AGNICO EAGLE

MEADOWBANK MINE

Construction Monitoring Report

Airstrip Extension

MAY 2013

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Document Control

Version	Date	Section	Page	Revision
V1	May 31	All	All	

Prepared by:
Agnico Eagle Mines Limited- Meadowbank Division

Approved by:

Kevin Buck- Environment Superintendant

1 INTRODUCTION

1.1 Background

On January 27, 2013, Agnico Eagle Mines: Meadowbank Division (AEM), sent a letter with supporting information entitled "Meadowbank Mine: Airstrip Expansion- NWB Modification Application" (AEM, 2013) to the NWB to modify NWB license 2AM-MEA0815 under Part G to include an expansion of the airstrip. On February 15, 2013, the NWB distributed AEM's submission to interested parties for a fifteen (15) day review. The NWB received comments and approved the modification (Motion No. 2012-B1-019) and AEM was advised to follow the conditions in the letter, supporting information and Type A License accordingly.

On April 6th, 2013 AEM completed the extension of the airstrip from 1,495m x 45m to 1,752m x 45m, to accommodate a Boeing 737. This required an extension to the north end by approximately 18m beyond the ordinary high water mark of Third Portage North. On April 30th, 2013, the first Boeing 737 landed and departed from the Meadowbank mine site.

1.2 NWB Concordance

The following document fulfills the requirements of Part D of the license which requires the submission of as-built drawings and summary of the construction monitoring according to NWB License 2AM-MEA0815 Part D item 26. The Licensee shall submit a Construction Summary Report to the Board, within ninety (90) days following the completion of each structure designed to contain, withhold, divert or retain Waters or Wastes. The Construction Summary Report shall be prepared by a qualified Engineer(s) in accordance with Schedule D, Item 1 (see Table 1.1).

Table 1.1 –Construction Monitoring Report Requirements

	Conformity
Schedule D Item 1 - The Construction Monitoring Report referred to in Part D Item 26 shall include:	
a) A summary of construction activities including photographic records before, during and after construction;	Section 2.1 pg. 5 Appendix A
b) As-built drawings;	Appendix B.
c) Documentation of field decisions that deviate from original plans and any data used to support these decisions;	Section 2.2 pg. 5 Section 3.2.5 pg 8 Appendix A

	Conformity
d) Discussion of mitigation measures implemented during construction and effectiveness;	Section 3.3 pg 8 Section 4 pg 12
e) Monitoring undertaken in accordance with Part D;	Section 3.2 pg 6, Section 3.3 pg 8 Section 3.4 pg 9
f) Blast vibration monitoring for quarrying activity carried out in close proximity to fish bearing waters; and	Section 3.2.4 pg 8
g) Monitoring for sediment release from construction areas.	Section 3.2 pg 6 and Section 3.3 pg 8

1.3 Location of Construction Activity

The airstrip expansion into Third Portage Lake is located at 65° 01'44" N and 96° 05'19" W. (see Figure 1.1).

2 CONSTRUCTION ACTIVITIES

2.1 Summary of Construction Activity

Construction of the in-water portion began on March 21st, with much of the material stock piling and field preparation already in place. All fill material used for construction of the airstrip extension was non-potentially acid generating and non-metal leaching as per Part D Item 8 of the NWB license. As per Part D Item 23 and 25, daily inspections for QA/QC were completed and supervised by Stavibel, a qualified engineering firm, and AEM environment technicians to ensure the AEM (2013) airstrip extension plan was followed, and that construction activities were not creating unexpected erosion. Ice was removed and selected material cobble and boulder material (100- 1000mm or 0-1000mm) was used to construct the base of the airstrip according to the original plan. Crushed material was applied and compacted as per engineered plans.

Photos of the construction activities and a construction report are provided in Appendix A.

2.2 Plan Changes or Deviations

In accordance with Part G, Item 4, as built plans and drawings of the airstrip extension are provided in Appendix B. There were few minor deviations from the originally construction plan presented in AEM (2013). Culverts, originally intended for placement and crossing of dewatering pipes on the East side of the airstrip were not installed, rather the pipes were

moved to another location. Originally culverts were proposed for drainage on the west side of the airstrip. Instead, clean course material was placed to allow for ephemeral water drainage. Compacted rockfill thickness and material changed slightly from the original plan and mitigation will be implemented as required during spring-time. None of these changes were significant deviations from the original plan. All deviations or modifications are presented in the construction report found in Appendix A.

3 MONITORING

3.1 Construction Methods Minimized TSS Disturbance during the Airstrip Expansion

A small portion of the airstrip extension was within the ordinary high water mark of Third Portage Lake thus construction methods were: adapted to minimize the potential introduction and disturbance of TSS, conducted under frozen conditions to prevent TSS spreading by wind currents and TSS monitoring as conducted. Overall operations described in AEM (2013) were followed and as a result there was no risk to fish and fish habitat.

3.2 Methods

3.2.1 TSS Monitoring

As per the Plan submitted with AEM's Modification request, moving, water quality monitoring stations were established approximately 50m (or as close as safety permits) from the front portion of the airstrip expansion platform which extends slightly into Third Portage Lake (TPL).. TSS was sampled at all monitoring stations on a daily basis. The final stations are presented in Figure 2.1.

As per AEM's Dike Dewatering and Monitoring Plan the maximum average concentration and maximum concentration of any grab sample for Total Suspended Solids followed NWB Type A Water License, Part D, Item 23 for the airstrip expansion construction monitoring (Table 3.1).

Table 3.1: Part D Item 24 - Maximum allowable TSS concentrations during construction of any facilities

Parameter	Maximum Monthly Mean (mg/L)	Maximum Concentration of Any Grab Sample (mg/L)
Total Suspended Solids	50	100

During this activity, AEM was committed to proactive, immediate and effective response to any potential TSS exceedance. As a result the monitoring program was designed to provide quick feedback which is based on the previously developed relationship between turbidity and TSS, that allows the use of turbidity as a surrogate for TSS to obtain real-time results. The resulting linear regression was used during construction monitoring based on a larger database of data:

$\log_{10}(\text{turbidity}) = 0.62196 + (0.95619 * \log_{10}(\text{TSS}))$ [$p<0.001$; r^2 adj = 0.81]

where turbidity is measured in NTUs in the field using an Analite NEP 160 meter, and TSS is measured in the lab as mg/L. The TSS-turbidity relationship was developed using paired data collected across a range of TSS sources and concentrations (more details can be found in the Azimuth memo TSS-Turbidity relationship Feb 2010 v3 (AEM, 2013).

Background water chemistry samples (including TSS) levels were taken as part of Core Receiving Environment Monitoring Plan (CREMP) sampling in the 2012 fall and TSS were measured prior to construction at all airstrip extension monitoring stations a few weeks before the in water portion of the airstrip extension began. As per AEM (2013), TSS was determined during daily through turbidity monitoring and TSS samples were submitted weekly for all stations to an accredited external laboratory.

3.2.2 QA/QC

All laboratory analysis during construction was completed by Multilab Direct in Rouyn-Noranda, Que. The results met laboratory QA/QC internal data quality objectives for precision and completeness. The certificates of analyses from Multilab are presented in Appendix C.

A total of four duplicate water samples were collected during the open water season; which is greater than the target of 10% duplicates for QA/QC purposes.

3.2.3 Equipment calibration

Furthermore, to meet the QA/QC objectives, turbidity was measured using the approved McVan's Analite NEP160-3-05R portable turbidity meter/logger with a high sensitivity NEP260 90° probe. The meter was calibrated by qualified technicians and properly maintained following the manufacturer's instructions. Turbidity meters were calibrated before each

sampling event (i.e. daily, in most cases), using the manufactured specified calibration solution. No calibration errors were noted.

3.2.4 Blast Monitoring

No additional blast vibration monitoring was required for the construction of the airstrip extension as quarry material was not taken from areas close in proximity to fish bearing waters. Blast vibration monitoring data for pit operations will be submitted annually as part of the NWB annual report to meet DFO guidance.

3.2.5 Plan Changes or Deviations

No significant deviations were made to the construction monitoring plan presented in AEM (2013). Station IDs changed from SW-1 to SW-5, presented in AEM (2013) to ST-AS-1 to ST- AS-5. Monitoring stations SW1 and SW5 presented in the original plan were located in water that was frozen to the bottom; as a result sampling stations ST-AS-2, ST-AS-3 and ST-AS-4 were the only stations monitored for TSS. No other specifics related to construction monitoring deviated from AEM (2013).

3.3 Results and Discussion

Data was collected at all routine monitoring stations on February 5, 2013 prior to the start of the work below the Third Portage Lake high water mark. Airstrip expansion TSS construction monitoring began on March 20, 2010, one day prior to construction. Routine turbidity monitoring was conducted once daily, weather permitting. Turbidity data indicated that the TSS concentrations at the routine monitoring stations did not exceed the NWB limits. All of the daily maximum TSS results by station and overall by day are presented in Table 3.2. The weekly laboratory results compared to the daily monitoring are presented in Table 3.3. Laboratory certificate of analyses are found in Appendix C. See Appendix C (Table B1) for all of the daily monitoring results by depth.

The daily maximum TSS from March 22nd to April 3rd, 2013 was 1.9 mg/L TSS with a weighted "monthly" average over an 18 day period of 0.7 mg/L. No samples exceeded the 50 mg/L TSS maximum concentration of a grab sample. As a result, no additional mitigation or sampling was required for this construction monitoring.

Table 3.2- 2013 Airstrip Extension Monitoring Results by Station and Daily maximum, average and weighted average (during the 18 day period of construction).

Date	ST-AS-2		ST-AS-3		ST-AS-4		Daily Maximum	
	Max NTU by day	Max TSS per day	Max NTU by day	Max TSS per day	Max NTU by day	Max TSS per day	Max NTU by day	Max TSS per day
2013-02-05	0.0	0.0	0.0	0.0	0.3	0.1	0.3	0.1
2013-03-13	0.0	0.0	0.2	0.0	0.1	0.0	0.2	0.0
2013-03-20	0.4	0.1	0.0	0.0	1.6	0.4	1.6	0.4
2013-03-22	3.4	0.8	0.3	0.1	1.9	0.4	3.4	0.8
2013-03-23	1.6	0.4	0.3	0.1	0.4	0.1	1.6	0.4
2013-03-24	1.9	0.4	3.0	0.7	1.9	0.4	3.0	0.7
2013-03-25	0.6	0.1	3.3	0.8	1.5	0.3	3.3	0.8
2013-03-26	0.5	0.1	0.7	0.2	1.3	0.3	1.3	0.3
2013-03-27	0.6	0.1	0.5	0.1	1.1	0.2	1.1	0.2
2013-03-28	2.0	0.5	2.5	0.6	0.7	0.2	2.5	0.6
2013-03-29	3.8	0.9	0.6	0.1	0.4	0.1	3.8	0.9
2013-03-30	5.3	1.3					5.3	1.3
2013-03-31	7.4	1.8	5.8	1.4	1.5	0.3	7.4	1.8
2013-04-01	7.8	1.9	3.4	0.8	5.0	1.2	7.8	1.9
2013-04-02	6.9	1.7	5.5	1.3	4.0	0.9	6.9	1.7
2013-04-03	2.5	0.6	1.2	0.3	2.1	0.5	2.5	0.6
2013-04-06	6.1	1.5	3.6	0.8	6.1	1.5	6.1	1.5
Maximum	7.8	1.9	5.8	1.4	5.0	1.2	7.8	1.9
Average	3.2	0.8	2.1	0.5	1.8	0.4	3.7	0.9
Weighted Average	2.5	0.6	1.5	0.4	1.2	0.3	2.8	0.7

Table 3.3- 2013 Airstrip Extension Weekly Monitoring and Laboratory Results

Sample ID	Depth	Date	Turbidity Measurement (by ENV Dept.)	TSS/ Turbidity correlation		Multilab Results
			NTU	mg/L TSS		mg/L TSS
ST-AS-2	3	5-Feb-2013	0.040	0.0		1.0
ST-AS-3	3	5-Feb-2013	0.010	0.0		1.0
ST-AS-4	3	5-Feb-2013	0.320	0.1		2.0
ST-AS-4 DUP	3	5-Feb-2013	0.32	0.1	<	1.0
ST-AS-2	1	20-Mar-2013	0.410	0.1	<	1
ST-AS-4	2	20-Mar-2013	1.640	0.4	<	1
ST-AS-2	2	24-Mar-2013	1.850	0.4		7
ST-AS-3	3	24-Mar-2013	2.980	0.7		3
ST-AS-3-DUP	3	24-Mar-2013	2.980	0.7		3
ST-AS-4	3	24-Mar-2013	1.890	0.4	<	1
ST-AS-2	1	31-Mar-2013	7.4	1.8		25
ST-AS-2 Dup	1	31-Mar-2013	5.8	1.4		23
ST-AS-3	1	31-Mar-2013	5.8	1.4		3
ST-AS-4	1	31-Mar-2013	1.5	0.3		7
ST-AS-2	1	6-Apr-2013	6.1	1.5		10
ST-AS-2 Dup	1	6-Apr-2013	6.1	1.5		7
ST-AS-3	1	6-Apr-2013	3.6	0.8	<	1
ST-AS-4	1	6-Apr-2013	6.1	1.5		2

3.4 CREMP Monitoring

As discussed in AEM (2013), Core Receiving Environmental Monitoring Program (CREMP) monitoring was conducted in April at nearby stations in Third Portage Lake north basin. There are no changes to water quality or aquatic biota that warrant additional discussion; results for these monitoring will be presented in the 2013 annual CREMP report.

3.5 Additional Sediment and Erosion Control Measures in 2013

As discussed in AEM (2013), if deemed necessary, turbidity curtains will be deployed along the face of the airstrip extension to contain sediment and erosion during freshet and during the open water season. If deemed necessary, additional TSS monitoring at ST-AS 2 to 4 will be conducted during this time.

4 SUMMARY AND CONCLUSIONS

The provided as-built plans (Appendix B), construction inspections, erosion control measures and construction monitoring of TSS met the various sections of Part D and G of the NWB Type A license related to construction monitoring.

As presented in AEM (2013), the construction monitoring of the airstrip extension below the Third Portage Lake high water mark, used turbidity as a surrogate for TSS (using a TSS/turbidity correlation) which provided AEM with the ability to forecast TSS levels and prevent licence limit exceedances. Routine monitoring was completed at 3 stations that were not frozen to depth. TSS samples were collected on a weekly basis and submitted to a CALEA certified laboratory to verify TSS according to the license.

The combination of construction management measures (winter construction and material placement practices) effectively controlled and eliminated increased levels of TSS inputs into Third Portage Lake. Throughout the airstrip expansion construction, TSS monitoring did not exceed the 50 mg/L limit. Furthermore, no weekly laboratory TSS levels exceeded the license limits. As a result, no mitigative action was required.

5 REFERENCES

Agnico Eagle Mines (AEM 2013). Meadowbank Mine Airstrip Expansion- NWB Modification Application. January 2013. Submitted along with a cover letter to the NWB on January 27, 2013.

Figure 1: Location airstrip expansion

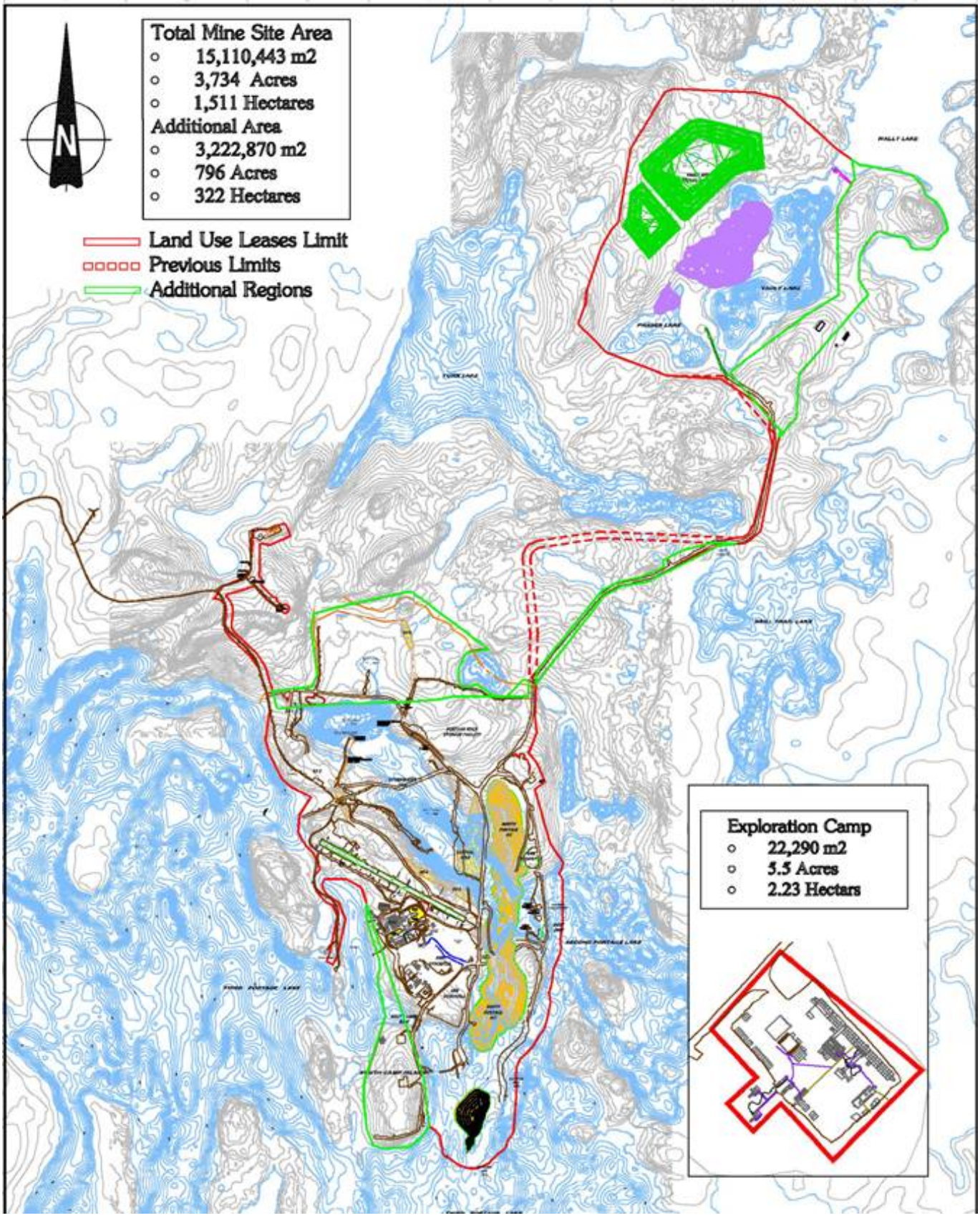
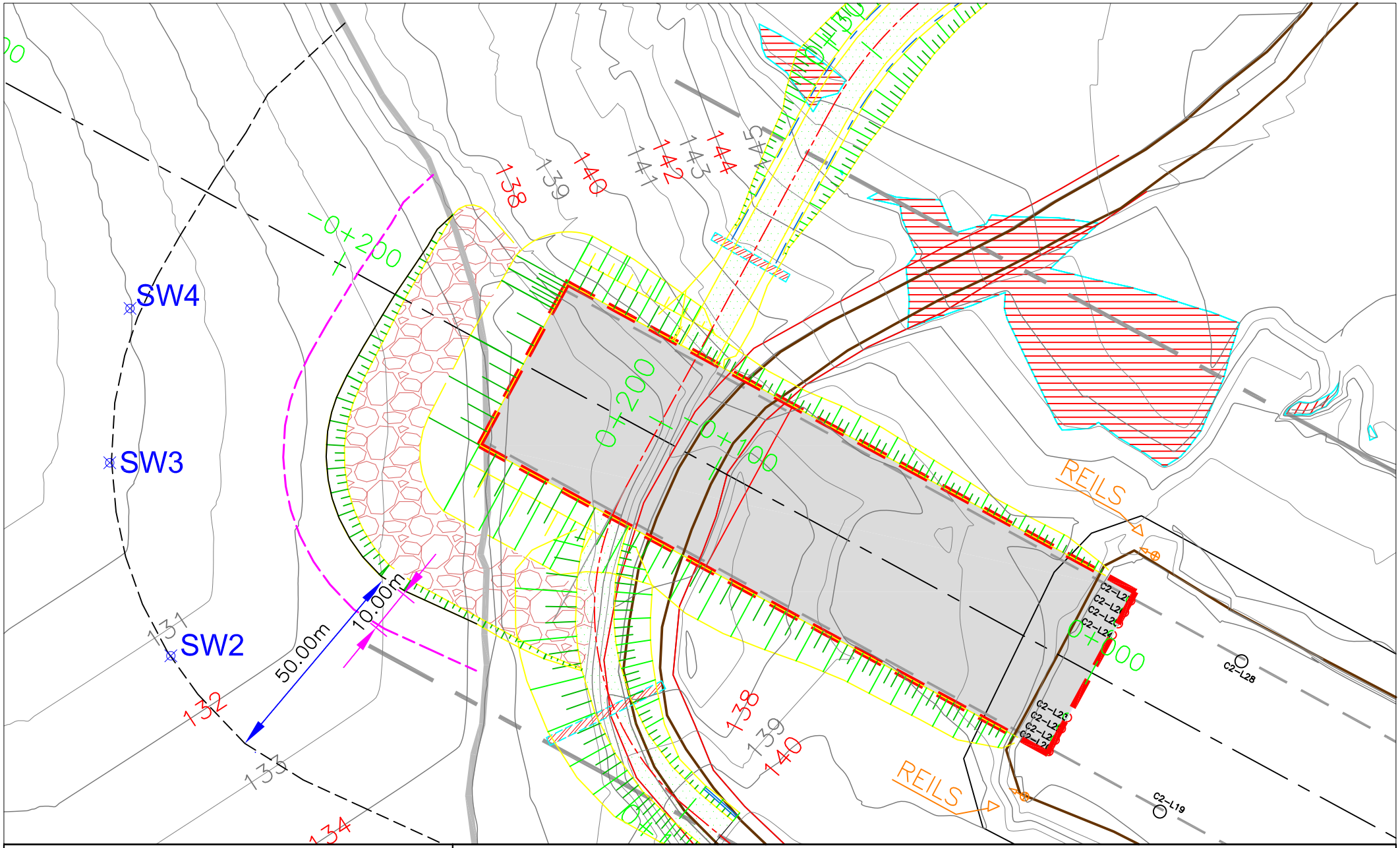

Total Mine Site Area
15,110,443 m2
3,734 Acres
1,511 Hectares
Additional Area
3,222,870 m2
796 Acres
322 Hectares
Land Use Leases Limit
Previous Limits
Additional Regions
Exploration Camp
22,290 m2
5.5 Acres
2.23 Hectars

Figure 2: TSS Monitoring Station



AGNICO-EAGLE

MEADOWBANK DIVISION

Representation of surface water sampling and turbidity barrier locations for airstrip extension project

Drawn By: M.Legault Modified By: D. Gravel

Date : 14/02/2013

Legend : Surface water Sampling Location — — — — — — Turbidity Barrier Location

Appendix A: Stavibel construction monitoring summary report, construction photos & drawings

AGNICO EAGLE

CONSTRUCTION REPORT

STAVIBEL

Project :	Meadowbank Airstrip Expansion	Date : 2013-06-03	
Project # :	OP-79853-J /VD3245	Document #:	VD3245-001
Prepared by :	Michaël Racine, tech.	Contractor :	Fernand Gilbert Ltée
		Verify by :	Richard Marcoux, ing.

Table des matières

1.0 CONSTRUCTION ACTIVITIES

1.1 *Summary*

1.1.1 East side airstrip expansion

Airstrip extension lenght :	116 meters
Machinery :	1 Bulldozer (D8 or D9) 1 Excavator (CAT 345) 5 or less Haul trucks between 50 and 150 tons. 1 Compactor 10 tons 1 Loader 1 Grader
Materials and quantities :	17 572 m^3 of rockfill 0-1000mm NPAG 2094 m^3 of crushed 0-150mm NPAG 1103 m^3 of crushed 0-20mm NPAG
Work duration :	11 days (2012/12/10 to 2012/12/21)

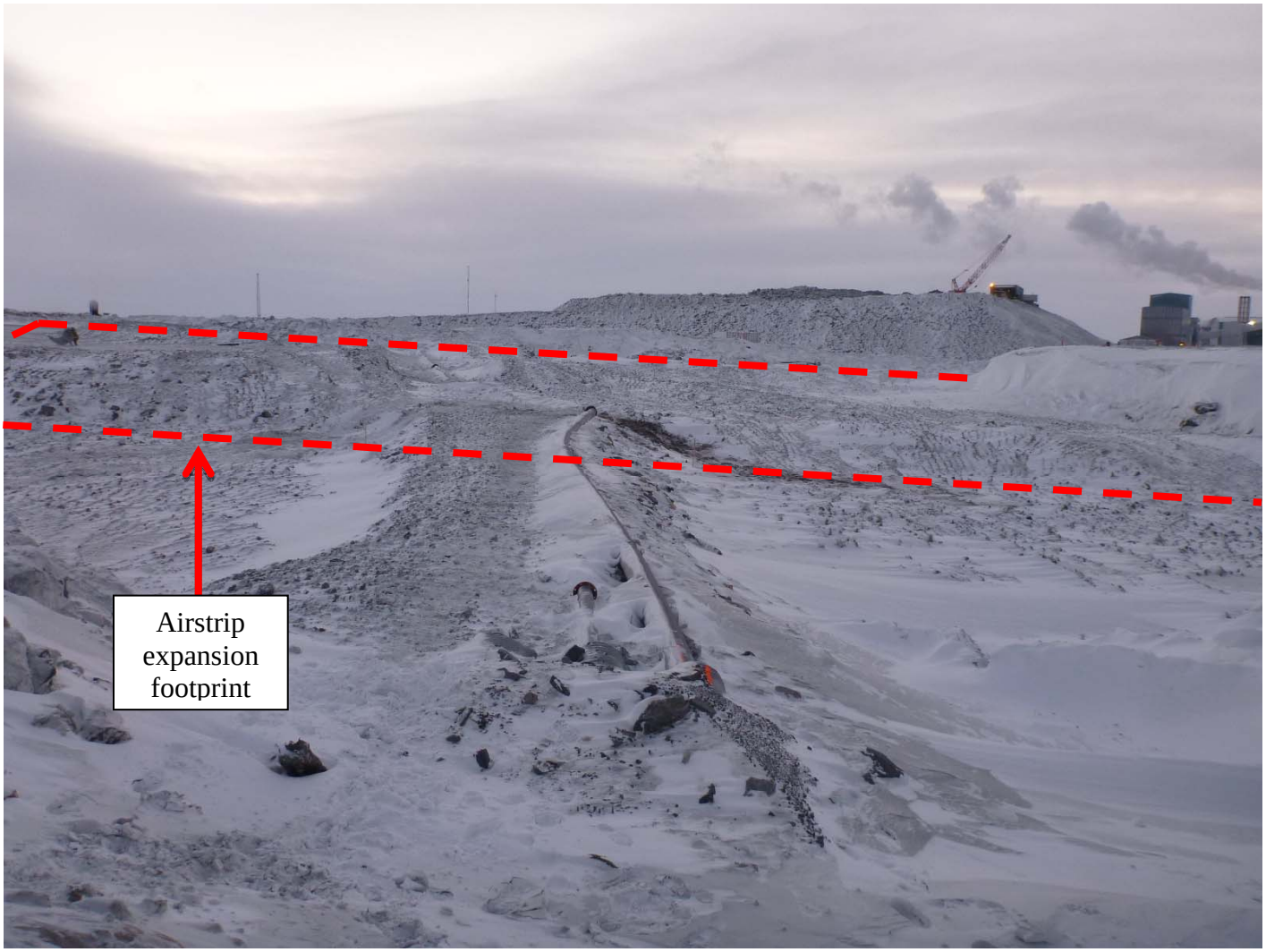
1.1.2 West side airstrip expansion and road construction

Airstrip extension lengh :	152.5 meters
Machinery :	1 Bulldozer (D8) 2 Excavators (CAT 345 and 365) 5 or less Haul trucks between 50 and 150 tons. 1 Compactor 10 tons 1 Loader 1 Grader
Materials and quantities :	3607 m3 of selected rocks 100-1000mm NPAG 55 104m^3 of rockfill 0-1000mm NPAG 1970 m^3 of crushed 0-150mm NPAG 2502 m^3 of crushed 0-20mm NPAG (airstrip + road)
Work duration :	39 days (2013/01/07 to 2013/01/27 and 2013/03/20 to 2013/04/06)

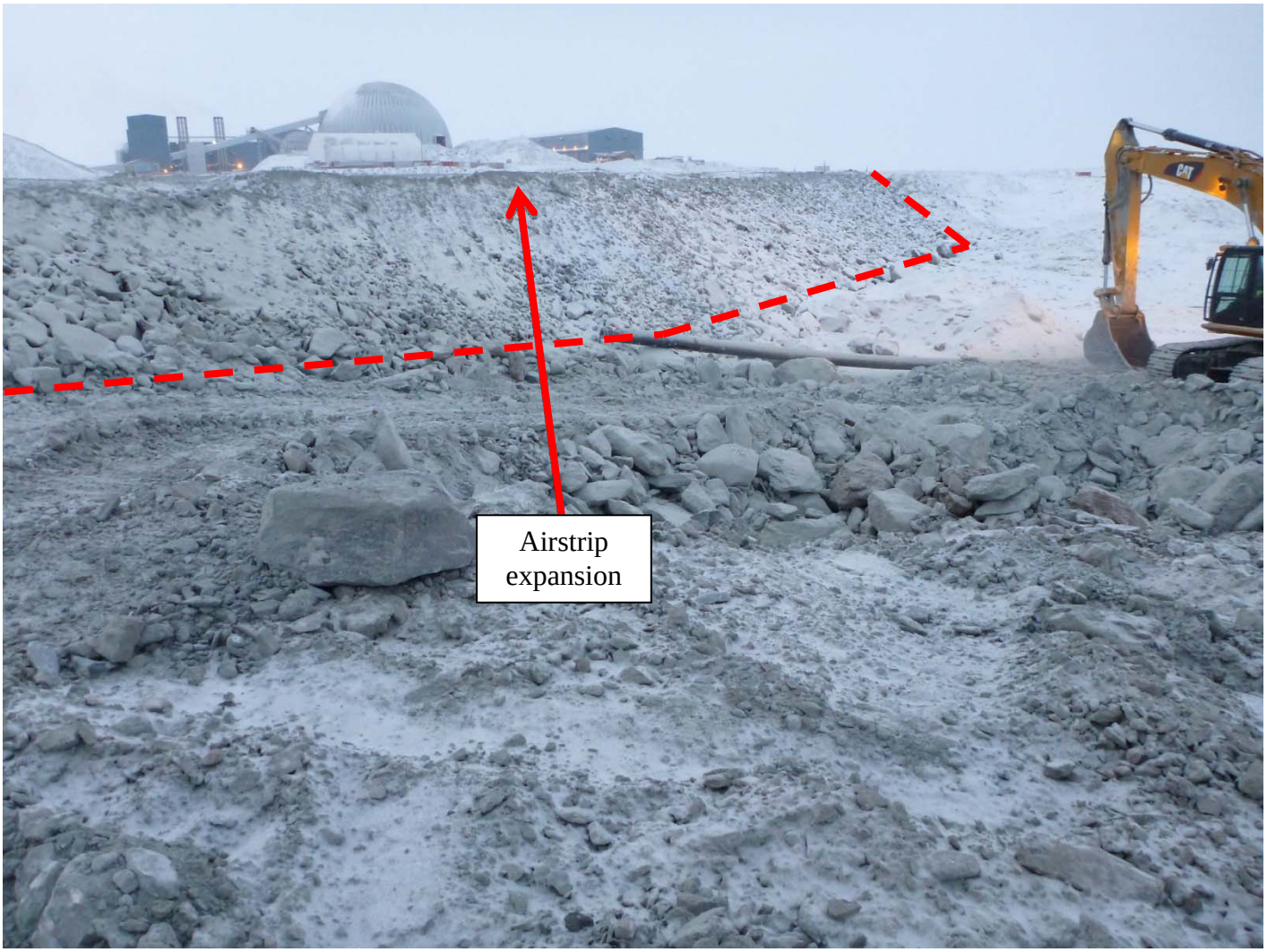
1.2 *Photos*

1.2.1 East side airstrip expansion

- Photo #01, – Before airtstrip construction (East expansion)



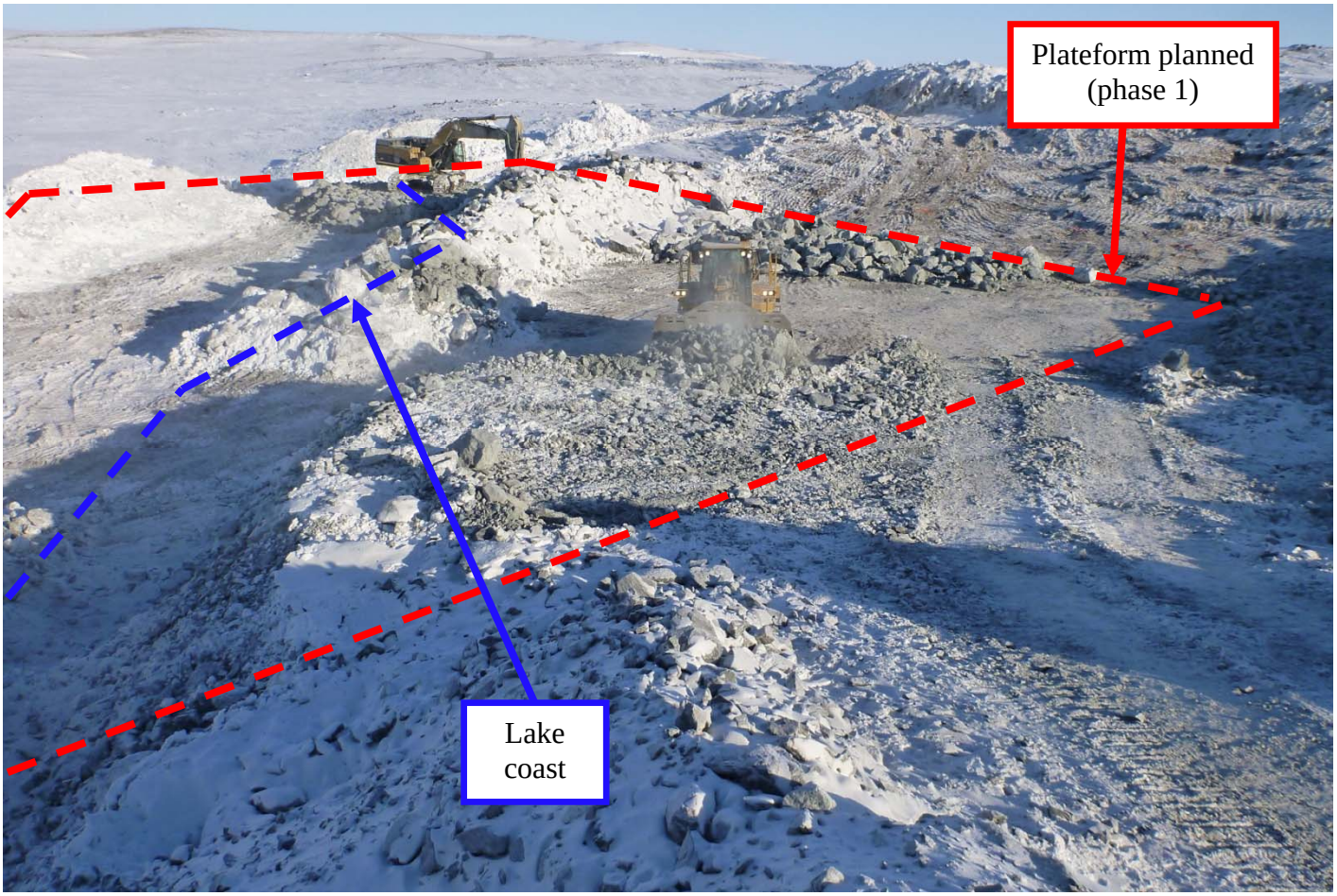
- Photo #02, – After airtstrip construction (East side).



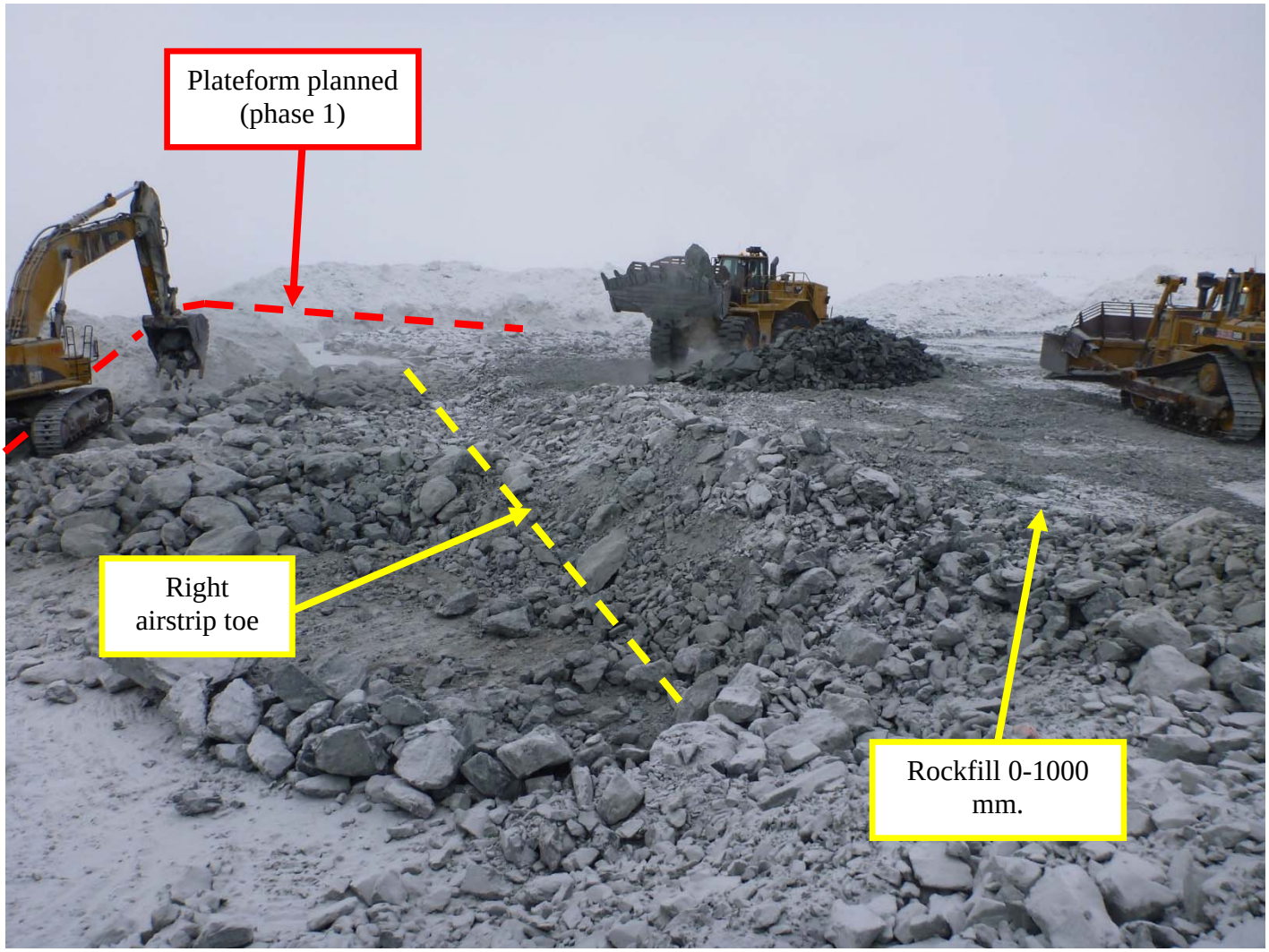
1.2.2 West side airstrip expansion and road construction

- Photo #03, – Before airtstrip construction (West expansion)

- Photo #04, – Removal of ice and construction of the platform (phase 1) with selected rocks 100-1000mm until reaching elevation 135.1m (1 meter above the lake).

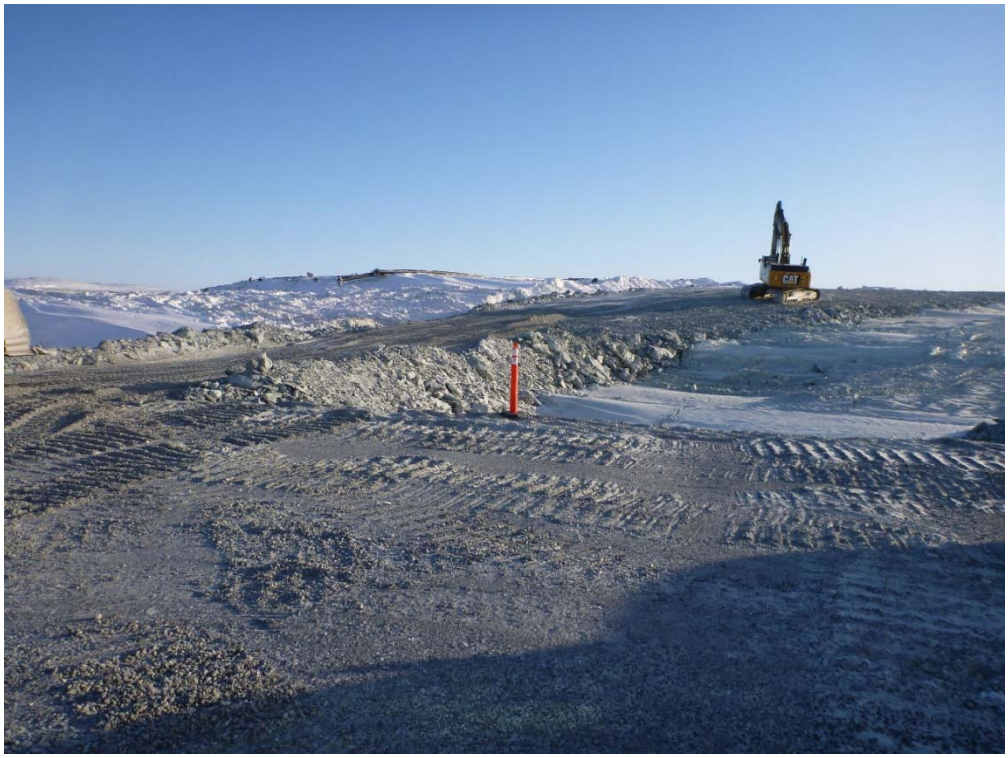


- Photo #05, – Construction of the phase 1 platform with selected rocks 100-1000mm and rockfill 0-1000mm above this platform. The excavator was inspectedby mechanics to ensure there is no leaking of oil. The top of the boom was cleaned to remove any contaminated snow that could melt during operations near the lake.



- Photo #06, – After airtstrip construction (West side).

- Photo #07 et 08, – New Road that pass on the airstrip runway (west side)



2.0 MODIFICATIONS DURING CONSTRUCTION

2.1 *Culverts on East side*

The 5 proposed culverts under the airstrip between 1+500 and 1+550 were removed from the original plan. These culverts were planned to to allow for the crossing of dewatering pipes (not related to this project).. AEM decided to move the pipes to another location.

2.2 *Culverts on West side*

The 2 proposed culverts under the road at 0+130 and 0+223 have been replaced by beds of clean rock because they offer better draining according to the topography of the site.

2.3 *Increase tickness of crushed stone 0-20 mm.*

The thickness of the crushed stone 0-20 mm on the airstrip between -0+080 and -0+152.5 was increased to 300mm (instead of 150 mm) and the layer of minus 150mm was reduced to 300mm (instead of 450mm). The reason for this is that there was a shortage of minus 150mm. In brief, part of the minus 150 mm was replaced by 0-20mm.

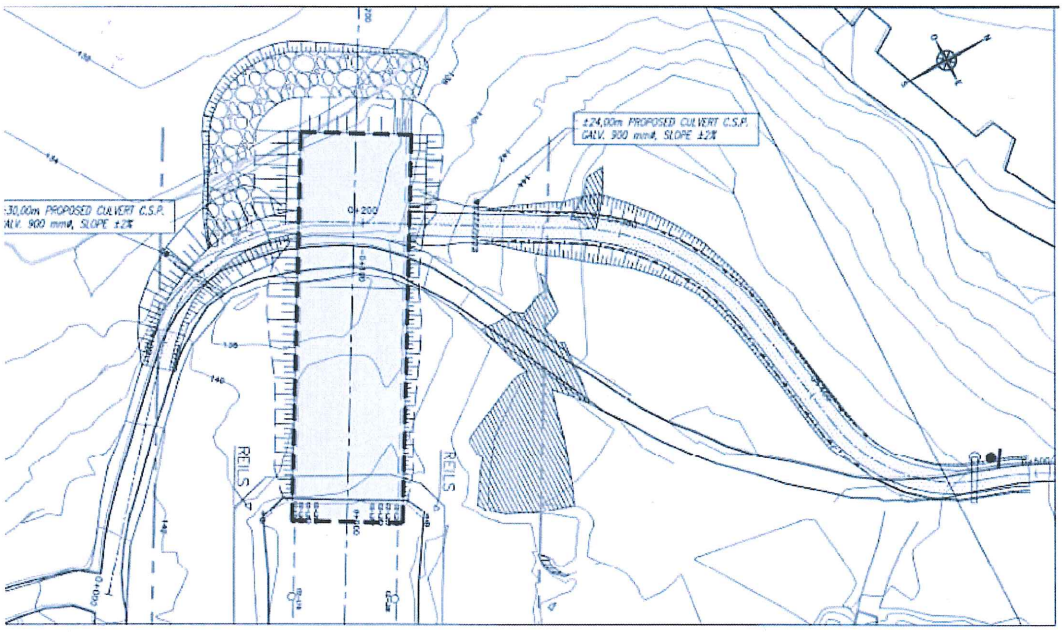
2.4 *Phase 2 : rockfill*

The specifications of the plans (for construction)» suggested filling material of selected rocks between 100 and 1000mm. According to the low risk of turbidity/TSS potentially generated by the rockfill of the phase 2 (rockfill 1m above water and higher), it was decided that the phase 2 would be constructed with rockfill 0-1000mm. Turbidity barriers will be used in thawing period if there is any signs of contamination into the lake.

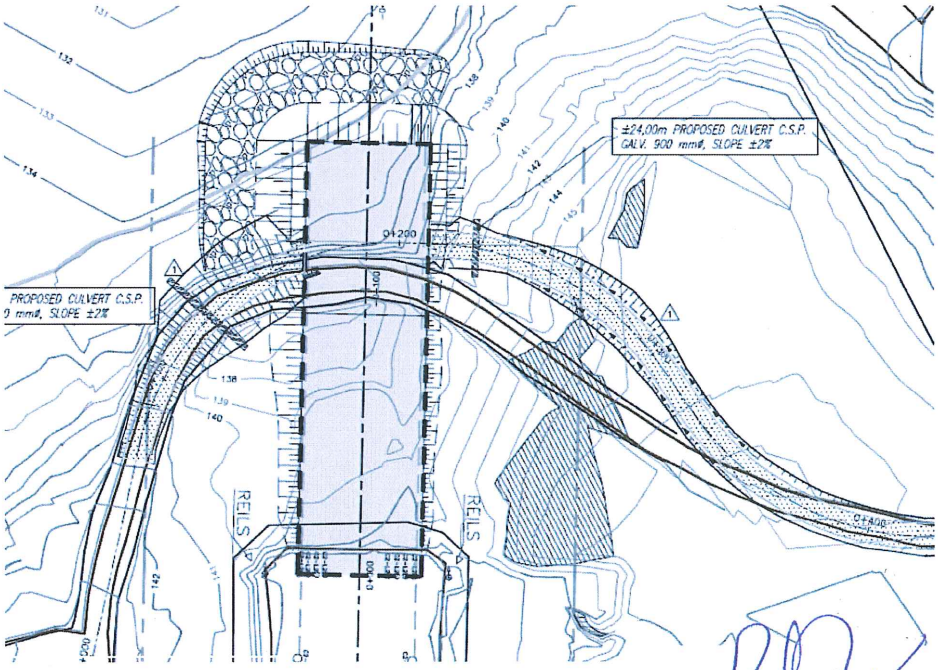
2.5 *Modification of road location*

The road was moved to reduce to the construction footprint and was constructed in accordance with the topography. This modification allowed for the elimination of blasting near the lake. The two figures below show the differences between planned road and constructed road.

Before :



After :



REGISTERED PROFESSIONAL ENGINEER
R. MARCOUX
LICENSEE
NT/NU

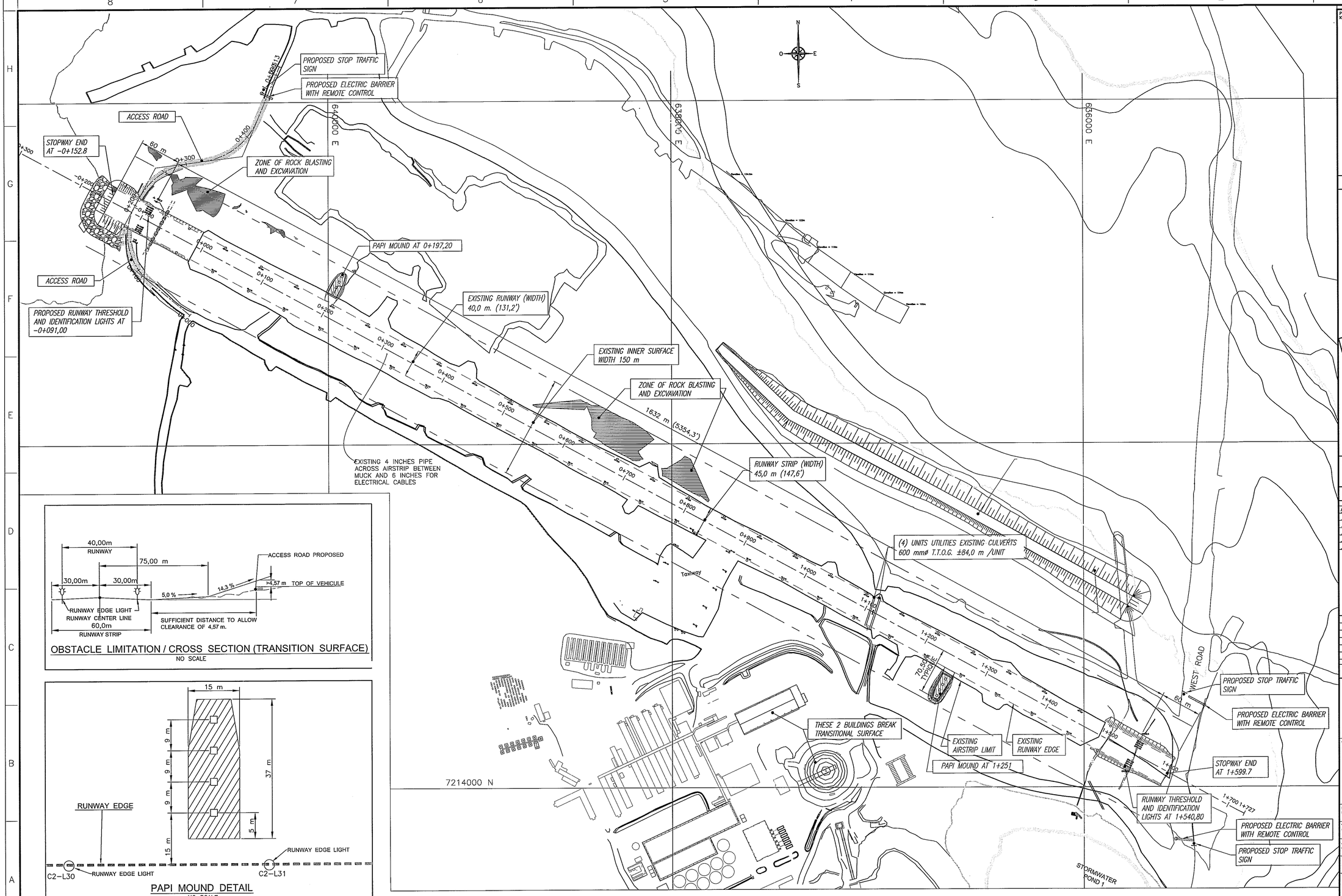
Michaël Racine, tech

Richard Marcoux, ing.
No. OIQ : 38724

Appendix B: As-built drawings

NO. DESSIN DRAWING NO. MEAD-620-230-200_1

FORMAT ARCHD



OBSTACLE LIMITATION / CROSS SECTION (TRANSITION SURFACE)

NO SCALE

PAPI MOUND DETAIL

NO SCALE

PLAN VIEW – AIRPORT DESIGN

SCALE: 1:2500

PLAN CLÉ
KEY PLAN

NOTES GÉNÉRAL / GENERAL NOTES

■ BASE ON SURVEY TAKEN BY AGNICO-EAGLE NOVEMBER 2012

TEL QUE CONSTRUIT
AS BUILT
AGNICO EAGLE
DATE : 2013/06/07

DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE	# DWG
AIRSTRIP DESIGN FOR B737-200	MK01-620-230-100-A

AGNICO EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT
▲1	2013-06-07	AS BUILT	Y.B.	R.M.	A.H.
0	2012-12-07	FOR CONSTRUCTION	Y.B.	R.M.	A.H.
B	2012-12-03	FOR APPROVAL	Y.B.	R.M.	A.H.
A	2012-11-19	FOR APPROVAL	Y.B.	R.M.	A.H.

REVISIONS

REGISTERED PROFESSIONAL ENGINEER
R. MARCOUX
LICENSEE
NT/NU

TITRE / TITLE

AGNICO-EAGLE – MEADOWBANK DIVISION
AIRPORT DESIGN FOR BOEING 737
CODE NUMBER : 3 CODE LETTER : C
NON-PRECISION APPROACH RUNWAY
1752 m (5748')
2012 EXPANSION RUNWAY

DESSINÉ PAR DRAWN BY	YVES BOISVERT , T.P.	DATE 2012-11-19
VERIFIÉ PAR CHECKED BY	RICHARD MARCOUX, ing.	2012-11-19
APPROUVÉ PAR APPROVED BY		
ÉCHELLE SCALE	1 : 2500	DATE 19 NOVEMBRE 2012
NO. DESSIN DRAWING NO.	MEAD-620-230-200_1	
NO. PROJET PROJECT NO.	OP-79853-J	REVISION 1 / FEUILLE / SHT 1 / 1

AE-CART-ARCH D

P:\200-VD\VD3245\002\Dessins maitres\30-Civil\TOC\DWG\MEAD-620-230-200_1.dwg-2013-06-17 14:28:22

FILE NO. MEAD-620-230-200_1.DWG

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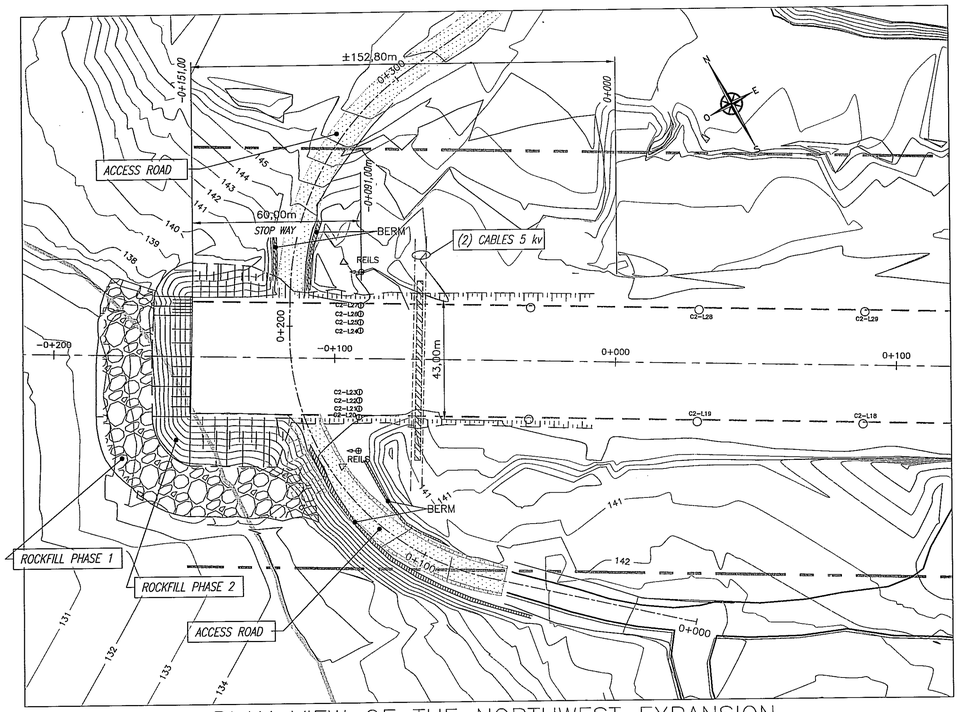
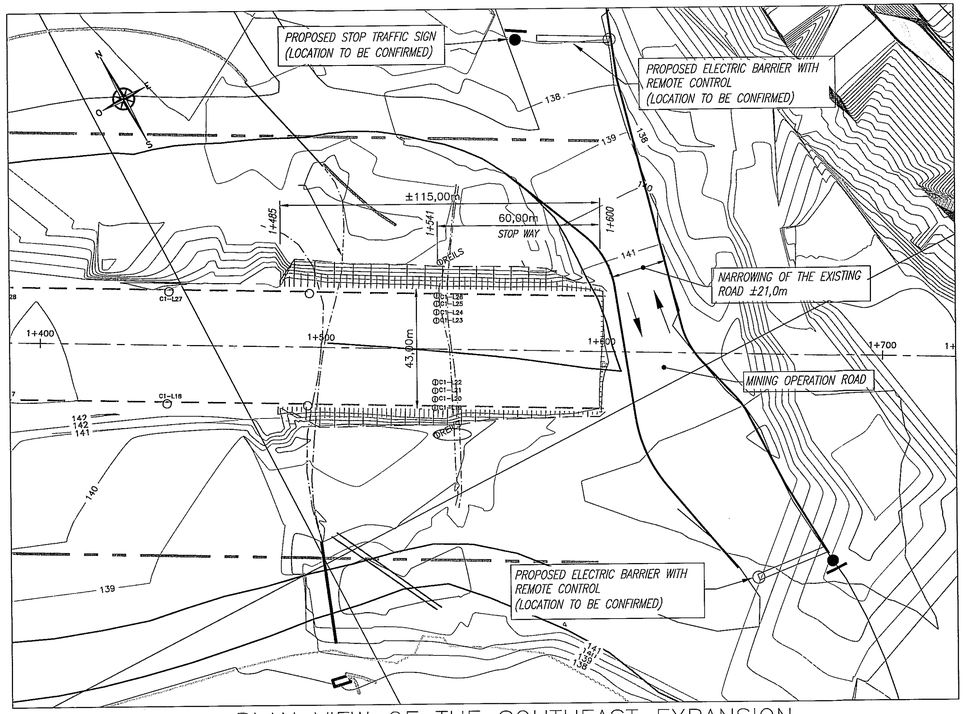


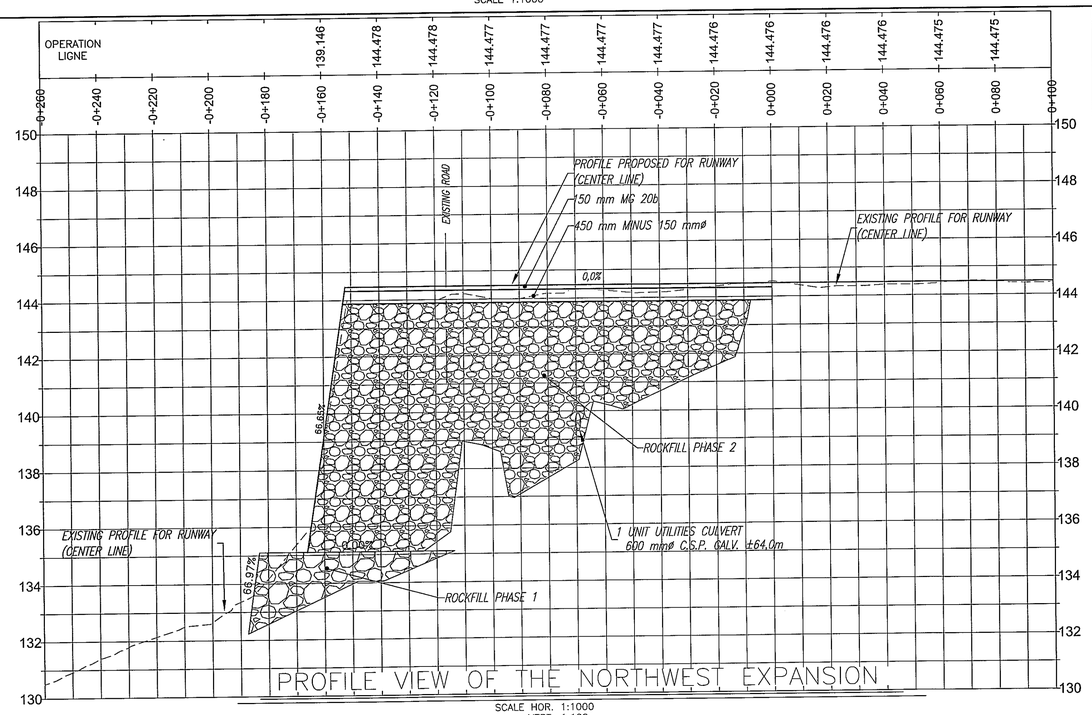
PLAN VIEW OF THE NORTHWEST EXPANSION

SCALE 1:1000



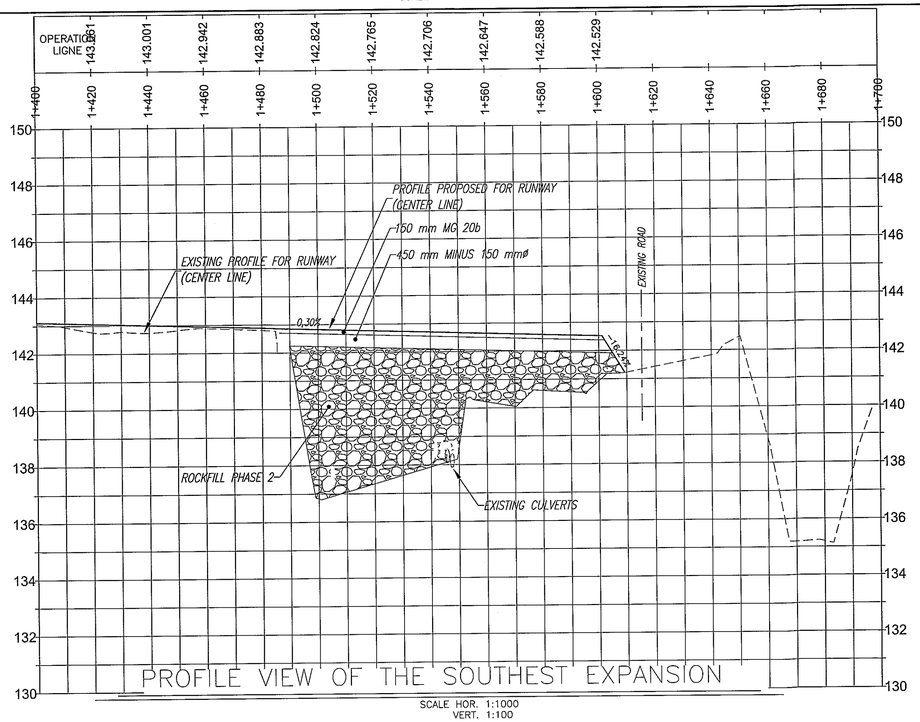
PLAN VIEW OF THE SOUTHEAST EXPANSION

SCALE 1:1000



PROFILE VIEW OF THE NORTHWEST EXPANSION

SCALE HOR. 1:1000
VERT. 1:100



PROFILE VIEW OF THE SOUTHEST EXPANSION

SCALE HOR. 1:1000
VERT. 1:100

PLAN CLÉ
KEY PLAN

NOTES GÉNÉRAL / GENERAL NOTES

TEL QUE CONSTRUIT
AS BUILT
AGNICO EAGLE DATE : 2013/06/07

DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE	# DWG
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AGNICO EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT
1	2013-06-07	AS BUILT	Y.B.	R.M.	A.H.
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B	2012-12-03	FOR APPROVAL	Y.B.	R.M.	A.H.
A	2012-11-19	FOR APPROVAL	Y.B.	R.M.	A.H.

REVISIONS

REGISTERED PROFESSIONAL ENGINEER
R. MARCOUX
LICENSEE
NT/NU

TITRE / TITLE
AGNICO-EAGLE – MEADOWBANK DIVISION
AIRPORT DESIGN FOR BOEING 737
CODE NUMBER : 3 CODE LETTER : C
NON-PRECISION APPROACH RUNWAY
2012 EXPANSION RUNWAY
PLAN AND PROFILE

DESSINÉ PAR / DRAWN BY	YVES BOISVERT , T.P.	DATE 2012-11-19
VÉRIFIÉ PAR / CHECKED BY	RICHARD MARCOUX, ing.	2012-11-19
APPROUVÉ PAR / APPROVED BY		
ÉCHELLE / SCALE	1 : 1000	DATE 19 NOVEMBRE 2012

NO. DESSIN / DRAWING NO. MEAD-620-230-201_1

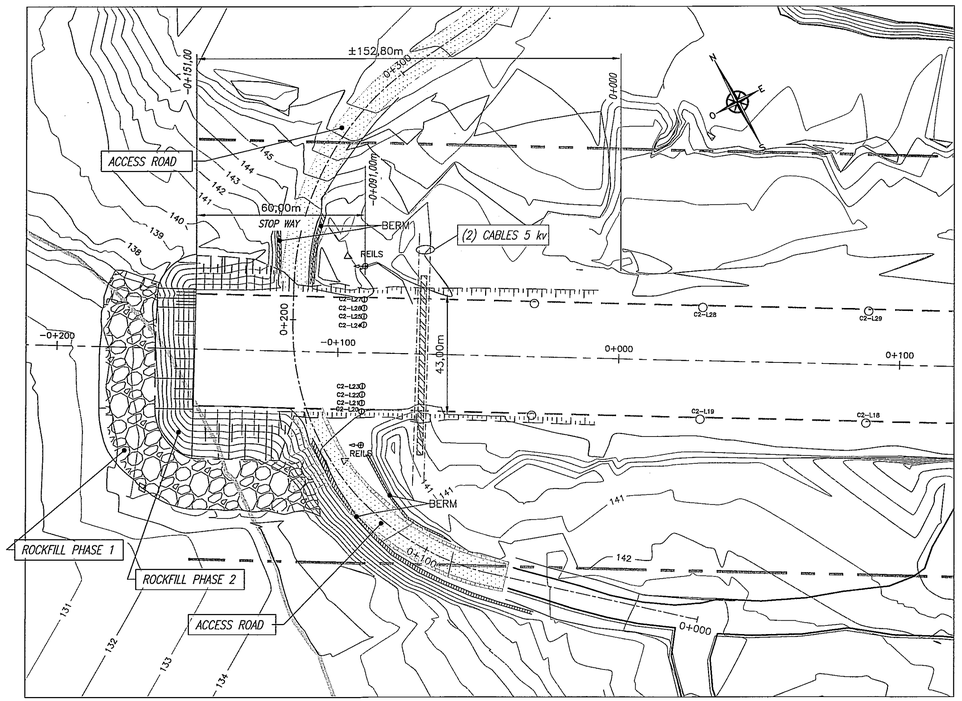
NO. PROJET / PROJECT NO.	REVISION	FEUILLE / SHT
OP-79853-J	1	1 / 1

AE-GART-ARCH D

FILE NO. MEAD-620-230-201_1.DWG

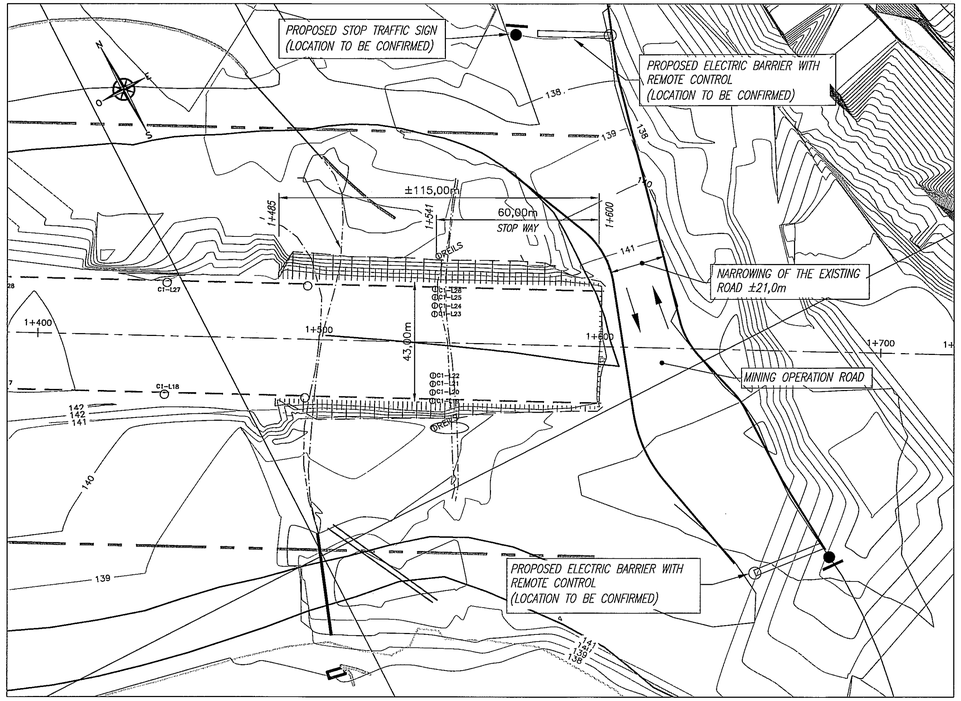
NO. DESSIN
DRAWING NO. MEAD-620-230-201_1

FORMAT ARCHD



PLAN VIEW OF THE NORTHWEST EXPANSION

SCALE 1:1000



PLAN VIEW OF THE SOUTHEAST EXPANSION

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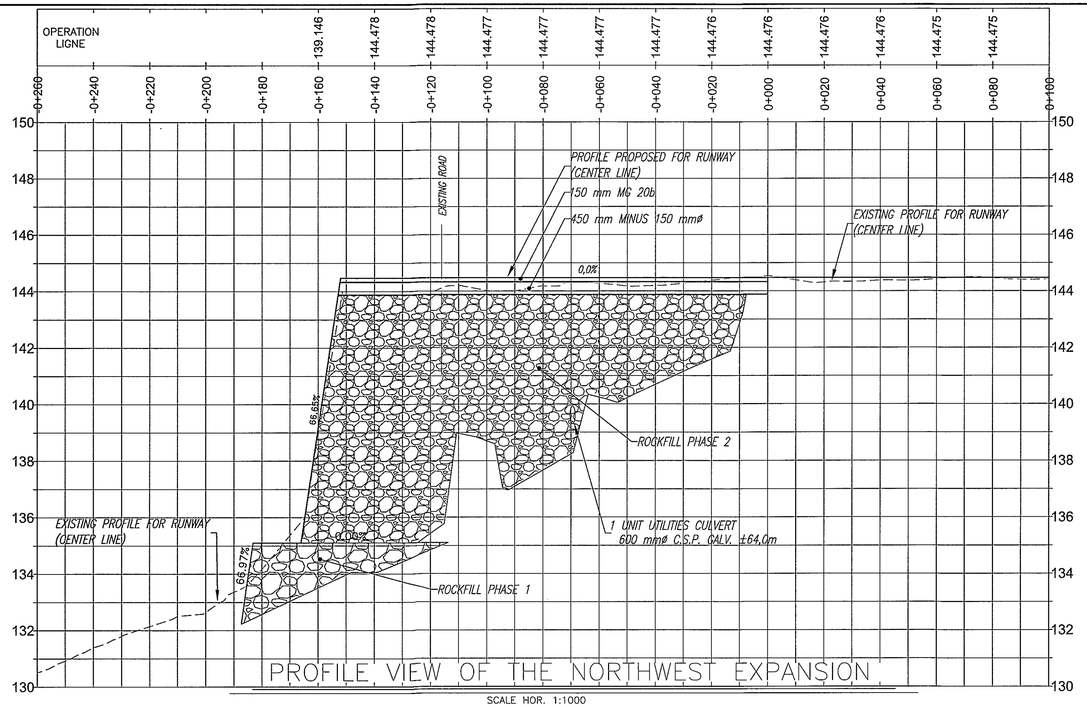

PROFILE VIEW OF THE NORTHWEST EXPANSION

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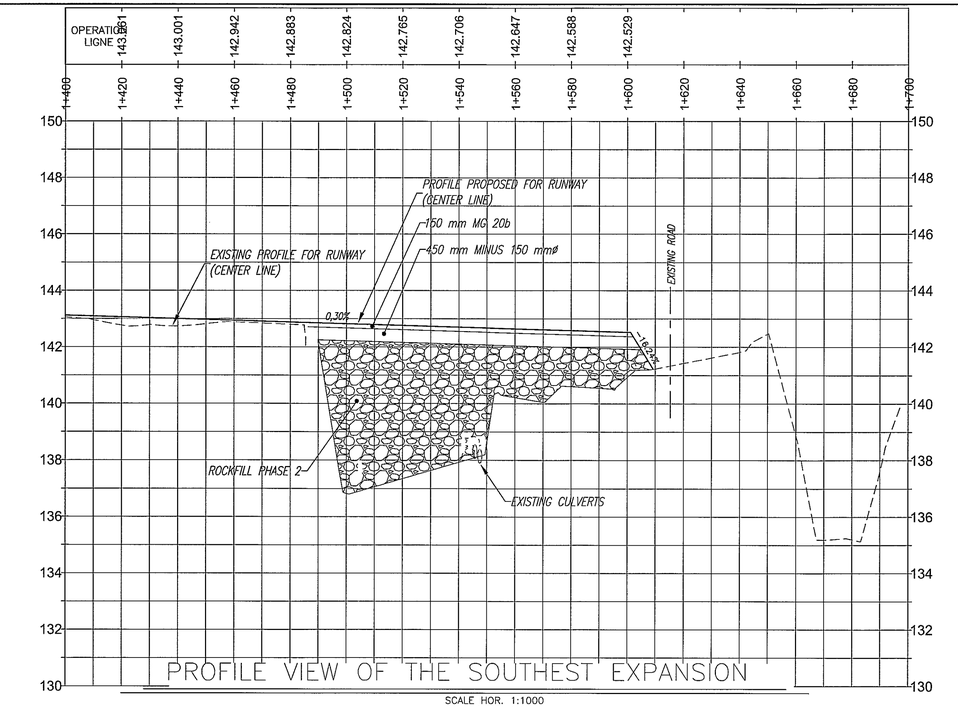

PROFILE VIEW OF THE SOUTHEST EXPANSION

SCALE HOR. 1:1000
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PLAN CLÉ
KEY PLAN

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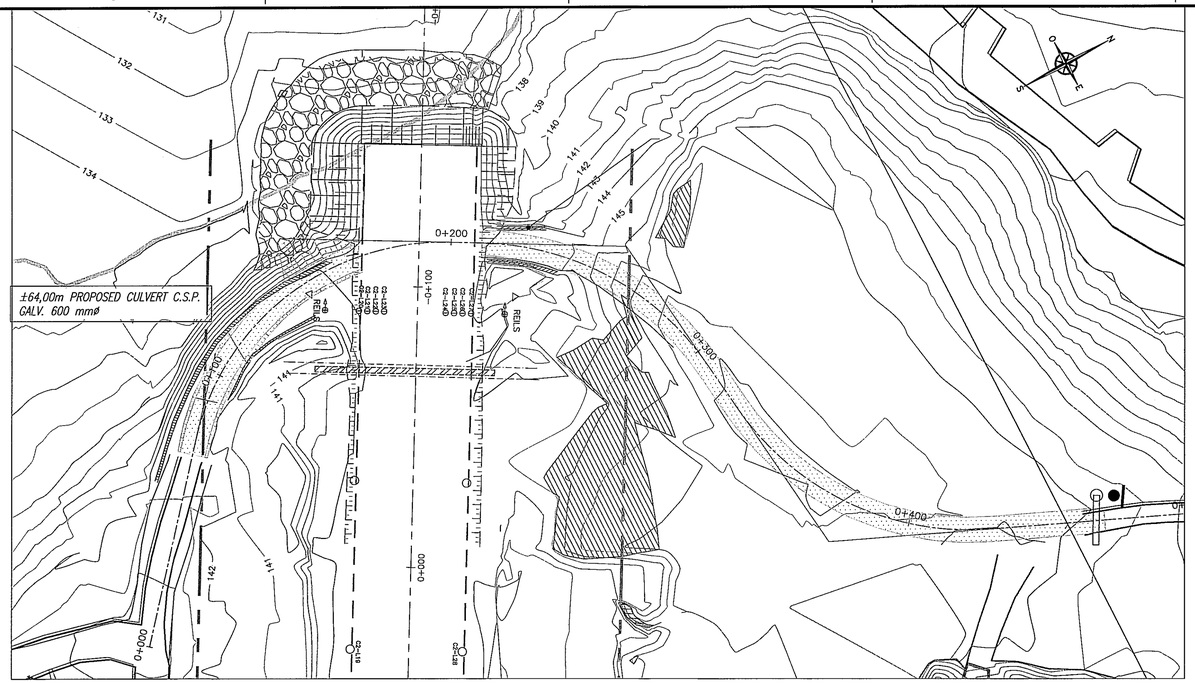
NO. PROJET / PROJECT NO.	OP-79853-J	REVISION 1 / FEUILLE / SHT 1 / 1

AE-CART-ARCH D

FILE NO. MEAD-620-230-201_1.DWG

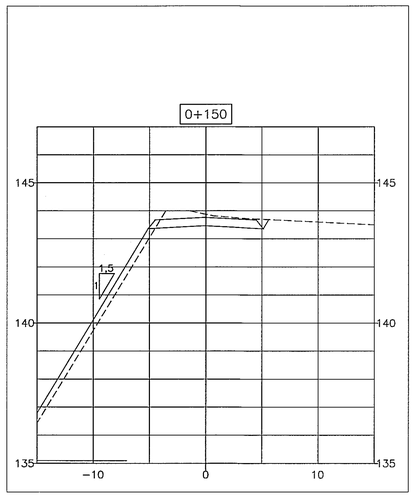
NO. DESSIN
DRAWING NO. MEAD-620-230-202_1

FORMAT ARCHD



PLAN VIEW – ACCESS ROAD

SCALE 1:1000



BACKFILL SECTION

SCALE HOR. 1:250
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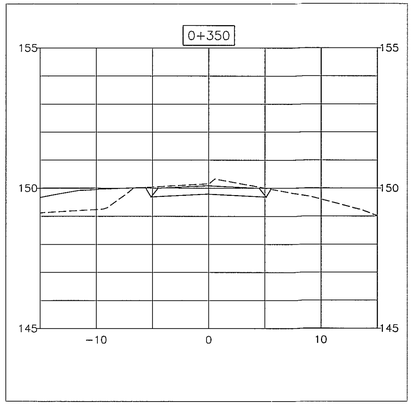

EXCAVATION SECTION

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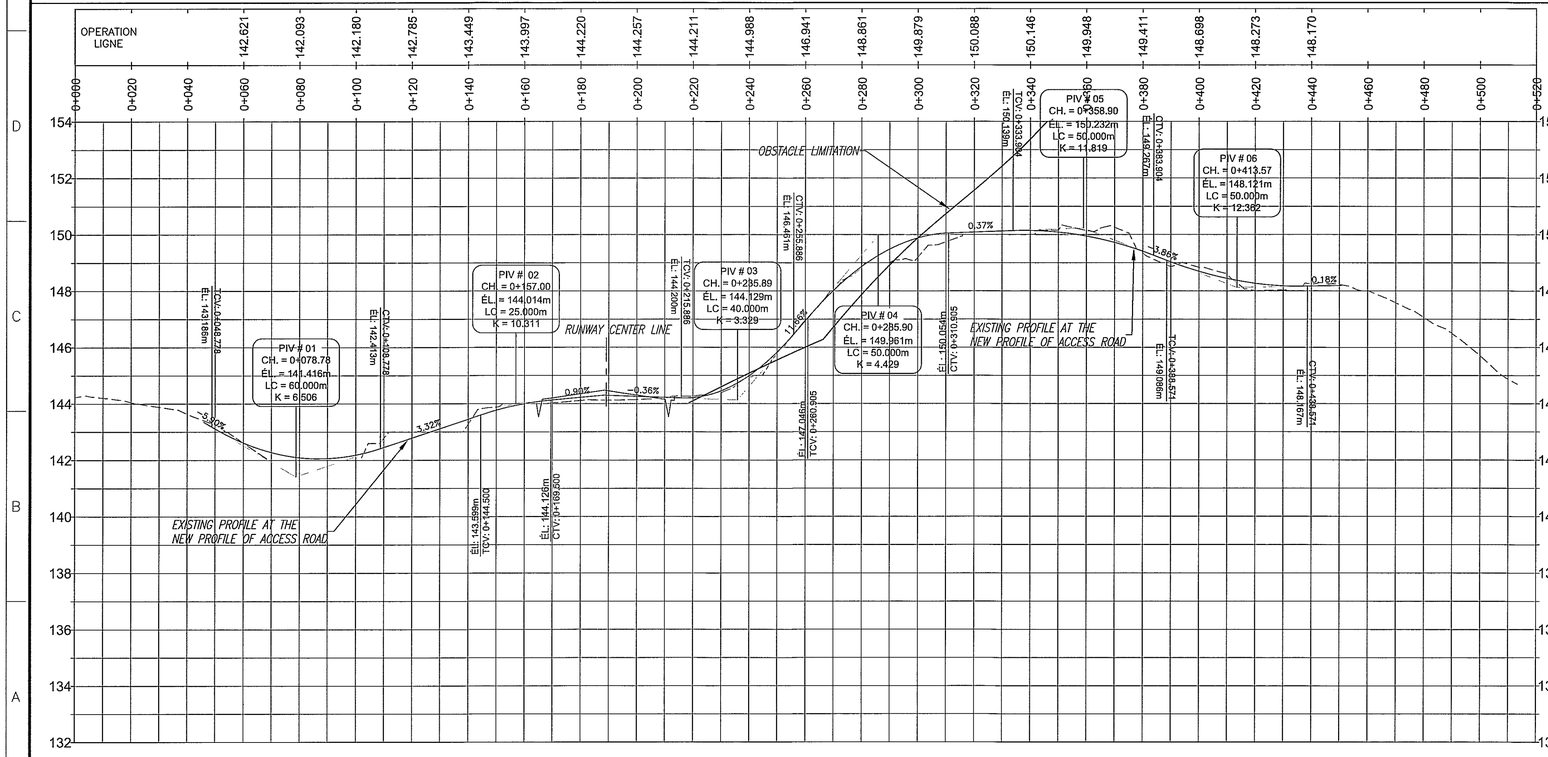

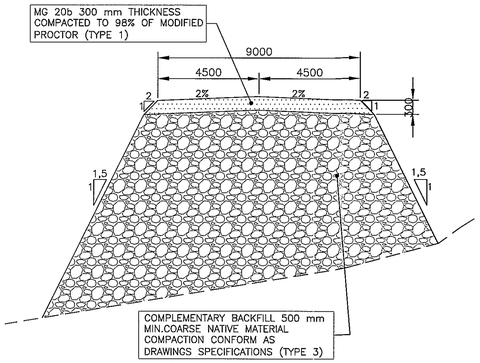

TYPICAL CROSS SECTION

NO SCALE

PLAN CLÉ
KEY PLAN

NOTES GÉNÉRAL / GENERAL NOTES

TEL QUE CONSTRUIT
AS BUILT
AGNICO EAGLE
DATE : 2013/06/07

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REVISIONS

REGISTERED PROFESSIONAL ENGINEER
R. MARCOUX
LICENSEE
NT/NU

TITRE / TITLE
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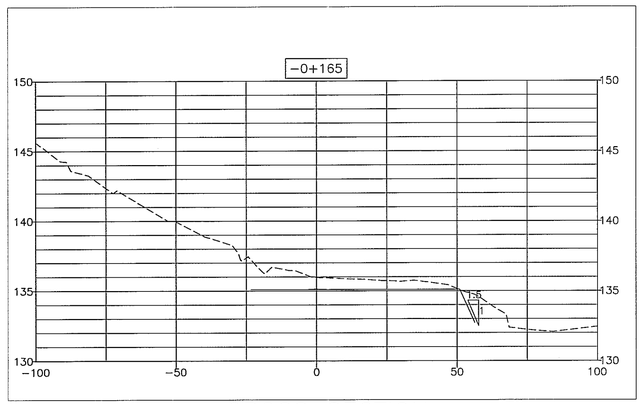
OP-79853-J	1	1 / 1

AE-CART-ARCH D

FILE NO. MEAD-620-230-202_1.DWG

NO. DESSIN DRAWING NO. MEAD-620-230-203_1

FORMAT ARCHD



CROSS SECTION

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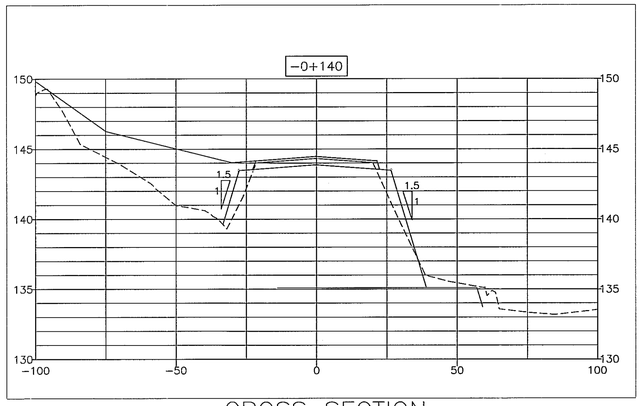
VERT. 1:200



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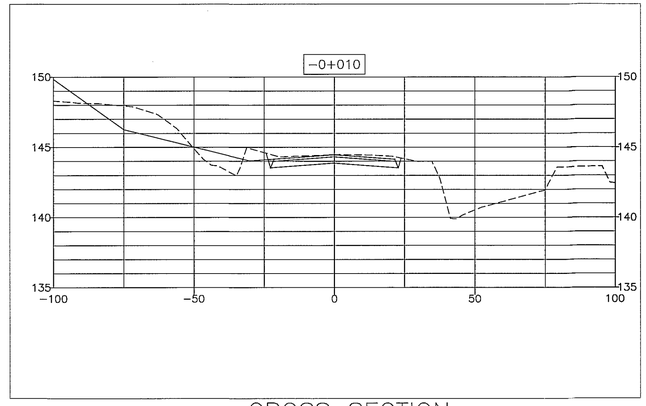

CROSS SECTION

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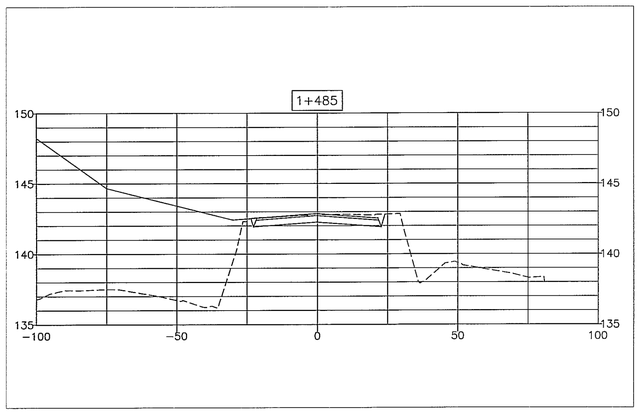

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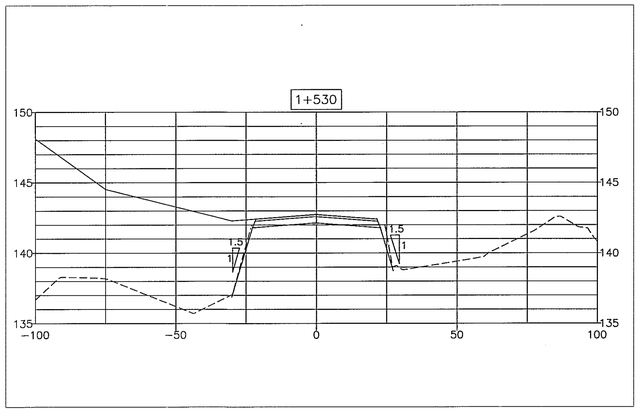

CROSS SECTION

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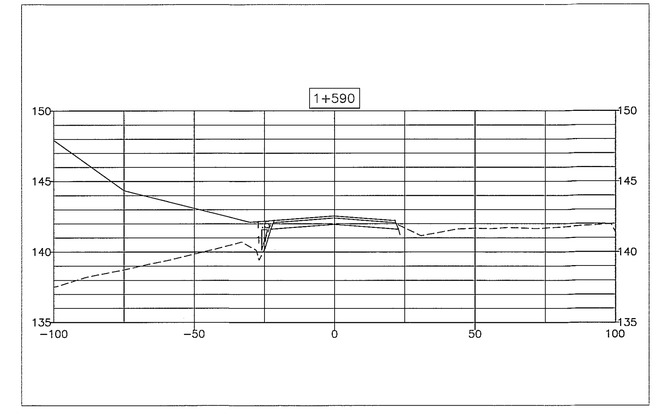
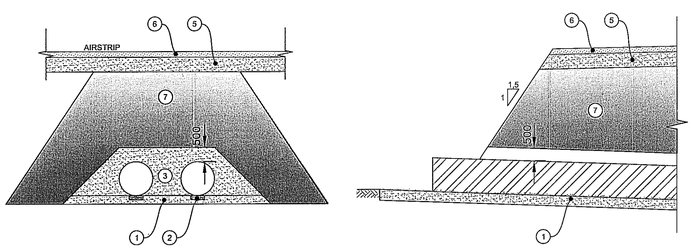
VERT. 1:200



CROSS SECTION

SCALE HOR. 1:1000
VERT. 1:200



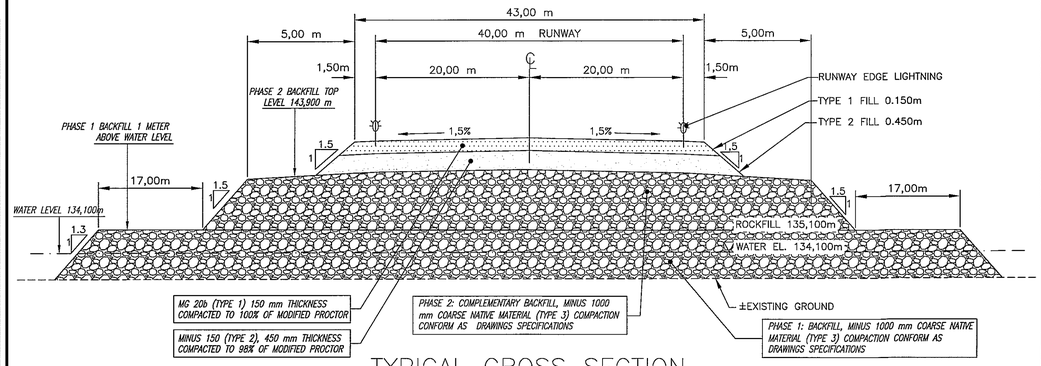
CULVERT – TYPICAL CROSS SECTION

NO SCALE

1. SUPPORT PAD BUILT IN MG 20, 150 mm THICKNESS COMPACTED TO 90 % M.P.
2. UNCOMPACTED PORTION OF THE SUPPORT
3. LATERAL EMBANKMENT MG 20 TO ¾ OF DIAMETER, COMPACTED TO 93% M.P. BY LAYER NOT EXCEEDING 150 mm THICKNESS. FILL EACH SIDE NOT EXCEEDING 300 mm DIFFERENCE BETWEEN THE 2 SIDES.
4. PROTECTION COVERING WITH MG 20 COMPACTED TO M.P. BY LAYER OF 300 mm THICKNESS..
5. SUBFOUNDATION, MINUS 150, 450 mm THICKNESS, COMPACTED TO 98% M.P.
6. FOUNDATION MG 20b, 150 mm THICKNESS, COMPACTED TO 100% M.P.
7. ROCKFILL EMBANKMENT.

NOTES :

- JOINTS SHOULD BE COVERED WITH A TYPE GEOTEXTILE TEXEL GEOSOL 7616, OF A WIDTH EXCEEDING 600 mm SIDES FITTINGS AND A LENGTH TO GO AROUND THE DIAMETER WITH A 600 mm OVERLAP.
- COMPACTORS MUST NOT RUN IN THE REGION OF 300 mm LOCATED JUST ABOVE THE PIPE.
- THE ONLY EQUIPMENT ALLOWED COMPACTION ARE VIBRATORY PLATES AND VIBRATORY DRUM ROLLERS WHOSE TOTAL FORCE APPLIED MUST NOT EXCEED 50 kN ON THE FIRST METER ABOVE THE PIPE.



TYPICAL CROSS SECTION

SECTION – LAKE

NO SCALE

PLAN CLÉ
KEY PLAN

NOTES GÉNÉRAL / GENERAL NOTES

TEL QUE CONSTRUIT
AS BUILT
AGNICO EAGLE DATE : 2013-06-07

DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE	# DWG

AGNICO EAGLE

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REVISIONS

REGISTERED PROFESSIONAL ENGINEER
R. MARCOUX
LICENSEE
NT/NU

TITRE / TITLE

AGNICO–EAGLE – MEADOWBANK DIVISION
AIRPORT DESIGN FOR BOEING 737
CODE NUMBER : 3 CODE LETTER : C
NON–PRECISION APPROACH RUNWAY
2012 EXPANSION RUNWAY
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VÉRIFIÉ PAR CHECKED BY	RICHARD MARCOUX, ing.	2012–11–19
APPROUVÉ PAR APPROVED BY		
ÉCHELLE SCALE	1 : 2500	DATE 19 NOVEMBRE 2012

NO. DESSIN DRAWING NO. MEAD–620–230–203_1

NO. PROJET PROJECT NO.	REVISION	FEUILLE / SHT
OP–79853–J	1	1 / 1

AE–CART–ARCH D

FILE NO. MEAD–620–230–203_1.DWG

NO. DESSIN DRAWING NO. MEAD-620-230-200_1

FORMAT ARCHD

1. SALVAGE AND STOCKPILE ORGANIC MATERIALS

1.1 Products

1. "Organic Materials" are the naturally occurring organic rich, A-Horizon soils found at ground surface and may include topsoil and/or fibrous peat.

1.2 Execution

1. Salvage Organic Materials by excavation and loading for transport from Work Site area(s) designated by the Owner's Representative.

2. Excavation of Organic Materials may require the use of drilling, blasting, ripping and or other approved techniques to prepare the Organic Materials for salvaging.

3. Organic Materials encountered within the Work Site areas of less than 0.1 m measured thickness are considered impractical to salvage and may be incorporated as part of the common excavation.

4. Haul and stockpile Organic Materials in area(s) designated on the Drawings and/or by the Owner's Representative.

5. Shape stockpile(s) of Organic Materials to smooth, uniform surface with side slopes not steeper than three horizontal to one vertical (3H:1V).

2. FOUNDATION PREPARATION

2.1 Products

1. "Unsuitable Materials" include ice, snow, topsoil, organic soils, vegetation, boulders, etc. to a depth or in a location that will impede the removal of the competent materials. Unsuitable Material may be frozen in situ depending on time of year and/or ground ice conditions. Within the foundation preparation limits of the embankments, Unsuitable Materials may include Mineral Soil that has a high silt, clay and/or ice content.

2. "Competent Materials" may include Mineral Soil overburden material and the underlying Bedrock formation as defined in Section 3 "BULK EXCAVATION."

3. Determination of Unsuitable Materials and Competent Materials will be at the discretion of the Owner's Representative, as recommended by the Geotechnical Engineer. The Contractor may be required to assist during the determination by performing such work as proof rolling, test pit excavation and the like as directed by the Owner's Representative.

2.2 Execution

1. Salvage and Stockpile Organic Materials, as outlined in Section 1, to be performed.

2. Remove Unsuitable Materials in areas indicated on the Drawings or as per the Owner's Representative and to the limits of Competent Materials.

3. In areas where Unsuitable Materials within the limits of the Work are encountered, the Contractor may be requested to advance test pit excavations as directed by the Owner's Representative to delineate the extent of the deposits. The materials encountered will be inspected by the Geotechnical Engineer. A determination of Competent Materials of the excavated and underlying materials shall be made by the Owner's Representative using recommendations provided by the Geotechnical Engineer.

4. The Contractor shall allow the Geotechnical Engineer to review the prepared foundation to evaluate conformance to the Specifications. Acceptance of foundation preparation shall be performed by the Owner's Representative using recommendations provided by the Geotechnical Engineer.

5. Stockpile excavated material which is considered by the Owner's Representative suitable for reuse as Fill Material (as defined in Section 3 "BULK EXCAVATION") at a location.

6. Stockpile excavated material which is considered by the Owner's Representative unsuitable for embankment construction at a location indicated on the Drawings or as directed by the Owner's Representative.

3. BULK EXCAVATION

3.1 Products

1."Mineral Soil" is the near surface layer of earth materials generally composed of till-like soil, including but not limited to varying proportions of sand, gravel, silt, clay cobbles and boulders. Thawed Mineral Soil materials are normally suitable for mechanical excavation. Frozen Mineral Soil materials may require the use of drilling, blasting, ripping and or other approved techniques to prepare the Mineral Soil materials for excavation.

2. "Bedrock" is the underlying rock formation comprising frost-shattered weathered Bedrock and/or intact unweathered Bedrock that will require the use of drilling, blasting, ripping and/or other approved techniques to prepare the Bedrock materials for excavation.

3.2 Execution

1. Salvage and Stockpile Organic Materials, as outlined in Section 2, to be performed.

2. Excavate from available areas of cut along the airstrip alignment to the elevations and profile shown on the Drawings or from approved local borrow areas adjacent to the proposed airstrip. Excavation of Mineral Soil and Bedrock are expected.

3. Haul and place the bulk excavation materials according to the technical specifications defined in Section 6 or stockpile Mineral Soil and Bedrock in area(s) designated by the Owner's Representative.

4. Where frozen soils are encountered, they shall be excavated using methods that conform to all applicable laws and regulations and to proven safe practices. The proposed method shall be submitted to the Engineer in writing for review and approval at least two weeks prior to beginning such excavation.

5. Where blasting is required, all operations in connection with transporting, storage and use of explosives shall be subject to the rules and regulations of governing authorities. Only perform blasting using experienced and licensed personnel. Obtain prior approval of the Owner for blasting operations.

6. Blast and remove Bedrock to the depths and profiles shown on the Drawings.

7. Shape Mineral Soil and or Bedrock subgrade to uniformly graded surfaces intended to minimize ponding of water within the drainage ditch as defined on the Drawings and to the satisfaction of the Owner's Representative.

8. Final cut slopes in Mineral Soil shall be trimmed no steeper than 3 Horizontal to 1 Vertical. Cut slopes in areas of peat or any soil or weak soil(s) may require flatter slopes, as determined by the Geotechnical Engineer.

9. Final cut slopes in bedrock shall be no steeper than 0.5 Horizontal to 1 Vertical.Flatter slopes may be required for environmental or other reasons defined by the Owner.

4. BACKFILL MATERIALS

Any fill material that has become saturated, softened, loosened, or has undergone a reduction in density by precipitation, ponded water, construction traffic, or frost action is to be treated excavated and replaced with suitable material. The Owner's Representative shall identify areas from which material shall be removed. This work shall be performed to the satisfaction of the Owner's Representative. The Contractor, QA Representative and the Owner's Representative will conduct field trials and develop methodologies to achieve satisfactory degree of compaction for the fill materials.

4.1 General

1. Two structural fill types shall be used to construct the airstrip as follows:

a. Type 1 Fill – Fine Granular Surfacing MG 20b (recommended – table 1a) or Owner's production (table 1b);
b. Type 2 Fill - Minus 150mm;
c. Type 3 Fill – Rockfill Embankment.

4.2 Type 1 Fill – MG 20b Granular Surfacing (recommended) or Owner's production

1. Type 1 fill shall comprise crushed non-AG rockfill processed to satisfy the gradation limits shown in Table 1a or 1b. Type 1 fill shall be free of organic material, debris, cinders, ash, refuse, snow, ice, and other deleterious material subject to the satisfaction of the Owner's Representative. The maximum loose lift thickness of fine filter shall be 0.15 m prior to compaction. Compaction of type 1 fill shall be carried out using a 10 metric tonne smooth drum vibratory roller compactor with a minimum of 4 passes parallel to the axis of the Air Strip and to the satisfaction of the Owner's Representative.

Table 1a: Type 1 MG 20b-Gradation Specification

Grain Size	Percent Passing by Mass
31,5 mm	100%
20 mm	90-100%
14 mm	68-93%
5 mm	35-60%
315 µm	8-17%
80 µm	5-11%

Table 1b: Fine Granular Surfacing (Owner's production)

Grain Size	Percent Passing by Mass
20 mm	100%
12.7mm	50-100%
4.76 mm	23-68%
5 mm	35-60%
425 µm	0-20%
75 µm	0-15%

2. Type 1 material shall be placed with a moisture content within ± 2% of the optimum moisture content, as determined by the Engineer.

4.3 Type 2 Fill – Minus 150 mm

1. Type 2 fill shall comprise crushed non-AG rockfill processed to satisfy the gradation limits in Table 2. Type 2 fill material shall be free of clay, organic matter, debris, cinders, ash, refuse, snow, ice and other deleterious material, subject to the satisfaction of the Owner's Representative. The maximum loose lift thickness of Type 2 fill shall be 0.45 m prior to compaction. Coarse filter shall be placed and compacted to avoid disturbing the underlying materials. Compaction of the Type 2 fill shall be carried out using a 10 metric tonne smooth drum vibratory roller compactor with a minimum of 4 passes parallel to the axis of the Air Strip and to the satisfaction of the Owner's Representative.

Table 2: Type 2 Fill Gradation Specification

Grain Size	Percent Passing by Mass
200 mm	100%
152.4 mm	86-100%
76.2 mm	35-100%
12.7 mm	0-18%
4.76 mm	0-9%
2 mm	0-5%

2. Care shall be taken to place the Type 2 Fill material within approximately ± 4% of the optimum moisture content. If frozen material is worked until thawed, special attention must be given to observing the moisture content. Material that is visibly too wet, as determined by the Engineer, shall not be incorporated into the airstrip embankment fill, and shall be place in a designated stockpile area.

4.4 Type 3 Fill – Rockfill Embankment

1. Type 3 fill shall comprise sound, hard, durable, well-graded rock fragments free from ice, frozen chunks, organic matter, debris and other deleterious materials. Type 3 fill shall have a maximum particle size of 1.0 m. All Rockfill shall be geochemically classified by the Owner prior to placement. Type 3 fill shall comprise non-AG Rockfill material.

2. Care shall be taken to place the Type 3 material within approximately ± 4% of the optimum moisture content. If frozen material is worked until thawed, special attention must be given to observing the moisture content. Material that is visibly too wet, as determined by the Engineer, shall not be incorporated into the airstrip embankment fill, and shall be placed in a designated stockpile area.

3. The Rockfill embankment shall be made of non-potentially-acid-generating (NPAG) and non-metal-leaching material of good quality with no particle content smaller than 0.1 m. The material shall be strong and durable enough to resist the internal and external effort to which the embankment will be subjected (i.e. internal settlement, compaction and load while in operation). As a clear example, the volcanic ultramafic rock (soap stone), the prime rock on site, is to be avoided for construction of this structure. The specification regarding particles smaller than 0.1 m is necessary to avoid migration of particles due to wave action, as no specific wave protection is expected to be put in place. The loose maximum lift should be 1.0 m prior to compaction.

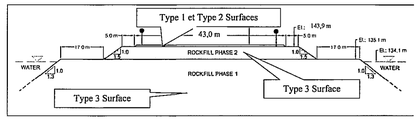
4.5 Oversize Particles

1. Oversize particles are considered to be rock fragments with a diameter greater than 1 000 mm. Where oversize particles are encountered, the particles shall be selectively removed from the 3 Fill materials prior to compaction.

2. Oversize particles shall be incorporated in the production of Type 1 Fill and/or salvaged and stockpiled in a designated locations approved by the Owner's Representative.

4.6 Placement and Compaction – Rockfill Embankment (Type 3)

1. Placement of the Rockfill shall be performed so that the lakebed mud is displaced from the Rockfill embankment. The Rockfill embankment shall be constructed in two phases. The first phase corresponds to the placement of the Rockfill to an elevation of 1.0 m above the water and the second phase corresponds to the Rockfill construction to its final elevation. The Rockfill slopes for the Phase 1 Rockfill portion are expected to be 1.3H: 1.0V. For Phase 2, we recommend a side slope of 1.5H: 1.0V. The final design must include, on both sides of the structure, a 17.0-m-wide bench from the toe of Phase 2 to the crest edge of Phase 1, and a 5-m-wide bench on each side of the 43-m-wide airstrip runway, see Figure below.



2. The *Phase 1* portion consists of constructing the Rockfill platform in the water to an elevation of 1 m above the water. The freeboard of 1 m is recommended to avoid the wave submerging the Rockfill front. The first construction phase is critical in regards to stability of the embankment. It is important to note that the Phase 1 elevation presents risks of instability of the embankment. Therefore, Golder's Geotechnical Investigation Report (No. 001-11-1221-0053-3000 RevD – July 2011) have suggested two methods to mitigate the instability risk associate with the construction of the embankment in the water.

The first proposed construction method recommends the use of a remotely-controlled dozer for placing the material in the critical zone. The limit of this critical zone consists of the distance to any crest edge (each side or at the front) where the stability analysis returned a safety factor of less than 1.1. Similarly, the haul trucks will be required to unload outside of this critical zone. Based on the stability analysis, the limits of the critical zone, where no worker should be allowed to go has been estimated to 25 m from the crest edge while constructing Phase 1. Based on the relatively fast recovery of CPTs dissipation tests, Golder anticipates a quick improvement in the lakebed material's competency, which is favourable for the stability of the structure (see Section 6.0 for more details). Thus, construction Phase 2 (above water), with respect to the 17.0-m bench from the Phase 1 crest edge, could be constructed without the need of a remotely-operated dozer after a period of rest.

The second proposed construction method consists of building a first band of Rockfill, about 20 m wide, to a certain length into the lake. Then, after allowing enough time to let the clayey material dissipate some excess pore pressures, a ring could be advanced all around the first band perimeter. This sequence would be repeated until the full width and length of the airstrip is built. Note that this method would avoid using a remotely-controlled dozed for the entire period of construction but could have an impact on the schedule.

If the air strip expansion project is advancing, a detailed construction sequence would need to be prepared. The consolidation time would need to be determined in order to set the time of rest between the two phases of the method using a remotely-controlled dozer. For the proposed ring methods, the ring width will need to be defined and the time of rest between each ring advancement would also need to be determined.

3. The *Phase 2* portion consists of constructing the platform above the water Golder's Geotechnical Investigation Report (No. 001-11-1221-0053-3000 RevO – July 2011) recommend placing the material in lifts of 1.0 m maximum. Each lift must be compacted to minimize the settlement of the Rockfill material. Placement equipment shall traffic the material uniformly parallel and perpendicular to the lift front advancement to aid in compaction. Type 3 fill shall be placed and compacted to avoid disturbance of the underlying materials. Rockfill Coarse Native Material (Type3) should be compacted by a minimum of 6 complete passes of a smooth drum 3.5 tonne vibratory roller, or equivalent.

Based on Golder's past experience (i.e. Bay Goose dike), if the placement of Rockfill through the water occurs in the winter, ice may become entrapped within the Rockfill. During the next spring thaw, rapid and significant settlement is expected. The placement method shall be optimized to limit the inclusion of ice within the Rockfill. A daily inspection of the airstrip will need to be completed throughout the first thawing season to ensure good conditions of the airstrip runway. Rockfill placement during winter will require precautions; all snow between lifts must be removed to avoid accumulation inside the Rockfill material.

Regarding the portion outside the lake footprint, the airstrip foundation will need preparation. All waste soil or rock, frozen material, snow, organic materials or any others materials known to induce unfavourable settlement must be removed from the airstrip footprint.

With all the precautions detailed above, it is still expected that settlement will occur but can be managed through frequent inspection and maintenance of the airstrip runway. Additional MG-20B will need to be added and appropriately compacted to keep the runway at grade and in good condition. In regards to the advancement of Phases 1 and 2, safety berms will need to be built on each side of the crest to ensure worker security. As a guide, the design of these berms shall be approximately two-thirds of the haul truck wheel to be used for material transportation on the embankment.

4.6 Placement and Compaction – Type 1 and Type 2

1. Compaction of Type 1 and Type 2 Fill material shall be obtained using a 10 tonne smooth drum vibratory compactor (4 passes). The compactor shall maintain a minimum 0.2 m overlap between passes. Carry out rolling over large surfaces and execute turns carefully to obtain uniform compaction.

2. Compaction of Types 2 Fill materials shall be obtained using the smooth drum vibrator roller and/or load and unloaded haul trucks. The trucks shall take care to traffic over the entire working surface of each lift. Where required, the Geotechnical Engineer shall indicate where additional compaction traffic is required.

3. Place and compact fill materials in horizontal lifts beginning in the lowest area of the foundations unless specified otherwise.

4. All lifts must pass density and gradation requirements prior to placement of subsequent lift.

5. All lifts shall be uniformly compacted using a smooth drum 10 tonne vibratory roller to the following in situ density:

a. Type 1 Fill: Granular base should be compacted to 100 per cent of the standard Proctor maximum dry density, as determined by ASTM Test Method D698-70;

b. Type 2 Fill: Fine Native Material should be compacted to 98 per cent of the standard Proctor maximum dry density and to 100 per cent within 300 mm of finished subgrade, as determined by ASTM Test Method D698-70.

6. For each fill type, a Method Compaction Technique test fill will be completed onsite to determine the number of compactor passes required to meet placed fill density specifications and confirm the maximum lift thicknesses.

7. Test fills used for determining specifics of the method compaction technique, to the extent possible, will employ the compaction equipment and simulate placement methods proposed.

9. Wherever possible, the degree of compaction shall be evaluated by nuclear densometer testing.

10. The embankment fill surfaces should be sloped to provide positive drainage to the site perimeter. Perimeter ditches may be required to control surface water runoff from this area by directing the runoff to a designated sump location(s) for monitoring prior to treatment and discharging to the environment.

5. AIRSTRIP EMBANKMENT CONSTRUCTION

5.1 Products

1. "Mineral Soil" as defined in Section 3. "BULK EXCAVATION".

2. "Bedrock" as defined in Section 3. "BULK EXCAVATION".

3. "Fill Material" is non-frozen, excavated Mineral Soil, Bedrock, Run of Mine material, processed material and/or other approved imported fill material that is suitable for use in the embankments (Type 2 Fill is expected, as defined in Section 4. "BACKFILL MATERIAL).

4. Fill Materials will be approved by the Owner's Representative, using recommendations provided by the Geotechnical Engineer, prior to usage by the Contractor

5.2 Execution

1. The airstrip embankment fills shall be constructed to the lines, grades and cross-sections shown on the Construction Drawings.

2. Salvage and Stockpile Organic Materials, as outlined in Section 1. "SALVAGE AND STOCKPILE ORGANIC MATERIALS" to be performed.

3. Foundation Preparation, as outlined in Section 2. "FOUNDATION PREPARATION", to be performed. No Fill Materials to be placed on prepared foundation surface without approval from Owner's Representative.

4. Native Fill materials for construction of the airstrip embankment will be obtained preferentially from areas of cut. In the event that insufficient quantities of bulk excavation materials are available, local borrow areas may be developed, as approved by the Owner's Representative.

5. All embankment fills shall be placed and compacted in dry conditions at temperatures above 0°C. Granular surfacing materials may be placed at temperatures below 0°C, at the discretion of the Engineer or as specified by Owners Representative.

6. The minimum in situ compacted thickness of fill placed at any fill areas shall consist of 300 mm of Type 1 Fill material and 500 mm of Type 2 Fill material.

7. In areas where the total thickness of the embankment fill is 150 mm or less, Type 1 Fill material shall be placed and no Type 2 Fill material shall be placed.

8. In areas where the total thickness of embankment fill is greater than one meter, Type 2 Fill material shall be placed to within about 300 mm of the finished subgrade surface of the airstrip embankment. The topmost lift of the Type 2 Fill material shall be of a noticeably finer gradation, as directed by the Geotechnical Engineer, in order to transition to geotextile membrane and the Type 1 Fill material.

9. Oversize Particles (greater than 1 000mm diameter) may be considered for placement at the base of deep embankment fills where the embankment thickness is greater than 1.5 metres, subject to approval by the Owners Representative. Oversize Particles shall be 'scalped off' by blading them off the fill grade with a bulldozer and pushing ahead of the fill into the advancing toe of the fill.

10. All embankment fill materials used for construction of the airstrip should comprise unfrozen materials, within the specified limits for particle size and moisture content.

11. Hauling and spreading equipment shall be routed approximately parallel to the axis of the embankment and the traffic patterns shall be varied to prevent rutting. Any damage to the embankment or to the Fill Materials already placed shall be repaired to the satisfaction of the Owner's Representative prior to the placement of the next lift. This may include, but shall not be limited to, the removal of ruts and repairs to fill boundaries.

12. Haul trucks should not follow existing tracks. If, however, rutting occurs, scarify and re-compact to produce an even surface. Develop a traffic pattern to achieve required densities to the satisfaction of the Owner's Representative.

13. Haul to designated fill placement area(s) within embankment footprint.

14. Adjacent lifts shall have a maximum elevation difference of one compacted lift thickness.

15. During dumping and spreading activities, remove any waste materials such as, but not limited to, debris, organics, vegetation or any other unsuitable material if such material has been transported into the working areas.

16. Spread Fill Material in even, horizontal lifts, of which the maximum loose lift thickness will be specified by the Owner's Representative based on the results of field compaction tests. The maximum loose lift thickness is expected to be in the order of 150 mm for Type 1, 450 mm for Type 2 and 1 000 mm for Type 3.

17. Oversize particles shall be removed. Where reduced lift thicknesses are required, particles larger than two-thirds (2/3) of the reduced lift thickness shall be removed prior to compaction. Requirements for reduced lift thicknesses shall be determined by the Owner's Representative.

18. Compaction to be performed using the smooth drum vibratory 10 tonne compactor and full-loaded Caterpillar 773 rock trucks.
19. When compacting Fill Materials, adjust the water content of the Fill Material to within ± 2% (by weight) of optimum water content.

20. Fill Material consisting of Mineral Soil shall be compacted to a minimum standard Proctor maximum dry density specified in Section 4. "BACKFILL MATERIALS". Fill Materials consisting of rock fill shall be compacted to a performance-based requirement. This compaction requirement shall be developed in the field as recommended by the Geotechnical Engineer. The resulting compaction achieved will be to the satisfaction of the Owner's Representative. The Contractor shall cooperate with the Geotechnical Engineer and the Owner's Representative to develop the performance-based requirement.

21. Water shall not be permitted to pond on surface. Ponded water should be removed from the fill.
22. Any Fill Material which has become saturated, softened, loosened or has undergone a reduction in density by precipitation, ponded water, construction traffic or frost action is to be excavated and replaced with suitable material. The Geotechnical Engineer shall identify areas in which material should be removed. This work shall be performed to the satisfaction of the Owner's Representative. The excavated material may be dried and/or thawed and used for fill upon approval from the Owner's Representative.

23. Shape the embankment to a dense, uniform surface free of ruts or loose material at a slope sufficient to promote free drainage of surface water at all times.

24. Slope exterior embankment surfaces to be plane and uniform and to the lines and grades shown on the Drawings. This will require the placement and compaction of Fill Material beyond the lines and grades shown on the Drawings followed by trimming to the said lines and grades.

25. Before suspension of operations each day or before inclement weather, the Fill Materials in place shall be compacted and the surface rolled smooth and crowned to facilitate free drainage of precipitation.

26. Where possible, Fill Material placed in the embankment shall be free from lenses, pockets or layers of materials which are significantly different in gradation from the surrounding material. The Contractor shall employ methods to limit the amount and limits of segregated materials. The Contractor shall work with the Geotechnical Engineer to develop such methods which may include, but not be limited to, the placement of parallel strips of Fill Material within a given lift and/or material blending. The Geotechnical Engineer shall provide recommendations to the Owner's Representative as to the acceptability of the results of the placed materials. Fill Material shall be placed to the satisfaction of the Owner's Representative.

6. GRANULAR PAVEMENT SURFACE CONSTRUCTION

6.1 Products

1. "Type 1 Fill Material" as defined in Section 4.

6.2 Execution

1. The Contractor shall confirm the as-built surface of the embankment fill by survey prior to applying Type 1 Fill. Any discrepancies determined by the as-built survey shall be corrected prior to applying Type 1 Fill.

2. Spread Type 1 Fill Material in an even, horizontal lift, of which the maximum loose lift thickness will be specified by the Owner's Representative based on the results of field compaction tests of the underlying embankment fill materials.

3. The maximum loose lift thickness is expected to be in the order of 150 mm for Type 1 Fill material. However, greater thickness may be applied as directed by the Owner's Representative.

4. Type 1 Fill is considered a processed material and shall be approved for placement by the Owner's Representative prior to construction. Therefore, Oversize Particles are not considered part of this application.

5. Compaction to be performed using the smooth drum vibratory 10 tonne compactor and full-loaded Caterpillar 773 rock trucks, as necessary.

6. When compacting Type 1 Fill, adjust the water content of the Fill Material to within ± 2% (by weight) of optimum water content.

7. Compact Type 1 Fill in accordance with Section 4.

8. Shape the granular pavement surface to a dense, uniform surface free of ruts or loose material at a slope sufficient to promote free drainage of surface water at all times.

7. RUNOFF AND SEDIMENT CONTROL DITCHES AND MONITORING PONDS

7.1 Ditches

1. Ditches shall be constructed as required to:

a. Capture runoff from areas impacted by construction activities; and
b. Promote drainage away from the as-constructed airstrip embankment, in the longer term.

2. The locations and sizes of the ditches will be determined in the field by the Geotechnical Engineer. In general, ditches will have a minimum cross-sectional area of 1.0 m^2 and channel side slopes will not be steeper than 3 Horizontal to 1 Vertical.

3. Ditches shall be graded at a minimum 0.1% slope, or as directed by the Geotechnical Engineer, toward the monitoring ponds.

7.2 Monitoring Pond

1. Monitoring ponds shall be constructed to allow for sedimentation and visual observation of surface runoff water prior to discharge to the environment;

2. The monitoring pond shall be lined with a 150 mm thick layer of select Type 1 Fill material. The monitoring pond shall have minimum dimensions of 20 m length, 20 m width, and 0.5 m depth.

3. The exact location of the monitoring pond(s) will be determined by the Geotechnical Engineer during construction. The Pond shall be located at least 25 m away from settlement-sensitive structures.

4. Ditches and monitoring ponds shall be constructed and commissioned prior to beginning construction activities;

5. During the construction phase, monitoring will be limited to identifying suspended sediments in runoff discharge at the point of release from the Monitoring Pond;

6. If sediments are observed in discharge flows, immediate action shall be taken to mitigate sediment concentration to a non-observable level, or the project permit levels;

7. The Monitoring Pond will be field fit during the course of construction, and will collect ditch flow at a common point. The Pond shall be of sufficient capacity to provide adequate residence time to the collected runoff for sedimentation to a degree so that discharge from the Monitoring Pond contains little to no visible sediment in surface water runoff from the airstrip.

8. The details of erosion protection to minimize erosion and/or sedimentation will be determined during the course of construction; and

9. One test pit will be excavated and geotechnically logged in an area of the pond foundation. The pond will not be placed over thick peat deposit(s).

7.3 Turbidity Barrier

Turbidity barrier shall be used if the works are not done during winter, as used during the Rockfill placement at East Dike and Bay Goose Dike to limit the suspended solids into the lake.

7.4 Access

1. Free, unrestricted access to the general open areas surrounding the developed site will not be available. Equipment movements and work operations shall be confined to the areas designated by the Owner's Representative.

7.5 Temporary Protection of Works

1. If a section of fill is to be left for a period of time (e.g., overnight) before subsequent lifts are placed, or when rain is imminent, roll smooth the surface of the top lift in order to promote drainage of surface water. Before restart of the Work on this section, scarify and re-compact, as directed by the Owner's Representative.

7.6 Weather

1. Do not place material when satisfactory work cannot be performed due to intense periods of inclement weather such as, rain, snow, extreme cold or any other unsatisfactory conditions. However, one must take into consideration that the work must be performed during the winter.

8. SURVEY CONTROL

1. Sufficient survey control shall be provided to:

a. Lay out the construction;
b. Measure as-constructed quantities;
c. Prepare as-built drawings; and
d. Periodically verify the accuracy of the constructed works.

2. Survey shall be provided as required by the Owner's Representative as part of the QA/QC control.

3. In general, the constructed works shall be carried out within 50 mm vertically and 100 mm horizontally of the dimensions indicated on the Drawings. In the event that these tolerances are in conflict, the vertical tolerance shall prevail.

4. Where stricter grade control is required, at the discretion of the Owner's Representative, it shall be provided for.

PLAN CLÉ
KEY PLAN

NOTES GÉNÉRAL / GENERAL NOTES

TEL QUE CONSTRUIT
AS BUILT
AGNICO EAGLE DATE : 2013/06/07

DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE	# DWG
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AGNICO EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT
1	2013-06-07	AS BUILT	Y.B.	R.M.	A.H.
0	2012-12-07	FOR CONSTRUCTION	Y.B.	R.M.	A.H.
B	2012-12-03	FOR APPROVAL	Y.B.	R.M.	A.H.
A	2012-11-19	FOR APPROVAL	Y.B.	R.M.	A.H.

REVISIONS

REGISTERED PROFESSIONAL ENGINEER
R. MARCOUX
LICENSEE
NTINU

TITRE / TITLE

AGNICO–EAGLE – MEADOWBANK DIVISION
AIRPORT DESIGN FOR BOEING 737
CODE NUMBER : 3 CODE LETTER : C
NON–PRECISION APPROACH RUNWAY
2012 EXPANSION RUNWAY
DEVIS

DESSINÉ PAR DRAWN BY	YVES BOISVERT , T.P.	DATE 2012–11–19
VÉRIFIÉ PAR CHECKED BY	RICHARD MARCOUX, ing.	2012–11–19
APPROUVÉ PAR APPROVED BY		
ÉCHELLE SCALE	NO SCALE	DATE 19 NOVEMBRE 2012

NO. DESSIN DRAWING NO. MEAD–620–230–204_1

NO. PROJET PROJECT NO.	REVISION	FEUILLE / SHT
OP–79853–J	1	1 / 1

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FILE NO. MEAD–620–230–204_1.DWG

NO. DESSIN
DRAWING NO. MEAD-620-230-205-1

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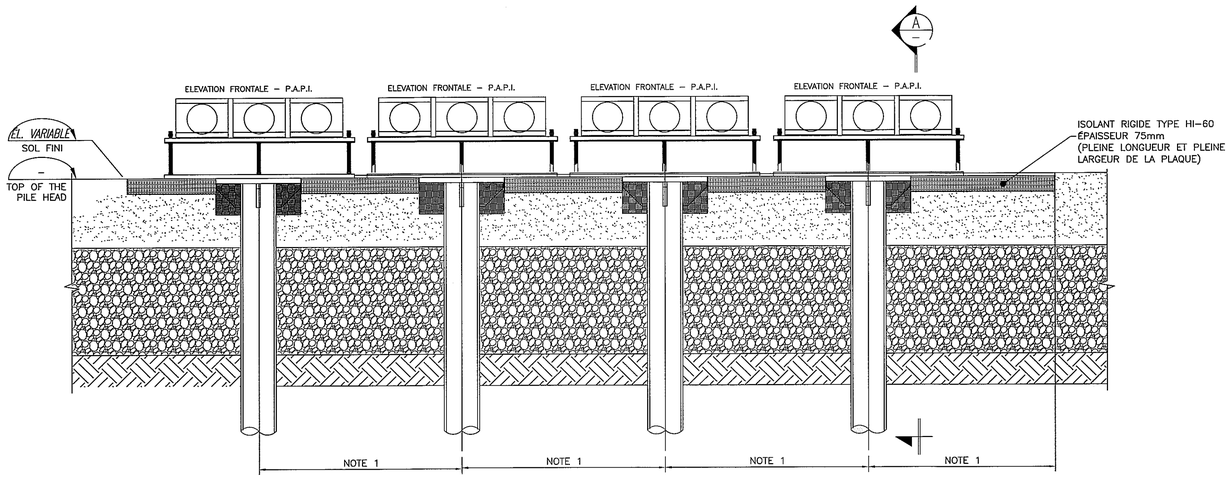
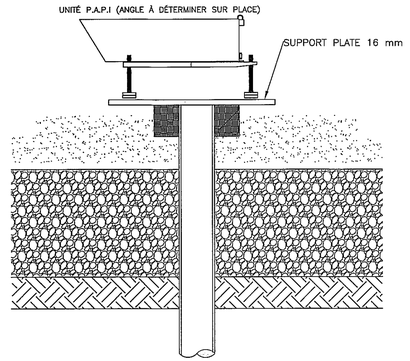
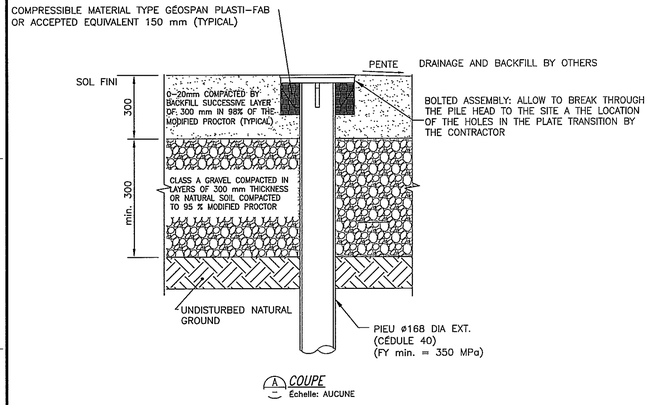


NOTE 1: DISTANCE TO BE DETERMINED BY THE CONTRACTOR BASED ON THE HOLES IN THE PLATE TRANSITIONS P.A.P.I.

DÉTAIL TYPIQUE – INSTALLATION P.A.P.I.
Échelle: AUCUNE



A *COUPE*
Échelle: AUCUNE



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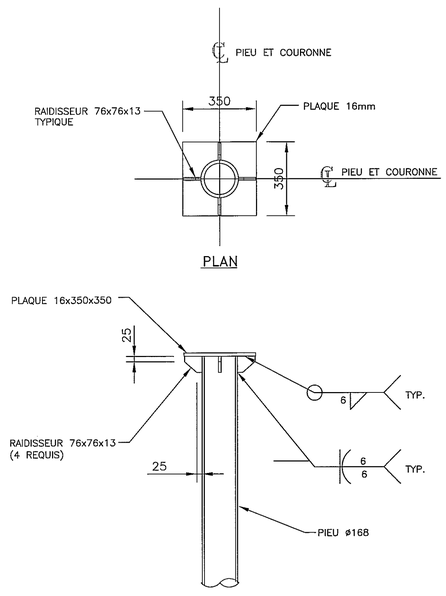
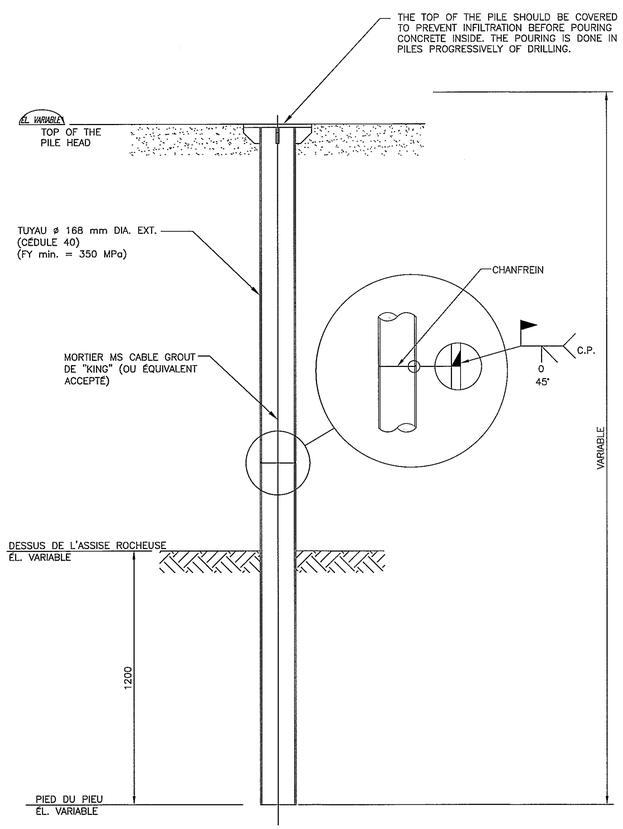


RING OF SINGLE PILE
Échelle: AUCUNE



DÉTAIL TYPIQUE – PIEU VERTICAL
Échelle: AUCUNE

General Notes

General

1. The Contractor shall provide all labor and equipment necessary to perform the work shown in the plans.
2. Refer only to the dimensions shown in the plans. Do not measure the plans to scale.
3. All dimensions must be checked on site by the contractor.
4. See electrical drawings to do a good coordination.

Structures

1. Details of steel, fabrication and assembly shall comply with the requirements of CSA CAN3-S16.1 (latest edition).
2. All structural steel shall be new and must comply with the requirements of the G40.21-M (latest edition).
3. All structural steel shall be new and must comply with the requirements of the G40.21-M (latest edition). For example:
   - Quality steel G40.21-M 300W (44W);
   - Steel structure G40.21-M 300W (44W);
   - HSS 350W (50W).
4. The practices and plans for welding must comply with requirements of CSA W59 (latest edition) and shall be implemented by a manufacturer certified for Division 1 or 2 of W47.1 (latest edition).
5. The manufacturer is fully responsible for welding but welding procedures must be approved by the project engineer prior to assembly is completed.
6. Any substitution must be approved by the project engineer. However, the contractor is responsible to ensure compliance with the required dimensions.
7. Exterior painting:
   - Do SP-1 (DEVPREP 88) followed by a surface preparation SP-6 (profile 1.5 à 2 MILL. maximum);
   - Apply one (1) to two (2) coats of epoxy BAR-RUST 235 (8-10 MILL. thickness total dry);
   - Apply one (1) 379 Devthane layer of UV resistant (2-3 MILL. thickness total dry);
   - Color: rust Bar 235 # DC2973 pale gray of Devoe (structure).
8. The manufacturing tolerance of the external dimensions of those parts is 3 mm.
9. Bolted assembly to the site

Piles

1. The head of a pile can not be more than 50 mm from the specified location. The misalignment of a pile along its length must not exceed 2% of its length.
2. When installed the top of the piles should be covered to prevent water or debris accumulate at the bottom and, until the concrete is poured in and around the pile.
3. Piles are provided by the owner and installed by the contractor.
4. Splices must made by full penetration welding chamfered. All welding must be performed by a company certified by the Canadian Welding Bureau (CWB) to CSA W47.1-2003 and comply with the requirements of CSA W59-2003 (the cards are required).
5. The piles are filled with concrete King's MS Cable Grout or approved equivalent.
6. The contractor or subcontractor shall submit to the Engineer detailed shop drawings, base plate, splice, protection method, and any other important notes with calculation before proceeding with the work. These shop drawings must be signed and sealed by an engineer registered member of NAPEG.
7. The Contractor shall keep a book specific to each pile and deliver to the Engineer three (3) copies of this book. The Contractor shall take the level of piles at the end having returned. No concrete pour will take place until all piles non-compliant is completed.
8. The contractor shall install piles in compliance with Ethics and the Rules of Law, while considering the current conditions of the ground, the bottom of the excavation and existing recommendations mentioned above.

PLAN CLÉ
KEY PLAN

NOTES GÉNÉRAL / GENERAL NOTES

TEL QUE CONSTRUIT
AS BUILT
AGNICO EAGLE DATE : 07/06/2013

DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE	# DWG
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AGNICO EAGLE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT
1	2013-05-21	AS BUILT	Y.B.	R.M.	A.H.
0	2012-12-07	FOR CONSTRUCTION	I.P.	R.M.	A.H.

REVISIONS

REGISTERED PROFESSIONAL ENGINEER
R. MARCOUX
LICENSEE
NT/NU

TITRE / TITLE
AGNICO-EAGLE – MEADOWBANK DIVISION
AIRPORT DESIGN FOR BOEING 737
CODE NUMBER : 3 CODE LETTER : C
NON-PRECISION APPROACH RUNWAY
1752 m (5748')
2012 EXPANSION RUNWAY

DESSINÉ PAR / DRAWN BY	YVES BOISVERT, T.P.	DATE 2012-11-19
VÉRIFIÉ PAR / CHECKED BY	RICHARD MARCOUX, ing.	2012-11-19
APPROUVÉ PAR / APPROVED BY		
ÉCHELLE / SCALE	NO SCALE	DATE 19 DÉCEMBRE 2012

NO. DESSIN / DRAWING NO. MEAD-620-230-205

NO. PROJET / PROJECT NO.	REVISION	FEUILLE / SHT
OP-79853-J	1	1 / 1

AE-CART-ARCH D

FILE NO. MEAD-620-230-205-1.DWG

Appendix C - Daily monitoring data and TSS/ turbidity relationship & Multilab certificates of analysis

Table B1: Airstrip Extension Turbidity Profiles by day

						Turbidity Reading at Depth (meters below surface; units: NTU)						
Date	**Station**	**Time**	**GPS Coordinate**		**Max (m)**	**0**	**1**	**2**	**3**	**4**	**5**	**6**
			UTM 14W NAD 83									
	ST-AS-1											
2013-02-05	ST-AS-2	11:45	637098.00	7214785.00	3.2		0.040	0.000	0.000			
2013-02-05	ST-AS-3	11:30	637086.00	7214833.00	4.8		0.010	0.000	0.000	0.000		
2013-02-05	ST-AS-4	11:17	637091.00	7214870.00	5.0		0.320	0.000	0.000	0.000		
	ST-AS-5											
2013-03-13	ST-AS-2	16:45	637098.00	7214785.00	4.2		0.000	0.000	0.000	0.000		
2013-03-13	ST-AS-3	16:35	637086.00	7214833.00	4.7		0.200	0.000	0.000	0.000		
2013-03-13	ST-AS-4	16:27	637091.00	7214870.00	5.6		0.070	0.000	0.000	0.000	0.000	
2013-03-20	ST-AS-2	9:23	637098.00	7214785.00	4.2		0.410	0.140	0.020			
2013-03-20	ST-AS-3		637086.00	7214833.00	4.7							
2013-03-20	ST-AS-4		637091.00	7214870.00			1.020	1.640	1.220	0.650		
2013-03-22	ST-AS-2	16:30	637098.00	7214785.00	3.5		3.390	0.000	0.000			
2013-03-22	ST-AS-3	16:10	637086.00	7214833.00	5.0		0.310	0.000	0.000	0.000		
2013-03-22	ST-AS-4	11:25	637091.00	7214870.00	5.0		1.930	0.000	0.000	0.000		
2013-03-23	ST-AS-2	9:40	637098.00	7214785.00	3.5		1.570	0.000	0.000			
2013-03-23	ST-AS-3	9:55	637086.00	7214833.00	5.0		0.310	0.000	0.000	0.000		
2013-03-23	ST-AS-4	10:05	637091.00	7214870.00	5.0		0.420	0.000	0.000	0.000		
2013-03-24	ST-AS-2	16:30	637098.00	7214785.00	3.1		1.850	0.060	0.000			
2013-03-24	ST-AS-3	16:05	637086.00	7214833.00	4.5		2.980	0.000	0.000	0.000		
2013-03-24	ST-AS-4	15:45	637091.00	7214870.00	4.3		1.890	0.000	0.070	0.000		
2013-03-25	ST-AS-2	17:05	637098.00	7214785.00	3.1		0.560	0.010	0.000			
2013-03-25	ST-AS-3	16:50	637086.00	7214833.00	4.6		3.340	0.060	0.010	0.000		
2013-03-25	ST-AS-4	16:35	637091.00	7214870.00	4.6		1.510	0.490	0.000	0.000		
2013-03-26	ST-AS-2	16:50	637098.00	7214785.00	3.1		0.470	0.000	0.000			
2013-03-26	ST-AS-3	16:39	637086.00	7214833.00	4.6		0.710	0.010	0.010	0.050		
2013-03-26	ST-AS-4	16:28	637091.00	7214870.00	4.6		1.290	0.010	0.020	0.010		
2013-03-27	ST-AS-2	14:45	637098.00	7214785.00	3.1		0.570	0.030	0.000			
2013-03-27	ST-AS-3	14:35	637086.00	7214833.00	4.6		0.490	0.010	0.000	0.040		
2013-03-27	ST-AS-4	14:20	637091.00	7214870.00	4.6		1.060	0.010	0.210	0.340		
2013-03-28	ST-AS-2	14:32	637098.00	7214785.00	3.1		1.990	0.000	0.000			
2013-03-28	ST-AS-3	14:22	637086.00	7214833.00	4.6		2.490	0.030	0.010	0.000		
2013-03-28	ST-AS-4	14:17	637091.00	7214870.00	4.6		0.710	0.020	0.000	0.160		
2013-03-29	ST-AS-2	14:40	637098.00	7214785.00	3.1		3.810	0.690	0.140			
2013-03-29	ST-AS-3	14:47	637086.00	7214833.00	4.6		0.550	0.000	0.000	0.000		
2013-03-29	ST-AS-4	12:57	637091.00	7214870.00	4.6		0.420	0.000	0.000	0.000		
2013-03-30	ST-AS-2	17:16	637098.00	7214785.00	3.1		5.340	0.810	0.000			
2013-03-30	ST-AS-3		637086.00	7214833.00								
2013-03-30	ST-AS-4		637091.00	7214870.00								
2013-03-31	ST-AS-2	12:07	637098.00	7214785.00	3.1		7.430	0.100	0.000			
2013-03-31	ST-AS-3	11:47	637086.00	7214833.00	4.7		5.750	0.000	0.000	0.000		
2013-03-31	ST-AS-4	11:31	637091.00	7214870.00	4.7		1.480	0.000	0.000	0.000		
2013-04-01	ST-AS-2	10:18	637098.00	7214785.00	3.1		7.760	0.000	0.000			
2013-04-01	ST-AS-3	10:31	637086.00	7214833.00	4.7		3.410	0.000	0.000	0.000		
2013-04-01	ST-AS-4	10:52	637091.00	7214870.00	4.7		5.040	0.000	0.000	0.000		
2013-04-02	ST-AS-2	11:43	637098.00	7214785.00	3.1		6.890	0.030	0.000			
2013-04-02	ST-AS-3	11:54	637086.00	7214833.00	4.7		5.520	0.020	0.000	0.000		
2013-04-02	ST-AS-4	12:02	637091.00	7214870.00	4.7		3.960	0.000	0.000	0.000		
2013-04-03	ST-AS-2	15:24	637098.00	7214785.00	3.1		2.470	0.000	0.000			
2013-04-03	ST-AS-3	15:38	637086.00	7214833.00	4.7		1.230	0.000	0.000	0.000		
2013-04-03	ST-AS-4	15:52	637091.00	7214870.00	4.7		2.080	0.010	0.000	0.000		
2013-04-06	ST-AS-2	15:05	637098.00	7214785.00	3.1		6.100	0.830	0.000			
2013.04-06	ST-AS-3	14:55	637086.00	7214833.00	4.7		3.580	0.020	0.000	0.000		
2013-04-06	ST-AS-4	14:31	637091.00	7214870.00	4.7		6.060	0.330	0.000	0.000		

AEM Dike Construction Monitoring 2010- from Azimuth Feb 2010 memo

intercept: 0.62196
slope: 0.95619

DO NOT CHANGE

TSS (mg/L)	Turbidity (NTU)	TSS (mg/L)	Turbidity (NTU)	TSS (mg/L)	Turbidity (NTU)
0.2	1	16.2	60	102	350
0.5	2	16.8	62	110	375
1.0	4	17.3	64	118	400
1.5	6	17.9	66	125	425
2.0	8	18.5	68	133	450
2.5	10	19.0	70	141	475
3.0	12	19.6	72	149	500
3.5	14	20.2	74	180	600
4.1	16	20.7	76	211	700
4.6	18	21.3	78	243	800
5.1	20	21.9	80	275	900
5.7	22	22.4	82	307	1000
6.2	24	23.0	84	339	1100
6.8	26	23.6	86	371	1200
7.3	28	24.2	88	404	1300
7.8	30	24.7	90	436	1400
8.4	32	25.3	92	469	1500
8.9	34	25.9	94	502	1600
9.5	36	26.5	96	535	1700
10.0	38	27.0	98	567	1800
10.6	40	28	100	601	1900
11.1	42	35	125	634	2000
11.7	44	42	150	667	2100
12.3	46	50	175	700	2200
12.8	48	57	200	733	2300
13.4	50	64	225	767	2400
13.9	52	72	250	800	2500
14.5	54	80	275		
15.1	56	87	300		
15.6	58	95	325		

Results summary

Client: **Agnico Eagle Division Meadowbank**
Company: M. Stéphane Robert
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Date received: February 08, 2013
Sampled by: M. Theriault/T. Thompson
Matrix: Waste Water

Lab number:	24598	24599	24600	24601
Sample name:	ST-AS-2	ST-AS-3	ST-AS-4	ST-AS-4 DUP
Sampling date:	05-02-2013	05-02-2013	05-02-2013	05-02-2013
Total Suspended Solids mg/L	1	1	2	<1

These results are as followed on the Certificate's analisys of the coresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: March 29, 2013

F-02-13
Version 2ième: 18/10/2006

125, boul Industriel, Rouyn-Noranda (Québec) J9X 6P2 ● Tél: (819) 797-0550 ● Fax:(819) 797-2155 ● Courriel: multilab@cablevision.qc.ca ● www.multilab-direct.com

Results summary

Client: **Agnico Eagle Division Meadowbank**
Company: M. Stéphane Robert
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Date received: March 26, 2013
Sampled by: Robin Allard
Matrix: Waste Water

Lab number:	25081	25082	25083	25084	25085	25086
Sample name:	ST-AS-2	ST-AS-4	ST-AS-2	ST-AS-3	ST-AS-3 DUP	ST-AS-4
Sampling date:	20-03-2013	20-03-2013	24-03-2013	24-03-2013	24-03-2013	24-03-2013
Total Suspended Solids mg/L	<1	<1	7	3	3	<1

These results are as followed on the Certificate's analisys of the coresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: March 29, 2013

F-02-13
Version 2ième: 18/10/2006

125, boul Industriel, Rouyn-Noranda (Québec) J9X 6P2 ● Tél: (819) 797-0550 ● Fax:(819) 797-2155 ● Courriel: multilab@cablevision.qc.ca ● www.multilab-direct.com

Quality control Report

Company: **Agnico Eagle Division Meadowbank**
Client: M. Stéphane Robert
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Lab number: Multiple
Date received: 26-mars-13
Sampled by: Robin Allard
Matrix: Waste Water

Parameter	Standard				Sample duplicate	
	Limit	Nom	Obtenue	Intervalle	1	2
M.E.S. mg/L	<1	MR-0638-2012	91	72 - 114		

Lab number: 25081:25086

Results relate only to the sample tested.
This report shall not be reproduced except in full without the written authority of the laboratory.
All samples will be disposed of after 30 days following analysis.

Reported on: March 29, 2013

F-02-15
Version 1ière: 24/07/2006

125, boul Industriel, Rouyn-Noranda (Québec) J9X 6P2 ● Tél: (819) 797-0550 ● Fax:(819) 797-2155 ● Courriel: multilab@cablevision.qc.ca ● www.multilab-direct.com

Results summary

Client: **Agnico Eagle Division Meadowbank**
Company: M. Stéphane Robert
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Date received: April 03, 2013
Sampled by: Martin Theriault/Tom Thomson
Matrix: Water

Lab number:	25237	25238	25239	25240
Sample name:	ST-AS-2	ST-AS-2 Dup	ST-AS-3	ST-AS-4
Sampling date:	31-03-2013	31-03-2013	31-03-2013	31-03-2013
Total Suspended Solids mg/L	25	23	3	7

These results are as followed on the Certificate's analisys of the coresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: April 04, 2013

F-02-13
Version 2ième: 18/10/2006

125, boul Industriel, Rouyn-Noranda (Québec) J9X 6P2 ● Tél: (819) 797-0550 ● Fax:(819) 797-2155 ● Courriel: multilab@cablevision.qc.ca ● www.multilab-direct.com

Quality control Report

Company: **Agnico Eagle Division Meadowbank**
Client: M. Stéphane Robert
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Lab number: Multiple
Date received: 03-avr-13
Sampled by: Martin Theriault/Tom Thomson
Matrix: Water

Parameter	Standard				Sample duplicate	
	Limit	Nom	Obtenue	Intervalle	1	2
M.E.S. mg/L	<1	TD-MES 25mg	24	19 - 31		

Lab number: 25237:25240

Results relate only to the sample tested.
This report shall not be reproduced except in full without the written authority of the laboratory.
All samples will be disposed of after 30 days following analysis.

Reported on: April 04, 2013

F-02-15
Version 1ière: 24/07/2006

125, boul Industriel, Rouyn-Noranda (Québec) J9X 6P2 ● Tél: (819) 797-0550 ● Fax:(819) 797-2155 ● Courriel: multilab@cablevision.qc.ca ● www.multilab-direct.com

Results summary

Client: **Agnico Eagle Division Meadowbank**
Company: M. Stéphane Robert
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Date received: April 10, 2013
Sampled by: T.Thomson/J.Kataluk
Matrix: Water

Lab number:	25370	25371	25372	25373
Sample name:	ST-AS-2	ST-AS-2 Dup	ST-AS-3	ST-AS-4
Sampling date:	06-04-2013	06-04-2013	06-04-2013	06-04-2013
Total Suspended Solids mg/L	10	7	<1	2

These results are as followed on the Certificate's analisys of the coresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: April 11, 2013

F-02-13
Version 2ième: 18/10/2006

125, boul Industriel, Rouyn-Noranda (Québec) J9X 6P2 ● Tél: (819) 797-0550 ● Fax:(819) 797-2155 ● Courriel: multilab@cablevision.qc.ca ● www.multilab-direct.com

Quality control Report

Company: **Agnico Eagle Division Meadowbank**
Client: M. Stéphane Robert
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Lab number: Multiple
Date received: 10-avr-13
Sampled by: T.Thomson/J.Kataluk
Matrix: Water

Parameter	Standard				Sample duplicate	
	Limit	Nom	Obtenue	Intervalle	1	2
M.E.S. mg/L	<1	TD-MES 25mg	26	19 - 31		

Lab number: 25370:25373

Results relate only to the sample tested.
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All samples will be disposed of after 30 days following analysis.

Reported on: April 11, 2013

F-02-15
Version 1ière: 24/07/2006

125, boul Industriel, Rouyn-Noranda (Québec) J9X 6P2 ● Tél: (819) 797-0550 ● Fax:(819) 797-2155 ● Courriel: multilab@cablevision.qc.ca ● www.multilab-direct.com

Quality control Report

Company: **Agnico Eagle Division Meadowbank**
Client: M. Stéphane Robert
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Lab number: Multiple
Date received: 08-févr-13
Sampled by: M. Theriault/T. Thompson
Matrix: Waste Water

Parameter	Standard				Sample duplicate	
	Limit	Nom	Obtenue	Intervalle	1	2
M.E.S. mg/L	<1	MR-0017-2013	101	83 - 131		

Lab number: 24598:24601

Reported on: March 29, 2013

125, boul Industriel, Rouyn-Noranda (Québec) J9X 6P2 ● Tél: (819) 797-0550 ● Fax:(819) 797-2155 ● Courriel: multilab@cablevision.qc.ca ● www.multilab-direct.com