The EAO's Analysis of a Substantially Started Determination Request



Pursuant to Section 31 of the *Environmental Assessment Act*, S.B.C. 2018, c.51



1.0 INTRODUCTION

The Environmental Assessment Office's (EAO) Analysis of a Substantially Started Determination Request (this Report) provides information to support the Minister of Environment and Parks (or her delegate)'s determination as to whether the Prince Rupert Gas Transmission Project (PRGT or the Project), owned by the Holder (Prince Rupert Gas Transmission Ltd. [PRGT Ltd.]) has been substantially started, pursuant to Section 31 of the *Environmental Assessment Act*, 2018 (the Act). On November 19, 2024, PRGT Ltd. wrote to the EAO requesting a substantially started determination. The submission included a report titled <u>Substantially Started Determination Application: Prince Rupert Gas Transmission Project</u> (the Request), which outlines the status of the work completed by PRGT Ltd. In addition, on December 19, 2024, PRGT Ltd. submitted supplemental information to support the substantially started determination (the December 19 Supplement), and on January 27, 2025, PRGT Ltd. responded to an information request by Gitga'at First Nation (the January 27 Supplement) that provided additional information regarding access roads, bridges and permits required for the Project. Further information regarding the January 27 Supplement is provided in <u>section 4.1.5.1</u>.

PRGT is a proposed natural gas transmission pipeline that would run across northern British Columbia (B.C.). On November 25, 2014, the Minister of Environment and the Minister of Natural Gas Development issued Environmental Assessment Certificate #E14-06 (the Certificate), including the Certified Project Description (CPD), to PRGT Ltd. with the requirement to substantially start the Project by November 24, 2019. On April 25, 2019, a five-year extension was granted to extend the substantial start deadline to November 25, 2024.

PRGT consists of both onshore and offshore pipelines and the CPD includes alternative routes in several portions of the pipeline to allow flexibility as field studies occur and Project engineering progresses. The Certificate authorizes PRGT Ltd. to construct a pipeline that originates near Hudson's Hope, B.C. and terminates at the formerly certified Pacific NorthWest LNG facility on Lelu Island, near Prince Rupert, B.C. The CPD includes up to 780 kilometres (km) of 1,219-millimetre diameter (NPS 48) land-based pipeline and up to 120 km of twin 914-millimetre diameter (NPS 36) marine-based pipeline. The total length of the pipeline will depend on the final route design, but the pipeline could reach up to 900 km in length. The CPD specifies what physical elements and activities were assessed and are authorized for PRGT. PRGT Ltd. cannot construct components or conduct activities that are not authorized by the CPD; however, the CPD does not require all authorized components to be constructed or all authorized activities to be conducted. Any changes in Project design that exceed or fall outside the project set out in the CPD require an amendment to the Certificate.

PRGT Ltd. has received five amendments to the Certificate to date, and there are currently two more proposed amendments being reviewed by the EAO. The Eastern Route Alternative Amendment (the Eastern Amendment) proposes an approximately 172 km alternate route reducing the total route by approximately 130 km, moving the pipeline origin to a location approximately 37 km west of Chetwynd B.C. and following the Highway 97 corridor before rejoining the certified pipeline route approximately 50 km southwest of Mackenzie B.C. PRGT Ltd. has also proposed the Marine Route Alternative Amendment (the Marine Amendment), which would authorize an alternative route for the marine portion of the pipeline to terminate at the proposed Ksi Lisims LNG project on Pearse Island, approximately 15 km west of the Nisga'a Village of Gingolx. The Ksi Lisims LNG project is currently undergoing an environmental assessment. The current certified pipeline route and both proposed amendments are depicted in Figure 1.



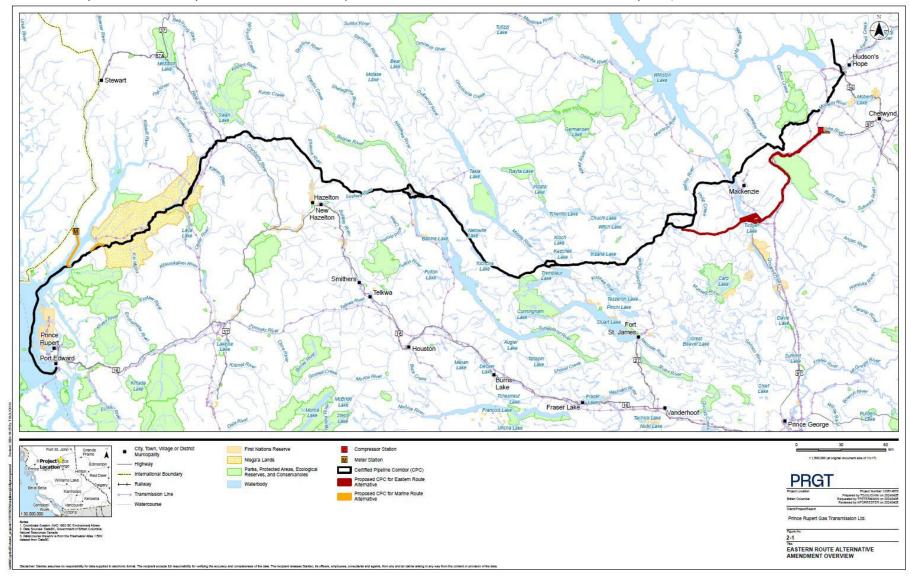


Figure 1: Map of certified pipeline route and proposed Eastern and Marine Amendment routes

2.0 GENERAL CONSIDERATIONS FOR SUBSTANTIALLY STARTED DETERMINATIONS

Under Section 31 of the Act, the Holder must have substantially started PRGT by the deadline specified in the Certificate, in the reasonable opinion of the Minister of Environment and Parks (or, if delegated the EAO's Chief Executive Assessment Officer), or the Certificate will have expired on November 25, 2024. If the project has been substantially started by the specified deadline, the Certificate remains in effect for the life of the project, subject only to suspension or cancellation for the reasons listed under Section 56 of the Act. PRGT was certified under the Environmental Assessment Act, 2002, (the 2002 Act) which stipulated that an Environmental Assessment Certificate (EAC) must specify a deadline, at least three years and not more than five years after the issue date of the EAC, by which time the Holder must have substantially started the project. The 2002 Act allowed Holders to apply for one five-year extension to this deadline, giving the Holders of projects certified under the 2002 Act a maximum of ten years to have substantially started the project.

The substantial start requirement reduces the risk that projects remain undeveloped for a long period of time after receiving an EAC. The requirement that a project be substantially started within a certain time balances the economic interest in developing projects with the need to protect the environment by seeking to ensure that the assessment that forms the basis of the Ministers' decision to issue a an EAC, and the Certificate itself, remain appropriately current, as set out in *Glacier Resorts Ltd. v. British Columbia* (Minister of Environment), 2019 BCCA 289.

The term "substantially started" is not defined in the Act, but the courts have provided guidance on its meaning. The term does not equate to a project being considered substantially constructed. Ultimately the determination is made by the decision maker on a case-by-case basis by considering all relevant facts related to the project, including consideration of information, evidence and views submitted as part of the process, EAO policy, and relevant court decisions. Case law directs the decision maker to focus on what has taken place physically, although there is latitude to consider other factors, along with physical works. The B.C. Supreme Court decision in *Taku River Tlingit First Nation v. British Columbia* (Minister of Environment), 2014 BCSC 1278, stated:

- Based on the definition of "project" in the Act, the substantial start determination should address "primarily physical activities affecting the land environmentally, as contrasted with bureaucratic activities, for example, which do not.";
- "The decision-maker should focus less on the permits which have been granted and the money expended, and more on what has taken place physically at the site.";
- "Temporary structures at the site, if they will soon be removed followed by remediation, are less important to consider than structures which will be in place for the duration of the project.";
- To have been substantially started, the project needs to be started "in its essentials in a real and tangible way."; and
- To be considered as part of the substantial start determination, activity must have occurred after the EAC was issued and before the expiry date in the EAC.

Overall, the EAO considered the following questions in its analysis for a substantial start determination:

- What time, effort, and resources have been invested to physically develop one or more main project elements?
- How have the activities undertaken to date contributed to the development of the overall project? For example, are the activities in relation to a significant or important step, or are they ancillary, secondary, or temporary?
- Is the activity or component identified in the CPD as part of the project?

¹ The Minister's power to formulate the opinion referred to in Sections 31(1), 31(6) and 31(7) of the Act have been delegated to the Chief Executive Assessment Officer under Section 72 of the Act.



Did the activity occur after the Certificate was issued and before the deadline specified?

This Report focuses primarily on the components of PRGT that have been fully or partially constructed prior to November 25, 2024, or observed during previous inspections undertaken by the EAO Compliance and Enforcement Branch (CEB). On November 26 and November 27, 2024, EAO CEB staff assessed construction activities conducted in the PRGT footprint to identify works completed, to support the Minister's determination under Section 31 of the Act. The field evaluation was performed against the components included in the CPD of the Certificate. Findings from this inspection have been described in the EAO CEB's Substantial Start Field Evaluation Report (Appendix B) and are discussed in this Report.

Additionally, the Holder's Request included information regarding permits and authorizations PRGT Ltd. has received, and expenditures to advance the Project, as well information pertaining to the proposed Eastern and Marine Amendments, providing more context for the development of the Project. This Report summarizes the information provided in the Request alongside EAO CEB staff observations and photographs from their field evaluation and additional information provided by permitting agencies, First Nations and other organizations and individuals who wrote to the EAO regarding the substantial start determination.

3.0 ENGAGEMENT

3.1. First Nations Engagement

3.1.1. PRGT Ltd.-Led Engagement

PRGT is co-owned by Nisga'a Nation, who have an equal equity stake in the Project. In the Request, PRGT Ltd. stated that as an Indigenous co-owned company, it prioritizes a strong, positive relationship with First Nations along the pipeline route and has been making meaningful efforts to strengthen these relationships by bolstering engagement with other First Nations along the route. PRGT Ltd. reported that engagement with First Nations along the pipeline route began prior to the environmental assessment process, beginning in January 2013. In the Request, PRGT Ltd. stated that 15 out of 20 Project Agreements have been signed between First Nations PRGT Ltd., with the remaining five Project Agreements set to enter into a negotiation phase. Section 4.2.1 contains more information on how the Project will support First Nations' economic interests.

PRGT Ltd. indicated that it had conducted significant and substantive engagement with First Nations over the past 12 years. In the Request, PRGT Ltd. stated that from 2012 to 2023, it conducted more than 20,000 engagements (for example, emails, calls, meetings) and over 1,100 direct meetings with 20 First Nations along the pipeline corridor. PRGT Ltd. stated that their engagement with First Nations has helped to inform route amendments, approach(es) to Project Agreements, equity offers in the Project, environmental regulator considerations; has led to PRGT Ltd. providing new and updated information to communities; and aided in the understanding and addressing of concerns raised by members of First Nations along the pipeline corridor. PRGT Ltd. provided a notification to First Nations related to PRGT's commencement of construction in February 2024, and later, shared a draft of the Request with First Nations in October 2024.

3.1.2. EAO-Led Engagement

As part of the substantial start determination process, the EAO consults with First Nations to request any information relevant to the consideration and seek their views with regard to whether the Project has substantially started. On November 22, 2024, the EAO shared the Request with 18 First Nations and 13 Gitxsan Wilps with territory overlapping the pipeline route and invited them to provide any relevant information as to whether the Project is substantially started to the EAO for consideration by January 15, 2025. The EAO also notified an additional six First Nations and 16 Gitxsan Wilps of the Request whose territory did not overlap the pipeline route but had either been consulted during the environmental assessment or were located within 30 km of the pipeline route. On March 11, 2025, the EAO shared a draft version of the



Report with not only those whose territories overlap the pipeline route, but also others who responded regarding the substantial start determination. Overall, the EAO consulted 53 Indigenous rights asserting groups regarding the substantial start decision.

The responses from the overlapping groups, and others who responded, will be provided to the decision maker, and are summarized in the following sections with respect to their agreement or disagreement that the Project has substantially started.

3.1.2.1. First Nations

Table 1: First Nations Response Summary

First Nations contacted to provide evidence regarding the substantial start determination		
No response received	 Halfway River First Nation; West Moberly First Nations; Saulteau First Nation; McLeod Lake Indian Band; Doig River First Nation; Nak'azdli Band; Takla Lake First Nation; Tl'azt'en Nation; Lake Babine First Nation; Yekooche First Nation; Lax Kw'alaams Nation; Metlakatla; and Binche Whut'en. 	
Response received – Agree Response received – Do not oppose (pending the outcome of the Marine Amendment decision)	 Nisga'a Nation Kitselas First Nation 	
Response received – Did not specify (other interests shared)	 Tsetsaut Skii km Lax Ha Gitxaała Territorial Management Agency (on behalf of Gitxaała Nation) 	
Response received – Disagree	Gitanyow Hereditary Chiefs; andKitsumkalum First Nation.	

The First Nations who were notified of the substantial determination process included:

- Horse Lake First Nation;
- Gitga'at First Nation this Nation requested further information from PRGT but did not share their opinion regarding substantial start;
- Blueberry River First Nation;
- Tsay Keh Dene First Nation;



- Tsetsaut Skii Km Lax Ha this Nation shared their opinion regarding substantive start; and
- Office of the Wet'suwet'en.

3.1.2.2. Gitxsan Wilps

Table 2: Gitxsan Wilps response summary

Gitxsan Wilps contacted to provide evidence regarding the substantial start determination		
No response received	 Delgamuukw (Sax Geen; Xsu Willi Wakw) Wii Mugulsxw (Sgan Snaat) Mauus (Gwiss Xsagan Gaxda; Xsa Gay Laaxan) Wosimlaxha (Dam Lax Andatw) 	
Response received – Disagree	Luutkudziiwus (Madii Lii) (received from Chief Charlie Wright) ,	
Response received – Did not specify (comments provided additional information)	Gitxsan Development Corporation - on behalf of the Wilps listed below: Geel (Luu Andilgan); Gitludahl (Naa Dax Deet); Guutkunuxw (Lax Xsin Djihl); Gwii Yeehl (Xsi Git Gat Gaitin; Lip Aheetxwit); Gyetm Galdoo (An Djam Lan); Kliiyeem Lax Ha (Xsan Seegit; Tsihl Hlii Din); Luutkudziiwus (Madii Lii) Gordon Sebastian; Wii Eelast (Waulp; Giist); and Yagosip (Max Hla Gandit; An Guuxs Di Gehlx).	

The Gitxsan Wilps who were notified of the substantial determination process included:

- Antgilibix (Xsu Wii Masxwit; Xsi Wis An Skit);
- Djogaslee (Sagat; Xsu Gwil Gwalgit);
- Gaxsbgabaxs (Gasa Lax Loobit);
- Gwis Gyen (Luu Skaiyansit);
- Haiwaas (Djil Djila);
- Hanamuxw (Tax Gwa Ansx);
- Kyulogyet (Xsagan Gaxda);
- Luus (Xsi Duutswit);
- Miluulak (Xsi Adeea; Wii Tax);



- Nii Kyap (Xsugwin Liginsxw);
- Nikate'en (Dam Gan Gyuuxs; Lax Lix Hetwit);
- Sakum Higuukxw;
- Spookw (Stekyawdenhl);
- Wii Gyet (Xsi Luu Skayanst; Wii Gyet; Miinhl Gwogood; Baskyatsinhlikit; Xsi Maxhla Saa Giiblax); and
- xGwoimtxw (Tsuwinhl Geets).

The Gitxsan Wilps who were not notified of the substantial determination process but requested consultation:

• Wii K'aax (An Gil Galanos; Miin Anhl Gii; Xsu Wii Ax) - this Wilp shared their opinion regarding the substantial start.

3.1.2.3. Summary of First Nations' Information Received

The EAO received letters and other correspondence from some First Nations with concerns regarding the substantial start decision. The key concerns have been thematically summarized in Table 3, below:

Table 3: First Nation submissions in support of the Project not being substantially started

Overview of information provided to the EAO by First Nations

Construction work is insufficient relative to the size of the Project

Some First Nations highlighted that construction has been conducted solely on Nisga'a Lands (section 5B), after the BC Energy Regulator (BCER) amended the PRGT permit to split section 5 into 5A and 5B in April 2024. Section 5B comprises roughly 12% of the pipeline route and some First Nations have shared concerns that construction has only been completed along approximately 5% of the route.

Construction focused on clearing and temporary structures

Construction focused on clearing activities, road upgrades and workforce accommodations on one section of the current EAC-approved pipeline route. These are temporary and/or ancillary and often reversible and therefore, some First Nations shared the view that this work does not represent a permanent start that will endure over the life of the Project.

Uncertain future due to lack of confirmed terminus

Some First Nations expressed the view that the status of the Project is unclear in regard to its route and terminus. Under the Certificate, PRGT's current approved Project terminus is a nonexistent facility at Lelu Island and the proposed new Ksi Lisims LNG facility has yet to be approved.

Some First Nations expressed concern that if the Marine Amendment were approved, PRGT Ltd. would still maintain the option to build to Lelu Island/Prince Rupert despite there being no terminus planned for that location. This creates uncertainty as to the future of the Project, which First Nations felt was relevant to the substantial start decision.

Permitting concerns

Some First Nations shared concerns that construction on the project will continue to be delayed as PRGT Ltd. cannot begin construction on much of the pipeline route until PRGT Ltd. fulfills BCER permit conditions related to cumulative effects assessments. Additionally, some BCER permits are undergoing amendments in order to align with the in-progress PRGT EAC amendments.



Non-physical work does not count towards a substantial start determination

Some First Nations shared the view that PRGT Ltd.'s Request focuses on non-physical factors rather than physical construction activities, including financial expenditures, Project benefits and First Nations engagement. It was stated that these factors are of secondary relevance to the question of whether sufficient physical construction activities have been carried out to justify a positive substantial start determination.

Pre-EAC activities should not be taken into consideration

Some First Nations noted that the Request relies on costs and activities which pre-date the EAC.

External factors cannot be used to justify delays

Delays outside the Holder's control are not relevant to the substantial start determination.

The Gitanyow Hereditary Chiefs (Gitanyow) stated that the PRGT substantial start determination poses significant impacts to Gitanyow rights and warrants deep engagement. They asked for clarity on the steps proposed by the EAO for engaging First Nations in the substantial start determination and sought more meaningful engagement than consideration of their written submission. Gitanyow also expressed disagreement with how PRGT Ltd. characterized its engagement with Gitanyow in the draft Request. Gitanyow shared the view that PRGT Ltd misrepresented Gitanyow's support for the Project in the draft Request and was not responsive to Gitanyow's requests to make changes to the Request in response to these concerns. Gitanyow also shared the view that the lack of a final investment decision on the proposed customer facility, Ksi Lisims LNG, indicates a lack of financial and practical readiness to proceed with the Project. Gitanyow also set out its view that PRGT Ltd.'s approach to construction is inconsistent with the underlying purposes of the substantial start requirement. Furthermore, Gitanyow noted that current works to advance the Project do not meet any of the three thresholds of "Material Commencement of Construction" [in relation to payment] that were established in the 2014/2015 Prince Rupert Natural Gas Pipeline Benefit Agreements signed between Gitanyow and the Province.

Tsetsaut Skii km Lax Ha stated they had not been consulted by PRGT Ltd. They requested further consultation and participation in PRGT in the future.

Gitxsan Wilp Luutkudziiwus (Charlie Wright) wrote to the EAO expressing the view that PRGT is not substantially started as construction has only occurred in one section of the proposed route to date and PRGT Ltd. is not yet able to initiate construction along a large portion of the pipeline route due to in-progress EAC amendments, unmet conditions on BCER permits and the lack of a confirmed terminus. Wilp Luutkudziiwus also conveyed concerns that the Request relies on the construction of ancillary or temporary works and on activities such as expenditures and permits rather than physical construction.

The Gitxsan Development Corporation responded on behalf of Wilps Geel, Gitludahl, Guutkunuxw, Gwii Yeehl, Gyetm Galdoo, Kliiyeem Lax Ha, Luutkudziiwus (Chief Gordon Sebastian), Wii Eelast and Yagosip. They confirmed several pieces of information from PRGT Ltd.'s Request and stated that the Project provides opportunities for the Gitxsan people but must be built with respect for their laxyip (territory). In addition, they raised concerns regarding the potential impacts of the Project on fish and wildlife.

The EAO also heard from the Gitxsan Wilp 'Wii K'aax, which was not initially notified as their territory does not overlap with the Project route, and whose territory is greater than 30 km from the pipeline route. Wilp 'Wii K'aax expressed their view that they should have been notified of the substantial start determination by the EAO because, in their view, there is a duty to consult. The EAO responded to Gitxsan Wilp 'Wii K'aax and indicated that while their territory is more than 30 km from the pipeline route, any information they wish to provide relevant to the decision can be incorporated into the EAO's Report. In response, Wilp 'Wii K'aax requested to be consulted with prior to the substantial start decision, and stated their position as being that the Project has not substantially started based on the amount of physical progress



achieved, the changes in Project design since the EAC was issued and uncertainty regarding the planned terminus at Ksi Lisims LNG.

The Gitxaała Territorial Management Agency, on behalf of Gitxaała Nation (Gitxaała), stated that the current physical works undertaken by PRGT Ltd. are limited in relation to the scope of the Project and primarily represent temporary works rather than a start on the permanent essential components of the Project. The limited construction was only made possible after the BCER amended the PRGT permit to split section 5 into 5A and 5B in April 2024 and changed the conditions that needed to be met, waiving the requirement for pre-construction cumulative effects assessment, First Nation engagement, and mitigation plans. Gitxaała has significant concerns about PRGT's option to construct the pipeline to Lelu Island remaining in place and lack of certainty regarding the Marine Amendment and the Ksi Lisims LNG environmental assessment. Gitxaała highlighted that currently Project impacts are unclear given that the Project that has no confirmed terminus.

Kitselas stated they do not oppose a decision that determines the Project to be substantially started. However, this lack of opposition is subject to the proposed marine route to the Ksi Lisims Project being constructed, and the original route to Lelu Island not being utilized. Kitselas shared their concern that given the volatility of the oil and gas market, there is a possibility that the proposed Ksi Lisims LNG facility would not be constructed and that PRGT Ltd. would remain authorized to conduct activities along the original Project route, which intersects a far greater portion of Kitselas Traditional Territory and directly impacts a vulnerable critical nursery habitat for Skeena River salmon.

Nisga'a Nation expressed the view that the Project has substantially started.

The EAO responded to the correspondence it received from First Nations and shared a draft of this Report with the 18 First Nations, and 13 Gitxsan Wilps, in coordination with the Gitxsan Development Corporation, as well as with the Gitxsan Wilp Luutkudziiwus (Charlie Wright) and Gitxsan Wilp 'Wii K'aax for review.

Submissions provided by First Nations regarding whether the project has substantially started are attached to this report in order for them to be considered by the decision maker.

3.2. Public Engagement

Non-Government Organizations and members of the public wrote to the EAO to provide additional information or convey their views regarding the substantial start determination for PRGT.

3.2.1. Non-Government Organizations

Ecojustice, a non-profit environmental law organization submitted a <u>letter</u> to the EAO on December 18, 2024, regarding the substantial start determination. Ecojustice noted that the letter was written on behalf of the Skeena Watershed Conservation Coalition, Kispiox Valley Community Centre Association and the Kispiox Band, stating their opinion that PRGT has not substantially started.² The view of these parties is that minimal construction took place to advance PRGT between August and November of 2024 and the construction completed is not sufficient to support a substantial start determination. Ecojustice raised concerns regarding construction completed prior to November 25, 2024 (work-to-date), watercourse crossings, PRGT Ltd.'s expenditures, cumulative effects assessments required by BCER permits, construction completed in pipeline section 5B and the proposed amendments (Eastern and Marine) currently undergoing assessment by the EAO.



² The Gitxsan Nation operates under a Hereditary Chief structure in which each Hereditary Chief represents the members of a discrete portion (a Wilp or House) of the larger Gitxsan traditional territorial assertion. Kispiox does not assert a traditional territory and defers decision making on Provincial Land and Resource decisions to the appropriate Hereditary Chief(s) for the affected Wilp/House.

Gitksan Watershed Authorities, a non-profit society, submitted a <u>letter</u> to the Minister of Environment and Parks and the EAO's Chief Executive Assessment Officer on March 6, 2025, dated February 19, 2025. The letter requested that the EAO conduct a public comment period, not allow the proponent to continue construction without a determination, and for the Minister of Environment and Parks to make the substantial start determination, rather than delegating it. The letter cited various concerns regarding matters such as climate change, BCER permitting, potential for human rights violations, impacts to salmon, declining liquefied natural gas (LNG) demand, the B.C. government's commitment to implementing the United Nations Declaration on the Rights of Indigenous Peoples, the lack of an approved terminus or approved corresponding amendment and length of time since the original environmental assessment.

3.2.2. Public Correspondence

Between July and December 2024, the EAO received approximately 32 letters or emails from members of the public either directly or indirectly via the Minister of Environment and Parks' Office. In addition, two campaigns were run by Dogwood B.C. with emails sent to the Minister and/or the EAO. The majority of the public expressed opposition to a conclusion that the Project had substantially started, with opinions on the topics of cumulative effects, climate change, greenhouse gas emissions, effects on ecosystems, the lack of an approved terminus, the pending outcomes of the Marine and Eastern Amendments currently undergoing assessment, the length of time since the original environmental assessment, and asking for the Minister of Environment and Parks to make the determination.

4.0 Analysis to Inform the Substantially Started Determination

4.1. Review of Physical Works

4.1.1. Overview

The CPD for PRGT divided the Project components into four main areas of infrastructure: Pipelines, Compressor Stations, Meter Stations, and Ancillary Facilities. Sections 4.1.2 to 4.1.5 of this Report provide a development status summary of each of the four main Project areas described in the CPD. Further descriptions of the works and additional photographs are available in the Request and the EAO CEB Field Evaluation Report (Appendix B).

Typically, pipeline construction follows a series of steps which starts with clearing the right-of-way (ROW), removing topsoil and grading to prepare the ground for construction crews to work. After this has been completed sections of the pipe are brought to the site to be welded together, a trench is excavated to receive the pipe, and the pipe is installed in the trench, which is then refilled. Once the construction concludes, the ROW is revegetated.

In reviewing the physical works, the EAO has presented, based on the information collected, descriptions of works undertaken in respect of the CPD components.

All the physical works that have been undertaken in respect of the Project have occurred after the date of the Certificate issuance and prior to the potential Certificate expiry date. In advancing these Project works, PRGT Ltd. has stated that between August 24, 2024, to November 19, 2024, over 110,700 person-hours for more than 368 construction personnel have been invested by construction crews to complete PRGT Ltd.'s Year 1 Construction Program, with construction estimated to be completed in 2029. The Year 1 work has been completed by the primary contractor and five major subcontractors.

Under the BCER primary pipeline and facility permits, the pipeline is divided into sections 1, 2, 3, 4, 5A, 5B, 6 and 7, and the three compressor stations authorized by the Certificate. All planned construction for the Year 1 Construction Program took place entirely within Nisga'a Lands under the BCER permit for pipeline section 5B.

EAO CEB staff conducted a field assessment on Nisga'a Lands in BCER permits for sections 5A and 5B of the PRGT footprint. No activity took place on section 5A. The findings of EAO CEB staff are discussed in the sections below.



In the Request, PRGT Ltd. stated that the work conducted to clear 42 km of the pipeline ROW exceeds the length of a new pipeline project that would trigger the threshold to be considered a reviewable project requiring an environmental assessment under the B.C. Reviewable Projects Regulation, 2019. PRGT Ltd. argued that this work to clear a portion of the pipeline ROW constituted a project in and of itself, and therefore this should be considered towards the substantial start determination. For pipelines with the diameter of PRGT's (greater than 323.9 millimetres), a proposed pipeline greater than 40 km in length, exceeds the Reviewable Projects Regulation threshold and triggers an environmental assessment.

The EAO acknowledges the 42 km of clearing conducted by PRGT Ltd. to advance PRGT is relevant to the substantial start assessment; however, the substantial start determination is not an assessment of whether the physical works are equivalent to a reviewable project, but rather, whether the work constitutes a substantial start in regard to the specific project in question.

4.1.2. Pipelines

The activities needed to construct a pipeline include clearing vegetation and trees to prepare the pipeline ROW, followed by grubbing, grading and digging a trench to receive the pipe. Once the pipe is installed, the trench is backfilled and the construction ROW is allowed to revegetate to a certain width, which is maintained as the permanent pipeline ROW.

PRGT Ltd. reported that it has cleared approximately 42 km of the pipeline ROW in two distinct sections between kilometre post (KP) 652+750 to 727+259, spanning roughly 75 km. This information was confirmed by EAO CEB who observed cleared areas adjacent to existing access roads and transmission lines, as well as previously undisturbed areas. The 42 km of clearing for the pipeline ROW includes timber bunching, skidding and processing; however, it does not include grubbing, grading or trenching.

The CPD authorized a land-based pipeline from Hudson's Hope to Nasoga Gulf of up to 780 km in length and two marine pipelines, up to 120 km long, from Nasoga Gulf to Lelu Island.

During the EAO CEB evaluation, a Project representative reported the average cleared width of the ROW was 20 to 25 metres, and that additional clearing would take place where required as supported by geotechnical surveys. This was corroborated by measurements taken by EAO CEB staff at eight locations along the ROW.

In addition to the pipeline ROW, the CPD includes several components related to pipeline construction and operations (Appendix A). No physical works on these components have been initiated. These components are associated with later stages of construction. As such, any physical development of the pipeline ROW is considered work to advance a primary and permanent component of the Project.

See Photos 01 to 14 in Appendix B for photos of the pipeline route following clearing activities being completed.

4.1.3. Compressor Stations

The CPD authorized up to eight natural gas fired compressor stations (see Appendix A for a full list of all compressor stations from the CPD and proposed Amendments) with maximum footprints ranging from 9.5 to 20 hectares (ha). Currently, no physical works have been advanced toward any of the proposed compressor stations. In the Request, PRGT Ltd. anticipated only one combination compressor and meter station, proposed under the Eastern Amendment and located near the eastern initiation of the pipeline route, may be required to support Phase 1 operations; however, under the CPD, PRGT Ltd. retains the option to build up to eight compressor stations if they determine additional stations are required.

4.1.4. Meter Stations

The CPD for PRGT included one meter station of up to 0.8 ha, located on Lelu Island, to support the delivery of natural gas to the planned Pacific NorthWest LNG Facility at Lelu Island. No works have been advanced towards this component; however, there is no longer a delivery customer on Lelu Island and the permit for this meter station has expired. The



Eastern Amendment proposes a combination compressor and meter station at the eastern initiation of the pipeline route and the Marine Amendment proposes a meter station at the proposed Ksi Lisims LNG facility.

The CPD lists several supporting components for the meter station such as access roads, personnel and instrument support buildings, valves and piping. These components are detailed in Appendix A.

4.1.5. Ancillary Facilities

4.1.5.1. Access Roads and Bridges

In the CPD, access roads that will be required for the compressor stations and meter stations are listed as permanent infrastructure. Other access infrastructure includes upgraded roads and bridges, and temporary access roads and workspace, which are considered ancillary infrastructure; however, access infrastructure is necessary to support Project construction.

PRGT Ltd. has upgraded and maintained 47 km of existing access roads in Nisga'a Lands required to access the Project ROW and Sga Sgin'ist Lodge. Activities to upgrade and maintain access roads included brushing, grubbing, grading, installing culverts, ballasting and installing signage. PRGT Ltd. performed maintenance activities on 21.3 km of existing access roads, with major road upgrades required for an additional 17 km of road, and reactivation work on 7.7 km of decommissioned roads. PRGT Ltd. also installed nine new, permanent bridges, cleared vegetation and advanced construction towards approximately 1.9 km of new access roads.

The January 27 Supplement noted that approximately 2,695 km of roads are currently planned for Project access; however, this is currently under review and does not account for newly developed or decommissioned roads, as such total net length may be shorter or longer. Out of the 2,695 km currently projected as the total net length of access roads for the entirety of the proposed pipeline, only 19 km would be considered new roads and 85 km would require major upgrades.

The January 27 Supplement also noted that there are approximately 48 new or replaced bridges for the entire pipeline planned at this time, which does not include additional bridges for any proposed new roads, or recently decommissioned roads. A total of nine permanent bridges were completed during Year 1 construction (2024). Additionally, approximately 369 stream crossings will likely require temporary bridges to facilitate Project construction. Year 1 construction did not require any temporary bridges to be constructed, as they were not required in the portion of section 5B in which the construction activities occurred.

The EAO CEB's Substantial Start Field Evaluation Report (Appendix B) recorded that a Project representative identified five Project roads and two Sga Sgin'ist Lodge (described below) access roads as "new roads" and that in some cases, this term may be used to describe an old, pre-existing spur road (short roadway branching from the main roadway) that has been brushed, widened, and improved with culverts, where required. Some of the 1.9 km of construction on new roads that were reported in the Request may consist of improvements to small, existing spur roads rather than net new construction.

See Photos 22 to 73 in Appendix B for pictures of the road and bridge construction work that has been completed.

4.1.5.2. Sga Sgin'ist Lodge

PRGT Ltd. developed workforce accommodations and on-site office facilities at Sga Sgin'ist Lodge to support 222 individuals. The Sga Sgin'ist Lodge development covers 10 ha of cleared land, including clearing, as well as grading and grubbing. The cleared land includes an area for the camp and adjacent ancillary sites for laydown and storage of materials and equipment. The camp was fully constructed and operational during pipeline construction activities. The Request reported that initial residents occupied the site on September 27, 2024, and that construction crews consistently occupied the camp until the camp demobilized for winter, which occurred at the time of the submission of the Request on November 12, 2024. As of October 11, 2024, an onsite medical facility was established at Sga Sgin'ist Lodge, with an



Advanced Care Paramedic available for Project staff. Sga Sgin'ist Lodge is one of up to 15 camps that PRGT Ltd. is authorized to build under the CPD, which includes 11 main spread camps, three compressor station camps, and one for construction of the marine portion of the pipeline.

Activities to develop Sga Sgin'ist Lodge included soil stripping, grading, and construction, which included installing office trailers, on-site tanks for potable water and wastewater, kitchen modules, and plumbing and electrical work. PRGT Ltd. also implemented environmental mitigation measures, including wildlife security measures and environmental response trailers.

Sga Sgin'ist Lodge will be in place until construction is complete and will no longer be necessary once the Project enters operations.

See Photos 15 to 16 in Appendix B for pictures of Sga Sgin'ist Lodge.

4.1.5.3. Storage Areas, Laydown Yards, and Borrow Sites

The CPD includes temporary storage areas, stockpile sites, contractor storage yards, laydown yards and borrow sites that will be required to support the construction of PRGT. The January 27 Supplement confirmed that plans and approvals for 20 ancillary storage sites across the pipeline route are in place. PRGT Ltd. used the existing, pre-Project Nass Camp area under a special use permit from the Nisga'a Lisims Government for three temporary storage areas. No physical works or additional development was performed by PRGT Ltd. at this location. Nass Camp was used as a laydown while the storage areas at Sga Sgin'ist Lodge were being developed and is no longer in use. No equipment is currently being stored at this location.

A portion of the 10 ha cleared area for Sga Sgin'ist Lodge is allocated space for a stockpile site, contractor storage yard, and laydown yard to support Project construction, which amounts to three out of the 20 storage areas noted in the January 27 Supplement. EAO CEB staff reported that no Project equipment is currently being stored at the site and that small amounts of stockpiled material and construction supplies were observed at the storage areas.

Four pre-Project borrow sites were reactivated and further developed by PRGT Ltd. to provide granular materials for road upgrades and bridge installations. EAO CEB staff reported evidence of recent blasting at one of these locations.

These sites are categorized under the CPD as ancillary Project components.

See Photos 17 to 25 in Appendix B for pictures of laydown and storage areas and borrow sites.

4.2. Expenditures

PRGT Ltd. reported that between 2013 and November 2024 it expended approximately \$584 million to advance the Project. These expenditures represent efforts to secure Project permits and contractors, fulfill regulatory and environmental commitments, develop engineering and Project planning works, and advance construction activities. In the Request, PRGT Ltd. provided a brief inventory of expense categories, with Project Management and Construction activities accounting for the largest expenditure at approximately \$336 million. Approximately \$70 million was invested during the Year 1 of Construction (August 24 to November 12, 2024). The \$336 million also includes \$13.4 million directed to the community of Terrace B.C., as reported in the December 19 Supplement and \$25.9 million towards First Nations engagement and contracting; please see section 4.2.1 below for more details. The EAO requested that PRGT Ltd. provide an updated set of Project costs that only included capital costs for comparison to the Project's total capital cost estimate.

4.2.1. First Nations-related Expenditures

In the Request, PRGT Ltd. reported the development of its Project Engagement Plan, which is set to engage and employ First Nation individuals through PRGT's construction and operations phases. PRGT Ltd. reported that between June and September 2024, \$2.2 million has been directed towards First Nations and local contractors, while over \$25.9 million has been spent towards milestone-related Project Agreement payments and \$14.5 million in capacity and technical support



funding has been provided to First Nations groups since 2013. Between 2023 and September 12, 2024, a total of 300 person-days has been completed through First Nation employment opportunities, with the majority being for Wildlife Monitors (101 person-days) and Field Staff (130 person-days). PRGT Ltd. stated that the Project Agreements commit to significant additional milestones and ongoing operating payments and comprehensive approaches to procurement, workforce, education, training, and other commitments of significance to PRGT Ltd. and First Nations along the corridor.

In the Request, PRGT Ltd. stated that it created equity ownership opportunities for any First Nation who is interested, with equity conversations expected to extend into 2025. In 2024 PRGT Ltd. conducted career fairs and youth engagement meetings to facilitate occupational interest in the Project and provide employment and procurement opportunities to First Nation groups.

4.3. Review of Permits and Other Approvals

4.3.1. EAC Amendments

PRGT Ltd. has received five amendments to the Certificate to date. These included:

- 1) Amendment #1: An addition of ancillary facilities to the CPD (for example, barge landing sites, material off-loading facilities, jetties) and an additional construction camp;
- 2) Amendment #2: A change in location of the Witter Lake compressor station and alteration of a portion of the pipeline route (Mt. Milligan Route Alternative);
- 3) Amendment #3: A second alteration of the pipeline route (Nass Camp Route Alternative);
- 4) Amendment #4: Two additional main spread construction camps and standby compressor units at each compressor station; and
- 5) Amendment #5: An expansion of the certified pipeline corridor to include the crossing of the Ksi Mat'in River.

As stated in the introduction, PRGT Ltd. submitted two additional amendment applications in 2024. Both proposed amendments are currently undergoing rigorous review by the EAO, First Nations and other agencies. The Marine Amendment was submitted on June 21, 2024, and proposes to provide PRGT Ltd. with the option to change the pipeline route terminus to end at the proposed Ksi Lisims LNG site on Pearse Island. The Eastern Amendment was submitted on August 23, 2024, and proposes to reroute the eastern portion of the pipeline to have it initiate approximately 37 km west of Chetwynd and be shortened by approximately 50 km. The Marine Amendment and Eastern Amendment are projected to be referred to the EAO's Deputy Chief Executive Assessment Officer in June and August, respectively.

4.3.2. Permitting

PRGT Ltd. reported completed work on preconstruction surveys, field programs, geotechnical investigations, drilling, and engineering studies, as well as applications for several permits and regulatory approvals for the Project. From BCER, PRGT Ltd. has received 11 primary permits (eight pipeline permits and three compressor station facility permits) and 17 ancillary activity permits (including *Water Sustainability Act* permits). Seven of the primary permits were set to expire on Nov. 25, 2024; however, PRGT Ltd. noted in the Request that it had applied for extensions to all seven which are under review by the BCER.

The Request stated that PRGT Ltd. holds an additional 34 approved federal and provincial permits under the following pieces of legislation:

- Fisheries Act (DFO);
- Ecological Reserve Act;
- Wildlife Act;



- Water Sustainability Act (BCER);
- Forest Practices Code of British Columbia Act;
- Forest Practices and Range Act;
- Heritage Conservation Act (BCER);
- Land Title Act (BCER);
- Land Act (BCER); and
- Energy Resource Activities Act (BCER).

The BCER permits for pipeline sections 1, 2, 3, 4, 5A, 6 and 7, contain conditions requiring PRGT Ltd. to submit two primary items. First, a report must be provided describing the site-specific mitigation plans to the BCER and impacted First Nations. Second, PRGT Ltd. "must submit a notice to the BCER at least six months prior to construction start for the purpose of receiving an assessment of cumulative effects of the Project, and a description all of mitigations and offsets required during and post construction to address cumulative effects and to avoid, minimize and restore impacts to the current use of land and resources for traditional purposes by an impacted First Nation." In 2022, the BCER also introduced a new condition into each of the primary BCER permits that stipulates that construction cannot be commenced until the BCER is notified who the LNG facility customer is and that a positive financial investment decision has been made on that LNG facility.

The BCER amended the permit for section 5, which covered the section of the pipeline overlapping Nisga'a Lands, to split it into sections 5A and 5B. Nisga'a Nation has agreed to accept any impacts or risks associated with pipeline construction advancing in section 5B on Nisga'a Lands without the LNG facility customer having made a final investment decision. The BCER Permit for pipeline section 1 has been suspended as it applies to the portion of the currently approved pipeline route which PRGT Ltd. has requested to amend as part of the Eastern Amendment. PRGT Ltd. is applying to amend the current section 6 and 7 BCER permits to follow the Marine Amendment proposed route should the amendment be approved. Additional information provided to the EAO by BCER is provided in Table 4 below.

Table 4: List of BCER Permit Status

PRGT Section	Permit Number OGC Legacy / AD Number	Status	Six-month Notice Condition
Pipeline section 1	9708456 / 100082204	Suspended (Eastern Amendment)	Condition Applies
Pipeline section 2	9708458 / 100082205	Permitted/Approved	Condition Applies
Pipeline section 3	9708459 / 100082373	Permitted/Approved	Condition Applies
Pipeline section 4	9708460 / 100082374	Permitted/Approved	Condition Applies
Pipeline section 5A	9708461 / 100082835	Permitted/Approved	Condition Applies
Pipeline section 5B	9708461 / 100119498	Construction started	Condition Met
Pipeline section 6	9708462 / 100082836	Permitted/Approved (Marine Amendment)	Condition Applies
Pipeline section 7	9708463 / 100082837	Permitted/Approved (Marine Amendment)	Condition Applies
Johnson Creek (Compressor)	9708510 / 100082385	Suspended	Condition Applies



PRGT Section	Permit Number OGC Legacy / AD Number	Status	Six-month Notice Condition
Middle River (Compressor)	9708511 / 100082421	Permitted/Approved	Condition Applies
Borden Lake (Compressor)	9708512 / 100082678	Permitted/Approved	Condition Applies

PRGT Ltd. has also acquired 29 Nisga'a Lisims Government permits required for Project construction in Nisga'a Lands, including road use permits and *Heritage Conservation Act* permits. Finally, PRGT Ltd. has conducted work related to compliance with EAC conditions and regulatory requirements.

5.0 CONCLUSION

The EAO's analysis has considered the EAO's <u>Substantial Start Determination Policy</u>, the information contained in PRGT Ltd.'s Request and both Supplements, the information about PRGT provided by the EAO CEB in their field evaluation, the Holder's consultation and engagement with First Nations, and the EAO's engagement with First Nations. The EAO received feedback from the public, which has been summarized in this Report; however, no additional evidence was provided.

The EAO evaluated the activities undertaken to date against the Project that was authorized by the EAC. Construction has been initiated by PRGT Ltd. on physical Project components authorized within the CPD; for a full list of components and their construction status, refer to Appendix A.

To date PRGT Ltd. has not completed construction of the permanent, primary components of PRGT, including the pipeline, compressor stations and meter station. The majority of initial construction has consisted of clearing and preparation of the pipeline ROW, which must be done before the pipe can be installed.

The EAO acknowledges that there has been additional work undertaken by PRGT Ltd. to advance PRGT, including reaching agreements with First Nations and seeking amendments to their EAC and obtaining permits.

In summary, the EAO concludes that:

- PRGT Ltd. has advanced works on construction access and ancillary facilities to support the clearing and preparation of the pipeline ROW in BCER Permit section 5B, including one camp (workforce housing for up to 222 individuals), access roads and bridges, as well as materials and equipment storage areas and borrow sites. These activities are necessary activities for advancing PRGT;
- The following remains to be completed:
 - Between one and eight compressor station(s);
 - A meter station;
 - o Up to an additional 738 km of clearing for the pipeline ROW;
 - o Trenching and laying of pipe; and
 - o Up to an additional 14 construction camps.
- The development of access and ancillary infrastructure has enabled PRGT Ltd. to advance construction on the pipeline ROW by clearing timber and vegetation from 42 km on Nisga'a Lands, of the approximately 780 km proposed land-based pipeline;
- Of the eight BCER pipeline permits, one is suspended, seven have been approved, three of which are being amended to align with the proposed Marine and Eastern Amendments, and construction has started on one section. BCER facility permits also remain valid for two compressor stations with the third currently suspended;



- PRGT Ltd. currently intends to deliver natural gas to the proposed Ksi Lisims LNG facility, jointly proposed by Nisga'a Nation, Rockies LNG Limited Partnership and Western LNG, in respect of which an EAC decision is pending;
- The reported 584 million Canadian dollars of Project spending on securing permits and contractors, fulfilling regulatory and environmental commitments, developing engineering and Project planning works, consulting and signing agreements with First Nations and advancing construction activities can be considered as evidence of PRGT Ltd.'s stated intention to advance the Project to full construction;
- PRGT Ltd. stated that the total anticipated capital cost of the Project is approximately \$10 to \$12 billion;
- PRGT Ltd. has indicated it has made tangible efforts to partner with First Nations; and
- The provincial Crown has fulfilled its statutory and constitutional obligations owed to First Nations relating to this substantial start determination.

APPENDIX A: STATUS OF DEVELOPMENT OF CERTIFIED PROJECT DESCRIPTION COMPONENTS

CPD	Status	Details
Section 1: Overview (Roads)		
The overview section of the CPD (section 1) includes "upgraded roads and bridges" and "temporary access roads" in a listing of ancillary facilities of the Project. While neither of these entries are included in the detailed ancillary features section of the CPD (section 5), permanent access roads for the compressor and meter stations are noted in the CPD sections for those Project components (sections 3 and 4).	 Works on 47 of 2,695 km of roads that would be used for Project access (1.74%) Clearance and other works on 1.9 of 19 km of "new roads" (10%) 17 of 85 km of major upgrades completed (20%). Nine permanent bridges constructed out of currently planned 48 new or replacement bridges (18.75%), OR out of temporary bridges for a total of 369 stream crossings (2.43%). 	Upgraded and maintained 47 km of access roads in Nisga'a Lands, BCER Permit section 5B, which the Request splits into three sections: Western Front (all access road upgrades in this section complete): • Maintenance activities: 11.3 km; • Reinstated decommissioned roads: 1 km; • Cleared new access road ROW: 1.3 km; Eastern Front (all access road upgrades in this section complete): • Maintenance activities: 10 km; • Reinstated decommissioned roads: 6.7 km; • Cleared new access road ROW: 600 m; Ginlulak Road: • Maintenance and upgrades: 17 km; and • Installed nine permanent bridges. The January 27 Supplement estimated that 2,695 km of roads would be used for Project access; this includes 19 km of "new" roads, and major upgrades on 85 km of roads. When Year 1 of construction was completed



CPD	Status	Details
		in November 2024, 17 km of major upgrades were completed.
Section 2: Pipeline Permits		
Land-based and marine-based natural gas pipeline extending from Hudson's Hope in northeast B.C. to Lelu Island near Prince Rupert with multiple routing options. CPD Mapbook indicates a total pipeline length of approximately 878 km, with the Land-Based pipeline reaching up to 780 km (Request notes this as 768 km). This may change depending on final route selection. Width of construction and operation ROW varies but is within the approximately 500 metre wide CPD.	 42 km of pipeline ROW cleared out of a potential land-based pipeline ROW length of 780 km. This does not include grubbing, grading, or excavating the trench for the pipe. The average cleared width for the pipeline is 20 – 25 metres. 	 Final length and route to be determined based on additional preconstruction surveys and the Eastern and Marine Amendments; 24 km of pipeline ROW cleared between pipeline KP 652+750 to 678+495; 17.7 km of pipeline ROW cleared between KP 692+271 and 727+259; and Portions of the cleared ROW width may be insufficient to allow construction to progress without additional clearing.
Project components related to pipeline construction and operations include: • Mainline valves; • Suction and discharge valves; • Communication towers; • Satellite transmitter/receivers at block valve sites and compressor stations; • In-line inspection facilities; • Cathodic protection; and • Telecommunications systems.	Not started	Associated with later stages of pipeline construction.
Section 3: Compressor Stations - Up to a maximur	n of eight natural gas fired compres	sor stations
Eastern Initiation - (20 ha) KP 0; (55.645334 N, - 122.21744E)	Not started – Currently proposed under the Eastern Amendment	Based on the original design, the Holder estimated only three of the 15 authorized compressor stations would be required for Phase 1. However, under the current Project design, (pending approval of the Eastern Amendment) only one combined compressor and meter station may be required to support Phase 1 operation.
One of two options: Johnson Creek 2A KP 36; 55.912391 N, -122.063532 E (9.5 ha) OR Johnson Creek 2F KP 34; 55.928544 N, -122.044904 E (9.5 ha)	Not started	BCER permit suspended



CPD	Status	Details
Callazon Creek - (20 ha) KP 126; 55.562325 N, -122.875059 E	Not started	Not permitted
Witter Lake - (20 ha) KP 227; 55.107078 N, -123. 715373 E	Not started	Not permitted
Middle River - (20 ha) KP 322; 54.89014 N, -125.059591 E	Not started	BCER permit valid
Hautete Lake - (20 ha) KP 426; 55.218528 N, -126.219518 E	Not started	Not permitted
Kispiox - (20 ha) KP 536; 55.463414 N, -127.604057 E	Not started	Not permitted
Borden Lake - (20 ha) KP 641; 55.50217 N, -128.870337 E	Not started	BCER permit valid
Ishkeenickh - (20 ha) KP 733; 54.977153 N, -129.630936 E	Not started	Not permitted
Section 4: Meter Station		
One meter station with a maximum size of 0.8 ha	Not started	May no longer be required under the current Project design. The Eastern and Marine Amendments instead propose one meter station associated with the Ksi Lisims LNG facility, and a combination compressor and meter station near the Eastern Initiation. These are subject to proposed amendments and are currently not part of the authorized project.
The meter station includes the following components: Isolation and control valves; Mainline valves; High pressure yard piping; Pig receivers; Inlet gas filter separators; Meter runs; Cathodic protection; Gas pressure, volume and quality instrumentation; Supervisory control and data acquisition; Telecommunications; Permanent access roads; and	Not started	Associated with late-stage construction



CPD	Status	Details
Instrument and personnel buildings.		
Section 5: Ancillary Facilities		
Up to 15 construction camps to house workers during construction: • Eight main spread camps housing up to 1,100 workers; • Three main spread camps housing up to 700 workers; • Three compressor station camps housing up to 225 workers; and • One marine camp housing up to 400 workers on barge or vessel.	 One 222-person camp constructed and operational (Sga Sgin'ist Lodge), with adjacent ancillary sites, representing 10 ha of disturbance. Total site area measuring approximately 12 ha, with two access roads each measuring approximately 180 metres. 	Camp facilities observed include dorms, office and kitchen trailers, portable water and sewage tanks, and generator power.
Temporary storage areas used throughout construction for pipe storage, construction material and equipment storage, contractor offices and equipment laydown.	 Three storage areas established with equipment stored, approximately five ha in total size (located at Nass Camp, no longer in use). One storage area developed at Sga Sgin'ist Lodge adjacent to camp facilities. The January 27 Supplement reported that 20 temporary storage areas are currently planned and permitted. 	Nass Camp laydown area was an existing (pre-Project) site utilized under a special use permit from Nisga'a Lisims Government. No physical works (clearing, earthworks, fencing) or other development by the Project occurred at this location. The site was used as a laydown until the adjacent Sga Sgin'ist Lodge was developed and is no longer utilized by the Project.
Stockpile sites to store pipe and materials during construction, with a maximum area of 38.5 ha each.	One stockpile site established at Sga Sgin'ist Lodge adjacent to camp facilities.	At the western end of the Sga Sgin'ist Lodge site, stockpiled soil and grubbed stumps were observed by EAO CEB staff.
Contractor storage yards to store equipment and supplies during construction, a maximum area of eight ha each in size, and where practical, integrated with main construction camps or stockpile sites.	One contractor storage yard developed at Sga Sgin'ist Lodge.	EAO CEB staff reported that no construction equipment was observed to be stored at this or other Project areas, contrary to the Request's statement "Equipment will remain at Sga Sgin'inst Lodge and ancillary sites over the winter in preparation for spring 2025 remobilization." Project representative advised EAO CEB staff during the field evaluation that the equipment previously at the camp was demobilized to a non-Project contractor yard in early November. Minimal construction supplies were observed to be stored onsite.
Laydown yards to setup and teardown construction equipment with a maximum size of 26.3 ha each.	One laydown yard developed at Sga Sgin'ist Lodge.	A minimal amount of construction supplies and no equipment were observed to be stored onsite.



CPD	Status	Details
Rail sidings to offload and store pipe and equipment.	Not started	The Request noted rail sidings are not needed in Nisga'a Lands.
Borrow sites to provide granular material for construction.	Reactivated and developed four pre- Project borrow pits: Ginlulak Rock Quarry (KM 4.5 Quarry); Gwilgyew Quarry (KM 13.2 Quarry); Ginlulak Pit (KM 3.1 Gravel Pit); and Hlginx Rock Quarry (KM 1.6 Monkley Dump Pit).	EAO CEB staff observed evidence of recent blasting at the Gwilgyew Quarry through blast rock found approximately 20 metres into the forest on the opposite side of the road.
Sites to place excess granular material.	Not started	
Material offloading facilities at Iceberg Bay, Nass Harbour and Nass Bay.	Not started	
Barge Landing sites at Monkley and Welda Creek.	Not started	
Jetty at Nass Harbour.	Not started	
Dock at Nasoga Gulf.	Not started	



APPENDIX B: EAO COMPLIANCE AND ENFORCEMENT BRANCH SUBSTANTIAL START FIELD EVALUATION REPORT





Project Name	Prince Rupert Gas Transmission Project		
EA Certificate #	E14-06	Report Date	2025-01-14
Certificate Holder	Prince Rupert Gas Transmission Ltd.	Field Evaluation Dates	2024-11-26 to 27
Project Description	The Prince Rupert Gas Transmission Project (Project) is a natural gas pipeline to deliver natural gas from Hudson's Hope in northeast BC to Lelu Island near Prince Rupert on the northwest coast of BC. Depending on the final route, the pipeline could include up to 780 kilometres of land-based pipeline and up to 120 kilometres of twin marine pipelines. The Project also includes compressor stations, a meter station and ancillary features.		
Evaluation Summary	On November 26-27, 2024, officers from Compliance and Enforcement Branch the physical works and activities under the physical works.	(EAO CEB) collected field ol	oservations to document
	At the time of the field evaluation, the Project had completed its planned 2024 construction program, which commenced on August 24, 2024, and occurred exclusively within Nisga'a Lands. Observations of the pipeline right-of-way (ROW), access roads, and ancillary facilities developed for the Project were collected via helicopter on November 26 and by ground on November 27. No active works were observed during the field evaluation.		
	The Certificate Holder was notified of the field evaluation and provided a representative to attend. A representative from Nisga'a Lisims Government was also present for the duration of the field evaluation.		
	EAO CEB field evaluation observations are presented in this report in direct relation to the physical project components identified in the Certified Project Description (Schedule A to EAC 14-06, as amended), as well as with respect to the Certificate Holder's November 19, 2024 substantial start application.		
	The observations documented in this report reflect the findings based on the information obtained during the field evaluation on the dates noted above. These findings can change if new information is obtained by the EAO CEB.		
In Attendance	Lead Environmental Inspector, Western LNG Lands and Resource Administration Supervisor, Nisga'a Lisims Government (Nov 26) Lands Officer, Nisga'a Lisims Government (Nov 27)		
Attending Officers	Christie Lombardi Senior Compliance & Enforcement Off Chris Parks Deputy Director, Compliance & Enforc		

BACKGROUND

Environmental Assessment Certificate (EAC) E14-06 was issued to the Certificate Holder for the Project on November 25, 2014 (Appendix 1). Schedule A to the EAC, the Certified Project Description, describes the permissible infrastructure that may be built for the Project (Appendix 2). The EAC has been amended five times since it was issued, resulting in several modifications to the Certified Project Description (Appendix 3).



On November 19, 2024, the Certificate Holder submitted an application (the Application) to the Environmental Assessment Office for a determination of whether or not the Project has been substantially started (Appendix 4) pursuant to section 31 of the *Environmental Assessment Act*. The Application includes an inventory of physical works and activities undertaken prior to November 25, 2024 to develop the Project in support of the Certificate Holder's request for a substantial start determination.

Following receipt of the Application, EAO CEB attended the Project area with Certificate Holder and Nisga'a Lisims Government representatives to collect field observations of the physical works noted in the Application. The objective of the field evaluation was to document the physical progress of the Project in relation to the Project infrastructure detailed in the Certified Project Description and noted in the Application. This report details the observations made during that field evaluation, within the context of the Application and available Project documentation.

OBSERVATIONS

As noted in the Application, Project construction commenced on August 24, 2024. Project construction consisted of the development of Project areas and facilities within Nisga'a Lands, approximately 100 kilometres northwest of Terrace, between August 24 and November 12, 2024. At the time of the field evaluation, no active work areas or facilities were observed. The Application notes that the Project has been demobilized and that construction activities are anticipated to resume after spring break-up in 2025.

On November 26, 2024, the entirety of the Project ROW between KP 652+700 and 729+500 was observed via helicopter under largely snow free conditions. This KP range includes the furthest extent of ROW development noted in the Application. Aerial observations were also made of Project access roads, each of the four borrow sites, the Nass Camp storage area, and the Sga Sgin'inst Lodge accommodation camp and ancillary sites (stockpile and laydown). Ground-based observations were also made of the Gwilgyew Quarry (KM 13.2 Quarry) and the accommodation and ancillary areas at the Sga Sgin'inst Lodge site the same day. On November 27, 2024, ground-based observations were made of a number of Project access roads, each of the nine bridges referenced in the Application, and multiple ROW locations. Ground-based observations on November 27 were made under snowy conditions, which limited access and the extent of surface observations.

In addition to information collected during the field evaluation, these findings are also informed by an August 14, 2024 pre-construction site tour attended by EAO CEB, EAO CEB field inspection 20240051_IR001 on October 2, 2024, the Access Management Plan for the Project (Appendix 5), the Access Management Plan Mapbook (Appendix 6) and spatial information provided to EAO CEB by the Certificate Holder on October 23, 2024.

In addition to the observations and images presented in this report, an interactive digital map has been created that presents additional EAO CEB photos in relation to the Project components they depict. The digital map also includes additional spatial detail and data in relation to Project access road development, including road lengths and the scope of works on individual roads, that are not specified in the Application and which EAO CEB was largely unable to be verify in the field. The interactive digital map is intended as a supplement to this report, for the presentation of additional data within a spatial context.

Observations of the Certified Project Description Components:

Table 1 below presents a summary of findings regarding the physical development of the Project components detailed in the Certified Project Description. Information from the Application, when available, is presented in Table 1 alongside EAO CEB observations. The photos noted in Table 1 are presented in the section below.



TABLE 1. SUMMARY OF EAO CEB OBSERVATIONS WITH RESPECT TO THE PHYSICAL DEVELOPMENT OF THE PROJECT COMPONENTS DESCRIBED IN THE CERTIFIED PROJECT DESCRIPTION. INFORMATION PRESENTED IN THE CERTIFICATE HOLDER'S NOVEMBER 19, 2024 APPLICATION FOR A SUBSTANTIAL START DETERMINATION IS ALSO INCLUDED. PHOTOS NOTED IN TABLE 1 ARE PRESENTED IN THE SECTION BELOW.

Certified Project Description (CPD) Component	Application Reference	EAO CEB Observations
CPD Section 2 – Pipeline		
Land-based and marine-based natural gas pipeline extending from Hudson's Hope in northeast BC to Lelu Island near Prince Rupert with multiple routing options. CPD Mapbook indicates a total pipeline length of approximately 878 kilometres (km), based on proposed routing. Width of construction and operation ROW varies but is within Certified Pipeline Corridor. Certified Pipeline Corridor width in the CPD Mapbook varies, with a typical width of approximately 500 metres (m).	24 km of pipeline ROW cleared between pipeline kilometre post (KP) 652+750 to 678+495. 17.7 km of pipeline ROW cleared between KP 692+271 and 727+259. ROW clearing width is not specifically discussed in Application.	 Pipeline ROW clearing observed to be consistent with the KP ranges reported in the application. Cleared ROW areas include locations both adjacent to existing access roads and transmission lines as well as previously undisturbed areas. Timber was cleared and decked on the ROW and slash piles were also present. No evidence of grubbing or grading on the ROW. No running track was evident on the cleared ROW, nor were erosion and sediment control measures observed on the ROW. Project representative identified that the average cleared ROW width was 20-25 m, to be followed up with geotechnical assessment and additional clearing as required and to take extra workspace. ROW clearing width was measured at eight locations. Widths were noted as approximately 20 m at four locations, 30 m at three locations and 40 m at one location. As compared to recent pipelines constructed in similar terrain, the cleared width appears to be insufficient to allow construction to progress without additional clearing. Photos 1 to 14 depict observations of the cleared ROW. See Table 2 for observations related to road development for ROW access.
Project components related to pipeline construction and operations include: • Mainline valves;	-	No associated works were observed.



Certified Project Description (CPD) Component	Application Reference	EAO CEB Observations
Suction and discharge valves;Communication towers;		
Satellite transmitter/receivers at block valve sites and compressor stations;		
 In-line inspection facilities; 		
Cathodic protection; and		
Telecommunications systems.		
CPD Section 3 – Compressor Stations		
Up to a maximum of eight natural gas fired compressor stations with maximum land areas ranging from 9.5 to 20 hectares (ha).	-	No associated works were observed.
The compressor stations include the following components:	-	No associated works were observed.
 Natural gas fired turbo-compressor units; 		
 Discharge gas coolers; 		
 Suction scrubbers; 		
High pressure yard piping;		
Isolation valves;		
Mainline block valves;		
Fuel gas systems;		
Multiple sub-systems; Office personnel torrepersualitying.		
Office, personnel, temporary living quarters, and storage buildings; and		
 Permanent access roads. 		
CPD Section 4 – Meter Station		
One meter station with a maximum size of 0.8 ha.	-	No associated works were observed.
The meter station includes the following components:	-	No associated works were observed.



Certified Project Description (CPD) Component	Application Reference	EAO CEB Observations
 Isolation and control valves; Mainline valves; High pressure yard piping; Pig receivers; Inlet gas filter separators; Meter runs; Cathodic protection; Gas pressure, volume and quality instrumentation; Supervisory control and data acquisition; Telecommunications; Permanent access roads; and Instrument and personnel buildings. 		
CPD Section 5 – Ancillary Facilities		
 Up to 15 construction camps to house workers during construction: Eight main spread construction camps housing up to 1,000 workers each and three housing up to 700 workers each, each occupying up to 26.5 ha of land. Three compressor station camps each with up to 225 workers that occupy up to 4 ha of land. One main spread marine camp housing up to 400 workers. 	One 222-person camp constructed and operational (Sga Sgin'ist Lodge). Approximately 10 ha cleared for Sga Sgin'ist Lodge and adjacent ancillary sites (stockpile and laydown areas).	 Total site area measuring approximately 12 ha, with two access roads each measuring approximately 180 m. Camp and laydown area was noted by the Project representative to have been cleared and developed by the Project on native material, no fill was brought in. Camp facilities observed include dorms, office and kitchen trailers, portable water and sewage tanks, and generator power. No fuel island or tanks were observed for equipment fuelling. A security truck was observed to be parked near the camp gate. Wire-topped chain link fencing was installed around the perimeter of the site. Electric fencing in place but was not operational (unplugged) at the time of the field evaluation. Photos 15 to 17 depict observations of the camp.



Certified Project Description (CPD) Component	Application Reference	EAO CEB Observations
Temporary storage areas used throughout construction for pipe storage, construction material and equipment storage, contractor offices and equipment laydown.	Three storage areas established with equipment stored, approximately 5 ha in total size (located at Nass Camp).	 Nass Camp laydown area was confirmed by the Nisga'a Lisims Government representative to be an existing (pre-Project) site utilized under a special use permit from Nisga'a Lisims Government. No physical works (clearing, earthworks, fencing) or other development by the Project occurred at this location.
		 Site was used as a laydown until the adjacent Sga Sgin'ist Lodge was developed and is no longer utilized by the Project.
		No project equipment was observed to be stored at Nass Camp.
		Photo 18 depicts observations of the Nass Camp temporary storage area.
Stockpile sites to store pipe and materials during construction, with a maximum area of 38.5 ha each.	One stockpile site established at Sga Sgin'ist Lodge.	 At the western end of the Sga Sgin'ist Lodge site, stockpiled soil and grubbed stumps were observed. Windrows and sumps for management of site water were also in place.
		Photos 15 and 19 depict observations of the stockpile site.
Contractor storage yards to store equipment and supplies during construction, a maximum area of 8 ha each in size, and where practical, integrated with main construction camps or stockpile sites.	One contractor storage yard developed at Sga Sgin'ist Lodge.	No construction equipment was observed to be stored at this or other Project areas, contrary to the Application statement "Equipment will remain at Sga Sgin'inst Lodge and ancillary sites over the winter in preparation for spring 2025 remobilization." Advised by the Certificate Holder representative during the field evaluation that the equipment previously at the camp was demobilized to a non-Project contractor yard in early November.
		Minimal construction supplies were observed to be stored onsite, including erosion and sediment control materials, skids for trailers, a small amount of lumber and culverts.
		Photo 20 depicts observations of the contractor storage yard.



Certified Project Description (CPD) Component	Application Reference	EAO CEB Observations
Laydown yards to setup and teardown construction equipment with a maximum size of 26.3 ha each.	One laydown yard developed at Sga Sgin'ist Lodge.	 As noted above for the contractor storage yard at the Sga Sgin'ist Lodge site, a minimal amount of construction supplies and no equipment were observed to be stored onsite. Photo 21 depicts observations of the laydown yard.
Rail sidings to offload and store pipe and equipment.	-	No associated works were observed.
Borrow sites to provide granular material for construction.	Continued development of four borrow pits for road upgrades and bridge installations: Ginlulak Rock Quarry (KM 4.5 Quarry) Gwilgyew Quarry (KM 13.2 Quarry) Ginlulak Pit (KM 3.1 Gravel Pit) Hlginx Rock Quarry (KM 1.6 Monkley Dump Pit)	 Four existing (pre-Project) borrow sites were reactivated and further developed by the Project. Recent blasting at the Gwilgyew Quarry was evidenced by blast rock ejected from the quarry site having entered approximately 20 m into the forest on the opposite side of the road. Photos 14 and 22 to 25 depict the borrow sites utilized by the Project.
Sites to place excess granular material.	-	No associated works were observed.
Hydrostatic test fill lines to transport water for testing the pipeline.	-	No associated works were observed.
Material offloading facilities at Iceberg Bay, Nass Harbour and Nass Bay.	-	No associated works were observed.
Barge landing sites at Monkley and Welda Creek.	-	No associated works were observed.
Jetty at Nass Harbour.	-	No associated works were observed.
Dock at Nasoga Gulf.	-	No associated works were observed.



Access Road Development Observations:

The overview section of the Certified Project Description (Section 1) includes "upgraded roads and bridges" and "temporary access roads" in a listing of ancillary facilities of the Project. While neither of these entries are included in the detailed ancillary features section of the Certified Project Description (Section 5), permanent access roads for the compressor and meter stations are noted in the Certified Project Description sections for those Project components (Sections 3 and 4). As noted in Table 1 above, no works associated with the permanent access road development for the compressor and meter stations were observed. Road works associated with access to the Project ROW and camp within Nisga'a Lands, which are identified in the Access Management Plan (Appendix 5), were observed during the field evaluation and EAO CEB observations associated with these works are detailed in Table 2 below.

Section 4.1.1.2 of the Application notes that over 47 km of access road upgrades and maintenance have been completed for the Project. Although a listing of roads for each of the construction fronts is included in the Application, and reproduced in Table 2 below, the scope of works on any individual roads is not. The distribution of access road activities completed on the Project to date, as presented in the Application, is as follows: 1.9 km of new road construction, 7.7 km of road reinstatement, 17 km of major road upgrades and 21.3 km of maintenance on existing roads.

The Project's Access Management Plan and spatial files provided to EAO CEB by the Certificate Holder contain additional detail regarding the scope of works on the individual roads. The reported length and extent of road works noted in the Application, however, could not be reliably verified by EAO CEB due to the lack of detail provided in the Application, gaps in the labeling of the spatial dataset, and the poor weather conditions during field work that constrained EAO CEB's ability to make direct observations of completed road works. The previously referenced digital map intended to supplement this report, however, does present additional information on road lengths and scope of works for the roads referenced in the Application, as well as other Project roads of unknown construction status.

During the field evaluation, the Project representative identified that Roads #2, #16, #20 #21A and the two access roads to Sga Sgin'ist Lodge (Road #5 and Road #6) referenced in the Application are characterized by the Project as "new roads". It was further clarified by the Project representative that the Project may use the term "new road", as in the confirmed case of Road #21A, to describe an old, pre-existing spur road that has been reactivated by brushing it out using a mulching machine and the potential addition of culverts.

Table 2 below presents a summary of EAO CEB observations specific to access road development on the Project. As noted previously, weather conditions significantly hampered the ability for EAO CEB to verify the road surfacing (if capped and/or ballasted with aggregate) or lengths of road works noted in the Application. In some instances, images of pre-Project road conditions were available and are presented in photos alongside the field evaluation observations. In other cases, existing roads extending beyond the Project scope are included as a potential indicator of the pre-Project condition of the road.



TABLE 2. SUMMARY OF EAO CEB OBSERVATIONS AND FINDINGS WITH RESPECT TO PROJECT ACCESS ROAD PRESENTED IN THE CERTIFICATE HOLDER'S NOVEMBER 19, 2024 APPLICATION FOR A SUBSTANTIAL START DETERMINATION. PHOTOS NOTED IN THE TABLE ARE PRESENTED BELOW. PHOTOS NOTED IN TABLE 2 ARE PRESENTED IN THE SECTION BELOW.

Road Name ¹	Scope of Works ²	EAO CEB Observations
Eastern Consti	ruction Front Access Roads ¹	
Application states that over 17 km access road works were completed in the Eastern Front, including maintenance on approximately 10 km of existing roads, reinstating over 6.7 km of decommissioned roads and clearing approximately 600 m of new access road ROW.		
Road #1A	Upgrade existing road (North Hoodoo Road / Alice Arm Road).	 Segment 1 of 2 upgrades to the North Hoodoo Road, which continues beyond the Project area. Provides access to the Project ROW from the Nass Forest Service Road (Cranberry Connector). Photos 1 and 26 depict Road #1A.
Road #1B	Upgrade existing road (North Hoodoo Road / Alice Arm Road).	 Segment 2 of 2 upgrades to the North Hoodoo Road, which is adjacent to the Project ROW and continues beyond the Project area. Photo 27 depicts Road #1B.
Road #2	Upgrade existing road (Dragon Loop Road) and new construction access.	 Provides access to the Project ROW from the Nass Forest Service Road (Cranberry Connector). Photo 28 depicts Road #2.
Road #3	Upgrade deactivated road (DL2).	 Provides access to the Project ROW from the Nass Forest Service Road (Cranberry Connector). Photo 29 depicts Road #3.
Road #8	Maintain existing road (Hydro Access No. 5 / Old Gun Range Road).	 Provides access to and across the Project ROW from Nass Road across an existing, non-Project transmission line ROW. Road continues beyond the Project area. Photos 3 and 30 depict Road #8.
Road #9	Maintain existing road (Hydro Access No. 4 / Seaskinish Road).	 Short spur from Nass Road providing access to the Project ROW across an existing, non-Project transmission line ROW. Road continues beyond the Project area. Photo 31 depicts Road #9.
Road #10	Maintain existing road (Hydro Access No. 3 / Flats Road).	 Short 6 m wide spur from Nass Road providing access to the Project ROW across an existing, non-Project transmission line ROW. Road continues beyond the Project area. Photo 32 depicts Road #10.
Road #13	Maintain existing road (Pit Road).	Project ROW access from Nass Road via a gated road which first crosses the Project ROW, then an existing, non-Project transmission line ROW (indicated in blue) to what appeared an active, non-Project maintenance yard beyond the Project area. Road continues beyond the Project area.



Road Name ¹	Scope of Works ²	EAO CEB Observations
		Photo 33 depicts Road #13.
Western Construction Front Access Roads ¹ Application states that over 13 km of access road works were completed in the Eastern Front, including maintenance activities on approximately 11.3 km of existing roads, reinstating over 1 km of decommissioned roads and clearing of more than 1.3 km of new access road ROW		
Road #16	New construction access.	 Access to the Project ROW from the Nisga'a Hwy measuring approximately 100 m long and 50 m wide, and with decked timber stored along the sides. The access ramp from the highway was deactivated at the time of the field evaluation. Photo 34 depicts Road #16.
Road #18	Maintain deactivated road (BR 233306 / Kwinyarh).	 Access to the Project ROW from the Nisga'a Hwy. Road was observed to be approximately 8 m wide. Photo 35 depicts Road #18.
Road #19	Upgrade existing road (Ansedegan Road).	 Access to the Project ROW from the Nisga'a Hwy. Road was observed to be approximately 9 m wide and the existing road continues beyond the Project area. Photo 36 depicts Road #19.
Road #20	Upgrade deactivated road (N220 and Alberts Road) and new construction access.	 Access to the Project ROW from the Nisga'a Hwy. Photo 37 depicts Road #20.
Road #21A	Upgrade deactivated road (Pinks Road) and new construction access.	 Spur from the Ksedin Mainline FSR to provide access to the Project ROW. Road appeared to have been brushed out to a width of 5 m using a mulching machine. Vegetation was observed to be encroaching on the road margins. Road surface was not capped. Photo 38 depicts Road #21A.
Road #22	Upgrade existing forestry road (Ksedin Creek FSR).	 Segment 1 of 3 upgrades to the Ksedin Creek FSR from the Nisga'a Hwy, which continues beyond the Project area. Photo 39 depicts Road #22.
Road #22A	Maintain deactivated road (name unknown).	 Spur road off the Ksedin Creek FSR (Road #22) providing access to the Project ROW. Photos 39 and 40 depict Road 22A.
Road #22B	Upgrade existing forestry road (Ksedin Creek FSR).	 Segment 2 of 3 upgrades to the Ksedin Creek FSR providing access to the Project ROW. Road continues beyond the Project area. Photo 41 depicts Road 22B.



Road Name ¹	Scope of Works ²	EAO CEB Observations
Road #22C	Upgrade existing forestry road (Ksedin Creek FSR), maintain existing road (Ksi Mat'in Access Road) and new access.	 Segment 3 of 3 upgrades to the Ksedin Creek FSR, which provides access to the Project ROW. And continues beyond the Project area. Photo 42 depicts Road 22C.
Road #23	Upgrade deactivated forestry road (BR 5000).	 Road from the Nisga'a Hwy that connects to subsequent Project access roads and continues beyond the Project area. Photo 43 depicts BR 5000 beyond the Road 23 upgrades.
Road #23B	Upgrade deactivated road (Ignkte Road).	 Spur to the Project ROW off BR 5000 (Road #23) providing access to the Project ROW. Photo 44 depicts Road 23B.
	skheenickh Road Construction ¹	rades and installation of nine permanent bridges completed.
Road #24 Upgrade existing forestry roads (Ginlulak Road and Ishkheenickh Road).	 Provides Project access from the Nisga'a Hwy. Total length of upgraded road measured as approximately 15.6 km using GPS device, after which it continues as a non-Project road (Ishkheenickh Road) that was not upgraded. Typical road width measured to be 7 m. Photos 14, 22 to 24, and 45 to 51 depict observations of 	
		 Road #24, including pre-and post-construction observations. Observations were made of each of the five bridges on Road 24, which are depicted in Photos 52 to 59: BR01: 20 m steel bridge deck with prefabricated concrete footings. Ramps on either side of the bridge have been built up and capped with blast rock and have rip rap scour protection at the footings observed to be encroaching into and restricting the watercourse channel. No sideboards were present on the bridge deck. Photo 52 depicts bridge BR01. BR02 20 m clear bridge with split steel bridge deck with prefabricated concrete footings. Ramps on either side of the bridge have been built up and capped with blast rock and have rip rap scour protection at the footings. No sideboards were present on the bridge deck. Photo 53 depicts bridge BR02. BR03
		 27 m steel bridge deck with timber rails and prefabricated concrete footings. Ramps on either side



Road Name ¹	Scope of Works ²	EAO CEB Observations
		of the bridge have been built up and capped with blast rock and have rip rap scour protection at the footings. • Photo 54 depicts bridge BR03. • BR04: • 23 m split steel bridge deck with prefabricated
	concrete footings. Ramps on either side of the bridge have been built up and capped with blast rock and have rip rap scour protection at the footings observed to be encroaching into the watercourse channel below the bankfull width. No sideboards were present on the bridge deck.	
		 Photos 55 to 57 depict bridge BR04, including pre- and post construction images.
		 BR06 30 m split steel deck bridge with a steel stringer and timber beams and rails. Ramps on either side of the bridge have been built up and capped with blast rock and have rip rap scour protection at the footings. Photos 58 to 59 depict bridge BR06, including preand post-construction images.
(Ishkheenickh Main). length of upgraded road from where it branches f device. Measured road w The first 1.6 km of Road a ballasted and capped, wi to 62 depict this section of the Ishkheenickh Main be the Project scope of world Project road condition. The final 800 m of Road a Ishkheenickh Main, was depresentative to have be machine and the road su this section of Road #24A section Road #24A. Beyo road was observed to be which is potentially indicated.	Provides Project access from Ginlulak Road (Road #24). Total length of upgraded road measured as approximately 2.4 km from where it branches from Road #24, measured using GPS device. Measured road width varied from 7-14 m.	
	ballasted and capped, with a width of 14 m. Photos 25 and 60 to 62 depict this section of Road 24A. Photos 63 to 64 depict the Ishkheenickh Main beyond the north and south extent of the Project scope of works and may be indicative of the pre-	
		• The final 800 m of Road #24A, where it diverges from the Ishkheenickh Main, was observed and noted by the Project representative to have been brushed out using a mulching machine and the road surface was not capped. The width of this section of Road #24A was 7 m. Photos 65 to 66 depict this section Road #24A. Beyond the extent of Project works, this road was observed to be a relatively narrow existing trail, which is potentially indicative of the pre-Project condition of this section of Road #24A (Photo 67).
		 Observations were made of each of the four bridges on Road 24, which are depicted in Photos 68 to 73: BR11:



Road Name ¹	Scope of Works ²	EAO CEB Observations
		• 18 m split steel bridge deck with prefabricated concrete footings. Ramps on either side of the bridge have been built up and capped with blast rock and have rip rap scour protection at the footings observed to be encroaching into the watercourse channel. No sideboards were present on the bridge deck.
		Photos 68 to 69 depict bridge BR11.
		 BR12: 18 m split steel bridge deck with prefabricated concrete footings. Ramps on either side of the bridge have been built up and capped with blast rock and have rip rap scour protection at the footings observed to be encroaching into the watercourse channel and have restricted the watercourse channel. No sideboards were present on the bridge deck. Photos 68 and 70 depict bridge BR12.
		• BR13:
		20 m split steel bridge deck with prefabricated concrete footings. Ramps on either side of the bridge have been built up and capped with blast rock and have rip rap scour protection at the footings that appeared to have restricted the watercourse channel. No sideboards were present on the bridge deck.
		Photos 68 and 71 depict bridge BR13.
		 BR14: 18 m steel bridge deck with prefabricated concrete footings. Ramps on either side of the bridge have been built up and capped with blast rock and have rip rap scour protection at the observed to be encroaching into the watercourse channel. No sideboards were present on the bridge deck. Bridge was identified by the Project representative to have previously been a large box culvert. Photos 72 to 73 depict bridge BR14.

¹ From Application Table 4-1, 4-3, 4-5.

² From Project Access Management Plan and/or spatial data provided by the Certificate Holder. Road names are pre-Project names of existing roads or trails.



PHOTOS

Photos that are referenced in Tables 1 and 2 above are presented below. These photos include those taken during the November 26-27, 2024 field evaluation, as well as pre-construction photos taken on August 14, 2024. Some photos have been annotated with marking to aid in distinguishing Project-related infrastructure referenced in the Application (in red), from pre-existing or other non-Project features (in blue). Additional photos taken during the field evaluation are presented in the previously referenced digital map. All photos included here and in the digital map were taken by EAO CEB.



Photo 1. Cleared pipeline ROW at KP 655+050 adjacent to North Hoodoo Road / Alice Arm Road (Road #1A).





Photo 2. Cleared pipeline ROW at KP 663+850 adjacent to non-Project transmission line ROW. Nisga'a Hwy indicated in blue.



Photo 3. Cleared pipeline ROW at KP 668+600, where it temporarily diverges from an existing, non-Project transmission line ROW. Road #8 from Nass Road across the transmission line ROW to the Project ROW indicated in red.





Photo 4. Cleared pipeline ROW at KP 672+300.



Photo 5. Cleared pipeline ROW at KP 676+400 adjacent to existing, non-Project transmission line ROW.





Photo 6. Cleared pipeline ROW at KP 677+700 alongside existing, non-Project Nass Road.



Photo 7. Cleared pipeline ROW at KP 678+200.





Photo 8. Cleared pipeline ROW at KP 700+700.



Photo 9. Cleared pipeline ROW at KP 704+800.





Photo 10. Cleared pipeline ROW at KP 705+700.



Photo 11. Cleared pipeline ROW at KP 707+150 intersected by the existing Ksedin Mainline FSR (indicated in blue).





Photo 12. Cleared pipeline ROW at KP 710+150.



Photo 13. Cleared pipeline ROW at KP 717+300.





Photo 14. Cleared pipeline ROW at KP 718+400 adjacent to Road #24 (Ginlulak Road) approaching Ginlulak Pit (KM 3.1 Gravel Pit) utilized by the Project.



Photo 15. Overview of Sga Sgin'ist Lodge site, with office and accommodation trailers in the foreground and stockpile area at the far end. Existing, non-Project Nass Road indicated in blue.





Photo 16. Accommodation trailers at Sga Sgin'ist Lodge site.



Photo 17. Utilities at Sga Sgin'ist Lodge site.





Photo 18. Pre-existing Nass Camp temporary storage area that is no longer used by the Project.



Photo 19. Stockpile site at the Sga Sgin'ist Lodge site, with Project access from Nass Road (red) and non-Project road (blue).





Photo 20. Contractor storage at Sga Sgin'ist Lodge site inside perimeter fencing.



Photo 21. Laydown yard developed at Sga Sgin'ist Lodge site as viewed from stockpile area.





Photo 22. Ginlulak Rock Quarry (KM 4.5 Quarry) utilized by the Project. Road #24 (Ginlulak Road) indicated in red.



Photo 23. Gwilgyew Quarry (KM 13.2 Quarry) utilized by the Project. Road #24 (Ginlulak Road) indicated in red.





Photo 24. Ginlulak Pit (KM 3.1 Gravel Pit) utilized by the Project. Road #24 (Ginlulak Road) indicated in red.



Photo 25. Hlginx Rock Quarry (KM 1.6 Monkley Dump Pit) utilized by the Project. Road #24A indicated in red.





Photo 26. Road #1A (upgraded North Hoodoo Road / Alice Arm Road) adjacent to the pipeline ROW at KP 656+400.



Photo 27. Road #1B (upgraded North Hoodoo Road / Alice Arm Road) adjacent to the pipeline ROW at KP 654+250.





Photo 28. Road #2 (upgraded Dragon Loop Road and new construction access, indicated in red) off the existing non-Project Nass FSR (blue).



Photo 29. Road #3 (upgraded deactivated road DL2) curving to the pipeline ROW at KP 662+100 and non-Project transmission line ROW (blue).





Photo 30. Road #8 (maintained Hydro Access No. 5 / Old Gun Range Road) from the from Nass Road, running across the Project ROW at 668+000 and continuing beyond the Project area to a non-Project transmission line ROW (blue).



Photo 31. Road #9 (maintained Hydro Access No. 4 / Seaskinish Road) from existing Nass Road across a non-Project transmission line ROW (indicated in blue) to the pipeline ROW at KP 669+450 and continuing beyond the Project area.



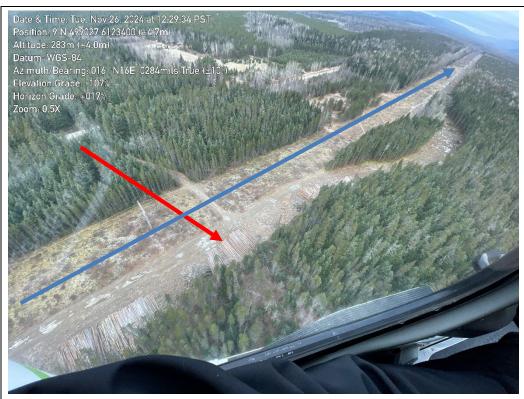


Photo 32. Road #10 (maintained Hydro Access No. 3 / Flats Road) from existing Nass Road across the existing non-Project transmission line ROW (indicated in blue) to the pipeline ROW at KP 671+050.



Photo 33. Road #13 (maintained Pit Road) from Nass Road crossing the pipeline ROW at KP 671+050 to an existing, non-Project transmission line ROW (indicated in blue) and beyond.





Photo 34. Road #16 (new construction access) to pipeline ROW from the Nisga'a Hwy at KP 693+015.



Photo 35. Road #18 (reactivation of road BR 233306 / Kwinyarh) crossing the pipeline ROW at KP 699+000.





Photo 36. Road #19 (upgrade to Ansedegan Road). Red arrow indicates direction from the Nisga'a Hwy to the Project ROW, blue arrow indicates continuation of the existing road beyond the Project area.



Photo 37. Road #20 (new construction and reactivated spurs) meeting pipeline ROW at KP 704+900.



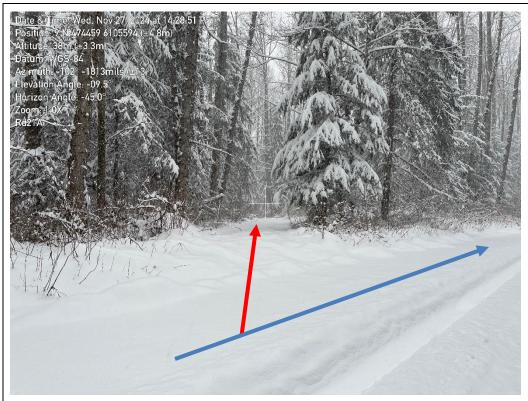


Photo 38. Road #21A (reactivation of Pinks Road) entrance off of Ksedin Mainline FSR (blue).



Photo 39. Road #22 (upgraded Ksedin Creek FSR) approaching Road #22A (orange) and pipeline ROW.





Photo 40. Road #22A (maintenance on deactivated road) meeting the pipeline ROW at KP 707+600.



Photo 41. Road #22B (upgraded Ksedin Creek FSR) meeting with pipeline ROW at KP 707+900.





Photo 42. Road #22C (upgraded Ksedin Creek FSR).

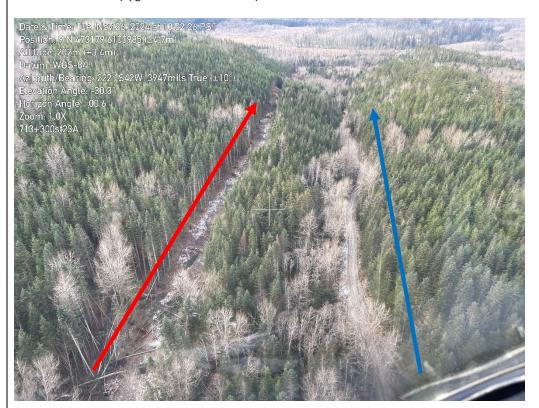


Photo 43. Forestry road BR 5000 (blue) paralleling the pipeline ROW (red) beyond the section of upgrades road scoped as Road #23, to give a sense of pre-Project road condition and extent.





Photo 44. Road #23B (upgraded Ignkte Road) intersecting the pipeline ROW at KP 714+420.



Photo 45. Road #24 (upgraded Ginlulak Road) at approximately km 5.5.





Photo 46. Road #24 (upgraded Ginlulak Road) at approximately km 12.



Photo 47. Road #24 (upgraded Ginlulak Road) at approximately km 13.





Photo 48. Pre-construction photo of Road #24 (Ginlulak Road) at approximately km 2.



Photo 49. Road #24 (upgraded Ginlulak Road) at approximately km 2.





Photo 50. Pre-construction photo of Road #24 (Ginlulak Road) at approximately km 9.



Photo 51. Road #24 (upgraded Ginlulak Road) at approximately km 7.





Photo 52. Bridge BR01 on Road #24.



Photo 53. Bridge BR02 on Road #24.





Photo 54. Bridge BR03 on Road #24.



Photo 55. Bridge BR04 on Road #24.





Photo 56. Pre-construction photo of Bridge BR04 on Road #24.



Photo 57. Bridge BR04 on Road #24.





Photo 58. Pre-construction photo of Bridge BR06 on Road #24.



Photo 59. Bridge BR06 on Road #24.





Photo 60. Road #24A (upgraded Ishkheenickh Main) from approximately km 0 to 1.



Photo 61. Road #24A (upgraded Ishkheenickh Main) at approximately km 1.4.





Photo 62. Road #24A (upgraded Ishkheenickh Main) at approximately km 0.1.



Photo 63. Ishkheenickh Main beyond the scope of Project upgrades at km 0 of Road #24A.



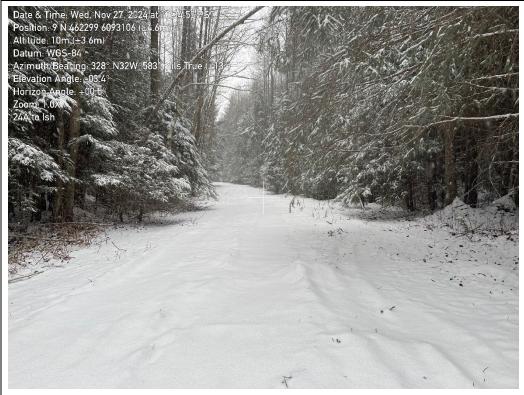


Photo 64. Ishkheenickh Main beyond the scope of Project upgrades at approximately km 1.6 where Road #24A branches in the opposite direction (indicated with blue arrow in Photo 65 below).



Photo 65. Road #24A (upgraded Ishkheenickh Main) at approximately km 1.6 at divergence from the Ishkheenickh Main (indicated in blue).



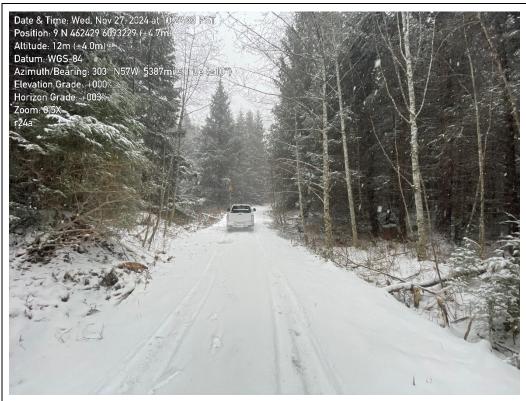


Photo 66. Road #24A at approximately km 2.3 and beyond divergence from the Ishkheenickh Main.



Photo 67. Road 24A at approximately km 2.4, beyond Project upgrades.





Photo 68. Bridges BR11, BR 12 and BR13 on Road #24A.



Photo 69. Bridge BR11 on Road #24A.





Photo 70. Bridge BR12 on Road #24A.



Photo 71. Bridge BR13 on Road #24A.



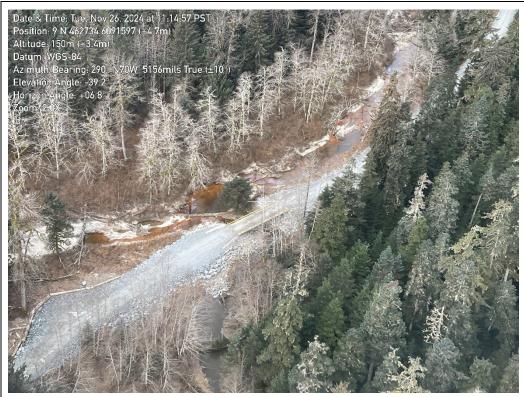


Photo 72. Bridge BR14 on Road #24A.



Photo 73. Bridge BR14 on Road #24.



APPENDICES

Appendix 1: Environmental Assessment Certificate E14-06

Appendix 2: EAC E14-06 Schedule A - Certified Project Description

Appendix 3: EAC E14-06 Amendments 1 to 5

Appendix 4: Substantial Start Application 2024-11-19 Appendix 5: Access Management Plan Rev 6 April 2016 Appendix 6: Access Management Plan Rev 5 2015-09-30