



Project Introduction

Qulliq Energy Corporation (QEC) is proposing to construct and operate a new power plant in the Hamlet of Cambridge Bay located in the Kitikmeot Region of Nunavut (the Project). This will be a multi-year Project that will include the installation of a 90,000-liter capacity horizontal fuel tank and two 2 million-liter capacity vertical fuel tanks and the new power plant will use more fuel-efficient engines. The plant will generate less noise and exhaust gases, due to the availability of equipment like industrial scrubbers and hospital grade silencers which will substantially reduce sound and air pollution. The new plant will have a life cycle of over 40 years and will be capable of integrating renewable energy sources.

Proponent Information

Qulliq Energy Corporation (QEC) is a Government of Nunavut (GN) territorial corporation. Through the operation of 25 stand-alone diesel power plants with a total installed capacity of approximately 76,000 kilowatts, QEC is the sole provider of electricity to approximately 15,000 customers in the territory. QEC provides mechanical, electrical, and line maintenance services from three regional centers: Iqaluit, Rankin Inlet and Cambridge Bay. QECs administrative activities are carried out at the Head Office in Baker Lake and the Corporate Office in Iqaluit.

QEC is committed to planning and developing cost effective and efficient ways to provide a safe, reliable and stable energy supply for all Nunavummiut.

Project Background

Cambridge Bay is a community with increasing demand for electricity, reflecting its growing population and increasing government and commercial enterprise. According to the Nunavut Bureau of Statistics, the population of Cambridge Bay is estimated to reach 1,845 by 2036. The existing Cambridge Bay power plant was constructed in 1958, and has the installed firm capacity to meet the required firm capacity for several years. However, the power plant suffers from several deficiencies, including unreliable superstructure, and aging systems and equipment. There is also a need to bring the facility into compliance with current safety and environmental regulations.

In particular, the existing switchgear is obsolete, and not Arc resistant. This increases the fire and safety risk of the facility. The building structure itself is also in poor condition, having started to deteriorate, and has no room for expansion. The existing fuel storage system includes a single-walled tank and some of the storage tanks are suspected of leaking. In addition, the tank is housed in a berm, which requires decanting each year. The melt water that accumulates in the steel berm gradually erodes and degrades the berm floor. These conditions are not in compliance with the current codes and regulations of Environment and Climate Change Canada.

As the systems continue to age and become more outdated, it will become more difficult to maintain the facility, and plant reliability will become an issue. Without reliable equipment, QECs customers are at risk of system failure. A new power plant equipped with new fuel-efficient generators and plant automation is expected to increase fuel efficiency and overall plant reliability.

Alternatives Considered

QEC recognizes the need for a long-term approach to prioritize and maximize the benefit of capital expenditures while providing safe and reliable electricity service. The existing plant deficiencies mean the “Do Nothing” option



is not a viable option. Operating assets beyond their service life also places a larger burden on QEC's maintenance and operations personnel by trying to maintain and operate assets that should be replaced.

The following two alternatives were evaluated and are described further below.

- Major plant upgrade
- Construct a new plant at a new location

Major Plant Upgrade

A major plant upgrade would include replacement of major components and systems within the existing facility, including the generators, switch gear and fuel system. This option was determined to be not technically feasible for the following reasons:

- the plant buildings have deteriorated due to age and are beyond upgrading;
- upgrading the existing plant requires the installation of temporary generation equipment on the same site and sufficient space for this is not available; and
- the existing plant site does not have sufficient land space to accommodate a plant expansion.

The existing power plant is located in the Core Area as defined by the Hamlet of Cambridge Bay Community Plan (2015 – 2025). It is understood that the Hamlet of Cambridge Bay is interested in moving industrial land uses outside of the core area where feasible, to focus on retail and community uses.

Construct a new plant at a new location

Taking into consideration the space issues associated with upgrading the existing facility, and the interest of the Hamlet in moving industrial land uses outside the community, QEC considered the construction of a new power plant at a suitable location in the community. QEC explored four different location options (Figure 1) and considered a number of criteria that are important in selection of a new power plant location including, but not limited to the following.

- Proximity to Petroleum Products Division (PPD) Tank Farm: If the power plant is located near the PPD Tank Farm then QEC may be able to have a direct pipeline connection for fuel transfers. This reduces the health and safety risks associated with trucking fuel.
- Sufficient space: QEC requires approximately 12,000 m² for the new power plant to accommodate the power plant building, bulk fuel storage and fuels systems, pole storage, transient unit, line shop, Quonset garage, and waste oil containment area.
- Current land use zoning: If an area is not currently zoned for industrial development, additional time may be required for re-zoning applications prior to securing land for the power plant.
- Flat and level: If an area is flat and level this reduces the cost and time associated with earthworks that would be required to prepare the site for construction.
- Airport Restrictions: Transport Canada Airport Zoning Regulations apply to areas within 4 km of an airport. Additional permitting and approval required.
- Previous Disturbance/Development: Preference is to avoid impacts to native tundra areas. Additional cost and schedule implications if an area has not been previously disturbed or developed (e.g., survey, site investigations, earthworks).



- Proximity to Migratory Bird or Wildlife Areas or Cultural Sites: Close proximity to migratory bird sanctuary, wildlife area or cultural site may increase environmental permitting requirements and environmental monitoring during construction and operation.
- Evidence of Groundwater or Surface Drainages: If present, increases the potential need for ground or surface water management for the site (e.g., to avoid contamination). Development closer than 50 m from natural surface drainages may result in additional permitting, environmental monitoring during construction/operations.
- Prevailing wind: Wind direction affects noise, odour and snow drifting considerations depending on if the wind prevails towards or away from the community.
- Known Contamination: May impact the type and extent of site investigation required and increase environmental risk. Additional permitting may be required if located within 450 m of a waste disposal site.

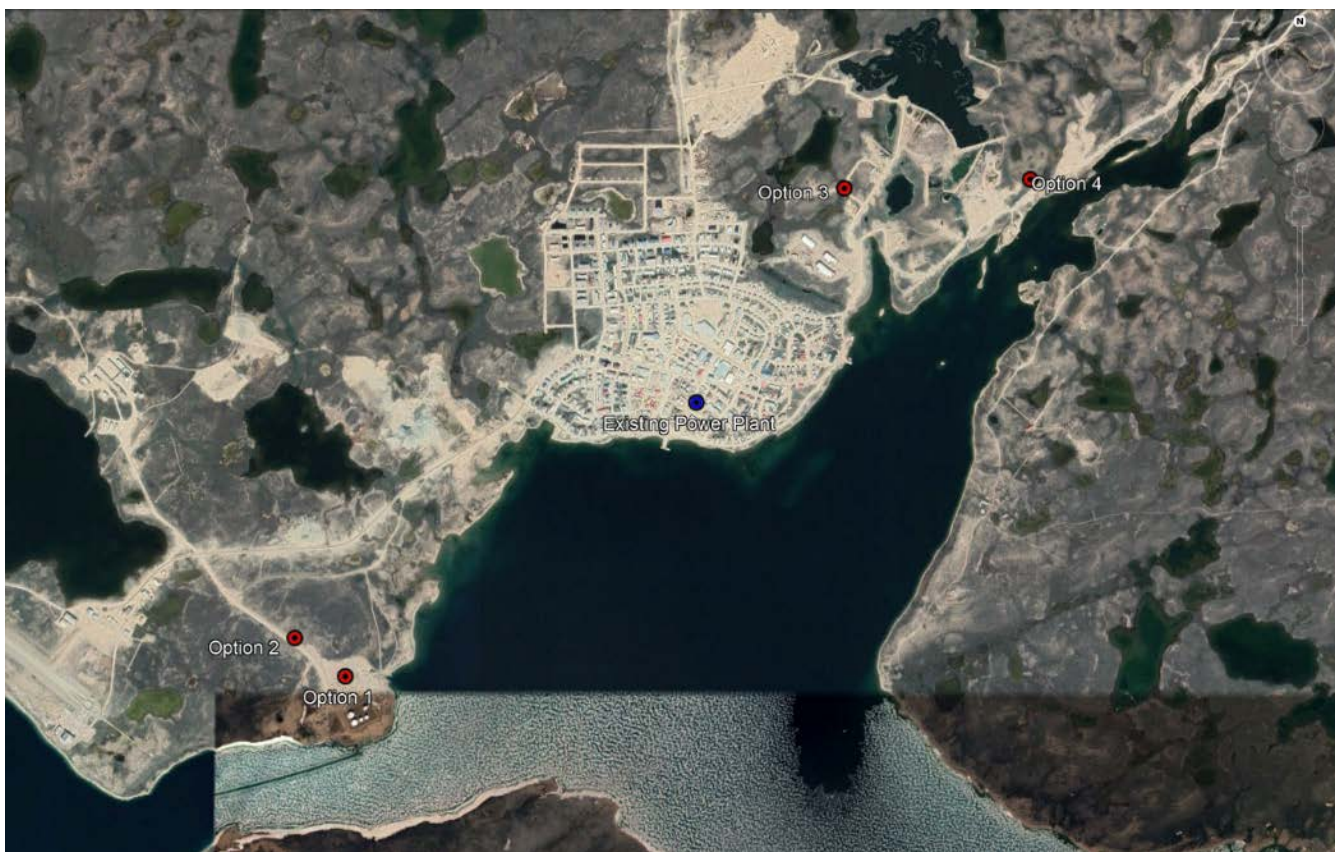


Figure 1: Alternative Location Options Considered for the Cambridge Bay Power Plant Project (Image Source: Google Earth)

QEC met with the Cambridge Bay Hamlet Council on July 20, 2020. At this time, QEC presented the four proposed location options for the new power plant and outlined the pros and cons of each location. QEC indicated a preference for location Option 2 given its proximity to PPD; sufficient space appeared to be available, and it is fairly flat so limited earthworks would be required to prepare the site for construction. This location is approximately 2 kilometers outside the community core. Additionally, Option 2 would limit disruption to Hamlet sea lift operations and construction materials lay down area that are currently located at Option 1.



Following these discussions, on August 24, 2020 the Hamlet carried a motion to “approve in principle” the location approximately 400 meters north of the PPD tank farm, in the area of the new industrial lands on the east side of the road (identified as “Option 2”). This motion authorized QEC to carry out additional site investigations to provide further insight into the suitability of Option 2. A copy of this motion is included in the minutes from the August 24, 2020 Council Meeting (Attachment A).

Project Location and Components

A Phase I and Limited Phase II Environmental Site Assessment, Geotechnical Evaluation, and topographic survey were completed in 2020 at the proposed location. The results of these site investigations provided QEC with sufficient site specific information to confirm that “Option 2” would be technically feasible to support the construction and operation of the power plant and prepare a preliminary site layout. A land application and preliminary site layout was submitted to the Hamlet of Cambridge Bay on March 9, 2021. QEC continued internal efforts to optimize the site layout and identified the need for additional space to accommodate a line shop and Quonset garage, this increased the lot size to approximately 14,400 square metres. QEC worked collaboratively with representatives of the Hamlet to further refine the location. The resulting proposed location for the power plant is shown in Figure 2. A land application has been submitted to the Hamlet of Cambridge Bay.



Figure 2: Location Selected for the Cambridge Bay Power Plant Project

The proposed new lot is approximately 14,400 square metres located on Commissioner’s Land within Lot 1017 Plan 4573 which will become Lot 3 Block 67 Plan 4781 (Sketch 500-SK-2019). The location is on the east side of Tank Farm Road (Road R36), approximately 2 kilometres (km) southwest of the Hamlet of Cambridge Bay, approximately 1 km east of the Cambridge Bay Airport, and approximately 400 metres northeast of the PPD bulk fuel storage facility.



The power plant will include a five-engine generation facility (proposed generating capacity of 5,500 kilowatts) designed for a 40-year life and incorporate new technology to improve reliability, efficiency, operation, and safety. Construction will include a fuel storage system consisting of a 90,000 litre double wall horizontal fuel tank, two vertical fuel tanks with 2 million litre capacity, secondary containment berm, and an approximately 400 metre long above ground fuel pipeline to connect to the PPD facility, appropriate pumping facilities, Quonset garage, concrete pad for transformers, storage for two sea cans, pole racks, oil and glycol drum storage/containment, and approximately 2 km of distribution lines. The detailed design is anticipated to include the installation of industrial scrubbers and hospital grade silencers on the radiator and exhaust system, and the new plant would be capable of integrating renewable energy sources. The main power plant building (55 m by 23 m) will include an office, electrical control room, line shop, and garage/workshop, in addition to the power generation hall. The specific location and orientation of these components within the area selected will be determined through detailed engineering; however, a preliminary site layout of the power plant is provided in Attachment B.

Schedule

The project schedule is shown in Table 1.

Table 1: Schedule for the Cambridge Bay Power Plant Project

Task	Anticipated Milestone
Secure Land and Complete Archaeological Impact Assessment	March 2021 to March 2022
Detailed engineering design	April 2022 to March 2023
Contracting and Procurement	April 2023 to March 2024
Construction	April 2024 to December 2025 (seasonal)
Testing and Commissioning	January 2026 to March 2026
Plant Handover to QEC Staff	March/April 2026

Construction Labour

Based on previous project statistics, the anticipated total number of workers during construction is shown in Table 2. The contractor awarded the construction tender will ultimately determine their required labour force to meet project requirements.

Table 2: Estimated Number of Construction Workers Required During Construction

Construction Phase	Estimated Number of Workers
Foundation and Land Development	15
Civil Works, Building Structure, Vertical Fuel Tanks	50
Mechanical and Electrical Installations	50
Commissioning	30

Construction of the Project will be completed through a request for tender (RFT) process. As per the Nunavummi Nangminiqaqtunik Ikajuuti (NNI) Regulation, contractors will be obligated to meet mandatory Inuit labour levels for all construction work.



Operations Labour

QEC has staff in the community of Cambridge Bay that are responsible for the day to day operation of the power plant. This includes a Plant Superintendent (full time), Assistant Operator (part time), and Relief Operator (casual). It is expected that existing staff will transition over to the new power plant once it has been constructed and commissioned. No new staffing is anticipated to be required as a result of this project.

QEC has regionally based power line technicians and maintenance crews that travel to and from communities to provide support to the operations staff each community on an as needed basis and respond to emergencies (e.g., power outages). Cambridge Bay is the regional hub for the Kitikmeot region. The Production Supervisor for the Kitikmeot Region, and the Lines Supervisor for the Kitikmeot/Kivalliq Regions are both located in Cambridge Bay; their offices will be relocated to the new power plant facility. Once the lines/maintenance shop and storage area is fully constructed, the power line technician crew (up to four power line technicians), maintenance crew (up to four mechanics and electricians), and stores keeper will establish their offices here.

In total, there will be up to 14 QEC staff working from the new power plant location.

Construction Materials and Equipment

The majority of construction materials for the Project will be delivered to the community by sealift. Some materials may be sourced locally or delivered via cargo plane depending on size and quantity.

Equipment anticipated to be required during construction will include but is not limited to the following.

- Excavator
- Backhoe
- Bulldozer
- Grader
- Compactor machines
- Dump trucks/articulated trucks
- Tower crane
- Pile boring/driving machine
- Boom truck
- Tele-handlers
- Fork lift
- Trailer
- Concrete Mixers
- Welding/steel cutting machines
- Testing, inspection and commissioning equipment

The contractor awarded the construction tender will be responsible for sourcing the equipment. This may include a combination of sub-contracting locally available equipment or bringing equipment to the community through the annual sealift.

Water required during construction will be the responsibility of the construction contractor (e.g., sourcing and obtaining applicable permits). It is anticipated that a water use and deposit of waste licence will be required to complete a hydrostatic test on the new bulk fuel storage tank and associated piping prior to putting into service.

For operations, QEC will connect to the Hamlet's utility system for provision of water and sewer service.

Fuel Management

Fuel storage and handling during construction will be the responsibility of the contractor. Details regarding the location and volume of fuel storage or equipment refueling during construction are not known at this time. The



contractor will be required to provide appropriate secondary containment for fuel storage and/or refueling location and have a refueling procedure and spill response plan in place.

During operation, QEC will store fuel in a bulk fuel storage facility. The final design of the bulk fuel storage facility will be determined as part of detailed engineering; however, the following specifications will be required.

- Two above ground, single wall welded, fixed roof vertical storage tank with a nominal capacity of 2.0 million litres to operate 24 hours per day and 365 days per year with a minimum design life of 40 years.
- Bulk fuel storage tanks will be located and constructed in accordance with API 650 requirements, National Fire Code of Canada (NFCC) and National Fire Protection Association (NFPA) 30 guidelines, and comply with Canadian Council of Ministers of the Environment (CCME) Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products and local, territorial and federal act and regulation requirements.
- Secondary containment area shall have dyke wall with high-density polyethylene (HDPE) liner and geotextile. It shall contain spill control and drainage mechanism. It is estimated that the secondary containment berm will be 65 metres by 53 metres (1,265 square metres).
- Suitable under-tank leak detection monitoring system such as monitoring well and/or automatic leak detection device with alarm feature.
- Applicable corrosion monitoring mechanism in accordance with soil characteristics.
- Automatic overfill prevention mechanism for shutoff the fuel supply such as motor operative valve (MOV) as per applicable standard.
- Overfill protection system with audible/visual such as weather proof strobe/sounder.

The bulk fuel tanks will connect directly with the PPD bulk fuel facility by pipeline for fuel transfers. As with the storage tanks themselves, the pipeline system will be designed to meet the federal Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations, and the CCME Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products. QEC will also work with PPD to confirm the pipeline connection is designed to meet facility specific requirements. This will include having a metering device to measure and record fuel delivery. Prior to operation, the bulk fuel storage facility will be registered with the Federal Identification Registry for Storage Tank Systems.

In addition to the bulk fuel storage facility, one above ground horizontal storage tank with a capacity of 90,000 litres will also be constructed. This tank shall be design to operate 24 hours per day and 365 days per year with a minimum equipment design life of 40 years. The tank will be double-walled with 110% secondary containment, an interstitial space monitoring system, skid mounted and located outside the berm, near the power plant building at an allowable distance. The tank shall be shop fabricated as per ULC S601 standard and will also comply with NFCC codes. In addition to being connected to the bulk fuel storage facility, a truck refueling station will be constructed with applicable safety measures (e.g., bollards) and spill prevention.

Waste Management

During construction, the contractor will be responsible for appropriately handling, storing, and disposing of all construction waste, including hazardous waste such as waste oil, in accordance with municipal and territorial requirements.



The permits approvals anticipated to be required prior to starting construction of the project are listed in Table 3. Should additional permits or approvals be identified to be required throughout the process, QEC is committed to working with the applicable agency to obtain the necessary approvals in a timely manner.

Agency	Permit Requirement
Nunavut Planning Commission	Conformity Determination
Nunavut Impact Review Board	Screening Decision
Hamlet of Cambridge Bay	Development Permit & Land Rezoning
Government of Nunavut – Community and Government Services	Lease agreement for new lot (Planning and Lands)
	Approval Letter (Nunavut Airports)
	Building Permit (Safety Services)
NavCanada	Land Use Proposal Review
Nunavut Water Board	Water Use and Deposit of Waste Licence for Hydrostatic Test

Following internal evaluation of project location options, representatives from QEC met with the Hamlet of Cambridge Bay on July 20, 2020 to present the four proposed location options for the new power plant and seek feedback regarding the location options being considered. The Hamlet carried a motion on August 24, 2020 giving QEC authorization to proceed with additional site investigations required to confirm the most suitable location for all project components.

June 02, 2021



representatives from the Hamlet of Cambridge Bay have continued on an as needed basis to progress the land review process.

QEC has also held conference calls and email correspondence with the Government of Nunavut Community and Government Services Planning and Lands Department and PPD to discuss plans QECs planning for the Cambridge Bay project.

Environmental Effects

Potential environmental effects resulting from the Project and the proposed mitigation that QEC will put in place is provided in Table 4.

Activity	Potential Environmental Effect	Positive or Negative Effect	Mitigation
Construction of all components of the Project	Construction of the power plant on a new lot will result in loss of space within the community for use by community members and wildlife	Negative	<ul style="list-style-type: none"> The area proposed for the power plant has been designated by the Hamlet as ‘restricted industrial’ and is proposed for re-zoning as industrial which suggests the Hamlet is interested in or willing to consider development of some kind in this area Location for the power plant is adjacent to an existing road; community members or wildlife using this area will already be accustomed to some activity in the area (e.g., traffic) Contractors will be required to have a construction environmental protection plan in place to limit the potential for adverse effects to the environment during construction activity The location selected for the power plant is generally flat terrain covered with sparse vegetation and gravel Surrounding development in this area is industrial in nature (e.g., airport, sea lift operations, and PPD bulk fuel facility) Efforts were made to limit disturbance to the local golf course Construction personnel will not harass wildlife; this includes the prohibition of hunting and fishing unless applicable Nunavut permits/authorizations have been acquired There are no natural drainages, or watercourses within 100 metres of the project location; Cambridge Bay is approximately 400 metres southeast There are no designated wildlife areas, marine protected areas, territorial or national parks or Inuit owned lands in conflict with the power plant location; however, it is acknowledged that terrestrial and marine wildlife may be observed in the surrounding area
	Construction of the power plant on a new lot may result in the disturbance or destruction of cultural or archaeological artifacts	Negative	<ul style="list-style-type: none"> An archaeological impact assessment will be carried out in summer 2021 to determine if archaeological sites are in potential conflict with the project and identify any necessary avoidance or mitigation measures In the event that cultural or archaeological artifacts are encountered, construction activity will stop and the Government of Nunavut Department of Culture and Heritage will be contacted
	Construction of all components of the Project may contribute to permafrost degradation	Negative	<ul style="list-style-type: none"> Project components will be constructed over bedrock where possible; jointed and frost shattered bedrock was encountered starting from depths ranging between 6.0 and 9.8 metres below ground surface Protection of permafrost and stability of the foundations/structural ground floor of the power plant and bulk fuel storage facility, shall be prime structural design considerations Rock-socketed piles are considered a feasible foundation type at this site given geotechnical conditions observed; however, this will be confirmed during detailed design The foundation design for the power plant and bulk fuel storage facility will be reviewed by a qualified professional with expertise in permafrost Well-graded frost-stable sand and gravel is expected to be used for construction of the bulk fuel storage facility Piles will be used in structural supports where possible to limit ground/permafrost disturbance (e.g., pole and transformer racks)
	Construction of all components of the Project may contribute to additional dust and noise in the community	Negative	<ul style="list-style-type: none"> Contractors will be required to maintain equipment in good working order to reduce noise generation Construction will occur during typical working hours (e.g., 10 to 12-hour shift) Dust suppression (e.g., water) and erosion control will be used on-site during construction as required Other development in the surrounding area is industrial in nature; likely that community members are accustomed to some level of dust and noise in this area from existing road and industrial activity
Fuel or hydraulic oil leak from equipment during construction	Fuel or hydraulic oil could leak or spill on to the ground resulting in contaminated soil or surface water	Negative	<ul style="list-style-type: none"> Contractors will be required to use equipment in good working condition Contractors will be required to have a spill response plan as well as spill response equipment and materials available in the event of a leak or spill In the event of a spill or leak, contaminated soil will be collected for disposal at an approved facility Contractors will be required to have a fuel management plan in place that includes refueling procedures and proper bulk storage, including secondary containment, if applicable There are no natural drainages, or watercourses within 100 metres of the project location; Cambridge Bay is approximately 400 metres southeast
Fuel leak from the Bulk Fuel Storage Facility during operation	Fuel stored within the bulk fuel storage facility could leak on to the ground resulting in contaminated soil or surface water if it is not maintained	Negative	<ul style="list-style-type: none"> Bulk fuel tanks will be designed to meet API 650 requirements, NFCC and NFPA 30 guidelines Bulk fuel storage facility will be constructed and operated in compliance with Canadian Council of Ministers of the Environment (CCME) Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products Secondary containment area shall have dyke wall with HDPE liner and geotextile and shall contain spill control and drainage mechanism Suitable under-tank leak detection monitoring system such as monitoring well and/or automatic leak detection device with alarm feature Applicable corrosion monitoring mechanism in accordance with soil characteristics Automatic overflow prevention mechanism for shutoff the fuel supply such as motor operative valve (MOV) as per applicable standard

Activity	Potential Environmental Effect	Positive or Negative Effect	Mitigation
			<ul style="list-style-type: none"> • Overfill protection system with audible/visual such as weather proof strobe/sounder • The bulk fuel storage facility will be inspected by QEC personnel on a monthly basis • The bulk fuel storage facility will be inspected by a qualified third-party contractor in accordance with API 653 as required • A spill contingency plan and community specific spill plan will include response measures applicable to the bulk fuel storage facility
Fuel or oil leak from generators or other onsite activities during operation	Fuel or oil could leak or spill in the plant or on the ground resulting in contaminated soil or surface water	Negative	<ul style="list-style-type: none"> • There are no natural drainages, or watercourses within 100 metres of the project location; Cambridge Bay is approximately 400 metres southeast • Surface water will be diverted around project components and towards drainage ditches established adjacent to roadways • Surface water will be collected within the bulk fuel storage facility berm and will be disposed of under the direction of a local wildlife officer or conservation officer • In the event of a spill or leak, contaminated soil will be collected for disposal at an approved facility • Environmental SOPs will be followed by operations staff • A lined berm will be onsite for storage of new and waste hazardous products (e.g., fuel, oil, glycol) • A spill contingency plan and community specific spill plan will be updated to reflect the new power plant location • Spill response materials will be kept on-site during operations
Fuel spill during fuel transfer	Fuel could spill on the ground resulting in contaminated soil or surface water	Negative	<ul style="list-style-type: none"> • Fuel transfers will occur via pipeline connection with PPD Tank Farm (tank to tank) • A truck fill station will be constructed as a back-up fuel transfer option; an appropriate secondary containment box will be included in the design of the truck fill station • QEC Environmental SOPs will be followed for all fuel transfers; this includes visual monitoring for the duration of the transfer • Surface water will be collected within the bulk fuel storage facility berm and will be disposed of under the direction of a local wildlife officer or conservation officer • There are no natural drainages, or watercourses within 100 metres of the project location; Cambridge Bay is approximately 400 metres southeast • A spill contingency plan and community specific spill plan will be updated to reflect the new power plant location • Spill response materials will be kept on-site during operations
Operation of the Power Plant	Operation of the new power plant may contribute to additional noise or dust in the community	Negative	<ul style="list-style-type: none"> • The new power plant location is approximately 2 kilometres away from the community core; noise and dust that may be generated during operations is anticipated to have less effect on the community than the existing power plant located in the community core • Prevailing wind is from the north-northwest; therefore, there is limited potential for dust or noise to be directed towards the community • New, more efficient generators and equipment are anticipated to generate less noise and dust in comparison to the older equipment at the existing power plant • The exhaust system will include industrial scrubbers to remove additional pollutants and dust from the exhaust before being released from the power plant. • The design of the exhaust system will consider the use of hospital grade silencers to further reduce the noise produced during operations
	The new power plant will be designed to meet the current and future energy needs of the community which will contribute to community growth	Positive	<ul style="list-style-type: none"> • None proposed as this is a positive effect
Reduction in diesel fuel usage	Operation of more efficient generators will result in a reduction in the amount of fuel used during operation of the power plant.	Positive	<ul style="list-style-type: none"> • None proposed as this is a positive effect
	Operation of more efficient generators will reduce the amount of fuel used during operation of the power plant which will result in the reduction of greenhouse gas emissions	Positive	<ul style="list-style-type: none"> • None proposed as this is a positive effect



Closure

This project is anticipated to provide an overall benefit to the Hamlet of Cambridge Bay with more efficient use of diesel, a non-renewable resource, and the reduction of greenhouse gas emissions. It will also allow QEC to improve power generation infrastructure in the community, support continued community growth and achieve its mandate for the provision of safe, reliable electrical power to the communities it serves.

Should additional information be required please contact QEC's Health, Safety and Environment representative:

Megan Larose
Health, Safety, and Environment Advisor
Qulliq Energy Corporation
Phone: 867 979 7553
Email: MLarose@qec.nu.ca

References

Canadian Council of Ministers of the Environment (CCME). 2003. Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products (PN 1326). ISBN 1-896997-33-3. Available at: https://www.ec.gc.ca/lcpe-cepa/61B26EE8-AFB3-47AC-91AC-12AFBB0B549B/CCME_eng.pdf

Nunavut Bureau of Statistics. Nunavut Population Estimates and Projections by Community, 1996 to 2023. Source: Estimates - Statistics Canada, Projections - Nunavut Bureau of Statistics. Prepared by: Nunavut Bureau of Statistics, June 10, 2010.

Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations. SOR/2008-197. Government of Canada. Last amended on October 26, 2020. Available at: <https://laws-lois.justice.gc.ca/PDF/SOR-2008-197.pdf>



Attachment A

*Municipality of Cambridge Bay Regular Council Meeting #014
Monday, August 24, 2020
Minutes*



**Municipality of Cambridge Bay
Regular Council Meeting #014
Monday, August 24th 2020 @ 5:30pm
Minutes**

Present	Staff
Mayor Pamela Gross	CAO Marla Limousin
Councillor Wilfred Wilcox	ACAO Jim MacEachern
Councillor Derek Elias	Director of Healthy Living Solomon Bucknor
Deputy Mayor Angulalik Pedersen	Executive Coordinator Genevieve Lafrance
Councillor Barrie Ferguson	Members of the Public
Councillor Savanna Moore	RCMP Jasber Dhillon
Excused	RCMP Steve Bergermen
Councillor Sandi Gillis	
Councillor Candice Pedersen	
Councillor Jenna Kamingoak	

1. Call to Order

- a. RCMP Sgt. Jasber Dhillon swore Barrie Ferguson in as a Councillor on August 24th, 2020.
- b. Mayor Pamela Gross called the meeting to order at 5:34pm.

2. Opening Prayer

Councillor Derek Elias said the opening prayer.

3. Adoption of Agenda

- a. RCM#014

Motion

To adopt RCM#014 on August 24th, 2020 with minor changes.

Moved by: Councillor Derek Elias

Seconded by: Councillor Savanna Moore

CARRIED#20-014-001

4. Declaration of Interest

Councillor Wilfred Wilcox and Deputy Mayor Angulalik Pedersen declared a Conflict of Interest with item 9c. *Amendment to Community Plan No. 288 and Zoning ByLaw No. 289* as they are both Coast Guard Auxiliary Members.



**Municipality of Cambridge Bay
Regular Council Meeting #014
Monday, August 24th 2020 @ 5:30pm
Minutes**

5. Delegation

a. RCMP July Report

Sergeant Jasber Dhillon introduced the new District Advisory Staff Sergeant, Steve Bergermen. He moved to Cambridge Bay to be closer to the community and the people in the community; to have oversight on a variety of issues; and to provide detachment commanders staffing support from a management level which gives him closer access to his commanders.

Sergeant Jasber Dhillon, RCMP, provided a policing report from July 1, 2020 to August 1, 2020. The following are the highlights:

- The volume of calls from the Detachment were 248 calls for the month of July.
- There were 6 criminal charges of offence that will be presented at Court in September.
- The Detachment held 83 prisoners.
- Calls for service show an increase of mischief, assault, and suicide all related to alcohol.
- The Detachment is still receiving calls related to permits with how they are being distributed and how many are allowed.
- The Detachment is still running with a full staff. The two vacant positions are being filled with relief workers who come in on a monthly and rotational basis.
- Due to COVID, there has not been much community engagement aside from the Canada Day Event.

b. Introduction of Solomon Bucknor – Director of Healthy Living

Mayor Pamela Gross introduced Solomon Bucknor as the new Director of Healthy Living.

Solomon introduced his background and thanked Council for their time. He discussed the current projects along with future projects.

6. Approval of Minutes

a. RCM#012 Monday, July 20th, 2020

Motion

To approve the minutes of RCM#012 held on Monday, July 20th, 2020.



**Municipality of Cambridge Bay
Regular Council Meeting #014
Monday, August 24th 2020 @ 5:30pm
Minutes**

Moved by: Councillor Derek Elias

Seconded by: Deputy Mayor Angulalik Pedersen

CARRIED#20-014-002

b. RCM#013 Monday, July 27th, 2020

Motion

To approve the minutes of RCM#013 held on Monday, July 27th, 2020.

Moved by: Councillor Savanna Moore

Seconded by: Deputy Mayor Angulalik Pedersen

CARRIED#20-014-003

7. Business

a. Cancellation of 2021 Trade Show

Discussion took place that with the current COVID-19 pandemic and our Trade Show Planner resigning from his position, Council will cancel the Kitikmeot Trade Show for the year 2021.

Motion

To cancel the 2021 Trade Show due to the COVID-19 Pandemic.

Moved by: Councillor Derek Elias

Seconded by: Councillor Savanna Moore

CARRIED#20-014-004

c. Review of Quarterly Financial Statement

The item was deferred until Director of Finance returns.

8. Committee Reports

a. Economic Development Committee

Deputy Mayor presented the Economic Development Committee Report for the month of July. Report is attached to the minutes of this meeting for reference.



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Minutes**

As per discussion, Tourism Nunavut has encouraged Municipalities to raise the fee for Cruise Ship visitation.

Motion

To increase the levy from \$75 to \$100 per Cruise Ship Passenger

Moved by: Councillor Derek Elias

Seconded by: Councillor Savanna Moore

CARRIED#20-014-005

Motion

To approve the PPP Contribution Agreement for 2021

Moved by: Councillor Wilfred Wilcox

Seconded by: Councillor Derek Elias

CARRIED#20-014-006

Motion

To approve the home based Uvayok business by Eliza Crockett

Moved by: Councillor Savanna Moore

Seconded by: Councillor Barrie Ferguson

CARRIED#20-014-007

b. Planning and Lands Development Committee

Councillor Wilfred Wilcox presented the Planning and Lands Development Committee Report for the month of July. Report attached to the minutes for reference.

Motion

To approve the Proposed Commercial Subdivision as per the presentation

Moved by: Councillor Wilfred Wilcox

Seconded by: Deputy Mayor Angulalik Pedersen

CARRIED#20-014-008



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Motion

To approve the rezoning for Residential in the Aurora Heights Subdivision as per the presentation to accommodate a separation of density for low density and higher density residential uses.

Moved by: Councillor Wilfred Wilcox

Seconded by: Councillor Derek Elias

CARRIED#20-014-009

Motion

To approve in principal the location of a new power plant for the Qulliq Energy Corporation in the area of the new industrial lands on the east side of the tank farm road (Option 2 as presented at the meeting) and request a site plan be submitted in order to determine the specific location and land requirements for the facility.

Moved by: Councillor Wilfred Wilcox

Seconded by: Angulalik Pedersen

CARRIED#20-014-010

Motion

To request the Department of Transportation upgrade the road to the airport from town and to thank them for initiating the project.

Moved by: Councillor Wilfred Wilcox

Seconded by: Councillor Barrie Ferguson

CARRIED#20-014-011

9. Bylaws and Policies

a. Bylaw 316 – Disposal of Land – Aurora Subdivision

Motion

To have a Third and Final reading of Bylaw 316 – Disposal of Land -Aurora Subdivision

Moved by: Councillor Derek Elias

Seconded by: Deputy Mayor Angulalik Pedersen

CARRIED#20-014-012



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a. Bylaw 317 – Tin Can Alley Industrial Subdivision

Motion

To have a Third and Final reading of Bylaw 317 – Disposal of Land - Tin Can Alley Industrial Subdivision

Moved by: Councillor Derek Elias

Seconded by: Councillor Wilfred Wilcox

CARRIED#20-014-013

c. Bylaw 315 – Amendment to Community Plan No. 288 and Zoning Bylaw No. 289

Motion

To go 'in camera' at 6:41pm

Moved by: Councillor Derek Elias

Seconded by: Councillor Savanna Moore

CARRIED#20-014-014

Councillor Wilfred Wilcox and Deputy Mayor Angulalik Pedersen left the Council Chambers as an 'In Camera' discussion took place regarding Bylaw 315 – Amendment to Community Plan No. 288 and Zoning Bylaw No. 289

Motion

To go 'out of camera' at 6:55pm

Moved by: Councillor Derek Elias

Seconded by: Councillor Savanna Moore

CARRIED#20-014-015

Councillor Wilfred Wilcox and Deputy Mayor Angulalik Pedersen returned to the Council Chambers.

Motion

Whereas, it is proposed to amend the Community Plan and Zoning By-law designations for Sketch lot 500-SK-410, as shown on Schedule A, from Open Space to Transportation for the purpose of permitting the construction of a Canadian Coast Guard Boat Storage Facility, and



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Whereas; due process has taken place in accordance with the Nunavut Planning Act to consider a rezoning of the lands identified; and

Whereas; the said zoning change is required to allow for a facility to be constructed having direct waterfront access in order to achieve the rapid response time of the Cambridge Bay Coast Guard Auxiliary requires in the event of a boating emergency; and

Whereas, a boat house for the Coast Guard Auxiliary is intended for the greater good of community residents and a greater consideration than the loss of a partial view by one resident; and

Whereas, comments were solicited from the public through a Public Hearing Process in accordance with the Nunavut Planning Act and only one submission was received not in support; and

Whereas, two written submissions were received prior to the Public Hearing in accordance with the requirements set forth in the "Notice of Public Hearing" with one submission in support of the rezoning and the other against the rezoning;

And Whereas, The Mayor allowed two Oral Submissions in recognition of the audience in attendance and respecting IQ Principals;

Now therefore be it resolved that after due process and consideration of the submissions, the Municipal Council of Cambridge Bay reads for a second time, the Amending ByLaw to the Community Plan 288 and to the Zoning ByLaw 289.

Councillor Wilfred Wilcox and Deputy Mayor Angulalik Pedersen abstained from the vote.

CARRIED#20-014-016

10. Administration Report

a. CAO Marla Limousin

CAO Marla Limousin updated Council on the current events within the Municipality. In short summary:



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- The work on the Heritage Park is nearing completion for this season. It is a joy to see people using it during the day and the youth using it during the evenings in a very respectful way.
- A few pieces of equipment at the new playground was installed this week. The first bids for the work was way beyond our budget and a second Expression of Interest has been sent again.
- The Paintball Course will open next week. We have placed seacans around the perimeter of the site which will be painted to make it more aesthetically pleasing.
- The Art Studio will be opening on September 12th if all goes well with the contractors completing the work.
- The opening of the Youth Centre was last night. There are new activities like Foosball, Air Hockey, Ping Pong, and Computer Games.
- Our sea lift with the arena materials and supplies will be delayed this year.
- Kerry Illerbrun will be returning to our community to work with our Youth on the Art Welding Studio, along with other projects such as getting the Welcome Sign up.
- We had a COVID-19 Response Plan meeting last week with the Government of Nunavut to plan for when COVID hits our communities and it was very reassuring to know all the items in place.
- We had 29 students in our Youth Employment throughout the summer. Our Youth were extremely interested in Trades. They were instrumental in the major cleanup of the community.

b. CAO Jim MacEachern

Jim McEachern submitted his resignation from the Municipality after 10 years.

Jim says "As everyone knows from my email last week, unfortunately I am leaving the Hamlet of Cambridge Bay and the community of Cambridge Bay. My last day will be on September 4th. I have to say that I thoroughly loved my time in Cambridge Bay. I consider Cambridge Bay home. My parents aren't getting any younger and I haven't been home for Christmas for 15-16 years now. With COVID and being home earlier this year, it made me realize that they are not getting any younger and with all of the travel restrictions, it would be difficult for me to go home to spend time with them. I want to thank everyone on Mayor & Council and previous Mayor & Council's, our



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CAO Marla and previous administrations. I have nothing but great things to say about Cambridge Bay.”

Motion

To go ‘In Camera’ at 7:04pm

Moved by: Deputy Mayor Angulalik Pedersen

Seconded by: Councillor Savanna Moore

CARRIED#20-014-017

Motion

To go ‘Out of Camera’ at 7:05pm

Moved by: Councillor Derek Elias

Seconded by: Councillor Savanna Moore

CARRIED#20-014-018

11. Around the Table

Mayor Pamela Gross: “Thank you Jim for your time and your commitment to the Municipality and our community and for the growth that you brought to our community. The biggest accomplishment that we started seeing is what you were brought here for with the CHARs Facility. It will have a long-standing impact to us. Thank you for your time.

I’m proud of the summer that we’ve had despite COVID. We’ve had the Day camp which was very successful. The Youth Centre which has just opened. I encourage you all to check it out sometime. It’s very nice in there and the kids are really enjoying it.

Exciting things coming for the Youth. I’m excited to see where things are going with the Playground, the Paintball and the Arena which should all be coming soon. I’m very happy that the youth have all stepped up and were gainfully employed. I think that is feedback that we can give to the funders to not only thank them for their time but also to show what improvement that they’ve contributed to our community and how their hands on work has really played a part in improving our communities looks and also the feel of the community seeing the youth happy and employed. Doing different things is always very uplifting.”



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Deputy Mayor Angulalik Pedersen: "Thank you for everything Jim. In and out of the Hamlet you have done so much for this town."

Just so that you are aware, I will be away from September 7th-October 1st. I have a lot of travelling to do to Arctic communities as an instructor for Coastguard Auxiliary."

Councillor Barrie Ferguson: "It's my first night in as Councillor, thanks for being patient. If I can help with anything than let me know."

Mayor Pamela Gross: "I forgot to welcome you earlier. We are happy to have you here."

Councillor Savanna Moore: "The question that I have is about the Youth Centre. Do they have late night hours?"

CAO Marla Limousin: "They open in the morning for the Breakfast Program. On weeknights they open from 4pm-11pm. On the weekends they are open from 4pm-12am."

Councillor Savanna Moore: "I heard that there is a possibility of the Hamlet taking over the Liquor Permits?"

CAO Marla Limousin: "We have spoken about it but we haven't been able to get feedback. It is the same with the Drivers Licenses. We will continue to prompt them again."

ACAO Jim MacEachern: "Frontier College is coming into Cambridge Bay to deliver Pre-Trades Training. They already had an instructor with students lined up as well. We are just in the process of trying to find accommodations to seal the deal. I saw that a few other communities in Nunavut delivered the program as well and their success ratios were very good. People have gone through the Pre-Trades Training, then continued on to the Trades Training."

Mayor Pamela Gross: "Koana. Where are they doing that training?"

ACAO Jim MacEachern: "I'm not sure."



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This has always been a struggle, and not just in Cambridge Bay. Every community is struggling with trying to get people into that training. It is the Math and English requirements. There is a gap between people leaving High

School and having the ability to pass those classes. This Pre-Trades training is to address those short falls."

Councillor Wilfred Wilcox: "I have a question. There is a Sea Can houses business at the airport. The Hamlet's name was dropped into that. Do we have anything to do with that?"

CAO Marla Limousin: "No. The only thing that we have to do with that is Angela having a discussion on a business license."

Councillor Derek Elias: "On behalf of me, the Fire Department, KIA – you will be severely missed by the community. Your general all good personality, your knowledge and expertise will be missed. The runway is always open. We wish you all the best in your future endeavors. We sincerely hope that you come back to Cambridge Bay."

12. Adjournment



Motion

To Adjourn RCM#014 at 7:18pm

Moved by: Councillor Derek Elias

Seconded by: Deputy Mayor Angulalik Pedersen

CARRIED#20-014-019

	M. Hossain for 
Mayor Pamela Gross	CAO Marla Limousin
Date: Sept. 23, 2020	Date:

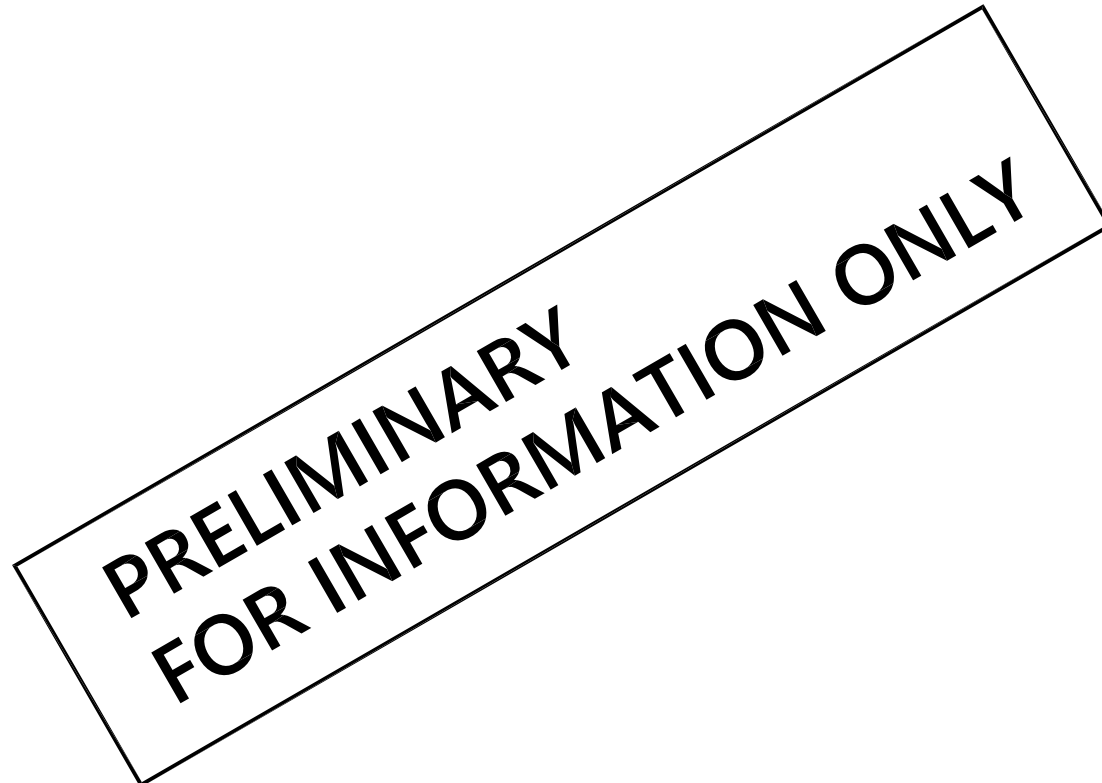


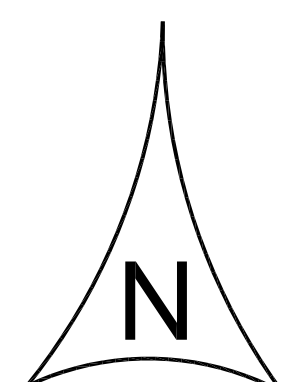
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Qulliq Energy Corporation
Société d'énergie Qulliq
Qulliq Aluyaktuqtunik Ikumatjutiit

Cambridge Bay New Power Plant Project
Nunavut Planning Commission

Attachment B

Preliminary Site Layout of the Proposed Power Plant

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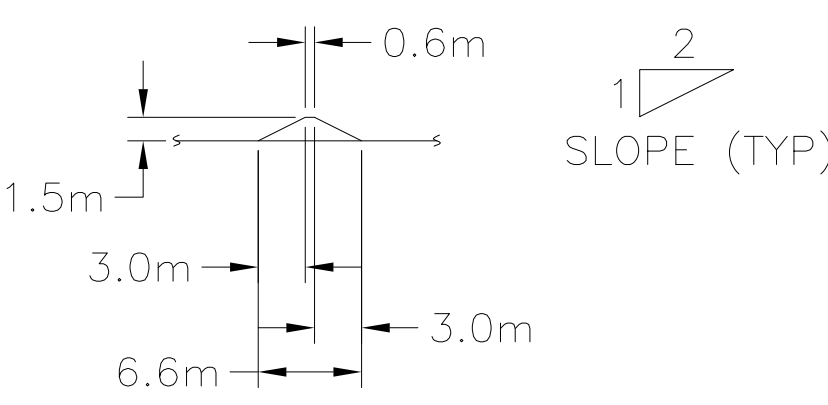
Cambridge Bay

**PRELIMINARY
FOR INFORMATION ONLY**

COORDINATES FOR PROPOSED POWER PLANT SITE		
CORNER	EASTING (X)	NORTHING (Y)
1 (NORTH)	495933.19m	7666392.90 m
2 (EAST)	496080.02 m	7666288.74 m
3 (SOUTH)	496033.79 m	7666223.59 m
4 (WEST)	495886.89 m	7666327.60 m

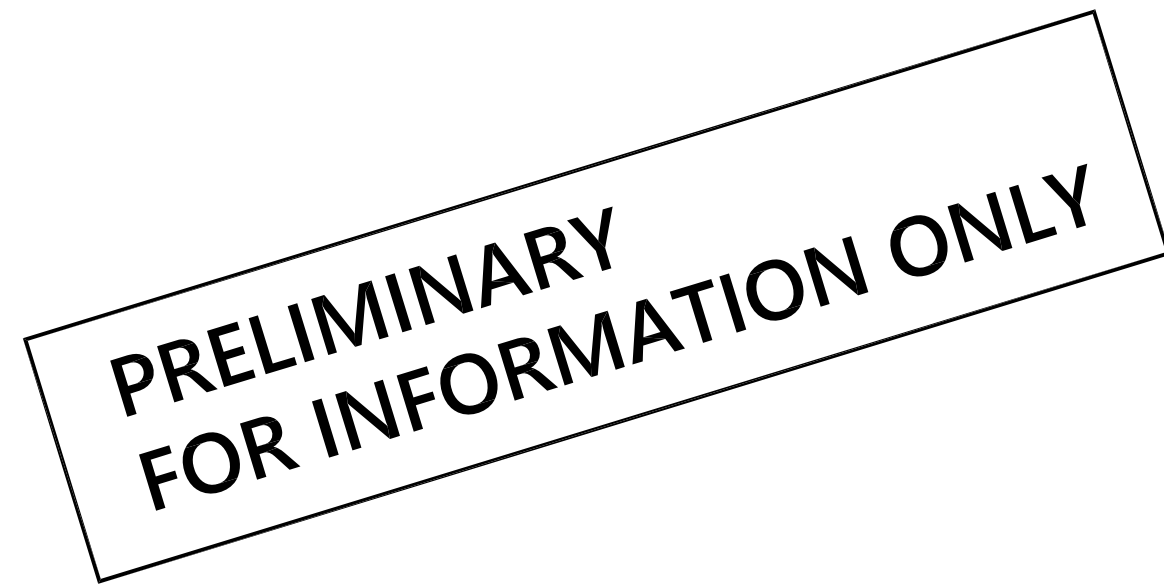
NOTES: (CONTINUED ON SHEET 3)

- 1 COORDINATES ARE TAKEN FROM EXISTING AUTOCAD BASE MAP.
FINAL COORDINATES TO BE VERIFIED FROM AN ONSITE SURVEY.
- 2 CONTAINMENT VOLUME OF THE BERM CALCULATED TO BE 2.76 M LITERS.



TYPICAL BERM WALL DETAIL

[illegible]

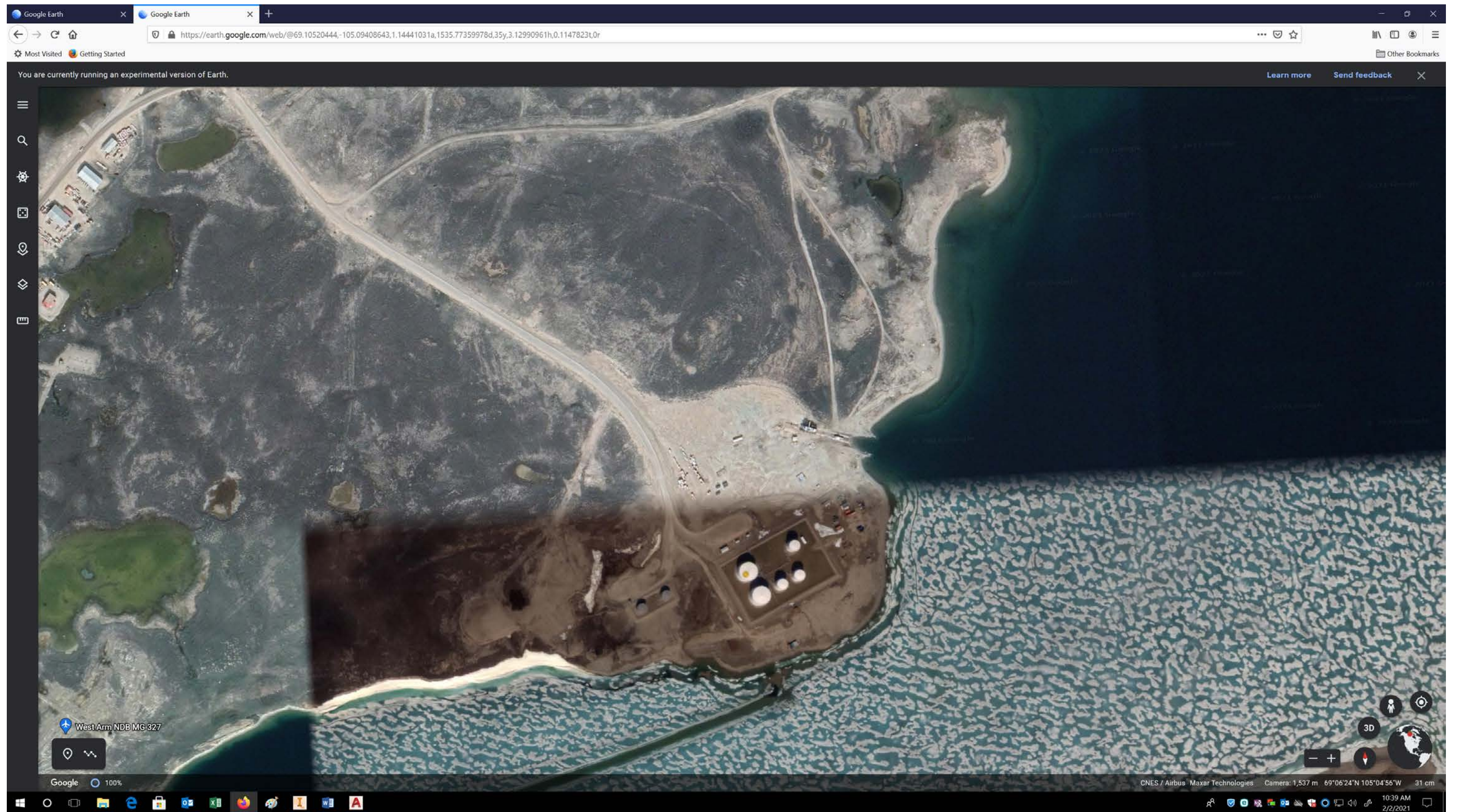


3 PROPOSED POWER PLANT SITE PLAN WITH TOPOGRAPHIC CONTOUR LINES

NOTES: (CONTINUED)

- 3 CONTOUR LINES AND ROAD R36 OUTLINE ARE TAKEN FROM CONSULTANT (ENGLOBE CORP.)
DRAWING NO: 80590-TOPO-OC26-REV 1.
DETAILED CONTOUR LINE INFORMATION IS NOT AVAILABLE FROM THIS AUTOCAD BASE MAP.

[illegible]





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Qulliq Energy Corporation
Société d'énergie Qulliq
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