AGNICO EAGLE

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Dear Mr. Hack

The following information is intended to detail the request following our discussions today. This information relates to the management of contact water at the site.

Should you have any questions or require further information, please do not hesitate to contact me below.

Regards

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Environment Superintendent
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Cc: Jeremy Fraser, CIRNAC
Assol Kubeisinova, NWB
Karen Kharatyan, NWB

Appendix A: 2AM-WTP1826 Treated Water Diffuser

Appendix B: 2AM-WTP1826 Whale Tail North Basin Dewatering Part D Item 1_2

Request for Discharge – Memorandum from Agnico Eagle to CIRNAC

Date: - July 12 2019

Current efforts at the Whale Tail operations consists of dewatering the Whale Tail North Basin as per Agnico's Water Management Plan. During this dewatering phase, that is currently ongoing, the contact water from the mining activities are collected in the footprint of the pit, previously referred to as Quarry 1. Once dewatering of Whale Tail North Basin has concluded, a small portion of the footprint of Whale Tail North Basin will then act as an attenuation pond for all of the contact water on site.

The water management plan and the approved design report (2AM-WTP1826 Treated Water Diffuser Design Report) details that contact water would be treated though the WTP and discharged via diffusors. Table 3.3 of the water management plan details the overall timeframe of the water management, with contact water being discharged at Mammoth Lake (Lake A17). It is proposed in section 2 of the design report that diffusers will be used to disperse the treated water in the Mammoth Lake water column. Two different types of diffuser will be used: one during the summer months, the other for winter months. Section 3.3 of the design report also specifies that the installation methodology will take place over the winter months to prevent erosion issues during the installation.

Since June, the site has been accumulating larger than predicted inflows, primarily from the spring rainfall. This resulted in the site team to evaluate all associated infrastructure and water collection ponds. A few priorities have been identified and are listed below:

1. Dewatering Whale Tail North Basin to allow the site's contact water management to be initiated, which is using the dewatered basin as the main attenuation pond for contact water
2. Remove accumulated Quarry 1 contact water to prevent migration through active layer into Whale Tail North Basin during the dewatering activities.

Work and efforts are ongoing with the Dewatering of Whale Tail North Basin as per previous communication of July 12, 2019, in the document; 2Am-WTP1826 Responses to CIRNAC 2019_07_12.

To provide the site with the most options to discharge water, the site is proposing to commence the contact water strategy that includes pumping water to the permanent summer diffusers locations as per the Whale Tail Approved Water Management Plan and design report. However, following the winter installation of the permanent diffusers, the snow and ice melt on Mammoth Lake has displaced the permanent diffusers (2 summer diffusor and 1 winter diffusor, see section 3.0 in the design report). . One of the diffusers has remained in the appropriate location. The remaining two diffusers require some maintenance due to the winter displacement of the two diffusers.

A work plan is being developed to rectify the location of the permanent diffuser and ensure a successful completion of the installation. During this time that the permanent diffusers are being fixed as per the work plan, Agnico is proposing to use the temporary dewatering diffuser to discharge treated contact water until the permanent diffusers are operational. The water treatment system and pumping rates

remain consistent with the Whale Tail Approved Water Management Plan. The water management plan and the approved report (2AM-WTP1826 Whale Tail North Basin Dewatering Part D Item 1 & 2) details that the dewatering system from North Basin to Mammoth Lake will consist of pumping water from the North Basin to the WTP and then discharging it into Mammoth Lake via a submerged dewatering diffuser at a flowrate between 800 m3/h to 1,600 m3/h. Section 3,4 and figure 5 of the design report details the dewatering diffusers information.

To provide some additional clarity, the proposed workplan is estimated to take up to 3 weeks until the permanent diffusers are operational. During this 3-week window, it is estimated a total of 500,000 m3 of treated contact water at a rate of 1,000 m^3/hr would be discharged to Mammoth Lake via the temporary diffuser.

The water quality will still meet all of the 2AM-WTP1826 Water Licence, part D, Item 10; and part F, items 4 and 5 and the MDMER Division 2 Section 12 (1) (weekly sample), Division 2 Section 14 (1) (toxicity trout and daphnia), Schedule 5 Section 4(3) (effluent characterization), Schedule 5 Section 6(1) (sublethal toxicity testing) and Schedule 5 Section 7(2) (water quality monitoring exposure and reference areas). Samples for section 12 (1) and section 14 (2). Samples were collected on July 9, 2019.

The ramifications of not using the temporary diffuser could impact the integrity of the infrastructure. As both diffusers are approved and planned, the adaptive management strategy we are presenting will minimize this effect. The use of this adaptive management mitigation is for the additional water that accumulated from the unplanned precipitation event and to address the major concern, related to high water levels and high volumes water that have a high potential impact on the integrity of key infrastructure.

Contact water – using temporary diffusor

Appendix A: 2AM-WTP1826 Treated Water Diffuser Design Report

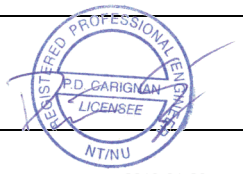
Title of document: **TREATED WATER DIFFUSER DESIGN**

Client: **AGNICO EAGLE MINES**

Project: DETAILED ENGINEERING OF WATER MANAGEMENT AND GEOTECHNICAL INFRASTRUCTURE AT AMARUQ

Prepared by: Anh-Long Nguyen, P.Eng.

Reviewed by: Pierre Carignan, P.Eng.



2019-01-29

REVISION INDEX

Revision				Pages Revised	Remarks
#	Prep.	Rev.	Date		
EPA	ALN	PC	Nov. 26, '18		Issued for comments
EPB	ALN	PC	Nov. 27, '18		Issued for Client's comments
E00	ALN	PC	Dec. 18, '18		Issued for design
E01	ALN	PC	Jan. 29, '19	all	Issued for design

NOTICE TO READER

This document contains the expression of the professional opinion of SNC-Lavalin Inc. ("SNC-Lavalin") as to the matters set out herein, using its professional judgment and reasonable care. It is to be read in the context of the agreement dated October 4th, 2017 (the "Agreement") between SNC-Lavalin and Agnico Eagle Mines (the "Client") and the methodology, procedures and techniques used, SNC-Lavalin's assumptions, and the circumstances and constraints under which its mandate was performed. This document is written solely for the purpose stated in the Agreement, and for the sole and exclusive benefit of the Client, whose remedies are limited to those set out in the Agreement. This document is meant to be read as a whole, and sections or parts thereof should thus not be read or relied upon out of context.

SNC-Lavalin has, in preparing estimates, as the case may be, followed accepted methodology and procedures, and exercised due care consistent with the intended level of accuracy, using its professional judgment and reasonable care, and is thus of the opinion that there is a high probability that actual values will be consistent with the estimate(s). Unless expressly stated otherwise, assumptions, data and information supplied by, or gathered from other sources (including the Client, other consultants, testing laboratories and equipment suppliers, etc.) upon which SNC-Lavalin's opinion as set out herein are based have not been verified by SNC-Lavalin; SNC-Lavalin makes no representation as to its accuracy and disclaims all liability with respect thereto.

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1.0 Introduction

1.1 Context

Agnico Eagle Mines Limited, Meadowbank Division ("AEM") is developing the Whale Tail Pit, a satellite deposit on the Amaruq property, as a continuation of current mine operations and milling at the Meadowbank Mine. The Amaruq property is a 408 km² site located on Inuit Owned Land, approximately 150 km north of the Hamlet of Baker Lake and approximately 50 km northwest of the Meadowbank Mine in the Kivalliq region of Nunavut. The property was acquired by AEM in April 2013.

The Meadowbank Mine is an approved mining operation and AEM is looking to extend the life of mine operation by constructing and operating Whale Tail Pit, which is located on the Amaruq exploration property, in accordance with Type A Water Licence 2AM-WTP-1826.

1.2 Scope

SNC Lavalin (SLI) was mandated to realize the detailed engineering of the water management pumping infrastructure with regard to piping and pumps required to manage the surface water at the Amaruq mine site.

As part of the water management infrastructure, a diffuser is required when discharging treated water from the Amaruq Arsenic Water Treatment Plant (AsWTP) in Mammoth Lake during the summer and winter months.

The following technical note presents the design of the treated water diffuser.

1.3 Reference Document

Table 1-1 summarizes all of the pertinent drawings and documents relevant to the design of the treated water diffuser. Drawings can be found in *Appendix A*.

Table 1-1 : Reference Documents

Document Number	Revision	Title
1789310_247-TM	--	TECHNICAL MEMORANDUM – EFFLUENT PLUME MODELING IN MAMMOTH LAKE
61-695-270-204	R0	AGNICO EAGLE - AMARUQ DIVISION 695 - WATER MANAGEMENT 270 - PIPING PIPING PROFILE PIPELINE AND DIFFUSER INSTALLED IN MAMMOTH LAKE

Document Number	Revision	Title
61-695-270-205	R0	AGNICO EAGLE - AMARUQ DIVISION 695 - WATER MANAGEMENT 270 - PIPING PIPING DETAILS TYPICAL DETAILS FOR DIFFUSER AND BOULDER INSTALLATION
61-695-270-206	R0	AGNICO EAGLE - AMARUQ DIVISION 695 - WATER MANAGEMENT 270 - PIPING PIPING PROFILE PIPELINE AND DIFFUSER INSTALLED IN MAMMOTH LAKE FOR WINTER OPERATION
61-695-270-207	R0	AGNICO EAGLE - AMARUQ DIVISION 695 - WATER MANAGEMENT 270 - PIPING PIPING DETAILS TYPICAL DETAI LS FOR DIFFUSER AND BOULDER INSTALLATION FOR WINTER OPERATION

2.0 Design Basis

2.1 Purpose

Surface runoff are collected and transferred to the Attenuation Pond. The raw water is then treated at the Amaruq AsWTP to remove total suspended solids and arsenic. Treated water produced from the Amaruq AsWTP will be discharged into Mammoth Lake. A diffuser will be used to disperse the treated water in the Mammoth Lake water column. Two different types of diffuser will be used: one during the summer months, the other for winter months.

2.2 Discharge Capacity

During the summer monts, treated water from the Amaruq AsWTP will be transferred to Mammoth Lake using up to 2 x 14-in HDPE pipelines and will be discharged in the lake via 2 submerged diffusers. Each line and diffuser is designed for a flow of 800 m^3/h. The total treatment capacity of the Amaruq AsWTP is 1600 m^3/h.

During the winter months, treated water will be transferred to Mammoth Lake using 1 x 6-in HDPE pipelines and will be discharged in the lake using 1 submerged diffuser. The diffuser will be designed for a discharge capacity of 84 to 105 m^3/h.

2.3 Treated Water Quality Data

The quality of the treated water that will be discharged in Mammoth Lake is summarized in the following table (reference document 1789310_247-TM) and will meet the Water License and the Metal and Diamond Mining Effluent Regulations (MDMER).

Table 2-1: Expected Water Discharge Quality

Parameters	Units	Mean Monthly Concentration
pH		6 – 9.5
Total Suspended Solids	mg/L	15
Total Ammonia	mg-N/L	0.23
Total Phosphorus	mg-P/L	0.27
Aluminum	mg/L	0.32
Arsenic	mg/L	0.11
Cadmium	mg/L	0.000097
Chromium	mg/L	0.019
Copper	mg/L	0.014
Iron	mg/L	1.1
Lead	mg/L	0.0037
Mercury	mg/L	0.000074
Nickel	mg/L	0.059
Zinc	mg/L	0.019

3.0 Diffuser Design

3.1 Diffuser Requirements

The treated water diffusers are designed to obtain the required dilution factor in order to meet the receiving environment water quality guidelines at the edge of the mixing zone.

Of all the parameters listed in table 2-1, total phosphorus required the highest dilution factor in order to meet the CCME or the site specific water quality objective (SSWQO) discharge criterion of 0.01 mg/L. The diffusers are designed to provide a minimum dilution factor of 27 for phosphorus with a water depth of 7.9 m under open water conditions and a flow rate of 800 m^3/h. The minimum dilution factor provided by the diffuser is sufficient for all other constituents in the treated water.

To achieve the required dilution, in the summer months, a diffuser equipped with 10 ports spaced at 12.6 m intervals will be required. Two diffusers will be required to be able to discharge a total flow of 1600 m^3/h. In the winter months, one diffuser will be used equipped with 3 ports spaced at 14.0 m.

The summer and winter diffusers will be approximately installed in Mammoth Lake at the following coordinates:

- West diffuser: Northing: 7254804, Easting: 604936

- East diffuser: Northing 724861, Easting: 605017

The two summer diffusers will be placed parallel to one another, with a distance separating them of at least 100 m. The winter diffuser will be placed in between the two summer diffuser. It is important to note that during the summer months, the winter discharge pipeline and diffuser are not used.

3.2 Design Details

Figure 3-1 shows the treated water discharge locations in Mammoth Lake as well as the diffusers.

For the summer operation, each line will be equipped with a diffuser. Each diffuser consists of:

- 10 discharge ports spaced out at 12.5m intervals starting at the end of the line on a 14-in DR17 HDPE pipeline;
- Each port consists of an Ø80mm diameter pipe mounted on a saddle with a total length of 725 mm. The end of the pipe is equipped with an orifice plate with an opening of 61 to 62 mm;
- The diffuser and submerged portion of the pipelines are weighted using boulders as ballasts.

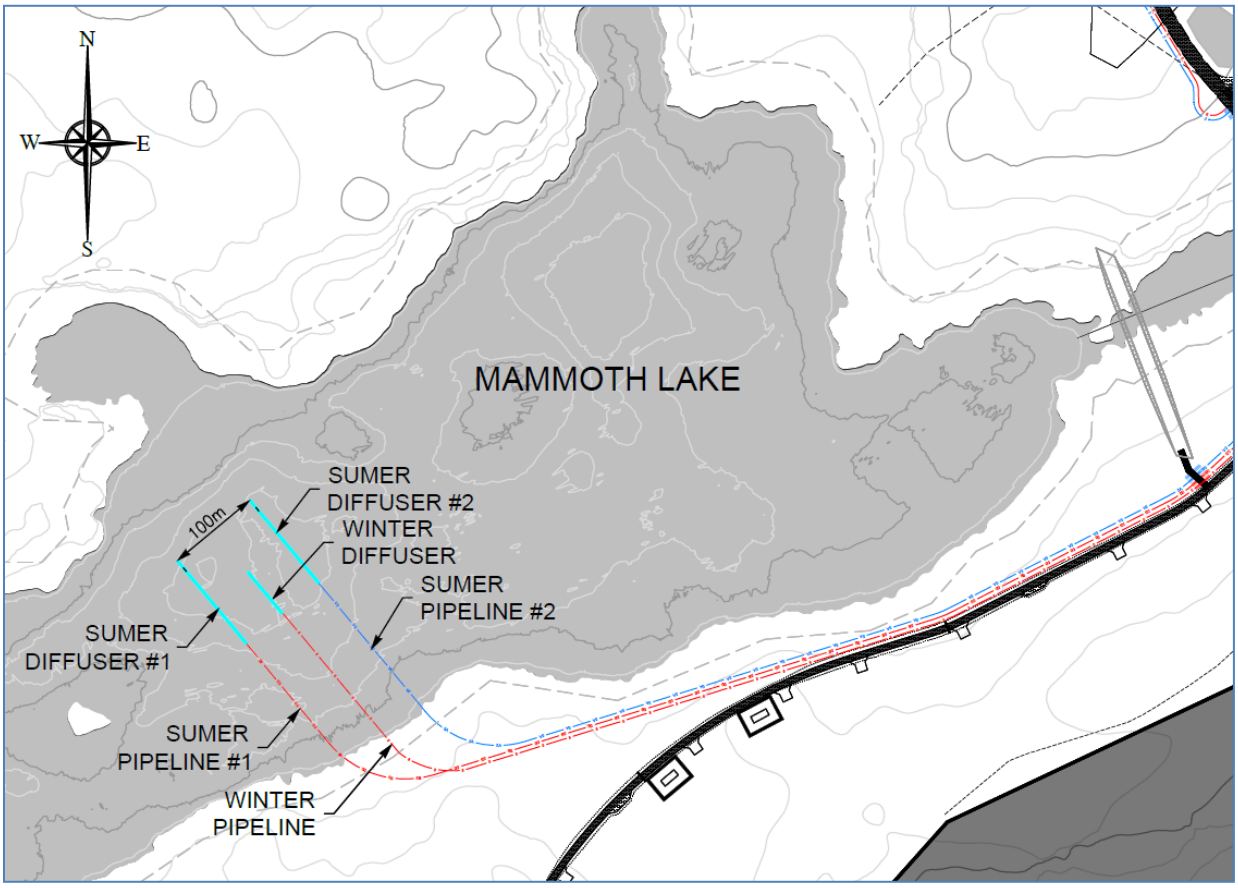
Refer to drawings 61-695-270-204 and 61-695-270-205 for details on the diffusers and submerged pipelines for summer operation.

For the winter operation, one diffuser will be installed, consisting of:

- 3 discharge ports spaced out at 14.0 m intervals starting at the end of the line on a 14-in DR17 HDPE pipeline;
- Each port consists of an Ø80mm diameter pipe mounted on a saddle with a total length of 725 mm. The end of the pipe is equipped with an orifice plate with an opening of 61 to 62 mm;
- The diffuser and submerged portion of the pipelines are weighted using boulders as ballasts.

Refer to drawings 61-695-270-206 and 61-695-270-207 for details on the diffusers and submerged pipelines for winter operation.

Figure 3-1 : Location of Summer Discharge in Mammoth Lake



3.3 Installation Methodology

The following section describes the general installation procedure for the diffuser and pipeline in Mammoth Lake. The installation will take place over the winter months to prevent erosion issues during the installation. The general installation procedure for the diffusers is as follows:

1. Assemble the diffuser and submerged pipeline segment on the shoreline using pipe-butt welding for the whole length.
   a. Install flanges at both ends of the pipeline.
   b. Install a blind flange on the diffuser end and keep the other end open on the shoreline.
   c. Install clamp rings at regular intervals starting from the end of the diffuser that is farthest from the shore. Install electro-fused flex-restraints on each side of every clamp ring as specified in construction drawings.
2. Install the discharge ports by mounting 3-in saddles on the 14-in DR17 HDPE and drilling a 3-in hole. Each saddle is electro-fused or mechanically secured. Screw in the 3-in diffuser riser. Refer to drawing 61-695-270-204 to 61-695-270-207 for details.

3. The positioning of the diffuser and submerged pipeline is to be carried out the winter months on the ice cover of Mammoth Lake. Wait until a thick ice cover has formed over Mammoth Lake to execute positioning. Refer to drawing 61-695-270-200 and 61-695-270-204 for the location of the diffuser/pipeline. Ensure a 100 m spacing between the two summer diffuser lines.

4. Place a boulder next to each clamp ring on the ice cover and attach it to the pipeline according to specifications. The boulder shall be equipped with an eye-bolt through which a steel wire can be threaded and attached to the clamp ring. Boulder attachment method and other details are shown on the construction drawings.

5. The end of the pipeline that in onshore should be anchored to the shore to prevent it from slipping into the water. One possible approach that could be considered is to use a group of massive boulders that shall be attached to a backup ring placed near the end of the pipeline. The backup ring shall be free to slide along the pipe. Steel wires that link the pipeline to the boulders shall not be taut during installation. The exact method to anchor the line on the shore will be detailed based on site conditions.

4.0 Date of Construction

The diffusers are planned to be installed between March and April 2019.

The summer diffusers are planned to be operational in July 2019.

The winter diffuser is planned to be operational in January 2020.

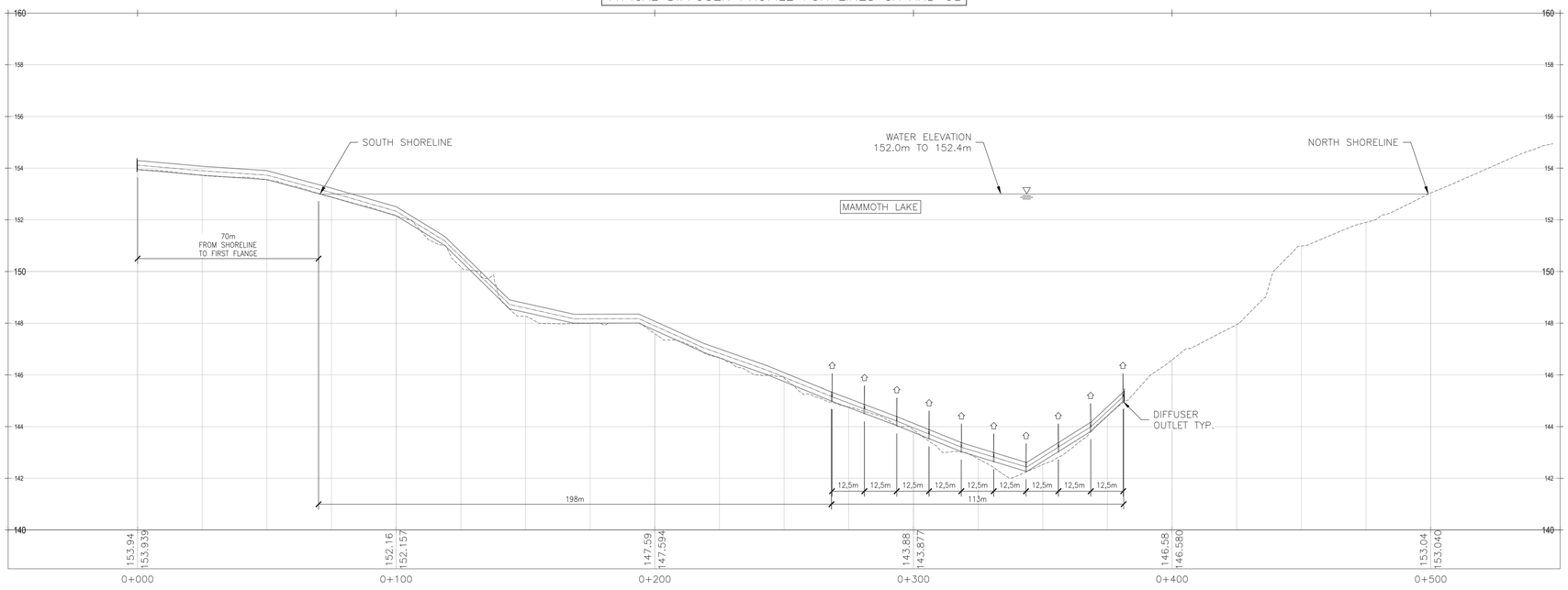
Appendix A: Diffuser Drawings

Document Number	Revision	Title
61-695-270-204	R0	AGNICO EAGLE - AMARUQ DIVISION 695 - WATER MANAGEMENT 270 - PIPING PIPING PROFILE PIPELINE AND DIFFUSER INSTALLED IN MAMMOTH LAKE
61-695-270-205	R1	AGNICO EAGLE - AMARUQ DIVISION 695 - WATER MANAGEMENT 270 - PIPING PIPING DETAILS TYPICAL DETAILS FOR DIFFUSER AND BOULDER INSTALLATION
61-695-270-206	R0	AGNICO EAGLE - AMARUQ DIVISION 695 - WATER MANAGEMENT 270 - PIPING PIPING PROFILE PIPELINE AND DIFFUSER INSTALLED IN MAMMOTH LAKE FOR WINTER OPERATION
61-695-270-207	R0	AGNICO EAGLE - AMARUQ DIVISION 695 - WATER MANAGEMENT 270 - PIPING PIPING DETAILS TYPICAL DETAILS FOR DIFFUSER AND BOULDER INSTALLATION FOR WINTER OPERATION

NO. DESSIN
DRAWING NO. 651298-VIEWPORTS

FORMAT ARCHD

TYPICAL DIFFUSER PROFILE FOR LINES 5A AND 5B



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Date 2018-10-26
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PROJECT No	SUBDIVISION	SUBJECT	SERIAL	REV.
651298	8200	41	0005	E00

NOTES GÉNÉRALES / GENERAL NOTES

Notes:
1) The Profile view shows the pipeline and diffuser to be installed in Mammoth Lake required for lines 5A and 5B (WTP to Mammoth Lake).
2) The pipeline is a 14-in HDPE DR17.
3) Refer to drawing 61-695-270-205 for typical details on the installation of the diffuser and boulders on the pipeline.

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R0	2018-10-24	ISSUED FOR CONSTRUCTION	PC	ALN	

REVISIONS

2018-10-24

TITRE / TITLE
AGNICO EAGLE – AMARUQ DIVISION
695 – WATER MANAGEMENT
270 – PIPING
PROFILE VIEW
PIPELINE AND DIFFUSER INSTALLED
IN MAMMOTH LAKE

DESSINÉ PAR / DRAWN BY	STÉPHANE LANTEIGNE	DATE 2018-08-31
VÉRIFIÉ PAR / CHECKED BY	PIERRE CARIGNAN	2018-08-31
APPROUVÉ PAR / APPROVED BY	ANH-LONG NGUYEN, RENÉ LAVIOLETTE	2018-08-31
ÉCHELLE / SCALE 1:1000	DATE	2018-08-31

NO. DESSIN / DRAWING NO. 61-695-270-204

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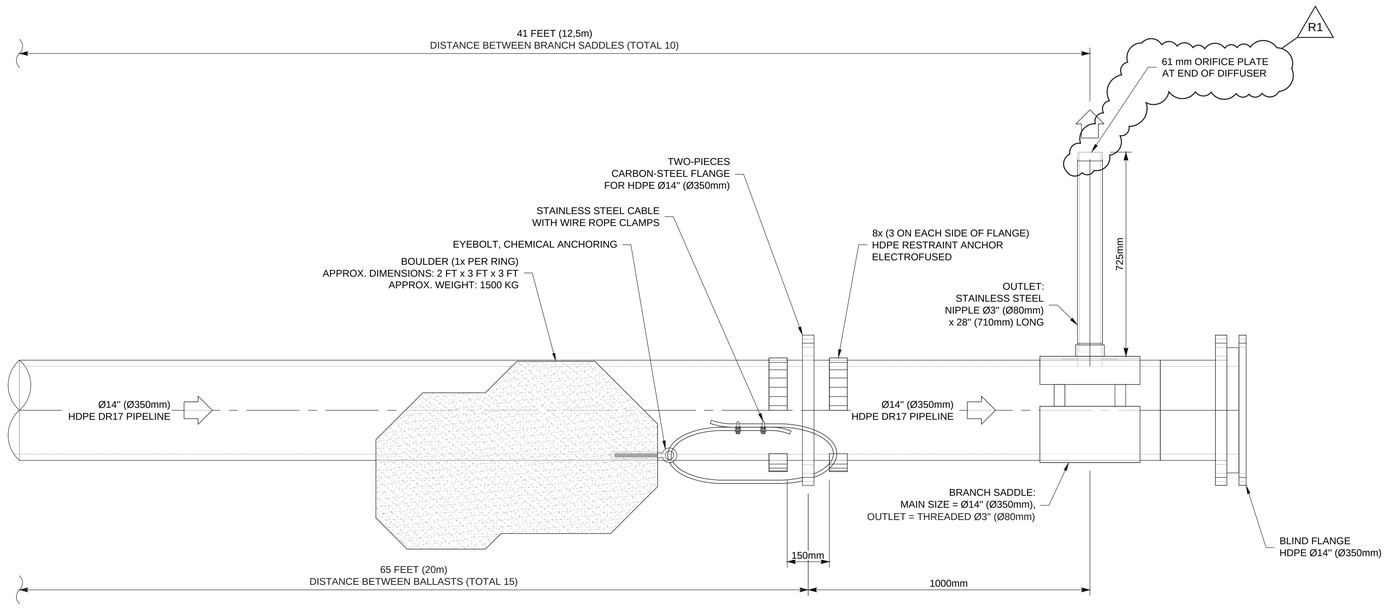
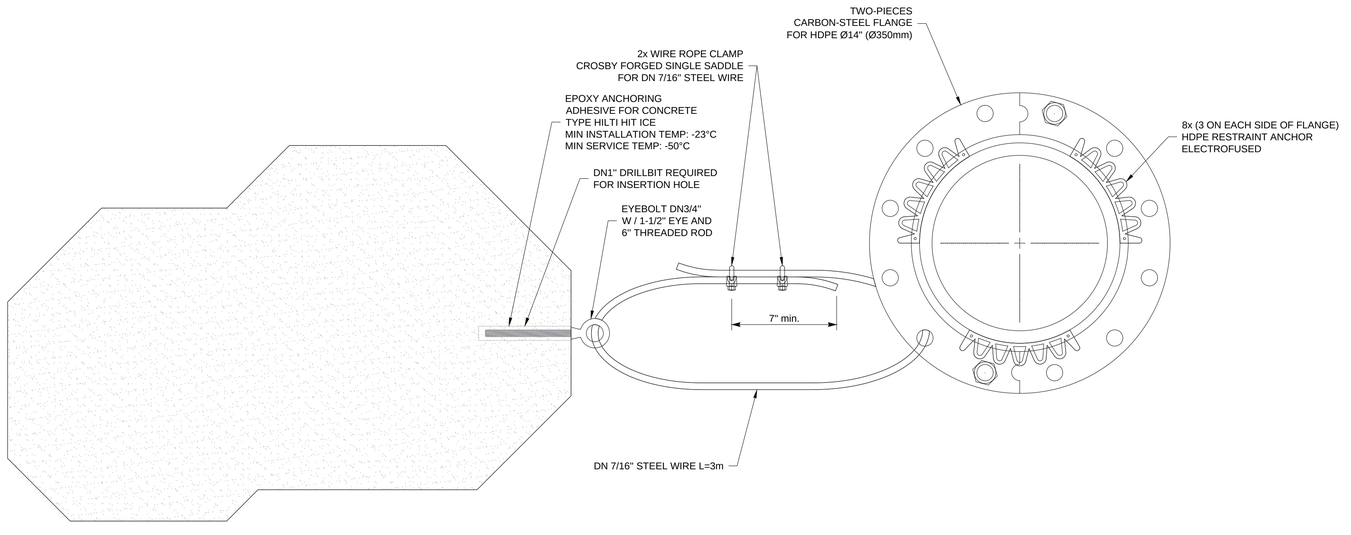


TYPICAL DETAIL
DIFFUSER OUTLETS AND BALLASTING
ELEVATION VIEW
1:10



TYPICAL DETAIL - BALLASTING
ELEVATION VIEW
1:5

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PROJECT No	SUBDIVISION	SUBJECT	SERIAL	REV.
651298	8200	41_D6	0006	E01

NOTES GÉNÉRALES / GENERAL NOTES

Notes:
1) Boulders are used as ballast. They are installed every 20m approximately along the pipeline, from the diffuser end to the shoreline.

Disclaimer :
1) The proposed method for ballasting the diffuser and submerged pipeline length is not according to standard practice nor does it comply with the pipe manufacturer's recommendations. It is based upon AEM's experience and site constraints.
2) The spacing between ballasts here specified is greater than the maximum recommended spacing and may cause the pipeline to arc upwards between ballasts. This may cause air to be entrapped along the line and reduce pumping capacity. The air should be pushed out of the line once pumping starts. However, if this is not the case, air pockets may be evacuated subsequently by drilling a small hole at the apex of the submerged arc. This will require a diver. Pre-Drilling is not recommended and will affect the pipe's structural integrity.
3) The proposed spacing dictates the boulder sizing. The greater the spacing, the greater the boulder size. The proposed boulders are important weights acting on a small pipe surface and may cause the pipeline to kink, especially given the cold temperatures that could render the pipe more brittle.
4) Given AEM's chosen installation method, the final pipeline location cannot be guaranteed. The pipeline may sink elsewhere than at the intended coordinates, determined by Golder Associates Inc. Indeed, the rate at wich it will sink, as well as where it sink are dependent upon the climate and weather as well as the rate at wich the ice melts.
To mitigate the risk:
a) Allow for a longer pipeline length on the south shore of Mammoth Lake. If the pipeline is dragged towards the lake, the end will not be lost underwater.
b) Properly anchor the pipeline on both the south and the north shores, according to recommendations. The anchors will attempt to prevent important displacements, but cannot guarantee that minor displacements will occur.

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R1	2018-12-18	ISSUED FOR CONSTRUCTION	PC	ALN	
R0	2018-10-24	ISSUED FOR CONSTRUCTION	PC	ALN	

REVISIONS

2018-12-18

TITRE / TITLE
AGNICO EAGLE – AMARUQ DIVISION
695 – WATER MANAGEMENT
270 – PIPING
PIPING DETAILS
TYPICAL DETAILS FOR DIFFUSER
AND BOULDERS INSTALLATION

DESSINÉ PAR / DRAWN BY	STÉPHANE LANTEIGNE	DATE 2018-08-31
VERIFIÉ PAR / CHECKED BY	PIERRE CARIGNAN	2018-08-31
APPROUVÉ PAR / APPROVED BY	ANH-LONG NGUYEN, RENÉ LAVIOLETTE	2018-08-31
ÉCHELLE / SCALE 1:10	DATE	2018-08-31

NO. DESSIN / DRAWING NO. 61-695-270-205

NO. PROJET / PROJECT NO.	REVISION	FEUILLE / SHT
6118	R1	1 / 1

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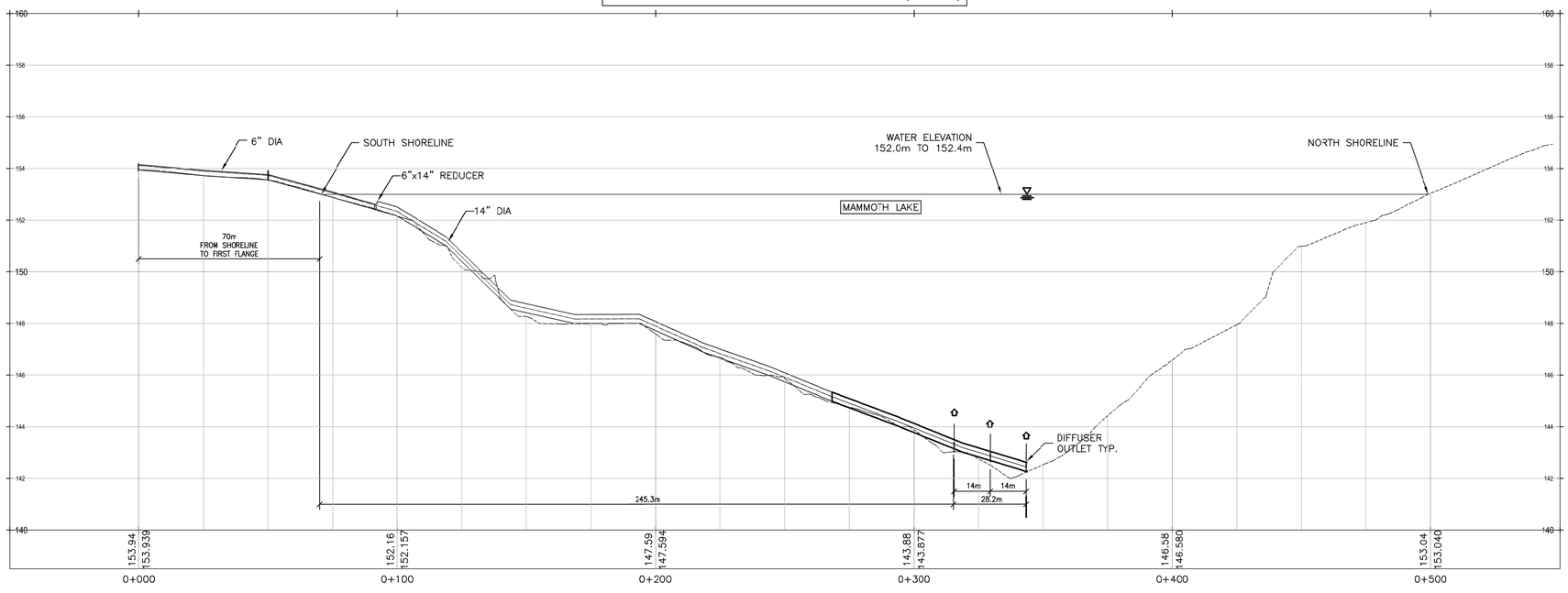
FILE NO. 61-695-270-205 R1.dwg

NO. DESSIN DRAWING NO. ACAD-61-695-270-206_R0

FORMAT ARCHD

TYPICAL DIFFUSER PROFILE FOR LINES 8 (WINTER)



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PROJECT No	SUBDIVISION	SUBJECT	SERIAL	REV.
651298	8200	41 D6	0007	E00

NOTES GÉNÉRALES / GENERAL NOTES

Notes:
1) The Profile view shows the pipeline and diffuser to be installed in Mammoth Lake required for line 8 (WTP to Mammoth Lake).
2) The submerged pipeline is a 14-in HDPE DR17.
3) Refer to drawing 61-695-270-207 for typical details on the installation of the diffuser and boulders on the pipeine.

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REVISIONS

2019-01-29

TITRE / TITLE

AGNICO EAGLE – AMARUQ DIVISION
695 – WATER MANAGEMENT
270 – PIPING
PROFILE VIEW
PIPELINE AND DIFFUSER INSTALLED
IN MAMMOTH LAKE FOR WINTER OPERATION

DESSINÉ PAR DRAWN BY	MONILA MARIUS	DATE 2019-01-28
VÉRIFIÉ PAR CHECKED BY	PIERRE CARIGNAN	2019-01-28
APPROUVÉ PAR APPROVED BY	ANH-LONG NGUYEN, RENÉ LAMOLLETTE	2019-01-28
ÉCHELLE SCALE	1:1000	DATE 2019-01-28
NO. DESSIN DRAWING NO.	61-695-270-206	
NO. PROJET PROJECT NO.	6118	REVISION R0 / FEUILLE / SHT 1 / 1

PERMIT TO PRACTICE
SNC-LAVALIN INC.
Signature _____ P.Eng.
Date 2019-01-29
PERMIT NUMBER: P 260
The Association of Professional Engineers, Geologists and Geophysicists of NWT/NU

AE-CART-ARCH D

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FILE NO. ACAD-61-695-270-206_R0.dwg

NO. DESSIN
DRAWING NO. DRAFT_61-695-270-207_R0

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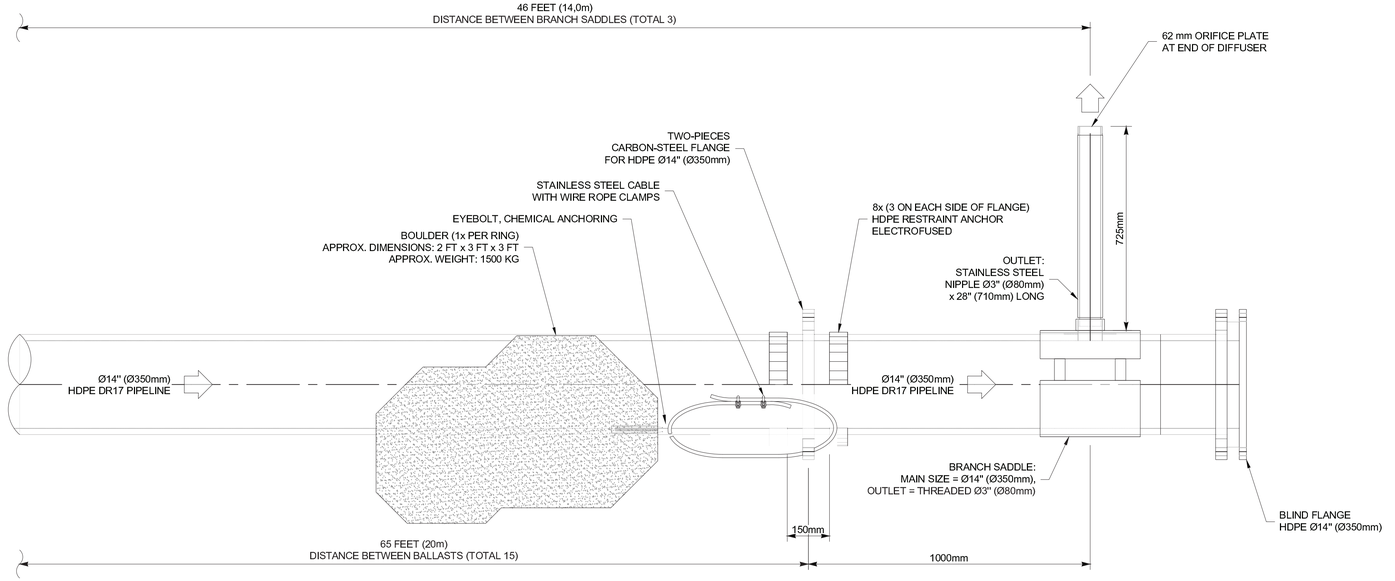
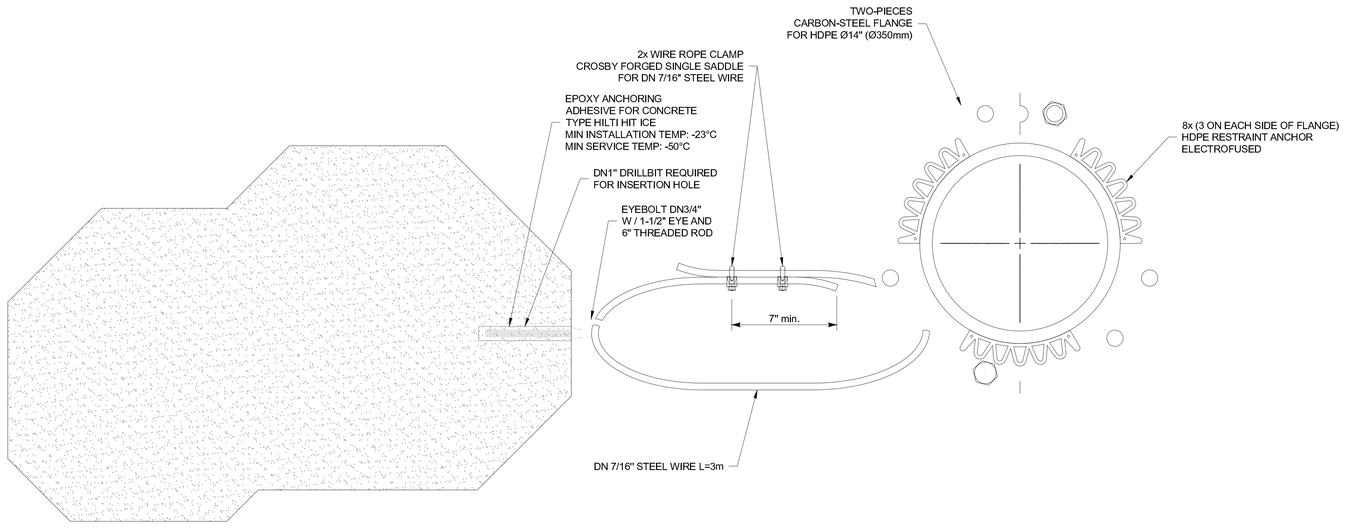


TYPICAL DETAIL
DIFFUSER OUTLETS AND BALLASTING
ELEVATION VIEW
1:10



TYPICAL DETAIL - BALLASTING
ELEVATION VIEW
1:5

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Date 2019-01-29
PERMIT NUMBER: P 260
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PLAN CLÉ
KEY PLAN

SNC·LAVALIN
Mining & Metallurgy
5500, des Galeries Blvd., bur. 200, Quebec (Quebec), Canada G2K 2E2
Telephone: (418) 621-5500, Fax: (418) 621-8887

PROJECT No	SUBDIVISION	SUBJECT	SERIAL	REV.
651298	8200	41_D6	0008	E01

NOTES GÉNÉRALES / GENERAL NOTES

Notes:
1) Boulders are used as ballast. They are installed every 20m approximately along the pipeline, from the diffuser end to the shoreline.

Disclaimer :
1) The proposed method for ballasting the diffuser and submerged pipeline length is not according to standard practice nor does it comply with the pipe manufacturer's recommendations. It is based upon AEM's experience and site constraints.
2) The spacing between ballasts here specified is greater than the maximum recommended spacing and may cause the pipeline to arc upwards between ballasts. This may cause air to be entrapped along the line and reduce pumping capacity. The air should be pushed out of the line once pumping starts. However, if this is not the case, air pockets may be evacuated subsequently by drilling a small hole at the apex of the submerged arc. This will require a diver. Pre-Drilling is not recommended and will affect the pipe's structural integrity.
3) The proposed spacing dictates the boulder sizing. The greater the spacing, the greater the boulder size. The proposed boulders are important weights acting on a small pipe surface and may cause the pipeline to kink, especially given the cold temperatures that could render the pipe more brittle.
4) Given AEM's chosen installation method, the final pipeline location cannot be guaranteed. The pipeline may sink elsewhere than at the intended coordinates, determined by Golder Associates Inc. Indeed, the rate at wich it will sink, as well as where it sink are dependent upon the climate and weather as well as the rate at wich the ice melts.
To mitigate the risk:
a) Allow for a longer pipeline length on the south shore of Mammoth Lake. If the pipeline is dragged towards the lake, the end will not be lost underwater.
b) Properly anchor the pipeline on both the south and the north shores, according to recommendations. The anchors will attempt to prevent important displacements, but cannot guarantee that minor displacements will occur.

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TITRE / TITLE	# DWG

AGNICO EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT
R0	2019-01-28	ISSUED FOR CONSTRUCTION	PC	ALN	

REVISIONS

2019-01-29

TITRE / TITLE
AGNICO EAGLE – AMARUQ DIVISION
695 – WATER MANAGEMENT
270 – PIPING
PIPING DETAILS
TYPICAL DETAILS FOR DIFFUSER AND BOULDERS INSTALLATION FOR WINTER OPERATION

DESSINÉ PAR / DRAWN BY	MOVILA MARIUS	DATE 2019-01-28
VERIFIÉ PAR / CHECKED BY	PIERRE CARIGNAN	2019-01-28
APPROUVÉ PAR / APPROVED BY	ANH-LONG NGUYEN	2019-01-28

ÉCHELLE / SCALE	DATE
1:10	2019-01-28

NO. DESSIN / DRAWING NO.
61-695-270-207

NO. PROJET / PROJECT NO.	REVISION	FEUILLE / SHT.
6118	R0	1 / 1

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FILE NO. 61-695-270-207 R0.dwg

Appendix B: 2AM-WTP1826 Whale Tail North Basin Dewatering Part D Item 1_2

AGNICO EAGLE

MEADOWBANK GOLD MINE

WHALE TAIL PROJECT

WHALE TAIL LAKE NORTH BASIN DEWATERING

60-Day Notice to Nunavut Water Board
In Accordance with Water License 2AM-WTP-1826

NOVEMBER 2018

VERSION 01

DOCUMENT CONTROL

Version	Date (YMD)	Section	Page	Revision
1	2018-11-23	ALL	-	For Approval

Prepared By:

Engineering and Environmental Departments

Approved by:

Frederick Bolduc, M.Sc.A., P.Eng. – Geotechnical Coordinator

Miles Legault, P. Eng. – Engineering Assistant Superintendent

Reviewed and signed by:

Pascal Poirier, M. Sc, P. Eng. – Water and Tailings Engineer
NAPEG Member No. L3318

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1 INTRODUCTION

1.1 SITE LOCATION AND ACCESS

Agnico Eagle Mines Limited is developing the Whale Tail Pit Project, a satellite deposit located on the Amaruq property, in the Kivalliq Region of Nunavut (65°24'25" N 96°41'50" W). The 99,878-hectare Amaruq property is located on Inuit-owned and federal crown land; roughly 55 kilometers north of the existing Meadowbank mine. The Meadowbank Complex is accessible from Baker Lake, located 70 kilometers to the south, via an all-season access road.

1.2 SITE FACILITIES

The Amaruq mineral deposit is considered to be an extension of the currently operating Meadowbank mine. The Whale Tail pit is projected to be a conventional open pit mining operation, mined by truck-and-shovel operation. The Whale Tail road, 64-kilometers long, connects the Meadowbank site to the Amaruq site. On-site facilities will include a power plant, maintenance facilities, tank farm for fuel storage, water treatment plant (WTP), sewage treatment plant, drinking water treatment plant, as well as accommodation and kitchen facilities for approximately 400 people. **Figure 1 (Appendix A)** presents the general Whale Tail Project layout during the operation phase including its major facilities and infrastructures.

1.3 PURPOSE OF DOCUMENT

As part of the Construction Phase, the Whale Tail Lake North Basin (called hereafter the North Basin) needs to be dewatered in order to mine the Whale Tail Pit. Following the dewatering, a part of the North Basin will become the Whale Tail Attenuation Pond. This pond will received contact water from the Whale Tail site prior to discharge into the environment.

This document presents the 60-day construction notice of the Whale Tail Lake North Basin Dewatering and is submitted to the Nunavut Water Board as per requirement of the Whale Tail Type A Water Licence 2AM-WTP1826, Part D, conditions 1 and 2. The purpose of this notice is to provide final design and construction drawings and includes the system design and drawings, project timetable and environmental monitoring program.

2 GENERAL SITE CONDITIONS AND DESIGN CRITERIA

The dewatering phase will consist of two different dewatering systems:

- A dewatering system pumping the water from the North Basin to the Whale Tail Lake South Basin (called hereafter the South Basin) without water treatment and discharging the effluent via submerged diffuser, if the water quality is compliant with the discharge criteria;
- A dewatering system pumping the water from the North Basin to Mammoth Lake through the water treatment facility and discharging the effluent via a submerged diffuser.

The North Basin, at the current water elevation of 152.7 masl (Surveyed on October 31st, 2018), has a total water volume of 3,140,000 m^3. A two meter ice sheet is expected to form and cover the lake corresponding to a total water volume of 1,140,000 m^3 and resulting in a 2,000,000 m^3 of free water ("pumpable" water) until the end of May 2019.

The South Basin (first discharge location) will receive approximately 66% of the water volume (if it meets discharge criteria). If water continues to meet discharge criteria, the remaining water volume will continue to be discharged into the South Basin. However, conservatively, Agnico Eagle has assumed the remaining 34% may require treatment. If so, it will be pumped to the WTP and then discharged to Mammoth Lake. There is a possibility that the dewatering of the North Basin will be completed without any water treatment, therefore without any dewatering discharge to Mammoth Lake.

The design criteria of the dewatering system are the following:

- The dewatering system is designed to be operational in cold temperature as the dewatering phase is planned to start in February 2019 after the completion of the Whale Tail Dike when the extreme minimum temperature is -51°C (Baker Lake weather station);
- A parallel dewatering system (intakes, pumps, pipes) with one discharge diffuser is proposed to meet the flow capacity requirement in order to meet the dewatering schedule;
- The dewatering system is designed to mitigate potential sediment suspension and erosion during the dewatering phase.

2.1 DEWATERING SYSTEM – NORTH BASIN TO SOUTH BASIN

The dewatering system will consist of transferring water from North to South Basin via a submerged dewatering diffuser at a flowrate between 800 m^3/h to 3,000 m^3/h. This dewatering

system will be used when the water quality in the North Basin meets effluent criteria stipulated in Water License Part D Item 7 and the MDMER Regulation. A water quality sample will be taken prior to starting the dewatering discharge. Thereafter, effluent water samples will be collected to demonstrate compliance with the discharge criteria as per the monitoring program presented in Section 5.

Dewatering from North Basin to South Basin will cease if all of the free water is pumped or if the water quality results reach the discharge criteria limits. The latter would trigger the use of the second dewatering system, e.g. from North Basin to Mammoth Lake.

2.2 DEWATERING SYSTEM – NORTH BASIN TO MAMMOTH LAKE

The dewatering system from North Basin to Mammoth Lake will consist of pumping water from the North Basin to the WTP and then discharging it into Mammoth Lake via a submerged dewatering diffuser at a flowrate between 800 m^3/h to 1,600 m^3/h. Effluent water samples will be collected to demonstrate compliance with the discharge criteria as per the monitoring program presented in Section 5.

2.3 DEWATERING PHASE COMPLETION - ATTENUATION POND OPERATION

Once the dewatering phase is completed, part of the North Basin located outside the Whale Tail Pit footprint will become the Whale Tail Attenuation Pond. The Attenuation Pond will receive contact water from different sumps and ponds around site. Water from the attenuation pond will be pumped, and discharged via the attenuation pond diffuser into Mammoth Lake. If water quality does not meet discharge criteria, water will be treated via the water treatment system.

The dewatering phase will be completed once all the free and pumpable water (2Mm^3) is removed from the North Basin. The North Basin will then be considered as the Whale Tail Attenuation Pond. Any remaining water contained in low areas that could not be pumped and the ice portion (1.1Mm3) will be considered as contact water within the attenuation pond and will be used as part of the site water management, as per the WTP Water Management Plan. If required, the water contained in the Attenuation Pond will be treated, and the effluent water will be discharged into Mammoth Lake. The design report of the Attenuation Pond diffuser and the water treatment plant are presented in the 60-day construction notice of the water treatment plant.

Once the North Basin dewatering is complete, the Whale Tail Attenuation Pond will continue to require discharge into Mammoth Lake. Considering the diffuser associated with the WTP (detailed in the 60-day construction notice of the water treatment plant) may not be operational prior to July 2019, due to ice condition on Mammoth Lake, Agnico Eagle intends to continue

using the temporary dewatering diffuser to discharge water from the Whale Tail Attenuation Pond.

3 DEWATERING SYSTEM DESIGN

Figure 2 and **Figure 3 (Appendix A)** present the layout of both dewatering systems. The three-line system on Figure 2 consists of three intakes, three suctions, three pumps, and three water pipelines. The lines are then merged into to one single pipe that leads to one unique diffuser for dewatering from North Basin to South Basin. A two-line system consisting of two intakes, two suctions, two pumps, two water pipelines and one diffuser will be used for the dewatering from North Basin to Mammoth Lake. The pumping system designed from the Attenuation Pond to Mammoth Lake during the Attenuation Pond normal operation is detailed the 60-day construction notice of the water treatment plant.

3.1 INTAKES AND SUCTIONS LINES

The intakes in North Basin will be located in an area with sufficient depth and sufficient distance from shore. The intakes installed will have a fish screen respecting DFO criteria (see **Figure 4**, **Appendix A** for the intake design). The intake installation method will reduce the risk of potential sediment uptake as the intakes will be located near the water surface and in deep sections of the lake. The suction lines will consist of 50 feet sections of pipe 14”Ø PE3608 DR17 or 14”Ø PE3608 DR11. As the water level goes down, the ramp will be extended and the pump will be lowered closer to the water elevation.

3.2 PUMPS

The selected pump model for the dewatering system from North Basin to South Basin is Goodwin HL250M.

For the dewatering system from North Basin to Mammoth Lake, the water will be pumped from the North Basin to the WTP with two Godwin HL250M pumps and from the WTP effluent to the diffuser with two Warman FAH 12x10, 250HP pumps.

3.3 PIPES

The piping used for the system will be HDPE pipe 14”Ø PE3608 DR17 or 14”Ø HDPE PE3608 DR11 insulated and non-insulated. The piping was selected by considering the design flow and pressure rating. The installation and placement of the pipelines will be done in a manner not to restrict or impede the natural flow of water.

3.4 DEWATERING DIFFUSERS

During the dewatering phase, the water will be discharged sub-aqueously in the South Basin and Mammoth Lake via a diffuser. **Figure 5** (**Appendix A**) presents the dewatering diffuser design (same design for both discharges). The locations of the diffusers were selected to have a minimal water depth of 4 m. The discharge will consist of an HDPE pipe draining towards the outlet, where a 90° elbow followed by sufficient piping to ensure sub-aqueous discharge. In the last meter of submerged piping, seven rows of four 4" holes will be pierced in the piping.

The dewatering diffusers will be installed on ice prior to the beginning of dewatering. They will be installed on a floatable device to maintain the pipe outlet near, but still below, the water surface for summer operation, if required.

3.5 WATER TREATMENT PLANT

The purpose of the WTP is to remove Total Suspended Solids (TSS) during the dewatering phase.

The WTP is composed of:

- One precipitation reactor used for pH adjustment, oxidation, precipitation process;
- Two Actiflo® in parallel, treating the precipitation reactor effluent.

The WTP effluent is designed to meet the Type A Licence final effluent discharge criteria for TSS concentrations and Arsenic during the mine operation. The final effluent is monitored continuously for pH and turbidity.

The WTP design is detailed in the 60-day construction notice of the water treatment plant.

The flowrate and total volume will be monitored during the dewatering phase with electromagnetic Rosemount flowmeters. One flowmeter will be installed at the influent of the WTP as well to monitor the total water volume treated.

4 CONSTRUCTION

4.1 DEWATERING RAMP

A dewatering ramp will be constructed in the North Basin and will be required to install the Goodwin HL250M pumps during the dewatering phase. The dewatering ramp will be progressively built to move the pumps closer to the water line as the water level goes down. The construction strategy will minimize the rockfill placement in the North Basin during the dewatering phase to avoid sediment suspension. The rockfill required for the ramp will come from non-acid generating / non-metal leaching waste rock available onsite as per our

Operational ARD-ML Sampling and Testing Plan – Whale Tail Pit Addendum June 2018 (AEM 2018).

The estimated total required material for the ramp design is 11,300 m^3.

4.2 WATER TREATMENT PLANT

The water treatment plant construction details are presented in the 60-day construction notice of the water treatment plant.

4.3 TESTING AND INSPECTION

Prior to start up, the full length of pipelines will be tested for leaks at fusion weld and flange joints. If leaks are found, the joint will be re-welded or re-torqued and the hydrostatic test must be redone from the beginning.

5 ENVIRONMENTAL MONITORING PROGRAM

Routine monitoring of water quality monitoring at the WTP water outlets (opening valve at the outlet of the WTP when in operation) or at the merge ('Y') of the dewatering pipes (when the WTP is not in use) will be as per the Type A Water Licence Part D Item 7, the Water Quality Monitoring and Management Plan For Dike Construction and Dewatering (Version 1, Jan 2017) and the Metal and Diamond Mining Effluent Regulation (MDMER).

As per the Water Quality Monitoring and Management Plan For Dike Construction and Dewatering, TSS/turbidity will be measured in the receiving environment on a weekly basis; monitoring will take place, when safely possible, approximately 30 - 100 meters from end-of-pipe, dependent on stable ice conditions during ice-up. This monitoring will allow Agnico Eagle to follow the receiving environment water quality, detect any problem associated with the dewatering and put mitigation measures (for example, reducing the dewatering flow) if needed.

In addition to the monitoring and management of suspended sediments, a hydraulic monitoring plan has been developed to monitor the following components:

- Water levels in Mammoth Lake and the South Basin will be monitored on a regular basis while dewatering activities are occurring; and
- Outlet erosion inspections to monitor outlet stability, including potential erosion and/or ice damming within the outlets.

Mammoth Lake and South Basin water levels will be surveyed at a location of sufficient distance from the outlets to limit potential lake level drawdown effects. Lake water levels will be

monitored weekly during the freshet and ice-free period, and during the ice-up period, dependent of the ice conditions and worker safety.

6 PROJECT TIMETABLE

The project timetable is presented in **Table 1** below and will be subject to change depending on the conditions encountered during the dewatering (e.g. effluent water quality).

Table 1: Project Timetable – Dewatering phase

Task	Start date (YY-MM-DD)	End date (YY-MM-DD)	Trigger
Commissioning of WTP	2019-02-15	-	-
Beginning of dewatering	2019-02-15	-	Commissioning of Whale Tail Dike
Dewatering from North Basin to South Basin	2019-02-15	2019-05-01	If water quality meet transfer requirement
Dewatering from North Basin to Mammoth Lake	2019-02-15	2019-05-01	If water treatment required
Construction of attenuation pond infrastructure (diffuser, pipeline)	2019-03-01	2019-07-01	-

APPENDIX A – FIGURES

DRAWING NO.

FORMAT ARCH-D-LANDSCAPE

AGNICO EAGLE - MEADOWBANK DIVISION

AMARUQ PROJECT

DRAWING No.	TITLE	REVISION	DATE
0	DRAWING INDEX	1	22/11/2018
1	GENERAL SITE MAP	2	18/11/2018
2	WHALE TAIL NORTH BASIN DEWATERING – NORTH BASIN TO SOUTH BASIN	3	22/11/2018
3	WHALE TAIL NORTH BASIN DEWATERING – NORTH BASIN TO MAMMOTH LAKE	3	22/11/2018
4	INTAKE CROSS-SECTION	2	22/11/2018
5	DIFFUSER CROSS-SECTION	3	22/11/2018

KEY PLAN

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REVISIONS

AGNICO EAGLE
MEADOWBANK

TITLE
AGNICO-EAGLE – MEADOWBANK DIVISION
WHALE TAIL NORTH BASIN DEWATERING
DRAWING INDEX

DRAWN BY	Claude Gagné	DATE 22/11/2018
CHECKED BY	Pascal Poirier, P. Eng.	22/11/2018
APPROVED BY	Pascal Poirier, P. Eng.	22/11/2018
SCALE –	DATE 22/11/2018	
DRAWING NO.	0	
PROJECT NO.	REVISION 1	SHEET 1 / 6

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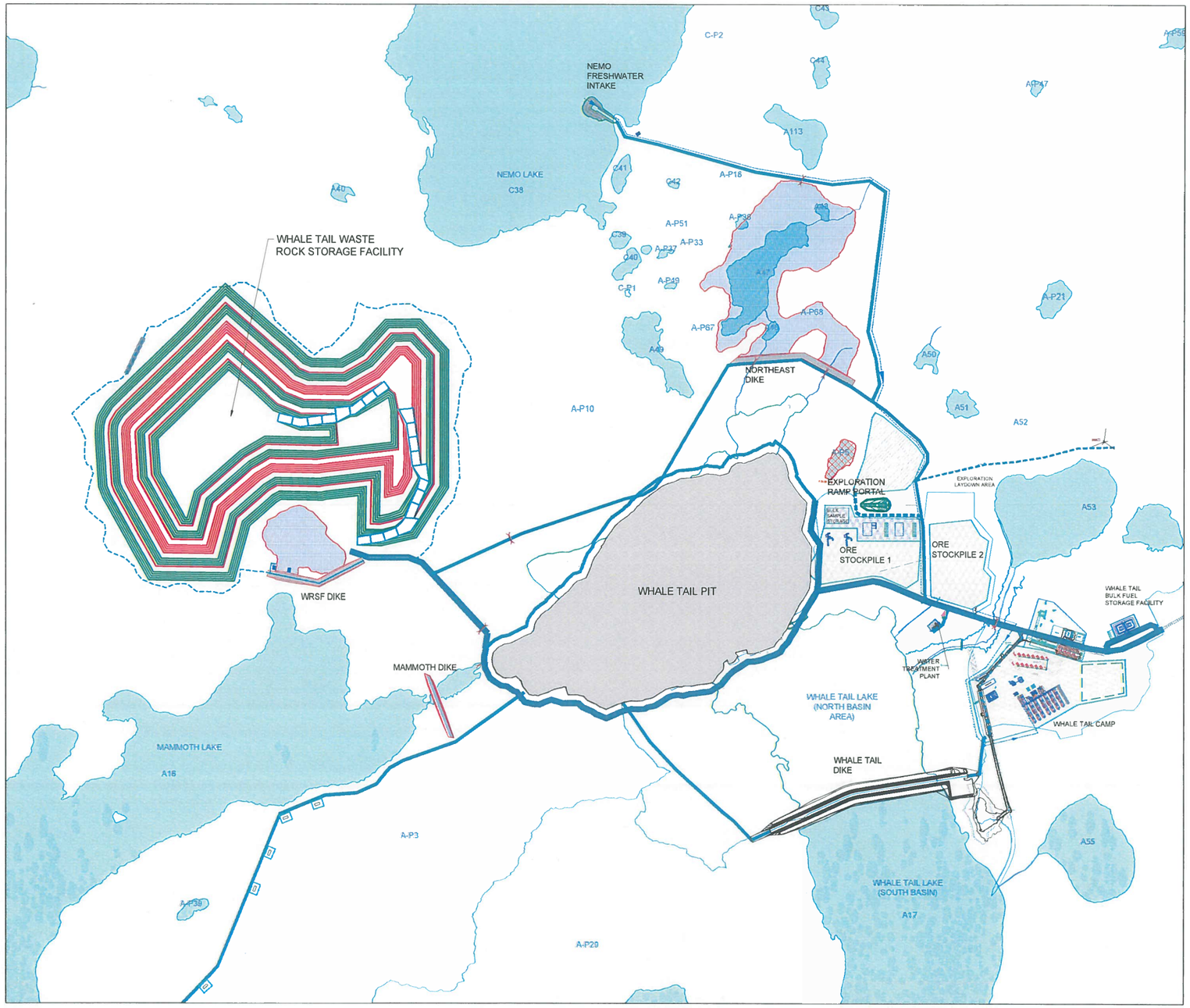
FILE NO. .DWG

NO. DESSIN
DRAWING NO.

FORMAT ANSI C



PLAN CLÉ
KEY PLAN

NOTES GÉNÉRALES / GENERAL NOTES

LEGEND

- WHALE TAIL LAKE(SOUTH BASIN) FLOODED LIMIT (WATER LEVEL 156.0m)
- ROAD
- TEMPORARY ROAD
- NATURAL WATERSHED
- DIVERSION CHANNEL
- COLLECTION CHANNEL
- CULVERT
- INTAKE WATER PIPE
- CONTACT WATER PIPE
- FRESHWATER PIPE
- DIKE
- POND / SUMP
- ARCHAEOLOGICAL SITE

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2	18/11/2018	Issued for Information	C.G.	F.B.	
1	11/08/18	Issued for Information	C.G	F.B.	–

REVISIONS

TITRE / TITLE
AGNICO–EAGLE – MEADOWBANK DIVISION
WHALE TAIL NORTH BASIN DEWATERING
GENERAL SITE MAP

DESSINÉ PAR / DRAWN BY	Claude Gagné	DATE 18–11–2018
VERIFIÉ PAR / CHECKED BY	Pascal Poirier, P. Eng.	18/11/2018
APPROUVÉ PAR / APPROVED BY	Frédérick Bolduc, P. Eng.	18/11/2018
ÉCHELLE / SCALE 1:10000	DATE 18/11/2018	
NO. DESSIN / DRAWING NO. 1		
NO. PROJET / PROJECT NO.	REVISION 2	FEUILLE / SHT 1 / 1

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AE–CART–ANSI C

FILE NO. .DWG

DRAWING NO.

FORMAT ARCHD–PORTRAIT

Notes:

1- The water crossing will not interfere the natural water course It will be temporary, built and dismantled in freezing conditions. A type-bridge crossing will be installed and no culvert will be installed.

2- The temporary dewatering ramp will be built in phases as the water level goes down.

WTP

Temporary dewatering ramp
(See note 2)

Intake
(See Fig. 4)

Pumps
HL250

Water Course
Crossing (see note 1)

Flowmeter
Seacan
Installation

Pumps
HL250

HDPE ø14"
DR17 min.

WHALE TAIL NORTH BASIN

Road Crossing

"Y" Connector

WHALE TAIL DIKE

Sampling Port

Discharge Diffuser
(See Fig. 5)

WHALE TAIL SOUTH BASIN

		3	Issued for Construction	22/11/2018	PP
Diffuser Cross–Section	5	2	Issued for Internal Revision	18/11/2018	EH
Intake Cross–Section	4	1	Issued for Internal Revision	11/05/18	P.P.
TITLE	# DWG	REV	DESCRIPTION	DATE	BY
REFERENCE DRAWINGS		REVISIONS			

REGISTERED PROFESSIONAL ENGINEER
P. POIRIER
LICENSEE
NTNU

AGNICO EAGLE
MEADOWBANK

DRAWN BY	Eric Haley — DATE 18/11/2018
CHECKED BY	Pascal Poirier, P.Eng. — 22/11/2018
APPROVED BY	Pascal Poirier, P.Eng. — 22/11/2018
PROJECT NO.	
DATE	22/11/2018

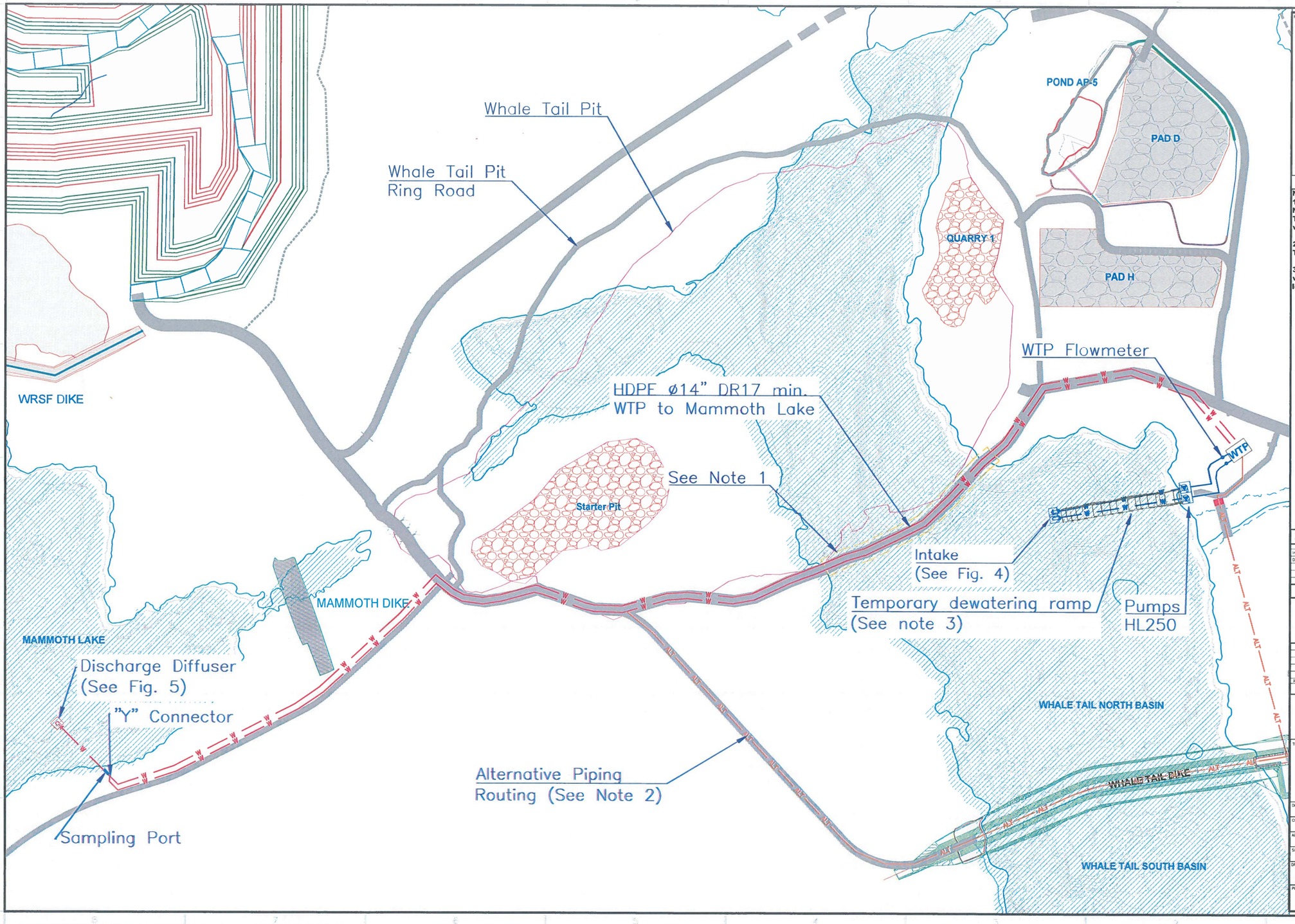
TITLE
AGNICO–EAGLE – MEADOWBANK DIVISION
WHALE TAIL NORTH BASIN DEWATERING
NORTH BASIN TO SOUTH BASIN
SYSTEM LAYOUT

SCALE	N.T.S.	FILE	
DRAWING NO.	2	REVISION 3	SHEET 3 / 6

P:\Engineering\05-Geotechnic\14- Amaruq\04- Water Management\4- Water Management Infrastucture\2- 2019\1 - Planning\9- 60 days notice\Drawings\DWG-telest\WhaleTail North Basin Dewatering Layout_V3.dwg, 27 Nov 2018

DRAWING NO.

FORMAT ARCHD-LANDSCAPE



KEY PLAN

GENERAL NOTES

Notes:

1- The piping crossing the Whale Tail North Basin will be installed on Whale Tail Pit ring road depending on the water level during dewatering.

2- Piping might be routed on Whale Tail Dike based on site condition.

3- The temporary dewatering ramp will be built in phases as the water level goes down.

REGISTERED PROFESSIONAL ENGINEER
P. POIRIER
LICENSEE
NT/NU

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TITLE	# DWG
Intake Cross-Section	4
Diffuser Cross-Section	5

REFERENCE DRAWINGS

REV.	DATE	DESCRIPTION	BY	APP.	CLIENT
3	22/11/2018	Issued for Construction	EH	P.P.	–
2	19/11/2018	Issued for Internal Revision	EH	–	–
1	11/05/18	Issued for Internal Revision	C.G.	P.P	–

REVISIONS

AGNICO EAGLE
MEADOWBANK

TITLE
AGNICO-EAGLE – MEADOWBANK DIVISION
WHALE TAIL NORTH BASIN DEWATERING
NORTH BASIN TO MAMMOTH LAKE
SYSTEM LAYOUT

DRAWN BY	Eric Haley	DATE 16/11/2018
CHECKED BY	Pascal Poirier, P. Eng.	22/11/2018
APPROVED BY	Pascal Poirier, P. Eng.	22/11/2018
SCALE	N.T.S.	DATE 22/11/2018
DRAWING NO.	3	
PROJECT NO.	REVISION 3	SHEET 4 / 6

P:\Engineering\05-Geotechnic\14- Amaruq\04- Water Management\4- Water Management Infrastructure\2- 2018\1 - Planning\8- 60 days notice\Drawings\DWG-latest\WhaleTail North Basin Dewatering Layout_V3.dwg, 27 Nov 2018

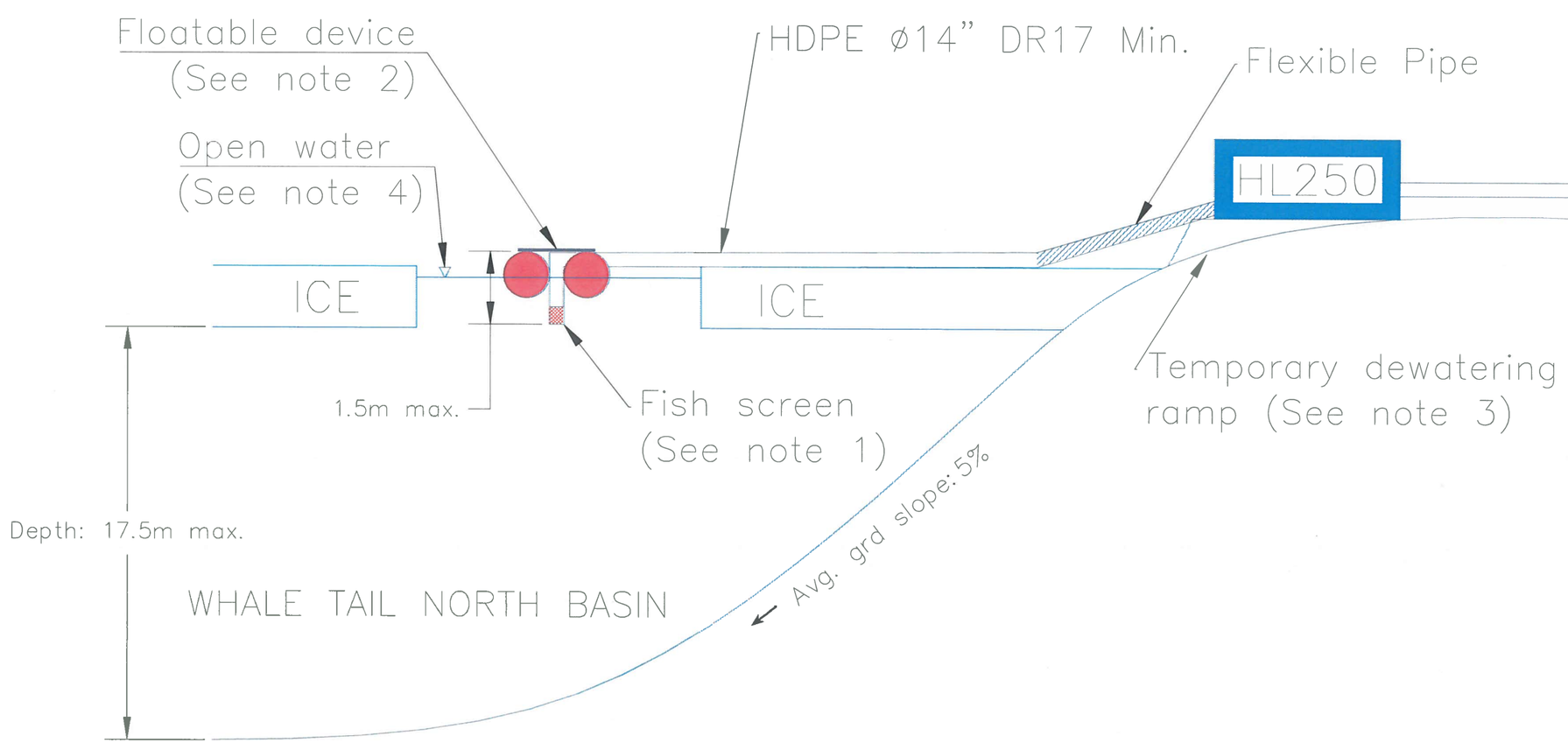
FILE NO. .DWG

DRAWING NO.

FORMAT ARCH-D-LANDSCAPE

WHALE TAIL NORTH BASIN DEWATERING

INTAKE CROSS-SECTION



KEY PLAN

GENERAL NOTES

Notes:

1-A fish screen in compliance with DFO criteria shall be installed.

2-A floatable device with a buoyant force of 7300N shall be installed.

3-The temporary dewatering ramp will be built in phases as the water level goes down.

4- Ice cover shall be removed prior intake installation. Water flow will prevent the intake from freezing.

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TITLE	# DWG

REFERENCE DRAWINGS

REV.	DATE	DESCRIPTION	BY	APP.	CLIENT
2	22/11/2018	Issued for Construction	C.G.	P.P.	-
1	06/11/2018	Issued for Internal Revision	C.G	P.P	-

REVISIONS

AGNICO EAGLE
MEADOWBANK

TITLE
AGNICO-EAGLE - MEADOWBANK DIVISION
WHALE TAIL NORTH BASIN DEWATERING
INTAKE CROSS-SECTION

DRAWN BY	Claude Gagné	DATE 06/11/18
CHECKED BY	Pascal Poirier, P. Eng.	22/11/18
APPROVED BY	Pascal Poirier, P. Eng.	22/11/18
SCALE	N.T.S.	DATE 22/11/18
DRAWING NO.	4	
PROJECT NO.	REVISION 2	SHEET 5 / 6

P:\Engineering\05-Geotechnic\14- Amaruq\04- Water Management\4- Water Management Infrastructure\2- 2018\1 - Planning\8- 80 days notice\Drawings\DWG-latest\intake and diffuser V4.dwg, 27 Nov 2018

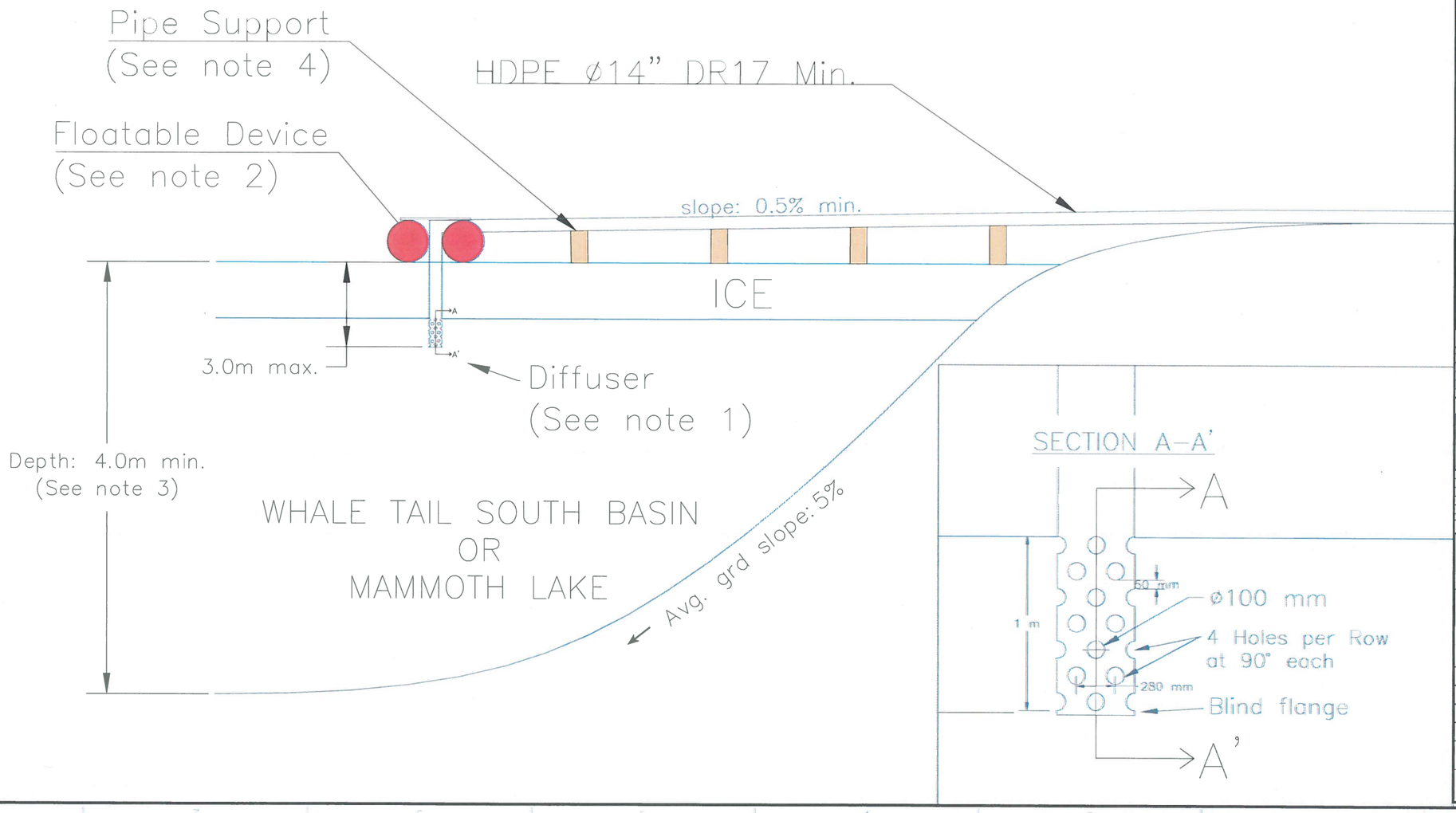
FILE NO. Intake and Diffuser.DWG

DRAWING NO.

FORMAT ARCH-D-LANDSCAPE

WHALE TAIL NORTH BASIN DEWATERING

DIFFUSER CROSS-SECTION



KEY PLAN

GENERAL NOTES

Notes:

1-The diffuser is designed for 3000 m3/h and shall be installed as per drawing to prevent potential erosion and sediment suspension.

2-A floatable device with a buoyant force of 7300N shall be installed. The floatable device can be installed on ice as per drawing.

3-A minimum of 4m depth is required (corresponding to 1m depth below the diffuser) to prevent potential erosion and sediment suspension.

4- Quantity and spacing of the pipe support shall allow a minimum slope of 0.5%.

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TITLE	# DWG

REFERENCE DRAWINGS

REV.	DATE	DESCRIPTION	BY	APP.	CLIENT
3	22/11/2018	Issued for Construction	E.H.	P.P.	–
2	16/11/2018	Issued for Internal Revision	EH	–	–
1	11/08/18	Issued for Internal Revision	C.G	P.P	–

REVISIONS

AGNICO EAGLE
MEADOWBANK

TITLE
AGNICO-EAGLE – MEADOWBANK DIVISION
WHALE TAIL NORTH BASIN DEWATERING
DIFFUSER CROSS-SECTION

DRAWN BY	Eric Haley	DATE 16/11/2018
CHECKED BY	Pascal Poirier, P. Eng.	22/11/2018
APPROVED BY	Pascal Poirier, P. Eng.	22/11/2018
SCALE	N.T.S.	DATE 22/11/2018
DRAWING NO.	5	
PROJECT NO.	REVISION 3	SHEET 6 / 6

P:\Engineering\05-Geotechnic\14- Amaruq\04- Water Management\4- Water Management Infrastructure\2- 2018\1 - Planning\8- 60 days notice\Drawings\DWG-latest\intake and diffuser V4.dwg, 27 Nov 2018

FILE NO. Intake and Diffuser.DWG