



January 15, 2016

Coastal GasLink Pipeline Ltd.
450 – 1st SW
Calgary, Alberta
T2P 5H1

Attention: Surface Land Administrator

RE: Investigative Permit within Units 11, 12 & 13, Block K, Group 93-P-5

Date of Issuance: January 15, 2016

Commission No.: 9639067

PERMISSIONS

1. Pursuant to section 138(1) of the *Petroleum and Natural Gas Act*, the permit holder is permitted to enter, occupy, and use any unoccupied Crown land located within the areas described in the attached sketch plan, Document No, CGE4703-MSI-G-MP-158-001-Geotech-SukunkaFalls-Sketch, Sheet 1 of 3, Revision 2, Document No, CGE4703-MSI-G-MP-158-002-Geotech-SukunkaFalls-Sketch, Sheet 2 of 3, Revision 2, Document No, CGE4703-MSI-G-MP-158-003-Geotech-SukunkaFalls-Sketch, Sheet 3 of 3, Revision, dated November 28, 2013, by Midwest Surveys Land Surveying Ltd. as submitted to the Commission in the permit application dated December 15, 2015 to construct and operate a related activity for the purposes of carrying out oil and gas activities as defined in the *Oil and Gas Activities Act* (hereinafter referenced together as the "site"), subject to the conditions set out below.
 - a. The permission to occupy and use Crown land expires 1 year from the date of issuance, unless the Commission has received notice of construction start, or this authorization is otherwise suspended, cancelled, surrendered or declared spent.
 - b. The permission to occupy and use Crown land does not entitle the permit holder to exclusive possession of the site.

CONDITIONS

1. The total disturbance within the site must not exceed:
 - a. Borehole Pads 0.36ha.
 - b. Temporary Access 5.02ha.
 - c. Staging Area 0.72ha.
2. The rights granted by this permit are subject to all subsisting grants to or rights of any person made or acquired under the *Coal Act*, *Forest Act*, *Land Act*, *Mineral Tenure Act*, *Petroleum and Natural Gas Act*, *Range Act*, *Water Act* or *Wildlife Act*, or any extension or renewal of the same.
3. The permit holder must not assign, sublicense or transfer this permit or permit any person to use or occupy the land, other than its employees, contractors, or representatives, without the Commission's written consent.
4. A notice of construction start must be submitted to the Commission a minimum of 48 hours prior to the commencement of activities under this permit. Notification must be sent to OGC.ExternalNotifications@bcogc.ca.
5. The permit holder must ensure that the area is maintained in a condition so as to minimize hazards, including but not limited to hazards associated with storage of materials and equipment.

6. The permit holder must ensure that the area is free of garbage, debris and unused equipment.
7. Following completion of the activities permitted under this permit the permit holder must, as soon as practicable, de-compact any soils compacted by the activity.
8. If natural surface drainage pattern was altered by the carrying out of the activity, the permit holder must
 - a. restore, to the extent practicable, to the drainage pattern and its condition before the alteration; and
 - b. re-vegetate any exposed soil on the site using seed or vegetative propagules of an ecologically suitable species that
 - i. 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.
9. Following completion of the activities permitted under this permit, any surface soils removed from the site must be redistributed so that the soil structure is restored, to the extent practicable, to its condition before the activity was begun.
10. Within 60 days of the completion of construction activities under this permit, the permit holder must submit to the Commission a post-construction plan as an ePASS shape file and PDF plan accurately identifying the location of the total area actually disturbed under this permit. The shape file and plan must be submitted to postconstructionplan@bcogc.ca.
11. An Archaeological Impact Assessment (AIA) is required for the proposed development area prior to any development activities taking place.
 An AIA report must be submitted to the Commission as soon as practicable.
 If artifacts, features, materials or things protected under section 13(2) of the Heritage Conservation Act are identified the permit holder must, unless the permit holder holds a permit under section 12 of the Heritage Conservation Act issued by the Commission in respect of that artifact, feature, material or thing:
 - a. immediately cease all work in the vicinity of the artifacts, features, materials or things;
 - b. immediately notify the Commission and the Archaeology Branch of the Ministry of Forests, Lands and Natural Resource Operations
 - c. refrain from resuming work in the vicinity of the artifacts, features, materials or things except in accordance with an appropriate mitigation plan that has been prepared in accordance with the Heritage Conservation Act and approved by the Archaeology Branch of the Ministry of Forests, Lands and Natural Resource Operations.
12. The permit holder notifies West Moberly First Nations Land Use Office prior to commencement of project construction
13. The permit holder must notify McLeod Lake Indian Band via phone or fax 48 hours prior to commencement of construction.
14. The permit holder notifies Saulteau First Nations Land Use Office Prior to commencement of project construction.

RELATED AUTHORIZATIONS ASSOCIATED WITH THE PERMIT

Cutting Permit under Master Licence to Cut under section 47.4 of the Forest Act

1. The Commission hereby issues the permit holder Cutting Permit No. 7 under Master Licence to Cut number M02340, subject to the following conditions:
 - a. This Cutting Permit is subject to the terms and conditions in the Master Licence to Cut;
 - b. This Cutting Permit applies to only the Crown land portion shown on survey plan associated with this permit (sketch plan, Document No, CGE4703-MSI-G-MP-158-001-Geotech-SukunkaFalls-Sketch, Sheet 1 of 3, Revision 2, Document No, CGE4703-MSI-G-MP-158-002-Geotech-SukunkaFalls-Sketch, Sheet 2 of 3,

Revision 2, Document No, CGE4703-MSI-G-MP-158-003-Geotech-SukunkaFalls-Sketch, Sheet 3 of 3, Revision, dated November 28, 2013);

- c. All harvested Crown timber must be marked with Timber Mark Number MTA 235;
- d. This Cutting Permit is deemed spent upon the submission of the post-construction plan or upon either the cancellation or the expiry of the permitted oil and gas activity;
- e. This Cutting Permit does not grant the permit holder the exclusive right to harvest timber from the license area and the Commission reserves the right to grant rights to other persons to harvest timber from the license area;
- f. The felling, bucking and utilization specifications as described in Appendix A of your Master License to Cut applies to this Cutting Permit;
- g. Stumpage for this Cutting Permit will be calculated as per Table 6.6 in the Interior Appraisal Manual;
- h. Stumpage billing will be calculated on the gross project area. The amount billed will be determined upon submission of the final post-construction plan to the Commission;
- i. Timber that is stored in decks or piles must be marked with the correct timber mark before transportation, or at the end of every shift. The marking must be applied to one end of at least 10% of the timber pieces in each deck or pile using a hammer indentation or paint. Marking must be kept concurrent with decking;
- j. Where the permit holder is aware of overlapping forest tenure rights that have been granted to other persons, the permit holder is obligated to communicate to these persons the timing and extent of their harvest operations at least two weeks prior to commencement of harvest and take all reasonable steps to coordinate their activities with these persons.

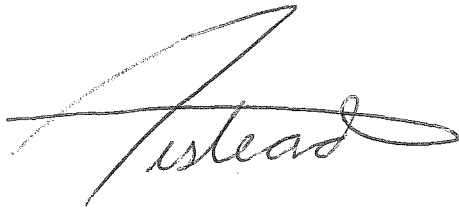
Changes in and about a Stream Authorization under section 9 of the *Water Act*

1. The Oil and Gas Commission hereby authorizes the permit holder, under section 9 of the *Water Act*, to make changes in and about streams, as shown on sketch plan; Document No, CGE4703-MSI-G-MP-158-001-Geotech-SukunkaFalls-Sketch, Sheet 1 of 3, Revision 2, Document No, CGE4703-MSI-G-MP-158-002-Geotech-SukunkaFalls-Sketch, Sheet 2 of 3, Revision 2, Document No, CGE4703-MSI-G-MP-158-003-Geotech-SukunkaFalls-Sketch, Sheet 3 of 3, Revision, dated November 28, 2013 by Midwest Surveys Land Surveying Ltd.; subject to the following conditions:
 - a. 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 must not be placed, used or stored within the stream channel;
 - b. Temporary material, fill, bridge, culvert, pump, pipe, conduit, ditch or other structure used in the construction of any works must be constructed and maintained only during the period of construction, and must be removed upon completion of the works;
 - c. Activities associated with the stream crossing are carried out in accordance with the regional and/or species-specific timing windows or the period(s) of time in the year when the change can proceed without causing serious harm to fish, wildlife or habitat;
 - d. The stream crossing is constructed and maintained at times and in a manner that will not cause serious harm to fish that are parts of a commercial, recreational or Aboriginal (CRA) fishery, as defined under section 35 of the *Fisheries Act*.

ADVISORY GUIDANCE

1. 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.

The attached plan(s) forms an integral part of this permit.

A handwritten signature in black ink, appearing to read 'Istead', with a large, sweeping horizontal stroke above the letters.

Ashley Istead
Natural Resource Officer

pc: Commission No.: 9639067
Worksafe BC
MoFLNRO: Peace
OGC First Nations: MLIB, SFN, WMFN

BORHOLE	NORTHING	EASTING	AREA	TABLE OF AREAS REQUIRED (CROWN LANDS)			
1	6143082.0	577227.9	0.01 ha	Proposed Feature:	New Cut	Existing Clearing	Total
2	6143104.7	577254.5	0.01 ha	Borehole Pads (36)	0.36 ha	0.00 ha	0.36 ha
3	6143156.0	577275.5	0.01 ha	Temp Access (Investigative Area)	4.00 ha	0.00 ha	4.00 ha
4	6143178.7	577302.0	0.01 ha	Temp 5.0 Access (Segment 1)	0.98 ha	0.00 ha	0.98 ha
5	6143069.3	577279.8	0.01 ha	Temp 5.0 Access (Segment 2)	0.04 ha	0.00 ha	0.04 ha
6	6143107.8	577304.6	0.01 ha	Staging Area 1	0.36 ha	0.00 ha	0.36 ha
7	6143054.7	577300.8	0.01 ha	Staging Area 2	0.36 ha	0.00 ha	0.36 ha
8	6143113.5	577338.6	0.01 ha	Total Area	6.10 ha	0.00 ha	6.10 ha
9	6143172.4	577376.5	0.01 ha	Investigative Area Total Area = 16.72 ha.			
10	6143231.2	577414.3	0.01 ha	Staging Area Placement Zone Total Area = 0.96 ha.			
11	6143002.6	577294.8	0.01 ha	Access Buffer Total Area = 8.26 ha.			
12	6143039.6	577323.5	0.01 ha				
13	6143098.5	577361.3	0.01 ha				
14	6143157.3	577399.2	0.01 ha				
15	6143216.1	577437.0	0.01 ha				
16	6143016.4	577329.9	0.01 ha				
17	6143075.2	577367.7	0.01 ha				
18	6143134.1	577405.6	0.01 ha				
19	6143192.9	577443.4	0.01 ha				
20	6143029.7	577368.1	0.01 ha				
21	6143089.6	577400.8	0.01 ha				
22	6143147.4	577443.8	0.01 ha				
23	6143206.2	577481.7	0.01 ha				
24	6142994.7	577363.5	0.01 ha				
25	6143053.6	577401.3	0.01 ha				
26	6143112.4	577439.2	0.01 ha				
27	6143171.3	577477.1	0.01 ha				
28	6142993.2	577423.7	0.01 ha				
29	6143052.0	577461.5	0.01 ha				
30	6143110.9	577499.4	0.01 ha				
31	6143169.7	577537.3	0.01 ha				
32	6142949.8	577423.7	0.01 ha				
33	6143009.7	577462.2	0.01 ha				
34	6143068.5	577500.1	0.01 ha				
35	6143127.4	577537.9	0.01 ha				
36	6143294.8	577423.6	0.01 ha				
TOTAL BOREHOLE PAD AREAS =			0.36 ha				

ACCESS SEGMENTS				
Segment No.	Begin Northing	Begin Easting	End Northing	End Easting
1	6143517.8	578869.4	6143035.1	577543.9
2	6143035.1	577543.9	6143011.2	577469.1

LEGEND:	
	Proposed 10 x 10 Heliportable Borehole Pad
	Investigative Area
	Staging Area
	PNG Grid Boundary
	Coastal GasLink Study Corridor Centerline Rev C2
	5.0 Access
	20.0 Access Buffer
	Existing Access

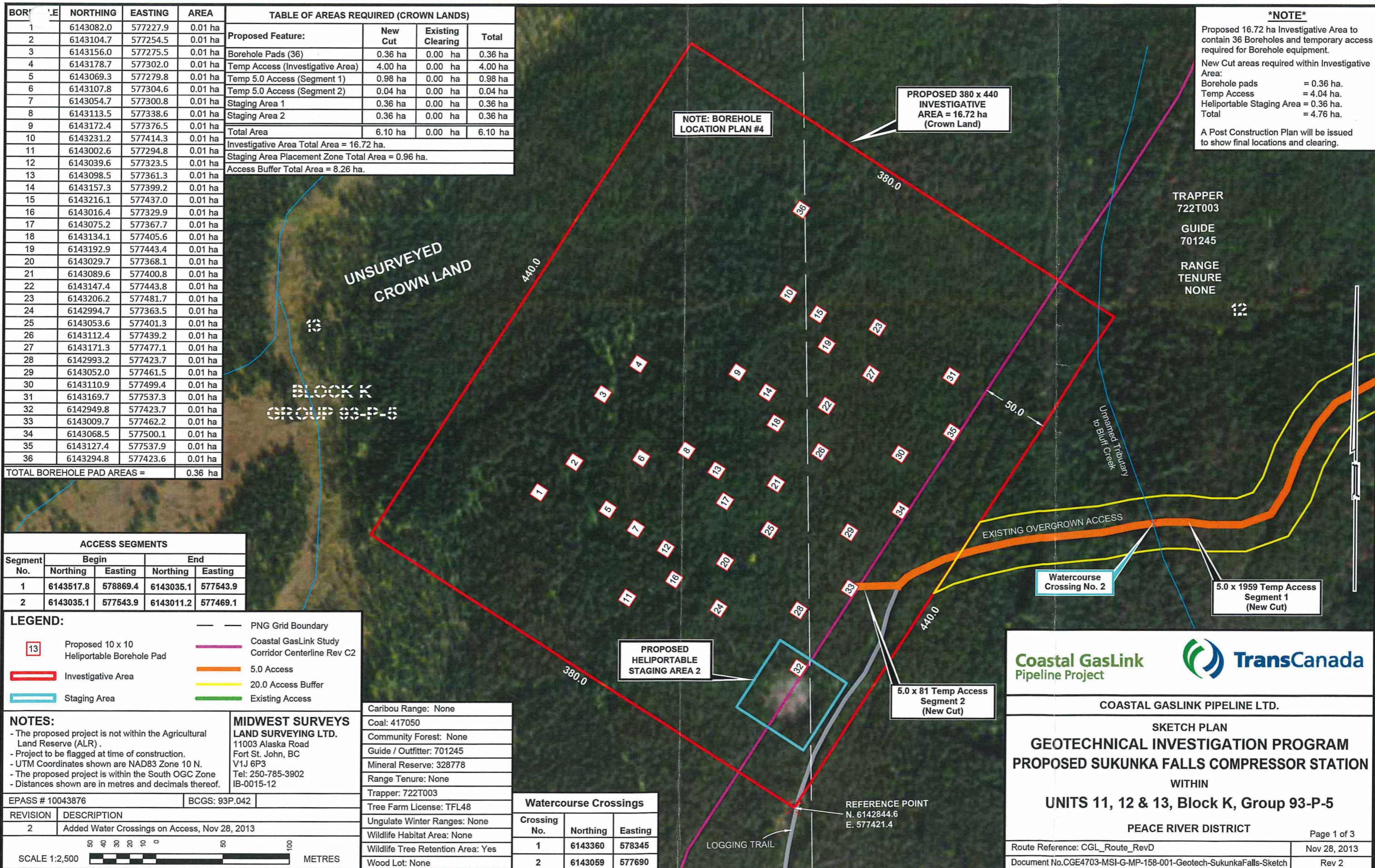
NOTES:

- The proposed project is not within the Agricultural Land Reserve (ALR).
- Project to be flagged at time of construction.
- UTM Coordinates shown are NAD83 Zone 10 N.
- The proposed project is within the South OGC Zone
- Distances shown are in metres and decimals thereof.

MIDWEST SURVEYS LAND SURVEYING LTD.
11003 Alaska Road
Fort St. John, BC
V1J 6P3
Tel: 250-785-3902
IB-0015-12

EPASS # 10043876	BCGS: 93P.042
REVISION	DESCRIPTION
2	Added Water Crossings on Access, Nov 28, 2013
SCALE 1:2,500	
METRES	

R:\2012\IB-0015-12\CADD\COASTAL GAS LINK\SKETCH PLANS\COMPRESSORS\BOREHOLES\CGE4703-MSI-G-MP-132-Geotech-1940-KP86-Sketch



NOTE

Proposed 16.72 ha Investigative Area to contain 36 Boreholes and temporary access required for Borehole equipment.

New Cut areas required within Investigative Area:

- Borehole pads = 0.36 ha.
- Temp Access = 4.04 ha.
- Heliportable Staging Area = 0.36 ha.
- Total = 4.76 ha.

A Post Construction Plan will be issued to show final locations and clearing.

Coastal GasLink Pipeline Project

TransCanada

COASTAL GASLINK PIPELINE LTD.

SKETCH PLAN

GEOTECHNICAL INVESTIGATION PROGRAM

PROPOSED SUKUNKA FALLS COMPRESSOR STATION

WITHIN

UNITS 11, 12 & 13, Block K, Group 93-P-5

PEACE RIVER DISTRICT

Route Reference: CGL_Route_RevD

Document No. CGE4703-MSI-G-MP-158-001-Geotech-SukunkaFalls-Sketch

Nov 28, 2013

Rev 2

Page 1 of 3

0639067

Watercourse Crossings		
Crossing No.	Northing	Easting
1	6143360	578345
2	6143059	577690

TABLE OF AREAS REQUIRED (CROWN LANDS)				
Proposed Feature:	New Cut	Existing	Clearing	Total
Borehole Pads (36)	0.36 ha	0.00 ha	0.00 ha	0.36 ha
Temp Access (Investigative Area)	4.00 ha	0.00 ha	0.00 ha	4.00 ha
Temp 5.0 Access (Segment 1)	0.98 ha	0.00 ha	0.00 ha	0.98 ha
Temp 5.0 Access (Segment 2)	0.04 ha	0.00 ha	0.00 ha	0.04 ha
Staging Area 1	0.36 ha	0.00 ha	0.00 ha	0.36 ha
Staging Area 2	0.36 ha	0.00 ha	0.00 ha	0.36 ha
Total Area	6.10 ha	0.00 ha	0.00 ha	6.10 ha
Investigative Area Total Area = 16.72 ha.				
Staging Area Placement Zone Total Area = 0.96 ha.				
Access Buffer Total Area = 8.26 ha.				

LEGEND:

-  Forest Cut Block
-  Wildlife Tree Retention
-  Staging Area
-  Placement Zone
-  PNG Grid Boundary
-  5.0 Access
-  20.0 Access Buffer
-  Existing Access

NOTES:

- The proposed project is not within the Agricultural Land Reserve (ALR).
- Project to be flagged at time of construction.
- UTM Coordinates shown are NAD83 Zone 10 N.
- The proposed project is within the South OGC Zone
- Distances shown are in metres and decimals thereof.

MIDWEST SURVEYS
LAND SURVEYING LTD.

11003 Alaska Road
Fort St. John, BC
V1J 6P3
Tel: 250-785-3902
IB-0015-12

EPASS # 10043876

BCGS: 93P-042

REVISION	DESCRIPTION
2	Added Water Crossings on Access, Nov 28, 2013

SCALE 1:2,500



METRES

UNSURVEYED
CROWN LAND

BLOCK K
GROUP 93-P-5

PROPOSED
STAGING AREA
PLACEMENT ZONE

PROPOSED 60 X 60
HELI-PORTABLE
STAGING AREA 1

EXISTING ROAD

MOF OPENING
66607

MOF OPENING
66607

EXISTING LOGGING TRAIL

EXISTING OVERGROWN ACCESS

5.0 x 1959 Temp Access
Segment 1
(New Cut)

Coastal GasLink
Pipeline Project



COASTAL GASLINK PIPELINE LTD.

SKETCH PLAN

GEOTECHNICAL INVESTIGATION PROGRAM
PROPOSED SUKUNKA FALLS COMPRESSOR STATION

WITHIN

UNITS 11, 12 & 13, Block K, Group 93-P-5

PEACE RIVER DISTRICT

Route Reference: CGL_Route_RevD

Document No. CGE4703-MSI-G-MP-158-003-Geotech-SukunkaFalls-Sketch

Page 3 of 3

Nov 28, 2013

Rev 2



OGC File: 9639067

January 17, 2014

Coastal Gaslink Pipeline Ltd.
450- 1st Street
Calgary, Alberta T2P 5H1

Attention: Surface Land Administrator

Re: Investigative Permit- Section 14 over Crown Land, Peace River District
within units 11, 12 & 13, Block K, Group 93-P-5.

Date of Issuance: January 17, 2014
Commission File No: 9639067
Applicant File No: 130473(Sukunka Falls Compressor)

PERMISSIONS

The Oil and Gas Commission ("Commisson") hereby authorizes the holder of permit number 9639067, under section 14 of the *Land Act*, to allow Coastal Gaslink Pipeline Ltd. (the "permit holder") to occupy Crown land within the areas described as borehole pad, temporary access and staging area in the attached sketch plan Document No: CGE4703-MSI-G-MP-158-001-Geotech-SukunkaFalls-Sketch, Sheets 1 to 3, Revision 2, dated November 28, 2013 as submitted to the Commission in the permit application dated December 10, 2013 (hereinafter referenced together as the "Site"), to conduct appraisals, inspections, analyses, inventories, surveys or other investigations under Authorization Number 942188, subject to conditions set out below.

CONDITIONS

1. The permit holder may use and occupy the Site only for the purposes of investigating the site for potential oil and gas activities and related activities as defined in the *Oil and Gas Activities Act*.
2. The total disturbance within the Site must not exceed:
 - a. Borehole Pads: 0.36 Ha.
 - b. Temporary Access: 5.02 Ha.
 - c. Staging Area: 0.72 Ha.
3. The permit holder will indemnify the Province of British Columbia (the Province) and the Oil and Gas Commission against all losses, damages, costs and liabilities arising out of any breach or non-performance of any condition or agreement set out in this Permit and any personal injury, death or property damage occurring within the Site, or happening by virtue of its occupation of the Site, and the amount of such losses, damages and costs shall be payable to the Province or the Oil and Gas Commission immediately.
4. The permit holder will immediately effect, and keep in force while this Permit is in effect, insurance of an amount not less than \$1,000,000 protecting the Province, the Commission

and the permit holder (without any rights of cross-claim or subrogation) against claims for personal injury, death, property damage, or third party or public liability claims arising from any accident or occurrence on the Site.

5. The permit holder will restore the site to the satisfaction of the Oil and Gas Commission following expiration or cancellation of this Permit.
6. The authorization to occupy and use Crown land does not entitle the permit holder to exclusive possession of the Site. The permit holder will not interfere with any person found on the Site who has a public right of access over the Site or is using the Site pursuant to a prior or subsequent Land Act disposition.
7. The rights granted by this permit are subject to all 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, Range Act, Water Act or Wildlife Act, or any extension or renewal of the same, any prior dispositions made under the Land Act, and the exceptions and reservations of rights and interests under Section 50 of the Land Act.
8. The permit holder will acknowledge and agree that any interference with rights granted under this permit by virtue of the exercise or operation of the rights or interests set out in the Sections (6) or (7) above shall not constitute a breach of the Province's or the Commission's obligations under this permit and the permit holder will release and discharge the Province and/or the Commission from any claim for loss or damage arising directly or indirectly out of any such interference. The permit holder will also agree to pay all costs and expenses that arise out of the permit holder's interference with the rights or interests set out in Sections (6) or (7) and that the permit holder will not commence or maintain proceedings under Section 65 of the Land Act with respect to interference with the permit holder's rights arising out of exercise or operation of the rights set out in Sections (6) or (7).
9. The permit holder must pay to the Province, when due, the Fees to the address and in accordance with the instructions set out in the attached covering letter.
10. The permit holder must not assign or sub-tenure this Permit. The permit holder must not transfer this permit without the Commission's written consent, which consent may be granted or withheld at the Commission's sole discretion.
11. This permit expires two years from the date of issuance.
12. The permit holder must notify the Commission prior to commencing activities under this permit. Notification may be sent to C&E@bcogc.ca.
13. An Archaeological Impact Assessment(AIA) is required for the proposed development area prior to any development activities taking place.
14. If an archaeological site is recorded as a result of this assessment, a report must be submitted immediately to the Archaeology Branch of the Ministry of Forest, Lands and Natural Resource Operations and Commission and all mitigation measures must be approved by the Archaeology Branch prior to the start of construction.
15. If no archaeological site is recorded during this assessment, an AIA report is still required and must be submitted to the Archaeology Branch and the Commission as soon as possible as per the Archaeology Process Guidelines.

16. If artifacts, features, materials or things protected under section 13(2) of the Heritage Conservation Act are identified the permit holder must, unless the permit holder holds a permit under section 12 of the Heritage Conservation Act in respect of that artifact, feature, material or thing:
 - a. immediately cease all work in the vicinity of the artifacts, features, materials or things;
 - b. immediately notify the Archaeology Branch and Commission; and
 - c. refrain from resuming work in the vicinity of the artifacts, features, materials or things except in accordance with an appropriate mitigation plan that has been prepared in accordance the Heritage Conservation Act, endorsed by a qualified archaeologist, and approved by the Archaeology Branch.
17. Within 60 days of the completion of the clearing phase of the activity authorized, the permit holder must submit to the Commission a Post-construction plan as an ePASS shape file accurately identifying the locations of the overall disturbance within the Site.
18. The permit holder must abide by and comply with all applicable laws, bylaws, orders, directions, ordinances, and regulations of any government authority having jurisdiction in any way affecting its use or occupation of the Site, including, without limitation, the provisions of the *Land Act* and the provisions of this Permit.

CUTTING PERMIT AUTHORIZATION

Pursuant to section 47.4 of the *Forest Act*, the Commission hereby issues Cutting Permit No. 7, under Master License to Cut number M02340, Peace Forest District, to cut and remove timber from the areas of Crown land within the area within the Site subject to the following conditions:

1. This Cutting Permit expires 2 years from the date of issuance of the Investigative Permit or the revised date should this permit be extended.
2. This Cutting Permit is subject to the terms and conditions in the Master Licence to Cut.
3. All harvested Crown timber must be marked with Timber Mark Number MTA 235.
4. The felling, bucking and utilization specifications in the Master License to Cut apply to this Cutting Permit.
5. Stumpage required to be paid under this cutting permit will be calculated on the gross project area. The amount will be determined upon submission of final as-cleared plans to the Commission and in accordance with the Ministry of Forests Interior Appraisal Manual.
6. Timber that is stored in decks or piles must be marked with the correct timber mark before transportation, or at the end of every shift. The marking must be applied to one end of at least 10% of the timber pieces in each deck or pile using a hammer indentation or paint. Marking must be kept concurrent with decking.
7. In accordance with the Master Licence to Cut referenced above, "Within 60 days of completing operations on a cutting permit, the Licensee shall submit to the Commission a map showing all disturbances that have occurred pursuant to that Cutting Permit, at a scale of 1:20,000 or 1:50,000."
8. The utilization of merchantable timber is not mandatory for this permit.
9. Prior to harvesting, any clearing authorized by this Cutting Permit must be clearly defined on the ground by ribboning or blazing.

10. This permit authorizes a maximum total new cut area of:

- a. Borehole Pads: 0.36 Ha.
- b. Temporary Access: 5.02 Ha.
- c. Staging Area: 0.72 Ha.

CHANGES IN AND ABOUT A STREAM AUTHORIZATION

Pursuant to section 9 of the *Water Act*, the Commission hereby authorizes the permit holder to make changes in and about a stream subject to the following conditions:

1. The approved temporary stream crossing locations on the Crown land are located at:
 - a. Bluff Creek UTM locations N. 6143360 E.577690, zone 10, NAD 83
 - b. Unnamed Tributary UTM locations N. 6143059 E.577690, zone 10, NAD 83
2. Any substance, sediment, debris or material that could adversely impact the stream:
 - a. 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.
3. Temporary material, fill, bridge, culvert, pump, conduit, ditch or other structure used to assist in the construction of any works must be constructed and maintained only during the period of construction, and must be removed upon completion of the works.
4. During the construction, maintenance or removal of a clear span bridge, the authorization holder must ensure that:
 - a. the equipment used for construction, including site preparation, maintenance or removal of the bridge, is situated in a dry stream channel or is operated from the top of the bank,
 - b. the bridge and its approaches do not produce a back water effect or increase the head in the stream,
 - c. the hydraulic capacity of the bridge is equivalent to the hydraulic capacity of the stream channel and the height under the bridge will provide free passage of flood debris, and
 - d. the bridge material meets the standards of the Canadian Standards Association, as applicable.
5. During the installation, maintenance or removal of a stream culvert for crossing a stream, the authorization holder must ensure that:
 - a. the equipment used for site preparation, construction, maintenance or removal of the culvert is situated in a dry stream channel or operated from the top of the bank,
 - b. in fish bearing waters, the culvert allows fish in the stream to pass up or down stream under all flow conditions,
 - c. the culvert inlet and outlet incorporate measures to protect the structure and the stream channel against erosion and scour,
 - d. if debris cannot safely pass, provision is made to prevent the entrance of debris into the culvert,
 - e. the installation, maintenance or removal does not destabilize the stream channel,

- f. the culvert and its approach roads do not produce a backwater effect or increase the head of the stream,
 - g. a culvert having an equivalent diameter of 2 metres or greater, or having a design capacity to pass a flow of more than 6 cubic metres a second, is designed by a professional engineer and is constructed in conformance with that design,
 - h. the stream channel, located outside the cleared width, is not altered,
 - i. embankment fill materials do not and will not encroach on culvert inlets and outlets,
 - j. the culvert material meets the standards of the Canadian Standards Association.
6. During the restoration of a change in and about a stream, the authorization holder must ensure that:
- a. any structures constructed to cross the stream are removed,
 - b. the channel is restored to its natural state, to the extent practicable,
 - c. the site of the crossing and associated approaches (including cut and fill slopes and ditch lines) are restored by:
 - i. stabilizing any waste materials removed from the site to above the high water mark to prevent them from entering the stream,
 - ii. re-vegetating disturbed areas associated with the crossing using seed or vegetative propagules of an ecologically suitable species,
 - iii. redistributing coarse wood debris in a manner that aids soil stabilization, and
 - iv. ensuring that surface drainage associated with approaches will not transport sediments into the stream.
7. Stream crossing methods must be selected and/or constructed in accordance with the Environmental Protection and Management Guidebook, including the Best Management Practices outlined therein.
8. Stream crossing activities must 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.
9. This approval does not authorize any work or undertaking that results in the harmful alteration, disruption or destruction of fish habitat, as described within the Federal Fisheries Act of Canada, nor does this approval authorize any requirements under the Navigable Waters Protection Act.

ADDITIONAL CONDITIONS

- 1. The permit holder notifies West Moberly First Nations Land Use Office prior to commencement of project construction.
- 2. The Permit holder must notify McLeod Lake Indian Band via phone or fax 48 hrs prior to commencement of construction.
- 3. The permit holder notifies Sauteau First Nations Land Use Office prior to commencement of project construction.

The attached plan(s) form an integral part of this authorization.



Justin Anderson
Natural Resource Officer

pc: FLNRO – Fort St John

pc: Kelly Lake Cree Nation, Kelly Lake First Nation, Kelly Lake Metis Settlement Society

pc: Mcleod Lake Indian Band, Sauteau First Nation, West Moberly First Nations

pc: Roy Northern Land and Environmental

Borehole	NORTHING	EASTING	AREA	TABLE OF AREAS REQUIRED (CROWN LANDS)			
2	6143082.0	577227.9	0.01 ha	Proposed Feature:	New Cut	Existing Clearing	Total
3	6143104.7	577254.5	0.01 ha	Borehole Pads (36)	0.36 ha	0.00 ha	0.36 ha
4	6143156.0	577275.5	0.01 ha	Temp Access (Investigative Area)	4.00 ha	0.00 ha	4.00 ha
5	6143178.7	577302.0	0.01 ha	Temp 5.0 Access (Segment 1)	0.98 ha	0.00 ha	0.98 ha
6	6143069.3	577279.8	0.01 ha	Temp 5.0 Access (Segment 2)	0.04 ha	0.00 ha	0.04 ha
7	6143107.8	577304.6	0.01 ha	Staging Area 1	0.36 ha	0.00 ha	0.36 ha
8	6143054.7	577300.8	0.01 ha	Staging Area 2	0.36 ha	0.00 ha	0.36 ha
9	6143113.5	577338.6	0.01 ha	Total Area	6.10 ha	0.00 ha	6.10 ha
10	6143172.4	577376.5	0.01 ha	Investigative Area Total Area = 16.72 ha.			
11	6143231.2	577414.3	0.01 ha	Staging Area Placement Zone Total Area = 0.96 ha.			
12	6143002.6	577294.8	0.01 ha	Access Buffer Total Area = 8.26 ha.			
13	6143039.6	577323.5	0.01 ha				
14	6143098.5	577361.3	0.01 ha				
15	6143157.3	577399.2	0.01 ha				
16	6143216.1	577437.0	0.01 ha				
17	6143016.4	577329.9	0.01 ha				
18	6143075.2	577367.7	0.01 ha				
19	6143134.1	577405.6	0.01 ha				
20	6143192.9	577443.4	0.01 ha				
21	6143029.7	577368.1	0.01 ha				
22	6143089.6	577400.8	0.01 ha				
23	6143147.4	577443.8	0.01 ha				
24	6143206.2	577481.7	0.01 ha				
25	6142994.7	577363.5	0.01 ha				
26	6143053.6	577401.3	0.01 ha				
27	6143112.4	577439.2	0.01 ha				
28	6143171.3	577477.1	0.01 ha				
29	6142993.2	577423.7	0.01 ha				
30	6143052.0	577461.5	0.01 ha				
31	6143110.9	577499.4	0.01 ha				
32	6143169.7	577537.3	0.01 ha				
33	6142949.8	577423.7	0.01 ha				
34	6143009.7	577462.2	0.01 ha				
35	6143068.5	577500.1	0.01 ha				
36	6143127.4	577537.9	0.01 ha				
	6143294.8	577423.6	0.01 ha				
TOTAL BOREHOLE PAD AREAS =			0.36 ha				

Segment	Begin	End
No.	Northling	Eastling
1	6143517.8	578869.4
2	6143035.1	577543.9

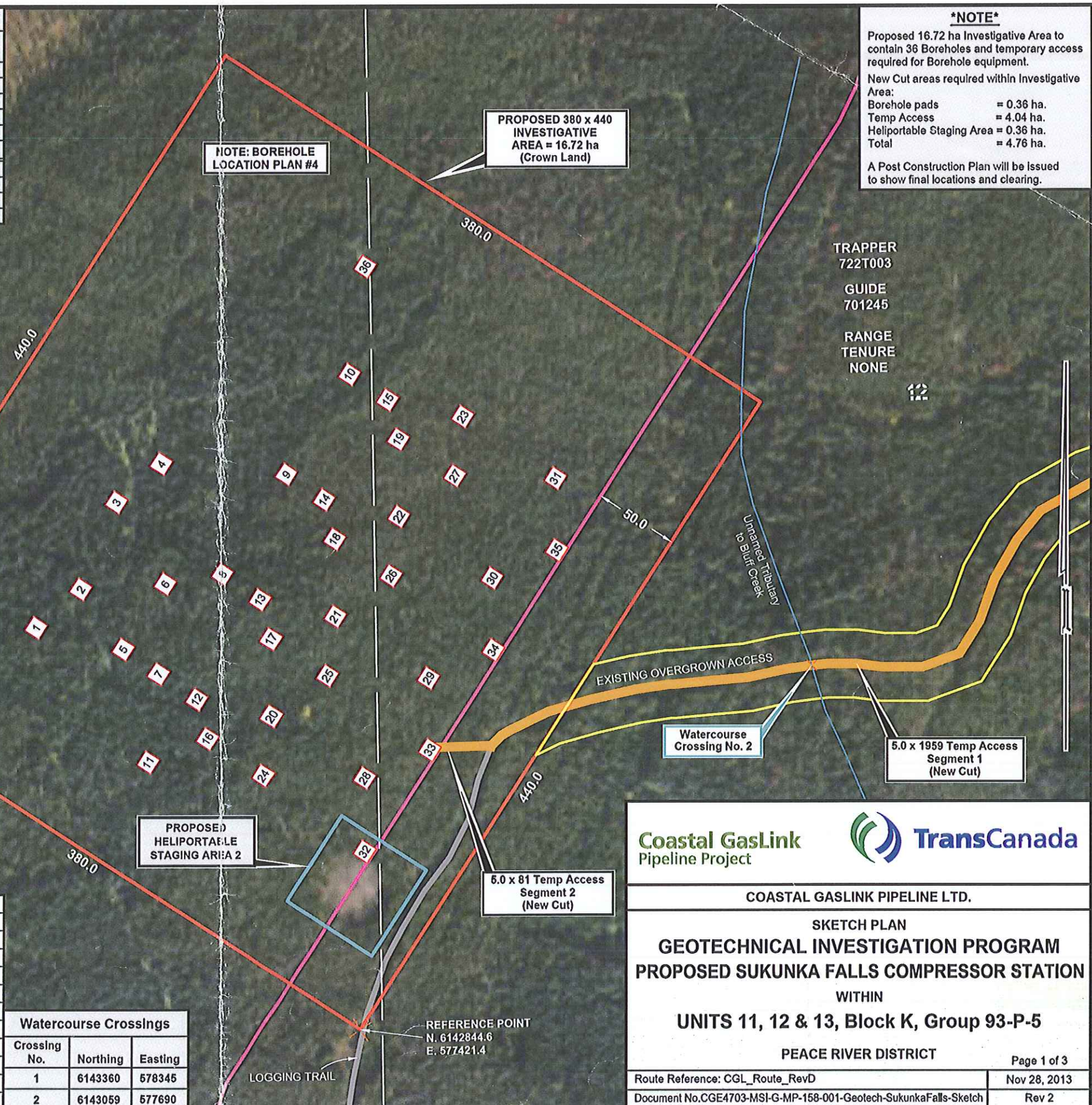
Segment	Begin	End
No.	Northling	Eastling
1	6143517.8	578869.4
2	6143035.1	577543.9

Legend:	
13	Proposed 10 x 10 Heliportable Borehole Pad
	Investigative Area
	Staging Area
	PNG Grid Boundary
	Coastal GasLink Study Corridor Centerline Rev C2
	5.0 Access
	20.0 Access Buffer
	Existing Access

Notes:	
- The proposed project is not within the Agricultural Land Reserve (ALR).	
- Project to be flagged at time of construction.	
- UTM Coordinates shown are NAD83 Zone 10 N.	
- The proposed project is within the South OGC Zone	
- Distances shown are in metres and decimals thereof.	

Midwest Surveys Land Surveying Ltd.	
11003 Alaska Road	
Fort St. John, BC	
V1J 6P3	
Tel: 250-785-3902	
IB-0015-12	

Watercourse Crossings		
Crossing No.	Northling	Eastling
1	6143360	578345
2	6143059	577690



NOTE
 Proposed 16.72 ha Investigative Area to contain 36 Boreholes and temporary access required for Borehole equipment.
 New Cut areas required within Investigative Area:
 Borehole pads = 0.36 ha.
 Temp Access = 4.04 ha.
 Heliportable Staging Area = 0.36 ha.
 Total = 4.76 ha.
 A Post Construction Plan will be issued to show final locations and clearing.

COASTAL GASLINK PIPELINE LTD.

SKETCH PLAN

GEOTECHNICAL INVESTIGATION PROGRAM

PROPOSED SUKUNKA FALLS COMPRESSOR STATION

WITHIN

UNITS 11, 12 & 13, Block K, Group 93-P-5

PEACE RIVER DISTRICT

Page 1 of 3

Nov 28, 2013

Rev 2

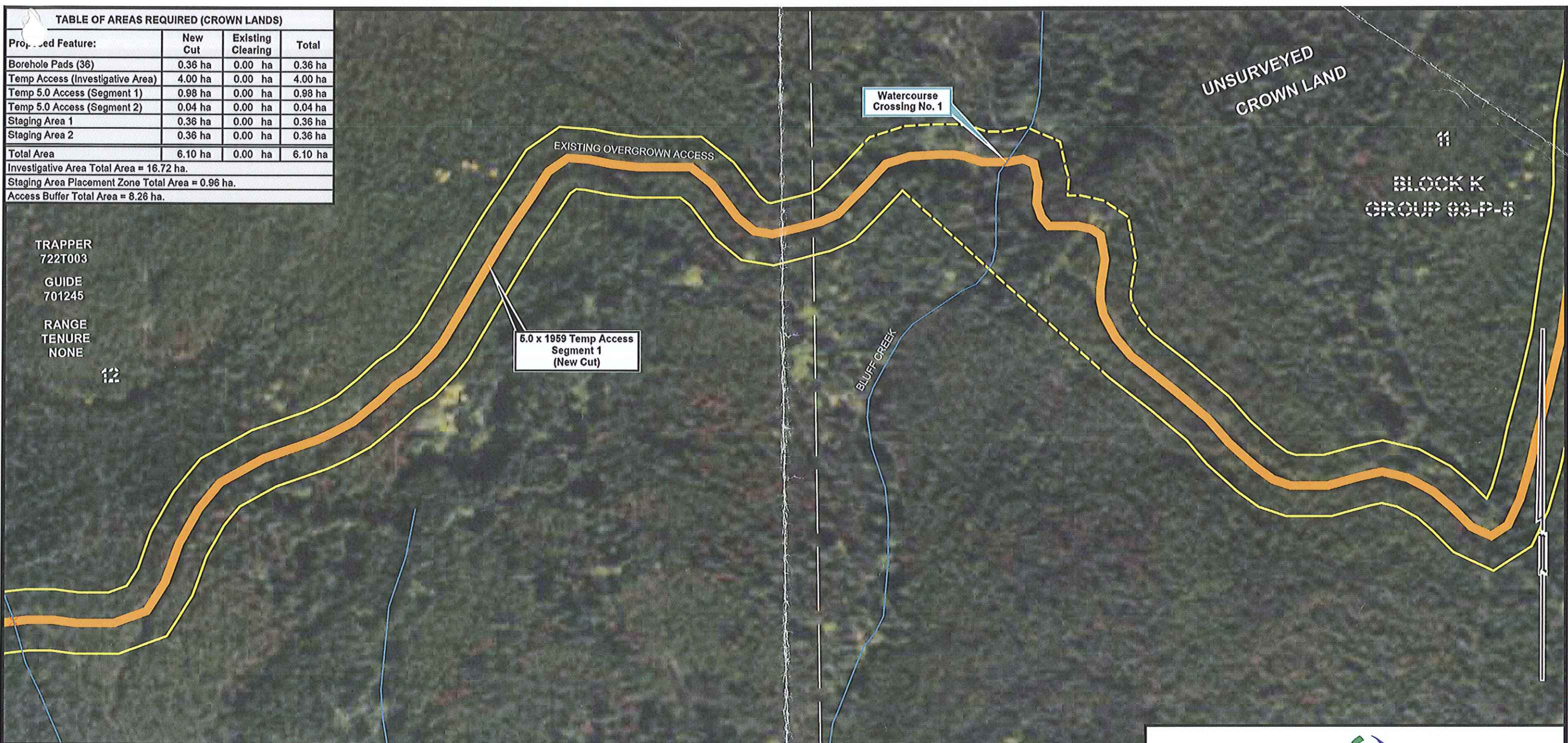
TABLE OF AREAS REQUIRED (CROWN LANDS)			
Proposed Feature:	New Cut	Existing Clearing	Total
Borehole Pads (36)	0.36 ha	0.00 ha	0.36 ha
Temp Access (Investigative Area)	4.00 ha	0.00 ha	4.00 ha
Temp 5.0 Access (Segment 1)	0.98 ha	0.00 ha	0.98 ha
Temp 5.0 Access (Segment 2)	0.04 ha	0.00 ha	0.04 ha
Staging Area 1	0.36 ha	0.00 ha	0.36 ha
Staging Area 2	0.36 ha	0.00 ha	0.36 ha
Total Area	6.10 ha	0.00 ha	6.10 ha
Investigative Area Total Area = 16.72 ha.			
Staging Area Placement Zone Total Area = 0.96 ha.			
Access Buffer Total Area = 8.26 ha.			

TRAPPER
722T003

GUIDE
701245

RANGE
TENURE
NONE

12



LEGEND:

— PNG Grid Boundary	Variable Width Access Buffer
5.0 Access	20.0 Access Buffer

NOTES: - The proposed project is not within the Agricultural Land Reserve (ALR). - Project to be flagged at time of construction. - UTM Coordinates shown are NAD83 Zone 10 N. - The proposed project is within the South OGC Zone - Distances shown are in metres and decimals thereof.		MIDWEST SURVEYS LAND SURVEYING LTD. 11003 Alaska Road Fort St. John, BC V1J 6P3 Tel: 250-785-3902 IB-0015-12
EPASS # 10043876	BCGS: 93P.042	
REVISION	DESCRIPTION	
2	Added Water Crossings on Access, Nov 28, 2013	
SCALE 1:2,500 METRES		

Caribou Range: None
Coal: 417050
Community Forest: None
Guide / Outfitter: 701245
Mineral Reserve: 328778
Range Tenure: None
Trapper: 722T003
Tree Farm License: TFL48
Ungulate Winter Ranges: None
Wildlife Habitat Area: None
Wildlife Tree Retention Area: Yes
Wood Lot: None

Watercourse Crossings		
Crossing No.	Northing	Easting
1	6143360	678345
2	6143059	677690

COASTAL GASLINK PIPELINE LTD.

SKETCH PLAN

GEOTECHNICAL INVESTIGATION PROGRAM

PROPOSED SUKUNKA FALLS COMPRESSOR STATION

WITHIN

UNITS 11, 12 & 13, Block K, Group 93-P-5

PEACE RIVER DISTRICT

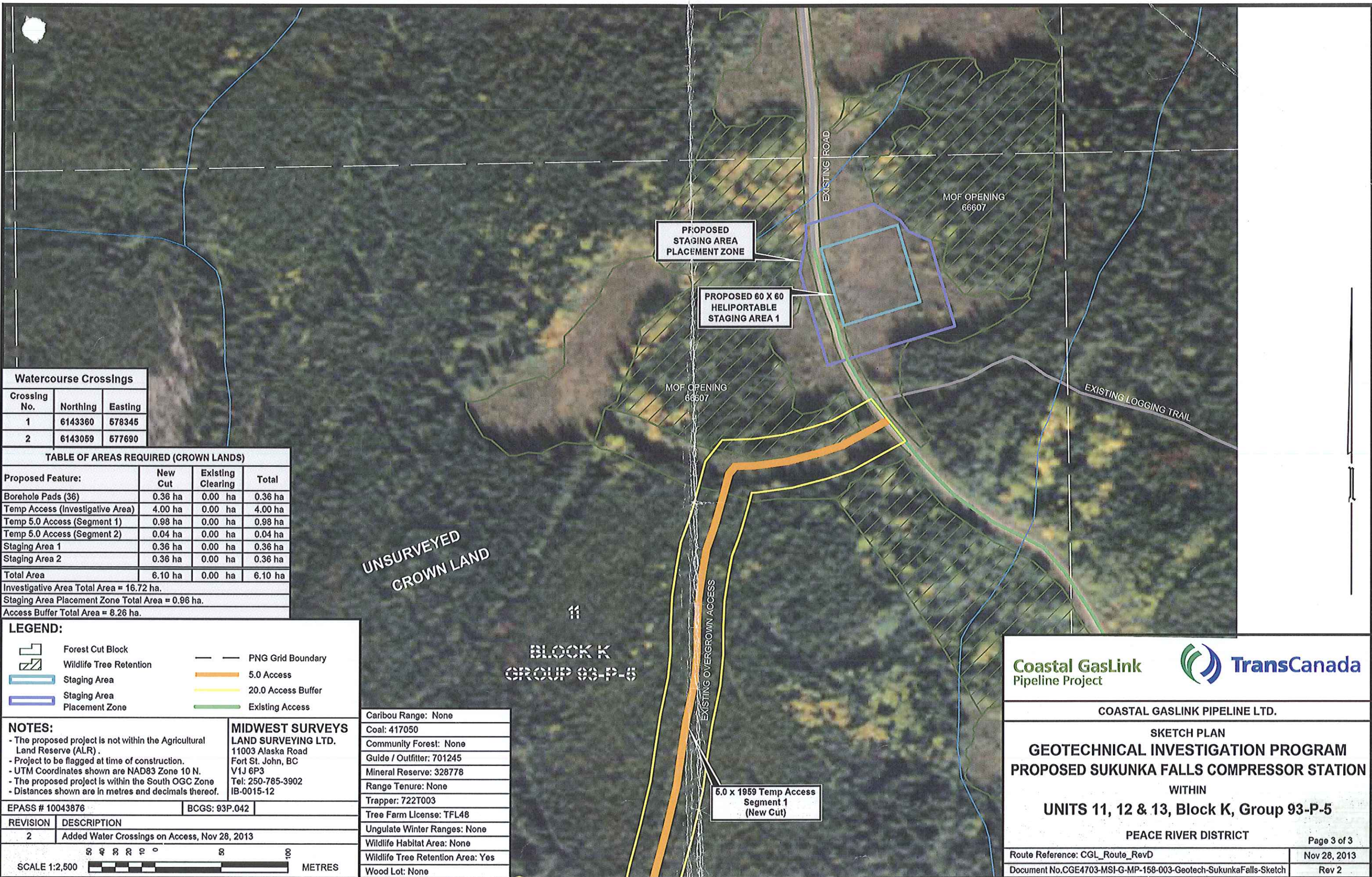
Page 2 of 3

Route Reference: CGL_Route_RevD

Document No. CGE4703-MSI-G-MP-158-002-Geotech-Sukunka Falls-Sketch

Nov 28, 2013

Rev 2



Watercourse Crossings		
Crossing No.	Northing	Easting
1	6143360	578345
2	6143059	577690

TABLE OF AREAS REQUIRED (CROWN LANDS)			
Proposed Feature:	New Cut	Existing Clearing	Total
Borehole Pads (36)	0.36 ha	0.00 ha	0.36 ha
Temp Access (Investigative Area)	4.00 ha	0.00 ha	4.00 ha
Temp 5.0 Access (Segment 1)	0.98 ha	0.00 ha	0.98 ha
Temp 5.0 Access (Segment 2)	0.04 ha	0.00 ha	0.04 ha
Staging Area 1	0.36 ha	0.00 ha	0.36 ha
Staging Area 2	0.36 ha	0.00 ha	0.36 ha
Total Area	6.10 ha	0.00 ha	6.10 ha
Investigative Area Total Area = 16.72 ha.			
Staging Area Placement Zone Total Area = 0.96 ha.			
Access Buffer Total Area = 8.26 ha.			

LEGEND:

	Forest Cut Block		PNG Grid Boundary
	Wildlife Tree Retention		5.0 Access
	Staging Area		20.0 Access Buffer
	Staging Area Placement Zone		Existing Access

NOTES:

- The proposed project is not within the Agricultural Land Reserve (ALR).
- Project to be flagged at time of construction.
- UTM Coordinates shown are NAD83 Zone 10 N.
- The proposed project is within the South OGC Zone
- Distances shown are in metres and decimals thereof.

MIDWEST SURVEYS LAND SURVEYING LTD.
11003 Alaska Road
Fort St. John, BC
V1J 6P3
Tel: 250-785-3902
IB-0015-12

EPASS # 10043876	BCGS: 93P.042
REVISION	DESCRIPTION
2	Added Water Crossings on Access, Nov 28, 2013

SCALE 1:2,500 METRES

Caribou Range: None
Coal: 417050
Community Forest: None
Guide / Outfitter: 701245
Mineral Reserve: 328778
Range Tenure: None
Trapper: 722T003
Tree Farm License: TFL48
Ungulate Winter Ranges: None
Wildlife Habitat Area: None
Wildlife Tree Retention Area: Yes
Wood Lot: None

COASTAL GASLINK PIPELINE LTD.

SKETCH PLAN

GEOTECHNICAL INVESTIGATION PROGRAM

PROPOSED SUKUNKA FALLS COMPRESSOR STATION

WITHIN

UNITS 11, 12 & 13, Block K, Group 93-P-5

PEACE RIVER DISTRICT

Route Reference: CGL_Route_RevD	Nov 28, 2013
Document No. CGE4703-MSI-G-MP-158-003-Geotech-SukunkaFalls-Sketch	Rev 2

Page 3 of 3

9639067