to the Ministry of Forests, Lands and Natural Resource Operations and Rural Development and received confirmation of the stumpage rate.
- 2. Stumpage for the cutting permits will be determined according to the Interior Appraisal Manual (Manual) as amended from time to time. In the current version of the Manual, stumpage will be determined in accordance with Table 6-3 (volume based).
- Clearing must be confined to the areas approved in the spatial data referenced in condition 1 of Schedule A of the Licence of Occupation.

24 Hour: (250) 794-5200

Approval Holder: Trans Mountain Pipeline ULC

Application Submission Date: November 10, 2020

Application Determination Number: 100101506

Date Issued: December 16, 2020

- 4. Despite condition 3, the Approval Holder is permitted to fell any trees located on Crown land within 1.5 tree lengths of the Permit Area that are considered to be a worker safety hazard under applicable regulations and must be felled in order to eliminate the hazard. Trees or portions of these trees that can be accessed from the permit area without causing damage to standing timber may be harvested.
- 5. All harvested Crown Timber must be marked with the cutting permit's associated Timber Mark (identified above) in accordance with timber marking requirements of the *Forest Act*.
- 6. Any timber removed from the Permit Area must be scaled in accordance with scaling requirements of the Forest Act.
- 7. The interior merchantability specifications identified in the Provincial Logging Residue and Waste Measurement Procedures Manual in place at the time the timber is harvested apply to these cutting permits.
- 8. The holder of the cutting permits must pay to the Province any waste billing determined in accordance with the Master Licence to Cut and the terms of this approval.

Termination

9. The cutting permits terminate upon the submission of the post construction plan required under the Licences of Occupation identified in the definition of Permit Area above or upon either the cancellation or expiry of those Licences.

Advisory Guidance

- 1. The Approval Holder should be aware that the approval under the *Forest Act* to harvest timber does not extend to harvesting within private land.
- The Approval Holder should be aware that impacts to recreation features, trails, recreation facilities, interpretative forest sites or recreation sites identified, authorized or established under the Forest and Range Practices Act are subject to additional authorizations by the Ministry of Forests, Lands and Natural Resource Operations.

All pages included in this permit and any attached plan(s) form an integral part of this permit.

Lori Phillips

Authorizations Manager

n Phillips



MODIFICATION AGREEMENT

Licence No. 954899 File No. 9000180

THIS AGREEMENT is dated for reference December 16, 2020.

BETWEEN:

OIL and GAS COMMISSION, a corporation continued under the *Oil and Gas Activities Act*, S.B.C. 2008, c.36, an agent of Her Majesty the Queen in Right of the Province of British Columbia, having its offices at 6534 Airport Road, Fort St. John, British Columbia V1J 4M6

(the "Commission")

AND:

TRANS MOUNTAIN PIPELINE ULC (Inc. No. A0070893) 2700, 300 – 5th Avenue, SW Calgary, Alberta T2P 5J2

(the "Licensee")

WITNESS THAT WHEREAS:

The Commission and the Licensee entered into a Licence of Occupation dated August 8, 2018 under Licence No: 954899 (herein called the "Tenure")

The parties desire to amend the Tenure as follows:

a) to decrease the Road area from 26.553 hectares to **25.403** hectares and amend two access locations.

The "land" now means:

Crown Land within the Thompson Okanagan Natural Resource Region, containing 25.403 hectares, more or less, as identified in the spatial data submitted to the Commission under 100101506 and as revised with amendment application 100111713 on November 10, 2020;

The Schedule A – Additional Conditions now read:

Approved Disturbance Footprint: 25.403 ha

As attached to the Licence of Occupation document, dated August 8, 2018 on file at the Oil & Gas Commission.

Licence No. 954899 File No. 9000180

The parties have agreed to amend the Tenure.

NOW THEREFORE in consideration of the premises, and of the covenants and agreements herein contained, the parties hereto mutually covenant and agree as follows:

- 1. In all other respects the Tenure shall remain in full force and effect and is hereby ratified and confirmed.
- 2. Time shall continue to be of the essence in this agreement and the Tenure.
- 3. This agreement shall ensure to the benefit of and be binding upon the parties hereto and their respective successors and permitted assigns.

The parties hereto have executed and delivered this agreement as of the day and year first above written.

SIGNED on behalf of the **OIL and GAS COMMISSION** by a duly authorized signatory

| Authorized Signatory – Lori Phillips, Authorizations Manager, Applications | |
|---|--|

Jon Phillips

| SIGNED on behalf of TRANS MOUNTAIN PIPELINE U lby a duly authorized signatory | LC |
|--|----|
| Authorized Signatory | |



Correction v 1.0

August 10, 2020

Trans Mountain Pipeline ULC 2700, 300 - 5th Avenue SW Calgary, AB T2P 5J2

Attention: Trans Mountain Pipeline ULC

Re: Correction to Application Determination Number 100101506

Approval Holder: Trans Mountain Pipeline ULC Date of Permit Issuance: October 13, 2017 Date of Correction: August 10, 2020

Application Determination Number: 100101506

The BC Oil and Gas Commission hereby corrects the approval identified and dated above as follows:

Remove Condition #24 and replace with:

Prior to deactivating any road segment approved under this Agreement, the Approval Holder must provide written notice of the intention to users of the road known to the Approval Holder, and the Commission via the Declaration of Road Deactivation Form.

The Approval Holder must comply with any permissions, authorizations, approvals and conditions set out in the original approval, any subsequent amendments to the approval and any additional corrections as set out herein.

This letter forms an integral part of your permit and should be attached thereto.

Lori Phillips

Authorized Signatory

Commission Delegated Decision Maker

24 Hour: (250) 794-5200



Non OGAA v 3.3

APPROVALS

RE: Determination of Application Area Number 100101506

Approval Holder: Trans Mountain Pipeline ULC

Date of Issuance: October 13, 2017 Effective Date: October 13, 2017 Amendment Date: August 8, 2018

Application Submitted Date: July 17, 2017 **Application Determination Number:** 100101506

CUTTING PERMITS

"Permit Area" means the areas described in condition 1 of Schedule A of the following Licence of Occupation

Tenure No.: 9000180

Document No.: 954899

but does not include any areas described above that are located within:

- A Community Forest Agreement, First Nations Woodland Licence, Tree Farm Licence, Timber Licence, Occupant Licence to Cut or Woodlot Licence unless there is an agreement with the Agreement or Licence holder to harvest the timber located within the Agreement or Licence area under the relevant Master Licence to Cut and associated cutting permit indicated below, or
- 2. A subsisting cutting permit issued to another party.

APPROVAL

Pursuant to section 47.4 of the *Forest Act*, and subject to the conditions of these permits the Commission hereby approves the removal of Crown timber from the Permit Area under the cutting permits associated with the Master Licences to Cut as follows:

Master Licence to Cut No.: M02363

Cutting Permit No.: 11

Timber Mark No.: MTC180

Total New Cut: 12.68 ha

Forest District: (DKA) Thompson Rivers Natural

Resource District

Region: Interior

24 Hour: (250) 794-5200

Approval Holder: Trans Mountain Pipeline ULC Application Submission Date: July 17, 2017

Application Determination Number: 100101506 Date Issued: October 13, 2017

Conditions

1. Timber harvesting under the above cutting permits must not commence until the Permit Holder has submitted the relevant appraisal documents to the Ministry of Forests, Lands and Natural Resource Operations and Rural Development and received confirmation of the stumpage rate.

- Stumpage for the cutting permits will be determined according to the Interior Appraisal Manual (Manual)
 as amended from time to time. In the current version of the Manual, stumpage will be determined in
 accordance with Table 6-3 (volume based).
- 3. Clearing must be confined to the areas approved in the spatial data referenced in condition 1 above, and must not, without leave of the Commission, occur within:
 - a) an area containing a significant mineral lick, bear den, Trumpeter Swan nest, other nesting site, significant wallow, or Sharp-tailed Grouse Lek, unless it is not damaged by activities approved under this permit;
 - b) Old Growth Management Areas, other than those identified in conflict in the Old Growth Management Areas Mitigation and Replacement Plan for the Trans Mountain Pipeline ULC Trans Mountain Expansion Project NEB Condition 76, dated September 2016, unless the incursion is less than 0.1 ha;
 - c) Wildlife Tree Retention Areas; or
 - d) a Riparian Management Area, except as approved in the spatial data referenced above, unless the Riparian Management Area has been previously cleared.
- 4. The Approval Holder is permitted to fell any trees located on Crown land within 1.5 tree lengths of the Permit Area that are considered to be a worker safety hazard under applicable regulations and must be felled in order to eliminate the hazard. Trees or portions of these trees that can be accessed from the permit area without causing damage to standing timber may be harvested.
- 5. All harvested Crown Timber must be marked with the cutting permit's associated Timber Mark (identified above) in accordance with timber marking requirements of the *Forest Act*.
- 6. Any timber removed from the Permit Area must be scaled in accordance with scaling requirements of the *Forest Act*.
- 7. The interior merchantability specifications identified in the Provincial Logging Residue and Waste Measurement Procedures Manual in place at the time the timber is harvested apply to these cutting permits.
- 8. The holder of the cutting permits must pay to the Province any waste billing determined in accordance with the Master Licence to Cut and the terms of this approval.

Termination

 The cutting permits terminate upon the submission of the post construction plan required under the Licences of Occupation identified in the definition of Permit Area above or upon either the cancellation or expiry of those Licences.

Advisory Guidance

- 1. The Approval Holder should be aware that the approval under the *Forest Act* to harvest timber does not extend to harvesting within private land.
- The Approval Holder should be aware that impacts to recreation features, trails, recreation facilities, interpretative forest sites or recreation sites identified, authorized or established under the *Forest and Range Practices Act* are subject to additional authorizations by the Ministry of Forests, Lands and Natural Resource Operations.

Permitting and Authorizations Page 2 of 8 Telephone: (250) 794-5200 Physical Address: 6534 Airport Road, Fort St. John, BC Facsimile: (250) 794-5379 Mailing Address: Bag 2, Fort St. John, BC V1J 2B0 24 Hour: (250) 794-5200

All pages included in this permit and any attached plan(s) form an integral part of this permit.

James O'Hanley

Vice President, Applications

Application Determination Number: 100101506

Date Issued: October 13, 2017

CHANGES IN AND ABOUT A STREAM

APPROVAL

The Commission, pursuant to section 11 of the *Water Sustainability Act*, approves the changes in and about a stream, as detailed in the application, for construction and maintenance activities within the activity areas identified below, unless otherwise restricted or refused by this approval and to the conditions below.

| Changes in and about a Stream No.: 0004004 | As included in the application referenced herein, unless referenced in the Refused Activities table, below. | Tenure No.: N/A Document No.: N/A |
|--|---|------------------------------------|
|--|---|------------------------------------|

Refusals

The approval of the application for changes in and about streams submitted as part of the Application Area Number referenced above does not include the activity(s) indicated in the Refused Activities table below and.

REFUSED ACTIVITIES

| Changes in and about a Stream | BCVA-74, BCVA-75, BCVA-76, Blue-Darf_W625point85, Blue-Darf_WC630cpoint6, Blue-Darf_W630point5, BCVA-80, Blue-Darf_WC639apoint5, BCVA-81, BCVA-82, BCVA-84, BCVA-85, BCVA-86, Blue-Darf_W682point4, BCVA-104, BCVA-105, BCVA-106 |
|-------------------------------|--|
|-------------------------------|--|

Conditions

- Unless a condition or its context suggests otherwise, terms used in the following conditions have the same meaning as the Environmental Protection and Management Regulation and the Oil and Gas Road Regulation under the Oil and Gas Activities Act.
- Subject to the provisions of this approval, crossings of streams must be constructed in accordance with the Vehicle Crossing Methods, as appropriate, that are specified in the document named 01-13283-S4-0000-EV-XGS-0003 R2.xlsx, uploaded 2017-09-08 14:59:56.0 that has been submitted to the satisfaction of the Commission.
- 3. Except with leave of the Commission, in-stream works must be carried out in accordance with the methods and any mitigations specified in the application.
- 4. A notice of maintenance activities must be submitted to OGC.ExternalNotifications@bcogc.ca, or such other address as indicated in a notice from the Commission, at least 21 working days prior to the commencement of any changes in or about a stream associated with maintenance activities.
- 5. At least 21 working days prior to the commencement of any changes in or about a stream associated with maintenance activities, the Approval Holder must provide a notice of works to any First Nation(s) who may have Aboriginal Interests identified, as per the BC First Nations Consultative Areas Database, within the area in which the works are to occur.
- 6. Except with leave of the Commission, any bird nest site located within or adjacent to a stream, wetland or lake crossing must not be damaged by activities authorized under this approval.
- 7. (1) Except with leave of the Commission or where the stream is dry or frozen at the time, water quality must be monitored by a qualified professional in accordance with this condition, during construction or modification of a crossing on a fish bearing stream.

Permitting and Authorizations Physical Address: 6534 Airport Road, Fort St. John, BC Mailing Address: Bag 2, Fort St. John, BC V1J 2B0 Approval Holder: Trans Mountain Pipeline ULC

Application Submission Date: July 17, 2017

Application Determination Number: 100101506

Date Issued: October 13, 2017

- (2) In monitoring water quality under (1) the Approval Holder must:
 - a) monitor water in the stream upstream and downstream of the location of any physical disturbance associated with the project either in-stream or in the adjacent riparian areas identified above;
 - identify and document any exceedance of the British Columbia Approved Water Quality Guideline: Aquatic Life, Wildlife & Agriculture (March 2016 or as amended or replaced from time to time) (the "Water Quality Guidelines") caused by, or likely caused by the construction activities;
 - undertake and document measures to eliminate the cause of any exceedance identified under b)
 or, if the cause could not be eliminated, to minimize the duration and significance of any detrimental
 effects; and
 - d) make the information documented under b) and c) available to the Commission upon request.
- 8. Activities under this Approval must not result in any deleterious materials being deposited into a stream, wetland or lake.
- 9. The Approval Holder must ensure all of the following for each crossing of a stream, wetland and lake:
 - a) the crossing is constructed and maintained at times and in a manner that is unlikely to harm fish or destroy, damage or harmfully alter fish habitat;
 - b) the crossing does not prevent the movement of fish, nor impede the movement of fish to the extent that it is harmful to the survival of the fish;
 - c) the side of the stream, lake or wetland is protected at the crossing; and
 - any disturbance to the stream channel and stream bank, wetland or lake bottom, as applicable, is mitigated.
- 10. In-stream activities within a fish bearing stream, lake or wetland must occur:
 - a) during the applicable reduced risk work windows as specified in the regional timing windows for respective regions through which the pipeline passes and within which the works will occur;
 - in accordance with alternative timing and associated mitigation recommended by a qualified professional and accepted by the National Energy Board and provided to the Commission; or
 - in accordance with an authorization from Fisheries and Oceans Canada (DFO) that is provided to the Commission, or in accordance with DFO's Measures to Avoid Causing Harm to Fish and Fish Habitat.
- 11. Mechanical stream crossings must be constructed, maintained and deactivated according to the following requirements, as applicable:
 - a) To facilitate construction of a crossing, a machine is permitted to ford the stream a maximum of one time in each direction at the crossing location;
 - b) Only bridges, culverts, ice bridges or snow fills may be constructed at stream crossings;
 - c) Notwithstanding, (b), matting or steel plates may be used to cross streams classified as NCD, S4 or S6;
 - d) The Approval Holder must ensure that permanent bridges are designed and fabricated in compliance with:
 - (i) the Canadian Standards Association Canadian Bridge Design Code, CAN/CSA-S6; and
 - (ii) soil property standards, as they apply to bridge piers and abutments; set out in the Canadian Foundation of Engineering Manual.
 - e) Except with leave of the Commission, the Approval Holder must ensure that:
 - (i) any culverts used are designed and fabricated in compliance with the applicable:
 - (a) Canadian Standards Association CSA G401, Corrugated Steel Pipe Products; or
 - (b) Canadian Standards Association Standard CSA B1800, Section B182.2, Plastic Non-pressure Pipe Compendium, or

Permitting and Authorizations
Page 5 of 8
Physical Address: 6534 Airport Road, Fort St. John, BC
Mailing Address: Bag 2, Fort St. John, BC V1J 2B0
Page 5 of 8
Facsimile: (250) 794-5200
24 Hour: (250) 794-5200

Approval Holder: Trans Mountain Pipeline ULC

Application Submission Date: July 17, 2017

Application Determination Number: 100101506

Date Issued: October 13, 2017

(ii) Any pipe installed in lieu of a culvert is of at least equivalent standard and strength as any culvert as specified above.

- f) Except with leave of the Commission, the Approval Holder must ensure that bridges and culverts meet the criteria set out in (i), (ii), or (iii) below:
 - (i) The bridge or culvert is designed to pass the highest peak flow of the stream that can reasonably be expected within the return periods set out in column 2 the table below for the period the Approval Holder anticipates the structure will remain on site, as set out in column 1 in the table below:

| Column 1 Anticipated period crossing structure will remain on site | Column 2 Peak flow period |
|---|------------------------------|
| Bridge or culvert, 3 years or less | 10 years |
| Bridge other than a bridge within a community watershed, more than 3 years but less than 15 | 50 years |
| Bridge within a community watershed, more than 3 years | 100 years |
| Bridge, 15 years or more | 100 years |
| Culvert, more than 3 years | 100 years |

- (ii) The bridge, or any component of the bridge:
 - (a) is designed to pass expected flows during the period the bridge is anticipated to remain on the site:
 - (b) is constructed, installed and used only in a period of low flow; and
 - (c) is removed before any period of high flow begins.
- (iii) The culvert:
 - (a) is a temporary installation, and the Approval Holder does not expect to subsequently install a replacement culvert at that location;
 - (b) is not installed in a stream, when the stream contains fish;
 - (c) is sufficient to pass flows that occur during the period the culvert remains on the site;
 - (d) is installed during a period of low flow; and
 - (e) is removed before any period of high flow begins.
- g) Ice bridges on fish bearing streams may only be constructed where sufficient water depth and stream flows prevent the bridge structure from coming in contact with the stream bottom;
- h) Water applied to construct an ice bridge on a water body must be sourced in accordance with the *Water Sustainability Act* unless:
 - the water body is a stream with a stream channel width of at least 5 metres and is not designated as a sensitive stream under the Fish Protection Act, or has a riparian class of W1, W3, or L1;
 - (ii) the water is sourced from the same water body proximal to the location on which the ice bridge is constructed;
 - (iii) the water body is not within the boundaries of a public park;
 - (iv) pump intakes do not disturb beds of streams or wetlands and are screened with a maximum mesh size and approach velocity in accordance with the Fisheries and Oceans Canada Freshwater Intake End-of-Pipe Fish Screen Guideline; and
 - where the water body is a stream, the flow of water in the stream at the time and location of pumping exceeds 60 litres per second and the instantaneous pumping rate

Permitting and Authorizations
Page 6 of 8
Physical Address: 6534 Airport Road, Fort St. John, BC
Mailing Address: Bag 2, Fort St. John, BC V1J 2B0
Page 6 of 8
Facsimile: (250) 794-5200
24 Hour: (250) 794-5200

Application Submission Date: July 17, 2017

Date Issued: October 13, 2017

Approval Holder: Trans Mountain Pipeline ULC

Application Determination Number: 100101506

- does not exceed 1% of the water flowing in the water body at the time and location the pumping occurs, or
- (b) where the water body is a lake or pond, the cumulative volume of water withdrawn does not exceed 10 cm of lake or pond depth, calculated as the product of lake or pond surface area x 10 cm.
- Records of water withdrawal and corresponding streamflow measurements are maintained by the Approval Holder and provided to the Commission upon request;
- j) Snow fills must consist of clean snow and may only be located on streams that are dry or frozen to the bottom during the period of construction, maintenance and use. Where periodic thaws are anticipated, culverts must be installed to allow meltwater to pass through. Snow fill and any installed culverts must be removed prior to spring snow melt;
- k) Bridge or culvert abutments, footings and scour protection must be located outside the natural stream channel and must not constrict the channel width;
- Equipment used for activities under this approval must not be situated in a stream channel unless it is
 dry or frozen to the bottom at the time of the activity, or if under flowing conditions, is carried out in
 accordance with DFO's Measures to Avoid Harm to Fish and Fish Habitat, and the advice of a qualified
 professional.
- 12. Following initial road construction, stream, lake and wetlands crossings are approved for necessary road maintenance activities except for:
 - a) works within the boundary of a provincial park;
 - b) stream bank or stream bed revetment works in a stream classified as S1, S2, S3, S4 or S5;
 - c) permanent alteration of a stream bank;
 - works within a Temperature Sensitive Stream established by order under s. 27 of the Environmental Protection and Management Regulation; or
 - e) works within a Fisheries Sensitive Watershed established by order under s. 28 of the Environmental Protection and Management Regulation.
- 13. (1) Before any in-stream maintenance works in or adjacent to a stream or wetland crossing occurs where any of the following are established in relation to the stream or wetland after construction of the road is complete:
 - Species identified as special concern, threatened, or endangered under the federal Species at Risk Act. or
 - b) Species identified by Order as a species at risk under the Forest and Range Practices Act or the Oil and Gas Activities Act.

the Approval Holder must submit a plan developed by a qualified professional, to the satisfaction of the Commission, that specifies measures to avoid or mitigate potential impacts to those species.

- (2) The Approval Holder must implement the plan when undertaking the maintenance works.
- 14. Construction and maintenance activities in and about wetlands including wetland crossings must be constructed, maintained and removed in accordance with the following:
 - a) minimize erosion or release of sediment within the wetland;
 - b) ensure the natural flow of water is reasonably maintained:
 - c) any padding materials must be placed on the wetland surface only and must not be used for infilling;
 - d) except with leave of the Commission, construction or maintenance works within a W1 wetland containing open water must either be isolated or utilize sediment curtains to minimize turbidity; and
 - any padding materials must be removed as soon as practicable following construction, considering weather and ground conditions.

Permitting and Authorizations Page 7 of 8 Telephone: (250) 794-5200 Physical Address: 6534 Airport Road, Fort St. John, BC Mailing Address: Bag 2, Fort St. John, BC V1J 2B0 Telephone: (250) 794-5200 24 Hour: (250) 794-5200

Approval Holder: Trans Mountain Pipeline ULC Application Submission Date: July 17, 2017

Application Determination Number: 100101506 Date Issued: October 13, 2017

- 15. The Approval Holder must place and maintain a sign, at a distance from each bridge sufficient to enable users to stop safely before reaching the bridge that states the maximum load capacity of the bridge.
- 16. The Approval Holder must ensure that each bridge or major culvert is regularly inspected by a qualified person. Records of inspections must be retained by the Approval Holder for at least one year after the bridge or major culvert is removed from the site or the Approval Holder's responsibility for the road ceases.
- 17. The Approval Holder must perform the maintenance and undertake modifications necessary to ensure that watercourse crossing structures and any other in-stream works associated with the road are functional and appropriate for the uses of the road.
- 18. The Approval Holder must ensure that bridges and culverts on fish streams are constructed and maintained in a manner that does not prevent or impede the movement of fish.
- 19. The Approval Holder must prepare and maintain as-built drawings of any bridges or culverts exceeding 2000 mm in diameter or height that are constructed or modified by the Approval Holder. These drawings must be provided to the Commission upon request.

Advisory Guidance

- Construction Plans are for the Approval Holder's internal reference only and were not reviewed as decision tools for this approval, nor do they form an integral part of this approval.
- 2. The Approval Holder should be aware that there may be First Nation's traditional, cultural, or spiritual activities occurring concurrently with maintenance activities, as well as cultural resources that overlap the activity area. All reasonable efforts should be made to minimize interference with those activities and resources while carrying out the maintenance.

All pages included in this approval and any attached plan(s) form an integral part of this approval.

James O'Hanley

Vice President, Applications

1- 11

Facsimile: (250) 794-5379 24 Hour: (250) 794-5200



Licence of Occupation

Licence No. 954899 File No. 9000180

THIS AGREEMENT is dated for reference August 8, 2018 and is made under the Land Act.

BETWEEN:

OIL and GAS COMMISSION, a corporation continued under the *Oil and Gas Activities Act*, S.B.C. 2008, c. 36, an agent of Her Majesty the Queen in Right of the Province of British Columbia, having its offices at 6534 Airport Road, Fort St. John, British Columbia V1J 4M6

(the "Commission")

AND:

TRANS MOUNTAIN PIPELINE ULC (Inc. No. A0070893) 2700, 300 – 5th Avenue SW Calgary, Alberta T2P 5J2

(the "Licensee")

The parties agree as follows:

ARTICLE 1 - INTERPRETATION

1.1 In this Agreement:

"Agreement" means this license of occupation;

"Certificates" means Certificates OC-064, OC -049, and OC-02 issued by the National Energy Board on December 1, 2016.

"Commencement Date" means the date that is 30 days following the date upon which the Licensee provides notice to the Commission that it is prepared to commence activities on the Land:

"Disposition" has the meaning given to it in the Land Act and includes a licence of occupation;

"Fee" means the fees set out in Article 3;

"Financing Entities" means the Persons, if any, or their agent or trustee, providing the Licensee with any or all of its development, construction, operating, term or project financing with respect to the Improvements or the Pipeline or any activity related thereto, whether at the time of execution of this Agreement or during the term of this Agreement;

"Improvements" includes anything made, constructed, erected, built, altered, repaired or added to, in, on or under the Land, and attached to it or intended to become a part of it, and also includes any clearing, excavating, digging, drilling, tunneling, filling, grading or ditching of, in, on or under the Land;

"Land" means:

Crown land within the Omineca and Thompson/Okanagan Districts (along construction corridor from a-035-F/083-D-03 to d-075-B/092-P-08), identified in the spatial data

OGC – NEB ROADWAY Page 1 of 15

submitted to the Commission in permit application 100101506, on July 17, 2017 containing 26.553 hectares more or less:

except for those parts of the land that, on the Commencement Date, consist of highways (as defined in the *Highway Act*) and land covered by water;

"Person" means any individual, partnership, limited partnership, firm, trust, body corporate, agency, administrative board, unincorporated body of persons, association or government authority;

"Pipeline" has the same meaning as prescribed in the *National Energy Board Act* (Canada) and shall include the Pipeline approved by the Certificates;

"Province" means Her Majesty the Queen in Right of the Province of British Columbia;

"Road" means a road or portion of a road constructed, maintained or used to facilitate the construction or operation of the Pipeline, each as more specifically identified as Activity Details in Schedule "A".

"Security" means the security referred to in section 6.1 or 6.2 as replaced or supplemented in accordance with section 6.5;

"Term" means the period of time set out in section 2.2;

"we", "us" or "our" refers to the Commission alone and never refers to the combination of the Commission and the Licensee: that combination is referred to as "the parties"; and

"you" or "your" refers to the Licensee.

- 1.2 In this Agreement, "person" includes a corporation, firm or association and wherever the singular or masculine form is used in this Agreement it will be construed as the plural or feminine or neuter form, as the case may be, and vice versa where the context or parties require.
- 1.3 The captions and headings contained in this Agreement are for convenience only and do not define or in any way limit the scope or intent of this Agreement.
- 1.4 This Agreement will be interpreted according to the laws of the Province of British Columbia.
- 1.5 Where there is a reference to an enactment of the Province of British Columbia or of Canada in this Agreement, that reference will include a reference to every amendment to it, every regulation made under it and any subsequent enactment of like effect and, unless otherwise indicated, all enactments referred to in this Agreement are enactments of the Province of British Columbia.
- 1.6 If any section of this Agreement, or any part of a section, is found to be illegal or unenforceable, that section or part of a section, as the case may be, will be considered separate and severable and the remainder of this Agreement will not be affected and this Agreement will be enforceable to the fullest extent permitted by law.
- 1.7 Each schedule to this Agreement is an integral part of this Agreement as if set out at length in the body of this Agreement.
- 1.8 This Agreement constitutes the entire agreement between the parties and no understanding or agreement, oral or otherwise, exists between the parties with respect to the subject matter of this Agreement except as expressly set out in this Agreement and this Agreement may not be modified except by subsequent agreement in writing between the parties.
- 1.9 Each party will, upon the request of the other, do or cause to be done all lawful acts necessary for the performance of the provisions of this Agreement.

OGC - NEB ROADWAY

Licence No. 954899 File No. 9000180

1.10 All provisions of this Agreement in our favour and all of our rights and remedies, either at law or in equity, will survive the termination of this Agreement.

- 1.11 Time is of the essence of this Agreement.
- 1.12 Wherever this Agreement provides that an action may be taken, a consent or approval must be obtained or a determination must be made, then you or we, as the case may be, will act reasonably in taking such action, deciding whether to provide such consent or approval or making such determination.

ARTICLE 2- GRANT AND TERM

- 2.1 On the terms and conditions of this Agreement, including the conditions specified in Schedule 'A', we grant you a licence for you, and your employees, invitees, agents, consultants, Financing Entities, and contractors and their subcontractors to occupy the Land only for the purposes of construction, maintenance and use of the Roads, and you acknowledge this licence of occupation does not grant you exclusive use and occupancy of the Land.
- 2.2 Subject to conditions of the approval and Article 8, this Agreement is effective as of the date of execution and the Term shall commence on the Commencement Date and terminates on the date you notify the Commission in writing that you no longer require the Land for the purpose identified in section 2.1
- 2.3 Except as permitted by law or as otherwise permitted pursuant to this Agreement, you will not restrict, or permit the restriction of, the use of the Land or any Roads thereon to a defined or limited group of persons, it being the intention of the parties that such services and facilities will be available for use by all members of the public.

ARTICLE 3- FEES

3.1 You will pay to us the Fee for the Term, being \$500.00, payable within 90 days of the effective date of this Agreement.

ARTICLE 4- COVENANTS

- 4.1 You must:
 - (a) pay, when due;
 - (i) the Fee to us at the address set out in Article 10;
 - (ii) all charges for electricity, gas, water and other utilities supplied to the Land for use by you or on your behalf or with your permission;
 - (b) observe, abide by and comply with:
 - (i) all applicable laws, bylaws, orders, directions, ordinances, of any competent governmental authority, having jurisdiction over the Pipeline, Roads, Improvements and associated activities, or your use or occupation of the Land, Road or the Improvements; and
 - (ii) the provisions of this Agreement;
 - (c) in respect of the use of the Land by you or by anyone you permit to use the Land, keep the Roads and Improvements in a safe, clean and sanitary condition satisfactory to us, and at our written request, make the Land and the Improvements safe, clean and sanitary;

OGC – NEB ROADWAY Page 3 of 15

- (d) use and occupy the Land only in accordance with and for the purposes set out in section 2.1;
- (e) not construct, place or affix any Improvement on or to the Land except as necessary for the purposes set out in section 2.1;
- (f) pay all accounts and expenses as they become due for work performed on or materials supplied to the Land at your request, on your behalf or with your permission, except for money that you are required to hold back under the *Builders Lien Act*;
- (g) if any claim of lien over the Land is made under the Builders Lien Act for work performed on or materials supplied to the Land at your request, on your behalf or with your permission, immediately take all steps necessary to have the lien discharged, unless the claim of lien is being contested in good faith by you and you have taken the steps necessary to ensure that the claim of lien will not subject the Land or any interest of yours under this Agreement to sale or forfeiture;
- (h) not cut or remove timber on or from the Land without being granted the right under the Forest Act to harvest Crown timber on the Land;
- (i) dispose of raw sewage and refuse only in accordance with the requirements and regulations of appropriate federal and provincial agencies;
- (j) store bulk hazardous petroleum products and other toxic substances in accordance with the provisions of the *Environmental Management Act*;
- (k) permit us, or our authorized representatives, to enter on the Land at any time to inspect the Land and the Improvements;
- (I) indemnify and save us, the Province and our and the Province's servants, employees and agents harmless against all claims, actions, causes of action, losses, damages, costs and liabilities, including fees of solicitors and other professional advisors, arising out of:
 - (i) your breach, violation or non-performance of a provision of this Agreement, and
 - (ii) any personal injury, bodily injury (including death) or property damage occurring or happening on or off the Land that was caused by your entry upon, use or occupation of the Land,

the amount of all such losses, damages, costs and liabilities will be payable to us or the Province immediately upon demand: and

- (m) on the termination of this Agreement, you will:
 - within 90 days, remove from the Land any Improvement you want to remove, if the Improvement was placed on or made to the Land by you and you are not in default of this Agreement;
 - (ii) not remove any Improvement from the Land if you are in default of this Agreement unless we direct or permit you to do so under paragraph (iii);
 - (iii) remove from the Land any Improvement that we, in writing, direct or permit you to remove, other than any Improvement permitted to be placed on or made to the Land under another disposition or direction of the applicable government agency governing the Improvement; and

OGC – NEB ROADWAY Page 4 of 15

(iv) thereafter, peaceably quit and deliver possession of the Land and Roads to us and, subject to (i),(ii),(iii) above the Improvements in a safe, clean and sanitary condition,

and all of your right, interest, and estate in the Land will be absolutely forfeited to us, and to the extent necessary, this covenant will survive the termination of this Agreement.

- 4.2 Except as permitted by law or as otherwise permitted in this Agreement, you will not permit any person that you are legally responsible for to do anything you are restricted from doing under this Article.
- 4.3 Except as permitted law, or as otherwise permitted in this Agreement, we will not do anything on the Land that will interfere materially with the Roads and Improvements or your use of the Roads or Improvements, or that creates a public hazard.

ARTICLE 5-LIMITATIONS

- 5.1 You agree with us that:
 - (a) we and the Province are under no obligation to provide access or services to the Land or to maintain or improve existing access roads;
 - (b) this Agreement is subject to:
 - (i) all subsisting dispositions and subsisting grants to or rights of any Person made or acquired under the Coal Act, Forest Act, Mineral Tenure Act, Petroleum and Natural Gas Act, Land Act, Range Act, Wildlife Act or Water Sustainability Act, or any extension or renewal of the same, whether or not you have actual notice of them, and
 - (ii) the exceptions and reservations of interests, rights, privileges and titles referred to in section 50 of the *Land Act*.
 - (c) without limiting subsection 4.1(l), you must indemnify and save us, the Province and our and the Province's servants, employees and agents harmless from and against all claims, actions, causes of action, losses, damages, costs and liabilities, including fees of solicitors and other professional advisors, arising out of any conflict between your rights under this Agreement and the rights of any person under a disposition or under a subsisting grant to or right of any person made or acquired under the Coal Act, Forest Act, Mineral Tenure Act, Petroleum and Natural Gas Act, Range Act, Wildlife Act or Water Sustainability Act (or any prior or subsequent enactment of the Province of British Columbia of like effect), or any extension or renewal of the same, whether or not you have actual notice of them, and the amount of all such losses, damages, costs and liabilities will be payable to us immediately upon demand;
 - (d) you release us and the Province from all claims, actions, causes of action, suits, debts and demands that you now have or may at any time in the future have against us or the Province arising out of any conflict between your rights under this Agreement and the rights of any person under a disposition or under a subsisting grant to or right made or acquired under the enactments referred to in subsection (c), and you acknowledge that this Agreement and your rights under this Agreement are subject to those grants and rights referred to in subsection (c) whether or not you have actual notice of them;
 - (e) we may make other dispositions of or over the Land, provided that we are satisfied that access to the Pipelines can continue or alternate access to the Pipeline can be reasonably obtained;

OGC – NEB ROADWAY Page 5 of 15

- (f) you will make no claim against us or the Province for compensation, in damages or otherwise, in respect of a disposition made under subsection (e), where such disposition does not materially affect the exercise of your rights under this Agreement;
- (g) subject to subsection (f), all of your costs and expenses, direct or indirect, that arise out of any lawful interference with your rights under this Agreement as a result of the exercise or operation of the interests, rights, privileges and titles reserved to us and the Province in subsections (b) and (e) will be borne solely by you;
- (h) you will not commence or maintain proceedings under section 65 of the Land Act in respect of any lawful interference with your rights under this Agreement that arises as a result of the exercise or operation of the interests, rights, privileges and titles described in subsections (b) and (e);
- (i) you will not remove or permit the removal of any Improvement from the Land except as expressly permitted or required under this Agreement and the *National Energy Board Act* (Canada) or any other applicable legislation;
- (j) any interest you may have in the Improvements ceases to exist and becomes our property upon the termination of this Agreement, except where an Improvement may be removed under paragraph 4.1(o)(i), (ii) or (iii) in which case any interest you may have in that Improvement ceases to exist and becomes our property if the Improvement is not removed from the Land within the time period set out in paragraph 4.1(o)(i) or the time period provided for in the direction or permission given under paragraph 4.1(o)(ii); and
- (k) if, after the termination of this Agreement, we permit you to remain in possession of the Land and we accept money from you in respect of such possession, a tenancy from year to year will not be created by implication of law and you will be deemed to be a monthly occupier only subject to all of the provisions of this Agreement, except as to duration, in the absence of a written agreement to the contrary.

ARTICLE 6 - SECURITY AND INSURANCE

- 6.1 You acknowledge that we may notify you to deliver to us security within 60 days' of such notice, which will:
 - (a) guarantee the performance of your obligations under this Agreement;
 - (b) be in the form and amount required by us; and
 - (c) remain in effect until we certify, in writing, that you have fully performed your obligations under this Agreement.
- 6.2 Despite section 6.1, your obligations under that section are suspended for so long as you maintain in good standing other security acceptable to us to guarantee the performance of your obligations under this Agreement and all other dispositions held by you.
- 6.3 We may use the Security for the payment of any costs and expenses incurred by us and the Province to perform any of your obligations under this Agreement that are not performed by you or to pay any overdue Fees and, if such event occurs, you will, within 30 days of that event, deliver further Security to us in an amount equal to the amount drawn down by us.
- 6.4 After we certify, in writing, that you have fully performed your obligations under this Agreement, we will return to you any Security maintained under section 6.1, less all amounts drawn down by us under section 6.3.

OGC – NEB ROADWAY Page 6 of 15

Licence No. 954899 File No. 9000180

- 6.5 You acknowledge that we may, from time to time, notify you to:
 - (a) change the form or amount of the Security; and
 - (b) provide and maintain another form of Security in replacement of or in addition to the Security posted by you under this Agreement, such replacement or additional Security will be appropriate and reasonable for your activities under the Agreement.

and you will, within 60 days of receiving such notice, deliver to us written confirmation that the change has been made or the replacement or additional form of Security has been provided by you.

6.6 You must:

- (a) without limiting your obligations or liabilities under this Agreement, at your expense, effect and keep in force during the Term Comprehensive/Commercial General Liability insurance protecting us and the Province as additional insured in an amount of not less than \$1,000,000.00 inclusive per occurrence insuring against liability for personal injury, bodily injury (including death) or property damage, and claims for liability assumed under contract, arising from all accidents or occurrences on the Land or the Improvements;
- (b) on the Commencement Date and immediately upon demand, deliver to us a completed "Province of British Columbia Certificate of Insurance" for all insurance required to be maintained by you under this Agreement;
- (c) ensure that all insurance required to be maintained by you under this Agreement is:
 - (i) placed with insurers licensed in British Columbia;
 - (ii) primary and does not require the sharing of any loss by any insurer that insures us; and
 - (iii) endorsed to provide us with 30 days' advance written notice of cancellation; and
- (d) allow us, upon written request, to review and inspect at your premises all policies of insurance required to be maintained by you under this Agreement. No copies or photos of your policies shall be made.
- 6.7 You acknowledge that we may, from time to time, notify you to:
 - (a) reasonably change the amount of insurance set out in subsection 6.6(a); and
 - (b) provide and maintain another type or types of insurance in replacement of or in addition to the insurance previously required to be maintained by you under this Agreement.

Such replacement or additional insurance will be appropriate and reasonable for your activities under this Agreement; and you will, within 60 days of receiving such notice, cause the amounts and types to be changed and deliver to us a completed "Province of British Columbia Certificate of Insurance" for all insurance then required to be maintained by you under this Agreement.

ARTICLE 7- ASSIGNMENT

7.1 Except as otherwise permitted in this Agreement, you must not sublicense, assign, mortgage or transfer this Agreement or permit any person to use or occupy the Land, without our prior written consent, which may not be unreasonably withheld with respect to an assignment to a party authorized to construct and operate the Pipeline by the National Energy Board or any successor thereto.

OGC – NEB ROADWAY Page **7** of **15**

7.2 In consideration of granting consent under section 7.1, but only to the extent that we or the Province have full authority or jurisdiction over the subject matter of the request and the information or subject matter of the request has not been addressed or considered in connection with the National Energy Board approval of a transfer of the Certificates by the Licensee, we may require you to submit to us a "site profile", "preliminary site investigation" or "detailed site investigation" (as those terms are defined in the *Environmental Management Act*) or other similar type of investigation on or over a portion of the Land that we consider to require such an investigation based upon a reasonable expectation of contamination thereon.

ARTICLE 8- TERMINATION

- 8.1 You agree with us that:
 - (a) if you:
 - (i) default in the payment of any money payable by you under this Agreement; or
 - (ii) fail to observe, abide by and comply with the provisions of this Agreement (other than the payment of any money payable by you under this Agreement),

and your default or failure continues for 60 days after we give written notice of the default or failure to you;

- (b) if a Certificate authorizing you to construct and operate the Pipeline has expired, or been terminated or cancelled and you are not pursuing reinstatement, an appeal or other available cure options, or a Certificate has not been reinstated, reissued or otherwise replaced to allow for the construction and operation of the Pipeline; or
- (c) if:
 - (i) any case, proceeding or other action shall be instituted in any court of competent jurisdiction against you, seeking in respect of you an adjudication in bankruptcy, reorganization of your indebtedness, dissolution, winding up, liquidation, a composition, proposal or arrangement with creditors, a readjustment of debts, the appointment of a trustee, receiver, receiver and manager, interim receiver, custodian, liquidator sequestrator or other person with similar powers with respect to you or of all or any substantial part of your property, or any other like relief in respect of you under the Bankruptcy and Insolvency Act (Canada), the Companies' Creditors Arrangement Act (Canada), or any other bankruptcy, insolvency or analogous law and:
 - (A) such case, proceeding or other action results in an entry of an order for relief or any such adjudication or appointment; or
 - (B) the same shall continue undismissed, or unstayed and in effect, for any period of 60 days; or
 - (ii) you make any assignment in bankruptcy or you make any other assignment for the benefit of creditors, you make any proposal under the Bankruptcy and Insolvency Act (Canada) or any comparable law, you seek relief under the Companies' Creditors Arrangement Act (Canada), or any other bankruptcy, insolvency or analogous law, or you file a petition or proposal to take advantage of any act of insolvency; or
- (d) if this Agreement is taken in execution or attachment by any person and such execution or attachment is not released, bonded, satisfied, discharged, vacated or stayed within 60 days after the entry, commencement or levy.

OGC – NEB ROADWAY Page 8 of 15

Licence No. 954899 File No. 9000180

- (e) if
 - (i) we or the Province require the Land for our or the Province's own use or, in our opinion, it is in the public interest to cancel this Agreement;
 - (ii) we have given you 6 months' written notice of such requirements or opinion; and
 - (iii) we are satisfied that alternate access to the Pipeline can be reasonably obtained;

this Agreement may be, at our option and with or without entry, terminated and your right to use and occupy the Land will cease, except that such termination must not become effective on any date between the Commencement Date and the date that construction of the Pipelines is completed.

- We agree that any termination under this Article 8 does not prevent you from seeking lawful authority to use the Land pursuant to another statutory authority.
- 8.3 If the condition complained of (other than the payment of any money payable by you under this Agreement) reasonably requires more time to cure than 60 days, you will be deemed to have complied with the remedying of it if you commence remedying or curing the condition within 60 days and diligently complete the same.
- 8.4 You agree with us that:
 - (a) you will make no claim for compensation, in damages or otherwise, upon the lawful termination of this Agreement under section 8.1; and
 - (b) our remedies under this Article are in addition to those available to us under the Land Act.

ARTICLE 9 - DISPUTE RESOLUTION

- 9.1 If any dispute arises under this Agreement, the parties will attempt to resolve the dispute within 60 days of the dispute arising (or within such other time period agreed to by the parties) and, subject to applicable laws, provide candid and timely disclosure to each other of all relevant facts, information and documents to facilitate those efforts.
- 9.2 If a dispute under this Agreement cannot be resolved under section 9.1, we or you may refer the dispute to arbitration conducted by a sole arbitrator appointed pursuant to the *Arbitration Act*.
- 9.3 The cost of the arbitration referred to in section 9.2 will be shared equally by the parties and the arbitration will be governed by the laws of the Province of British Columbia.
- 9.4 The arbitration will be conducted at our offices (or the offices of our authorized representative) in Fort St. John, British Columbia, and if we or our authorized representative have no office in Fort St. John, British Columbia, then our offices (or the offices of our authorized representative) that are closest to Fort St. John, British Columbia.

OGC – NEB ROADWAY Page 9 of 15

ARTICLE 10- NOTICE

- Any notice required to be given by either party to the other will be deemed to be given if mailed by prepaid registered mail in Canada or delivered to the address of the other as follows:
 - (a) to us:

OIL and GAS COMMISSION

Bag 2

Fort St. John, BC V1J 2B0;

(b) to you:

TRANS MOUNTAIN PIPELINE ULC

2700, 300 – 5th Avenue S.W. Calgary, AB T2P 5J2;

or at such other address as a party may, from time to time, direct in writing, and any such notice will be deemed to have been received if delivered, on the day of delivery, and if mailed, 7 days after the time of mailing, except in the case of mail interruption in which case actual receipt is required.

- In order to expedite the delivery of any notice required to be given by either party to the other, a concurrent facsimile copy of any notice will, where possible, be provided to the other party but nothing in this section, and specifically the lack of delivery of a facsimile copy of any notice, will affect the deemed delivery provided in section 10.1.
- 10.3 The delivery of all money payable to us under this Agreement will be effected by hand, courier or prepaid regular mail to the address specified above, or by any other payment procedure agreed to by the parties, such deliveries to be effective on actual receipt.

ARTICLE 11 - MISCELLANEOUS

- 11.1 No provision of this Agreement will be considered to have been waived unless the waiver is in writing, and a waiver of a breach of a provision of this Agreement will not be construed as or constitute a waiver of any further or other breach of the same or any other provision of this Agreement, and a consent or approval to any act requiring consent or approval will not waive or render unnecessary the requirement to obtain consent or approval to any subsequent same or similar act.
- 11.2 No remedy conferred upon or reserved to us under this Agreement is exclusive of any other remedy in this Agreement or provided by law, but that remedy will be in addition to all other remedies in this Agreement or then existing at law, in equity or by statute.
- 11.3 The grant of a sublicence, assignment or transfer of this Agreement does not release you from your obligation to observe and perform all the provisions of this Agreement on your part to be observed and performed unless we specifically release you from such obligation in our consent to the sublicence, assignment or transfer of this Agreement.
- 11.4 This Agreement extends to, is binding upon and enures to the benefit of the parties, their heirs, executors, administrators, successors and permitted assigns.
- 11.5 If, due to a strike, lockout, labour dispute, act of God, inability to obtain labour or materials, law, ordinance, rule, regulation or order of a competent governmental authority, enemy or hostile action, civil commotion, fire or other casualty or any condition or cause beyond your reasonable control, other than normal weather conditions, you are delayed in performing any of your obligations under this Agreement, the time for the performance of that obligation will be extended by a period of time equal to the period of time of the delay so long as

OGC – NEB ROADWAY Page 10 of 15

Licence No. 954899 File No. 9000180

(a) you give notice to us within 30 days of the commencement of the delay setting forth the nature of the delay and an estimated time frame for the performance of your obligation; and (b) you diligently attempt to remove the delay.

- 11.6 You agree with us that:
 - (a) we are under no obligation, express or implied, to provide financial assistance or to contribute toward the cost of servicing, creating or developing the Land or the Improvements and you are solely responsible for all costs and expenses associated with your use of the Land and the Improvements for the purposes set out in this Agreement; and
 - (b) nothing in this Agreement constitutes you as our agent, joint venturer or partner or gives you any authority or power to bind us or the Province in any way.
- 11.7 This Agreement does not override or affect any powers, privileges or immunities to which you are entitled under any enactment of the Province of British Columbia.

The parties have executed this Agreement as of the date of reference of this Agreement.

SIGNED on behalf of the **OIL and GAS COMMISSION** by a duly authorized signatory

1. Oh

Authorized Signatory - James O'Hanley, Vice President Applications

SIGNED on behalf of **TRANS MOUNTAIN PIPELINE ULC** by a duly authorized signatory

Authorized Signatory

Licence No. 954899 File No. 9000180

SCHEDULE A - ADDITIONAL CONDITIONS

Approval Holder: Trans Mountain Pipeline ULC Application Submitted Date: July 17, 2017 Application Determination Number: 100101506 Approved Disturbance Footprint: 26.553 ha

Activity Area

 The approvals granted under this Agreement to occupy and use the Land are limited to the areas identified in the spatial data submitted to the Commission in the application as identified in the following table:

| NEB Ancillary Activity No: | Type: Access | Tenure No.: 9000180 |
|---|--|-----------------------------|
| 00171417-00171420, 00171422- 00171431, 00171435-00171445 | | Document No.: 954899 |
| NEB Road Right of Way No.: 04616 | Segment No.: 006, 007, 027, 049 | |

ACTIVITY DETAILS

| Seg No.: 006 | From: N 5770920.228 | E 341036.706 | To: N 5770889.291 | E 341068.37 |
|---------------------|---------------------|---------------------|--------------------------|---------------------|
| Seg No.: 007 | From: N 5770855.731 | E 341095.702 | To: N 5771097.822 | E 341270.797 |
| Seg No.: 027 | From: N 5742715.391 | E 341557.938 | To: N 5742953.924 | E 341846.117 |
| Seg No.: 049 | From: N 5727856.906 | E 319989.874 | To: N 5727864.119 | E 319986.922 |

The approvals to occupy and use the Land identified in the above table are subject to the following;

- a) The total disturbance caused by the approved activities must not exceed the total approved disturbance footprint as referenced above.
- b) The permission to occupy and use the Land excludes the area within map reserves designated under sections 16 and 17 of the Land Act, unless:
 - the map reserves have been amended for the purposes of the Trans Mountain Expansion Project; or
 - (ii) the Trans Mountain Expansion Project has been deemed compatible use with the overlapped map reserves.

Notification

- A notice of construction start must be submitted to OGC. External Notifications@bcogc.ca, or such other address as indicated in a notice from us, at least 48 hours prior to the commencement of activities under this Agreement.
- 3. At least 48 hours prior to the commencement of activities under this Agreement, you must provide notice to any First Nation(s) who may have Aboriginal Interests identified, as per the BC First Nations Consultative Areas Database, within the area in which the work is to commence.
- 4. On or before April 30 of each year until construction is completed, you must submit to the Commission an interim post-construction plan as a PDF plan accurately identifying the location any roads constructed under this approval during the preceding year (April 1 to March 31).

OGC – NEB ROADWAY Page 12 of 15

5. Within 60 days of the completion of construction activities under this approval, you must submit to the Commission a final post-construction plan as a shapefile and PDF plan accurately identifying the location of the total area actually disturbed under this approval.

Road Construction, Use and Maintenance

- 6. Unless a condition or its context suggests otherwise, terms used in the following conditions have the same meaning as the Environmental Protection and Management Regulation and the Oil and Gas Road Regulation under the Oil and Gas Activities Act.
- 7. You must ensure that the road is cleared to the width necessary to ensure all of the following:
 - a) the safety of Approval Holders using the road;
 - b) the integrity of the topography of the area;
 - c) the maintenance of draining of water in the area;
 - d) the stability of terrain in the area; and
 - e) the safe conduct of operations, considering the following:
 - i. the placement of pits, quarries, landings or waste areas;
 - ii. the storage of bridge of culvert material;
 - iii. the amount of area required to operate equipment within the clearing width, including equipment turnaround sites;
 - iv. the need to remove snow; and
 - v. the need to construct fencing or other ancillary structures.
- 8. You must ensure that any temporary access is constructed and maintained in a manner that provides for proper surface drainage, prevents pooling on the surface and maintains slope integrity.
- You must ensure that the road, including stream crossings and the road right of way, is designed, constructed and maintained in a manner that does each of the following:
 - a) enables industrial and non-industrial users of the road to use the road safely;
 - b) maintains the natural drainage patterns of water in the area;
 - c) protects stability of the terrain in the area;
 - d) ensures watercourse crossing structures and any other in-stream works associated with the road are functional and appropriate for the uses of the road; and
 - e) road surface and slope drainage systems are functional and prevent pooling of water on the road surface.
- 10. If the Agreement Holder temporarily stops using the road for the purposes specified in article 2.1 for a period anticipated to be greater than 6 months, the person is not required to perform the maintenance and undertake the modifications set out in condition 8 but must ensure:
 - a) the structural integrity of the road prism and clearing width are stable, and
 - b) the drainage systems of the road are functional
 - to the extent necessary to ensure there is no material adverse effect on fish, fish habitat, water quality or quantity, wildlife or wildlife habitat.
- 11. You must not operate a motor vehicle at a speed that is unsafe for the conditions and exceeds the lesser of 80km/h or the speed posted on a relevant traffic control device.
- 12. You must not close or restrict access to the road by another person except temporarily as set out below:
 - To address an existing or imminent threat to the road or environment, or that may endanger human life or property;
 - To address something that would impede you from using the road; or
 - c) To carry out maintenance on the road as required by this Agreement.
 - d) If access to the road is restricted in accordance with the provisions of this Agreement, you must notify the Commission immediately.

OGC – NEB ROADWAY Page 13 of 15

Environmental

- 13. You must ensure that the activities under this Agreement do not result in any deleterious materials being deposited into a stream, wetland or lake.
- 14. You must make reasonable efforts to prevent establishment of invasive plants on the activity area resulting from the carrying out of activities authorized under this approval.
- 15. If construction activities result in the removal or rendering ineffective of a range barrier, you must, before livestock is turned out on the area, or, if livestock turnout has occurred, as soon as practicable, construct a replacement barrier that is at least as effective as the one removed or rendered ineffective was before the removal or rendering ineffective.
- 16. You must, as soon as practicable, restore recreation sites, recreation trails, or recreation facilities established or authorized under the *Forest and Range Practices Act* that are adversely affected by construction activities to their pre-construction condition to the Commission's satisfaction.
- 17. Clearing and site preparation must be confined to areas approved in the spatial data referenced in Approvals, above, and must not, without leave from us, occur within an area containing a significant mineral lick, bear den, Trumpeter Swan nest, other nesting site, significant wallow, or Sharp-tailed Grouse Lek, unless it is not damaged by activities approved under this Agreement.
- 18. Construction and significant maintenance activities within critical American Badger habitat, as identified in Trans Mountain's American Badger Mitigation and Habitat Restoration Plan, must be carried out in accordance with:
 - a) The following requirements:
 - (i) Prior to commencing construction or significant maintenance activities, and subject to relevant access permissions, conduct a survey within the appropriate buffer for the season of construction (i.e., out to 500 m for activities commencing between April 1 to July 15; out to 50 m for activities commencing between July 15 to March 31) to identify American Badger burrows in the vicinity of the Pipeline;
 - (ii) Maintain a setback on activities of 50 meters from any occupied summer/temporary residence and winter burrows; and
 - (iii) Maintain a setback on activities occurring between April 1 and July 15 of 500 meters for any occupied natal burrow for American Badger; or
- Alternative timing and associated mitigation recommended by a qualified professional and accepted by the Commission.
- 20. Prior to new construction or modification, you must complete a pre-site assessment identifying any karst features within 100 m of approved activities. You must submit, to the satisfaction of the Commission, results of the assessment, including mitigation in the form of a report. The assessment and report must be completed by a qualified professional.
- 21. The road must be maintained such that dust resulting from construction or use does not affect safe travel on a road or significantly impair the use and enjoyment of lawfully occupied permanent dwellings, significant public use areas or other similar areas.
- 22. You must undertake reasonable measures to mitigate noise from the construction or use of the road that has the potential to affect public safety or significantly impair the use and enjoyment of lawfully occupied permanent dwellings, significant public use areas during periods of use or other similar areas.

Archaeology

 For areas involving new road construction an AIA report must be submitted to the Commission as soon as practicable.

Deactivation

24. Prior to deactivating any road segment authorized under this Agreement, you must provide written notice that intention to the Commission via the Declaration of Road Deactivation Form via eSubmission and to industrial users of the road known to you.

OGC – NEB ROADWAY Page **14** of **15**

Licence No. 954899 File No. 9000180

25. Except with leave of the Commission, the you must deactivate the road when the road is no longer required for the purposes specified in article 2.1 of the Agreement. At a minimum, you must:

- Barricade of the road surface width in a clearly visible manner to prevent access by motor vehicles, other than all-terrain vehicles;
- b) Remove stream pipe culverts and arch culverts;
- c) Remove bridge and log or box culvert superstructures; and
- d) Stabilize the road prism and the clearing width of the road.
- 26. You must not begin deactivating the road for 14 days from the date of submission of notice of deactivation.
- 27. Any road segment authorized by this Agreement that is not included in the notice to deactivate must continue to be maintained by you.

ADVISORY GUIDANCE

- Construction Plans are for the your internal reference only and were not reviewed as a decision tool for this Agreement, nor do they form an integral part of the Agreement.
- You should be aware that the approval under s.39 of the Land Act does not extend to Indian Reserves; parks, protected areas or recreation areas designated under the BC Parks Act, municipal Crown land; or private land.
- You should be aware that the approval under the Forest Act to harvest timber does not extend to harvesting
 within private land or area based tenures, specifically woodlots, tree farm licences, First Nations woodland
 licences, and community forests.
- 4. You should be aware that impacts to recreation features, trails, recreation facilities, interpretative forest sites or recreation sites identified, authorized or established under the Forest and Range Practices Act are subject to additional authorizations by the Ministry of Forests, Lands and Natural Resource Operations.
- 5. You should be aware that there may be First Nation's traditional, cultural, or spiritual activities occurring concurrently with maintenance activities, as well as areas of current use or cultural resources that overlap the activity area. All reasonable efforts should be made to minimize interference with those activities while carrying out the activities authorized herein.
- 6. Temporary access is intended to be short-term access to facilitate construction of an oil and gas activity. It is not intended for sustained use and is not constructed to oil and gas road standards.

REFUSALS

The BC Oil and Gas Commission ("the Commission"), hereby refuses permissions for the following activity(s) indicated in the Refused Activities table below and submitted as part of the Application Area Number referenced above.

REFUSED ACTIVITIES

| NEB Ancillary Activity No.: 00171421 | Type: Access |
|--------------------------------------|--------------|
| NEB Ancillary Activity No.: 00171432 | Type: Access |
| NEB Ancillary Activity No.: 00171433 | Type: Access |
| NEB Ancillary Activity No.: 00171434 | Type: Access |

OGC – NEB ROADWAY Page 15 of 15



Non OGAA v 3.3

October 13, 2017

Trans Mountain Pipeline ULC 2700, 300 – 5th Avenue SW Calgary, AB T2P 5J2

Attention: Trans Mountain Pipeline ULC

RE: Determination of Application Area Number 100101506

Approval Holder: Trans Mountain Pipeline ULC

Date of Issuance: October 13, 2017 **Effective Date:** October 13, 2017

Application Submitted Date: July 17, 2017 Application Determination Number: 100101506 Approved Disturbance Footprint: 26.553 ha

GENERAL APPROVALS and CONDITIONS

APPROVALS

Land Act

1. The BC Oil and Gas Commission (the "Commission") under section 39 of the Land Act hereby approves the Approval Holder referenced above to use and occupy Crown land to construct and operate an NEB related activity(s) as set out in the applicable Approved Activities and Activity Details tables below for the purposes of constructing and operating a pipeline under the National Energy Board Act (Canada) subject to the conditions set out herein.

APPROVED ACTIVITIES

| NEB Ancillary Activity No: 00171417-00171420, 00171422- 00171431, 00171435-00171445 | Type: Access | Tenure No.: 9000180 Document No.: 954899 |
|---|---|---|
| NEB Road Right of Way No.: 04616 | Segment No.: 006, 007, 027, 049 | |
| Changes in and about a Stream No.: 0003909 | As included in the application referenced herein, unless referenced in the Refused Activities table, below. | Tenure No.: N/A Document No.: N/A |

Approval Holder: Trans Mountain Pipeline ULC

Application Determination Number: 100101506 Date Issued: October 13, 2017

Application Submission Date: July 17, 2017

ACTIVITY DETAILS

| Seg No.: 006 | From: N 5770920.228 | E 341036.706 | To: N 5770889.291 | E 341068.37 |
|--------------|---------------------|---------------------|--------------------------|---------------------|
| Seg No.: 007 | From: N 5770855.731 | E 341095.702 | To: N 5771097.822 | E 341270.797 |
| Seg No.: 027 | From: N 5742715.391 | E 341557.938 | To: N 5742953.924 | E 341846.117 |
| Seg No.: 049 | From: N 5727856.906 | E 319989.874 | To: N 5727864.119 | E 319986.922 |

- 2. The approvals granted under this permit are limited to the area identified in the spatial data submitted to the Commission in the permit application as identified and dated above; herein after referred to as the 'activity area'.
- 3. The Commission, pursuant to section 39 of the *Land Act*, hereby approves the occupation and use of any Crown land located within the activity area.
 - a) A licence approved under section 39 of the Land Act for the Crown land portion of this application is attached. The Approval Holder is subject to the conditions contained in the Licence.
 - b) The approval to occupy and use Crown land under the Licence expires two years from the date of issuance, unless the Commission has received notice of construction start, or this permit is otherwise extended, suspended, cancelled, surrendered or declared spent.
 - c) The approval to occupy and use Crown land does not entitle the Approval Holder to exclusive possession of the activity area.
 - d) The total disturbance within the activity area must not exceed the total approved disturbance footprint as referenced above.
 - e) The permission to occupy and use Crown land excludes the area within map reserves designated under sections 16 and 17 of the *Land Act*, unless:
 - (i) the map reserves have been amended for the purposes of the Trans Mountain Expansion Project; or
 - the Trans Mountain Expansion Project has been deemed compatible use with the overlapped map reserves.

Forest Act

4. The Commission, pursuant to section 47.4 of the *Forest Act*, hereby approves the removal of Crown timber from the activity area under the cutting permits associated with the Master Licence(s) as follows:

Master Licence to Cut No.: M02363

Cutting Permit No.: 11

Timber Mark No.: MTC180

Total New Cut: 12.68 ha

Forest District: (DKA) Thompson Rivers Natural Resource District

Region: Interior

- 5. Timber harvesting under the above cutting permit must not commence until the Approval Holder has submitted the relevant appraisal documents to the Ministry of Forests, Lands and Natural Resource Operations and Rural Development and received confirmation of the stumpage rate.
- 6. The cutting permits are deemed spent upon the submission of the post-construction plan or upon either the cancellation or expiry of the activities approved under the permit.

Permitting and Authorizations Page 2 of 12 Telephone: (250) 794-5200 Physical Address: 6534 Airport Road, Fort St. John, BC Facsimile: (250) 794-5379 Mailing Address: Bag 2, Fort St. John, BC V1J 2B0 24 Hour: (250) 794-5200

Application Determination Number: 100101506 Date Issued: October 13, 2017

Water Sustainability Act

7. The Commission, pursuant to section 11 of the *Water Sustainability Act*, approves the changes in and about a stream, as detailed in the application, within the activity area for construction and maintenance activities, unless otherwise restricted by this approval.

8. Except with leave of the Commission, in-stream works must be carried out in accordance with the methods and any mitigations, as specified in the application.

CONDITIONS

Notification

- 9. A notice of construction start must be submitted prior to the commencement of activities under this permit 48 hours before or as per the relevant legislation if longer than 48 hours. Notification must submitted via Kermit for pipelines and facilities. For all other activity types notification must be submitted through OGC.ExternalNotifications@bcogc.ca.
- 10. At least 48 hours prior to the commencement of activities under this approval, the Approval Holder must provide notice to any First Nation(s) who may have Aboriginal Interests identified, as per the BC First Nations Consultative Areas Database, within the area in which the work is to commence.
- 11. On or before April 30 of each year until construction is completed, the Approval Holder must submit to the Commission an interim post-construction plan as a PDF plan accurately identifying the location any roads constructed under this approval during the preceding year (April 1 to March 31).
- 12. Within 60 days of the completion of construction activities under this approval, the Approval Holder must submit to the Commission a final post-construction plan as a shapefile and PDF plan accurately identifying the location of the total area actually disturbed under this approval.
- 13. A notice of maintenance activities must be submitted, as per the relevant Commission process at the time of submission, at least 21 working days prior to the commencement of any changes in or about a stream associated with maintenance activities.
- 14. At least 21 working days prior to the commencement of any changes in or about a stream associated with maintenance activities, the Approval Holder must provide a notice of works to any First Nation(s) who may have Aboriginal Interests identified, as per the BC First Nations Consultative Areas Database, within the area in which the works are to occur.
- 15. Prior to deactivating any road segment authorized under this permit, the Approval Holder must provide written notice of the intention to users of the road known to the Approval Holder, and the Commission via the Declaration of Road Deactivation Form via eSubmission.

Environmental

- 16. Unless a condition or its context suggests otherwise, terms used in this approval have the same meaning as the Environmental Protection and Management Regulation under the *Oil and Gas Activities Act*.
- 17. Clearing and site preparation must be confined to the area approved in the Certified Project Description of the associated Environmental Assessment Certificate.
- 18. Construction activities must not result in rutting, compaction or erosion of soils that cannot be reasonably rehabilitated to similar levels of soil productivity that existed on the operating area prior to the construction activities taking place.
- 19. Any temporary access must be constructed and maintained in a manner that provides for proper surface drainage, prevents pooling on the surface, and maintains slope integrity.
- 20. The Approval Holder must make reasonable efforts to prevent establishment of invasive plants on the activity area resulting from the carrying out of activities authorized under this approval.
- 21. Following completion of the construction activities authorized herein, the Approval Holder must, as soon as practicable:
 - a) decompact any soils compacted by the activity;

Permitting and Authorizations Page 3 of 12 Telephone: (250) 794-5200 Physical Address: 6534 Airport Road, Fort St. John, BC Facsimile: (250) 794-5379 Mailing Address: Bag 2, Fort St. John, BC V1J 2B0 24 Hour: (250) 794-5200

Application Determination Number: 100101506 Date Issued: October 13, 2017

 if natural surface drainage pattern was altered by the carrying out of the activity, the Approval Holder must restore, to the extent practicable, to the drainage pattern and its condition before the alteration; and

- re-vegetate any exposed soil on the activity area including, where necessary, using seed or vegetative propagules of an ecologically suitable species that:
 - promote the restoration of the wildlife habitat that existed on the area before the oil and gas activity was begun; and
 - (ii) stabilize the soil if it is highly susceptible to erosion.
- 22. Following completion of construction activities authorized herein, any retrievable surface soils removed from the activity area must be redistributed so that the soil structure is restored, to the extent practicable, to its condition before the activity was begun.
- 23. The Approval Holder must take reasonable measures to ensure that the quality, quantity or timing of flow of the water to any waterworks located within or adjacent to the activity area is not materially adversely affected. If it is not practicable to avoid such an effect, the Approval Holder must:
 - a) take all reasonable measures to minimize the adverse effect;
 - b) provide notice to the owner or user of the waterworks before or as soon as practicable following any adverse effect: and
 - c) for the period of adverse effect, provide the owner or user of the waterworks with an alternate supply of water of equal or better quality.
- 24. The Approval Holder must ensure that the approved activities do not cause a material adverse effect on the quality, quantity or natural timing of flow of water in an aquifer.
- 25. If construction activities result in the removal or rendering ineffective of a range barrier, the Approval Holder must, before livestock is turned out on the area, or, if livestock turnout has occurred, as soon as practicable, construct a replacement barrier that is at least as effective as the one removed or rendered ineffective was before the removal or rendering ineffective.
- 26. The Approval Holder must, as soon as practicable, restore recreation sites, recreation trails, or recreation facilities established or authorized under the *Forest and Range Practices Act* that are adversely affected by construction activities to their pre-construction condition to the Commission's satisfaction.
- 27. Clearing and site preparation must be confined to the construction corridor, except as approved in the spatial data referenced in Approvals, above, and must not, without leave of the Commission, occur within:
 - a) an area containing a significant mineral lick, bear den, Trumpeter Swan nest, other nesting site, significant wallow, or Sharp-tailed Grouse Lek, unless it is not damaged by activities approved under this permit;
 - b) Old Growth Management Areas, other than those identified in conflict in the Old Growth Management Areas Mitigation and Replacement Plan for the Trans Mountain Pipeline ULC Trans Mountain Expansion Project NEB Condition 76, dated September 2016, unless the incursion is less than 0.1 ha;
 - c) Wildlife Tree Retention Areas; or
 - d) a Riparian Management Area, except as approved in the spatial data referenced above, unless the Riparian Management Area has been previously cleared.
- 28. Prior to new construction or modification, the Approval Holder must complete a pre-site assessment identifying any karst features within 100 m of approved activities. The Approval Holder must submit, to the satisfaction of the Commission, results of the assessment, including mitigation in the form of a report. The assessment and report must be completed by a qualified professional.
- 29. New construction and modification activities within critical American Badger habitat, as identified in Trans Mountain's American Badger Mitigation and Habitat Restoration Plan, must be carried out:
 - a) In accordance with the following:
 - i. Prior to commencing construction or modification activities and subject to relevant access permissions, conduct a survey within the appropriate buffer for the season of construction (i.e.,

Permitting and Authorizations Page 4 of 12 Telephone: (250) 794-5200 Physical Address: 6534 Airport Road, Fort St. John, BC Facsimile: (250) 794-5379 Mailing Address: Bag 2, Fort St. John, BC V1J 2B0 24 Hour: (250) 794-5200

Application Determination Number: 100101506 Date Issued: October 13, 2017

out to 500 m for activities commencing between April 1 to July 15; out to 50 m for activities commencing between July 15 to March 31) to identify American Badger burrows in the vicinity of the road or access:

- ii. Maintain a setback on activities of 50 meters from any occupied summer/temporary residence and winter burrows; and
- iii. Maintain a setback on activities occurring between April 1 and July 15 of 500 meters for any occupied natal burrow for American Badger; or
- b) In accordance with alternative timing and associated mitigation recommended by a qualified professional and accepted by the Commission.
- 30. The road must be maintained such that dust resulting from construction or use does not affect safe travel on a road or significantly impair the use and enjoyment of lawfully occupied permanent dwellings, significant public use areas or other similar areas.
- 31. The Approval Holder must undertake reasonable measures to mitigate noise from the construction or use of the road that has the potential to affect public safety or significantly impair the use and enjoyment of lawfully occupied permanent dwellings, significant public use areas during periods of use or other similar areas.
- 32. (1) Except with leave of the Commission or where the stream is dry or frozen, water quality must be monitored by a qualified professional in accordance with this condition, during construction where works occur:
 - a) in-stream;
 - b) within the Riparian Reserve Zone of streams with a Riparian Class of S1, S2, or S3; or
 - c) within 20 m of a stream with a Riparian Class of S4.
 - (2) The Approval Holder must:
 - a) monitor locations upstream and downstream of the location of any physical disturbance associated with the project either in-stream or in the riparian areas identified above;
 - b) identify, document and report to the Commission any exceedance of the *British Columbia Approved Water Quality Guideline: Aquatic Life, Wildlife & Agriculture* (March 2016 or as amended or replaced from time to time) (the "Water Quality Guidelines"):
 - c) inform the Commission of any exceedance within 24 hours of becoming aware of it; and
 - d) undertake measures to eliminate the cause of the exceedance and remedy the effects of it.
- 33. Except with leave of the Commission or where the wetland is dry or frozen, water quality must be monitored by a qualified professional in accordance with this condition, during construction where works occur within a W1 wetland. The Approval Holder must:
 - a) monitor the locations proximal to the disturbance from construction activities;
 - identify, document and report to the Commission any exceedance of the British Columbia Approved Water Quality Guideline: Aquatic Life, Wildlife & Agriculture (March 2016 or as amended or replaced from time to time) (the "Water Quality Guidelines");
 - c) inform the Commission of any exceedance within 24 hours of becoming aware of it; and
 - d) undertake measures to eliminate the cause of the exceedance and remedy the effects of it.

Clearing

- 34. The Approval Holder is permitted to fell any trees, under applicable regulations, located on Crown land within 1.5 tree lengths of the activity area that are considered to be a worker safety hazard and must be felled in order to eliminate the hazard. Trees or portions of these trees that can be accessed from the activity area without causing damage to standing timber may be harvested.
- 35. The holder of the cutting permit must pay to the government, stumpage and any monetary waste billing determined in accordance with the *Forest Act* and the terms of this approval.
- 36. All harvested Crown Timber must be marked with the cutting permit's associated Timber Mark.

Permitting and Authorizations
Physical Address: 6534 Airport Road, Fort St. John, BC
Mailing Address: Bag 2, Fort St. John, BC V1J 2B0

Page 5 of 12 Telephone: (250) 794-5200

Facsimile: (250) 794-5379 24 Hour: (250) 794-5200

Application Determination Number: 100101506 Date Issued: October 13, 2017

37. Stumpage for cutting permits falling within the Interior Area, as defined in the Interior Appraisal Manual (Manual) will be calculated in accordance with the Manual as amended from time to time. In the current version of the Manual, stumpage will be determined in accordance with Table 6-3 (volume based).

38. Monetary waste billing applied under the Master Licence to Cut are subject to the merchantability specifications and waste billing requirements in the Provincial Logging Residue and Waste Measurement Procedures Manual.

Water Course Crossings and Works

- 39. Subject to the provisions of this approval, crossings of streams must be constructed in accordance with the Vehicle Crossing Methods, as appropriate, that are specified in the document named 01-13283-S4-0000-EV-XGS-0003 R2.xlsx, uploaded 2017-09-08 14:59:56.0, that has been submitted to the satisfaction of the Commission.
- 40. Stream, lake and wetland crossing methods, other than the Vehicle Crossing Methods described in condition 39, may be constructed if a qualified professional assesses potential environmental impacts as less than impacts associated with the aforementioned methods and as long as the alternate methods are not otherwise restricted by this approval.
- 41. The Approval Holder must ensure all of the following for each crossing of a stream, wetland and lake:
 - a) the crossing is constructed and maintained at times and in a manner that is unlikely to harm fish or destroy, damage or harmfully alter fish habitat;
 - b) the crossing does not prevent the movement of fish, nor impede the movement of fish to the extent that it is harmful to the survival of the fish;
 - c) the side of the stream, lake or wetland is protected at the crossing; and
 - any disturbance to the stream channel and stream bank, wetland or lake bottom, as applicable, is mitigated.
- 42. In-stream activities within a fish bearing stream, lake or wetland must occur:
 - a) during the applicable reduced risk work windows as specified in the regional timing windows for respective regions through which the road/access passes and within which the works will occur;
 - b) in accordance with alternative timing and associated mitigation recommended by a qualified professional and accepted by the National Energy Board and provided to the Commission; or
 - c) in accordance with an authorization from Fisheries and Oceans Canada (DFO) that is provided to the Commission, or in accordance with DFO's Measures to Avoid Causing Harm to Fish and Fish Habitat.
- 43. Any substance, sediment, debris or material that could adversely impact the stream:
 - must not be allowed or permitted to enter or leach or seep into the stream from an activity, construction, worksite, machinery or from components used in the construction of any works, or
 - b) must not be placed, used or stored within the stream channel.
- 44. Mechanical stream crossings must be constructed, maintained and deactivated according to the following requirements, as applicable:
 - a) Only bridges, culverts, ice bridges or snow fills may be constructed at stream crossings;
 - b) Notwithstanding, (a), matting or steel plates may be used to cross streams classified as NCD or S6;
 - The Approval Holder must ensure that permanent bridges are designed and fabricated in compliance with:
 - i. the Canadian Standards Association Canadian Bridge Design Code, CAN/CSA-S6; and
 - ii. soil property standards, as they apply to bridge piers and abutments; set out in the Canadian Foundation of Engineering Manual.
 - d) Except with leave of the Commission, the Approval Holder must ensure that:
 - i. any culverts used are designed and fabricated in compliance with the applicable:

Permitting and Authorizations Page 6 of 12 Telephone: (250) 794-5200 Physical Address: 6534 Airport Road, Fort St. John, BC Facsimile: (250) 794-5379 Mailing Address: Bag 2, Fort St. John, BC V1J 2B0 24 Hour: (250) 794-5200

Application Submission Date: July 17, 2017

Application Determination Number: 100101506 Date Issued: October 13, 2017

- (a) Canadian Standards Association CSA G401, Corrugated Steel Pipe Products; or
- (b) Canadian Standards Association Standard CSA B1800, Section B182.2, Plastic Non-pressure Pipe Compendium, or
- ii. Any pipe installed in lieu of a culvert is of at least equivalent standard and strength as any culvert as specified above.
- e) Except with leave of the Commission, the Approval Holder must ensure that bridges and culverts meet the criteria set out in (i), (ii), or (iii) below:
 - i. The bridge or culvert is designed to pass the highest peak flow of the stream that can reasonably be expected within the return periods set out in Column 2 the table below for the period the Approval Holder anticipates the structure will remain on site, as set out in Column 1 in the table below:

| Column 1 | Column 2 |
|---|------------------|
| Anticipated period crossing structure will remain on site | Peak flow period |
| Bridge or culvert, 3 years or less | 10 years |
| Bridge other than a bridge within a community watershed, more than 3 years but less than 15 | 50 years |
| Bridge within a community watershed, more than 3 years | 100 years |
| Bridge, 15 years or more | 100 years |
| Culvert, more than 3 years | 100 years |

- ii. The bridge, or any component of the bridge:
 - (a) is designed to pass expected flows during the period the bridge is anticipated to remain on the site:
 - (b) is constructed, installed and used only in a period of low flow; and
 - (c) is removed before any period of high flow begins.
- iii. The culvert:

Approval Holder: Trans Mountain Pipeline ULC

- (a) is a temporary installation, and the Approval Holder does not expect to subsequently install a replacement culvert at that location;
- (b) is not installed in a stream, when the stream contains fish;
- (c) is sufficient to pass flows that occur during the period the culvert remains on the site;
- (d) is installed during a period of low flow; and
- (e) is removed before any period of high flow begins.
- f) Ice bridges on fish bearing streams may only be constructed where sufficient water depth and stream flows prevent the bridge structure from coming in contact with the stream bottom.
- g) Water applied to construct an ice bridge on a water body must be sourced in accordance with the Water Sustainability Act unless:
 - the water body is a stream with a stream channel width of at least 5 metres and is not designated as a sensitive stream under the Fish Protection Act, or has a riparian class of W1, W3, or L1;
 - the water is sourced from the same water body proximal to the location on which the ice bridge is constructed;
 - iii. the water body is not within the boundaries of a public park;

Permitting and Authorizations Page 7 of 12 Telephone: (250) 794-5200 Physical Address: 6534 Airport Road, Fort St. John, BC Mailing Address: Bag 2, Fort St. John, BC V1J 2B0 Telephone: (250) 794-5200 24 Hour: (250) 794-5200

Application Submission Date: July 17, 2017

Application Determination Number: 100101506 Date Issued: October 13, 2017

Approval Holder: Trans Mountain Pipeline ULC

iv. pump intakes do not disturb beds of streams or wetlands and are screened with a maximum mesh size and approach velocity in accordance with the Fisheries and Oceans Canada Freshwater Intake End-of-Pipe Fish Screen Guideline, and:

- (a) where the water body is a stream, the flow of water in the stream at the time and location of pumping exceeds 60 litres per second and the instantaneous pumping rate does not exceed 1% of the water flowing in the water body at the time and location the pumping occurs; or
- (b) where the water body is a lake or pond, the cumulative volume of water withdrawn does not exceed 10 cm of lake or pond depth, calculated as the product of lake or pond surface area x 10 cm.
- h) Records of water withdrawal and corresponding streamflow measurements are maintained by the Approval Holder and provided to the Commission upon request.
- i) Snow fills must consist of clean snow and may only be located on streams that are dry or frozen to the bottom during the period of construction, maintenance and use. Where periodic thaws are anticipated, culverts must be installed to allow meltwater to pass through. Snow fill and any installed culverts must be removed prior to spring snow melt.
- Bridge or culvert abutments, footings and scour protection must be located outside the natural stream channel and must not constrict the channel width.
- k) Equipment used for activities under this approval must not be situated in a stream channel unless it is dry or frozen to the bottom at the time of the activity or if under flowing conditions, is carried out in accordance with DFO's Measures to Avoid Harm to Fish and Fish Habitat, and the advice of a qualified professional.
- 45. (1) Before any in-stream maintenance works in or adjacent to a stream or wetland crossing occurs where any of the following are established in relation to the stream or wetland after construction of the road is complete:
 - Species identified as special concern, threatened, or endangered under the federal Species at Risk Act, or
 - b) Species identified by Order as a species at risk under the Forest and Range Practices Act or the Oil and Gas Activities Act.

the Approval Holder must submit a plan developed by a qualified professional, to the satisfaction of the Commission, that specifies measures to avoid or mitigate potential impacts to those species.

- (2) The Approval Holder must implement the plan when undertaking the maintenance works.
- 46. Wetland crossings must be constructed, maintained and removed in accordance with the following:
 - a) Organic cover within and adjacent to the wetland must be retained;
 - b) Minimize erosion or release of sediment within the wetland;
 - c) Any padding materials must be placed on the wetland surface only and must not be used for infilling;
 - Any padding materials must be removed as soon as practicable following construction, considering weather and ground conditions; and
 - e) The wetland, including banks and bed, must be restored, to the extent practicable, to the condition that existed before the crossing was initiated.
- 47. Following initial construction, stream crossings are approved for necessary road modification activities on the operations area except for:
 - a) works within the boundary of a provincial park;
 - b) construction or replacement of a bridge or major culvert on a S1, S2, S3, S4 or S5 stream;
 - c) installation of a closed bottom structure in a fish bearing stream;
 - d) excavation or grading of a stream bank of stream bed;

Permitting and Authorizations Page 8 of 12 Telephone: (250) 794-5200 Physical Address: 6534 Airport Road, Fort St. John, BC Facsimile: (250) 794-5379 Mailing Address: Bag 2, Fort St. John, BC V1J 2B0 24 Hour: (250) 794-5200

Application Determination Number: 100101506 Date Issued: October 13, 2017

- e) works within a stream established under s. 27 of the Environmental Protection and Management Regulation (EPMR) as a Temperature Sensitive Stream; or
- f) works within a Fisheries Sensitive Watershed established under s. 28 of the EPMR.
- 48. The Approval Holder must place and maintain a sign, at a distance from each bridge sufficient to enable users to stop safely before reaching the bridge that states the maximum load capacity of the bridge.
- 49. The Approval Holder must ensure that each bridge or major culvert is regularly inspected by a qualified person. Records of inspections must be retained by the Approval Holder for at least one year after the bridge or major culvert is removed from the site or the Approval Holder's responsibility for the road ceases.
- 50. The Approval Holder must perform the maintenance and undertake modifications necessary to ensure that watercourse crossing structures and any other in-stream works associated with the road are functional and appropriate for the uses of the road.
- 51. The Approval Holder must ensure that bridges and culverts on fish streams are constructed and maintained in a manner that does not prevent or impede the movement of fish.
- 52. The Approval Holder must prepare and maintain as-built drawings of any bridges or culverts exceeding 2000 mm in diameter or height that are constructed or modified by the Approval Holder. These drawings must be provided to the Commission upon request.

Archaeology

53. An AIA report must be submitted to the Commission as soon as practicable.

Road Conditions

- 54. Unless a condition or its context suggests otherwise, terms used in this approval have the same meaning as the Oil and Gas Road Regulation under the *Oil and Gas Activities Act*.
 - a) The term "culvert" refers to culverts other than "major culverts", as defined in the Oil and Gas Road Regulation.
 - b) A "major culvert" has the same meaning as in the Oil and Gas Road Regulation.
- 55. The Approval Holder must ensure that the road is cleared to the width necessary to ensure all of the following:
 - a) the safety of Approval Holders using the road;
 - b) the integrity of the topography of the area;
 - the maintenance of draining of water in the area;
 - d) the stability of terrain in the area; and
 - e) the safe conduct of operations, considering the following:
 - i. the placement of pits, quarries, landings or waste areas;
 - ii. the storage of bridge of culvert material;
 - iii. the amount of area required to operate equipment within the clearing width, including equipment turnaround sites;
 - iv. the need to remove snow; and
 - v. the need to construct fencing or other ancillary structures.
- 56. The Approval Holder must ensure that the road is designed, constructed and maintained in a manner that does each of the following:
 - a) enables industrial and non-industrial users of the road to use the road safely;
 - b) preserves the integrity of the topography of the area;
 - c) maintains the drainage of water in the area; and
 - d) protects stability of the terrain in the area.

Permitting and Authorizations Page 9 of 12 Telephone: (250) 794-5200 Physical Address: 6534 Airport Road, Fort St. John, BC Mailing Address: Bag 2, Fort St. John, BC V1J 2B0 Telephone: (250) 794-5200 24 Hour: (250) 794-5200

Application Determination Number: 100101506 Date Issued: October 13, 2017

57. If the Approval Holder temporarily stops using the oil and gas road to carry out a primary activity for a period anticipated to be greater than 6 months, the person is not required to perform the maintenance and undertake the modifications set out in condition 8 but must ensure:

- a) the structural integrity of the road prism and clearing width are stable, and
- b) the drainage systems of the road are functional

to the extent necessary to ensure there is no material adverse effect on fish, fish habitat, water quality or quantity, wildlife or wildlife habitat.

Road Operations and Maintenance

- 58. The Approval Holder must perform the maintenance and undertake modifications necessary to ensure that:
 - a) The road prism and all access structures related to the road are stable;
 - b) Watercourse crossing structures and any other in-stream works associated with the road are functional and appropriate for the uses of the road; and
 - Road surface and slope drainage systems are functional and prevent pooling of water on the road surface.
- 59. If a structural deficiency occurs on a bridge authorized under this Permit during the construction or maintenance of the road, the Approval Holder must do at least one of the following:
 - a) Correct the defect or deficiency;
 - b) Close, remove or replace the bridge; or
 - c) Restrict traffic loads to a safe level.
- 60. The Approval Holder must ensure that the activities associated with this permit do not result in any deleterious materials being deposited into a stream, wetland or lake.
- 61. The Approval Holder must not operate a motor vehicle at a speed that is unsafe for the conditions and exceeds the lesser of 80km/h or the speed posted on a relevant traffic control device.
- 62. The Approval Holder must not close or restrict access to the road by another person except temporarily as set out below:
 - To address an existing or imminent threat to the road or environment, or that may endanger human life or property;
 - b) To address something that would impede the Approval Holder from using the road; or
 - c) To carry out maintenance on the road as required by this permit.
- 63. If access to the road is restricted in accordance with the provisions of this permit, the Approval Holder must notify the Commission immediately.

Deactivation

- 64. Except with leave of the Commission, the Approval Holder must deactivate the road when the road is no longer needed. At minimum, deactivation must include:
 - Barricade of the road surface width in a clearly visible manner to prevent access by motor vehicles, other than all-terrain vehicles;
 - b) Removal of stream pipe culverts and arch culverts;
 - c) Removal of bridge and log or box culvert superstructures; and
 - d) Stabilization of the road prism and the clearing width of the road.
- 65. The Approval Holder must not begin deactivating the road for 14 days from the date of submission of the Declaration of Road Deactivation Form to the Commission.
- 66. Any road segment authorized by this permit that is not included in the notice to deactivate must continue to be maintained by the Approval Holder.

Permitting and Authorizations
Physical Address: 6534 Airport Road, Fort St. John, BC
Mailing Address: Bag 2, Fort St. John, BC V1J 2B0

24 Hour: (250) 794-5200

Date Issued: October 13, 2017

Approval Holder: Trans Mountain Pipeline ULC

Application Determination Number: 100101506

ADVISORY GUIDANCE

- Construction Plans are for the Approval Holder's internal reference only and were not reviewed as a decision tool for this permit, nor do they form an integral part of this permit.
- 2. The Approval Holder should be aware that the approval under s.39 of the *Land Act* does not extend to Indian Reserves; parks, protected areas or recreation areas designated under the *BC Parks Act*; municipal Crown land; or private land.
- 3. The Approval Holder should be aware that the approval under the *Forest Act* to harvest timber does not extend to harvesting within private land or area based tenures, specifically woodlots, tree farm licences, First Nations woodland licences, and community forests.
- 4. The Approval Holder should be aware that impacts to recreation features, trails, recreation facilities, interpretative forest sites or recreation sites identified, authorized or established under the *Forest and Range Practices Act* are subject to additional authorizations by the Ministry of Forests, Lands and Natural Resource Operations.
- 5. The Approval Holder should be aware that there may be First Nation's traditional, cultural, or spiritual activities occurring concurrently with maintenance activities, as well as areas of current use or cultural resources that overlap the activity area. All reasonable efforts should be made to minimize interference with those activities while carrying out the activities authorized herein.
- 6. Appropriate tenure will be issued upon acceptance of the post-construction plan. Submission of the original application and submission of the post-construction plan is considered an application for all subsequent applicable Land Act tenures. Upon the Commission's acceptance of the post-construction plan no further applications for replacement tenure are required.
- 7. Temporary access is intended to be short-term access to facilitate construction of an oil and gas activity. It is not intended for sustained use and is not constructed to oil and gas road standards.

<u>REFUSALS</u>

The BC Oil and Gas Commission ("the Commission"), under section 26 (1) (a) of the *Oil and Gas Activities Act (OGAA)*, hereby refuses permissions for the following activity(s) indicated in the Refused Activities table below and submitted as part of the Application Area Number referenced above.

REFUSED ACTIVITIES

| NEB Ancillary Activity No.: 00171421 | Type: Access |
|--------------------------------------|--|
| NEB Ancillary Activity No.: 00171432 | Type: Access |
| NEB Ancillary Activity No.: 00171433 | Type: Access |
| NEB Ancillary Activity No.: 00171434 | Type: Access |
| Changes in and about a Stream | BCVA-74, BCVA-75, BCVA-76, Blue-Darf_W625point85, Blue-Darf_WC630cpoint6, Blue-Darf_W630point5, BCVA-80, Blue-Darf_WC639apoint5, BCVA-81, BCVA-82, BCVA-84, BCVA-85, BCVA-86, Blue-Darf_W682point4, BCVA-104, BCVA-105, BCVA-106 |

All pages included in this permit and any attached plan(s) form an integral part of this permit.

James O'Hanley

In Oh

Vice President, Permit Adjudication

Permitting and Authorizations Physical Address: 6534 Airport Road, Fort St. John, BC Mailing Address: Bag 2, Fort St. John, BC V1J 2B0

24 Hour: (250) 794-5200

Application Determination Number: 100101506 Date Issued: October 13, 2017

Copied to:

OGC Community Relations

Land Agent – CH2M Hill Energy Canada, Ltd.

First Nations – Adams Lake Indian Band, Canim Lake Indian Band, Little Shuswap Indian Band, Neskonlith Indian Band, Simpow First Nation

Ministry of Forests District Office – Thompson Rivers Natural Resource District

OGC Compliance and Enforcement

Permitting and Authorizations Page 12 of 12 Telephone: (250) 794-5200 Physical Address: 6534 Airport Road, Fort St. John, BC Facsimile: (250) 794-5379 Mailing Address: Bag 2, Fort St. John, BC V1J 2B0 24 Hour: (250) 794-5200