Table 2-7: General Dimensions and Storage Capacities of the Stockpiles

Site	Area (ha)	Approx. Crest Elev. (m)	max Height (m)	Capacity (Mt)	Capacity (Mcm)
Kimberlite Ore Stockpile	2	530	5	0.05	0.03
Coarse PK Stockpile & Recovery Circuit Rejects – Area 1 (south side of PKCA)	4.0	539	23	0.77	0.48
Coarse PK Stockpile – Area 2 (upstream of E and SE dams)	0.9	523	8	0.03	0.02
Coarse PK Stockpile – Area 3 (west of camp facilities)	4.0	539	19	0.50	0.31
Coarse PK Stockpile – Area 4 (south of East Sump)	8.4	539	24	1.81	1.13
Total Available Capacity (excluding live storage at the ore stockpile)				3.10	1.94

Notes:
1. The capacity stated for the kimberlite ore stockpile is based on several blending piles and incorporates less than one month of plant feed at full capacity
2. The recovery circuit rejects stockpile will be developed in stages within Area 1, according to the actual rate of production.

2.4.3.2 Kimberlite Ore Stockpile

The kimberlite ore stockpile will be a relatively small, "live" stockpile. The stockpile area will be sloped so that any drainage from the area will either flow to the East Sump for transfer to the PKCA or recycle to the process plant.

2.4.3.3 Coarse PK Stockpiles

Typical sections through the coarse PK stockpiles are provided in Figure 2-12 [SRK Drawing WRMP-P2-2]. The overall slopes at these stockpiles will be about 2.6H:1V (21 degrees), though they will be made up of benches. The slope angles between benches are expected to about 1.4H:1V (35 degrees).
The thickness of each lift in the stockpile is expected to be approximately 5 m, but depending on the projected height of the structure and the number of benches, the lift thickness may be modified in order to develop relatively uniform bench heights. The overall coarse PK stockpile areas will have nominal excess capacity at the final elevations indicated in Table 2-6.

2.4.3.4 Recovery Circuit Rejects Stockpile

Recovery circuit rejects are piled at the north abutment of the East Dam where drainage is to the PKCA. The stockpile is relatively small and may be reprocessed prior to mine closure.

2.5 Pads and Mine All Weather Access Roads

2.5.1 Main Haul Road

The information in this section is taken from the Jericho Diamond Mine Notice of Intention to Commence Work, Version 2 (Mine Plan, Tahera 2005).

The haul roads and ramps are for two lane traffic to accommodate Cat 777D trucks. From the maintenance shop to the open pit the roads are 24 m wide. Pit ramps are wider to accommodate crest blast over-break, ditches and shoulder barriers ¾ the height of the Cat 777 tire (Ø is 2.63m). The surface roads are constructed of run-of-mine granite waste and capped with a mixture of esker and -2" or -3/4" crush to minimize tire wear and improve operator

comfort. The height of the roads is about 2m and incorporate a 5H:1V side slope for those that have a height greater than 3m. The side slopes provide ease of maintenance and emergency run-out capability.

2.5.2 Other Access Roads

All other roads are constructed in a manner similar to the main haul road but with a running surface of 10 to 18 m.

2.5.3 Facilities Pads and Laydowns

Facilities pads are composed of crushed rock of variable thickness to provide a level surface for placement or construction of buildings. The average pad thickness is approximately 2 m principally to insulate the tundra and prevent permafrost melt. The diamond processing plant DMS and other heavy plant equipment are exceptions, being founded directly on bedrock. Drawing 1, Appendix A shows the general mine layout and location of pads.

The following pads were constructed:

- accommodations complex, truck shop, crusher
- emulsion plant
- ammonium nitrate storage
- explosives magazines
- laydown area opposite the waste transfer area
- laydown area at the south end of the airstrip

The list excludes lined and bermed pads for fuel and hazardous materials containment which are discussed in Section 2.7.

2.6 Sediment Ponds and Ditches

Sediment ponds and ditches are discussed in the Jericho Water Management Plan (Tahera 2005).

2.6.1 Pit Pond

Sumps will be constructed within the open pit to keep the working area of the pit dewatered and to allow pumping of runoff inflows from the pit to the East Sump for possible reclaim use or onward to the PKCA. The location and size of the pit sump(s) will vary as the pit is developed. During the construction period all the pit water was pumped to the East Sump for containment and construction use. The construction period is expected to be the highest water inflow period of the mine life as water and ice saturated tills covering the kimberlite are exposed. By the end of the first year of operations, these tills were to be substantially removed and placed in the till dump (centre of Waste Dump Site 2).

2.6.2 East Sump

The East Sump is a natural surface depression located in the area of the plant site, fuel farm and ore stockpiles. During the construction phase it was determined that this natural topographic feature was well suited for the purposes of area drainage for the plant and ore stock pile areas, and as an interim storage and transfer point for the pit discharge water. During

operations excess water from this sump is to be either pumped to the PKCA, or used for plant reclaim, or for construction, and road maintenance.

Facilities listed below are staged contingency structures that would be constructed during operations if and as required to maintain adequate control of site water quantity and quality.

- Pond A - to collect runoff and potential seepage from Waste Dump Site 1.
- Pond B - to collect runoff and potential seepage from Waste Dump Site 2 that is not
- directed to the pit.
- Pond C – to collect runoff and potential seepage from the Ore and Coarse Rejects piles if required.

To date, ditches have not been required at the Jericho site; water is trained by roads and culverts where necessary. Other than the culverted C1 diversion where it passes beneath the freshwater intake access road, the only culverts are located on the airport access road to pass small, mostly intermittent streams. Culvert locations are shown on Drawing 1, Appendix A.

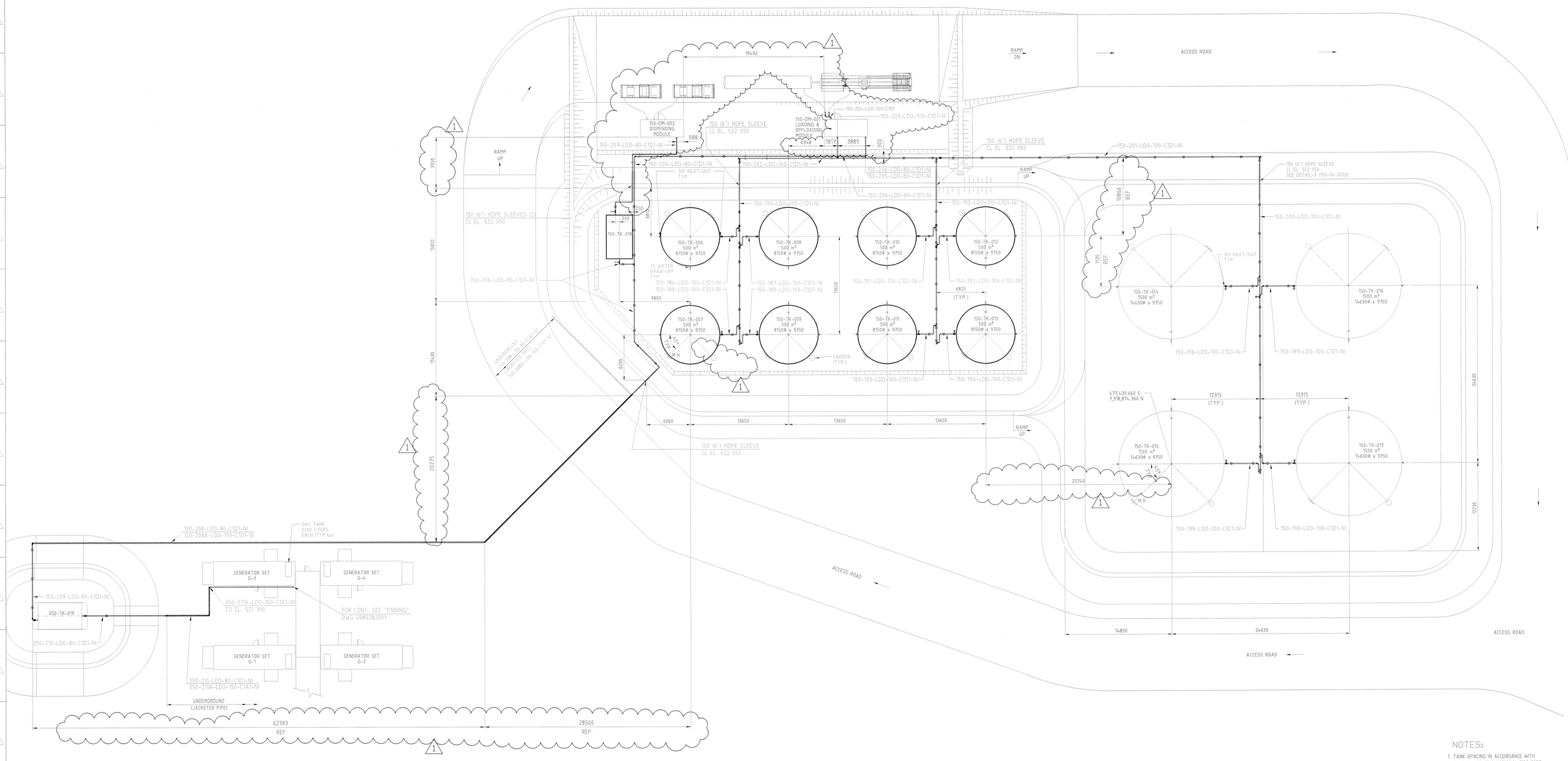
2.7 Fuel and Hazardous Materials Berms

Fuel and hazardous materials berms include:

- main fuel farm
- main generator day tank
- hazardous materials transfer area
- airstrip Jet A tanks

The layout of the Fuel Farm is shown in Figure 2-15. Berms are all constructed in a manner similar to the main fuel farm. The information in this section is taken from the Fuel Farm Design Plan (Tahera 2005). Figure 2-16 and 2-17 [EBA Figures 2 and 4] show a plan of the accommodation complex area including the fuel farm and a cross section of the fuel farm berm. The pad at the main fuel farm is a minimum of 3.5 m thick to preserve permafrost.

SHEET NO.
150-04-0001
DWG NO.



NOTES:

1. TANK SPACING IN ACCORDANCE WITH NFPA 30 AND THE NATIONAL FIRE CODE
2. READ THIS DRAWING WITH PIPING ISOMETRICS

LEGEND

- SINGLE PIPE SUPPORT
- DOUBLE PIPE SUPPORT

PERMIT TO PRACTICE
HATCH LTD.
Signature
Date February 1, 2005
PERMIT NUMBER: P 512
The Association of Professional Engineers, Geologists and Geophysicists of the NWT / NU

J.P. PARADIS LICENSEE L1541 NWT/NU
01/01/2005

PERMIT TO PRACTICE
HATCH LTD.
ORIGINAL SIGNED BY
BERNARD BRUMAN
01/19/05
PERMIT NUMBER: P512
The Association of Professional Engineers, Geologists and Geophysicists of the NWT/NU

STAMP
NWT/NU
ORIGINAL SIGNED BY
J.C. PARADIS
P. Eng.
L1541
01/19/05

NO.	DESCRIPTION	AUTH. BY	DATE
1	REVISED AS NOTED	JCP	01/19/05

REVISIONS

REV.	ISSUE FOR	AUTH. BY	DATE
1	CONSTRUCTION CG-501	JCP DL	01/19/05
0	CONSTRUCTION CG-501	JCP DL	01/19/05

ISSUE AUTHORIZATION

HATCH

DESIGNED BY K.LEMCELLI DATE:12.12.24	DRAWN BY B.KRICKOVIC DATE:16.12.24
CHECKED BY H.RUPNIK DATE:01.19.05	DISCIPLINE ENG. J.-C. PARADIS DATE:01.19.05
PROJ. DES/COORD. J.-C. PARADIS DATE:01.19.05	PROJECT ENG. M. CAMPANELLI DATE:01.19.05
PROJECT MGR. D. LAM DATE:01.19.05	

TAHERA DIAMOND CORPORATION

PROJECT TITLE
JERICHO DIAMOND PROJECT

DIESEL FUEL FARM
PIPING LAYOUT
PLAN

HA PROJECT NO. 316996 FIGURE 2-15

SCALE	DWG NO.	SHEET NO.	REV.
1:200	150-04-0001		1

150-09-0001 DIESEL FUEL FARM - CONTAINMENT BASSIN - LAYOUT
DRAWING NO. DRAWING TITLE

REFERENCE DRAWINGS

INCH MILLIMETRE

01/27/2005 11:02:48 AM P:\Tahera\316996\CAD\PLAN\150-04-0001.dgn PARADISJ

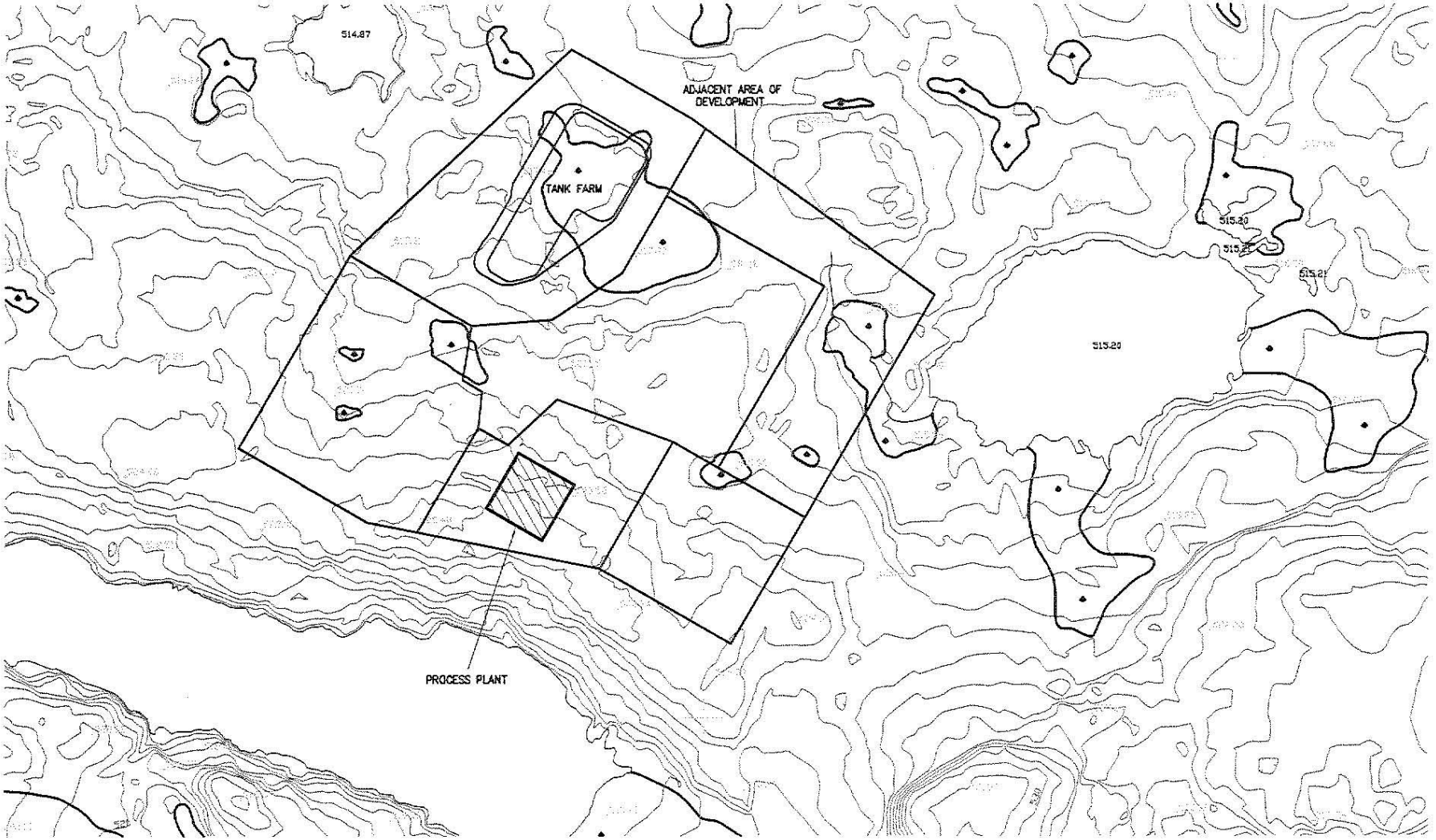
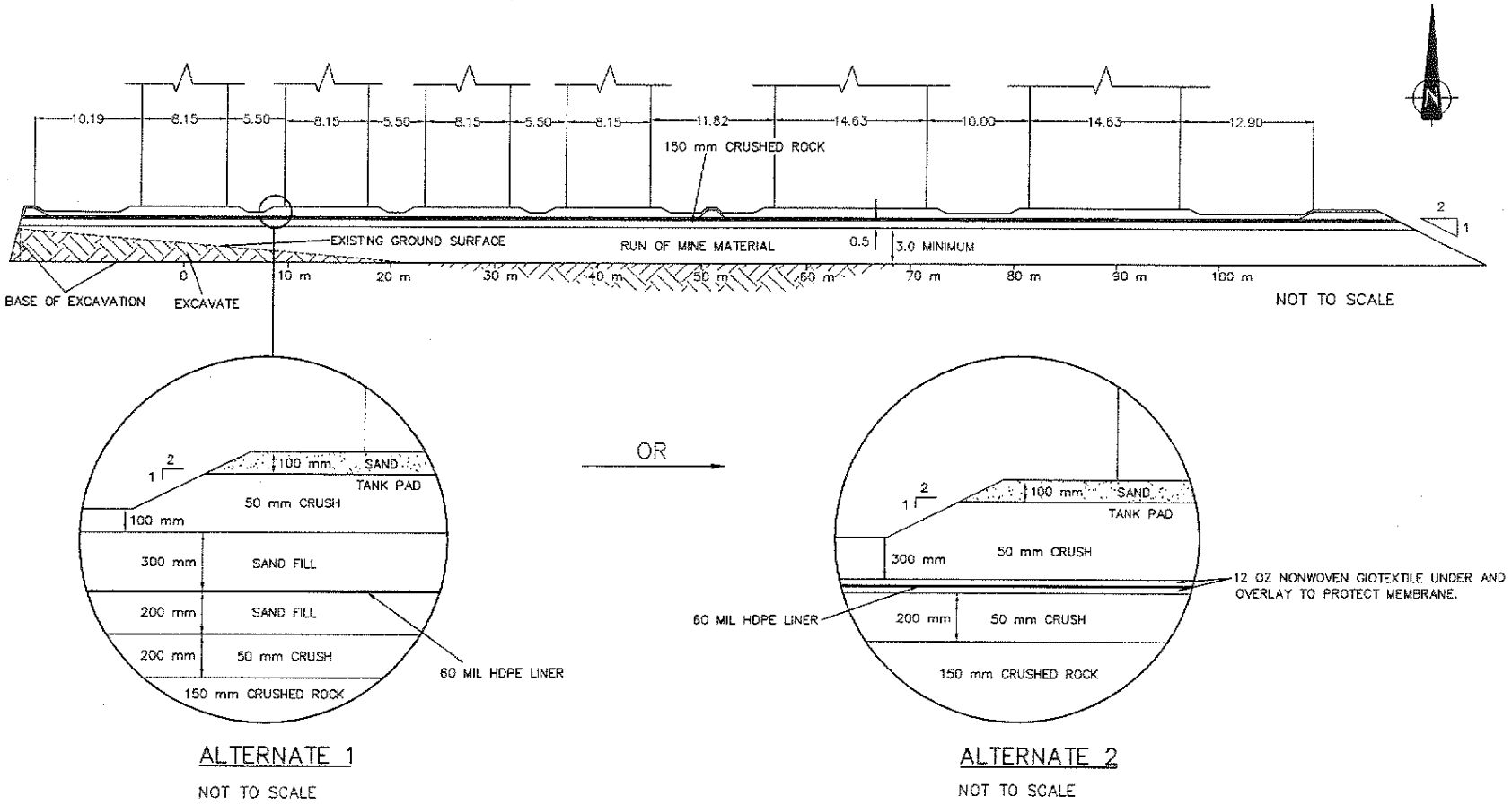


Figure 2-16

Proposed Tank Farm Location



ALTERNATE 1

NOT TO SCALE

ALTERNATE 2

NOT TO SCALE

FIGURE 2-17
Proposed Fill Configuration
Tank Farm Liner Design
1100060002K01A.dwg

2.8 Borrow Pits

The Jericho Mine Plan includes three esker borrow areas. Partial development had occurred at Borrow A as of 31 December 2006 (See Appendix A, Drawing 1). Design and operation information in this section is taken from Tahera Borrow Management Plan (Tahera 2005d)

2.8.1 Exploitable Esker Area

Areas of the proposed borrow sites are as follows:

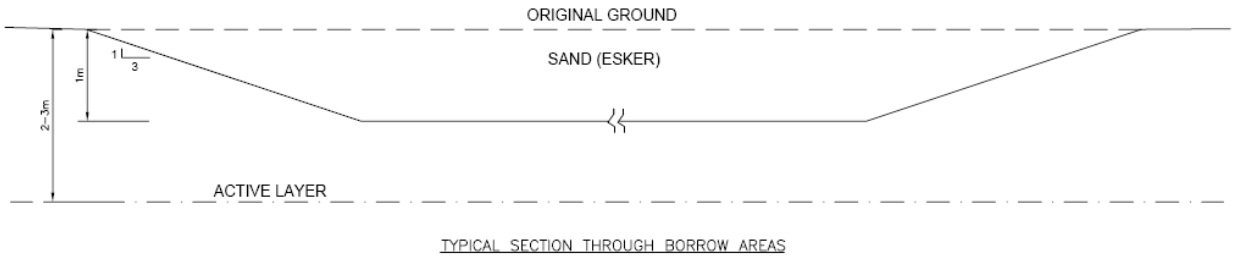
- Area A 95,320 m^2
- Area C 89,960 m^2
- Area D 155,400 m^2
- Total 340,680 m^2

Area C constitutes the airstrip and immediately adjacent areas on the west and east sides and will not be used unless other borrow sources are exhausted.

The mine manager discusses needs for esker borrow with the mining contractor prior to extraction and sets out the sequence of removal of aggregate material. The mine manager or designate supervises esker removal. Payment of a royalty is required for esker use and thus the volume of esker removed is recorded. Records are kept by the mine manager available for government inspection and reported annually.

To ensure aggregate is removed from designated areas only, the sites are staked out prior to removal of aggregate. No esker material was or will be removed closer than 30 m from a permanent water body. Vegetative layers and organic soil on the borrow surface will be removed, if of sufficient volume to practically handle, and stockpiled near the borrow site for revegetation on closure of the site. To date (end of 2006) insufficient organic soil was removed from the esker area exploited to be practical to stockpile. A front-end loader is used to scrap up the aggregate in bucket-width rows across the area being exploited and esker is transported via a D300 mine truck to the required. The eventual profile of borrow areas will resemble that shown in Figure 2-18.

Figure 2-18: Borrow Pit Cross Section



Source: Tahera. 2005. Borrow Management Plan