

March 12, 2013

Ryan Barry
Executive Director
Nunavut Impact Review Board
P.O. Box 1360
Cambridge Bay, NU X0B 0C0

Dear Ryan:

Project No: NIRB No.: 04DN001 2011 Annual Report

Regarding: DYE-M, Cape Dyer DEW Line Site

AECOM Canada Ltd. is providing the following information as per the requirements listed for the annual report. The information is being provided on behalf of Defence Construction Canada and the Department of National Defence.

a.) Summary of activities undertaken for the year, including but not limited to the amount of contaminated soil removed from the site.

The following is a detailed summary of the effort and activities that were undertaken by Qikiqtaaluk Logistics Inc. (the contractor) at the DYE-M, Cape Dyer DEW Line site:

Demolition

- The following buildings were demolished: Warehouses B13B and B13F, ATB building, and two billboards. The associated hazardous materials at these former building locations have been removed. Minimal debris remains in the building footprints, and barricades have been placed around the footprints for protection.
- Site investigation monitoring wells around the Dew Drop Area, US Non-Hazardous Waste Facility and the LS POL Storage area have been decommissioned.

Landfill Remediation

- The West Landfill was excavated and reshaped. In addition, drainage swales were constructed and culverts were installed at the West Landfill East Lobe.
- The Pallet Line Landfill was re-graded
- The placement of Type 1 material on the Powerhouse Landfill re-grade was approximately 40% complete at the end of the construction season.

Lower Site Non-Hazardous Waste Landfill

- Non-hazardous waste materials, including demolition waste from the warehouses (B13F & B13B) material from Debris Areas 4 and 7, along with liners from the AST Containment and POL Storage Areas have been placed inside the facility.
- A new temporary access ramp was developed on the east of the facility
- The waste layer was spread out and compacted inside the facility of Cell #2 and intermediate fill was placed over the waste for winter cover.
- Construction of the Type 2 granular cover over Cell #1 of the facility is completed; shaping of the side slopes is currently on hold until the upcoming 2013 construction season.
- Survey data indicates the need for additional Type 2 granular cover layer for the facility. This work will be completed in 2013.

Upper-Site Non-Hazardous Waste Landfill:

- Non-hazardous waste material from Debris Areas 14, 18, contaminated soils excavations and segmented billboard pieces from the Dew Drop Area were placed inside the facility.
- The contractor has recovered Tier I soils that were previously leveled and spread throughout the landfill floor. Material is stockpiled inside the landfill for future use as intermediate fill.
- Sufficient Type 6 intermediate cover over waste has been placed and compacted.
- Pending the final survey of the facility, the Type 2 granular cover layer has been completed. The forth 250 mm lift has been spread and compacted over the entire facility.

Lower Site Tier II Disposal Facility:

- Tier II Soils from excavations at the POL storage area and AST containment berm have been placed in the facility.
- Tier II soils have been compacted within Cell 2 of the facility and covered with a thin layer of granular material for winter cover.
- The placement of a Type 2 granular cover layer on Cell 1 was in progress at the end of the construction season, and remains to be completed in the 2013 construction season.

Upper Site Tier II Disposal Facility:

- Waste material from Station and Dew Drop Areas were placed within the facility and leveled out into a 200- 300 m lift.
- The placement of Type 5 material over the liner system is complete.
- Type 2 granular cover layer has been completed. The seventh 250 mm lift has been completed.

Thermistors and Monitoring Wells

- Installation of the Vertical Thermistor pipes at the Lower Site and the Upper Site Tier II facilities has been completed. Final cover for the facilities is not complete; adequate compaction around the installed pipes remains to be completed to suit the construction of the top cover layer.
- Monitoring wells were drilled and installed in August at the northwest perimeter of Lower and Upper Tier II Disposal facilities.

Landfarm

- Tilling of the soils and collection of samples for moisture content determination was completed
- Type B soils placed within the landfarm were spread out.

General

- Contaminated soil areas HC-6A and HC-6B were excavated.
- Debris was removed from Areas 4, 7, 14, 16.
- Reshaping of contaminated soil excavations and re-grading of foundation pads by the Dew Drop area was completed.
- Reshaping was completed at the POL storage area containment berms, the beach landing area, the wastewater holding basins and the AST area were reshaped following the completion of the contaminated soil excavations.
- Surveys were completed for the Non-Hazardous Waste Landfills, Tier II Disposal Facilities, Borrow Areas, contaminated soil excavations and known debris areas.

b.) Work plan for the following year.

Work to be completed in 2013 includes the collection and disposal of all remaining debris; completion of demolition activities; excavation of remaining contaminated soil areas and disposal in the appropriate landfill or packaged for off-site disposal; final capping and closure of the two Non-Hazardous Waste Landfills and two Tier II Disposal Facilities; completion of land treatment of the hydrocarbon contaminated soils and decommissioning of the landfarm; reclamation of borrow areas; and collection of as-built survey data.

c.) Update on the extent of contamination on-site and supporting documentation.

An exhaustive site investigation was completed in 1997, 1998 and 2000 to determine all areas of contamination prior to the preparation of the specifications and drawings.

d.) Wildlife encounters and actions/mitigation taken.

Polar bears were identified on and around the site throughout the season; however, no mitigative actions were required other than awareness and avoidance. Other wildlife and avifauna observed include Arctic fox, Arctic hare, snow buntings, snow geese and ravens.

e.) Summary of local hires and initiatives.

The percentage of Inuit in the workforce at DYE-M averaged 74% in 2012.

f.) Summary of community consultations undertaken and results (if any).

The results of the community meetings held by DCC were submitted with the Project Description submission. The contractor typically holds a project start up meeting each year prior to the start of construction; however, a copy of the presentation has not been received.

g.) Summary of site visits by inspectors with results and follow-up actions.

An inspection of the site was completed by an AANDC Inspector on August 9, 2012. However, a written inspection report was not provided.

h.) Summary of site visits with community members.

N/A.

i.) Site photos and updated maps.

See attached.

j.) Number of barges utilized.

There was one barge trip in August for fuel resupply.

k.) Issues related to monitoring, including updates to the plan.

To date, there have been no issues or updates to the monitoring plan.

l.) Revisions to the abandonment and restoration plan.

The entire project is an abandonment and restoration plan. There are currently no updates to the plan.

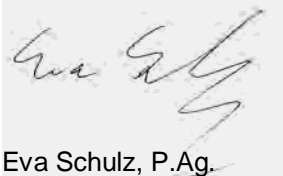
m.) Summary of how it has complied with all project Terms and Conditions and how the terms and conditions are achieving their purpose.

The Terms and Conditions supplied by NIRB are consistent with the requirements of the Project Description and Screening Report submitted by DCC, which were based on the specifications and drawings. The specifications and drawings are part of the contract package that the contractor must adhere to, and therefore, contractor compliance with the contract documents ensures compliance with the NIRB Terms and Conditions. DCC has a Contract Manager on-site for the duration of the construction season to ensure compliance with the contract.

We trust the information provided is sufficient. Please feel free to contact the undersigned if you have any questions or comments.

Sincerely,

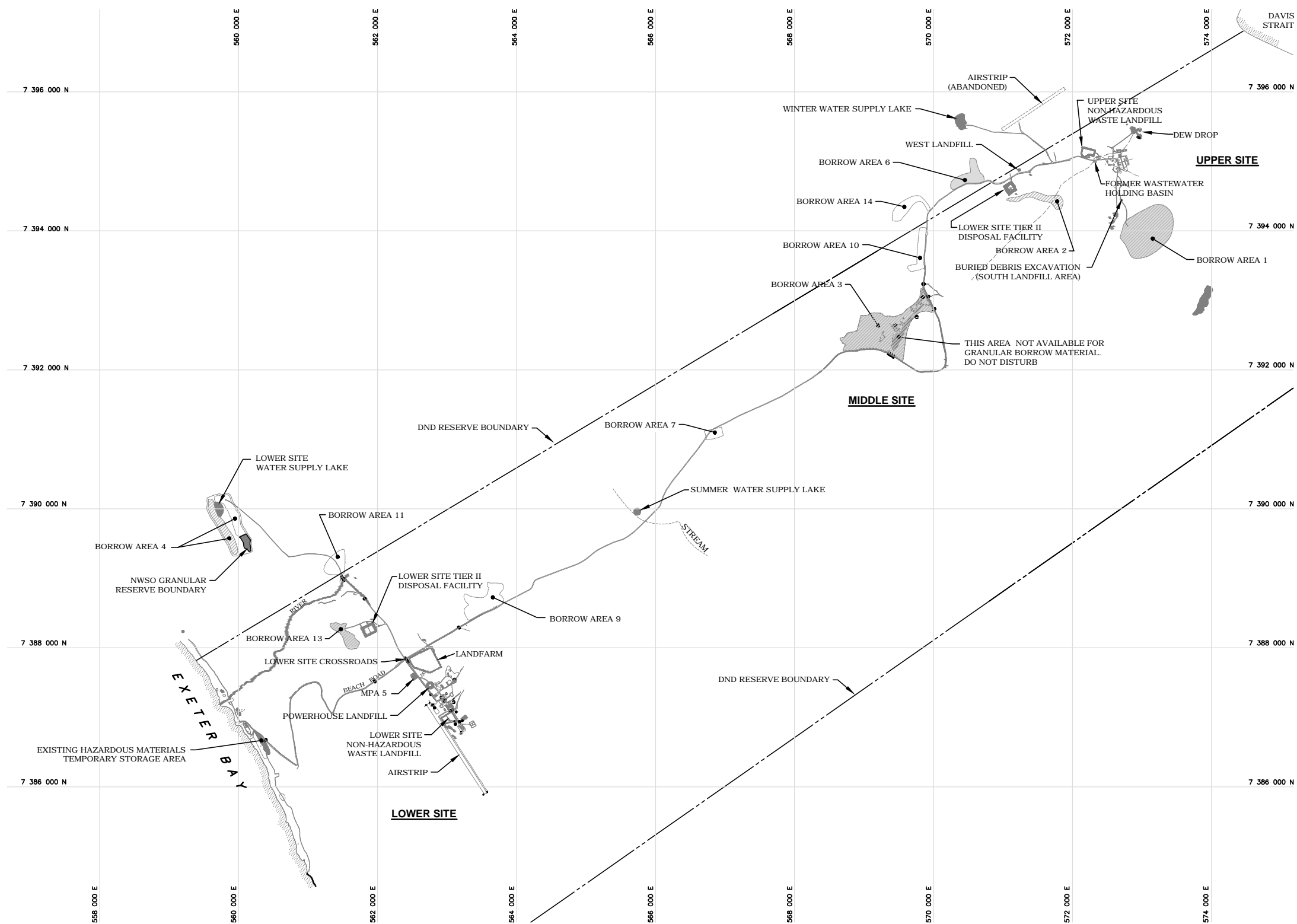
AECOM Canada Ltd.



Eva Schulz, P.Ag.
Senior Environmental Scientist
Eva.Schulz@aecom.com

EMS
Encl. Updated Site Plans; Selected Site Photos
cc: Tamara Van Dyck, DCC

L:\MarketSectors\Earth & Water\Projects\0171 DLCLUDYE M2012 Geotech QC Report\Winipeg CAD Figures\10995\027.011_Figure_1.dwg FIGURE 1] November 09, 2012 - 2:02:49 pm (BY: CLOUSTON, CASSANDRA)



LEGEND:

- WORKED BORROW AREA IN 2011
- WORKED BORROW AREA IN 2012

NOTES

1. DRAWING NOT TO SCALE
2. FIGURE UPDATED FROM EBA 2011 GEOTECH QA SUMMARY REPORT



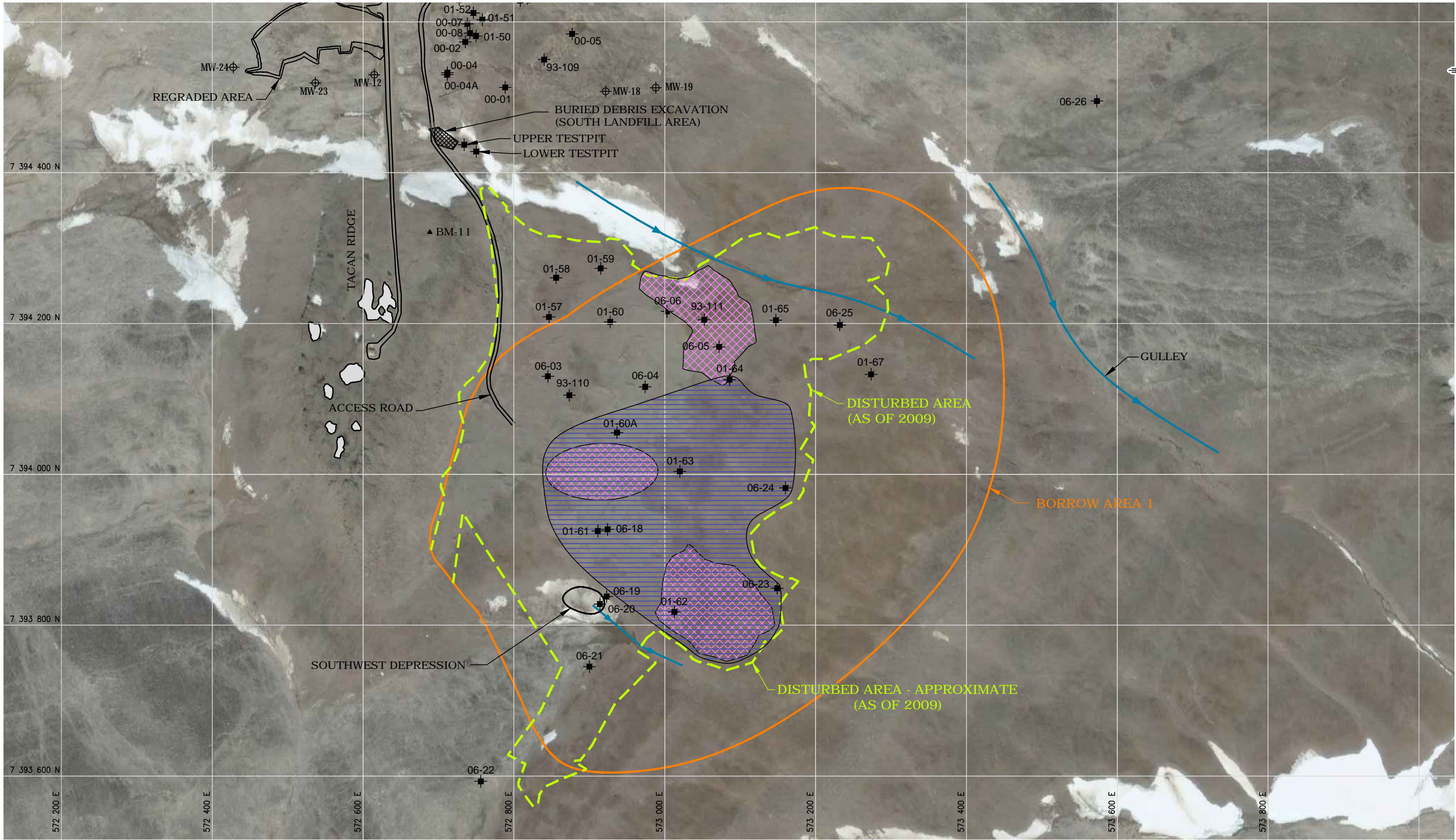
DEW LINE CLEAN UP PROJECT
DYE-M, CAPE DYER, NU

GENERAL SITE PLAN
BORROW SOURCES LOCATIONS









PROJECT NO. 60263380	DWN CLC	CKD DM	REV 0
OFFICE EDM	DATE November 2012		

Figure 1

L:\MarketSectors\Earth & Water\Projects\0171 DLU\DYEM2012 Gootch QC Report\Winnipeg CAD Figures\10955027.01_Figure 2_3_7_11_U.dwg [FIGURE 2] November 13, 2012 - 1:04:45 pm (BY: CLOUSTON, CASSANDRA)



LEGEND:

- | | | |
|--|---|---|
|  - DRAINAGE |  - TESTPIT (EXCAVATION YEAR DENOTED BY FIRST TWO DIGITS OF TESTPIT ID) | <p>NOTES:</p> <ol style="list-style-type: none">1. SATELLITE IMAGE FROM GOOGLE EARTH2. FIGURE UPDATED FROM EBA 2011 GEOTEH QA SUMMARY REPORT |
|  - SPECIFIED BORROW LIMITS |  - GROUND TEMPERATURE CABLE LOCATION | |
|  - DISTURBED AREA (AS OF 2009) |  - MONITORING WELL LOCATION | |
|  - APPROXIMATE 2011 BORROW DEVELOPMENT AREA | BM-8 ▲ - BENCHMARK | |
|  - APPROXIMATE 2012 BORROW DEVELOPMENT AREA | | |

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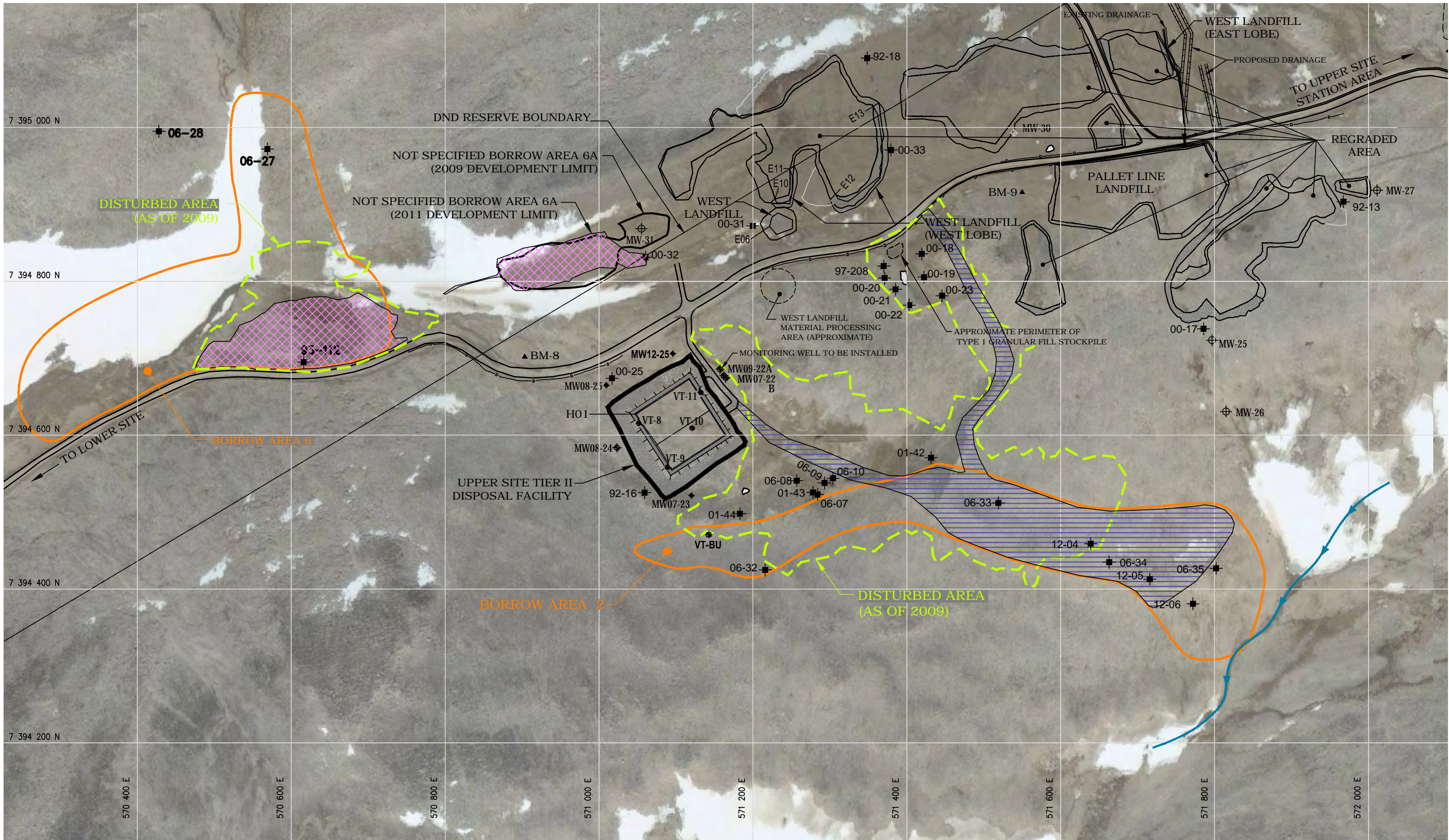
DEW LINE CLEAN UP PROJECT
DYE-M, CAPE DYER, NU

BORROW AREA 1
BURIED DEBRIS EXCAVATION
(SOUTH LANDFILL AREA)

PROJECT NO. 60263380	DWN CLC	CKD DM	REV 0
OFFICE EDM	DATE November 2012		

Figure 2

L:\MarketSectors\Earth & Water\Projects\0171 DLU\DYER M2012 Geotech QC Report\Winnipeg CAD Figures\10995\027.011_Figure 2_3_7_11_U.dwg [FIGURE 3] November 13, 2012 1:05:36 pm (BY: CLOUSTON, CASSANDRA)



LEGEND:

— DRAINAGE

— SPECIFIED BORROW LIMITS

- - - DISTURBED AREA (AS OF 2009)

— APPROXIMATE 2011 BORROW DEVELOPMENT AREA

— TESTPIT (EXCAVATION YEAR DENOTED BY FIRST TWO DIGITS OF TESTPIT ID)

— GROUND TEMPERATURE CABLE LOCATION

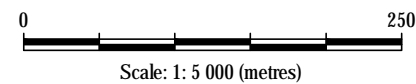
— MONITORING WELL LOCATION

BM-8 ▲ - BENCHMARK

— APPROXIMATE 2012 BORROW DEVELOPMENT AREA

NOTES:

1. FIGURE UPDATED FROM EBA 2011 GEOTECH QA SUMMARY REPORT



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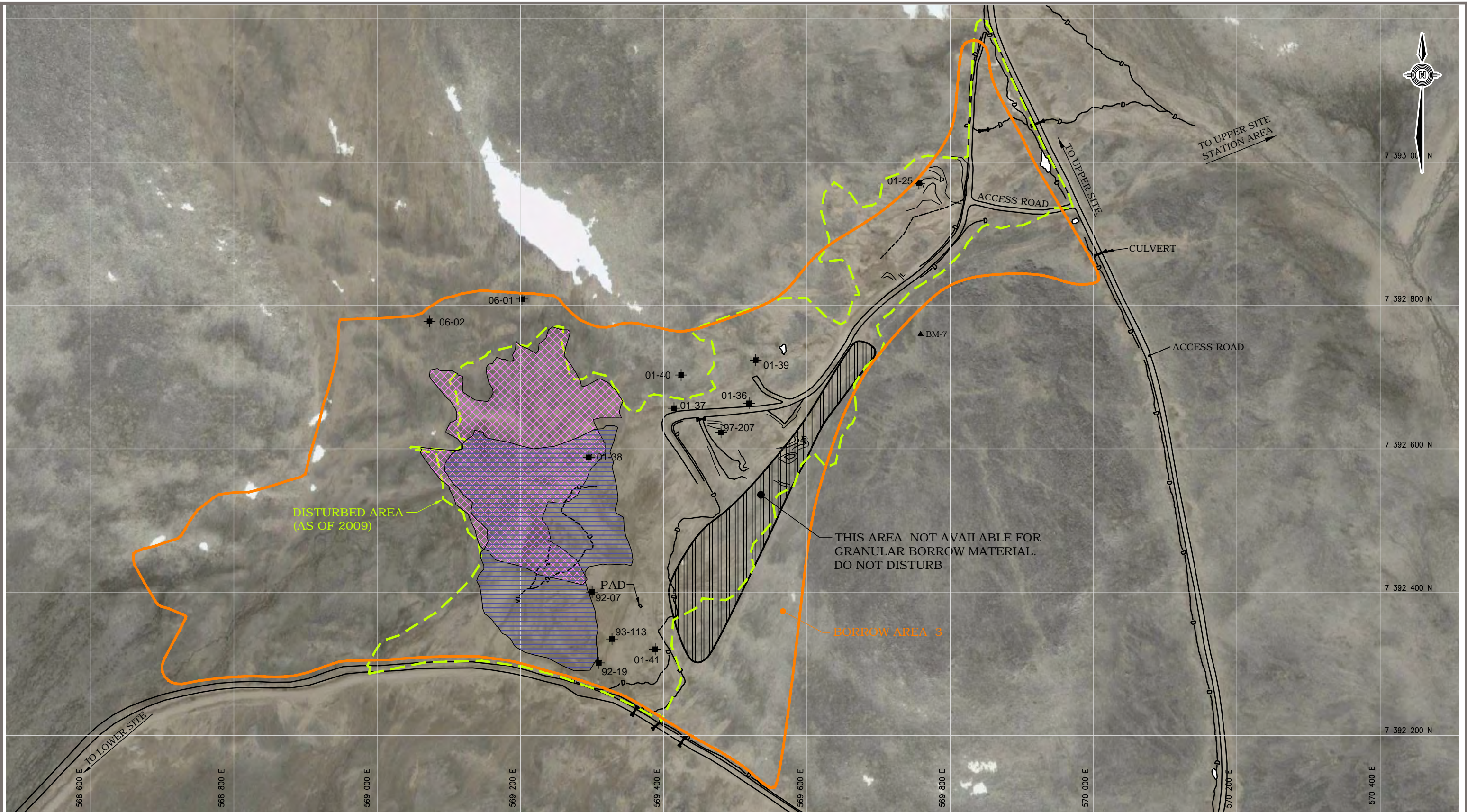
DEW LINE CLEAN UP PROJECT
DYE-M, CAPE DYER, NU

BORROW AREA 2 AND 6
UNSPECIFIED BORROW AREA 6A









PROJECT NO. 60263380	DWN CLC	CKD DM	REV 0
OFFICE EDM	DATE November 2012		

Figure 3

L:\MarketSectors\Earth & Water\Projects\0171 DLCDUYE.M\2012 Geotech\QC Report\Winipeg CAD Figures\10995\027\011_Figure_4_M.dwg FIGURE 4] November 13, 2012 - 1:12:21 pm (BY: CLOUSTON, CASSANDRA)

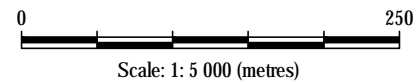


LEGEND:

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|  - DRAINAGE |  - TESTPIT (EXCAVATION YEAR DENOTED BY FIRST TWO DIGITS OF TESTPIT ID) |
|  - SPECIFIED BORROW LIMITS |  - GROUND TEMPERATURE CABLE LOCATION |
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|  - APPROXIMATE 2011 BORROW DEVELOPMENT AREA | BM-8 ▲ - BENCHMARK |
| |  - APPROXIMATE 2012 BORROW DEVELOPMENT AREA |

NOTES:

1. SATELLITE IMAGE FROM GOOGLE EARTH
2. FIGURE UPDATED FROM EBA 2011 GEOTEH QA SUMMARY REPORT



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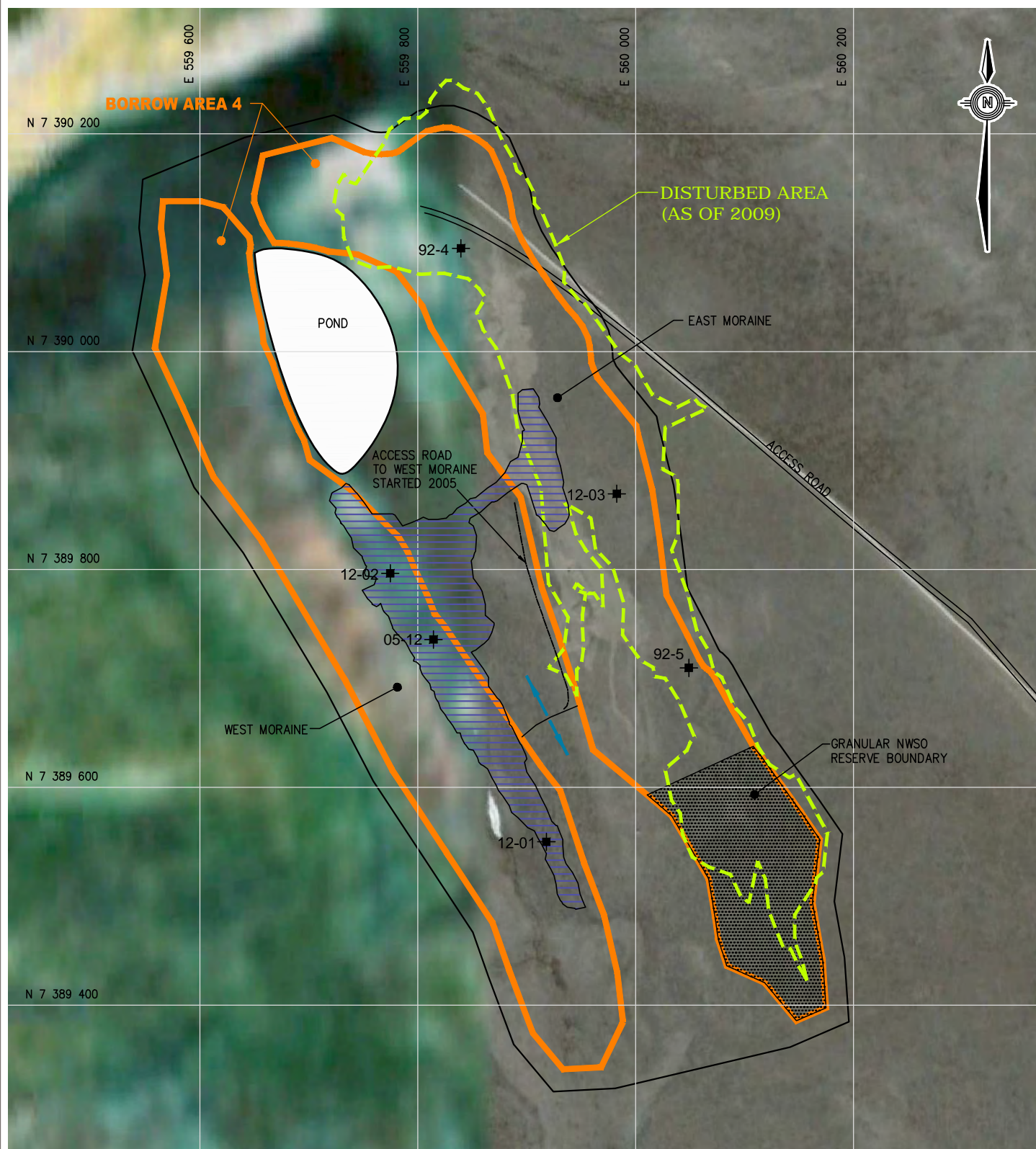
DEW LINE CLEAN UP PROJECT
DYE-M, CAPE DYER, NU

BORROW AREA 3

PROJECT NO. 60263380	DWN CLC	CKD DM	REV 0
OFFICE EDM	DATE November 2012		

Figure 4

L:\MarketSectors\Earth & Water\Projects\0171 DL\DUDE M2012 Geotech QC Report\Winnipeg CAD Figures\10995027.011_Figure_5.6.8.9.10.12_1.dwg [FIGURE 5] November 13, 2012 - 1:31:05 pm (BY: CLOUSTON, CASSANDRA)



NOTES

1. SATELLITE IMAGE FROM GOOGLE EARTH
2. FIGURE UPDATED FROM EBA 2011 GEOTEH QA SUMMARY REPORT

LEGEND:

- DRAINAGE
- SPECIFIED BORROW LIMITS
- DISTURBED AREA (AS OF 2009)
- TESTPIT (EXCAVATION YEAR DENOTED BY FIRST TWO DIGITS OF TESTPIT ID)
- APPROXIMATE 2012 BORROW DEVELOPMENT AREA

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DEW LINE CLEAN UP PROJECT
DYE-M, CAPE DYER, NU

BORROW AREA 4

PROJECT NO.
60263380

DWN
CLC

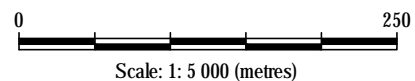
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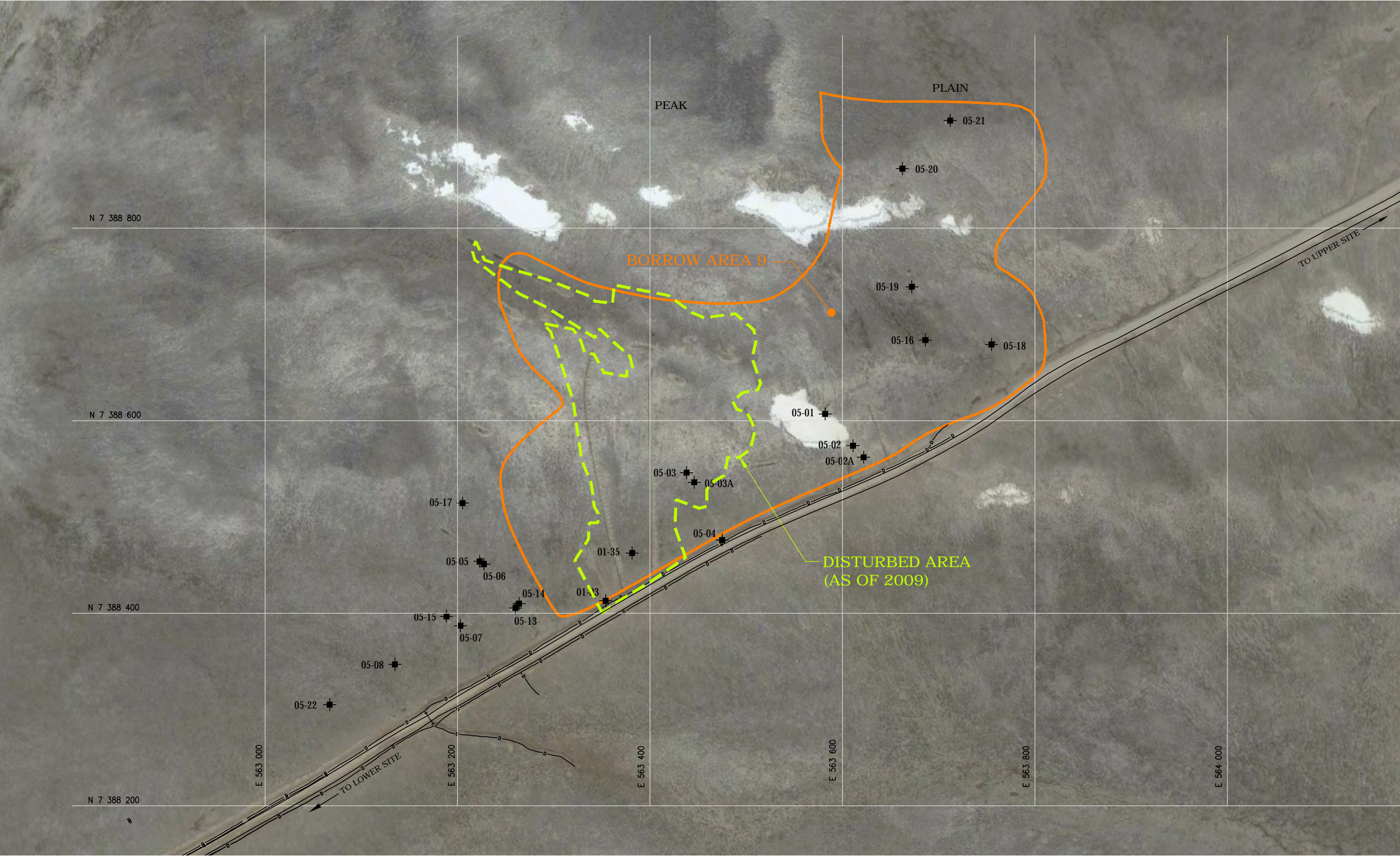
OFFICE
EDM

DATE
November 2012

Figure 5



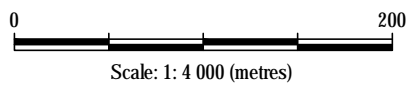
L:\MarketSectors\Earth & Water\Projects\0171 DLU\DYER.M2012 Gootch QC Report\Winnipeg CAD Figures\10995\027.011_Figure_5.6.8.9,10,12_L.dwg [FIGURE 6] November 13, 2012 - 1:28:04 pm (BY: CLOUSTON, CASSANDRA)



LEGEND:

- DRAINAGE
- SPECIFIED BORROW LIMITS
- DISTURBED AREA (AS OF 2009)
- APPROXIMATE 2011 BORROW DEVELOPMENT AREA
- TESTPIT (EXCAVATION YEAR DENOTED BY FIRST TWO DIGITS OF TESTPIT ID)
- GROUND TEMPERATURE CABLE LOCATION
- MONITORING WELL LOCATION
- BM-8 ▲ - BENCHMARK

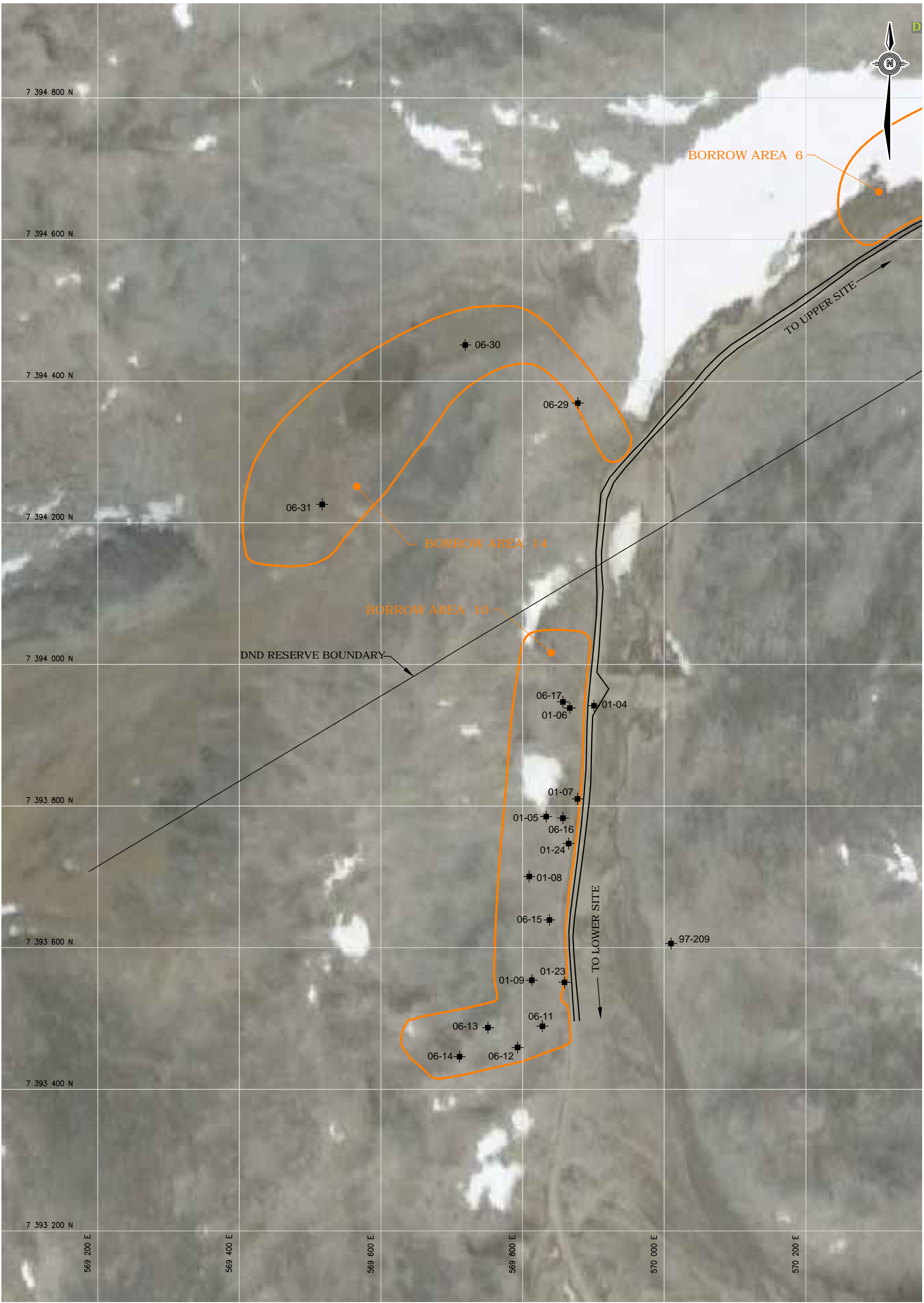
- NOTES:
1. SATELLITE IMAGE FROM GOOGLE EARTH
 2. FIGURE UPDATED FROM EBA 2011 GEOTEH QA SUMMARY REPORT



DEW LINE CLEAN UP PROJECT
DYE-M, CAPE DYER, NU

BORROW AREA 9

PROJECT NO. 60263380	DWN CLC	CKD DM	REV 0	Figure 6
OFFICE EDM	DATE November 2012			



LEGEND:

- DRAINAGE
- SPECIFIED BORROW LIMITS
- DISTURBED AREA (AS OF 2009)
- APPROXIMATE 2011 BORROW DEVELOPMENT AREA
- TESTPIT (EXCAVATION YEAR DENOTED BY FIRST TWO DIGITS OF TESTPIT ID)

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- SATELLITE IMAGE FROM GOOGLE EARTH
- FIGURE UPDATED FROM EBA 2011 GEOTEH QA SUMMARY REPORT

0 250

Scale: 1: 5 000 (metres)










DEW LINE CLEAN UP PROJECT DYE-M, CAPE DYER, NU				
BORROW AREA 10 AND 14				
PROJECT NO. 60263380	DWN CLC	CKD DM	REV 0	Figure 7
OFFICE EDM	DATE November 2012			

L:\MarketSectors\Earth & Water\Projects\0171 DLCLUDYE M2012 Gootch QC Report\Winnipeg CAD Figures\10995\027.011_Figure_5.0.8.9,10,12_L.dwg [FIGURE 8] November 13, 2012 - 1:28:08 pm (BT: CLOUSTON, CASSANDRA)

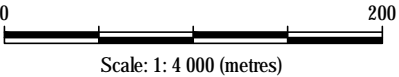


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|  - SPECIFIED BORROW LIMITS |  - GROUND TEMPERATURE CABLE LOCATION |
|  - DISTURBED AREA (AS OF 2009) |  - MONITORING WELL LOCATION |
|  - APPROXIMATE 2011 BORROW DEVELOPMENT AREA | BM-8 ▲ - BENCHMARK |

NOTES:

1. SATELLITE IMAGE FROM GOOGLE EARTH
2. FIGURE UPDATED FROM EBA 2011 GEOTEH QA SUMMARY REPORT



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DEW LINE CLEAN UP PROJECT
DYE-M, CAPE DYER, NU

BORROW AREA 11









PROJECT NO. 60263380	DWN CLC	CKD DM	REV 0
OFFICE EDM	DATE November 2012		

Figure 8

L:\MarketSector\Earth & Water\Projects\0171 DLU\DUYE M2012 Geotech QC Report\Winipeg CAD Figures\10995\027.011_Figure_5.6.8.9.10.12_L.dwg [FIGURE 9] November 13, 2012 - 1:27:14 pm (BY: CLOUSTON, CASSANDRA)

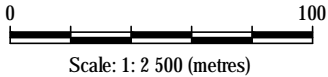


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|  - SPECIFIED BORROW LIMITS |  - GROUND TEMPERATURE CABLE LOCATION |
|  - DISTURBED AREA (AS OF 2009) |  - MONITORING WELL LOCATION |
|  - APPROXIMATE 2011 BORROW DEVELOPMENT AREA | BM-8 ▲ - BENCHMARK |
| |  - APPROXIMATE 2012 BORROW DEVELOPMENT AREA |

NOTES:

1. SATELLITE IMAGE FROM GOOGLE EARTH
2. FIGURE UPDATED FROM EBA 2011 GEOTECH QA SUMMARY REPORT



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DEW LINE CLEAN UP PROJECT
DYE-M, CAPE DYER, NU

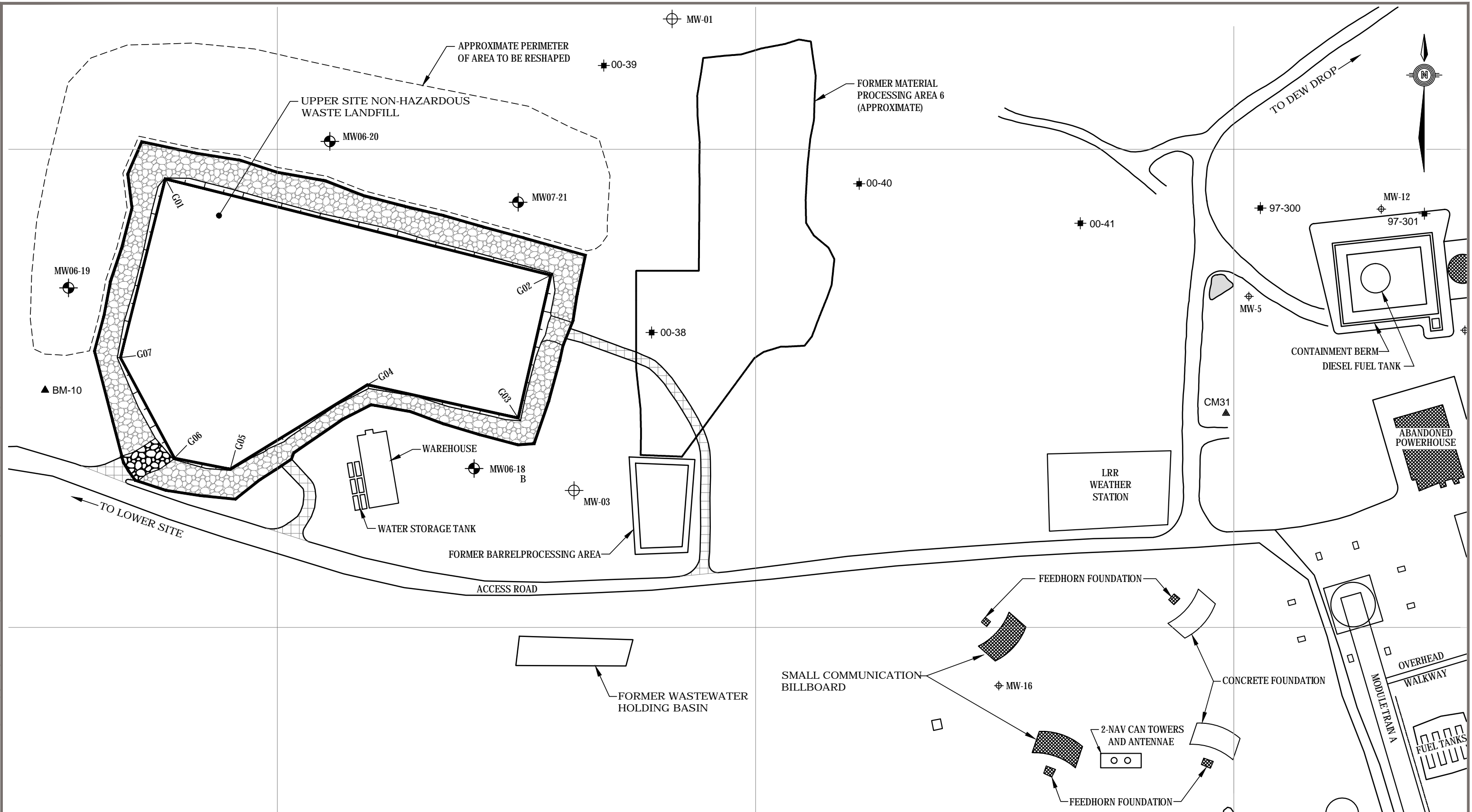
BORROW AREA 13
LOWER SITE TIER II DISPOSAL FACILITY

PROJECT NO. 60263380	DWN CLC	CKD DM	REV 0
OFFICE EDM	DATE November 2012		

Figure 9

Figure 10

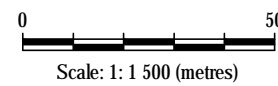
L:\MarketSectors\Earth & Water\Projects\0171 DLCLUDYE M2012 Geotech QC Report\Winnipeg CAD Figures\10995\027.011_Figure 2_3_7_11_U.dwg [FIGURE 11] November 13, 2012 - 1:08:44 pm (BY: CLOUSTON, CASSANDRA)



- LEGEND:
- DRAINAGE
 - TESTPIT (EXCAVATION YEAR DENOTED BY FIRST TWO DIGITS OF TESTPIT ID)
 - MONITORING WELL LOCATION
 - BM-10 ▲ - BENCHMARK

NOTES

1. FIGURE UPDATED FROM EBA 2011 GEOTEH QA SUMMARY REPORT



DEW LINE CLEAN UP PROJECT DYE-M, CAPE DYER, NU				
UPPER SITE NON-HAZARDOUS WASTE LANDFILL FORMER WASTEWATER HOLDING BASIN SMALL BILLBOARD FOUNDATIONS				
PROJECT NO. 60263380	DWN CLC	CKD DM	REV 0	Figure 11
OFFICE EDM	DATE November 2012			

L:\MarketSectors\Earth & Water\Projects\0171 DLU\DUYE M2012 Geotech QC Report\Winipeg CAD Figures\10995\027.011_Figure_5.6.8.9.10.12_L.dwg [FIGURE 12] November 13, 2012 - 12:03:36 pm (BY: CLOUSTON, CASSANDRA)



PHOTOGRAPHIC LOG



Site Name: DYE-M

Site Location: Cape Dyer, NU

Project No.
60263359

Photo No.
1

Date:
June 15,
2012

**Direction Photo
Taken:**

South

Description:

Upper Site Tier I DF..

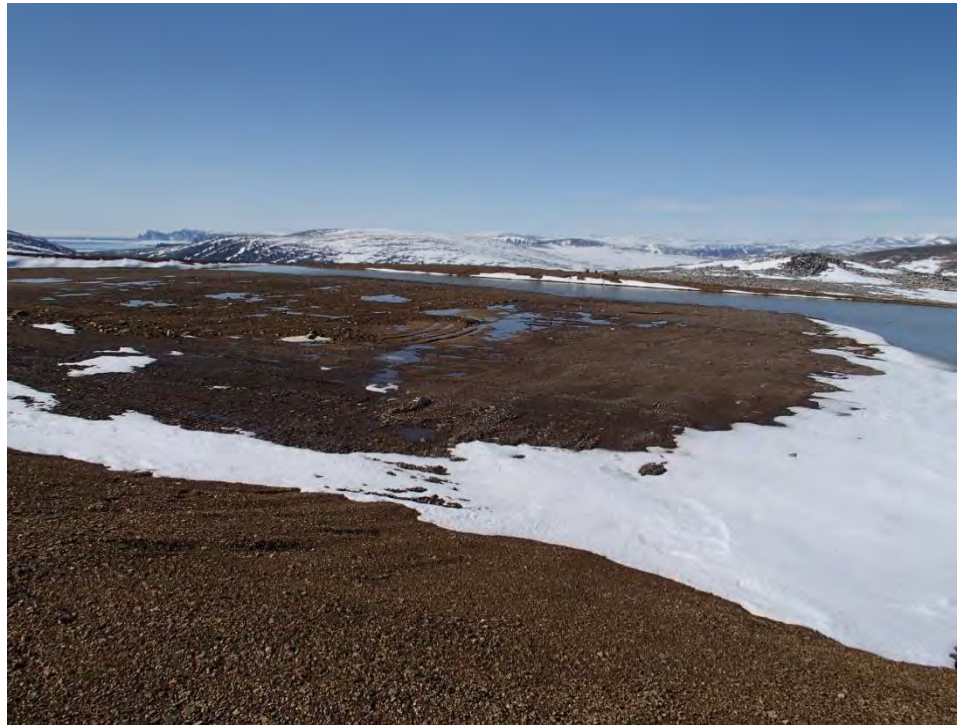


Photo No.
2

Date:
June 15,
2012

**Direction Photo
Taken:**

North

Description:

Upper Site NHWL



PHOTOGRAPHIC LOG



Site Name: DYE-M

Site Location: Cape Dyer, NU

Project No.
60263359

Photo No.
3

Date:
June 20,
2012

**Direction Photo
Taken:**

South

Description:

Borrow Area 4 –
Access roadway
construction.



Photo No.
4

Date:
June 20,
2012

**Direction Photo
Taken:**

North

Description:

Landfarm.



PHOTOGRAPHIC LOG



Site Name: DYE-M

Site Location: Cape Dyer, NU

Project No.
60263359

Photo No.
5

Date:
June 20,
2012

Direction Photo Taken:

North

Description:

Upper Site NHWL.



Photo No.
6

Date:
June 25,
2012

Direction Photo Taken:

South

Description:

Borrow Area 4 –
Screening Type 2
Granular Fill.



PHOTOGRAPHIC LOG



Site Name: DYE-M

Site Location: Cape Dyer, NU

Project No.
60263359

Photo No.
7

Date:
July 4,
2012

Direction Photo Taken:

East

Description:

Lower Site NHWL –
Construction of Type 2
Granular Cover Layer.



Photo No.
8

Date:
July 6,
2012

Direction Photo Taken:

North

Description:

Landfarm – Tilling Event.



PHOTOGRAPHIC LOG



Site Name: DYE-M

Site Location: Cape Dyer, NU

Project No.
60263359

Photo No.
9

Date:
July 11,
2012

**Direction Photo
Taken:**

East

Description:

Pallet Line Landfill – Type
1 Granular Fill Placement.



Photo No.
10

Date:
July 20,
2012

**Direction Photo
Taken:**

North

Description:

Lower Site Tier II DF –
Removal of Spilled Soils.



PHOTOGRAPHIC LOG



Site Name: DYE-M

Site Location: Cape Dyer, NU

Project No.
60263359

Photo No.
11

Date:
July 21,
2012

Direction Photo Taken:

Northeast

Description:

DEW Drop Area – Large Billboard Demolition.



Photo No.
12

Date:
July 24,
2012

Direction Photo Taken:

West

Description:

Upper Site NHWL – Segmentation of Large Generators.



PHOTOGRAPHIC LOG



Site Name: DYE-M

Site Location: Cape Dyer, NU

Project No.
60263359

Photo No.
13

Date:
August 3,
2012

Direction Photo Taken:

West

Description:

Unloading Sealift.



Photo No.
14

Date:
August
10, 2012

Direction Photo Taken:

South

Description:

Upper Site NHWL –
Landfilling of Large
Billboard.



PHOTOGRAPHIC LOG



Site Name: DYE-M

Site Location: Cape Dyer, NU

Project No.
60263359

Photo No.
15

Date:
August
11, 2012

**Direction Photo
Taken:**

South

Description:

Upper Site Tier II DF –
Installation of Geotextile.



Photo No.
16

Date:
August
20, 2012

**Direction Photo
Taken:**

Northwest

Description:

Upper Site Tier II DF –
Backfilling Ramp Area.



PHOTOGRAPHIC LOG



Site Name: DYE-M

Site Location: Cape Dyer, NU

Project No.
60263359

Photo No.
17

Date:
August
21, 2012

**Direction Photo
Taken:**

Not Applicable

Description:

Upper Site Tier II DF –
Installation of
Geomembrane Boot on
VT-10..



Photo No.
18

Date:
August
30, 2012

**Direction Photo
Taken:**

West

Description:

Lower Site Station Area –
Demolition of Warehouse
B13F.



PHOTOGRAPHIC LOG



Site Name: DYE-M

Site Location: Cape Dyer, NU

Project No.
60263359

Photo No.
19

Date:
Sept 8,
2012

**Direction Photo
Taken:**

West

Description:

Upper Site Tier II DF –
Construction of Type 2
Granular Cover Layer.



Photo No.
20

Date:
Sept 13,
2012

**Direction Photo
Taken:**

North

Description:

Lower Site Tier II DF –
Placement of Winter
Cover Layer on Cell 2.

