AGNICO-EAGLE
MEADOWBANK DIVISION

March 7, 2011

Via Email and Xpresspost

Mr. Richard Dwyer
Licensing Administrator
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0
Phone: (867) 360-6338
licensingadmin@nunavutwaterboard.org

Dear Mr. Dwyer,

Re: Water License 2AM-MEA0815 Part D, Item 26 and Part G, Item 4: Baker Lake Fuel Storage Tank #5 and 6 Construction Summary Report and As-Built

In accordance with Water License 2AM-MEA0815, Part D, Item 26 and Part G, Item 4, please find a copy of the Construction Summary report including As-Built drawings for the Baker Lake Fuel Storage Tank #5 and #6.

Should you require any further information, please contact me directly at 819-763-0229 or via email at stephane.robert@agnico-eagle.com.

Regards,

Stéphane Robert
Environment Superintendent

Encl (1)

cc: *Ian Rumbolt, INAC*
David Abernethy, INAC

AEM

AGNICO-EAGLE MINES LTD
MEADOWBANK DIVISION

BAKER LAKE FUEL STORAGE INSTALLATIONS
TANK # 5 AND # 6

2010

FINAL REPORT

FOLLOWING THE CONSTRUCTION

OF

PHASE 3 (2010)

JANUARY 2011

AEM

AGNICO-EAGLE MINES LTD
MEADOWBANK DIVISION

BAKER LAKE FUEL STORAGE INSTALLATIONS

FINAL REPORT

FOLLOWING THE CONSTRUCTION

OF

PHASE 3 (2010)

PREPARED BY :

France Bérubé,Eng..Jr
Civil
STAVIBEL

REGISTERED PROFESSIONAL ENGINEER
S.M. BEAULE
LICENSEE
NWT/NU

2011-02-23

Serge Beaulé, Eng. associate
Head Department Civil
STAVIBEL

JANUARY 2011

AGNICO-EAGLE MINES LTD
MEADOWBANK DIVISION

BAKER LAKE FUEL STORAGE INSTALLATIONS TANK # 5 AND # 6

FINAL REPORT

FOLLOWING THE CONSTRUCTION
PHASE 3 (2010)

TABLE OF CONTENTS

A. DESCRIPTION OF MANDATE

Agnico-Eagle Mines has given a mandate to Stavibel, engineering services in order to verify the compliance with applicable regulations of its fuel storage installations in Baker Lake, Nunavut.

Accord to the terms of reference, the mandate consists summarily in the following activities.

A. Review and compilation of the available documentation;

B. Collection of any information that may be missing;

C. REVISION OF CONSTRUCTION DRAWINGS

- Preparation of « *AS BUILT* » drawing of the construction tank #5 and #6, of phase 3.

D. Verifications to the storage capacity within the existing containment berms of phase 3.

B. DOCUMENTATION READILY AVAILABLE

GOLDER ASSOCIATES – Vancouver office (phase 1, 2, 3)

For the Baker Lake bulk fuel storage facilities, this firm has produced some construction specifications on 2006-04-25, which were given reference SP-GAL-03 under their project number 06-1413-009.

NISHI-KHON/SNC LAVALIN LTD – Vancouver office (phase 1, 2)

For the Baker Lake bulk fuel facilities, this firm has produced a set of drawings issued **for construction** on 2007-08-03, under their project number 017202. Some specifications for fuel piping and valves were also issued.

EARTHWORK DRAWINGS	017202-1000-41D1-0006	17202-1000-46ES-1001A	017202-8000-46DC-9150
017202-1000-41D1-0001	**FUEL PIPING DRAWINGS**	17202-1000-46ES-1001B	017202-8000-46DC-9152
017202-1000-41D1-0002	017202-1000-41D1-0007	**ELECTRICAL DRAWINGS**	017202-8000-46DC-9153
017202-1000-41D1-0003	017202-1000-46D4-1004	017202-1000-46D6-1001	017202-8000-46DC-9156
017202-1000-41D1-0004	017202-1000-46D4-1005	017202-1000-47D2-2001	017202-8000-46DC-9157
017202-1000-41D1-0005	017202-1000-46D4-1006	017202-8000-47DA-9004	017202-8000-46DC-9166

GEM STEEL EDMONTON LTD (phase 1, 2, 3)

This vendor has submitted a set of « *AS BUILT* »drawings issued for the completion and permitting, which consist in four (4) structural drawings showing the details of a fuel tank of 10 million liters nominal capacity. These fuel tanks are shown on revision 1 of drawings BL-2010-1, BL210-2, BL-2010-3 and BL-2010-4.

CHAMCO INDUSTRIES LTD (phase 1, 2)

This vendor has submitted a set of drawings issued **for construction** under their project number 1014938ABS, consisting of the following drawings. These documents have all been received by HATCH and approved.

DRAWING NUMBER	H325174-M268-VD-0040	H325174-M268-VD-0041	H325174-M268-VD-0010
H325174-M268-VD-0011	H325174-M268-VD-0012	H325174-M268-VD-0013	H325174-M268-VD-0014
H325174-M268-VD-0015	H325174-M268-VD-0016	H325174-M268-VD-0017	H325174-M268-VD-0019
H325174-M268-VD-0020	H325174-M268-VD-0021	H325174-M268-VD-0029	H325174-M268-VD-0030
H325174-M268-VD-0031	H325174-M268-VD-0032	H325174-M268-VD-0033	H325174-M268-VD-0034
H325174-M268-VD-0035	H325174-M268-VD-0036	H325174-M268-VD-0037	H325174-M268-VD-0039

C. STAVIBEL, ROUYN-NORANDA OFFICE (phase 3)

This firm has produced a set of construction and has built drawings consisting of the following drawings.

Fuel tanks of phase 3 are shown on these drawing as well as the earthwork, the piping and electrical grounding details.

Earthwork drawings

DRAWING NUMBER
740-C-0123
740-C-0124
740-C-0125

Fuel piping drawings

DRAWING NUMBER
740-M-0100

Electrical drawings

DRAWING NUMBER
740-E-0120

D. ADDITIONAL COLLECTION OF INFORMATION

TECHNIC EXPERT INC.
Role during construction phase #3 : Field supervision during construction of phase 3 (2010)

Mr. Luc Croisetière, which is a civil consultant at the time and Julie Bacon (AEM employee), have supervised the construction of the fuel containment area around tank #5 and #6, in phase 3 of this project. A specialized crew coming from Saskatoon (Enviroline Service inc.) was hired in May 2010 to install an HDPE membrane over the berms. This HDPE membrane has been covered with a minimum layer of about 150 mm thickness of crushed stone.

The installation of the liners has been done and completed on October 5th 2010 before the blizzard and show arrival. Also, before any fuel fill in these new set of tank.

QAMANITTUAP, SANA, GILBERT GOUP.
Role during construction phase #3

In early May 2010, and considering a short window of time for the 2010 tanks construction, (2) diamond drills and (1) crew of blasters were required 24 hr/day considering an estimated ± 125 000 tons of rock to blast, excavate and haul to a dump area. The bottom final floor was cutted at the elevation ± 35.5 and completely on slip rock.

GEM STEEL EDMONTON LTD
Role during construction phase #3 : Fabrication and field assembly of 10 M liters fuel tanks

Construction of phase 3 (tanks #5 and #6) took place from July to September 2010, with a crew of about 16 workers.

Following phase 3 of this field word, a crew from ACUREN has proceeded to X-RAY testing of horizontal and vertical welds according to specifications described in the latest edition of API Standard 650. According to the report made by ACUREN, minor repairs of defective welds were required, either on the tank shell or nozzles.

SM CONSTRUCTION INC.
Role during construction phase #3

As the connection and pipe were already built in 2009 for the phase 3 futur development a crew of 4 welders have installed pipeline from existing tank #4 to reach tank #5 and #6. This work have been completed on September 30th 2010. The tank fuel filling planned in mid-october 2010.

E. REVISION OF CONSTRUCTION DRAWINGS

AEM has hired Stavibel Engineering Services, a firm based in Rouyn-Noranda, in order to complete the drawings that were used in producing this report. Those drawings are enclosed in Appendix 1 of this report.

Drawing 740-C-0123 shows the general layout of fuel storage area. It has been compiled using surveying data by a crew from NUNA and Agnico Eagle.

Drawing 740-C-0124 shows the cross sections of the containment area of phase 3. They are generated using AutoCad CIVIL 3D software and based on the informations collected by Agnico Eagle.

Drawing 740-C-0125 shows the details of the HDPE membrane, its limits and the components of the phase3.

Drawing 740-M-0100 G shows the general of the piping layout and also the specification of the main equipment (valves, check valves, etc.)

Drawing 740-E-0120 shows the layout and the details of the electrical grounding of fuel storage area. It's based on the informations collected by Agnico Eagle.

Drawing BL2010-01 shows the general tank elevation of the fuel storage tanks.

Drawing BL2010-02 shows the roof and the nozzle plan of the fuel storage tanks.

Drawing BL2010-03 shows the details of the assembly of the fuel storage tanks.

Drawing BL2010-04 shows also the details of the assembly of the fuel storage tanks.

F. VERIFICATION TO STORAGE CAPACITY WITHIN BERMS

Stavibel Engineering Services has completed verifications on the liquid storage capacity inside the containment berms, which create an impermeable enclosure around tank #5 and #6.

The method used was volume calculation using AutoCad CIVIL 3D software.

The maximum storage capacity of fuel tanks #5 and #6 is 15 500 m^3 of diesel fuel at a standard temperature of fifteen degrees Celcius (15 ^oC).

It has been verified using the above software that the impermeable enclosure built in phase 3 will effectively hold 100% of the maximum storage capacity of the biggest tank, plus 10% of the maximum storage of the other tank. This calculation has been summarized in a worksheet that is shown on page 7, here under.

The containment volume for tanks #3 and #4 is 15 500 m^3.

Thus, the lowest point of the HDPE membrane that sits atop the containment area is sufficiently high (at elevation 39.3 m) to meet the above criteria.

A worst case scenario has been simulated, and consists in either a rupture of the first course of side plates in the tank shell, or a failure in the outlet piping, when either one of fuel tank is 100% full.

This simulation shows that, in such a worst case scenario, the hydraulic balancing level inside the containment area would not exceed the point with the lowest elevation (39.3 m) on the surrounding berms, which is located on the south-west side. On north-east side, the berm gives more elevation at an elevation of approximative ±45 m.

The containment volume for tanks #5 and #6 is 15 500 m^3 as a result, this new containment requirement of 110% of the biggest tank volume (or 11 843 m^3), expressed while considering all two (2) tanks as a whole, will then be exceeded by 45%.

DESIGN REVIEW – FOR FUEL SPILL CONTAINMENT BERMS AT BAKER LAKE

ÉQUIPEMENTS	DIAM (ft)	RIM EL. (m)	Radius (m)	Surface (m^2)	TOP EL. (m)	Height (m)	Volume (m^3)
740-TK-044-**TANK** #5	110	***37.846**	16.764	882.89	50.04	12.195	10.767
740-TK-044-**TANK** #5	110	***37.831**	16.764	882.89	50.03	12.195	10.767

Let's say berms are 5' 3" higher than the average tank floor (so 1.60 m total height) with variable slopes and that the tanks are sitting on cones made of crushed stone of 20 m diameter x 1.0 m height.

***Average tank #5 = (37.839 + 37.846 + 37.848 + 37.852)/4 = 37.846
***Average tank #6 = (37.835 + 37.825 + 37.830 + 37.833)/4 = 37.831

Volume

Secondary Containment Requirement → 11 843 **m^3**
according to ref. PN-1326, Section 3.9.1 (1) 2-b-ii → 110%

Containment volume to be substracted for the two (2) cones made of crushed stone: already reducted from AutoCad 3D

Volume
NET CONTAINMENT 15 500 m^3
or 144% > 110%

APPENDIX 1

AS BUILT DRAWINGS FOR PHASE 3

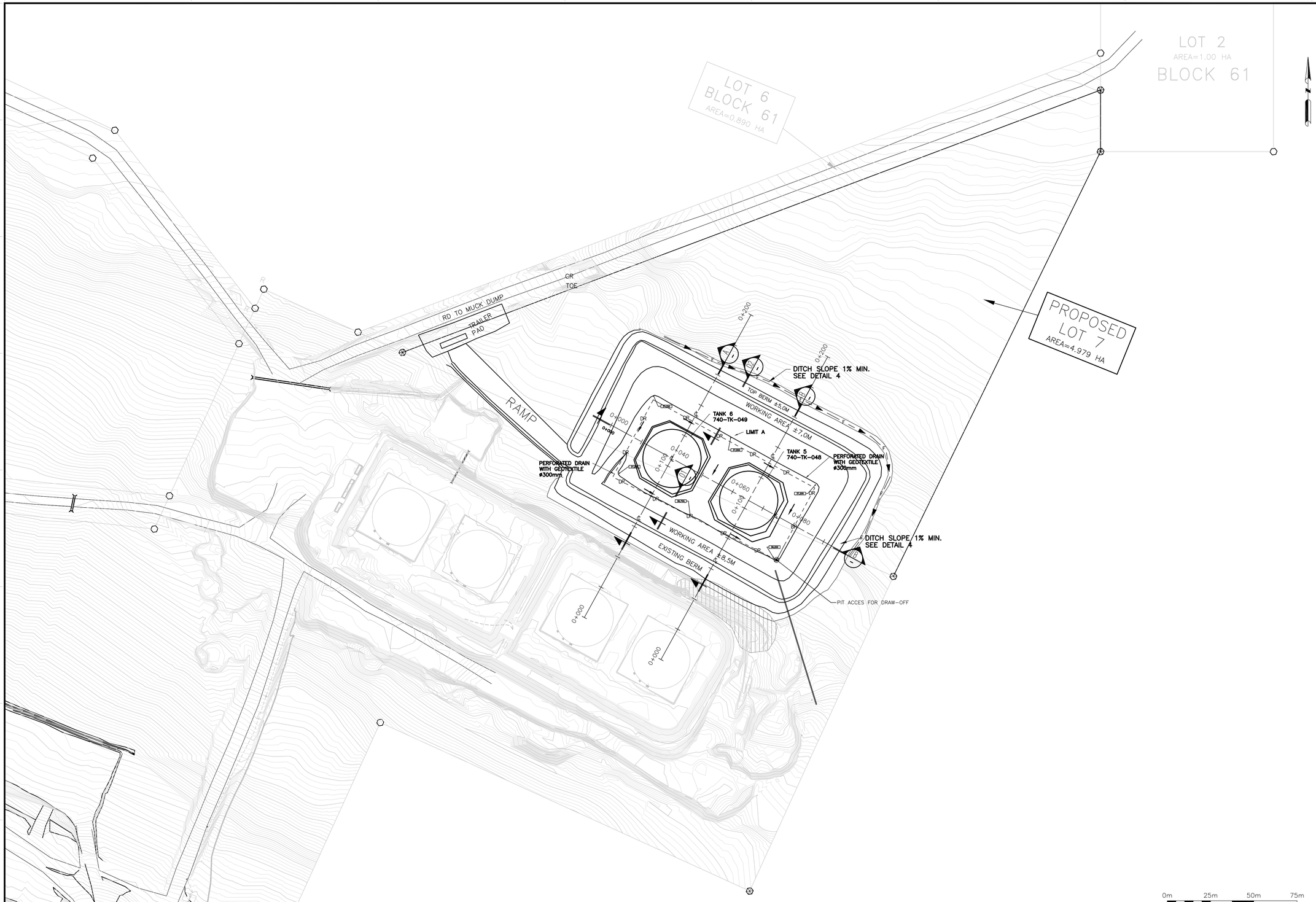
DRAWINGS NUMBER			
Earthwork drawings	**Fuel piping drawing**	**GEM Steel drawings**	BL2010-4
740-C-0123	740-M-0100	BL2010-1	
740-C-0124	**Electrical drawings**	BL2010-2	
740-C-0125	740-E-0120	BL2010-3	

IFC DRAWING FOR PHASE 3

DRAWINGS NUMBER			
Earthwork drawings	**Fuel piping drawing**	**GEM Steel drawings**	BL2010-4
740-C-0123	740-M-0100	BL2010-1	
740-C-0124	**Electrical drawings**	BL2010-2	
740-C-0125	740-E-0120	BL2010-3	

NO. DESSIN
DRAWING NO. 740-C-0123-0125 TQC

FORMAT ARCHD



PLAN CLÉ
KEY PLAN

NOTES GÉNÉRAL / GENERAL NOTES

TEL QUE CONSTRUIT
AS BUILT
DATE : 21/01-2011

DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE	# DWG
–	–
–	–
–	–
–	–
–	–
–	–

AGNICO-EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT
C	21-01-2011	AS BUILT	J-F.S.	S.B.	
B	20-07-2010	APPROVAL	J-F.S.	S.B.	
A	16-07-2010	APPROVAL	J-F.S.	S.B.	

REVISIONS

Stavibel Inc.
150, rue Gamble Ouest
Rouyn-Noranda (Québec) J9X 2R7
Tél. : 819 764-5181 Téléc. : 819 797-0158
Courriel : stavibel-rn@stavibel.qc.ca
www.stavibel.qc.ca

Projet No. : - -

TITRE / TITLE
AGNICO-EAGLE – MEADOWBANK DIVISION
BAKER LAKE AREA 740
TANK #5 AND #6
GENERAL LAYOUT

DESSINÉ PAR / DRAWN BY	J-F SYLVESTRE, TECH.	DATE 2010-07-20
VERIFIÉ PAR / CHECKED BY	FRANCE BÉRUBÉ, ING. JR.	2010-07-20
APPROUVÉ PAR / APPROVED BY	SERGE BEAULÉ, ING.	2010-07-20
ÉCHELLE / SCALE	1:1000	DATE 30-06-2010

NO. DESSIN / DRAWING NO. 740-C-0123

NO. PROJET / PROJECT NO.	REVISION	FEUILLE / SHT
MEAD-I-400	C	1 / 3

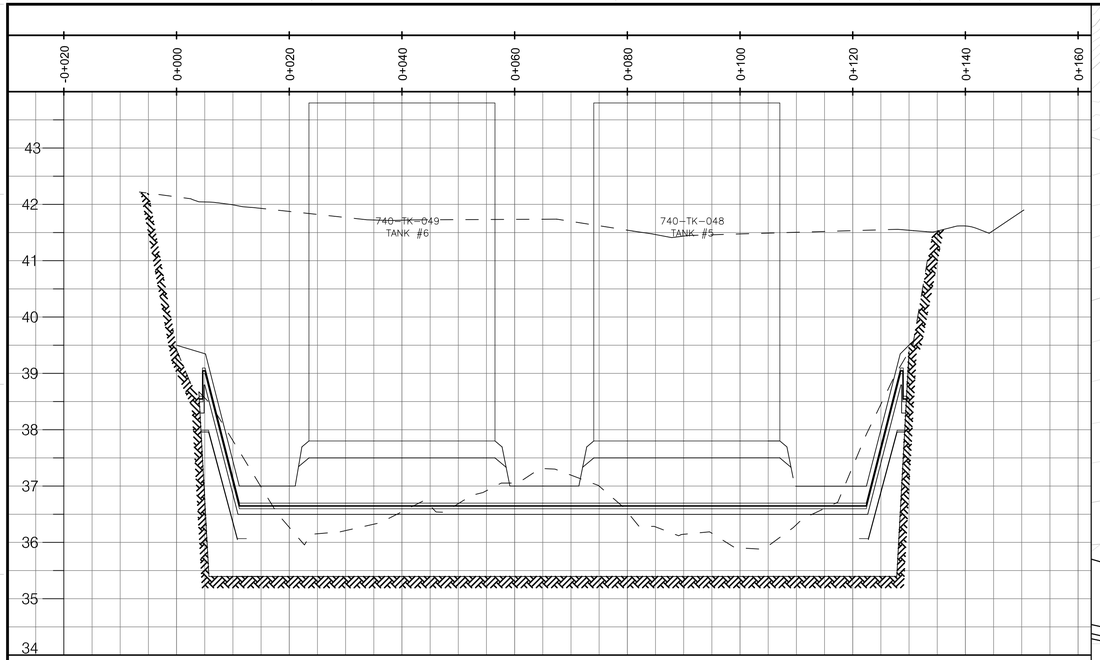
AE-CART-ARCH D

P:\VD2622\001\Dessins maitres\30-Civ\740-C-0123-0125 TQC.dwg, 25 Jan 2011

FILE NO. 740-C-0123-0125 TQC.dwg

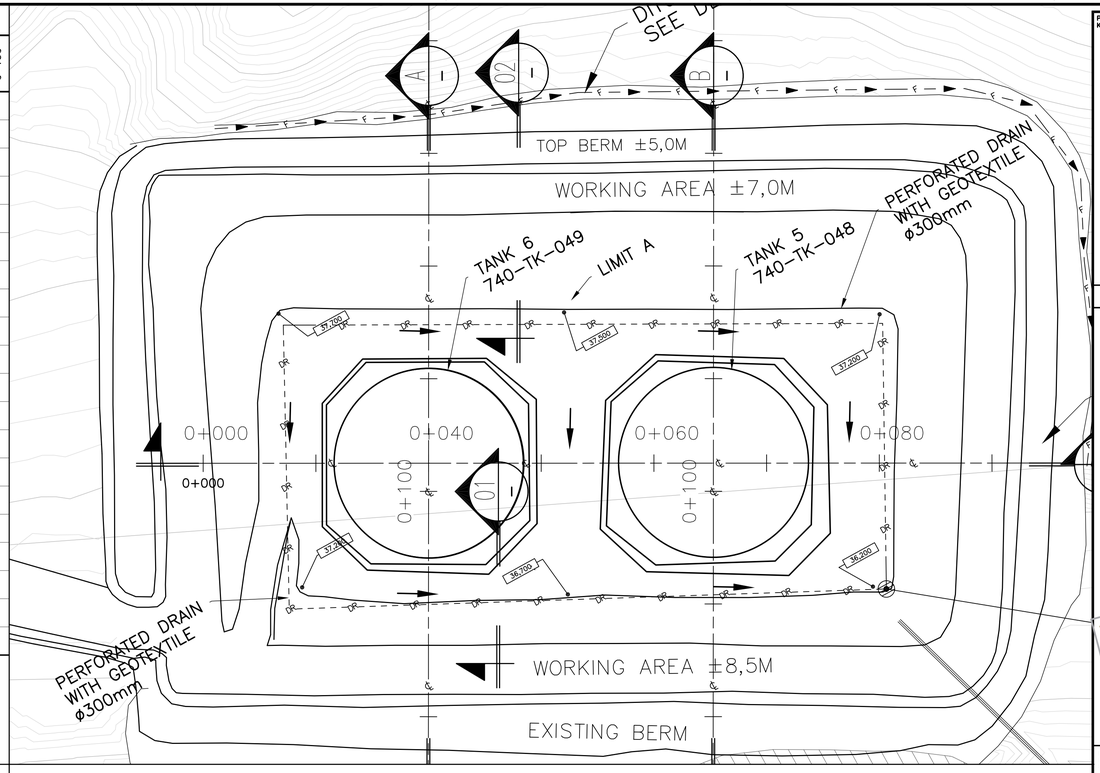
NO. DESSIN
DRAWING NO. 740-C-0123-0125 TQC

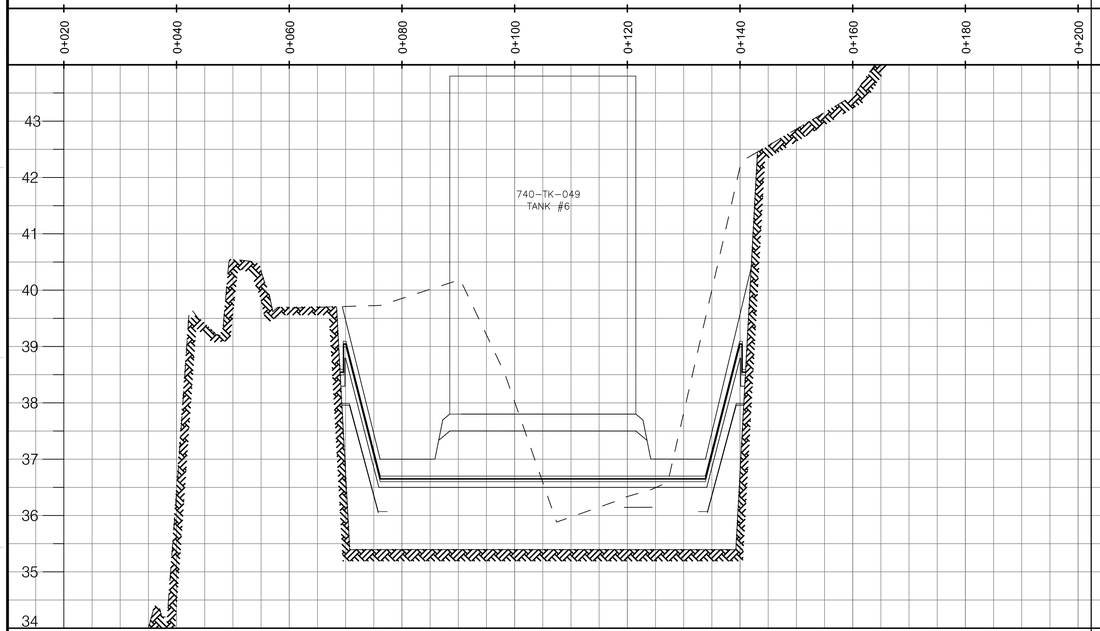
FORMAT ARCHD



PROFIL TANK 5 & 6

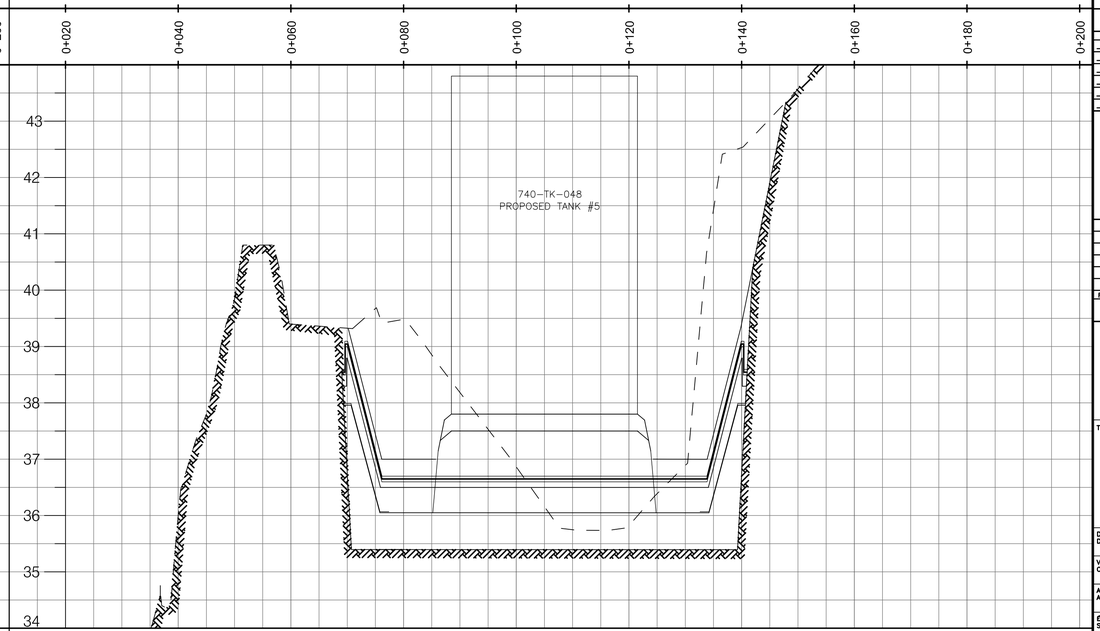
CROSS SECTION C





PROFIL TANK 6

CROSS SECTION A



PROFIL TANK 5

CROSS SECTION B

PLAN CLÉ
KEY PLAN

NOTES GÉNÉRAL / GENERAL NOTES

TEL QUE CONSTRUIT
AS BUILT
DATE : 21/01-2011

DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE	# DWG
–	–
–	–
–	–
–	–
–	–
–	–

AGNICO-EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT
C	21-01-2011	AS BUILT	J-F.S.	S.B.	
B	20-07-2010	APPROVAL	J-F.S.	S.B.	
A	16-07-2010	APPROVAL	J-F.S.	S.B.	

REVISIONS

STAVIBEL
Stavibel inc.
150, rue Gamble Ouest
Rouyn-Noranda (Québec) J9X 2R7
Tél.: 819 764-5181 Télécc.: 819 797-0158
Courriel : stavibel-rn@stavibel.qc.ca
www.stavibel.qc.ca

Projet No.: - -

TITRE / TITLE
AGNICO-EAGLE – MEADOWBANK DIVISION
BAKER LAKE AREA 740
TANK #5 AND #6
PLAN VIEW AND CROSS SECTION

DESSINÉ PAR / DRAWN BY	J-F SYLVESTRE, TECH.	DATE 2010-07-20
VÉRIFIÉ PAR / CHECKED BY	FRANCE BÉRUBÉ, ING. JR.	2010-07-20
APPROUVÉ PAR / APPROVED BY	SERGE BEAULÉ, ING.	2010-07-20
ÉCHELLE / SCALE	N/A	DATE 30-06-2010

NO. DESSIN / DRAWING NO. 740-C-0124

NO. PROJET / PROJECT NO.	REVISION	FEUILLE / SHT
MEAD-I-400	C	2 / 3

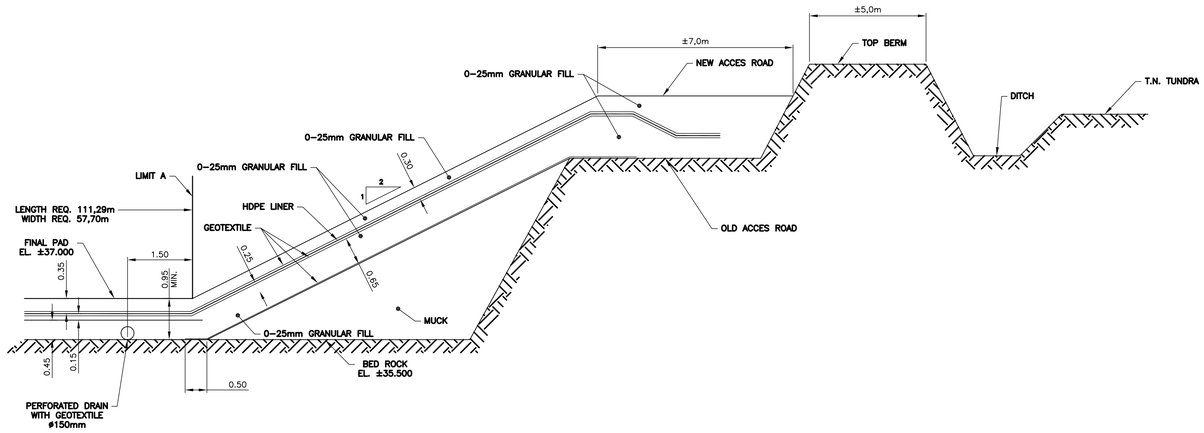
AE-CART-ARCH D

P:\02822\001\Dessins maitres\30-Civ\740-C-0123-0125 TQC.dwg, 25 Jan 2011

FILE NO. 740-C-0123-0125 TQC.dwg

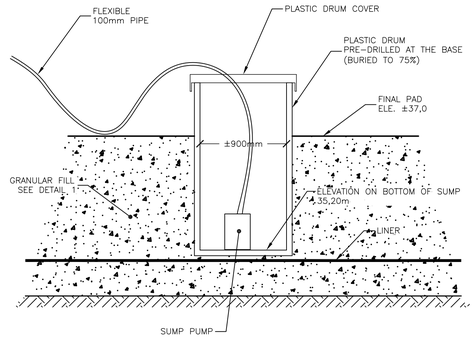
NO. DESSIN
DRAWING NO. 740-C-0123-0125 TQC

FORMAT ARCHD



TYPICAL SECTION – DAM

SCALE : NONE
DETAIL 2

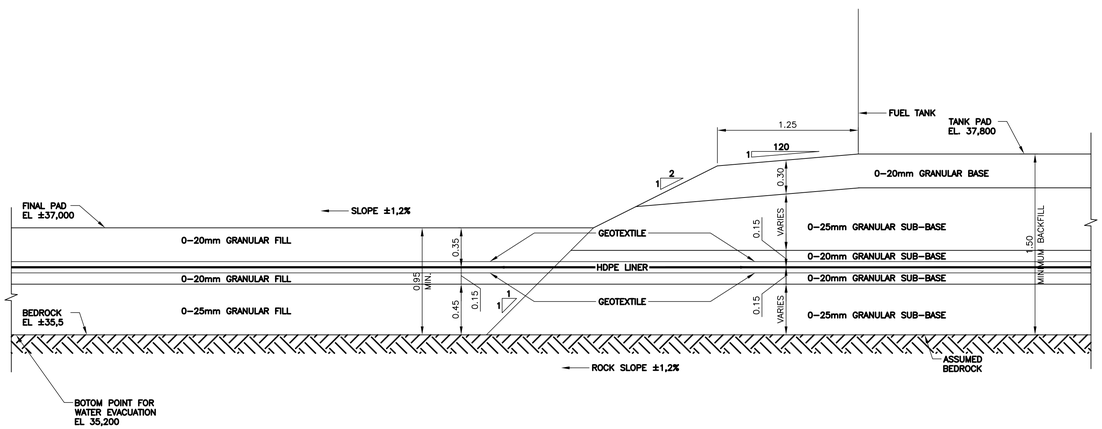


NOTES :

- **THE WATER WILL BE REJECTED TO THE INFERIOR BASIN WHERE IT WILL BE TREATED WITH AN OIL SEPARATOR.**

ACCESS WELL FOR DRAINING

SCALE : NONE
DETAIL 3



TYPICAL SECTION – PAD

SCALE : NONE
DETAIL 1

PLAN CLÉ
KEY PLAN

NOTES GÉNÉRAL / GENERAL NOTES

TEL QUE CONSTRUIT
AS BUILT
AGNICO-EAGLE
DATE : 21/01-2011

DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE	# DWG
–	–
–	–
–	–
–	–
–	–
–	–

AGNICO-EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT
C	21-01-2011	AS BUILT	J-F.S.	S.B.	
B	20-07-2010	APPROVAL	J-F.S.	S.B.	
A	16-07-2010	APPROVAL	J-F.S.	S.B.	

REVISIONS

STAVIBEL
BÂTISSEURS D'INGÉNIERIE
Stavibel inc.
150, rue Gamble Ouest
Rouyn-Noranda (Québec) J9X 2R7
Tél.: 819 764-5181 Téléc.: 819 797-0158
Courriel : stavibel-rn@stavibel.qc.ca
www.stavibel.qc.ca

Projet No.: - -

TITRE / TITLE
AGNICO-EAGLE – MEADOWBANK DIVISION
BAKER LAKE AREA 740
TANK #5 AND #6
DETAILS

DESSINÉ PAR / DRAWN BY	J-F SYLVESTRE, TECH.	DATE 2010-07-20
VERIFIÉ PAR / CHECKED BY	FRANCE BÉRUBÉ, ING. JR.	2010-07-20
APPROUVÉ PAR / APPROVED BY	SERGE BEAULÉ, ING.	2010-07-20
ÉCHELLE / SCALE	N/A	DATE 30-06-2010
NO. DESSIN / DRAWING NO.	740-C-0125	
NO. PROJET / PROJECT NO.	MEAD-I-400	REVISION C
		FEUILLE / SHT 3 / 3

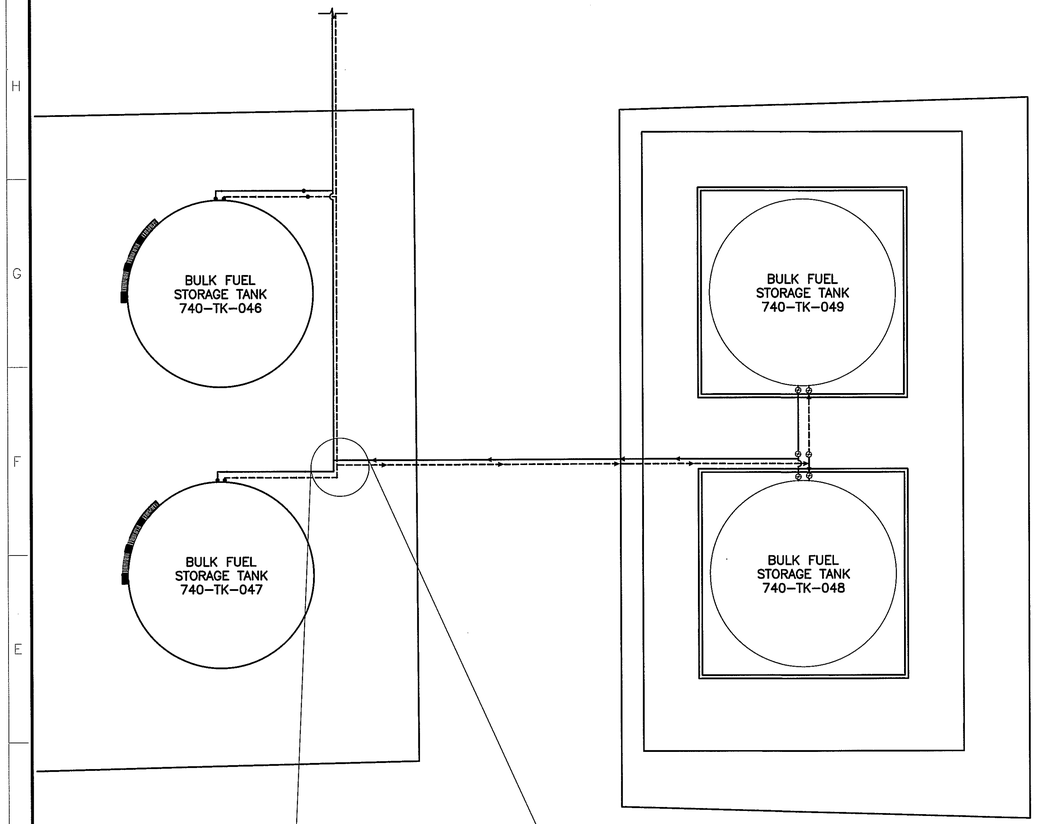
AE-CART-ARCH D

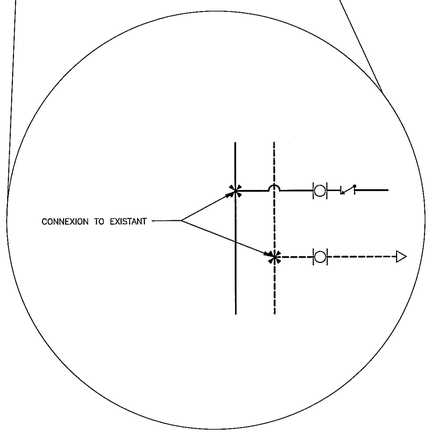
P:\02822\001\Dessins maitrise\30-CH\740-C-0123-0125 TQC.dwg, 25 Jan 2011

FILE NO. 740-C-0123-0125 TQC.dwg

NO. DESSIN DRAWING NO. VD2622–001(MEAD–I–400)00

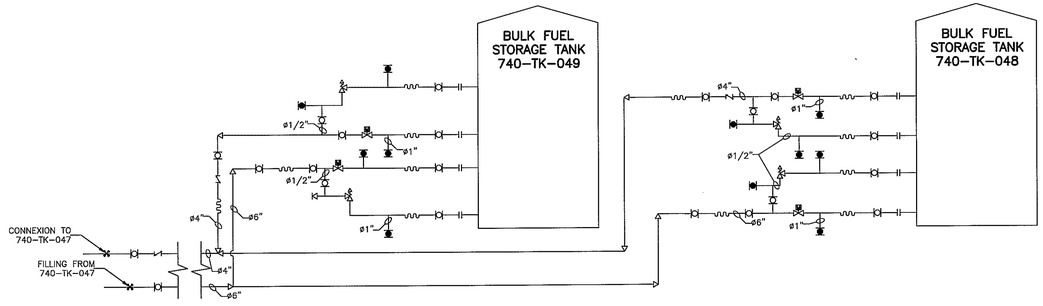
FORMAT ARCHD





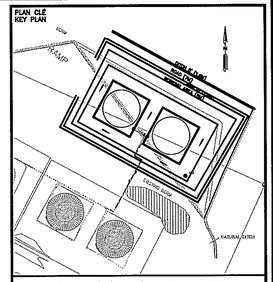
Piping	Symbol	Equipment	Details	Type	Models	Diameter	Quantity
Filling of Tank 740-TK-048 Tank 740-TK-049		Gate Valve	Integrally reinforced extended body gate, female socket weld outboard end; API STD 602; forged carbon steel; ASTM A 105/A 105M; OS&Y; welded bonnet or bolted bonnet with flexible graphite-filled spiral wound gasket; trim #8; flexible graphite packing; metal tagged V903; Class 800	NA	Velan W-DD-2-17-4W-02-TY (1") or equivalent	1"	2
		Gate Valve	Class 150; flanged, raised-face; API STD 600; carbon steel body, ASTM A 105/A 105M or ASTM A 216/A 216M Grade WCB; OS&Y; solid or flexible wedge; bolted bonnet with stainless steel reinforced flexible graphite bonnet gasket; trim #8; flexible graphite packing; metal tagged VGA01; full port.	NA	Velan F-DD-0-06-4C-02-TY (6") or equivalent	6"	7
		Flanged Mettallc flexible tube	- Flanges: Class 150, raised face and ANSI B16.5; - Metallic flexible tube: 18" length in Stainless Steel	NA	CONNECTALL AA1-096-0180 or equivalent	6"	4
	M	Motorized Valve	- 6" direct mount split body ball valve; - Body materieal: Carbon Steel Body; - SS 316 Trim, Seat Reinforced TFE Seats ; - Flanges: Class 150 raised face and ANSI B16.5; C/W: Actuator Electric Serie XE (XE-6900) ATEX certified for Flame Proof Eexd IIB T4 + Heater	NA	Matheson valves D9C-F1-600-XHE1-XX 6.00	6"	2
		Gasket	Composition: Aramid fibers with a nitril binder Tickness: 1/8"	NA	Garlock Blue guard Style 3000	1" 6"	as required
		Piping	Carbon steel piping sch. 40 ASTM A53 gr.B seamless	NA	NA	1" 6"	as required
Distribution from Tank 740-TK-048 Tank 740-TK-049		Gate Valve	Class 150; flanged, raised-face; API STD 600; carbon steel body, ASTM A 105/A 105M or ASTM A 216/A 216M Grade WCB; OS&Y; solid or flexible wedge; bolted bonnet with stainless steel reinforced flexible graphite bonnet gasket; trim #8; flexible graphite packing; metal tagged VGA01; full port.	NA	Velan F-DD-0-06-4C-02-TY (4") or equivalent	4"	7
		Gate Valve	Integrally reinforced extended body gate, female socket weld outboard end; API STD 602; forged carbon steel; ASTM A 105/A 105M; OS&Y; welded bonnet or bolted bonnet with flexible graphite-filled spiral wound gasket; trim #8; flexible graphite packing; metal tagged V903; Class 800	NA	Velan W-DD-2-17-4W-02-TY (1") or equivalent	1"	2
		Flanged Mettallc flexible tube	- Flanges: Class 150, raised face and ANSI B16.5; - Metallic flexible tube: 18" length in Stainless Steel	NA	CONNECTALL AA1-054-0150 or equivalent	4"	4
		Check valve	- Cast steel flanged check valve ; - Body material: Low temperature cast carbon steel to ASTM A352, grade LCB; - Trim material: Disc - Stainless steel, 13% Cr Seat - Stainless steel, 13% Cr; - Valve: Face to face dimensions to ANSI B16.10; - Flanges: Class 150, raised face and ANSI B16.5.	CKF1 [1]	Kitz 150 SCOBL or equivalent	4"	3
	M	Motorized Valve	- 4" direct mount split body ball valve; - Body materieal: Carbon Steel Body; - SS 316 Trim, Seat Reinforced TFE Seats ; - Flanges: Class 150 raised face and ANSI B16.5; C/W: Actuator Electric Serie XE (XE-2640) ATEX certified for Flame Proof Eexd IIB T4 + Heater	NA	Matheson valves D9C-F1-400-XEE-1-XX 4.00	4"	2
		Gasket	Composition: Aramid fibers with a nitril binder Tickness: 1/8"	NA	Garlock Blue guard Style 3000	1" 4"	as required
		Piping	Carbon steel piping sch. 40 ASTM A53 gr.B seamless	NA	NA	1" 4"	as required
Overpressure line filling tank 740-TK-048 filling tank 740-TK-049		Gate Valve	Integrally reinforced extended body gate, female socket weld outboard end; API STD 602; forged carbon steel; ASTM A 105/A 105M; OS&Y; welded bonnet or bolted bonnet with flexible graphite-filled spiral wound gasket; trim #8; flexible graphite packing; metal tagged V903; Class 800	NA	Velan W-DD-2-17-4W-02-TY (¾") or equivalent	¾"	8
		Flanged Mettallc flexible tube	- Flanges: Class 150, raised face and ANSI B16.5; - Metallic flexible tube: 18" length in Stainless Steel	NA	CONNECTALL AA-B1B1-HHH-0180-0150 or equivalent	¾"	4
		Pressure safety valve	- Stainless steel; - Set pressure at 75 PSI	NA	Swagelok SS-RL4M8F8-BU	¾"	2
		Gasket	Composition: Aramid fibers with a nitril binder Tickness: 1/8"	NA	Garlock Blue guard Style 3000	¾"	as required
		Piping	Carbon steel piping sch. 40 ASTM A53 gr.B seamless	NA	NA	¾"	as required

[1] Reference to "PIPE AND VALVE SPECIFICATION" #0 17202-0000-46ES-1001 by SNC Lavalin 15th august 2007



PIPING DETAILS

PLAN CLÉ
KEY PLAN



NOTES GÉNÉRAL / GENERAL NOTES

1–ALL THE PIPING CONNECTION MUST BE AT THE BOTTOM OF THE TANK

POUR CONSTRUCTION
FOR CONSTRUCTION
DATE : 12/08/2010
AGNICO-EAGLE

DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE	# DWG
–	–
–	–
–	–
–	–
–	–
–	–

AGNICO-EAGLE

REV.	DATE	DESCRIPTION	DES./DR.	APP.	CLIENT
0	2010-08-12	FOR CONSTRUCTION	MA.BÉD	JM.C	
B	2010-07-20	FOR APPROVAL	V.Crè.	JM.C	
A	2010-07-16	FOR APPROVAL	V.Crè.	JM.C	

REVISIONS

L-2198
2010-08-12

TITRE / TITLE

AGNICO–EAGLE – MEADOWBANK DIVISION
BAKER LAKE AREA 740
TANK #5 AND #6
FUEL DISTRIBUTION PIPING
LAYOUT AND DETAILS

DESSINÉ PAR DRAWN BY	VICKY CRÈTE, TECH.	DATE 2010-07-16
VERIFIÉ PAR CHECKED BY	J–M CHARRON, Ing.	
APPROUVÉ PAR APPROVED BY	J–M CHARRON, Ing.	
ÉCHELLE SCALE	N/A	DATE

NO. DESSIN DRAWING NO. 740–M–0100

NO. PROJET PROJECT NO.	REVISION	FEUILLE / SHT
MEAD–I–400	0	1 / 1

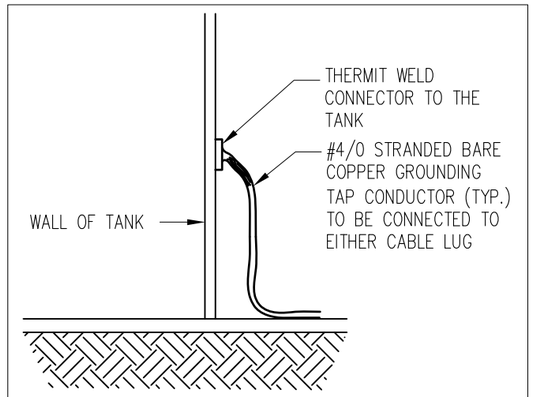
AE–CART–ARCH D

\\groupe\stanbet\Projet\300–INI\VD2622\001\Dessins maitres\75–PEF\VD2622–001(MEAD–I–400)00.dwg, 12 Aoû 2010

FILE NO. VD2622–001(MEAD–I–400)00.dwg

NO. DESSIN / DRAWING NO. 740-E-0120

FORMAT ANSI B-11x17

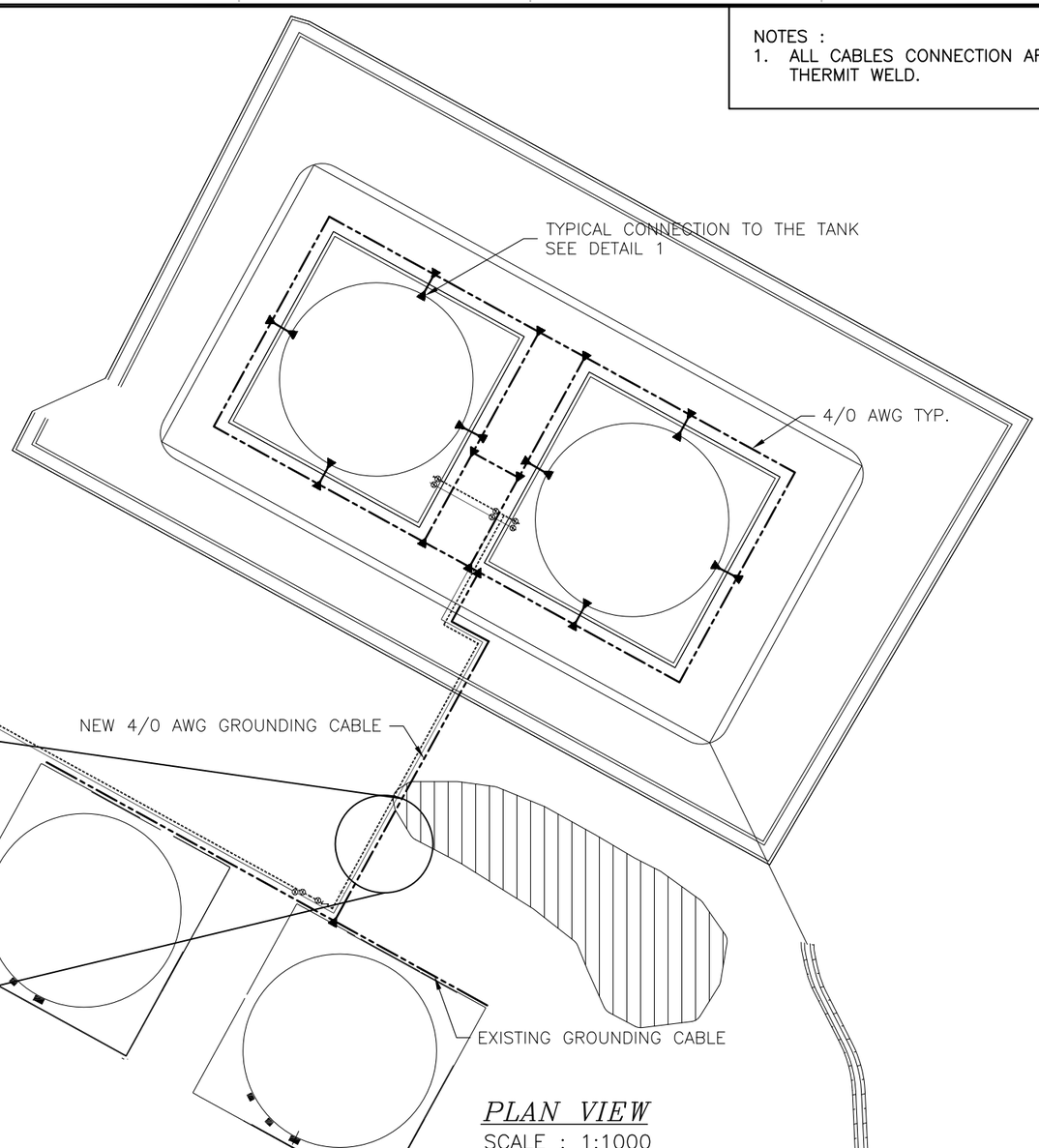


BONDING CONNECTION TO EXTERIOR TANK

DETAIL 1 / –

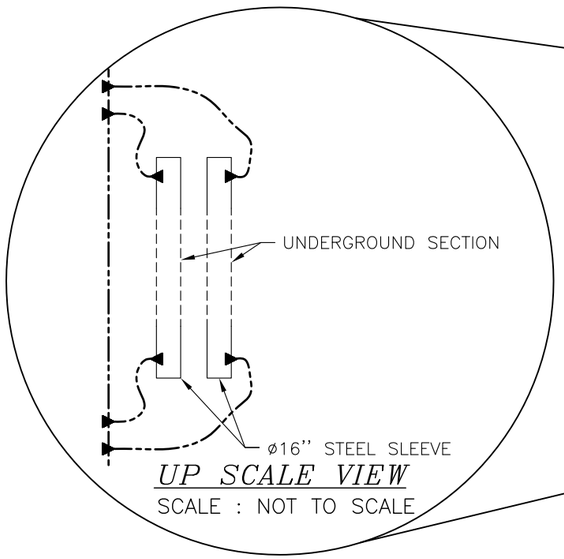
SCALE : N.T.S.

NOTES :
1. ALL CABLES CONNECTION ARE THERMIT WELD.



PLAN VIEW

SCALE : 1:1000



UP SCALE VIEW

SCALE : NOT TO SCALE

TITRE / TITLE	# DWG	REV	DESCRIPTION	DATE	PAR BY
–	–				
–	–				
–	–				
–	–				
–	–	0	AS BUILD	14-01-2011	M.O.

DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

REVISIONS

AGNICO-EAGLE

DESSINÉ PAR / DRAWN BY	M.MATTEAU, T.P.	DATE 2011-01-12
VÉRIFIÉ PAR / CHECKED BY	M. OUELLETTE (AEM)	
APPROUVÉ PAR / APPROVED BY		
No. PROJET / PROJECT NO.	VD2622-001	
DATE	2011-01-12	

TITRE / TITLE

AGNICO-EAGLE – MEADOWBANK
AREA 740 BAKER LAKE
ELECTRICAL
GROUNDING PLAN

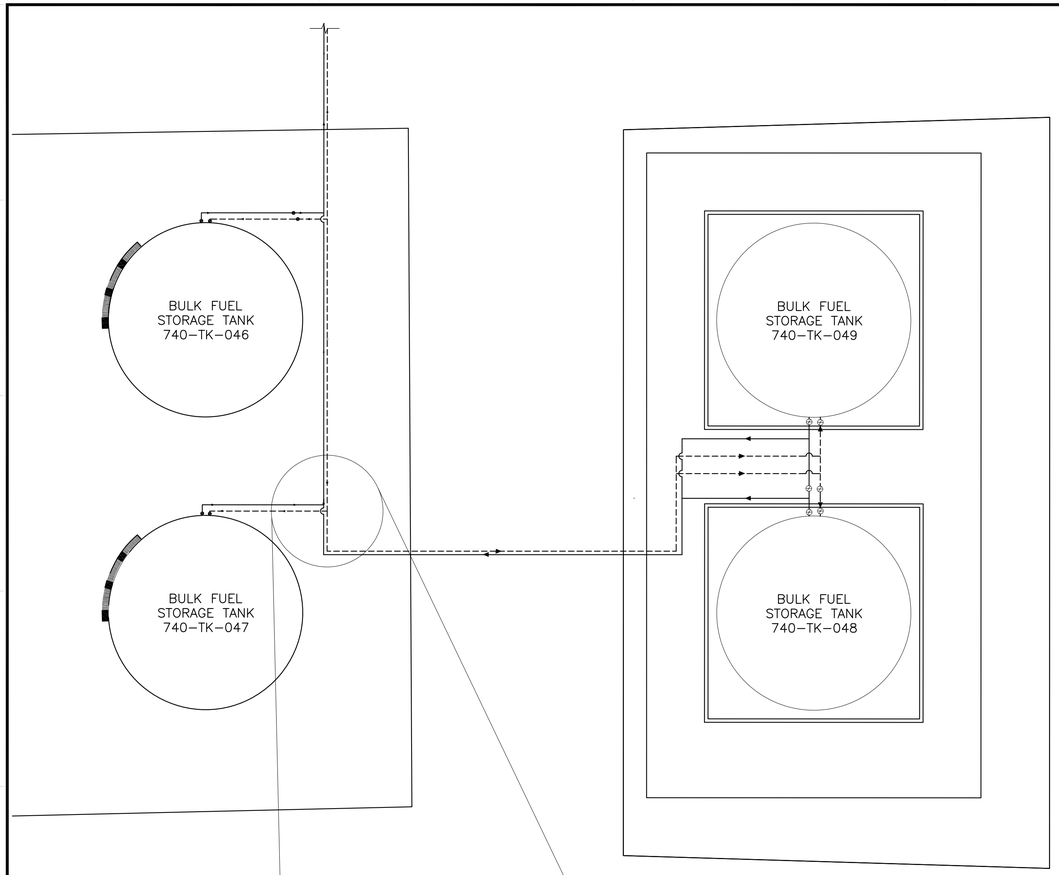
ÉCHELLE / SCALE	FICHIER / FILE	REVISION	FEUILLE/SHT
INDICATED	740-E-0120.DWG		
No. DESSIN / DRAWING NO. 740-E-0120		0	1 / 1

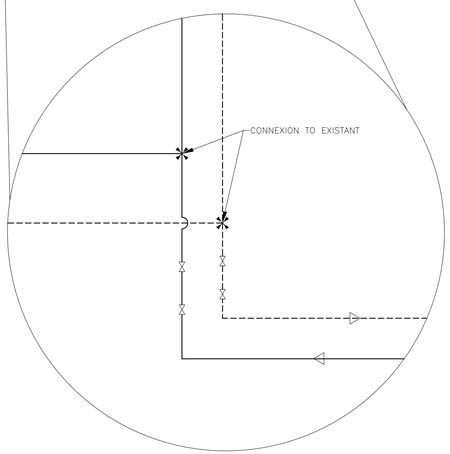
AE-CART-ANSI B

P:\VD2622\001\P200\Dessins emis\D_Cons\50-ELE\2011-01-14 – Tel que construit\740-E-0120.dwg, 14 Jan 2011

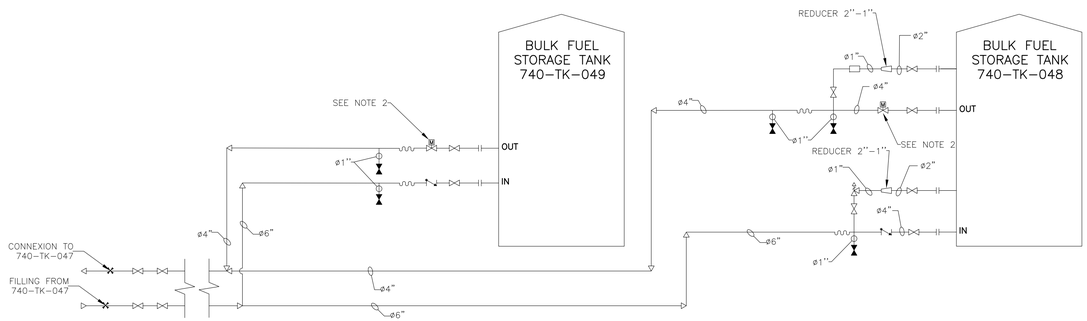
NO. DESSIN
DRAWING NO. VD2622-001(MEAD-I-400)00

FORMAT ARCHD



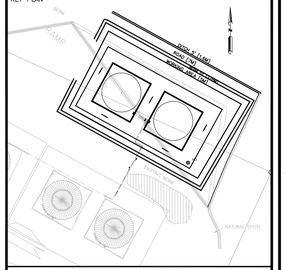


Piping	Symbol	Equipment	Details	Type	Models	Diameter	Quantity
Filling of Tank 740-TK-048 Tank 740-TK-049		Gate Valve	Class 150; flanged, face to face dimension ANSI B16.10, End flange dimension ANSI B16.5, API STD 600; carbon steel body, ASTM A 352-LCC	NA	Beric Class 150	1"	2
		Gate Valve	Class 150; flanged, face to face dimension ANSI B16.10, End flange dimension ANSI B16.5, API STD 600; carbon steel body, ASTM A 352-LCC	NA	Beric Class 150	6"	4
		Flanged Mettalic flexible tube	- Flanges: Class 150, raised face and ANSI B16.5, carbon steel; - Metallic flexible tube: 18" length in Stainless Steel	NA	CONNECTALL AAB1B1LLL0240	6"	2
		Gasket	Composition: Aramid fibers with a nitril binder Tickness: 1/8"	NA	Garlock Blue guard Style 3000	1" 6"	as required
		Piping	Carbon steel piping sch. 40 ASTM A53 gr.B seamless	NA	NA	1" 6"	as required
Distribution from Tank 740-TK-048 Tank 740-TK-049		Gate Valve	Class 150; flanged, face to face dimension ANSI B16.10, End flange dimension ANSI B16.5, API STD 600; carbon steel body, ASTM A 352-LCC	NA	Beric Class 150	4"	4
		Gate Valve	Class 150; flanged, face to face dimension ANSI B16.10, End flange dimension ANSI B16.5, API STD 600; carbon steel body, ASTM A 352-LCC	NA	Beric Class 150	1"	4
		Flanged Mettalic flexible tube	- Flanges: Class 150, raised face and ANSI B16.5, carbon steel; - Metallic flexible tube: 18" length in Stainless Steel	NA	CONNECTALL AAB1B1WWW0240	4"	2
		Check valve	Class 150; flanged, face to face dimension ANSI B16.10, End flange dimension ANSI B16.5, ANSI B16.34 (CONFORMS TO THE APPLICABLE REQUIREMENTS OF API 600), carbon steel body, ASTM A 352-LCC	NA	Beric Class 150	4"	2
	M	Motorized Valve	- Ball valve class 150; - Body materieal: Carbon Steel Body; - Reinforced TFE Seats ; - Flanges: Class 150 raised face and ANSI B16.5; C/W: Actuator Electric Serie XE (XE-2640) ATEX certified for Flame Proof Eexd IIB T4 + Heater	NA	TRIAC Actuator electric XE-2640 C/W Ball valve classe 150	4"	1
		Gasket	Composition: Aramid fibers with a nitril binder Tickness: 1/8"	NA	Garlock Blue guard Style 3000	1" 4"	as required
		Piping	Carbon steel piping sch. 40 ASTM A53 gr.B seamless	NA	NA	1" 4"	as required
Overpressure line filling tank 740-TK-048 filling tank 740-TK-049		Gate Valve	Class 150; flanged, face to face dimension ANSI B16.10, End flange dimension ANSI B16.5, API STD 600; carbon steel body, ASTM A 352-LCC	NA	Beric Class 150	2"	4
		Gate Valve	Class 150; flanged, face to face dimension ANSI B16.10, End flange dimension ANSI B16.5, API STD 600; carbon steel body, ASTM A 352-LCC	NA	Beric Class 150	1"	2
		Check valve	-Carbon steel; - Set pressure at 25 PSI;	NA	Check All UN-3 (U3)	1"	1
		Pressure safety valve	-Carbon steel; - Set pressure at 80 PSI; - 16 USGPM capacity; - Temperature range: -50 to 750F	NA	FARRIS Serie 2700	1"	1
		Gasket	Composition: Aramid fibers with a nitril binder Tickness: 1/8"	NA	Garlock Blue guard Style 3000	½"	as required
		Piping	Carbon steel piping sch. 40 ASTM A53 gr.B seamless	NA	NA	½"	as required
		Gasket	Composition: Aramid fibers with a nitril binder Tickness: 1/8"	NA	Garlock Blue guard Style 3000	½"	as required
		Piping	Carbon steel piping sch. 40 ASTM A53 gr.B seamless	NA	NA	½"	as required



PIPING DETAILS

PLAN CLÉ
KEY PLAN



NOTES GÉNÉRAL / GENERAL NOTES

1-ALL THE PIPING CONNECTION MUST BE AT THE BOTTOM OF THE TANK

2-MOTORIZED VALVES ARE INSTALLED BUT NOT RECORDED. THEY ARE IN OPEN POSITION.

DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE	# DWG
_	_
_	_
_	_
_	_
_	_
_	_

AGNICO-EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT
1	31-01-2011	AS FIELD	K.F	JM.C	
0	2010-08-12	FOR CONSTRUCTION	MA.BÉD	JM.C	
B	2010-07-20	FOR APPROVAL	V.Cre.	JM.C	
A	2010-07-16	FOR APPROVAL	V.Cre.	JM.C	

REVISIONS

TITRE / TITLE

AGNICO-EAGLE - MEADOWBANK DIVISION
BAKER LAKE AREA 740
TANK #5 AND #6
FUEL DISTRIBUTION PIPING
LAYOUT AND DETAILS

DESSINÉ PAR DRAWN BY	VICKY CRÊTE, TECH.	DATE 2010-07-16
VÉRIFIÉ PAR CHECKED BY	J-M CHARRON, Ing.	2010-08-20
APPROUVÉ PAR APPROVED BY	J-M CHARRON, Ing.	2010-08-20
ÉCHELLE SCALE	N/A	DATE

NO. DESSIN
DRAWING NO. 740-M-0100

NO. PROJET PROJECT NO.	REVISION	FEUILLE / SHT
MEAD-I-400	1	1 / 1

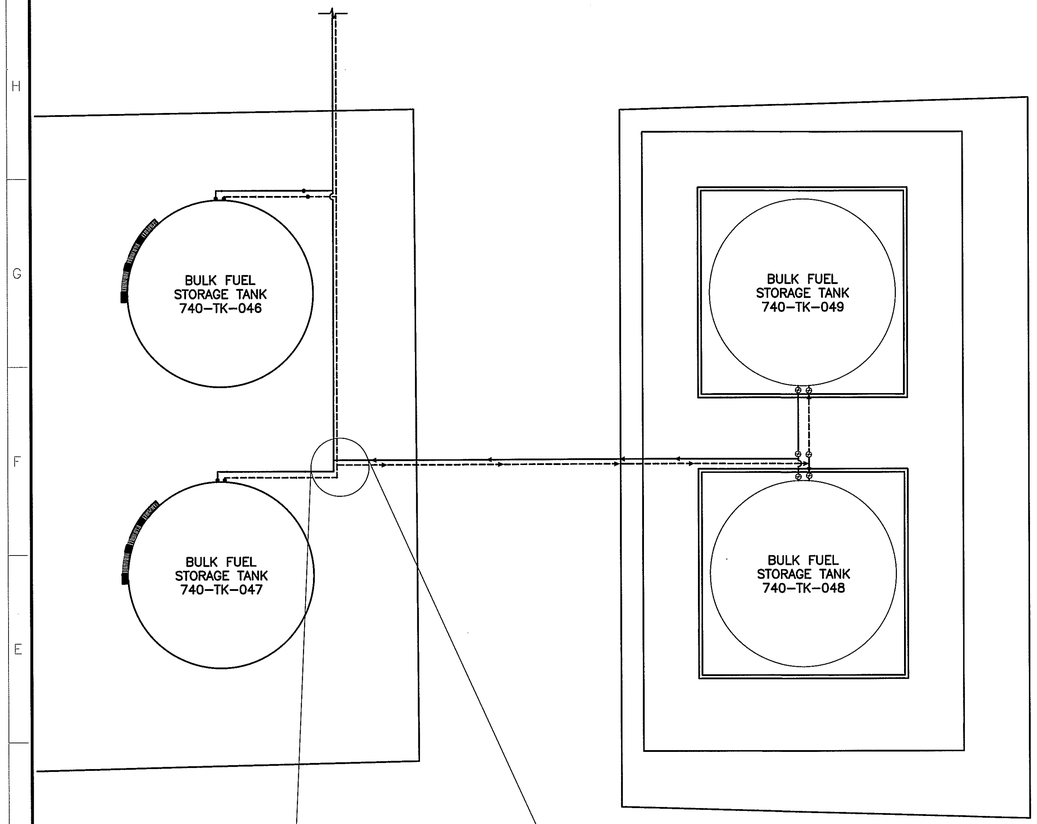
AE-CART-ARCH D

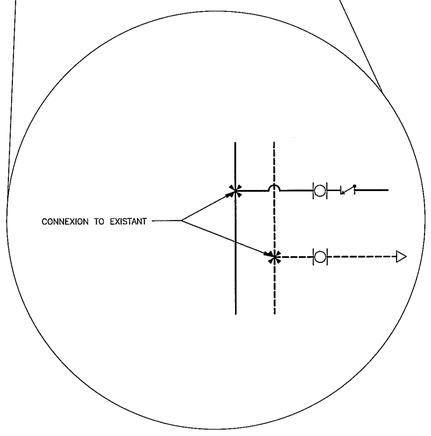
P:\VD2622\001\Dessins maitres\75-PID\VD2622-001(MEAD-I-400)01.dwg, 28 Jan 2011

FILE NO. VD2622-001(MEAD-I-400)01.dwg

NO. DESSIN DRAWING NO. VD2622–001(MEAD–I–400)00

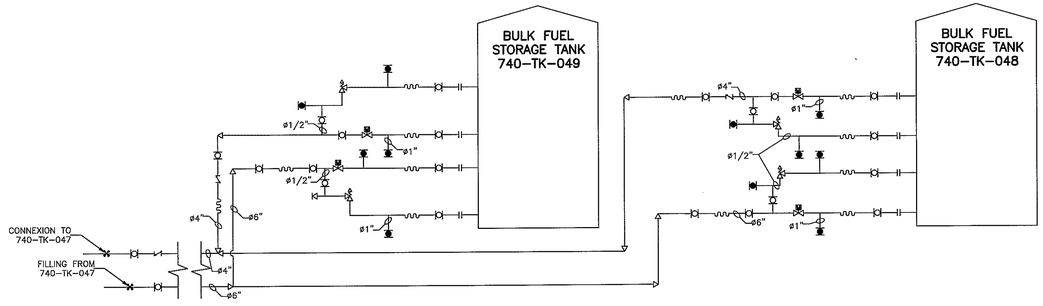
FORMAT ARCHD





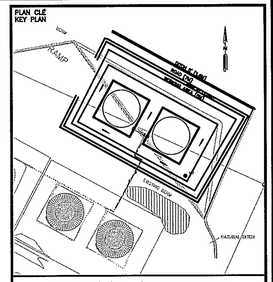
Piping	Symbol	Equipment	Details	Type	Models	Diameter	Quantity
Filling of Tank 740-TK-048 Tank 740-TK-049		Gate Valve	Integrally reinforced extended body gate, female socket weld outboard end; API STD 602; forged carbon steel; ASTM A 105/A 105M; OS&Y; welded bonnet or bolted bonnet with flexible graphite-filled spiral wound gasket; trim #8; flexible graphite packing; metal tagged V903; Class 800	NA	Velan W-DD-2-17-4W-02-TY (1") or equivalent	1"	2
		Gate Valve	Class 150; flanged, raised-face; API STD 600; carbon steel body, ASTM A 105/A 105M or ASTM A 216/A 216M Grade WCB; OS&Y; solid or flexible wedge; bolted bonnet with stainless steel reinforced flexible graphite bonnet gasket; trim #8; flexible graphite packing; metal tagged VGA01; full port.	NA	Velan F-DD-0-06-4C-02-TY (6") or equivalent	6"	7
		Flanged Mettallc flexible tube	- Flanges: Class 150, raised face and ANSI B16.5; - Metallic flexible tube: 18" length in Stainless Steel	NA	CONNECTALL AA1-096-0180 or equivalent	6"	4
	M	Motorized Valve	- 6" direct mount split body ball valve; - Body materieal: Carbon Steel Body; - SS 316 Trim, Seat Reinforced TFE Seats ; - Flanges: Class 150 raised face and ANSI B16.5; C/W: Actuator Electric Serie XE (XE-6900) ATEX certified for Flame Proof Eexd IIB T4 + Heater	NA	Matheson valves D9C-F1-600-XHE1-XX 6.00	6"	2
		Gasket	Composition: Aramid fibers with a nitril binder Tickness: 1/8"	NA	Garlock Blue guard Style 3000	1" 6"	as required
		Piping	Carbon steel piping sch. 40 ASTM A53 gr.B seamless	NA	NA	1" 6"	as required
Distribution from Tank 740-TK-048 Tank 740-TK-049		Gate Valve	Class 150; flanged, raised-face; API STD 600; carbon steel body, ASTM A 105/A 105M or ASTM A 216/A 216M Grade WCB; OS&Y; solid or flexible wedge; bolted bonnet with stainless steel reinforced flexible graphite bonnet gasket; trim #8; flexible graphite packing; metal tagged VGA01; full port.	NA	Velan F-DD-0-06-4C-02-TY (4") or equivalent	4"	7
		Gate Valve	Integrally reinforced extended body gate, female socket weld outboard end; API STD 602; forged carbon steel; ASTM A 105/A 105M; OS&Y; welded bonnet or bolted bonnet with flexible graphite-filled spiral wound gasket; trim #8; flexible graphite packing; metal tagged V903; Class 800	NA	Velan W-DD-2-17-4W-02-TY (1") or equivalent	1"	2
		Flanged Mettallc flexible tube	- Flanges: Class 150, raised face and ANSI B16.5; - Metallic flexible tube: 18" length in Stainless Steel	NA	CONNECTALL AA1-054-0150 or equivalent	4"	4
		Check valve	- Cast steel flanged check valve ; - Body material: Low temperature cast carbon steel to ASTM A352, grade LCB; - Trim material: Disc - Stainless steel, 13% Cr Seat - Stainless steel, 13% Cr; - Valve: Face to face dimensions to ANSI B16.10; - Flanges: Class 150, raised face and ANSI B16.5.	CKF1 [1]	Kitz 150 SCOBL or equivalent	4"	3
	M	Motorized Valve	- 4" direct mount split body ball valve; - Body materieal: Carbon Steel Body; - SS 316 Trim, Seat Reinforced TFE Seats ; - Flanges: Class 150 raised face and ANSI B16.5; C/W: Actuator Electric Serie XE (XE-2640) ATEX certified for Flame Proof Eexd IIB T4 + Heater	NA	Matheson valves D9C-F1-400-XEE-1-XX 4.00	4"	2
		Gasket	Composition: Aramid fibers with a nitril binder Tickness: 1/8"	NA	Garlock Blue guard Style 3000	1" 4"	as required
		Piping	Carbon steel piping sch. 40 ASTM A53 gr.B seamless	NA	NA	1" 4"	as required
Overpressure line filling tank 740-TK-048 filling tank 740-TK-049		Gate Valve	Integrally reinforced extended body gate, female socket weld outboard end; API STD 602; forged carbon steel; ASTM A 105/A 105M; OS&Y; welded bonnet or bolted bonnet with flexible graphite-filled spiral wound gasket; trim #8; flexible graphite packing; metal tagged V903; Class 800	NA	Velan W-DD-2-17-4W-02-TY (¾") or equivalent	¾"	8
		Flanged Mettallc flexible tube	- Flanges: Class 150, raised face and ANSI B16.5; - Metallic flexible tube: 18" length in Stainless Steel	NA	CONNECTALL AA-B1B1-HHH-0180-0150 or equivalent	¾"	4
		Pressure safety valve	- Stainless steel; - Set pressure at 75 PSI	NA	Swagelok SS-RL4M8F8-BU	¾"	2
		Gasket	Composition: Aramid fibers with a nitril binder Tickness: 1/8"	NA	Garlock Blue guard Style 3000	¾"	as required
		Piping	Carbon steel piping sch. 40 ASTM A53 gr.B seamless	NA	NA	¾"	as required

[1] Reference to "PIPE AND VALVE SPECIFICATION" #0 17202-0000-46ES-1001 by SNC Lavalin 15th august 2007



PIPING DETAILS

PLAN CLÉ
KEY PLAN



NOTES GÉNÉRAL / GENERAL NOTES

1–ALL THE PIPING CONNECTION MUST BE AT THE BOTTOM OF THE TANK

POUR CONSTRUCTION
FOR CONSTRUCTION
DATE : 12/08/2010
AGNICO-EAGLE

DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE	# DWG
–	–
–	–
–	–
–	–
–	–
–	–

AGNICO-EAGLE

REV.	DATE	DESCRIPTION	DES./DR.	APP.	CLIENT
0	2010-08-12	FOR CONSTRUCTION	MA.BÉD	JM.C	
B	2010-07-20	FOR APPROVAL	V.Crè.	JM.C	
A	2010-07-16	FOR APPROVAL	V.Crè.	JM.C	

REVISIONS

L-2198
2010-08-12

TITRE / TITLE

AGNICO–EAGLE – MEADOWBANK DIVISION
BAKER LAKE AREA 740
TANK #5 AND #6
FUEL DISTRIBUTION PIPING
LAYOUT AND DETAILS

DESSINÉ PAR DRAWN BY	VICKY CRÈTE, TECH.	DATE 2010-07-16
VERIFIÉ PAR CHECKED BY	J–M CHARRON, Ing.	
APPROUVÉ PAR APPROVED BY	J–M CHARRON, Ing.	
ÉCHELLE SCALE	N/A	DATE

NO. DESSIN DRAWING NO. 740–M–0100

NO. PROJET PROJECT NO.	REVISION	FEUILLE / SHT
MEAD–I–400	0	1 / 1

AE–CART–ARCH D

\\groupe\stanbet\Projet\300–INI\VD2622\001\Dessins maitres\75–PEF\VD2622–001(MEAD–I–400)00.dwg, 12 Aoû 2010

FILE NO. VD2622–001(MEAD–I–400)00.dwg

APPENDIX 2

SAFE FILL LEVELS FOR ALL FUEL TANKS

TEMPERATUE OF FUEL in the barge at discharge	MAXIMUM FUEL LEVEL To be read on the VAREC float level	
	TANK # 5	TANK #6
0 °C	9,63	9,63
+ 5 °C	9,67	9,67
+ 10 °C	9,72	9,72
+ 15 °C	9,76	9,76

NOTE: EACH TANK HAS A SLIGHTLY DIFFERENT ELEVATION, SO CARE MUST BE TAKEN DURING HYDRAULIC BALANCING OF TANKS, ESPECIALLY WHEN THOSE ARE FULL