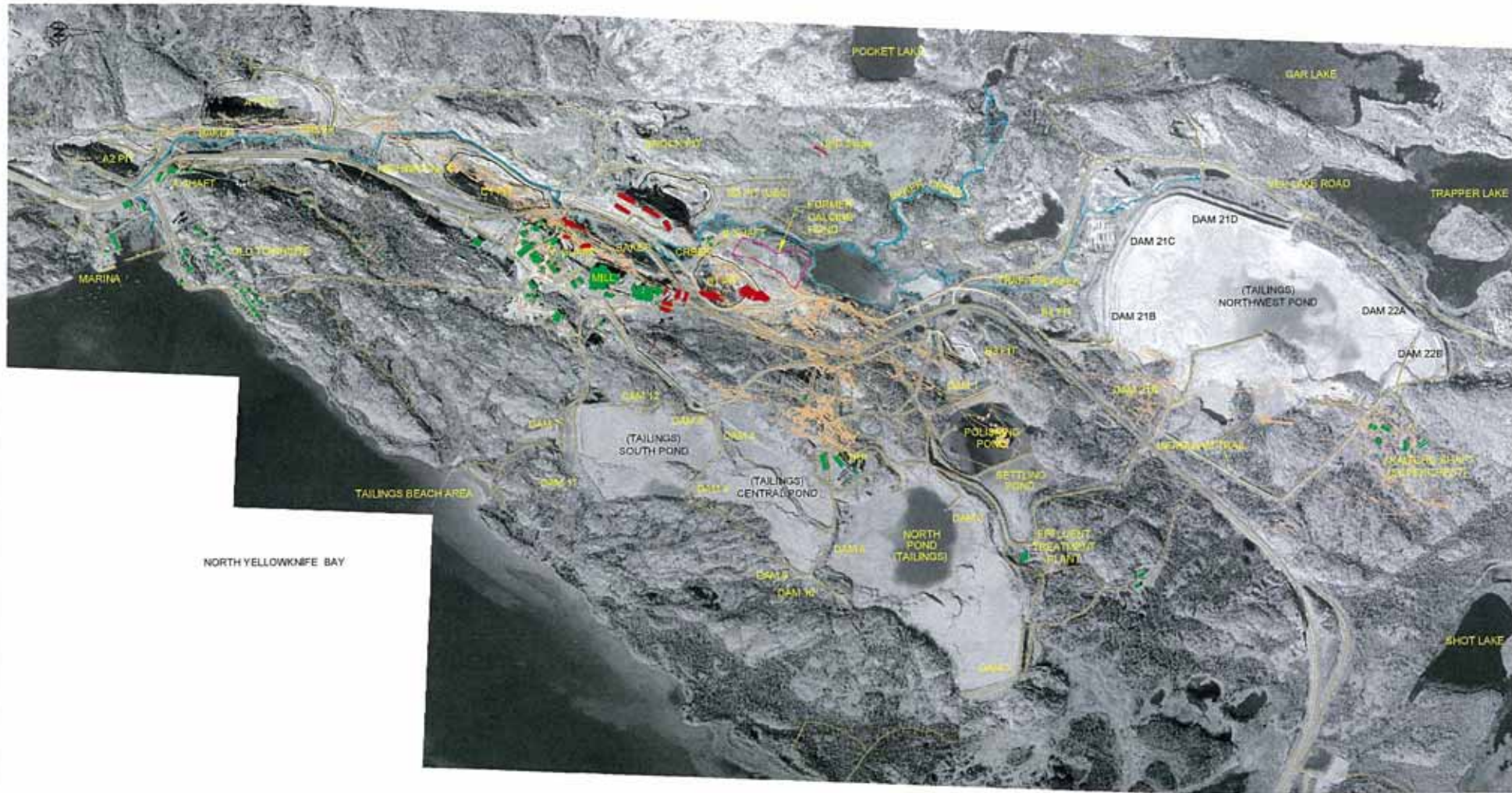




Legend

- Underground Workings
- Location of Underground Arsenic Chamber or Stope
- Building
- Road

0 100 200 300 400
Scale in Metres

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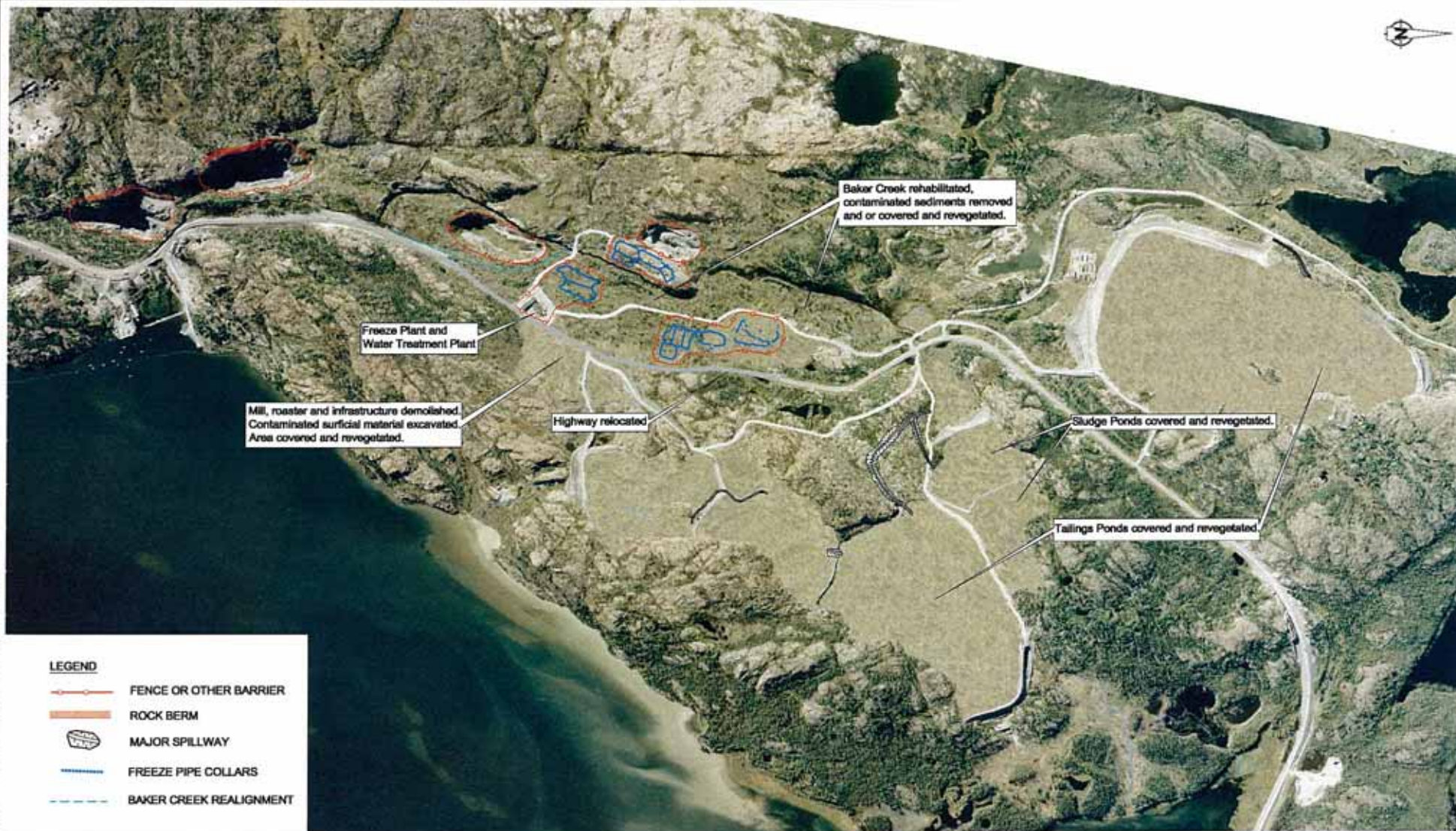
Developer's Assessment Report

Surface and Underground Site Components

SRK Job No: 100001 (213.0012.00)
File Name: Major site features.mxd

GIANT MINE

DATE: Nov. 2009
SHEET: AL
FIGURE: 5.1.1



SRK JOB NO: YC001.01.3.0012.06
FILE NAME: Post-remed-sitedeug



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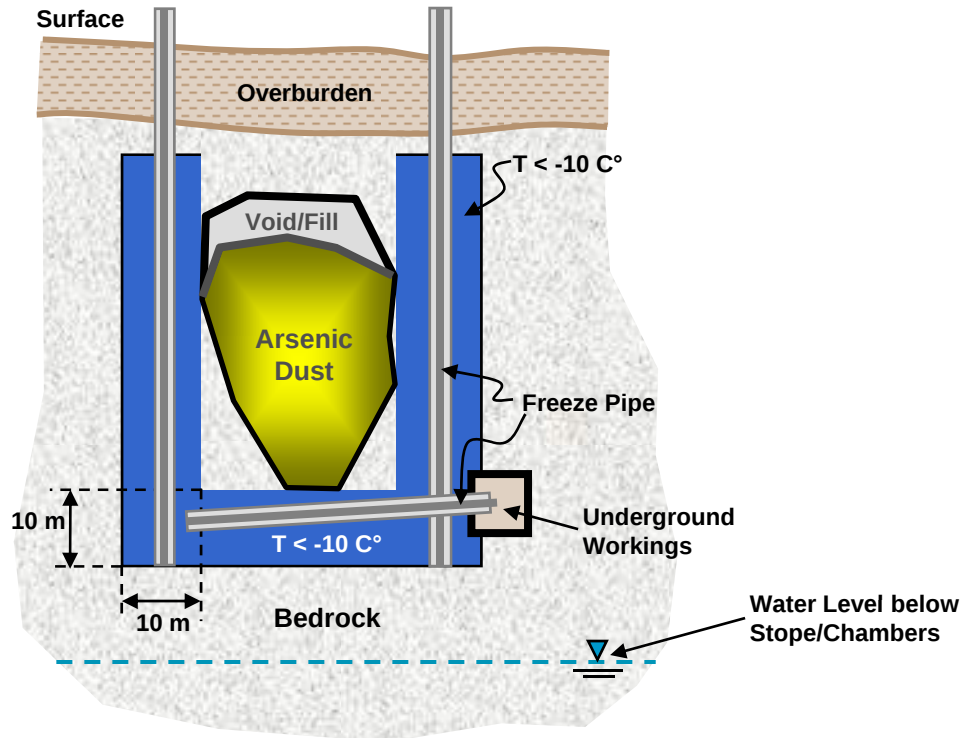
GIANT MINE

Developer's Assessment Report

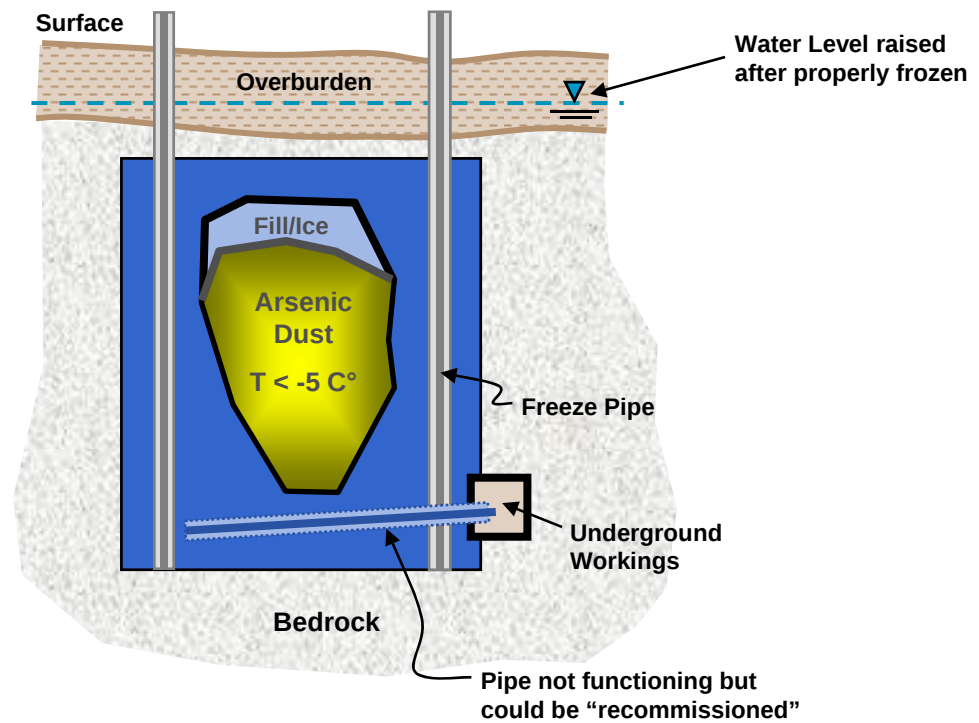
Conceptual Post Remediation Site Conditions

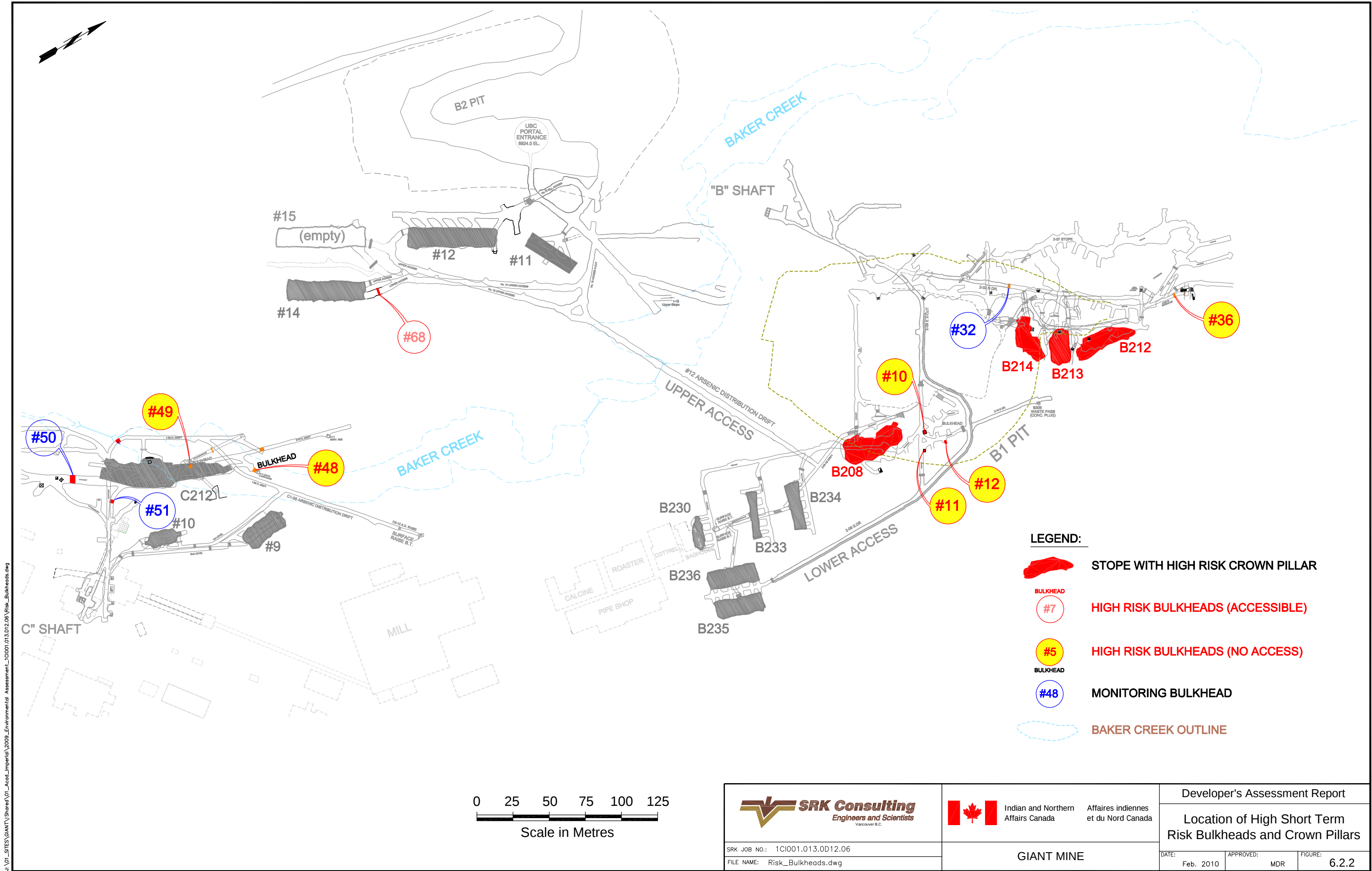
DATE	APPROVED	FILE NO.
Mar. 2010	AL	6.1.2

STAGE I

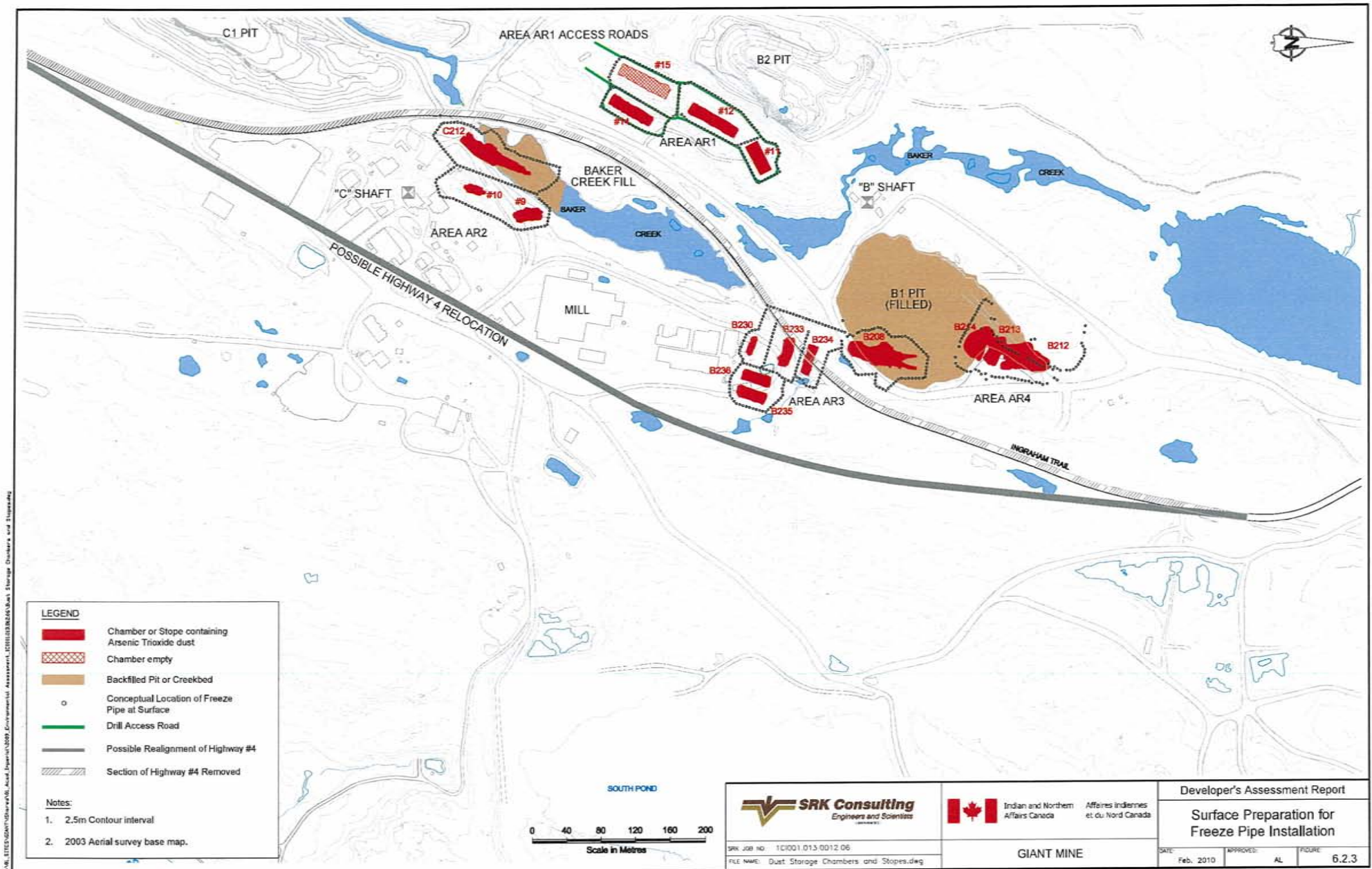


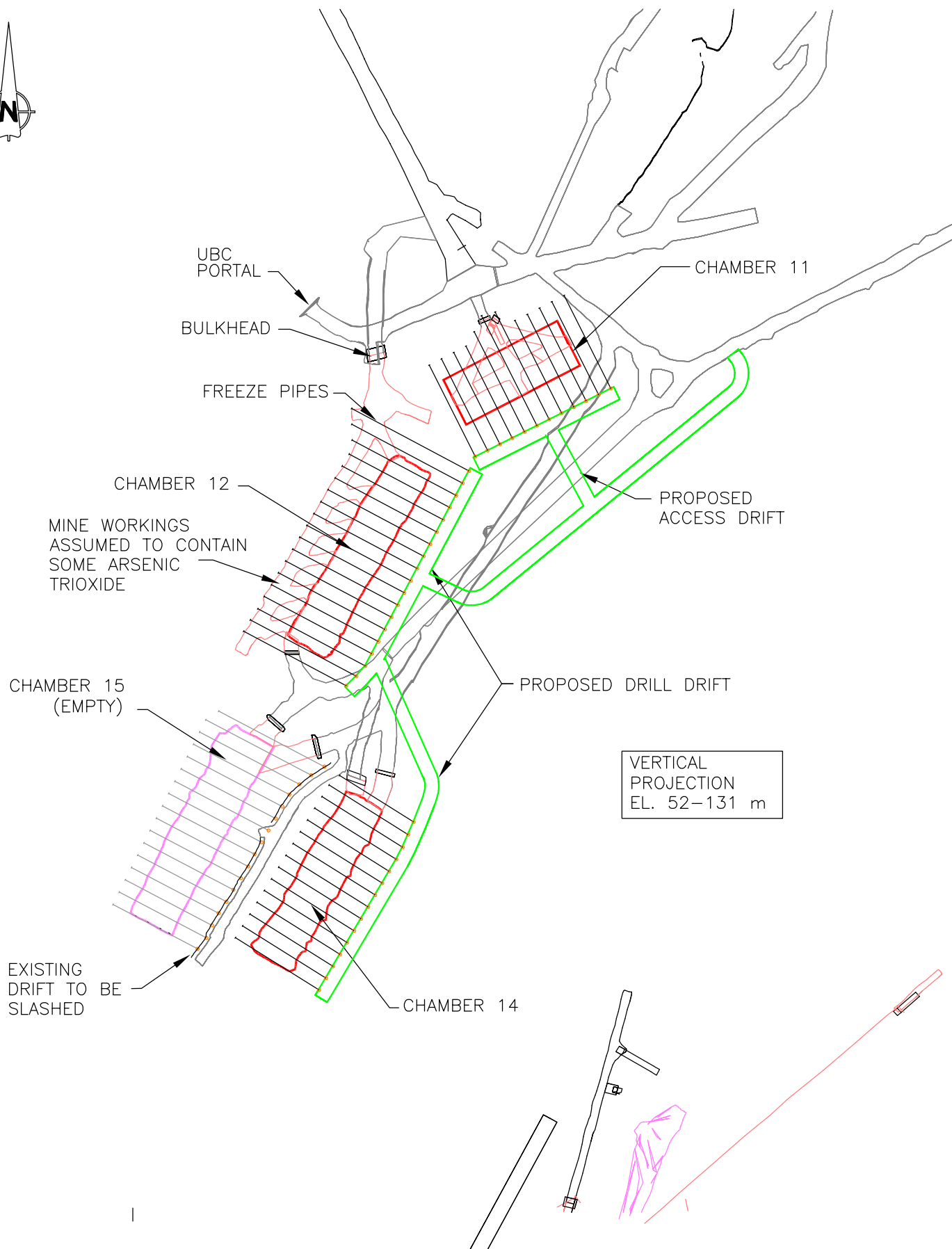
STAGE II

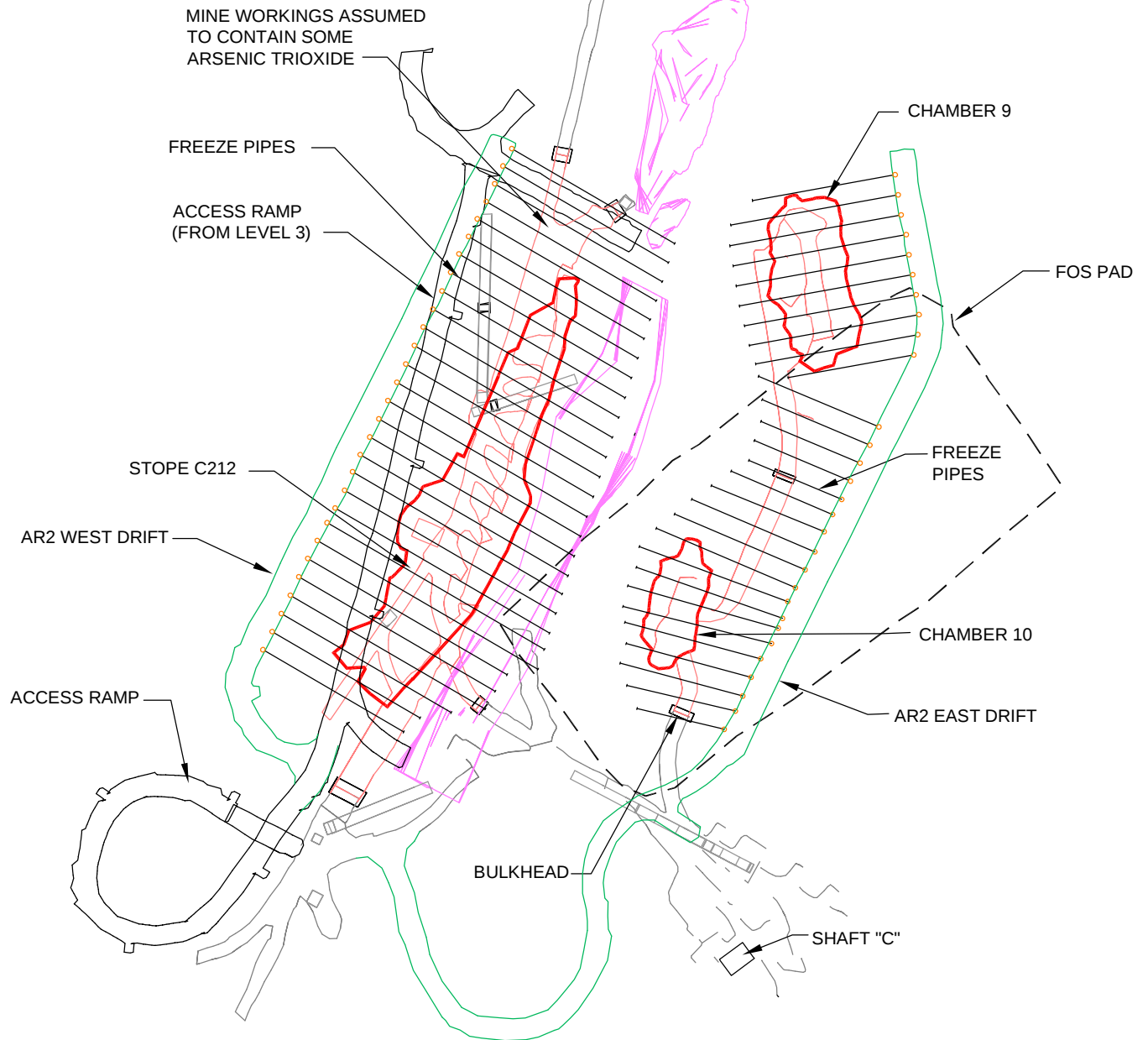




J:\01_SITES\GIANT\Shred\01_Accid_Impact\2009_Environmental_Assessment\10001.013.012.06\Risk_Bulkheads.dwg







0 10 20 30 40 50
Scale in Metres

VERTICAL
PROJECTION
EL. 52-131 m



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et du Nord Canada

Developer's Assessment Report

Underground Access
in Area AR2

SRK JOB NO.: 1CI001.013.0D12.06

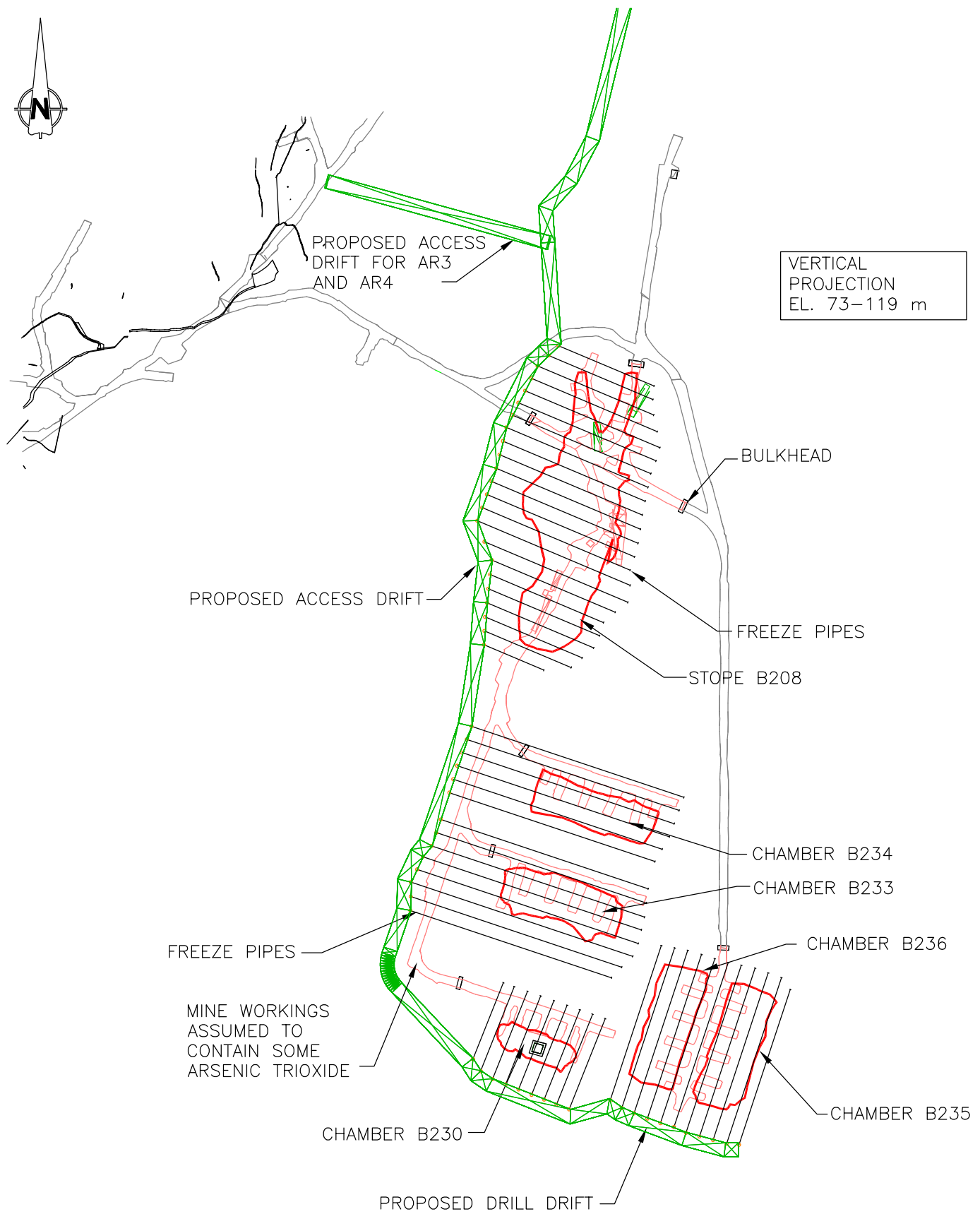
FILE NAME: UG Access.dwg

GIANT MINE

DATE:
July 2010

APPROVED:
MNN

FIGURE:
6.2.5





VERTICAL
PROJECTION
EL. 52-131 m

BULKHEAD

FREEZE
PIPES

MINE WORKINGS
ASSUMED TO
CONTAIN SOME
ARSENIC TRIOXIDE

PROPOSED
DRILL DRIFT

STOPE B212

FREEZE PIPES

STOPE B213

STOPE B214

PROPOSED
ACCESS DRIFT



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Underground Access
in Area AR4

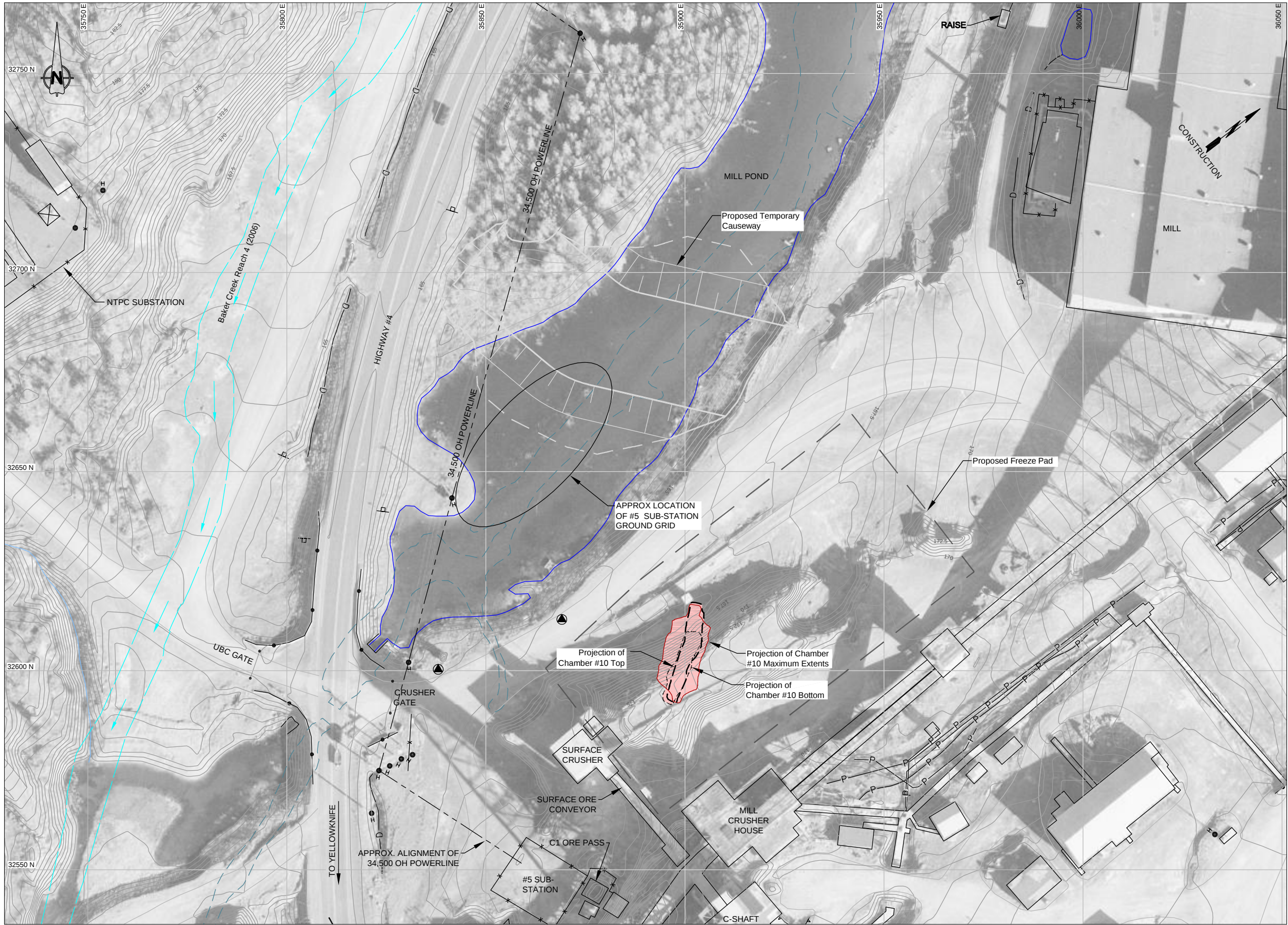
SRK JOB NO.: 1CI001.013.0D12.06
FILE NAME: FreezePlanAR4.dwg

GIANT MINE

DATE: Feb. 2010	APPROVED: MNN	FIGURE: 6.2.7
--------------------	------------------	------------------

J:\01_SITES\GIANT\Shared\01_Acad\Inpenta\2009_Environmental_Assessment_1CI001.013.0D12.06\FreezePlanAR4.dwg

J:\01_SITES\GIANT\Shared\01_Acad\Imperial\2009_Environmental_Assessment\1CI001.013.0D12.06\Freeze_Optimization_Study.dwg



Notes:

1. Grid shown is Metric GMRP. Contour interval is 0.5m. Approximate conversion to UTM NAD83 Zone 11: Add 600,000 E and 6,900,000 N.
2. Scale ratio shown is for B-size (11"x17" tablet size) drawing.
3. Bathymetry of the Mill Pond is unknown and was assumed to have an average depth of 3m.
4. Orthophoto provided by Eagle Mapping Ltd. (March 2004).

LEGEND

- P — Pipe
- D — Ditch
- Water Line
- - - Old Baker Creek
- H Hydro Power Pole
- X — Fence
- Sign
- ● — Guardrail
- ● — Monitoring Well
- Arsenic Chamber

1:1000 0 10 20 30 40 50 Metres



SRK JOB NO.: 1CI001.013.0D12.06
FILE NAME: Freeze Optimization Study.dwg



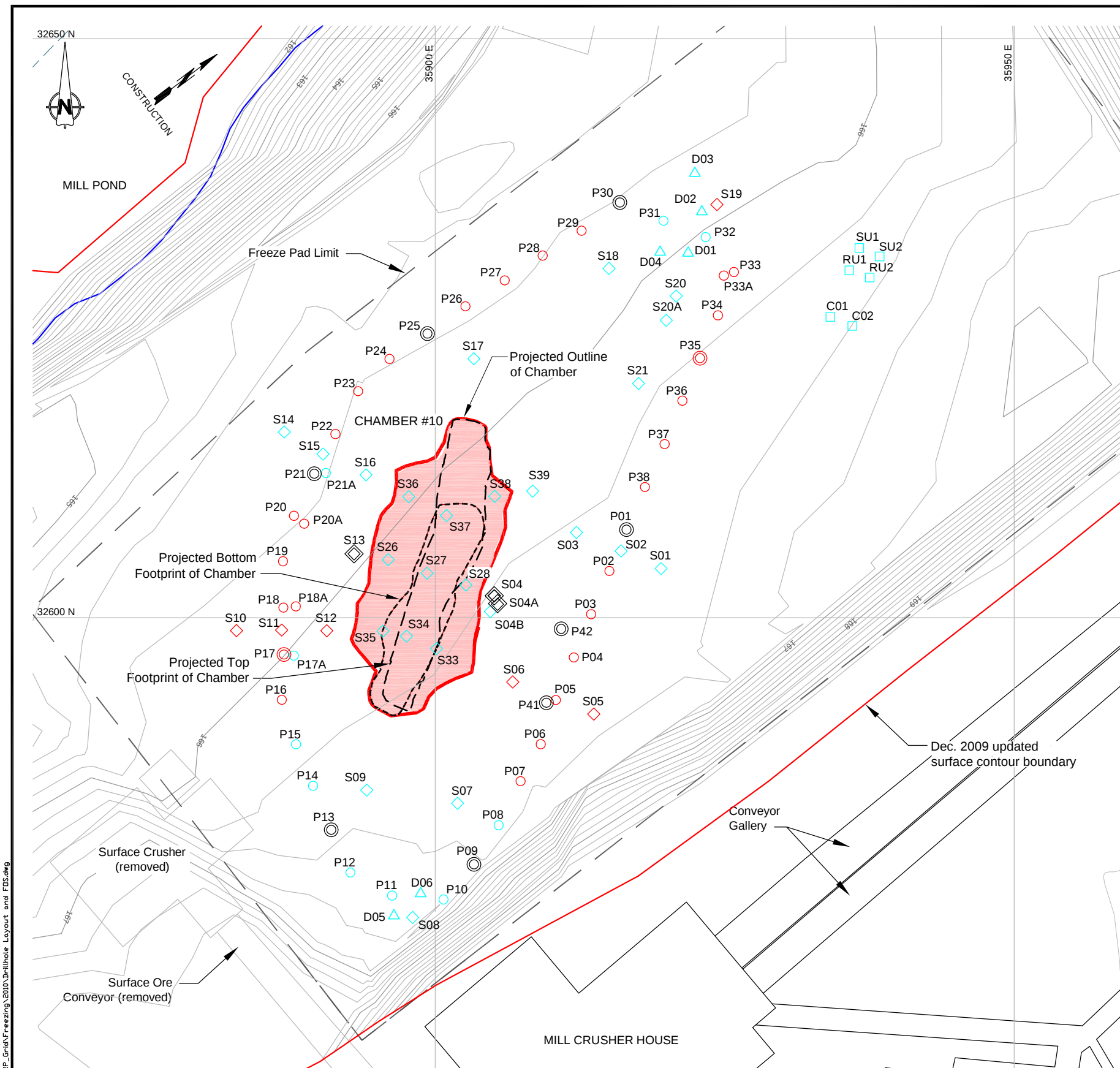
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Affaires indiennes et du Nord Canada

GIANT MINE

Developer's Assessment Report

Location of Freeze Optimization Study

DATE: Nov. 2009 APPROVED: AL FIGURE: 6.2.8



LEGEND

165

Major Contour

Month	Very satisfied (%)
March	40
April	35
May	40

Minor Contour

Freeze Pad Limit

Year	Percentage
1990	85%
2000	82%
2010	85%

Water Line

P02

Freeze Hole by Mud Rotary (MR)

P15

Freeze Hole by Down Hole Hammer (DHH)

P07 ○

Freeze Hole by Diamond Drill (DDH)

S20

Instrumentation - Mud Rotary

S19

Instrumentation - DHH

S19 

Instrumentation - DDH

PR-1 ☐

Underground Support Holes - DHH

D-1 

Drift Plug Holes - DHH

P35   S1

Core Recovery (outlined marker)

Arsenic Chamber

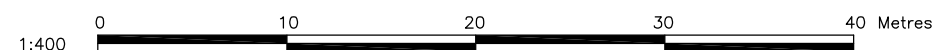
1

Asbuilt Survey Limit

Notes:

1. The grid shown is a flat metric GMRP grid and a conversion must be applied to transform to UTM. Approximate conversion to UTM Zone 11 NAD83 - Add 600,000 E and 6,900,000 N.
2. Freeze Pad asbuilt survey contour interval is 0.2m. Contour interval outside of the December 2009 survey is 0.5m. Scale bar shown are for D Size drawing prints.
3. Scale ratio shown is for B-Size (11"x17" ledger size) drawing.
4. Drillholes listed in *italics and underlined* have been abandoned and replacement holes denoted with an 'A' suffix.

SURFACE DRILLHOLE LAYOUT PLAN



SRK JOB NO.: 1CI001.013.0D12.06

FILE NAME: Drillhole Layout and FOS.dwg



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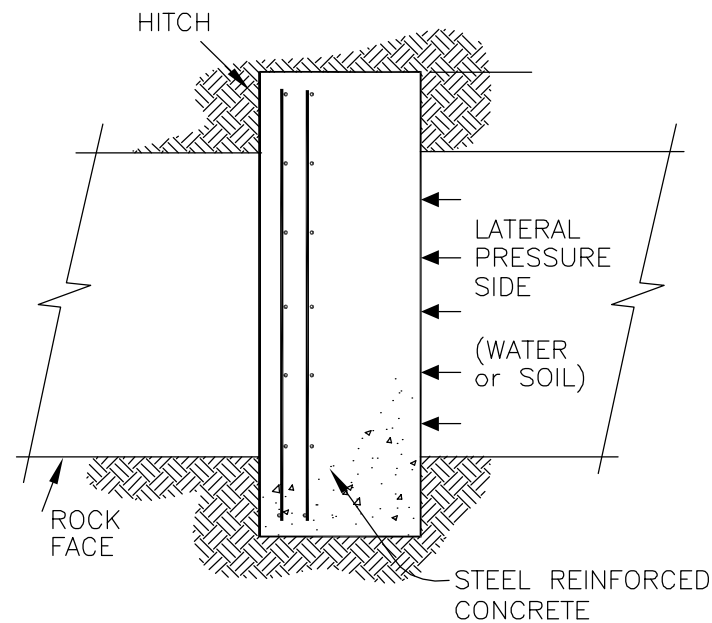
Location of Drill Holes for Freeze Optimization Study

DATE:
Aug. 7, 2010

APPROVED: AL

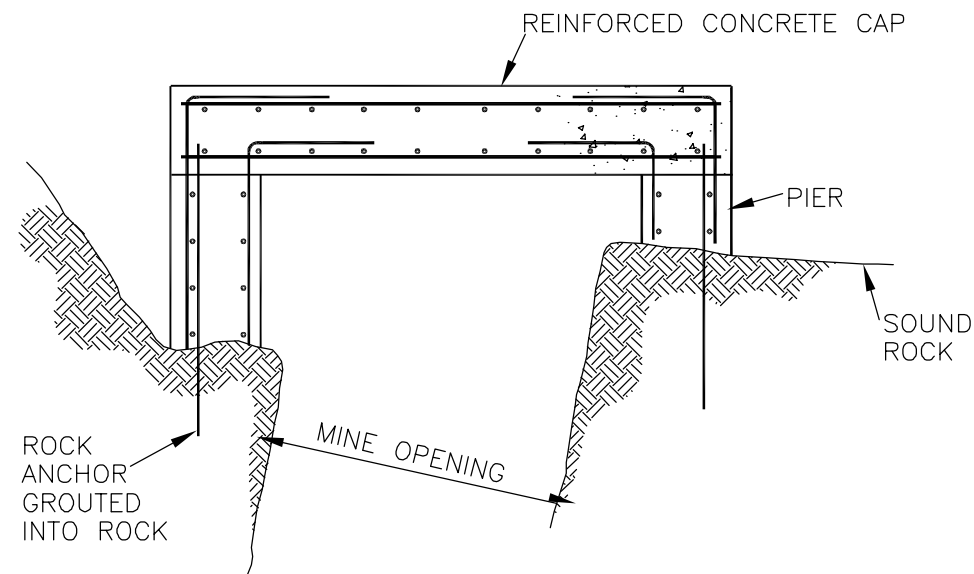
FIGURE: 6.2.9

GIANT MINE



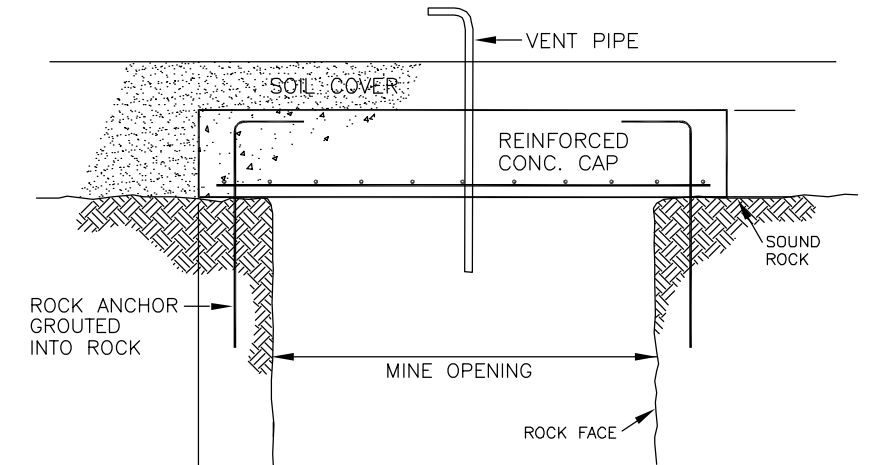
DETAIL 1

TYPICAL CROSS-SECTION OF CONCRETE FOR HORIZONTAL MINE OPENING



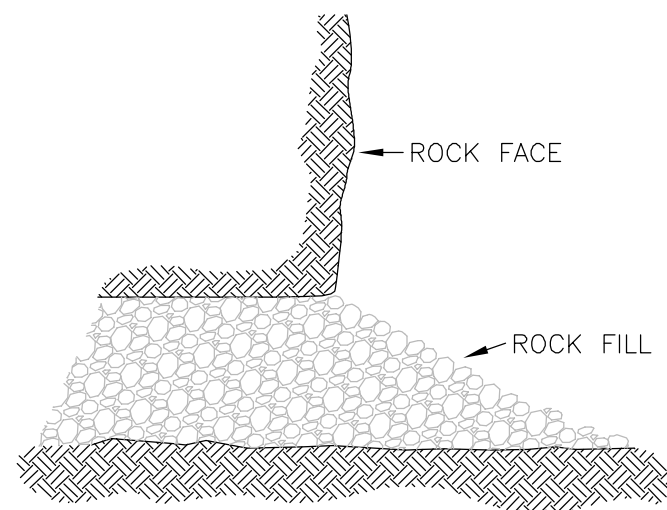
DETAIL 3

TYPICAL CROSS-SECTION OF CONCRETE CAP ON PIERS FOR VERTICAL/INCLINED OPENING



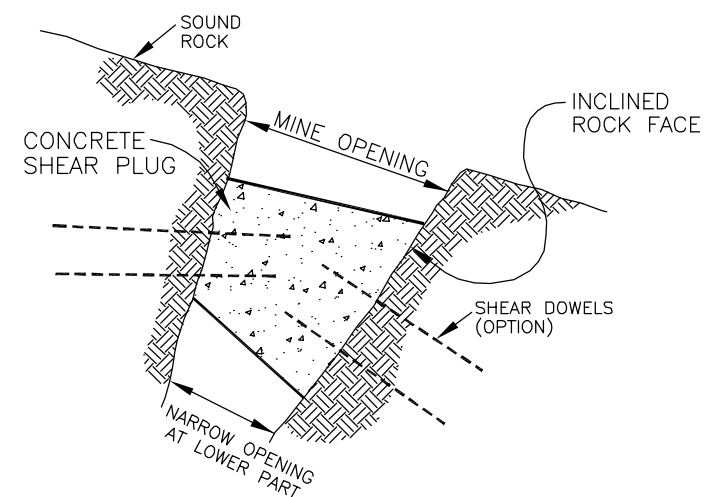
DETAIL 5

TYPICAL CROSS-SECTION OF CONCRETE CAP FOR VERTICAL MINE OPENING



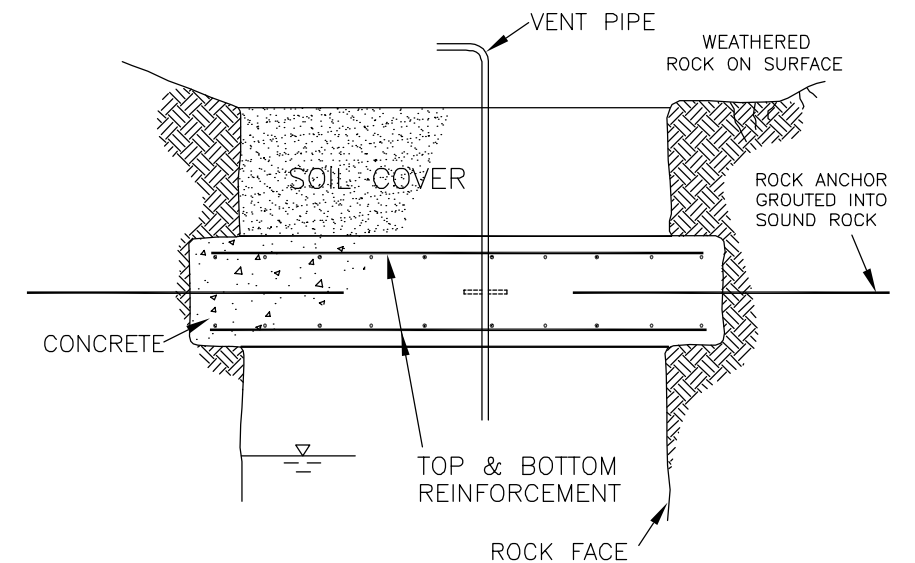
DETAIL 2

TYPICAL CROSS SECTION OF ROCKFILL PLUG FOR HORIZONTAL MINE OPENING



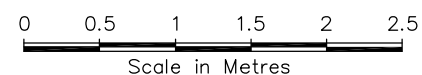
DETAIL 4

TYPICAL SECTION OF CONCRETE SHEAR PLUG FOR SMALL INCLINED MINE OPENING



DETAIL 6

TYPICAL CROSS-SECTION SHOWING INTERIOR CAP INSTALLATION



SRK JOB NO.: 1CI001.013.0D12.06

FILE NAME: TYPICAL PERMANENT SEALS.dwg



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GIANT MINE

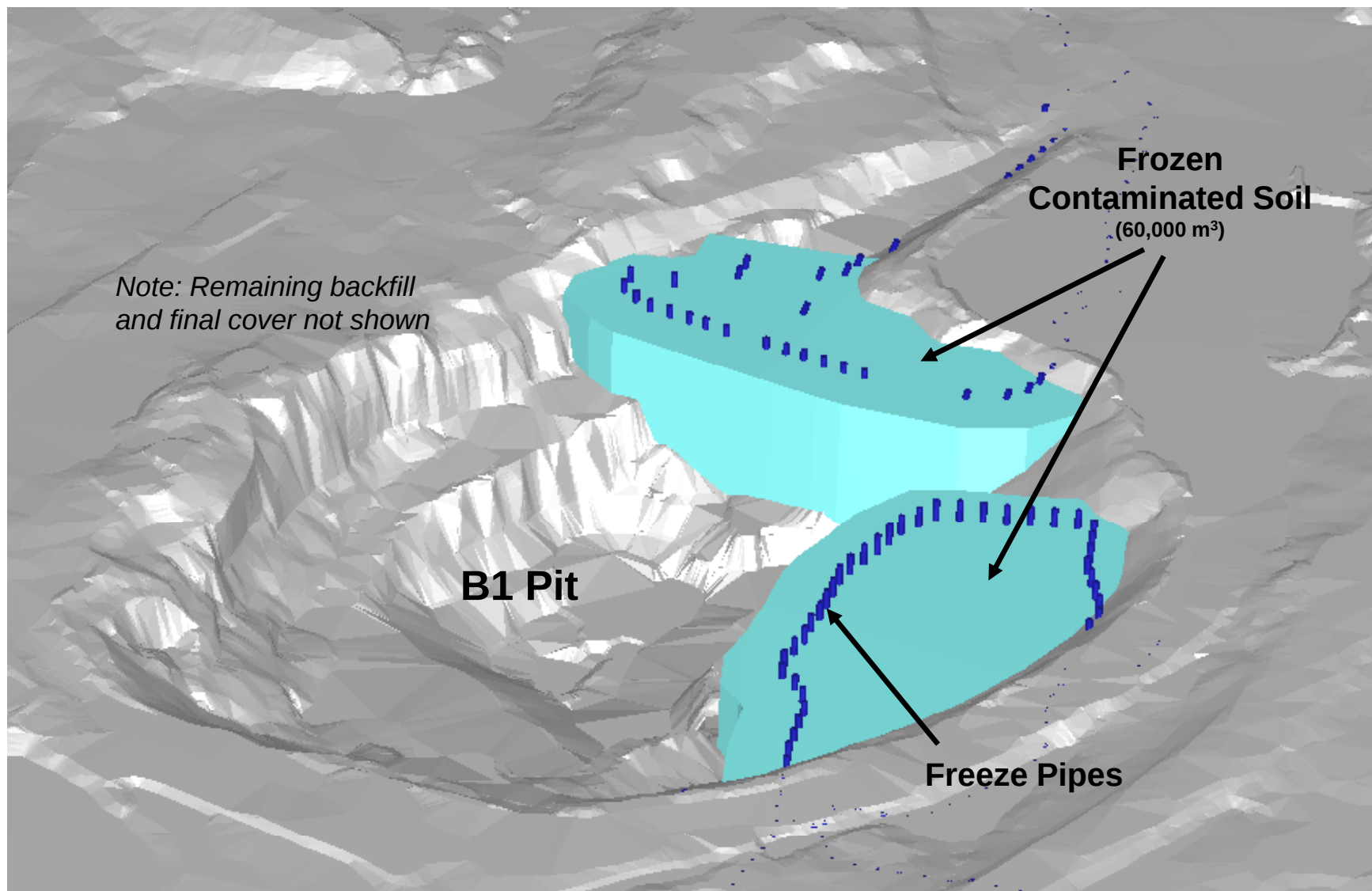
Developer's Assessment Report

Typical Permanent Seals for
Underground Mine Openings

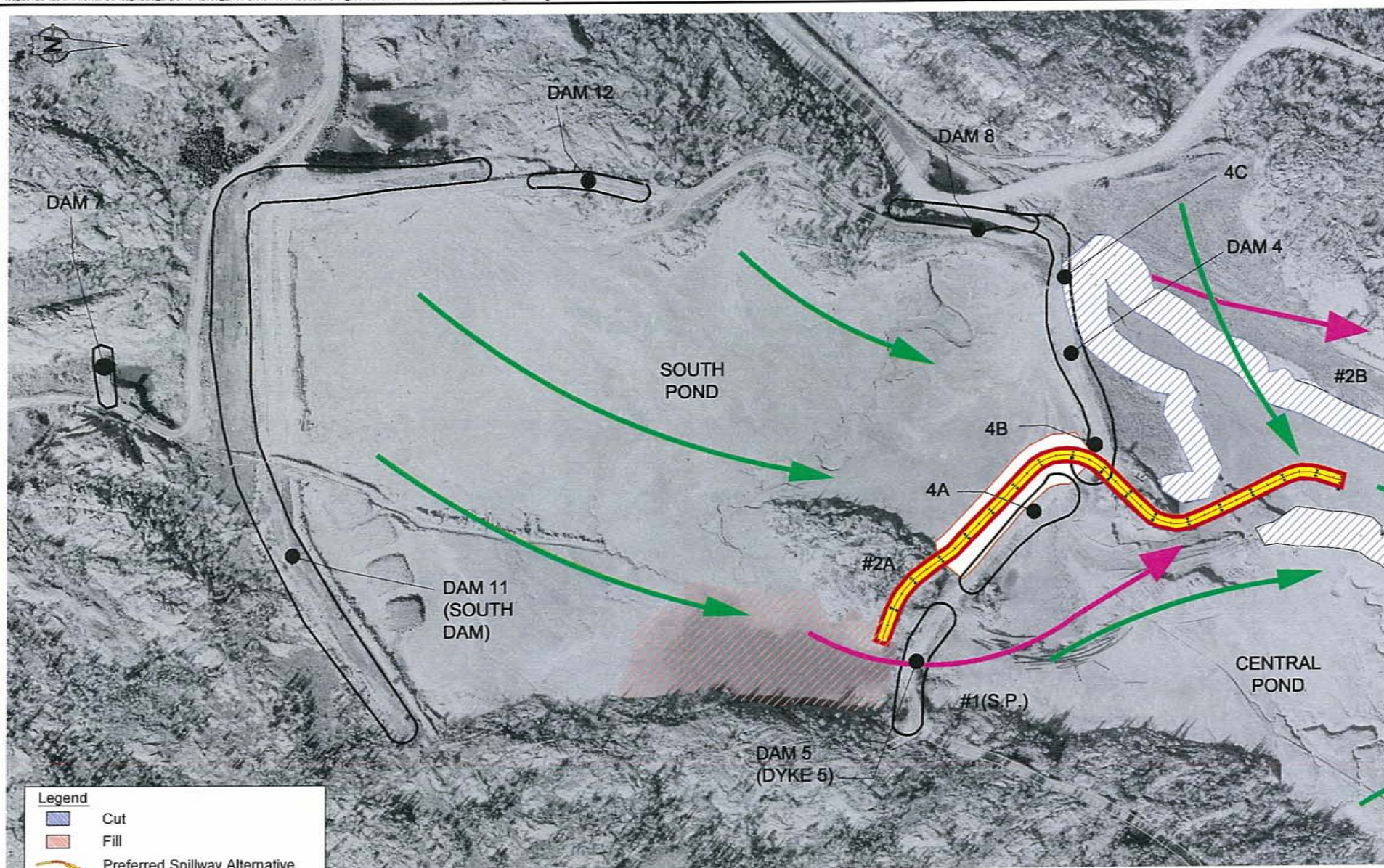
DATE:
Feb. 2010

APPROVED:
MDR

FIGURE:
6.3.1



 SRK Consulting <i>Engineers and Scientists</i> VANCOUVER	 Indian and Northern Affairs Canada Affaires indiennes et du Nord Canada	Developer's Assessment Report		
		Frozen Contaminated Soil Placed in B1 Pit		
Job No: 1CI001.013.D12.06 Filename: Fig 6.4.1_Frozen Soil B1_20100914.ppt	Giant Mine	Date: February 2010	Approved: AL	Figure: 6.4.1



Legend

- Cut
- Fill
- Preferred Spillway Alternative
- Alternate Spillways (#1)
- General Drainage Pattern

0 25 50 75 100 125
Scale in Metres



SRK JOB NO.: IC1001.013.0D12.06
FILE NAME: RE-GRADE-LAYOUT_PONDS.dwg



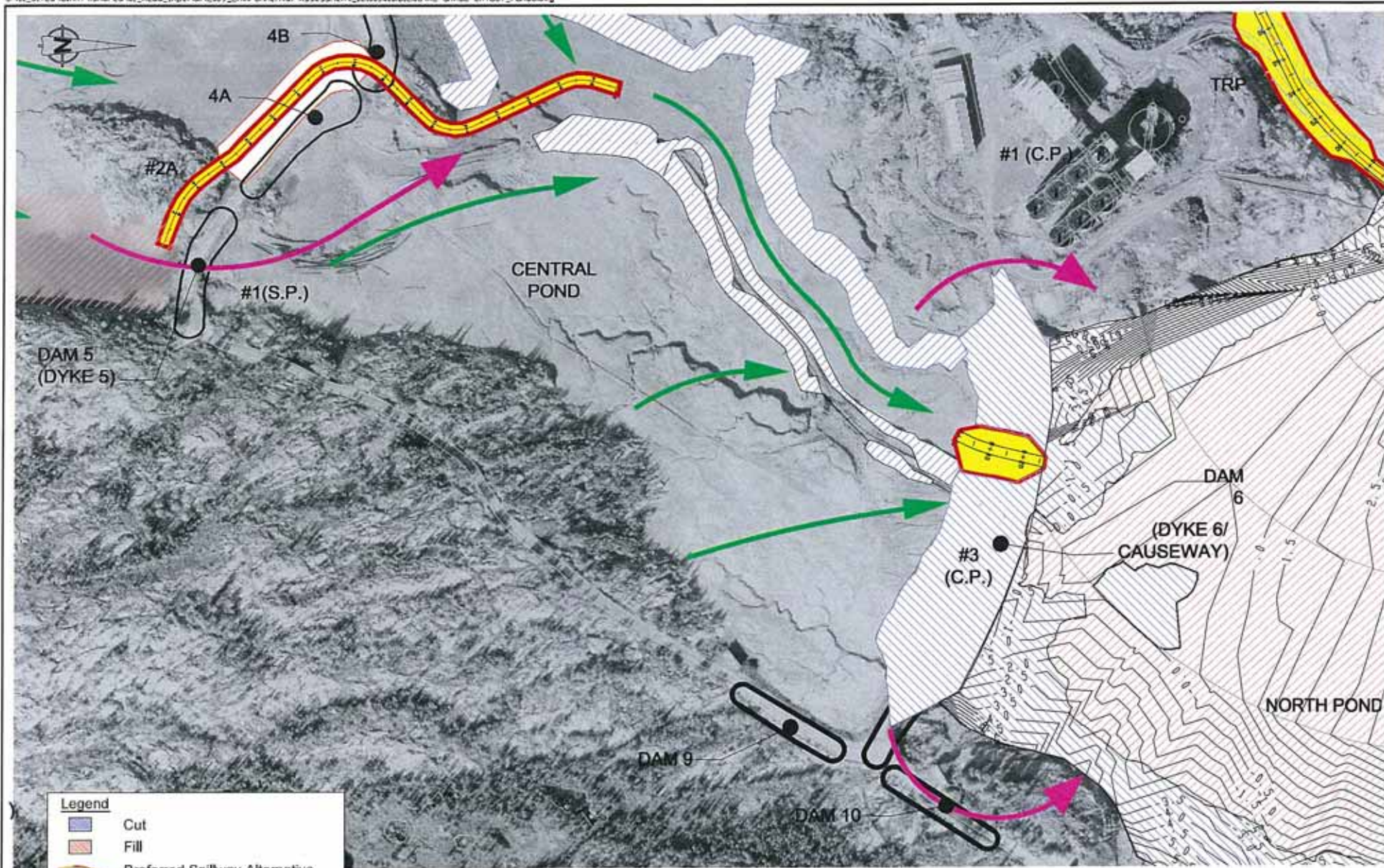
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Affaires indiennes
et du Nord Canada

GIANT MINE

Developer's Assessment Report

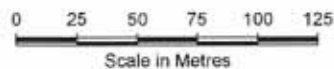
**South Pond Re-Grading
and Water Management**

DATE: Feb. 2010	APPROVED: AL	FIGURE: 6.6.1
--------------------	-----------------	------------------



Legend

- Cut
- Fill
- Preferred Spillway Alternative
- Alternate Spillways (#1)
- General Drainage Pattern



SRK JOB NO.: 1C1001.013.0012.06
FILE NAME: RE-GRADE-LAYOUT_PONDS.dwg



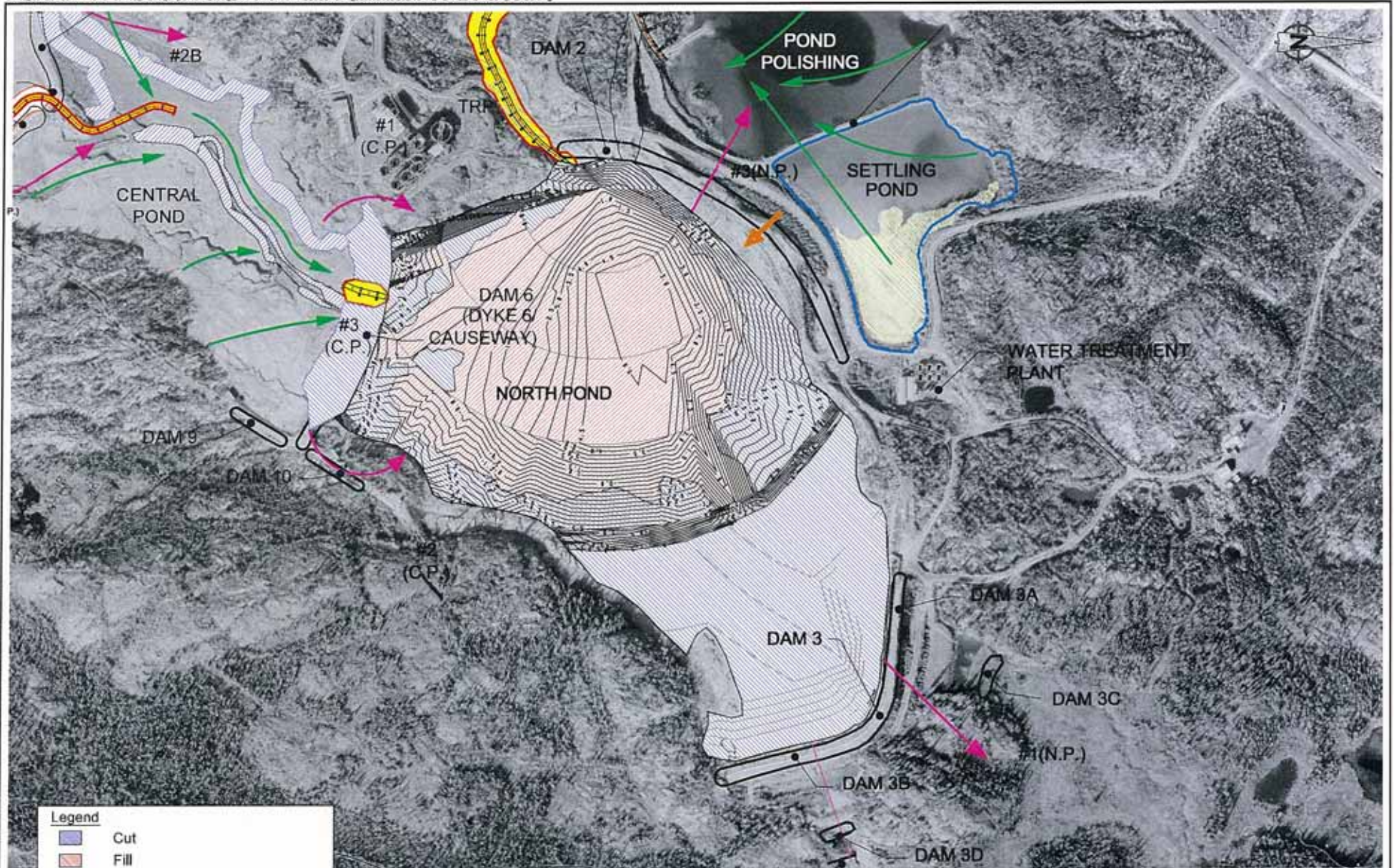
Indian and Northern
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Affaires indiennes
et du Nord Canada

GIANT MINE

Developer's Assessment Report

Central Pond Re-Grading
and Water Management

DATE: Feb. 2010	APPROVED: AL	FIGURE: 6.6.2
--------------------	-----------------	------------------



Legend

- Cut
- Fill
- Preferred Spillway Alternative
- Alternate Spillways (#1)
- General Drainage Pattern

0 100 200 300
Scale in Metres



SRK JOB NO.: IC1001.013.D012.06

FILE NAME: RE-GRADE-LAYOUT_PONDS.dwg



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GIANT MINE

Developer's Assessment Report

North Pond Re-Grading
and Water Management

DATE:

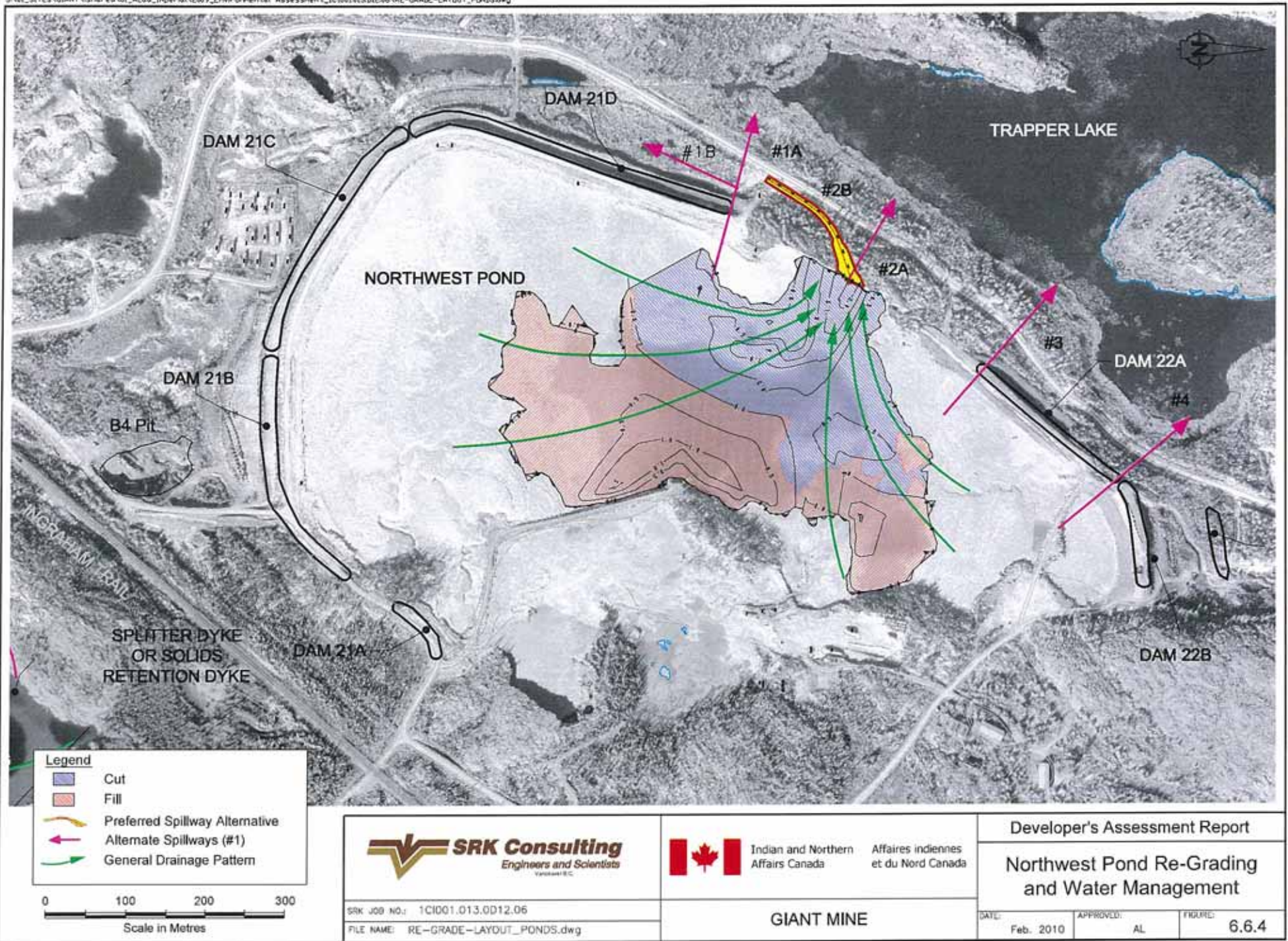
Feb. 2010

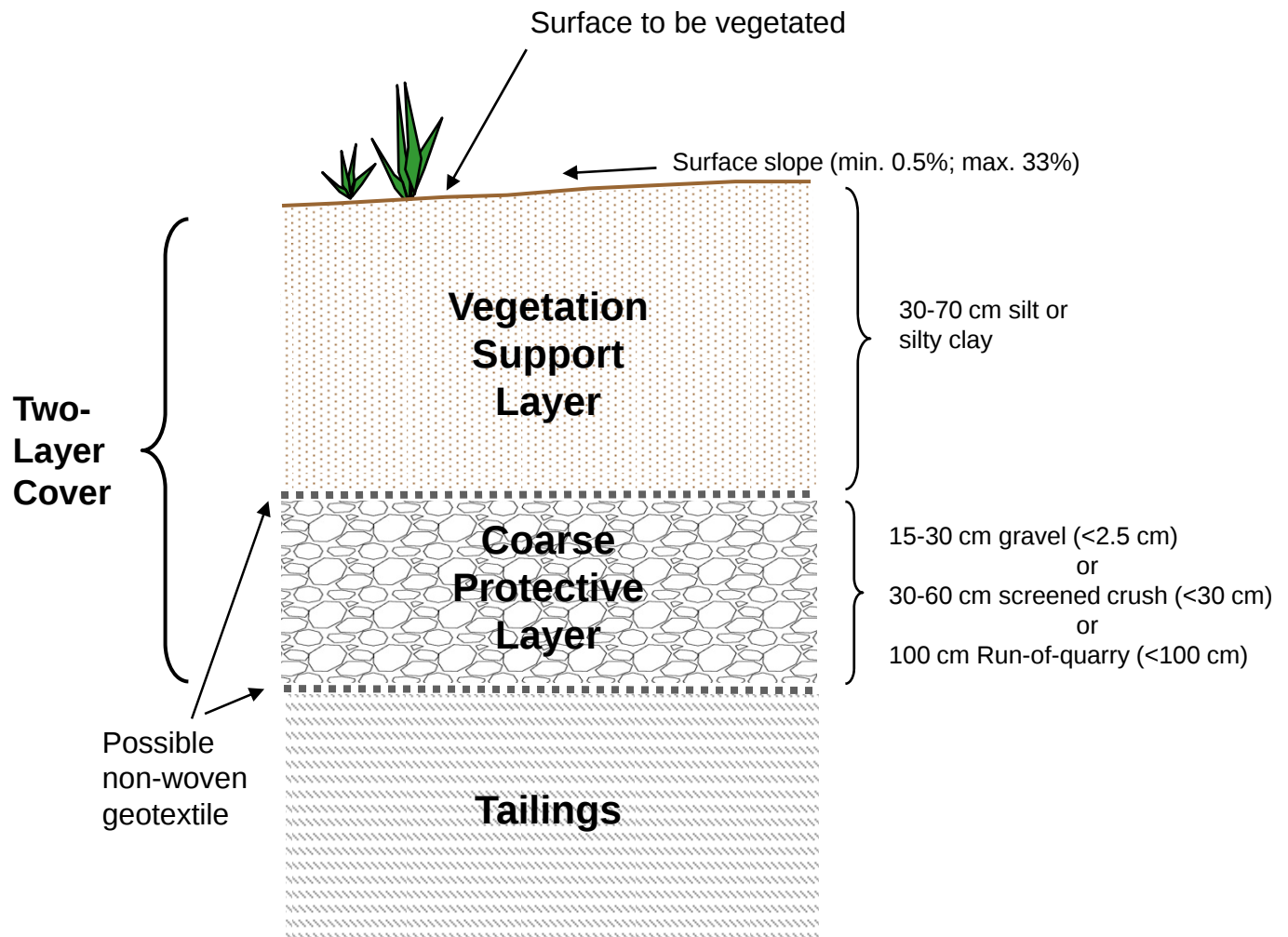
APPROVED:

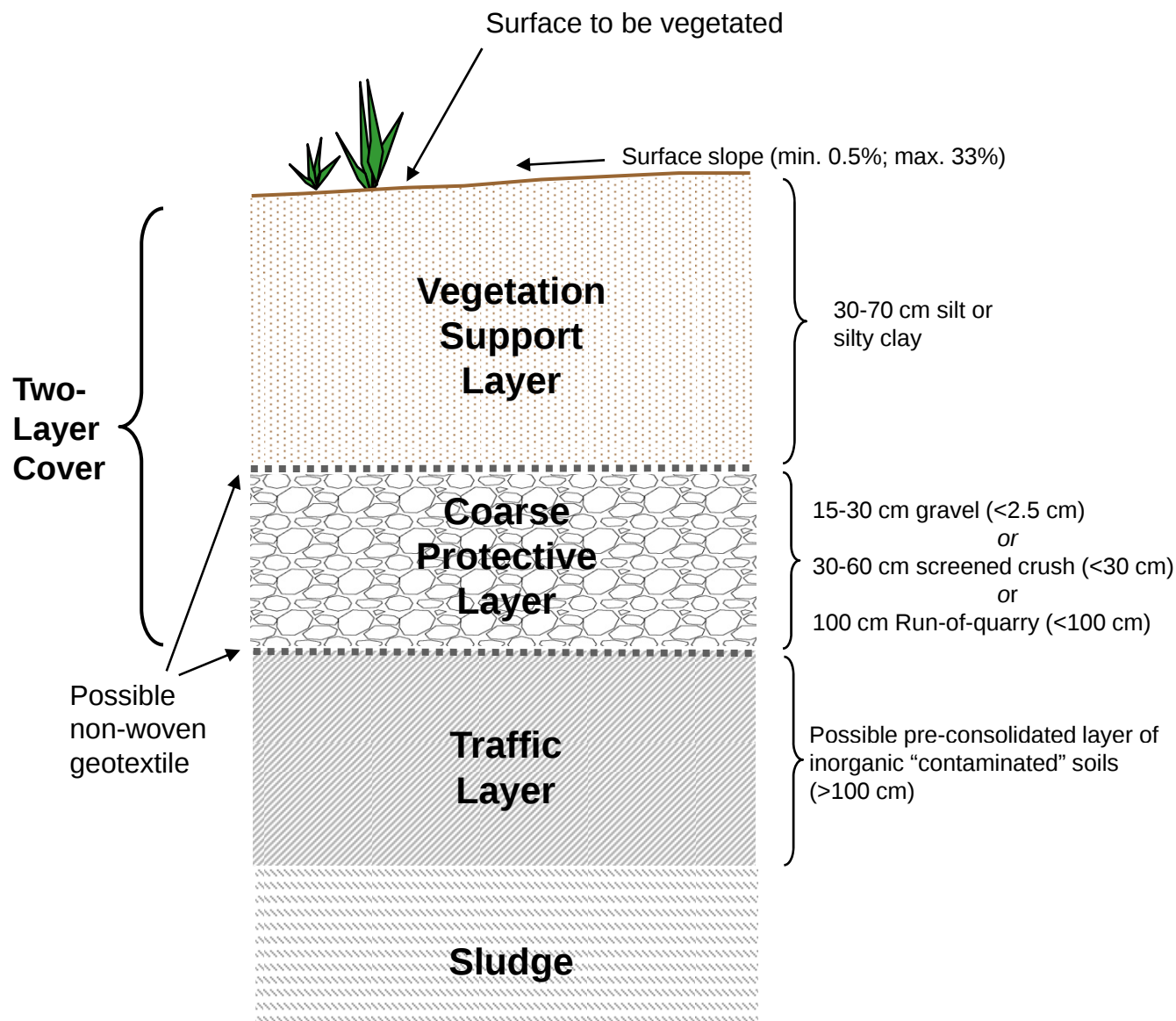
AL

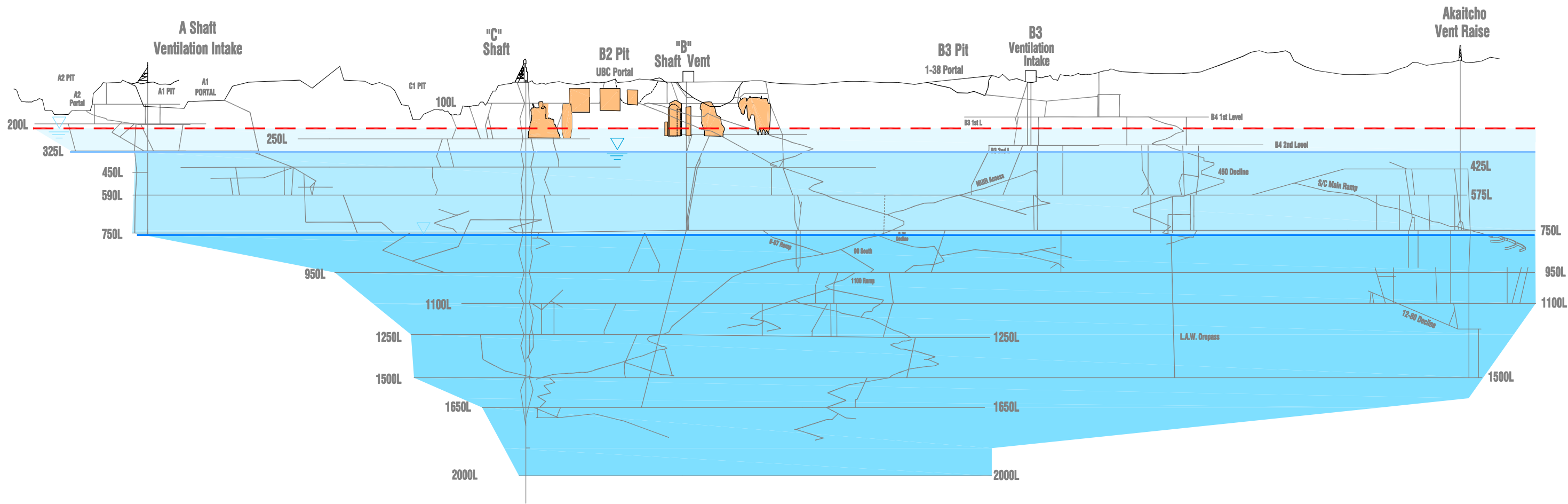
FIGURE:

6.6.3

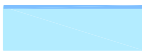
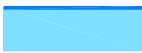






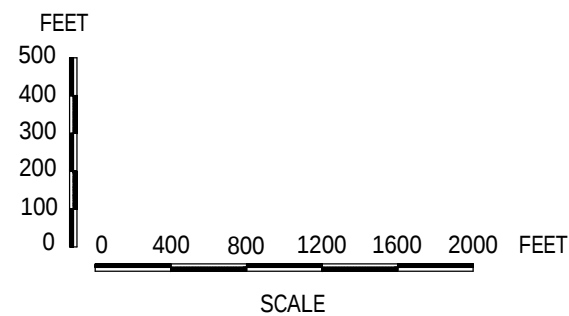
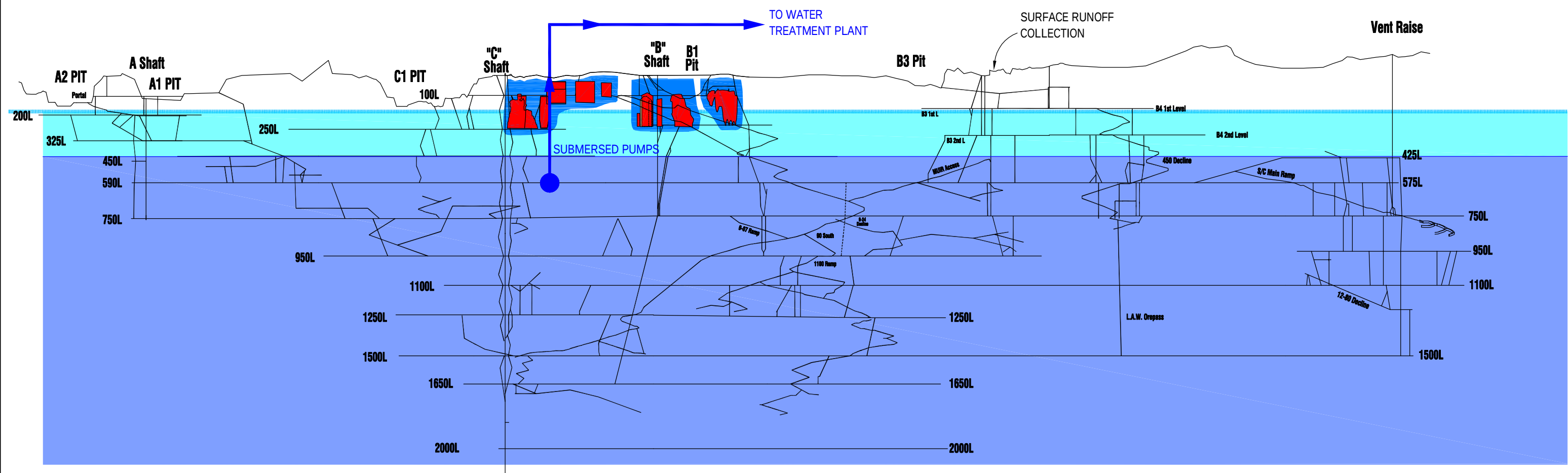


LEGEND

-  Reflood Level After Freezing Process but Prior to Full Reflooding (20m below Open Pits)
-  Reflood Level During Freezing Process (20m below Arsenic Stopes and Chambers)
-  Current Flood Level
-  Water Level

 SRK Consulting <i>Engineers and Scientists</i> Vancouver B.C.	 Indian and Northern Affairs Canada Affaires indiennes et du Nord Canada	Developer's Assessment Report		
		Mine Reflooding Plan		
		DATE: Feb. 2010	APPROVED: AL	FIGURE: 6.8.1
SRK JOB NO.: 1CI001.013.0D12.06	GIANT MINE			
FILE NAME: Current UG system.dwg				

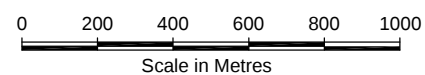
J:\01_SITES\GIANT\Shared\01_Acad\Imperial\2009_Environmental Assessment\LCI001.013.0D12\PROPOSED MINE DEWATERING.dwg



NOTE: 2:1 VERTICAL EXAGGERATION

LEGEND

- MAXIMUM FLOODED MINE WORKINGS
- PERMANENTLY FLOODED MINE WORKINGS
- MAXIMUM MINE WATER LEVEL
- LOCATION OF ARSENIC CHAMBERS
- FROZEN BLOCK



SRK JOB No.: 1CI001.013.0D12.06
FILE NAME: PROPOSED MINE DEWATERING.dwg



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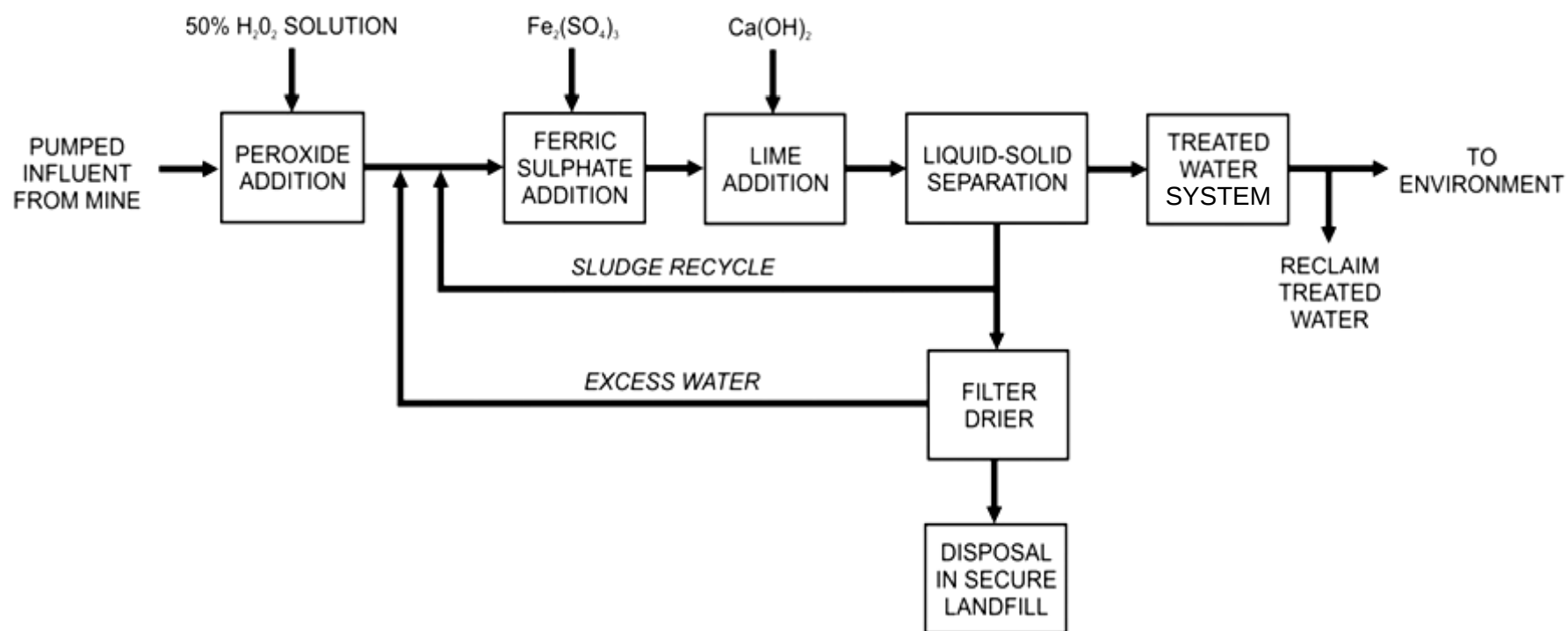
GIANT MINE

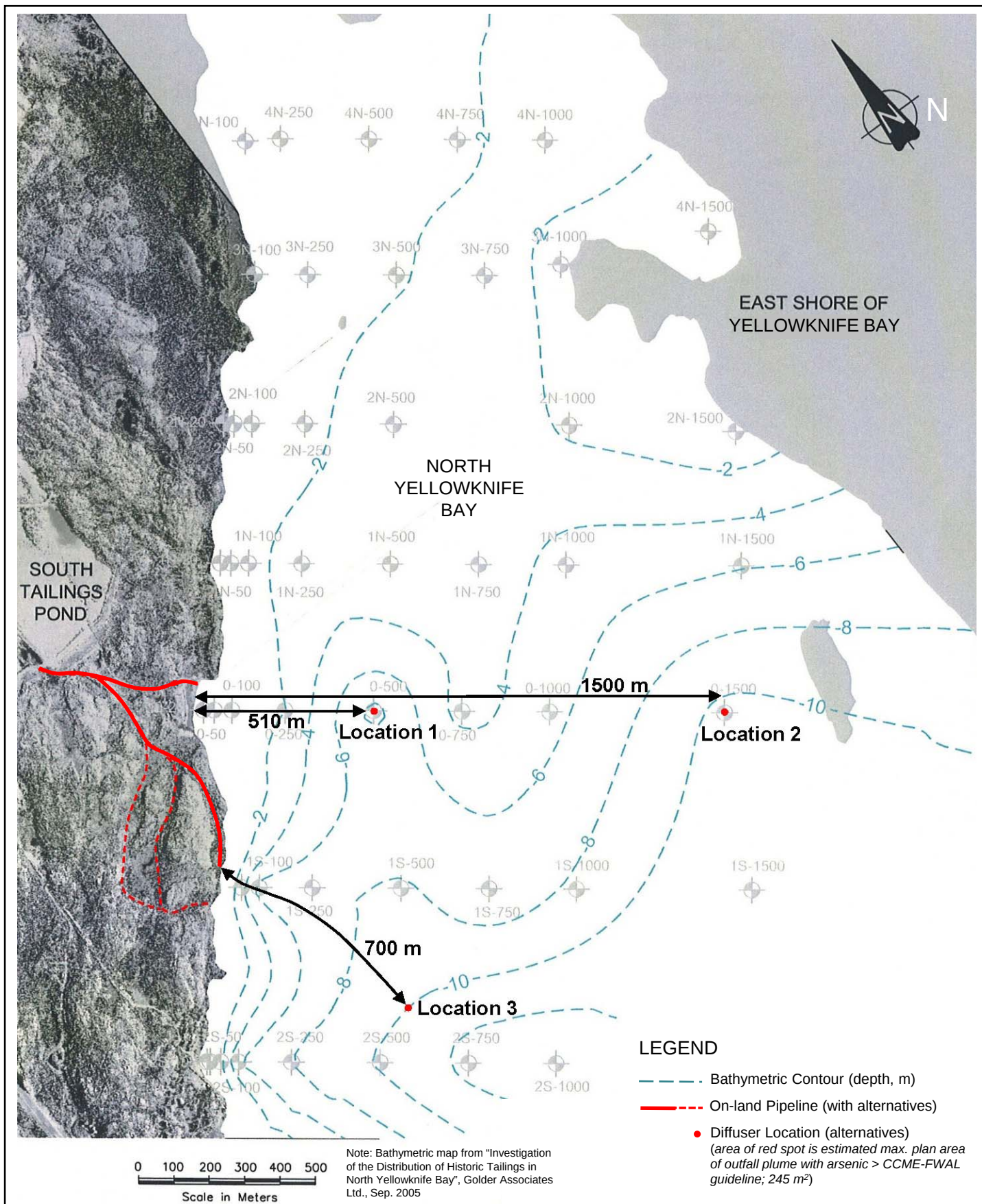
Developer's Assessment Report

Long-term Mine
Pumping System

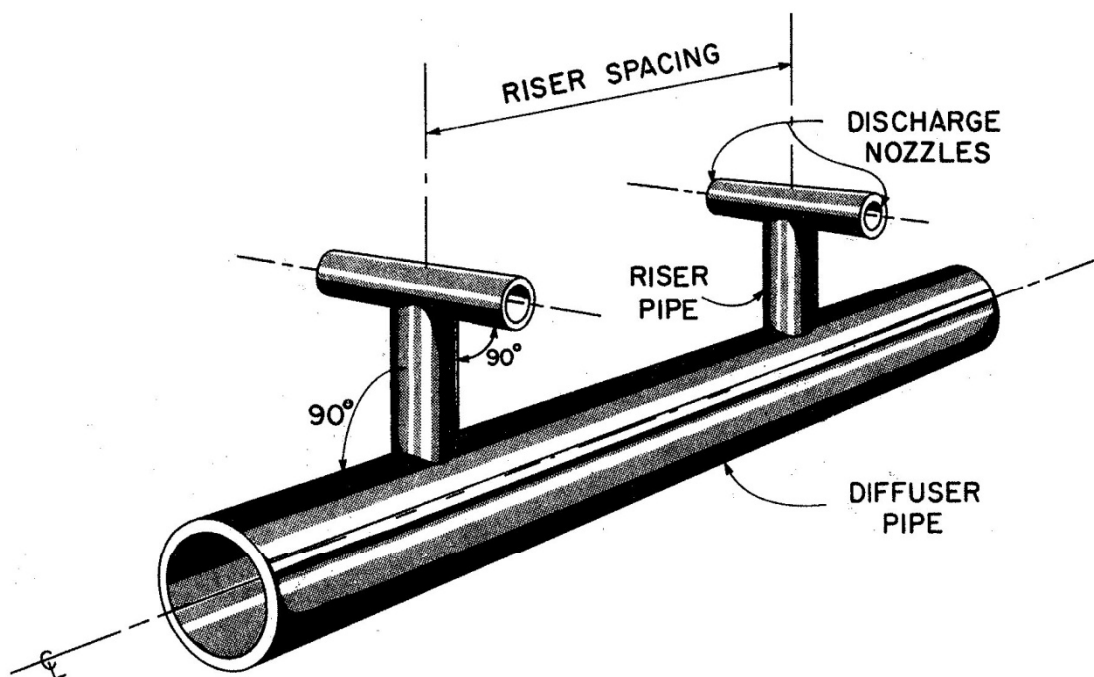
DATE: Nov. 2009 APPROVED: AL FIGURE: 6.8.2

CONCEPTUAL PROCESS DIAGRAM **OPTION No. 1 - WATER TREATMENT USING OXIDATION STAGE** **FOLLOWED BY FERRIC SULPHATE AND LIME ADDITION**





 SRK Consulting <i>Engineers and Scientists</i> VANCOUVER	 Indian and Northern Affairs Canada Affaires indiennes et du Nord Canada	Developer's Assessment Report		
		Potential Future Locations of Treated Water Discharge		
Job No: 1CI001.013.D12.06	Giant Mine	Date: March 2010	Approved: AL	Figure: 6.8.4
Filename: Fig 6.8.4_WaterDischarge_20100826.ppt				



HAY & COMPANY CONSULTANTS

Indian and Northern Affairs Canada

GIANT MINE EFFLUENT DILUTION

DIFFUSERS PORTS SCHEMATIC DIAGRAM

FIG
2



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Diffuser Ports Schematic Diagram

Job No: 1CI001.013.D12.06

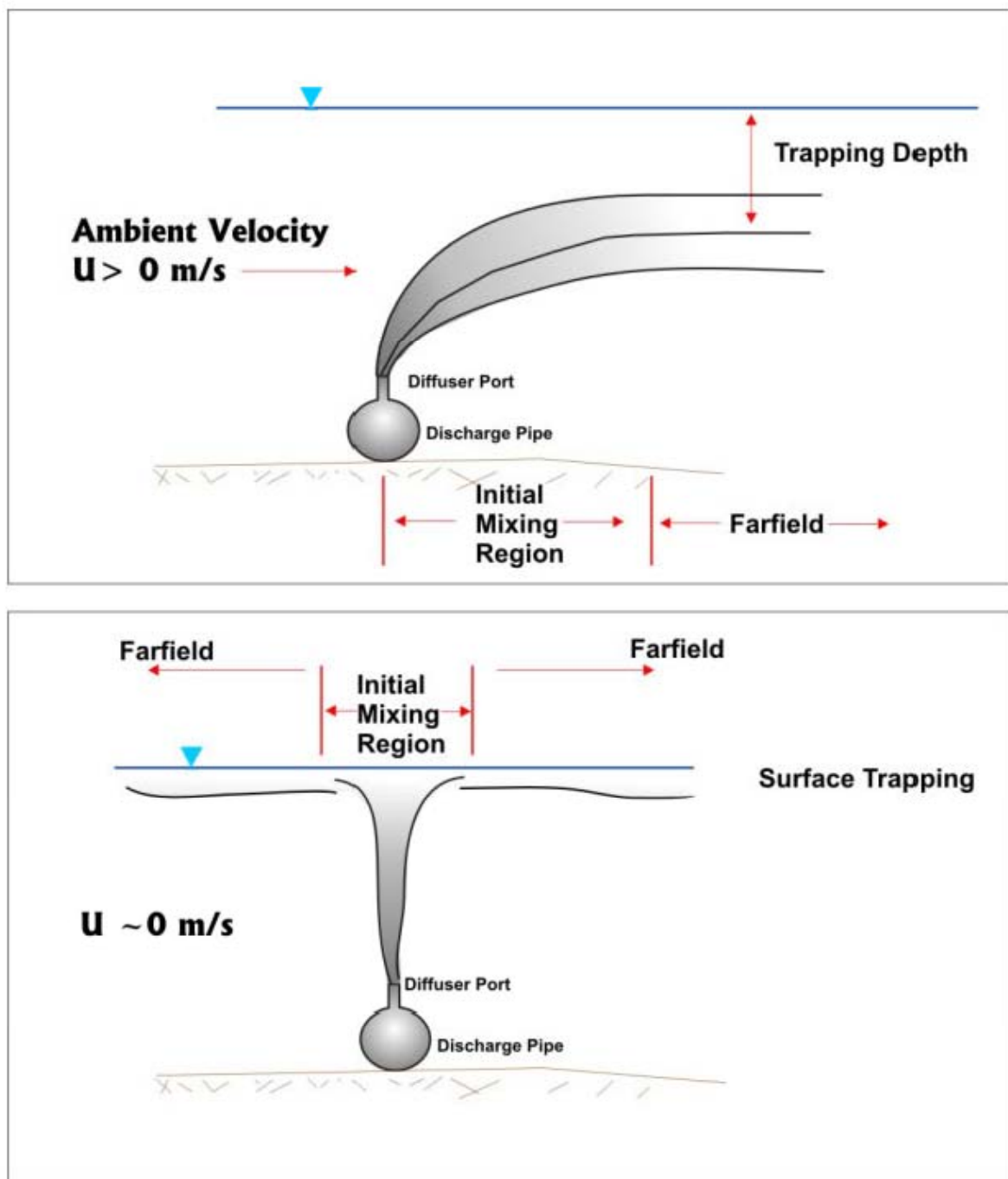
Filename: Fig 6.8.6-7_SchematicDiagram_20091117.ppt

Giant Mine

Date:
February 2010

Approved:
AL

Figure: **6.8.5**



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GIANT MINE EFFLUENT DILUTION DIFFUSER PERFORMANCE STUDY

SCHEMATIC DIAGRAM SUBMERGED OUTFALL

FIG.
3



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Schematic Diagram of Submerged Outfall

Job No: 1CI001.013.D12.06

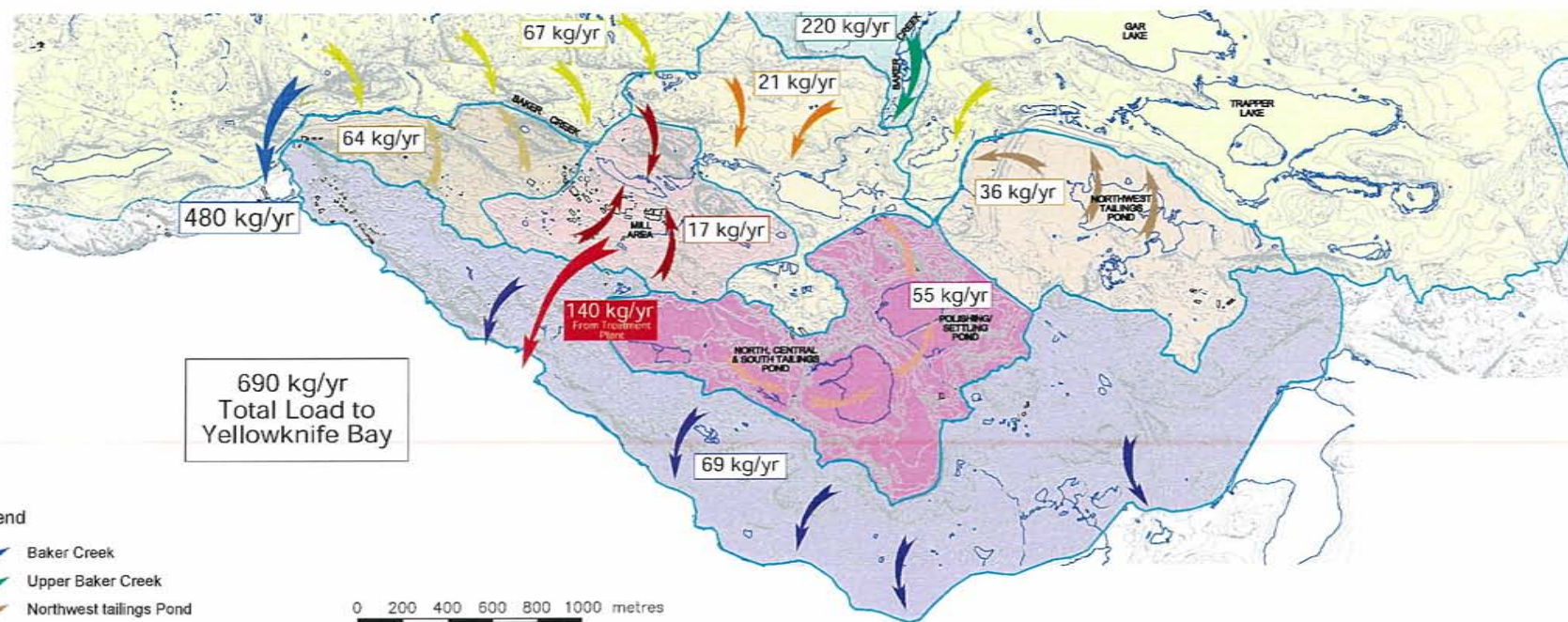
Filename: Fig 6.8.6-7_SchematicDiagram_20091117.ppt

Giant Mine

Date:
February 2010

Approved:
AL

Figure: **6.8.6**



Legend

- Baker Creek
- Upper Baker Creek
- Northwest tailings Pond
- Upstream of Trapper Creek and West of Baker Creek
- Polishing Pond /Settling Pond Area
- Mill Area
- Upstream of Mill Area
- Downstream of Mill Area
- Water Treatment Plant
- Yellowknife Bay Shoreline

0 200 400 600 800 1000 metres
0 1000 2000 3000 feet

2.5m contour interval



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SRK JOB NO: 101001.013.0012.06

FILE NAME: Load catch plan.dwg

GIANT MINE

Developer's Assessment Report

Estimated Post Remediation
Arsenic Loadings

DATE: Nov. 2009	APPROVED: AL	FIGURE: 6.8.7
--------------------	-----------------	------------------



0 30 60 90 120 150
Scale in Metres



SRK JOB NO.: 1C1001.013.0D12.06

FILE NAME: Interest-Townsite Area.dwg



Indian and Northern Affairs Canada
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GIANT MINE

Developer's Assessment Report

NWT Mining Heritage Society
Interests at Giant Mine
Townsite Area

DATE:
August 2010

APPROVED:
AL

FIGURE:
6.11.1