

NANISIVIK MINE

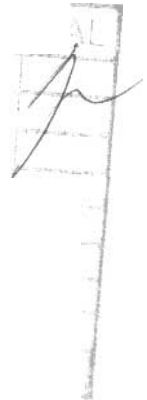
A Division of CanZinco Ltd.

WASTE ROCK DISPOSAL PLAN

FOR 2002

TECHNICAL SERVICES

February 2002



NANISIVIK MINE

WASTE ROCK DISPOSAL PLAN-2002

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1.0 SUMMARY

The waste rock stockpiles generated from the mining activities at Nanisivik will be relocated to meet the requirements of the reclamation plan.

The 2002 mining plan considers that 61,659 m³ will be reintroduced within areas that will reduce the environmental impact of the sulphide enriched waste material.

The present plan includes all waste disposal activities that have been planned in conjunction with the mining activities. The mining activities are planned to cease at the end of September 2002. Thereafter, the closure and reclamation plan governs the waste disposal.

2.0 INTRODUCTION

The waste rock stockpiles on surface that must be relocated at the Nanisivik Mine are in three areas and represent a total of 103,651 m³ of material.

The recovery program for the year 2002 will include recovery from the West Adit and East Adit locations. Most of the recovered waste rock from the East Adit will be placed underground as backfill in support of mining activities.

Waste generated by the mining activities within the mine will be used internally and not stored outside. The Ocean View waste overburden and pit waste rock excavated during mining will be kept on surface to be used to backfill the open pit area once mining is completed.

3.0 WASTE ROCK STOCKPILES

At Nanisivik Mine, there are three main sulphide waste rock stockpiles, including the West Adit area (09 South and 02 South) and the East Adit area (39 South). Remnant waste piles are also located at Area 14, K-Baseline site and the Ocean View site. These areas are remote from the main mine area.

The volume of sulphide bearing waste rock in the stockpile is indicated in Table 1. The stockpile locations on the property are shown in Figure 1. The volumes of the individual stockpiles were readjusted based on updated survey data.

SURFACE WASTE ROCK INVENTORY

TABLE 1

DESCRIPTION	VOLUME (m3)
WEST ADIT AREA	15,900
09 SOUTH	24,861
EAST ADIT AREA	62,890
AREA 14	Remnants
K-BASELINE	Remnants
OCEAN VIEW	Remnants
TOTAL	103,651

3.1 WEST ADIT AREA

The West Adit area stockpiles contain approximately 40,761 m³ of waste or 35% of the total sulphide bearing waste rock on the Nanisivik property.

The West Adit stockpile is made up of two areas, the 02S and the 09S. The West Adit area is shown in Figure 2.

3.2 EAST ADIT AREA

The East Adit area represents a volume of 62,890 m³ or 55% of the total waste rock to be recovered on the mine site. Waste rock was deposited in this stockpile until 1991.

Disposal of the waste rock will be done in the East Lower Lens Blocks 80 to 85, East Open Pit, East Open Pit Trench and Block 39 of the Main Ore Zone. The remaining waste not used for underground mining activities at the East Adit will be dumped into the East Open Pit and the surface contoured and covered. The East Adit area is shown in Figure 3.

3.3 AREA 14

In 1988, a stockpile of sulphide bearing waste rock was placed in Area 14 in order to study the effectiveness of shale rock covering as a means of maintaining a state of permafrost in the underlying waste rock. The results so far have been encouraging.

It is anticipated that the Area 14 stockpile will remain in place as it is already covered with shale and contoured

4.0 DISPOSAL PLAN FOR 2001

The waste rock disposal plan for 2001 called for 12,192m³ recovered from the East Adit area and 3,731 m³ from the West Adit area. The actual recovery from the waste stockpiles during 2001 is shown in Table 2 that follows.

WASTE ROCK RECOVERY - 2001

TABLE 2

HAULED FROM	HAULED TO	TONNAGE	VOLUME(m3)
09S	U/G	9,700	3,731 0 0
SUB-TOTAL		9,700	3,731
39S	U/G	31,700	12,192 0
SUB-TOTAL		31,700	12,192
TOTAL		41,400	15,923

5.0 DISPOSAL PLAN FOR THE FUTURE

The Ocean View and the K-Baseline satellite zones are remote from the main mine area and have not been incorporated in the 2002 waste disposal plan.

The waste rock disposal plan for the future is indicated in Table 3 that follows.

WASTE ROCK DISPOSAL SCHEDULE

TABLE 3

YEAR	2002	2003	2004	TOTAL
EAST ADIT	36,798	26,092		62,890
WEST ADIT	24,861	15,900		40,761
TOTAL	61,659	41,992	0	103,651

(Units=m³)

The post September 2002 Waste Disposal Schedule will be addressed in the final reclamation plan. The completion of the mining activities is slated for the end of September 2002.

6.0 MONITORING OF PROGRESSIVE RECLAMATION

The monitoring of the reclamation areas is accomplished in two ways, by sampling the water drainage via sample points strategically located in line with the Surveillance Network Program, and by geotechnical monitoring with thermocouple installations to confirm the aggradation of permafrost into the waste rock.

6.1 WATER QUALITY MONITORING

As noted above, water sampling stations are established at each of the waste rock storage areas. These are listed below for each area and the locations are indicated on Figure 1.

LOCATION**SAMPLE STA.**

West Adit

S.N.P. 159-10

09S Portal

S.N.P. 159-9

East Adit

S.N.P. 159-12 & 12A

Area 14

S.N.P. 159-15 & 16

The water sampling is carried out from these points following schedule 1 established in the "Surveillance Network Program" outlined in the water licence NWB1NAN9702 dated July, 1997.

In addition, water sampling is done at the following metal loading study stations:

TABLE 4: Metal Loading Study Stations

STATION ID	LOCATION
159-6	10 m, upstream of high water mark @ Strathcona Sound
200-1	West of Mill, upstream of culvert
200-2	South of Mill @ dump pond
200-10	Feeder creek from town site
159-10	50 m upstream of 200-2, entrance to canyon below mill
200-3	50 m upstream from 159-10 near sulphide outcrops
159-11	Below 02 South Portal and West Open Pit
200-4	50 m from 200-3, below 02 South waste rock dump
200-5	50 m upstream of 200-4, between 02 & 09 waste rock dumps
200-6	50 m upstream of 200-5, below 09 South Portal and waste dump
200-7	Upstream of 200-6 (~50 m), & 09 South waste rock dump & Portal
200-8	50 m upstream of 200-7, & top of waterfall at exit of canyon
200-9	50 meters upstream from 200-8
159-9	50 m upstream of 200-9, across road

6.2 GEOTECHNICAL MONITORING

Presently, monitoring of the thermocouples is done on a monthly basis at the Area 14 and East Adit waste dumps. Additional thermocouple strings will be installed into remnant waste piles when the abandonment cover and armouring material is graded into place.

In the waste stockpile areas, some minor waste material may remain as unrecoverable due to extreme variations in the terrain. When the recovery operations cease, the areas will be covered and graded with local shale materials and armouring quartzite. Based on acid rock drainage (ARD) characteristics, some areas may be deemed net neutralizer and therefore not a risk to the environment

The confirmation of permafrost aggradation will also serve to confirm the isolation of the waste rock by the increased elevation of the active layer. As the isolation of waste rock is

complete any metal loading from the waste rock will cease and will be reflected in the water sampling results.

7.0 OCEAN VIEW PROJECT

Limited mining activity is planned in the pit. Any waste generated from the mining activity will be stockpiled within the boundaries of the pit to ensure that melt water containing elevated metal concentrations emanating from the waste are contained within the designated sump. No underground activity is planned at Ocean View. Once all mining activities have ceased, the overburden waste material and the waste rock from the pit will be used to fill up the pit. The backfilled material will then be covered with appropriate material.

8.0 CONCLUSION

The Waste Rock Disposal Plan for the Nanisivik Mine will be an important part of the remainder of the mine life activities.

This plan covers the period from January to September of 2002, where after, the reclamation plan will be governing the waste disposal.

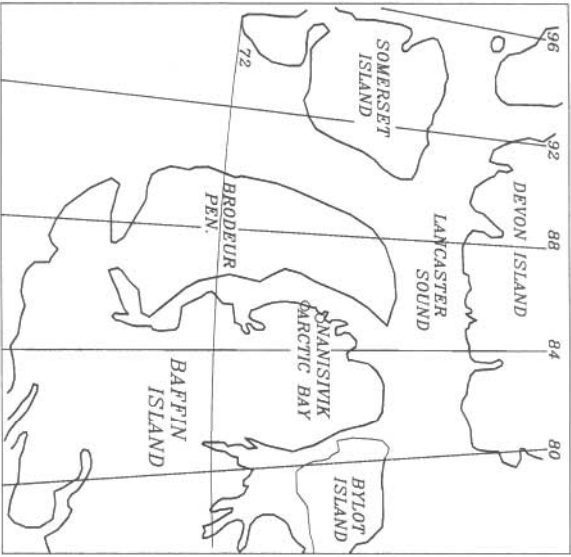
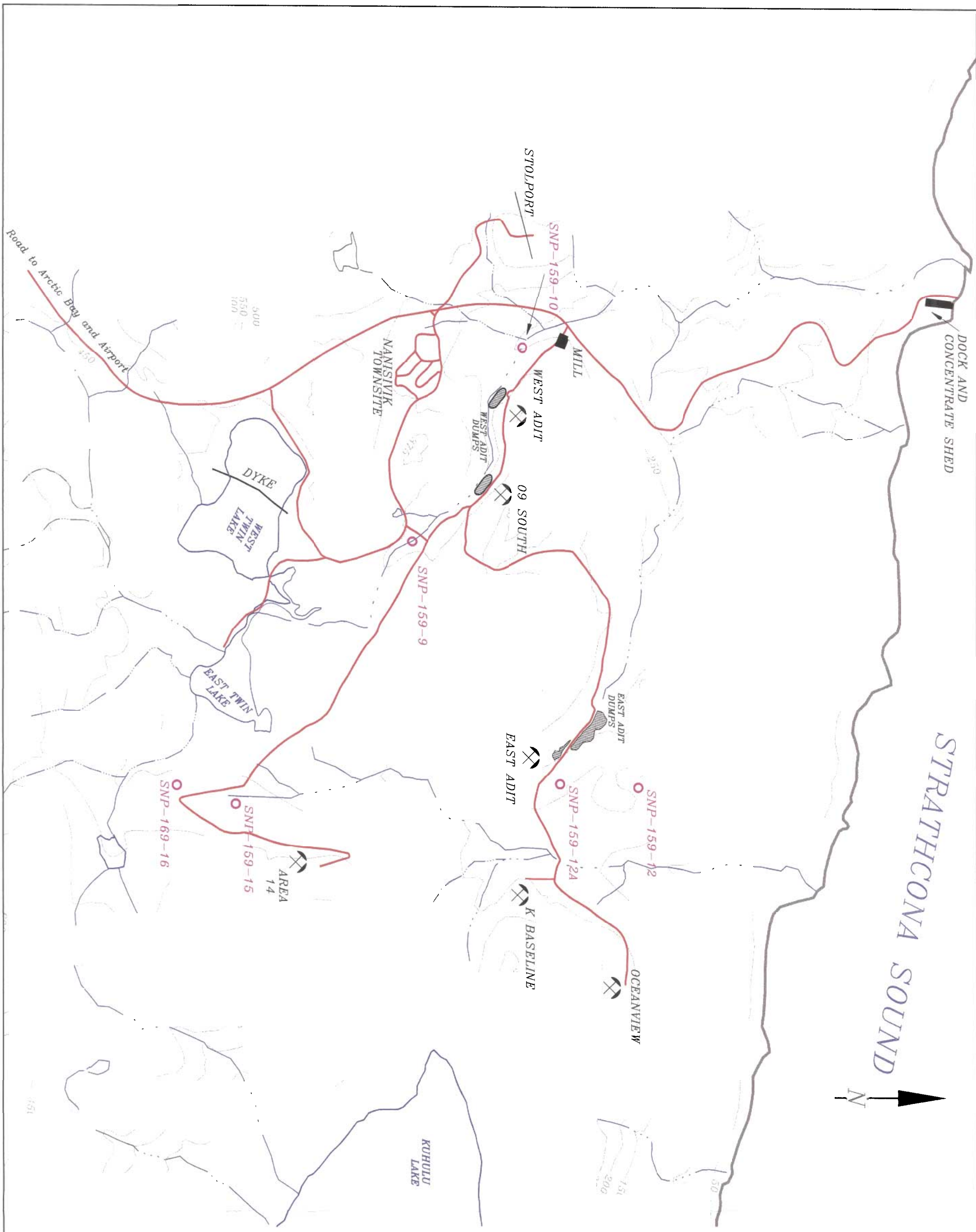
The total waste rock in these surface stockpiles adds up to approximately 103,651 m³.

The surface sulphide rock to be recovered in 2002 will total 61,569 m³ from the West Adit and East Adit areas.

The bulk of the remaining waste will be used to reclaim the East Pit Area and the West Pit Areas.

Backfilling of the Ocean View Pit is planned for the year 2002.

Some minor amounts of waste rock may not be recoverable due to variations in terrain. Also some areas may be deemed a net neutralizer based on the ARD characteristics. When the recovery operations are completed, the areas will be covered.



LEGEND

- Surface Opening To Sulphide Deposits
- Stream Drainage
- Topographic Contour
- Roads
- Water Sampling Stations

NANISIVIK PROJECT
GENERAL LOCATION PLAN
FIGURE 1

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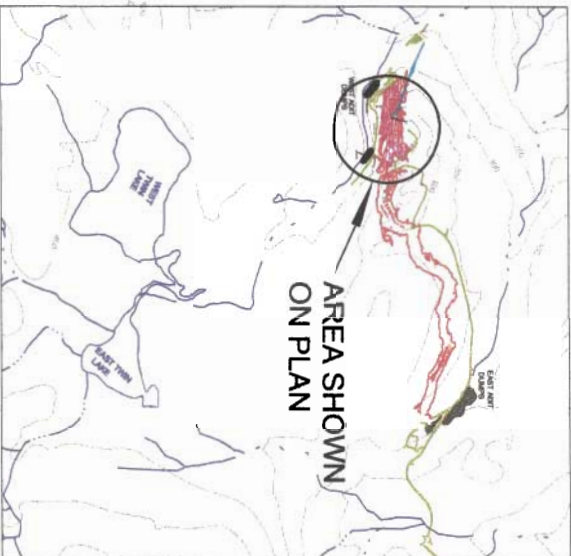
ORE PASS

SURFACE ACCESS ROAD

WEST ADIT 02 SOUTH
SURFACE WASTE DUMP

09 SOUTH
PORTAL TO THE
UNDERGROUND WORKINGS

WEST ADIT 09 SOUTH
SURFACE WASTE DUMP



LEGEND

Underground Workings - Main Ore Zone

Underground Workings - Lower Adg

Surface Road

Haulage Route of Waste Disposal Trucks

Surface Waste Dump

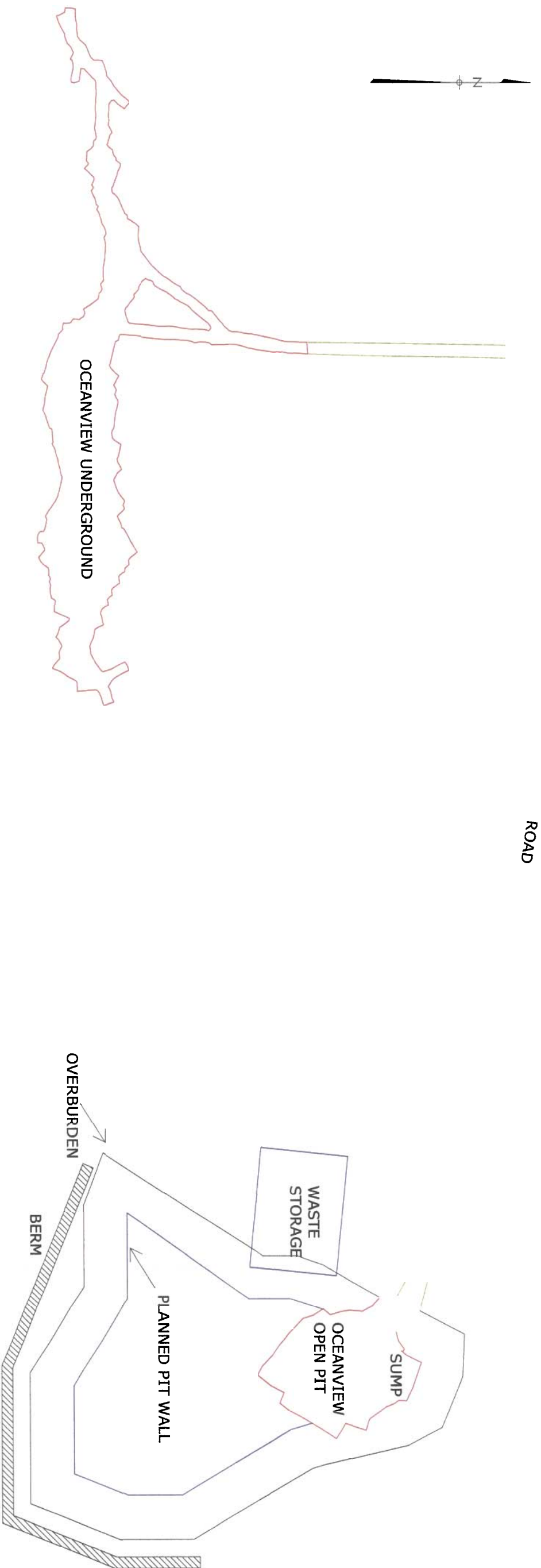
Stream Drainage

NANISIVIK PROJECT
2001 WEST ADIT ROCK RECOVERY PLAN
FIGURE 2

NANISIVIK MINE
A Division of Can zinc Ltd.
NANISIVIK, NT

SCALE 1 : 3000
DATE Feb 16/2002

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Designed by DTW		Checked by		Approved by - date		Filename Figure 4		Date Feb16, 2002		Scale 1:2000	
Owner NANISIVIK MINE <i>A Division of CanZimco Ltd.</i> <i>NANISIVIK, NT</i>				Title/Name FIGURE 4: OCEAN VIEW							
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