

MINTO EXPLORATIONS LTD.

General Site Plan

Minto Mine Phase IV Expansion

March 1 2011

Revision 0

General Site Plan for Minto Mine covering the period commencing April 1, 2011.

Table of Contents

INTRODUCTION	3
1. BACKGROUND	5
1.1. Geology and Mineralization	5
1.2. Relevant Deposits	6
1.2.1. Area 2	6
1.2.2. Area 118	6
1.3. Reserve Estimates	6
2. OPEN PIT MINE PLAN	7
2.1. Open Pit Design	7
2.2. Long-Term Open Pit Mine Plan	7
2.3. Open Pit Mine Operation	10
2.3.1. Mine Equipment	10
2.3.2. Unit Operations	10
2.3.3. Grade Control	11
2.4. Pre-Stripping Schedule	11
3. UNDERGROUND MINE PLAN	12
3.1. Mineral Resources	12
3.1.1. Area 2/118	12
3.1.2. Exploration	13
3.2. Mining Method Description	13
3.3. Conceptual Mine Design and Operation	14
3.3.1. Portal	14
3.3.2. Decline	15
3.3.3. Ventilation	16
3.3.4. Mine Air Heating	17
3.3.5. Underground Electrical Power Distribution System	17
3.3.6. Underground Communications	18
3.3.7. Explosives Storage and Handling	18
3.3.8. Fuel Storage and Distribution	18
3.3.9. Compressed Air	18
3.3.10. Water Supply	18
3.3.11. Dewatering	19
3.3.12. Transportation of Personnel and Materials Underground	20
3.3.13. Equipment Maintenance	20

3.3.14.	Mine Safety	20
3.3.15.	Underground Mobile Equipment	21
3.3.16.	Personnel	21
3.4.	Underground Development Schedule	24
3.4.1.	Timeline for the First Six Months	25
4.	WASTE MANAGEMENT PLAN	26
4.1.	Types of Waste	26
4.2.	Waste Disposal Schedule	27
4.3.	Underground Waste Rock Management	28
4.4.	Waste Dumps Pertaining to Stage 1	29
4.4.1.	Main Pit South Wall Buttress	30
4.4.2.	Mill Valley Fill Expansion	30
4.4.1.	Southwest Waste Dump Expansion	31
4.5.	General Site Preparation and Monitoring	32
5.	TAILINGS	32
6.	HEALTH, SAFETY AND EMERGENCY PLANNING	32

INTRODUCTION

This document (the “General Site Plan” or “GSP”) describes the plan for the Minto Mine Phase IV Expansion for the 90 to 180-day period [April 1 to September 30, 2011]. The nature of the somewhat open-ended application arises from the uncertainty around the Minto Application for Amendment to its water license under the Yukon Water Board. For this reason, it is intended to submit this plan that gives detailed plans that entail the first 90 to 180 days commencing April 1, 2011. Should the License not be obtained or imminent approaching the period of the first 90 days, MintoEx will submit an update at that time with revision / confirmation that the next 90 day plan as shown in this plan are still valid and representative.

MintoEx will provide the detailed plans and schedules in three stages, which are:

1. Stage 1: the initial 90-day period of the Phase IV Expansion; (**Deadline: March 1, 2011**)
2. Stage 2: Updated Plans for next 90 day period, in advance of obtaining a water use licence amendment; should it not be obtained or imminent at that time, and (**Deadline: May 30, 2011**)
3. Stage 3: the remainder of the Phase IV Expansion. (**Deadline: Aug 30, 2011**)

The Phase IV Expansion consists of the following discrete elements:

- Strip Area 2 Pit
- Strip Area 118 Pit
- Strip Portal area
- Underground Development Portal
- Underground Development Decline to Underground portions of Area 2/118 and beyond to the Minto East, Inferno, Copper Keel and Wildfire deposits
- Mine Area 2 Pit
- Mine Area 118 Pit
- Mine Underground portions of Area 2/118
- Deposit overburden from Area 2/118 Pit and Portal area
- Deposit waste rock from Area 2/118 Pit and Underground
- Mill ore from Area 2/118 Pit and Underground
- Deposit tailings from Area 2/118 Pit and Underground
- Construct Mill Valley Fill
- Construct South Wall Buttress in the Main Pit
- Construct water management infrastructure (diversions)
- Construct expanded camp and office space

MintoEx will provide Yukon Government with the following detailed plans for the Phase IV Expansion:

- Development and Operations Plan, entitled “General Site Plan Minto Mine” including:
 - Mine Plan, including Open Pit & Underground
 - Waste Management Plan

- Including Mill Valley Fill Dump Project
 - Including Main Pit Dump Buttress Project
 - Water Management Plan
 - Emergency Response Plan
- Environmental Management Plan, including:
 - Solid Waste Management Plan
 - Wildlife Protection Plan
 - Spill Response Plan
- Detailed Decommissioning and Reclamation Plan

MintoEx will include IFR drawings for the Mill Valley Fill and South Wall Buttress in the Waste Management Plan.

Stage 1 of this General Site Plan includes detailed plans for time sensitive elements of the Phase IV Expansion which must commence immediately following completion of the Minto Mine Main Pit in order to prevent a hiatus in mining.

Activities we propose to undertake in Stage 1 are limited to the following:

- Strip Area 2 Pit
- Strip Portal area, and
- Develop up to 500m of decline in non-mineral bearing waste rock
- Deposit overburden from Area 2 Pit and Portal area
- Deposit waste rock from Area 2 and Underground Workings
- Construct Mill Valley Fill
- Construct South Wall Buttress in the Main Pit
- Construct expanded camp and office space

For Stage 1 we will provide the following detailed plans related to Phase IV mining:

- General Site Plan, including:
 - Mine Plan
 - Waste Management Plan
 - Mill Valley Fill Dump Plan and Layout
 - Main Pit Buttress Plan and Layout
- Environmental Management Plan, including:
 - Sediment and Erosion Control Plan
 - Environmental Monitoring Plan
 - Emergency Response Plan
 - Wildlife Protection Plan
 - Heritage Resources Protection Plan
- Detailed Decommissioning and Reclamation Plan

Stage 2 of this General Site Plan includes detailed plans for elements of the Phase IV Expansion which may commence in advance of receiving a water use licence amendment.

Activities (in addition to Stage 1 activities) which we propose to undertake in Stage 2 are limited to the following:

- Develop Portal
- Continue to Develop Decline to Underground portions of Area 2/118 and beyond to the Minto East, Inferno, Copper Keel and Wildfire deposits
- Mine Area 2 Pit, continued stripping and ore mining
- Mine Area 118 Pit
- Mine Underground portions of Area 2/118
- Deposit waste rock from Area 2/118 Pit and Underground
- Construct water management infrastructure (diversions)

For Stage 2 we will provide the following detailed plans related to Phase IV mining:

- Development and Operations Plan, including:
 - Mine Plan (revised)
 - Waste Management Plan (revised)
 - Tailings Management Plan (revised)
- Detailed Decommissioning and Reclamation Plan (revised)

Stage 3 of this General Site Plan includes detailed plans for remaining elements of the Phase IV Expansion which may commence upon receiving a water use licence amendment.

Activities (in addition to Stage 1 and Stage 2 activities) which we propose to undertake in Stage 3 are:

- Mill ore from Area 2/118 Pit and Underground
- Deposit tailings from Area 2/118 Pit and Underground

For Stage 3 we will provide the following detailed plans related to Phase IV mining:

- Development and Operations Plan, including:
 - Mine Plan (revised)
 - Waste Management Plan (revised)
 - Tailings Management Plan (revised)
- Detailed Decommissioning and Reclamation Plan (revised)

1. BACKGROUND

1.1. Geology and Mineralization

The Minto Project is located in the Carmacks Copper Belt along the eastern margin of the Yukon-Tanana Composite Terrane, which is comprised of several metamorphic assemblages and batholiths.

Mineralization at Area 2/118 is hosted entirely in foliated granodiorite layers with sulfides occurring as disseminations (primarily associated with mafic minerals), along foliation planes (foliaform stringers), occasional splashy blebs, and very rare 5 to 30cm semi-massive bands. The dominant sulphide species at Area 2/118 include chalcopyrite and bornite in roughly a 3:1 ratio with only trace to sub-trace

amounts of pyrite. In almost all cases sulphide mineralization is accompanied by the presence of magnetite.

Mineralized horizons occur immediately beneath the base of overburden; however, the bulk of the Area 2/118 ore body is found approximately 75 m below the base of overburden.

Further detail about the geology at Minto was previously submitted as part of the Phase IV Expansion Application.

1.2. Relevant Deposits

Mineralization at Area 2/118 is distinct in that mineralisation is predominantly disseminated (plus occasional foliaform stringers) and that semi-massive to massive sulphide mineralization is absent; as a whole, the mineralization is more homogenous and consistent as compared to Minto Main.

1.2.1. Area 2

A relatively deep soil overburden deposit exists under the northeast portion of the proposed Area 2 pit that consists primarily of transported silt and fine sand with occasional lenses of clay and coarse sand to gravel. The soil is high in organic content and is known to contain permafrost. The majority of this deep soil deposit is located to the northeast, outside of the Area 2 pit; however, a significant portion of the north and east Area 2 pit walls will be comprised of the frozen overburden soil. Based on available information from resource and geotechnical drilling, Area 2 is covered with soil overburden ranging from about 5 to 15m in depth in the southwest portion with up to 20 to 45m along much of the north and east walls reaching a maximum depth of 70m at the far north.

1.2.2. Area 118

The majority of the proposed Area 118 open pit footprint is covered with up to approximately 5m of overburden soil except the southwest portion where the soil locally deepens to approximately 16m. The depth of bedrock weathering at Area 118 is generally to about 30 to 60m below ground surface.

1.3. Reserve Estimates

Mineral reserves estimates have only been published for open pit mining at Minto. The Area 2/118 open pit reserves summarised below have been adjusted from the Minto Phase IV Technical Report of December 2009, as a portion of the higher strip ratio lower zones was proposed to be mined via underground methods, for which no underground reserves estimate has been published at this time.

Table 1-1 Mineral Reserve Estimates

Deposit	Kt	Cut-off Grade (%Cu equiv.)	Diluted grade			Contained Metal		
			(%Cu)	(g/t Au)	(g/t Ag)	Cu (Mlb)	Au (koz)	Ag (koz)
Area2/118	3,280	0.56	1.35	0.48	4.61	98	51	486

2. OPEN PIT MINE PLAN

2.1. Open Pit Design

The open pit designs are based on an optimal Whittle™ pit shell, onto which geotechnical criteria, minimum mining widths, access ramps and detailed bench configurations were applied. These design criteria are summarised in Table 2-1 below.

Table 2-1 Detailed Pit Design Parameters

Design Parameter	Unit	Area2/118 Pits
Overburden angle	°	30
Inter-ramp angle	°	47 west, 53 east
Ramp width	m	25
Ramp grade	%	10
Bench height	m	9
Bench face angle	°	64 west, 73 east
Bench configuration	single/double	Double
Berm width	m	8

Sub-out maximum depth 6.0 m

Single lane ramp width 15 m @10%

2.2. Long-Term Open Pit Mine Plan

Mine planning for the Phase IV open pit deposits was conducted using a combination of Mintec Inc. MineSight® software, Gemcom GEMS™ and Whittle™ software. The detailed pit design and production scheduling was undertaken with the use of MineSight®.

Phase IV open pit mine designs were produced for Area 2 and Area 118. Table 2-2 summarizes the detailed long-term open pit design tonnages and grades.

Table 2-2 Open Pit Design

Pits	Diluted Ore (Kt)	Waste (Kt)	Total Material (Kt)	Strip Ratio (tW:tO)	Ore Grade			Contained Metal		
					Cu (%)	Au (g/t)	Ag (g/t)	Cu (Mlbs)	Au (Koz)	Ag (Koz)
Area 2	3,192	25,980	29,172	8.1	1.35	0.49	4.63	95	50	475
118	88	639	727	7.3	1.32	0.27	3.93	3	1	11
Total	6,805	37,033	43,838	5.4	1.49	0.52	5.6	224	113	1,227

The following figures and tables summarise the long term open pit mine plan for Area 2.

Figure 2-1: Phase IV Area 2 Pits – Stages 1 & 2

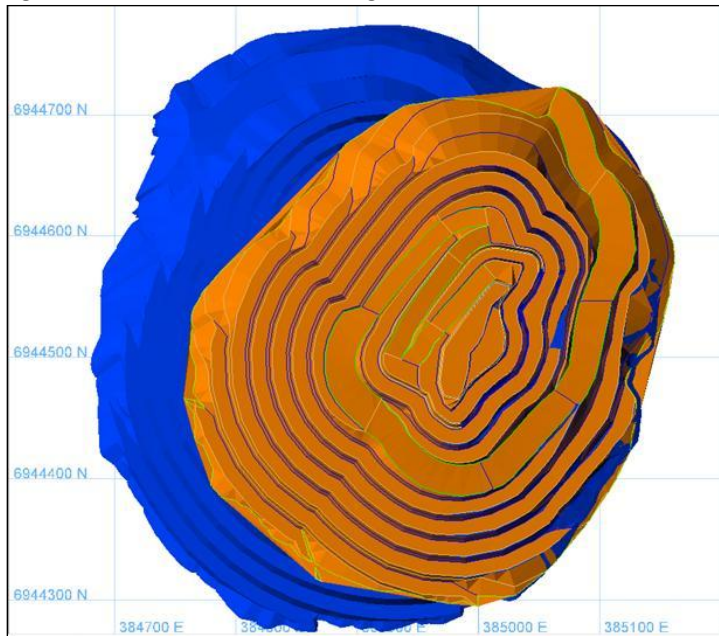


Figure 2-2: Phase IV Area 2 Pits – Stages 1 & 2 – Cross Section (Looking North)

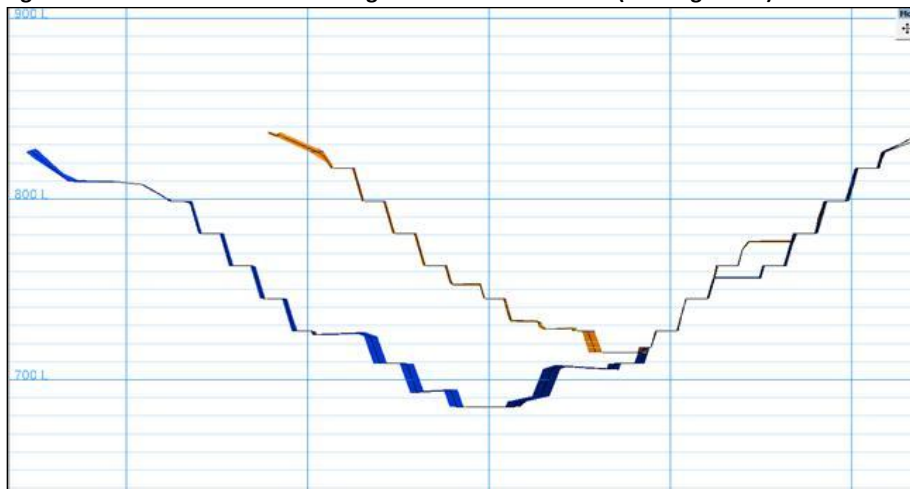


Figure 2-3: Planned Mining Rate for Phase IV

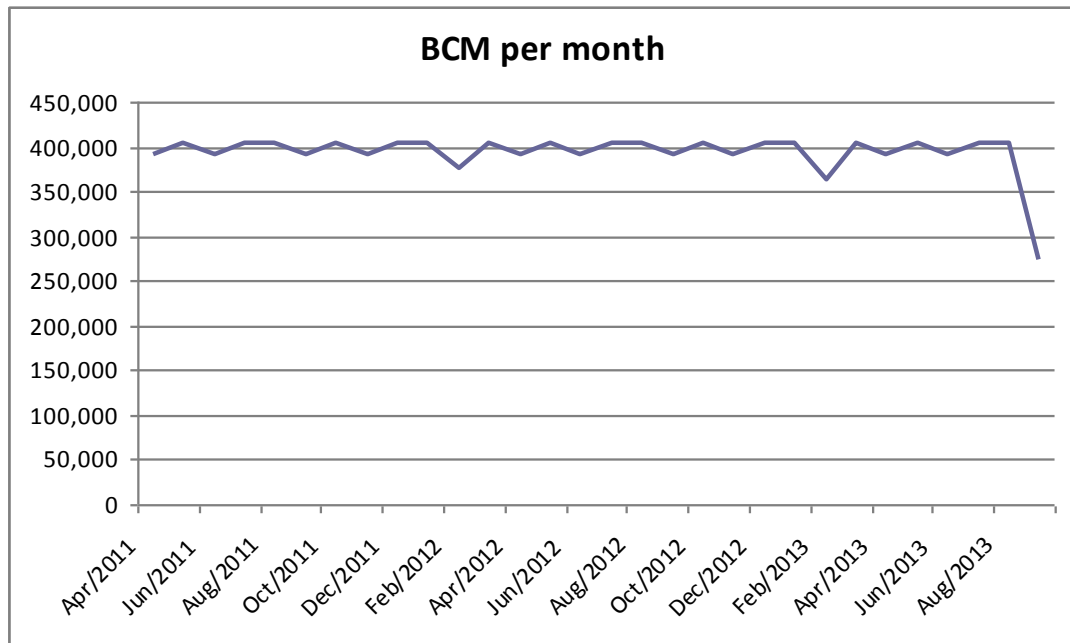


Table 2-3: Material Summary by Bench – Area 2 Stage 1



BCM (Bank Cubic Meters) & Tonnage by Bench

A2 Pit Stage 1 Bench (ELEV)	Waste		Overburden		Ore	
	BCM	Tonnes	BCM	Tonnes	BCM	Tonnes
871 m Elev	10,544	23,577	792	1,600	182	481
862 m Elev	80,574	181,428	587	1,198	3,664	9,627
853 m Elev	230,225	517,020	6,337	12,917	8,553	22,484
844 m Elev	346,415	832,260	14,612	30,306	5,389	14,325
835 m Elev	447,717	1,110,748	5,400	11,154	17,100	45,501
826 m Elev	513,412	1,288,129	5,688	11,743	3,300	8,760
817 m Elev	620,257	1,560,276	10,060	20,813	4,900	13,116
808 m Elev	675,307	1,669,533	3,157	6,452	9,399	24,964
799 m Elev	709,099	1,756,484	5,400	11,217	7,322	19,522
790 m Elev	525,227	1,349,688	3,901	7,996	32,188	86,509
781 m Elev	396,188	1,044,779	560	1,122	100,103	269,981
772 m Elev	219,673	585,350	0	0	162,238	440,490
763 m Elev	178,190	473,942	0	0	159,864	434,703
754 m Elev	140,752	373,968	0	0	92,461	251,576
745 m Elev	151,469	402,503	0	0	49,233	133,571
736 m Elev	71,495	189,479	0	0	47,235	128,242
727 m Elev	17,910	47,462	0	0	74,495	203,390
718 m Elev	592	1,611	0	0	35,684	97,795
709 m Elev	841	2,228	0	0	4,809	13,092

2.3. Open Pit Mine Operation

Mining will be conducted, for the balance of 2011, by Pelly Construction. This includes the Area 2 pit overburden and waste stripping scheduled for the balance of 2011.

2.3.1. Mine Equipment

Major mining equipment requirements are indicated in Table 2-4; these are based on similar-sized operations, as well as current practices at the Minto Mine. The proposed plant processing rate of 1.4-million tonnes per year was used to estimate the mining equipment fleet required. The fleet has an estimated maximum capacity of 40,000 tpd total material, which will be sufficient for the proposed life-of-mine plan.

Table 2-4 Mine Equipment (Current Contractor Fleet)

No. of units	Equipment Type
1	Hitachi EX1200 Shovel
1	Hitachi EX1100 Shovel
8	Cat 777F Haul Truck
1	Cat 992G Loader
2	Cat 385CL Excavator
3	Cat D9T Dozer
2	Cat 16 m Grader
2	Atlas Copco PV235 Drill
1	Atlas Copco D9-11 Drill
1	Cat 777C Water Truck
1	Cat 777B w/trailer

2.3.2. Unit Operations

The Atlas Copco PV235 drills will perform the majority of the production drilling in the mine, with the smaller Atlas Copco D9 drill used for secondary blasting requirements and may be used on the tighter-spaced patterns required for pit development blasts.

The main loading and haulage fleet consists of Cat 777F-100 ton haul trucks, which are loaded primarily with the diesel Hitachi shovels or the Cat 992G wheel loader, depending on pit conditions. As pit conditions dictate, the Cat D9 dozers are used to rip and push material to the excavators, as well as maintaining the waste dumps.

The remainder of the equipment listed in Table 2-4 will be used to maintain and build access roads and to meet various site facility requirements (including coarse mill feed stockpile maintenance and further exploration development).

The work schedule is based on two 11-hour shifts, seven days a week, 365 days per year.

2.3.3. Grade Control

In order to minimize ore dilution, maximize ore recovery, and thereby improve the operation's overall economics, grade control will play an important role throughout the mining process.

Grade control begins with the proper identification of the ore/waste zones and contacts in the field through:

- Information obtained from up-to-date 3-D resource model;
- Blast hole sampling;
- Driller reports;
- Face sampling (includes mapping, visual inspections, sampling); and
- Trenching (as required, to provide better definition of ore/waste contacts, sampling).

Once the above information has been gathered and compiled, it will be communicated to operational personnel through:

- Daily/weekly production meetings;
- Detailed "dig" maps – outlining ore zones, waste contacts, faults; and
- Field surveying and layout of dig limits, ore contacts, trenching required.

In order to maintain the effectiveness of the grade control process; regular field inspections will be undertaken by engineering/geology personnel. Clear lines of communication will be maintained with operational personnel, including equipment operators and front line supervisors.

As part of the grade control process, variable bench heights may be necessary in order to maximize the ore recovery. These include: variable bench heights in waste in order to target the top of the ore zone, and a varying bench height within the ore zones (reduce height at the periphery of the zone). Drill and blast control will also play an important role in order to minimize dilution of the ore zones during the blasting process (e.g. minimize heave in the ore zone).

2.4. Pre-Stripping Schedule

The mine plan anticipated for April 1st to September 30th, 2011 and for the balance of the year consists primarily of waste stripping. Similar to the current production rate, roughly 400,000 BCM of waste per month are planned, with roughly one-quarter of the material by volume being overburden soil, more than half being waste rock with no grade, and the remaining 13% being primarily waste rock with some grade.

Approximately 3% of the total material in the first three months of stripping is expected to be ore-grade oxide material. This oxide ore will be stockpiled for future milling and processing. This is the same procedure that has been applied to oxide ore material mined from the Main Pit as the mill is not currently configured to handle oxides.

The initial three months of pre-stripping for the Area 2 pit are summarised in Table 2-5.

Table 2-5: Area 2 Initial Pre-stripping

Month (2011)	April	May	June	July	August	September
Activity	Overburden & waste stripping.	Overburden & waste stripping.	Overburden & waste stripping.	Overburden & waste stripping.	Overburden & waste stripping.	Overburden & waste stripping.
Overburden (BCM)	193,354	113,833	76,141	70,183	71,640	89,277
Waste Rock - No Grade (BCM)	174,034	245,893	262,668	273,322	267,419	227,927
Waste Rock - Grade < 0.64% (BCM)	16,573	32,325	37,901	44,432	44,038	56,474
Ore Material - Low-Grade Oxide (BCM)	6,037	10,951	13,290	15,063	19,902	16,324
TOTAL MATERIAL (BCM)	389,997	403,002	390,000	402,999	403,000	390,002

For more details on waste material handling, please see Section 4 of this document.

3. UNDERGROUND MINE PLAN

Exploration at Minto Mine has historically been focused on finding near-surface deposits conducive to open pit mining. In the course of exploration, several deeper deposits and mineralized areas were discovered that may provide an opportunity to add mill feed material using underground mining methods and thereby extending the mine life.

There are several known deposits in the Area 2/118 complex that may have the grade, continuity and volume to be considered potentially mineable from underground. These deposits have been scheduled into the Phase IV LOM Schedule submitted as part of the Phase IV Expansion Application.

It should be noted that underground mining can generally be accomplished with a significantly reduced surficial footprint as compared to open pit mining resulting in potentially reduced environmental impacts. Closure and reclamation of an underground mine is not as extensive as that required for open pit mines.

3.1. Mineral Resources

Mineral resources that were considered as part of the underground component of the Phase IV LOM plan are limited to Area 118 and Area 2. However, there is a potential for future underground exploitation of Minto East, Wildfire and Copper Keel.

3.1.1. Area 2/118

A number of deposits with underground mining potential are located south and west of, as well as beneath, the proposed Area 2 Pit at depths of roughly 100 m to 300 m below surface.

3.1.2. Exploration

Additional development beyond these existing underground resources was included in the Phase IV LOM plan to the Minto East and Wildfire/Copper Keel exploration targets. These exploration declines were included in order to provide an underground platform for further resource delineation in these areas.

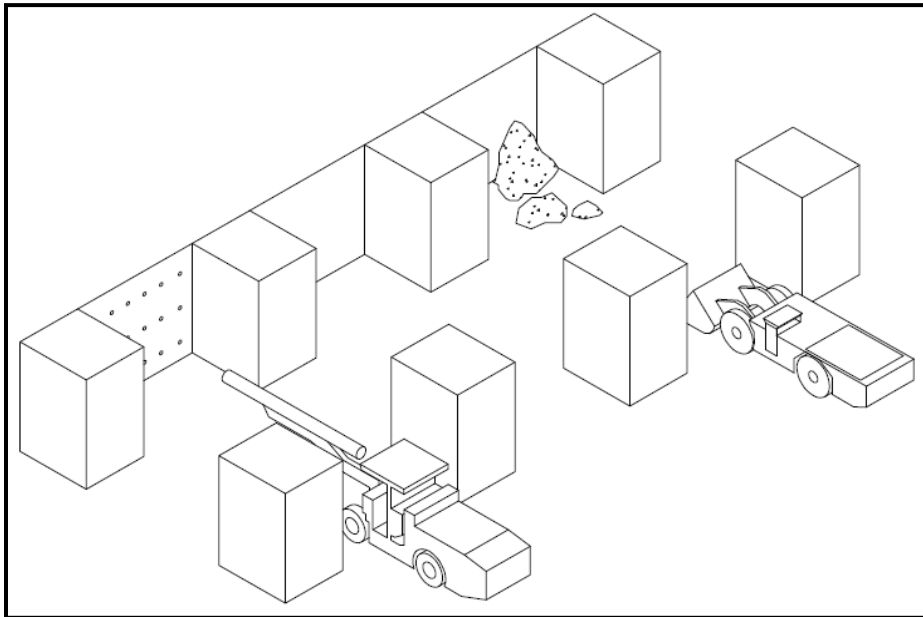
3.2. Mining Method Description

At this stage, two potential underground mining methods have been proposed for the Area 2/118 underground mining:

- Room and Pillar (“RAP”)
- Post-Pillar Cut and Fill (“PPCF”)

RAP mining is an open stoping method that utilizes un-mined rock as pillars to support a series of rooms or small stopes around the pillars. The method allows for excellent production capacity potential and relatively low cost while still providing mining flexibility and low dilution. The strong, massive nature of the Minto rock and shallow depth of the deposits mean that extraction ratios of at least 70% to 85% could reasonably be expected without the use of backfill or artificial support such as concrete posts.

Figure 3-1: Schematic of RAP mining method



PPCF mining is a variation of cut and fill and room and pillar and has the advantage of being able to be used in thicker (> 10 m), irregular-shaped deposits while keeping dilution and pillar sizes to a minimum.

Figure 3-2: Schematic of PPCF mining method

3.3. Conceptual Mine Design and Operation

3.3.1. Portal

The underground will be accessed via a portal from surface and a decline. The proposed portal location is in an area of minimal overburden approximately 40 metres south of the proposed Area 2 pit and near the pit access road.

The portal will be established by removing overburden from the area and then blasting a trench into the surface bedrock to establish a face of sufficient height to accommodate the portal opening and still have 7-10 metres of good rock in the brow above. The gradient of the rock trench will be -15% toward the portal, the same as the decline, and will be about 20 metres in length. The portal face of the rock trench will be inclined at 80° from the horizontal. The sides of the rock trench will each consist of two 55° wall segments separated by a 3 metre bench located at an elevation 10 metres above the bottom of the trench.

The overburden will be removed to 2 metres beyond the rock trench and graded to a maximum slope of 2.5:1. The road approaching the rock trench shall be graded at +2%, which is possible since the topography has a slope of 12-15%; this will promote drainage down the road and away from the rock trench. A laydown area will also be excavated into the overburden alongside the road. A perimeter ditch around the outside of the overburden cut will be established to direct rain water flowing down the hillside away from the portal.

Figure 3-3: Conceptual drawing of portal cut excavation



The rock trench will be supported as required and will at a minimum have 2.4 metre long #6 resin grouted rebar installed on a 1 metre by 1 metre spacing with welded wire mesh on the portal face.

It is anticipated that it will take approximately one month to excavate and prepare the portal cut.

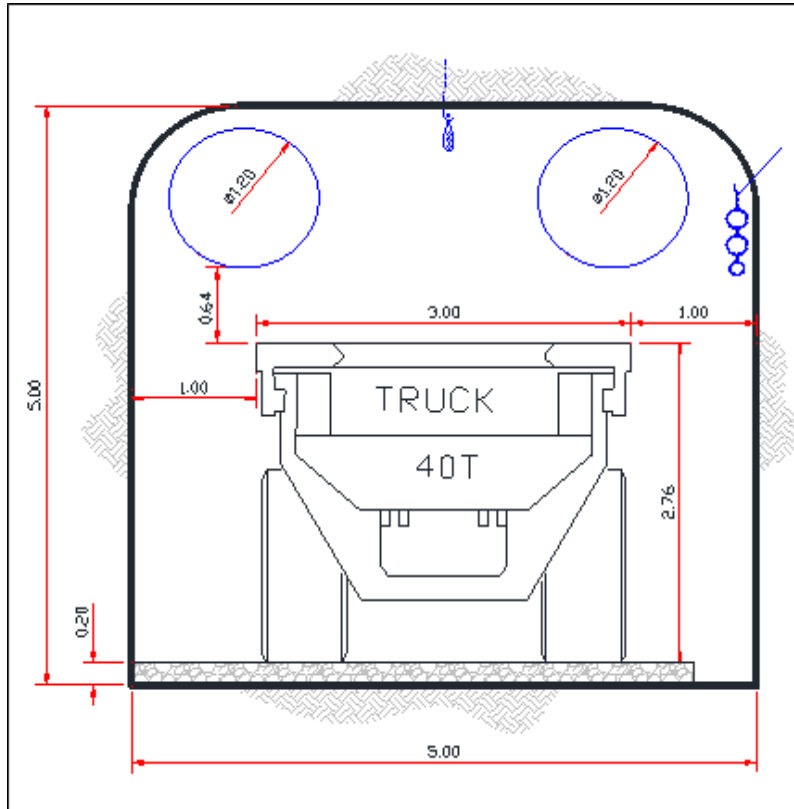
The portal cut excavation is conceptualised in Figure 3-3 and a drawing showing the excavation is included as Appendix A.

3.3.2. Decline

The main access to the underground workings is proposed to be via a single decline developed at a -15% gradient. It will be used for ore and waste haulage, access for personnel, equipment, materials, and services. It will also be the long-term exhaust airway.

The size of the decline was selected according to the mobile equipment size, required clearances, and ventilation requirements during development and production. It was estimated that a 5.0 m wide by 5.0 m high decline would be satisfactory for a 40 t truck (and 50-t trucks in the future, if desired). A schematic of the proposed cross-section is in Figure 3-4. A 25 m ramp curve radius will be used as this is ideal for a mobile drill jumbo.

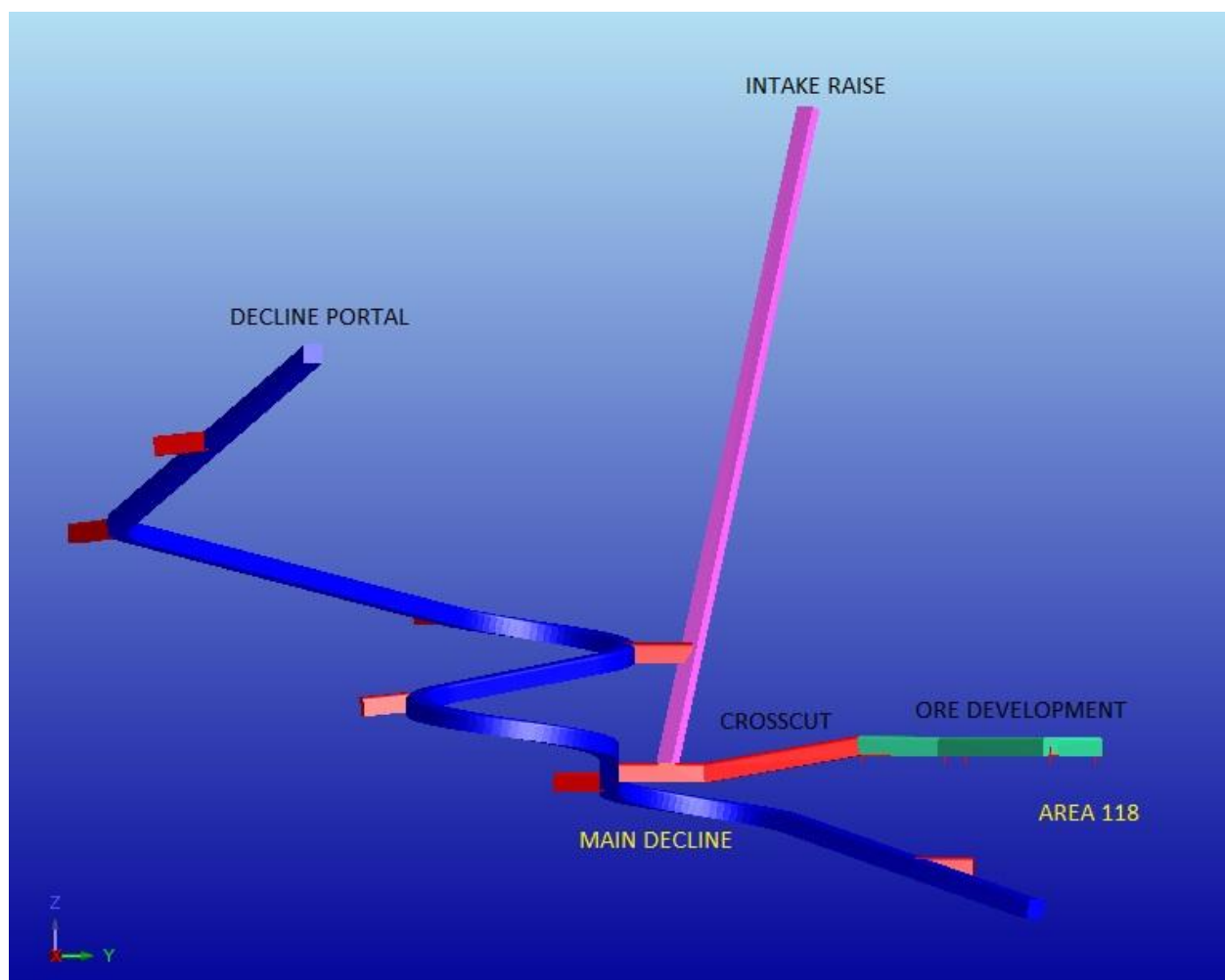
Figure 3-4: Proposed Decline Cross-Section



Re-muck bays are planned to be developed every 150 m along the decline to allow efficient use of the drilling equipment and would hold two rounds of development muck. The re-muck bays would be of a similar size as the decline and would be typically 15 m long. After they are no longer used for development, the bays would be used for equipment storage, pump stations, drill bays, refuge chambers, etc.

Ground support will consist of the installation of 1.8 m fully grouted resin rebar bolts on the back and the walls of the ramp on 1.2 m x 1.2 m pattern, 100% mesh coverage. In a few places, expected to be approximately 5% of the decline, 50 mm of shotcrete may be used.

Figure 3-5: Schematic showing the initial 1,400 metres of underground development



3.3.3. Ventilation

Two ventilation raises to surface are planned for the long-term: the first ventilation raise will begin off the main decline at a point approximately 1,300 metres along the decline from the portal and it will be an intake raise. The second ventilation raise will be located near the bottom of the long-term decline

and will be an exhaust airway. Both raises will contain manways and provide for secondary egress from the mine.

During the development phase of the mine, ventilation will be provided to the working face via ventilation duct down the main decline from the portal. The ventilation requirements are estimated at 35 m³/s, which is sufficient flow volume to dilute and remove exhaust from a 40 t truck, a 5.4 m³ LHD and a two-boom jumbo as outlined in Table 3-1.

Table 3-1: Ventilation Requirements for Development Heading

Description	Quantity	Diesel (kW)	Utilization (%)	Utilized (kW)	Air Volume (m3/s)
LHD, 5.4 m ³	1	220	100	220	13
Truck, 40 t	1	354	100	354	21
Jumbo, two-boom	1	111	10	11	1
Total				585	35

This volume of air will be provided initially by a single 75 kW fan feeding a 1.5 m vent duct. Beyond the first 600 metres of decline, this first ventilation duct will be reduced to 1.2 m and a second 75 kW fan feeding a parallel 1.2 m vent duct will be added from the portal. Both fans will be located on surface outside the portal in the laydown area excavated in the overburden.

3.3.4. Mine Air Heating

A mine air heating system will not be installed at Minto for the underground. Instead, a brine system will be used in winter to prevent service water from freezing in the mine. Also, mobile equipment will be fitted with heated, enclosed cabs to protect workers from exposure to low temperatures. This system is similar to systems used at other underground mines in Canada and elsewhere and is estimated to result in annual savings of approximately \$1.8M at Minto.

3.3.5. Underground Electrical Power Distribution System

Electrical power will be required in the underground mine for the following purposes:

- Ventilation fans;
- Drilling equipment;
- Dewatering pumps;
- Air compressors.

High voltage power will be delivered underground via the decline at 4.16 kV and will be reduced to 600 V at underground sub-stations (as well as single-phase 120 V circuits for lighting and other uses). All equipment and cables will be fully protected to prevent electrical hazards to personnel.

3.3.6. Underground Communications

A leaky feeder system will be used for communications underground and between underground and surface. Telephones will be located at key locations such as electrical sub-stations, refuge stations and main sump.

Key personnel (such as mobile mechanics, crew leaders, and shift bosses) and mobile equipment operators (such as loader, truck, and utility vehicle operators) would be supplied with an underground radio for contact via the leaky feeder network.

3.3.7. Explosives Storage and Handling

Explosives will be stored on surface in permanent magazines. Detonation supplies (NONEL, electrical caps, detonating cords, etc.) will be stored in a separate magazine.

During the initial decline development, day boxes will be used as temporary storage for daily explosive consumption.

Ammonium nitrate (AN) and fuel oil (FO) will be used as the major explosive for mine development and production. Packaged emulsion cartridges will be used as a primer and for loading lifter holes in the development headings. Smooth blasting techniques may be used as required for main access development headings with the use of trim powder for loading the perimeter holes.

During the decline development, blasting in the development headings will be done at any time during the shift when the face is loaded and ready for blasting. All personnel underground will be required to be in a designated Safe Work Area during blasting.

3.3.8. Fuel Storage and Distribution

Diesel fuel will be stored on surface and underground haul trucks, LHDs, personnel carriers and trucks will be fuelled on surface. A fuel/lube cassette carrier will be used for the fuelling/lubing of underground drills and rock bolters.

3.3.9. Compressed Air

Underground mobile equipment requiring compressed air will be fitted with their own air compressors. Portable air compressors will be used for other jobs requiring compressed air, such as jackleg and stopper drilling. There will not be a reticulated compressed air system underground.

3.3.10. Water Supply

Service water will be provided underground for drilling operations. It is anticipated that UG mining and diamond drilling will require approximately 50-200 m³/day of water during production and less during the development phase.

Water will be sourced from inflow water if available and from surface sources otherwise. Water will be re-used as much as possible once UG sumps are established off of the ramp. A water tank will be installed in a cross-cut near the top of the decline and will be the final holding and discharge point for any excess UG water. Water for the initial mining of the ramp, prior to sumps being established, will be provided by a temporary surface water tank and supplied with water from the water truck. All sumps and tanks will be designed to enhance the settling and collection of sludge, which will be periodically deposited in the Main pit.

During the winter months, a brine system will be used to prevent the water from freezing. Brine is typically mixed on surface and transported underground via the service water system. Through this system, which employs calcium chloride (CaCl_2) brine, the freezing point of the brine can be reduced to -51°C at an average concentration of 20% CaCl_2 .

In terms of health and safety, many companies operating in the far north have used brine systems in the past, including the Raglan Mine which has been using brine since 1997. The Quebec Ministry of Labour completed studies regarding vapours and other aspects with minimal concerns. This information will be requested by the site in 2011 in order to prepare training programs and ensure proper systems and personal protective equipment is in place before the use of brine commences.

3.3.11. Dewatering

Water inflows underground are expected to be small due to the tight nature of the rock. Other sources of water are spent drilling water and rain collected in the portal rock trench (minimised by the design of the portal cut).

Despite the anticipated scenario of minimal inflow, a mine dewatering piping system will be established to accommodate a rate of up to $500\text{ m}^3/\text{day}$ as a contingency measure. During the development phase of the mine, water will be collected in sumps off the decline and pumped to surface using semi-submersible pumps.

The primary water quality considerations for management of underground water are blasting residues (ammonia and nitrate) and suspended solids; dissolved metal loadings are a secondary consideration.

Minto plans to manage the water quality considerations of the underground operation as follows:

- Re-use of water for drilling and wash-down purposes, if available. A series of settling and water storage sumps will be placed every 300 metres along the decline.
- Discharging of excess water from the underground to either the processing plant's process water stream, or to the Main pit sump.

Once in the process water pond or the pit sump, the UG water will be treated as per the other non-potable water on site.

3.3.12. Transportation of Personnel and Materials Underground

All mine supplies and personnel will access the underground via the main access decline.

During the development phase, a personnel carrier will be used to shuttle employees from surface to the underground faces and back to surface during shift changes. Supervisors, engineers, geologists and surveyors will use diesel-powered trucks as transportation underground. Mechanics and electricians will use the mechanics' truck and maintenance service vehicles.

A boom truck with a 10 t crane will be used to move supplies, drill parts and other consumables from surface to active underground workings.

3.3.13. Equipment Maintenance

Mobile underground equipment will be maintained in a mechanical shop located on the surface. A mechanics' truck will be used to perform emergency repairs underground.

3.3.14. Mine Safety

Portable refuge stations will be used during the development phase of the mine. Initially, when the working face is within 250 metres of the portal, emergency escape will be directly to the surface via the portal. Once the decline reaches 250 metres in length from the portal to the working face, a portable refuge station will be installed underground near the face.

The refuge stations will be equipped with compressed air, potable water and first aid supplies; they will also be supplied with a fixed telephone line and emergency lighting. The refuge stations will be capable of being sealed to prevent the entry of gases.

Fire extinguishers will be provided and maintained in accordance with regulations and best practices at the underground electrical installations, pump stations and other strategic areas. Every vehicle will carry at least one fire extinguisher of adequate size and proper type. Underground heavy equipment will be equipped with automatic fire suppression systems.

A stench gas warning system will be installed on the main decline fans to alert underground workers in the event of an emergency.

In the long term, the stench gas system will be installed on the main intake raise and both the intake and exhaust ventilation raises will contain manway compartments.

Further information on mine safety for the underground mine is provided in the Emergency Response Plan.

3.3.15. Underground Mobile Equipment

The proposed mobile equipment for the underground operations is tabulated in Table 3-2 for both the development and production phases.

Table 3-2: Underground Mobile Equipment List

Equipment	Development Phase Quantity	Production Phase Quantity
Drilling Equipment		
Development / Production Jumbo (2 boom)	1	2
Rockbolter	1	2
Loading & Hauling Equipment		
Production / Development LHD, 5.4 m ³ (10 t)	1-2	2
Haulage Truck, 40 t	2	4
Service Vehicles		
Grader	1	1
Explosive Truck	1	1
ANFO Loader	1	2
Cassette Carrier	1	2
Personnel Cassette	1	2
Boom Cassette	0	1
Fuel / Lube Cassette	1	1
Mechanics Truck	1	1
Scissor Lift	1	1
Supervisor/Engineering Vehicle	1	3
Electrician Vehicle - Scissor Lift	1	1
Shotcrete Sprayer	1	1
Transmixer	1	1
Forklift	1	1

3.3.16. Personnel

Estimated personnel requirements for the Minto underground for the Stage 1 period and the long term are summarised in Table 3-3 and Table 3-4, respectively, for salaried employees and in Table 3-5: Hourly Labour for “Stage1” Exploration Decline Development, target start date May /June 2011Table 3-5 and Table 3-6 for hourly employees.

Table 3-3: Technical and Supervisory Staff - "Stage1" Exploration Decline Development: target start date June 2011

Quantity	
Staff Mine Operation	
Mine Superintendent	1
Senior Mining Engineer	1
Mine Ventilation/Project Engineer	1
Geotechnical Engineer	
Geologist	
Geological Technician	1
Mine Rescue / Safety / Training Officer	2
Surveyor	1
Mine Technical	1
Mine Captain	1
Mine Supervisor / Shift Boss	2
Total Operating Staff	10
Staff Mine Maintenance	
Maintenance Superintendent	1
Maintenance Planner	1
Mechanical / Electrical Foreman	1
Maintenance Supervisor/Shift Boss	1
Total Mine Maintenance Staff	4
Total Mining Staff	14

Table 3-4: Technical and Supervisory Staff - for production Commencing 2012

Quantity	
Staff Mine Operation	
Mine Superintendent	1
Senior Mining Engineer	1
Mine Ventilation/Project Engineer	1
Geotechnical Engineer	1
Geologist	1
Geological Technician	1
Mine Rescue / Safety / Training Officer	2
Surveyor	2
Mine Technical	1
Mine Captain	1
Mine Supervisor / Shift Boss	4
Total Operating Staff	16
Staff Mine Maintenance	
Maintenance Superintendent	1
Maintenance Planner	2
Mechanical / Electrical Foreman	1
Maintenance Supervisor/Shift Boss	2

Quantity	
Total Mine Maintenance Staff	6
Total Mining Staff	22

Table 3-5: Hourly Labour for “Stage1” Exploration Decline Development, target start date May /June 2011

Labour Description	Personnel per Shift	Personnel per Day	Total Payroll
HOURLY MINE LABOUR			
Production / Development			
Jumbo Operator	1	2	4
Ground Support			
Blaster	1	2	4
Haulage			
Scoop-Loader Operator	1	2	4
Truck Drivers			
Mine Services & Safety			
General Labourer / Service Crew	1	2	4
Grader Operator			
Utility Vehicle Operator/Nipper			
General Helper			
Sub-total Mine Operating	4	8	16
MINE MAINTENANCE			
Lead Mechanic / Electric	1	1	2
HD Mechanic, mobile	1	2	4
Mechanic, stationary			
Electrician			
Welder	1	1	2
Tireman / Instrument Man			
Mechanic Apprentice			
Dry / Lampman / Bitman	1	2	4
Sub-total Mine Maintenance	4	6	12
Total Mine Operating	8	14	28

Table 3-2: Hourly Labour for production Commencing 2012

Labour Description	Personnel per Shift	Personnel per Day	Total Payroll
HOURLY MINE LABOUR			
Production / Development			
Jumbo Operator	2	4	8
Ground Support	2	4	8
Blaster	1	2	4
Haulage			
Scoop-Loader Operator	2	4	8

Labour Description	Personnel per Shift	Personnel per Day	Total Payroll
Truck Drivers	3	6	12
Mine Services & Safety			
General Labourer / Service Crew	1	2	4
Grader Operator	1	1	2
Utility Vehicle Operator/Nipper	1	2	4
General Helper	1	2	4
Sub-total Mine Operating	14	27	54
MINE MAINTENANCE			
Lead Mechanic / Electric	1	1	2
HD Mechanic, mobile	1	2	4
Mechanic, stationary	1	1	2
Electrician	1	2	4
Welder	1	1	2
Tireman / Instrument Man	1	1	2
Mechanic Apprentice	1	1	2
Dry / Lampman / Bitman	1	1	2
Sub-total Mine Maintenance	8	10	20
Total Mine Operating	22	37	74

3.4. Underground Development Schedule

The objective of the mine development schedule is to ultimately achieve early ore production from higher-grade areas. The mine development is divided into two periods: pre-production development (prior to mine production) and ongoing development (during production). This summary focuses on pre-production development.

The purpose of pre-production development is to:

- Provide access for trackless equipment;
- Provide ventilation and emergency egress;
- Establish ore and waste handling systems;
- Install mining services.

It is assumed that the decline and lateral development will be performed by owner-operator crews. The development schedule is based on estimated cycle times for jumbo development, which are tabulated in Table 3-6.

Table 3-6: Development Cycle Times

Unit	Decline
Design Criteria	
Width (m)	5.0
Height (m)	5.0
Gradient (%)	15%
Summary Cycle Times	
Drilling (Hrs)	4.2
Blasting (Hrs)	1.8
Re-Entry (Hrs)	0.5
Mucking (Hrs)	2.0
Support (Hrs)	5.3
Services (Hrs)	1.0
Secondary Mucking (Hrs)	5.3
Trucking (Hrs)	5.9
Single Heading	
Critical Path Cycle Time (Hrs)	14.8
Advance Per Shift (m)	2.7
Advance Per Day (m)	5.3

Based on the estimate of 5.3 metres of advance per day, the maximum monthly advance would be 150 metres. However, during the first couple months of development, it can be assumed that the advance rate will be slower. Once development reaches a steady-state rate, it can be assumed that this rate will be approximately 120 m/mo due to occasional downtime or other factors.

3.4.1. Timeline for the First 180 Days

It is anticipated that it will take approximately one month to mobilise underground equipment and personnel to site. It is also expected that the portal cut will take about a month. Since the portal cut will be done primarily using surface mining equipment and personnel, these two items may occur concurrently starting in early April, 2011.

The decline will commence in May and will become more productive each month as the development becomes more routine. It is anticipated that within 180 days of commencing the Underground portal box cut, the underground decline will have advanced 510 metres and produced 42,525 tonnes of waste, including from the rock trench of the portal cut.

The first 180 days of development are shown in Table 3-7.

Table 3-7: Initial Development Timeline

Month (2011)	April	May	June	July	August	September
Activity	Mobilise underground equipment and personnel and excavate portal cut	Commence decline development	Decline development	Decline development	Decline development	Decline development
Development (m)	-	50	100	120	120	120
Waste Rock (t)	8,100	3,375	6,750	8,100	8,100	8,100
Waste Rock (BCM)	3,000	1,250	2,500	3,000	3,000	3,000

4. WASTE MANAGEMENT PLAN - SUMMARY

A complete Waste Management Plan (WMP) for Phase IV waste rock and overburden was produced by EBA Engineering Consultants Ltd. Portions of the WMP relevant to this Stage 1 application are summarised in this section.

4.1. Types of Waste

Mining operations at the Minto Mine generate three general types of waste materials: overburden, waste rock and tailings. Overburden includes all unconsolidated soil above the bedrock. Waste rock consists of rock that is mined, but is below ore cut-off grade, which for Minto's Phase IV development is 0.64% copper. Tailings consist of material left from processed ore and are outside of the scope of this WMP.

Overburden and waste rock may be further categorised as follows:

- Overburden
 - Ice-rich
 - Non ice-rich
- Waste Rock
 - Potentially acid generating (PAG)
 - Non potentially acid generating (NPAG)

Waste rock is further classified by grade bin as illustrated in Table 4-1.

Table 4-1: Summary of Waste Rock volumes by Grade bin

Grade Bin (% Copper)	Total Expected Volume (M m³)	ARD Classification
0.00	8.77	NPAG
0.01 – 0.05	0.18	NPAG
0.05 – 0.10	0.18	NPAG
0.10 – 0.20	0.44	PAG
0.20 – 0.64	2.11	PAG
Total	11.68	

4.2. Waste Disposal Schedule

All of the Phase IV waste will be disposed in the following five dump sites:

- The South Wall Buttress of the Main Pit;
- The Mill Valley Fill Expansion – Stages 1 and 2;
- The Grade Bin 0.10 – 0.64 Disposal Area;
- The Southwest Waste Dump Expansion; and
- The Area 118 Open Pit.

A summary of dump design volumes, material sources and schedule are presented in Table 4-2.

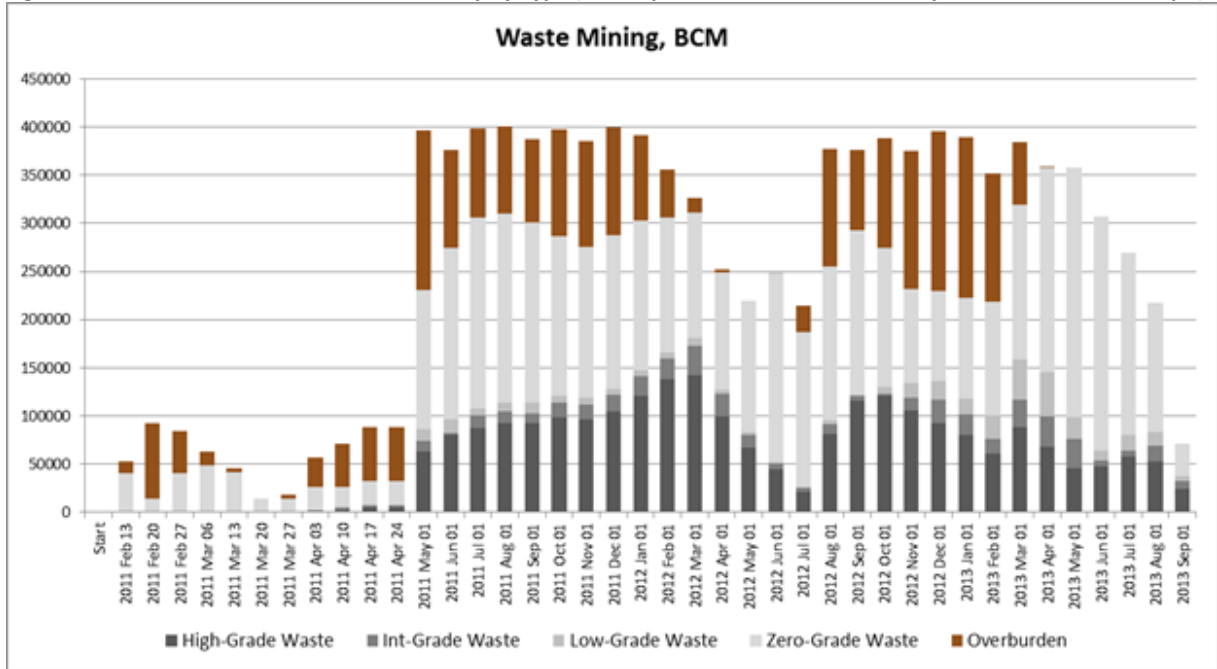
Table 4-2: Waste Dump Schedule and Volumes

Dump	Design Volume (M m ³)	Grade Bin (%Cu)	Waste Type	Material Source	Schedule
Main Pit South Wall Buttress	1.30	0.00 – 0.64	Waste Rock	Area 2 Open Pit	April to July 2011
Simultaneous Disposal with Tailings in Main Pit	1.38 (minimum)	0.10 – 0.64	Waste Rock	Area 2 and Area 118 Open Pits and Underground	July 2011 to September 2013
Mill Valley Fill Expansion	1.30	0.00	Waste Rock	Area 2 Open Pit	April to October 2011
Grade Bin 0.10 – 0.64 Disposal Area	0.93 (maximum)	0.10 – 0.64	Waste Rock	Area 2 and Area 118 Open Pits and Underground	July 2011 to September 2013
Southwest Expansion Stages 1 & 2 (Waste Rock)	6.44	0.00 – 0.10	Waste Rock	Area 2 and Area 118 Open Pits	July 2011 to October 2013
Southwest Waste Dump Expansion Stage 1 (Overburden Area)	2.78	N/A	Non Ice-rich Overburden	Area 2 and Area 118 Open Pits	February 2011 to April 2013
Area 118 Open Pit	0.30	0.00 – 0.10	Waste Rock	Area 2 Open Pit , Area 2 and Area 118 Underground	July 2012
TOTAL	14.47 M m³				

The waste dump and structure footprints are shown on the EBA drawing WMP-01 in Appendix B.

Planned waste production for Phase IV is summarised in the chart in Figure 4-1. In this chart, “Int-Grade Waste” and “High-Grade Waste” are PAG material, whereas “Low-Grade Waste” and “Zero-Grade Waste” are NPAG.

Figure 4-1: Waste Material Schedule – Summary by Type (Weekly for 3 months, then monthly for Duration of Area 2 pit)

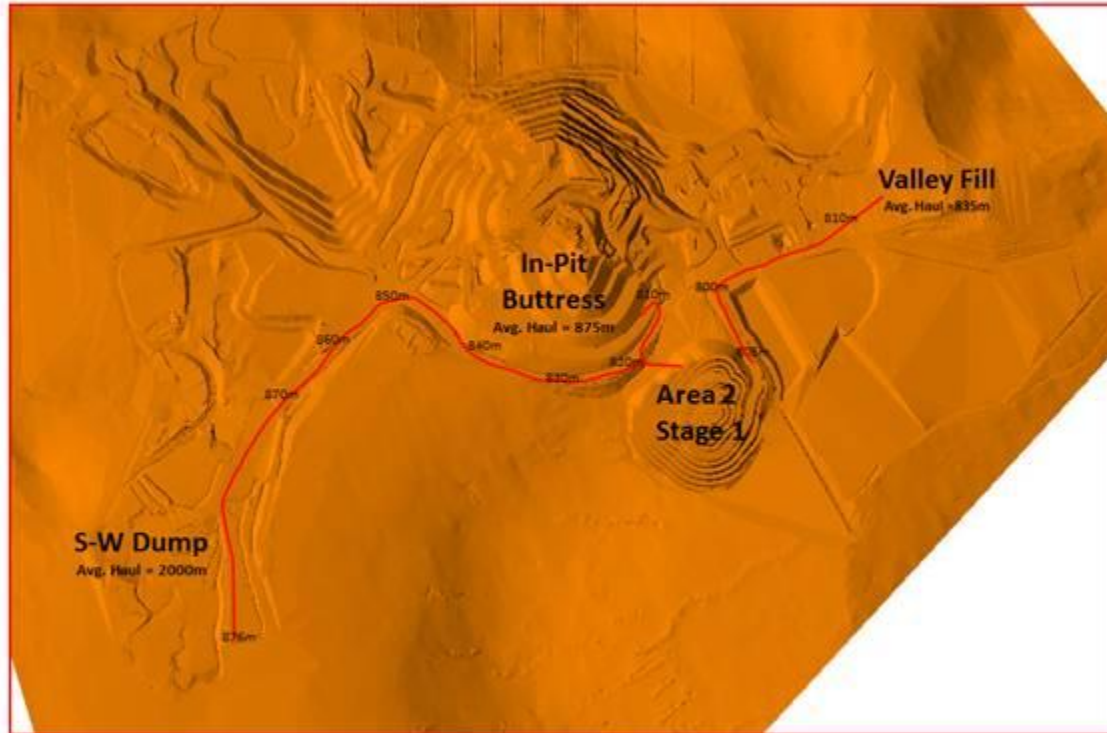


4.3. Underground Waste Rock Management

Waste rock from the initial mine access ramp will be hauled to surface and mixed with open pit waste on the currently planned waste dumps. The total tonnage of waste rock from the underground mine during the life of mine will be about 315 Kt and approximately 110 Kt of that is planned to be kept underground and deposited in mined-out stopes. Additional waste rock from surface will also be hauled underground for use as backfill, as about 434 Kt of backfill are anticipated to be required.

Currently, all underground waste rock scheduled to be disposed of on surface has been included in Grade Bin 0.10 – 0.64 material. A protocol for sampling and testing waste rock for potential acid generation and metal leaching (PAG) will be established: if the rock is confirmed to be PAG material, it will be initially disposed of in the Main Pit South Wall Buttress; if the rock is confirmed to be NPAG, it will be disposed of initially in the Mill Valley Fill Expansion. Based on preliminary tests for potential acid generation and metal leaching conducted on drill core samples taken from the area of the underground waste development, it is anticipated that underground waste rock will be NPAG.

Table 4-3: Waste Dump Locations planned for 180 day period and beyond



4.4. Waste Dumps Pertaining to Stage 1

The waste dumps that are planned for this Stage 1 application period (April 2011 through June 2011) are:

- Main Pit South Wall Buttress
- Mill Valley Fill Expansion
- Southwest Waste Dump Expansion Stage 1 (Overburden Area)

The design considerations for these dumps are summarised in the following sections.

Table 4-3: Waste Dump Volume Capacities planned for 180 day period

Seq.	Dump	BCM's	Elev (m) avg	Proportion	Notes
1	Valley Fill	1,200,000	757.5	28%	Clean Waste
2	In-Pit Buttress	1,500,400	810	34%	Clean, LG & HG Waste
3	S-W Dump	1,673,487	885	38%	Clean Waste & OB
	TOTAL	4,373,887		100%	

4.4.1. Main Pit South Wall Buttress

The construction of a new South wall buttress for the Main Pit is to stabilize the South wall of the pit that is currently in an unstable condition. Waste rock of Grade Bins 0.00 to 0.64% Cu generated from Area 2 Open Pit is to be used for construction of the south wall buttress. The waste management plan for this site is focused on short-term slope stability. Slope stability analyses were performed for cases of surface slope and deep-seated slope failures in a short-term (mine operation) period and long-term period (after closure) and in the design seismic event of an annual probability of 1 in 475 years (1/475).

The waste will be sub-aqueous at closure. Thus, metal leaching/transportation is not an issue. Surface water management for the south wall buttress is not required as the waste rock is confined by the pit. Surface water management will be addressed in Subsection 4.5 “Grade Bin 0.10 to 0.64 Disposal Area”.

The Main Pit South Wall Buttress will be covered by tailings and water at closure. The top portion of the wall buttress material (above the design pond water level Elevation 786.0 m) will be pushed into the pit at closure, if required.

A plan showing the Main Pit South Wall Buttress is included in Appendix B - MINTO MINESITE WMP WASTE DUMPS PLAN VIEW INCL. SW BUTTRESS as EBA drawing WMP-06.

4.4.2. Mill Valley Fill Expansion

The Mill Valley Fill (MVF) Expansion consists of two fills: an extension of the existing MVF (referred to as MVF Extension) and an expansion of the existing camp fill pad. The MVF Expansion will be constructed of Grade Bin 0.00 material to reduce the potential for transportation of metals. The design volume of the MVF Expansion is approximately 1.5 Mm³ based on the slope crest elevation of 770 m. The construction of the MVF Expansion is also intended to provide a toe berm to reduce the ground movement occurring in the adjacent Dry Stack Tailings Storage Facility area located to the south. The design of the expansion involves the construction of drainage systems, excavation and backfill of a toe key with waste rock, construction of water conveyance structures, placement of a drainage blanket and placement of general waste rock.

Drainage systems for the MVF Expansion will consist of a drainage blanket placed directly beneath the general rock fill to prevent the build-up of porewater pressures within the fill and to allow water to continue to flow down the Minto Creek valley. The drainage blanket will be 10 m thick and constructed using select waste rock with D₁₀ > 6 mm to allow free drainage. Although most of the waste rock is generally considered to be free draining and suitable for use as drain blanket material, this material should meet the specifications provided by EBA and will be approved by an engineer prior to placement on site.

The toe key will extend a minimum of 10 m below the existing ground or to bedrock, whichever is shallowest. The purpose of the toe key is to provide stability against deep seated failure by forcing a failure deeper into the foundation soils. The toe key will be backfilled with general rock fill.

Water conveyance structures will be constructed at the toe, which consist of a dyke with low permeable clay, an impacted water return line, and an inverted culvert collection point. The toe key will be used to collect water from the existing collect point W-8A.

Waste rock will be placed by the end dump method and nominally packed with the spreading equipment. The general fill will not meet the specifications for engineered fill; thus, only temporary structures can be constructed on the completed surface of the MVF Expansion.

The MVF Expansion will be graded to drain water from west to east. A grade of 5 percent should be maintained from the crest of the MVF Expansion to the crest of the existing Mill Valley Fill. This grade follows the grade of the existing access road.

At closure, any buildings on the MVF Expansion will be removed. All of the terrace slopes in the MVF Extension will be re-graded to 3H:1V.

Surface of the fill will be covered with overburden soil. The overburden will be vegetated with local vegetation to reduce the potential for erosion. The finished ground surface will be graded at 5% percent to allow surface water to drain to the east at closure.

The surface drainage system will be upgraded at closure. A west-east trunk drainage ditch will be installed to allow water flowing through the valley.

A plan of the Mill Valley Fill Expansion is included in Appendix B as EBA drawing WMP-08.

4.4.1. Southwest Waste Dump Expansion

The Southwest Waste Dump Expansion is located immediately to the west of the existing Southwest Waste Dump. The purpose of the Southwest Waste Dump (SWD) Expansion is to provide additional storage area for overburden and waste rock mined from the Area 2 and Area 118 Open Pits.

The SWD Expansion consists of two stages:

- Stage 1 includes an overburden area near the existing Reclamation Overburden Dump and a waste rock area to the east.
- Stage 2 consists of a waste rock area on the south side of Stage 1 and west of the existing waste placement.

The overburden placed in the SWD Expansion Overburden Area will be non ice-rich overburden. Ice-rich overburden will be disposed of in the Ice-Rich Overburden Dump.

Surface water management will include drainage structures for the overburden area. Surface ditches or swales will be constructed to promote positive drainage of precipitation and run-on water off the SWD Expansion. A grade of 2% for the dump surface will be maintained to allow surface water to drain to the east during the operational life of the mine.

Prior to closure, it is expected that some of the overburden material will be transported to the other waste disposal areas for use as surface cover material (growth media). Therefore, the final geometry of the overburden dump area will be subject to change.

At closure, all of the terrace slopes in the SWD Expansion will be re-graded to 2H:1V. The overburden will be vegetated with local vegetation to reduce the potential for erosion. The dump surface will be graded to 2% to allow surface water to drain to the east at closure.

The drainage ditches may be kept in place or re-routed pending actual surface conditions at closure.

4.5. General Site Preparation and Monitoring

It is expected that all of waste materials will be trucked into the dump sites and unloaded by using the end dump method. Bulldozers may be utilized to spread out the materials for a rough grading purpose. The dump sites are to be built up in lifts. The thickness of each lift is approximately 10 m. Rough grading is required for each lift in order to facilitate surface runoffs and traffic during construction. A diversion ditch will be created if a natural drainage path is intercepted by the dump sites.

The current site monitoring program includes both slope stability and water quality monitoring. The slope stability monitoring is focused on the south wall of the Main Pit, Dry Stack Tailings Storage Facility and Southwest Waste Dump. The water quality monitoring is performed through water sampling points. The current monitoring program is expected to continue through the operational life of the mine.

Additional visual monitoring of stability of the side slopes on all dump sites should be incorporated in the above mentioned monitoring program, and should be performed on a regular basis. Maintenance or termination of the monitoring program in post-closure will be decided at the closure stage.

5. TAILINGS

A Preliminary Tailings Management Plan for Phase IV was prepared by EBA Engineering Consultants Ltd. and was previously submitted as part of the Phase IV Expansion Application.

6. HEALTH, SAFETY AND EMERGENCY PLANNING

As an operational mine, MintoEx has comprehensive health and safety and emergency response plans in place. These have been revisited and revised as required to address any additional expected risks associated with Phase IV – primarily the move to include underground mining activities.

These protocols and plans are presented in the Emergency Response Plan: see attached documentation, Minto Mine ERP (Emergency Response Plan).