March 26, 2021

Mr. Marc Croteau
Provincial Administrator,
James Bay and Northern Quebec Agreement
Deputy Minister of the Environment
and the Fight against Climate Change
Marie-Guyart Building, 30th floor, Box 02
675, René-Lévesque Blvd. East
Québec City, QC G1R 5V7

Re: Request to amend certificate of authorization to include additional lands on the right bank
Innavik Hydroelectric Project, Inukjuak
N/Ref: 3215-10-005

Dear Sir,

As part of the Innavik Hydroelectric Project construction in Inukjuak, we wish to file a request to amend the certificate of authorization to include additional lands on the right bank of the Inukjuak River.

Indeed, additional lands are necessary to proceed with construction works for the hydroelectric power plant. Requests for the addition of all concerned lands have been filed with the Regional Direction (RD) in October 2020 (Annex 1) within the context of the amendment request pursuant to Article 22 of the Environmental Quality Act (EQA).

Enlargement of the storage area for excavated material

The permanent storage area for excavated material was authorized on May 19, 2020 (N/REF: 7430-10-01-10031-01, 401921389) for an area of 18,000 m². An additional space of 6,598 m² will be necessary in order to store the excavated material (Map 1). The increase in area will enable piling excavated material to a lower height and a greater spread. Furthermore, increasing the area will enable the installation of access paths for machinery as well as a sorting area for the excavated material. Piles will have a maximum height of 10 metres during the construction period and will be reduced to 5 metres afterwards.

Innergex Renewable Energy Inc.

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1225 Saint-Charles Street West, 10th floor
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Tel. 450 928-2550 | Fax 450 928-2544
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Samples have been delivered to a laboratory in order to proceed with geological identification of materials based on crushed core samples. No contamination of soils is expected. Acidic rock leaching is generally due to an oxidation reaction forming sulphuric acid, and this reaction is possible only in presence of sulphurs (pyrite), oxygen and water. Rocks on the project site are migmatitic (gray granite and amphibolite) of the Archean age. Results of the geological identifications show a very low percentage of sulphurous minerals, present in trace amounts, or less than 1%. Given the low sulphur concentration, it is unlikely that the excavated rocks provoke an acidic leaching.

	Authorized area (m^2)	Additional area (m^2)	Total (m^2)
Excavated material storage area	18,081	6,598	24,679
Impacted wetlands	0	889.6	889.6

Enlargement of the access area

The temporary access area, covering 7,460 m², was authorized on May 19, 2020 (N/Ref: 7430-10-01-10031-01, 401921389). An additional area of 6,046 m² will be necessary in order to guarantee a safe transit of vehicles on the construction site in order to reach the access ramp (Map 1). It was not initially foreseen to use that area for construction material storage but given the important quantity of material arriving by ship, it could be possible that this area be used. A list of the materials is displayed below. Storage of these materials will free up space on transit paths for vehicles and heavy equipment. Note that no hazardous material will be stored there.

Materials	**Storage**
Formwork panels	Bulk
Formwork accessories	Bulk in wooden crates
Wooden formwork	Bulk
Shoring	Bulk
Reinforcing steel	Bulk
Signage	Bulk
Grounding (electricity)	Bulk and container
Steel: fabricated metal	Bulk
Cement products (Big bag)	Bulk
Cement products (In bags and additives)	Container
Pipes/Culvert (drainage)	Bulk
Geotextiles	Bulk
Crushed aggregate	In pile

At the end of the construction phase, this temporary storage area will be restored to its original state as per the methods presented in the documents submitted to the RD in the context of authorization requests under Article 22 of the EQA. Applicable measures include, but are not limited to the following:

- All debris, equipment and materials will be removed.
- The grading and height of the backfill will blend in with the natural relief and natural drainage will be ensured.
- Erosion protection and sediment control measures will be taken.
- Soils that have been set aside will be spread and stabilized.
- Revegetation will be done using native species.
- Monitoring will be carried out for a period of two years following site restoration in order to ensure that the vegetation has taken hold.

The impacted wetlands will not be restored identically, however a revegetation will be realized, in concertation with the local community.

	Authorized area (m^2)	Additional area (m^2)	Total area (m^2)
Temporary access area	7,460	6,046	13,506
Impacted wetlands	523	907.5	1,430.5

Tailrace

The tailrace area, covering 4,707 m², was authorized on July 10, 2020 (N/Ref: 7430-10-01-10031-02, 401935683). The tailrace's path has been modified so that its outlet is moved further downstream because the overburden was not suitable for tailrace construction (maps 2 and 3). Therefore, the tailrace area is expanded to a total of 6,084 m².

	Authorized area (m^2)	Additional area (m^2)	Total area (m^2)
Tailrace	4,707	1,377	6,084
Impacted wetlands	740.8	483	1,223.8

Sedimentation basin

Construction of the sedimentation basin was authorized on July 10, 2020 (N/Ref: 7430-10-01-10031-02, 401935683). It is localised adjacent to the tailrace. Given the modification to the tailrace, the sedimentation basin also had to be moved beyond the tailrace area (Map 2). This way, there will be no need to dismantle the sedimentation basin before completing the tailrace excavation. By doing so, the sedimentation basin can be located further away from the Inukjuak River, all while freeing up more space to install filtrating berms. Such filtrating berms are used to filter the water and take away most of the sediments. The basin being further away from the river, the risk of sediment introduction into the river is considerably reduced.

However, the sedimentation basin was built without obtaining prior authorization. There may have been a confusion from the contractor's side, who was convinced that necessary authorizations had been obtained for the basin's construction. The facilities will be dismantled at the end of the construction phase and restored to their original state as per the methods presented in the documents submitted to the RD in the context of authorization requests under Article 22 of the EQA.

	Total area (m^2)
Sedimentation basin and filtrating berm	5,953
Temporarily impacted wetlands	101.9

Addition of a temporary working and storage area

An additional temporary storage area will be located between the tailrace and the sedimentation basin (Map 2). This area will principally be used by workers in order to gain easier and safer access to the tailrace and sedimentation basin. As for the temporary areas, it will be restored to its original state as per the methods presented in the documents submitted to the RD in the context of authorization requests under Article 22 of the EQA.

	Total area (m^2)
Temporary storage area	2,091
Impacted wetlands	258

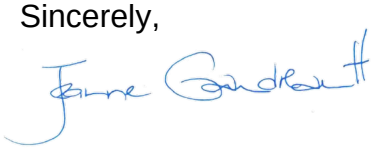
Meeting of the monitoring committee – March 24, 2021

We deemed important to meet the members of the monitoring committee in order to present them the modifications that we wish to realize. Members asked various questions and have been satisfied by the answers we provided and had no objections to the requested changes. The committee met on March 24 in the afternoon. Please find attached the meeting report. (Annex 2).

TIMEFRAME
Work is expected to resume on May 1, 2021. Climate conditions in Inukjuak provide that the period suitable for construction lasts from April to November. Resuming work after May would entail the risk of reporting the facility's commissioning by a year.

Please do not hesitate to contact me if you require any further information.

Sincerely,



Jeanne Gaudreault, F.E.
Senior Manager – Community Relations and Environment

c.c. Eric Atagotaaluk, Pituvik Landholding Corporation
Vanessa Chalifour, MELCC
Jean-Philippe Marcoux, MELCC

Annex 1

106, rue Industrielle, New Richmond, QC G0C 2B0
7240, rue Waverly, Suite 223, Montréal, QC H2R 0C8
797, boulevard Lebourgneuf, Suite 326, Québec City, QC G2J 0B5
431, rue des Artisans, Suite 200, Rimouski, Quebec G5M 1A4

Montréal, October 20, 2020

Ms. Cynthia Claveau
Ministry of the Environment and
the Fight against Climate Change
180, boulevard Rideau
Rouyn-Noranda, QC J9X 1N9

Ref. no.: 7430-10-01-10031-02
401935682

Re: Excavation of hydroelectric station site, tailrace and headrace of the Innavik Hydroelectric Project – Rerouting of tailrace, relocation of sedimentation ponds and addition of a work and storage area

Dear Madam,

We would hereby like to make modifications to the authorization to excavate the hydroelectric station site, tailrace and headrace (north bank) of the Innavik Hydroelectric Project. Indeed, in order to adapt the project to the conditions encountered on site, the following modifications need to be made to the authorization.

The tailrace will be rerouted so that its outlet is farther downstream; it is therefore correspondingly longer. The modification is presented in the enclosed plan and in Map 1. The surface area of the rerouted tailrace is increased to 6,083.8 m^2.

The sedimentation ponds that were initially to be created in the tailrace right-of-way will be relocated to the side of the said right-of-way. In fact, the volume of water from excavations is less than initially planned, hence the need to site the ponds outside the tailrace excavation area. Three sedimentation ponds will be constructed and will occupy an area measuring 2,670 m^2. Moreover, filter berms occupying a surface area of 2,304 m^2 will be constructed to reduce flow velocity and thus any soil erosion that might be triggered by water flowing from the ponds. This surface area (see Map 1) will be used temporarily and will be restored after the work has been completed.

Between the tailrace and the pond area, a work and storage area spanning 2,091.3 m^2 will be created. This area will also be temporary.

With regard to encroachment on wetlands or aquatic areas, Table 1 presents an updated summary of wetland and aquatic areas that will be affected by all work covered by the authorization and the modifications that will be made to the project. These areas are also presented in Map 1 (enclosed).

106, rue Industrielle, New Richmond, QC G0C 2B0
7240, rue Waverly, Suite 223, Montréal, QC H2R 0C8
797, boulevard Lebourgneuf, Suite 326, Québec City, QC G2J 0B5
431, rue des Artisans, Suite 200, Rimouski, Quebec G5M 1A4

Table 1. Wetlands Affected by Project Following Modification.

Wetland type	Surface area permanently affected [m^2]	Surface area temporarily affected [m^2]
Pool/fen complex	48.5	87.2
Continuous herbaceous and shrubby fen	149.5	93.1
Dense wet meadow	356.7	345.5
Open shrubby wet tundra	669.1	667.5
Total wetlands	**1,223.8**	**1,193.3**
River banks	618.7	810.11
Coast	450.1	1627.7
Total aquatic areas	**1068.8**	**2437.8**

All excavation and work methods, equipment, materials used and environmental measures remain the same as those described in the ministerial authorization. The temporary areas requested herein will also be restored upon completion of the work in accordance with the details provided in the authorization.

In sending this letter, I confirm that all information and documents provided in the request for modification are complete and exact.

It should be noted that the declaration of the applicant or holder according to Article 115.8 of the *Environment Quality Act* (EQA) has been provided in the context of another authorization application (Ref. no.: 7610-10-01-81037-00). The information is still valid and the declaration is no more than 1 year old.

You will find enclosed the documents required for this application.

For further information, please do not hesitate to communicate with me using the contact information indicated below.

Respectfully,

Jean-François Hudon, Project Manager
Activa Environnement
jfhudon@activaenviro.ca
1-866-392-5088, ext. 22

Encl. (3)
- Location maps
- Engineering plan
- Cheque in the amount of $2,076

106, rue Industrielle, New Richmond, QC G0C 2B0
7240, rue Waverly, Suite 223, Montréal, QC H2R 0C8
777, boulevard Lebourgneuf, Suite 200, Québec City, QC G2J 0B5
431, rue des Artisans, Suite 200, Rimouski, QC G5M 1A4

Montréal, October 22, 2020

Jonathan Gagnon
Analyst, Department of Water Resources, Municipal Affairs and the Environment
Ministry of the Environment and
the Fight against Climate Change
180, boulevard Rideau
Rouyn-Noranda, QC J9X 1N9

Ref. no.: 7430-10-01-10031-01
401921389

Re: Amendment to authorization for the construction of an access road as well as storage and work areas – Innavik Project

Mr. Gagnon,

We hereby wish to make two modifications to the authorization for the construction of an access road as well as storage and work areas (Ref. no.: 7430-10-01-10031-01). In order to adapt the project to the conditions encountered on site, the following modifications need to be made to the authorization.

The first modification consists of enlarging and slightly relocating the backfill storage area on the right bank. This area was indicated as measuring 18,081.9 m^2 in the authorization application. It needs to be enlarged to 24,679.3 m^2 in order to allow for the safe storage of dynamited rock from the excavation of the dam site. The entire storage area will be maintained following completion of the work phase for the permanent storage of dynamited rock.

The storage area must also be slightly relocated to respect the natural topology of the land (see Location Map in the Appendix). All mitigation measures presented in the application will be maintained, namely the installation of a geotextile membrane for erosion and sediment management and the creation of sediment traps. Catchment basins will be created to capture runoff at low points.

These modifications (enlargement and relocation) result in an additional and permanent encroachment on wetlands. A total of 366.6 m^2 of wetlands will be affected by these modifications (Table 1).

Table 1. Wetlands Affected by Modified Storage Area

Wetland type	Number of wetlands	Surface area affected [m^2]
Pool/fen complex	1	21.1
Continuous herbaceous and shrubby fen	1	17.7
Dense wet meadow	1	5.5
Open shrubby wet tundra	10	322.3
Total	**13**	**366.6**

The second modification consists of enlarging the access area. An area measuring 6,046 m^2 will have to be added to the existing access area (7,460 m^2) for a total surface area of 13,506 m^2. This enlargement is necessary due to a lack of space at the work site and in order to allow for the safe circulation of vehicles on

site. The purpose of this area must also be slightly amended to include the storage of materials. This work area is a temporary area and will be restored in compliance with what was presented in the authorization application.

This change results in an additional and permanent encroachment on wetlands. A total of 907.5 m^2 of wetlands will be affected by this modification (Table 2).

Table 2. Wetlands Affected by Enlarged Access Area

Wetland type	Number of wetlands	Surface area affected [m^2]
Dense wet meadow	6	460.9
Open shrubby wet tundra	6	413.1
Continuous herbaceous and shrubby fen	1	33.5
Total	**13**	**907.5**

A hard copy of the application as well as a cheque for the analysis fees have been mailed to you.

You will find enclosed the documents required for this application.

For further information, please do not hesitate to communicate with me using the contact information indicated below.

Respectfully,

Jean-François Hudon, Project Manager
Activa Environnement
jfhudon@activaenviro.ca
1-866-392-5088, ext. 22

Encl. (2)
- Location map
- Cheque in the amount of $692

Carte 1 - Map 1

MODIFICATION AUTORISATION

CRT Construction inc.

Projet hydroélectrique Innavik, Innujuak

Carte 1 Plan de localisation des modifications

PROJET

- Chemin d'accès
- Aires de travail autorisées
- Aire d'entreposage (agrandissement et modification)
- Aire d'accès (agrandissement)

MILIEU NATUREL

- Étendue d'eau
- Complexe de mares et fens
- Fen herbacé et arbustif humide continu
- Herbaçaie humide dense
- Marécage arbustif
- Toundra humide arbustive ouverte

0 25 50 100 150 m

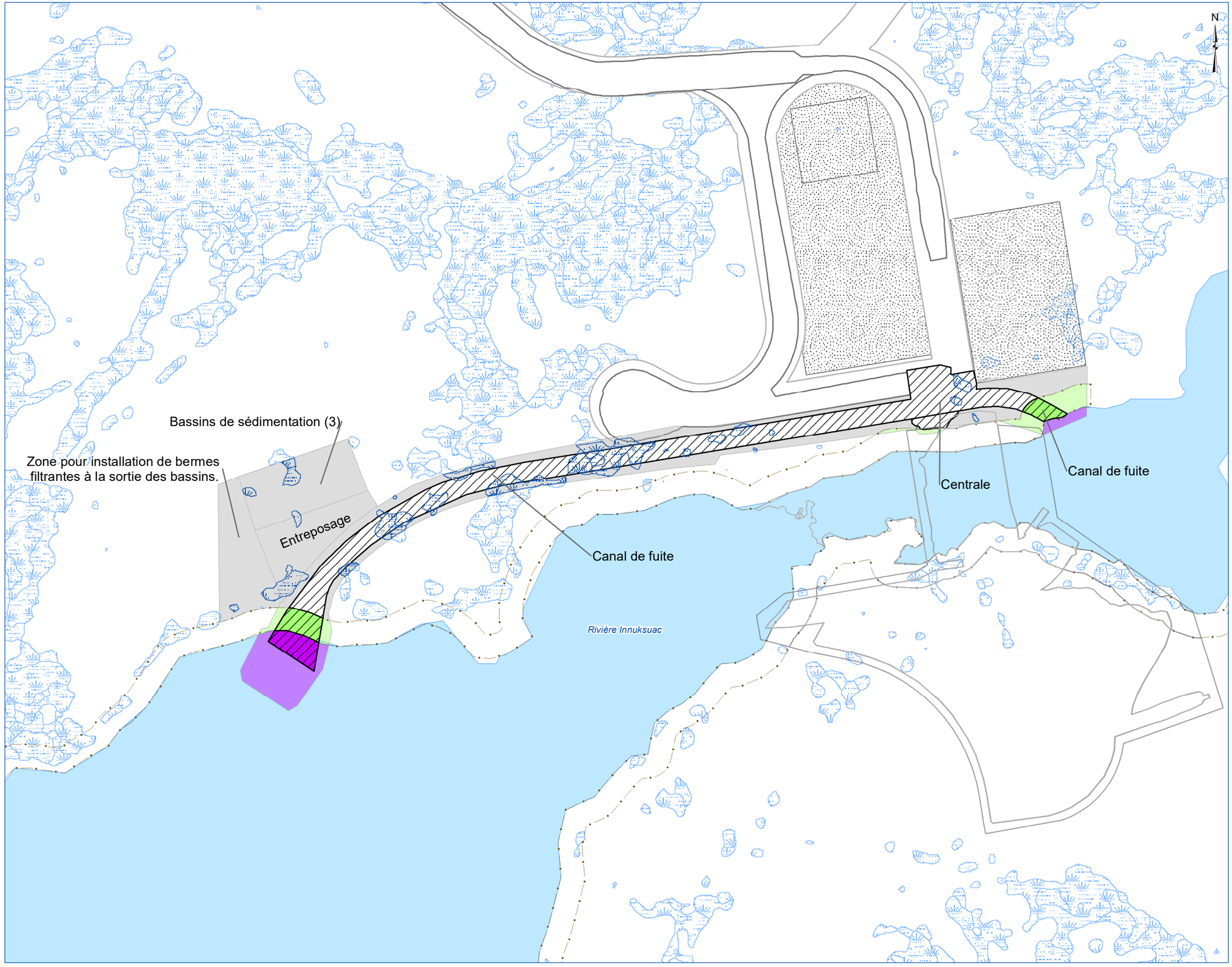
Projection NAD 1983 MTM 10

Sources : Gouvernement du Québec, ESRI, Activa Environnement inc.

Carte préparée par : Judith Plante, Biologiste
Projet : H1910-123/15370
13 octobre 2020

ACTIVA ENVIRONNEMENT

Carte 2 - Map 2



DEMANDE D'AUTORISATION

Innavik Hydro, S.E.C.

Projet d'aménagement hydroélectrique Innavik

Carte 1 Excavation en rive nord - Modification des emprises de travaux en milieux humide et hydrique

PROJET

- Emprise permanente
- Emprise permanente en rive
- Emprise permanente dans le littoral
- Emprise temporaire
- Emprise temporaire dans la rive
- Emprise temporaire dans le littoral
- Emprise de chemin permanente

MILIEU NATUREL

- Rive (15 m)
- Milieu humide dans l'emprise
- Milieux humides (WSP, 2017)
- Étendue d'eau

0 12,5 25 50 75 m

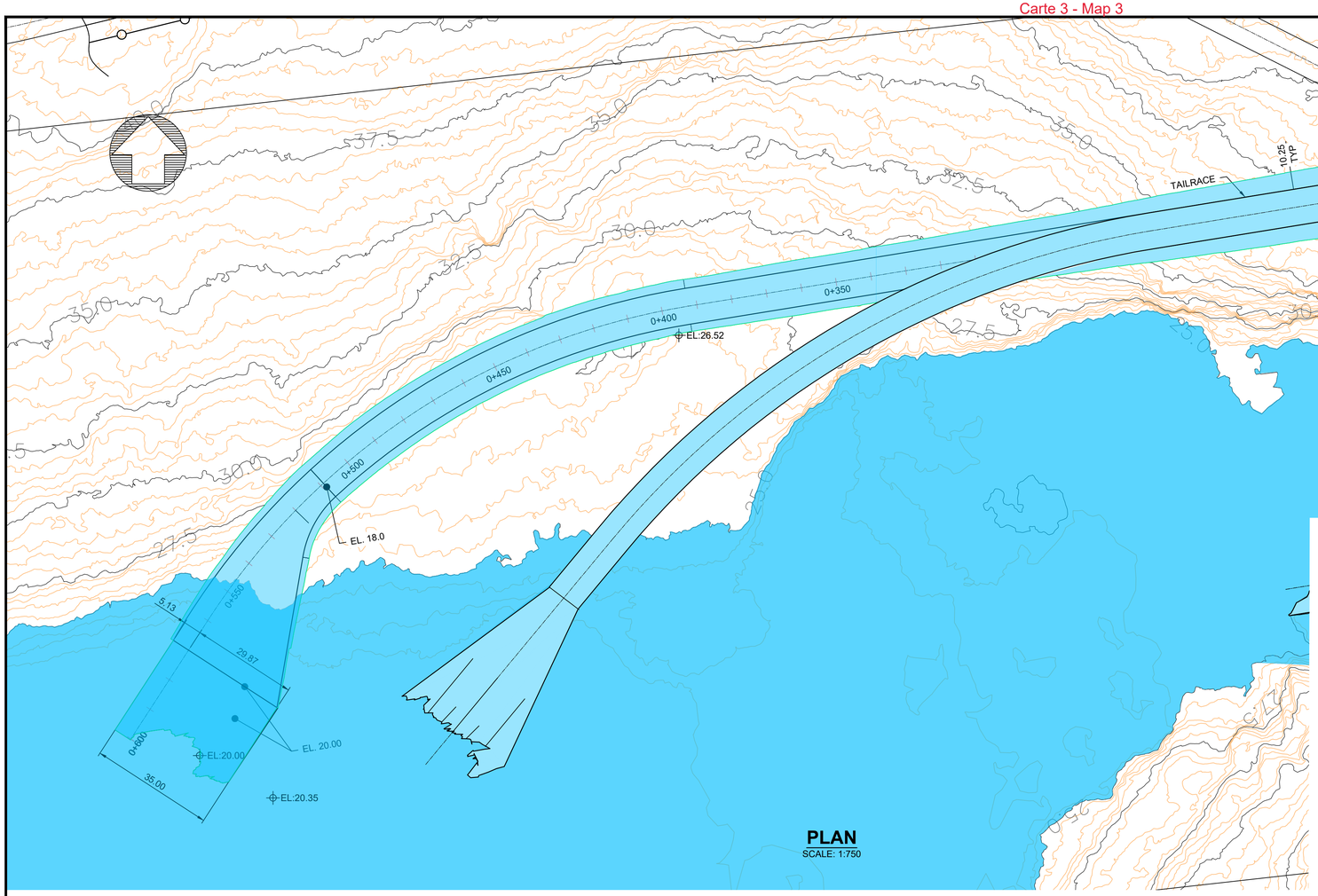
Projection NAD 1983 MTM 10

Sources : Gouvernement du Québec, CRT et Cima +, Activa Environnement inc. Caractérisation des milieux humides (WSP, 2017)

Préparée par : Simon Boudreault, biologiste M. Sc.
Projet : H1910-123/15370
20 octobre 2020

ACTIVA ENVIRONNEMENT

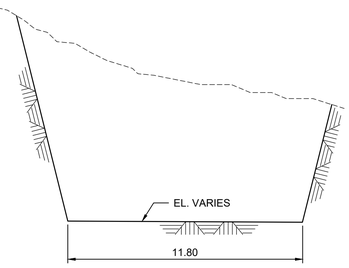
Carte 3 - Map 3



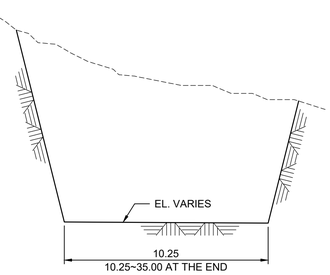
PLAN
SCALE: 1:750

NOTES:

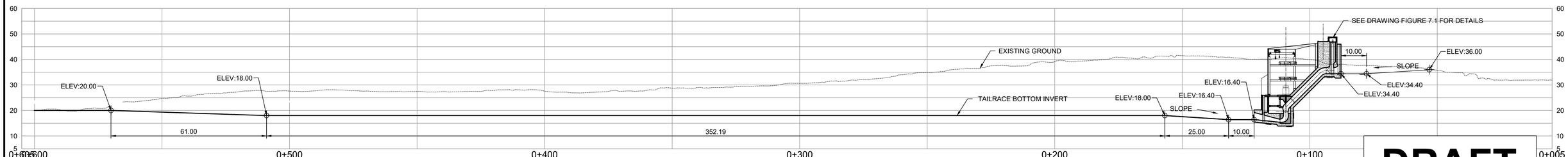
1. COORDINATE SYSTEM US MTM NAD83 ZONE 10.
2. ALL THE DIMENSIONS AND ELEVATIONS ARE IN METER.
3. DIMENSIONS AND NOTES WITH * SHALL BE DETERMINED BY CONTRACTOR DURING FINAL DESIGN.



INTAKE CANAL TYPICAL SECTION
SCALE: 1:150



TAILRACE CANAL TYPICAL SECTION
SCALE: 1:150



PROFILE VIEW
SCALE: 1:750

DRAFT

DRAWING NO.	DESCRIPTION
REFERENCE DRAWINGS	

SCALE
Meters 22.5 0 22.5 45
1:750
Meters 4.5 0 4.5 9
1:150
SCALE BAR AS PER 1:1 D-SIZE (22"x34" SHEET)

REV	DATE	REVISION DESCRIPTION	CAD	CHK	ENG	RVW
D	2020/XX	PROJECT DESIGN BASIS	QC		PA	CC
C	2018/DEC	PROJECT DESIGN BASIS	QC			CC
B	2018/DEC	PROJECT DESIGN BASIS	QC			CC
A	2018/NOV	FOR INFORMATION	QC			CC

DESIGNED PA
DRAWN QC
CHECKED
APPROVED CC

PROFESSIONAL SEAL

INNERGEX
Suit 900, 1185 West Georgia Street
Vancouver, British Columbia
Canada
V6E 4E6
JOINT VENTURE | DESIGNER

INNAVIK HYDROELECTRIC PROJECT
INTAKE AND TAILRACE WATERWAY

FILE No. INK-tailrace-2e-3(W10.25+EL18).dwg
PROJECT No. 81.XX
DRAWING No. FIGURE 3.0
D

DATE: 2020-03-20 — 11:12am (sehen)
PATH: I:\Vancouver\West Georgia\Hydro\CAD\Project_Drawings\Inukjuak_Innavik\1000 Drawings\Concept Design\C3D and 3D model\2019-2020 Tailrace re-design\INK-tailrace-2e-3(W10.25+EL18).dwg
LAYOUT: 3.0

INNAVIK HYDROELECTRIC PROJECT

MONITORING AND CONSULTATION COMMITTEE

AGENDA

DATE: March 24, 2021 **START TIME:** 15:00 p.m. **LOCATION:** Pituvik's office	**ATTENDEES:** Members: - Jobie Ohaituk, Anguvigaapik - Betsy Epoo (Women) - Johnny Mina (Ummajuit Warden) - Ricky Moorhouse (NV) Pituvik Land holding Corporation - Eric Atagotaaluk, Director Innergex - Jeanne Gaudreault (JG), Senior Manager Environment and Community Relations (Audio conferencing) CRT Construction – Contractor - Alain Labonté (AL), Project manager (Audio conferencing)

Modification of the Certificate of authorization

A. Right side of river enlargement of storage area

QC1- What type of material will it be disposed, and why do you need it bigger.

RQC1- AL- Rock from excavation of the powerhouse and the tailrace channel. There is more quantity than originally planned due to the rock stability during the excavation phase for safety reason, and longer tailrace.

QC2 – Will the aggregates be crushed?

RQC2 – AL – No it will not be crushed; it will be large block coming from the rock blasted.

QC3 – Will it affect wetland?

RQC3 – JG says that there are some identified on the map, but when we walked the area in summer 2020, we haven't seen any of them. JG says we will walk the area once more this summer 2021, and if any, they will be avoided.

B. Relocation of sedimentation ponds

QC1- Why do you need a sedimentation basin?

RQC1- Any dewatering system installed in the construction area need to have the water treated to remove the sediment before it will is returned to the river.

QC2– What will happen with the left-over sedimentation?

RQC2 – AL – They will be transported in the storage area.

QC3– What will happen with the pond post construction?

RQC3- AL – The ponds will be removed and dismantled to its natural stage.

QC 4– Is there any other contamination, like explosive, in the dewatering system that can be introduced in the river after?

RQC4 – AL – The pond only receives water coming from the excavation. There is nothing else than water and fine from excavation sediment. The pumps are installed in a prefilter mode to avoid any debris to get pumped. Any explosives are getting burned. If any are discovered during the excavation process, they are removed manually to be destroyed. The water is also tested as per the environmental plan.

C. <u>Modification of tailrace</u>

QC1 – Why has it been relocated?

RQC1 – AL – Because of the condition of natural ground. Only cobbles and fine gravel were discovered during the geotechnical investigation. For the short and long term, the tailrace channel stability was an issue.

QC2 – Is there any risks that the project would be delayed?

RQC2 – JG – That is why we are having this special meeting. We wanted to hear you, to hear you concerns, and then, send a report as soon as possible to the MELCC/KEQC.

QC3 – Since the tailrace is longer, will there be extra cost for the project?

RQC3 – AL – No, there is no cost impact. The CRT Construction contract as an inclusion clause which gave the geotechnical risk under the scope of work.

D. <u>Left side river storage (temporary and permanent)</u>

QC1 – Will it impact wetlands?

RQC1 – JG – On the drawing, the temporary area encroaching on wetlands along the river are below the planned flooded area for the operation phase water level. The loss of these wetlands has therefore been accounted. The permanent one has a total of 439 m^2 of wetlands that will be affected by the creation of the permanent storage area. This surface will be added to the total losses, and compensation plans will be submitted prior to the end of construction.

QC2 – Since the temporary storage is overlapping with planned flooded area, what is the plan before flooding?

RQC2 – AL – The temporary storage area will have to be restored to its original state.

QC3 – JG asks if CRT could try to avoid the planned flooded area by using the South side of the area if they have enough room?

RQC3 – Absolutely.

QC4 – What is the definition of a wetland according to the MELCC?

RQC4 – JG explains that she is not a specialist, but will share the technical note of WSP from their surveys of the wetland in 2016 and 2017 at our next meeting.