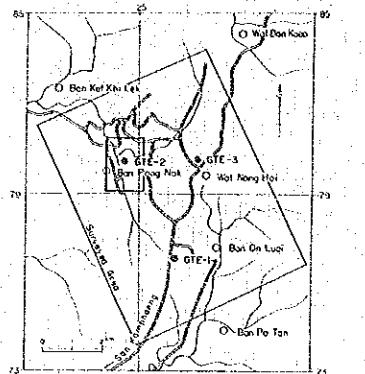


THE PRE-FEASIBILITY STUDY
ON
THE SAN KAMPAENG GEOTHERMAL DEVELOPMENT PROJECT
IN THE KINGDOM OF THAILAND

DETAILED SKETCH
OF
GEOTHERMAL MANIFESTATION



JAPAN INTERNATIONAL COOPERATION AGENCY
ELECTRICITY GENERATING AUTHORITY OF THAILAND
DEPARTMENT OF MINERAL RESOURCES
CHIANG MAI UNIVERSITY

MARCH 1983

0 100 200

LEGEND

	Alluvial deposit
	Sandstone > Chert
	Siltstone > Sandstone
	Chert > Sandstone
	Shale > Sandstone > Chert
	Sandstone
	Fault
	Anastom.
	Siltstone
	Shale
	Bedding plane
	Hole No (Depth m)
	Temp. of 10m depth

S-1 (8.5) 62.5

S-11 (210) 26.2

S-12 (100) 110

S-13 (315) 130

S-14 (24.0) 57.5

S-15 (24.0) 42.5

S-16 (24.5) 31.8

S-17 (22.5) 129.5

S-18 (24.0) 107.5

S-19 (24.0) 114.4

S-20 (24.0) 107.5

S-21 (24.0) 107.5

S-22 (24.0) 107.5

S-23 (24.0) 107.5

S-24 (24.0) 107.5

S-25 (24.0) 107.5

S-26 (24.0) 107.5

S-27 (24.0) 107.5

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S-78 (24.0) 107.5

S-79 (24.0) 107.5

S-80 (24.0) 107.5

S-81 (24.0) 107.5

S-82 (24.0) 107.5

S-83 (24.0) 107.5

S-84 (24.0) 107.5

S-85 (24.0) 107.5

S-86 (24.0) 107.5

S-87 (24.0) 107.5

S-88 (24.0) 107.5

S-89 (24.0) 107.5

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S-91 (24.0) 107.5

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S-95 (24.0) 107.5

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S-97 (24.0) 107.5

S-98 (24.0) 107.5

S-99 (24.0) 107.5

S-100 (24.0) 107.5

S-101 (24.0) 107.5

S-102 (24.0) 107.5

S-103 (24.0) 107.5

S-104 (24.0) 107.5

S-105 (24.0) 107.5

S-106 (24.0) 107.5

S-107 (24.0) 107.5

S-108 (24.0) 107.5

S-109 (24.0) 107.5

S-110 (24.0) 107.5

S-111 (24.0) 107.5

S-112 (24.0) 107.5

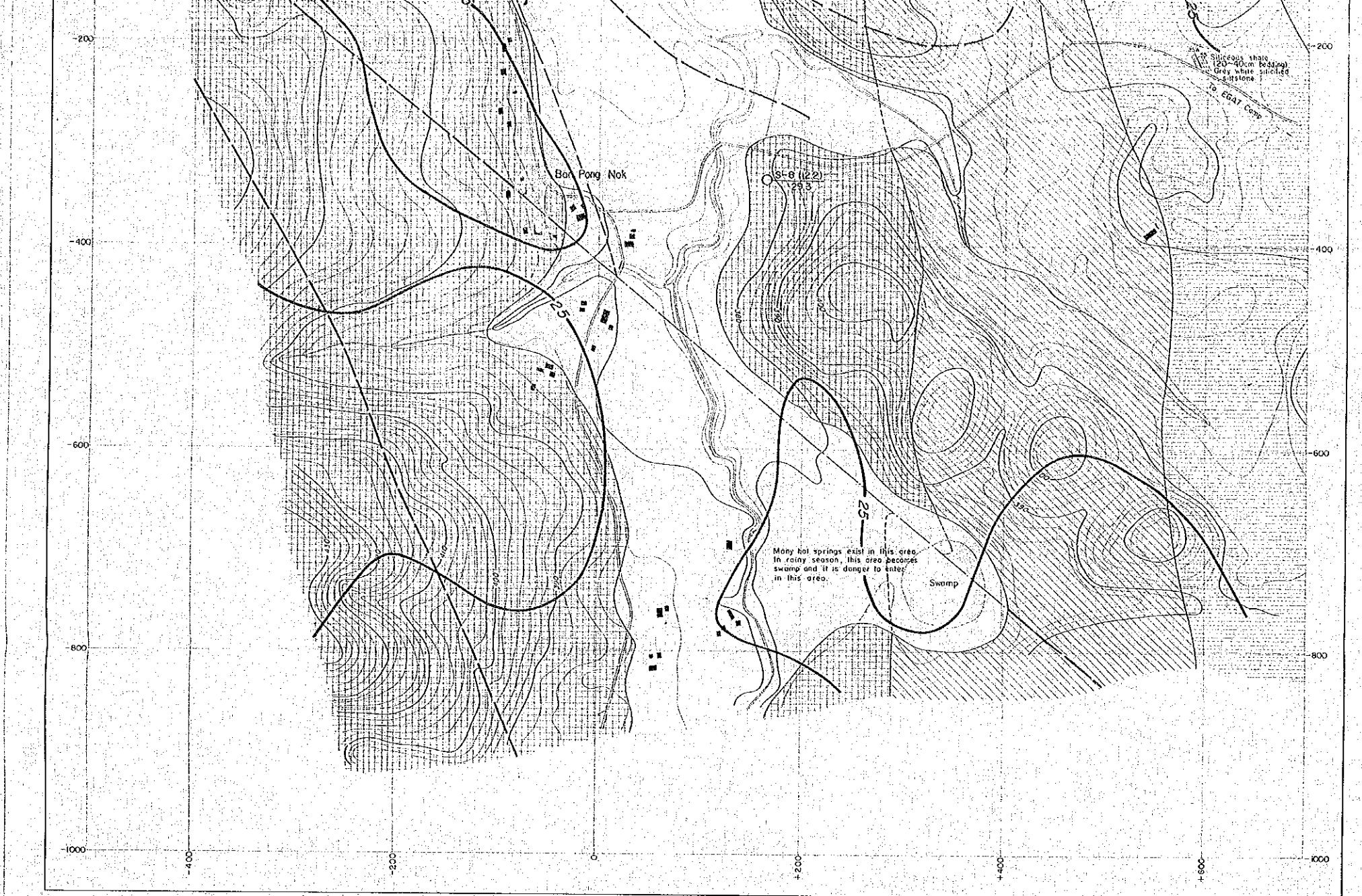
S-113 (24.0) 107.5

S-114 (24.0) 107.5

S-115 (24.0) 107.5

S-116 (24.0) 107.5

S-117 (24.0) 107



Temperatures of drill holes

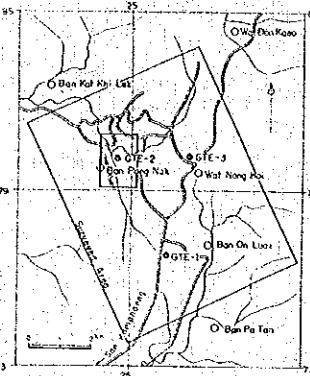
No	Depth (m)	Depth (m)					
		Temp (°C)					
S-1	11.8	-	5	10	10.5	-	-
		62.0	93.8	113.7	117.1	-	-
S-2	12.5	-	-	-	-	-	-
		98.5	-	-	-	-	-
S-3	18.5	-	5	10	15	17.1	-
		39.1	49.2	62.5	67.7	68.3	-
S-4	12.5	-	5	10	12.5	-	-
		-	29.5	31.8	33.0	-	-
S-5	12.3	-	5	10	11.5	-	-
		6.0	5.5	10.0	11.5	-	-
S-6	12.3	-	5	10	12	-	-
		16.4	17.7	21.9	23.2	-	-
S-7	12.3	-	5	10	12.5	-	-
		19.8	36.9	42.8	52.5	-	-
S-8	12.2	-	5	10	12.2	-	-
		39.5	40.9	65.5	63.0	-	-
S-9	12.2	-	5	10	11.5	-	-
		6.6	26.8	56.3	57.1	-	-
S-10	24.0	-	5	10	12	-	-
		30.9	26.8	50.2	51.5	-	-
S-11	24.0	-	5	10	15	20	24
		6.0	5	10	15	20	24
S-12	100.0	-	-	110.0	-	-	-
		-	-	-	-	-	-
S-13	31.5	0	-	10	21	-	-
		[64.0]	-	130.3	139.0	-	-
S-14	24.0	-	-	10	15	20	-
		-	-	57.5	58.1	58.3	-
S-15	24.0	34.3	5	10	15	20	-
		-	37.0	52.5	44.3	53.7	-
S-16	24.5	-	-	-	-	-	-
		-	-	-	-	-	-
S-17	-	-	-	-	-	-	-
S-18	24.0	0	5	10	12	-	-
		63.0	86.8	107.5	114.2	-	-
S-19	24.0	0	5	10	15	20	24
		65.0	95.1	114.4	117.6	117.4	116.6

List of hot springs

Hot spring No.	Sketch No.	Temper (°C)	Flow rate (l/min)	Sample No. (X-Roy)	Remark	Hot spring No.	Sketch No.	Temper (°C)	Flow rate (l/min)	Sample No. (X-Roy)	Remark
1		94	0.6	T - 033		33		90	0.3	T - 050	
2		95	1.0	T - 032		34		88	1.5	T - 049	
3		96	0.3	T - 031		35		92	1.0	T - 048	
4		98	0.1	T - 030		36	(D)	94	0.3	T - 047	
5	(A)	89	0.1	T - 029		37		92	0.2	T - 045	
6		83	0.2	T - 028		38		94	1.0	T - 045	Bubbled noise
7		81	0.1	T - 027		39		98	1.0	T - 045	Bubbled noise
8		76	0.3	T - 026		40		83	1.0	T - 044	Bubbled noise
9		73	0.2	T - 025		41		94	1.5	T - 039	Jet noise
10		81	0.3	T - 018		42	(E)	72	1.2	T - 040	
11		80	0.6	T - 017		43		84	0.5	T - 042	Jet noise
12		79	0.2	T - 016		44		90	1.0	T - 041	Jet noise
13		81	2.5	T - 015		45		98	1.0	T - 056	
14		66	0.3	T - 013		46	(F)	90	1.5	T - 055	
15		88	0.4	T - 014		47		84	0.5	T - 054	
16	(B)	83	0.4	T - 012		48		89	1.2	T - 057	Bubbled noise
17		72	0.3	T - 011		49	(G)	83	0.8	T - 058	Bubbled noise
18		81	0.7	T - 010		50		85	0.5	T - 059	Bubbled noise
19		83	0.4	T - 012		51		90	0.5	T - 060	Bubbled noise
20		88	2.0	T - 009		52	(H)	76	0.1	T - 061	
21		85	1.2	T - 021		53	(I)	78	0.1	T - 062	
22		92	2.0	T - 010		54		88	1.0	T - 063	
23		86	0.7	T - 022		55	(J)	95	0.4	T - 064	Geyser jet noise
24		84	1.0	T - 023		56		73	0.5	T - 065	
25		79	0.7	T - 024		57		73	0.2	T - 066	
GT-2		68.5	5-6		Depth - 500m	58	(K)	81	0.3	T - 067	
S-12		100.4	2		Depth - 105m	59		75	0.4	T - 068	
S-2		97-100	3		Depth - 125m	60		81	0.4	T - 069	
S-13		99.5	?		Depth - 31.5m	61	(L)	70	0.1	T - 070	
S-1	Non sketch	82	0.3	T - 034	Depth - 110m	62		98	0.9	T - 071	
26		78	0.3	T - 035		63		91	0.3	T - 072	
27		67	0.3	T - 036		64	(M)	94	0.3	T - 073	
28		82	0.3	T - 037		65		82	0.2	T - 074	
29		76	0.6	T - 038	Bubbled noise	66		62	0.3	T - 075	
30	(C)	90	0.1	T - 052	Bubbled noise	67		85	0.1	T - 076	
31		72	0.2	T - 051		68		72	0.2	T - 078	
32		83	0.4	T - 053		69	(N)	72	0.1	T - 079	

THE PRE-FEASIBILITY STUDY
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IN THE KINGDOM OF THAILAND

ZONAL DISTRIBUTION MAP OF ALTERATION ZONE

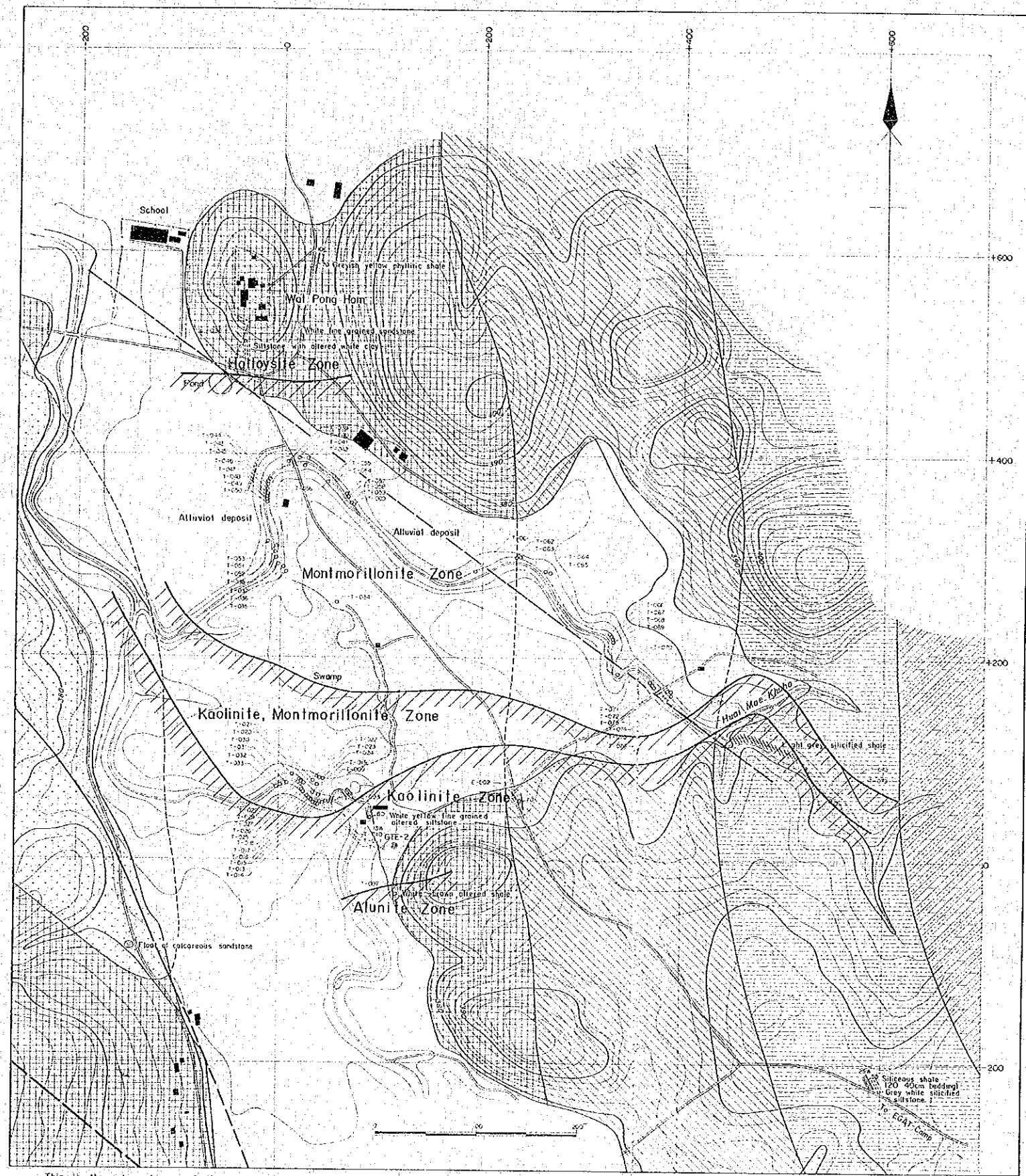


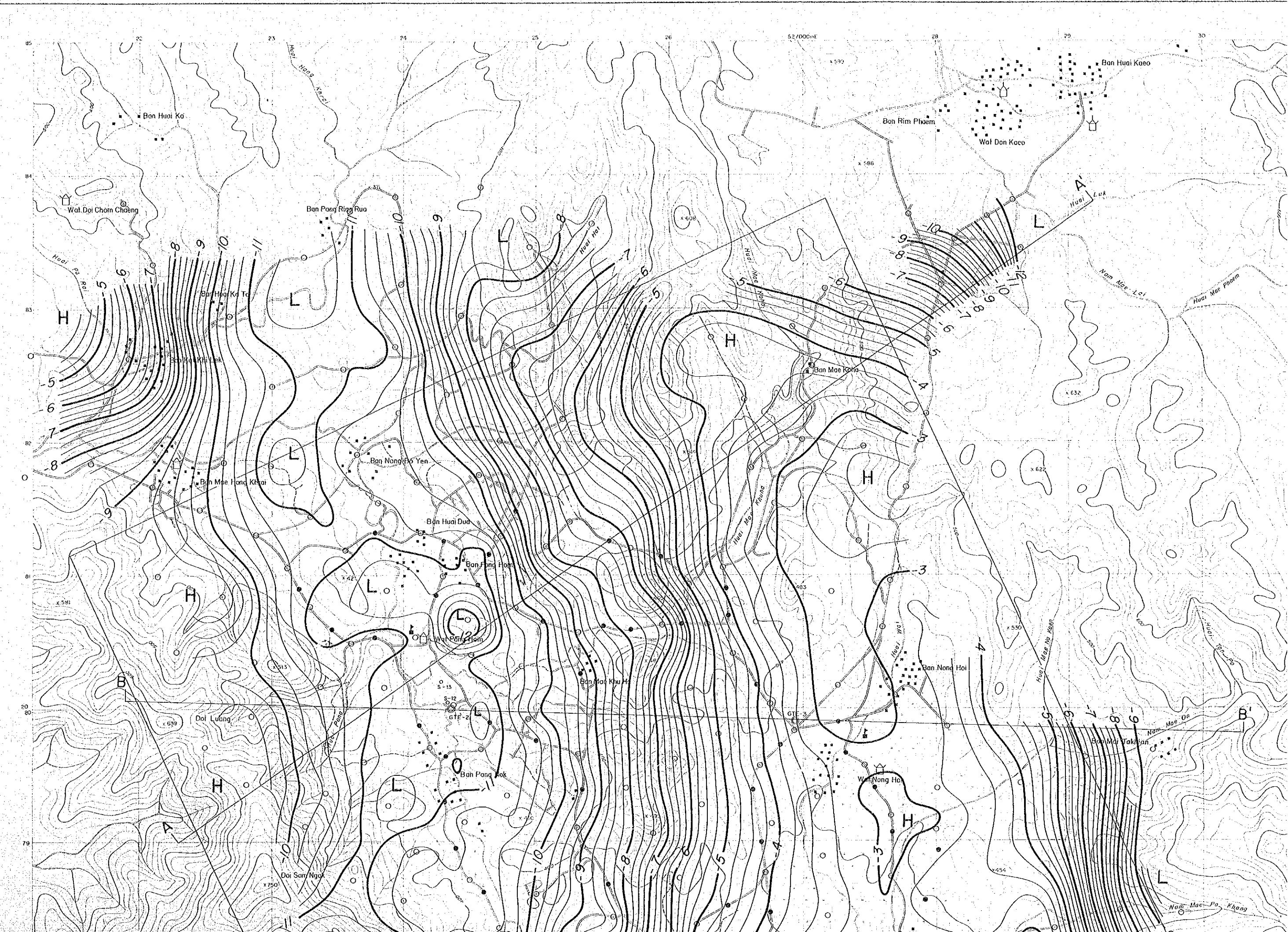
JAPAN INTERNATIONAL COOPERATION AGENCY
ELECTRICITY GENERATING AUTHORITY OF THAILAND
DEPARTMENT OF MINERAL RESOURCES
CHIANG MAI UNIVERSITY

MARCH 1983

LEGEND

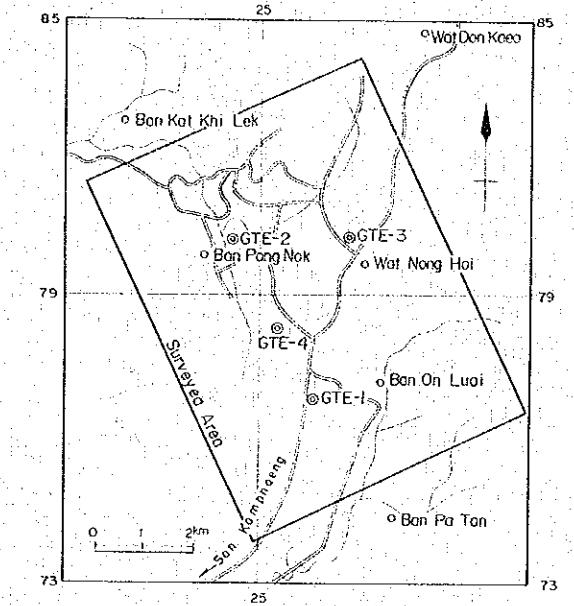
Alluvial deposit
Bedrock
Bedrock surf. profile, Lepid. mgt.
Basin
Slope
Siltstone + Sandstone
Sandstone
Clay
Siltstone + Clay
Clay + Sandstone
Sandstone + Clay
Clay
Siltstone
Sandstone
Calcareous shale
Shale
Fault
Quartzite
Fold
Anhydrite
Sulfur
Sulfur + Sulfide
Alteration Zone





THE PRE-FEASIBILITY STUDY
ON
THE SAN KAMPAENG GEOTHERMAL DEVELOPMENT PROJECT
IN THE KINGDOM OF THAILAND

BOUGUER ANOMALY ($\rho = 2.6$)



JAPAN INTERNATIONAL COOPERATION AGENCY
ELECTRICITY GENERATING AUTHORITY OF THAILAND
DEPARTMENT OF MINERAL RESOURCES
CHIANG MAI UNIVERSITY

MARCH 1983

0 1000 2000m

LEGEND

Wide road

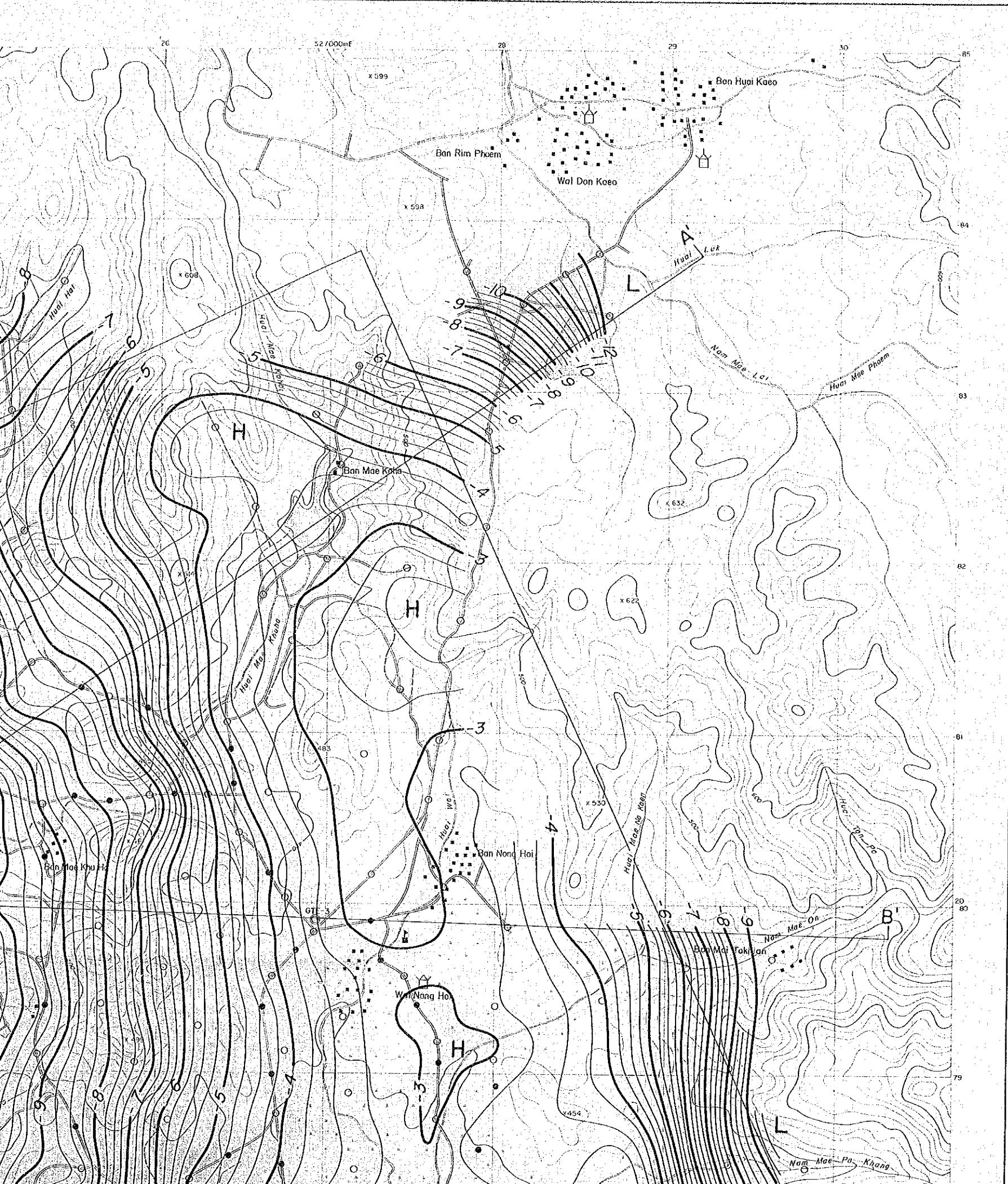
Narrow path

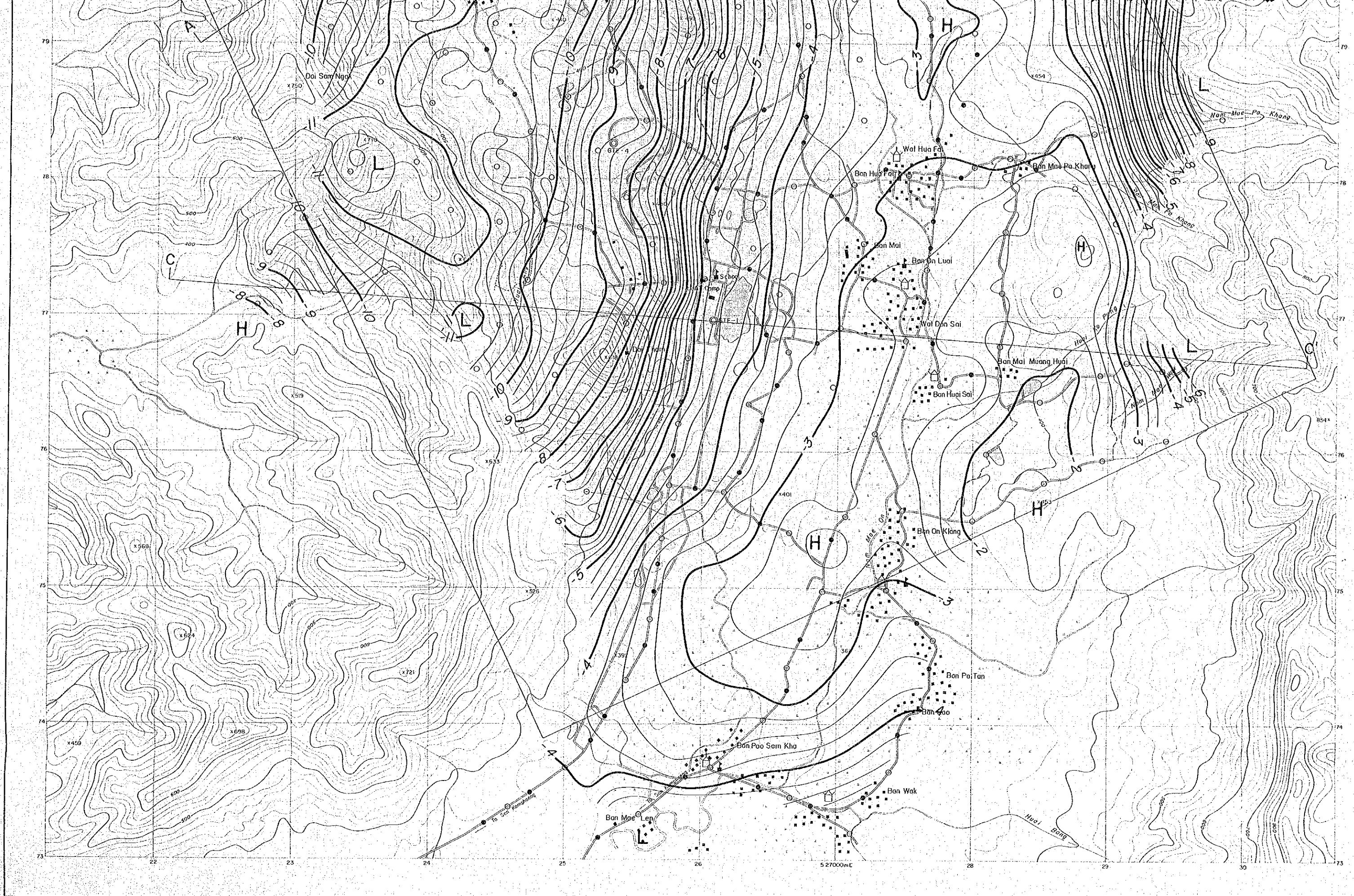
Rice field

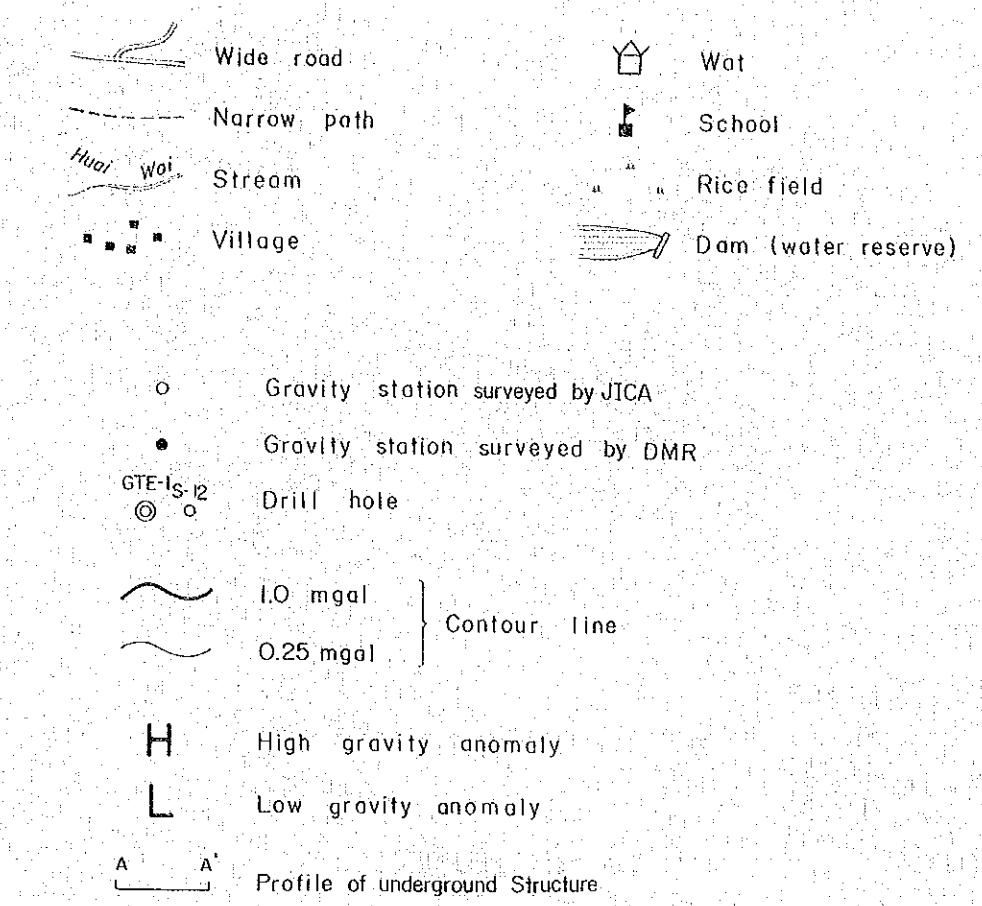
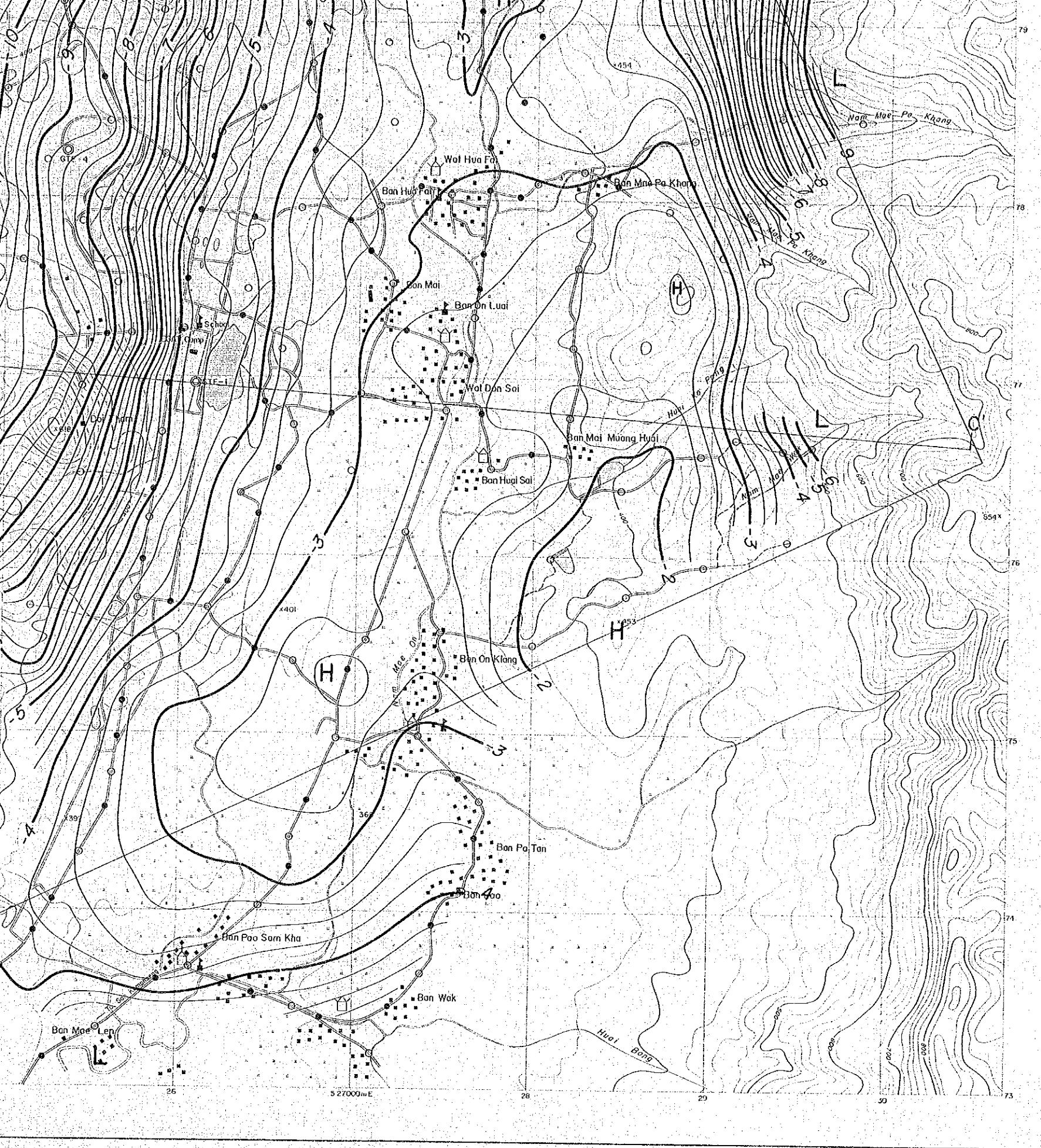
Wat

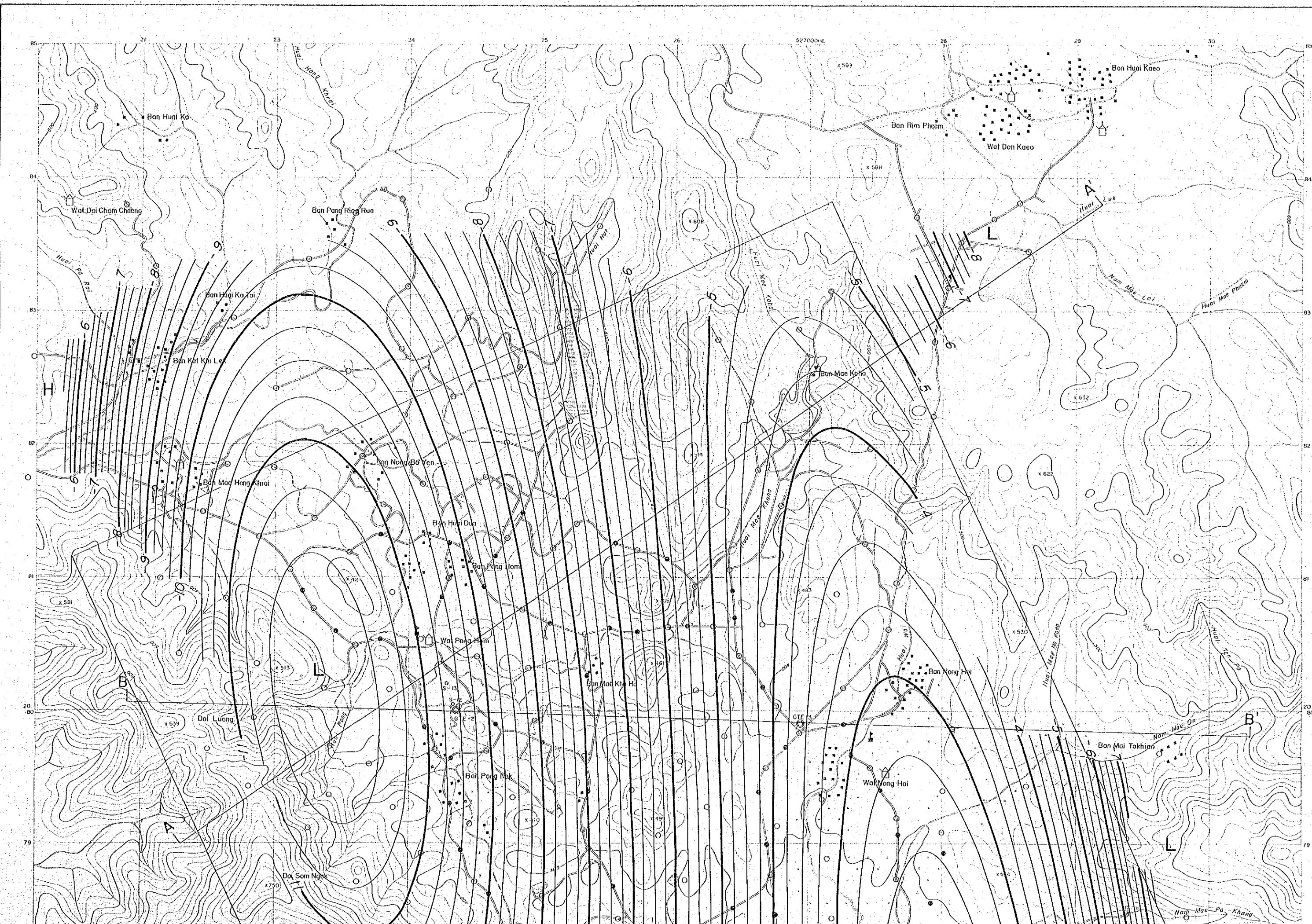
School

Stream



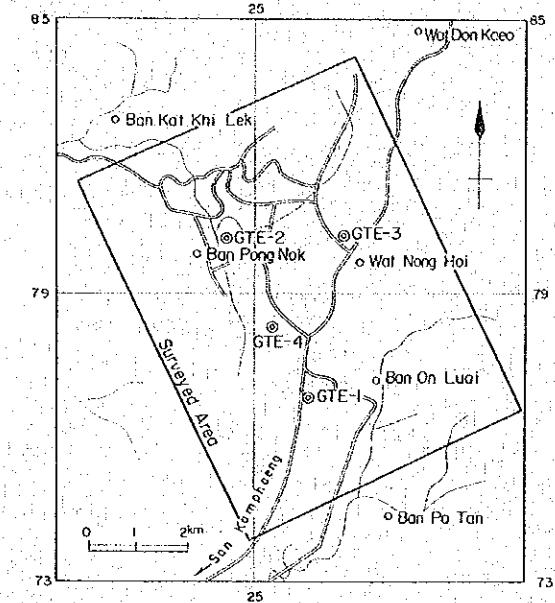






THE PRE-FEASIBILITY STUDY

ON

THE SAN KAMPAENG GEOTHERMAL DEVELOPMENT PROJECT
IN THE KINGDOM OF THAILANDGRAVITY TREND
(THIRD ORDER POLYNOMIAL)

JAPAN INTERNATIONAL COOPERATION AGENCY
ELECTRICITY GENERATING AUTHORITY OF THAILAND
DEPARTMENT OF MINERAL RESOURCES
CHIANG MAI UNIVERSITY

MARCH 1983

0 1000 2000 m

LEGEND

- Wide road
- Narrow path
- Stream
- Rice field
- Wat
- School

