



SNC • LAVALIN

**WHALE TAIL PIT INFRASTRUCTURE
ENGINEERING PROJECT**
Nunavut



AGNICO EAGLE

FUEL TANK STORAGE AND CONTAINMENT FACILITIES
DESIGN REPORT AND DRAWINGS

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TABLE OF CONTENTS

1.	GENERAL.....	1
1.1	Purpose of the Report	1
1.2	Operation Authorization	1
1.3	Scope of Work	1
1.4	Schedule.....	2
1.5	Inclusions.....	2
1.6	Engineering Documents.....	2
2.	CODES AND STANDARDS	3
2.1	Compliance for Field-Erected Fuel Tank	3
2.2	Code Analysis for Field-erected Fuel Tank	3
2.3	Compliance for Secondary Containment.....	4
3.	DESIGN – FIELD-ERECTED FUEL TANK	5
3.1	General	5
3.1.1	Field-erected Fuel Storage Tank – Baker Lake Fuel Farm	5
3.2	Commissioning	6
3.3	System Operation.....	6
3.3.1	Baker Lake – Fuel Farm.....	6
3.4	Maintenance / Inspection	6
4.	DESIGN OF FUEL STORAGE TANK FARM.....	7
4.1	Description of the Fuel Storage Tank Farm.....	7
4.2	Tank Foundations Design	7
4.3	Berms Design	8
4.4	Secondary Containment Capacity	8
4.5	Secondary Containment Imperviousness.....	9
4.6	Secondary Containment Drainage.....	9
4.7	Distance Restrictions	10
4.7.1	Minimum Clearances for Tank Farm Design	10
4.8	Inspection and Commissioning	10

 SNC • LAVALIN	WHALE TAIL PIT INFRASTRUCTURE ENGINEERING PROJECT	 AGNICO EAGLE
	FUEL TANK STORAGE AND CONTAINMENT FACILITIES DESIGN REPORT AND DRAWINGS	

5.

EARTH WORKS.....

11

5.1

Construction Material Quantities.....

11

5.2

Construction Material Specifications.....

11

5.2.1

Granular Fill (0-20 mm)

12

5.2.2

Granular Fill (0-150 mm)

12

5.2.3

Geomembrane Coletanche ES-2.....

12

APPENDICES

APPENDIX A: Engineering Drawings List

APPENDIX B: Engineering Drawings

 SNC • LAVALIN	WHALE TAIL PIT INFRASTRUCTURE ENGINEERING PROJECT	 AGNICO EAGLE
	FUEL TANK STORAGE AND CONTAINMENT FACILITIES DESIGN REPORT AND DRAWINGS	

1. GENERAL

SNC Lavalin Stavibel Inc. has been mandated by Agnico Eagle to design the new diesel storage tanks located at Baker Lake for the Whale Tail Pit project. The two new 10 million tanks will be installed near the existing storage area north-east of the #5 and #6 tanks. Once completed, the fuel farm will contain 80 million liters of fuel.

The Amaruq property is a 408 square kilometer (km²) site located on Inuit-Owned Land approximately 150 kilometers (km) north of the hamlet of Baker Lake and approximately 50 km northwest of Meadowbank Mine in the Kivalliq Region of Nunavut. The deposit will be mined as an open pit (i.e. Whale Tail Pit) plus an underground mine, and ore will be hauled by truck to the approved infrastructure at Meadowbank Mine for milling.

The infrastructures are designed to accommodate the personnel, equipment and fuel requirements. Given its location, project infrastructures was designed to accommodate cold temperatures and permafrost conditions.

1.1 Purpose of the Report

This report is intended to present the design basis and considerations, engineering design and drawings related to the fuel storage and containment facilities that will be installed for Agnico Eagle Mines Limited's, Whale Tail Pit project.

1.2 Operation Authorization

This report essentially provides information about the final design and construction drawings for fuel tank storage and containment facilities.

1.3 Scope of Work

Agnico Eagle has retained SNC Lavalin Stavibel Inc. to design surface infrastructures for the Project, which includes the fuel storage and containment facilities at the Baker Lake site. The report includes an overview of the Codes and Regulations that apply, the design criteria and construction details as well as site-specific considerations for the following facilities:

- One (1) fuel farm containing two (2) field-erected fuel storage tanks (10 million liters/each;
- Secondary containment for the fuel farm.

 SNC • LAVALIN	WHALE TAIL PIT INFRASTRUCTURE ENGINEERING PROJECT	 AGNICO EAGLE
	FUEL TANK STORAGE AND CONTAINMENT FACILITIES DESIGN REPORT AND DRAWINGS	

1.4 Schedule

The construction and installation of the tank will begin in 2019 for the first tank and in 2020 for the second one. Construction of the secondary containment, for both tanks, will begin in August 2019 followed closely by the erection of a 10 M liter tank and the installation of the piping network upon regulatory approval. The commissioning of this system must be completed ahead of the first fill, scheduled for October 15, 2019.

1.5 Inclusions

The following items are included in the design report:

- Field erection of two (2) new vertical 10 M liter fuel storage tanks;
- Accessories such as couplings, nozzles, stairs, steps, railings, fixed suction and piping;
- Piping network;
- Testing, calibration and inspection requirements;
- Instrumentation and control;
- Earthworks;
- Tank foundations;
- Fuel farm secondary containment system with liner.

1.6 Engineering Documents

Table 1 - Engineering documents list

Engineering documents	
Mechanical	General Arrangement (GA) drawings Process and Instrumentation Diagram (PID) drawings
Civil / Concrete / Structural	General Earth Works drawings

 SNC • LAVALIN	WHALE TAIL PIT INFRASTRUCTURE ENGINEERING PROJECT	 AGNICO EAGLE
	FUEL TANK STORAGE AND CONTAINMENT FACILITIES DESIGN REPORT AND DRAWINGS	

2. CODES AND STANDARDS

2.1 Compliance for Field-Erected Fuel Tank

The system complies with the latest editions of the Codes and Standards relating to this project (Federal, Territorial, Municipal, NBCC, NFCC, CEC, CSA, NFPA, and API) as well as the directives of the authorities having jurisdiction over this project. Specific codes and standards as: R-125-95 NWT and Nunavut Mine Health and Safety Regulations (Mine Health and Safety Act) and RRNWT 1990, c F-12 Fire Prevention Regulations shall apply.

Additionally, the design and field-erected vertical fuel storage tanks shall conform to API Std. 650, twelfth Edition - Welded Tank for Oil Storage, including errata 1 (2013), Errata 2 (2014), Addendum 1 (2014), Addendum 2 (2016) and applicable appendices.

NBCC	National Building Code of Canada
NFCC	National Fire Code of Canada
CEC	Canadian Electrical Code
CSA	Canadian Standards Association
NFPA	National Fire Protection Association
API	American Petroleum Institute
R-125-95 NWT	Consolidated Mine Health and Safety Act
CCME	Canadian Council of Ministers of the Environment – National Guidelines for the Landfilling of Hazardous Waste Landfills.

2.2 Code Analysis for Field-erected Fuel Tank

The field-erected storage tank system and pumping station design are first based on the compliance with the Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations (SOR/2008-197). Article 14 (1) of this regulation mentions that for the installation of a fuel storage system, the system has to comply with the applicable requirements set out in the CCME Code of Practice (CCME PN1326).

 SNC • LAVALIN	WHALE TAIL PIT INFRASTRUCTURE ENGINEERING PROJECT	 AGNICO EAGLE
	FUEL TANK STORAGE AND CONTAINMENT FACILITIES DESIGN REPORT AND DRAWINGS	

Under the CCME, the main design criteria that apply to the design and installation of a new aboveground storage tank are defined in Part 3 and Part 5 applicable to the design and installation of new piping systems.

The field-erected storage tank system design will comply with requirements of CCME 3.6.1(1) for aboveground storage tank, more specifically API 650 for single vertical wall Tank.

In accordance with CCME sections 3.3 and 3.4, the storage tanks will be equipped with an overfill protection to prevent spills.

In accordance with CCME section 5.4, all underground piping will be double-walled and installed such that leaks will be collected into an accessible sump.

Reviewing the NFCC latest edition, the main design criteria are defined in Part 4 regarding the flammable and combustible liquids. More specifically, the applicable sections are Section 4.1 which provides general information and requirements for fire protection and spill control of flammable and combustible liquid storage systems, Section 4.3 which provides the tank design and construction minimum requirements and Section 4.5 on piping and transfer systems.

Basically, most of the NFCC requirements for tank and piping systems are covered by CCME requirements but provide some additional ones. For example, table 4.3.2.1 defining the minimum requirements for the location of aboveground storage tank; section 4.3.2.2 defining the minimum requirements for spacing between tanks; or section 4.3.6.4.2 requesting that connections for filling or emptying storage tank shall be kept closed to prevent leakage when not in use.

2.3 Compliance for Secondary Containment

The secondary containment for the aboveground storage tank will conform to NFCC. The base and walls of a secondary containment will be designed, constructed and maintained to withstand full hydrostatic head and provide a permeability of not more than 10^{-6} cm/s to the flammable liquids or combustible liquids contained in the storage tank (section 4.3.7.2). The tank located in the fuel farms are placed entirely within a dyke area, with an impermeable barrier on the floor of the containment area and in the dyke walls. A membrane is providing the level of impermeability.

See also section 4.5 of this report for more details.

The secondary containment will have the minimum volumetric capacity stated in art.4.3.7.3. The fuel farm secondary containment has a greater volumetric capacity than required (see more details in section 4.4 of this report).

3. DESIGN – FIELD-ERECTED FUEL TANK

3.1 General

This section describes the criteria used to design the field-erected fuel storage tank, prepare general arrangements and select equipment and/or materials.

3.1.1 Field-erected Fuel Storage Tank – Baker Lake Fuel Farm

The fuel storage tank will be installed at the Baker Lake site. The site location of the two 10 M liter tanks is shown in Figure 1 below.

Figure 1 – Baker Lake Fuel Farm Site Overview



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	FUEL TANK STORAGE AND CONTAINMENT FACILITIES DESIGN REPORT AND DRAWINGS	

All surfaces on which the fuel tank and maneuvering areas of the machinery are located are protected from accidental spills by a watertight membrane (geomembrane) that directs the flow to a low point of recovery. This one is built inside the berms of secondary containment.

Drawings for the Baker Lake fuel farm are included in Appendix B.

3.2 Commissioning

The fabrication, erection, inspection, testing, welding and labeling of the vertical tank will be to the latest edition of API Standard 650. Before the first fill, the tanks will pass quality control checks as per API 650 requirements; finally, the tanks will be cleaned, dried, strapped and closed to be ready for service.

3.3 System Operation

System operation for the fuel farm consists of tank loading and unloading and fuel distribution. The following sections describe the operations for the Baker Lake fuel farm.

3.3.1 Baker Lake – Fuel Farm

At the Baker Lake site, a fuel storage and distribution system is in place since the last 10 years approximately. The six existing 10 million liters fuel storage tanks feed all of Agnico-Eagle's operations.

These two new tanks will be filled by the same distributing piping system from the ship. Due to the higher elevation of the tanks, a booster pump will be required to help achieve a higher flow and avoiding delays.

3.4 Maintenance / Inspection

A qualified maintenance team will inspect the system (mechanical equipment and piping) on a regular basis as per regulations and codes. Part of the distribution piping will be installed above ground which means any leaks can be detected during the periodic visual inspection. The underground piping is comprised of double walled pipe, and transition sumps will allow for periodic visual inspection.

The field-erected storage Tank shall be inspected externally and internally as per CCME section 8.4 and API 653 standard.

4. DESIGN OF FUEL STORAGE TANK FARM

4.1 Description of the Fuel Storage Tank Farm

The Project includes the development of two (2) fuel storage tanks farm at the Baker Lake site.

The table below presents the tank main dimensions.

Table 2 – Description of the fuel farm

Fuel farm Description	Mine site fuel farm (Baker Lake)
Product	Diesel
Volume (liter)	10 M
Diameter (m)	33.5
Height (m)	12.2

The detailed design of the Fuel Farm is presented in drawings in Appendix B.

4.2 Tank Foundations Design

The tank foundation pad will be 2 meters lower than the surrounding ground with a minimum total thickness of +/- 800 mm of compacted material which includes the liner system. A 3.0 m shoulder will surround the tank with a slope of 1V:2H away from the tank. The embankments of the foundation pad will be no steeper than 1V:2H.

The table below presents the design parameters for the tank foundations.

Table 3 – Design parameters for the tank foundations

Tank Foundation Pad	
Tank Diameter (m)	33.5
Tank foundation pad top (m)	2 X 18.0 x 18.0
Tank foundation pad average thickness, below surrounding ground (m)	1.2
Slope on shoulder	1V:2H
Embankment slope	1V:2H

4.3 Berms Design

The storage tank is enclosed inside berms in order to contain accidental spillage of fuel products. The berms are made of granular material and are made impervious with a geomembrane.

The design parameters for the berms surrounding the fuel tank are presented in the table below.

Table 4 - Design parameters for fuel farm Berms

Tank Farm Berms	
Berms length (distance between the outer sides of the Berms) (m)	± 125
Berms width (distance between the outer sides of the Berms) (m)	±71
Berms height (min) (m)	3.0
Containment height (m)	2.0
Berms flat top width (m)	1.5
Berms embankment slope	1V:2H
Impervious area (m ²)	± 10 000

4.4 Secondary Containment Capacity

The required capacity of the fuel farms is calculated based on the following codes and regulations:

- National Fire Code of Canada (NFCC);
- National Fire Protection Association (NFPA); and
- Design Rationale for Fuel Storage and Distribution Facility (DRFS).

As per the latest edition of NFCC, section 4.3.7.3, the required secondary containment capacity for a fuel farm with more than one storage tank must have a volumetric capacity of not less than the sum of:

- a) The capacity of the largest storage tank located in the contained space, and;
- b) 10% of the greater of:

 SNC • LAVALIN	WHALE TAIL PIT INFRASTRUCTURE ENGINEERING PROJECT	 AGNICO EAGLE
	FUEL TANK STORAGE AND CONTAINMENT FACILITIES DESIGN REPORT AND DRAWINGS	

- i. The capacity specified in section (a), or;
- ii. The aggregate capacity of all other storage tanks located in the contained space.

The volume occupied by the tank foundation is taken into account in the total secondary containment capacity.

The height of the secondary containment capacity is 300 mm lower than the berms' maximum elevation.

Based on the above-mentioned, the secondary containment capacity requirements and the available capacity for fuel farms are summarized in the following table.

Table 5 – Fuel farm containment capacity

Fuel farm	
Volume (liter)	20 M
Required Containment Capacity (liter)	11 M
Available Containment Capacity (liter)	20 M
Is Available containment > Required containment	YES

4.5 Secondary Containment Imperviousness

As per NFCC section 4.3.7.2, the base and walls of the fuel farms secondary containment are designed and will be constructed and maintained to withstand full hydrostatic head and provide a permeability of not more than 10^{-6} cm/s to the flammable liquids or combustible liquids contained in the storage tank. The Berms area will be impervious in order to avoid any seepage into the environment. A 5.10 mm ES-2 Coletanche geomembrane will provide adequate imperviousness. Technical specifications for the geomembrane are provided in section 5 of this report.

4.6 Secondary Containment Drainage

The finished grade of the secondary containment is sloped away from the tank in order to drain the runoff water. The bottom of the berms surface must be built with slopes that will allow accidental spills to be concentrated at a low point. A drainage basin located at the low point allows the recovery by pumping accumulations of rainwater and accidental spills.

As defined in Agnico Eagle Water License 2AM-MEA1526, due to melting snow that accumulates over the winter and precipitation, contact water will be collected inside the secondary containment berms. During visual inspections, the quantity of contact water collected inside the secondary containment berms will be evaluated. If there is a visible sheen

 SNC • LAVALIN	WHALE TAIL PIT INFRASTRUCTURE ENGINEERING PROJECT	 AGNICO EAGLE
	FUEL TANK STORAGE AND CONTAINMENT FACILITIES DESIGN REPORT AND DRAWINGS	

appearance of hydrocarbons on the contact water or if water withdrawal is deemed necessary, water samples will be collected and analyzed. Accumulated water will be released into the receiving environment only if it meets the Water License 2AM-MEA1526.

4.7 Distance Restrictions

4.7.1 Minimum Clearances for Tank Farm Design

The minimum clearances that were taken into account in the design of the tank farm are:


- The distance between the tank and the toe of the berms shall not be less than 1.5 m (NFCC, art. 4.3.7.4);
- The distance between the tank and the centerline of the berms shall not be less than $\frac{1}{2}$ the height of the tank (DRFS art. 4.5);
- The distance between the property limit and the tank shall not be less than 160 ft (48 m) (NFPA 30, table 22.4.1.1);
- The distance between the property limit and the exterior toe of the Berms shall not be less than 3 m (NFPA 30, art. 22.11.2.3);
- The Tank must be located 9 m away from the public roads and buildings (NFCC, art. 4.3.2.1).

4.8 Inspection and Commissioning

The manufacturer and supplier of the liner system for the fuel farm will comply with ASTM standard. The manufacturer will provide a certification stating that the material proposed has physical properties that meet the required values. The rolls of liner will be labeled, packaged, shipped, off-loaded, stored and handled by appropriately means to prevent damage to the material.

The subgrade surface will be inspected by the Engineer to verify suitability prior to the installation of the liner system. A minimum thickness of fill covering the liner will be maintained for operating equipment over the liner to prevent any damage. The installation of the liner system will be performed by a qualified technician. All seaming, patching, welding operations, and testing will be performed by a qualified technician. Joints/seams between liner panels will be field welded using the manufacturer's recommended procedures and equipment. Any welds that have been rejected will be fixed to satisfactory requirements. The backfill material will be placed in accordance with the drawings and specifications for the maximum lift thickness, compaction requirements and final grade levels. The fuel farm including its liner system installation and testing documentation will be accepted by the Engineer prior to the filling of the storage tank.

A quality control program for seams is proposed during and after installation. This program includes the following procedures:

 SNC • LAVALIN	WHALE TAIL PIT INFRASTRUCTURE ENGINEERING PROJECT	 AGNICO EAGLE
	FUEL TANK STORAGE AND CONTAINMENT FACILITIES DESIGN REPORT AND DRAWINGS	

- Visual testing by a qualified worker: The test is carried out once the bitumen has cooled. The joint is tested with a round-tipped trowel to ensure that the weld is not separating. A special attention must be taken if there is no bitumen bleeding out from the seam. All defects are recorded by the site supervisor in a data sheet and clearly marked for repairs.
- Ultra-sound testing (non-destructive): The seams are checked using an ultra-sound device. After a calibration test, the ultra-sound machine is placed on the joint with a sufficient quantity of coupling agent to make sure contact between the probe and the membrane is good. To control the seams, the probe must be carried out over the total width of the seam. The results are recorded by the site supervisor and in the case of a defect, additional tests along the same seam are required (in between the failed test and the nearest passed test – both sides).
- Vacuum testing (non-destructive): The seams are checked using a vacuum bell. The test is performed using liquid soap as a leakage indicator. If bubbles appear under the bell, the seamed section must be repaired.
- Destructive testing or mechanical resistance of the seams: Tests are done in the field with Leister equipment. A sample of the seam is required for the shear resistance test (ASTM D-7056). The sampled areas are to be repaired by welding a strip of COLETANCHE. The results are noted by the quality supervisor.

5. EARTH WORKS

5.1 Construction Material Quantities

The table below presents the estimated material required for the construction of the fuel farm.

Table 6 – Estimated material required for the construction of the Fuel farm

Item	
Granular fills 0-20 (m ³)	4 000
Granular fills 0-50 (m ³)	0
Backfill 0-150 (m ³)	3 000
Bituminous Coletanche ES-2 (m ²)	10 000
Total Fill Material Volume (m³)	7 000

5.2 Construction Material Specifications

The general requirements for the materials are specified below. The requirements for each of the materials can vary slightly for a specific earth composition to meet specific design intents.

5.2.1 Granular Fill (0-20 mm)

Table 7 - Granular fill (0-20 mm) – Particle size distribution limits

Particle size (mm)	% Passing
31.5	100
20	90 - 100
14	68 – 93
5	35 – 60
1.25	19 - 38
315 µm	9 -17
80 µm	2.0 -7.0

5.2.2 Granular Fill (0-150 mm)

Granular Fill (0-150 mm) shall consist of hard durable particles, be free of roots, topsoil and other deleterious material and have a particle size distribution as presented in the table below. Processing will be required to achieve the specified gradation.

Table 8 - Granular fill (0-150 mm) – Particle size distribution limits

Particle size (mm)	% Passing
150	100
100	50 - 100
50	25 – 65
25	10 – 40
5	0 - 15

5.2.3 Geomembrane Coletanche ES-2

An impervious Coletanche ES-2 geomembrane will be placed on granular material of minimum 0.3 m thickness order to contain the area in case of a spill. The liner will be a continuous membrane to ensure its imperviousness. The Coletanche geomembrane is based on elastomeric bitumen with the combination of a non-woven geotextile for mechanical resistance and a specifically designed bituminous binder that guarantees waterproofing, chemical resistance and ageing behavior.




 SNC • LAVALIN	WHALE TAIL PIT INFRASTRUCTURE ENGINEERING PROJECT	 AGNICO EAGLE
	FUEL TANK STORAGE AND CONTAINMENT FACILITIES DESIGN REPORT AND DRAWINGS	

Table 9 - Geomembrane composition specifications

Composition	Property	Fabric Density Value (oz/yd ²)
Glass mat	Reinforcement	1.5
Non-woven geotextile	Reinforcement	7.4
Elastomeric SBS (Styrene-Butadiene-Styrene)	Binder	126.8
Sand	Surface finish	5.9
Polyester antiriot film	Under surface finish	0.4

Table 10 - Geomembrane characteristic specifications

Characteristics		Standard	Units	Values	Tolerance	
					Min	Max
Dimensions	Length	-	ft	259	≥	
	Width		ft	16.4	≥	
Thickness (on finished products)		ASTM D 5199	mils	157	150	173
Surface mass		ASTM D 3776	oz/yd ²	143	133	153
Resistance to tearing	Longitudinal	ASTM D 4073	lbf	185	139	-
	Cross direction			157	118	-
Tensile properties: maximum tensile strength	Longitudinal	ASTM D 7275	Lbf/in.	154	116	-
	Cross direction			137	103	-
Tensile properties: elongation	Longitudinal		%	60	48	-
	Cross direction			60	48	-
Tensile properties: maximum tensile strength	Longitudinal	ASTM D 4595	Lbf/in.	143	108	-
	Cross direction			120	91	-
Tensile properties: elongation	Longitudinal		%	80	60	-
	Cross direction			80	60	-
Static Puncture		ASTM D 4833	lbf	119	107	-
Flexibility at low temperature	Surface	ASTM D 5147	°F	-4	-	
	Under surface			-4	-	
Water permeability (liquid tightness)		ASTM E 96	m/s	6. 10 ⁻¹⁴	-	
Gas permeability (gas tightness)		ASTM D 1434-82		< 2.3.10 ⁻¹⁴	-	



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	FUEL TANK STORAGE AND CONTAINMENT FACILITIES DESIGN REPORT AND DRAWINGS	

APPENDIX A
Engineering Drawings List

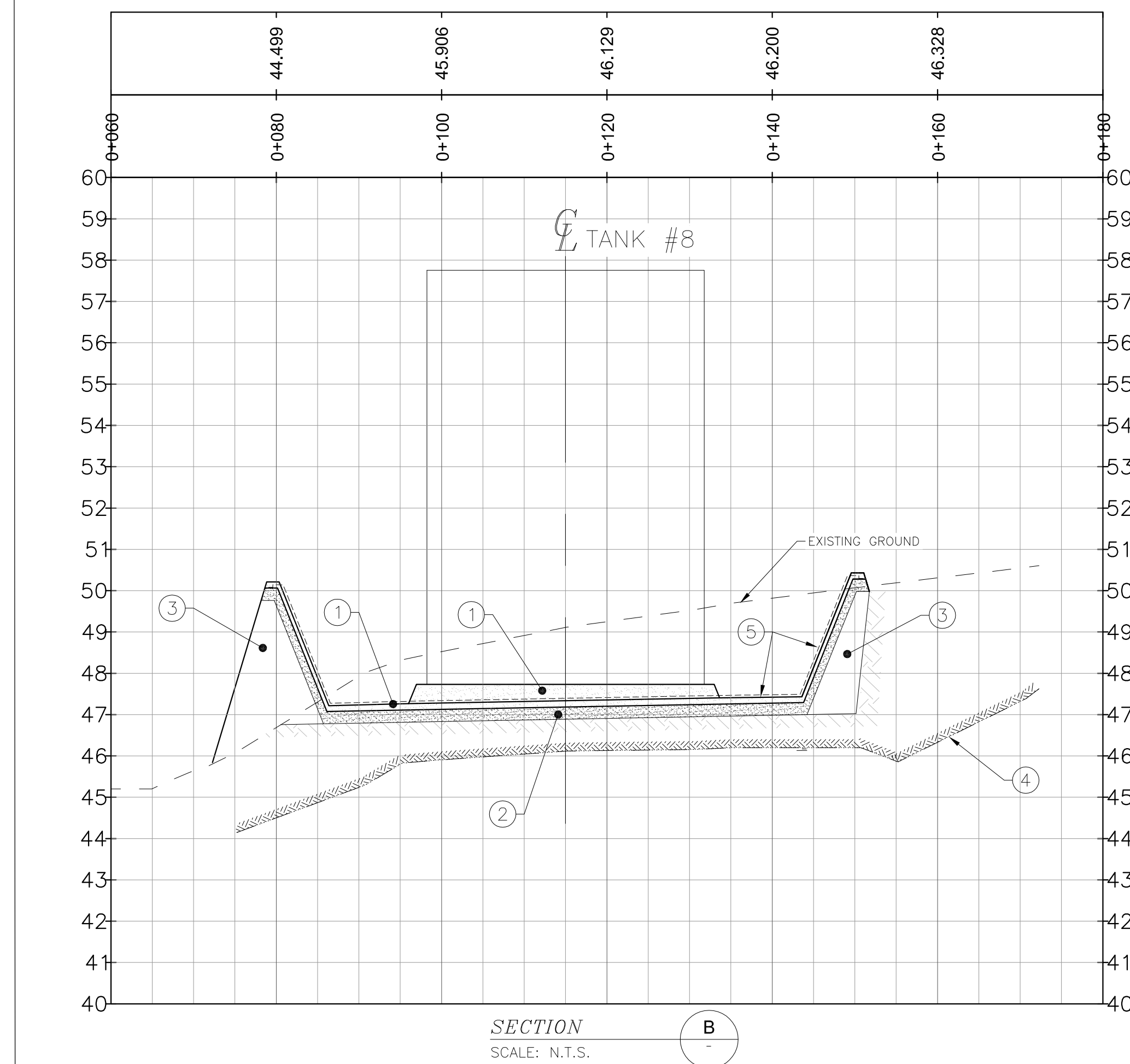
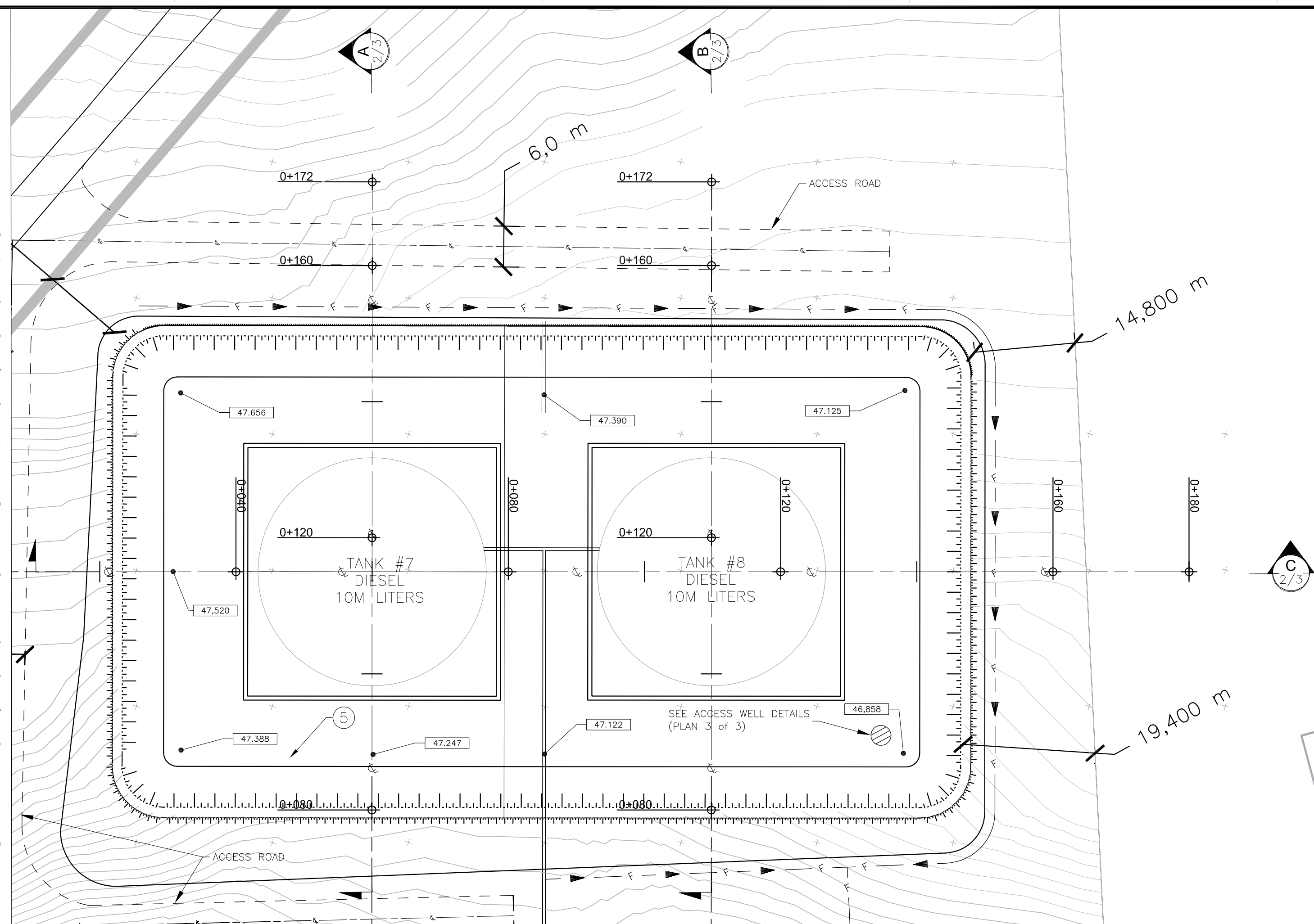
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	FUEL TANK STORAGE AND CONTAINMENT FACILITIES DESIGN REPORT AND DRAWINGS	

The following list of drawings covers the technical requirements for this package.

<u>Drawings</u>	<u>Title</u>	<u>Rev</u>
61-740-260-200	10M liters tank #7, platework – Plan & elevation	0
61-740-260-201	10M liters tank #8, platework – Plan & elevation	0
61-740-260-202	10M liters tank #7 & 8, platework – Details	0
61-740-210-201-1	10M liters tank #7 & #8 location – General Arrangement – Plan view	C
61-740-210-201-2	10M liters tank #7 & #8 location – General Arrangement – Plan & elevation view	C
61-740-210-201-3	10M liters tank #7 & #8 location – General Arrangement – Elevation view	C
61-740-J-0100-1	Process and instrumentation diagram	4
61-740-J-0100-2	Process and instrumentation diagram	4

 SNC • LAVALIN	WHALE TAIL PIT INFRASTRUCTURE ENGINEERING PROJECT	 AGNICO EAGLE
	FUEL TANK STORAGE AND CONTAINMENT FACILITIES DESIGN REPORT AND DRAWINGS	

APPENDIX B
Engineering Drawings




Description	
1	CRUSHED STONE ϕ 0-20 VARIABLE THICKNESS MINIMUM 300 mm COMPACTED @ 95% P.M.
2	CRUSHED STONE ϕ 0-50 THICKNESS 150mm COMPACTED @ 95% P.M.
3	BACKFILL-MATERIALS 0-150mm MIN. THICKNESS 300mm COMPACTED @ 92% P.M.
4	ASSUMED BEDROCK
5	COLETANCHE BITUMINOUS GEOMEMBRANE ES-2


PLAN CLE
KEY PLAN

NOTES GÉNÉRALES / GENERAL NOTES

POUR COMMENTAIRES
FOR COMMENTS

DATE : 2018-12-10


NE PAS UTILISER
POUR CONSTRUCTION
NOT FOR CONSTRUCTION

DATE : 2018-12-10

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DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE		# DWG.



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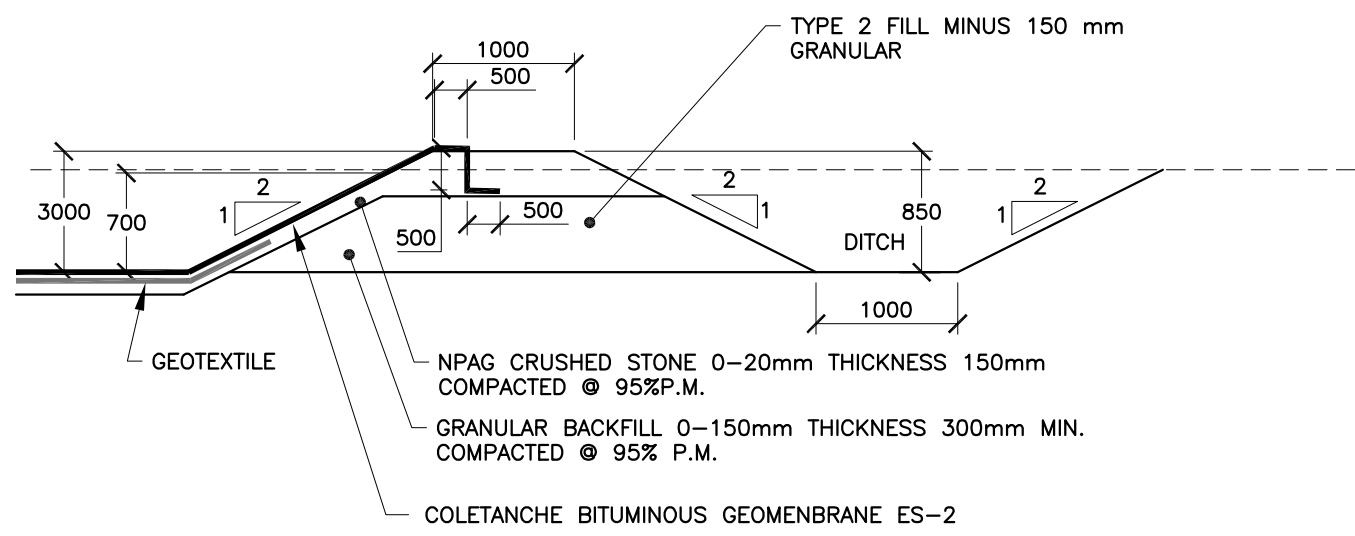
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B	2018-08-16	FOR COMMENTS	S.L.	M.H.	-
A	2018-07-24	FOR COMMENTS	D.L.	M.H.	-
REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT

REVISIONS

TITRE / TITLE

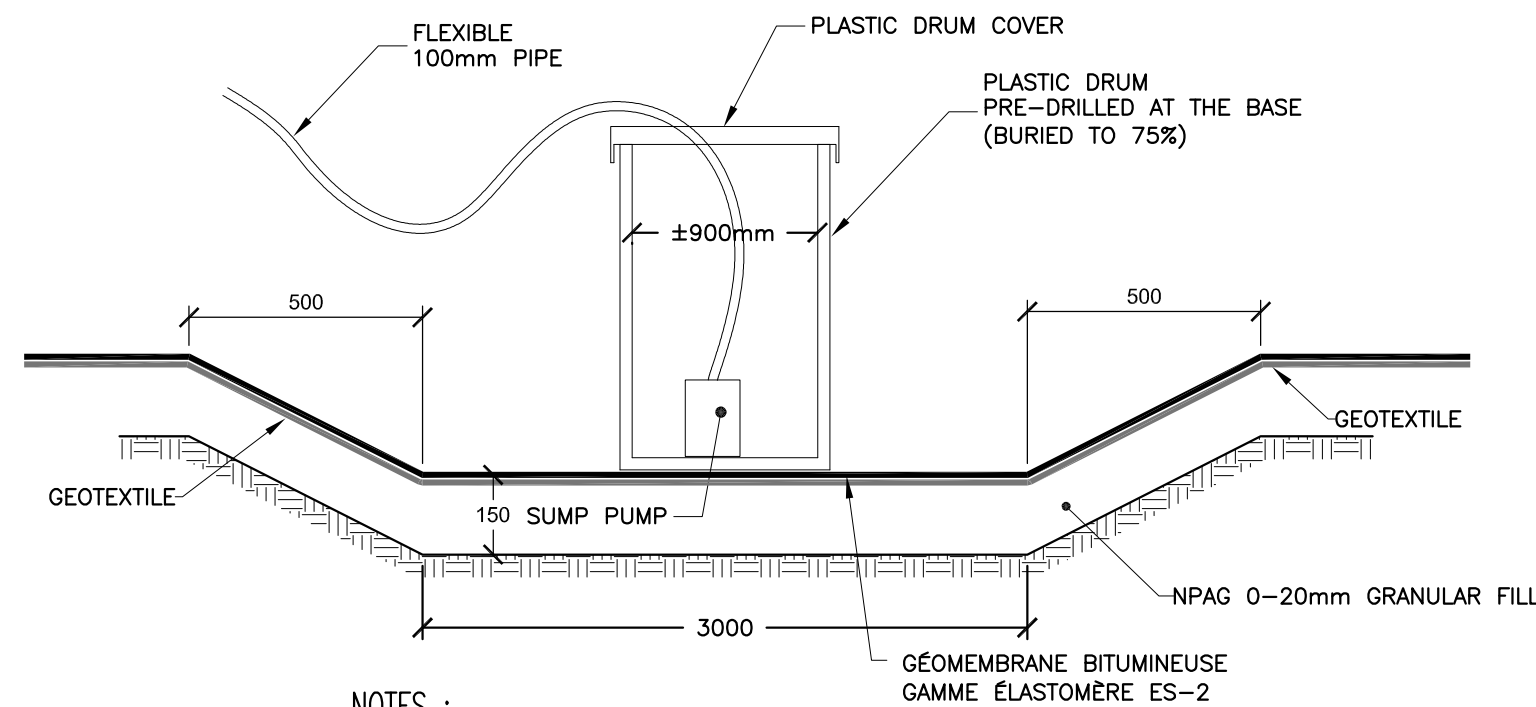
AGNICO-EAGLE – MEADOWBANK DIVISION
740 BAKER LAKE AREA
GENERAL ARRANGEMENT
PLAN VIEW AND PROFILE
10M LITERS TANKS LOCATION
TANKS #7 & #8

DESSINER PAR DRAWN BY		FRANCIS PERRON, TECH.	DATE 2018-12-10
VÉRIFIÉ PAR CHECKED BY		RICHARD MARCOUX, ING.	2018-12-10
APPROUVÉ PAR APPROVED BY		MARC HÉNAULT, P. ENG.	2018-12-10
ÉCHELLE SCALE		1 : 1000	DATE 2018-07-18
NO. DESSIN DRAWING NO.			
61-740-210-201			
NO. PROJET PROJECT NO.		REVISION	FEUILLE / SHT.
61		C	2 / 3



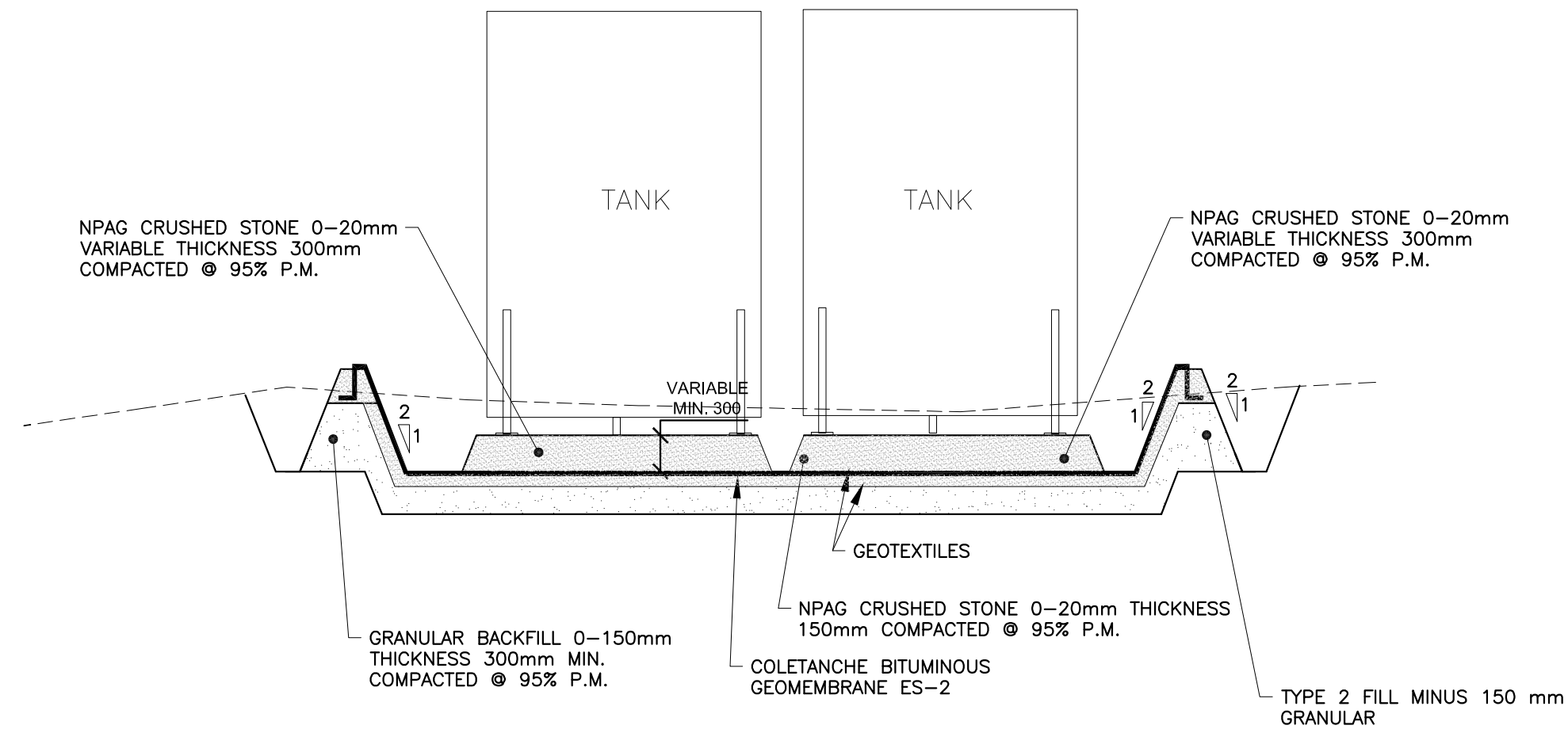
TYPICAL SECTION - DAM

SCALE : NONE



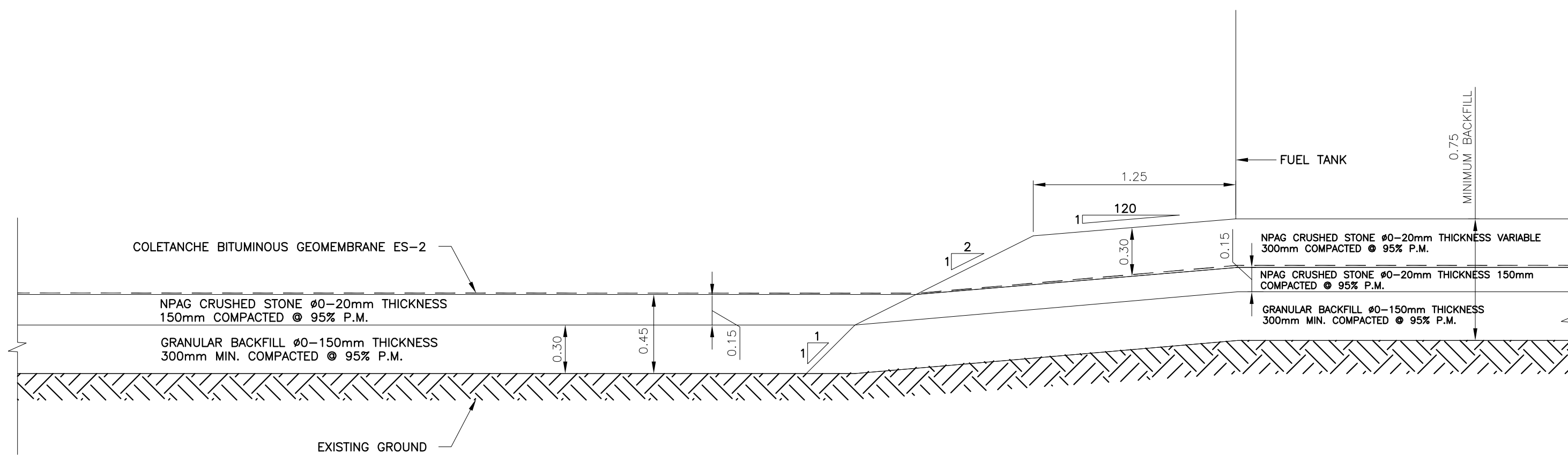
ACCESS WELL FOR DRAINING

SCALE : NONE



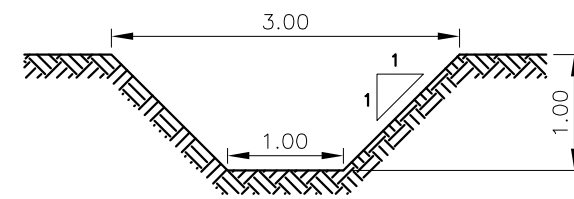
TYPICAL SECTION WITH OPTION COLETANCHE

SCALE : NONE



TYPICAL SECTION - PAD

SCALE : NONE
DETAIL 1



TYPICAL SECTION - DITCH

SCALE : NONE
DETAIL 3

PLAN CLE
KEY PLAN

NOTES GÉNÉRALES / GENERAL NOTES

POUR COMMENTAIRES
FOR COMMENTS



DATE : 2018-12-10

NE PAS UTILISER
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DATE : 2018-12-10

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DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE	# DWG



REVISIONS

TITRE / TITLE
AGNICO-EAGLE - MEADOWBANK DIVISION
740 BAKER LAKE AREA
GENERAL ARRANGEMENT
DETAILS
10M LITERS TANKS LOCATION
TANKS #7 & #8

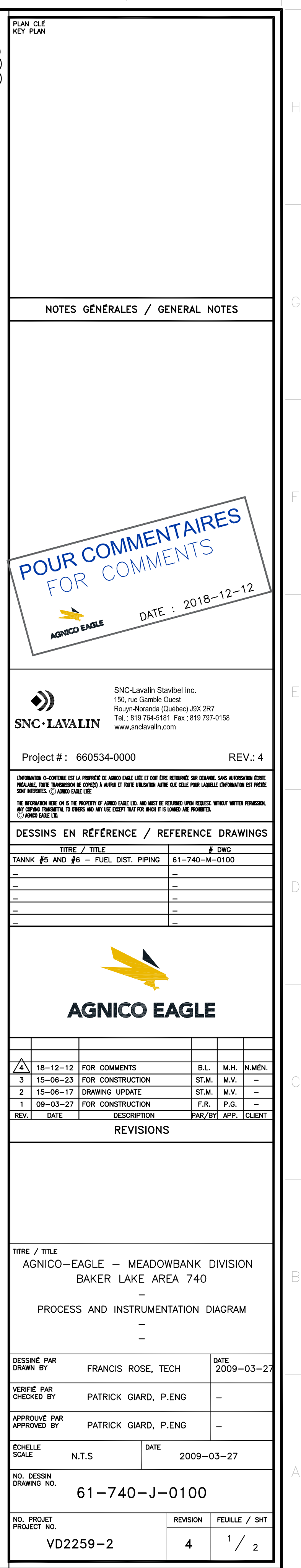
DESSINÉ PAR DRAWN BY	FRANCIS PERRON, TECH.	DATE 2018-12-10
VÉRIFIÉ PAR CHECKED BY	RICHARD MARCOUX, ING.	2018-12-10
APPROUVÉ PAR APPROVED BY	MARC HÉNAULT, P. ENG.	2018-12-10

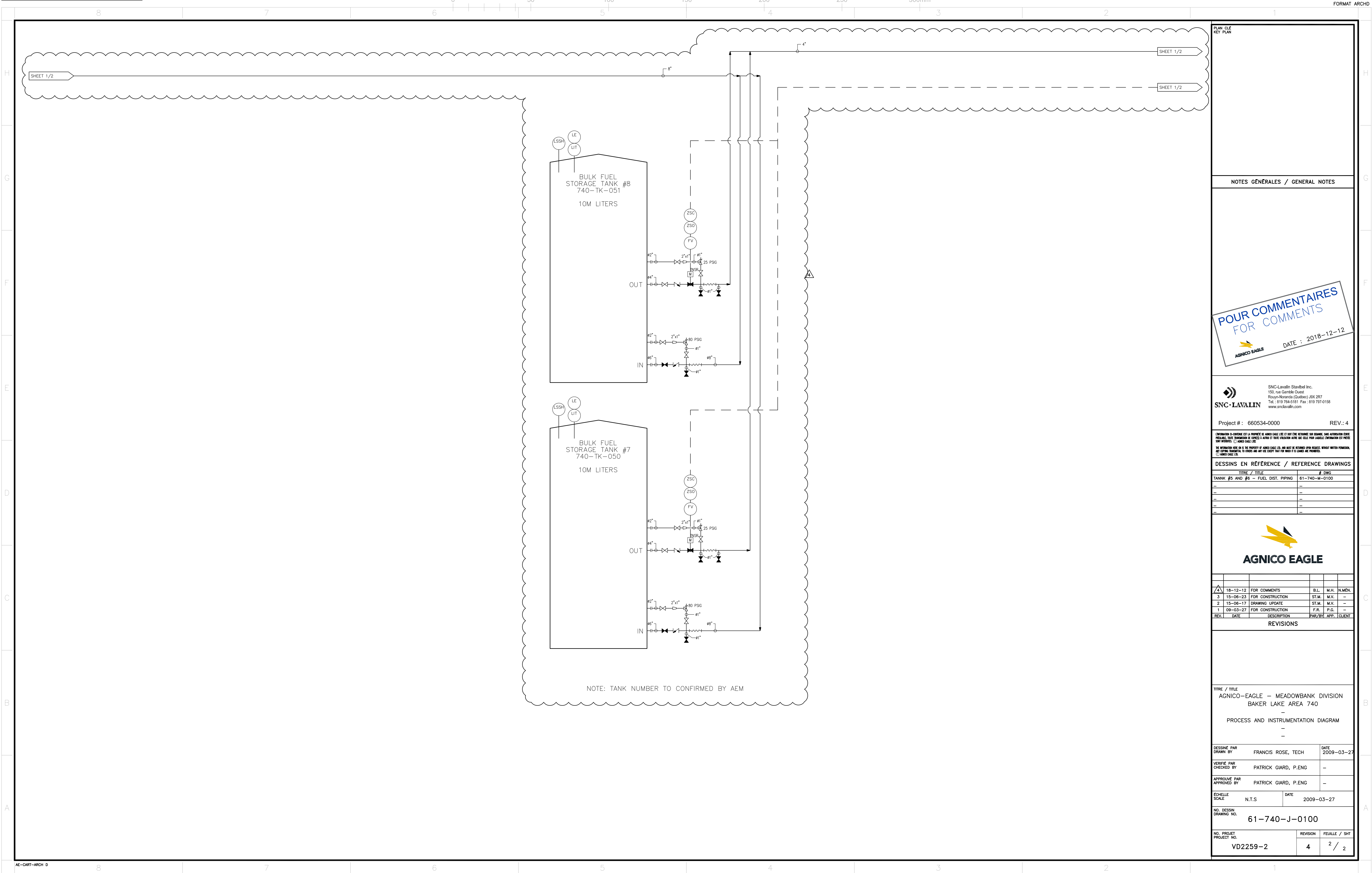
ÉCHELLE
SCALE 1 : 1000

DATE 2018-07-18

NO. DESSIN
DRAWING NO. 61-740-210-201

NO. PROJET PROJECT NO. 61	REVISION C	FEUILLE / SHIT 3 / 3
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PLAN CLE
KEY PLAN

NOTES GÉNÉRALES / GENERAL NOTES

POUR COMMENTAIRES
FOR COMMENTS
AGNICO EAGLE
DATE : 2018-12-12

SNC-Lavalin
150, rue Gamble Ouest
Roxbury-Montréal (Québec) J8X 2R7
Tél.: 514 754-0101 Fax: 514 757-0156
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Project #: 660534-0000 REV.: 4

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DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE	# DWG
TANK #5 AND #6 - FUEL DIST. PIPING	61-740-M-0100
-	-
-	-
-	-
-	-



REV.	DATE	DESCRIPTION	PAR/EN	APP.	CLIENT
4	18-12-12	FOR COMMENTS	B.L.	M.H.	N.MEN.
3	15-06-23	FOR CONSTRUCTION	ST.M.	M.V.	-
2	15-06-17	DRAWING UPDATE	ST.M.	M.V.	-
1	09-03-27	FOR CONSTRUCTION	F.R.	P.G.	-

REVISIONS

TITRE / TITLE
AGNICO-EAGLE - MEADOWBANK DIVISION
BAKER LAKE AREA 740
-
PROCESS AND INSTRUMENTATION DIAGRAM
-

DESSINÉ PAR
DRAWN BY FRANCIS ROSE, TECH DATE 2009-03-27

VERIFIÉ PAR
CHECKED BY PATRICK GIARD, P.ENG -

APPROUVÉ PAR
APPROVED BY PATRICK GIARD, P.ENG -

ÉCHELLE
SCALE N.T.S. DATE 2009-03-27

NO. DESSIN
DRAWING NO. 61-740-J-0100

NO. PROJET
PROJECT NO. VD2259-2

REVISION
FEUILLE / SHEET 4 2 / 2