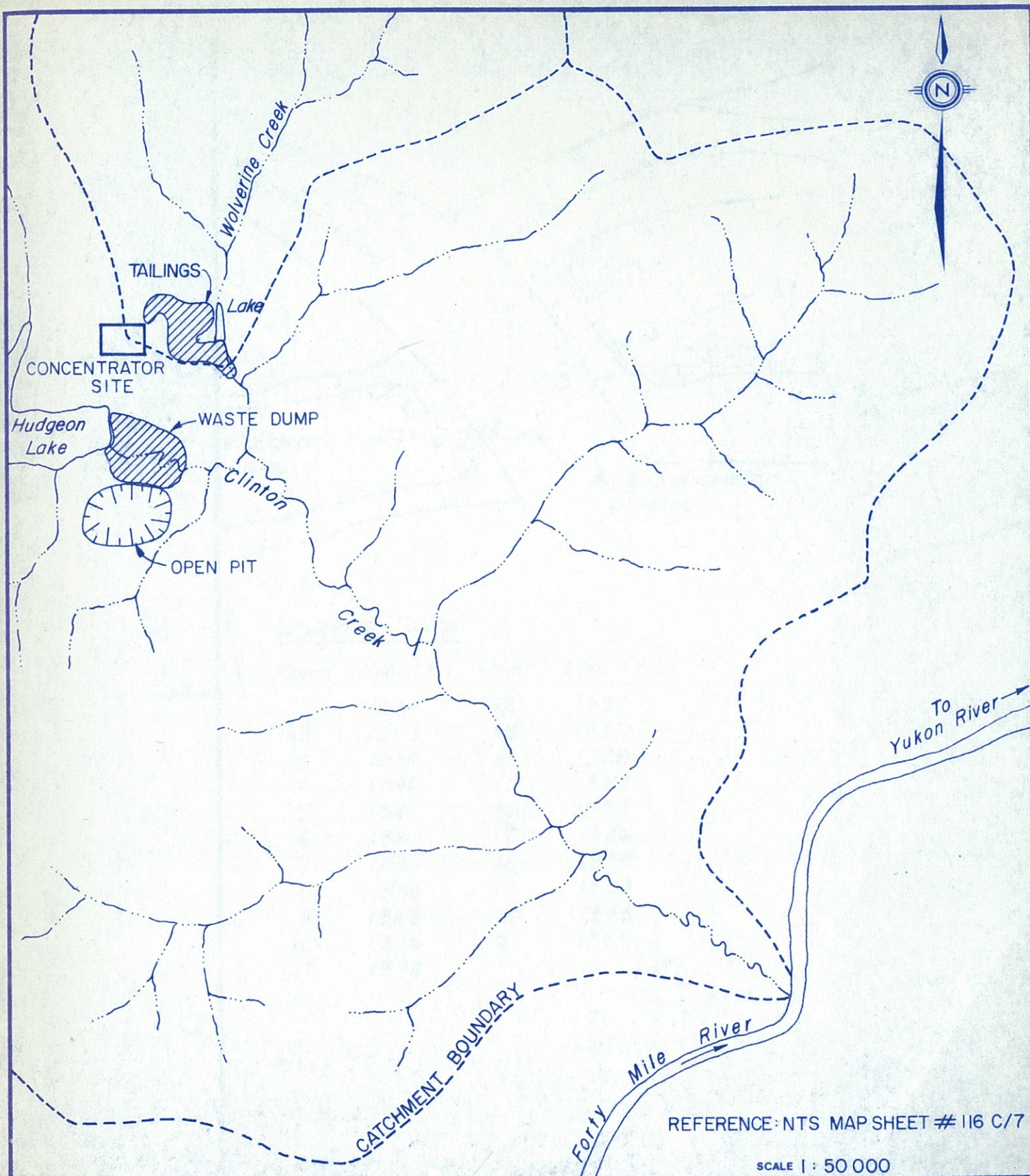


DRAWINGS

A-1012	-	SITE LOCATION PLAN
D-1006B	-	WASTE DUMP PLAN AND PROFILE ALONG CLINTON CREEK
D-1002A	-	PLAN AND SECTIONS OF CHANNEL RIPRAP PROTECTION
D-1004C	-	PLAN OF TAILINGS PILES
D-1005A	-	SECTIONS THROUGH TAILINGS PILES



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CONSULTING ENGINEERS

CLIENT:

BRINCO MINING LIMITED
CASSIAR DIVISION

PROJECT

CLINTON CREEK ASBESTOS MINE

TITLE

LOCATION PLAN

DATE OF ISSUE

SEPT. 12, 1986

APPROVED

Signature

PROJECT No.

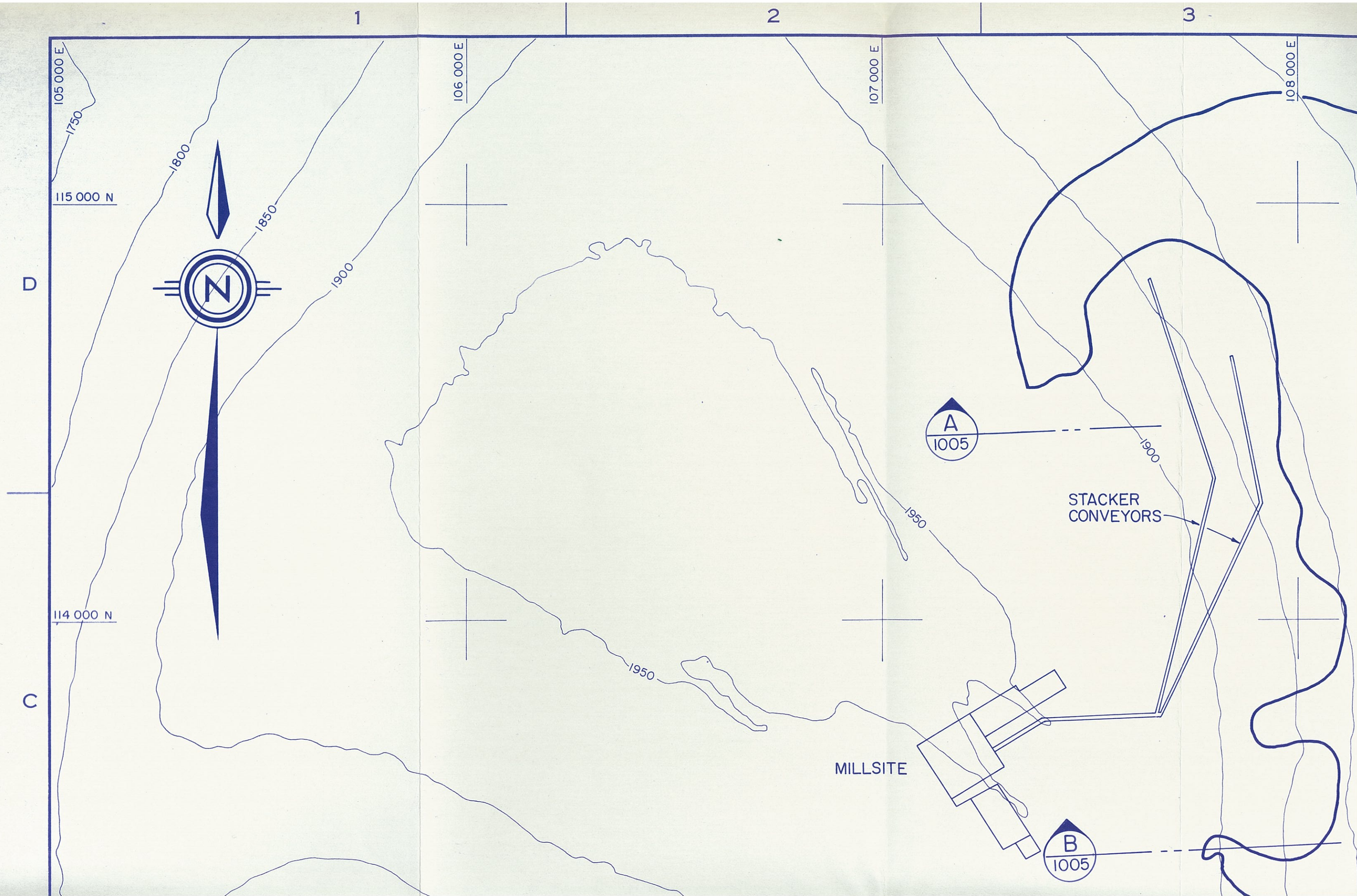
PB3169-03

DWG. No.

A-1012

REV.

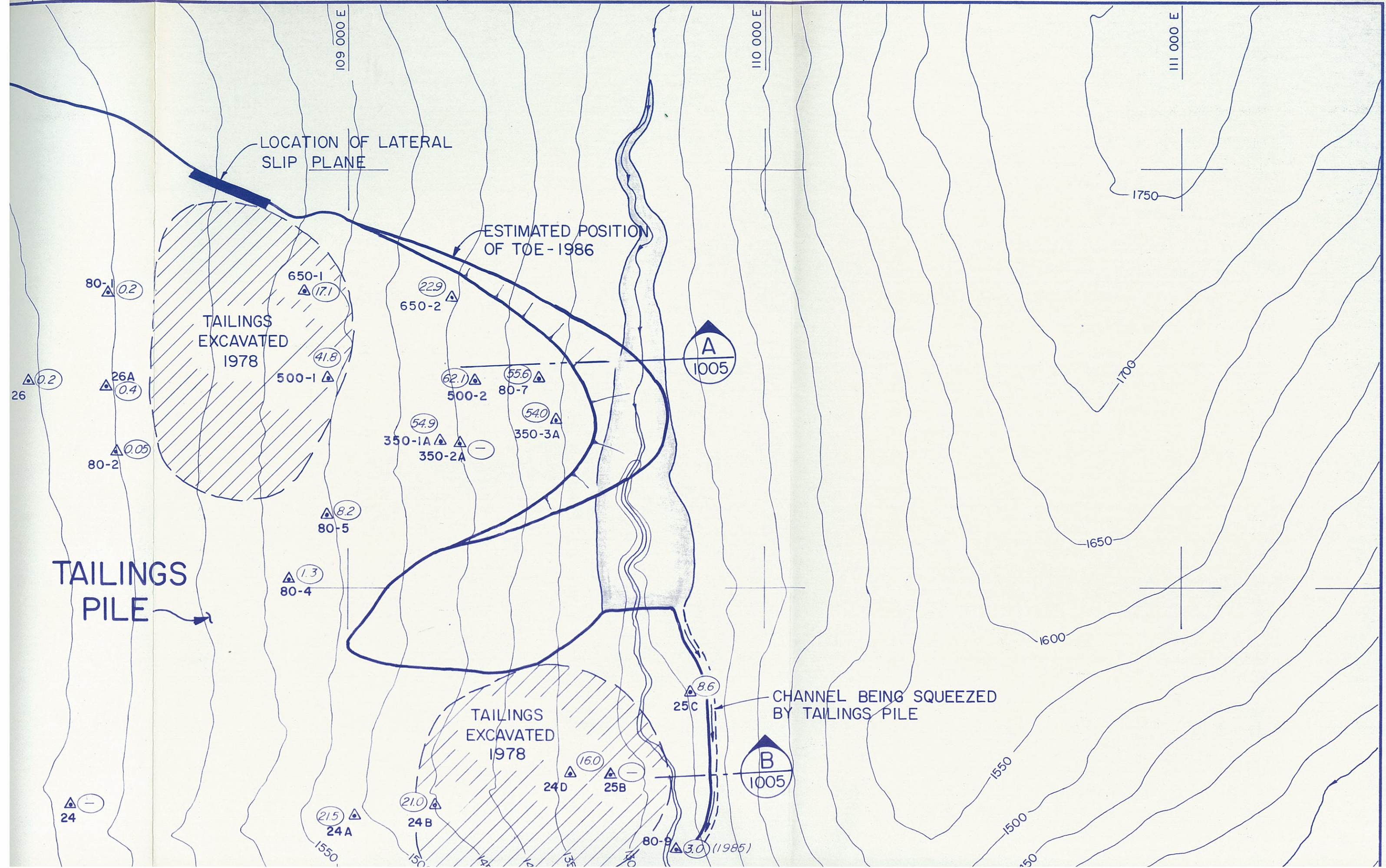
NOT 455-K



4

5

6



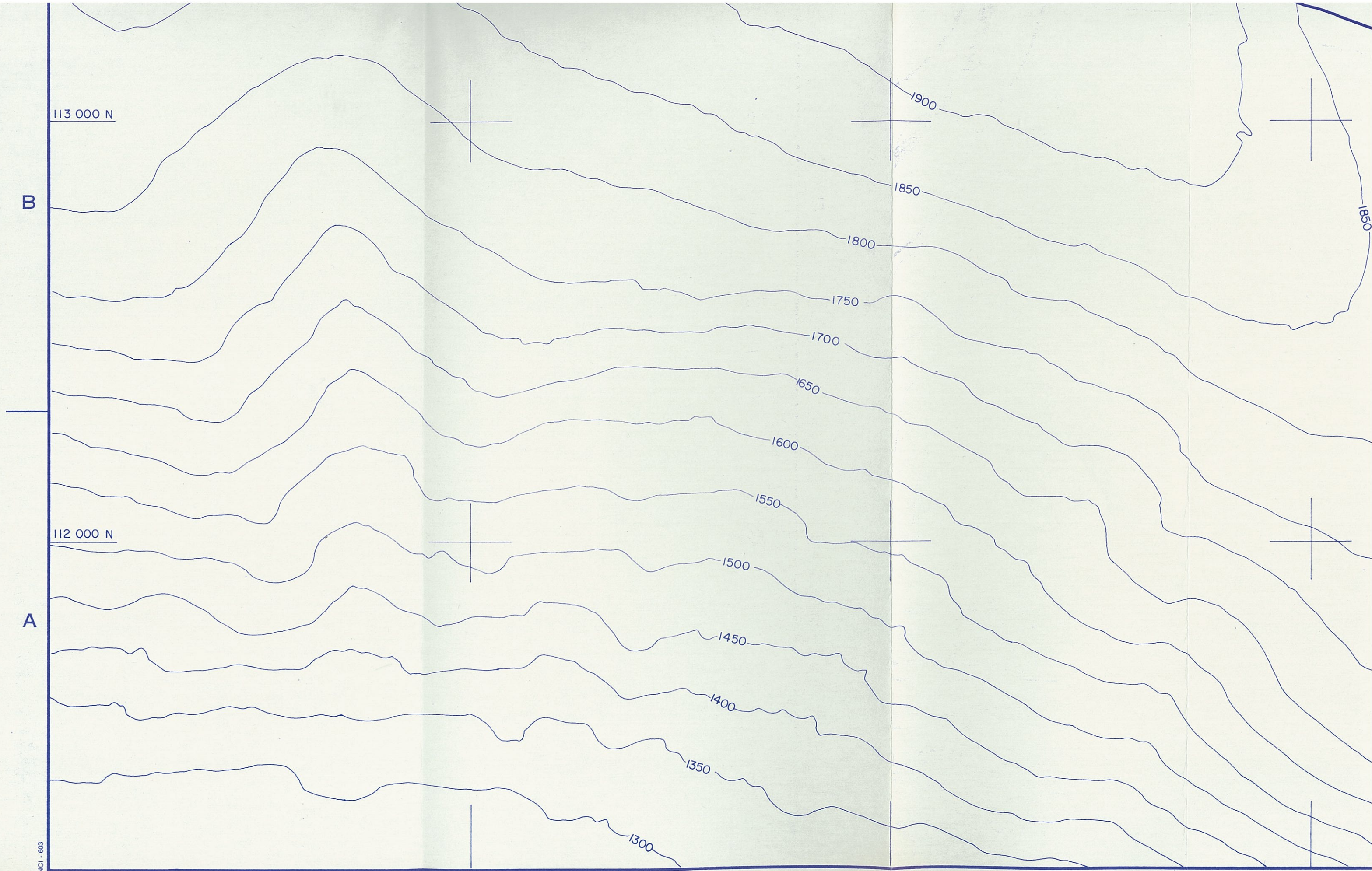
113 000 N

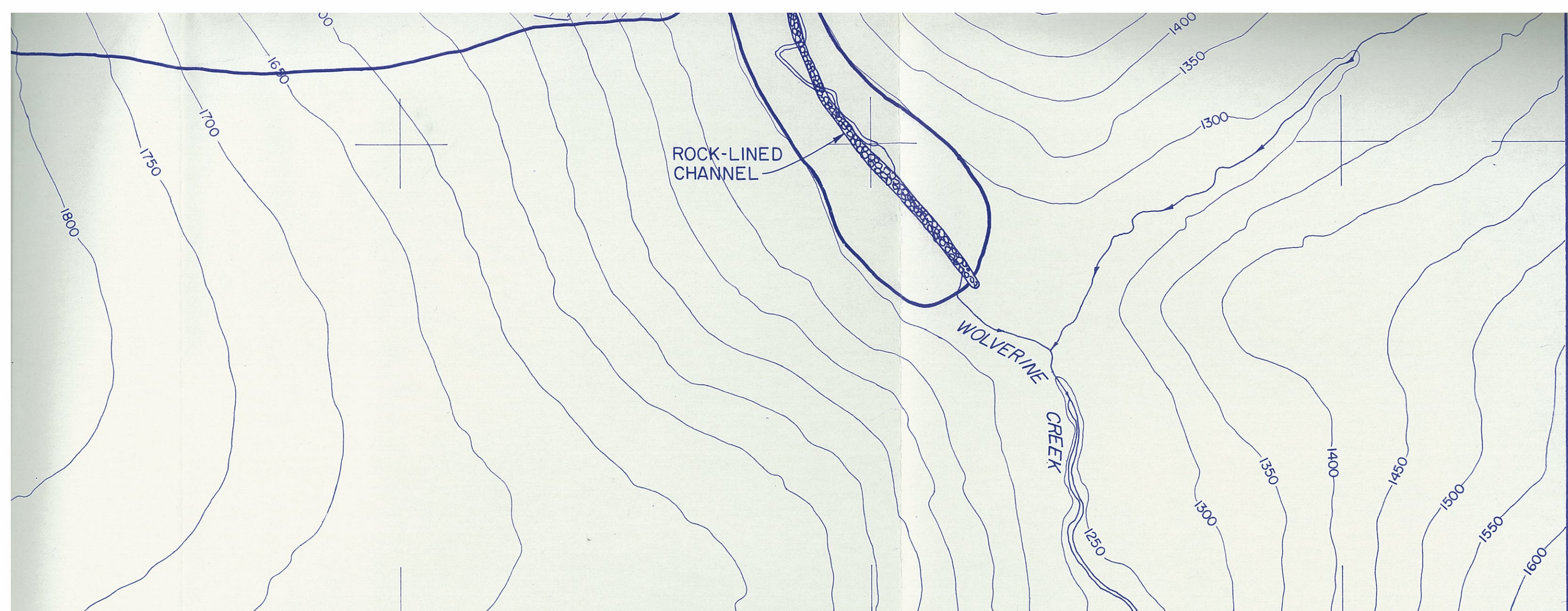
B

112 000 N

A

NC1 - 603





LEGEND

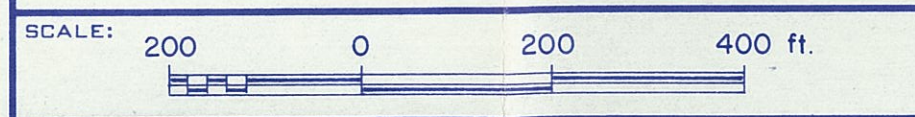
 **Monitoring Point** (Rate of horizontal movement - ft/yr
24 June 1985 to June 1986)

NOTE

TOPOGRAPHY TRACED FROM CASSIAR ASBESTOS CORPORATION LIMITED
SHEET No. 223, COMPILED IN 1965 BY McELHANNEY AIR SURVEYS LTD.

C	Aug 86	Monitor points plotted to 1986 coordinates. Movement rates revised. Position of toe revised.
B	Aug 85	Monitor points plotted to 1985 coordinates. Movement rates revised. Position of toe revised.
A	July 84	Monitor points plotted to 1984 coordinates. Movement rates revised. Position of toe revised.

TO BE READ WITH KLOHN LEONOFF REPORT DATED SEPT. 12, 1986



REV.	DATE	REVISION DETAILS		
DESIGN	P.C.L.	DRAWN	F.C.	DATE
				DEC. 1983



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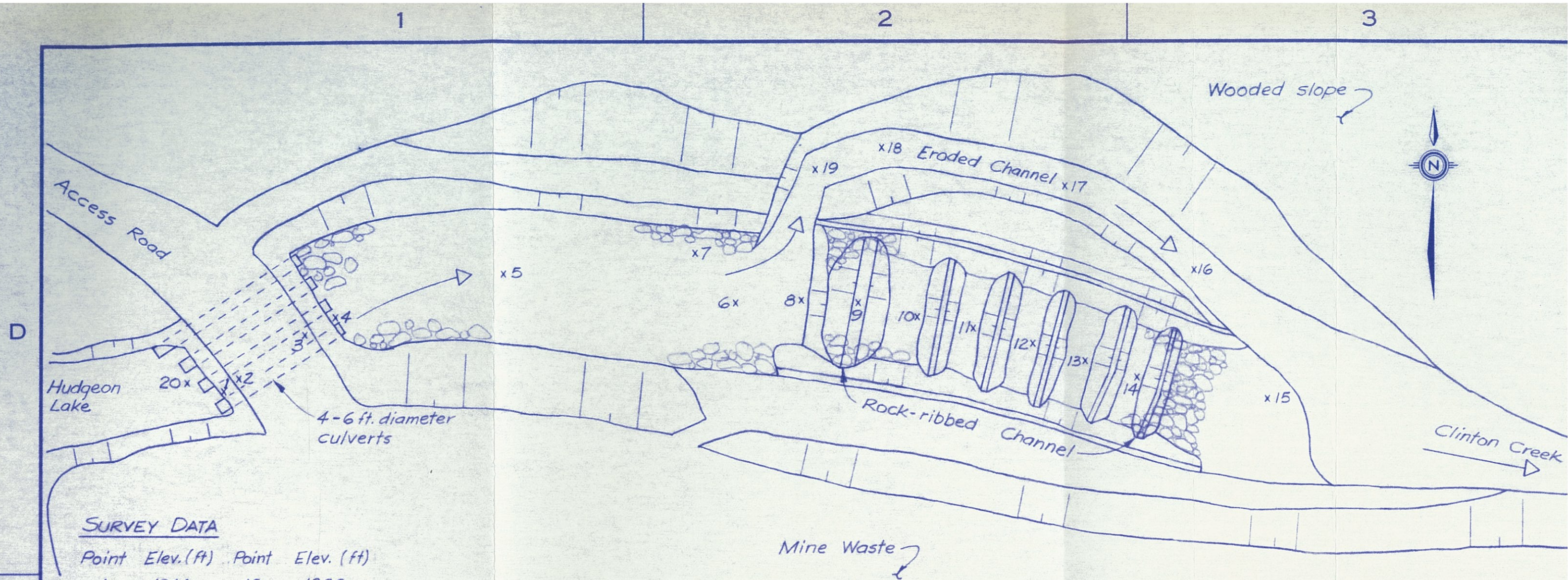
PROJECT **CLINTON CREEK MINE RECLAMATION**

TITLE **PLAN OF
WOLVERINE CREEK TAILINGS PILES**

CLIENT: **BRINCO MINING LIMITED
CASSIAR DIVISION**

DATE OF ISSUE JAN. 26, 1984	PROJECT No. PB 3169-01	DWG. No. D-1004	REV. C
APPROVED 			

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SURVEY DATA

Point	Elev. (ft)	Point	Elev. (ft)
1	1344	12	1332
2	1353	13	1330
3	1354	14	1328
4	1340	15	1322
5	1341	16	1322
6	1340	17	1326
7	1337	18	1325
8	1338	19	1329
9	1343	20	1343
10	1336	21	1355
11	1334		

SKETCH OF SITE PLAN FOR EXISTING CHANNEL

Approx. scale : 1" = 50'

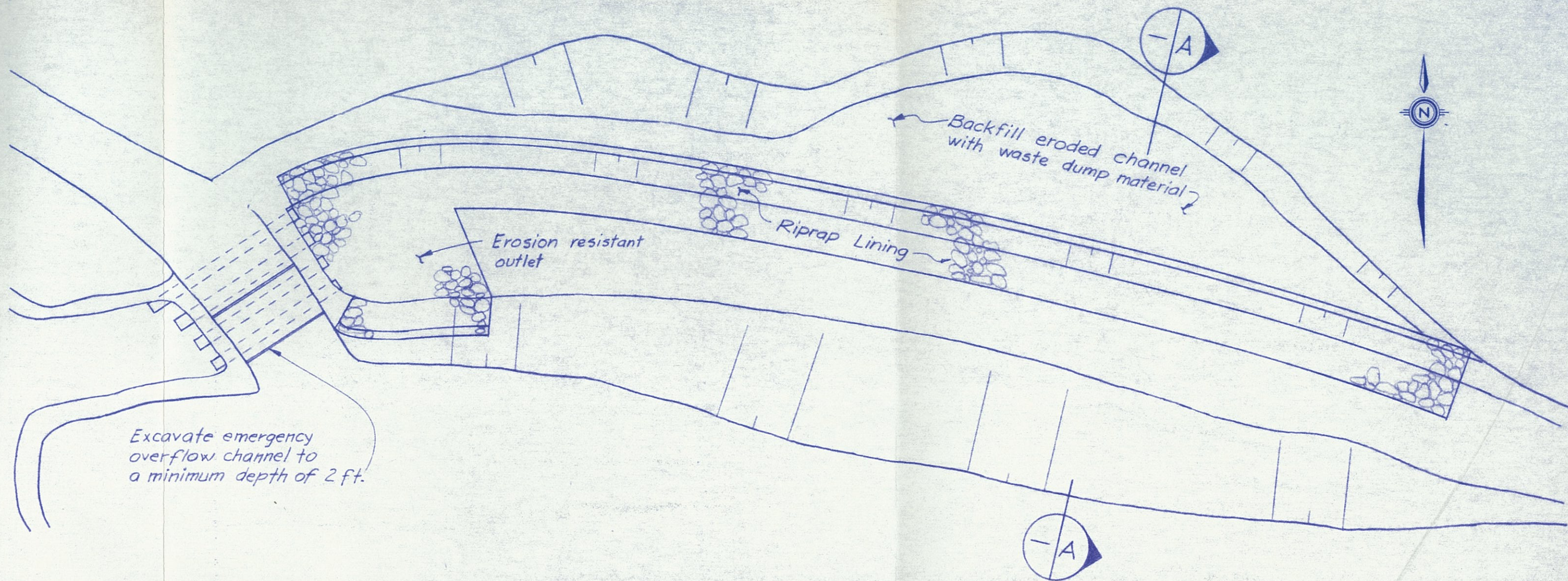
See Details below

1360
EET

4

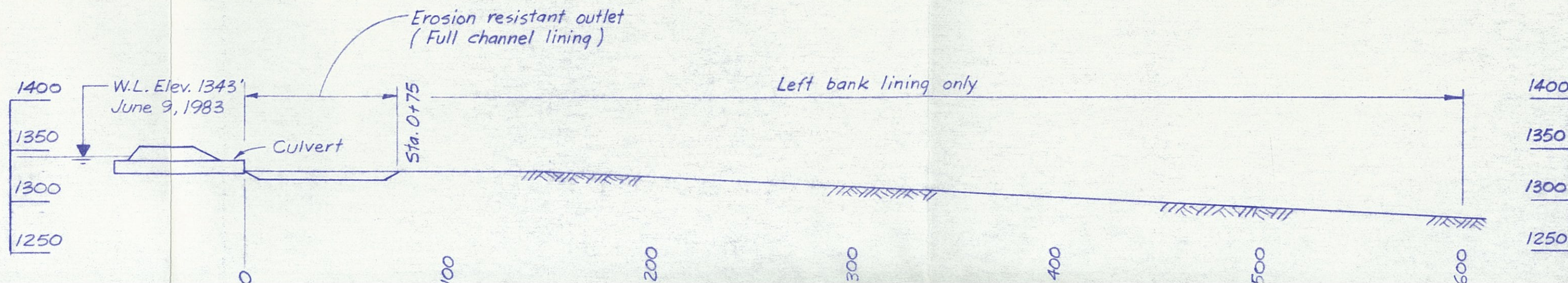
5

6



SITE PLAN SHOWING CHANNEL LINING

Approx. scale : 1" = 50'



ELEVATION -
1340
1320

Waste Dump
Backfill

SECTION

A

TYPICAL SECTION OF CHANNEL - STA. 0+75 TO 6+00

Scale : 1" = 20'

Full Channel Lining - Sta. 0+00 to 0+75

Left Bank Lining only - Sta. 0+75 to 6+00 ±

Waste Dump
Backfill

Existing Channel

Riprap

Geotextile Filter

Protective layer over
geotextile (mill overs)

DETAILS OF CHANNEL LINING

Scale 1" = 4'

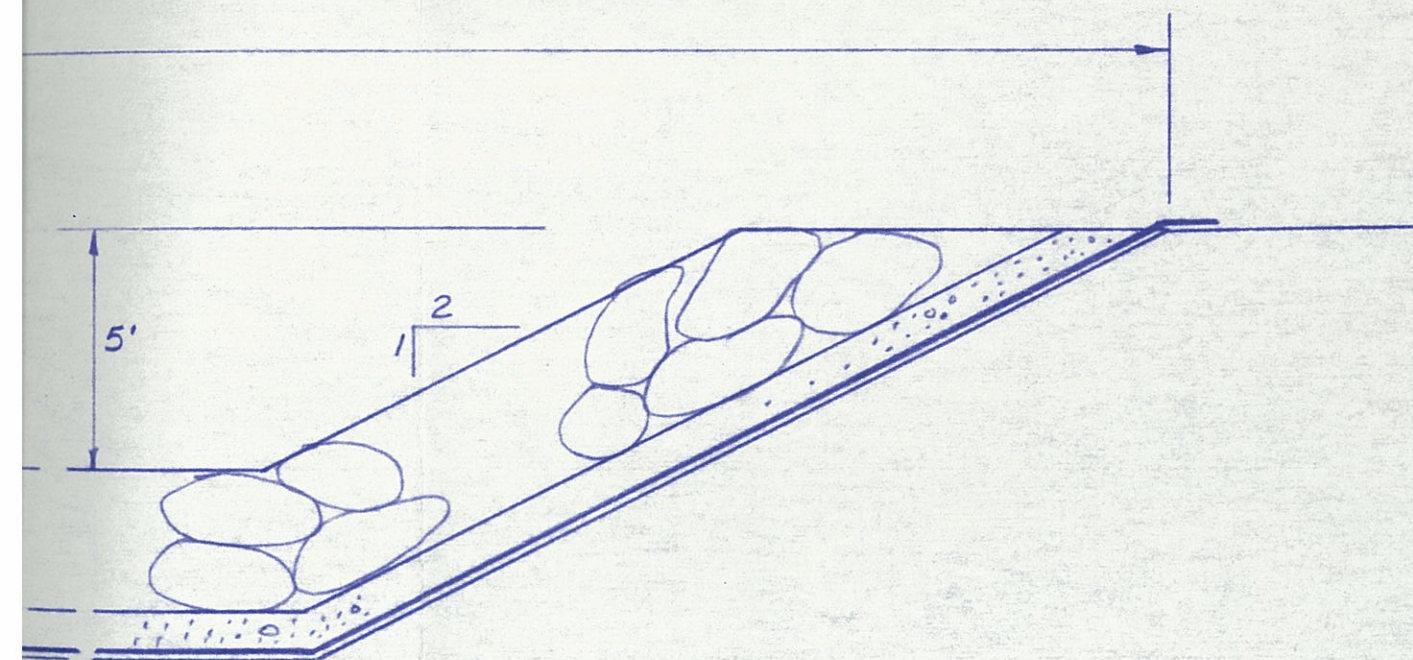
PROFILE ALONG CHANNEL &

Scale 1" = 50'

NOTES

1. Plans, profile and sections are approximate, based on limited survey data, sketches of site prepared during site inspection by Kohn Leonoff and photographs of the area.
- 2 Backfill in existing channel should be placed in maximum 1 ft. lifts and compacted by bulldozer travel.
- 3 Geotextile filter to consist of high strength woven polymer such as Mirafi P600X or equivalent. Where two sheets are joined provide minimum 1 metre overlap.
- 4 Riprap gradation :

<u>% finer by wt.</u>	<u>rock size</u>
100	3.0 ft.
50	1.5 ft
10	0.5 ft
- 5 Final alignment of riprap lining and extent of riprap placement to be approved by the Engineer on site.



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SCALE:



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A	Sept 2	Added erosion resistant outlet.
	83	Reduced side channel lining from 6' to 5'

REV.	DATE	REVISION DETAILS		
DESIGN A.M. / P.L.	DRAWN F.C.	DATE JULY 1983	SCALES AS SHOWN	

PROJECT CLINTON CREEK MINE WASTE DUMP

TITLE	PLAN AND SECTIONS OF CHANNEL RIPRAP PROTECTION
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DATE OF ISSUE AUG. 16, 1983	PROJECT No. PB 3169 01	DWG. No. D-1002	REV. A
APPROVED 			

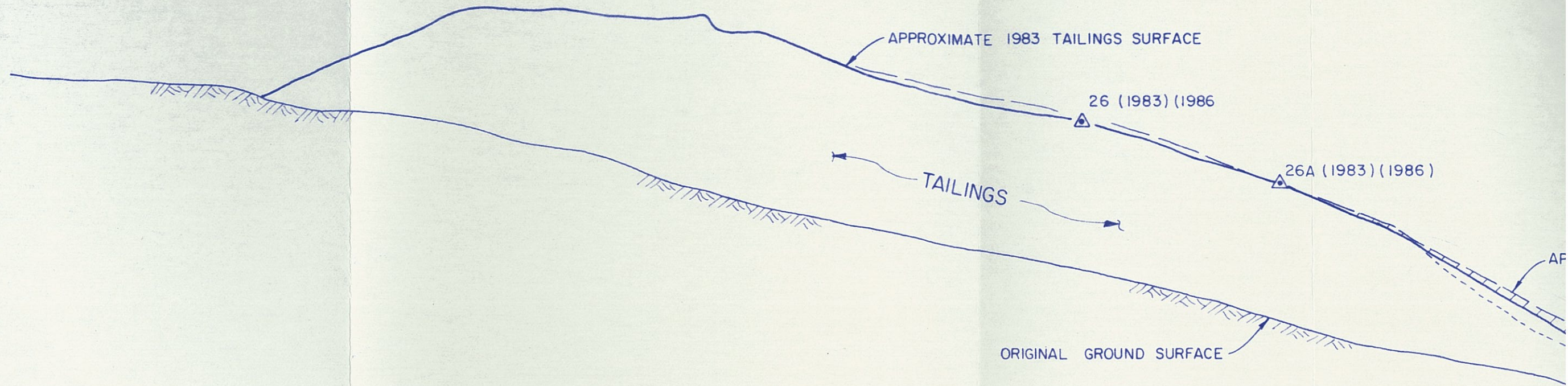
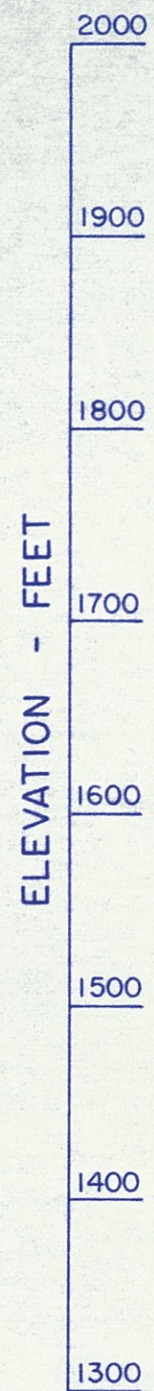
1

2

3

D

C

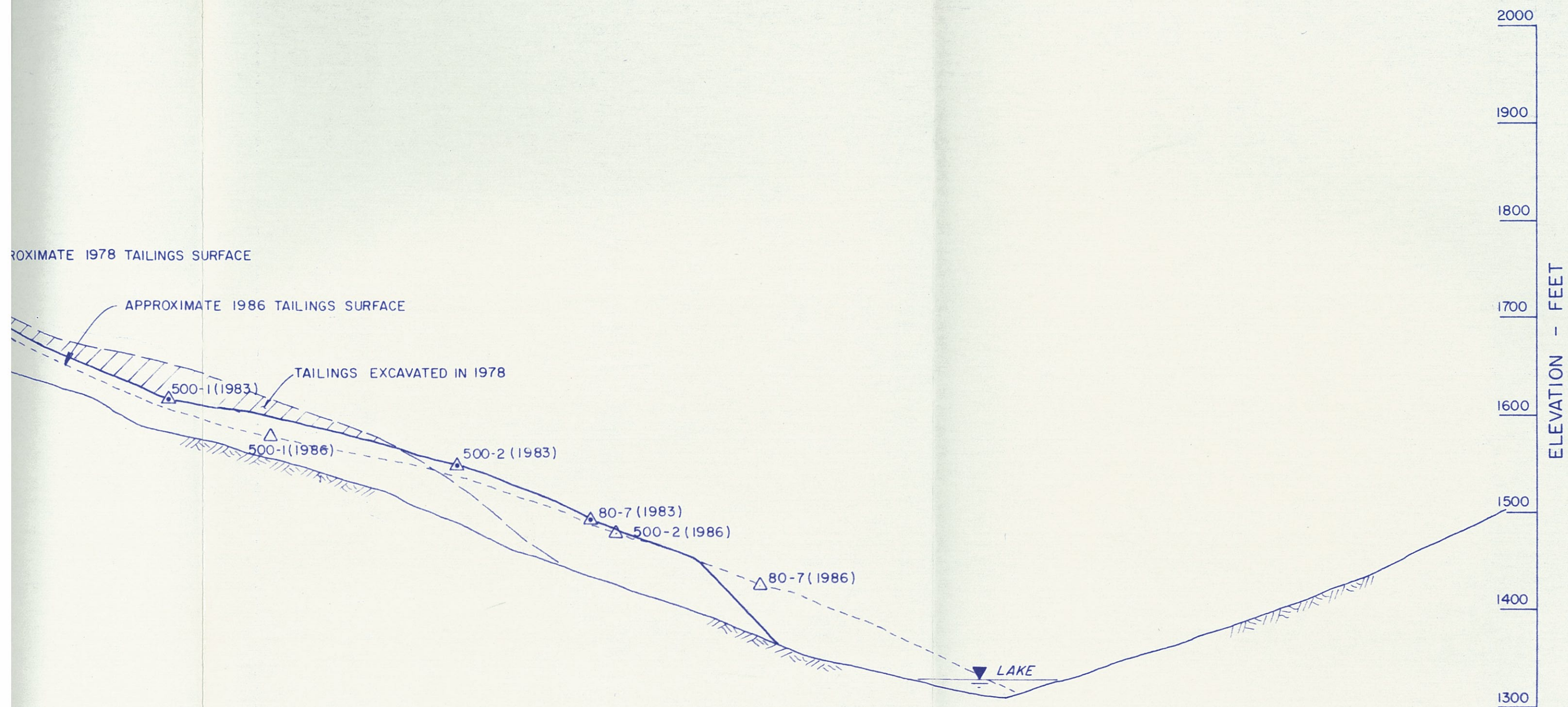


SECTION

A

1004

NORTH TAILINGS LOBE



B

ELEVATION - FEET

1900
1800
1700
1600
1500
1400
1300

A

LEGEND

△^{26A} Monitoring Point

24

TAILINGS

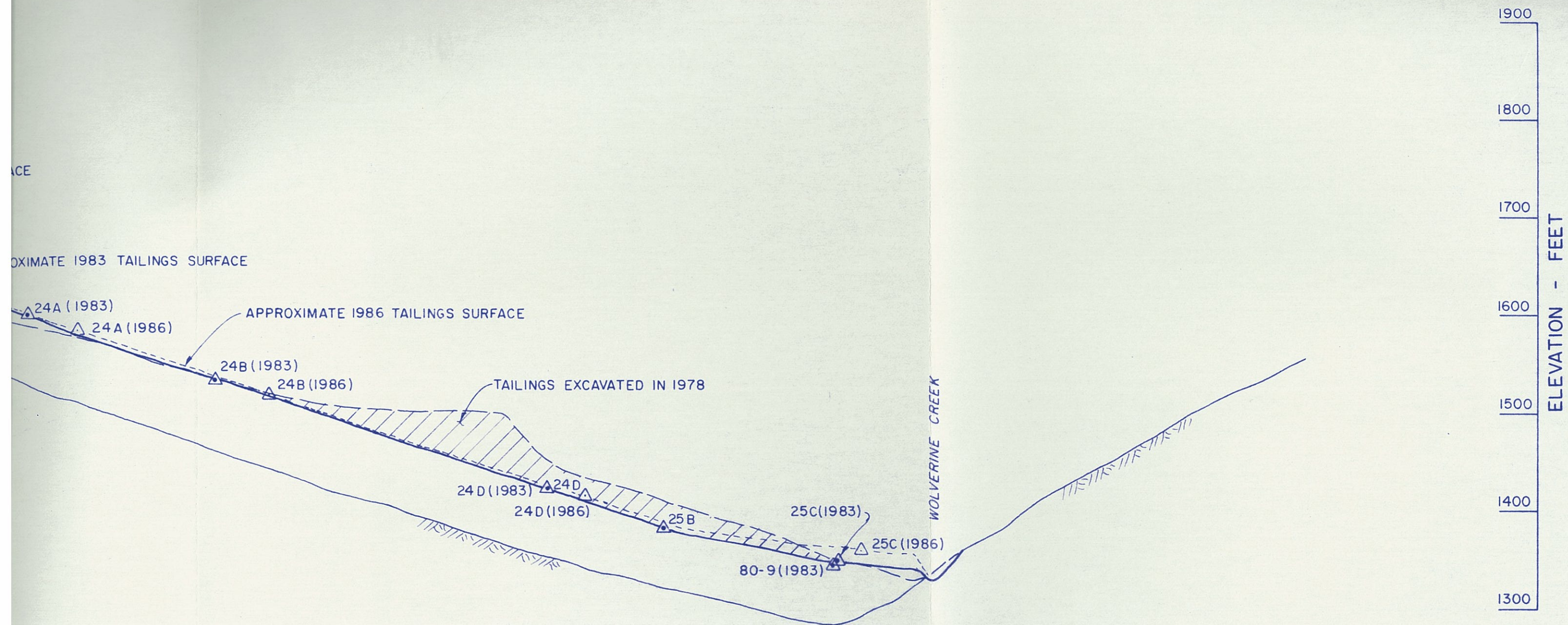
APPROXIMATE 1978 TAILINGS SU

AF



ORIGINAL GROUND SURFACE

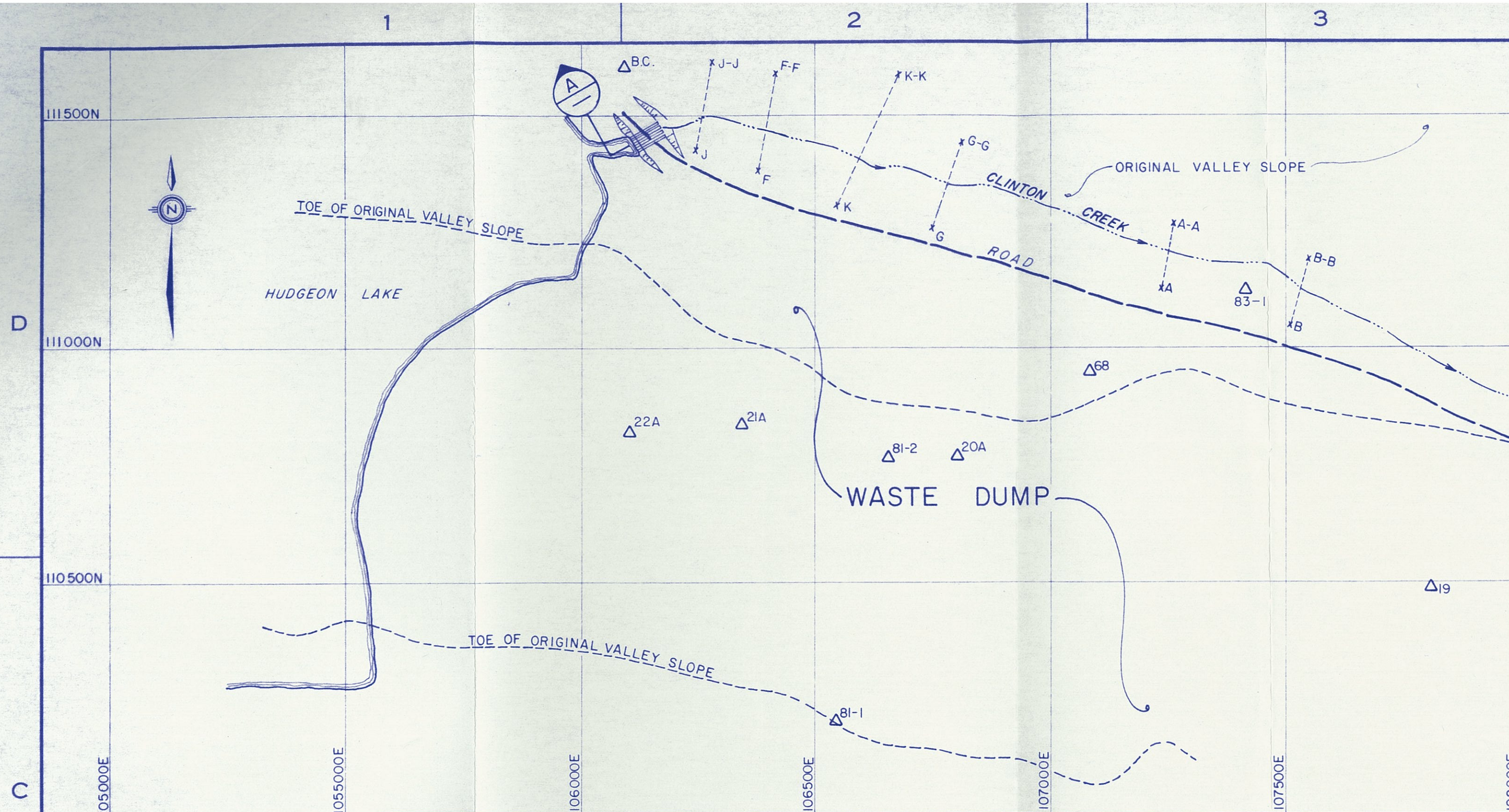
SECTION B
1004

SOUTH TAILINGS LOBI



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TO BE READ WITH KLOHN LEONOFF REPORT DATED SEPT. 12, 1986		A		1986 TAILINGS SURFACE ADDED.	
SCALE: 100 0 100 200 ft		REV.	DATE	REVISION DETAILS	
		DESIGN	DRAWN	DATE	SCALES
		P.C.L.	F.C.	DEC. 1983	1" = 100'
 KLOHN LEONOFF LTD. CONSULTING ENGINEERS		PROJECT CLINTON CREEK MINE RECLAMATION			
		TITLE WOLVERINE CREEK TAILINGS PILES SECTIONS 'A' AND 'B'			
CLIENT: BRINCO MINING LIMITED CASSIAR DIVISION		DATE OF ISSUE JAN. 26, 1984		PROJECT No. PB 3169-01	DWG. No. D-1005
		APPROVED 			REV. A



PLAN



1360

HUDGEON
LAKE



108 500E

LEGEND

Δ^{20A} SURVEY MONUMENT

x-----x CROSS-CHANNEL REFERENCE LINE
A A-A

NOTES

1. PROFILE IS PLOTTED WITH 5 TIMES VERTICAL EXAGGERATION.

B

ELEVATION - FEET

1340
1320
1300
1280
1260
1240
1220

DOWNSTREAM END OF CULVERTS

0+000

0+500

1+000

SECTION A



SEPT. 23, 1983

JUNE 1

A

ELEVATION - FEET

1340
1320
1300
1280
1260
1240
1220

TOE OF WASTE DUMP

JULY 12, 1986

1+500


2+000

2+500

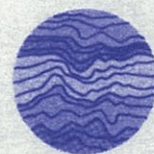
B Aug 86 ADDED JULY 12, 1986 PROFILE

TO BE READ WITH KLOHN LEONOFF REPORT DATED SEPT. 12, 1986

SCALE:

A	AUG. 1984	ADDED STATIONS TO PROFILE, REVISED CLINTON CREEK PLAN LOCATION ADDED JUNE 15, 1984 PROFILE			
		REV.	DATE	REVISION DETAILS	
DESIGN P.C.L.		DRAWN E.D.P.		DATE FEB., 1984	SCALES AS SHOWN
PROJECT CLINTON CREEK MINE WASTE DUMP					
TITLE PLAN AND LONGITUDINAL PROFILE OF WASTE DUMP CHANNEL					
DATE OF ISSUE		PROJECT No.		DWG. No.	REV.
APPROVED 		PB 3169-01		D-1006	B

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