

February 25, 2026

Bijaya Adhikari
Inuvialuit Water Board
P.O Box 2531
Inuvik, NT X0E 0T0

Dear Inuvialuit Water Board,

Please find attached the requested updates to the Questionnaire for Municipal Undertaking and its relevant appendices. Refer to the following table for an overview of the revisions made.

Question	How it is addressed	Where it is addressed
A1	The capacity has been updated to 19m3.	Page 7, Section 2 (page 8 of PDF package, counting this letter)
A2	The value has been updated to 30m3/day.	Page 7, Section 2 (page 8 of PDF package, counting this letter)
A3	Appendix A has been updated to include data from 2025. The appendix from 2019 has been preserved, as some details differ. The information provided is the most up to date.	Pages 19-30, Appendix A (pages 20-31 of PDF package, counting this letter)
A4	Appendix B has been updated with Bacteriological Results from November 2025.	Pages 31-38, Appendix B (pages 32-39 of PDF package, counting this letter)
A5	The current SAO has signed the page	Page 17, Section 8 (page 18 of PDF package, counting this letter)
A6	List of Attachments is updated	Page 18, Section 9 (page 19 of PDF package, counting this letter)
A7	The most recent available Hazmat Database is the one that covers the period from 2016-2020 and is included in Appendix C.	Pages 39-40, Appendix C (pages 40-41 of PDF package, counting this letter)
A8	A letter with updates to Appendix J has been included in its place in the document.	Pages 51-53, Appendix J (pages 52-54 of PDF, counting this letter)

We trust that the information provided addresses your questions. Please do not hesitate to reach out if there are any concerns.

Kind regards,

Kadence Bunke, RPP

Dillon Consulting Limited



Water Licence Application Questionnaire

for

Municipal Undertakings

'To provide for the conservation, development and utilization of waters in a manner that will provide the optimum benefit for all Canadians and in particular, for the residents of the Inuvialuit Settlement Region.'

October 2014

The purpose of this questionnaire is to solicit supplemental information from an applicant to support his/her application for a water license (or its renewal). It is anticipated that the completion of this questionnaire will reduce delays arising from the Inuvialuit Water Board having to solicit additional information after an application has been submitted. This information will also be useful during the review of your application, which must be undertaken prior to development and approval of a water license.

The applicant should complete the questionnaire to the best of his/her ability, recognizing that some questions may not be relevant to the project under consideration. For questions that do not relate to the operation undertaking, the applicant is requested to indicate "N/A" (Not Applicable).

NOTE: If space is insufficient for any of the responses on this questionnaire, use the back of the sheet or an attachment.

If any questions arise while completing the questionnaire, the applicant may wish to contact the Inuvialuit Water Board at (867) 678-2942.

This questionnaire can be sent with the application for a new licence or the renewal of an existing licence to the following contact information:

Executive Director
Inuvialuit Water Board
P.O. 2531
Inuvik, NT, Canada
X0E 0T0
Email: info@inuvwb.ca

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SECTION 1: GENERAL

Date:

Applicant:

(Company, Corporation, Hamlet, Town)

(Person to contact and its position)

(Postal address)

(Telephone number)

(Facsimile number)

Community Status

City _____ Village _____ Town _____ Camp _____
Other _____

Population (according to most recent census results), and the Estimated Growth Rate over next five years or Camp Maximum Capacity:

Indicate the status of the municipality's license on the date of application.

New Application: Yes No

If No, please submit your Water Licence Number and the date the licence was issued.

Renewal of Water License Number:

Date of Issuance:

Has any baseline data been collected for the main water bodies in the area?

Yes No Unknown

If yes, please attach:

- All data gathered on the physical, biological and chemical characteristics at each sampling location;
- A summary or program details indicating sampling locations, description of waste at each location, sampling frequency, and parameters analyzed;
- An outline of Quality Assurance/Quality Control methods being applied to sampling, preservation and analysis within the program.

Has any baseline data collection and evaluation been undertaken with respect to the various biophysical components of the environment potentially affected by the project (e.g., wildlife, soils, air quality) in addition to water related information requested in this questionnaire?

Yes No Unknown

If yes, please attach copies of reports or cite titles, authors and dates (prepared by, title and completion date).

If no, do you plan on doing such studies? If you do plan on doing such studies, please describe the proposals.

Attach detailed maps which show the relative locations of the:

- raw water intake;
- water treatment facilities;
- fuel & chemical storage;
- sewage treatment facilities;
- wastewater treatment area and discharge outlets;
- solid waste disposal areas and drainage patterns;
- hazardous waste disposal area;
- transportation access routes; and
- existing waterbodies/courses and any changes to these water bodies/courses which have or may occur as a result of water use of waste disposal facilities, locations of environmental monitoring sites.

Attach detailed scale plan drawing(s) of the proposed (or present) sewage treatment system. The drawing(s) must be stamped by an engineer registered in NWT and include the following:

- details of pond size and elevation;
- precise details of all retaining structures (dimensions, materials of construction, etc.);
- details of the drainage basin, and existing and proposed drainage modifications;
- details of all decant, siphon mechanisms etc, including sewage treatment facilities;
- details regarding direction and route followed by wastewater flow from the area;
- indications of the distance to nearby major watercourses, and fish bearing waters;
- location and construction of liners;
- leachate and groundwater collection systems; and
- control structures.

Attach detailed scale plan drawings of the proposed (or present) solid waste disposal area. The drawings must include the following:

- precise details of all retaining structures (dimensions, materials of construction, etc.);
- details of the drainage basin, and existing and proposed drainage modifications;
- details regarding direction and route followed by wastewater flow from the area;
- indications of the distance to nearby major watercourses, and fish bearing waters;
- all sources of seepage presently encountered in the vicinity of these areas;
- the volume of each seepage flow (m³/day); and
- the direction of each flow.

Attach the present or proposed contingency plan which will be used for each portion of the waste control system in the event it fails to operate properly.

Attach the present or proposed spill contingency plan which will be employed in case a spill of hazardous materials occurs. Describe courses of action, mitigative methods and equipment available for use.

NOTE: Individual detailed large scale drawings of all facilities (dam, decant system, ditch, dike, water treatment plant, etc) constructed or proposed must be attached. Specific details with regard to the methods of construction, materials used, etc. are required.

SECTION 2: WATER SUPPLY

Volume of water use (m³/day)

Type of source

Lake: _____ River: _____ Well: _____ Other: _____

Name of raw water source and alternative, if any

Usual break-up & freeze-up months

Break-up: _____ Freeze-up: _____

Please provide short descriptions for the following

Freshwater intake facility:

Operating capacity of the pumps used:

Type of water storage facility (ie: Reservoir, storage, tank, none. For other, please provide a description)

What is the capacity of the water storage facility? m³

What is the rate of withdrawal from the source? (m³/day)

Is water drawn from the source?

If yes, during what month(s) is it drawn? And for what period of time is it drawn (days/weeks/months)?

SECTION 3: WATER TREATMENT

Indicate the quality of the raw water prior to treatment & distribution and give a description

Good

Fair

Poor

Description:

Indicate the capacity of the treatment facility (L/minute)

Type of water treatment facility (ie: Filtration & Chlorination, Chlorination only, UV, None. If other, please describe)

Describe in detail the method of water treatment (ie: backwash, flocculation, sedimentation, chemicals used) and provide the results of the most recent bacteriological and chemical analysis. Attach a diagram if possible.

Have there been any problems or health and environmental concerns with the water treatment facilities?

Yes

No

If yes, please describe:

Are there any changes planned in the water treatment facilities?

Yes No

If yes, please attach a copy of the plan or indicate change

SECTION 4: SEWAGE DISPOSAL

Indicate the level of treatment the sewage will be receiving (primary, secondary or tertiary. If other, please describe)

Pre-treatment (if applicable)

Screening Maceration

Lagoons (if applicable)

Anaerobic aerobic facultative

Indicate the capacity of the sewage treatment facility (m³)

Indicate the retention time of the sewage while in the treatment facility (days)

Indicate the estimated rate of discharge of wastewater

Indicate the location of the discharge point

Will the discharge be seasonal or continuous?

If seasonal, during what month(s) will it occur?

What is the duration of the discharge (days/weeks/months)

Comment on the general condition of the:

Sewage collection system

Discharge control system

Dams, diversion, dykes or berms

Have there been any problems or health and environmental concerns with the sewage disposal facilities?

Yes No

If yes, please describe:

The average depth of the wastewater lagoon is (meters)

What is the design freeboard? (meters)

Is there any harvesting of fish or shellfish in the waters where waste is discharged?

Yes No

If yes, please indicate species harvested, and estimate amounts.

Will the municipality be using a honey bag pit?

Yes No

If yes, describe its location, drainage and operation & maintenance

Are there any sources of commercial or industrial liquid waste being discharged or deposited to the municipal system which may affect the quality of the effluent or leachate produced?

Yes No

If yes, please describe:

Have any spills occurred in the past five years?

Yes No

If yes, please submit a list of all spills with the date of the spill, the type of spill, the quantity spilled, the location of the spill, the method used to clean the spill and the results of the clean-up.

Have there been any operating problems with the lagoon?

Yes No

If yes, please describe:

Are there any changes planned in the sewage disposal facilities?

Yes No

If yes, please describe and if possible, attach a copy of the plan:

SECTION 5: SOLID WASTE DISPOSAL

Indicate the capacity of the disposal area (m³)

The average depth of the solid waste disposal site is (meters)

Are there any sources of commercial or industrial solid waste being deposited in the municipal system which may affect the quality of the effluent or leachate produced?

Yes No

If yes, please describe:

Briefly describe how the solid waste will be picked up & delivered to the disposal area

Is the solid waste site fenced?

Yes No

Will the municipality be using a dead animal pit?

Yes No

If yes, please describe its location, drainage and operation & maintenance:

Will the municipality be using a bulky metal waste disposal area?

Yes No

If yes, please describe its location and operation & maintenance:

Will the municipality be using a hazardous waste disposal area?

Yes No

If yes, please describe its location, structure and operation & maintenance:

Are there any hazardous commercial wastes entering the solid waste disposal system?

Yes No

If yes, please describe (source, volume, special handling and disposal methods for these wastes):

If any natural watercourse may gain access to the proposed solid waste disposal area, what methods will be used to decrease the amount of runoff water entering these areas? Indicate the volume of water which may enter these areas from the source(s) in question and attach all pertinent details of proposed diversions

Please describe the nature of any diversions of watercourses

Have there been any problems or health and environmental concerns with the solid waste disposal facilities?

Yes No

If yes, please describe:

Are any changes planned in the solid waste disposal system?

Yes No

If yes, please describe and, if possible, attach a copy of the plan:

SECTION 6: ABANDONMENT AND RESTORATION PROGRAM

List and describe the locations of abandoned or restored water treatment facilities.

List and describe the locations of abandoned or restored sewage treatment facilities.

List and describe the locations of abandoned or restored solid waste disposal facilities.

Do you have an abandonment and restoration plan?

Yes

No

If yes, please attach a copy of the plan.

SECTION 7: WATER QUALITY MONITORING PROGRAM

Briefly describe the methodology that is presently used to sample the raw water supply

Briefly describe any monitoring that is done on wastewater effluent and leachate

Recognized laboratory performing analysis of samples

Name of the laboratory:

Contact name:

Postal address:

Telephone number:

Facsimile number:

Are any changes planned in the water quality monitoring program?

Yes

No

If yes, please describe

SECTION 8: ENVIRONMENTAL ASSESSMENT AND SCREENING

Has this project ever undergone an initial environmental review, including previous owners?

Yes No Unknown

If yes, by whom and when?

[Redacted]

Has approval been obtained or sought from the Department of Fisheries and Oceans for using any fish bearing water bodies for containment or disposal of waste?


Yes No

Are there any environmental studies ongoing or planned?

Yes No

If yes, please provide a list of these studies.

[Redacted]

Prepared by:	<u>Aaron Ruben</u>	<u>Acting SAO</u>
	Printed Name	Title
	<u></u>	<u>February 27, 2026</u>
	Signature	Completion Date

Appendix A: Water Chemistry Raw Intake
2019 Results
2025 Results



Date: 27-MAR-19

PO No.:

WO No.: L2244092

Project Ref:

Sample ID: PAULATUK WTP-HAMLET OFFICE TAP

Sampled By:

Date Collected: 12-MAR-19

Lab Sample ID: L2244092-1

Matrix: WATER

Cash Clients
 106 VETERANS WAY
 PO BOX 1480
 INUVIK NT X0E 0T0
 ATTN: SHAWN HARDY

Test Description	Result	Qualifier	Units of Measure	CDWQG MAC	Aesthetic Objective	Date Analyzed
Alkalinity Species by Titration						
Alkalinity Species by Titration						
Alkalinity, Bicarbonate (as CaCO3)	177		mg/L			19-MAR-19
Alkalinity, Carbonate (as CaCO3)	<1.0		mg/L			19-MAR-19
Alkalinity, Hydroxide (as CaCO3)	<1.0		mg/L			19-MAR-19
Alkalinity, Total (as CaCO3)	177		mg/L			19-MAR-19
Anions by Ion Chromatography						
Sulfate in Water by IC						
Sulfate (SO4)	152		mg/L		500	19-MAR-19
Nitrite in Water by IC (Low Level)						
*Nitrite (as N)	<0.0010		mg/L	1		19-MAR-19
Nitrate in Water by IC (Low Level)						
*Nitrate (as N)	0.0561		mg/L	10		19-MAR-19
Fluoride in Water by IC						
Fluoride (F)	0.051		mg/L	1.5		19-MAR-19
Chloride in Water by IC						
Chloride (Cl)	9.06		mg/L		250	19-MAR-19
Bromide in Water by IC (Low Level)						
Bromide (Br)	<0.050		mg/L			19-MAR-19
BTEX+VPH+MTBE & F1 in Water						
F1-BTEX	<0.10		mg/L			25-MAR-19
Xylenes	<0.00075		mg/L	0.09	0.02	25-MAR-19
Surr: 3,4-Dichlorotoluene (SS)	109.8		%			25-MAR-19
VPH (C6-C10)	<0.10		mg/L			25-MAR-19
VOC7 and/or VOC Surrogates for Waters						
Surr: 1,4-Difluorobenzene (SS)	101.3		%			25-MAR-19
Surr: 4-Bromofluorobenzene (SS)	97.0		%			25-MAR-19
VH in Water by Headspace GCFID						
Volatile Hydrocarbons (VH6-10)	<0.10		mg/L			25-MAR-19
CCME F1 By Headspace with GCFID						
F1 (C6-C10)	<0.10		mg/L			25-MAR-19
BTEX/MTBE/Styrene by Headspace GCMS						
Benzene	<0.00050		mg/L	0.005		25-MAR-19
Ethylbenzene	<0.00050		mg/L	0.14	0.0016	25-MAR-19
Methyl t-butyl ether (MTBE)	<0.00050		mg/L		0.015	25-MAR-19

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Date: 27-MAR-19

PO No.:

WO No.: L2244092

Project Ref:

Sample ID: PAULATUK WTP-HAMLET OFFICE TAP

Sampled By:

Date Collected: 12-MAR-19

Lab Sample ID: L2244092-1

Matrix: WATER

Cash Clients
 106 VETERANS WAY
 PO BOX 1480
 INUVIK NT X0E 0T0
 ATTN: SHAWN HARDY

Test Description	Result	Qualifier	Units of Measure	CDWQG MAC	Aesthetic Objective	Date Analyzed
BTEX+VPH+MTBE & F1 in Water						
BTEX/MTBE/Styrene by Headspace GCMS						
Styrene	<0.00050		mg/L			25-MAR-19
Toluene	<0.00045		mg/L	0.06	0.024	25-MAR-19
meta- & para-Xylene	<0.00050		mg/L			25-MAR-19
ortho-Xylene	<0.00050		mg/L			25-MAR-19
Colour, True	<5.0		CU		15	19-MAR-19
Dissolved Organic Carbon	3.66		mg/L			20-MAR-19
Hardness (as CaCO3)	357	HTC	mg/L		500	20-MAR-19
Cyanide, Total	<0.0050	HTP	mg/L	0.2		21-MAR-19
Total Dissolved Solids	419		mg/L		500	19-MAR-19
Mercury (Hg)-Total	<0.0000050		mg/L	0.001		20-MAR-19
Total Suspended Solids	<3.0		mg/L			18-MAR-19
Total THMs	0.0117		mg/L	0.1		26-MAR-19
Total Organic Carbon	3.16		mg/L			19-MAR-19
*Turbidity	0.99		NTU			19-MAR-19
pH	8.27		pH		7-10.5	19-MAR-19
VOC (THM) by Headspace GCMS						
Chloroform	0.0081		mg/L			26-MAR-19
Bromodichloromethane	0.0036		mg/L			26-MAR-19
Bromoform	<0.0010		mg/L			26-MAR-19
Dibromochloromethane	<0.0010		mg/L			26-MAR-19
Total Metals in Water by CRC ICPMS						
Aluminum (Al)-Total	0.0047		mg/L		0.1	19-MAR-19
Antimony (Sb)-Total	<0.00010		mg/L	0.006		19-MAR-19
Arsenic (As)-Total	0.00040		mg/L	0.01		19-MAR-19
Barium (Ba)-Total	0.0597		mg/L	1		19-MAR-19
Beryllium (Be)-Total	<0.00010		mg/L			19-MAR-19
Bismuth (Bi)-Total	<0.000050		mg/L			19-MAR-19
Boron (B)-Total	0.011		mg/L	5		19-MAR-19
Cadmium (Cd)-Total	0.0000213		mg/L	0.005		19-MAR-19
Calcium (Ca)-Total	73.4		mg/L			19-MAR-19
Cesium (Cs)-Total	<0.000010		mg/L			19-MAR-19
Chromium (Cr)-Total	0.00013		mg/L	0.05		19-MAR-19
Cobalt (Co)-Total	0.00023		mg/L			19-MAR-19
Copper (Cu)-Total	0.695		mg/L	2.0	1.0	19-MAR-19
Iron (Fe)-Total	0.078		mg/L		0.3	19-MAR-19
Lead (Pb)-Total	0.00140		mg/L	0.01		19-MAR-19
Lithium (Li)-Total	0.0036		mg/L			19-MAR-19

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Date: 27-MAR-19

PO No.:

WO No.: L2244092

Project Ref:

Sample ID: PAULATUK WTP-HAMLET OFFICE TAP


Sampled By:

Date Collected: 12-MAR-19

Lab Sample ID: L2244092-1

Matrix: WATER

Cash Clients
 106 VETERANS WAY
 PO BOX 1480
 INUVIK NT X0E 0T0
 ATTN: SHAWN HARDY

Test Description	Result	Qualifier	Units of Measure	CDWQG MAC	Aesthetic Objective	Date Analyzed
Total Metals in Water by CRC ICPMS						
Magnesium (Mg)-Total	42.2		mg/L			19-MAR-19
Manganese (Mn)-Total	0.00897		mg/L		0.05	19-MAR-19
Molybdenum (Mo)-Total	0.000103		mg/L			19-MAR-19
Nickel (Ni)-Total	0.00311		mg/L			19-MAR-19
Phosphorus (P)-Total	<0.050		mg/L			19-MAR-19
Potassium (K)-Total	0.802		mg/L			19-MAR-19
Rubidium (Rb)-Total	0.00026		mg/L			19-MAR-19
Selenium (Se)-Total	<0.000050		mg/L	0.05		19-MAR-19
Silicon (Si)-Total	1.63		mg/L			19-MAR-19
Silver (Ag)-Total	0.000010		mg/L			19-MAR-19
Sodium (Na)-Total	5.78		mg/L		200	19-MAR-19
Strontium (Sr)-Total	0.0787		mg/L			19-MAR-19
Sulfur (S)-Total	54.6		mg/L			19-MAR-19
Tellurium (Te)-Total	<0.00020		mg/L			19-MAR-19
Thallium (Tl)-Total	<0.000010		mg/L			19-MAR-19
Thorium (Th)-Total	<0.00010		mg/L			19-MAR-19
Tin (Sn)-Total	<0.00010		mg/L			19-MAR-19
Titanium (Ti)-Total	<0.00030		mg/L			19-MAR-19
Tungsten (W)-Total	<0.00010		mg/L			19-MAR-19
Uranium (U)-Total	0.000104		mg/L	0.02		19-MAR-19
Vanadium (V)-Total	<0.00050		mg/L			19-MAR-19
Zinc (Zn)-Total	0.0635		mg/L		5.0	19-MAR-19
Zirconium (Zr)-Total	<0.000060		mg/L			19-MAR-19
CDWQG = Health Canada Guideline Limits updated		MAY 2018				
<p>* CDWQG for Nitrate+Nitrite-N is the limit for nitrate only. If present as Nitrate then the limit is 10mg/L < or N.D. = less than detection limit. * Turbidity guideline based on membrane filtration. For guidelines on conventional treatment and slow sand or diatomaceous earth filtration please see Summary Table of Guidelines for Canadian Drinking Water Quality - A blank entry designates no known limit. - A shaded value in the Results column exceeds CDWQG MAC and/ or Aesthetic Objective.</p>						
<p>Approved by  Oliver Gregg Account Manager</p>						

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Guidelines & Objectives

Sample Parameter Qualifier key listed:

Qualifier	Description
HTC	Hardness was calculated from Total Ca and/or Mg concentrations and may be biased high (dissolved Ca/Mg results unavailable).
HTP	Sample preparation or preservation hold time was exceeded.

Qualifiers for Individual Samples Listed:

Sample	Client ID	Qualifier	Description
L2244092-1	PAULATUK WTP-HAMLET C	THMP	Sample for THM analysis was preserved with sodium bisulfate. If sample is chlorinated, THM formation may have continued after time of sampling.

Health Canada MAC Health Related Criteria Limits

Nitrate/Nitrite-N*	Criteria limit is 10 mg/L (1.0 mg/L if present as all Nitrite-N). High concentrations may contribute to blue baby syndrome in infants.
Lead*	A cumulative body poison, uncommon in naturally occurring hard waters.
Fluoride*	Present in fluoridated water supplies at 0.8 mg/L to reduce dental caries. Elevated levels causes fluorosis (mottling of teeth).
Total Coliforms*	Criteria is 0 CFU/100mL. Adverse health effects.
E. Coli*	Criteria is 0 CFU/100 mL. Certain E. Coli bacteria can be life threatening.

*Health Canada Canadian Drinking Water Quality Guidelines (MAC limit)

Aesthetic Objective Concentration Levels

Alkalinity	Acid neutralizing capacity. Usually a measure of carbonate and bicarbonates and calculated and reported as calcium carbonate.
Balance	Quality control parameter ratiating cations to anions
Bicarbonate	See Alkalinity. Report as the anion HCO ₃ -1
Carbonate	See Alkalinity. Reported at the anion CO ₃ -2
Calcium	See Hardness. Common major cation of water chemistry.
Chloride	Common major anion of water chemistry.
Conductance	Physical test measuring water salinity (dissolved ions or solids)
Hardness	Classical measure or capacity of water to precipitate soap (chiefly calcium and magnesium ions). Causes scaling tendency in water if carbonates/bicarbonates are present (if >200 mg/L). For drinking water purposes waters with results <200 mg/L are considered acceptable, results >200 mg/L are considered poor but can be tolerated. Results >500 mg/L are unacceptable.
Hydroxide	See alkalinity
Magnesium	See hardness. Common major cation of water chemistry. Elevated levels (>125 mg/L) may exert a cathartic or diuretic action.
pH	Measure of water acidity/alkalinity. Normal range is 7.0-8.5.
Potassium	Common major cation of water chemistry.
Sodium	Common major cation of water chemistry. Measure of salinity (saltiness).The aesthetic objective (not related to health) for sodium in drinking water is 200 mg/L. However, where sodium concentration of the drinking water exceeds 20 mg/L, it is recommended that any person on a sodium restricted diet consult with his/her physician or Medical Officer of Health concerning the use of that water.
Sulphate	Common major anion of water chemistry. Elevated levels may exert a cathartic or diuretic action.
Total Dissolved Solids	A measure of water salinity.
Iron	Causes staining to laundry and porcelain and astringent taste. Oxidizes to red-brown precipitate on exposure to air.
Manganese	Elevated levels may cause staining of laundry and porcelain.
Heterotrophic Plate Count	Criteria is 500 cfu/mL Measure of heterotrophic bacteria present.

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Taiga Environmental Laboratory

4601-52nd Ave., Box 1320, Yellowknife, NT. X1A 2L9

Tel: (867)-767-9235 Fax: (867)-920-8740

Taiga Batch No.:
251747

- FINAL REPORT -

Prepared For: Hamlet of Paulatuk

Address: P.O. Box 98
Paulatuk, NT
XOE 1N0

Attn: SAO

Facsimile:

Final report has been reviewed and approved by:

Bradley Koswan
Quality Assurance Officer

NOTES:

- Test methods and data are validated by the laboratory's Quality Assurance Program. Taiga Environmental Laboratory is accredited by the Canadian Association for Laboratory Accreditation Inc. (CALA) to ISO/IEC 17025 as a testing laboratory for specific tests registered with CALA.
- Routine methods are based on recognized procedures from sources such as
 - Standard Methods for the Examination of Water and Wastewater APHA AWWA WEF;
 - Environment Canada
 - USEPA
- Samples shall be kept for thirty (30) days after the final report is issued. All microbiological samples shall be disposed of immediately upon completion of analysis to minimize biohazardous risks to laboratory personnel. Please contact the laboratory if you have any special requirements.
- Final results are based on the specific tests at the time of analysis and do not represent the conditions during sampling.
- All data provided by the customer will be represented by the blue colour used in this statement.



Taiga Batch No.:
251747

- CERTIFICATE OF ANALYSIS -

Client Sample ID: **1**

Taiga Sample ID: 001

Client Project:

Sample Type: **Drinking Water (Raw)**

Received Date: 14-Nov-25

Sampling Date: **12-Nov-25**

Sampling Time: 13:30

Location: **Water Treatment Plant**

Report Status: **Final**

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifer
<u>Cations by ICP-MS</u>						
Hardness	287	0.7	mg/L	18-Nov-25	TEL035	
Sodium	4.2	0.1	mg/L	18-Nov-25	TEL035	
<u>Inorganics - Nutrients</u>						
Organic Carbon, Dissolved	7.2	0.5	mg/L	27-Nov-25	TEL033	231
Organic Carbon, Total	7.3	0.5	mg/L	27-Nov-25	TEL033	231
<u>Inorganics - Physicals</u>						
Alkalinity, Total (as CaCO3)	153	0.4	mg/L	14-Nov-25	TEL060	
Colour, True	< 5	5	TCU	14-Nov-25	TEL051	
pH	7.15		pH units	14-Nov-25	TEL058	
Solids, Total Dissolved	328	10	mg/L	18-Nov-25	TEL009	
Solids, Total Suspended	< 3	3	mg/L	18-Nov-25	TEL008	
Turbidity	1.07	0.05	NTU	14-Nov-25	TEL006	
<u>Major Ions</u>						
Chloride	6.1	0.7	mg/L	14-Nov-25	TEL055	
Fluoride	< 0.1	0.1	mg/L	14-Nov-25	TEL055	
Nitrate as Nitrogen	0.03	0.01	mg/L	14-Nov-25	TEL055	
Sulphate	116	1	mg/L	14-Nov-25	TEL055	

Subcontracted Organics

ReportDate: Tuesday, December 2, 2025

Print Date: Tuesday, December 2, 2025



Taiga Batch No.:
251747

- CERTIFICATE OF ANALYSIS -

Client Sample ID: **1**

Taiga Sample ID: **001**

Cyanide, Total	< 0.0050	0.005	mg/L	24-Nov-25	APHA4500-CN
<u>Trace Metals, Total</u>					
Aluminum	2.0	0.6	µg/L	18-Nov-25	TEL035
Arsenic	0.3	0.2	µg/L	18-Nov-25	TEL035
Barium	47.9	0.1	µg/L	18-Nov-25	TEL035
Cadmium	< 0.04	0.04	µg/L	18-Nov-25	TEL035
Chromium	< 0.1	0.1	µg/L	18-Nov-25	TEL035
Copper	1.6	0.2	µg/L	18-Nov-25	TEL035
Iron	31	5	µg/L	18-Nov-25	TEL035
Lead	< 0.1	0.1	µg/L	18-Nov-25	TEL035
Manganese	3.6	0.1	µg/L	18-Nov-25	TEL035
Mercury	< 0.01	0.01	µg/L	18-Nov-25	TEL035
Selenium	< 0.3	0.3	µg/L	18-Nov-25	TEL035
Uranium	< 0.1	0.1	µg/L	18-Nov-25	TEL035
Zinc	0.6	0.4	µg/L	18-Nov-25	TEL035



Taiga Batch No.:
251747

- CERTIFICATE OF ANALYSIS -

Client Sample ID: **2**

Taiga Sample ID: 002

Client Project:

Sample Type: **Drinking Water (Treated)**

Received Date: 14-Nov-25

Sampling Date: **12-Nov-25**

Sampling Time: 13:30

Location: **Water Treatment Plant**

Report Status: **Final**

Test Parameter	Result	Detection Limit	Units	Analysis Date	Analytical Method *	Qualifier
<u>Cations by ICP-MS</u>						
Hardness	289	0.7	mg/L	18-Nov-25	TEL035	
Sodium	5.9	0.1	mg/L	18-Nov-25	TEL035	
<u>Inorganics - Nutrients</u>						
Organic Carbon, Dissolved	6.6	0.5	mg/L	27-Nov-25	TEL033	231
Organic Carbon, Total	7.2	0.5	mg/L	27-Nov-25	TEL033	231
<u>Inorganics - Physicals</u>						
Alkalinity, Total (as CaCO3)	156	0.4	mg/L	14-Nov-25	TEL060	
Colour, True	< 5	5	TCU	14-Nov-25	TEL051	
pH	7.25		pH units	14-Nov-25	TEL058	
Solids, Total Dissolved	316	10	mg/L	18-Nov-25	TEL009	
Solids, Total Suspended	< 3	3	mg/L	18-Nov-25	TEL008	
Turbidity	< 0.05	0.05	NTU	14-Nov-25	TEL006	
<u>Major Ions</u>						
Chloride	8.0	0.7	mg/L	14-Nov-25	TEL055	
Fluoride	< 0.1	0.1	mg/L	14-Nov-25	TEL055	
Nitrate as Nitrogen	0.05	0.01	mg/L	14-Nov-25	TEL055	
Sulphate	116	1	mg/L	14-Nov-25	TEL055	
<u>Organics</u>						
Bromodichloromethane	7.5	1	ug/L	21-Nov-25	TEL074	



Taiga Batch No.:
251747

- CERTIFICATE OF ANALYSIS -

Client Sample ID: **2**

Taiga Sample ID: **002**

Bromoform	< 1.0	1	ug/L	21-Nov-25	TEL074
Chloroform	54.5	1	ug/L	21-Nov-25	TEL074
Dibromochloromethane	1.4	1	ug/L	21-Nov-25	TEL074
Trihalomethanes, Total (calc.)	63.4	1	ug/L	21-Nov-25	TEL074
<u>Subcontracted Organics</u>					
Cyanide, Total	< 0.0050	0.005	mg/L	24-Nov-25	APHA4500-CN
<u>Trace Metals, Total</u>					
Aluminum	4.6	0.6	µg/L	18-Nov-25	TEL035
Arsenic	0.3	0.2	µg/L	18-Nov-25	TEL035
Barium	47.7	0.1	µg/L	18-Nov-25	TEL035
Cadmium	< 0.04	0.04	µg/L	18-Nov-25	TEL035
Chromium	< 0.1	0.1	µg/L	18-Nov-25	TEL035
Copper	3.0	0.2	µg/L	18-Nov-25	TEL035
Iron	< 5	5	ug/L	18-Nov-25	TEL035
Lead	< 0.1	0.1	µg/L	18-Nov-25	TEL035
Manganese	0.7	0.1	µg/L	18-Nov-25	TEL035
Mercury	< 0.01	0.01	µg/L	18-Nov-25	TEL035
Selenium	< 0.3	0.3	µg/L	18-Nov-25	TEL035
Uranium	< 0.1	0.1	µg/L	18-Nov-25	TEL035
Zinc	< 0.4	0.4	µg/L	18-Nov-25	TEL035

Taiga Batch No.:
251747

- CERTIFICATE OF ANALYSIS -

Client Sample ID: 2

Taiga Sample ID: 002

- DATA QUALIFIERS -

Data Qualifier Descriptions:

231 *Sample was re-analyzed; result has been verified.*

*** Taiga analytical methods are based on the following standard analytical methods**

SM - Standard Methods for the Examination of Water and Wastewater

EPA - United States Environmental Protection Agency

**Appendix B: Most Recent Water Chemistry
and Bacteriological Results**



Coli Presence / Absence Bacteriological Water Sampling Records

ENVIRONMENTAL HEALTH SERVICES

Phone (867) 669-8979 (867) 669-7517 Fax

This Form Must Be Faxed to (867) 669-7517 or emailed to colleen.lauzon@gov.nt.ca weekly

Community Name PAULATUK NWT

Location of Sample Treated or Raw	Sampled by	Date/time Sample collected	Date/Time Sample read	Total Coli forms	E.coli	Comments
WTP Raw water port	Colby Rubin Jr	NOV 27/25 11:10 AM	NOV 28/25 1:25 PM	NA	2	
Water truck Delivery nose Treated	"	" NOV 27/25 11:20 AM	NOV 28/25 1:26 PM	2	2	
Hamlet office Kitchen tap Treated	"	" NOV 27/25 11:35 AM	NOV 28/25 1:27 PM	2	2	
Health center Kitchen tap Treated	"	" NOV 27/25 11:45 AM	NOV 28/25 1:28 PM	2	2	
Youth center Kitchen tap Treated	"	" NOV 27/25 11:53 AM	NOV 28/25 1:29 PM	2	2	



Water Treatment Plant Weekly Log Sheet

Weekly Testing Instructions

- Minimum free chlorine residual of 0.2mg/l (ppm) after 20 minutes of contact time.
 - Most plants will require higher free chlorine to maintain adequate residual throughout the distribution system.
 - Truck fill plants without treated water storage should maintain a free chlorine residual of 0.4mg/l after 20 minutes contact time.
- Test free chlorine residue three (3) times a day from tank or truck after 20 minutes of contact time.
- Record raw water turbidity once (1) a day.
- Record treated water turbidity three (3) times a day.

Community Name

PAULATUK

Testing For The Week Of

NOV 3-9 2015

Day >	Monday			Tuesday			Wednesday			Thursday			Friday			Saturday			Sunday		
Free Chlorine mg/l (ppm)	.35			.38			.37			.38			.39								
Total Chlorine mg/l (ppm)	.42			.44			.45			.44			.46								
Raw Water Turbidity (NTU)																					
Treated Water Turbidity (NTU)	.14			.14			.14			.14			.14								
Observed Weather (Circle best choice)	Temp.	Rain	Sunny	Temp.	Rain	Sunny	Temp.	Rain	Sunny	Temp.	Rain	Sunny	Temp.	Rain	Sunny	Temp.	Rain	Sunny	Temp.	Rain	Sunny
		Snow Hail	Windy Cloud Foggy		Snow Hail	Windy Cloud Foggy		Snow Hail	Windy Cloud Foggy		Snow Hail	Windy Cloud Foggy		Snow Hail	Windy Cloud Foggy		Snow Hail	Windy Cloud Foggy		Snow Hail	Windy Cloud Foggy
Name of Operator(s)	PMS			PMS			PMS			PMS			PMS								
Comments and/or Observations																					

NWT1374/0511

➤ When completed - Please fax to: (867) 669-7517 ◀



Water Treatment Plant Weekly Log Sheet

Weekly Testing Instructions

- Minimum free chlorine residual of 0.2mg/l (ppm) after 20 minutes of contact time.
 - Most plants will require higher free chlorine to maintain adequate residual throughout the distribution system.
 - Truck fill plants without treated water storage should maintain a free chlorine residual of 0.4mg/l after 20 minutes contact time.
- Test free chlorine residue three (3) times a day from tank or truck after 20 minutes of contact time.
- Record raw water turbidity once (1) a day.
- Record treated water turbidity three (3) times a day.

Community Name

PAULATUK

Testing For The Week Of

Nov 10 - 16 2025

Day >	Monday			Tuesday			Wednesday			Thursday			Friday			Saturday			Sunday		
Free Chlorine mg/l (ppm)	.36			.38			.39			.41			.42								
Total Chlorine mg/l (ppm)	.413			.42			.45			.50			.49								
Raw Water Turbidity (NTU)																					
Treated Water Turbidity (NTU)	.14			.14			.14			.14			.14								
Observed Weather (circle best choice)	Temp.	Rain:	Sunny:	Temp.	Rain:	Sunny:	Temp.	Rain:	Sunny:	Temp.	Rain:	Sunny:	Temp.	Rain:	Sunny:	Temp.	Rain:	Sunny:	Temp.	Rain:	Sunny:
		Snow Hail	Windy Cloud Foggy		Snow Hail	Windy Cloud Foggy		Snow Hail	Windy Cloud Foggy		Snow Hail	Windy Cloud Foggy		Snow Hail	Windy Cloud Foggy		Snow Hail	Windy Cloud Foggy		Snow Hail	Windy Cloud Foggy
Name of Operator(s)	Prt			Prt			Prt			Prt			Prt								
Comments and/or Observations																					

NWT1376/011

➤ When completed - Please fax to: (867) 669-7517 ◀



Water Treatment Plant Weekly Log Sheet

Weekly Testing Instructions

- Minimum free chlorine residual of 0.2mg/l (ppm) after 20 minutes of contact time.
 - Most plants will require higher free chlorine to maintain adequate residual throughout the distribution system.
 - Truck fill plants without treated water storage should maintain a free chlorine residual of 0.4mg/l after 20 minutes contact time.
- Test free chlorine residue three (3) times a day from tank or truck after 20 minutes of contact time.
- Record raw water turbidity once (1) a day.
- Record treated water turbidity three (3) times a day.

Community Name

PAULATUK

Testing For The Week Of

NOV-23 2025

Day >	Monday			Tuesday			Wednesday			Thursday			Friday			Saturday			Sunday		
Free Chlorine mg/l (ppm)	.39			.40			.42			.40			.41								
Total Chlorine mg/l (ppm)	.45			.46			.48			.47			.50								
Raw Water Turbidity (NTU)																					
Treated Water Turbidity (NTU)	.14			.14			.14			.14			.14								
Observed Weather (circle best choice)	Temp.	Rain	Sunny	Temp.	Rain	Sunny	Temp.	Rain	Sunny	Temp.	Rain	Sunny	Temp.	Rain	Sunny	Temp.	Rain	Sunny	Temp.	Rain	Sunny
		Snow	Windy		Snow	Windy		Snow	Windy		Snow	Windy		Snow	Windy		Snow	Windy		Snow	Windy
		Hail	Cloud		Hail	Cloud		Hail	Cloud		Hail	Cloud		Hail	Cloud		Hail	Cloud		Hail	Cloud
			Foggy			Foggy			Foggy			Foggy			Foggy			Foggy			Foggy
Name of Operator(s)	Brd			Brd			Brd			Brd			Brd								
Comments and/or Observations																					

NWT324/211

➤ When completed - Please fax to: (867) 669-7517 ◀



Water Treatment Plant Weekly Log Sheet

Weekly Testing Instructions

- Minimum free chlorine residual of 0.2mg/l (ppm) after 20 minutes of contact time.
 - Most plants will require higher free chlorine to maintain adequate residual throughout the distribution system.
 - Truck fill plants without treated water storage should maintain a free chlorine residual of 0.4mg/l after 20 minutes contact time.
- Test free chlorine residue three (3) times a day from tank or truck after 20 minutes of contact time.
- Record raw water turbidity once (1) a day.
- Record treated water turbidity three (3) times a day.

Community Name

PAULATUK

Testing For The Week Of

NOV 24 - 30 2025

Day >	Monday			Tuesday			Wednesday			Thursday			Friday			Saturday			Sunday		
Free Chlorine mg/l (ppm)	.38			.40			.42			.40			.42								
Total Chlorine mg/l (ppm)	.43			.49			.58			.47			.49								
Raw Water Turbidity (NTU)																					
Treated Water Turbidity (NTU)	.14			.14			.14			.14			.14								
Observed Weather (circle best choice)	Temp.	Rain Snow Hail	Sunny Windy Cloud Foggy	Temp.	Rain Snow Hail	Sunny Windy Cloud Foggy	Temp.	Rain Snow Hail	Sunny Windy Cloud Foggy	Temp.	Rain Snow Hail	Sunny Windy Cloud Foggy	Temp.	Rain Snow Hail	Sunny Windy Cloud Foggy	Temp.	Rain Snow Hail	Sunny Windy Cloud Foggy	Temp.	Rain Snow Hail	Sunny Windy Cloud Foggy
Name of Operator(s)	BRO			BRO			BRO			BRO			BRO								
Comments and/or Observations																					

NWT15/0211

> When completed - Please fax to: (867) 669-7517 <



Water Treatment Plant Weekly Log Sheet

Weekly Testing Instructions

- Minimum free chlorine residual of 0.2mg/l (ppm) after 20 minutes of contact time.
 - Most plants will require higher free chlorine to maintain adequate residual throughout the distribution system.
 - Truck fill plants without treated water storage should maintain a free chlorine residual of 0.4mg/l after 20 minutes contact time.
- Test free chlorine residue three (3) times a day from tank or truck after 20 minutes of contact time.
- Record raw water turbidity once (1) a day.
- Record treated water turbidity three (3) times a day.

Community Name

PAULATUK

Testing For The Week Of

DEC 1-7 2025

Day	Monday			Tuesday			Wednesday			Thursday			Friday			Saturday			Sunday		
Free Chlorine mg/l (ppm)	.41			.38			.39			.37			.40								
Total Chlorine mg/l (ppm)	.50			.43			.45			.43			.48								
Raw Water Turbidity (NTU)																					
Treated Water Turbidity (NTU)	.14			.14			.14			.14			.14								
Observed Weather (circle best choice)	Temp.	Rain	Sunny	Temp.	Rain	Sunny	Temp.	Rain	Sunny	Temp.	Rain	Sunny	Temp.	Rain	Sunny	Temp.	Rain	Sunny	Temp.	Rain	Sunny
	Snow	Windy	Hail	Snow	Windy	Hail	Snow	Windy	Hail	Snow	Windy	Hail	Snow	Windy	Hail	Snow	Windy	Hail	Snow	Windy	Hail
Name of Operator(s)	BRS			PMB			PMB			PMB			PMB								
	Cloud			Cloud			Cloud			Cloud			Cloud			Cloud			Cloud		
Comments and/or Observations																					

NWT126/0511

➤ When completed - Please fax to: (867) 669-7517 ◀



Water Treatment Plant Weekly Log Sheet

Weekly Testing Instructions

- Minimum free chlorine residual of 0.2mg/l (ppm) after 20 minutes of contact time.
 - Most plants will require higher free chlorine to maintain adequate residual throughout the distribution system.
 - Truck fill plants without treated water storage should maintain a free chlorine residual of 0.4mg/l after 20 minutes contact time.
- Test free chlorine residue three (3) times a day from tank or truck after 20 minutes of contact time.
- Record raw water turbidity once (1) a day.
- Record treated water turbidity three (3) times a day.

Community Name

PAULATUK

Testing For The Week Of

Dec 8 - 14 2025

Day	Monday			Tuesday			Wednesday			Thursday			Friday			Saturday			Sunday		
Free Chlorine mg/l (ppm)	.36			.39			.38			.40			.42								
Total Chlorine mg/l (ppm)	.40			.45			.44			.49			.50								
Raw Water Turbidity (NTU)																					
Treated Water Turbidity (NTU)	.14			.14			.14			.14			.14								
Observed Weather (circle best choice)	Temp.	Rain	Sunny	Temp.	Rain	Sunny	Temp.	Rain	Sunny	Temp.	Rain	Sunny	Temp.	Rain	Sunny	Temp.	Rain	Sunny	Temp.	Rain	Sunny
		Snow	Windy		Snow	Windy		Snow	Windy		Snow	Windy		Snow	Windy		Snow	Windy		Snow	Windy
	Hail	Cloud	Foggy	Hail	Cloud	Foggy	Hail	Cloud	Foggy	Hail	Cloud	Foggy	Hail	Cloud	Foggy	Hail	Cloud	Foggy	Hail	Cloud	Foggy
Name of Operator(s)	A.R.S.			B.R.O.			B.R.O.			B.R.O.			B.R.O.								
Comments and/or Observations																					

NWT1324/0311

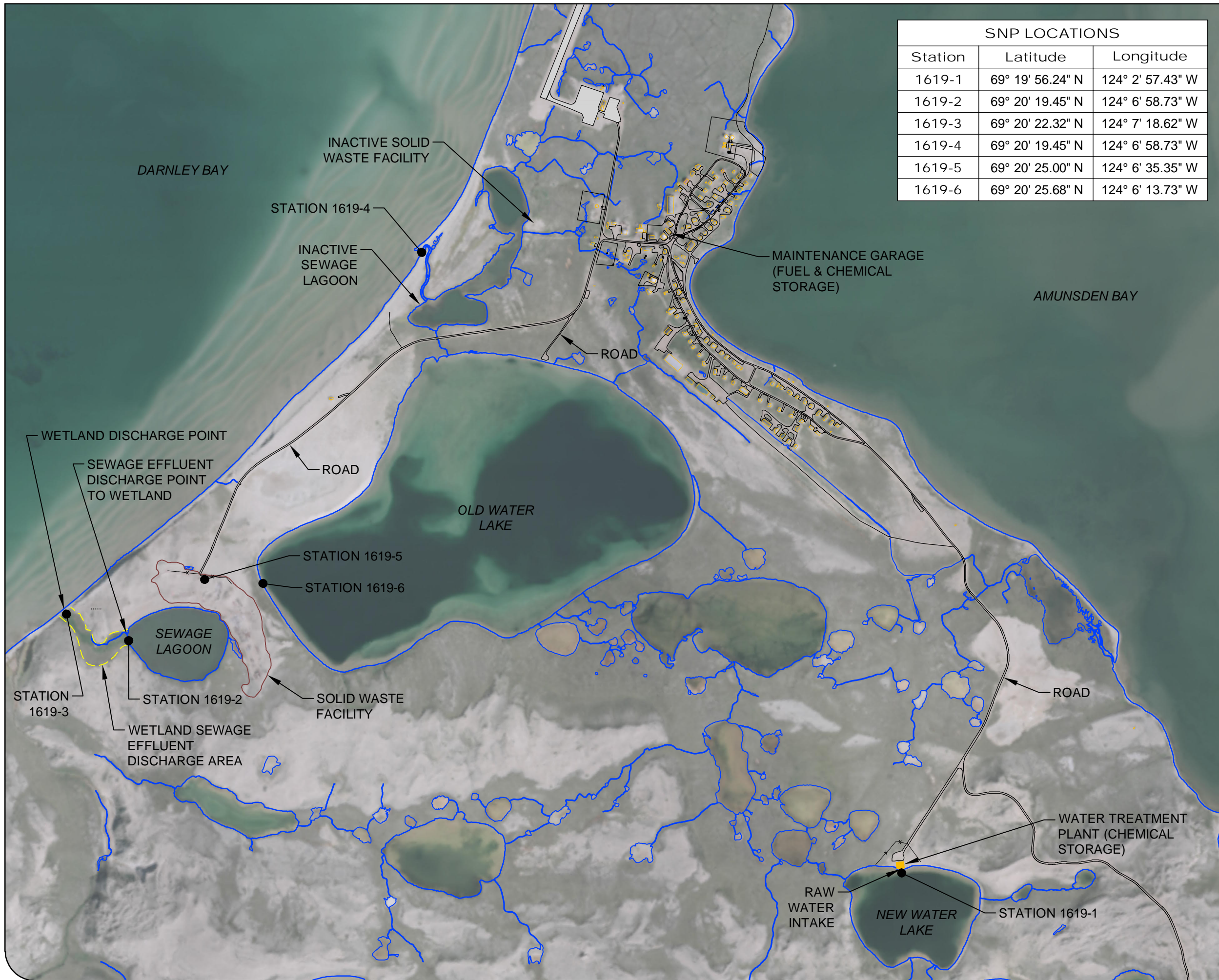
➤ When completed - Please fax to: (867) 669-7517 ◀

Appendix C: Haz Mat Database

Spill	spill-2020110	spill-2019235	spill-2017175	spill-2017167
Occurance Date	23-Apr-20	06-Jun-19	16-May-17	
Spill Region	Inuvik	Inuvik	Inuvik	Inuvik
Location	Paulatuk	Paulatuk	Paulatuk	Paulatuk
Location Description	Northern Store Warehouse Paulatuk,NT	Paulatuk	Lot # 49 - Units 52 & 53 - AKA 'The White House'	Paulatuk
Product Spilled	Petroleum - fuel oil (jet A, diesel, turbo A, heat)	Petroleum - waste oil (slops, sludge)	Petroleum - fuel oil (jet A, diesel, turbo A, heat)	Petroleum - fuel oil (jet A, diesel, turbo A, heat)
Quantity	700	150	30	1
Measurement	Litres	Litres	Litres	Litres
Spill Cause	Unknown Cause		Tank Leak	Unknown Cause
Lead Agency	GNWT - Department of Environment and Natural Resources			

This reports contains information regarding spills that were reported to the NWT 24-Hour Spill Line. The absence of information on any particular location in no way guarantees that contamination has no occurred in that location.

**Appendix D: Figures - Site Overview,
Sewage Treatment Systems and Solid
Waste Disposal Area**



SNP LOCATIONS		
Station	Latitude	Longitude
1619-1	69° 19' 56.24" N	124° 2' 57.43" W
1619-2	69° 20' 19.45" N	124° 6' 58.73" W
1619-3	69° 20' 22.32" N	124° 7' 18.62" W
1619-4	69° 20' 19.45" N	124° 6' 58.73" W
1619-5	69° 20' 25.00" N	124° 6' 35.35" W
1619-6	69° 20' 25.68" N	124° 6' 13.73" W

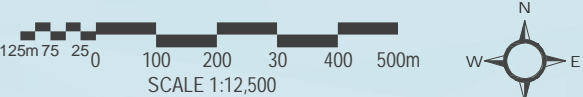


GOVERNMENT OF THE NWT
PAULATUK WATER LICENCE RENEWAL



SITE OVERVIEW
Figure 1

- BUILDING FOOTPRINT
- AIRPORT
- SOLID WASTE FACILITY
- ROADS
- FENCE
- DRAINAGE PATHS
- WETLAND AREA
- SNP LOCATIONS



MAP/DRAWING INFORMATION
2009 Cadastral information supplied by Commissioners Land Administration, ATLAS online. Paulatuk (2007) photo came from the Department of Municipal and Community Affairs. Locations and Features are Approximate.

CREATED BY: CLB
CHECKED BY: TLR
MAP PROJECTION: NAD83 UTM Zone 10N

File Location:
c:\projectsw\working directory\projects 2020\5011r\dms31306\202937 figs .dwg
June, 03, 2020 3:02 PM



PROJECT: 202937
STATUS: Issued for Review
DATE: June 2020

The following appendices have been previously updated and approved and are not attached to this updated submission.

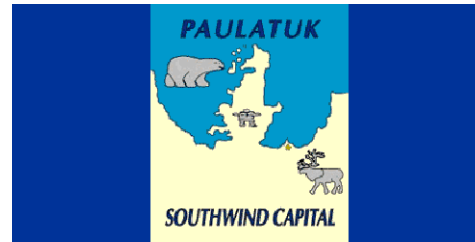
Appendix E: Spill Contingency Plan

Appendix F: Hazardous Waste Management Plan

Appendix G: Sewage Disposal Facilities Operation and Maintenance Plan

Appendix I: Solid Waste Disposal Facilities Operation and Maintenance Plan

**Appendix H: Sewage Lagoon
Upgrade Details**



HAMLET OF PAULATUK

PAULATUK SEWAGE LAGOON UPGRADES

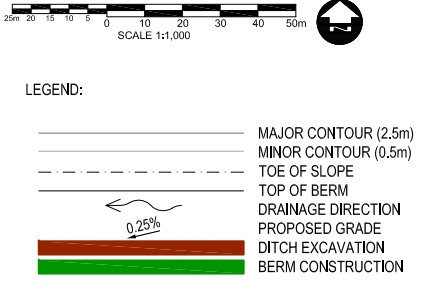
**ISSUED FOR CONSTRUCTION
AUGUST 2018**

DILLON PROJECT NO. 17-6028

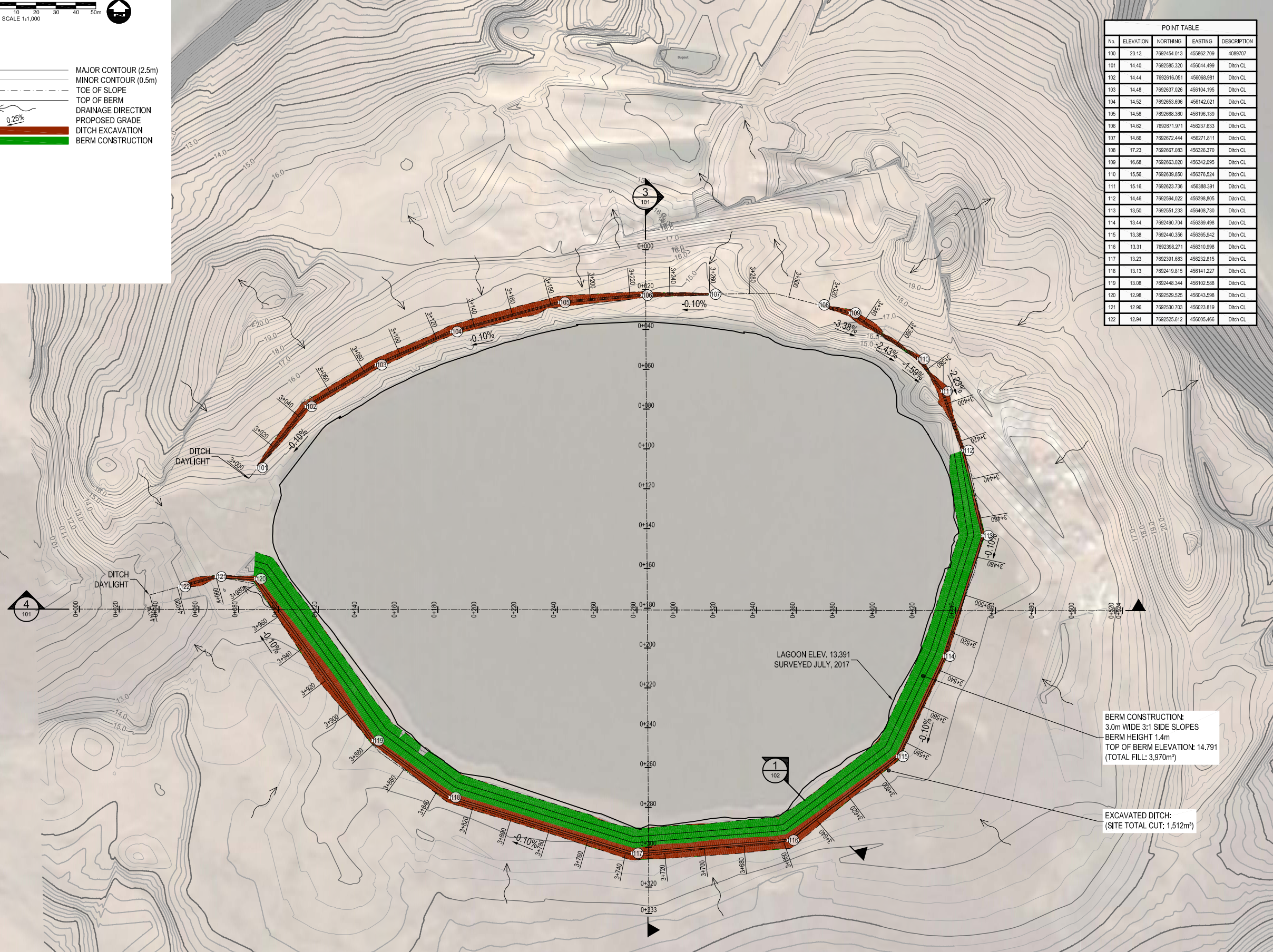
SHEET LIST	
SHEET NUMBER	SHEET TITLE
	COVER
100	SEWAGE LAGOON BERM AND DRAINAGE DITCH
101	DITCH PROFILE AND SITE SECTIONS
102	DETAILS AND SITE SECTIONS 1 OF 2
103	SITE SECTIONS 2 OF 2



- GENERAL NOTES:
1. ALL DIMENSIONS IN MILLIMETERS UNLESS NOTED OTHERWISE.
 2. ALL DIMENSIONS TO BE CHECKED AND VERIFIED IN THE FIELD PRIOR TO ANY CONSTRUCTION. ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER BEFORE PROCEEDING.
 3. QUANTITIES SHOWN ARE APPROXIMATE AND FOR TENDERING PURPOSES ONLY.
 4. ALL CONSTRUCTION WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS.
 5. THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE ENTIRE DRAWING SET AND CONTRACT DOCUMENTS.
 6. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS AS WELL AS ANY APPLICABLE TERRITORIAL STANDARD SPECIFICATIONS AND STANDARD DRAWINGS.
 7. ANY SURVEY FOR THE PURPOSE OF LAYOUT, QUANTITY CALCULATIONS, OR RECORD DRAWING TO BE CONDUCTED WITH REFERENCE TO A CANADA LANDS AND SURVEY MONUMENT.
 8. DESIGN CONTOURS SHOWN ARE FINAL GRADE AND REPRESENT BERM MATERIAL OR EXCAVATED SURFACE.
 9. TOPOGRAPHY SHOWN IS BASED ON CADASTRAL AND CONTOUR INFORMATION PROVIDED BY MACA AND IS APPROXIMATE.
 10. A SURVEY OF THE IMMEDIATE LAGOON AREA WAS CONDUCTED BY DILLON CONSULTING, LTD. 2017 FOR THE PURPOSES OF DESIGN: CLSR PLAN 80643, CCM4089707, NAD83, ZONE10, GSD95 GEOID.



POINT TABLE				
No.	ELEVATION	NORTHINGS	EASTING	DESCRIPTION
100	23.13	7892454.013	456862.709	4089707
101	14.40	7892585.320	456904.499	Ditch CL
102	14.44	7892816.051	456968.981	Ditch CL
103	14.48	7892637.026	456104.195	Ditch CL
104	14.52	7892653.696	456142.021	Ditch CL
105	14.58	7892668.360	456196.139	Ditch CL
106	14.62	7892671.971	456237.633	Ditch CL
107	14.66	7892672.444	456271.811	Ditch CL
108	17.23	7892667.083	456326.370	Ditch CL
109	16.68	7892663.020	456342.095	Ditch CL
110	15.56	7892638.850	456376.524	Ditch CL
111	15.16	7892623.736	456388.391	Ditch CL
112	14.46	7892594.022	456398.805	Ditch CL
113	13.50	7892551.233	456408.730	Ditch CL
114	13.44	7892490.704	456389.498	Ditch CL
115	13.38	7892440.356	456365.942	Ditch CL
116	13.31	7892398.271	456310.988	Ditch CL
117	13.23	7892391.683	456232.815	Ditch CL
118	13.13	7892419.815	456141.227	Ditch CL
119	13.08	7892448.344	456102.588	Ditch CL
120	12.98	7892529.525	456043.598	Ditch CL
121	12.96	7892530.703	456023.819	Ditch CL
122	12.94	7892525.612	456005.466	Ditch CL



BERM CONSTRUCTION:
 3.0m WIDE 3:1 SIDE SLOPES
 BERM HEIGHT 1.4m
 TOP OF BERM ELEVATION: 14.791
 (TOTAL FILL: 3,970m³)

EXCAVATED DITCH:
 (SITE TOTAL CUT: 1,512m³)

LAGOON ELEV. 13.391
 SURVEYED JULY, 2017

**DRAWING REDUCED
 NOT TO SCALE**

DILLON CONSULTING LIMITED 4020 47TH STREET, YELLOWKNIFE, NORTHWEST TERRITORIES, X1A 2P1, PHONE (867) 920-4655, FAX (867) 874-3328
 PLOT DATE: 2018-08-27 2:59:50 PM PLOT SCALE: 1:500 PLOT STYLE: DILLON HALF SCALE YK.GTB

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PERMIT NUMBER P 010
 DILLON CONSULTING LIMITED



ISSUED FOR CONSTRUCTION



DESIGN	REVIEWED BY	DATE	BY
GS	GS		
TPW	GS		
AUGUST 2018			
SCALE: 1:1000			
2	ISSUED FOR CONSTRUCTION	08/27/18	GS
1	ISSUED FOR INTERNAL REVIEW	08/24/18	GS
No.	ISSUED FOR	DATE	BY

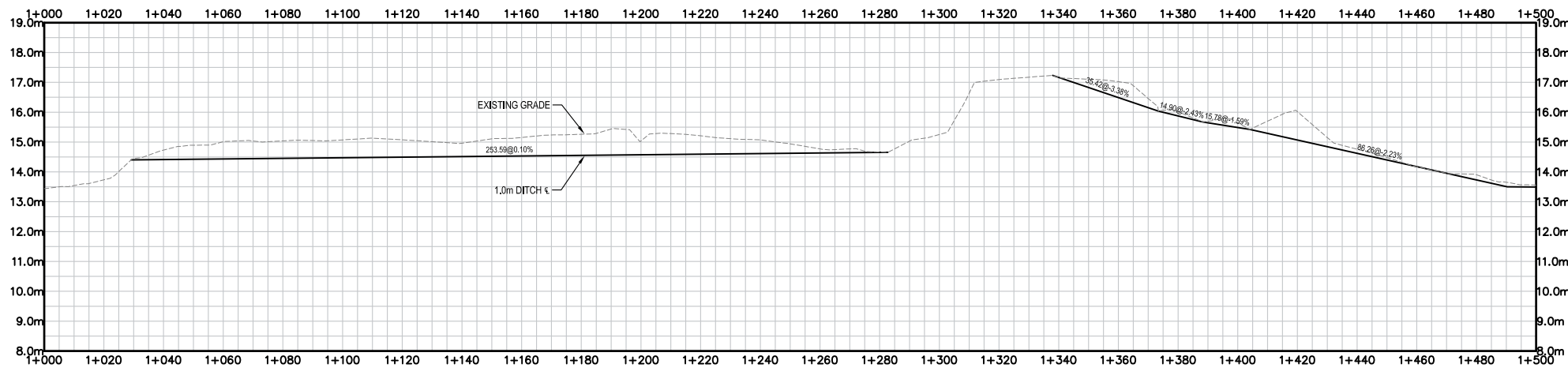
PAULATUK SEWAGE LAGOON UPGRADES
 HAMLET OF PAULATUK, NORTHWEST TERRITORIES

ISSUED FOR CONSTRUCTION

SEWAGE LAGOON BERM AND DRAINAGE DITCH

PROJECT NO. 17-6028
 SHEET NO. **100**

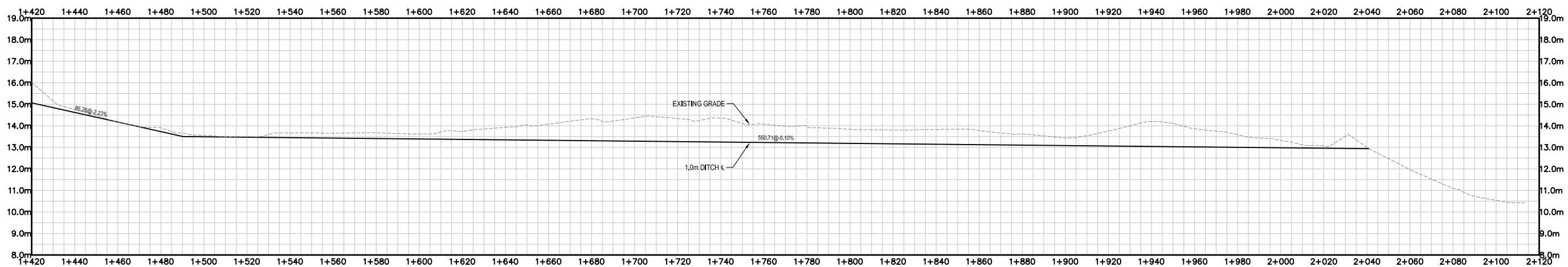
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 DILLON CONSULTING LIMITED 4820 47TH STREET, YELLOWKNIFE, NORTHWEST TERRITORIES, X1A 2P1, PHONE (867) 920-4655, FAX (867) 873-3328



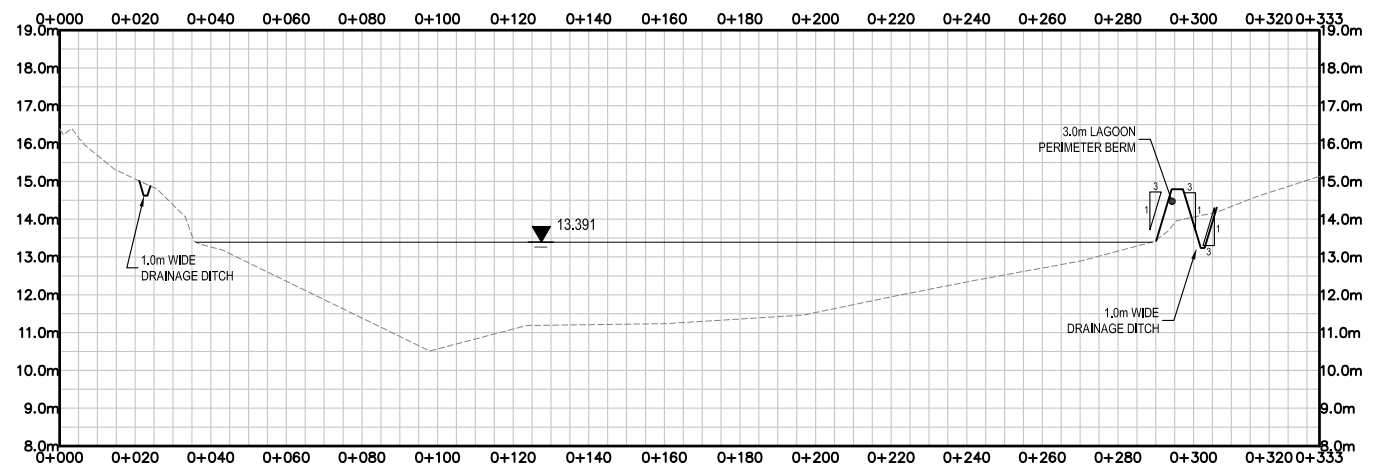
DITCH PROFILE 1
SCALE: 1:1000H 1:100V

LEGEND:
 - - - - - EXISTING GROUND
 _____ PROPOSED DITCH/BERM CONSTRUCTION
 _____ LAGOON LEVEL

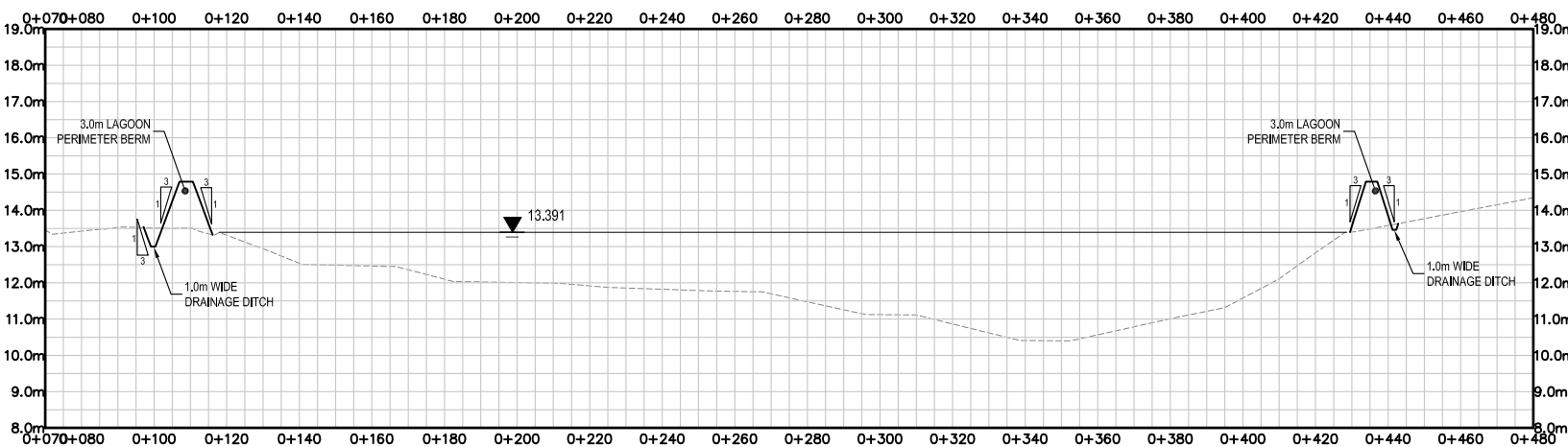
GENERAL NOTES:
 1. SEE DITCH/BERM CL STATIONING ON DRAWING 100.
 2. THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE ENTIRE DRAWING SET AND CONTRACT DOCUMENTS.



DITCH PROFILE 2
SCALE: 1:1000H 1:100V



Section 1
SCALE: 1:1000H 1:100V



SECTION 2
SCALE: 1:1000H 1:100V

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**PERMIT NUMBER
 P 010**
 DILLON CONSULTING
 LIMITED



ISSUED FOR CONSTRUCTION



NO.	ISSUED FOR	DATE	BY	SCALE
2	ISSUED FOR CONSTRUCTION	08/27/18	GS	AS SHOWN
1	ISSUED FOR INTERNAL REVIEW	08/24/18	GS	

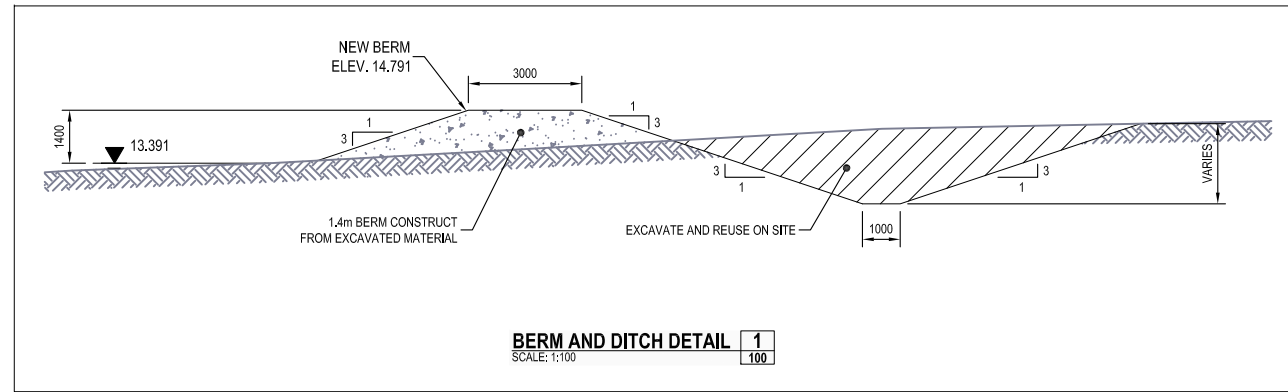
DESIGN: GS
 REVIEWED BY: GS
 DRAWN: TPW
 CHECKED BY: GS
 DATE: AUGUST 2018
 SCALE: AS SHOWN

**PAULATUK SEWAGE LAGOON UPGRADES
 HAMLET OF PAULATUK, NORTHWEST TERRITORIES**

**ISSUED FOR CONSTRUCTION
 DITCH PROFILE AND SITE SECTIONS**

PROJECT NO.
17-6028

SHEET NO.
101

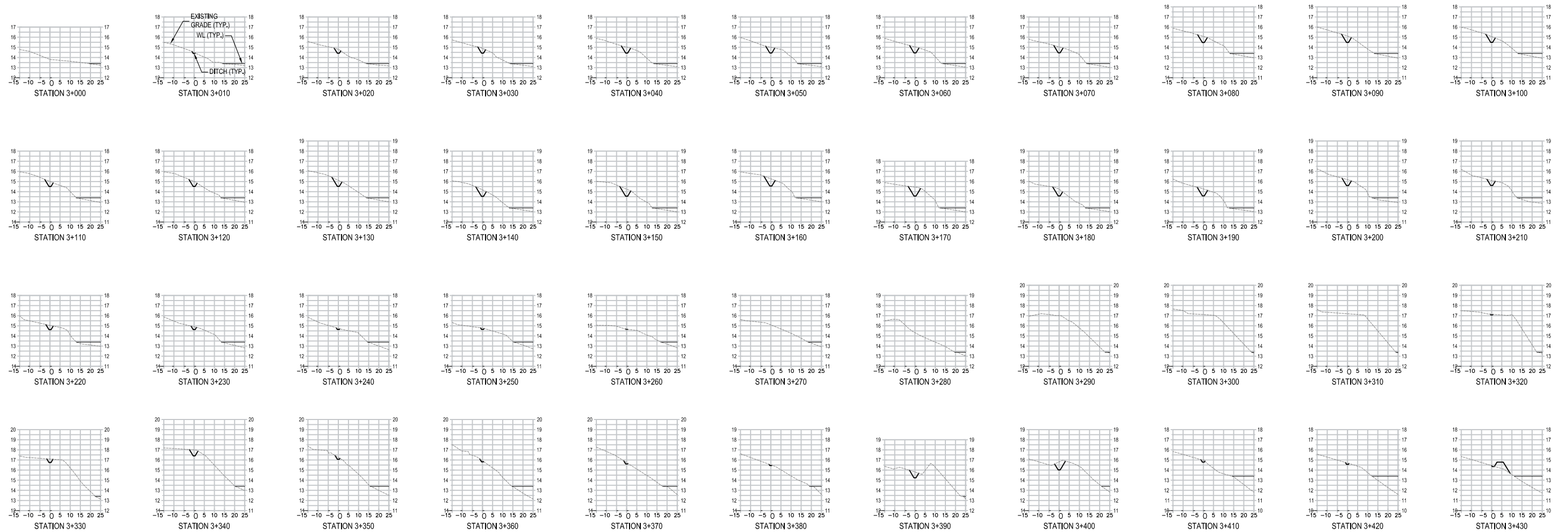


LEGEND:

- EXISTING GROUND / ROCK OUTCROP
- PROPOSED DITCH/BERM CONSTRUCTION
- LAGOON LEVEL

GENERAL NOTES:

1. SEE DITCH CL STATIONING ON DRAWING 100.
2. THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE ENTIRE DRAWING SET AND CONTRACT DOCUMENTS.



**DRAWING REDUCED
NOT TO SCALE**

Conditions of Use

Verify elevations and/or dimensions on drawing prior to use. Report any discrepancies to Dillon Consulting Limited.

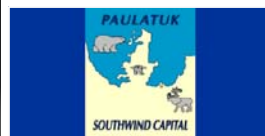
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**PERMIT NUMBER
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DILLON CONSULTING
LIMITED



ISSUED FOR CONSTRUCTION



DESIGN	REVIEWED BY	DATE	BY
GS	GS		
DRAWN	CHECKED BY	DATE	BY
TPW	GS	AUGUST 2018	
SCALE		DATE	BY
1:500 1:100			
NO.	ISSUED FOR	DATE	BY
2	ISSUED FOR CONSTRUCTION	08/27/18	GS
1	ISSUED FOR INTERNAL REVIEW	08/24/18	GS

PAULATUK SEWAGE LAGOON UPGRADES
HAMLET OF PAULATUK, NORTHWEST TERRITORIES

PROJECT NO.
17-6028

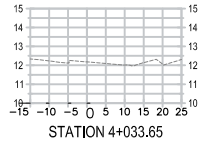
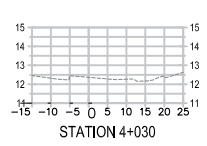
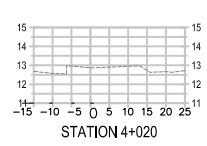
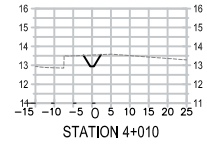
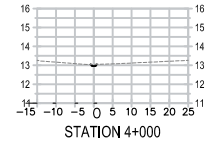
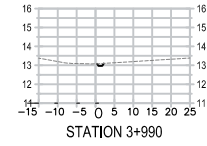
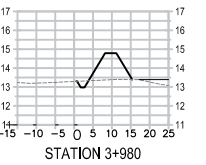
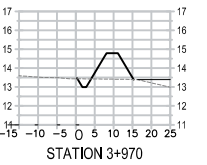
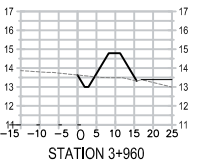
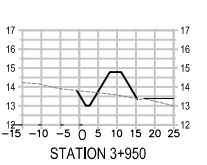
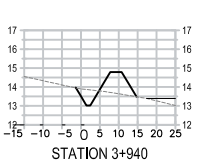
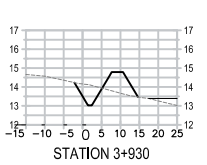
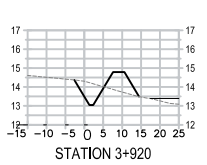
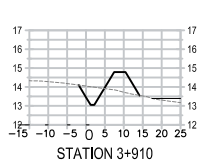
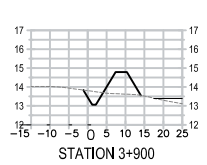
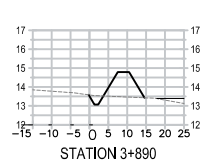
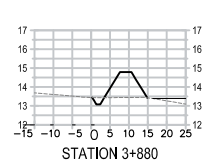
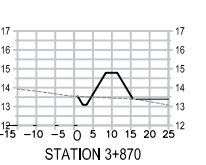
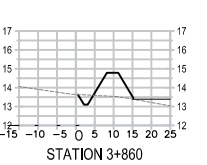
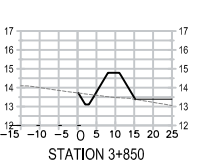
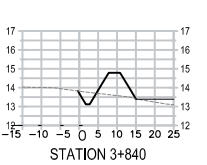
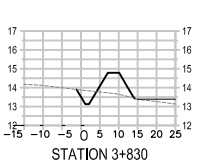
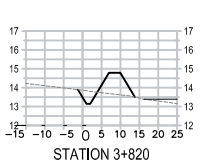
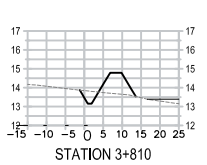
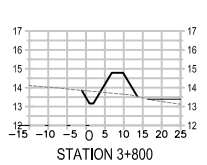
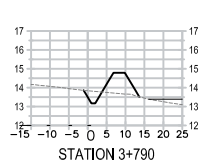
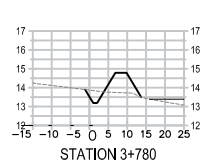
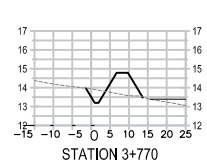
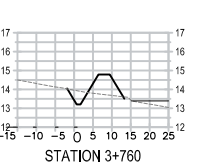
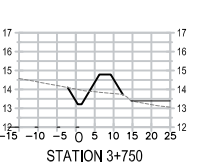
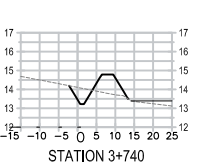
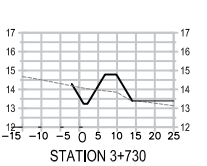
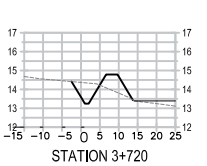
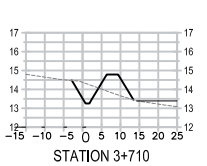
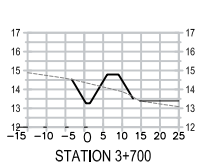
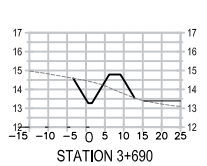
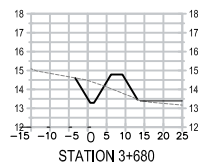
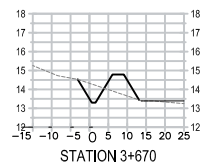
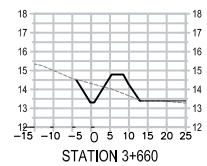
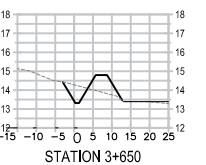
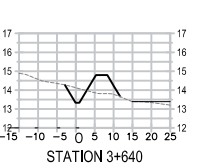
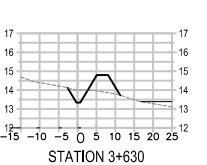
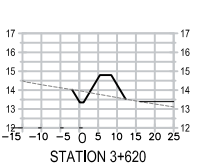
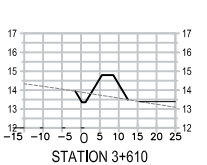
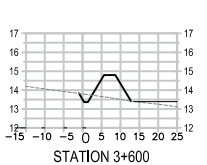
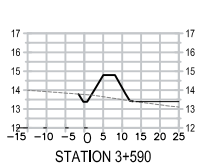
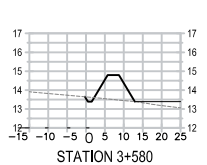
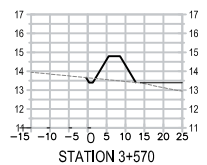
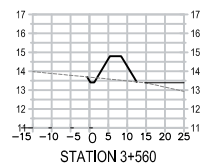
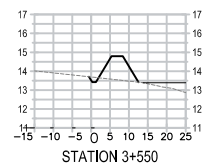
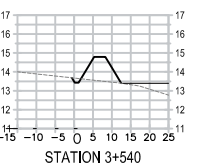
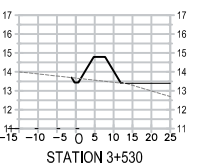
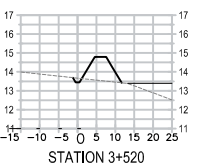
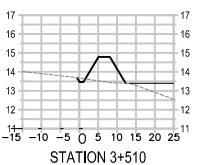
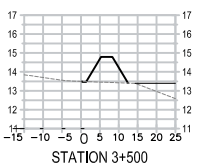
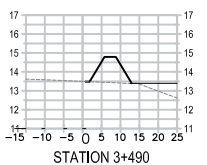
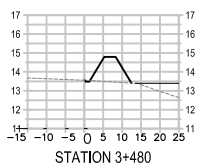
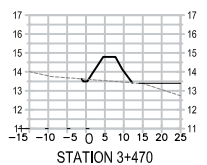
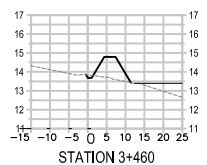
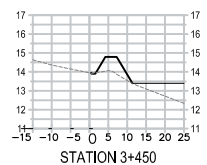
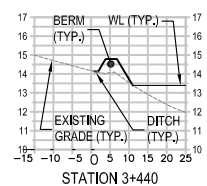
ISSUED FOR CONSTRUCTION
DETAILS AND SITE SECTIONS 1 OF 2

SHEET NO.

102

LEGEND:
 - - - - - EXISTING GROUND / ROCK OUTCROP
 ——— PROPOSED DITCH/BERM CONSTRUCTION
 ——— LAGOON LEVEL

- GENERAL NOTES:
 1. SEE DITCH CL STATIONING ON DRAWING 100.
 2. THIS PLAN IS TO BE READ IN CONJUNCTION WITH THE ENTIRE DRAWING SET AND CONTRACT DOCUMENTS.



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PERMIT NUMBER P 010
 DILLON CONSULTING LIMITED



ISSUED FOR CONSTRUCTION



DESIGN	GS	REVIEWED BY	GS
DRAWN	TPW	CHECKED BY	GS
DATE	AUGUST 2018		
SCALE	1:500 1:100		
NO.	ISSUED FOR CONSTRUCTION	08/27/18	GS
	ISSUED FOR INTERNAL REVIEW	08/24/18	GS
	ISSUED FOR	DATE	BY

**PAULATUK SEWAGE LAGOON UPGRADES
HAMLET OF PAULATUK, NORTHWEST TERRITORIES**

**ISSUED FOR CONSTRUCTION
SITE SECTIONS 2 OF 2**

PROJECT NO.
17-6028

SHEET NO.
103

FILENAME: C:\CWA\176028-03-SITE-DES-EXISTING.DWG PLOTTED BY: TREBOR
 PLOT DATE: 2018-08-27 2:55:39 PM PLOT SCALE: 1:500 PLOT STYLE: DILLON_HAF_SCALE_VK.CBT
 DILLON CONSULTING LIMITED 4920 4TH STREET, YELLOWKNIFE, NORTHWEST TERRITORIES, X1A 2P1, PHONE (867) 920-4655, FAX (867) 874-3328

**Appendix J: Sewage and Solid Waste Disposal
Facilities Abandonment and Restoration Plan**

February 26, 2026

Bijaya Adhikari
Inuvialuit Water Board
P.O Box 2531
Inuvik, NT X0E 0T0

Dear Inuvialuit Water Board,

The following are the responses to Question 8 in the letter dated February 4, 2026, updating Appendix J, as there are difficulties updating the main document. The key information is bolded in the responses.

Item 6. Appendix J: Sewage and Solid Waste Disposal Facilities Abandonment and Restoration Plan (S&SWDF A&RP) – Page 2, Section 2.1, paragraph 1, line 3 – Update the text with the current population of Paulatuk which is available on the NWT Bureau of Statistics website:

<https://www.statsnwt.ca/population/population-estimates/bycommunity.php>

Hamlet Response to IWB October 15, 2025, Information Request, Part B, Item 6:

Paulatuk is located in the Northwest Territories (NWT) approximately 400 km east of the Town of Inuvik and 855 km northwest of Yellowknife. The community is situated at the south end of Darnley Bay on the Arctic Coast as shown in Figure 1. **The 2025 population of Paulatuk was 355 based on data from the NWT Bureau of Statistics (July 2025).** The population has fluctuated up and down reaching a low of 303 individuals in 2006 (Bureau of Statistics, 2017a). The community is located in an area underlain by continuous permafrost and is dominated by glacial till in addition to marine sands and silt. The mean daily temperature in July is 10.8 degrees and the mean daily temperature in January is -25 degrees (Bureau of Statistics, 2017b). The Hamlet is not serviced by road access and supplies are only available via annual barge resupply or by plane.

Item 7. Appendix J: S&SWDF A&RP – Page 8, Section 2.3.2, paragraph 1, line 1: Update text to replace "Environment and Natural Resources" with "Environment and Climate Change".

In this section, SNP lab results are described based on the 2015 inspection report. Include a description of the recent available SNP lab results, ie: June 2022 SNP lab results, available on IWB website:

Hamlet Response to IWB Additional Information Request dated October 15, 2025, Part B, Item 7:

The most recent **Environment and Climate Change (formerly Environment and Natural Resources)** inspection was performed on July 16, 2019. The most recent samples collected at SNP stations 1619-2 (Effluent discharge from existing Sewage Waste Disposal Facilities before entering adjacent wetland), 1619-3 (Effluent discharge from adjacent wetland of existing Sewage Waste Disposal Facilities before entering Darnley Bay), and 1619-4 (Effluent discharge from Abandoned Sewage Lagoon before entering Darnley Bay) on June 8, 2022 and returned parameters under criteria of water licence Part E, Item 2 (<https://www.inuvwb.ca/register/paulatuk-municipal-water->

[licences/](#)). The Hamlet has established plans and protocols to begin sampling the discharged water on a regular basis.

Item 8. Appendix J: S&SWDF A&RP – Page 13, top paragraph, line 13: Replace “... as per Part D, Item 14...” with “...as per Part E, Item 7...”

Hamlet Response to IWB Request dated October 15, 2025, Part B, Item 8:

As detailed in the Sewage and Solid Waste Disposal Facilities Assessment report produced by Dillon (2017), it is not believed that inadequate capacity is the cause of this overflow, however manual decanting is recommended in place of current continuous natural flow. Additionally, the construction of a berm around the lagoon is recommended to reduce surface run-off from entering the lagoon. When sludge layers reach 0.5 m in depth, dredging is recommended as an effective option to increase lagoon capacity. Once the sludge is removed, it is treated typically by dewatering using a freeze / thaw detention system and then either landfilled or composted depending on its level of contamination. Dewatered sludge should be stockpiled on site and tested for heavy metals and other contaminants. Pending the results of the tests the dewatered sludge may be used as overburden for the active landfill cells. Prior to initiating lagoon desludging operations, the Hamlet should enlist an engineer to assist with the design and oversight of the desludging and sludge dewatering plan. Further, within 60 days prior to the removal of sludge from the lagoon, a Sludge Removal Plan must be submitted to the IWB for approval, **as per Part E, Item 7 of the water licence**. It is understood that the Hamlet has sufficient capacity to undertake desludging and dewatering by their own forces but if this is not the case then a qualified contractor should be enlisted to undertake the desludging activities.

**Appendix K: Inuvialuit Water Board Correspondence
and Water Treatment Plant Drawings**



December 11, 2018

Mayor Ray Ruben
Hamlet of Paulatuk
P.O. Box 98
Paulatuk, NT X0E 1N0

Dear Mayor Ruben:

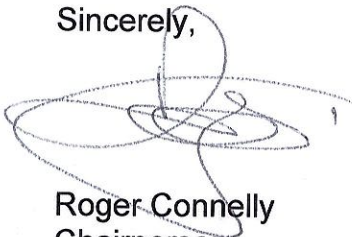
Re: Water Licence (WL) N7L3-1619 - Hamlet of Paulatuk – Water Treatment Plant Improvements - Modification

The Inuvialuit Water Board (IWB) acknowledges receipt of the proposed work and drawings submitted on October 22, 2018 for the installation of a prefabricated building housing a new municipal water treatment system. The IWB accepts the modifications as submitted subject to the following provision:

- WL N7L3-1619 - Part G: Conditions applying to Modifications - Item 3: The Licensee shall provide to the Board as built site plans referred to in Part G, Item 1 within ninety (90) days of completion of the modifications. If there are any changes to the drawings already submitted, please advise the IWB.

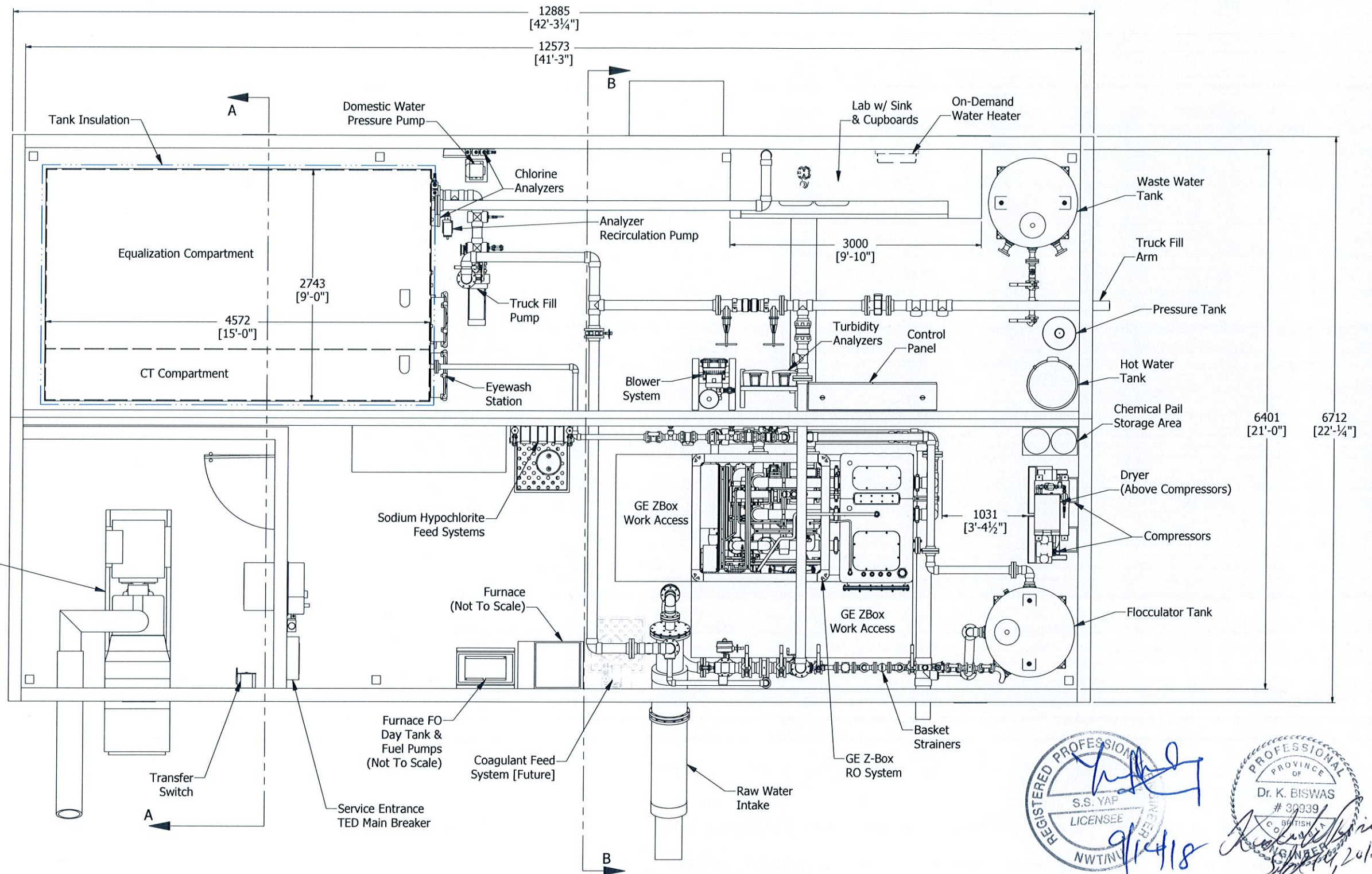
All documents, including IWB related correspondence, will be placed on the public register. Should you have any questions, please contact Mardy Semmler, IWB Executive Director, at 867-678-8609 or semmlerm@inuvwb.ca.

Sincerely,



Roger Connelly
Chairperson

cc: John Holland, Senior Administrative Officer - Hamlet of Paulatuk
Lloyd Gruben, Water Resources Officer – ENR, Inuvik



Generator
[Location As Per Stantec Drawing M-200]

REGISTERED PROFESSIONAL ENGINEER
S.S. YAP
LICENSEE
NWTINV
9/14/18

PROFESSIONAL ENGINEER
PROVINCE OF
Dr. K. BISWAS
30939
C.O. BRITISH COLUMBIA
SINCE 1988
APR 10, 2018

REV	DESCRIPTION	BY	CHK'D	APP'D	DATE
D	OVERFLOW RAISED ON FLOCCULATOR TANK	RT	KB	JY	SEP-06-2018
C	UPDATE	RT	KB	JY	AUG-20-2018
B	100% SUBMITTAL	RT	KB	JY	JUL-13-2018
A	70% SUBMITTAL	RT	KB	JY	APR-06-2018
REV	DESCRIPTION	BY	CHK'D	APP'D	DATE

REVISIONS

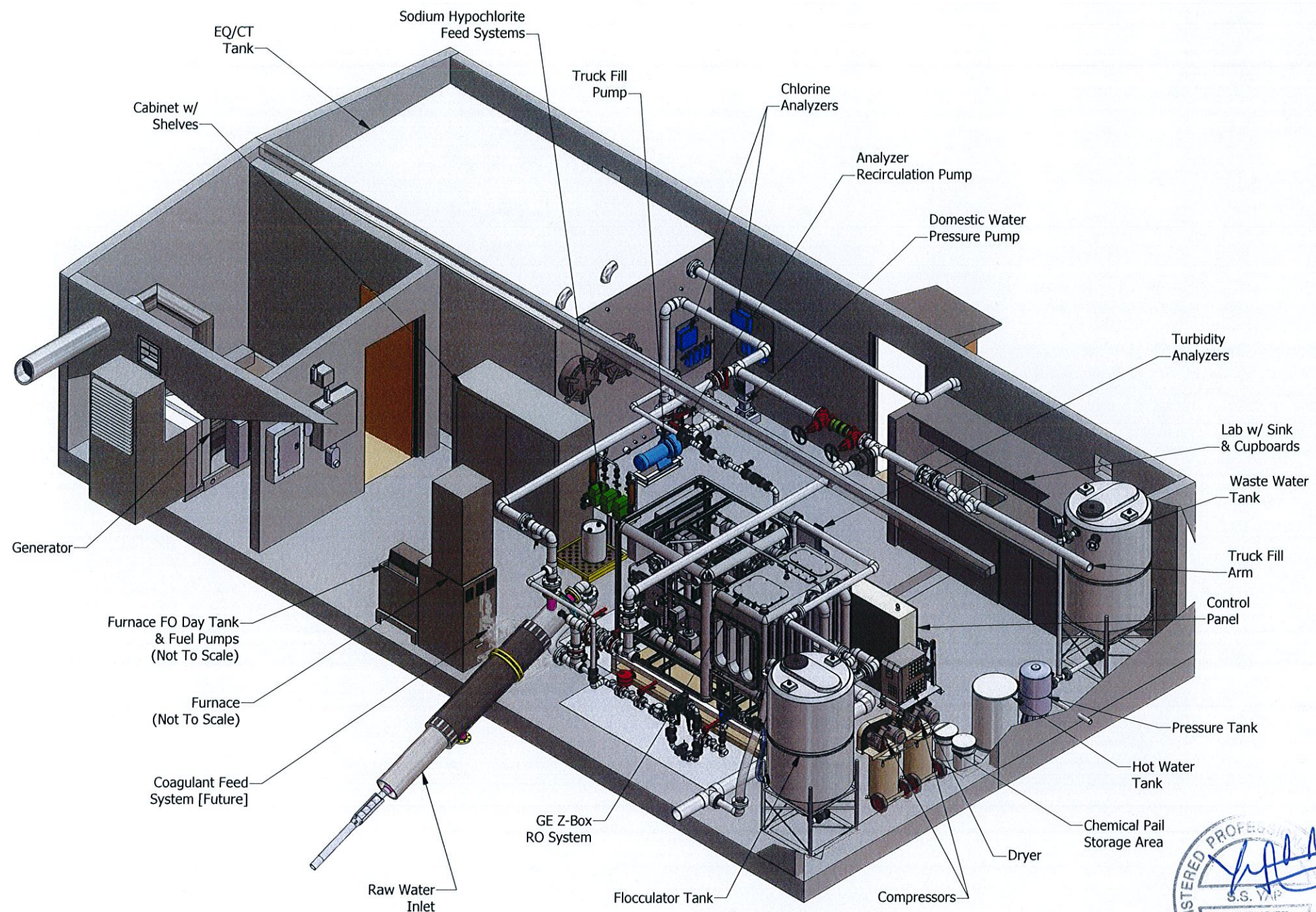
NOTE

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AWC WATER SOLUTIONS LTD.

#104-19074 22nd Avenue Surrey, BC Canada V3Z 3S6
Phone : 604-638-0760 Fax: 604-638-0795
www.awcwater.com

DRAWN	RT	GNWT3-PAULATUK WTP (REF #10338) AWC UF WTP GENERAL ARRANGEMENT SHEET 1 OF 3
DESIGN	KB	
CHECKED	KB	
APPROVED	JY	
DATE	JAN-29-2018	
SCALE	NTS	DRAWING NO. 10338-P-01
		REV D



REGISTERED PROFESSIONAL ENGINEER
 PROVINCE OF
 Dr. K. BISWAS
 # 30939
 S.S. Y.M.P. LICENSEE
 NWT/NU
 9/14/18

REV	DESCRIPTION	BY	CHK'D	APP'D	DATE
D	OVERFLOW RAISED ON FLOCCULATOR TANK	RT	KB	JY	SEP-06-2018
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REV	DESCRIPTION	BY	CHK'D	APP'D	DATE

REVISIONS

NOTE

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DESIGN	KB
CHECKED	KB
APPROVED	JY
DATE	JAN-29-2018
SCALE	NTS

GNWT3-PAULATUK WTP (REF #10338) AWC UF WTP GENERAL ARRANGEMENT SHEET 3 OF 3	DRAWING NO. 10338-P-01	REV D
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