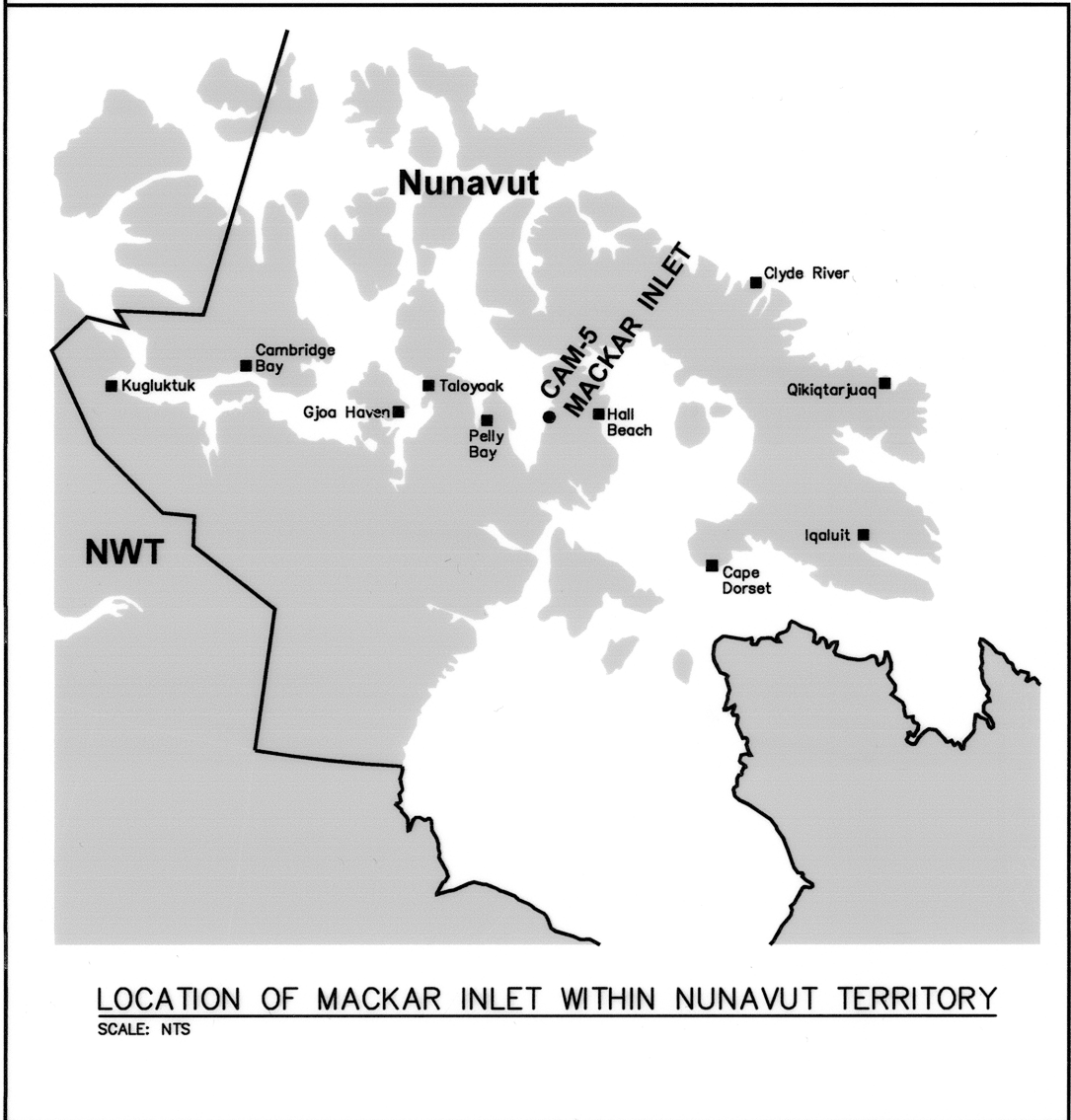
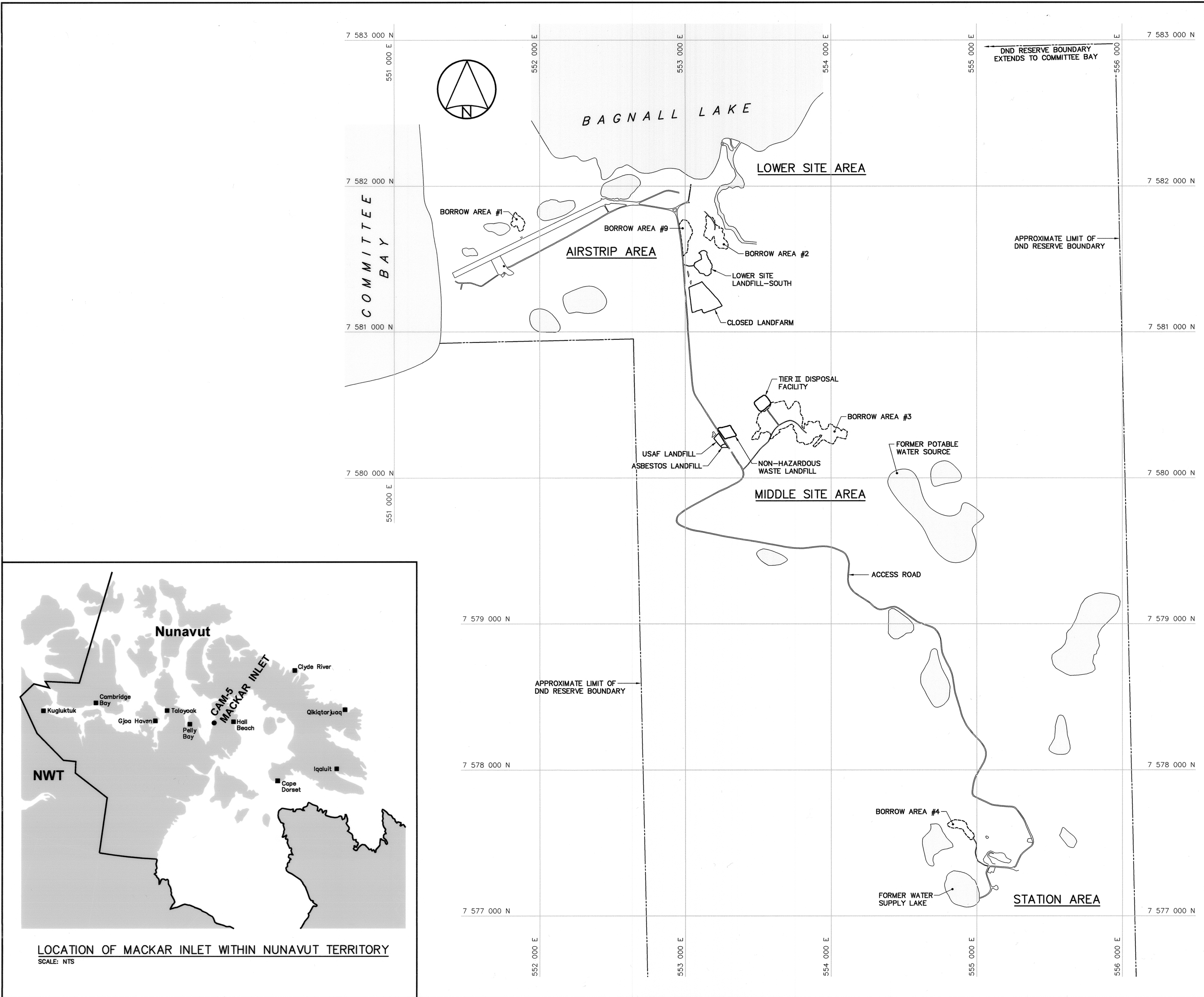


NOTE:  
THIS DRAWING PACKAGE HAS BEEN  
REVISED BASED ON INFORMATION  
SUPPLIED BY DEFENCE CONSTRUCTION  
CANADA.

DRAWING INDEX					
DRAWING No.	TITLE	DRAWING No.	TITLE	DRAWING No.	TITLE
SITING		SITING		STRUCTURAL	
H-M27/1-9101-101	OVERALL SITE PLAN	H-M27/1-9101-114	CLOSED LANDFARM CROSS SECTION	H-M27/1-9101-205	MODULE TRAIN UNITS 1A-25 PLAN
H-M27/1-9101-102	PROJECT LAYOUT	H-M27/1-9101-115	AIRSTRIIP LANDFILL PLAN AND CROSS SECTION	H-M27/1-9101-206	MODULE TRAIN UNITS 1A-25 ELEVATIONS
H-M27/1-9101-103	STATION AREA SITE PLAN	H-M27/1-9101-116	NON-HAZARDOUS WASTE LANDFILL CROSS SECTION	H-M27/1-9101-207	UNHEATED VEHICLE STORAGE PLAN AND ELEVATIONS
H-M27/1-9101-104	STATION AREA NORTH AND SOUTH SITE PLANS	H-M27/1-9101-117	TIER II DISPOSAL FACILITY KEY TRENCH EXCAVATION PLAN & GRADING/INSTRUMENTATION PLAN	H-M27/1-9101-208	QML STORAGE SHED PLAN AND SECTION
H-M27/1-9101-105	LOWER SITE AREA SITE PLAN SHEET 1	H-M27/1-9101-118	TIER II DISPOSAL FACILITY CROSS SECTION AND DETAIL	H-M27/1-9101-209	RADAR TOWER/RADOME PLAN AND SECTION
H-M27/1-9101-106	LOWER SITE AREA SITE PLAN SHEET 2	H-M27/1-9101-119	MISCELLANEOUS DETAILS	H-M27/1-9101-210	COMMUNICATION DISH ELEVATIONS
H-M27/1-9101-107	AIRSTRIIP AREA SITE PLANS	H-M27/1-9101-120	MISCELLANEOUS DETAILS SHEET 2	H-M27/1-9101-211	COMMUNICATION BILLBOARD, FEEDHORN AND WAVEGUIDE PLAN, SECTIONS AND ELEVATIONS
H-M27/1-9101-108	MIDDLE SITE LANDFILL AREA SITE PLAN			H-M27/1-9101-212	FUEL TANKS PLAN AND ELEVATIONS
H-M27/1-9101-109	UPPER SITE LANDFILL KEY TRENCH EXCAVATION PLAN & GRADING/INSTRUMENTATION PLAN	STRUCTURAL		H-M27/1-9101-213	AIRSTRIIP ANCILLARY FACILITIES STANDARD DETAILS
H-M27/1-9101-110	UPPER SITE LANDFILL CROSS SECTION	H-M27/1-9101-201	STATION AREA DEMOLITION SITE PLAN		
H-M27/1-9101-111	LOWER SITE LANDFILL NORTH EXCAVATION PLAN	H-M27/1-9101-202	AIRSTRIIP AREA DEMOLITION SITE PLANS	© COPYRIGHT HER MAJESTY THE QUEEN IN RIGHT OF CANADA 2012, AS REPRESENTED BY THE MINISTER OF NATIONAL DEFENCE.	
H-M27/1-9101-112	LOWER SITE LANDFILL SOUTH PLAN AND CROSS SECTION	H-M27/1-9101-203	WAREHOUSE PLAN, SECTION AND ELEVATION		
H-M27/1-9101-113	LOWER SITE LANDFILL SOUTH CROSS SECTION	H-M27/1-9101-204	GARAGE PLAN AND SECTION		



# DECEMBER, 2012



Headquarters  
Quartier général

General Notes:

1. ALL COORDINATES ARE REFERENCED TO NAD83 (CSRS), UTM ZONE 16N. ALL ELEVATIONS REFER TO GEODETIC DATUM.
2. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
3. ALL NON-HAZARDOUS DEBRIS REMOVED WITHIN THE PLAN AREA WAS PLACED IN THE NON-HAZARDOUS WASTE LANDFILL.

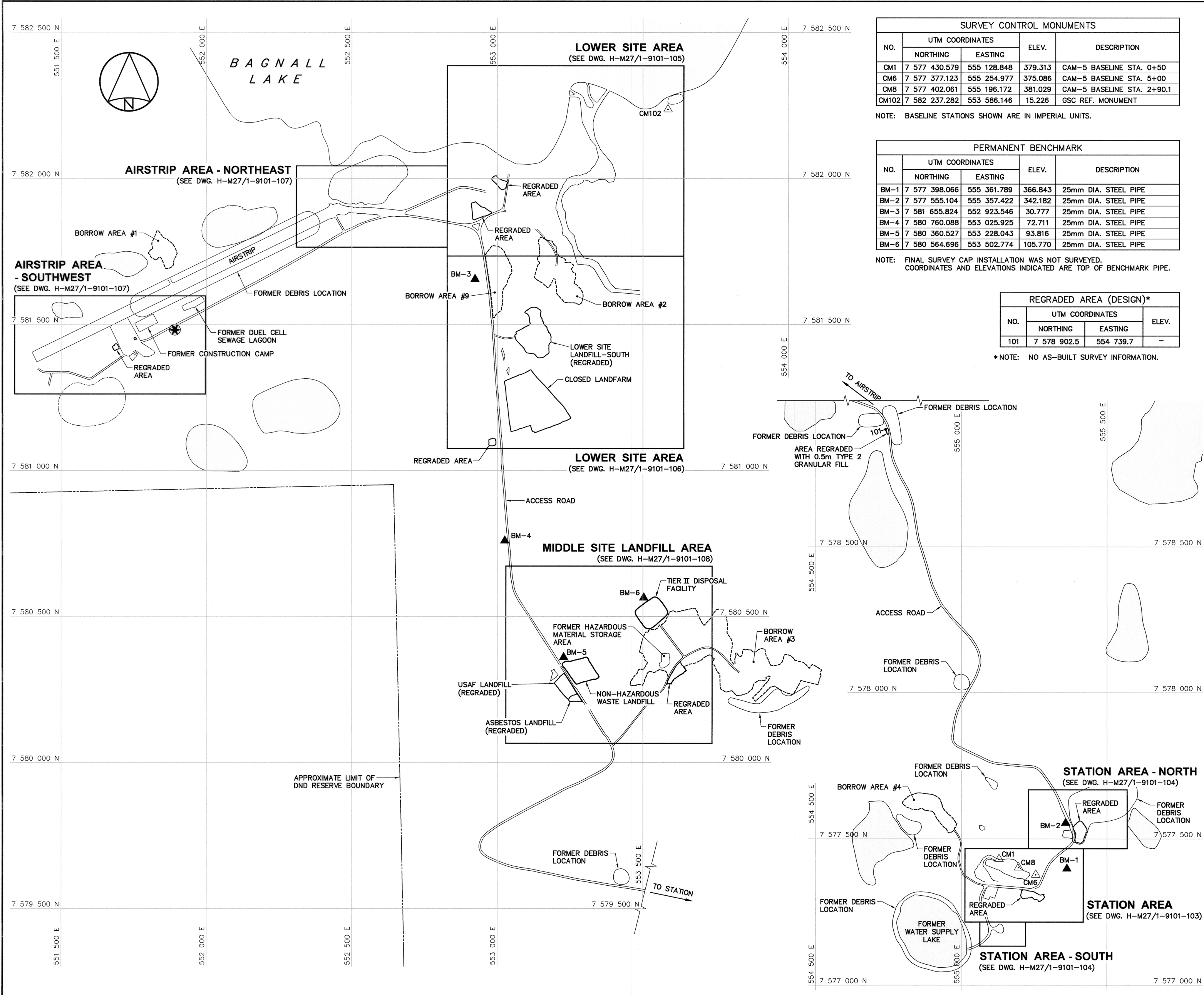
Legend:

- APPROXIMATE LOCATION OF PROPERTY BOUNDARY
- APPROXIMATE EXTENT OF BORROW AREA
- BODY OF WATER

0	12-12-10	AS-BUILT DRAWING	RRM
No.	DATE	REVISION	REVISION
		<div>PERMIT TO PRACTICE AECOM Canada Ltd. Signature:  Date:  PERMIT NUMBER: P639 NWT/NU Association of Professional Engineers and Geoscientists</div>	
AECOM		HATCH	
SCALE - ECHELLE 200 100 0 200 400 600m			
PROJECT - PROJET CAM-5 MACKAR INLET			
DEW LINE CLEAN UP			
© COPYRIGHT HER MAJESTY THE QUEEN IN RIGHT OF CANADA 2012, AS REPRESENTED BY THE MINISTER OF NATIONAL DEFENCE.			
TRADE - METIER SITING		DATE 2005-08-08	
SUBJECT - SUJET			
OVERALL SITE PLAN			
PRODUCTION		CONCURRENCE - ASSENTIMENT	
DESIGNED ETUDIE CY/BWF		DES OFF AGENT CONCEPT	
DRAWN DESSINE IC/CAE		SECT HD CHEF SECT	
CHECKED VERIFIE RRM		DES MGR GEST CONCEPT	
COORDINATION SMS		REVIEWED - REVU	
DWG. NO. - DESSIN NO. H-M27/1-9101-101			

Canada





SURVEY CONTROL MONUMENTS				
NO.	UTM COORDINATES		ELEV.	DESCRIPTION
	NORTHING	EASTING		
CM1	7 577 430.579	555 128.848	379.313	CAM-5 BASELINE STA. 0+50
CM6	7 577 377.123	555 254.977	375.086	CAM-5 BASELINE STA. 5+00
CM8	7 577 402.061	555 196.172	381.029	CAM-5 BASELINE STA. 2+90.1
CM102	7 582 237.282	553 586.146	15.226	GSC REF. MONUMENT

NOTE: BASELINE STATIONS SHOWN ARE IN IMPERIAL UNITS.

PERMANENT BENCHMARK				
NO.	UTM COORDINATES		ELEV.	DESCRIPTION
	NORTHING	EASTING		
BM-1	7 577 398.066	555 361.789	366.843	25mm DIA. STEEL PIPE
BM-2	7 577 555.104	555 357.422	342.182	25mm DIA. STEEL PIPE
BM-3	7 581 655.824	552 923.546	30.777	25mm DIA. STEEL PIPE
BM-4	7 580 760.088	553 025.925	72.711	25mm DIA. STEEL PIPE
BM-5	7 580 360.527	553 228.043	93.816	25mm DIA. STEEL PIPE
BM-6	7 580 564.696	553 502.774	105.770	25mm DIA. STEEL PIPE

NOTE: FINAL SURVEY CAP INSTALLATION WAS NOT SURVEYED. COORDINATES AND ELEVATIONS INDICATED ARE TOP OF BENCHMARK PIPE.

REGRADED AREA (DESIGN)*			
NO.	UTM COORDINATES		ELEV.
	NORTHING	EASTING	
101	7 578 902.5	554 739.7	-

\*NOTE: NO AS-BUILT SURVEY INFORMATION.

Headquarters  
Quartier général

General Notes:

- ALL COORDINATES ARE REFERENCED TO NAD83 (CSRS), UTM ZONE 16N. ALL ELEVATIONS REFER TO GEODETIC DATUM.
- ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
- ARCHAEOLOGICAL FEATURES LOCATED AS PER ENVIRONMENTAL CLEAN UP STUDY OF 21 DEW LINE SITES IN CANADA, VOL. 17, UMA 1991.
- FOR PERMANENT SURVEY CONTROL (BENCHMARK) INSTALLATION DETAIL, SEE DWG. H-M27/1-9101-119.

Legend:

- CM1 SURVEY CONTROL MONUMENT
- BM-1 PERMANENT BENCHMARK LOCATION (6)
- 101 COORDINATE POINT
- APPROXIMATE LOCATION OF COMMEMORATIVE PLAQUE
- APPROXIMATE LOCATION OF PROPERTY BOUNDARY
- ARCHAEOLOGICAL FEATURE
- BODY OF WATER

0	12-12-10	AS-BUILT DRAWING	RRM
No.	DATE	REVISION	APPR.

PERMIT TO PRACTICE  
AECOM Canada Ltd.  
Signature:   
Date:   
PERMIT NUMBER: P639  
NWT/NU Association of Professional Engineers and Geoscientists

SCALE - ÉCHELLE 100 50 0 100 200 300m

PROJECT - PROJET  
**CAM-5 MACKAR INLET**

**DEW LINE CLEAN UP**

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TRADE - MÉTIER	SITING	DATE
		2005-08-08

SUBJECT - SUJET

**PROJECT LAYOUT**

PRODUCTION	CONCURRENCE - ASSENTMENT
DESIGNED ETUDIE CY/BWF	DES OFF AGENT CONCEPT
DRAWN DESSINE IC/CAE	SECT HD CHEF SECT
CHECKED VERIFIE RRM	DES MGR GEST CONCEPT
COORDINATION SMS	REVIEWED - REVU

DWG. NO. - DESSIN NO.  
H-M27/1-9101-102

Canada

SURVEY CONTROL MONUMENTS				
NO.	UTM COORDINATES		ELEV.	DESCRIPTION
	NORTHING	EASTING		
CM1	7 577 430.579	555 128.848	379.313	CAM-5 BASELINE STA. 0+50
CM6	7 577 377.123	555 254.977	375.086	CAM-5 BASELINE STA. 5+00
CM8	7 577 402.061	555 196.172	381.029	CAM-5 BASELINE STA. 2+90.1

NOTE: BASELINE STATIONS SHOWN ARE IN IMPERIAL UNITS.

PERMANENT BENCHMARK				
NO.	UTM COORDINATES		ELEV.	DESCRIPTION
	NORTHING	EASTING		
BM-1	7 577 398.066	555 361.789	366.843	25mm DIA. STEEL PIPE

NOTE: FINAL SURVEY CAP INSTALLATION WAS NOT SURVEYED.  
COORDINATES AND ELEVATIONS INDICATED ARE TOP OF BENCHMARK PIPE.

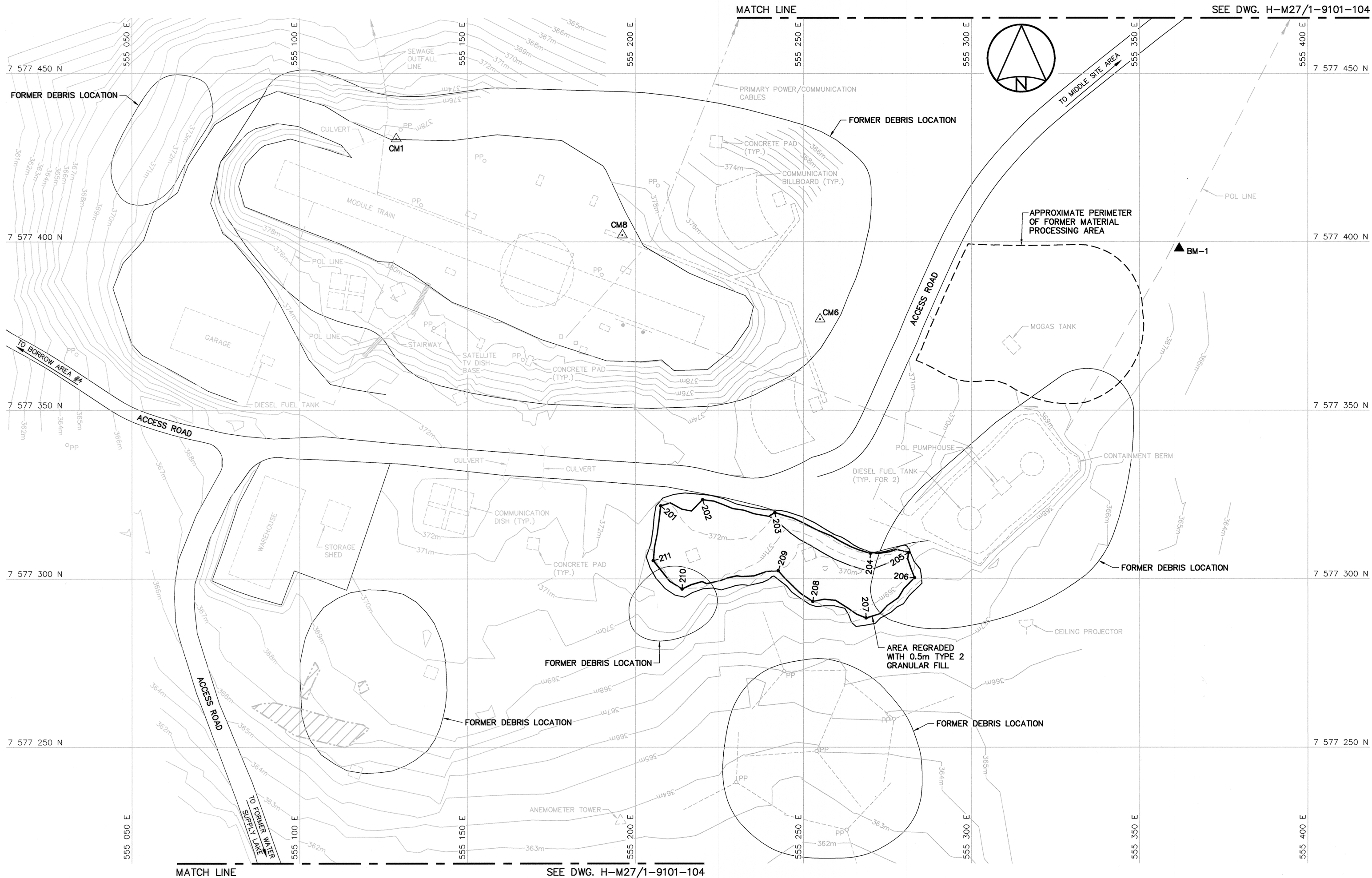
REGRADED AREA (AS-BUILT)			
NO.	UTM COORDINATES		ELEV.
	NORTHING	EASTING	
201	7 577 321.6	555 207.6	371.7
202	7 577 323.5	555 220.0	372.7
203	7 577 319.7	555 241.5	372.3
204	7 577 307.6	555 270.0	372.1
205	7 577 307.9	555 281.3	369.5
206	7 577 300.4	555 283.1	368.7
207	7 577 288.4	555 268.7	368.1
208	7 577 293.3	555 252.8	369.0
209	7 577 302.4	555 242.5	370.0
210	7 577 297.0	555 213.9	371.1
211	7 577 305.4	555 205.3	371.0

NOTE:

FOR DETAILS REGARDING CONFIRMATORY TESTING INFORMATION, REFER TO FINAL REPORT PREPARED BY THE ENVIRONMENTAL SCIENCES GROUP, ROYAL MILITARY COLLEGE.

NOTE:

CONTOURS SHOWN AS DASHED LINES WERE GENERATED FROM SURVEY INFORMATION AND REPRESENT FINISHED GROUND SURFACE FOLLOWING REGRADED OR RESHAPING.



General Notes:

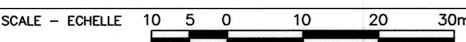
- ALL COORDINATES ARE REFERENCED TO NAD83 (CSRS), UTM ZONE 16N. ALL ELEVATIONS REFER TO GEODETIC DATUM.
- ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
- FOR PERMANENT SURVEY CONTROL (BENCHMARK) INSTALLATION DETAIL, SEE DWG. H-M27/1-9101-119.

Legend:

- CM1 SURVEY CONTROL MONUMENT
- BM-1 PERMANENT BENCHMARK LOCATION (1)
- 201 COORDINATE POINT
- PP FORMER UTILITY POLE
- FORMER BUILDING, STRUCTURE OR TANK LOCATION
- COMPLETED LANDFILL OR BURIED DEBRIS EXCAVATION
- BODY OF WATER

0	12-12-10	AS-BUILT DRAWING	RRM
No.	DATE	REVISION	REVISION
			APPR.

PERMIT TO PRACTICE  
AECOM Canada Ltd.  
Signature: *[Signature]*  
Date: 12/14/12  
PERMIT NUMBER: P639  
NWT/NU Association of Professional Engineers and Geoscientists



PROJECT - PROJET  
**CAM-5 MACKAR INLET**

**DEW LINE CLEAN UP**

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MINISTER OF NATIONAL DEFENCE.

TRADE - METIER  
**SITING**  
DATE  
**2005-08-08**

SUBJECT - SUJET

**STATION AREA  
SITE PLAN**

PRODUCTION		CONCURRENCE - ASSENTIMENT	
DESIGNED ETUDIE	CV/BWF	DES OFF AGENT	CONCEPT
DRAWN DESSINE	IC/CAE	SECT HD CHEF	SECT
CHECKED VERIFIE	RRM	DES MGR GEST	CONCEPT
COORDINATION SMS		REVIEWED - REVU	

DWG. NO. - DESSIN NO.  
**H-M27/1-9101-103**



General Notes:

1. ALL COORDINATES ARE REFERENCED TO NAD83 (CSRS), UTM ZONE 16N. ALL ELEVATIONS REFER TO GEODETIC DATUM.
2. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
3. FOR PERMANENT SURVEY CONTROL (BENCHMARK) INSTALLATION DETAIL, SEE DWG. H-M27/1-9101-119.

Legend:

- ▲ BM-2 PERMANENT BENCHMARK LOCATION (1)
- 301 COORDINATE POINT
- FORMER BUILDING, STRUCTURE OR TANK LOCATION
- ▨ COMPLETED LANDFILL OR BURIED DEBRIS EXCAVATION
- BODY OF WATER

0	12-10	AS-BUILT DRAWING	RRM
No.	DATE	REVISION	REVISION
			APPR.

PERMIT TO PRACTICE  
AECOM Canada Ltd.  
Signature: *[Signature]*  
Date: *Dec 14/12*  
PERMIT NUMBER: P639  
NWT/NU Association of Professional Engineers and Geoscientists

AECOM HATCH

SCALE - ECHELLE 10 5 0 10 20 30m

PROJECT - PROJET  
CAM-5 MACKAR INLET

DEW LINE CLEAN UP

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MINISTER OF NATIONAL DEFENCE.

TRADE - METIER SITING DATE 2005-08-08

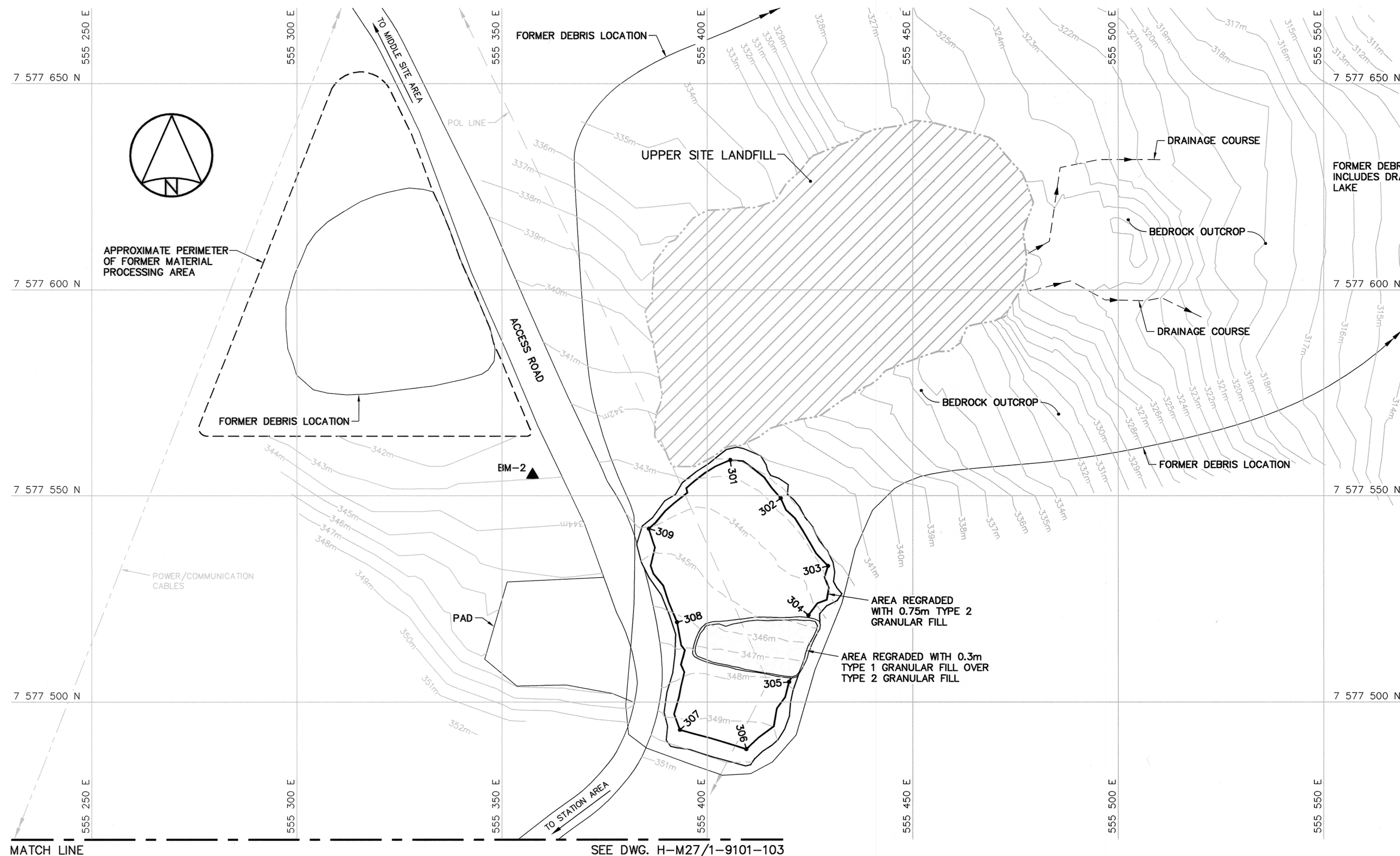
SUBJECT - SUJET

STATION AREA NORTH AND SOUTH  
SITE PLANS

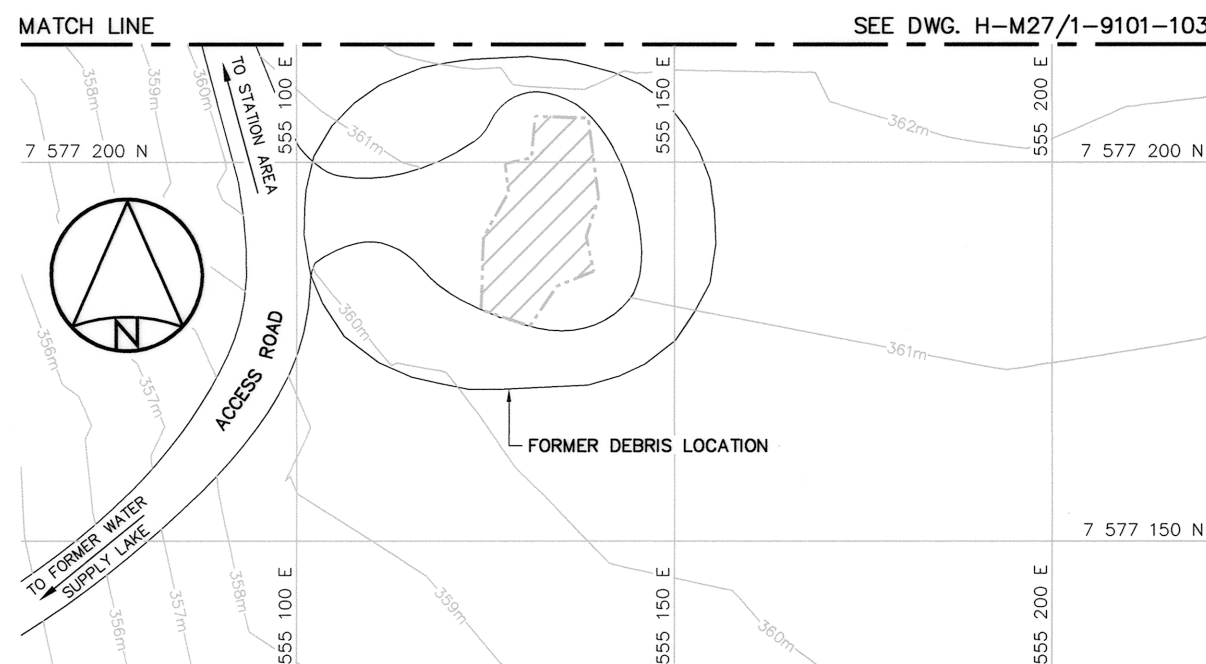
DESIGNED ETUDIE	CONCURRENCE - ASSENTIMENT	DES OFF AGENT CONCEPT
CY/BWF		
DRAWN DESSINE		SECT HD CHEF SECT
IC/CAE		
CHECKED VERIFIE		DES MGR GEST CONCEPT
RRM		
COORDINATION SMB		REVIEWED - REVU

DWG. NO. - DESSIN NO.  
H-M27/1-9101-104

Canada



STATION AREA-NORTH



STATION AREA-SOUTH

PERMANENT BENCHMARK				
NO.	UTM COORDINATES		ELEV.	DESCRIPTION
	NORTHING	EASTING		
BM-2	7 577 555.104	555 357.422	342.182	25mm DIA. STEEL PIPE

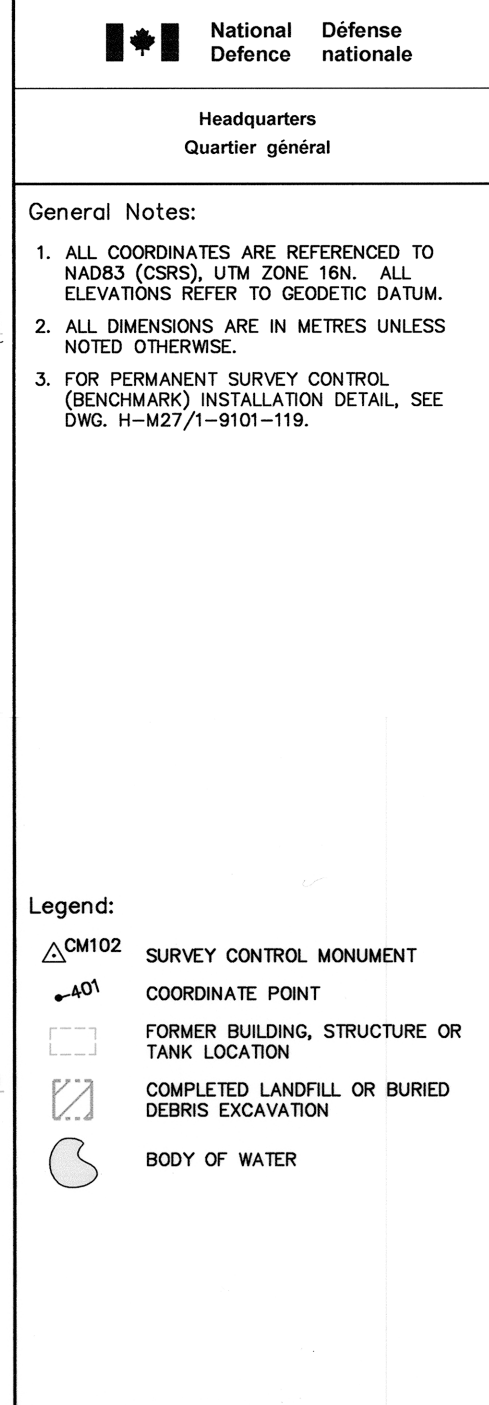
NOTE: FINAL SURVEY CAP INSTALLATION WAS NOT SURVEYED.  
COORDINATES AND ELEVATIONS INDICATED ARE TOP OF BENCHMARK PIPE.

NOTE:  
FOR DETAILS REGARDING CONFIRMATORY  
TESTING INFORMATION, REFER TO FINAL  
REPORT PREPARED BY THE ENVIRONMENTAL  
SCIENCES GROUP, ROYAL MILITARY COLLEGE.

NOTE:  
CONTOURS SHOWN AS DASHED LINES WERE  
GENERATED FROM SURVEY INFORMATION  
AND REPRESENT FINISHED GROUND SURFACE  
FOLLOWING REGRAIDING OR RESHAPING.

REGRADED AREA (AS-BUILT)			
NO.	UTM COORDINATES		ELEV.
	NORTHING	EASTING	
301	7 577 558.7	555 405.6	342.0
302	7 577 549.4	555 417.9	342.4
303	7 577 533.0	555 429.4	342.5
304	7 577 521.1	555 424.6	344.3
305	7 577 504.9	555 419.9	347.9
306	7 577 488.6	555 409.5	349.6
307	7 577 493.3	555 393.3	349.3
308	7 577 519.4	555 392.6	346.2
309	7 577 542.0	555 385.8	344.1

NOTE:  
CONTOURS SHOWN AS DASHED LINES WERE  
GENERATED FROM SURVEY INFORMATION  
AND REPRESENT FINISHED GROUND SURFACE  
FOLLOWING REGRADING OR RESHAPING.



	<p>PERMIT TO PRACTICE AECOM Canada Ltd.</p> <p>Signature: </p> <p>Date: <u>Dec 14/12</u></p> <p>PERMIT NUMBER: P639</p> <p>NWT/NU Association of Professional Engineers and Geoscientists</p>
--	---

SCALE - ECHELLE 20 10 0 20 40 60n

PROJECT - PROJCT  
CAM-5 MACKAR INLET

DEW LINE CLEAN UP	
-------------------	--

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TRADE - METIER	SITING	DATE
		2005-08-0

SUBJECT - SUJET	
-----------------	--

LOWER SITE AREA  
SITE PLAN

SHEET 1

PRODUCTION	CONCURRENCE - ASSENTIMENT
------------	---------------------------

DESIGNED	DES OFF
<i>CV/RWF</i>	

ETUDE	OFF. DWT	AGENT	CONCEPT
DRAWN DESSINE	IC/CAE	SECT CHEF	HD SECT

DESIGNÉ		CHÉF DES
CHECKED		DES MGR
VERIFIÉ <i>RRM</i>		GEST CONCEPT

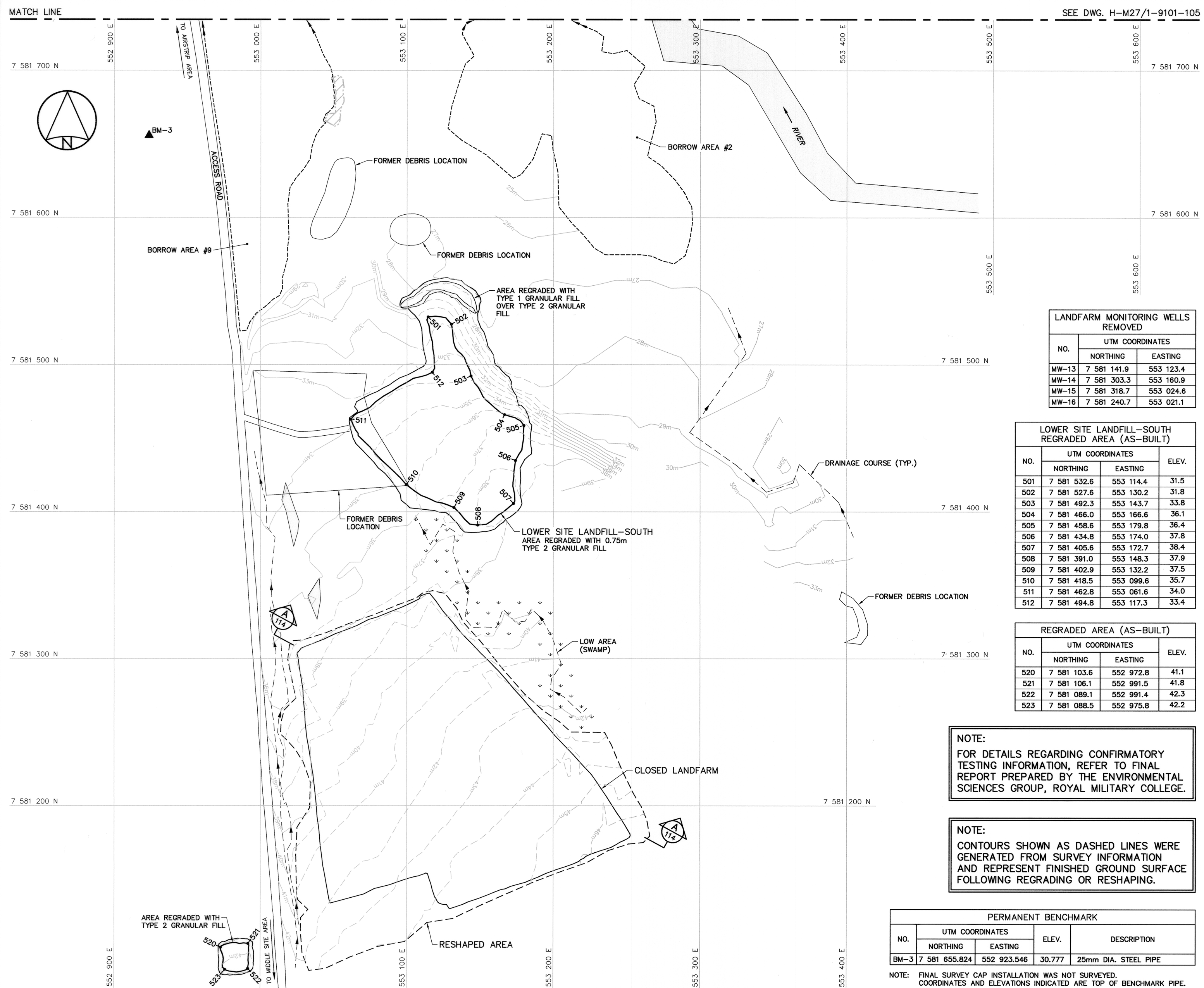
COORDINATION <i>SMS</i>	REVIEWED - REVU
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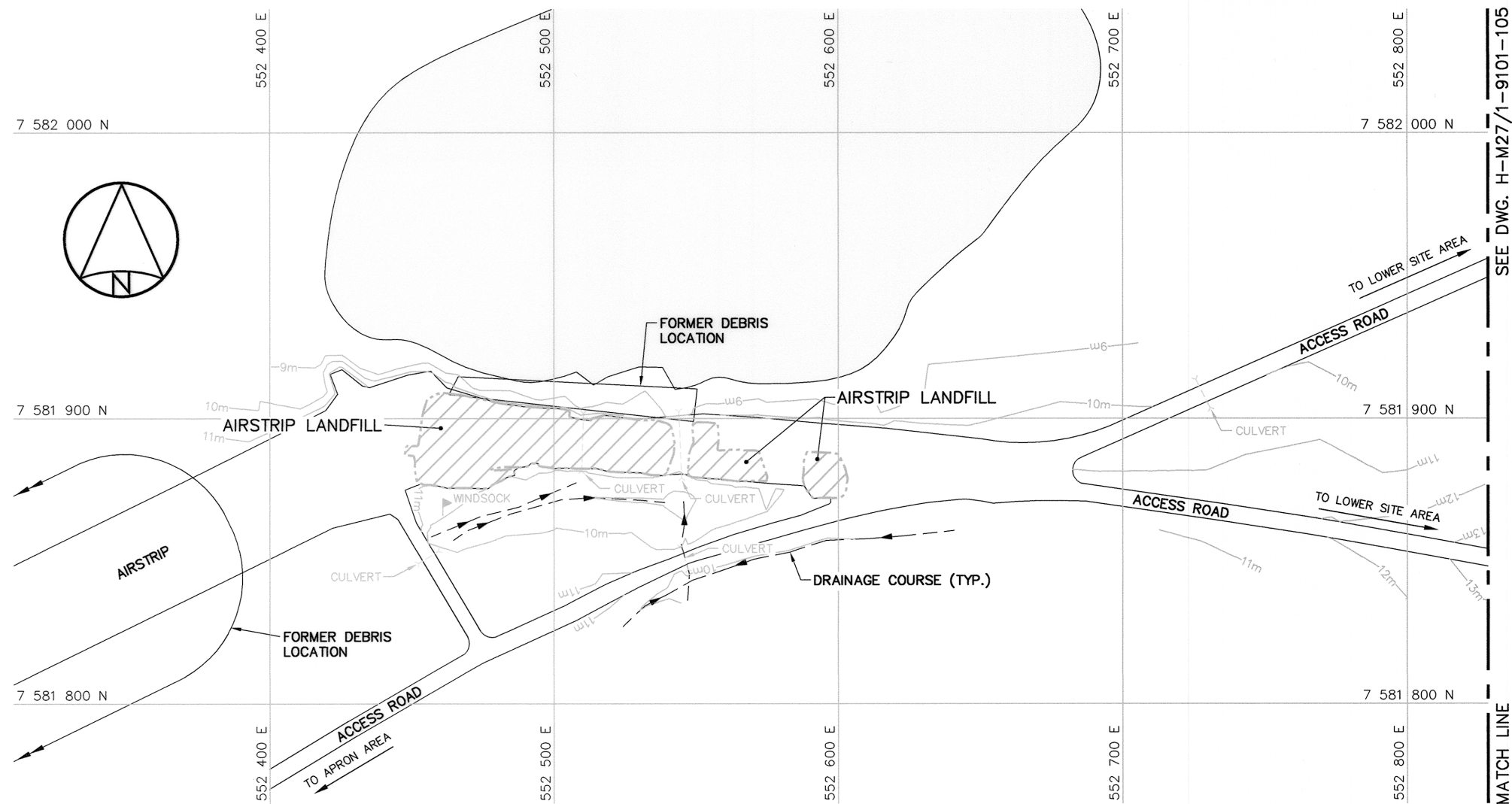
DWG. NO. - DESSIN NO.  
H-M27/1-9101-105

Canada

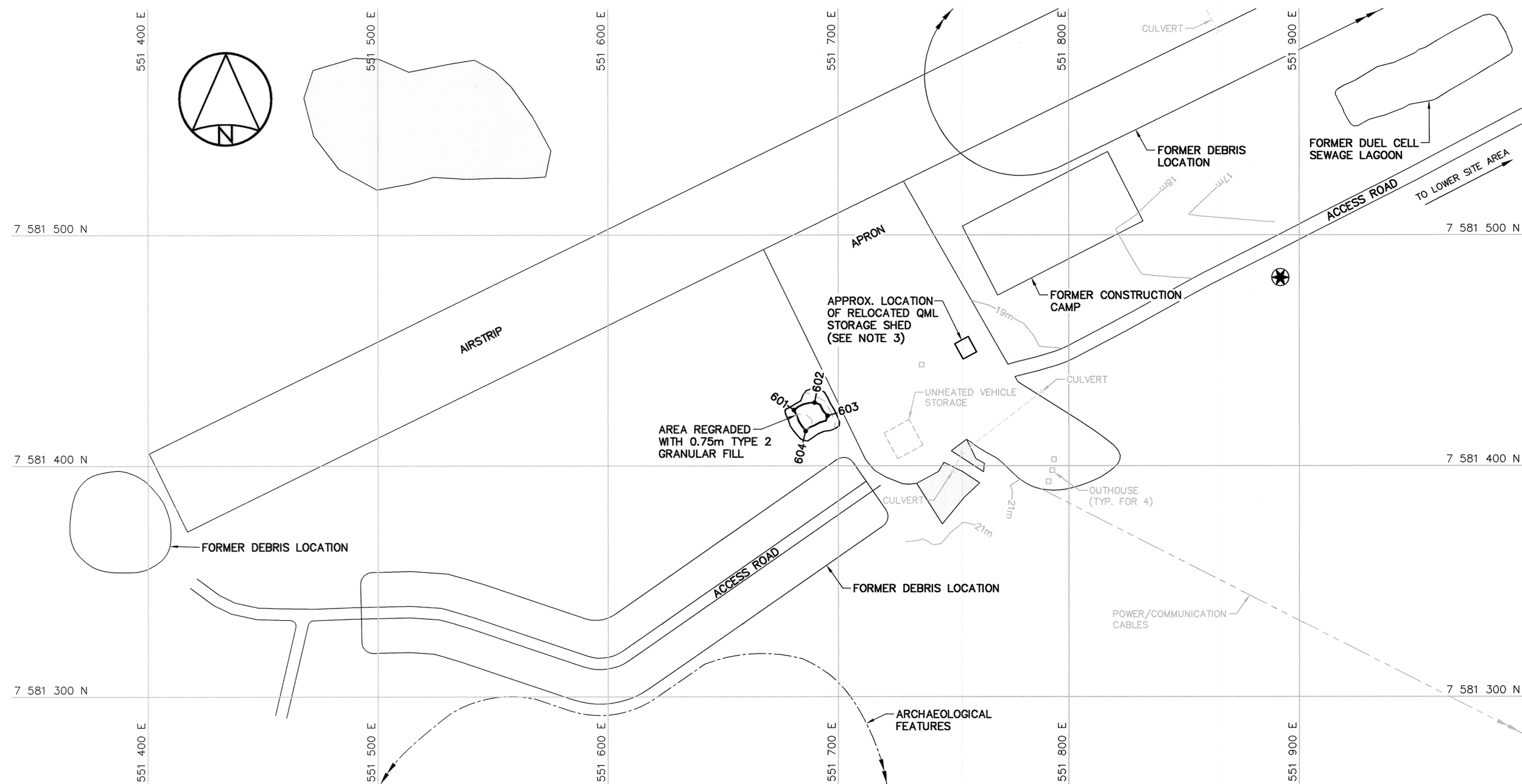
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**AIRSTrip AREA-NORTHEAST**



**AIRSTrip AREA-SOUTHWEST**

**NOTE:**  
FOR DETAILS REGARDING CONFIRMATORY TESTING INFORMATION, REFER TO FINAL REPORT PREPARED BY THE ENVIRONMENTAL SCIENCES GROUP, ROYAL MILITARY COLLEGE.

**NOTE:**  
CONTOURS SHOWN AS DASHED LINES WERE GENERATED FROM SURVEY INFORMATION AND REPRESENT FINISHED GROUND SURFACE FOLLOWING REGRADED OR RESHAPING.

REGRADED AREA (AS-BUILT)			
NO.	UTM COORDINATES		ELEV.
	NORTHING	EASTING	
601	7 581 424.2	551 680.7	20.7
602	7 581 427.4	551 689.7	20.5
603	7 581 421.7	551 695.3	20.4
604	7 581 415.1	551 685.8	21.0

**General Notes:**

- ALL COORDINATES ARE REFERENCED TO NAD83 (CSRS), UTM ZONE 16N. ALL ELEVATIONS REFER TO GEODETIC DATUM.
- ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
- FOR PLAN AND SECTION OF RELOCATED QML STORAGE SHED, SEE DWG. H-M27/1-9101-208.

**Legend:**

- COORDINATE POINT
- APPROXIMATE LOCATION OF COMMEMORATIVE PLAQUE
- FORMER BUILDING, STRUCTURE OR TANK LOCATION
- COMPLETED LANDFILL OR BURIED DEBRIS EXCAVATION
- BODY OF WATER

0 12-12-10 AS-BUILT DRAWING RRM

No. DATE REVISION REVISION APPR.

**PERMIT TO PRACTICE**  
AECOM Canada Ltd.  
Signature: [Signature]  
Date: Dec 14/12  
PERMIT NUMBER: P639  
NWT/NU Association of Professional Engineers and Geoscientists

**AECOM HATCH**

SCALE - ECHELLE 20 10 0 20 40 60m

PROJECT - PROJET  
**CAM-5 MACKAR INLET**

**DEW LINE CLEAN UP**

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TRADE - METIER SITING DATE 2005-08-08

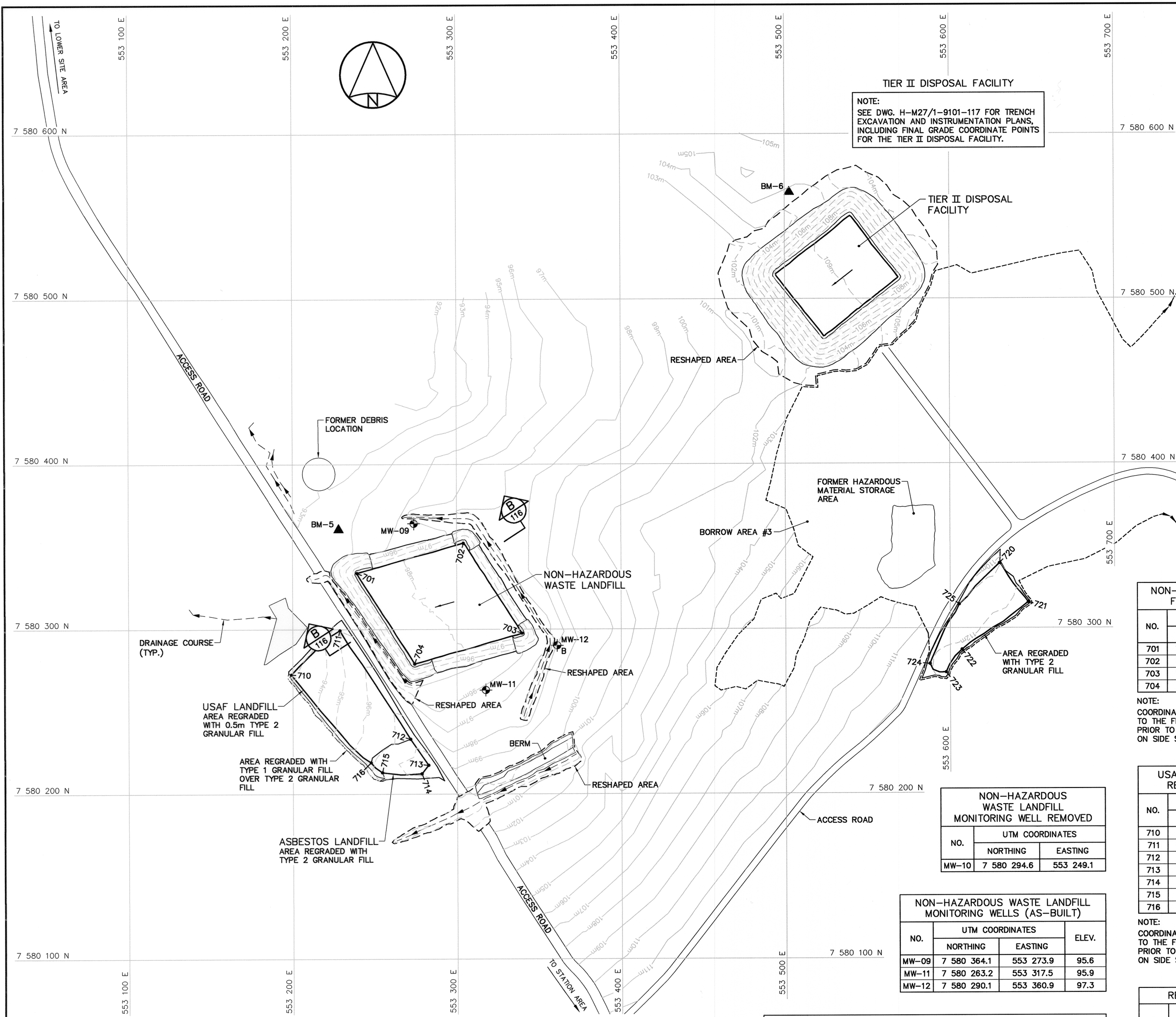
SUBJECT - SUJET

**AIRSTrip AREA  
SITE PLANS**

PRODUCTION	CONCURRENCE - ASSENTMENT	
DESIGNED ETUDIE	CY/BWF	DES OFF AGENT CONCEPT
DRAWN DESSINE	IC/CAE	SECT HD CHEF SECT
CHECKED VERIFIE	RRM	DES MGR GEST CONCEPT
COORDINATION	SMS	REVIEWED - REVU

DWG. NO. - DESSIN NO.  
H-M27/1-9101-107





TIER II DISPOSAL FACILITY

NOTE:  
SEE DWG. H-M27/1-9101-117 FOR TRENCH EXCAVATION AND INSTRUMENTATION PLANS, INCLUDING FINAL GRADE COORDINATE POINTS FOR THE TIER II DISPOSAL FACILITY.

NOTE:  
FOR DETAILS REGARDING CONFIRMATORY TESTING INFORMATION, REFER TO FINAL REPORT PREPARED BY THE ENVIRONMENTAL SCIENCES GROUP, ROYAL MILITARY COLLEGE.

NOTE:  
CONTOURS SHOWN AS DASHED LINES WERE GENERATED FROM SURVEY INFORMATION AND REPRESENT FINISHED GROUND SURFACE FOLLOWING REGRADING OR RESHAPING.

PERMANENT BENCHMARK			
NO.	UTM COORDINATES		ELEV.
	NORTHING	EASTING	
BM-5	7 580 360.527	553 228.043	93.816
BM-6	7 580 564.696	553 502.774	105.770

NOTE: FINAL SURVEY CAP INSTALLATION WAS NOT SURVEYED. COORDINATES AND ELEVATIONS INDICATED ARE TOP OF BENCHMARK PIPE.

NON-HAZARDOUS WASTE LANDFILL MONITORING WELL REMOVED		
NO.	UTM COORDINATES	
	NORTHING	EASTING
MW-10	7 580 294.6	553 249.1

NON-HAZARDOUS WASTE LANDFILL MONITORING WELLS (AS-BUILT)			
NO.	UTM COORDINATES		ELEV.
	NORTHING	EASTING	
MW-09	7 580 364.1	553 273.9	95.6
MW-11	7 580 263.2	553 317.5	95.9
MW-12	7 580 290.1	553 360.9	97.3


NON-HAZARDOUS WASTE LANDFILL FINAL GRADING (AS-BUILT)		
NO.	UTM COORDINATES	
	NORTHING	EASTING
701	7 580 334.1	553 239.2
702	7 580 352.2	553 304.0
703	7 580 297.6	553 339.6
704	7 580 279.2	553 274.2

NOTE:  
COORDINATE POINTS AND ELEVATIONS PROVIDED ARE TO THE FINAL GRADE OF TYPE 2 GRANULAR FILL PRIOR TO THE PLACEMENT OF TYPE 1 GRANULAR FILL ON SIDE SLOPES.


USAF AND ASBESTOS LANDFILLS REGRADED AREA (AS-BUILT)			
NO.	UTM COORDINATES		ELEV.
	NORTHING	EASTING	
710	7 580 272.7	553 199.1	92.8
711	7 580 299.5	553 228.7	94.8
712	7 580 233.5	553 271.6	97.6
713	7 580 217.7	553 282.5	98.4
714	7 580 212.5	553 278.5	98.2
715	7 580 213.2	553 254.4	97.6
716	7 580 219.2	553 247.5	96.6

NOTE:  
COORDINATE POINTS AND ELEVATIONS PROVIDED ARE TO THE FINAL GRADE OF TYPE 2 GRANULAR FILL PRIOR TO THE PLACEMENT OF TYPE 1 GRANULAR FILL ON SIDE SLOPES.

REGRADED AREA (AS-BUILT)		
NO.	UTM COORDINATES	
	NORTHING	EASTING
720	7 580 339.4	553 630.1
721	7 580 315.6	553 647.4
722	7 580 287.0	553 607.2
723	7 580 273.3	553 597.5
724	7 580 278.5	553 587.6
725	7 580 314.4	553 605.5



National  
Défense



Défense  
nationale

Headquarters  
Quartier général


General Notes:

- ALL COORDINATES ARE REFERENCED TO NAD83 (CSRS), UTM ZONE 16N. ALL ELEVATIONS REFER TO GEODETIC DATUM.
- ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
- FOR PERMANENT SURVEY CONTROL (BENCHMARK) INSTALLATION DETAIL, SEE DWG. H-M27/1-9101-119.
- FOR MONITORING WELL INSTALLATION DETAIL, SEE DWG. H-M27/1-9101-119.


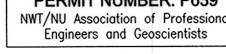
Legend:



- BM-5 PERMANENT BENCHMARK LOCATION (2)
- 701 COORDINATE POINT
- MW-09 MONITORING WELL LOCATION (2)
- MW-12 BACKGROUND MONITORING WELL LOCATION (1)
- B BODY OF WATER

0	12-12-10	AS-BUILT DRAWING	RRM
No.	DATE	REVISION	REVISION
			APPR.



Dec 14/12

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AECOM Canada Ltd.  
Signature:   
Date:   
PERMIT NUMBER: P639  
NWT/NU Association of Professional Engineers and Geoscientists



SCALE - ECHELLE 20 10 0 20 40 60m

PROJECT - PROJET  
CAM-5 MACKAR INLET

DEW LINE CLEAN UP

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MINISTER OF NATIONAL DEFENCE.

TRADE - METIER SITING DATE 2005-08-08

SUBJECT - SUJET

MIDDLE SITE LANDFILL AREA  
SITE PLAN

PRODUCTION	CONCURRENCE - ASSENTIMENT
DESIGNED ETUDIE CY/BWF	DES OFF AGENT CONCEPT
DRAWN DESSINE IC/CAE	SECT HD CHEF SECT
CHECKED VERIFIE RRM	DES MGR GEST CONCEPT
COORDINATION SMS	REVIEWED - REVU



DWG. NO. - DESSIN NO.  
H-M27/1-9101-108

Canada


General Notes:

1. ALL COORDINATES ARE REFERENCED TO NAD83 (CSRS), UTM ZONE 16N. ALL ELEVATIONS REFER TO GEODETIC DATUM.
2. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.


Legend:

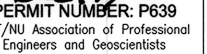
-  GENERATED BASED ON FINAL AS-BUILT SURVEY INFORMATION
-  GENERATED BASED ON INTERMEDIATE AS-BUILT SURVEY INFORMATION

0	12-12-10	AS-BUILT DRAWING	RRM
No.	DATE	REVISION	REVISION
			APPR.





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Date: 

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SCALE - ECHELLE

2
1
0
2
4
6m

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TRADE - METIER  
SITING

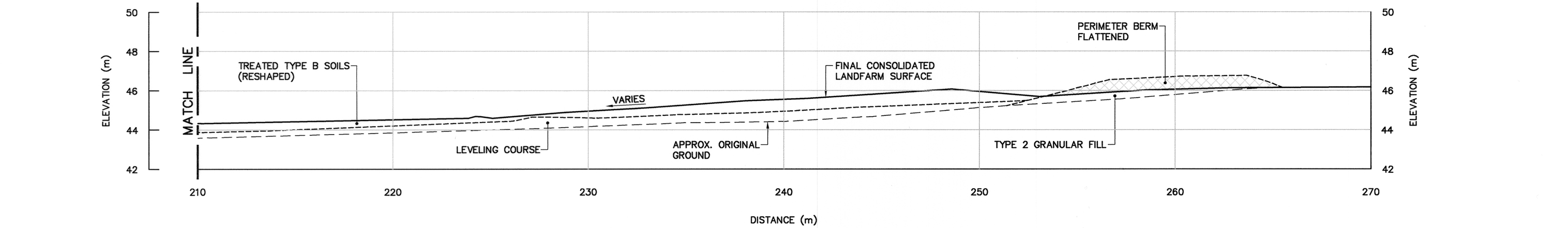
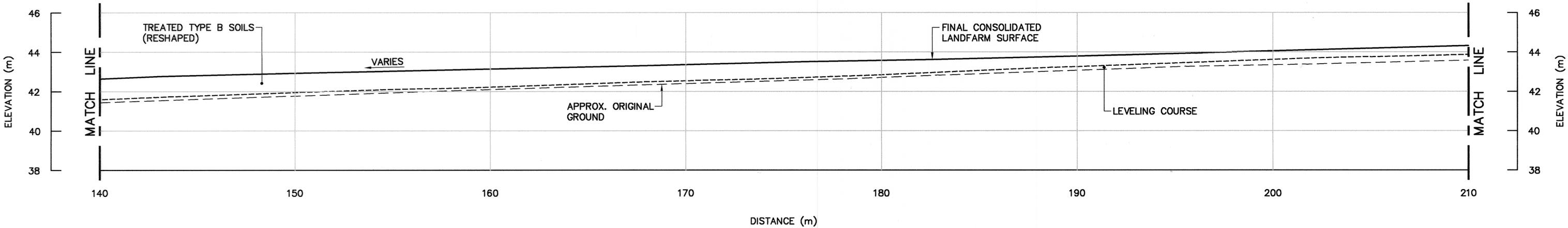
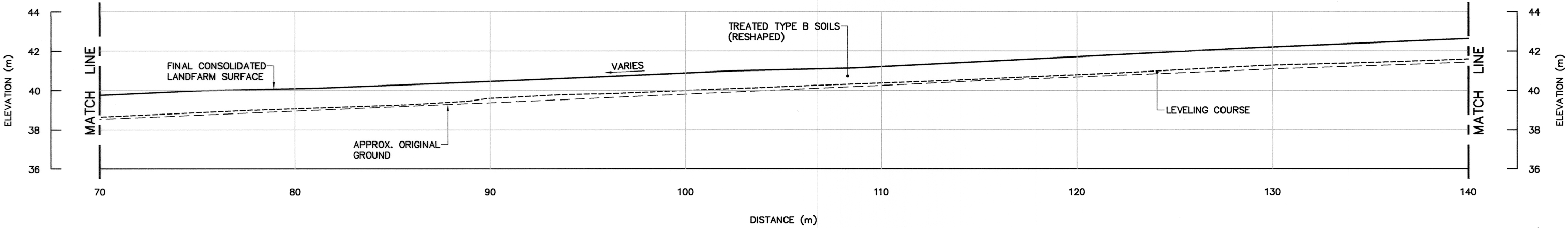
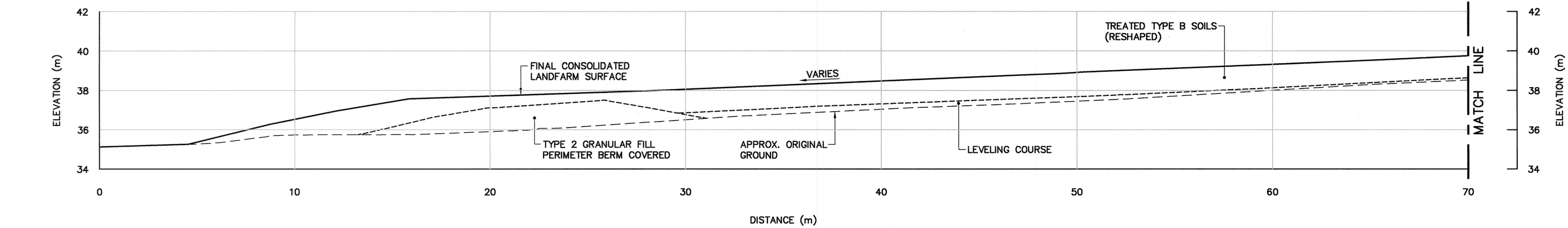
DATE  
2005-08-08

SUBJECT - SUJET

CLOSED LANDFARM  
CROSS SECTION

PRODUCTION		CONCURRENCE - ASSENTIMENT	
DESIGNED ETUDIE	CY/BWF	DES OFF AGENT CONCEPT	
DRAWN DESSINE	IC/CAE	SECT HD CHEF SECT	
CHECKED VERIFIE	RRM	DES MGR GEST CONCEPT	
COORDINATION	SMS	REVIEWED - REVU	

DWG. NO. - DESSIN NO.  
H-M27/1-9101-114



SECTION

A  
106



General Notes:

1. ALL COORDINATES ARE REFERENCED TO NAD83 (CSRS), UTM ZONE 16N. ALL ELEVATIONS REFER TO GEODETIC DATUM.
2. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.

Legend:

- GENERATED BASED ON AS-BUILT SURVEY INFORMATION
- ..... CONSTRUCTED AS PER DESIGN, NO AS-BUILT SURVEY INFORMATION

0	12-12-10	AS-BUILT DRAWING		RRM
No.	DATE	REVISION	REVISION	APPR.

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Date: *Dec 14/12*  
PERMIT NUMBER: P639  
NWT/NW Association of Professional Engineers and Geoscientists

AECOM

HATCH

SCALE - ECHELLE 2 1 0 2 4 6m

PROJECT - PROJET  
CAM-5 MACKAR INLET

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MINISTER OF NATIONAL DEFENCE.

TRADE - METIER SITING DATE 2005-08-08

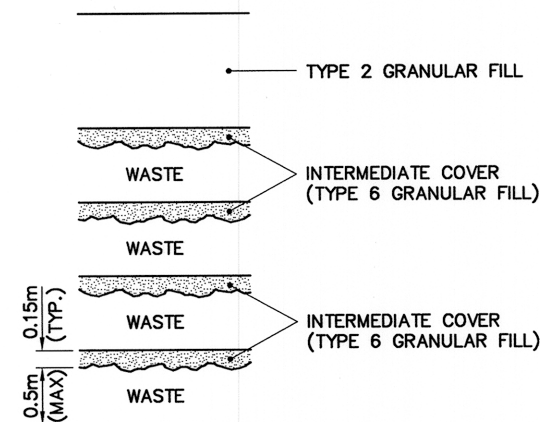
SUBJECT - SUJET

NON-HAZARDOUS WASTE LANDFILL  
CROSS SECTION

DESIGNED ETUDIE	CY/BWF	DES OFF AGENT CONCEPT
DRAWN DESSINE	IC/CAE	SECT HD CHEF SECT
CHECKED VERIFIE	RRM	DES MGR GEST CONCEPT
COORDINATION SMS		REVIEWED - REVU

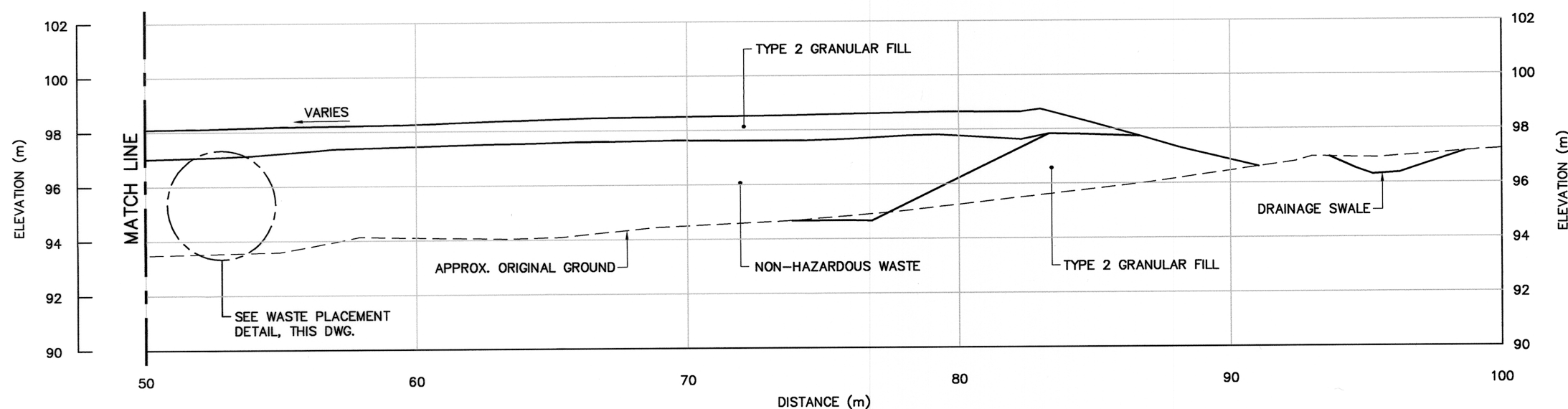
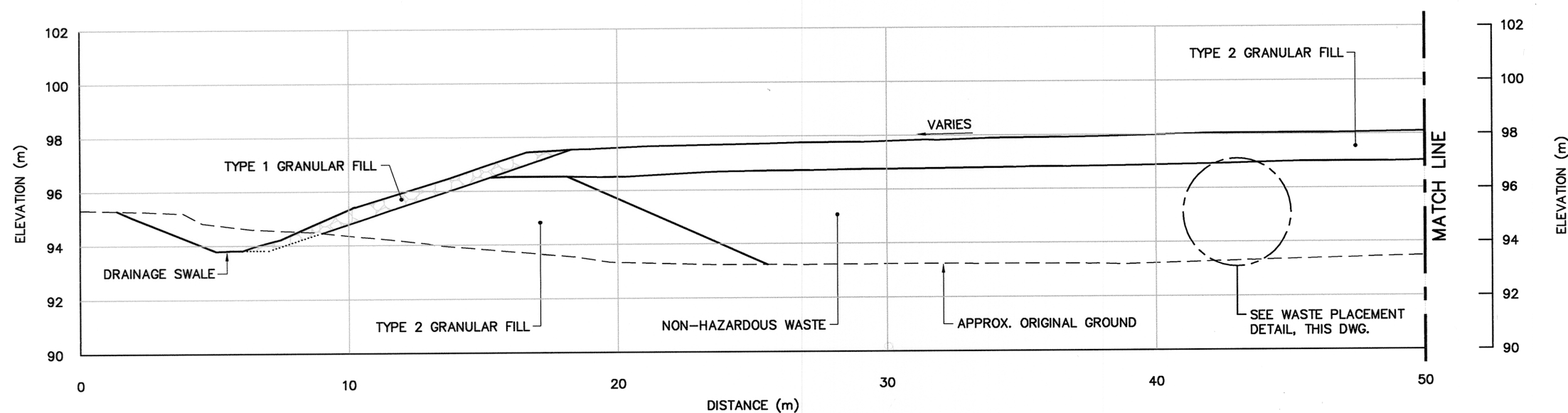
DWG. NO. - DESSIN NO.  
H-M27/1-9101-116

Canada



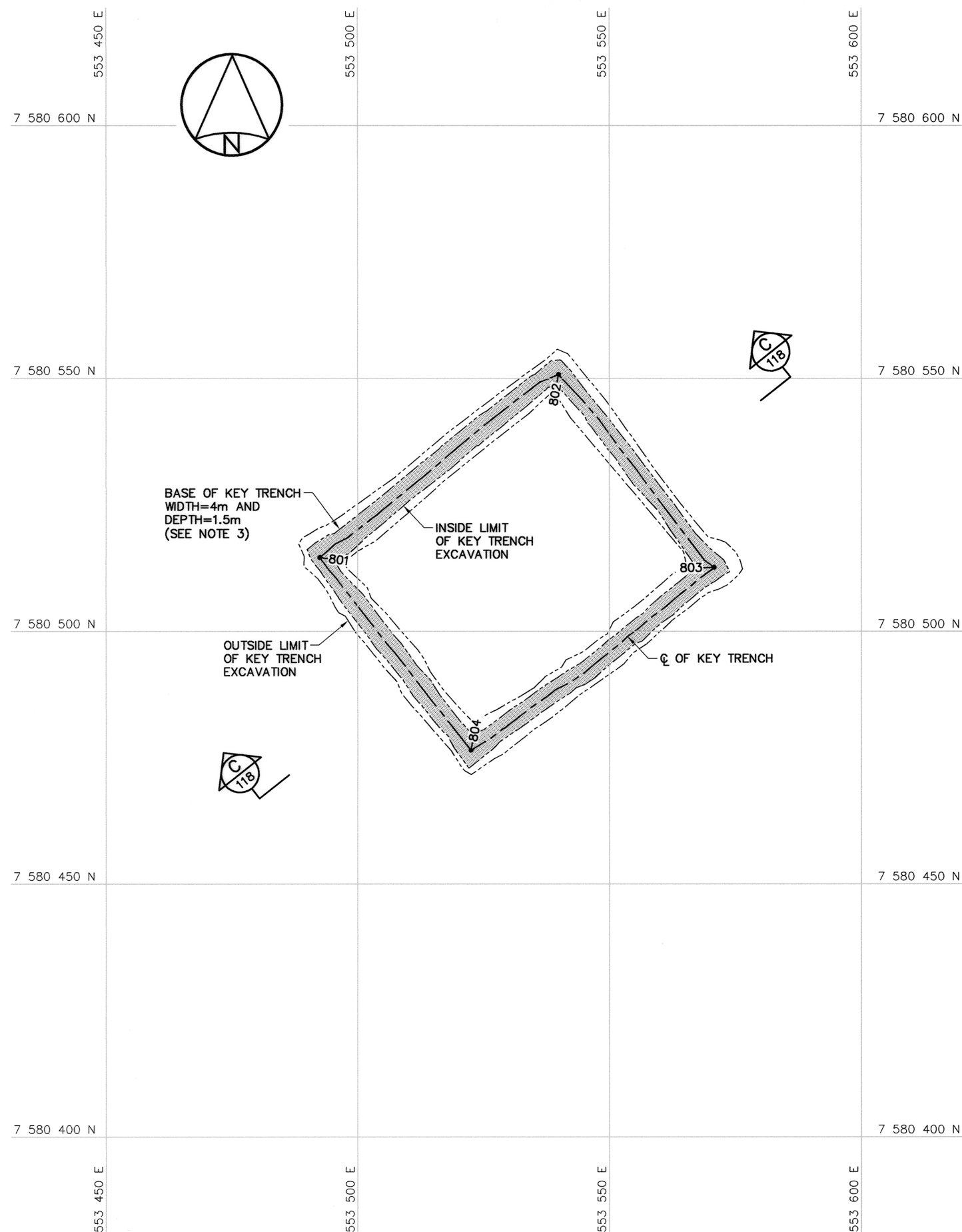
WASTE PLACEMENT DETAIL

SCALE: NTS



SECTION

B  
108

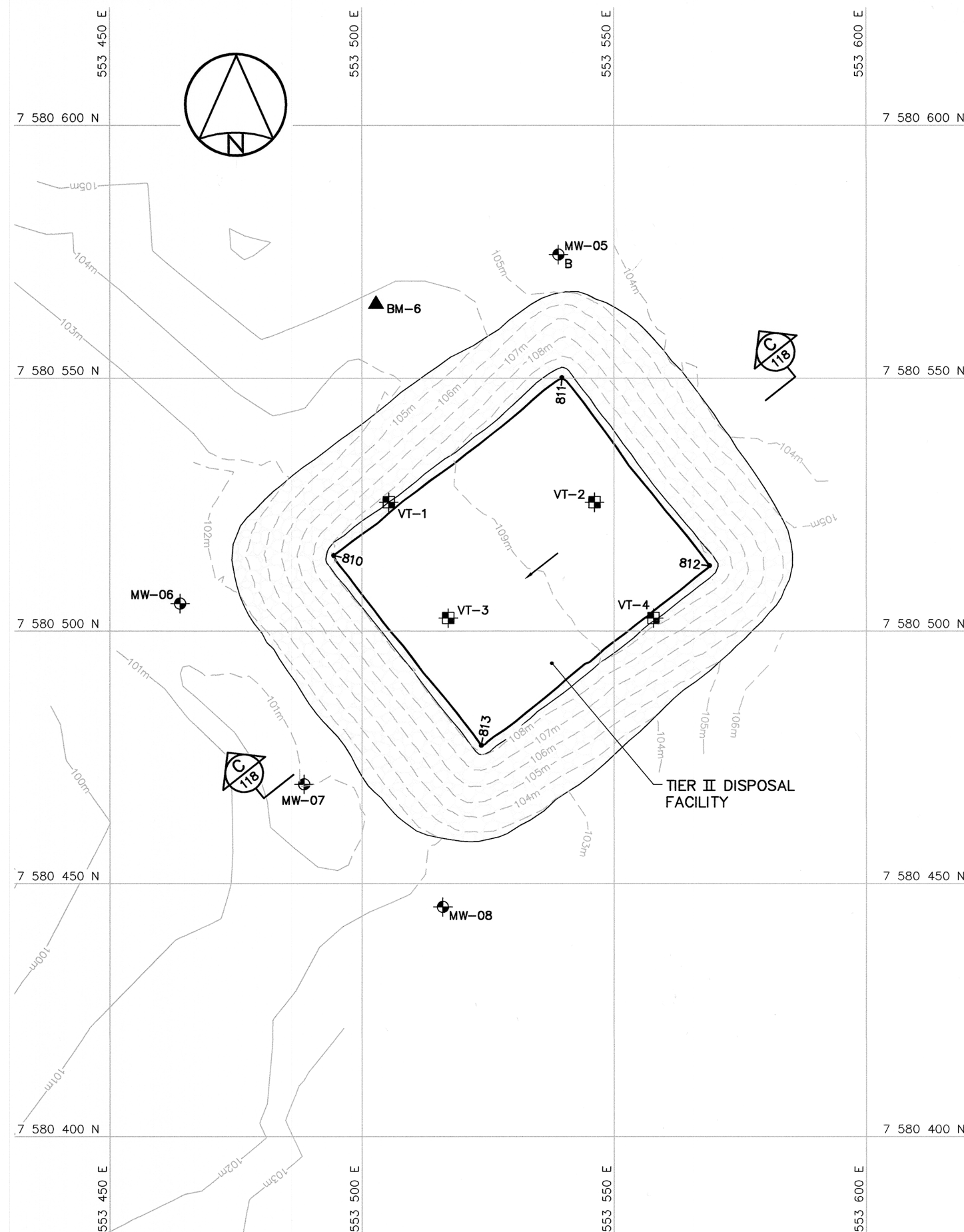


KEY TRENCH EXCAVATION PLAN

TIER II DISPOSAL FACILITY KEY TRENCH EXCAVATION (AS-BUILT)			
NO.	UTM COORDINATES		ELEV.
	NORTHING	EASTING	
801	7 580 514.6	553 492.5	
802	7 580 550.8	553 539.9	
803	7 580 512.7	553 570.8	
804	7 580 476.5	553 522.5	

NOTE:  
FOR DETAILS REGARDING CONFIRMATORY TESTING INFORMATION, REFER TO FINAL REPORT PREPARED BY THE ENVIRONMENTAL SCIENCES GROUP, ROYAL MILITARY COLLEGE.

NOTE:  
CONTOURS SHOWN AS DASHED LINES WERE GENERATED FROM SURVEY INFORMATION AND REPRESENT FINISHED GROUND SURFACE FOLLOWING REGRADING OR RESHAPING.



FINAL GRADING/INSTRUMENTATION PLAN

TIER II DISPOSAL FACILITY FINAL GRADING (AS-BUILT)			
NO.	UTM COORDINATES		ELEV.
	NORTHING	EASTING	
810	7 580 515.0	553 494.4	108.0
811	7 580 550.1	553 539.6	109.7
812	7 580 513.0	553 568.9	109.9
813	7 580 477.4	553 523.6	108.1


NOTE:  
COORDINATE POINTS AND ELEVATIONS PROVIDED ARE TO THE FINAL GRADE OF TYPE 2 GRANULAR FILL PRIOR TO THE PLACEMENT OF TYPE 1 GRANULAR FILL ON SIDE SLOPES.

TIER II DISPOSAL FACILITY MONITORING WELLS (AS-BUILT)			
NO.	UTM COORDINATES		ELEV.
	NORTHING	EASTING	
MW-05	7 580 574.5	553 539.0	104.3
MW-06	7 580 505.5	553 463.9	101.2
MW-07	7 580 469.7	553 488.5	100.9
MW-08	7 580 445.4	553 516.0	102.5


TIER II DISPOSAL FACILITY GROUND TEMPERATURE CABLES (AS-BUILT)			
NO.	UTM COORDINATES		ELEV.
	NORTHING	EASTING	
VT-1	7 580 525.5	553 505.3	108.4
VT-2	7 580 525.5	553 546.1	109.6
VT-3	7 580 502.6	553 517.1	108.3
VT-4	7 580 502.6	553 557.8	109.2

PERMANENT BENCHMARK			
NO.	UTM COORDINATES		ELEV.
	NORTHING	EASTING	
BM-6	7 580 564.696	553 502.774	105.770

NOTE: FINAL SURVEY CAP INSTALLATION WAS NOT SURVEYED. COORDINATES AND ELEVATIONS INDICATED ARE TOP OF BENCHMARK PIPE.



National  
Défense



Défense  
nationale

Headquarters  
Quartier général


General Notes:

- ALL COORDINATES ARE REFERENCED TO NAD83 (CSRS), UTM ZONE 16N. ALL ELEVATIONS REFER TO GEODETIC DATUM.
- ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
- KEY TRENCH WAS TO EXTEND 1.5m MIN. BELOW EXISTING GROUND. EXCAVATION DEPTH WAS FIELD CONFIRMED BY THE SITE ENGINEER, BASED ON THE PRESENCE OF SOUND BEDROCK OR SATURATED GROUND.
- FOR PERMANENT SURVEY CONTROL (BENCHMARK) INSTALLATION DETAIL, SEE DWG. H-M27/1-9101-119.
- FOR MONITORING WELL INSTALLATION DETAILS, SEE DWG. H-M27/1-9101-119.
- FOR GROUND TEMPERATURE CABLE INSTALLATION DETAIL, SEE DWG. H-M27/1-9101-119.


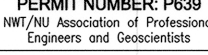
Legend:



- BM-6 PERMANENT BENCHMARK LOCATION (1)
- 801 COORDINATE POINT
- MW-06 MONITORING WELL LOCATION (3)
- MW-05 B BACKGROUND MONITORING WELL LOCATION (1)
- VT-1 GROUND TEMPERATURE CABLE LOCATION (4)

0	12-12-10	AS-BUILT DRAWING	RRM
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			APPR.



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SCALE - ECHELLE 10 5 0 10 20 30m

PROJECT - PROJET  
CAM-5 MACKAR INLET

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TRADE - METIER SITING DATE  
2005-08-08

SUBJECT - SUJET  
TIER II DISPOSAL FACILITY  
KEY TRENCH EXCAVATION PLAN &  
GRADING/INSTRUMENTATION PLAN

PRODUCTION	CONCURRENCE - ASSENTIMENT
DESIGNED ETUDIE BWF	DES OFF AGENT CONCEPT
DRAWN DESSINE IC/CAE	SECT HD CHEF SECT
CHECKED VERIFIE RRM	DES MGR GEST CONCEPT
COORDINATION SMS	REVIEWED - REVU

DWG. NO. - DESSIN NO.  
H-M27/1-9101-117

Canada



**General Notes:**

1. ALL COORDINATES ARE REFERENCED TO NAD83 (CSRS), UTM ZONE 16N. ALL ELEVATIONS REFER TO GEODETIC DATUM.
2. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
3. KEY TRENCH WAS TO EXTEND 1.5m MIN. BELOW EXISTING GROUND. EXCAVATION DEPTH WAS FIELD CONFIRMED BY THE SITE ENGINEER, BASED ON THE PRESENCE OF SOUND BEDROCK OR SATURATED GROUND.

**Legend:**

- GENERATED BASED ON AS-BUILT SURVEY INFORMATION
- ..... CONSTRUCTED AS PER DESIGN, NO AS-BUILT SURVEY INFORMATION

0	12-12-10	AS-BUILT DRAWING	RRM
No.	DATE	REVISION	REVISION
			APPR.

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AECOM Canada Ltd.

Signature: *[Signature]*

Date: *Dec 14/12*

PERMIT NUMBER: P639

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SCALE - ECHELLE 2 1 0 2 4 6m

PROJECT - PROJET  
**CAM-5 MACKAR INLET**

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TRADE - METIER **SITING** DATE **2005-08-08**

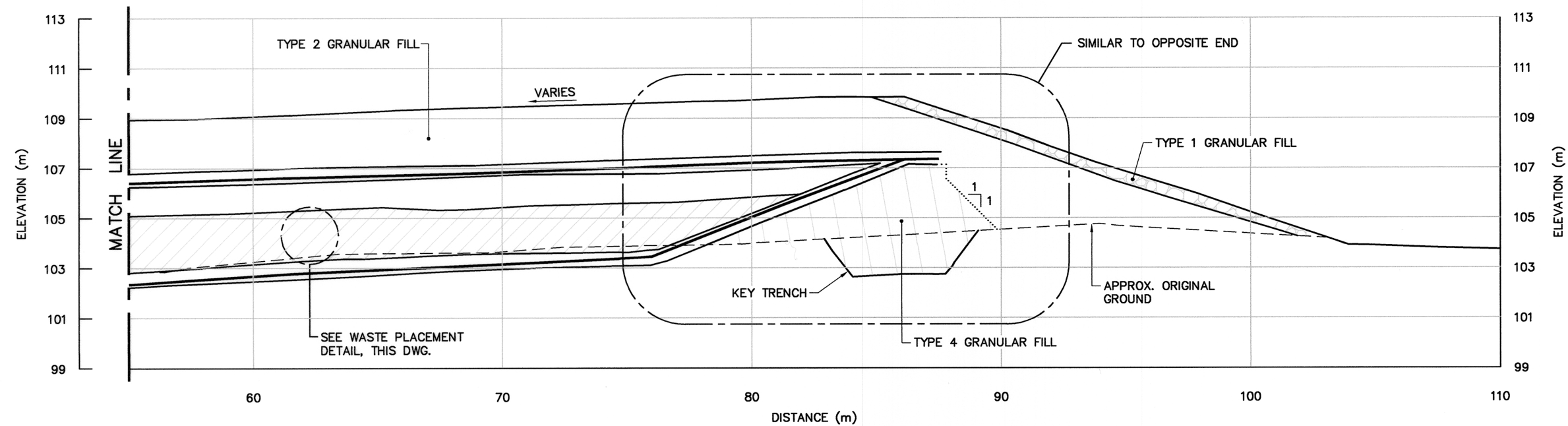
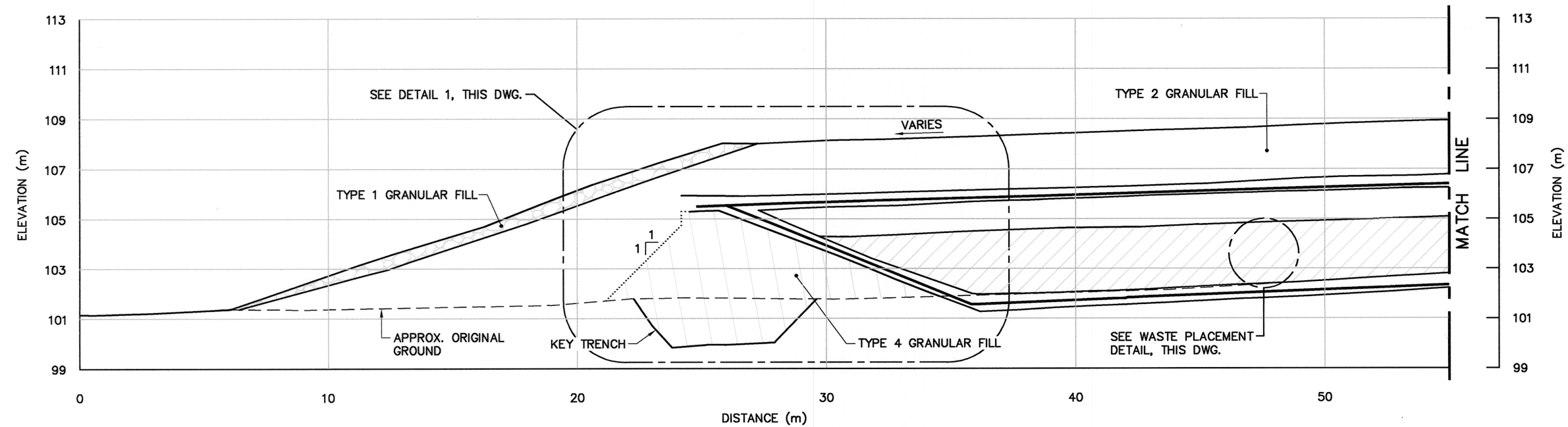
SUBJECT - SUJET

**TIER II DISPOSAL FACILITY  
CROSS SECTION AND DETAIL**

DESIGNED ETUDIE <b>BWF</b>	DES OFF AGENT CONCEPT
DRAWN DESSINE <b>IC/CAE</b>	SECT HD CHEF SECT
CHECKED VERIFIE <b>RRM</b>	DES MGR GEST CONCEPT
COORDINATION <b>SMS</b>	REVIEWED - REVU

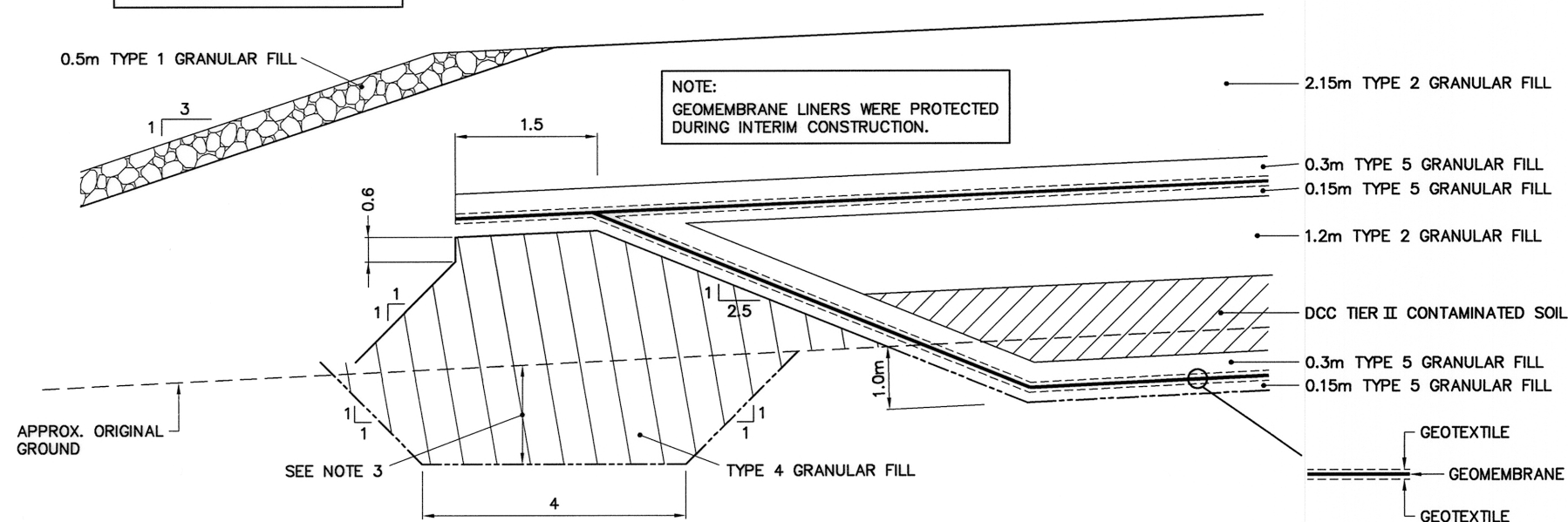
DWG. NO. - DESSIN NO.  
**H-M27/1-9101-118**

**Canada**

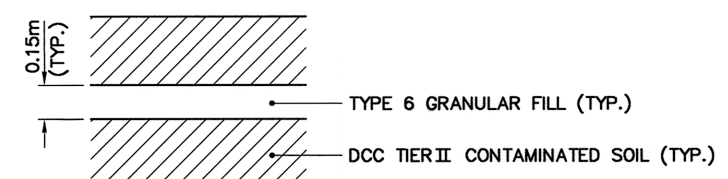


**SECTION** **C**  
**117**

NOTE:  
LINERS WERE IN CONTACT WITH  
EACH OTHER OVER TOP OF BERM  
AND PERIMETER WAS WELDED.



NOTE:  
GEOMEMBRANE LINERS WERE PROTECTED  
DURING INTERIM CONSTRUCTION.



NOTE:  
TYPE 6 INTERMEDIATE FILL WAS  
ONLY REQUIRED FOR LANDFILLING  
OF ORGANIC OR WET SOILS, AS  
DIRECTED BY THE ENGINEER.

**WASTE PLACEMENT DETAIL**  
SCALE: NTS

**DETAIL** **1**  
SCALE: NTS  
**118**

1. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
2. LOCATIONS OF INSTRUMENTATION ARE SHOWN ON THE DRAWINGS INCLUDING COORDINATE TABLES.

LOCKING CAP WITH LOCK

DATA LOGGER

WEATHERPROOF HOUSING FOR DATA LOGGER c/w GROUNDING ROD AND WIRE

GROUNDING WIRE

SOIL MOUNDED TO PROMOTE DRAINAGE AWAY FROM CASING

APPROX. TOP OF TYPE 2 GRANULAR FILL

GROUNDING ROD

CEMENT/BENTONITE MIXED GROUT BETWEEN DATA HOUSING AND ORIGINAL GROUND (AS REQUIRED) AND INSIDE

TYPE 2 GRANULAR FILL

200mm HDPE BOOT (CLAMP AND SEAL)

TYPE 4 GRANULAR FILL

50mm DIA. PVC PIPE GROUTED INTO HOLE

THERMISTOR CABLE

APPROX. ORIGINAL GROUND

FILTER SAND

WATERTIGHT END CAP

BOTTOM OF KEY TRENCH

GEOMEMBRANE LINER WITH 0.3m TYPE 5 GRANULAR FILL ABOVE AND 0.15m BELOW

1.2m

0.6m

3.35m

THERMISTOR BEADS AT 0.5m INTERVALS

VARIES

TIER II INSTALLATION DEPTH VARIES (SEE TABLE 3)

12-12-10	AS-BUILT DRAWING		RRM
DATE	REVISION	REVISION	APPR

Professional Engineer  
R.R. MENDENZ  
License No. 10917  
State of Texas  
Mechanical Engineering  
NWTJMS

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AECOM Canada Ltd.  
Signature:   
Date: Dec 14/12  
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**HATCH**

CALE - ECHELLE

AS SHOWN

PROJECT - PROJECT  
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## NEW LINE CLEAN UP

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GRADE - METIER	SITING	DATE 2005-08-08
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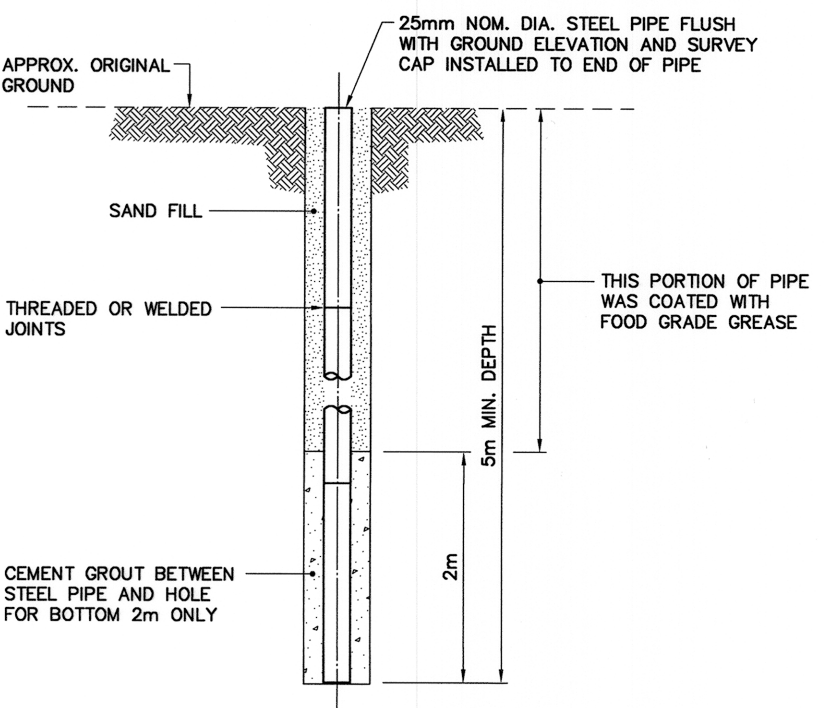
SUBJECT - SUJET

## MISCELLANEOUS DETAILS

PRODUCTION	CONCURRENCE — ASSESSMENT	
DESIGNED TUDIE <i>BWF</i>		DES OFF AGENT CONCEPT
DRAWN ESSINE <i>IC/CAE</i>		SECT HD CHEF SECT
CHECKED ERIFIE <i>RRM</i>		DES MGR GEST CONCEPT
COORDINATION <i>SMS</i>	REVIEWED — REVU	

DWG. NO. - DESSIN NO.  
H-M27/1-9101-119

# Canadă

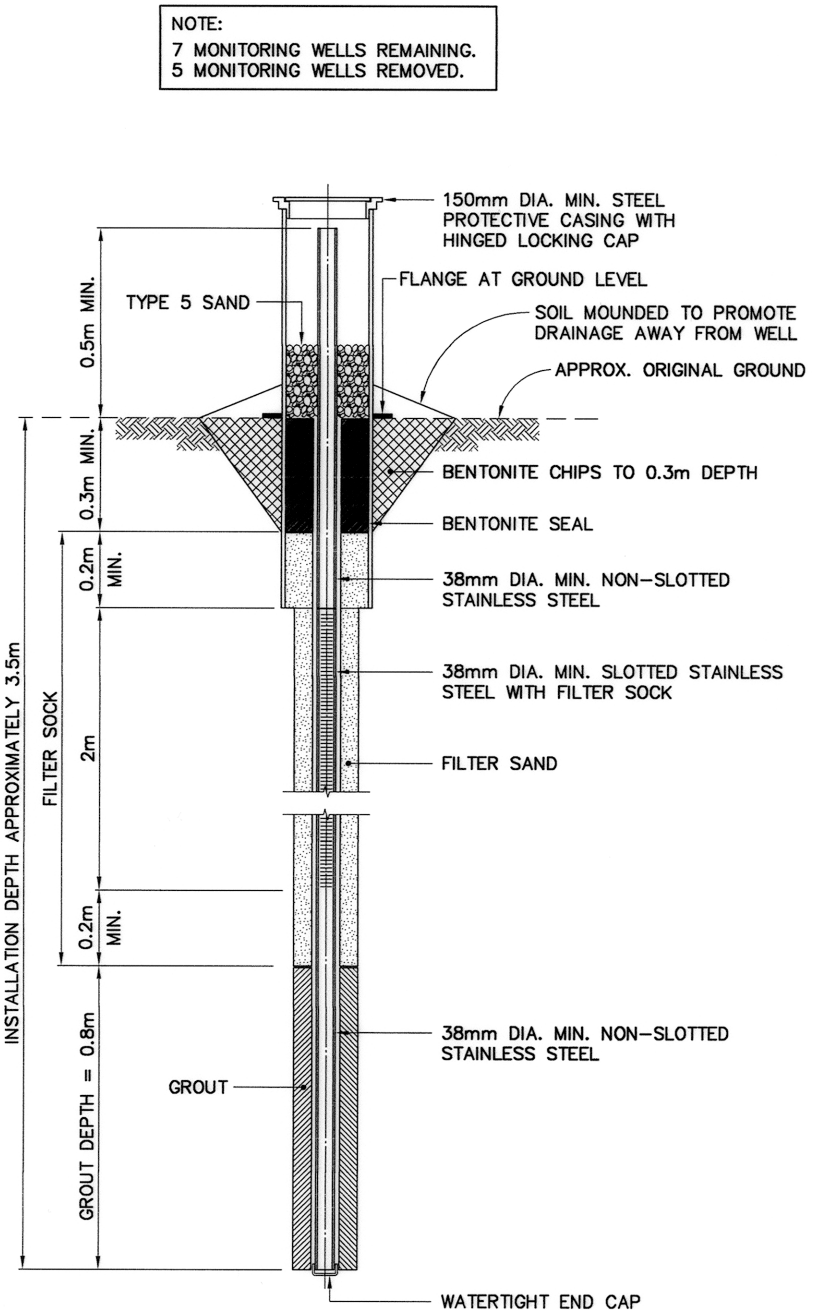


MIN. EMBEDMENT WAS REDUCED IF ROCK WAS ENCOUNTERED. INSTALLATION WAS PENETRATED 2m (MIN.) INTO ROCK.

NOTE:  
6 PERMANENT SURVEY CONTROL  
MONUMENTS INSTALLED.

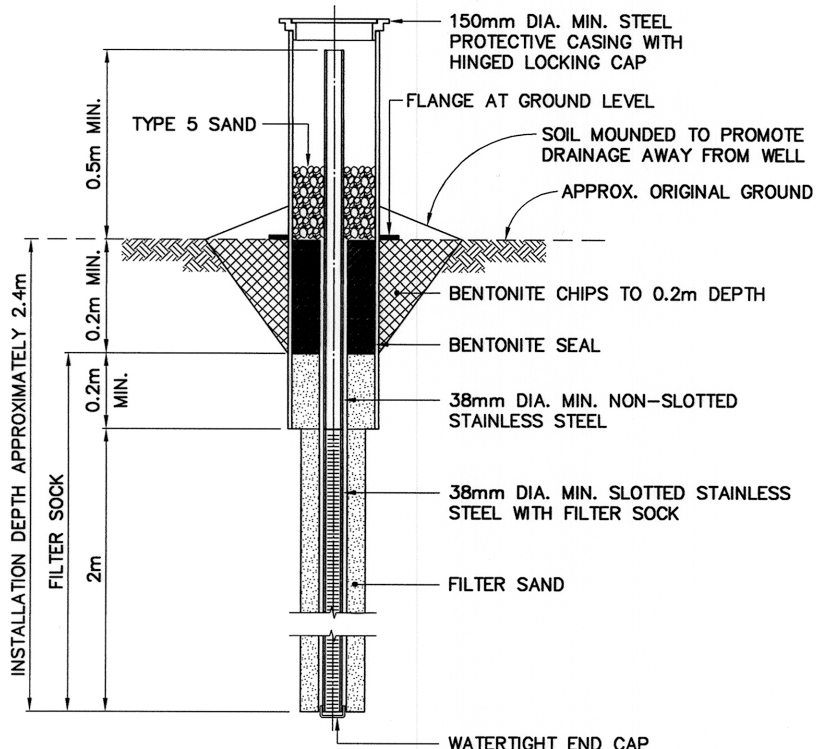
## TYPICAL PERMANENT SURVEY CONTROL MONUMENT

SCALE: NTS  
ALSO KNOWN AS PERMANENT BENCHMARK



## TYPICAL MONITORING WELL

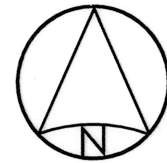
SCALE: NTS  
FOR BEDROCK DEPTH > 0.7m  
INCLUDING TYPICAL BACKGROUND MONITORING WELL INSTALLATION



## TYPICAL MONITORING WEL

SCALE: NTS  
FOR BEDROCK DEPTH < 0.7m  
INCLUDING TYPICAL BACKGROUND MONITORING WELL INSTALLATION





7 577 450 N

7 577 450 N

7 577 400 N

7 577 400 N

7 577 350 N

7 577 350 N

7 577 300 N

7 577 300 N

7 577 250 N

7 577 250 N

7 577 200 N

7 577 200 N

555 050 E

555 100 E

555 150 E

555 200 E

555 050 E

555 100 E

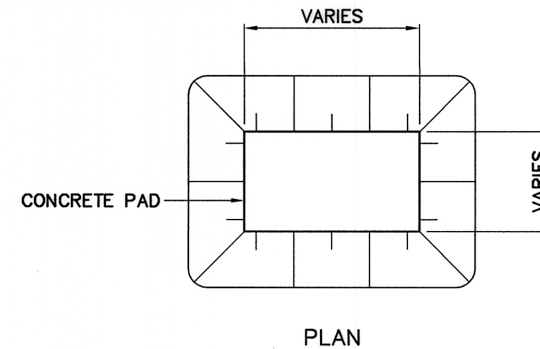
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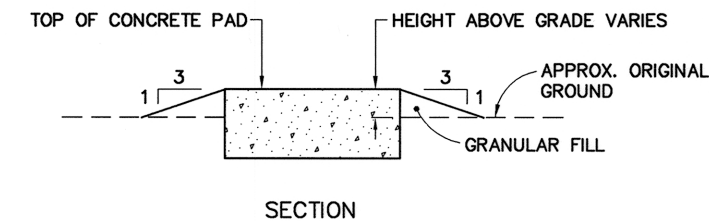
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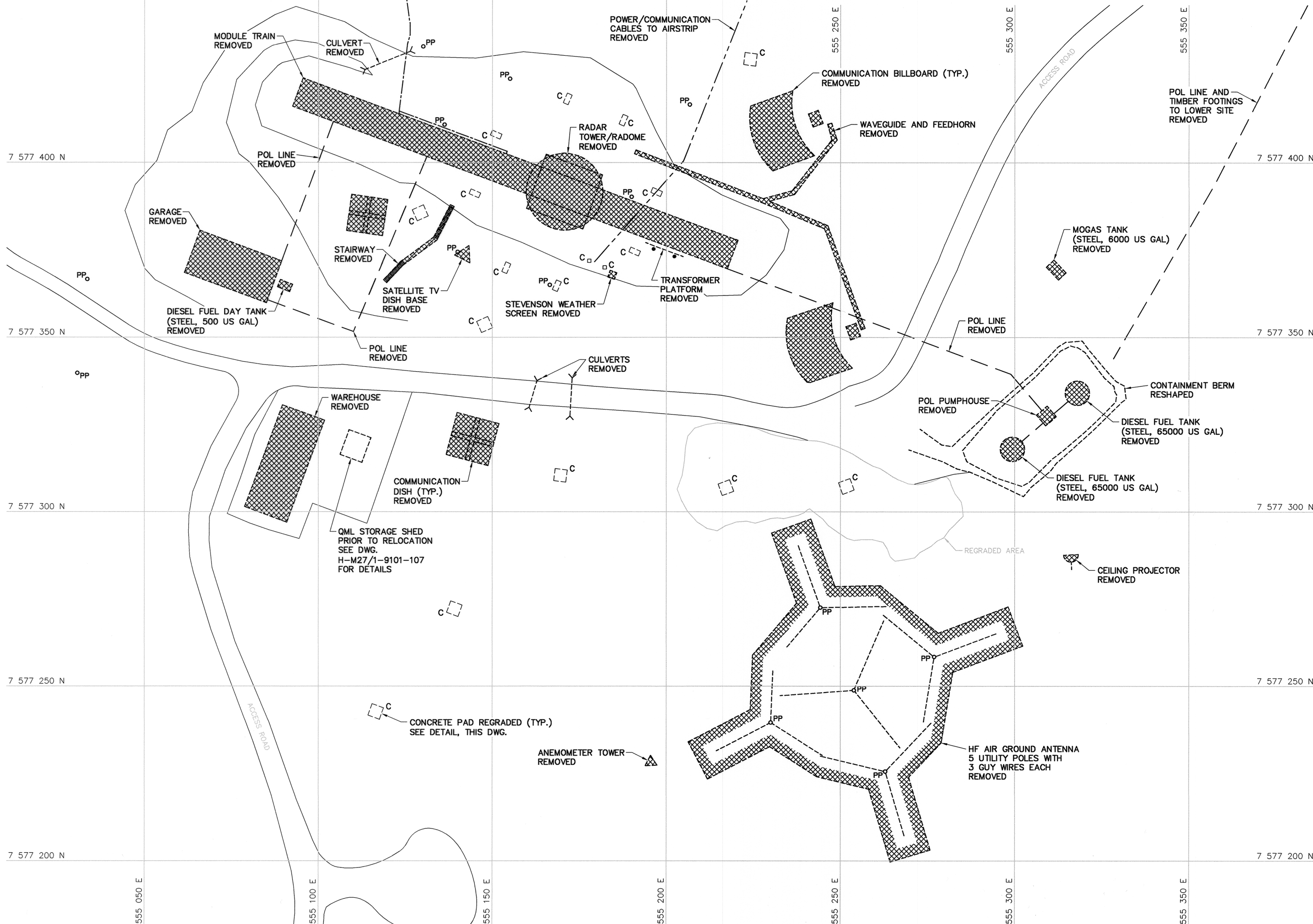
PLAN



SECTION

### TYPICAL CONCRETE PAD REGRADING DETAIL




SCALE: NTS




#### General Notes:

1. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
2. ALL STRUCTURES DESIGNATED FOR DEMOLITION WERE DEMOLISHED TO TOP OF CONCRETE FOUNDATIONS UNLESS NOTED OTHERWISE.
3. ALL POLES, INCLUDING GUY WIRES, WERE REMOVED UNLESS NOTED OTHERWISE.
4. ALL ELECTRICAL CABLES AND POL LINES DESIGNATED FOR DEMOLITION WERE REMOVED.
5. PIPELINES AND ANCILLARY EQUIPMENT WERE REMOVED INCLUDING ALL ASSOCIATED PIPE SUPPORTS AND PIPELINE MARKERS.
6. ALL CULVERTS WERE REMOVED.
7. ALL CONCRETE PADS REMAINING WERE REGRADED, AS PER TYPICAL DETAIL ON THIS DRAWING.

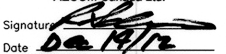
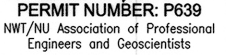
#### Legend:

-  DEMOLISHED
-  CONCRETE PAD REGRADED
-  UTILITY POLE REMOVED

0	12-12-10	AS-BUILT DRAWING	RRM
No.	DATE	REVISION	APPR.



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Date:   
PERMIT NUMBER: P639  
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SCALE - ECHELLE 10 5 0 10 20 30m

PROJECT - PROJET  
CAM-5 MACKAR INLET

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TRADE - METIER STRUCTURAL DATE 2005-08-08

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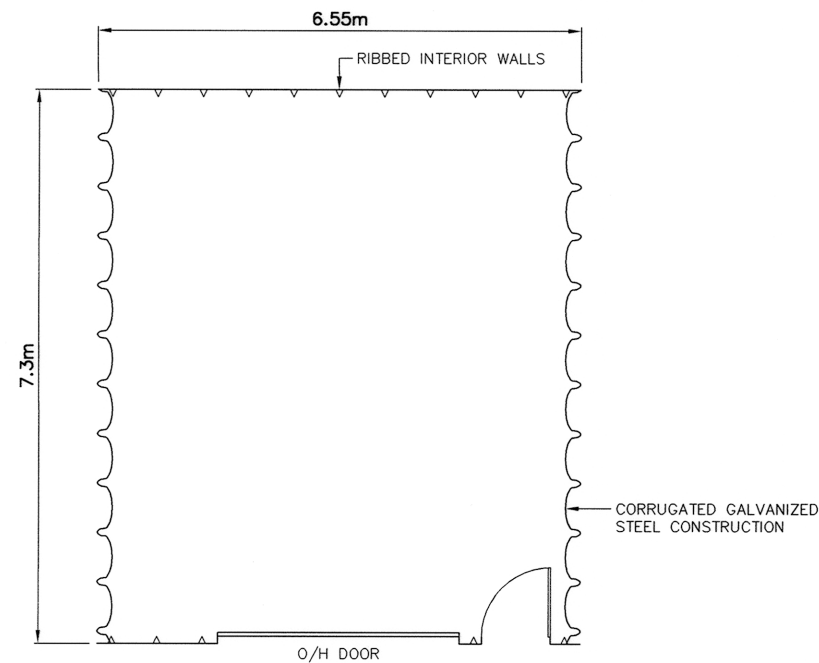
#### STATION AREA DEMOLITION SITE PLAN

PRODUCTION	CONCURRENCE - ASSENTIMENT
DESIGNED ETUDIE MAH/BWF	DES OFF AGENT CONCEPT
DRAWN DESSINE DMC/IC	SECT HD CHEF SECT
CHECKED VERIFIE RRM	DES MGR GEST CONCEPT
COORDINATION SMS	REVIEWED - REVU

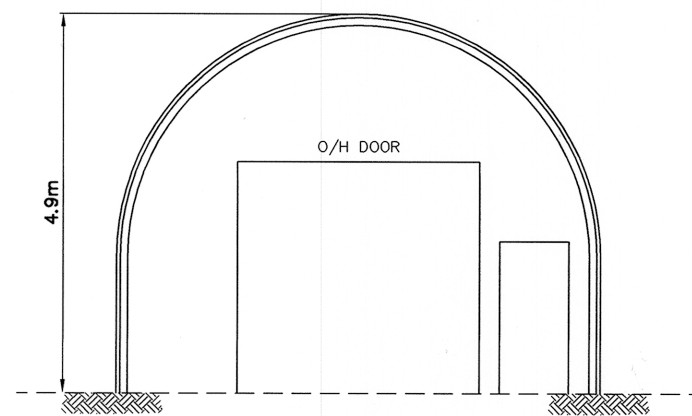
DWG. NO. - DESSIN NO.  
H-M27/1-9101-201







PLAN



SECTION

QML STORAGE SHED



BCE NUMBER	COMMENTS
-	AS SHOWN.

NOTE:  
QML STORAGE SHED RELOCATED  
TO AIRSTRIP APRON.


General Notes:

1. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.

Legend:

No.	DATE	REVISION	REVISION	APPR.
0	12-12-10	AS-BUILT DRAWING		RRM



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Date: 12/14/12  
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AECOM

HATCH

SCALE - ECHELLE  
AS SHOWN

PROJECT - PROJET  
CAM-5 MACKAR INLET

DEW LINE CLEAN UP

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TRADE - METIER  
STRUCTURAL  
DATE  
2005-08-08

SUBJECT - SUJET

QML STORAGE SHED  
PLAN AND SECTION

PRODUCTION	CONCURRENCE - ASSENTIMENT
DESIGNED ETUDIE MJH/BWF	DES OFF AGENT CONCEPT
DRAWN DESSINE DMC/IC	SECT HD CHEF SECT
CHECKED VERIFIE RRM	DES MGR GEST CONCEPT
COORDINATION SMS	REVIEWED - REVU

DWG. NO. - DESSIN NO.  
H-M27/1-9101-208

Canada