

Public Works and Government Services Canada / Travaux publics et Services gouvernementaux Canada

REAL PROPERTY SERVICES / Services immobiliers

Client: Indian and Northern Affairs Canada / Affaires indiennes et du Nord Canada

Canada

CONTAMINANTS and REMEDIATION DIRECTORATE / Yellowknife, N.W.T.

Client: Client

GENERAL NOTES:

- ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
- ALL COORDINATES AND ELEVATIONS ARE BASED ON UTM NAD83 DATUM.
- SITE PLANS AND TOPOGRAPHIC INFORMATION BASED ON AIR PHOTOS AND SURVEY PROVIDED BY OTHERS. CURRENT CONDITIONS MAY NOT BE EXACTLY AS SHOWN.
- EXTENT OF CONTAMINATION BASED ON RESULTS OF PREVIOUS SITE INVESTIGATIONS.
- COORDINATES FOR CONTROL POINT "BASE STATION PT 1001" (NOT WITHIN SHEET AREA) ARE PROVIDED IN SURVEY CONTROL POINTS TABLE (THIS SHEET).
- RE-ESTABLISH TEMPORARY BENCHMARKS IN FIELD.
- FORMER ACCESS ROUTE LOCATIONS SHOWN ARE APPROXIMATE.
- CONFIRM CONDITION OF SITE ACCESS ROUTES PRIOR TO MOBILIZATION.
- REMOVE EXISTING LAKE LEVEL SENSOR AND TRANSFER INSTRUMENTATION TO DEPARTMENTAL REPRESENTATIVE.
- REMOVE SURFICIAL DEBRIS AND PARTIALLY BURIED DEBRIS WITHIN 0.5m OF EXISTING GROUND SURFACE. REMOVE DEBRIS LOCATED IN IDENTIFIED DEBRIS AREAS, WITHIN 50m OF EXISTING ROADS AND WATERCOURSES/BODIES, IN WATERCOURSES/BODIES WITHIN 10m OF THE SHORELINE, AND WITHIN AREA SHOWN ON THIS SHEET.
- ADHERE TO REGULATORY REQUIREMENTS, BEST MANAGEMENT PRACTICES, AND OPERATIONAL STATEMENTS FOR ALL WORKS CONTRACT (REFER TO SPECIFICATION OF 41 00 REGULATORY REQUIREMENTS).

LEGEND

- EXISTING CONTOURS AT 0.5m INTERVAL
- SITE GRID (100m INTERVAL)
- EXISTING WATERCOURSE
- EXISTING TREELINE
- TREELINE CLEARING LIMIT
- APPROXIMATE DEBRIS AREA
- EXISTING BOREHOLE
- EXISTING TEST PIT
- EXISTING SURVEY CONTROL POINT
- COORDINATE POINT (DRAINAGE)
- COORDINATE POINT (CONTAMINATION)
- MINE OPENING
- F1/F2 CONTAMINATED SOIL
- OTHER CONTAMINATED SOIL
- WASTE ROCK

WATER DIVERSION BERM

NO.	COORDINATES		
	NORTHING	EASTING	ELEVATION
17	7 275 349.7	454 710.1	193.00
18	7 275 334.2	454 706.1	193.00
19	7 275 308.3	454 669.2	193.00

AREA NR-4-5 COORDINATE POINTS

NO.	COORDINATES		
	NORTHING	EASTING	ELEVATION
A1	7 275 333.0	454 642.1	
A2	7 275 333.1	454 649.7	
A3	7 275 328.5	454 655.4	
A4	7 275 319.8	454 654.6	
A5	7 275 318.1	454 647.6	
A6	7 275 319.5	454 640.4	
A7	7 275 327.1	454 637.6	

AREA NR-1-1 COORDINATE POINTS

NO.	COORDINATES		
	NORTHING	EASTING	ELEVATION
B1	7 275 309.5	454 761.0	
B2	7 275 317.0	454 769.5	
B3	7 275 313.3	454 783.0	
B4	7 275 301.5	454 791.3	
B5	7 275 296.6	454 787.6	
B6	7 275 294.5	454 778.6	
B7	7 275 288.7	454 769.8	
B8	7 275 303.0	454 761.6	

AREA NR-1-4 COORDINATE POINTS

NO.	COORDINATES		
	NORTHING	EASTING	ELEVATION
C1	7 275 197.0	454 779.8	
C2	7 275 201.0	454 787.4	
C3	7 275 212.3	454 820.1	
C4	7 275 230.5	454 837.3	
C5	7 275 235.2	454 846.7	
C6	7 275 229.1	454 860.3	
C7	7 275 217.1	454 865.4	
C8	7 275 212.7	454 866.5	
C9	7 275 211.5	454 859.8	
C10	7 275 202.0	454 846.5	
C11	7 275 196.6	454 833.2	
C12	7 275 191.3	454 823.9	
C13	7 275 187.6	454 813.8	
C14	7 275 186.3	454 803.1	
C15	7 275 182.9	454 795.2	
C16	7 275 177.6	454 788.1	
C17	7 275 179.1	454 782.0	
C18	7 275 186.1	454 776.5	

AREA NR-1-2 COORDINATE POINTS

NO.	COORDINATES		
	NORTHING	EASTING	ELEVATION
D1	7 275 251.1	454 915.9	
D2	7 275 248.1	454 925.6	
D3	7 275 243.8	454 926.6	
D4	7 275 231.7	454 938.8	
D5	7 275 223.9	454 932.1	
D6	7 275 221.2	454 926.2	
D7	7 275 225.6	454 914.8	
D8	7 275 239.7	454 908.3	

AREA NR-1-3 COORDINATE POINTS

NO.	COORDINATES		
	NORTHING	EASTING	ELEVATION
E1	7 275 265.9	454 947.3	
E2	7 275 276.1	454 961.9	
E3	7 275 270.1	454 974.9	
E4	7 275 266.3	454 985.1	
E5	7 275 263.0	454 990.6	
E6	7 275 256.6	454 991.3	
E7	7 275 251.8	454 991.7	
E8	7 275 247.0	454 988.4	
E9	7 275 241.8	454 980.7	
E10	7 275 237.3	454 970.7	
E11	7 275 249.4	454 955.3	

SURVEY CONTROL POINTS

POINT ID	COORDINATES		
	NORTHING	EASTING	ELEVATION
TBM-103	7 275 403.980	454 615.540	192.340
TBM-104	7 275 351.100	454 732.290	194.470
TBM-105	7 275 224.540	454 658.840	166.260
BASE STATION PT 1001	7 275 773.090	452 951.170	266.200

CONTAMINATED AND IMPACTED SOIL

AREA NAME	APPROX. AREA (m ²)	ESTIMATED DEPTH OF CONTAMINATION (m)	ESTIMATED VOLUME OF EXCAVATION (m ³)	COMMENTS	REFERENCE POINTS	
					N	E
NR-4-5	209	0.5	104.5	EXCAVATE AND CONTAINERIZE	7 275 326	454 646
NR-1-1	526	0.4-0.6	105.2	EX SITU TREATMENT	7 275 303	454 775
NR-1-4	2,061	1.5-2.0	3,096.75	EX SITU TREATMENT	7 275 201	454 822
NR-1-2	535	1.2	642	EX SITU TREATMENT	7 275 236	454 923
NR-1-3	1,070	1.2	1,284	EX SITU TREATMENT	7 275 255	454 973

REVISIONS

REVISIONS	DESCRIPTION	DATE
B	ISSUED FOR TENDER	13/03/28
A	ISSUED FOR 90% REVIEW	13/02/04

PERMIT TO PRACTICE

Signature: [Signature]
Date: [Date]
PERMIT NUMBER: P639
NWT/NU Association of Professional Engineers and Geoscientists

AECOM

project title: NORTHMINE AREA 1
titre du projet: NORTHMINE AREA 1

**MARCH 2012
REMEDIATION PROJECT
NORTHWEST TERRITORIES**

**ISSUED FOR TENDER
NOT FOR CONSTRUCTION
Date: 2013/03/28**

designed by: C. MOORE
conçu par: C. MOORE

drawn by: A. DE LEON
dessiné par: A. DE LEON

approved by: W. BEBEAU
approuvé par: W. BEBEAU

PM/SC Project Manager: M. BERNARDIN
Administrateur de Projets TPSGC: M. BERNARDIN

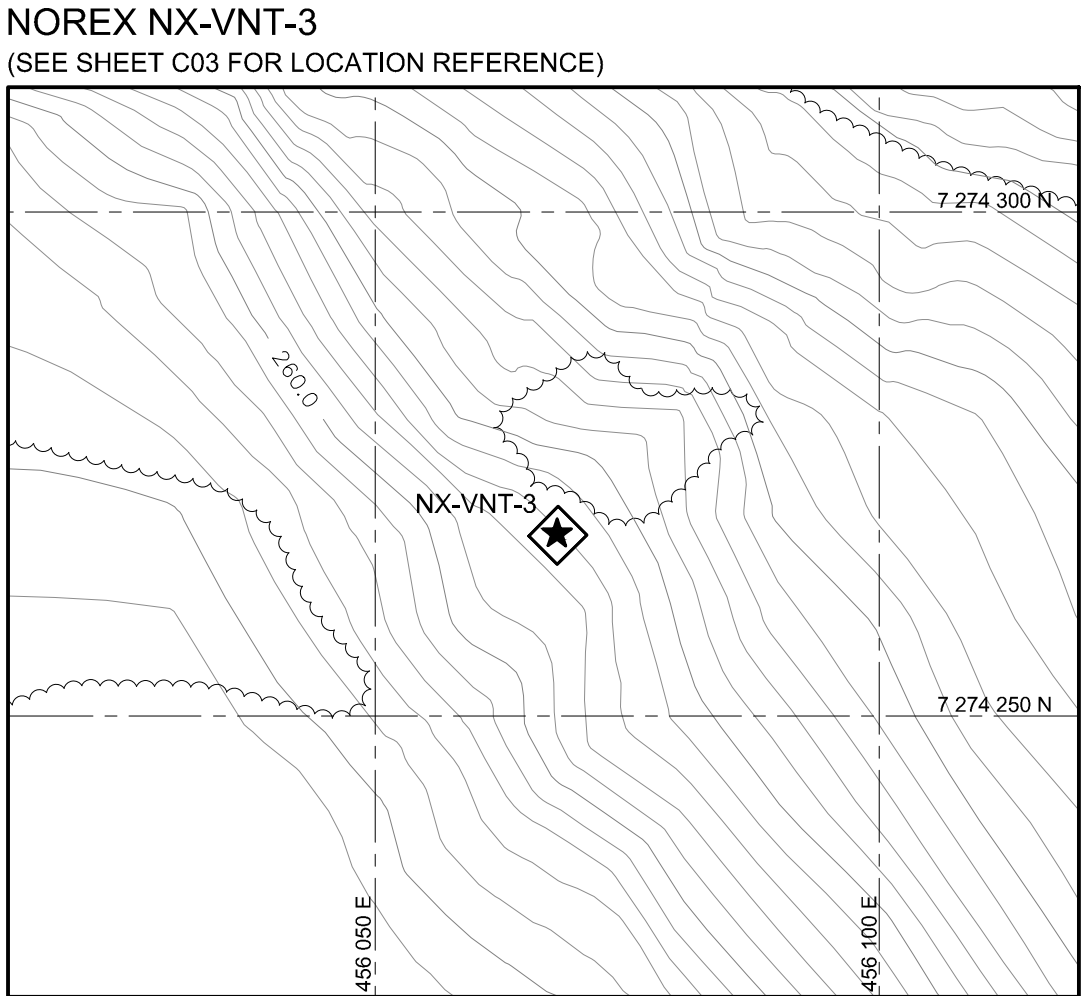
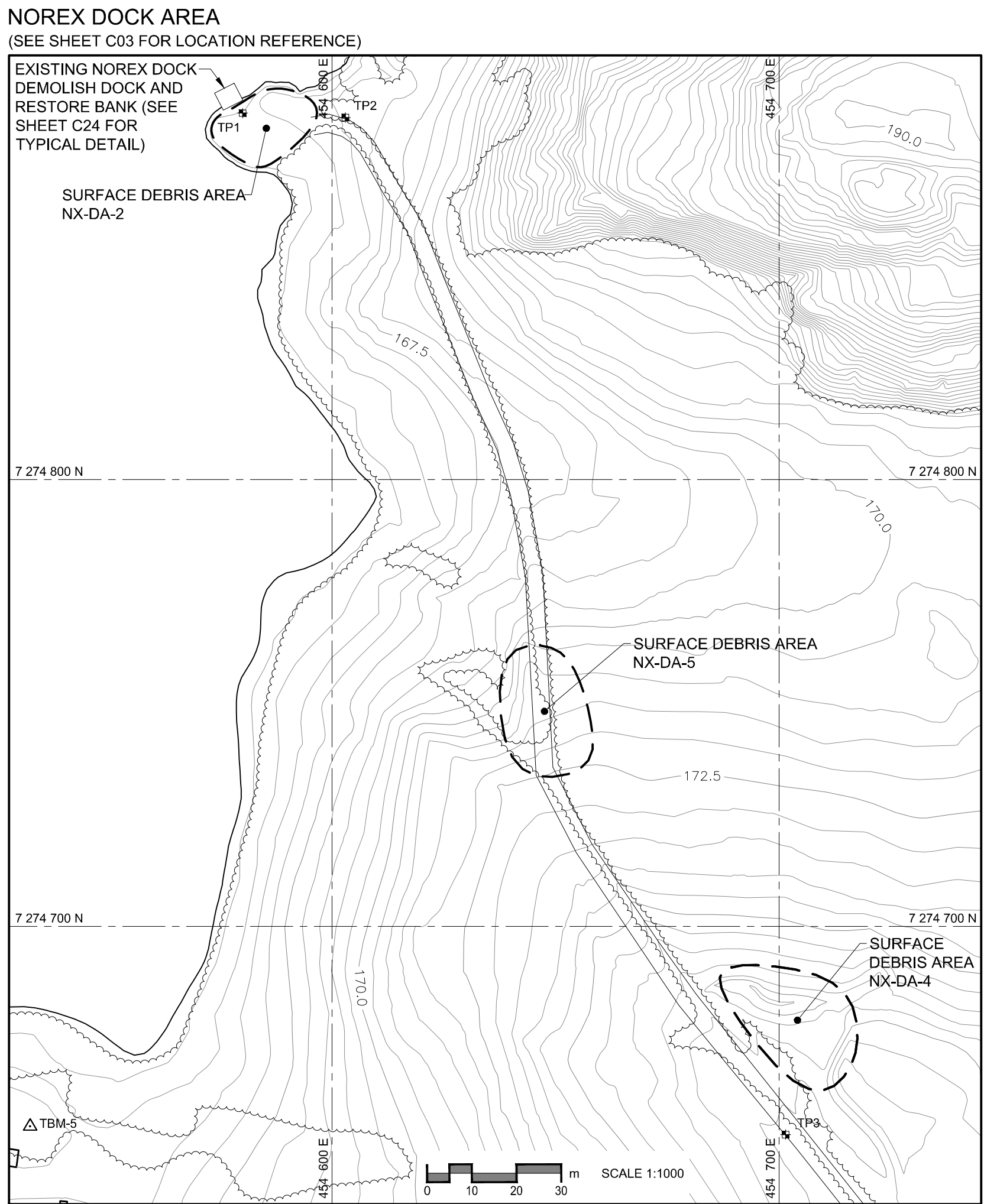
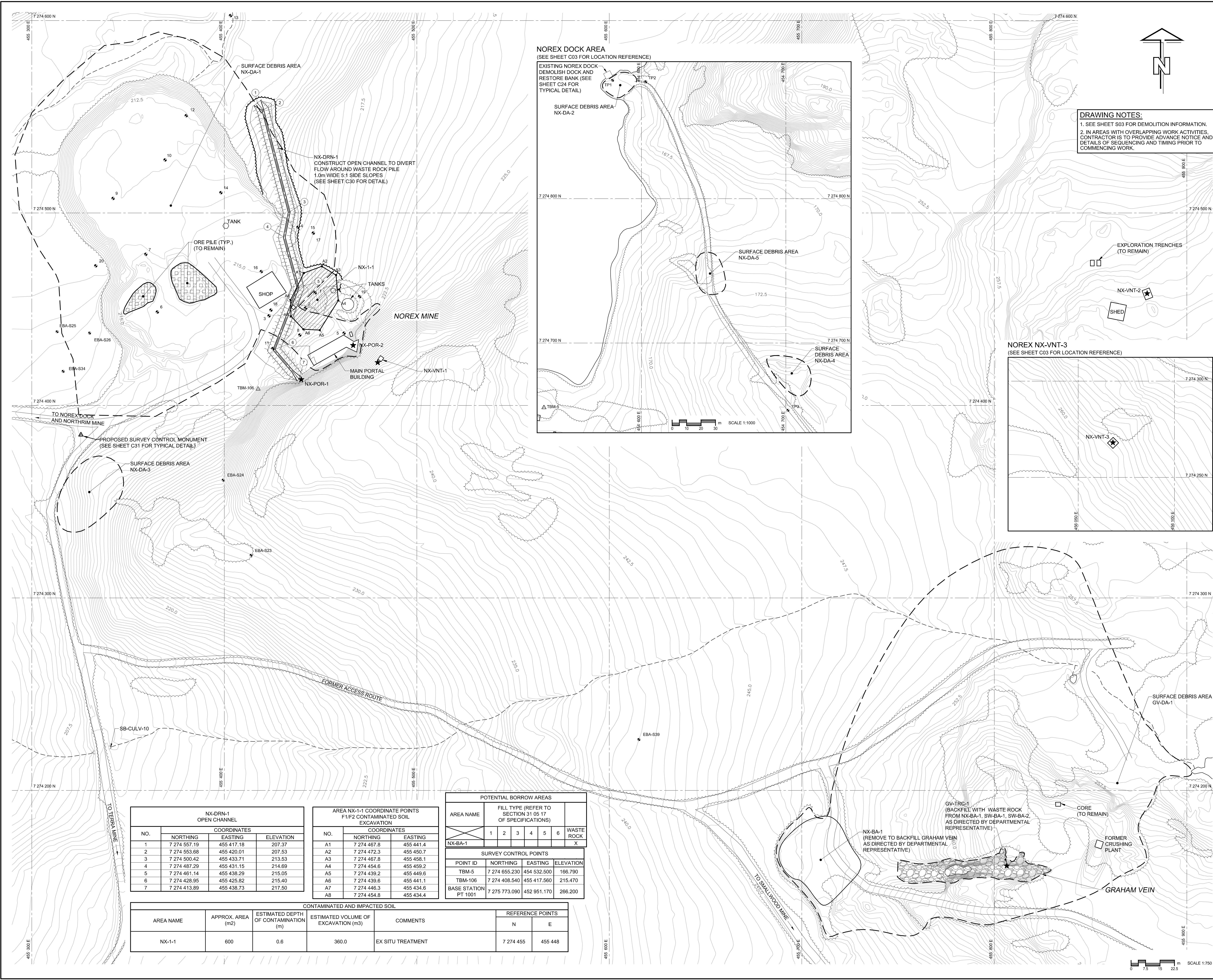
scale: 1:1000
échelle: 1:1000

project no.: R.015211.014
projet no.: R.015211.014

date: MARCH 2013
date: MARCH 2013

sheet: C10
feuille: C10

OF 32



DRAWING NOTES:
 1. SEE SHEET S03 FOR DEMOLITION INFORMATION.
 2. IN AREAS WITH OVERLAPPING WORK ACTIVITIES, CONTRACTOR IS TO PROVIDE ADVANCE NOTICE AND DETAILS OF SEQUENCING AND TIMING PRIOR TO COMMENCING WORK.

Public Works and Government Services Canada

Travaux publics et Services gouvernementaux Canada

REAL PROPERTY SERVICES

Western Region

Client

Indian and Northern Affairs Canada

Client

Affaires indiennes et du Nord Canada

Canada

CONTAMINANTS and REMEDIATION DIRECTORATE

YELLOWKNIFE, N.W.T.

Client

Client

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- COORDINATES FOR CONTROL POINT "BASE STATION PT 1001" (NOT WITHIN SHEET AREA) ARE PROVIDED IN SURVEY CONTROL POINTS TABLE (THIS SHEET).
- RE-ESTABLISH TEMPORARY BENCHMARKS IN FIELD.
- FORMER ACCESS ROUTE LOCATIONS SHOWN ARE APPROXIMATE.
- CONFIRM CONDITION OF SITE ACCESS ROUTES PRIOR TO MOBILIZATION.
- PORTAL 1 (NX-POR-1) SEASONALLY BLOCKED WITH ICE.
- REMOVE SURFICIAL DEBRIS AND PARTIALLY BURIED DEBRIS WITHIN 0.5m OF EXISTING GROUND SURFACE. REMOVE DEBRIS LOCATED IN IDENTIFIED DEBRIS AREAS, WITHIN 50m OF EXISTING ROADS AND WATERCOURSES/BODIES, IN WATERCOURSES/BODIES WITHIN 10m OF THE SHORELINE, AND WITHIN AREA SHOWN ON THIS SHEET.
- ADHERE TO REGULATORY REQUIREMENTS, BEST MANAGEMENT PRACTICES, AND OPERATIONAL STATEMENTS FOR ALL WORK IN CONTRACT (REFER TO SPECIFICATION 01 41 00 REGULATORY REQUIREMENTS).

LEGEND

165.0	EXISTING CONTOURS AT 0.5m INTERVAL
---	SITE GRID (INTERVAL VARIES)
---	EXISTING WATERCOURSE
---	EXISTING TREELINE
---	TREELINE CLEARING LIMIT
---	APPROXIMATE DEBRIS AREA
P	EXISTING POWER LINE
43%	EXISTING BOREHOLE
EBA-S31%	EXISTING TEST PIT
TBM-111	EXISTING SURVEY CONTROL POINT
Δ	PROPOSED SURVEY CONTROL MONUMENT
(X)	COORDINATE POINT (DRAINAGE)
A1	COORDINATE POINT (CONTAMINATION)
★	MINE OPENING
█	F1/F2 CONTAMINATED SOIL
█	BACKFILL
█	ORE

PERMIT TO PRACTICE

AECOM Canada Ltd.

Signature: [Signature]

Date: 2013/03/28

PERMIT NUMBER: P639

NWT/NU Association of Professional Engineers and Geoscientists

AECOM

B	ISSUED FOR TENDER	13/03/28
A	ISSUED FOR 90% REVIEW	13/02/04
REVISIONS	DESCRIPTION	DATE
A	A detail number	
C	B source drawing no. de dessin no.	
	C detail on drawing no. detail sur dessin no.	

project title

titre du projet

MARCH 2012

REMEDIATION PROJECT

NORTHWEST TERRITORIES

drawing title

titre du dessin

NOREX MINE AND GRAHAM VEIN

AREA 1

ISSUED FOR TENDER

NOT FOR CONSTRUCTION

Date: 2013/03/28

designed by

C. MOORE

conçu par

drawn by

A. DE LEON

dessiné par

approved by

W. BEBEAU

approuvé par

PM/SC Project Manager

M. BERNARDIN

Administrateur de Projets TPSGC

scale

1:750

échelle

sheet

C11

feuille

project no.

R.015211.014

proj. no.

date

MARCH 2013

date

OF 32

NO.

COORDINATES

NO.	NORTHING	EASTING	ELEVATION
1	7 274 557.19	455 417.18	207.37
2	7 274 553.68	455 420.01	207.53
3	7 274 500.42	455 433.71	213.53
4	7 274 487.29	455 431.15	214.69
5	7 274 461.14	455 438.29	215.05
6	7 274 428.95	455 425.82	215.40
7	7 274 413.89	455 438.73	217.50

AREA NX-1-1 COORDINATE POINTS

F1/F2 CONTAMINATED SOIL EXCAVATION

NO.	NORTHING	EASTING
A1	7 274 467.8	455 441.4
A2	7 274 472.3	455 450.7
A3	7 274 467.8	455 458.1
A4	7 274 454.6	455 459.2
A5	7 274 439.2	455 449.6
A6	7 274 439.6	455 441.1
A7	7 274 446.3	455 434.6
A8	7 274 454.8	455 434.4

POTENTIAL BORROW AREAS

AREA NAME	FILL TYPE (REFER TO SECTION 31 05 17 OF SPECIFICATIONS)	WASTE ROCK
NX-BA-1	1 2 3 4 5 6	X

SURVEY CONTROL POINTS

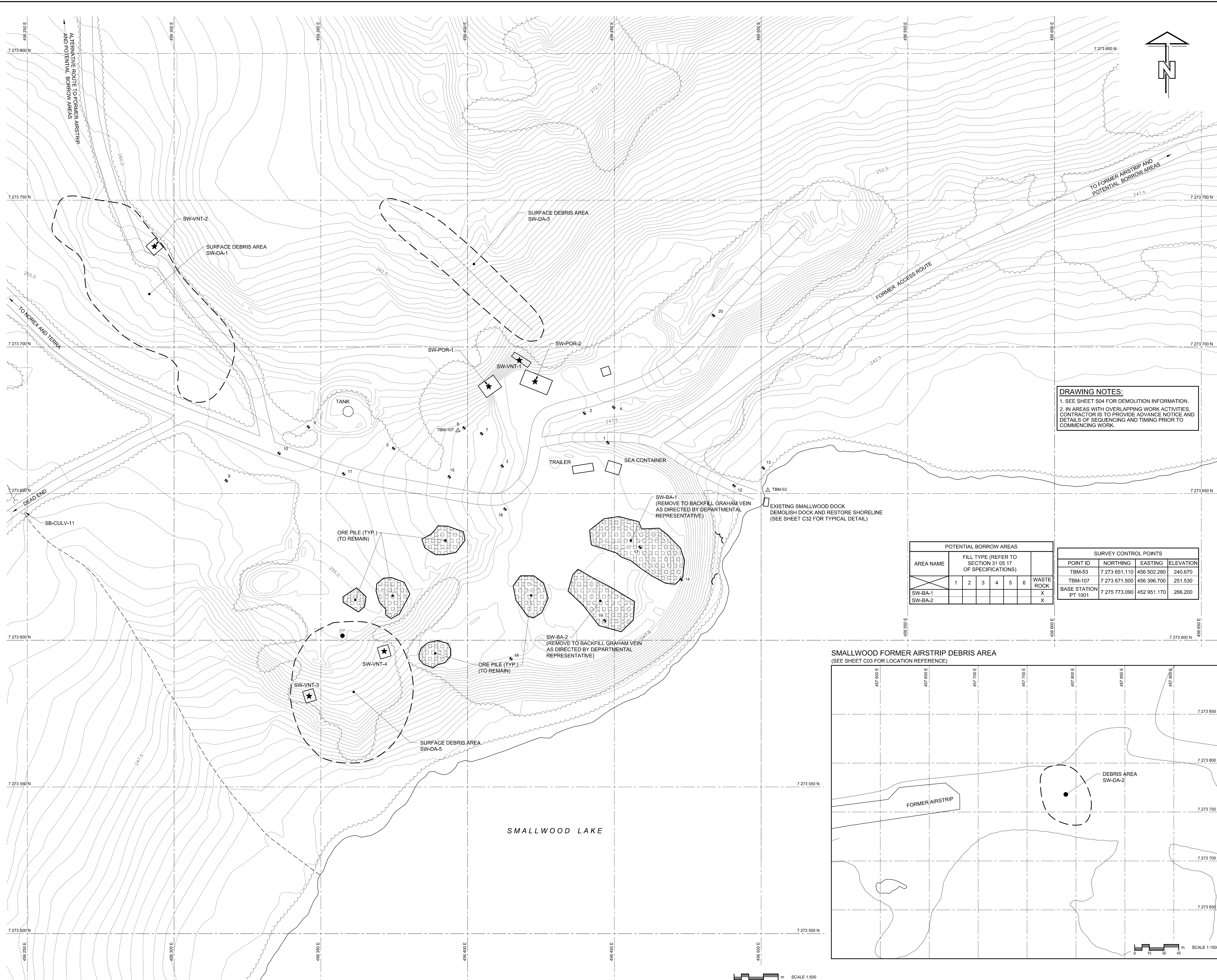
POINT ID	NORTHING	EASTING	ELEVATION
TBM-5	7 274 655.230	454 532.500	166.790
TBM-106	7 274 408.540	455 417.560	215.470
BASE STATION PT 1001	7 275 773.090	452 951.170	266.200

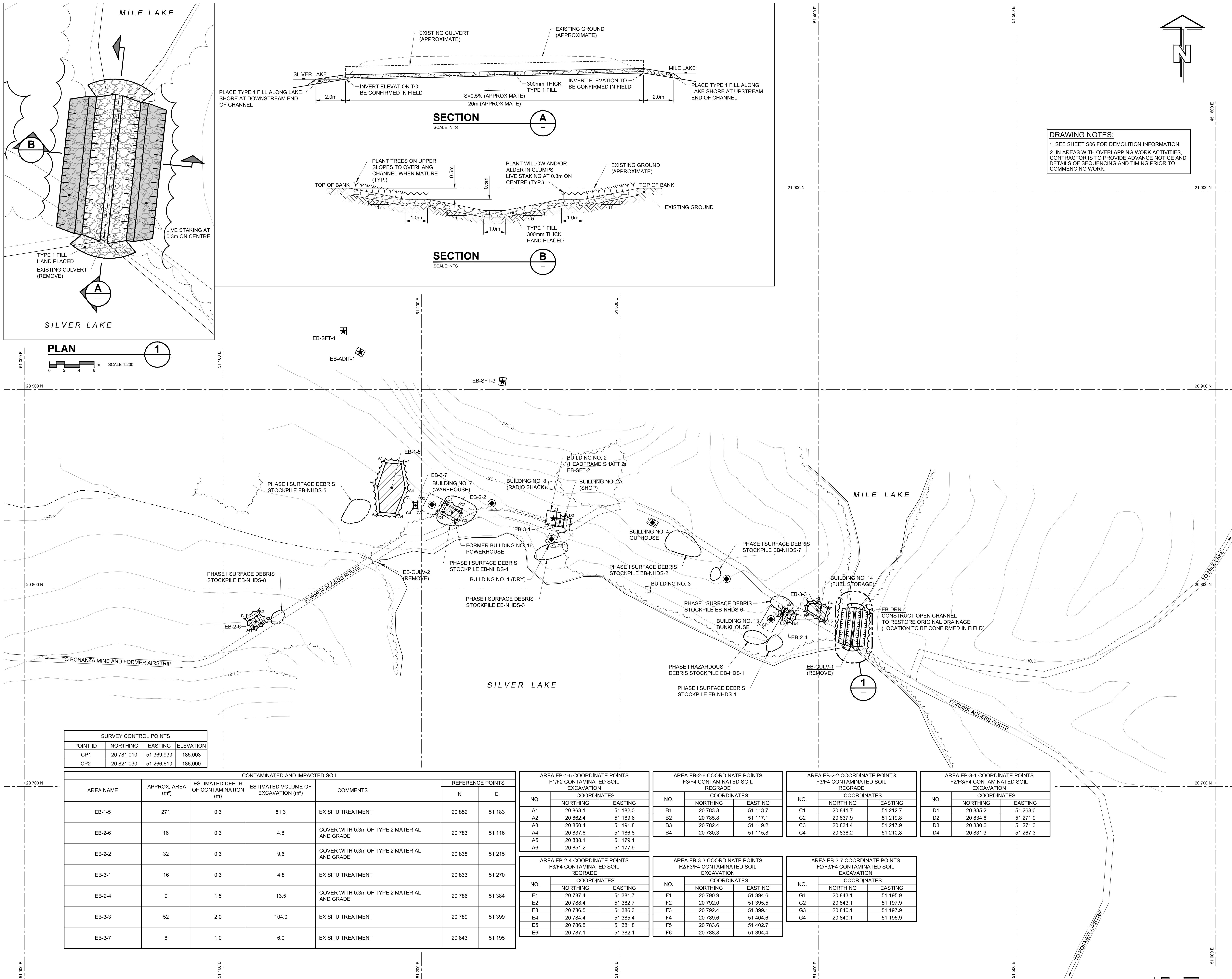
CONTAMINATED AND IMPACTED SOIL

AREA NAME	APPROX. AREA (m2)	ESTIMATED DEPTH OF CONTAMINATION (m)	ESTIMATED VOLUME OF EXCAVATION (m3)	COMMENTS	REFERENCE POINTS
NX-1-1	600	0.6	360.0	EX SITU TREATMENT	N 7 274 455 455 448

B1 1000 x 707

R.015211.014 - C11





Public Works and Government Services Canada

Travaux publics et Services gouvernementaux Canada

REAL PROPERTY SERVICES

Western Region

Indian and Northern Affairs Canada

Affaires indiennes et du Nord Canada

Canada

CONTAMINANTS and REMEDIATION DIRECTORATE

YELLOWKNIFE, N.W.T.

Client

Client

GENERAL NOTES

1. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
2. ALL COORDINATES AND ELEVATIONS ARE BASED ON LOCAL COORDINATE SYSTEM.
3. SITE PLANS AND TOPOGRAPHIC INFORMATION BASED ON AIR PHOTOS AND SURVEY PROVIDED BY OTHERS. CURRENT CONDITIONS AND LOCATIONS MAY NOT BE EXACTLY AS SHOWN.
4. EXTENT OF CONTAMINATION BASED ON RESULTS OF PREVIOUS SITE INVESTIGATIONS.
5. RE-ESTABLISH SURVEY CONTROL IN FIELD.
6. FORMER ACCESS ROUTE LOCATIONS SHOWN ARE APPROXIMATE.
7. CONFIRM CONDITION OF SITE ACCESS ROUTES PRIOR TO MOBILIZATION.
8. IDENTIFY LOCATION AND DEPTH OF EXISTING SURFACE TRENCHES (ON HILLSIDE ABOVE MINE SITE) IN FIELD. BACKFILL DEEPEST SURFACE TRENCH.
9. ESTABLISH LAYOUT OF OPEN CHANNEL (EB-DRN-1) WITH DEPARTMENTAL REPRESENTATIVE IN FIELD.
10. WILLOW AND/OR ALDER STAKES MAY BE SOURCED FROM MARSH WEST OF SILVER LAKE AND/OR OTHER LOCATIONS AS APPROVED BY DEPARTMENTAL REPRESENTATIVE.
11. REMOVE SURFICIAL DEBRIS AND PARTIALLY BURIED DEBRIS WITHIN 0.5m OF EXISTING GROUND SURFACE. REMOVE DEBRIS LOCATED WITHIN 50m OF EXISTING ROADS AND WATERCOURSES/BODIES. IN WATERCOURSES/BODIES WITHIN 10m OF THE SHORELINE, AND WITHIN AREA SHOWN ON THIS SHEET.
12. ADHERE TO REGULATORY REQUIREMENTS, BEST MANAGEMENT PRACTICES, AND OPERATIONAL STATEMENTS FOR ALL WORK IN CONTRACT (REFER TO SPECIFICATION 01 41 00 REGULATORY REQUIREMENTS).
13. SURFACE DEBRIS COLLECTION WAS UNDERTAKEN DURING PHASE I OF WORK AND WAS PLACED IN STOCKPILES ON SITE. APPROXIMATE STOCKPILE LOCATIONS INDICATED ON DRAWING.
14. BUILDING DEMOLITION WAS UNDERTAKEN DURING PHASE I OF WORK. APPROXIMATE LOCATIONS OF ASH PILES REMAINING FROM BUILDING DEMOLITION INDICATED ON DRAWING.

LEGEND

- 165.0 EXISTING CONTOURS AT 0.5m INTERVAL
- SITE GRID (100m INTERVAL)
- EXISTING WATERCOURSE
- EXISTING TREELINE
- TREELINE CLEARING LIMIT
- FORMER BUILDING
- EXISTING SURVEY CONTROL POINT
- COORDINATE POINT (CONTAMINATION)
- MINE OPENING
- F1/F2 CONTAMINATED SOIL
- F3/F4 CONTAMINATED SOIL
- F2/F3/F4 CONTAMINATED SOIL
- PHASE I ASH STOCKPILE LOCATION

PERMIT TO PRACTICE

AECOM Canada Ltd.

Signature: [Signature]

Date: 2013/03/28

PERMIT NUMBER: P639

NWT/NU Association of Professional Engineers and Geoscientists

AECOM

REVISIONS	DESCRIPTION	DATE
B	ISSUED FOR TENDER	13/03/28
A	ISSUED FOR 90% REVIEW	13/02/04

A

C

A

B

C

project title

titre du projet

GREAT BEAR LAKE SITES

REMEDATION PROJECT

NORTHWEST TERRITORIES

drawing title

titre du dessin

EL BONANZA AND BONANZA MINES

AREA 1

ISSUED FOR TENDER

NOT FOR CONSTRUCTION

Date: 2013/03/28

designed by

C. MOORE

conçu par

drawn by

A. DE LEON

dessiné par

approved by

W. BEBEAU

approuvé par

PM/SC Project Manager

M. BERNARDIN

Administrateur de Projets TPSGC

scale

1:750

échelle

project no.

R.015211.014

projet no.

date

MARCH 2013

date

sheet

C13

feuille

OF 32

R.015211.014 - C13

SURVEY CONTROL POINTS			
POINT ID	NORTHING	EASTING	ELEVATION
CP1	20 781.010	51 369.930	185.003
CP2	20 821.030	51 266.610	186.000

CONTAMINATED AND IMPACTED SOIL					
AREA NAME	APPROX. AREA (m²)	ESTIMATED DEPTH OF CONTAMINATION (m)	ESTIMATED VOLUME OF EXCAVATION (m³)	REFERENCE POINTS	
EB-1-5	271	0.3	81.3	20 852	51 183
EB-2-6	16	0.3	4.8	20 783	51 116
EB-2-2	32	0.3	9.6	20 838	51 215
EB-3-1	16	0.3	4.8	20 833	51 270
EB-2-4	9	1.5	13.5	20 786	51 384
EB-3-3	52	2.0	104.0	20 789	51 399
EB-3-7	6	1.0	6.0	20 843	51 195

AREA EB-1-5 COORDINATE POINTS F1/F2 CONTAMINATED SOIL EXCAVATION		
NO.	COORDINATES	
	NORTHING	EASTING
A1	20 863.1	51 182.0
A2	20 862.4	51 189.6
A3	20 850.4	51 191.8
A4	20 837.6	51 186.8
A5	20 838.1	51 179.1
A6	20 851.2	51 177.9

AREA EB-2-6 COORDINATE POINTS F3/F4 CONTAMINATED SOIL REGRADE		
NO.	COORDINATES	
	NORTHING	EASTING
B1	20 793.8	51 113.7
B2	20 785.8	51 117.1
B3	20 782.4	51 119.2
B4	20 780.3	51 115.8

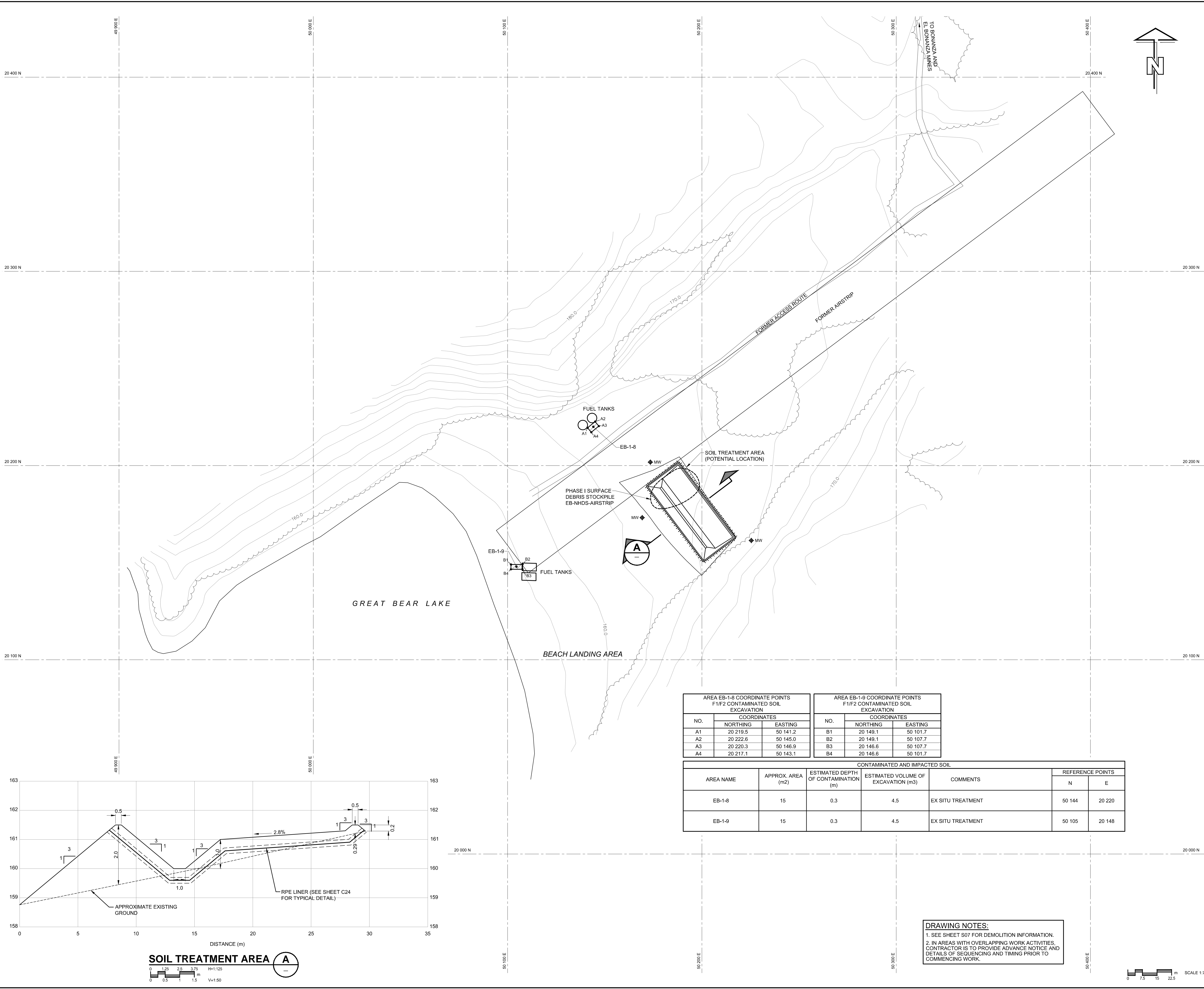
AREA EB-2-2 COORDINATE POINTS F3/F4 CONTAMINATED SOIL REGRADE		
NO.	COORDINATES	
	NORTHING	EASTING
C1	20 841.7	51 212.7
C2	20 837.9	51 219.8
C3	20 834.4	51 217.9
C4	20 838.2	51 210.8

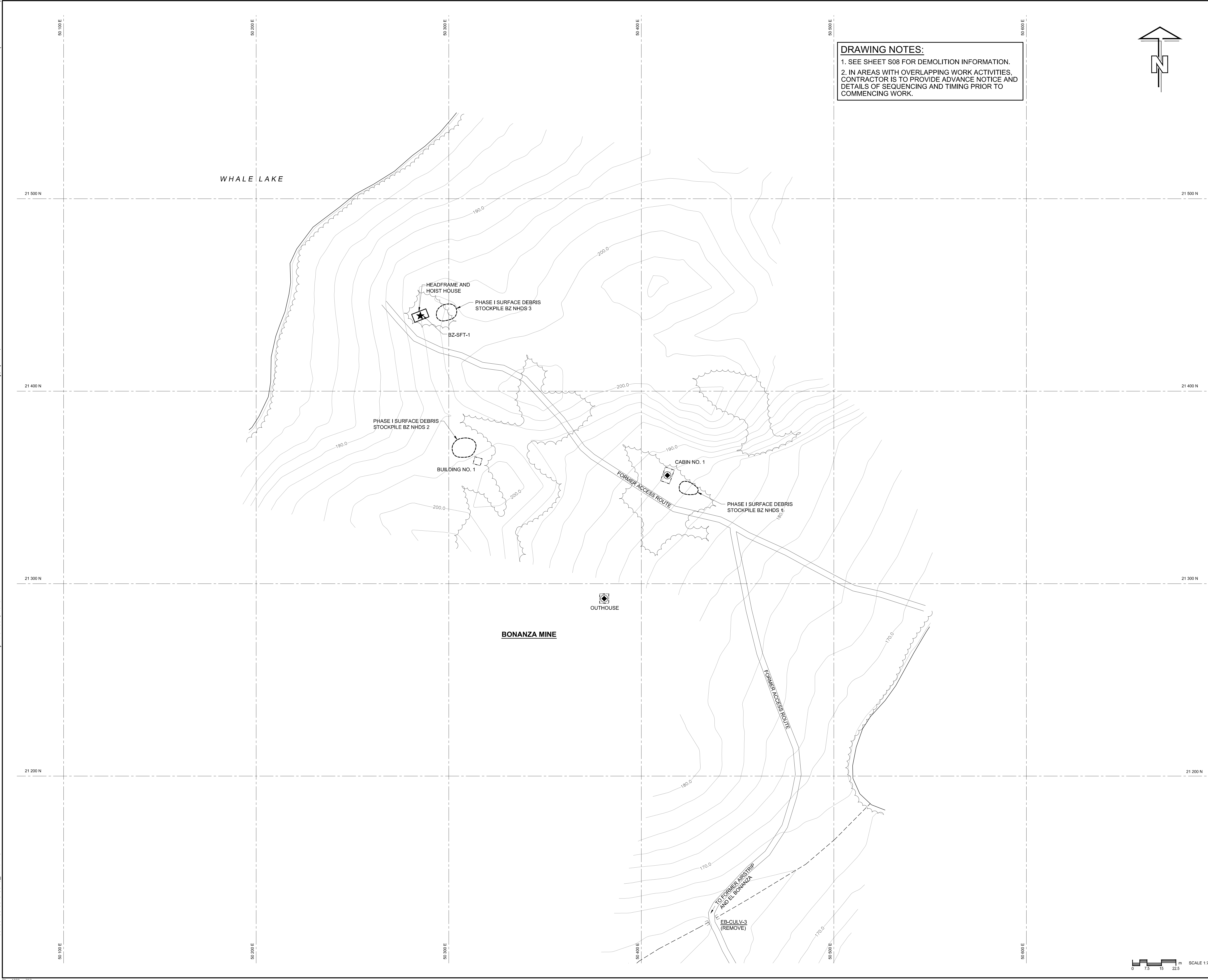
AREA EB-3-1 COORDINATE POINTS F2/F3/F4 CONTAMINATED SOIL EXCAVATION		
NO.	COORDINATES	
	NORTHING	EASTING
D1	20 835.2	51 268.0
D2	20 834.6	51 271.9
D3	20 830.6	51 271.3
D4	20 831.3	51 267.3

AREA EB-2-4 COORDINATE POINTS F3/F4 CONTAMINATED SOIL REGRADE		
NO.	COORDINATES	
	NORTHING	EASTING
E1	20 787.4	51 381.7
E2	20 788.4	51 382.7
E3	20 786.5	51 386.3
E4	20 784.4	51 385.4
E5	20 786.5	51 381.8
E6	20 787.1	51 382.1

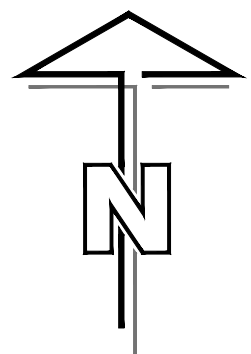
AREA EB-3-3 COORDINATE POINTS F2/F3/F4 CONTAMINATED SOIL EXCAVATION		
NO.	COORDINATES	
	NORTHING	EASTING
F1	20 790.9	51 394.6
F2	20 792.0	51 395.5
F3	20 792.4	51 399.1
F4	20 789.6	51 404.6
F5	20 783.6	51 402.7
F6	20 788.8	51 394.4

AREA EB-3-7 COORDINATE POINTS F2/F3/F4 CONTAMINATED SOIL EXCAVATION		
NO.	COORDINATES	
	NORTHING	EASTING
G1	20 843.1	51 195.9
G2	20 843.1	51 197.9
G3	20 840.1	51 197.9
G4	20 840.1	51 195.9





DRAWING NOTES:
1. SEE SHEET S08 FOR DEMOLITION INFORMATION.
2. IN AREAS WITH OVERLAPPING WORK ACTIVITIES, CONTRACTOR IS TO PROVIDE ADVANCE NOTICE AND DETAILS OF SEQUENCING AND TIMING PRIOR TO COMMENCING WORK.



Public Works and Government Services Canada

Travaux publics et Services gouvernementaux Canada

REAL PROPERTY SERVICES
Western Region

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Affaires indiennes et du Nord Canada

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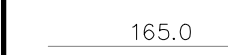
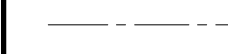




CONTAMINANTS and REMEDIATION DIRECTORATE
YELLOWKNIFE, N.W.T.


Client

Client

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- ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
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 - FORMER ACCESS ROUTE LOCATIONS SHOWN ARE APPROXIMATE.
 - CONFIRM CONDITION OF SITE ACCESS ROUTES PRIOR TO MOBILIZATION.
 - PORTAL BROWS MAY BE UNSTABLE. ADDITIONAL MEASURES MAY BE REQUIRED TO MAINTAIN SAFE CONDITIONS.
 - DECOMMISSION EXISTING ROADS. THIS INCLUDES ANY UPGRADES CONSTRUCTED BY THE CONTRACTOR AT CROSS DRAINAGE LOCATIONS FOR REMEDIATION WORK.
 - SURFACE TRENCHES EXIST WITHIN 500m (APPROXIMATELY) OF HEADFRAME AND HOIST HOUSE.
 - REMOVE SURFICIAL DEBRIS AND PARTIALLY BURIED DEBRIS WITHIN 0.5m OF EXISTING GROUND SURFACE. REMOVE DEBRIS LOCATED WITHIN 50m OF EXISTING ROADS AND WATERCOURSES/BODIES. IN WATERCOURSES/ BODIES WITHIN 10m OF THE SHORELINE, AND WITHIN AREA SHOWN ON THIS SHEET.
 - ADHERE TO REGULATORY REQUIREMENTS, BEST MANAGEMENT PRACTICES, AND OPERATIONAL STATEMENTS FOR ALL WORK IN CONTRACT (REFER TO SPECIFICATION 01 41 00 REGULATORY REQUIREMENTS).
 - SURFACE DEBRIS COLLECTION WAS UNDERTAKEN DURING PHASE I OF WORK AND PLACED IN STOCKPILES ON SITE. APPROXIMATE STOCKPILE LOCATIONS INDICATED ON DRAWING.
 - BUILDING DEMOLITION WAS UNDERTAKEN DURING PHASE I OF WORK. APPROXIMATE LOCATIONS OF ASH PILES REMAINING FROM BUILDING DEMOLITION INDICATED ON DRAWING.


LEGEND

	EXISTING CONTOURS AT 2.0m INTERVAL
	SITE GRID (100m INTERVAL)
	EXISTING TREELINE
	FORMER BUILDING
	MINE OPENING
	PHASE I ASH STOCKPILE LOCATION



PROFESSIONAL ENGINEER
T. GILBERTSON
LICENSEE
2013/04/05

PERMIT TO PRACTICE
AECOM Canada Ltd.
Signature: *[Signature]*
Date: *2013/04/05*
PERMIT NUMBER: P639
NWT/NU Association of Professional Engineers and Geoscientists



B	ISSUED FOR TENDER	13/03/28
A	ISSUED FOR 90% REVIEW	13/02/04
REVISIONS	DESCRIPTION	DATE
A	detail number	number du detail
B	source drawing no.	de dessin no.
C	detail on drawing no.	detail sur dessin no.

project title
**GREAT BEAR LAKE SITES
REMEDATION PROJECT
NORTHWEST TERRITORIES**
titre du projet

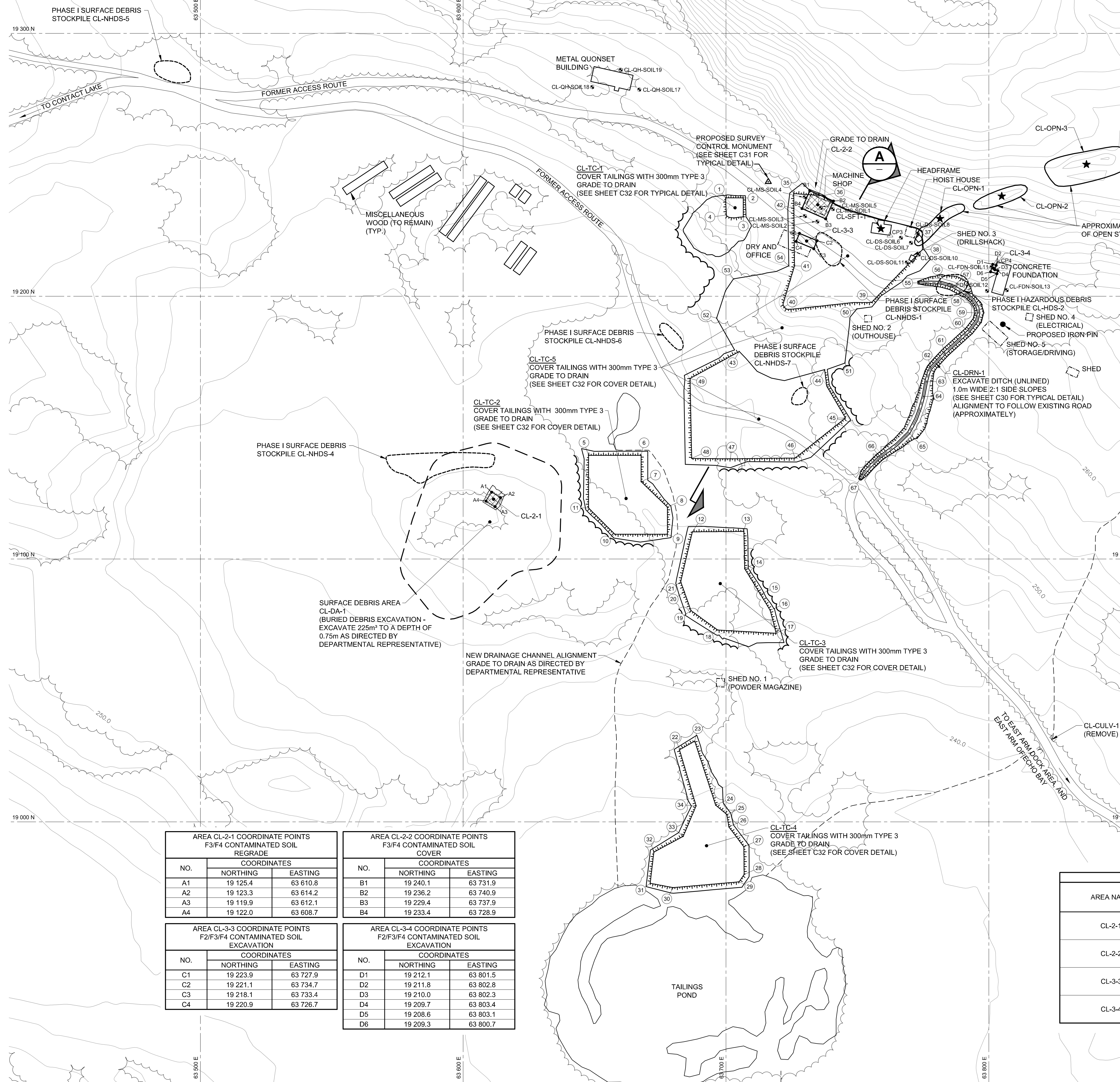
drawing title
**EL BONANZA AND BONANZA MINES
AREA 3**
titre du dessin

**ISSUED FOR TENDER
NOT FOR CONSTRUCTION**
Date: 2013/03/28

designed by	C. MOORE	conçu par	
drawn by	A. DE LEON	dessiné par	
approved by	W. BEBEAU	approuvé par	
PM/ISC Project Manager	M. BERNARDIN	Administrateur de Projets TPSGC	
scale	1:750	échelle	sheet
project no.	R.015211.014	projet no.	C15
date	MARCH 2013	date	OF 32



SCALE 1:750



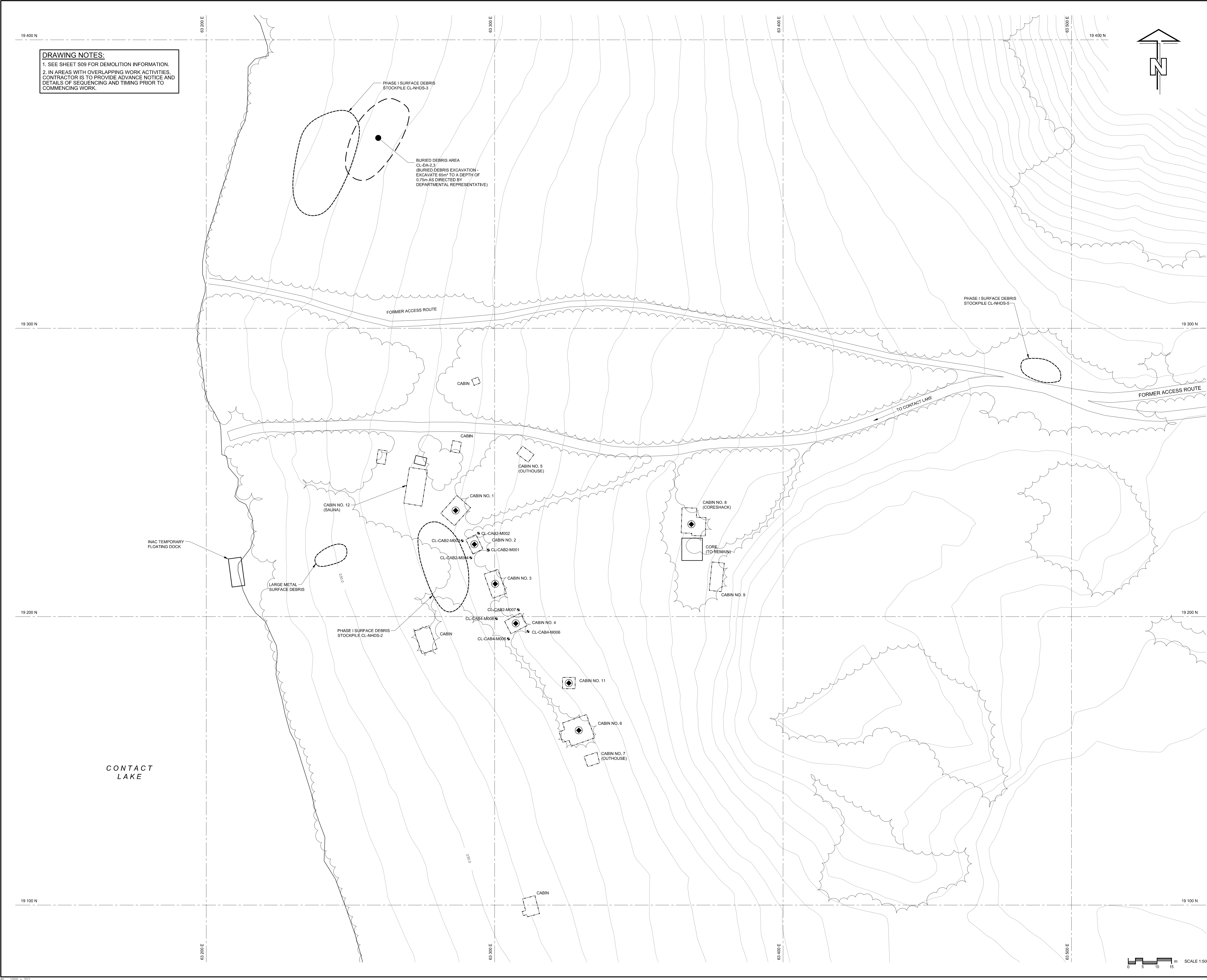
AREA CL-3-4 COORDINATE POINTS F2/F3/F4 CONTAMINATED SOIL EXCAVATION		
NO.	COORDINATES	
	NORTHING	EASTING
D1	19 212.1	63 801.5
D2	19 211.8	63 802.8
D3	19 210.0	63 802.3
D4	19 209.7	63 803.4
D5	19 208.6	63 803.1
D6	19 209.3	63 800.7

CONTAMINATED AND IMPACTED SOIL						
AREA NAME	APPROX. AREA (m2)	ESTIMATED DEPTH OF CONTAMINATION (m)	ESTIMATED VOLUME OF EXCAVATION (m3)	COMMENTS	REFERENCE POINTS	
					N	E
CL-2-1	16	0.3	4.8	COVER WITH 0.3m OF TYPE 2 MATERIAL AND GRADE	19 123	63 612
CL-2-2	73	1.0	73	COVER AS PART OF TAILINGS COVER	19 235	63 735
CL-3-3	24	1.0	24	EX SITU TREATMENT	19 221	63 731
CL-3-4	5	1.0	5	EX SITU TREATMENT	19 211	63 802

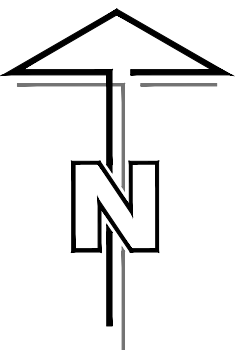
DRAWING NOTES:

1. SEE SHEET S09 FOR DEMOLITION INFORMATION.
2. IN AREAS WITH OVERLAPPING WORK ACTIVITIES, CONTRACTOR IS TO PROVIDE ADVANCE NOTICE AND DETAILS OF SEQUENCING AND TIMING PRIOR TO COMMENCING WORK.

 Public Works and Government Services Canada	Travaux publics et Services gouvernementaux Canada	
REAL PROPERTY SERVICES Western Region		
Client	Indian and Northern Affairs Canada Affaires indiennes et du Nord Canada	Client
 CONTAMINANTS and REMEDIATION DIRECTORATE YELLOWKNIFE, N.W.T.		
Client		Client
GENERAL NOTES 1. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE. 2. ALL COORDINATES AND ELEVATIONS ARE BASED ON LOCAL COORDINATE SYSTEM. 3. SITE PLANS AND TOPOGRAPHICAL INFORMATION BASED ON AIR PHOTOS AND SURVEY PROVIDED BY OTHERS. CURRENT CONDITIONS MAY NOT BE EXACTLY AS SHOWN. 4. EXTENT OF CONTAMINATION BASED ON RESULTS OF PREVIOUS SITE INVESTIGATIONS. 5. RE-ESTABLISH SURVEY CONTROL PRIOR TO DEMOLISHING HEADFRAME AND CONCRETE FOUNDATION. (LOCAL COORDINATES BASED ON CORNER OF HEADFRAME AND CONCRETE FOUNDATION.) 6. FORMER ACCESS ROUTE LOCATIONS SHOWN ARE APPROXIMATE. 7. CONFIRM CONDITION OF SITE ACCESS ROUTES PRIOR TO MOBILIZATION. 8. REMOVE SURFICIAL DEBRIS AND PARTIALLY BURIED DEBRIS WITHIN 0.5m OF EXISTING GROUND SURFACE. REMOVE DEBRIS LOCATED WITHIN 50m OF EXISTING ROADS AND WATERCOURSES/BODIES. IN WATERCOURSES/ BODIES WITHIN 10m OF THE SHORELINE. AND WITHIN AREA SHOWN ON THIS SHEET. 9. ADHERE TO REGULATORY REQUIREMENTS, BEST MANAGEMENT PRACTICES, AND OPERATIONAL STATEMENTS FOR ALL WORK IN CONTRACT (REFER TO SPECIFICATION 01 41 10 REGULATORY REQUIREMENTS).		
LEGEND <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> 165.0 SITE GRID (100m INTERVAL) EXISTING WATERCOURSE EXISTING TREELINE TREELINE CLEARING LIMIT APPROXIMATE DEBRIS AREA FORMER BUILDING EXISTING POWER LINE CL-M5-SOIL 1% TBM-111 △ A1-X A1-★ MINE OPENING PROPOSED IRON PIN F3/F4 CONTAMINATED SOIL F2/F3/F4 CONTAMINATED SOIL </div> <div style="width: 45%;"> EXISTING TEST PIT EXISTING SURVEY CONTROL POINT PROPOSED SURVEY CONTROL MONUMENT COORDINATE POINT (DRAINAGE) COORDINATE POINT (CONTAMINATION) MINE OPENING PROPOSED IRON PIN F3/F4 CONTAMINATED SOIL F2/F3/F4 CONTAMINATED SOIL </div> </div>		
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%; text-align: center;"> 2013/04/05 </div> <div style="width: 50%; border: 1px solid black; padding: 5px;"> PERMIT TO PRACTISE AECOM Canada Ltd. Signature: Date: APRIL 5, 2013 PERMIT NUMBER: P639 NWT/NT Association of Professional Engineers and Geoscientists </div> </div>		
B	ISSUED FOR TENDER	13/03/28
A	ISSUED FOR 90% REVIEW	13/02/04
REVISIONS	DESCRIPTION	DATE
A	A detail number number du detail	A B C
B	B source drawing no. de dessin no.	
C	C detail on drawing no. detail sur dessin no.	
project title	GREAT BEAR LAKE SITES REMEDIATION PROJECT NORTHWEST TERRITORIES	titre du projet
drawing title	CONTACT LAKE MINE AREA 1A	titre du dessin
<div style="border: 2px solid black; border-radius: 15px; padding: 10px; margin: 0 auto; width: 80%;"> ISSUED FOR TENDER NOT FOR CONSTRUCTION Date: 2013/03/28 </div>		
designed by	C. MOORE	conçu par
drawn by	A. DE LEON	dessiné par
approved by	W. BEBEAU	approuvé par
PWSSC Project Manager M. BERNARDIN Administrateur de Projets TPSSC		
scale	1:750	échelle
project no.	R.015211.014	feuille
date	MARCH 2013	OF 32



DRAWING NOTES:
1. SEE SHEET S09 FOR DEMOLITION INFORMATION.
2. IN AREAS WITH OVERLAPPING WORK ACTIVITIES, CONTRACTOR IS TO PROVIDE ADVANCE NOTICE AND DETAILS OF SEQUENCING AND TIMING PRIOR TO COMMENCING WORK.



Public Works and Government Services Canada / Travaux publics et Services gouvernementaux Canada

REAL PROPERTY SERVICES Western Region

Client: Indian and Northern Affairs Canada / Affaires indiennes et du Nord Canada

Canada

CONTAMINANTS and REMEDIATION DIRECTORATE YELLOWKNIFE, N.W.T.

- GENERAL NOTES**
1. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
 2. ALL COORDINATES AND ELEVATIONS ARE BASED ON LOCAL COORDINATE SYSTEM.
 3. SITE PLANS AND TOPOGRAPHIC INFORMATION BASED ON AIR PHOTOS AND SURVEY PROVIDED BY OTHERS. CURRENT CONDITIONS MAY NOT BE EXACTLY AS SHOWN.
 4. EXTENT OF CONTAMINATION BASED ON RESULTS OF PREVIOUS SITE INVESTIGATIONS.
 5. FORMER ACCESS ROUTE LOCATIONS SHOWN ARE APPROXIMATE.
 6. CONFIRM CONDITION OF SITE ACCESS ROUTES PRIOR TO MOBILIZATION.
 7. REMOVE SURFICIAL DEBRIS AND PARTIALLY BURIED DEBRIS WITHIN 0.5m OF EXISTING GROUND SURFACE. REMOVE DEBRIS LOCATED WITHIN 50m OF EXISTING ROADS AND WATERCOURSES/BODIES, IN WATERCOURSES/ BODIES WITHIN 10m OF THE SHORELINE, AND WITHIN AREA SHOWN ON THIS SHEET.
 8. ADHERE TO REGULATORY REQUIREMENTS, BEST MANAGEMENT PRACTICES, AND OPERATIONAL STATEMENTS FOR ALL WORK IN CONTRACT (REFER TO SPECIFICATION 01 41 00 REGULATORY REQUIREMENTS).
 9. SURFACE DEBRIS COLLECTION WAS UNDERTAKEN DURING PHASE I OF WORK AND PLACED IN STOCKPILES ON SITE. APPROXIMATE STOCKPILE LOCATIONS INDICATED ON DRAWING.
 10. BUILDING DEMOLITION WAS UNDERTAKEN DURING PHASE I OF WORK. APPROXIMATE LOCATIONS OF ASH PILES REMAINING FROM BUILDING DEMOLITION INDICATED ON DRAWING.

LEGEND

- 165.0 EXISTING CONTOURS AT 2.0m INTERVAL
- SITE GRID (100m INTERVAL)
- EXISTING WATERCOURSE
- EXISTING TREELINE
- TREELINE CLEARING LIMIT
- APPROXIMATE DEBRIS AREA
- FORMER BUILDING
- EXISTING POWER LINE
- CL-MS-SOIL 1%
- EXISTING TEST PIT
- MINE OPENING
- PHASE I ASH STOCKPILE LOCATION

PROFESSIONAL ENGINEER
GILBERTSON
LICENSEE
2013/01/05

PERMIT TO PRACTICE
AECOM Canada Ltd.
Signature: [Signature]
Date: 2013/03/28
PERMIT NUMBER: P639
NWT/NU Association of Professional Engineers and Geoscientists

AECOM

REVISIONS	DESCRIPTION	DATE
B	ISSUED FOR TENDER	13/03/28
A	ISSUED FOR 90% REVIEW	13/02/04

A
C

A detail number
number du detail
B source drawing no.
de dessin no.
C detail on drawing no.
détail sur dessin no.

A
B C

project title: **GREAT BEAR LAKE SITES REMEDIATION PROJECT NORTHWEST TERRITORIES** titre du projet

drawing title: **CONTACT LAKE MINE AREA 1B** titre du dessin

designed by: C. MOORE conçu par

drawn by: A. DE LEON dessiné par

approved by: W. BEBEAU approuvé par

PM/SCS Project Manager: M. BERNARDIN Administrateur de Projets TPSGC

scale: 1:750 échelle

project no.: R.015211.014 projet no.

date: MARCH 2013 date

sheet: C17 OF 32

scale: 0 5 10 15 m SCALE 1:500



DRAWING NOTES:
1. SEE SHEET S10 FOR DEMOLITION INFORMATION.
2. IN AREAS WITH OVERLAPPING WORK ACTIVITIES, CONTRACTOR IS TO PROVIDE ADVANCE NOTICE AND DETAILS OF SEQUENCING AND TIMING PRIOR TO COMMENCING WORK.



Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

REAL PROPERTY SERVICES
Western Region

Client



Indian and Northern
Affairs Canada

Client

Affaires indiennes
et du Nord Canada




**CONTAMINANTS and REMEDIATION DIRECTORATE
YELLOWKNIFE, N.W.T.**

Client

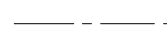
Client

- GENERAL NOTES**
1. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
 2. ALL COORDINATES AND ELEVATIONS ARE BASED ON LOCAL COORDINATE SYSTEM.
 3. SITE PLANS AND TOPOGRAPHIC INFORMATION BASED ON AIR PHOTOS AND SURVEY PROVIDED BY OTHERS. CURRENT CONDITIONS AND LOCATIONS MAY NOT BE EXACTLY AS SHOWN.
 4. EXTENT OF CONTAMINATION BASED ON RESULTS OF PREVIOUS SITE INVESTIGATIONS.
 5. FORMER ACCESS ROUTE LOCATIONS SHOWN ARE APPROXIMATE.
 6. CONFIRM CONDITION OF SITE ACCESS ROUTES PRIOR TO MOBILIZATION.
 7. REMOVE SURFICIAL DEBRIS AND PARTIALLY BURIED DEBRIS WITHIN 0.5m OF EXISTING GROUND SURFACE. REMOVE DEBRIS LOCATED WITHIN 50m OF EXISTING ROADS AND WATERCOURSES/BODIES. IN WATERCOURSES/ BODIES WITHIN 10m OF THE SHORELINE, AND WITHIN AREA SHOWN ON THIS SHEET.
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 10. BUILDING DEMOLITION WAS UNDERTAKEN DURING PHASE I OF WORK. APPROXIMATE LOCATIONS OF ASH PILES REMAINING FROM BUILDING DEMOLITION INDICATED ON DRAWING.


LEGEND




165.0
EXISTING CONTOURS AT
2.0m INTERVAL




SITE GRID (100m INTERVAL)




EXISTING TREELINE




A1 →
COORDINATE POINT
(CONTAMINATION)



F2/F3/F4 CONTAMINATED SOIL



PHASE I ASH
STOCKPILE LOCATION




PROFESSIONAL
ENGINEER
LICENSEE
D. GILBERTSON
2013/01/05

PERMIT TO PRACTICE
AECOM Canada Ltd.

Signature: 

Date: 13/03/28

PERMIT NUMBER: P639
NWT/NU Association of Professional
Engineers and Geoscientists



B	ISSUED FOR TENDER	13/03/28
A	ISSUED FOR 90% REVIEW	13/02/04
REVISIONS	DESCRIPTION	DATE

A

C

A detail number
number du detail
B source drawing no.
de dessin no.
C detail on drawing no.
detail sur dessin no.

A

B

C

project title
**GREAT BEAR LAKE SITES
REMEDIATION PROJECT
NORTHWEST TERRITORIES**

drawing title
**CONTACT LAKE MINE
AREA 2**

ISSUED FOR TENDER
NOT FOR CONSTRUCTION
Date: 2013/03/28

designed by
C. MOORE

conçu par

drawn by
A. DE LEON

dessiné par

approved by
W. BEBEAU

approuvé par

PM/SC Project Manager
M. BERNARDIN

Administrateur de Projets TPSGC

scale
1:750

échelle

project no.
R.015211.014

proj. no.

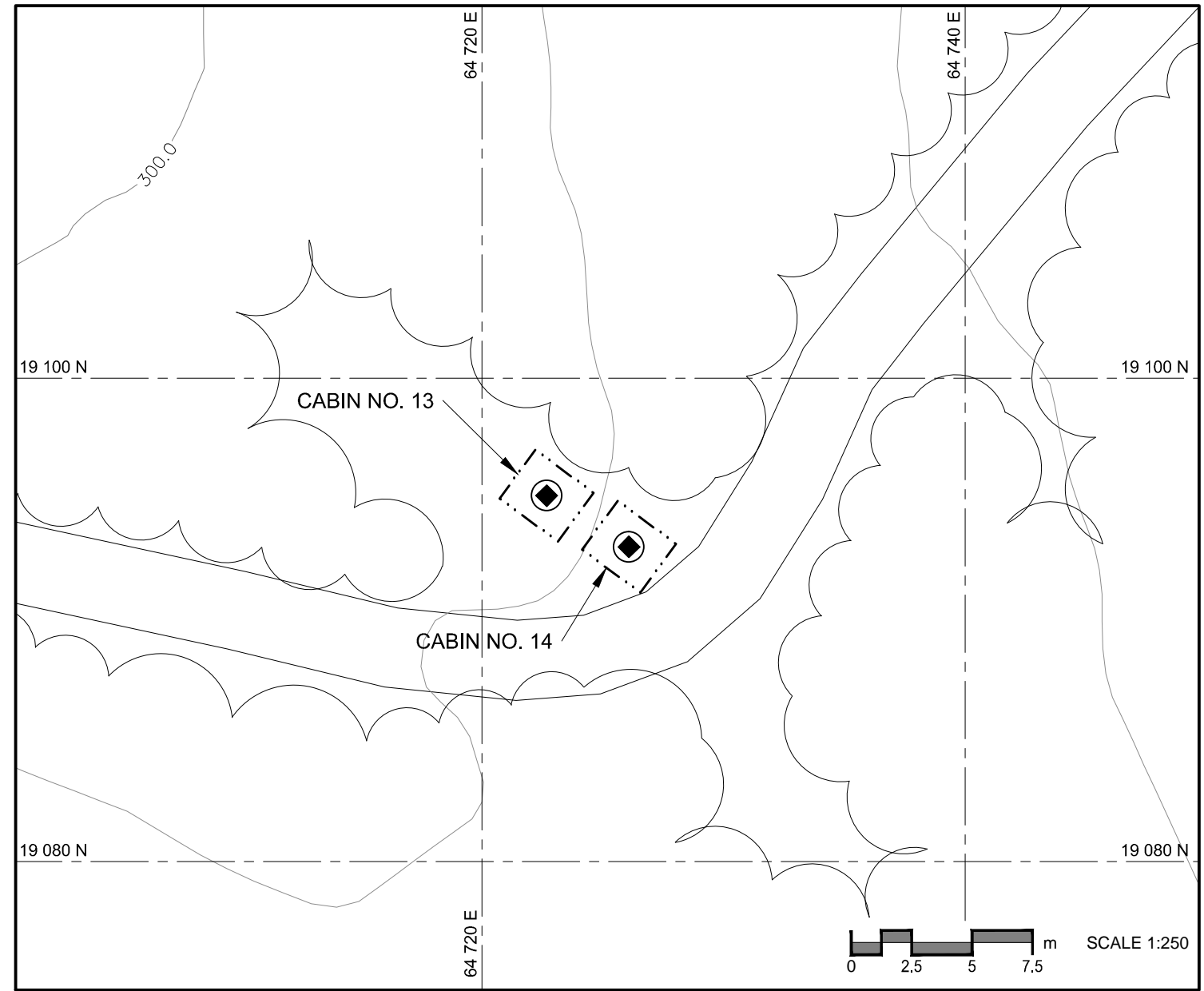
date
MARCH 2013

date

sheet
C18

feuille
OF 32

CONTACT LAKE - CABINS NO. 13 AND 14
(SEE SHEET C06 FOR LOCATION REFERENCE)



AREA CL-3-5 COORDINATE POINTS F2/F3/F4 CONTAMINATED SOIL EXCAVATION			
NO.	COORDINATES		
	NORTHING	EASTING	
A1	20 612.6	65 749.8	
A2	20 613.7	65 752.3	
A3	20 612.6	65 754.8	
A4	20 610.1	65 755.9	
A5	20 607.6	65 754.9	
A6	20 605.9	65 751.8	
A7	20 606.9	65 749.8	
A8	20 610.1	65 748.8	

CONTAMINATED AND IMPACTED SOIL						
AREA NAME	APPROX. AREA (m2)	ESTIMATED DEPTH OF CONTAMINATION (m)	ESTIMATED VOLUME OF EXCAVATION (m3)	COMMENTS	REFERENCE POINTS	
					N	E
CL-3-5	39	0.5	19.5	EX SITU TREATMENT	20 610	65 752

0 7.5 15 22.5 m SCALE 1:750

