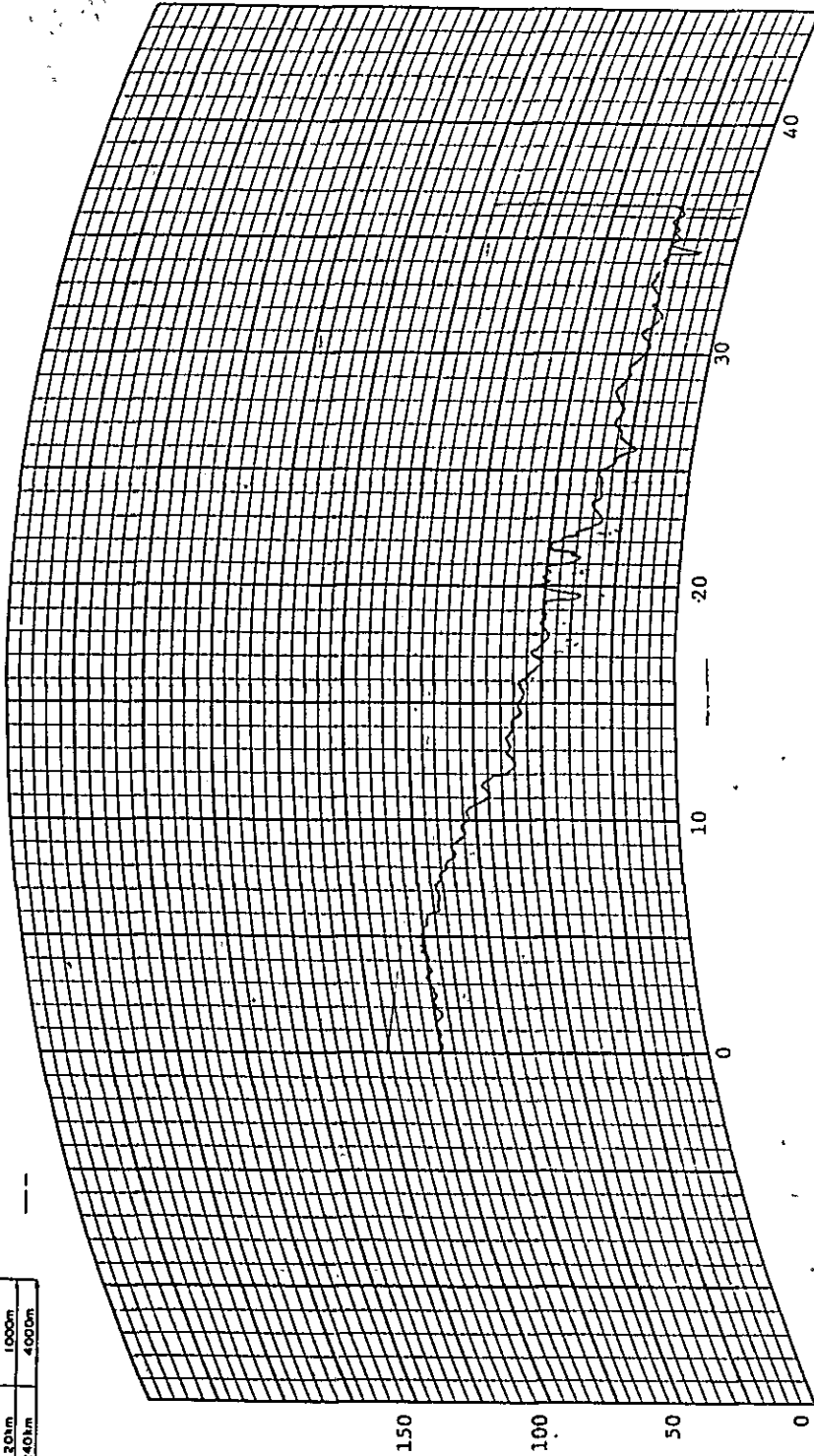


Langkat

PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



Bohorok. Attached DMG. III-2-4-2-15

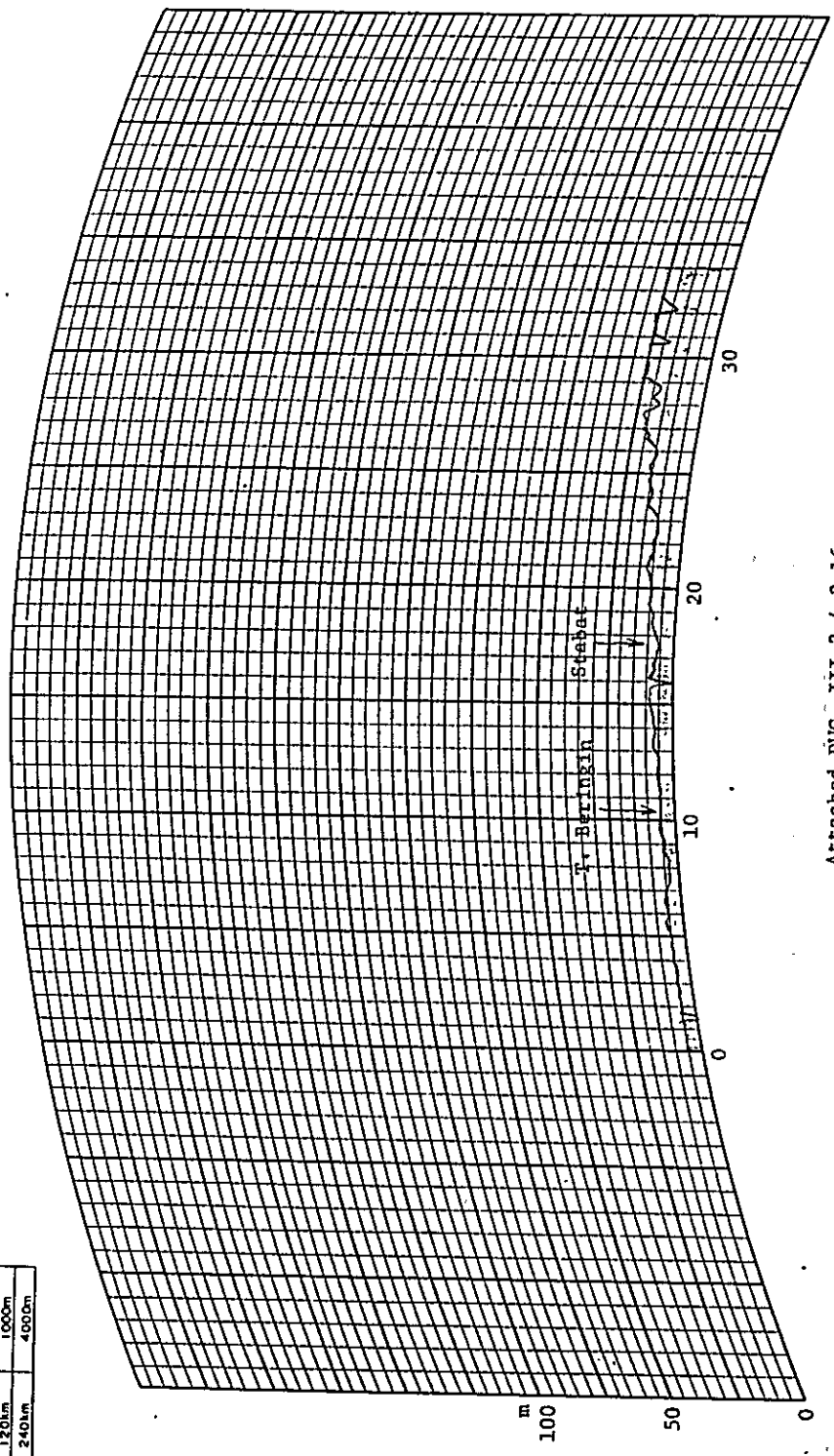
SITE _____
GROUND ELEVATION 100 m
ANTENNA HEIGHT: _____ m

SITE: Binjai
GROUND ELEVATION 25 m
ANTENNA HEIGHT: _____ m

DISTANCE: 36.3 km

Langkat
PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



Attached DWG. III-2-4-2-16

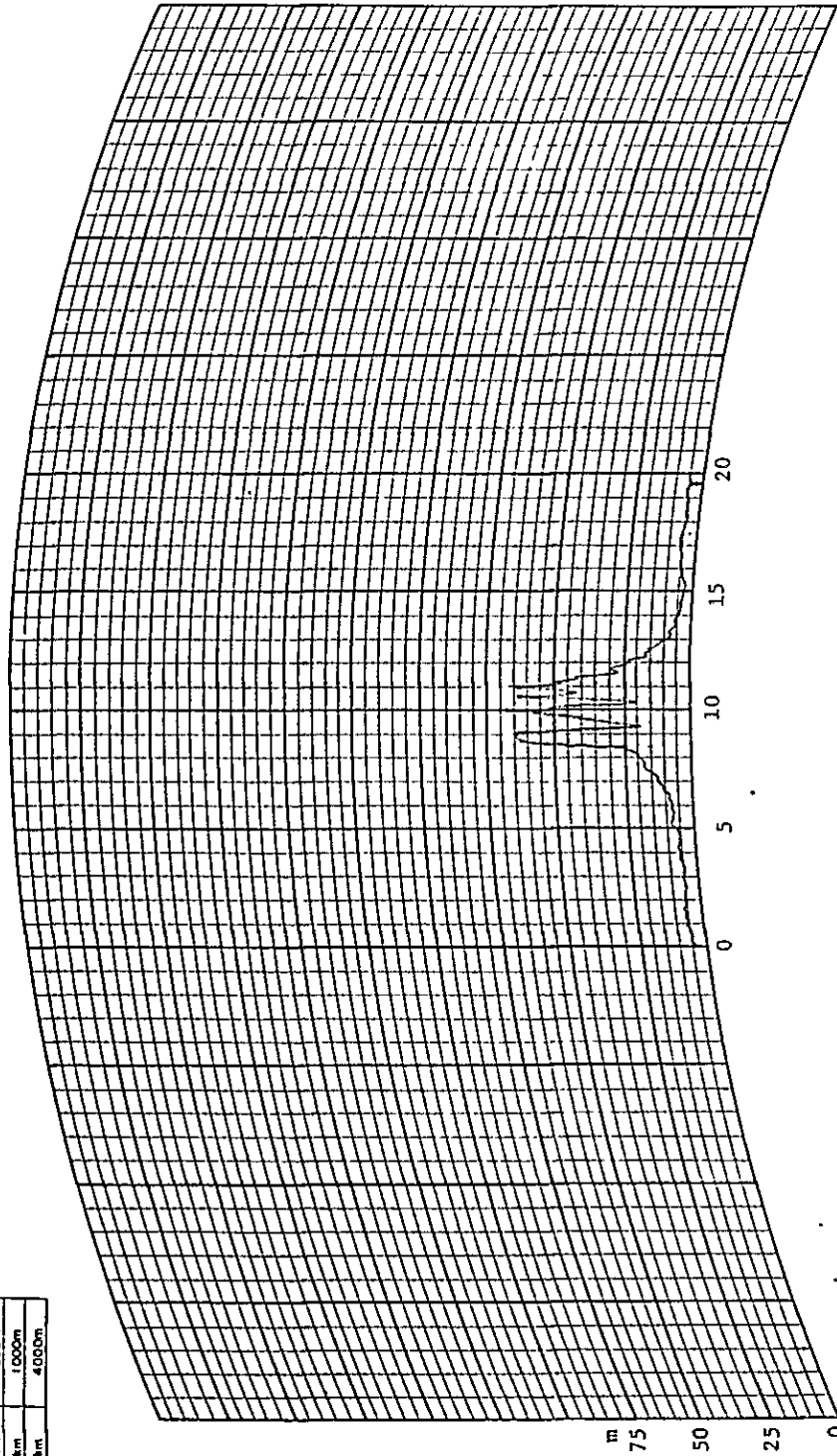
SITE Tanjung Pura
GROUND ELEVATION 5 m
ANTENNA HEIGHT: _____ m

SITE Binjai
GROUND ELEVATION 25 m
ANTENNA HEIGHT _____ m

DISTANCE 34.0 km

Langkat
 PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



Attached DWG. III-2-4-2-17

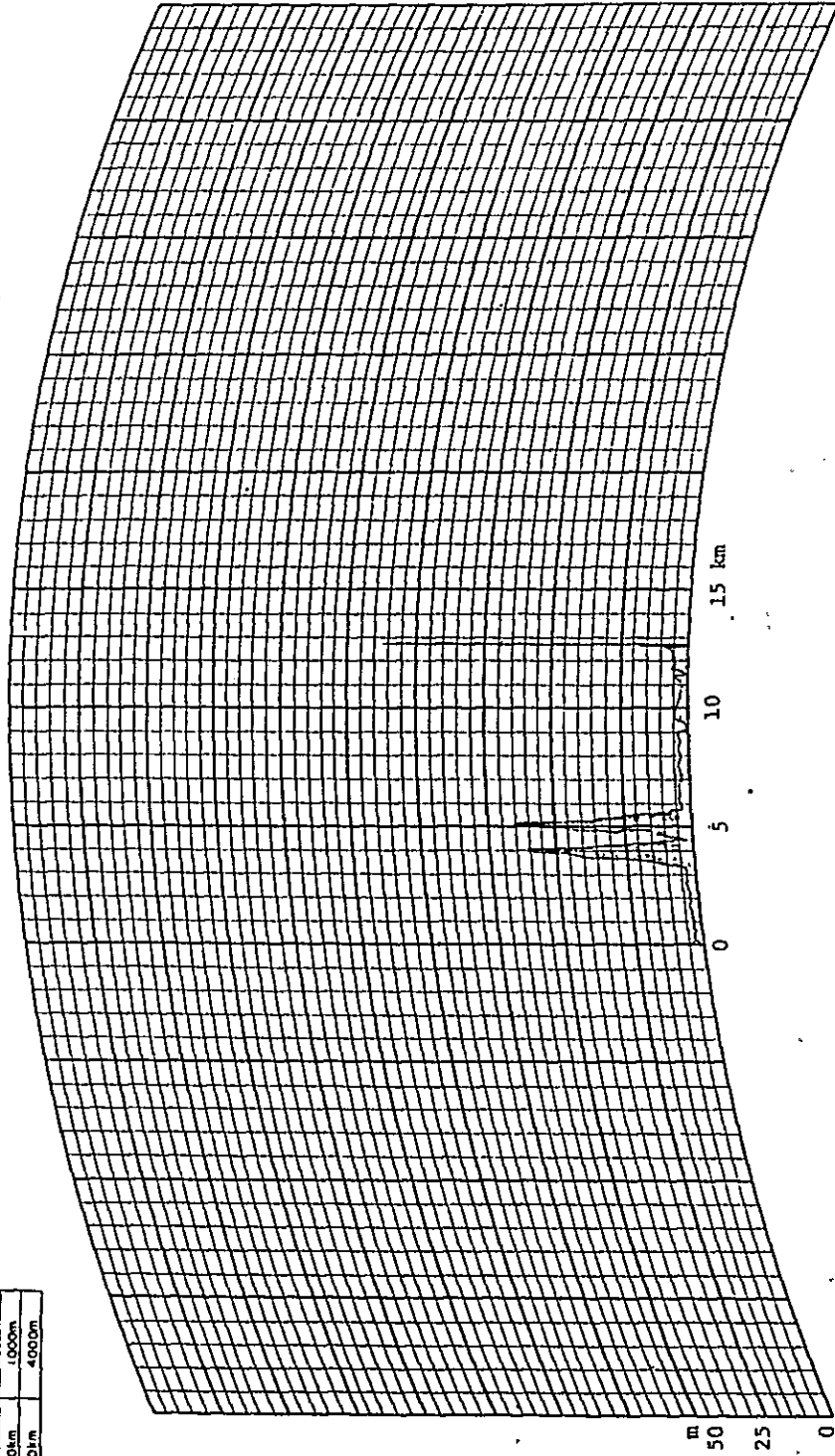
SITE Tanjung Pura
 GROUND ELEVATION 5 m
 ANTENNA HEIGHT _____ m

SITE Pangkalan Brandan
 GROUND ELEVATION 5 m
 ANTENNA HEIGHT _____ m

DISTANCE: 19.6 km

Langkat
PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



Attached DWG. III-2-4-2-18

SITE: Pangkajene Susu
GROUND ELEVATION 5 m
ANTENNA HEIGHT 25 m

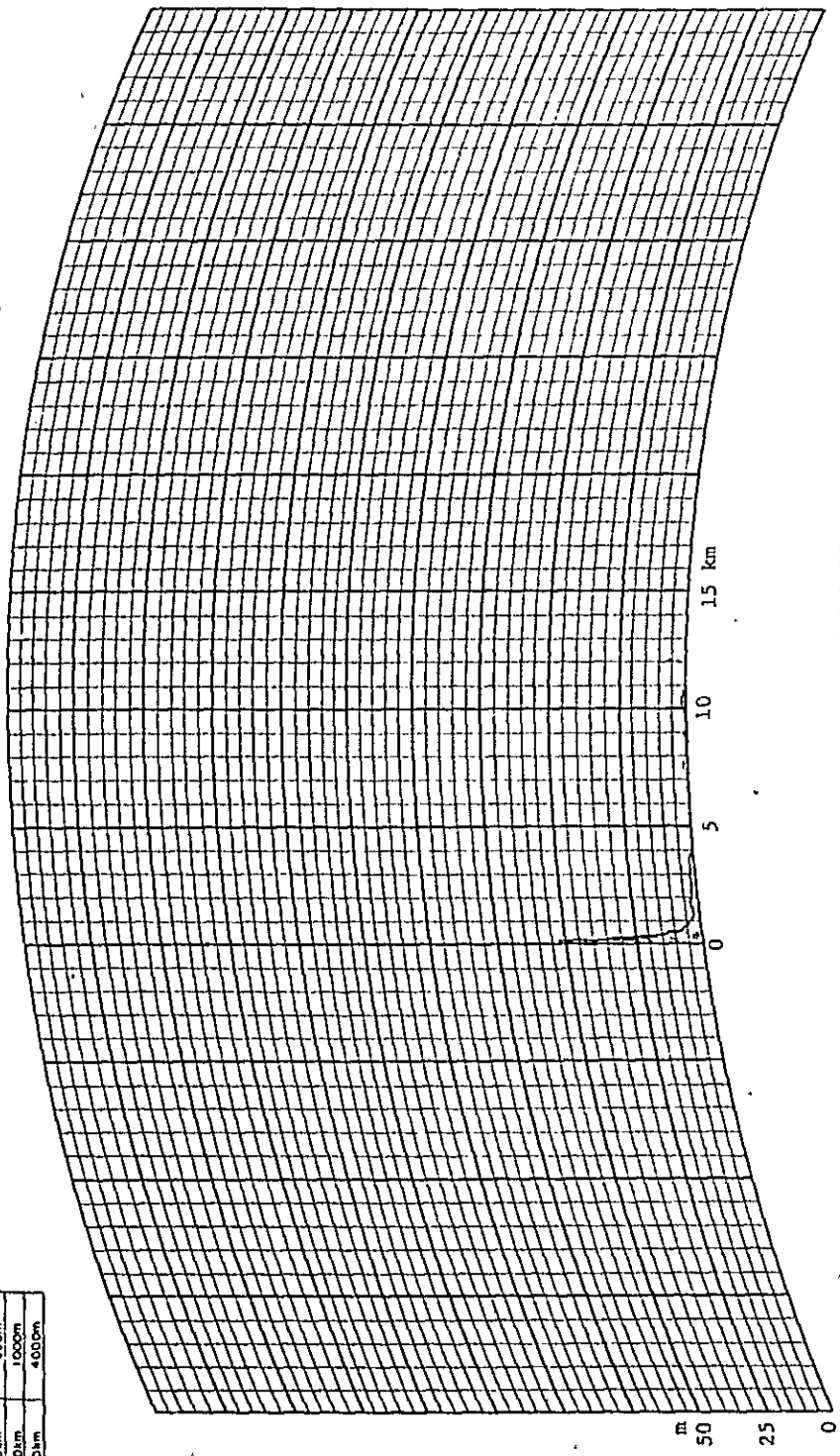
SITE: Pangkajene Brandan
GROUND ELEVATION 5 m
ANTENNA HEIGHT 25 m

DISTANCE: 12.8 km

Langkat
PATH PROFILE (4/3 RADIUS)

FULL SCALE

DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



Attached DWG. III-2-4-2-19

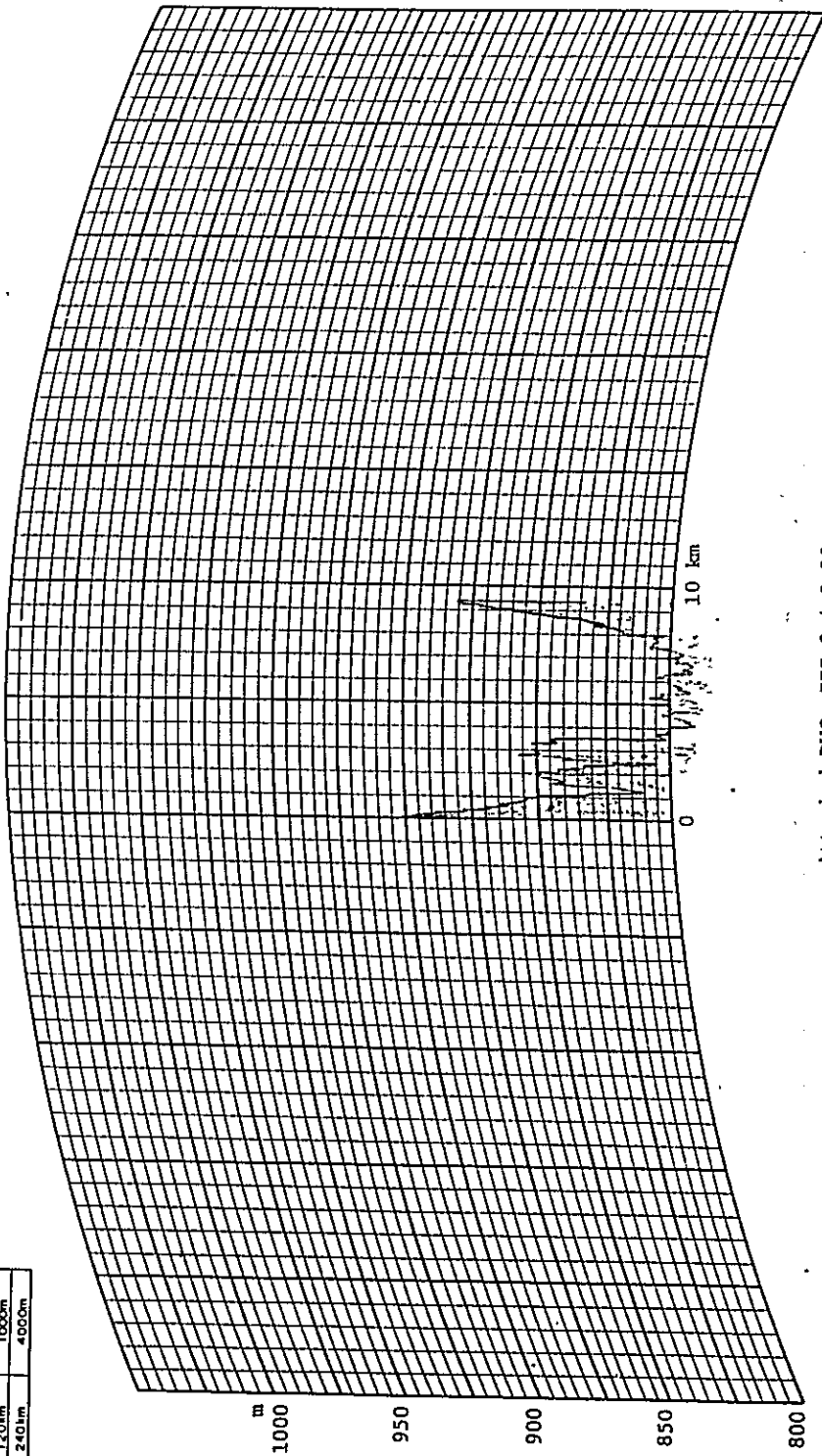
SITE Pangkajene Susu
 GROUND ELEVATION 5 m
 ANTENNA HEIGHT m

SITE Besitang
 GROUND ELEVATION 50 m
 ANTENNA HEIGHT m

DISTANCE 12.0 km

Karo
PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
50km	250m
120km	1000m
240km	4000m



Attached DWG. III-2-4-2-20

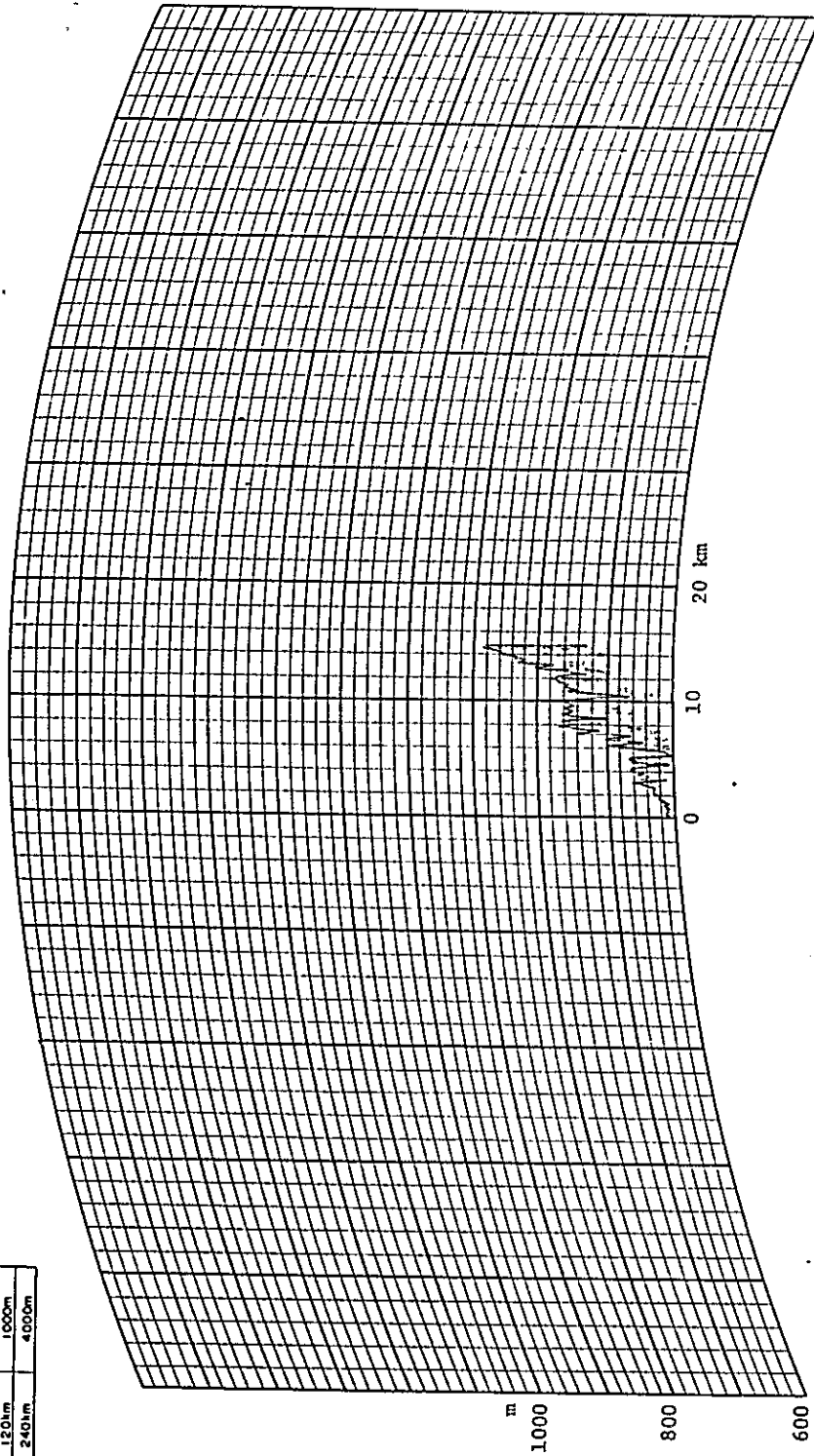
SITE: Kutabuluh
 GROUND ELEVATION: 900 m
 ANTENNA HEIGHT: _____ m

SITE: Tigaderket
 GROUND ELEVATION: 880 m
 ANTENNA HEIGHT: _____ m

DISTANCE 2.3 km

Karo
PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



Attached DWG. III-2-4-2-21

SITE Tigabinanga
 GROUND ELEVATION 610 m
 ANTENNA HEIGHT _____ m

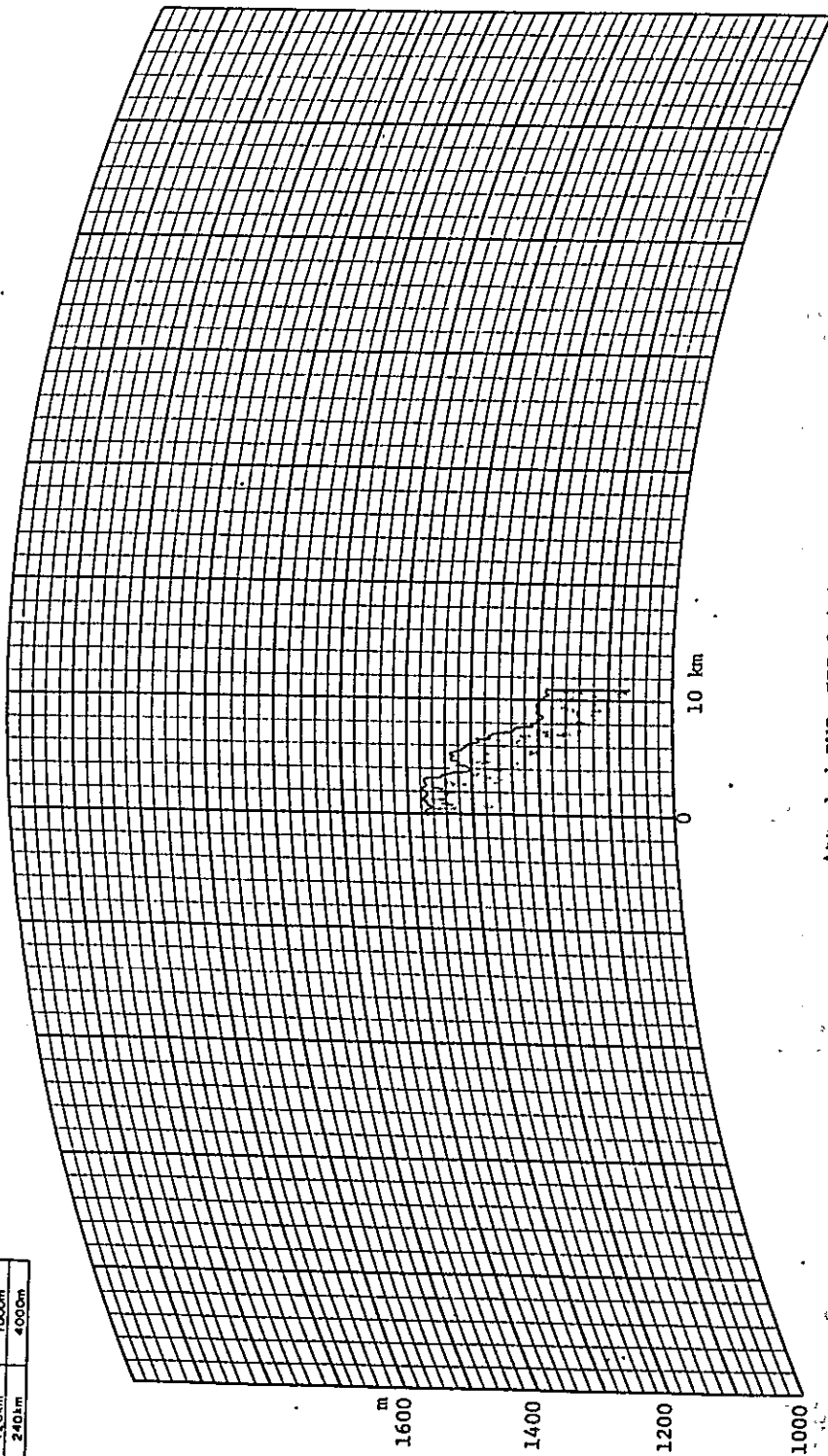
SITE Tigaderket
 GROUND ELEVATION 880 m
 ANTENNA HEIGHT _____ m

DISTANCE 14.5 km

Karo
PATH PROFILE (4/3 RADIUS)

FULL SCALE

DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



Attached DWG. III-2-4-2-22

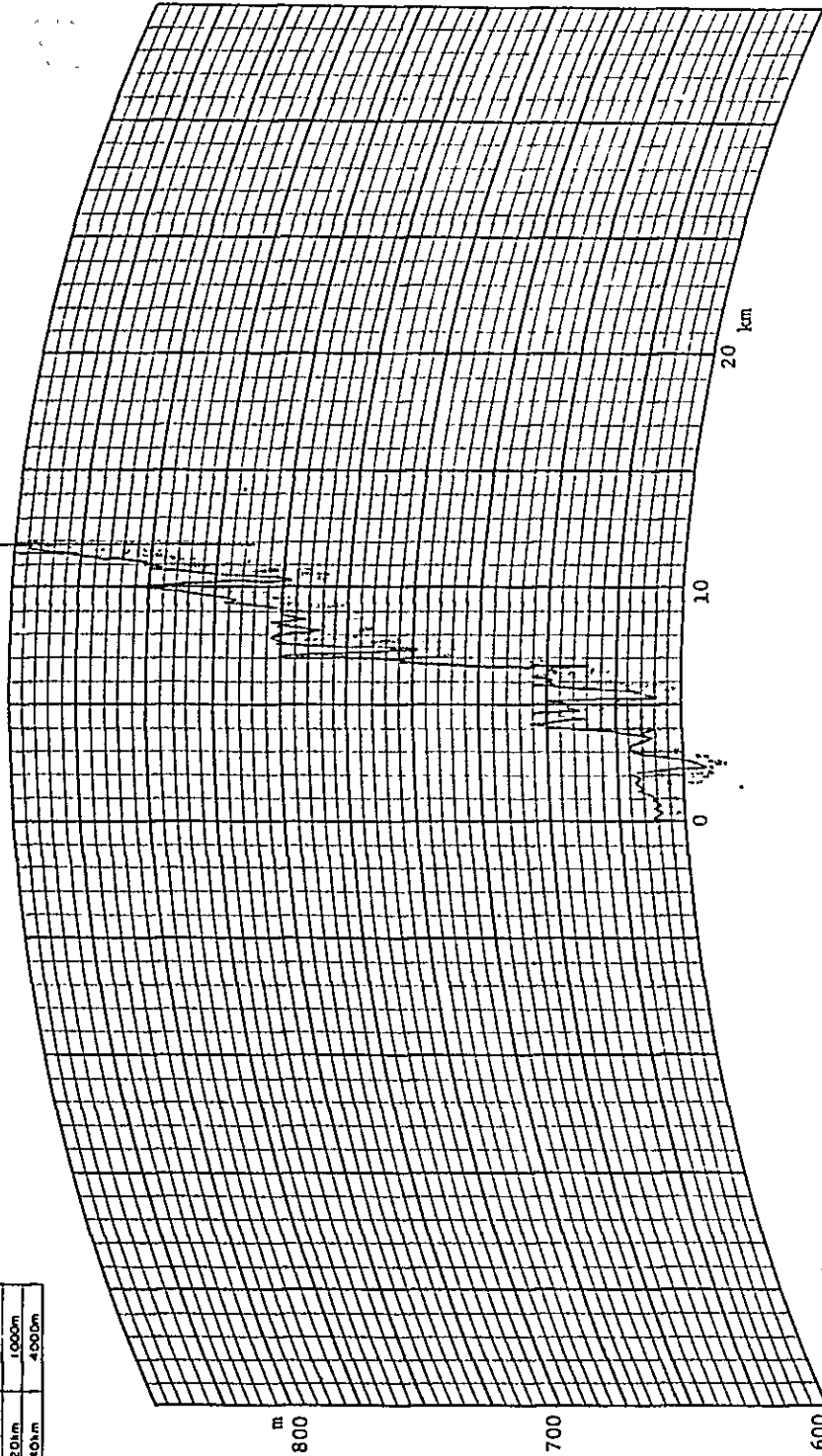
SITE: Barastegi
 GROUND ELEVATION: 1370 m
 ANTENNA HEIGHT: _____ m

SITE: Kabaniahe
 GROUND ELEVATION: 1190 m
 ANTENNA HEIGHT: _____ m

DISTANCE: 10.8 km

Karo
PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



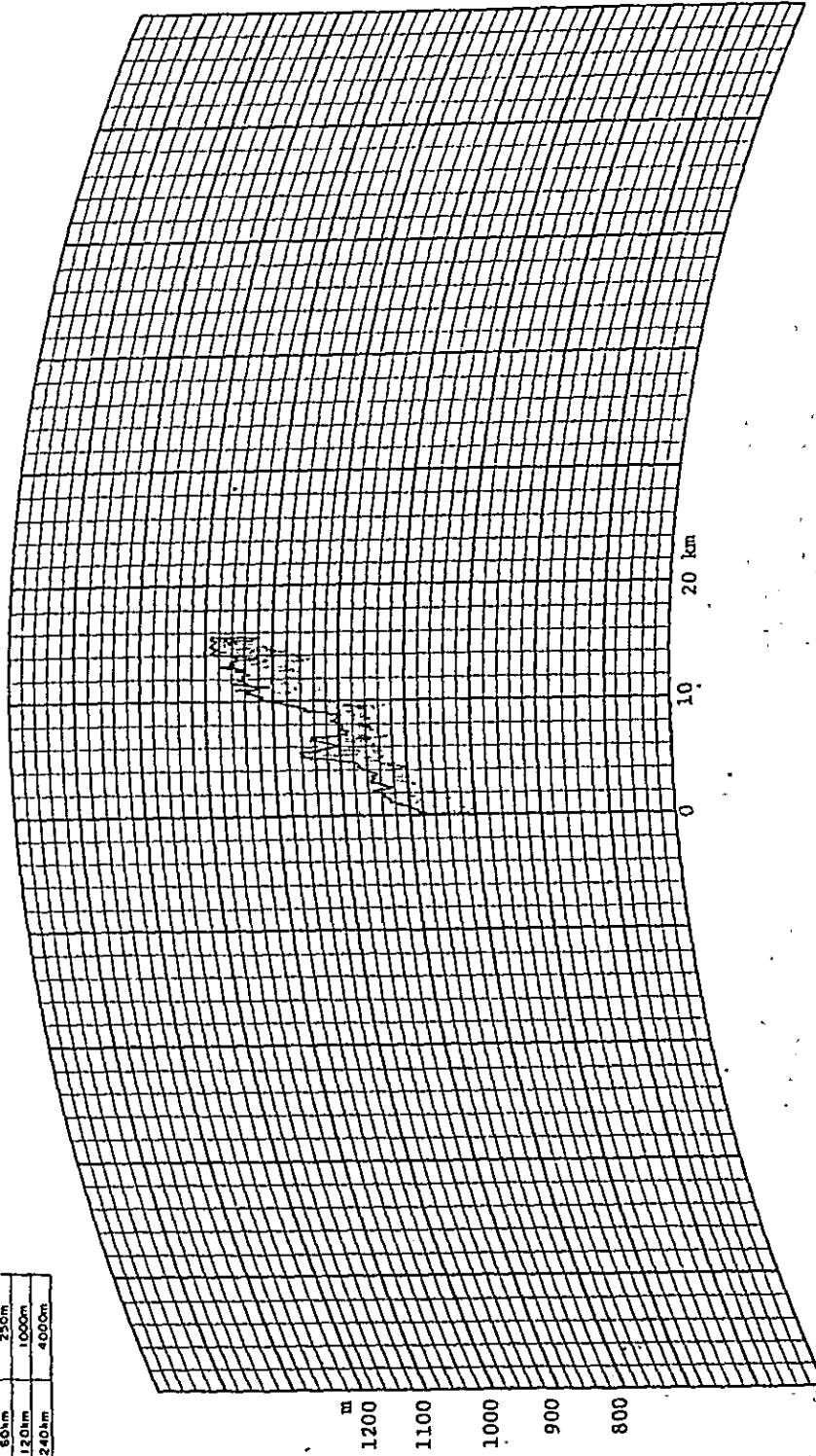
Attached DWG. III-2-4-2-23

SITE Tigabinanga
 GROUND ELEVATION 610 m
 ANTENNA HEIGHT _____ m

SITE Munthe
 GROUND ELEVATION 850 m
 ANTENNA HEIGHT _____ m

Karo
PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



Attached DWG. III-2-4-2-24

SITE: Tigaderket
GROUND ELEVATION 880 m
ANTENNA HEIGHT: m

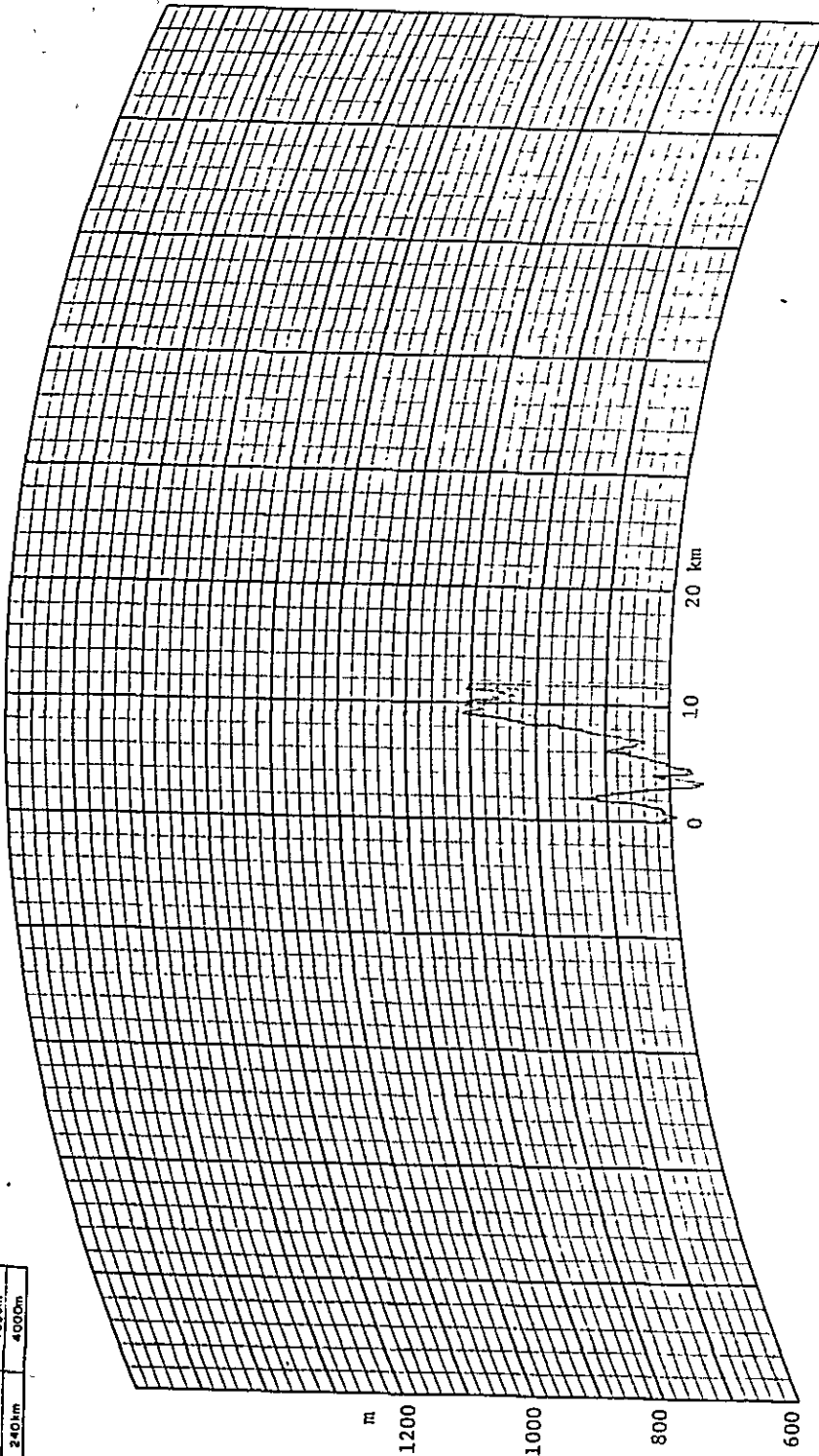
SITE: Kabanjane
GROUND ELEVATION 1190 m
ANTENNA HEIGHT: m

DISTANCE: 15.6 km

Karo
PATH PROFILE (4/3 RADIUS)

FULL SCALE

DISTANCE	HEIGHT
60m	250m
120m	1000m
240m	4000m



Attached DWG. III-2-4-2-25

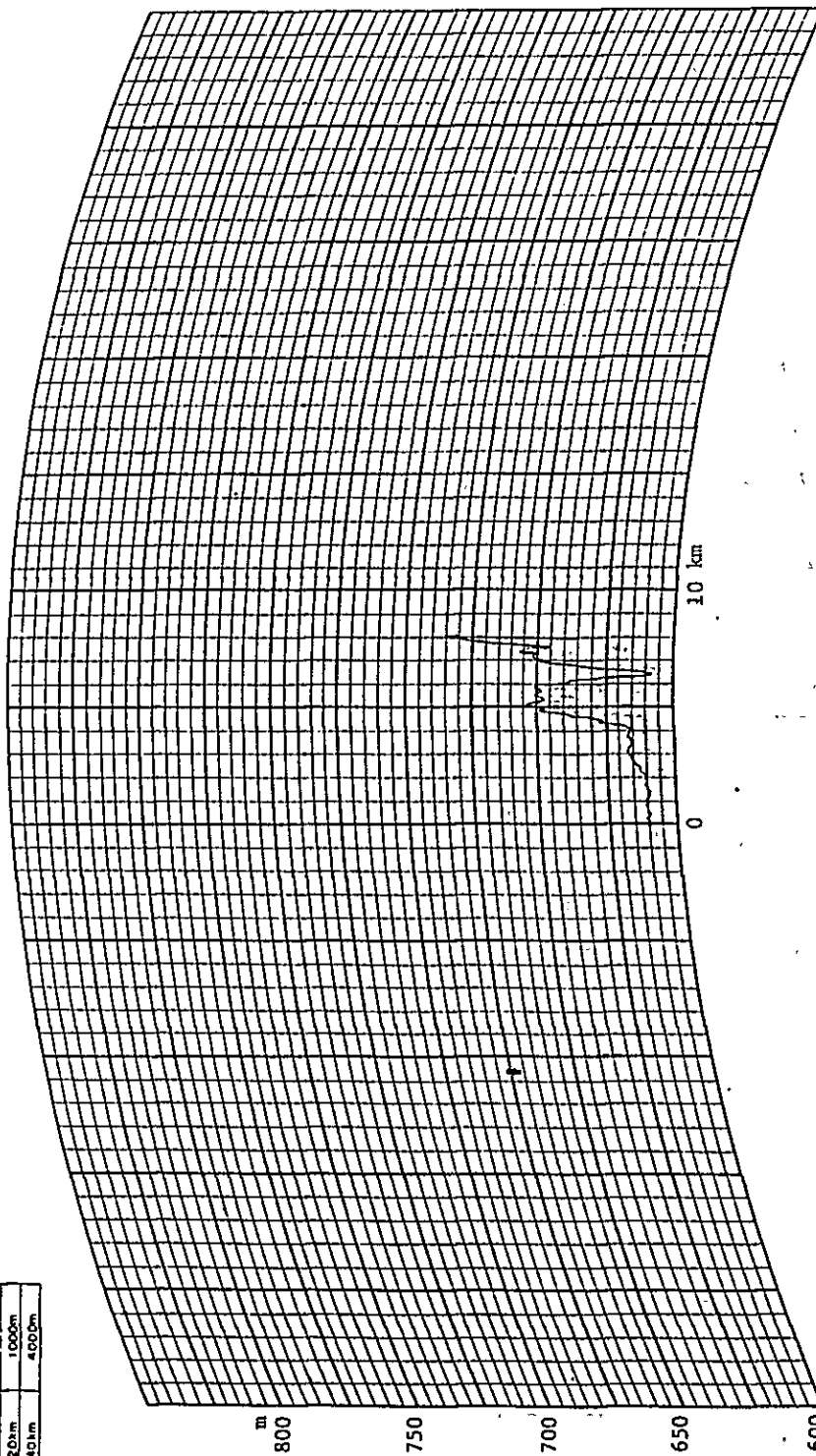
SITE Tigabinanga
 GROUND ELEVATION 610 m
 ANTENNA HEIGHT _____ m

SITE Kuta_buluh
 GROUND ELEVATION 900 m
 ANTENNA HEIGHT _____ m

DISTANCE 11.6 km

Karo
PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



Attached DWG. III-2-4-2-26

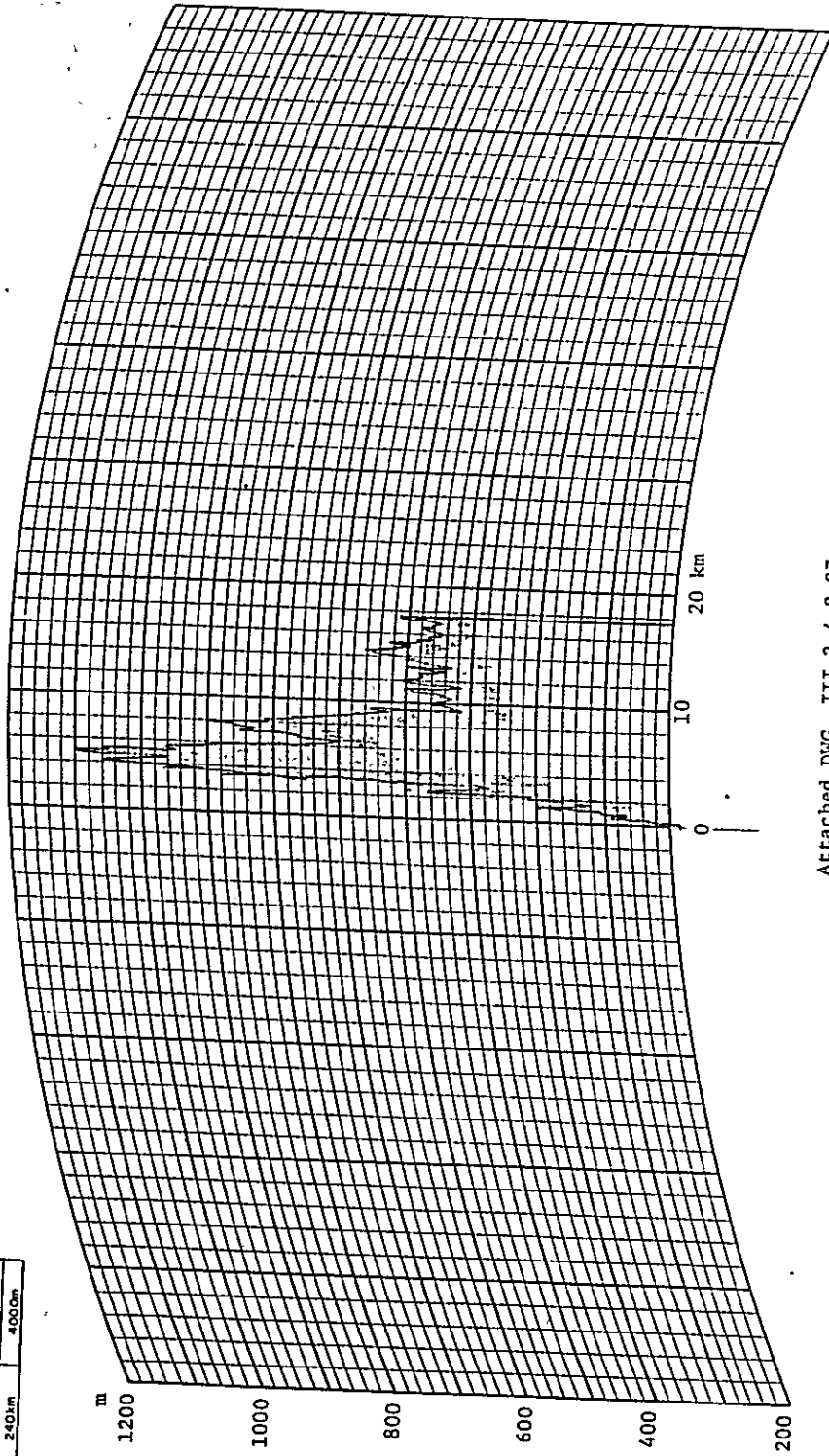
SITE Tiga binanga
GROUND ELEVATION 610 m
ANTENNA HEIGHT: 0 m

SITE Djuhar
GROUND ELEVATION 680 m
ANTENNA HEIGHT: 0 m

DISTANCE 8.0 km

Karo
PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



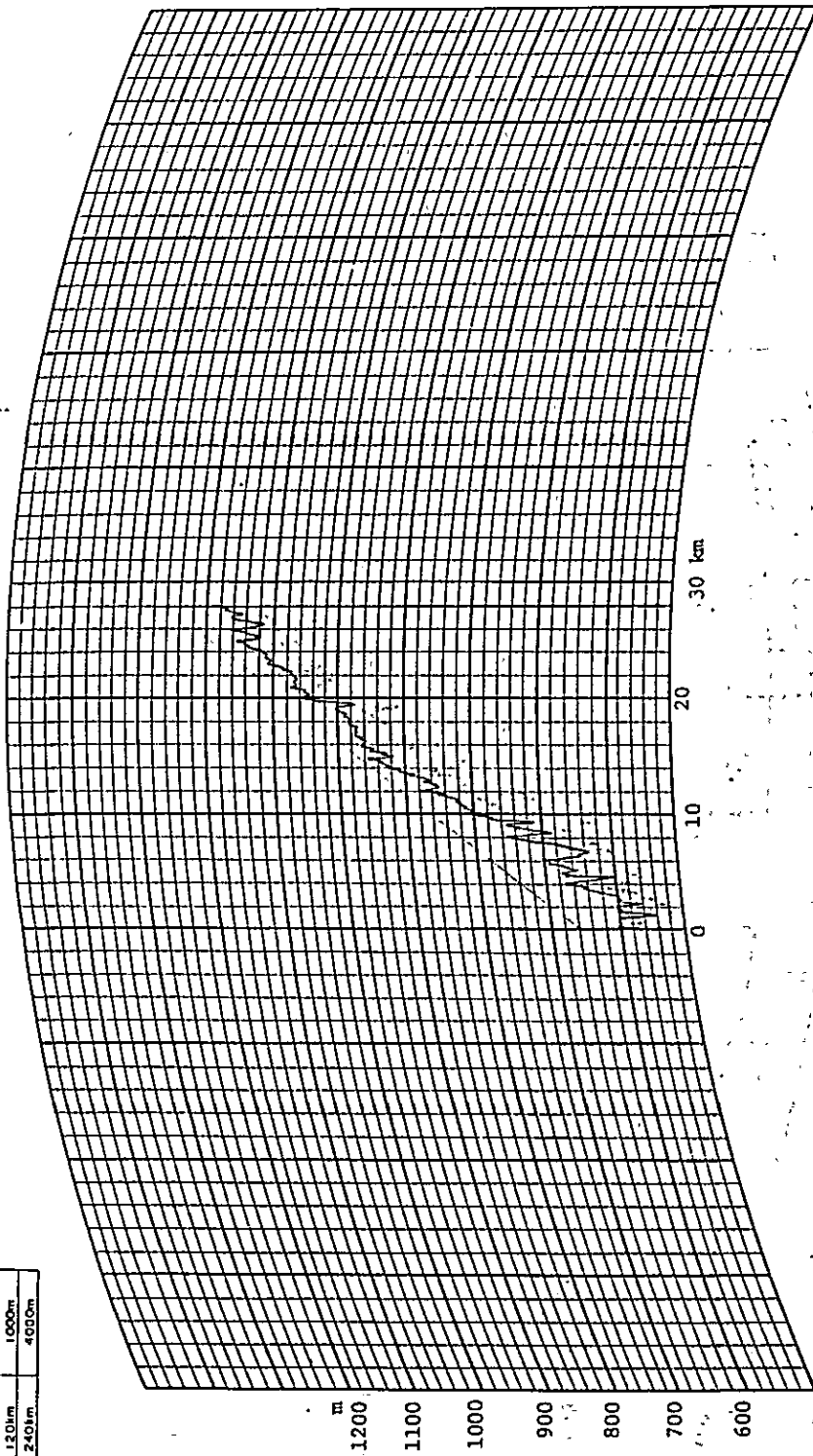
Attached DWG. III-2-4-2-27

SITE Laubaleng
 GROUND ELEVATION 180 m
 ANTENNA HEIGHT m

SITE Tigabinanga
 GROUND ELEVATION 610 m
 ANTENNA HEIGHT m

Karo
PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
50m	250m
120m	1000m
240m	4000m



Attached DWG: III-2-4-2-28

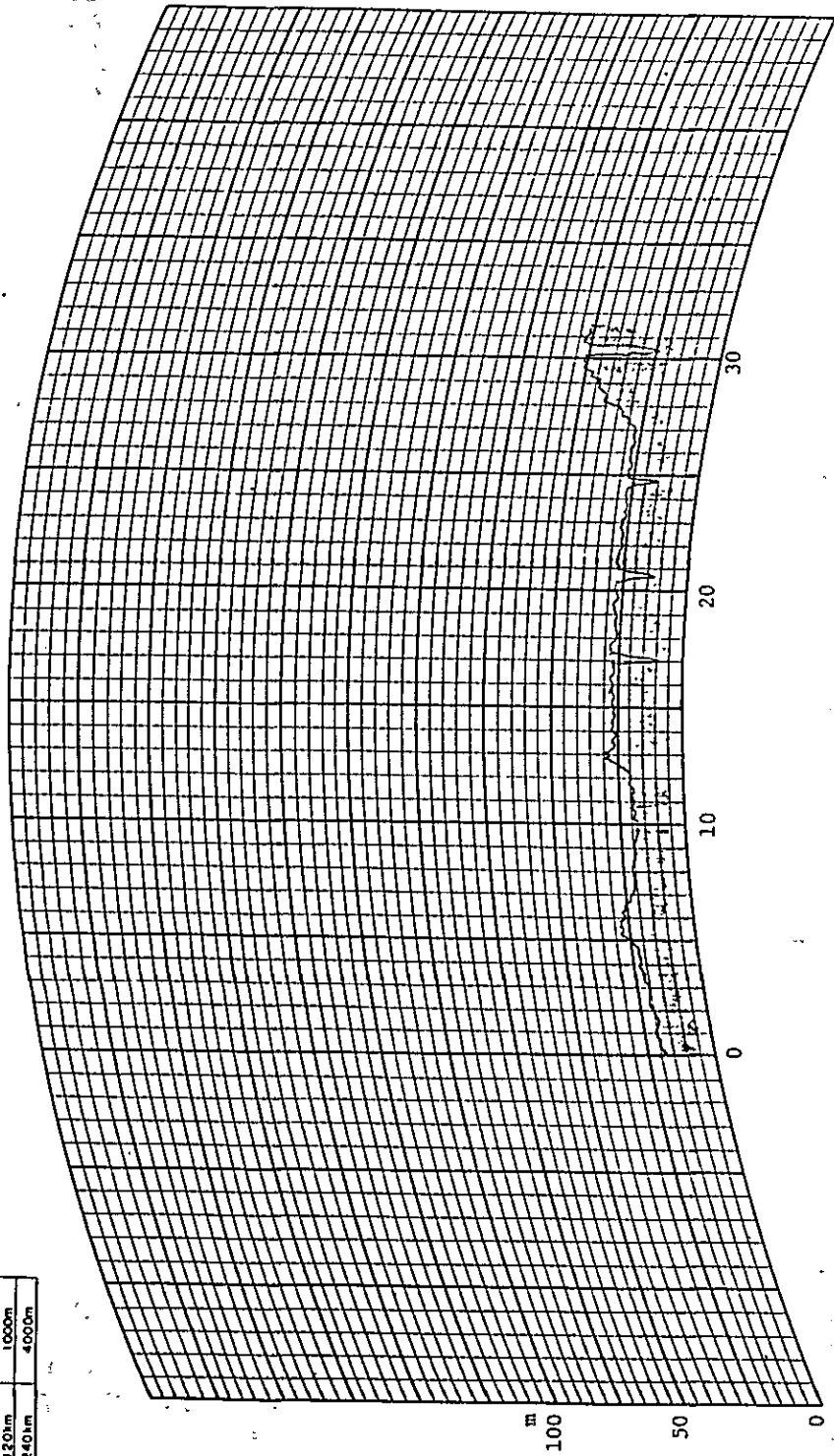
SITE: Tigabinanga
 GROUND ELEVATION 610 m
 ANTENNA HEIGHT _____ m

SITE: Kabaniahe
 GROUND ELEVATION 1190 m
 ANTENNA HEIGHT _____ m

DISTANCE: 28.0 km

Deli Serdang
PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60km	250m
150km	1000m
240km	4000m



Attached DWG. III-2-4-2-29

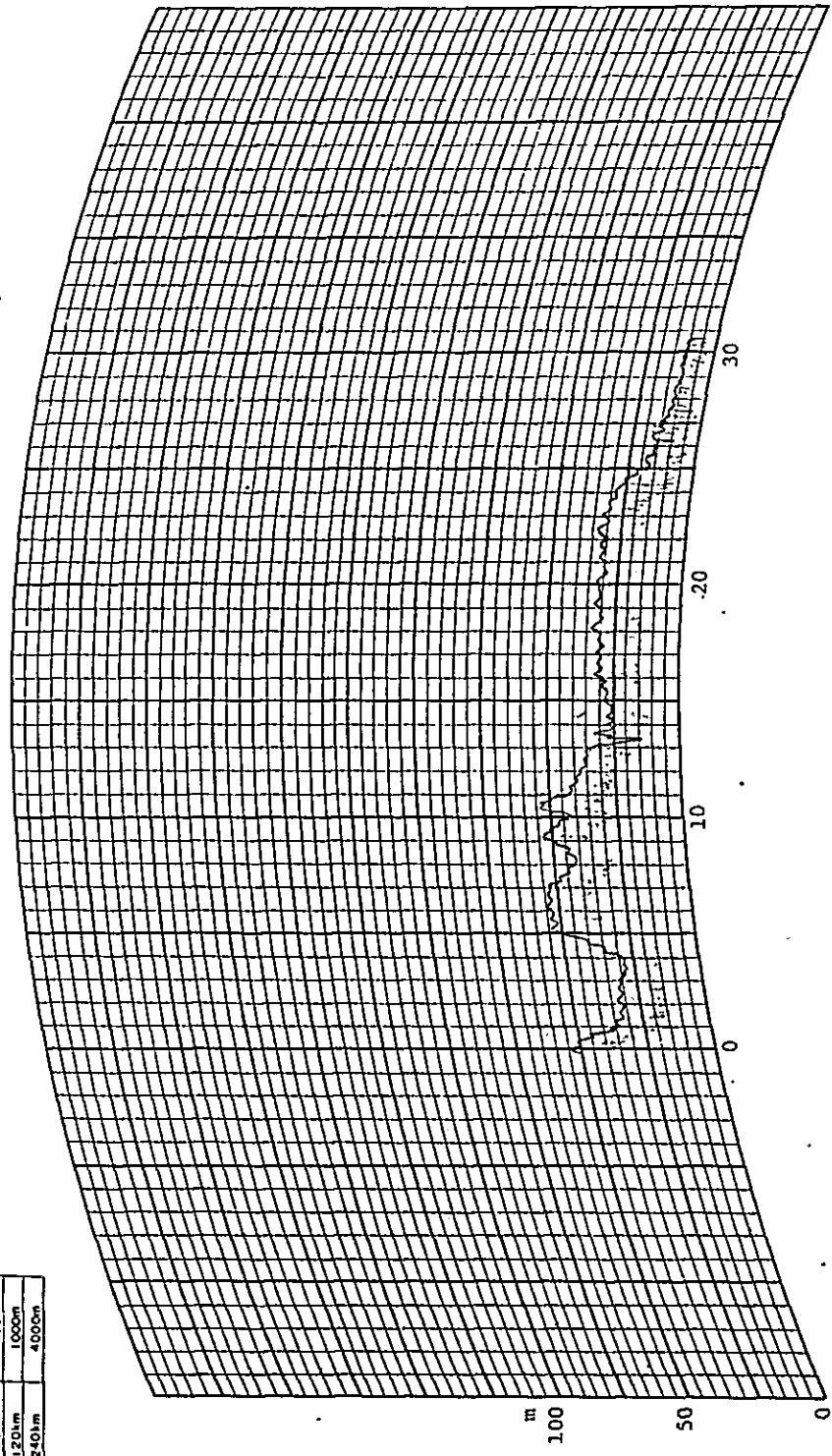
SITE Medan
 GROUND ELEVATION 20 m
 ANTENNA HEIGHT _____ m

SITE Galang
 GROUND ELEVATION 50 m
 ANTENNA HEIGHT _____ m

DISTANCE: 31.4 km

Deli Serdang
PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



Attached DMG. III-2-4-2-30

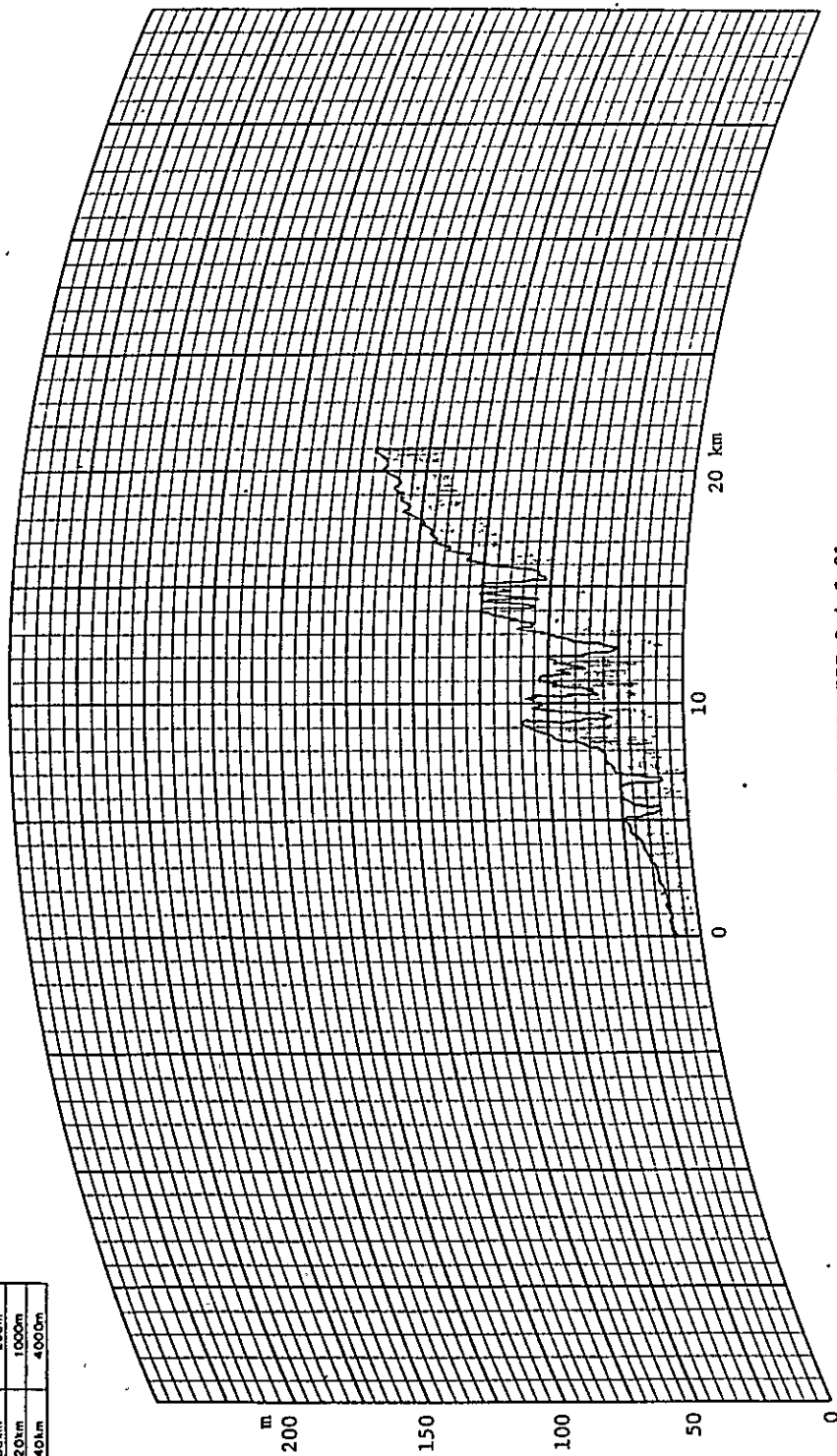
SITE Galang
GROUND ELEVATION 50 m
ANTENNA HEIGHT: _____ m

SITE Tebing Tinggi
GROUND ELEVATION 10 m
ANTENNA HEIGHT: _____ m

DISTANCE: 30.4 km

Deli Serdang
PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



Attached DWG. III-2-4-2-31

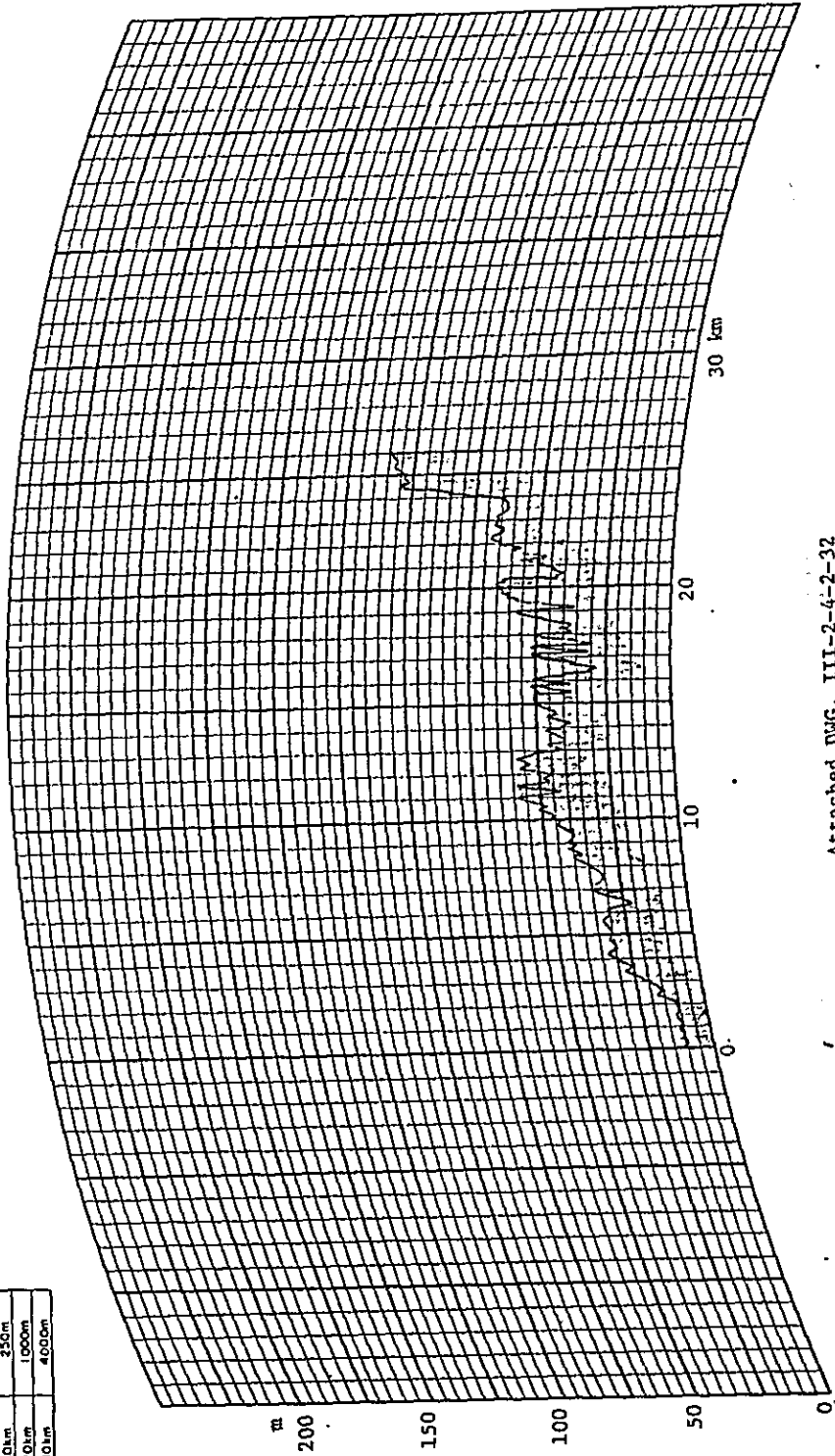
SITE Tebing Tinggi
 GROUND ELEVATION 10 m
 ANTENNA HEIGHT _____ m

SITE Dolok Merawan
 GROUND ELEVATION 110 m
 ANTENNA HEIGHT _____ m

DISTANCE 20.6 km

Deli Serdang
PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



Attached DWG. III-2-4-2-32

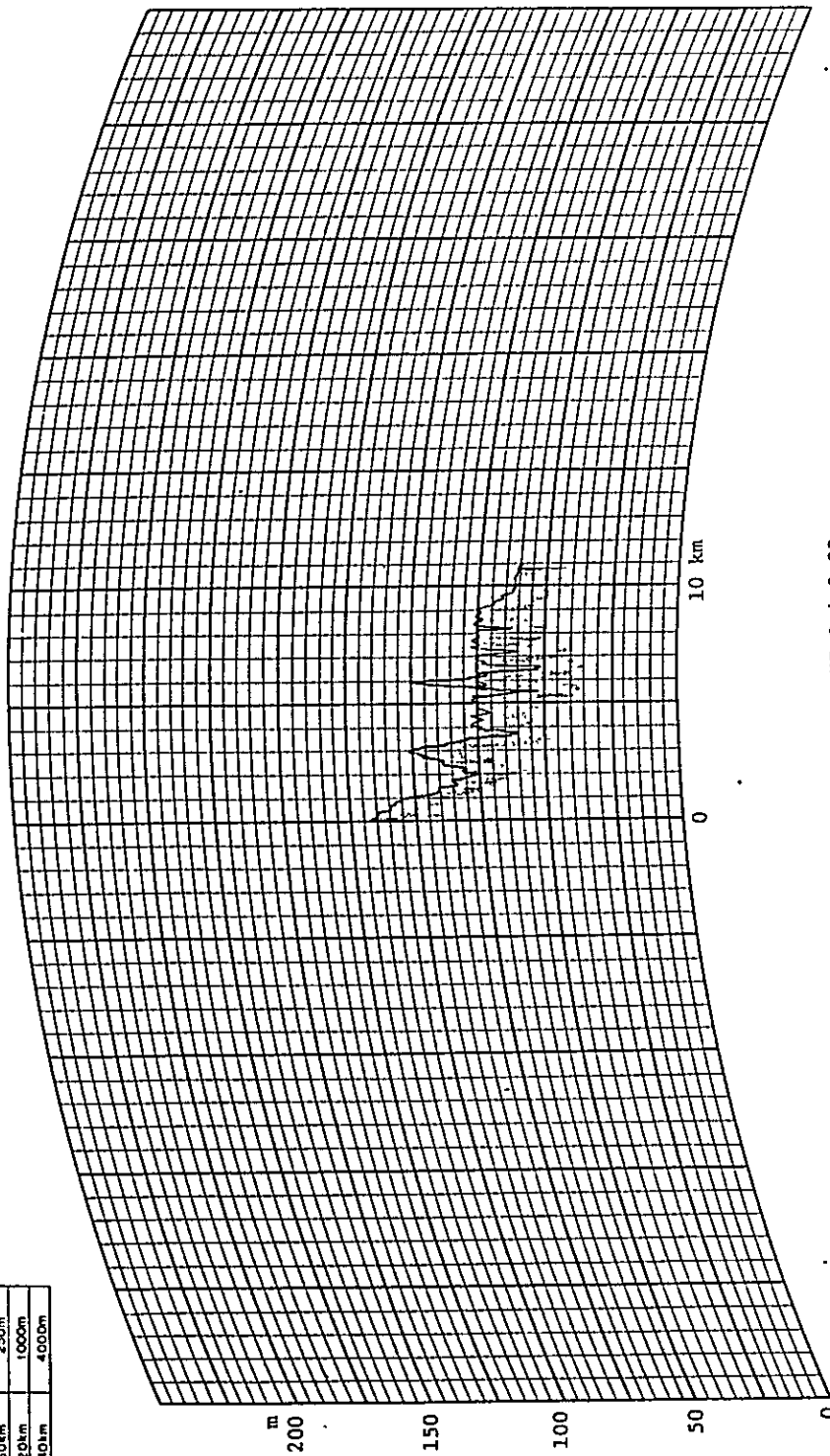
SITE Sidispis
 GROUND ELEVATION 110 m
 ANTENNA HEIGHT _____ m

SITE Tebing Tinggi
 GROUND ELEVATION 10 m
 ANTENNA HEIGHT _____ m

DISTANCE 25.2 km

Deli Serdang
PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



Attached DWG. III-2-4-2-33

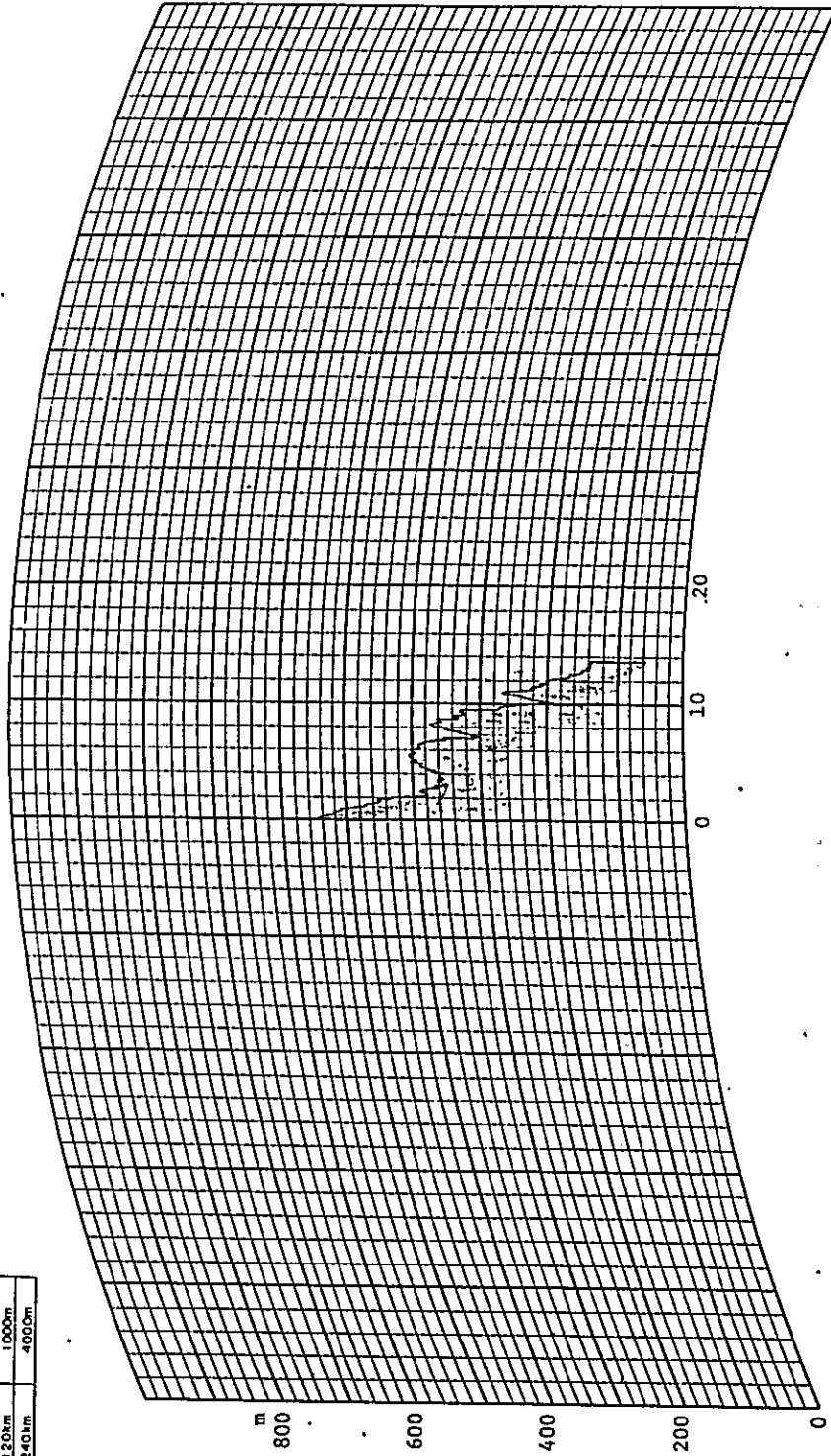
SITE Bangunpurba
GROUND ELEVATION 118 m
ANTENNA HEIGHT _____ m

SITE Galang
GROUND ELEVATION 64 m
ANTENNA HEIGHT _____ m

DISTANCE: 10.6 km

Delit Serdang
PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



Attached DWG. III-2-4-2-34

SITE: Sibolangit
 GROUND ELEVATION 540 m
 ANTENNA HEIGHT: _____ m

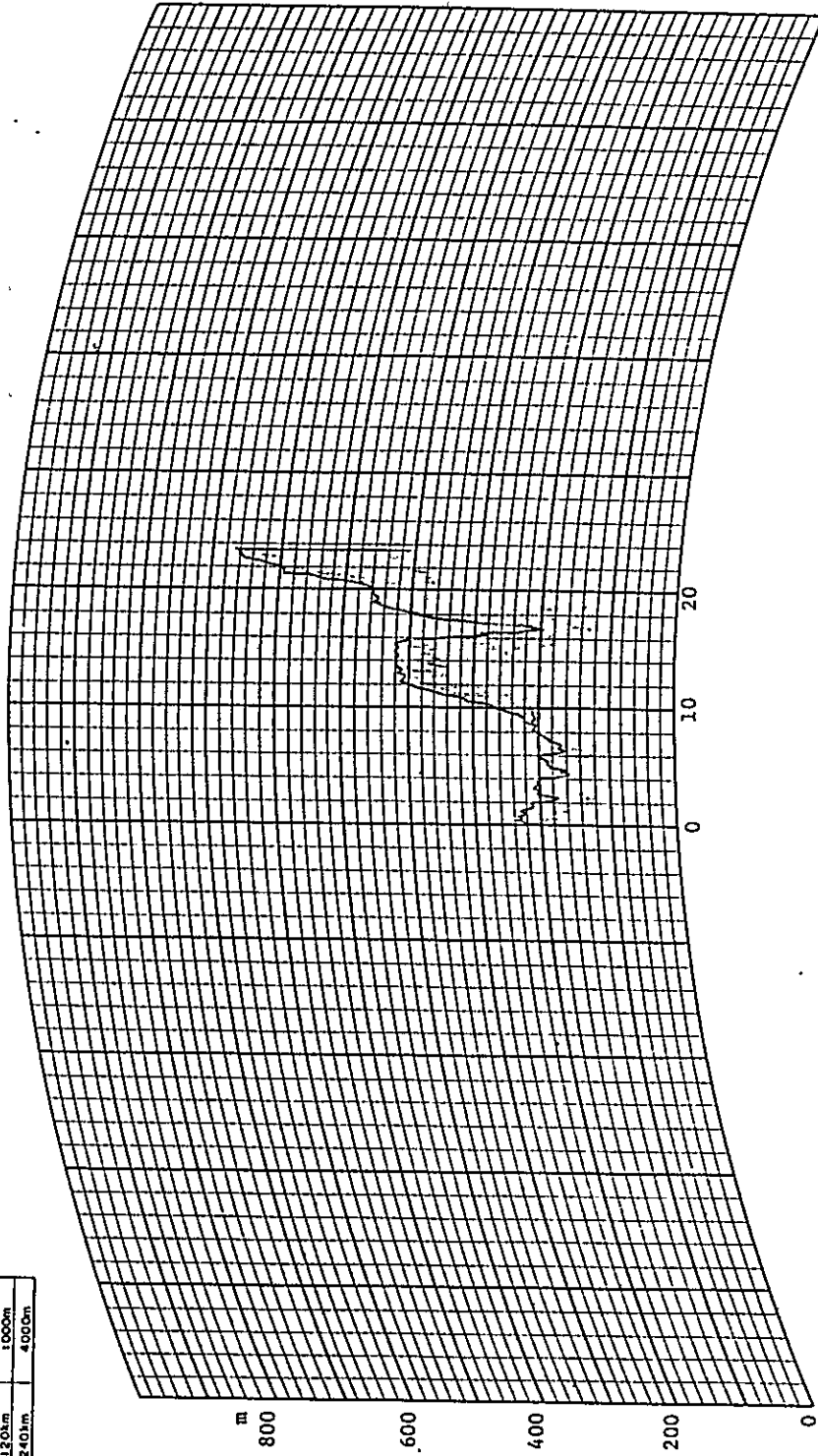
SITE: Birubiru
 GROUND ELEVATION 150 m
 ANTENNA HEIGHT: _____ m

DISTANCE: 13.4 km

Deli Serdang
PATH PROFILE (4/3 RADIUS)

FULL SCALE

DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



Attached DWG. III-2-4-2-35

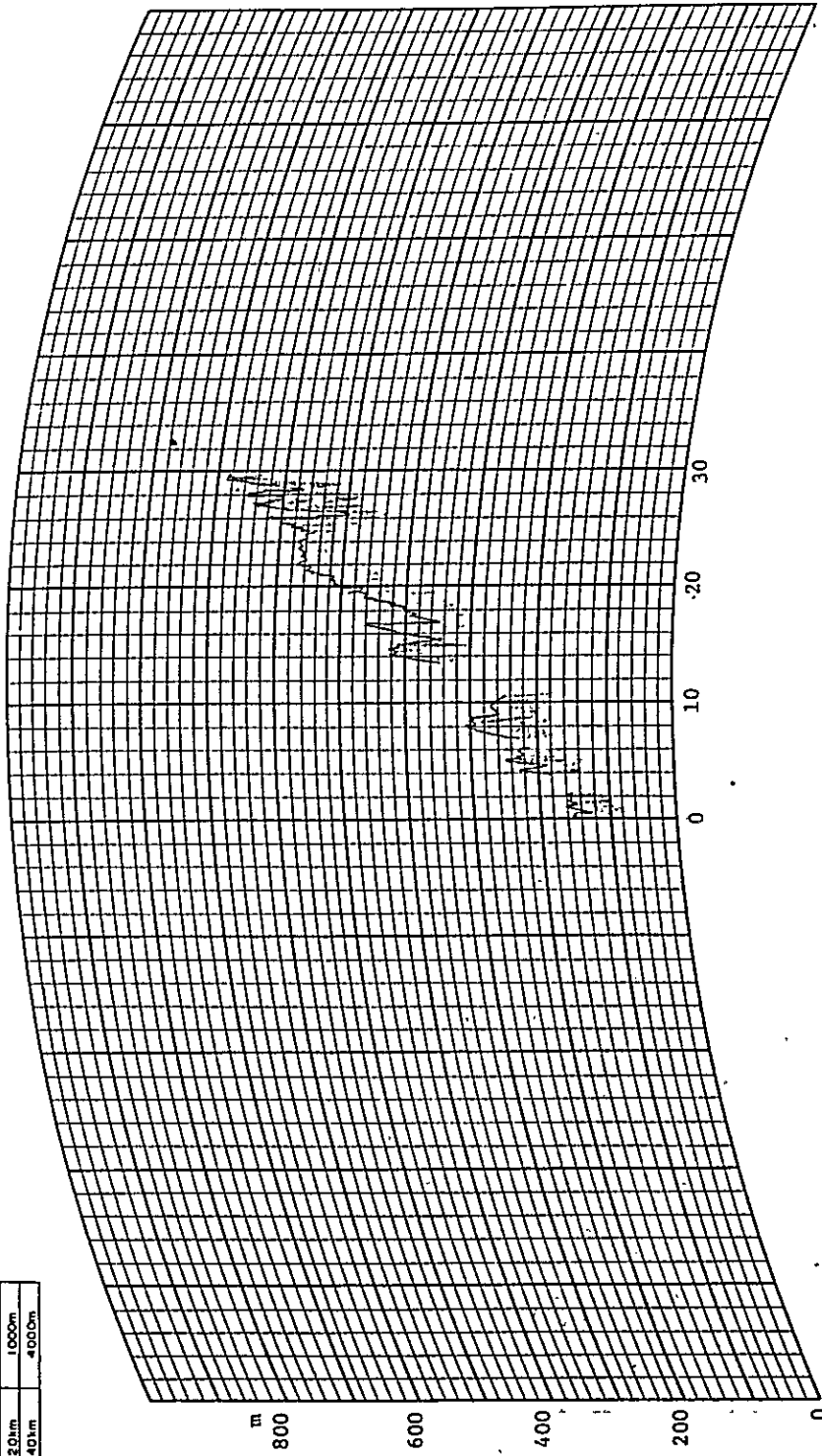
SITE Sibolangit
 GROUND ELEVATION 540 m
 ANTENNA HEIGHT _____ m

SITE Birubiru
 GROUND ELEVATION 150 m
 ANTENNA HEIGHT _____ m

DISTANCE 13.4 km

Deii Serdang
PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



Attached DWG. III-2-4-2-36

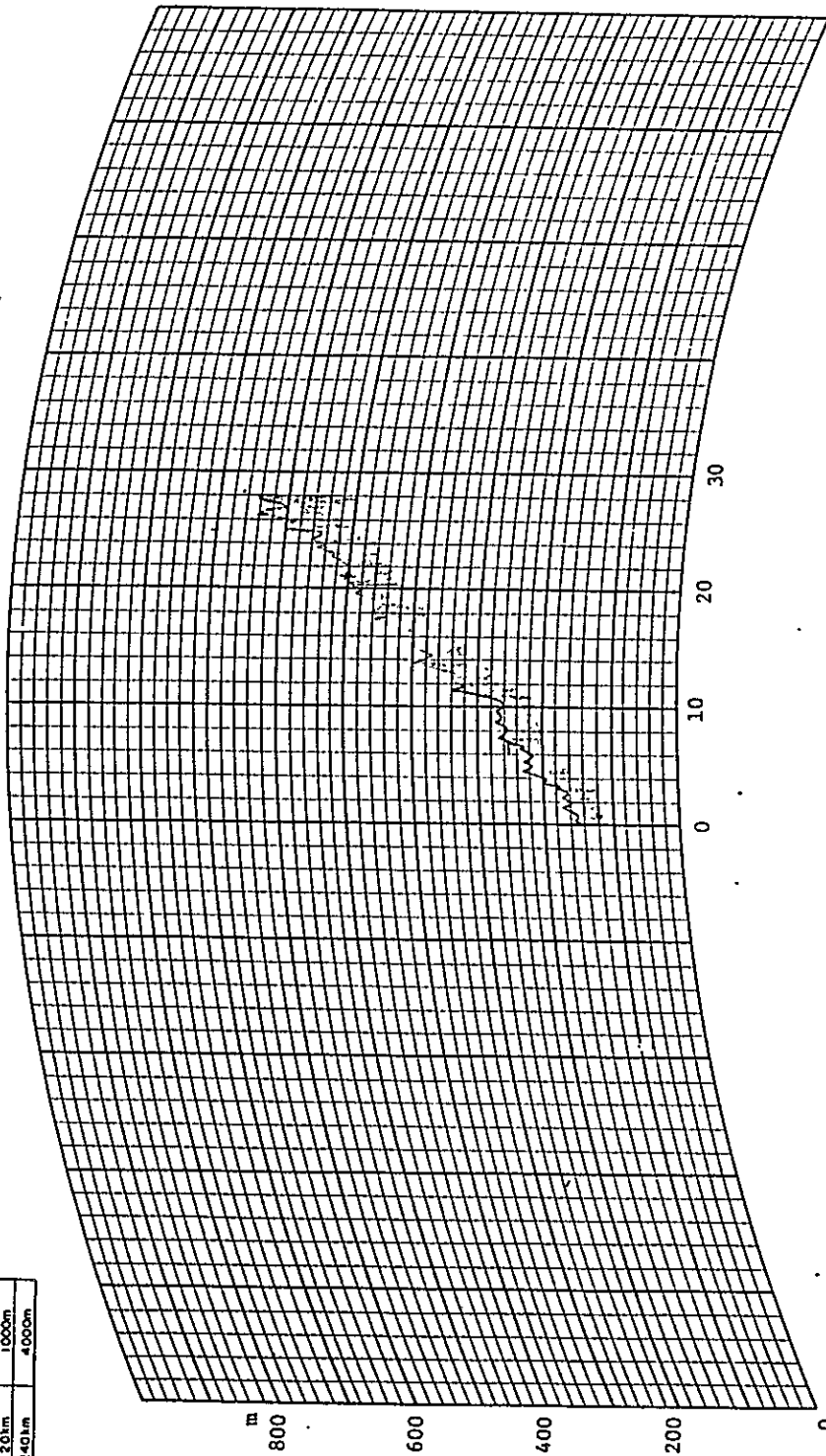
SITE Birubiru
 GROUND ELEVATION 150 m
 ANTENNA HEIGHT: _____ m

SITE Gunungmeriah
 GROUND ELEVATION 670 m
 ANTENNA HEIGHT: _____ m

DISTANCE: 29.5 km

Deli Serdang
PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



Attached DWG. III-2-4-2-37

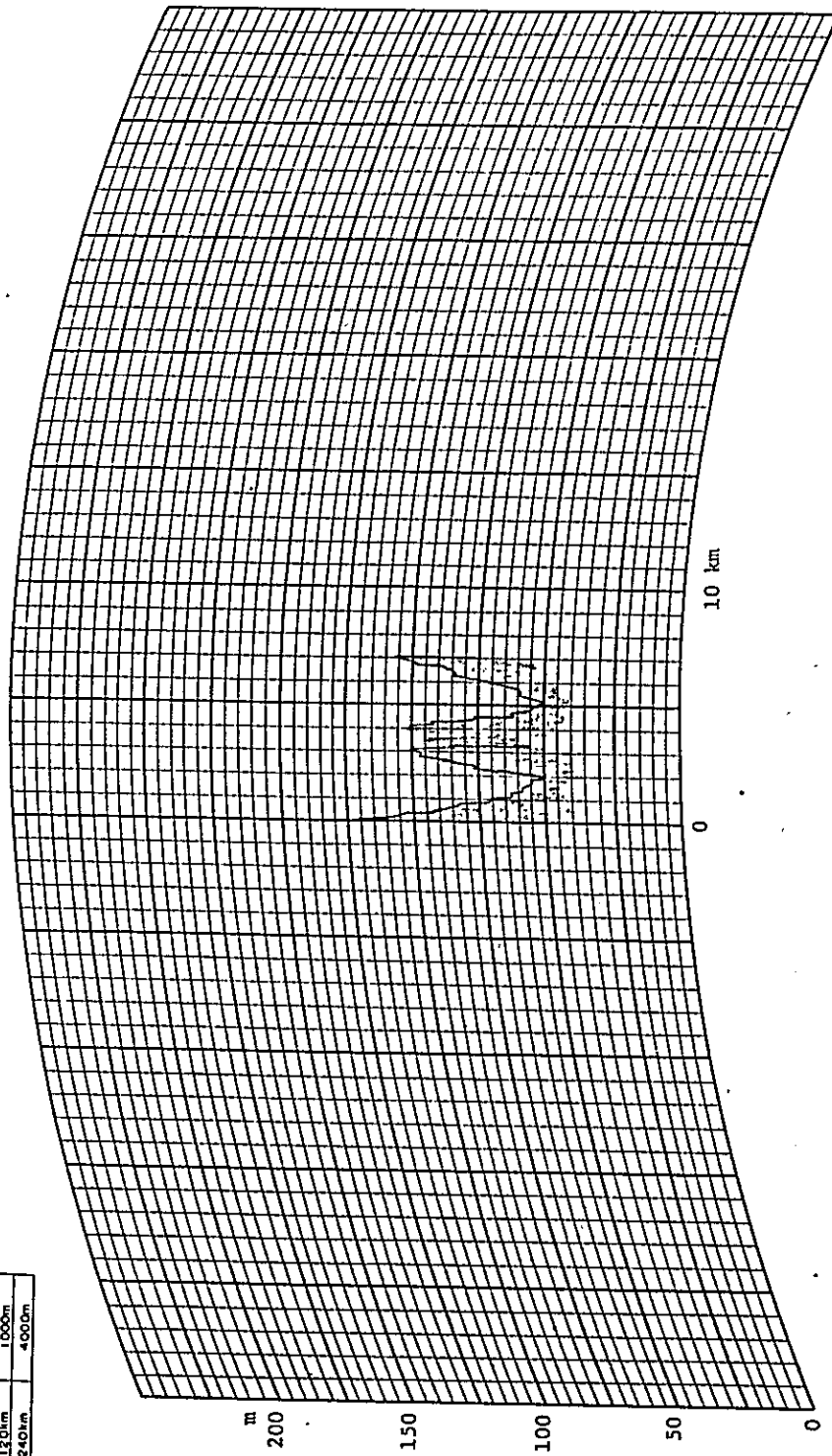
SITE Birubiru
 GROUND ELEVATION 150 m
 ANTENNA HEIGHT 0 m

SITE Gunungmeriah
 GROUND ELEVATION 660 m
 ANTENNA HEIGHT 0 m

DISTANCE 29.5 km

Deli Serdang
PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



Attached DWG. III-2-4-2-38

SITE Bangunpurba
GROUND ELEVATION 115 m
ANTENNA HEIGHT m

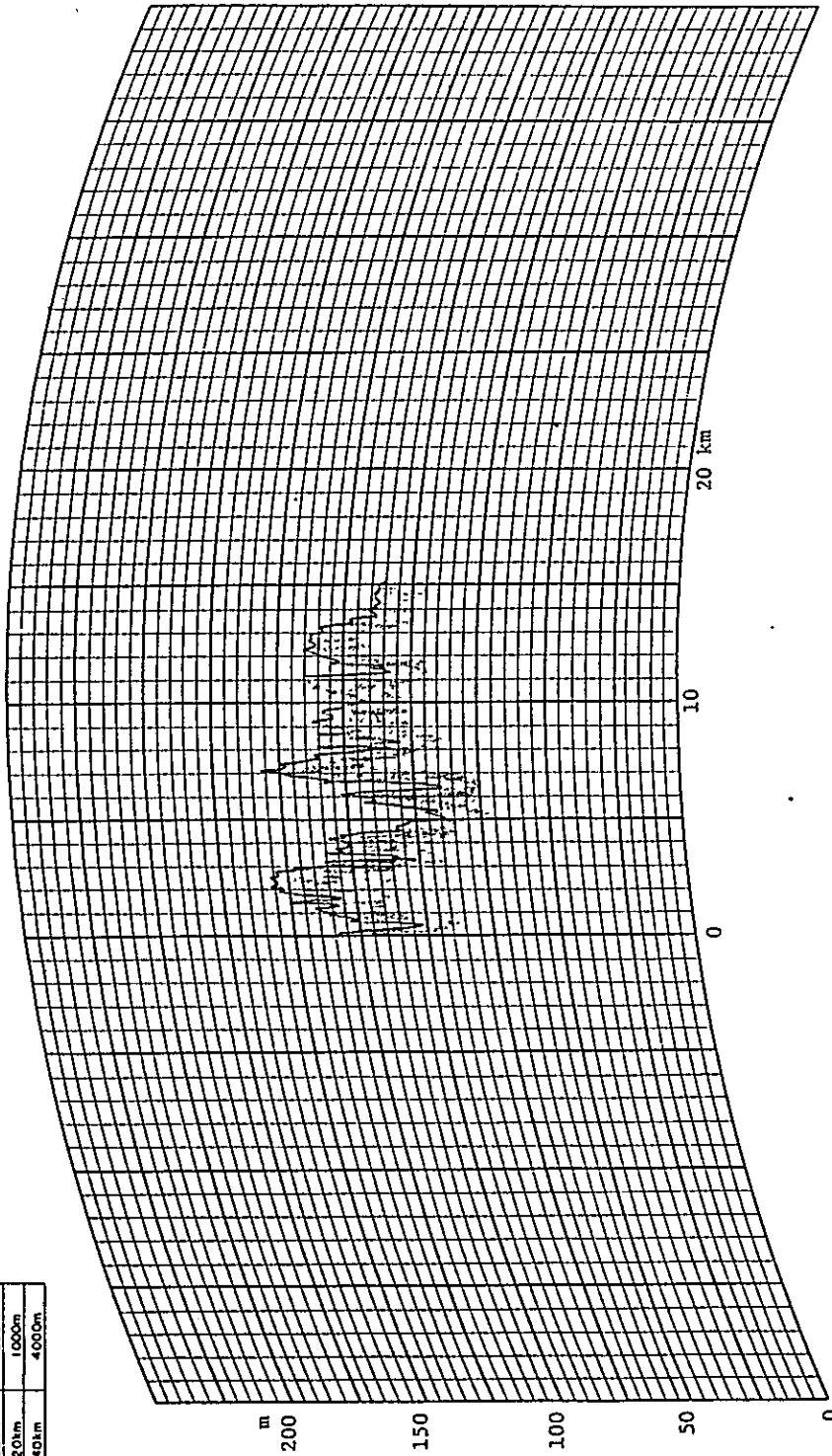
SITE Kotarih
GROUND ELEVATION 100 m
ANTENNA HEIGHT m

DISTANCE 7.0 km

Deli Serdang

PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



Attached DWG. III-2-4-2-39

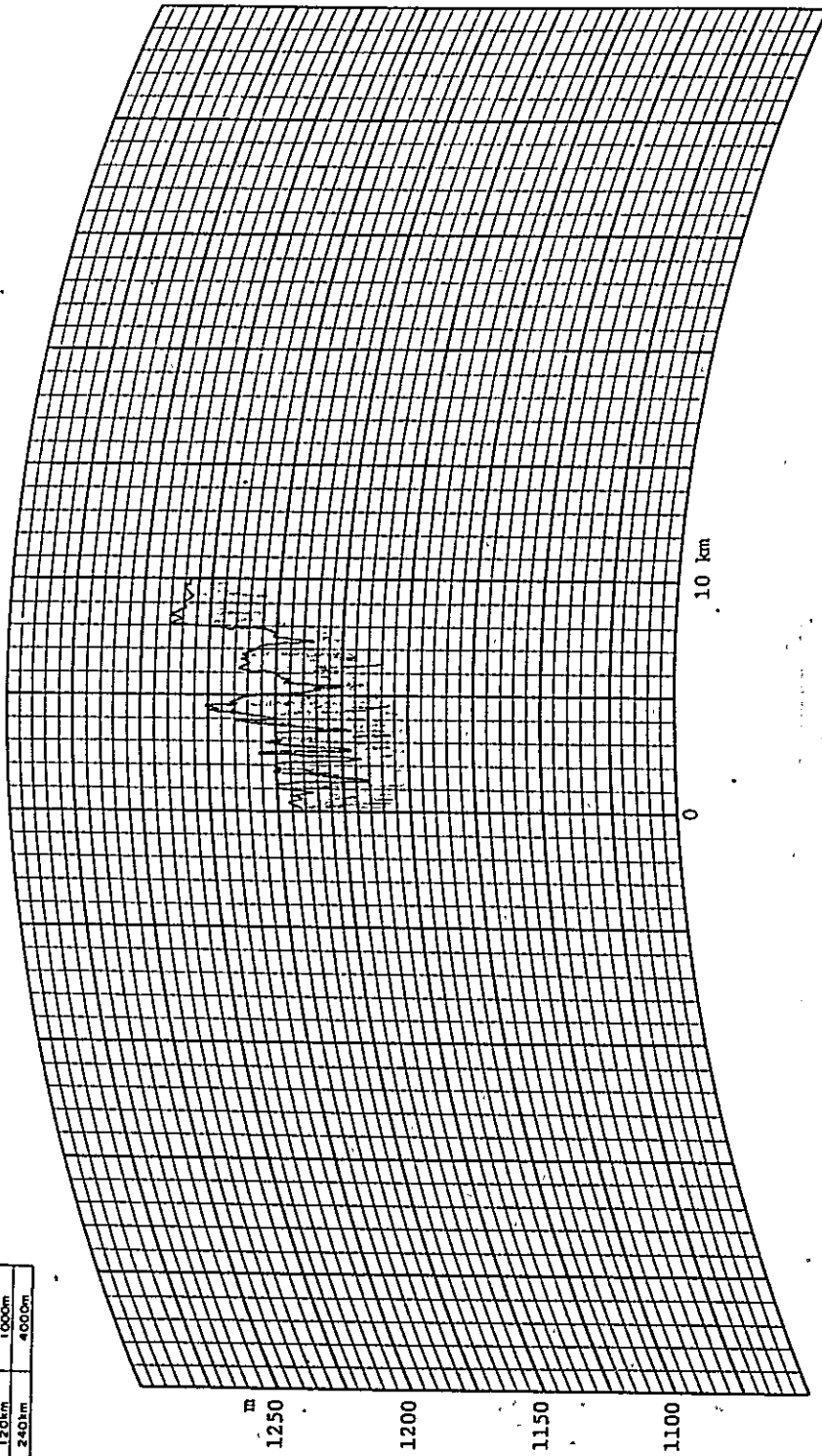
SITE Bangunpurba
GROUND ELEVATION 110 m
ANTENNA HEIGHT _____ m

SITE Birubiru
GROUND ELEVATION 150 m
ANTENNA HEIGHT _____ m

DISTANCE 15.0 km

Deli Serdang
PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



Attached DWG. III-2-4-2-40

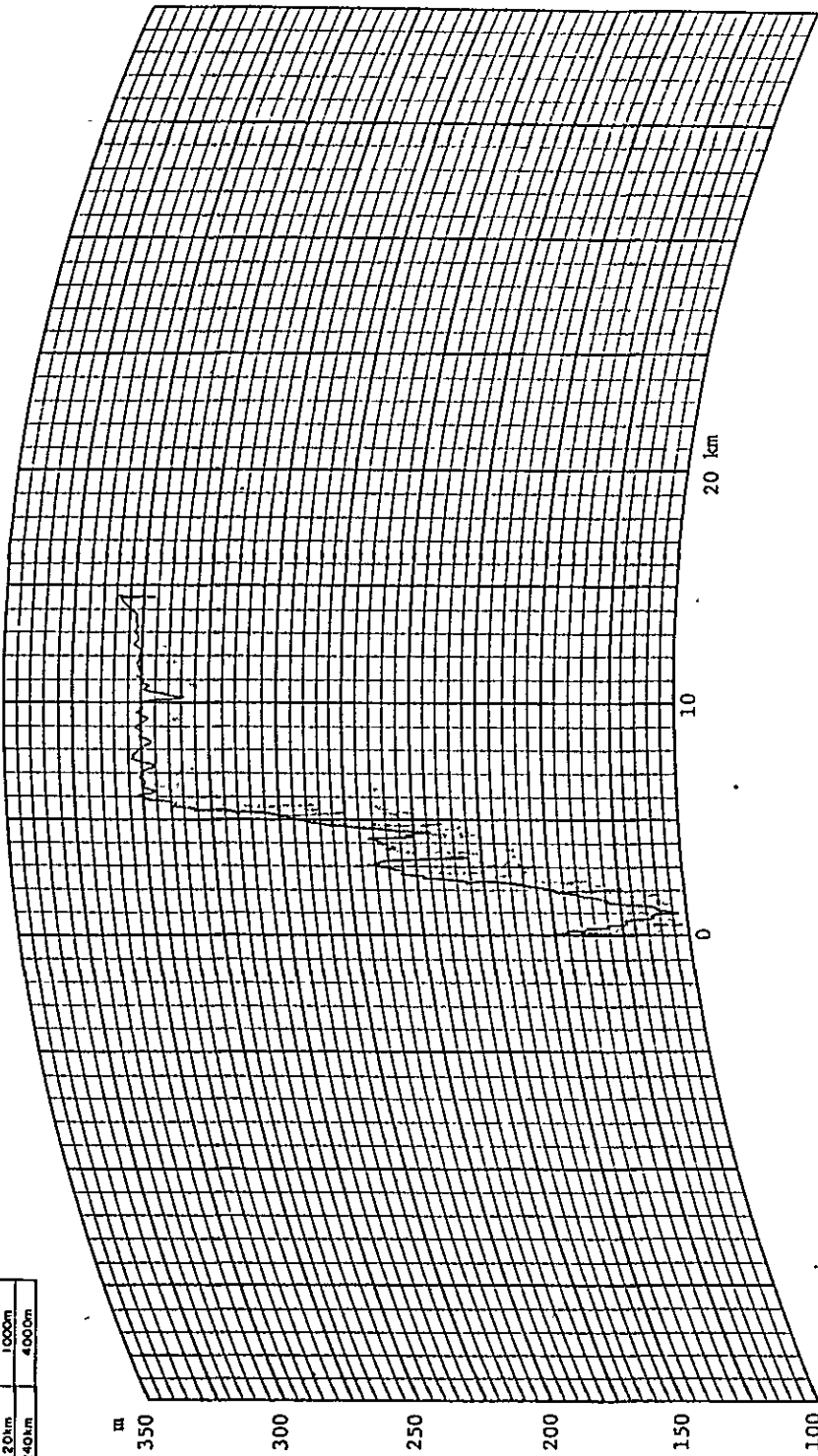
SITE: Kabanjahe
GROUND ELEVATION: 1190 m
ANTENNA HEIGHT _____ m

SITE: Barusjahe
GROUND ELEVATION: 1220 m
ANTENNA HEIGHT _____ m

DISTANCE: 9.9 km

Deli. Serdang
PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



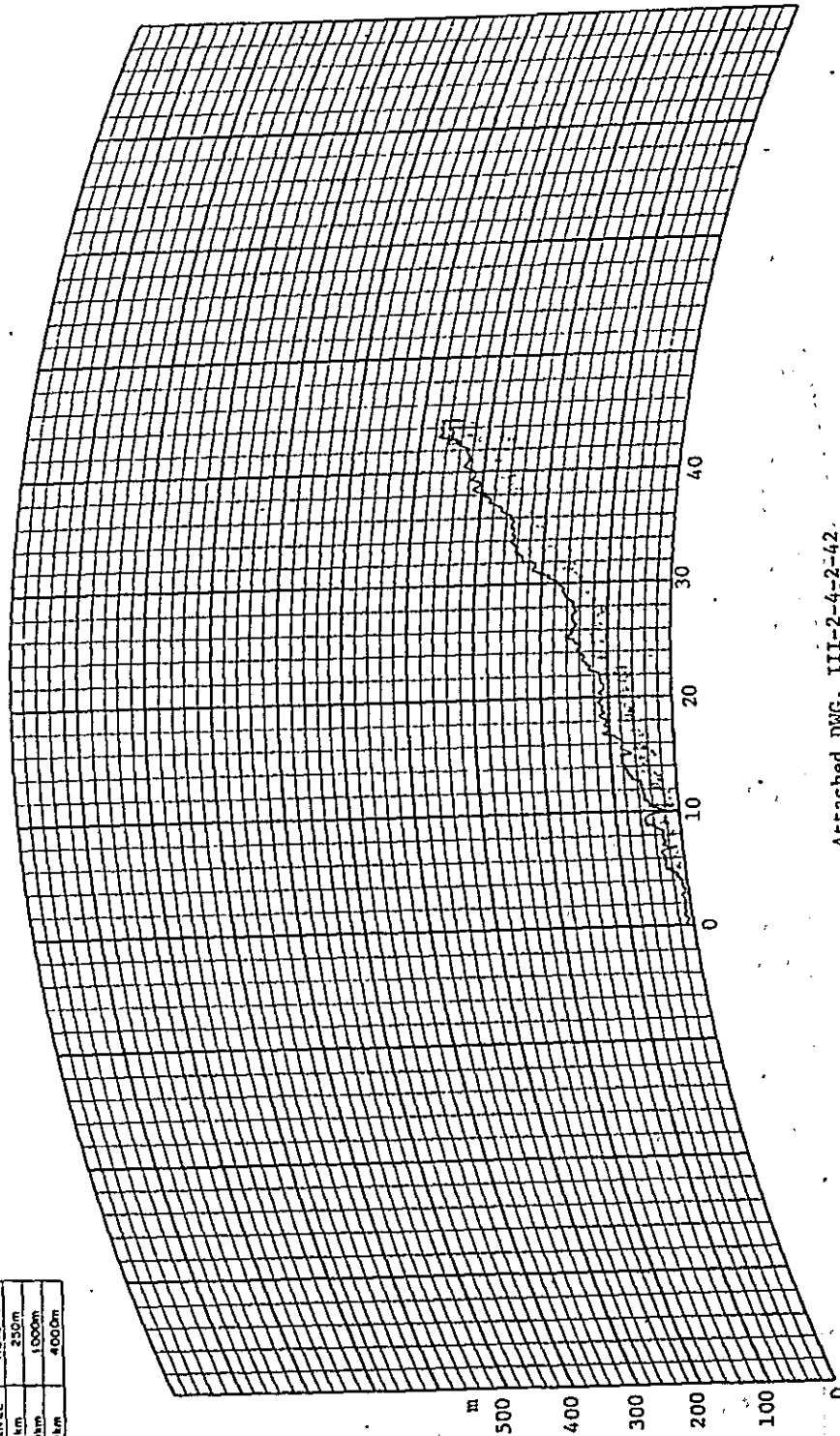
Attached DWG. III-2-4-2-41

SITE Birubiru
 GROUND ELEVATION _____ m
 ANTENNA HEIGHT _____ m

SITE Tigajuhah
 GROUND ELEVATION _____ m
 ANTENNA HEIGHT _____ m
 DISTANCE: 14.6 km

Simalungun
PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60km	330m
120km	1000m
240km	4000m



Attached DMG. III-2-4-2-42.

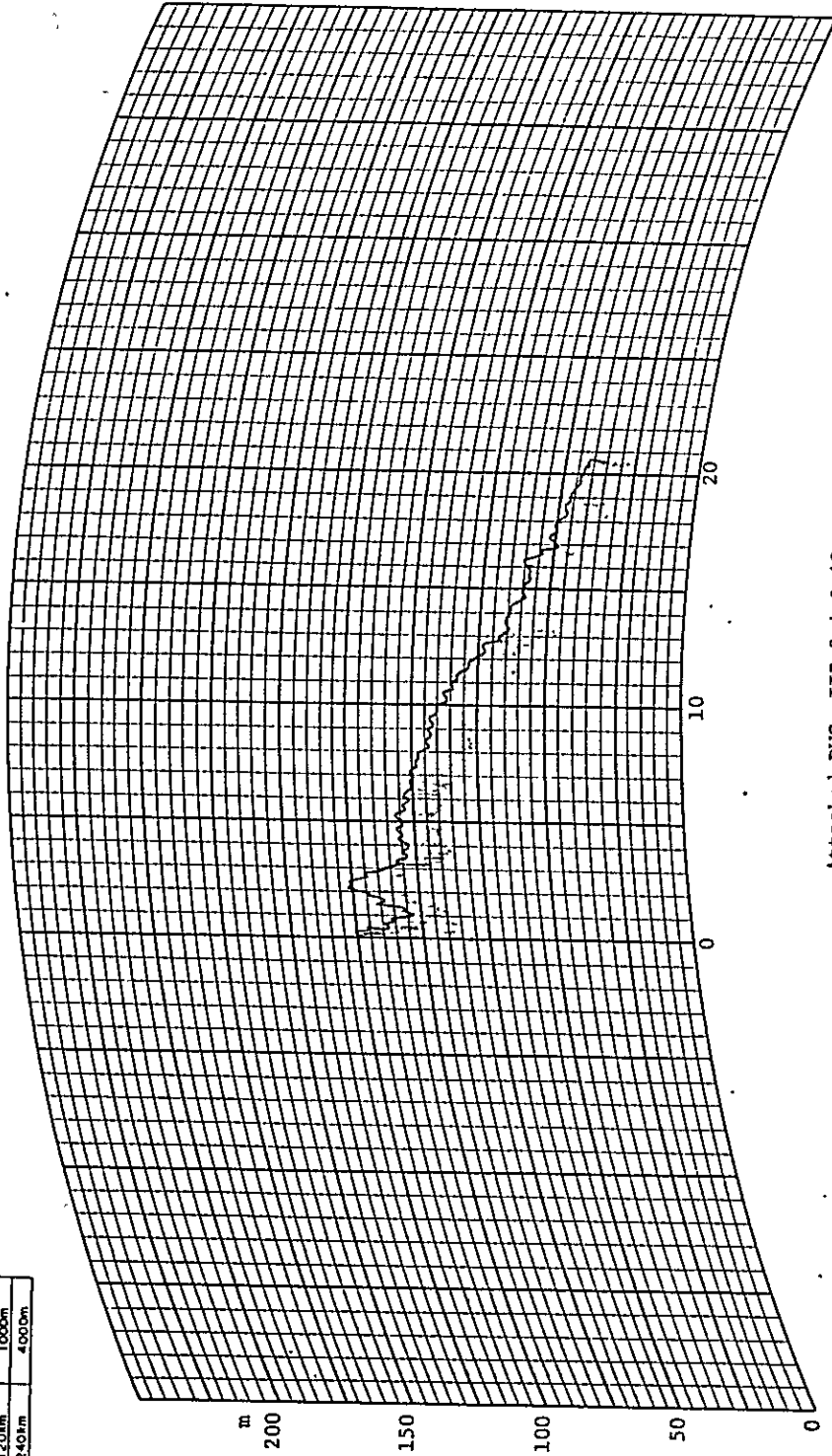
SITE Pematang Siantar
GROUND ELEVATION 375 m
ANTENNA HEIGHT m

SITE Tebing Tinggi
GROUND ELEVATION 10 m
ANTENNA HEIGHT m

DISTANCE 44.4 km

Simalungun
PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



Attached DWG. III-2-4-2-43

SITE Serberawan
GROUND ELEVATION 125 m
ANTENNA HEIGHT m

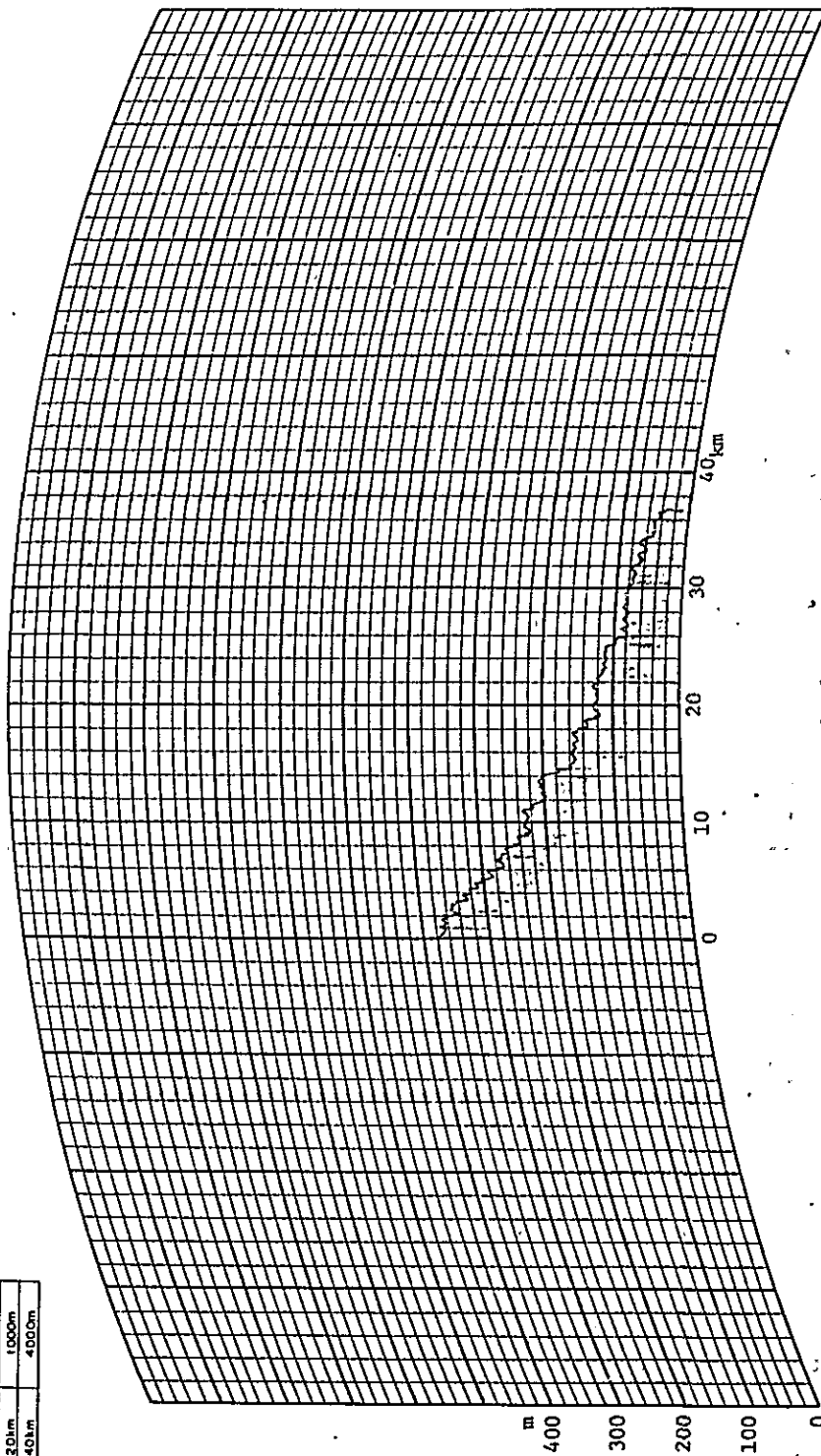
SITE Perdagangan
GROUND ELEVATION 43 m
ANTENNA HEIGHT m

DISTANCE: 20.6 km

Simalungun

PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



Attached DMG. III-2-4-2-44

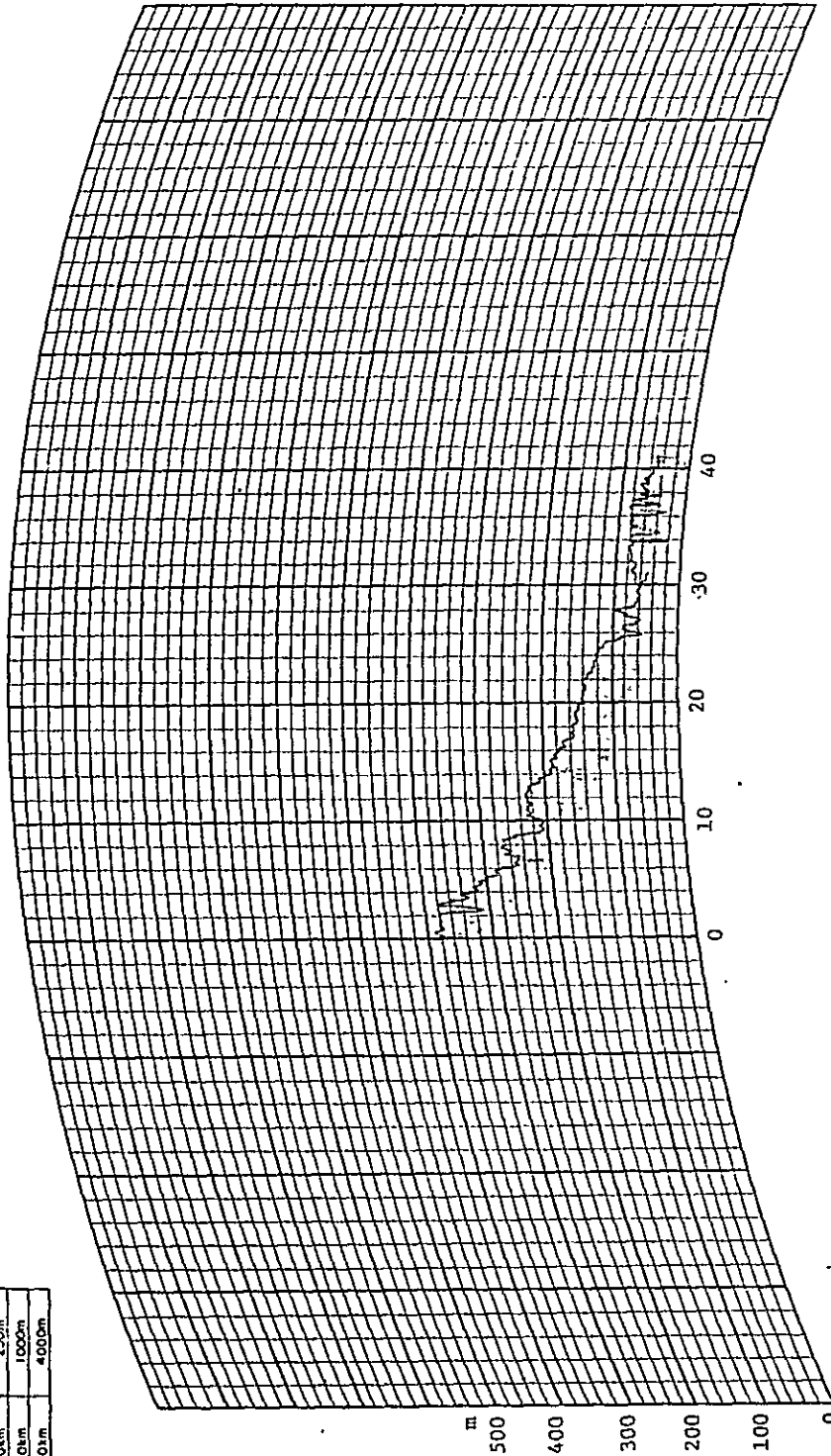
SITE Pematang Siantar
GROUND ELEVATION 375 m
ANTENNA HEIGHT. _____ m

SITE Perdagangan
GROUND ELEVATION 30 m
ANTENNA HEIGHT. _____ m

DISTANCE 37.1 km

Simalungun
PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
50km	250m
120km	1000m
240km	4000m



Attached DWG. III-2-4-2-45

SITE Pasar Baru
GROUND ELEVATION 50 m
ANTENNA HEIGHT _____ m

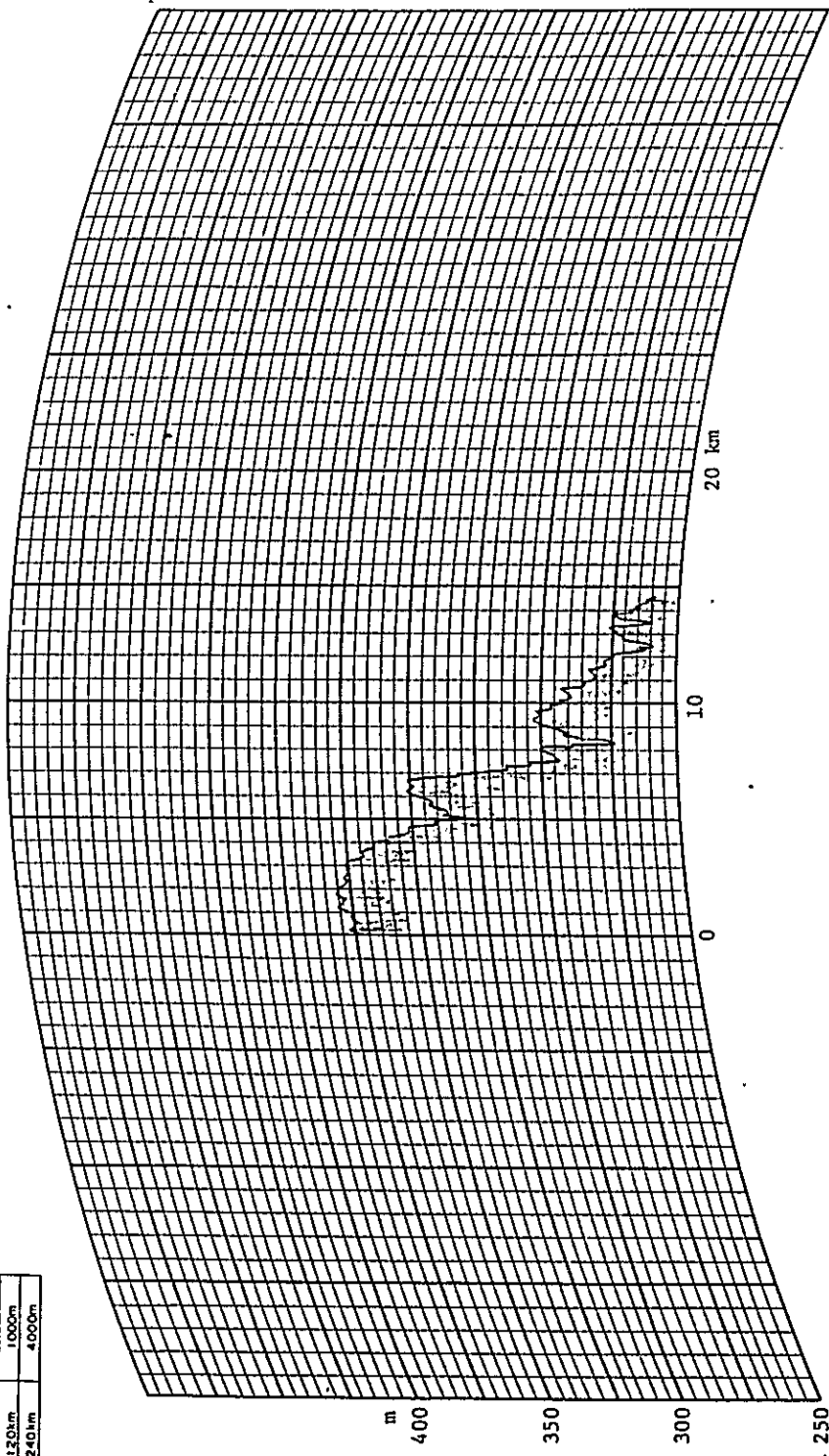
SITE Pematang Siantar
GROUND ELEVATION 375 m
ANTENNA HEIGHT _____ m

DISTANCE 41.1 km

Simalungun

PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



Attached DWG. III-2-4-2-46

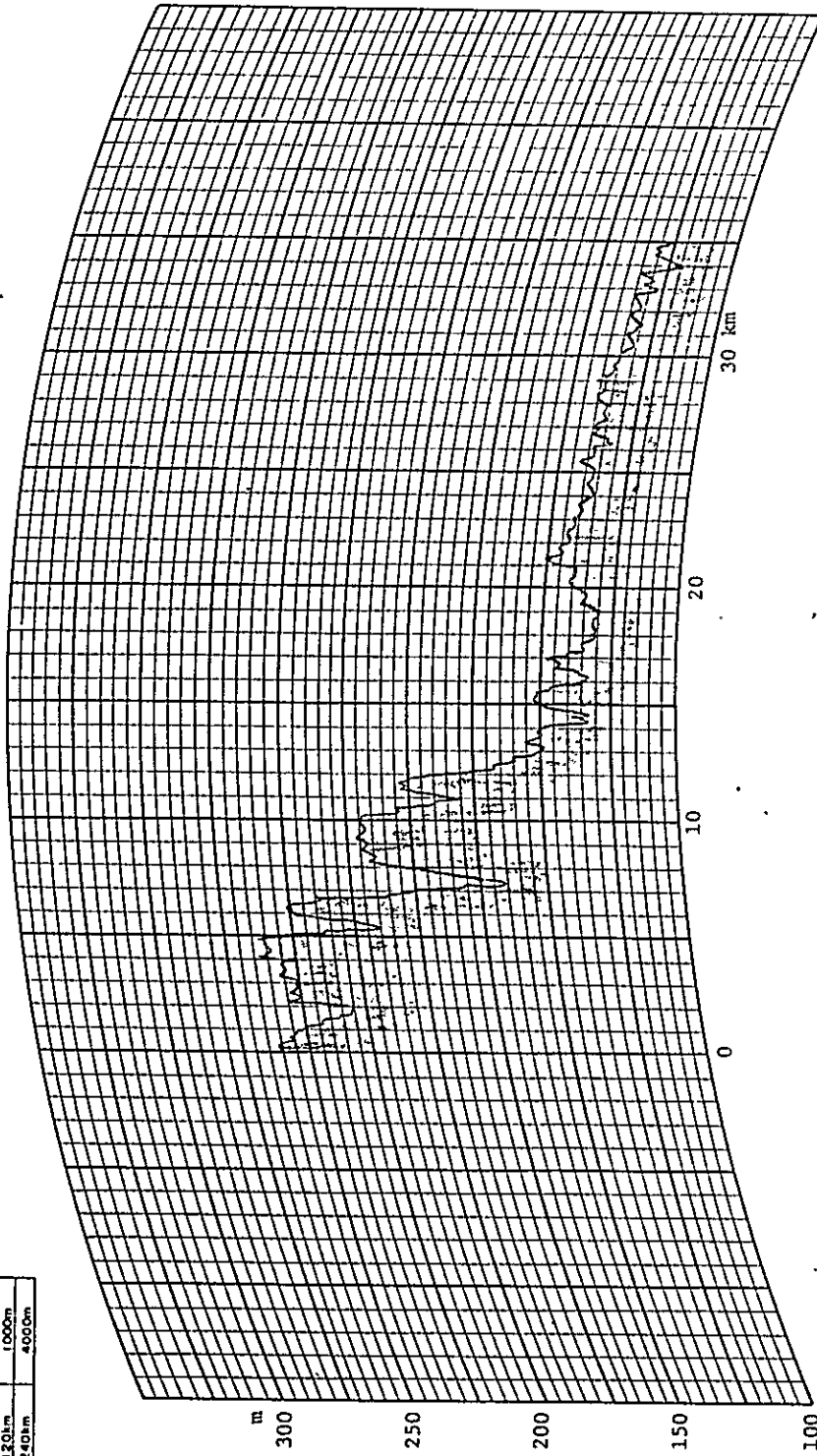
SITE: Pematang Siantar
GROUND ELEVATION: 375 m
ANTENNA HEIGHT: m

SITE: Tanah Jawa
GROUND ELEVATION: 260 m
ANTENNA HEIGHT: m

DISTANCE: 14.3 km

Simalungun
PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



Attached DWG. III-2-4-2-47

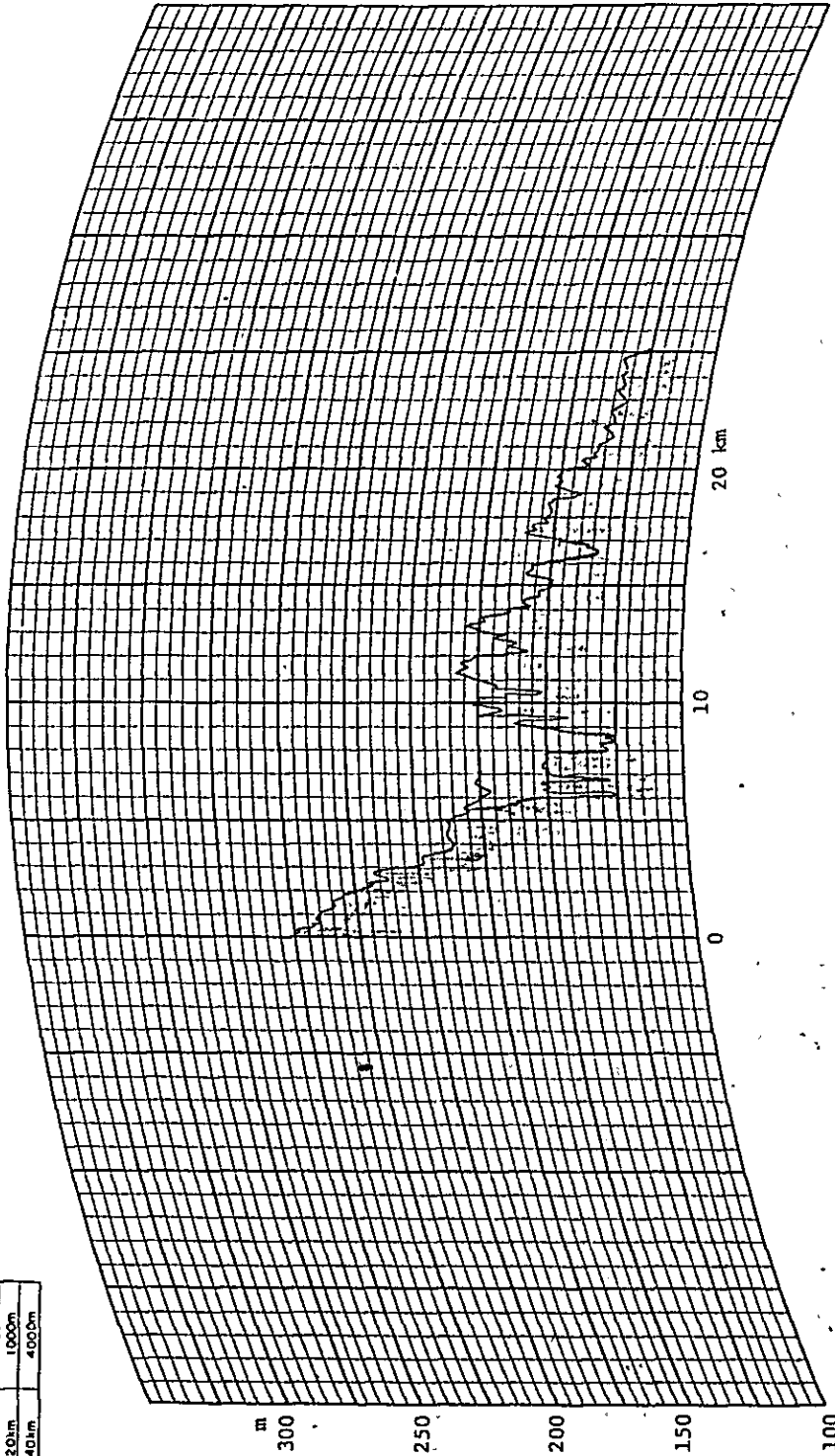
SITE Negeridolok
GROUND ELEVATION 260 m
ANTENNA HEIGHT m

SITE Serberawan
GROUND ELEVATION 125 m
ANTENNA HEIGHT m

DISTANCE 34 km

Simalungun
PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



Attached DMG. III-2-4-2-48

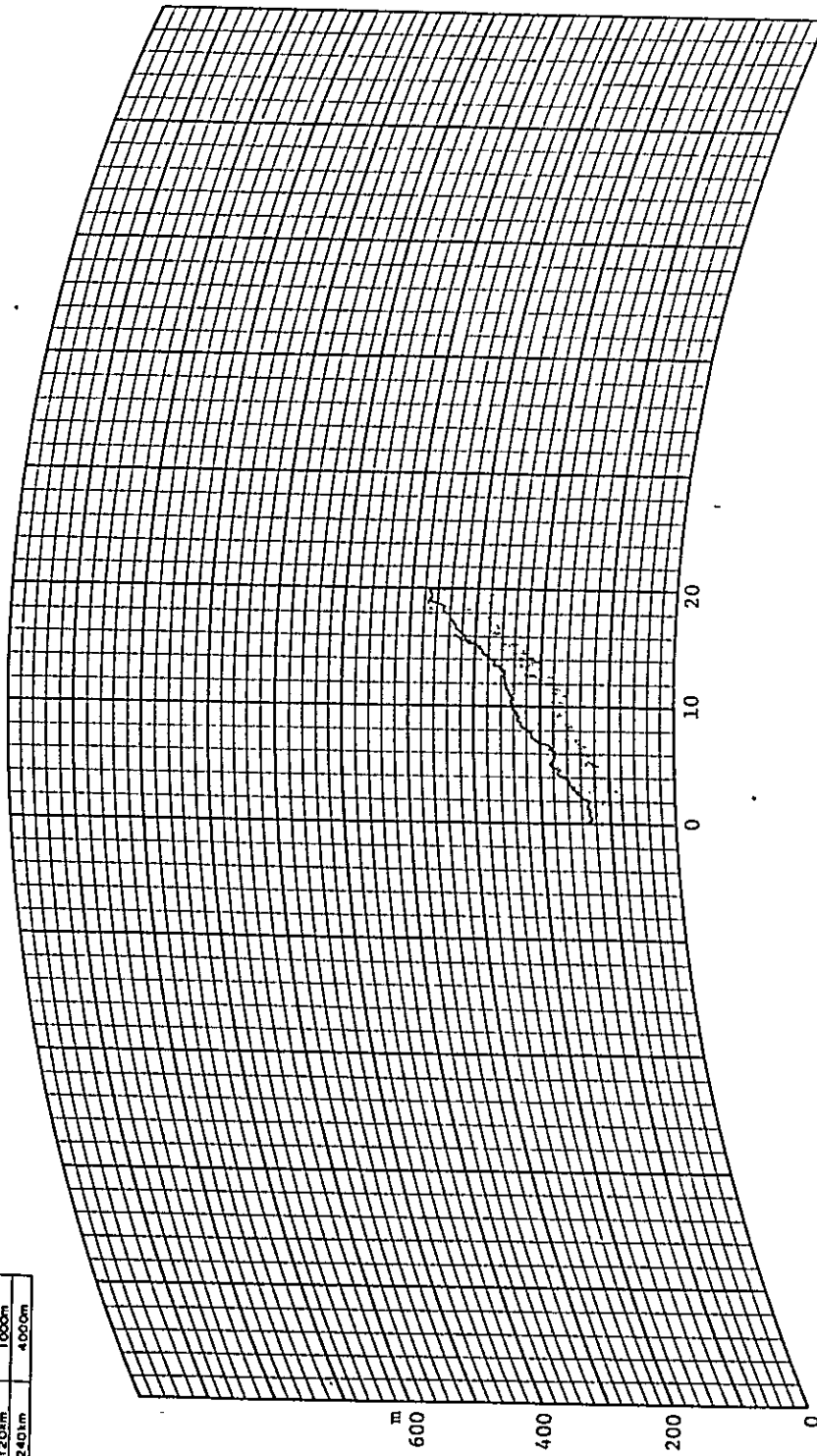
SITE Sindar Raya
 GROUND ELEVATION: 250 m
 ANTENNA HEIGHT _____ m

SITE Serbrawan
 GROUND ELEVATION _____ m
 ANTENNA HEIGHT _____ m

DISTANCE: 25 km

Simalungun
PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



Attached DWG. III-2-4-2-49

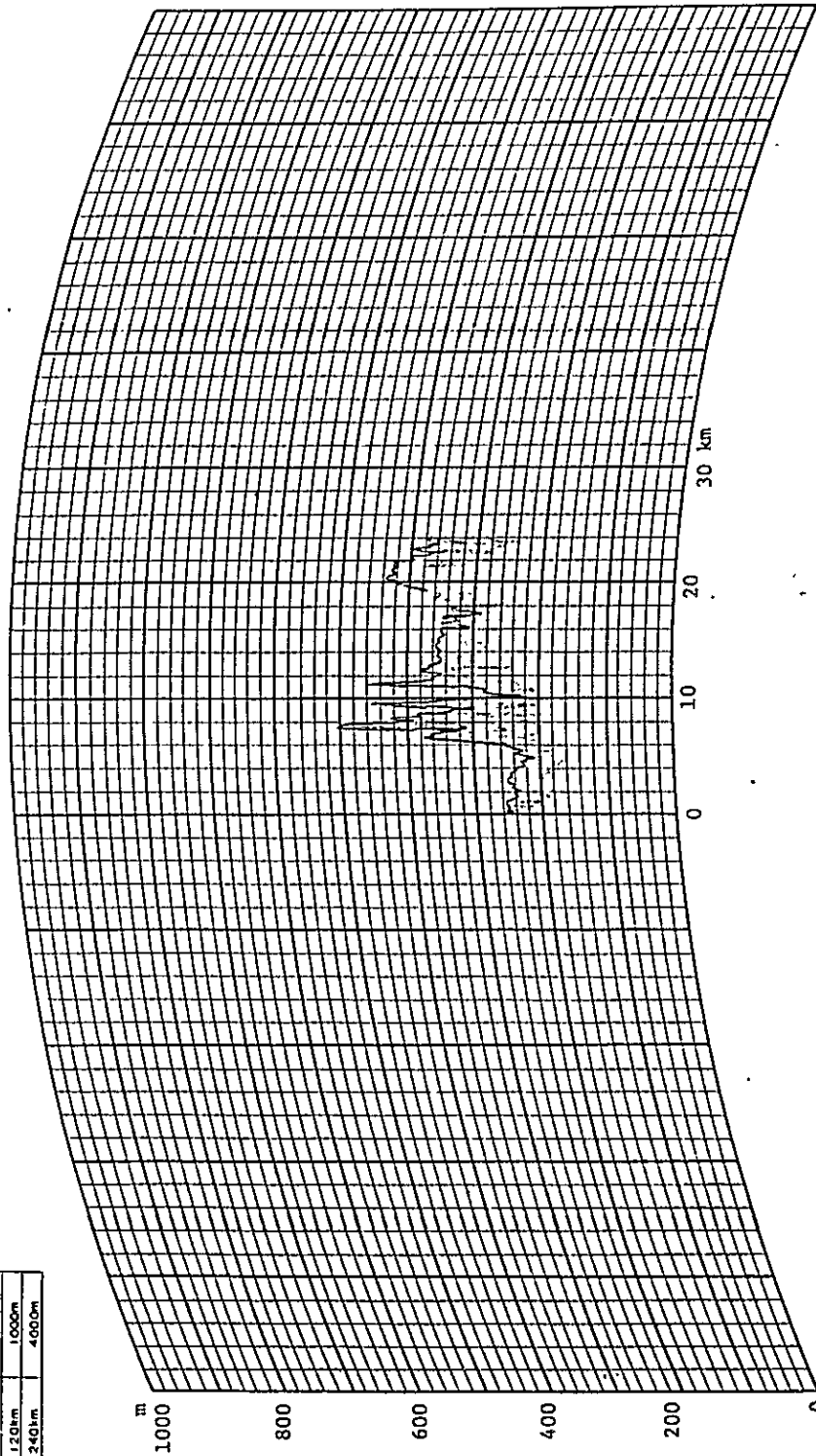
SITE Serbelawan
 GROUND ELEVATION 125 m
 ANTENNA HEIGHT _____ m

SITE Pematang Siantar
 GROUND ELEVATION 375 m
 ANTENNA HEIGHT _____ m

DISTANCE 20 km

Simalungun
PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



Attached DMG. III-2-4-2-50

SITE Sindar Raya
 GROUND ELEVATION 250 m
 ANTENNA HEIGHT: _____ m

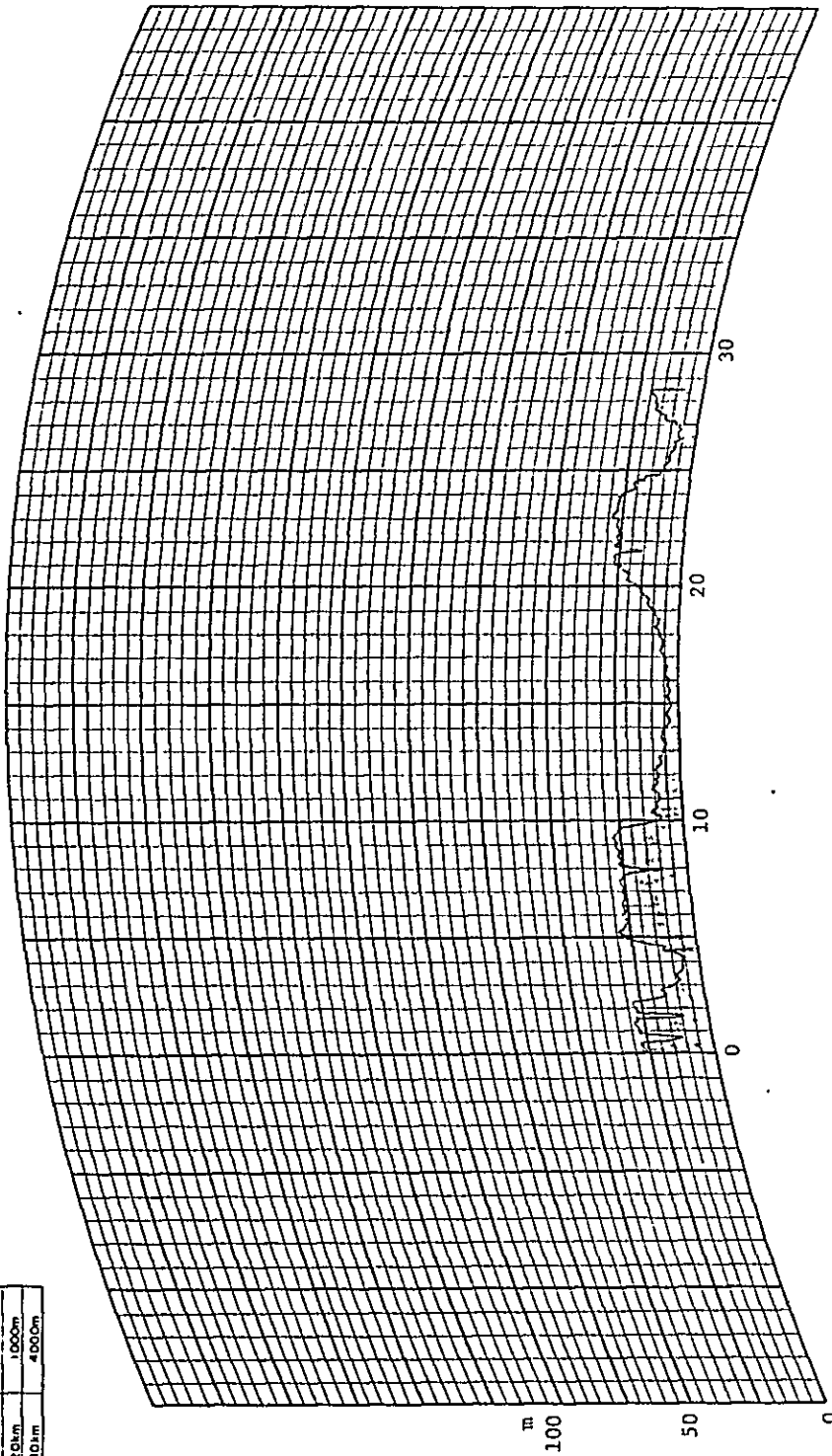
SITE Pematang Siantar
 GROUND ELEVATION: 375 m
 ANTENNA HEIGHT: _____ m

DISTANCE 24 km

Asahan

PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



Attached DWG. III-2-4-2-51

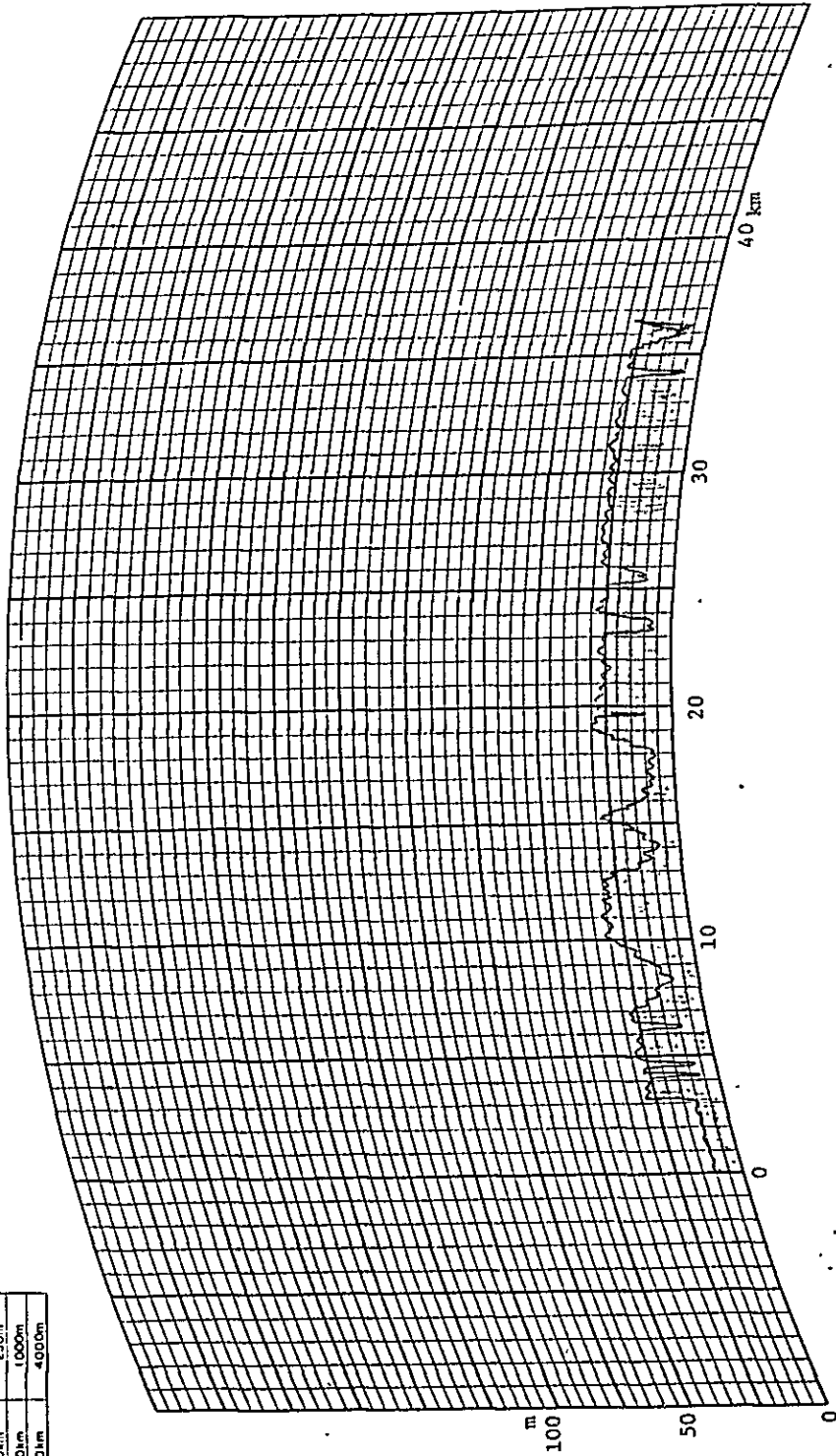
SITE Limapuluh
GROUND ELEVATION 27 m
ANTENNA HEIGHT _____ m

SITE Kisaran
GROUND ELEVATION 20 m
ANTENNA HEIGHT _____ m

DISTANCE 28.3 km

Asahan
PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



Attached DWG. III-2-4-2-52

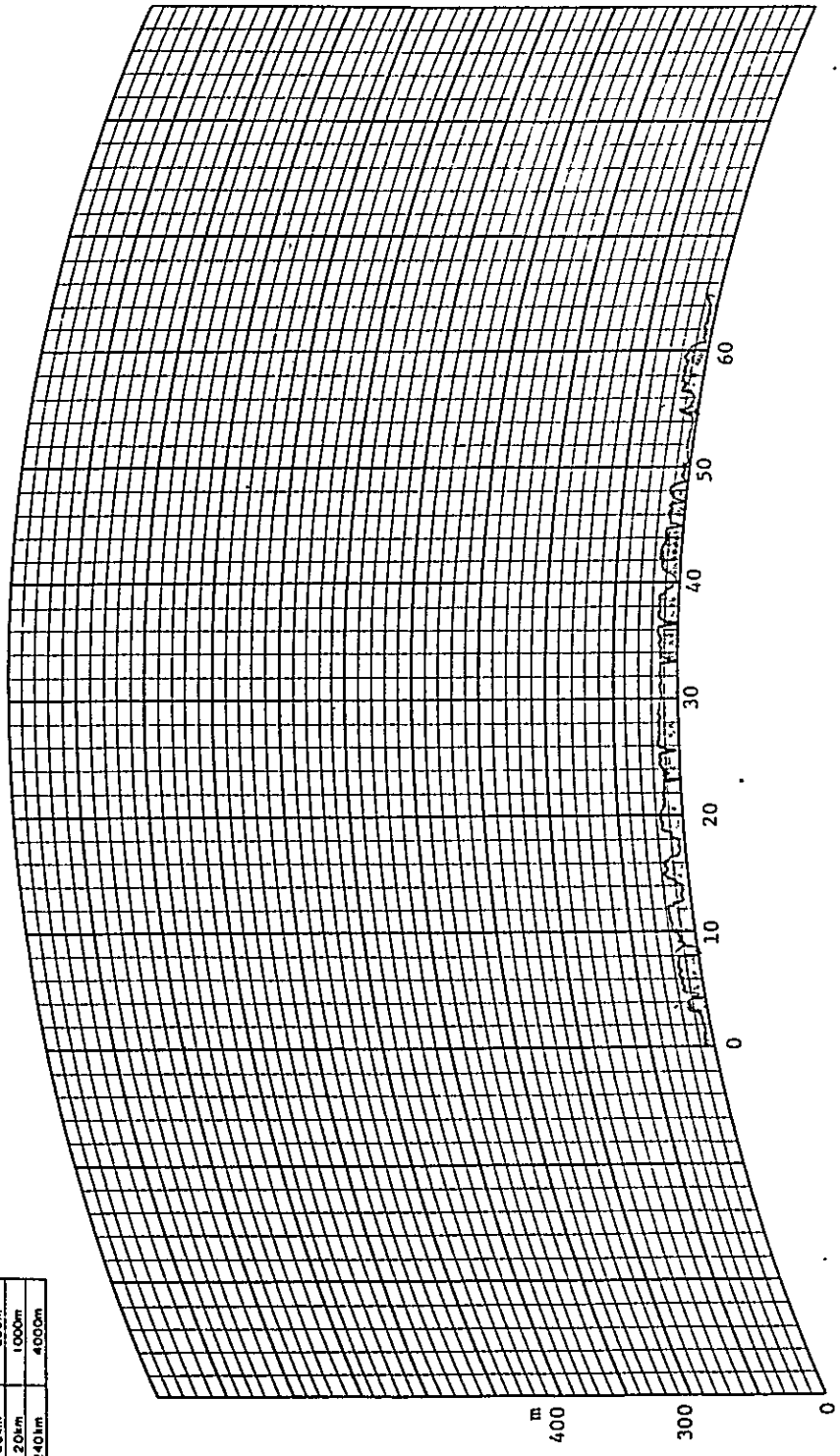
SITE Limapuluh
GROUND ELEVATION 27 m
ANTENNA HEIGHT _____ m

SITE Tebing Tinggi
GROUND ELEVATION 10 m
ANTENNA HEIGHT _____ m

DISTANCE 36.2 km

Asahan
PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



Attached DWG. III-2-4-2-53

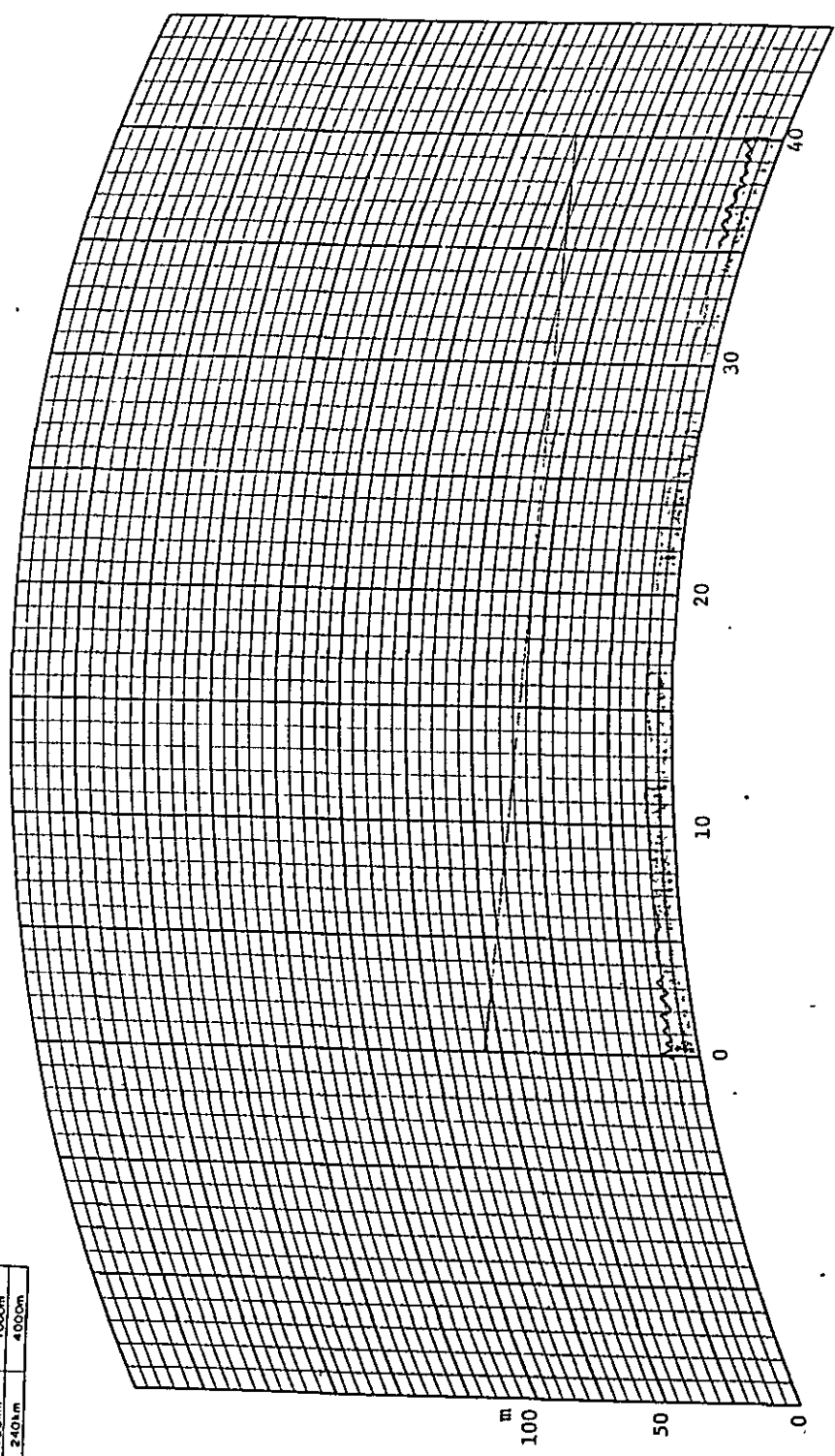
SITE Tebing Tinggi
GROUND ELEVATION 10 m
ANTENNA HEIGHT _____ m

SITE Kisaran
GROUND ELEVATION 20 m
ANTENNA HEIGHT _____ m

DISTANCE: 64.3 km

Asahan
PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60m	250m
120m	1000m
240m	4000m



Attached DWG. III-2-4-2-54

SITE: Lubuk pakam
 GROUND ELEVATION: 10 m
 ANTENNA HEIGHT: _____ m

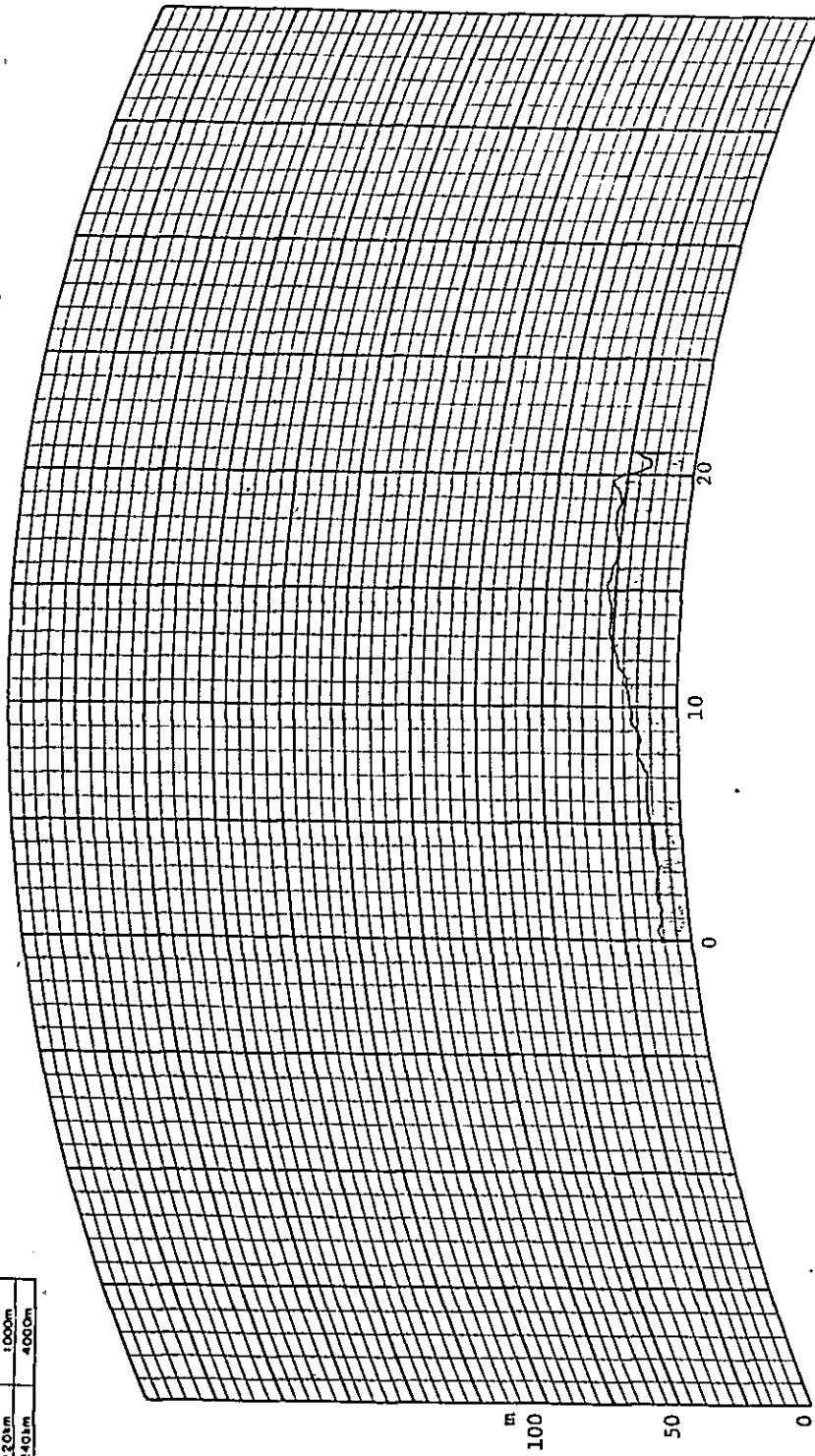
SITE: Tebing Tinggi
 GROUND ELEVATION: 10 m
 ANTENNA HEIGHT: _____ m

DISTANCE: 39.6 km

Asahan

PATH PROFILE (4/3 RADIUS)

FULL SCALE	
DISTANCE	HEIGHT
60km	250m
120km	1000m
240km	4000m



Attached DWG. III-2-4-2-55

SITE New Town
GROUND ELEVATION 12 m
ANTENNA HEIGHT _____ m

SITE Limapuluh
GROUND ELEVATION 27 m
ANTENNA HEIGHT _____ m

DISTANCE 21.0 km

Attached Table III.2.5-2 Composition of Planned Power Supply Facilities

Power Supply Facilities for Kotamadya Telephone Office		
Battery	48V, 25-cell battery 2500AH x 1 set	*1
Rectifier	48V, 500A x 2 sets	
Automatic voltage regulator	50KVA x 1 set	
Diesel engine generator	75KVA x 1 set	
Power Supply Facilities for Kecamatan Telephone Office		
Battery	48V, 25-cell battery 800AH x 1 set	*1
Rectifier	48V, 200A x 2 sets	
Automatic voltage regulator	30KVA x 1 set	*2
Diesel engine generator	Single engine type 25KVA	*3
	Dual engine type 50KVA	
Power Supply Facilities for Radio Station (with No Exchange Installed)		
Battery	48V, 25-cell battery 90AH x 1 set	*1
Rectifier	48V, 20A x 2 sets	
Automatic voltage regulator	5KVA x 1 set	*2
Diesel engine generator	Single engine type 5KVA	*3
	Dual engine type 10KVA	
Solar Battery Type Power Supply Equipment		
Solar battery	250W x 1 set	*4
Battery	24V, 290AH x 1 set	
Control equipment ...	1 set	

- *1 The battery holding time is supposed to be 8 hours.
- *2 Automatic voltage regulator is to be installed at offices or stations where commercial power is to be available.
- *3 Single engine type is to be used at offices or stations where commercial power is available and dual engine type at offices or stations where commercial power is not available.
- *4 One portable type rectifier (32V, 25A) and one engine generator (3KVA) are to be provided at the maintenance center for use as the power supply for emergency.

Attached Table IV.1.1-1 Demand Forecast for Sulawesi Selatan

- Legend:
- (1) The names of Kecamatan are designated by numbers. Kecamatan names and their numbers are listed in Attached DWG. IV.1.2-1.

 - (2) Of the expression A/B , A (lower stage) indicates the number of demands and B (upper stage) indicates the number of fulfilled demands.

Table IV.1.1-1 Demand Forecast for Sulawesi Selatan

Kabupaten	Year	Kecamatan Code								
		21	22	23	24	25	26	27	28	
Gowa (Code: 2)	1980	125	286	213	295	87	116	385	72	
	1985	148	339	253	338	104	138	450	86	(25) MANUAL
	1995	206	479	358	477	147	193	616	9	(27) AUTO
	2005	298				209	276	850		
Takalar (Code: 3)	Y K	31	32	33	34	35	36			
	1980	8	9	3	5	44	4			
	1985	8	9	3	6	48	5			(35) AUTO
	1995	10	12	4	7	59	6			
2005		14								
Jeneponto (Code: 4)	Y K	41	42	43	44	45				
	1980	228	128	84	94	78				
	1985	260	32	21	23	20				
	1995	340	32	21	23	20				(41) AUTO
2005	448	279	190	205	174					
Bantaeng (Code: 5)	Y K	51	52	53	54					
	1980	63	129	62						(52) AUTO
	1985	47	147	49						
	1995	100	191	103						
2005	136									
Bulukumba (Code: 6)	Y K	61	62	63	64	65	66	67		
	1980	230	155	101	43	29	30	28		(61) AUTO
	1985	261	37	26	11	7	8	7		
	1995	337	37	26	11	7	8	7		
2005		318	228	97	65		63			
Sinjai (Code: 7)	Y K	71	72	73	74	75				
	1980	138	38	26	45	27				(71) AUTO
	1985	157	45	31	53	34				
	1995	201	61	42	73	47				
2005	261	85	57		64					

Kabupaten	Year	Kecamatan Code									
		81	82	83	84	85					
Selayar (Code: 8)	1980	13	7	2	2	2					
	1985	14	13	2	3	2				(81) MANUAL	
	1995	17	17	2	3	2					
	2005	21	12	2	4	2					
Maros (Code: 10)	y K	101	102	103	104						
	1980	171	337	130	77					(101) AUTO	
	1985	201	346	153	91					(102) AUTO	
	1995	278	548	214	129						
2005	386	761	299	180							
Pangkep (Code: 11)	y K	111	112	113	114	115	116	117	118	119	
	1980	227	78			65	69	*	*	*	
	1985	261	25	30	19	22	58	*	*	*	
	1995	367	25	30	19	22	80	*	*	*	
2005	450	171	209	134	151	113	*	*	*		
Barru (Code: 12)	y K	121	122	123	124	125					
	1980	46	3	6	12	5				(12) AUTO	
	1985	59	3	3	3	3					
	1995	63	3	3	3	3					
2005	98	12	19	31	18						
Pinrang (Code: 13)	y K	131	132	133	134	135	136	137			
	1980	187	25	17	28	31	31	15		(13) AUTO	
	1985	222	18	19	21	21	25	3			
	1995	273	18	21	21	21	25	3			
2005	331	44	29	52	52	62	23				
Sidrap (Code: 14)	y K	141	142	143	144	145	146	147			
	1980	106	36	20	16	32	20	16		(14) AUTO	
	1985	153	36	21	16	33	22	19		(14) MANUAL	
	1995	187	44	25	20	39	28	25		(14) MANUAL	
2005	232	54	31	24	48	32	29				

Kabupaten	Year	Kecamatan Code									
		151	152	153	154	155					
Soppeng (Code: 15)	1980	179	55	45	31	28					(51) AUTO
	1985	183	57	41	30	25					(52) MANUAL
	1995	228	70	41	30	25					
	2005	228	70	56	40	34					
Bone (Code: 16)	Y K	161	162	163	164	165	166	167	168	169	1610
	1980	347	64	64	30	37	15	21	20	15	18
	1985	390	20	20	9	11	5	7	6	-	-
	1995	390	74	74	35	43	18	25	24	18	21
	2005	491	20	20	9	11	5	7	6	-	-
	Y K	1611	1612	1613	1614	1615	1616	1617	1618	1619	1620
	1980	22	20	58	48	18	37	61	44	29	50
	1985	27	-	18	57	-	-	31	23	16	26
	1995	37	-	18	80	-	-	31	23	16	26
	2005	491	99	99	48	59	25	34	33	24	29
	Y K	1621									
	1980	11		(16) AUTO							
	1985	13									
	1995	17									
	2005	25						(17) AUTO			
Wajo (Code: 17)	Y K	171	172	173	174	175	176	177	178	179	1710
	1980	212	30	16	21	39	35	23	30	28	21
	1985	225	14	8	11	20	15	14	14	-	-
	1995	225	38	18	24	46	37	30	82	32	23
	2005	264	14	8	11	20	15	14	14	-	-
Polmas (Code: 18)	Y K	181	182	183	184	185	186	187	188		
	1980	126	42	23	22	7	7	6	4	(18) AUTO	
	1985	150	59	3	3	-	-	-	-	(18) MANUAL	
	1995	150	59	33	34	11	10	6	7		
	2005	184	73	3	3	-	-	-	-		
	Y K	181	182	183	184	185	186	187	188		
	1980	126	42	23	22	7	7	6	4	(18) AUTO	
	1985	150	59	3	3	-	-	-	-	(18) MANUAL	
	1995	184	73	3	3	-	-	-	-		
	2005	209	89	50	51	16	15	9	11		

Attached Table IV. 2.2-1 Telephone Network Plan (Sulawesi Selatan)

<u>SECONDARY EX.</u>	<u>PRIMARY EX.</u>	<u>AREA CODE</u>	<u>END OFFICE</u>	<u>SUB NUMBER</u>		
UJUNG PANDANG	Ujung Pandang	0411	Ujung Pandang-I	2xxxx		
				3xxx ~ 7xxx		
			Ujung Pandang-II	81xxx ~ 84xxx		
			Sungguminasa	(MANUAL EX)		
			Takalar	(MANUAL EX)		
			Jenepont	(MANUAL EX)		
			Pankajene	(MANUAL EX)		
			Maros	(MANUAL EX)		
			Watanpone	0412	Wantapone	(MANUAL EX)
			Bantaeng	0413	Bantaeng	(MANUAL EX)
		Sinjai	(MANUAL EX)			
PARE-PARE	Pare Pare	0421	Pare-Pare	(MANUAL EX)		
			Barru	(MANUAL EX)		
			Watansopen	(MANUAL EX)		
			Pankajene-S	(MANUAL EX)		
			Pinrang	(MANUAL EX)		
			Polewari	0422	Polewari	(MANUAL EX)
					Majene	(MANUAL EX)
			Enrekang	0423	Enrekang	(MANUAL EX)
					Makale	(MANUAL EX)
			Palopo	0424	Palopo	(MANUAL EX)
			Senkang	0425	Senkang	(MANUAL EX)
			Mamuju	0421	Mamuju.	
			Masamba	0427	Masamba	
			Malili	0428	Malili	
			Karossa	0429	Karossa	

Attached Table IV.2.6-1 Assignment of Maintenance Personnel
for Facilities in Urban Areas

No.	Kabupaten Kodya	Office Under Concentrative Maintenance	Exchange Maint. Personnel				Power Supply Maint. P.		Sub's Line Maint. P.		MAS (TECH)	Total		
			Direc- tor	ENG	TECH	Key St.	ENG	TECH	ENG	TECH		Direc- tor	ENG	TECH
1	Ujung Pandang	Takalar Malino (Man.)	1	1	3			2	1	6	2	1	2	13
2	Gowa					UP		UP		UP	UP			
3	Takalar					UP		UP		UP	UP			
4	Jeneponto	Jeneponto				BNT		BNT		BNT	BNT			
5	Bantaeng			2	4			2		5	2		2	13
6	Bulukumba	Bulukumba				BNT		BNT		BNT	BNT			
7	Sinjai	Sinjai				BNT		BNT		BNT	BNT			
8	Selayar	(Man.)			2			-		2	-			4
9	Pare Pare		1	1	3				1	6	2	1	2	11
10	Maros	Mandai				UP		UP		UP	-			
11	Pangkep					UP		UP		UP	UP			
12	Barru					PRE		PRE		PRE	PRE			
13	Pinrang					PRE		PRE		PRE	PRE			
14	Sidrap	Rappang (Man.) Tanrutedong (Man.)				PRE		PRE		PRE	PRE			
15	Soppeng	Cabenge (Man.)				SKG		SKG		SKG	SKG			
16	Bone			1	2			1		3	1		1	7
17	Wajo			1	2			2		3	2		1	9
18	Polmas	Sidodadi (Man.)		1	2			1		2			1	5
19	Luwu	Malili		1	4			2		4	1		1	11
20	Majene					Pol		Pol		-	-			
21	Mamuju				2			-		2	-			4
22	Enreleang			1	2			1		2	-		1	5
23	Tana Toraja	Rantepao		1	2			1		2	-		1	5
Total			2	10	28			12	2	37	10	2	12	87

Number of existing technicians: 52

Attached Table IV.2.6-2 Assignment of Maintenance Personnel
For Transmission Line Facilities

No.	Kotamadya or Kabupaten	No. of Offices with Communication Facilities				Office in Charge of Maintenance	Maintenance Personnel			
		6GHz 800MHz	MAS	PCM-30	Existing COX & μ		No. of Director	No. of Engineer	No. of Technician	Location of Resident Office
1	Ujung Pandang	1	1	1	1	U.P.	1	2	6	U.P.
2	Gowa		1	1		U.P.				
3	Takalar	1	1			U.P.				
4	Jeneponto	1	1			Bantaeng				
5	Bantaeng	1	1		1	Bantaeng		1	3	BNT
6	Bulukumba	1(1)*	(1)			Bantaeng			3	BLK
7	Sinjai	1				Bantaeng			2	SIN
8	Selayar	VHF 1				Bantaeng			2	Benteng
9	Pare-Pare	1(2)		1	1	Pare Pare	1	2	7	PRE
10	Maros				1	U.P.				
11	Pangkep		1		1	U.P.				
12	Barru				1	Pare Pare				
13	Pinrang		1	1		Pare Pare				
14	Sidrap	1	1			Pare Pare				
15	Soppeng	1	1			Sengkang				
16	Bone	1(1)	1(1)			Wantanpone		1	3	WTP
17	Wajo	1	1			Sengkang		1	2	SKG
18	Polmas	1				Pare Pare			2	PLW
19	Luwu	1(1)	(2)			Palopo		1	6	PLP
20	Majene	1				Pare Pare			2	MAJ
21	Mamuju					Pare Pare				
22	Enreleang	1		2(1)		Pare Pare			2	ENR
23	Tana Toraja					Pare Pare			3	MKL
	Total	15(5) VHF 1	10(4)	6(1)	6		2	8	43	

* Unattended repeater station

Attached DWG. IV.1.2-2 Traffic Forecast for
Sulawesi Selatan

Attached DWG. IV.1.2-2 (A) Traffic Forecast for
Sulawesi Selatan (for 1985)

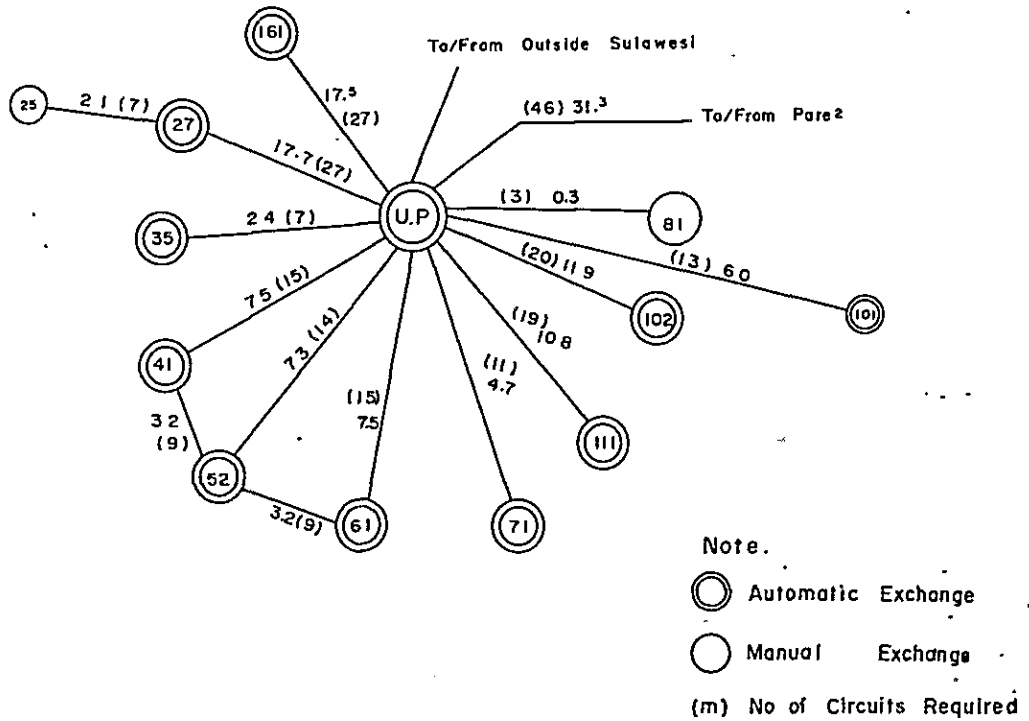
Attached DWG. IV.1.2-2 (B) Traffic Forecast for
Sulawesi Selatan (for 1995)

Attached DWG. IV.1.2-3 (C) Traffic Forecase for
Sulawesi Selatan (for 2005)

Legend © : Automatic exchange
 o : Manual switchboard
 (n): Number of required channels

Note: For the numbers of Kabupaten and Kecamatan,
see attached DWG. IV.1.2-1.

A. Ujung Pandang Secondary Trunk Area



B. Pare² Secondary Trunk Area

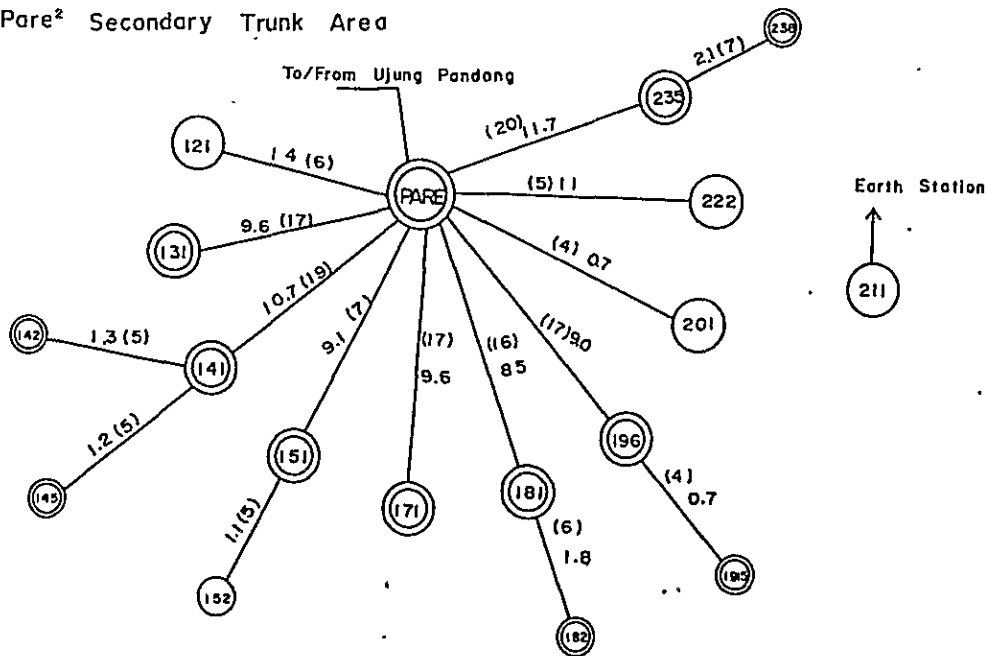
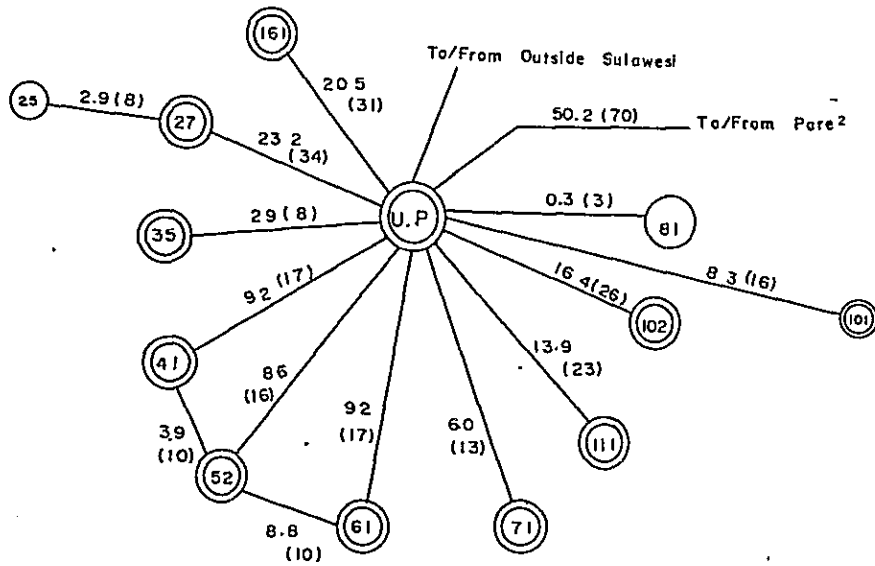


FIG. 1.2-1(A) Traffic Flow Chart & Circuits Requirement In 1985, (Sulawesi Selatan) (in Erlang)

A. Ujung Pandang Secondary Trunk Area



B. Pare² Secondary Trunk Area

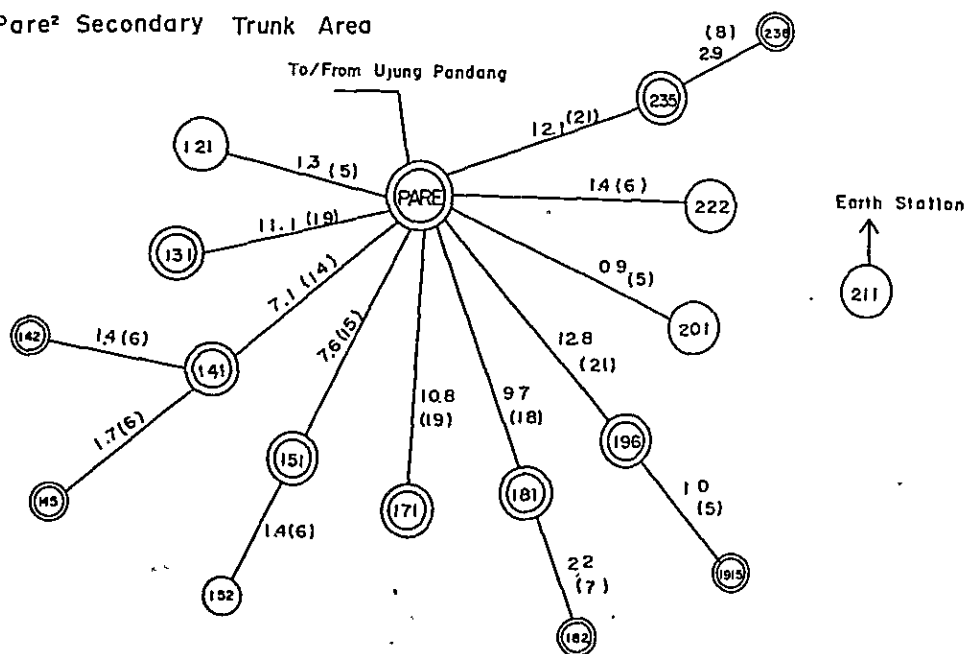
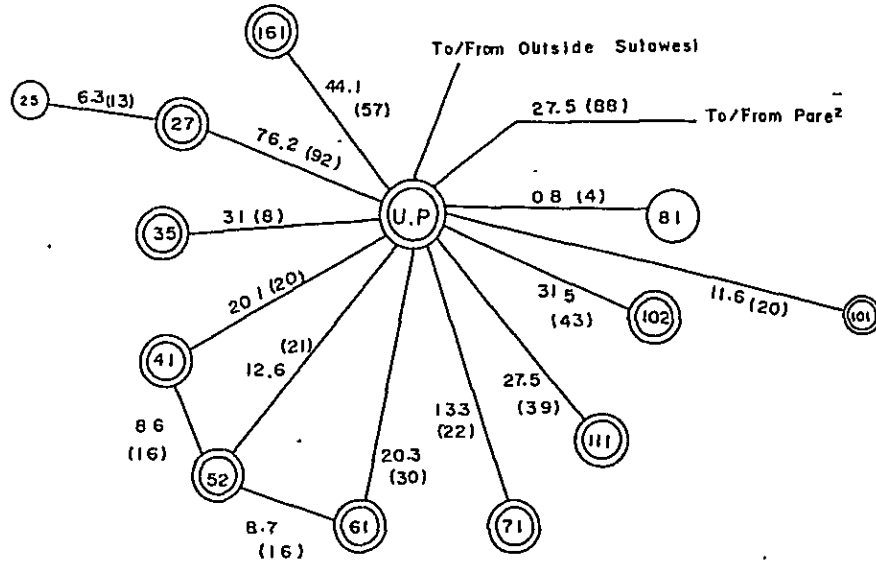


FIG. IV.1.2-1(B) Traffic Flow Chart & Circuits Requirement In 1995, (Sulawesi Selatan) (In Erlang)

A. Ujung Pandang Secondary - Trunk Area



B. Pare² Secondary Trunk Area

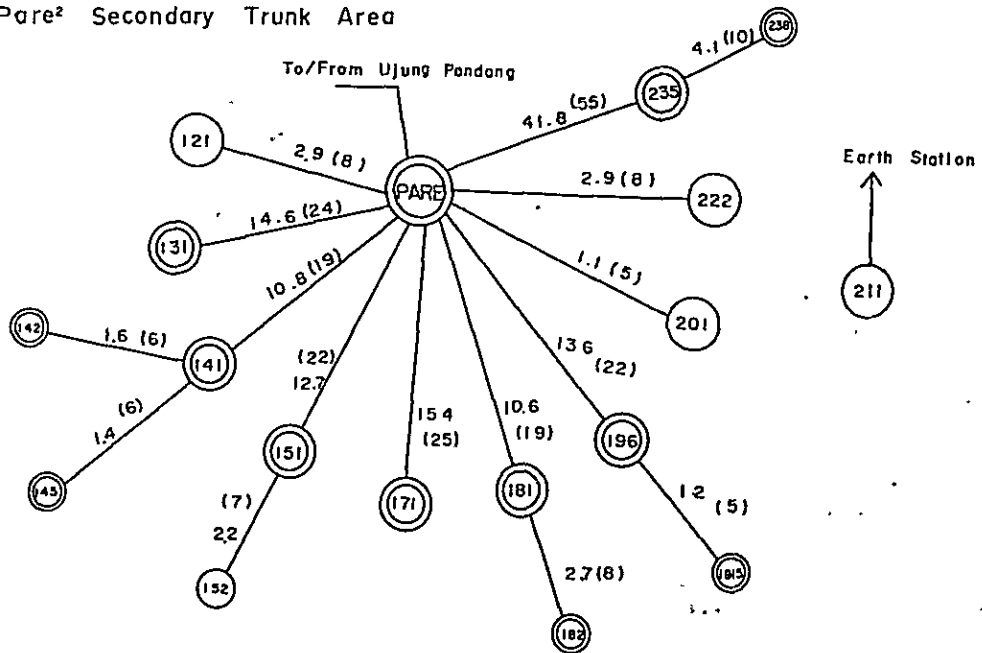


FIG.IV.1.2-1(C) Traffic Flow Chart & Circuits Requirement In 2005, (Sulawesi Selatan) (In Erlang)

Attached Drawings IV.1.2-1 (No.2 ~ No.23)

Kabupaten and Kecamatan in Sulawesi Selatan

Legend: (1) "km" shows the distance between Kabupaten and Kecamatan.

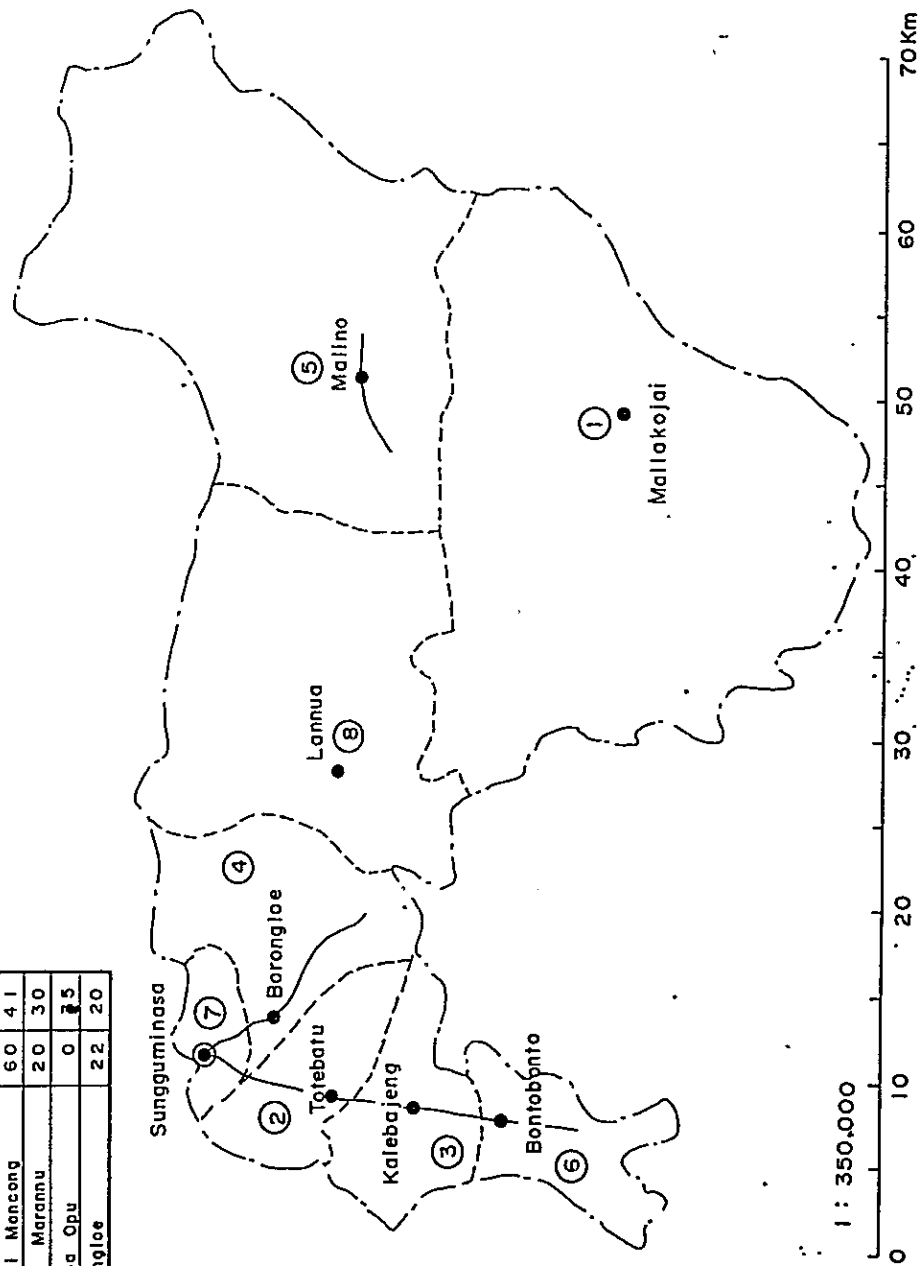
(2) "pl" shows the population in 1979.

(3) The names of Kabupaten are designated by numbers, and the following numbers are not included in these drawings.

<u>No.</u>	<u>Name of Kabupaten</u>
1	Kotamadya Ujung Pandang
8	Selayar
9	Kotamadya Pare-Pare
21	Mamuju

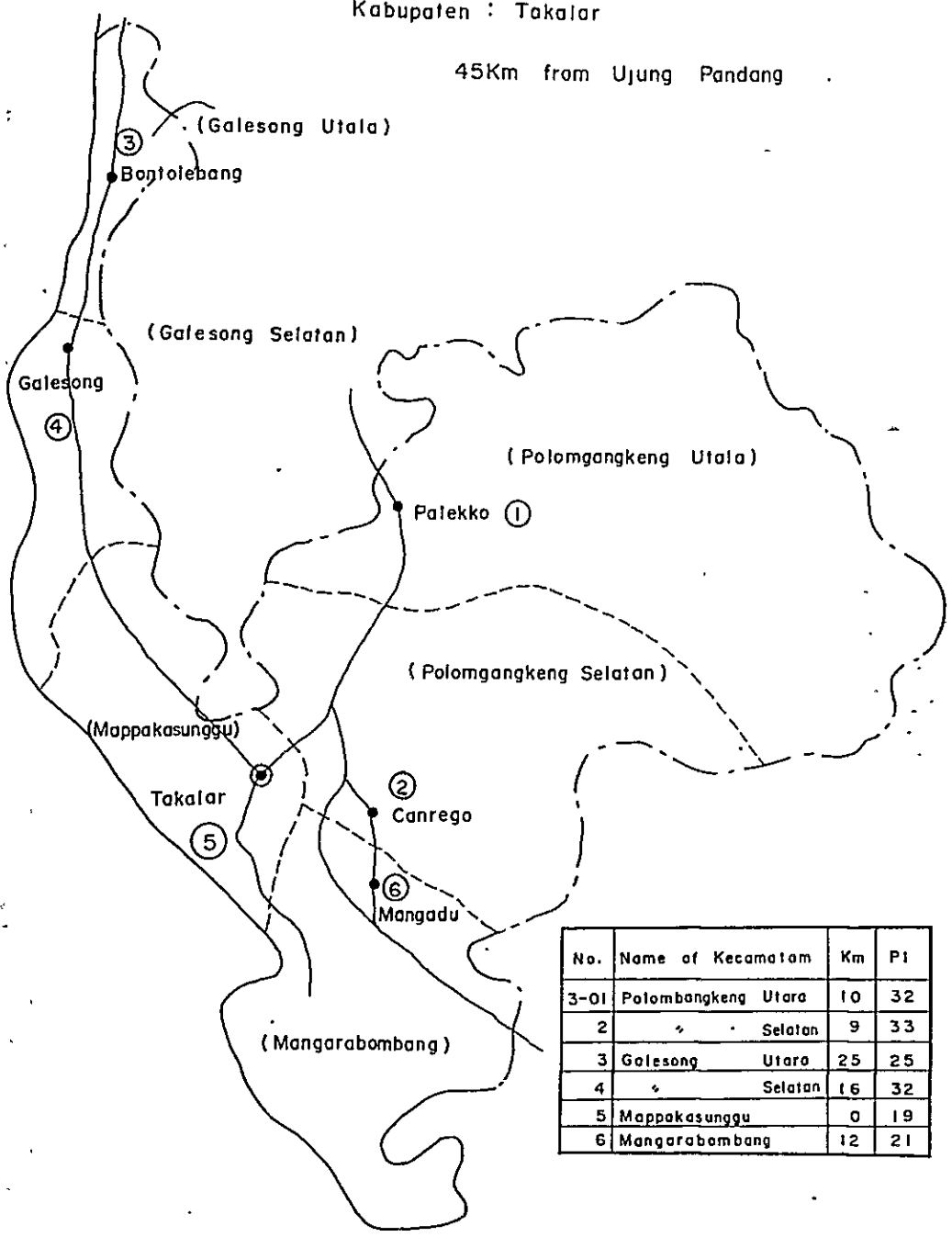
Kabupaten Gowa (Capital Sungguminasa)
 11 Km from Ujung Pandang

No.	Name of Kecamatan	Km ²	PI
1	Tompebulo	70	63
2	Pallangga	10	53
3	Bojeng	15	47
4	Bantanompo	7	47
5	Tinggi Mancang	60	41
6	Banta Marannu	20	30
7	Samba Opu	0	25
8	Parangloe	22	20



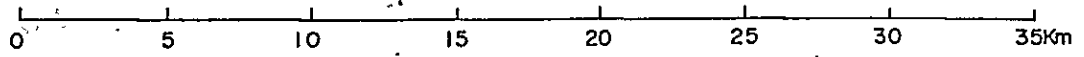
Kabupaten : Takalar

45Km from Ujung Pandang



No.	Name of Kecamatan	Km	Pt
3-01	Polombangkeng Utara	10	32
2	" Selatan	9	33
3	Galesong Utara	25	25
4	" Selatan	16	32
5	Mappakasunggu	0	19
6	Mangarabombang	12	21

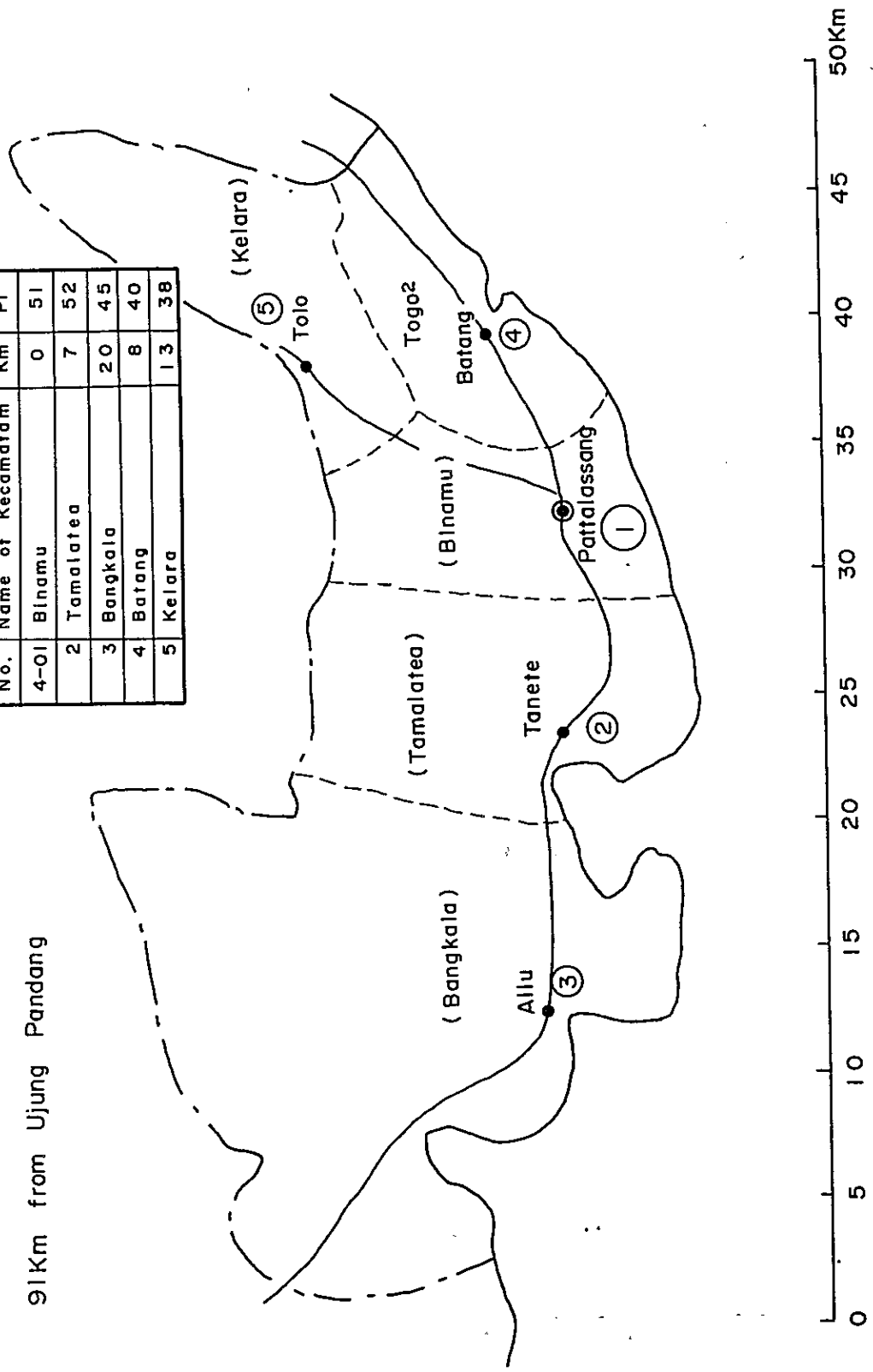
1 : 200 000



Kabupaten Jenepanto

91Km from Ujung Pandang

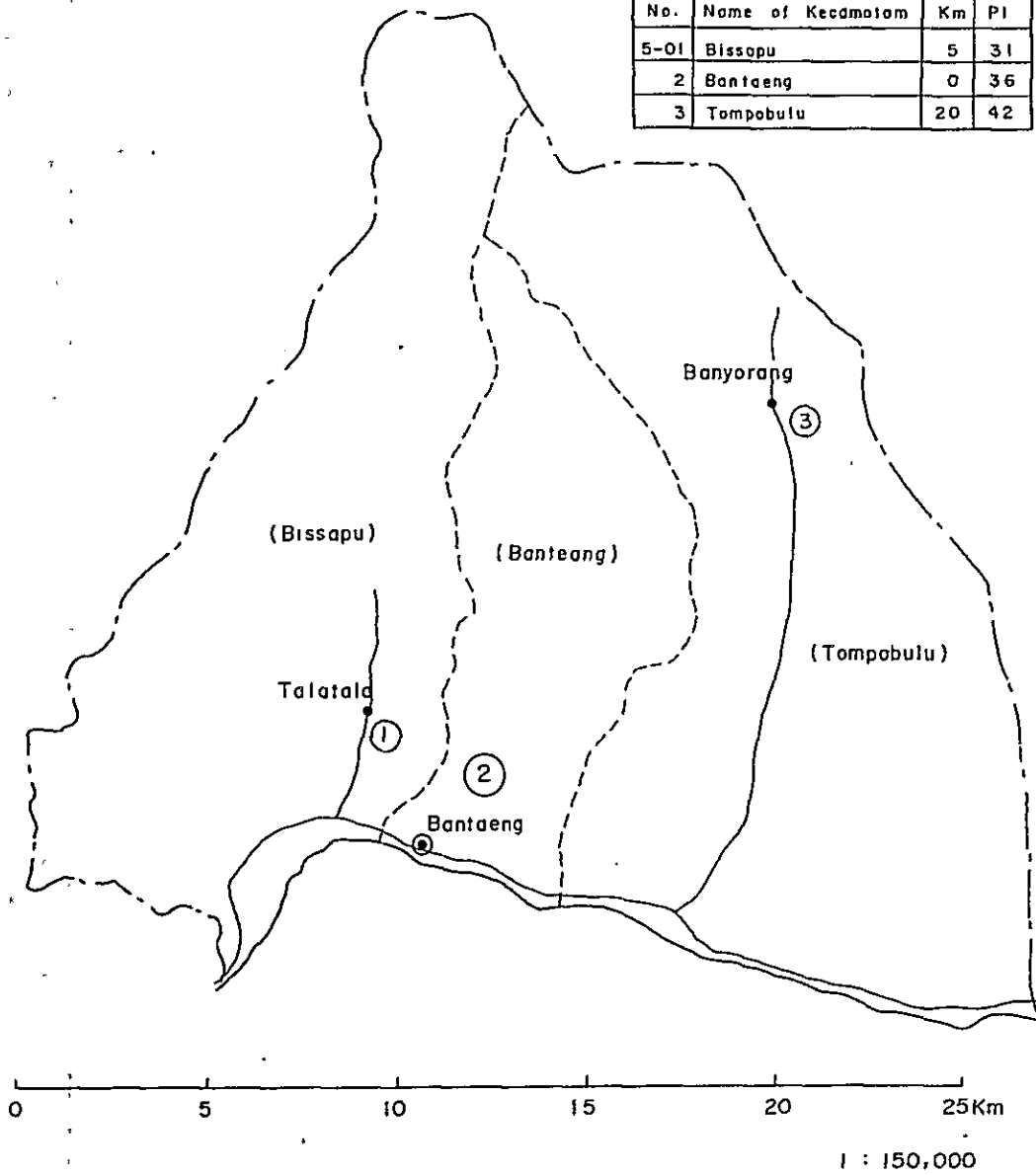
No.	Name of Kecamatan	Km	PI
4-01	Binamu	0	51
2	Tamalatea	7	52
3	Bangkala	20	45
4	Batang	8	40
5	Kelara	13	38



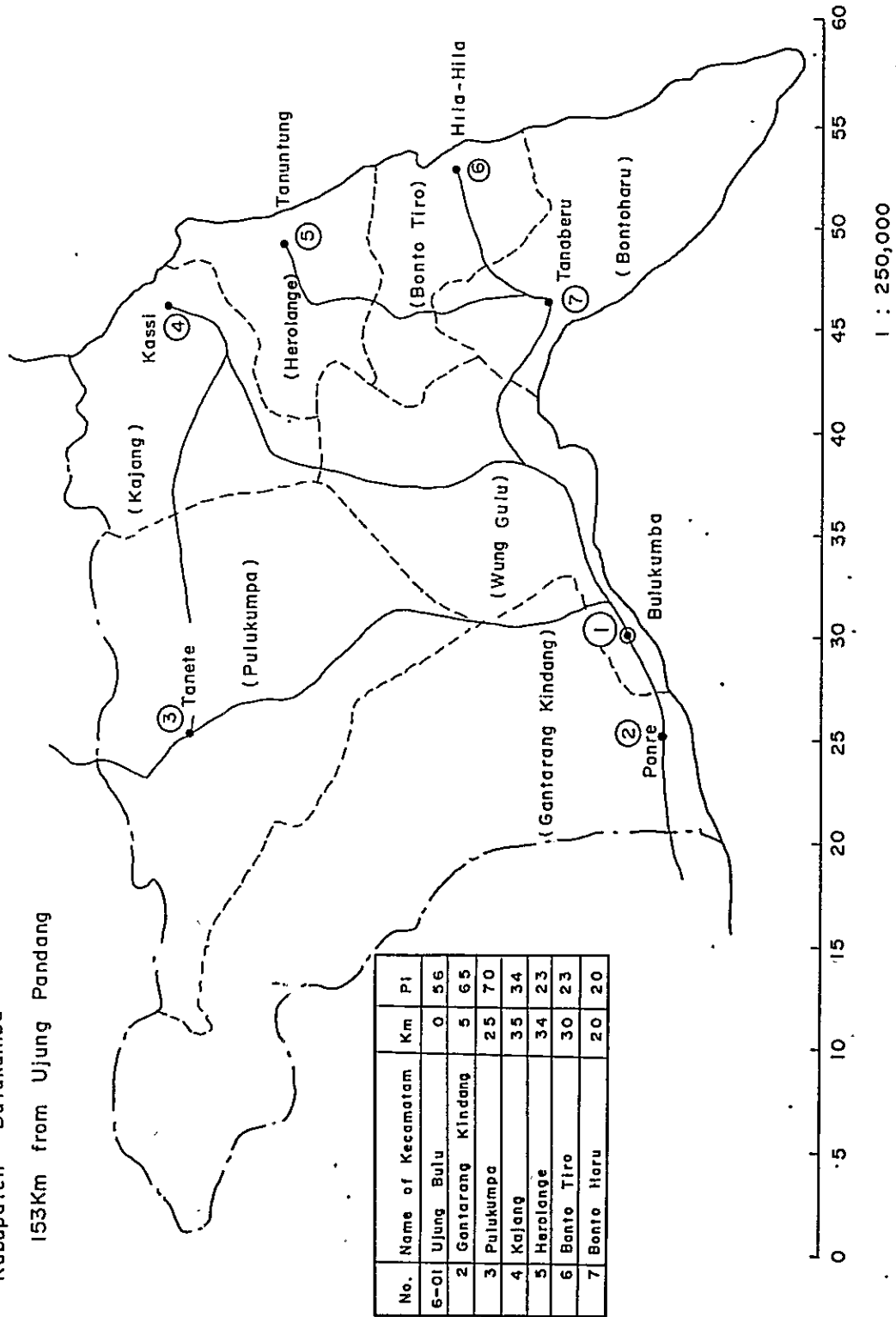
Kabupaten Bantaeng

123 Km from Ujung Pandang

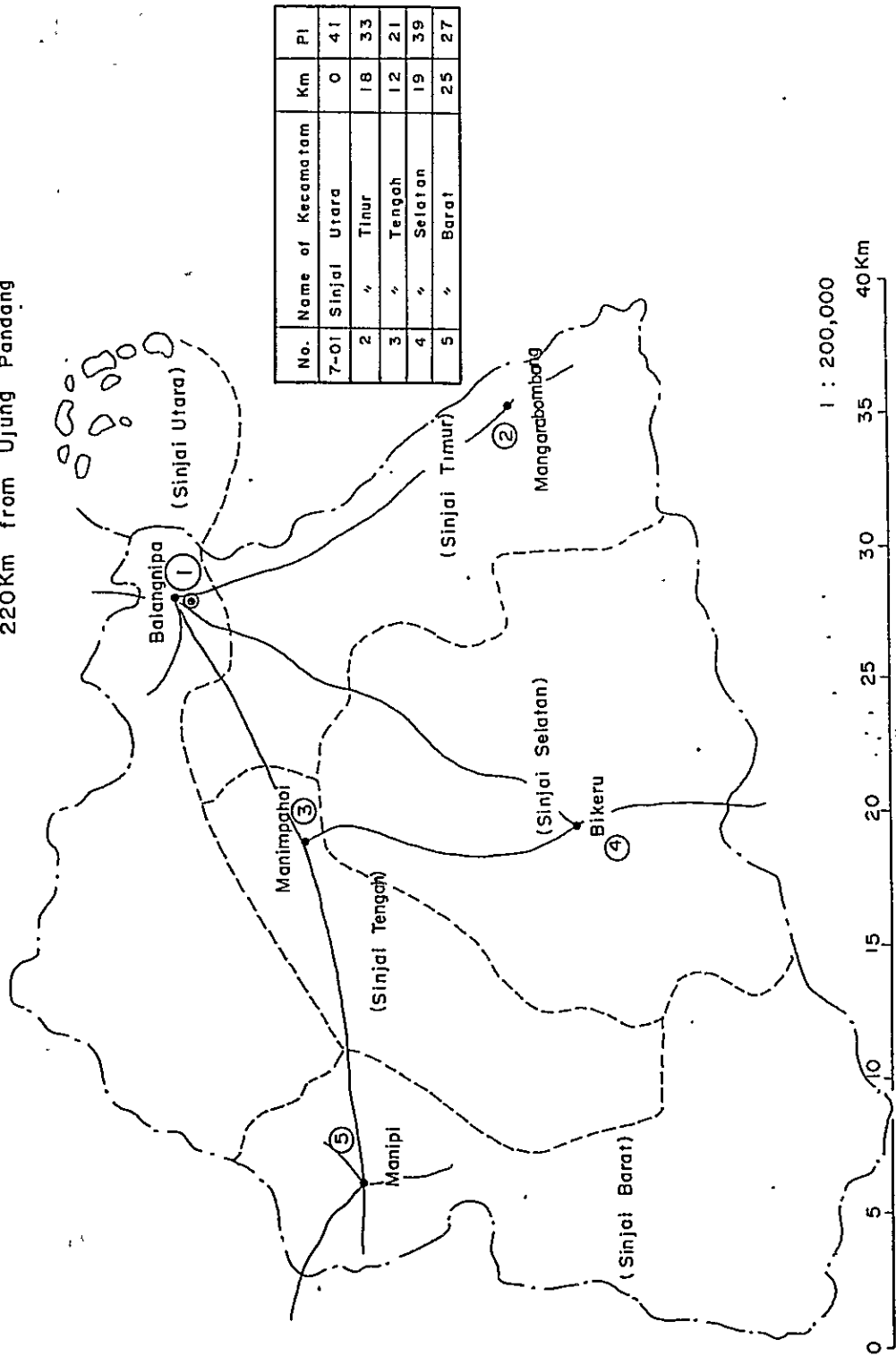
No.	Name of Kecamatan	Km	PI
5-01	Bissapu	5	31
2	Bantaeng	0	36
3	Tompobulu	20	42



Kabupaten Bulukumba
153Km from Ujung Pandang

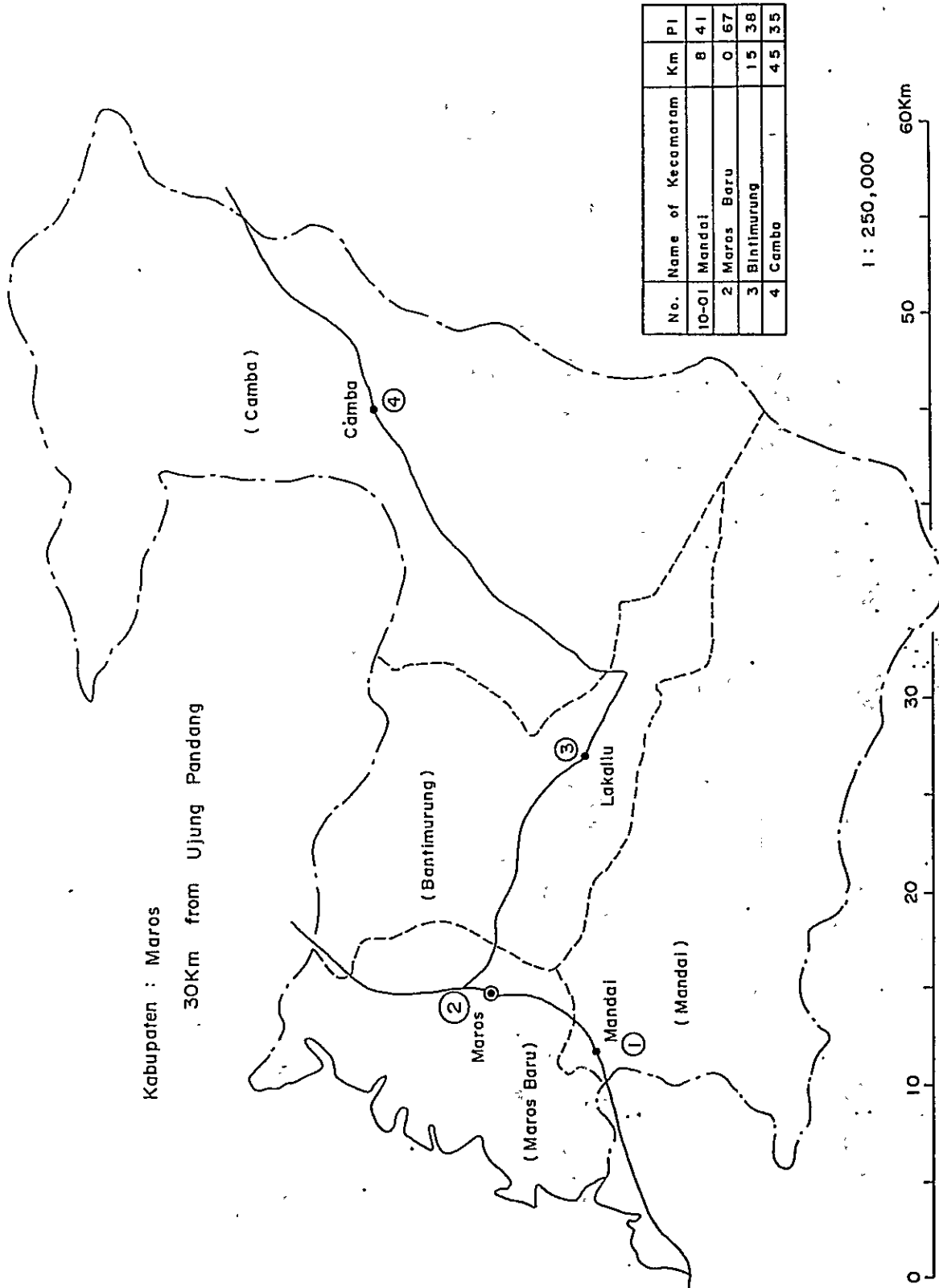


Kabupaten Sinjai
 220 Km from Ujung Pandang



Kabupaten : Maros

30Km from Ujung Pandang



No.	Name of Kecamatan	Km	PI
10-01	Mandal	8	41
2	Maros Baru	0	67
3	Bantimurung	15	38
4	Camba	45	35

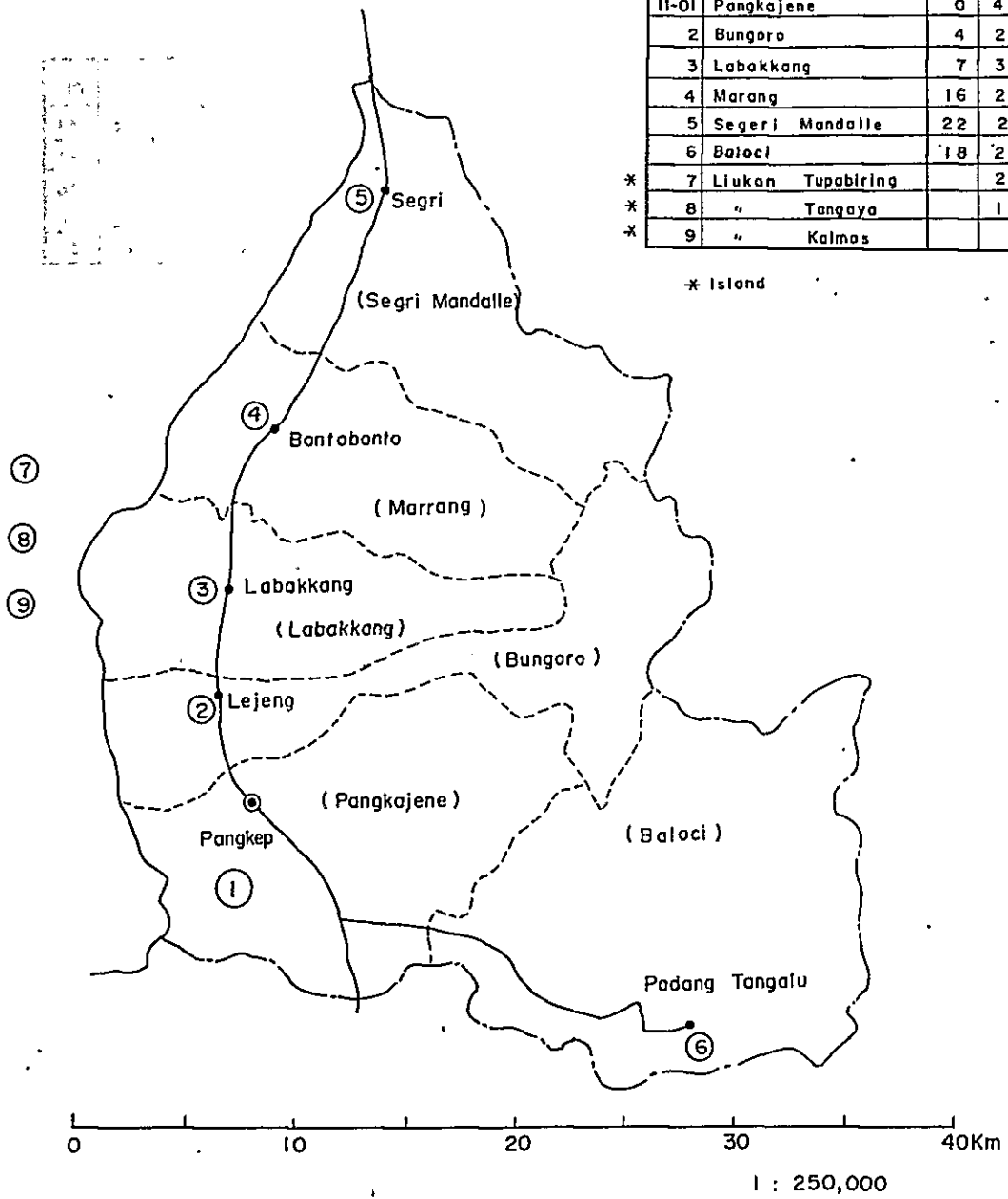
Kabupaten : Pangkajene

51Km from Ujung Pandang

No	Name of Kecamatan	Km	Pt
1-01	Pangkajene	0	43
2	Bungoro	4	23
3	Labakkang	7	31
4	Marang	16	24
5	Segeri Mandalle	22	29
6	Baloci	18	21
* 7	Liukan Tupabiring		20
* 8	" Tangaya		10
* 9	" Kalmas		8

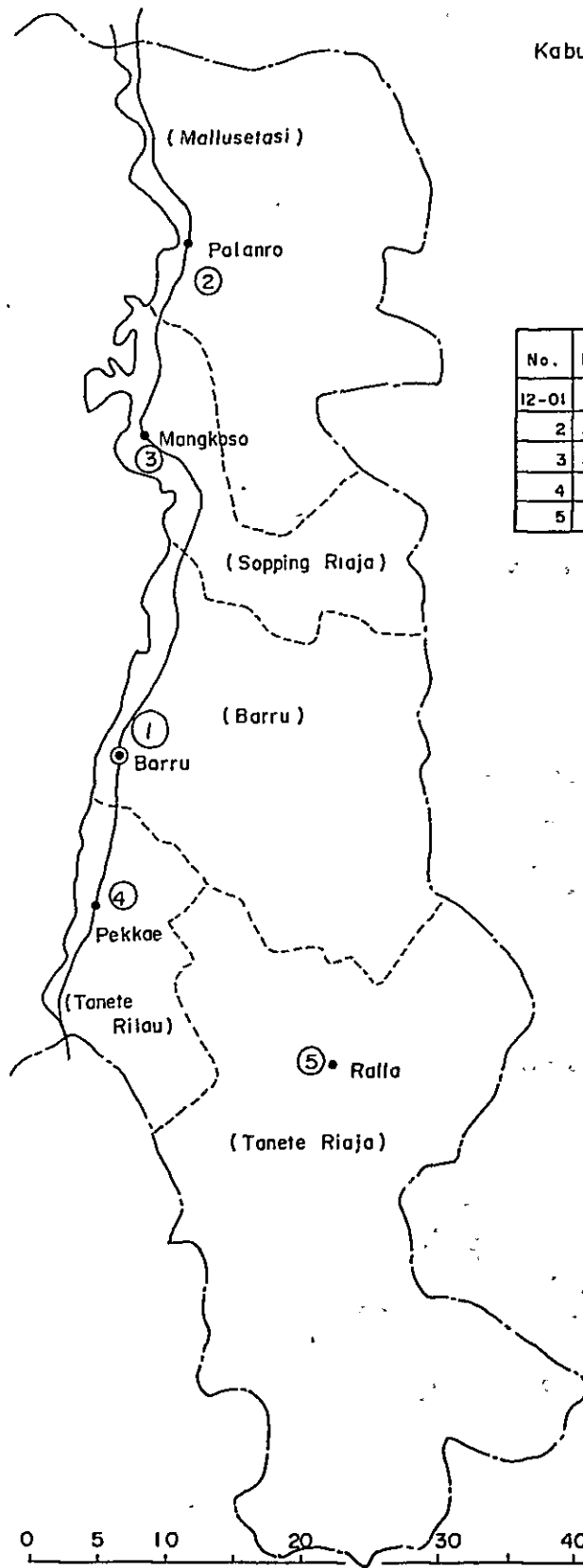
*
*
*

* Island



Kabupaten : Barru

63Km from Pare-Pare

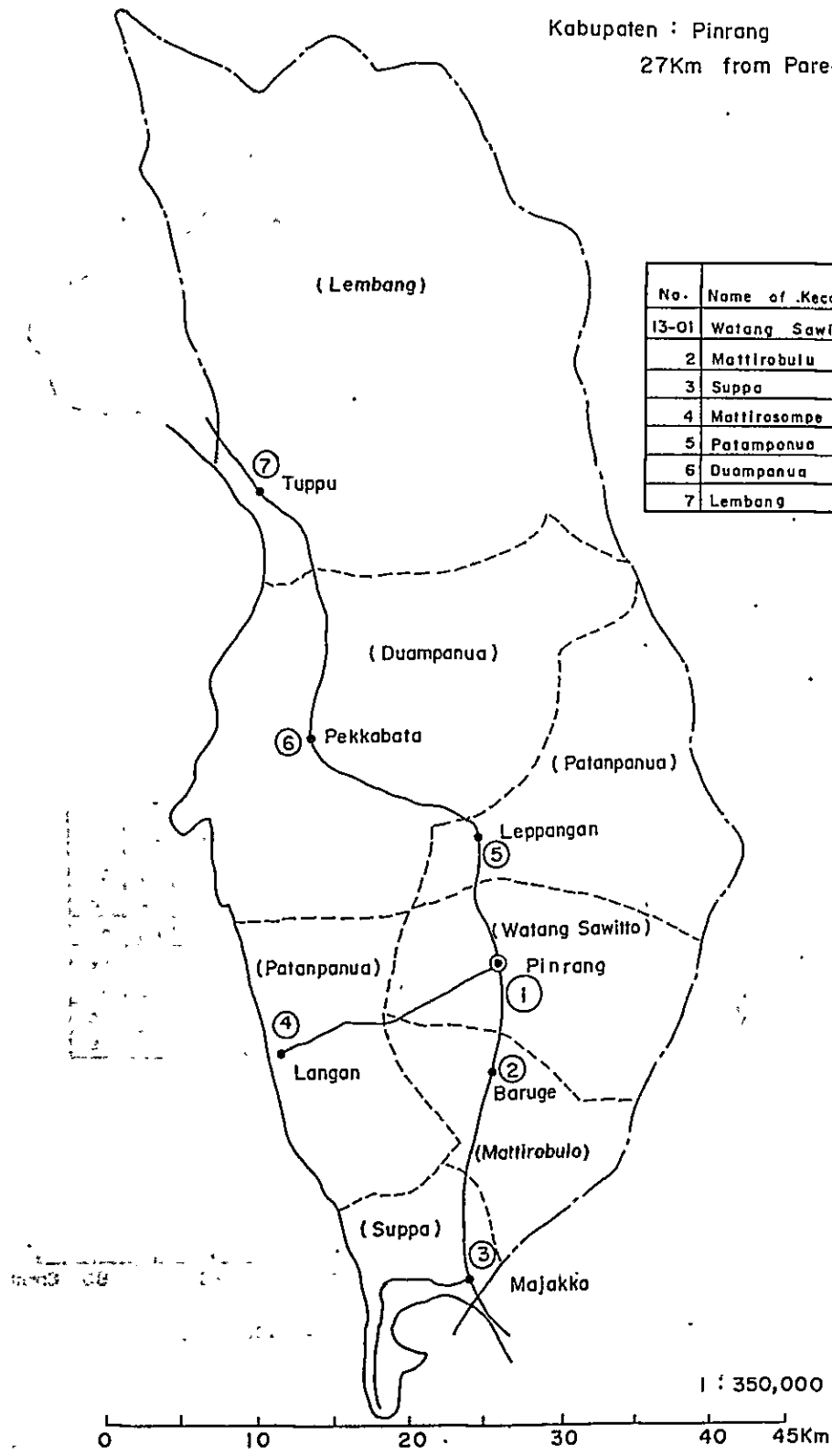


No.	Name of Kecamatan	Km	Pi
12-01	Barru	0	33
2	Mallusetasi	40	21
3	Soppengriaja	25	26
4	Tanete Riiau	10	28
5	Riaja	40	31

1 : 400,000

0 5 10 20 30 40 45Km

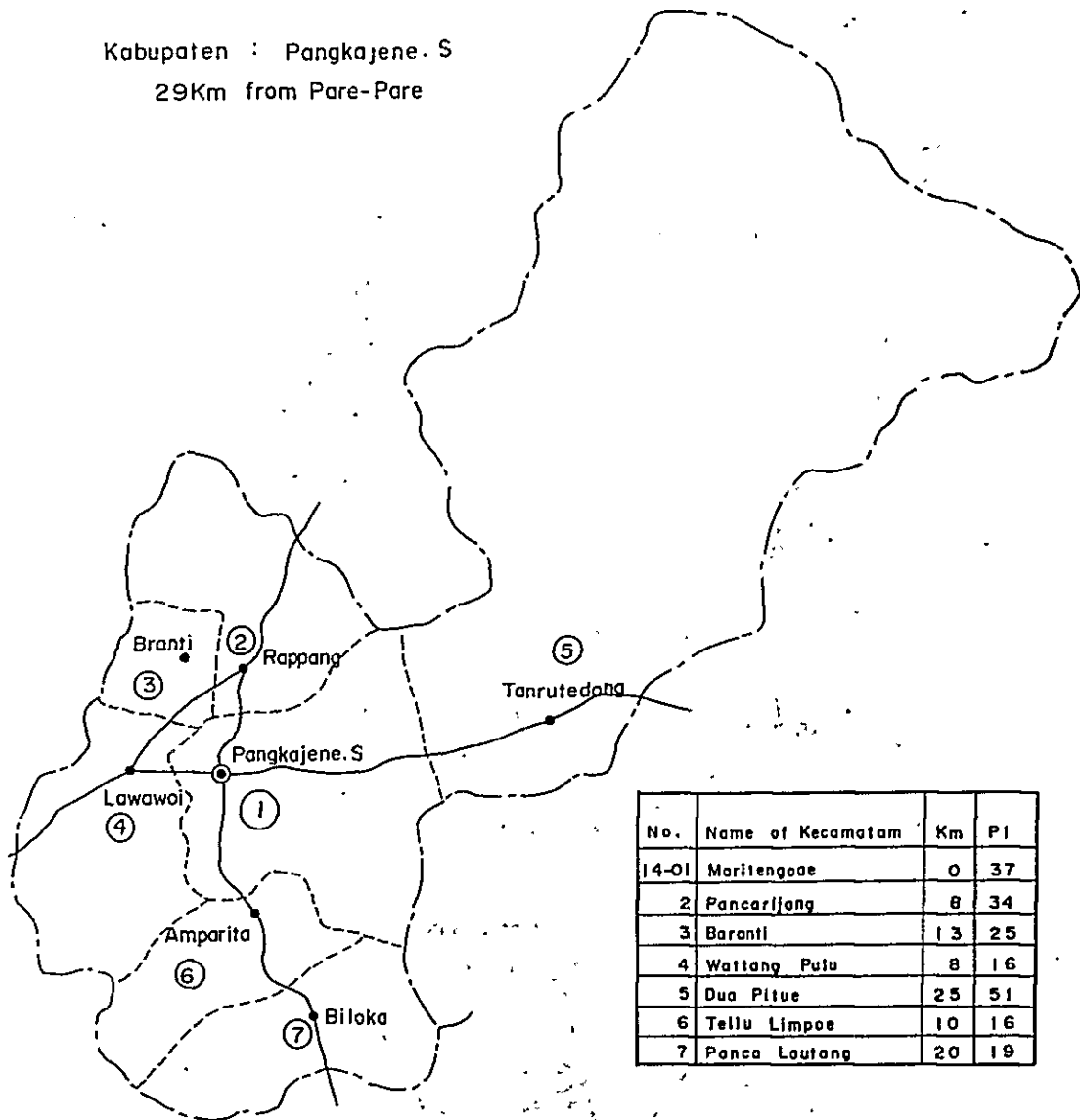
Kabupaten : Pinrang
 27Km from Pare-Pare



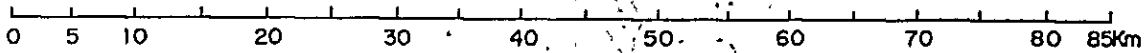
No.	Name of Kecamatan	Km	PI
13-01	Watang Sawitto	0	69
2	Mattirosompe	8	21
3	Suppa	20	23
4	Mattirosompe	16	36
5	Patanpanua	10	28
6	Duampanua	22	50
7	Lembang	40	28

1 : 350,000

Kabupaten : Pangkajene. S
 29Km from Pare-Pare



No.	Name of Kecamatan	Km	PI
14-01	Maritengae	0	37
2	Pancarjiong	8	34
3	Baranti	13	25
4	Wattang Putu	8	16
5	Dua Pitue	25	51
6	Tellu Limpoe	10	16
7	Panca Loutang	20	19

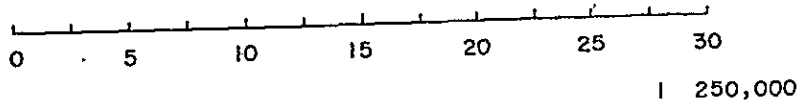
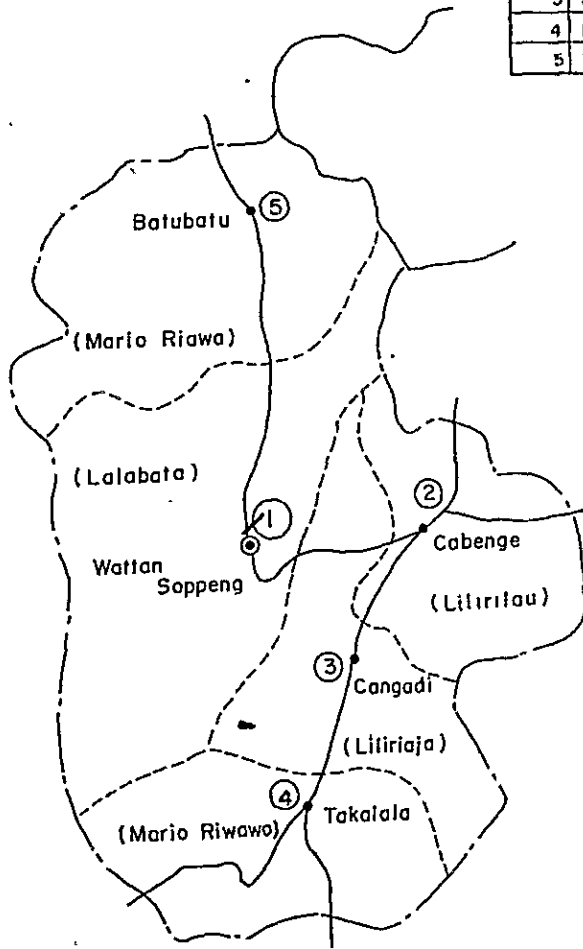


1 : 450,000

Kabupaten : Watansoppeng

87Km from Pare-Pare

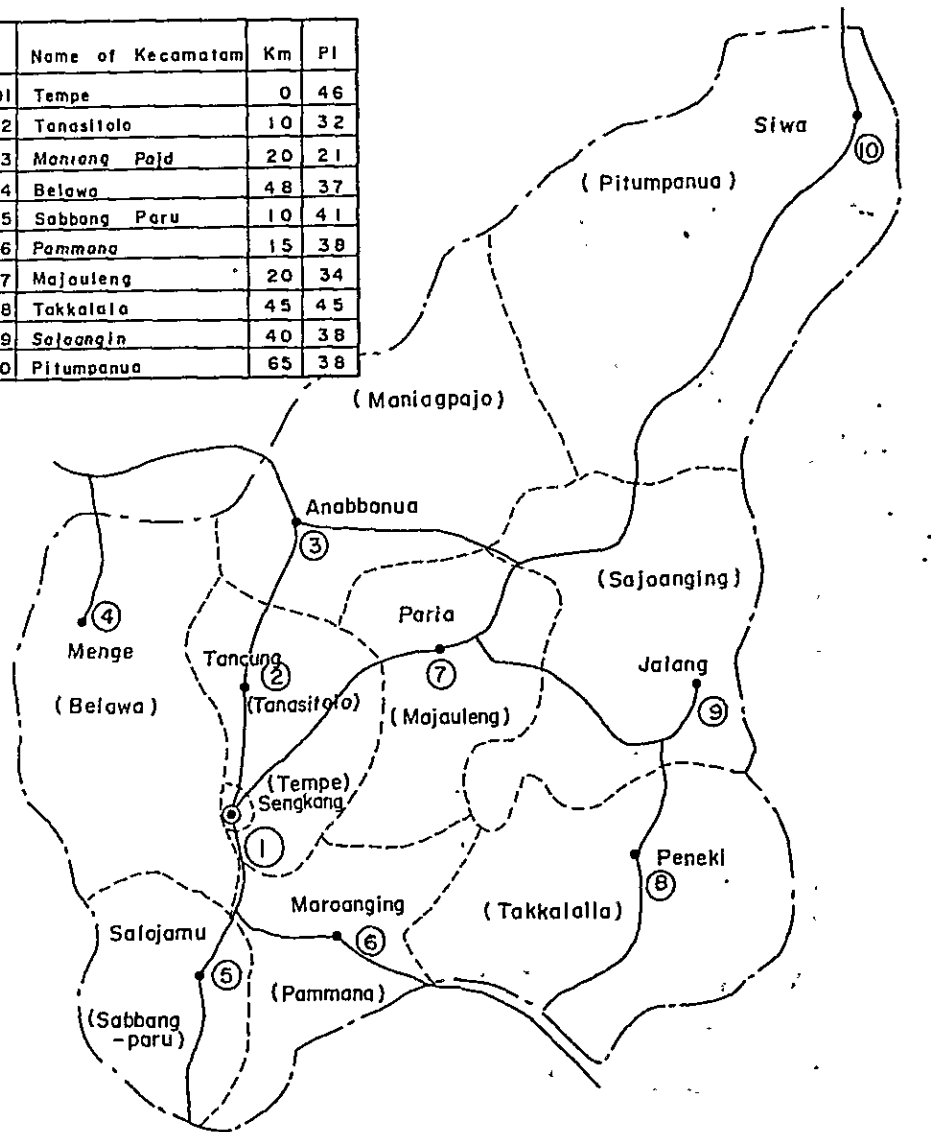
No.	Name of Kecamatan	Km	PI
15-01	Lalabata	0	65
2	Lilirilau	12	52
3	Liliriaja	15	50
4	Mario Riwawa	23	45
5	Mario Riawa	18	31



Kabupaten : Wajo

85Km from Pare-Pare

No.	Name of Kecamatan	Km	PI
17-01	Tempe	0	46
2	Tanasitolo	10	32
3	Maroang Pajd	20	21
4	Belawa	48	37
5	Sabbang Paru	10	41
6	Pammana	15	38
7	Majauleng	20	34
8	Takkalala	45	45
9	Sajaangin	40	38
10	Pitumpanua	65	38



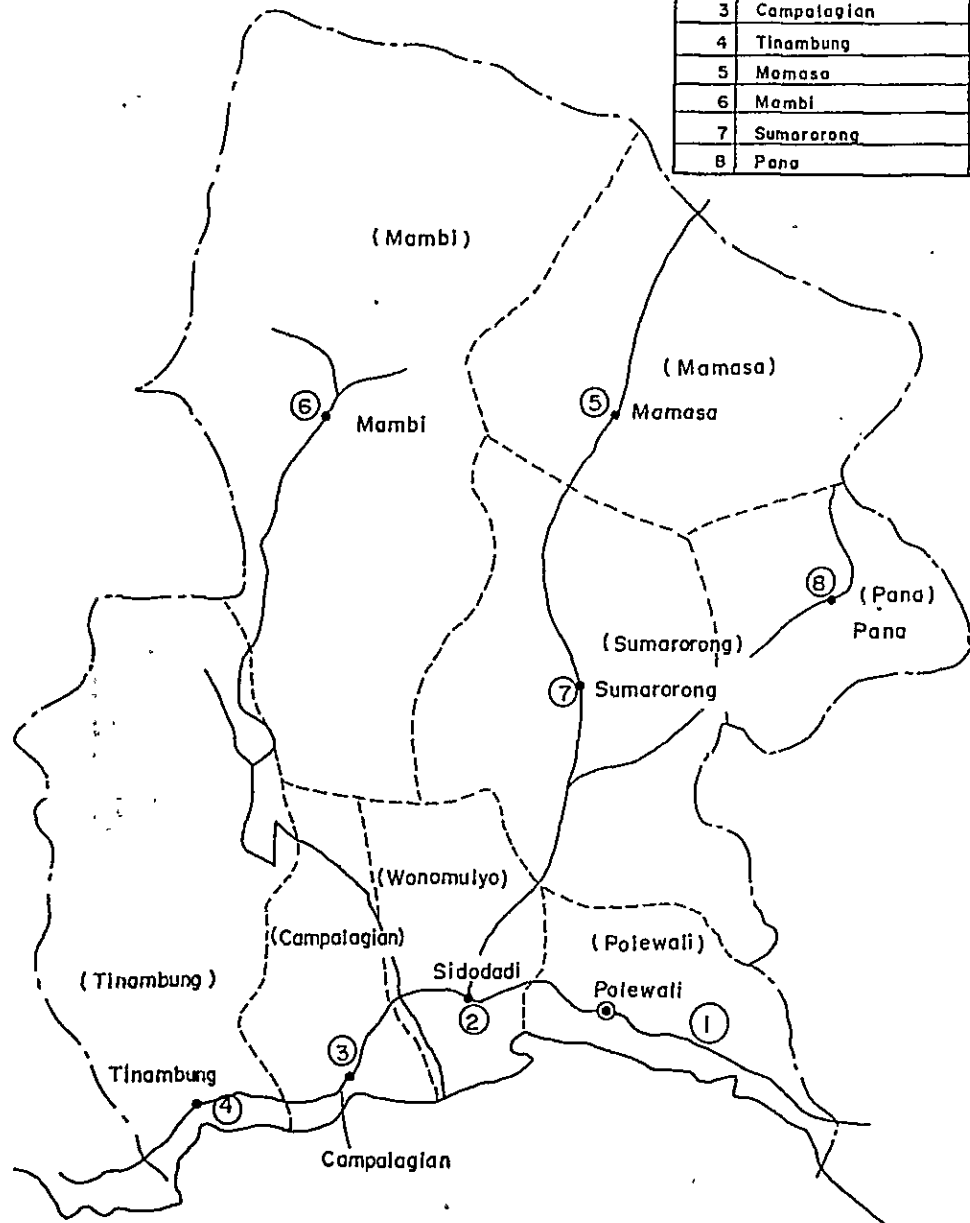
0 10 20 30 40 50 60Km

1 : 400,000

Kabupaten : Polewali- mas

92Km from Pare-Pare

No.	Name of Kecamatan	Km	PI
1B-01	Polewali	0	66
2	Wonomulyo	20	74
3	Campalagian	34	57
4	Tinambung	50	71
5	Momasa	75	29
6	Mambi	85	29
7	Sumarorong	52	13
8	Pana	68	16

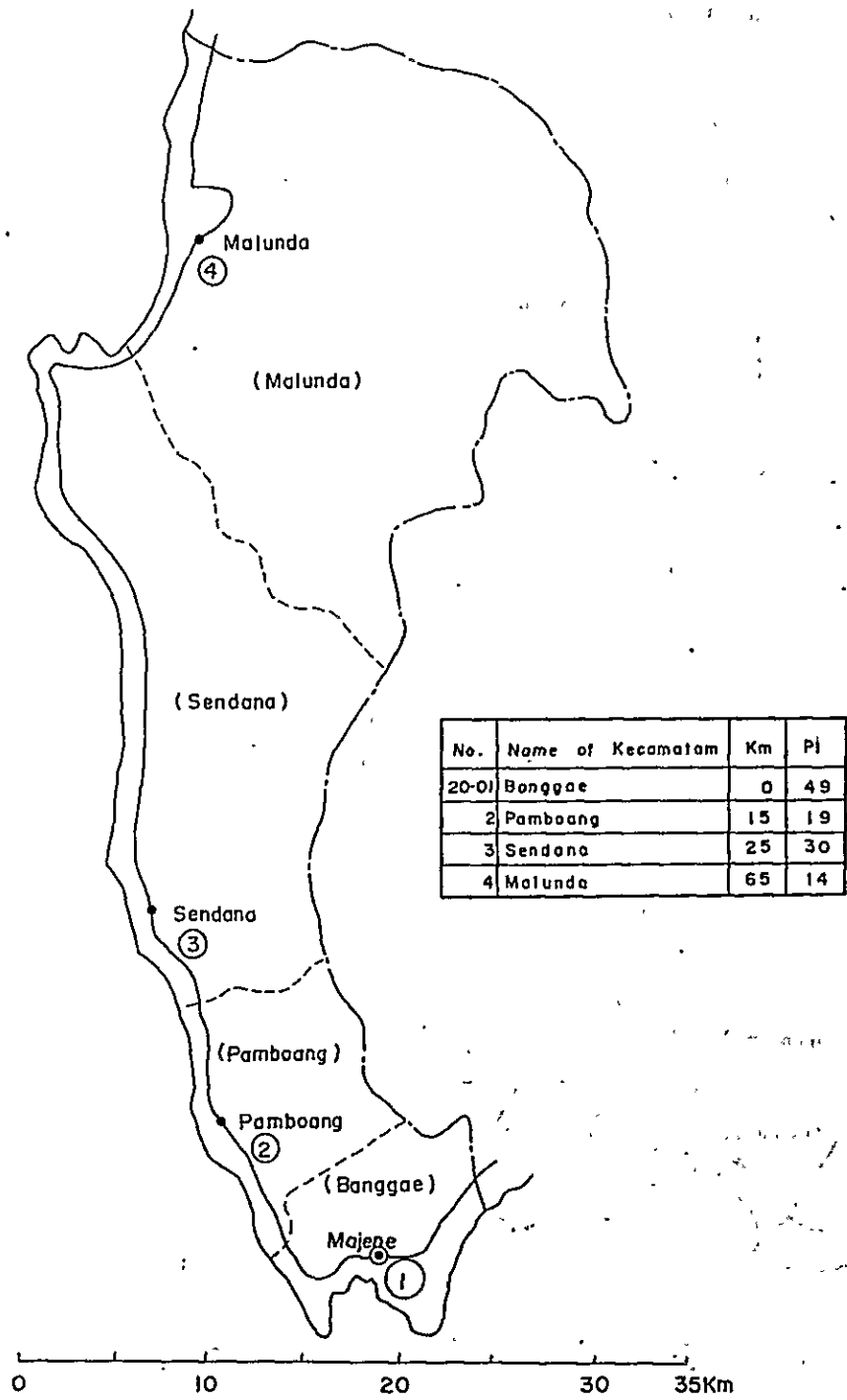


0 10 20 30 40 50 60 70 80Km

1 : 500,000

Kabupaten : Majene

147Km from Pare-Pare

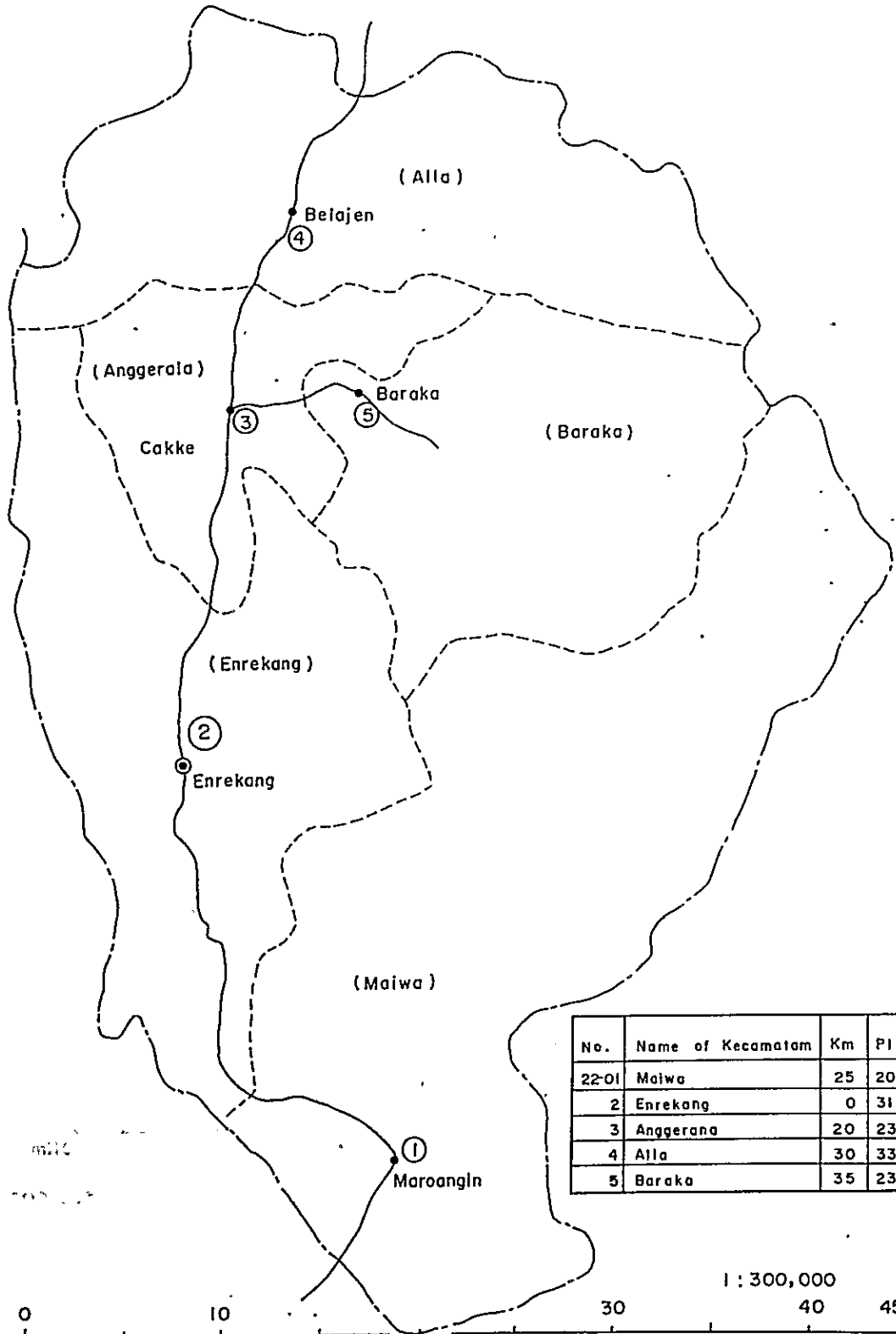


-325-

1 : 300,000

Kabupaten : Enrekang

81 Km from Pare-Pare

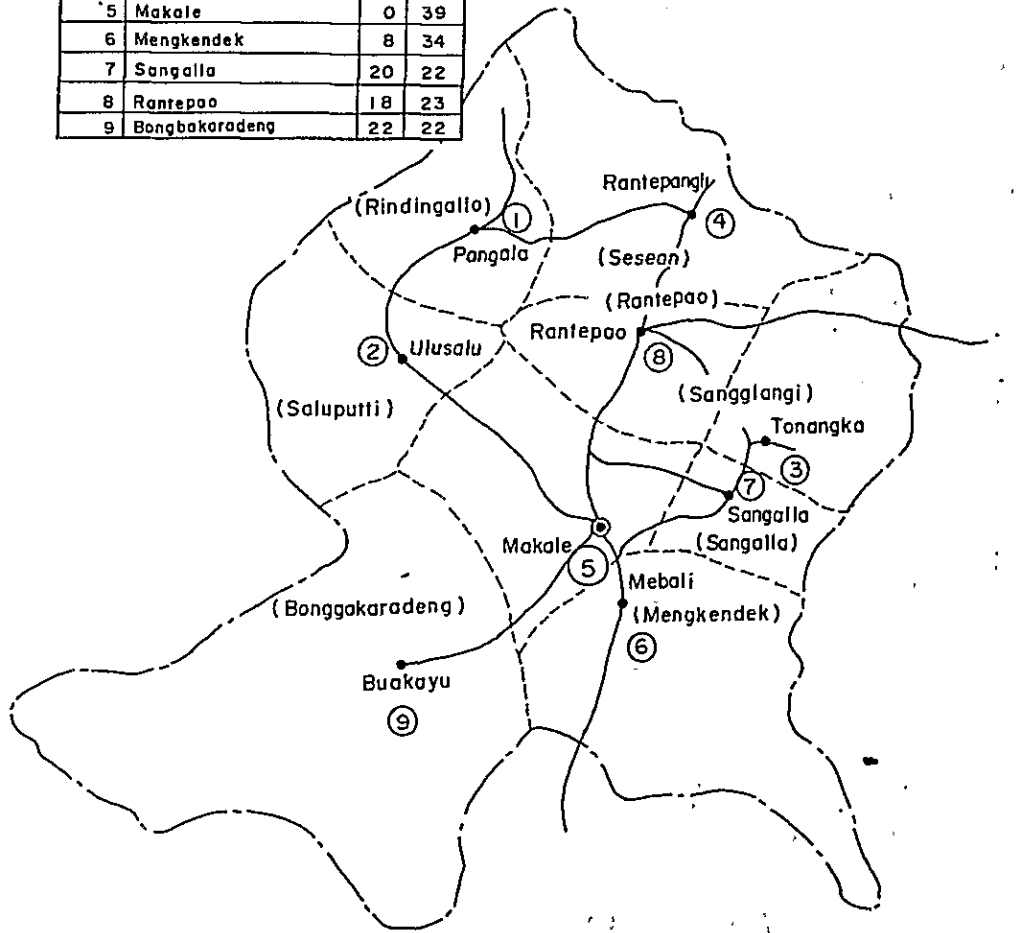


No.	Name of Kecamatan	Km	PI
22-01	Maiwa	25	20
2	Enrekang	0	31
3	Anggerana	20	23
4	Alla	30	33
5	Baraka	35	23

Kabupaten : Tana Toraja (Capital, Makale)

156Km from Pare-Pare

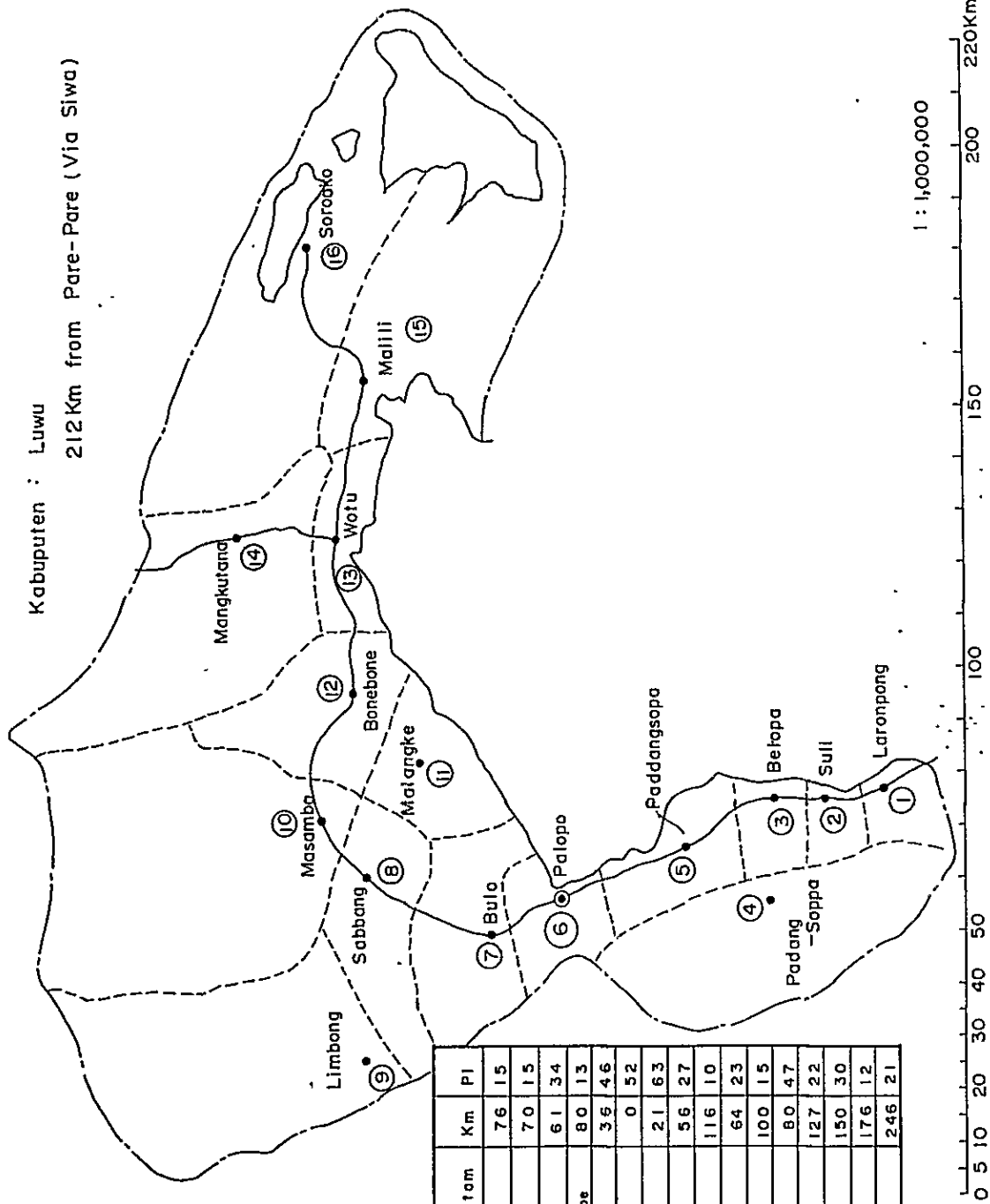
No	Name of Kecamatan	Km	PI
23-01	Rindingallo	48	41
2	Saluputti	24	43
3	Sanggalangi	35	53
4	Sesean	30	41
5	Makale	0	39
6	Mengkendek	8	34
7	Sangalla	20	22
8	Rantepao	18	23
9	Bongbakaradeng	22	22



0 10 20 30 40 50 60 70 80Km

1 : 500,000

Kabupaten : Luwu
 212 Km from Pare-Pare (Via Siwa)

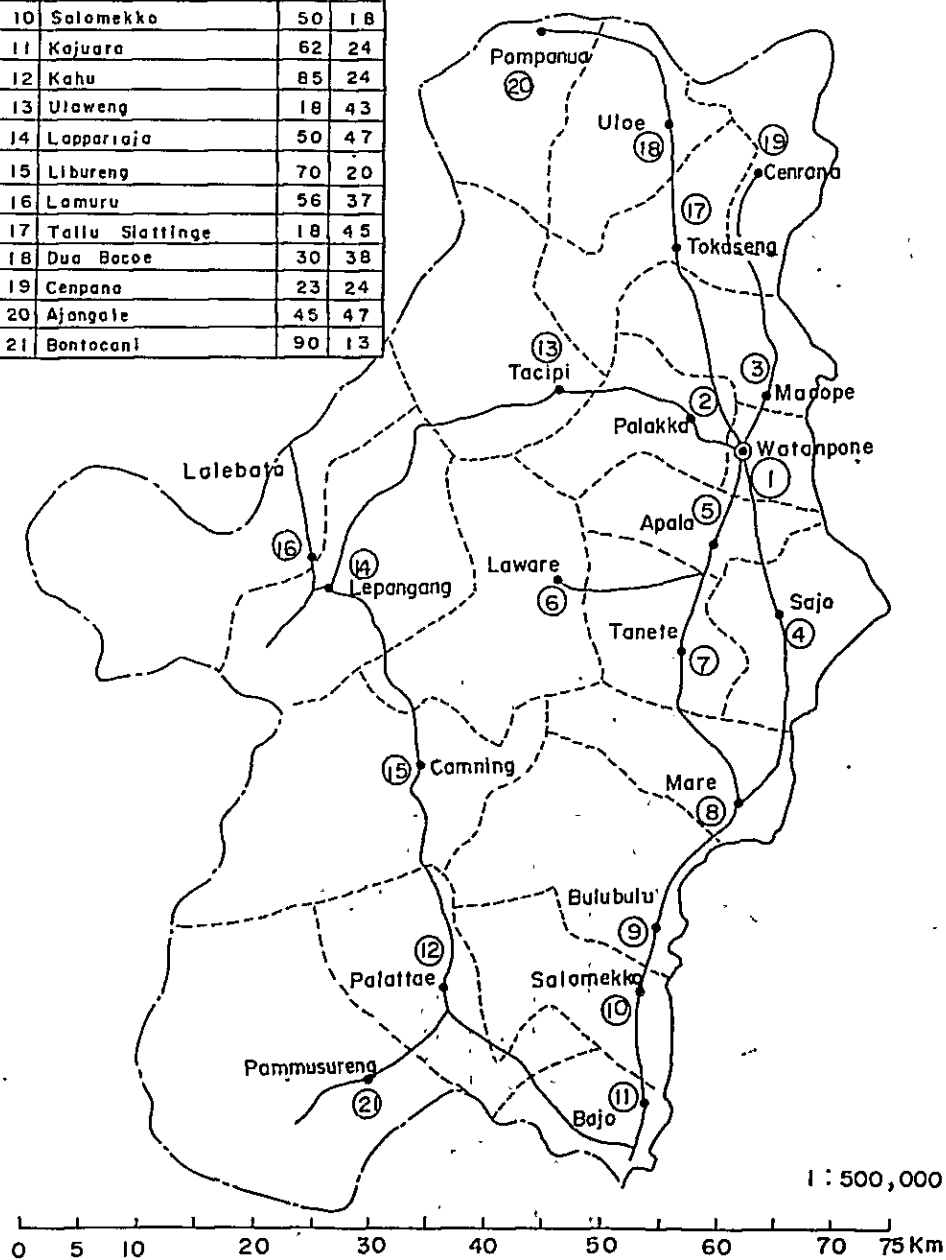


No.	Name of Kecamatan	Km	PI
1	Larongpong	76	15
2	Sull	70	15
3	Bejo	61	34
4	Basserang Tempe	80	13
5	Bua Peurang	36	46
6	Ward	0	52
7	Walentrang	21	63
8	Sabbang	56	27
9	Limbong	116	10
10	Masamba	64	23
11	Malangke	100	15
12	Bone - Bone	80	47
13	Watu	127	22
14	Mangkutana	150	30
15	Malli	176	12
16	Nuha	246	21

No.	Name of Kecamatan	Km	PI
16-01	Tanete Riattang	0	52
2	Palakka	6	34
3	Awang Pone	6	34
4	Sibulue	15	22
5	Barebbo	10	24
6	Ponre	23	13
7	Cina	20	17
8	Mare.	35	19
9	Torra	45	15
10	Salomekko	50	18
11	Kajuara	62	24
12	Kahu	85	24
13	Ulaweng	18	43
14	Lappariaja	50	47
15	Libureng	70	20
16	Lamuru	56	37
17	Tallu Slattinge	18	45
18	Dua Baco	30	38
19	Cenrana	23	24
20	Ajangale	45	47
21	Bontocani	90	13

Kabupaten : Bone

144Km from U.P.(Via Ujunglamuru)



Attached DWG. IV.2.5-1 Standard Office Buildings and Power Supply Facilities

Office Building	Power Supply Facilities								
<p>B-1 Type Building (building for medium-scale telephone office in Ibukota Kabupaten, etc.)</p> <p style="text-align: center;">** 6m</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 150px; height: 60px; vertical-align: top;">1 Office Head's Room Window*</td> <td style="width: 20px; text-align: center; vertical-align: middle;">3 Manual Switchboard</td> <td style="width: 60px; height: 60px; vertical-align: top;">5 MDF Room</td> <td style="width: 60px; height: 60px; vertical-align: top;">7 Power Supply Room</td> </tr> <tr> <td style="width: 150px; height: 60px; vertical-align: top;">2 Office Room Maintenance Personnel Room</td> <td style="width: 20px; text-align: center; vertical-align: middle;">4 AUX Room</td> <td style="width: 60px; height: 60px; vertical-align: top;">6 Equipment Room (Automatic Exchange & Transmission Equipment)</td> <td></td> </tr> </table> <p style="text-align: center;">6m</p> <p>* 1 includes public telephone room and window for accepting telephone. ** An area of 6 m x 6 m = 36 m² is designated one frame. (Total areas = 10 frames = 360 m²)</p>	1 Office Head's Room Window*	3 Manual Switchboard	5 MDF Room	7 Power Supply Room	2 Office Room Maintenance Personnel Room	4 AUX Room	6 Equipment Room (Automatic Exchange & Transmission Equipment)		<p>P-1 Type Power Supply Facilities (for B-1 office building)</p> <p>(1) Load Automatic exchange Transmission equipment MAS Airconditioner (for exchange & lighting)</p> <p>(2) Power supply facilities Diesel engine generator, 75 KVA x 2 Battery, 48V, 1230AH x 1 Rectifier, 300A x 2</p>
1 Office Head's Room Window*	3 Manual Switchboard	5 MDF Room	7 Power Supply Room						
2 Office Room Maintenance Personnel Room	4 AUX Room	6 Equipment Room (Automatic Exchange & Transmission Equipment)							
<p>B-2 Type Building (for small-scale telephone office in Ibukota Kecamatan, etc.)</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 60px; height: 60px; vertical-align: top;">1 Office Head's Room</td> <td style="width: 20px; text-align: center; vertical-align: middle;">4 AUX Room</td> <td style="width: 60px; height: 60px; vertical-align: top;">5 MDF Room</td> <td style="width: 60px; height: 60px; vertical-align: top;">6 Equip-ment Room</td> <td style="width: 60px; height: 60px; vertical-align: top;">7 Power Supply Room</td> </tr> </table> <p style="text-align: center;">Maintenance personnel: Unattended</p> <p style="text-align: center;">(Total area = 5 frames = 180 m²)</p>	1 Office Head's Room	4 AUX Room	5 MDF Room	6 Equip-ment Room	7 Power Supply Room	<p>P-2 Type Power Supply Facilities (for B-1 office building)</p> <p>(1) Load Automatic exchange Transmission equipment Airconditioner (for exchange & lighting)</p> <p>(2) Power supply facilities Diesel engine generator, 50KVA x 2 Battery, 48V, 800AH x 1 Rectifier, 200A x 2</p>			
1 Office Head's Room	4 AUX Room	5 MDF Room	6 Equip-ment Room	7 Power Supply Room					
<p>B-3 Type Building (for repeater station)</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 60px; height: 60px; vertical-align: top;">6 Equip-ment Room</td> <td style="width: 60px; height: 60px; vertical-align: top;">7 Power Supply Room</td> </tr> </table> <p style="text-align: center;">Maintenance personnel: Unattended</p> <p style="text-align: center;">(Total area = 3 frames = 108 m²)</p>	6 Equip-ment Room	7 Power Supply Room	<p>P-3 Type Power Supply Facilities (for B-3 office building)</p> <p>(1) Load Transmission equipment & lighting</p> <p>(2) Power supply facilities Diesel engine generator, 10KVA x 2 Battery, 48V, 210AH x 1 Rectifier, 50A x 2</p>						
6 Equip-ment Room	7 Power Supply Room								

Note: The plans of office buildings are depicted to clearly indicate required for areas and do not show standard shapes of buildings and floor layout.

7. References

7-1 Sumatera Utara

- (1) Table V.7.1-1 List of Collected Data
- (2) Table V.7.1-2 List of Exchange Offices in Sumatera Utara
- (3) Fig. V.7.1-3 The Existing Telephone Network
- (4) Table V.7.1-4 List of Kecamatan

7-2 Sulawesi Selatan

- (1) Table 7.2.1 List of Collected Data
- (2) Table 7.2.2 (a) Existing Telephone Exchanges
- (3) Table 7.2.2 (b) Number of Subscribers and Waiting Applicants
- (4) Table 7.2.2 (c) Existing Transmission Map

Table V.7.1-1 List of Collected Data

[Statistic Data]

No.	Name of Data	Remarks
S-1	STATISTICAL YEAR BOOK, NORTH SUMATERA FIGURES, 1978	
S-2	STATISTICAL YEAR BOOK, DELI SERDANG, 1978	
S-3	DATA-DATA PENDUDUK KOTAMADYA, MEDAN AKHIR, 1976	
S-4	STATISTICAL YEAR BOOK, KOTAMADYA TEBING TINGGI, 1978	
S-5	QUESTIONNAIRE, KECAMATAN RAMBUTAN, KOTAMADYA T.T., 1980	
S-6	QUESTIONNAIRE, KECAMATAN PADANG HILIR, KOTAMADYA T.T., 1979	
S-7	QUESTIONNAIRE, KECAMATAN PADANG HULU, KOTAMADYA T.T., 1979	
S-8	QUESTIONNAIRE, ASAHAN, 1971 ~ 1979	
S-9	BIG PLANTATION IN ASAHAN	
S-10	DAFTAR LUNAS AREAL DAN PRODUCKSI TAN. KARET DAN KELAPA (PERKEBUNAN RAKYAT), ASAHAN, 1970 ~ 1979	
S-11	REKAP DATI II SIMALUNGUN, 1976	
S-12	STATISTICAL YEAR BOOK, KOTAMADYA P. SIANTAR, 1978	
S-13	QUESTIONNAIRE, KARO	
S-14	STATISTIC DATA, KECAMATAN JUHAR, KARO, 1979	
S-15	STATISTICAL YEAR BOOK, LANGKAT, 1977	
S-16	STATISTICAL YEAR BOOK, KOTAMADYA BINJAI, 1979	
S-17	LAMPIRAN DATA, BADAN PENGUSAHAAN PELABUHAN, BELAWAN, 1978	
S-18	LAMPIRAN DATA, BADAN PENGUSAHAAN PELABUHAN, BELAWAN, 1979	
S-19	THE PORT OF BELAWAN	

(Continued)

No.	Name of Data	Remarks
S-20	PTP VI IN BRIEF	
S-21	PTP VI (PERSERO)	
S-22	PNP VI, A PROFILE OF A GROWING COMPANY	
S-23	LAPONAN TAHUNAN 1978, PERUMTEL (YEAR 1978 REPORT, PERUMTEL)	
S-24	DATA STATISTIK TELEKOMUNIKASI WILAYAH USAHA TELEKOMUNIKASI-I, SUMUT/ACEH, 1978	
S-25	BUKU STATISTIC TAHUNAN, SUMATERA UTARA, 1973	
S-26	BUKU STATISTIC TAHUNAN, SUMATERA UTARA, 1974	
S-27	BUKU STATISTIC TAHUNAN, SUMATERA UTARA, 1975	
S-28	BUKU STATISTIC TAHUNAN, SUMATERA UTARA, 1976	
S-29	BUKU STATISTIC TAHUNAN, SUMATERA UTARA, 1977	
S-30	PTP-VIII, 1978	
S-31	INFORMATION COLLECTED FROM PTP VIII	
S-32	PERKIRAAN PENDAPATAN REGIONAL, PROVINSI SUMATERA UTARA 1971 ~ 1978, BAPPEDA-S. U. (Calculation of Regional Income, Province of North Sumatra)	
S-33	TRANSPORT & COMMUNICATION STATISTICS, 1978 VEHICLES AND LENGTH OF ROAD STATISTICS	
S-34	COMMUNICATION STATISTIC POST & TELECOMMUNICATION STATISTIC, 1978	
S-35	POPULATION OF SUMATERA UTARA, 1971	

(Continued)

No.	Name of Data	Remarks
S-36	DAFTAR HIMPUNAN TAHUNAN, IURAN PEMBANGUNAN DAERAN 2 Annual Collected Table, District 2 SECTOR: Development PERKEBUNAN Contribution ASAHAN TK II Sector: Plantation	

[Development Plans]

No.	Name of Development Plan	Remarks
D-1	REPELITA III, KABUPATEN DAERAH TK II, DELI SERDANG -VOLUME I- 1979/80-1983/84	
D-2	REPELITA III, KABUPATEN DAERAH TK II, DELI SERDANG -VOLUME II-1979/80-1983/84	
D-3	REPELITA III, KABUPATEN DAERAH TK II, DELI SERDANG -VOLUME III-1979/80-1983/84	
D-4	REPELITA III, DAERAH TK II KOTAMADYA MEDAN -BUKU I-UHUM 1979/80-1983/84	
D-5	REPELITA III, DAERAH TK II KOTAMADYA MEDAN -BUKU II-SEKTORAL	
D-6	REPELITA III, DAERAH TK II KOTAMADYA MEDAN -BUKU III-PEMBANGUNAN WILAYAH	
D-7	MASTER PLAN KOTAMADYA MEDAN, 1974	
D-8	REPELITA III, KOTAMADYA DAERAH TK-II, TANJUNG BALAI 1979/80-1983/84	
D-9	POLA DASAR PEMBANGUNAN MAJU, KABUPATEN KARO, 1974	
D-10	REPELITA III, DAERAH TK-II KABUPATEN LANGKAT 1979/80-1983/84	
D-11	PRELIMINARY STUDY REPORT ON INDUSTRIAL DEVELOPMENT POTENTIAL IN THE ASAHAN AREA AND ITS VICINITY, 1980, ECFA	
D-12	EXPANSION PROGRAM: LOCAL CENTRAL EXTENSION PERUMTEL SLJJ CENTRAL EXTENSION CENTRAL TELEX EXTENSION TRANSMISSION EXPANSION PROGRAM	
D-13	REVISED PROGRAM REPELITA III, TELEPHONE PROGRAM	

(Maps)

No.	Name of Map	Remarks
M-1	PETA DAERAH TK II KABUPATEN DELI SERDANG 1:125000	
M-2	KOTAMADYA MEDAN 1:50000	
M-3	KOTAMADYA MEDAN	
M-4	KOTAMADYA TEBING TINGGI 1:10000	--
M-5	PETA ICHTISAR PERKUBUNAN, SUMATERA TIMUR 1:500000	
M-6	KABUPATEN ASAHAN 1:100000	
M-7	KABUPATEN ASAHAN 1:200000	
M-8	PETA RENCANA PERLUASAN KOTAMADYA TG. BALAI 1:25000	
M-9	KABUPATEN SIMALUNGUN 1:100000	
M-10	KOTAMADYA PEMATANG SIANTAR 1:10000	
M-11	KECAMATAN TANAH JAWA, KAB. SIMALUNGUN 1:50000	
M-12	KABUPATEN KARO 1:100000	
M-13	KECAMATAN JUHAR, KAB. KARO 1:25000	
M-14	KECAMATAN MUNTE, KAB. KARO 1:25000	
M-15	KOTAMADYA BINJAI 1:10000	
M-16	KABUPATEN LANGKAT 1:100000	
M-17	PTP-VIII TEA ESTATES 1:200000	

[Others]

No.	Name of Material	Remarks
O-1	TRAFFIC 1978-1979, PERUMTEL	
O-2	INDONESIAN TELECOMMUNICATION DEVELOPMENT, Second Edition PERUMTEL	
O-3	BUDGET, KANDATPON P. SIANTAR, PERUMTEL 1980	
O-4	NUMBER OF PERSONNEL, KANDATPON P. SIANTAR, PERUMTEL 1980	
O-5	SYSTEM UTILISATION IN TRANS SUMATRA MICROWAVE SYSTEM ATM	
O-6	SKSD FREQUENCY PLAN	
O-7	CIRCUIT REQUIREMENT FOR SPUR ROUTE, PERUMTEL, WITEL-1	
O-8	RADIO FREQUENCY CHANNEL ARRANGEMENT FOR TRANS SUMATERA MICROWAVE SYSTEM, PERUMTEL	
O-9	PEMILIHAN LOKASI "LANDING POINT" DAN "CABLE STATION" UNTUK SKKL MEDAN-PENANG (MENANG) DI PANTAI CERMIN PERUMTEL, PRANTRA	
O-11	PROJECT AID REQUEST FOR ESTABLISHMENT OF REMOTE AREA TELECOMMUNICATION NETWORK PROJECT PHASE I, DEPARTMENT OF TRANSPORTATION, COMMUNICATION & TOURISM	Partial Copy
O-12	MEMORI PENJELASAN LAPORAN STATUS DAN KEMAJUAN KEGIATAN PERENCANAAN TRANSMISI-TERRESTRIAL TAHUN 1979 DAN RENCANA-KERJA TAHUN 1980, PRANTRA, PERUMTEL	Partial Copy
O-13	TRAFFIC FLOW PLAN FOR YEAR 1992. TERTIARY NETWORK ATM	

(Continued)

No.	Name of Material	Remarks
O-14	FORMAT: NOTA GANGGUAN SENTRAL NOTA-GANGGUAN-LANGGANAN	
O-15	REGIONAL NETWORK PLANNING, TERTIARY AREA, CIRCUIT REQUIREMENTS, ATM	
O-16	REGIONAL NETWORK PLANNING, SECONDARY AREA, CIRCUIT REQUIREMENTS, ATM	
O-17	TRAFFIC FLOW PLAN FOR YEAR 1992. MEDAN TERTIARY, ATM	
O-18	TRAFFIC FLOW PLAN FOR YEAR 1992. MEDAN SECONDARY, ATM	
O-19	TRAFFIC FLOW PLAN FOR YEAR 1992. LANGSA SECONDARY, ATM	
O-20	MEDAN II ARF 102 INSTALLED TRUNKING DIAGRAM, ATM	
O-21	MEDAN EXCHANGE ARF 201 INSTALLED TRUNKING DIAGRAM, ATM	
O-22	ARF EXCHANGE, MEDAN II, KAN RELAY SET RECTIFIER COMMUNICATION, ATM	
O-23	MEDAN II ARF EXCHANGE CODE OUTLINE, 1/2, ATM	
O-24	MEDAN II ARF EXCHANGE CODE OUTLINE, 2/2, ATM	
O-25	TRAFFIC DATA EQUIPMENT EXCHANGE MEDAN TKT GROUP APPROPRIATION, 1/4, ATM	
O-26	TRAFFIC DATA EQUIPMENT EXCHANGE MEDAN TKT GROUP APPROPRIATION, 2/4, ATM	
O-27	STRUKTUR ORGANISASI PERUM TELEKOMUNIKASI KANTOR WITEL-I MEDAN	
O-28	NAMA-NAMA PEGAWAI YANG AKTIF DI KANTOR WITEL I MEDAN MENURUT KEADAAN 1 JULY, 1980	

(Continued)

No.	Name of Material	Remarks
O-29	JUMLAH KARYAWAN/KARYAWATI WITEL I SUMUT/ACEH KEADAAN 1 JUNI, 1980	
O-30	TRAFFIC, DALAM ANGKA 1977-1978, PERUMTEL	
O-31	FUNDAMENTAL PLAN 1972 FOR THE TELEPHONE NETWORK IN INDONESIA, PERUMTEL	
O-32	BUKU TARIP JASA TELECOMMUNIKASI, 1979	
O-33	PERINCIAN BIAYA PEMASANGAN JARINGAN KABEL TELEPON DI LOKAS MEDAN	
O-34	PERINCIAN BIAYA PEMASANGAN JARINGAN KABEL TELEPON DI PADAN	
O-35	PEDOMAN HARGA PEMBANGUNAN PERMAHAN DINAS STANDARD BAPPENAS 1979/80	
O-36	STANDARDISASI PEMBANGUNAN PERUMAHAN DINAS DAN GUDUNG KANTOR PEMENTAH, 1979/1980, BPPN DAN DEPART. KEUANGAN	
O-37	RADIO TELEPHONE NETWORK OF P. T. PERKUBUNAN VIII	
O-38	NETWORK OF PRIMARY CABLE EXTENSION PLAN, MEDAN, 1974 NKF	
O-39	PETA DASAR UNTUK JARING KABEL, MEDAN, ATM	
O-40	SYMBOLS FOR DRAWING OF CABLE NETWORK PERUMTEL	
O-41	PETA DASAR UNTUK JARING KABEL, MEDAN, BICC	
O-42	TELECOMMUNICATION FACILITIES, KOMANDO DAERAH KEPOLISITAN II, SUMATERA UTARA	

(Continued)

No.	Name of Material	Remarks
O-43	INTERNATIONAL, INTERLOCAL AND MINUTES & PULSES 1974 ~ 1977 PERUMTEL	
O-44	FORECAST REVENUE PER LINE UNIT PER ANNUM, PERUMTEL	
O-45	SAMBUNGAN TELEPON JARAK JAUH (LONG DISTANCE TELEPHONE CONNECTION, PT. INTI)	

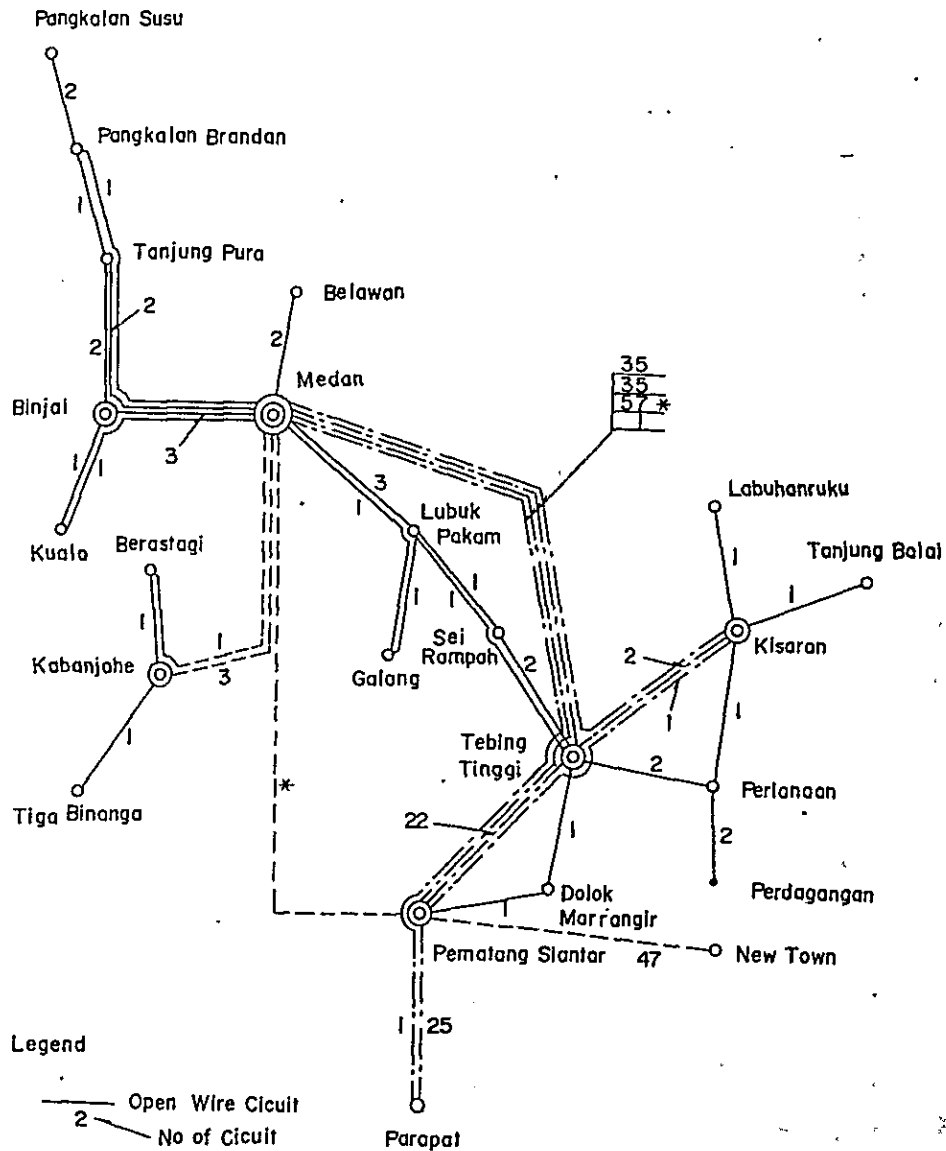
Attached Table V.7.1-2 List of Exchange Offices in Sumatera Utara (1/2)

1 : () Office out of the area to be surveyed.
 2 : () plan in fundamental plan (1972)
 3 : Office ranks are from the examination of the current condition.

No.	Exchange Name	Office Class	Kabu-Office Class	Area Code	Sub's No.	Exchange			Average Income per Month (In Rp.)	Personnel			MDF Capacity	No. of Lead-in Cable Pairs	
						Type	No. of L.U.	No. of Subs.		No. of Wait Appl.	Total No. of Personnel	(Opp.)(Tech)			(Tele-gram)
1	Kabanjaha	TC	KARO VI	628	1-250	400	250		Div. Area 5 million				250	50 x 5	
2	Berastage	EO	KARO VI	((628))	1-145	200	145	10	Total: 1-1.4 million phone; 400~670 thousand	11	4	5	1	200	50 x 4
3	Tigabinanga	EO	KARO	((628))	1-13	50	13	10		7	3	3	-	40	40 x 1
-	(Blangkejeran)	TC	-	642	-	-	-	-		-	-	-	-	-	-
-	(Kutabane)	TC	-	629	-	-	-	-		-	-	-	-	-	-
-	(Pangururan)	TC	-	626	-	-	-	-		-	-	-	-	-	-
-	(Sidikalang)	TC	-	627	-	-	-	-		-	-	-	-	-	-
-	(Langsa)	TC	-	641	-	-	-	-		-	-	-	-	-	-
4	P.X. Brandan	EO	Langk VII	((620))	-	150	115	25	Total: 1 million Cash: 625 thousand	14	4	9	-	100	100 x 1
5	P.K. Susu	EO	Langk	((620))	-	50	18	-	(Coin: 1 thousand) 6 thousand	7	3	2	-	50	50 x 1
-	(Peureula)	TC	-	638	-	-	-	-		-	-	-	-	-	-
-	(Idi)	TC	-	646	-	-	-	-		-	-	-	-	-	-
-	(Kualasimpang)	EO	-	?	-	-	-	-		-	-	-	-	-	-
6	Binjai	TC	Langk VI	620	1-11	1,000	250	222		31	9	Ex: 3 Line: 10	6	1,200	300 x 2 200 x 2 100 x 2
7	Kuala	EO	Langk	((620))	1-24	30	24	-	18 SUB 130,000	7	3	3	-	-	-
8	Tanjungpura	EO	-	((620))	1-97	200	97	30		10	3	6	-	130	120 x 1 10 x 1
9	Medan	DC	Deli II	61	2xxxx 32xxxx 51xxxx 52xxxx	10,000 7,000 10,000 10,000	8,000 6,000 2,500	4,530		10	-	-	-	14,000 9,600 13,000	1800 x 3 1200 x 2
10	Belawan	EO	Deli VI	((61))	511xx 515xx 516xx, 913 510xx, 918	500	500	307		-	-	-	-	360	100 x 3 60 x 1

Attached Table V.7.1.1-2 List of Exchange Offices in Sumatera Utara (2/2)

Exchange Name	Office Class	Kabu- Paten	Office Grade	Area Code No.	Sub's	Exchange		Average Income per Month (in Rp.)	Total No. of Personnel	Personnel				MDF Capacity	No. of Lead-in Cable Pairs	
						Type	No. of L. U. Subs.			No. of Wait Appl.	(Ope) (Tech)	(Tele- gram)	(Per- sonnel Admin)			
11 Galang	EQ	Deli		((61))	1 ~ 38	M-L.B.	50	38	1	400,000	8	3	4	-	-	
12 Lubukpakam	EQ	Deli	VI	((61))	1 ~ 169	M-L.B.	200	169	25	-	15	7	7	-	-	80 x 1 40 x 3
13 Seirampah	EQ	Deli		((62))	1 ~ 32	M-L.B.	60	32	-	-	5	3	1	-	-	50 x 1
14 Tebingtinggi	TC	Deli	V	621	21xxx 1 ~ 6	A-P.C. SM boards M-	1,000	517	200	-	27	17	Ex:3 Tx:2 Ot:2	-	-	1,200 x 1 100 x 1
15 Perdagangan	SO	Sima		((622))	1 ~ 80	M-L.B.	100	80	-	-	13	5	7	-	-	100 x 1
16 Perlannan	EQ	Sima		((622))	1 ~ 12	M-L.B.	60	12	-	-	7	3	2	1	-	60 x 1
17 Dolokmerangir	EQ	Sima		((622))	1 ~ 43	M-C.B.	50	43	50	-	7	3	2	1	-	60 x 1
18 Pematang Siantar	TC	Sima	IV	622		A-P.C. Mboard	4,000	3,000	214	-	-	-	-	-	-	1,200 x 4 400 x 1 200 x 1 200 x 1
19 Parapat	EQ	Sima	VII	622	41xxx	A-P.C.	1,000	87	30	2,000,000	13	3	L: 2 Ex:2 Tx:3 Ot:2	-	-	400 x 1
20 Newtown	EQ	Asah		((623)) 622		A-NC230	1,000	104	-	-	10	-	L: 2 Ex:2	Other:3 Tx:1	-	400 x 2
21 Kisaran	TC	Asah	VI	623	1 ~ 30	A-P.C. M- Mboard	1,000	300	300	-	46	17	L:17 Ex:4 Ot:1 Tx:3	2	-	400 x 1 200 x 1
22 Labuhanruku	EQ	Asah		((623))	1 ~ 25	M-L.B.	50	25	-	-	6	3	2	-	-	50 x 1
23 T.G. Bali	EQ	Asah	VI	((623))	1 ~ 460	M-C.B.	800	460	500	-	15	9	3	2	-	200 x 2
24 Pulaurayat		Asah		((623))	-	-	-	-	-	-	-	-	-	-	-	-



Legend

- Open Wire Circuit
- 2 — No of Circuit
- - - SHF or UHF Circuit
- |— Coaxial Cable Carrier Circuit

Note * These circuits are accommodated in both coaxial cable carrier system and SHF system (Trans - Sumatra Microwave System).

⊙ Secondary Center ⊙ Primary Center ○ Terminal exchange • Satellite exchange

Fig. V.7.1-3 The existing telephone network

Table V.7.1-4 List of Kecamatan (1/3)

<u>Kecamatan</u>	<u>Ibukota</u>	<u>Area in km²</u>	<u>Population in 1971</u>
1 Deli Serdang			
1 Hamperan Perak	Hamperan Perak	400	76183
2 Labuhan Deli	Labuhan Deli	261.78	157761
3 Sunggal	Sunggal	172.97	137818
4 Delitua	Delitua	30	37139
5 Patumbak	Patumbak	78	37139
6 Percut Sui Tuan	Tembung	158.40	159861
7 Biru-Biru	Biru-Biru	80	14397
8 Kuta Limbaru	Kuta Limbaru	480	16829
9 Namorambai	Namorambai	67.56	8840
10 Pancur Batu	Pancur Batu	400	31325
11 Sibolangit	Sibolangit	300	12159
12 Galang	Galang	160.57	55505
13 Batan Kuwis	Batan Kuwis	42	17136
14 Pantai Cermin	Pantai Cermin	150	21281
15 Tanjung Merawa	Tanjung Merawa	300	60128
16 Lubuk Pakam	Lubuk Pakam	510	113405
17 Perbaungan	Perbaungan	288	72840
18 Gunung Emriah	Gunung Meriah	120	2452
19 Kota Rih	Kota Rih	100	15211
20 Bangun Purba	Bangun Purba	1329	21651
21 Senembah Tanjung Mude Hilir	Talun Kenas	210	15722
22 Senebah Tanjung Mude Hulu	Tiga Juhar	350	4514
23 Dolok Merawan	Dolok Merawan	93	19067
24 Bandar Khalipah	Bandar Khalipah	116	20547
25 Sipispis	Sipispis	220	29167
26 Tebing Tinggi	Tebing Tinggi	326	100719
27 Sei Rampah	Ferdaus	570.14	80289
28 Siming Beringen	Tanjung Beringen	63	23214
29 Dolok Masihul	Dolok Masihul	130.27	43331
30 Teleuk Mengkubu	Sialang Buah	91	23810

Table V.7.1-4 List of Kecamatan (2/3)

<u>Kecamatan</u>	<u>Ibukota</u>	<u>Area in km²</u>	<u>Population in 1971</u>
2 Karo			
1 Kabanjahe	Kabanjahe	68.67	42333
2 Payung	Tigaderket	140.14	18554
3 Simpang Empat	Simpang Empat	20.5	20437
4 Barusjahe	Barusjahe	120.8	12324
5 Tigapanah	Tigapanah	200.88	23503
6 Tigabinanga	Tigabinanga	160.2	12971
7 Mardinding	Laubaleng	582.13	7675
8 Munthe	Munthe	122	13207
9 Juhar	Juhar	204.13	13201
10 Kota Buluh	Kota Buluh	167.30	79751
3 Langkat			
1 Gebang	Gebang	1541	21105
2 Bestitang	Bestitang	923	13547
3 Pangkaran Susu	Pangkalan Susu	324.9	22946
4 Babalan	Pangkalan Brandan	497	60299
5 Stabat	Stabat	238	62596
6 Padang Tualang	Tanjung Selamat	1180	54150
7 Hinai	Tanjung Beringen	86	21022
8 Sicangang	Hinai Kiri	322	40824
9 Tanjung Pura	Tanjung Pura	154	30992
10 Sei Bingei	Sei Bingei	229.50	24679
11 Binjai	Binjai	103	46998
12 Salapian	Salapina	483	32551
13 Kuala	Kuala	168.8	31416
14 Selesai	Selesai	175	32367
15 Bohorok	Bohorok	933	23972
4 Simalungun			
1 Siantar	Pematang Siantar	497.05	110602
2 Jorlang Hataran	Tiga Balata	20	14208
3 Sidamanik	Sarimatondang	1292	39942
4 Dolok Pardamean	Sipintu Angin	119	8851
5 Raya	Pematang Raya	36	21997

Table V.7.1-4 List of Kecamatan (3/3)

<u>Kecamatan</u>	<u>Ibukota</u>	<u>Area in km²</u>	<u>Population in 1971</u>
6 Panei	Panei Tonga	15.15	32225
7 Silimakuta	Saribudolok	158.30	11831
8 Dolok Silau	Saranpadang	185	15353
9 Purba	Tigarunggu	187.78	15353
10 Simpang Bolon	Parapat	166	7723
11 Basar Maligas	Pasar Baru	72.5	74250
12 Dolok Pariduan	Tiga Dolok	187.40	18612
13 Tanah Jawa	Tanah Jawa Pematang	59	10396
14 Raya Kahen	Sindarraya	114.08	11237
15 Silau Kahen	Negeri Dolok	245.50	11745
16 Dolok Batu	Serberawan	26	56857
17 Bandar Nyanggar	Perdaganggang	422	113526
5. Asahan			
1 Sungai Kupayang	Sungai Kupayang	499	28483
2 Air Joman	Air Joman		29908
3 Simpan Empat	Simpan Empat		22090
4 Kisaran	Kisaran	329, 33	100528
5 Air Batu	Air Batu	193.80	44612
6 Butu Pane	Sugai Silau	435.5	37733
7 Pulau Rakyat	Pulau Rakyat	451.70	42317
8 Bandar Pulau	Bandar Pulau	736.50	26040
9 Badar Pasir Mandugo	Bandar Pasir Mandugo	651	4716
10 Talawi	Labuhan. Ruku		28288
11 Lima Puluh	Lima Puluh		56948
12 Tanjung Tiram	Tanjung Tiram		55441
13 Air Putih	Indra Pula		47142
14 Medang Deras	Pangkalan Dodek		23241
15 Tanjung Balai	Tanjung Balai	134	46096

7.2.1 List of Collected Data (Sulawesi Selatan)

1. Kabupaten and Kecamatan Data

<u>Kabupaten/Kecamatan</u>	<u>Data</u>
(1) Gowa	Gowa in Figures in 1978
(2) Takalar	Takalar in Figures in 1978 (copy)
(3) Jeneponto	Statistical Data and Maps (copy)
(4) Banteng	Kabupaten Banteng Fact and Explanation (A), (B) and (C) (copy)
(5) Bulukumba	Regional General Data (type)
(6) Sinjai	Sinjai in Figures in 1978 (copy)
(7) Maros	Maros city Planning
(8) Pangkajene-P	Pangkajene and Island in Figures in 1977
(9) Barru	Kabupaten Barru Second Regional Area in Figures in 1977
(10) Pinrang	Kabupaten Pinrang in Figures in 1978
(11) Sindereng Rappang	Sindereng Rappang in Figures in 1978 (copy)
(12) Watansoppeng	Kabupaten Soppeng in Figures in 1979 (copy)
(13) Bone	Kabupaten Bone in Figures in 1977 (copy)
(14) Wajo	Kabupaten Wajo Second Regional Area in Figures in 1977
(15) Polewali-Mamasa	Monography in 1977 (copy)
(16) Luwa	Kabupaten Luwa in Figures in 1978
(17) Majene	Majene in Figures 1978/1979
(18) Enrekang	Kabupaten Enrekang in Figures in 1978 (copy)
(19) Tana-Toraja	Kabupaten Tana Toraja in Figures in 1979 (copy)
(20) Pare-Pare	Kotamadya Datill Pare-Pare in Figures in 1978
(21) Ujung Pandang	Data Potensi Ujung Pandang city in 1975

2. Maps

<u>No.</u>	<u>Data</u>
(1)	Atlas Indonesia - Buku Pertama Umum
(2)	City Maps (Kawitel X) Barru, Sungguminasa, Rappang, Palopo, Polewali, Enrekang, Watansoppeng, Cabenge, Prinrang, Sengkang
(3)	Cable Route Maps (Kawitel X) Sungguminasa, Enrekang, Watanpone, Palopo, Rantepao, Sinjai, Majene

3. Others

<u>No.</u>	<u>Data</u>
(1)	Telecommunication Statistis 1979 (WITEL-X Ujung Pandang)
(2)	List of Stations: Transmission Terrestrial PERUM TELEKOMUNIKASI Situation Juli 1978 (copy)
(3)	SW Frequency Planning for Toll Connection Link SKSD (copy)
(4)	CONTRACT NO.4/II/D/POSTEL/07-75 FOR THE SUPPLY, DELIVERY AND INSTALLATION OF THE EASTERN MICROWAVE SYSTEM
(5)	Site Survey Report on Long Distance Communication System in Central and Soutch Sulawesi January, 1974 (copy)
(6)	CONTRACT NO.21/PEM/TRA/75 Between PERUSAHAAN UMUM TELEKOMUNIKASI BANDUNG, INDONESIA AND CIT-ALCATEL LES CABLES OF LYON AND THOMSON-C. S. F FRANCE AMENDMENT NO.1 (copy)
(7)	BUKU TARIP JASA TELEKOMUNIKASI Peraturan Operasi and Teknik Telekommunikasi No.4/1979
(8)	PROCEDURE Penilaian Kembali and Pengusutan AKTIVA TERAP P.N Telekomunikasi

(Continued)

<u>No.</u>	<u>Data</u>
(9)	LAPORAN TAHUN 1978 -Perusahaan Umum Telekomunikasi-
(10)	Organization Chart of KANTOR WITEL-X
(11)	Revised REPRITA-III Program (copy)
(12)	Traffic Flow Plan for Year 1992 (ATM Report)
(13)	No. of Subscribers and Waiting Applicant of Each Telephone Exchange Offices in South Sulawesi (WITEL-X)
(14)	Trunking Diagram of U.P I and II (U.P Ex)
(15)	No. of Subscribers by year: Telephone, Telgraph and Telex (U.P Ex)
(16)	Dafter Aluran Multiplex and O.W Carrier Setastion Transmissi Ujing Pandang at 1-January-1980
(17)	PROJECT AID REQUEST 1980 Department of Transportation, Communication & Tourism Directorate General of Post & Telecommunications, Republic of Indonesia

7.2.2 Existing Telephone Exchange Offices (1)
(in Sulawesi Selatan)

Aug. 1980

Telephone Exchange Office	Item	Exchange				Number of Subscribers	Number of Subscribers
		Type, Maker	Equipped L. U.	Used L. U.	Installation Year		
①			②			③	④
1 Ujung Pandang	I	HKS-442 (S.E.L)	8,200	7,445	1954	7,445	1,800
	II	P.C	4,000	-	1980		
2 Sungguminasa		ABK-200 (Ericsson)	140	130	-	132	10
3 Takalar		ABK-100 (do.)	80	43	-	39	28
4 Jeneponto		ABK-100 (do.)	100	65	-	61	15
5 Banteng		ABK-100x2 (do.)	200	182	-	153	28
6 Bulukumba		ABK-200 (do.)	170	129	-	128	8
7 Sinjai		ABK-100 (do.)	100	71	-	71	35
8 Watanpone		ABK-200x2 (do.)	330	312	-	304	60
9 Maros		ABK-200 (do.)	150	138	1978	135	30
10 Mandai		ABH-50 (do.)	50	27	-	24	0
11 Malino		ABH-50 (do.)	50	30	-	29	18
12 Pare-Pare		ADK-513 (do.)	800	800	1967	800	205
13 Pangkajene Sidenreng		ABK-200 (do.)	130	102	-	96	40
14 Sengkang		ABK-200 (do.)	170	155	-	151	18
15 Watansoppeng		ABK-200 (do.)	170	118	1959	115	41
16 Cabenge		ABH-50 (do.)	50	12	-	12	0
17 Barru		ABH-50 (do.)	50	50	-	49	15
18 Pangkajene		ABK-100x2 (do.)	190	151	-	148	0
19 Rappang		ABH-50 (do.)	50	48	1977	46	13
20 Pinrang		ABK-50 (do.)	150	114	1972	111	36
21 Enrekang		ABK-50 (do.)	50	38	1972	37	18
22 Polewali		ABK-200 (do.)	110	87	-	87	23
23 Majene		ABK-100 (do.)	100	79	-	78	10
24 Makale		ABK-100 (do.)	100	71	1978	70	25
25 Rantepao		ABK-100 (do.)	100	84	-	84	38
26 Palopo		ABK-200 (do.)	200	188	1968	187	18
			3790				

Existing Telephone Exchange Offices (2)
(in Sulawesi Selatan)

Telephone Exchange Office	Item	Number of Telephone Sets	Number of Public Telephone Sets	Average Income per (Month Subscriber) (Rp.)	Average Traffic (Call) per Day	
					Originating	Incoming
		⑤	⑥	⑦	⑧	
1 Ujung Pandang	I	10,676	4	TLP-38,101	Operator Call	Operator Call
	II			TLG(Total) 29,345,963	510.1	477.6
2	Sungguminasa	141	1	3,788	57.5	40.0
3	Takalar	39	1	10,256	9.2	8.8
4	Jeneponto	65	1	6,676	9.3	12.0
5	Banteng	169	1	5,092	29.7	24.2
6	Bulukumba	136	1	6,301	10.7	10.3
7	Sinjai	75	1	5,525	10.8	10.9
8	Watanpone	332	1	3,145	22.3	29.6
9	Maros	148	1	3,507	36.9	25.6
10	Mandai	27	1	47,880	74.9	25.9
11	Malino	30	1	4,442	3.8	5.4
12	Pare-Pare	914	2	9,770	280.2	370.8
13	Pangkajene Sidenveng	99	1	7,537	39.2	18.3
14	Sengkang	152	1	7,644	21.5	17.8
15	Watansoppeng	126	1	3,567	19.1	20.3
16	Cabenge	12	1		0.2	0.12
17	Barru	50	1	7,221	12.6	9.8
18	Pangkajene	158	1	5,854	25.5	36.7
19	Rappang	46	1	4,174	12.6	7.4
20	Pinrang	112	1	8,409	38.4	23.7
21	Enrekang	39	1	4,307	5.7	5.6
22	Polewali	100	1	2,543	15.9	16.3
23	Majene	99	1	2,836	6.8	8.1
24	Makale	71	1	4,319	27.5	28.2
25	Rantepao	84	1	8,024	36.3	30.2
26	Palopo	204		5,028	31.0	30.4

Existing Telephone Exchange Office (3)
(in Sulawesi Selatan)

Telephone Exchange Office	Item	MDF (Pair)				Number of Lead-in Local Cables	Power	
		Kapacity	Number of Pairs Terminated at MDF					
			Local Junction Toll					
			⑨			⑩	⑪	
1	Ujung Pandang	I	12,800	10,392	2,400	8	240 x 43 80 x 1	PLN (110V)
		II	10,000	6,200	2,400		1200 x 5, 200 x 1 800 x 3 (Junction)	
2	Sungguminasa		280	135	-	3	40 x 1, 120 x 2	PLN (250V)
3	Takalar		100	76	-	4	40 x 2	PLN (220V)
4	Jeneponto		100	59	-	4	60 x 1	PLN (220V)
5	Banteng		200	168	20	4	40 x 2, 20 x 4, 5 x 1	PLN (220V)
6	Bulukumba		200	128	-	1	60 x 2, 10 x 1	PLN (220V)
7	Sinjai		100	70	-	1	60 x 2	PLN (220V)
8	Watanpone		480	305	1	2	80 x 5	PLN (110V)
9	Maros		150	127	-	3	60 x 8	PLN (110V)
10	Mandai		100	90	-	2	20 x 2, 10 x 1	PLN
11	Malino		36	29	-	1	20 x 1, 10 x 1, 5 x 2	PLN
12	Pare-Pare		1,400	1,208	-	9	240 x 5	PLN
13	Pangkajene Sindereng		180	96	-	6	40 x 4, 10 x 1	PLM (220V)
14	Sengkang		240	151	-	4	20 x 5	PLN (110V)
15	Watansoppeng		160	112	5	3	30 x 1, 20 x 5, 10 x 2	PLN (110V)
16	Cabenge		50	50	-	1	50 x 1	PLN (110V)
17	Barru		50	49	-	1	100 x 1	PLN (110V)
18	Pangkajene		200	197	-	3	40 x 4, 20 x 2	PLN (220V)
19	Rappang		60	45	-	3	30 x 1, 20 x 1	PLN (220V)
20	Pinrang		150	140	-	6	40 x 3, 10 x 2	PLN (110V)
21	Enrekang		50	37	-	1	20 x 2, 10 x 1	PLN (220V)
22	Polewali		200	87	-	2	20 x 5	PLN (220V)
23	Majene		150	142	-	1	40 x 3, 20 x 1	PLN (110V)
24	Makale		150	143	-	1	20 x 7	PLN (110V)
25	Rantepao		100	84	-	1	120 x 2	PLN (220V)
26	Palopo'		240	188	-	1	40 x 3, 20 x 4	PLN (110V)

Existing Telephone Exchange Office (4)
(in Sulawesi Selatan)

Telephone Exchange Office	Item	Area (m ²)		Number of Employees			
		Existing Site	Existing Building	Operator	Technician	Administration	Head
			(12)		(13)		
1	Ujung Pandang	I 7,104	3,382	58	104	43	1
		II 1,685	851				
2	Sungguminasa	268	49	5	3		1
3	Takalar	-*	15*	4	1		1
4	Jeneponto	975	70	4	2		1
5	Banteng	2,166	93	4	4		1
6	Bulukumba	825	208	4	4		1
7	Sinjai	327	66	4	2		1
8	Watanpone	924	174	4	6		1
9	Maros	-*	96	4	4		1
10	Mandai	550	71	4	2		1
11	Malino	-*	25*	4	1		1
12	Pare-Pare	2,360		TLP...22 TLG... 2 TLG Delivery 4	TLP..34 TLG.. 1	TLP..20 TLG.. 1	1
13	Pangkajene Sindereng	-*	18*	4	1		1
14	Sengkang	206	76	5	3		1
15	Watansoppeng	635	70	5	2		1
16	Cabenge	-*	10*	2	0		0
17	Barru	-*	44*	4	2		1
18	Pangkajene	1,225	72	4	2		1
19	Rappang	506	67	3	2		1
20	Pinrang	210	25	5	2		1
21	Enrekang	149	28	4	1		1
22	Polewali	-*	25*	4	2		1
23	Majene	246 Δ	53 Δ	3	2		1
24	Makale	-*	32*	4	1		1
25	Rantepao	240	61	4	2		1
26	Palopo	941	292	4	1		1

* Belongs to the Government, Δ belongs to the Private

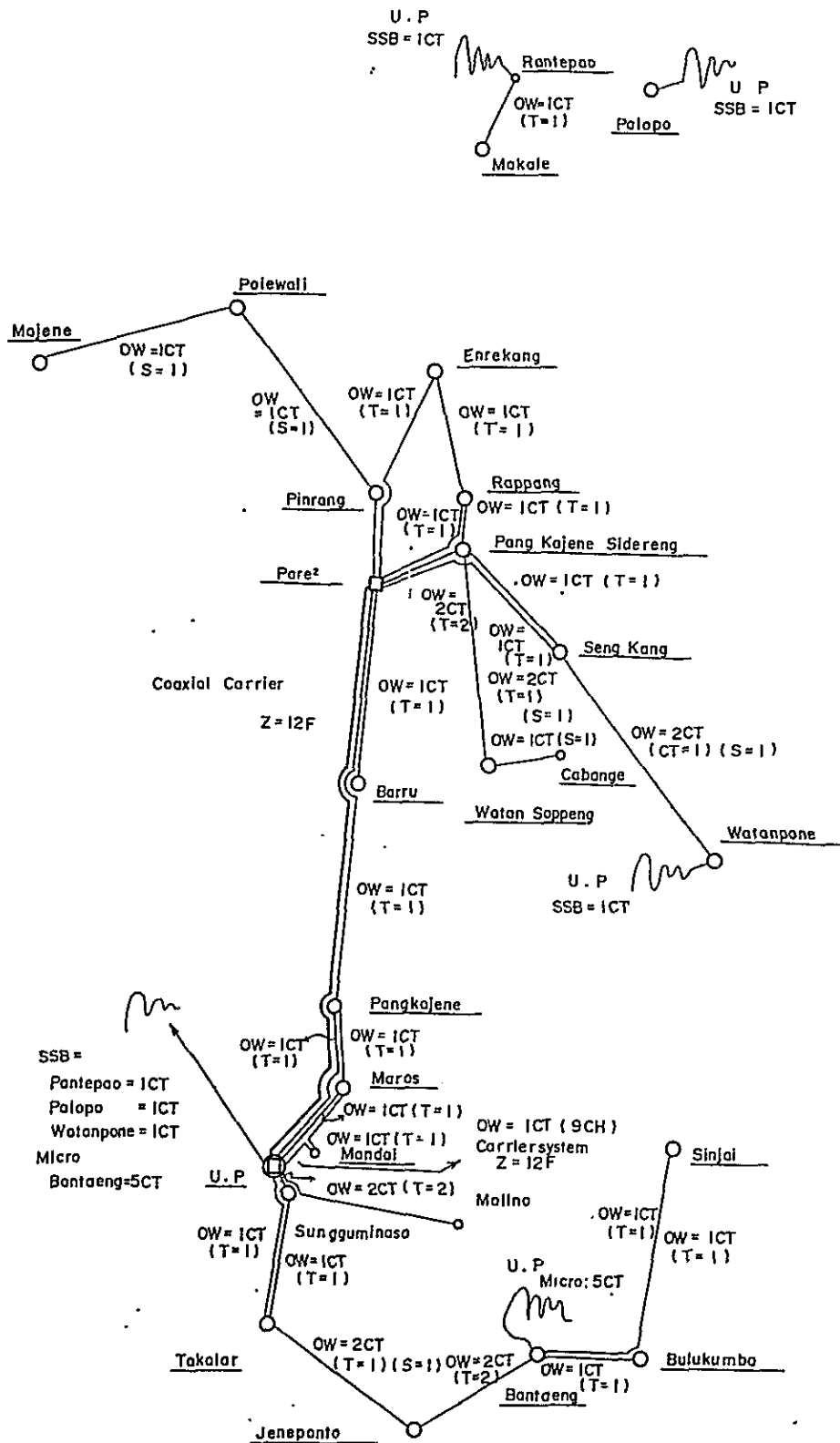
7.2.2 Number of Subscribers and Waiting Applicants
(in Sulawesi Selatan)

Name of Office	1975		1976		1977		1978		1979		1980	
	Subs	Wa	Subs	Wa	Subs	Wa	Subs	Wa	Subs	Wa	Subs	Wa
1 Ujung Pandang	5933		5941		6472		6855	214	7138	1800	7388	1800
2 Sungguminasa	83		91		101		125	10	124	10	133	10
3 Malino	22		24		26		29	5	30	5	30	
4 Takala	21		27		31		25	27	39	30	41	28
5 Jeneponto	49		56		58		58	8	65	8	65	15
6 Banteng	117		123		125		141	20	157	20	158	28
7 Bulukumba	110		117		118		122	25	125	25	128	28
8 Sinjai	40		40		47		59	29	71	29	71	35
9 Watampone	216		221		256		284	25	306	25	312	60
10 Sengkang	148		151		153		152	5	154	5	154	18
11 Watansoppeng	105		107		109		113	20	116	20	116	41
12 Cabenge	9		10		12		12		12	-	12	-
13 Pangkajene Sidenreng	74		83		92		97		104	14	107	40
14 Pare-Pare	702		776		786		794		797	165	798	205
15 Pinrang	95		101		105		113		114	25	114	36
16 Polewali	72		95		83		85		84	21	87	23
17 Majene	69		90		70		70		78	1	79	10
18 Rappang	39		42		48		48		47	5	48	13
19 Enrekang	33		37		37		37		36	12	38	24
20 Makale	52		56		62		65		68	16	71	25
21 Rantepao	46		46		66		76		81	26	84	38
22 Palopo	152		157		165		176		181	16	187	18
23 Barru	22		34		42		46		48	10	50	15
24 Pangkajene	88		122		128		137		149	15	152	
25 Maros	83		99		104		115		124	10	132	
26 Mandai	17		18		18		21		22	3	24	

Note: Sub = Number of subscribers
Wa = Number of waiting applicants

FIG 7.2.2(c) EXISING TRANSMISSION ROUTE MAP

o Mamuju (SULAWESI SELATAN)



（此处为大量模糊不清的印刷文字，无法准确转录）

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