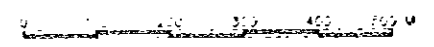
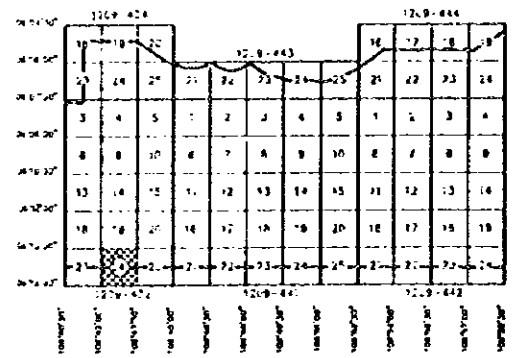


SCALE 1:5000



LEGEND

- ▲ Existing Transportation Point
- Gas Point
- Existing Sewer Manhole
- Spot Height
- ~ River
- ▣ Concrete Building (House or Shop)
- House
- ⊕ Mosque
- ⊕ Church
- ⊕ Hospital
- ⊕ School
- ⊕ Government Office
- Road
- Path
- bridge
- Railway
- ⊕ Station
- Electric Power Line
- ▨ Cutting and Embankment
- ⊕ Sewage
- ⊕ Muslim graves
- ⊕ Christian cemetery
- ⊕ Chinese graves
- ▨ Field, field
- Boundary of vegetation
- ⊕ Field
- ⊕ Forest
- ⊕ Grass
- Water hole
- Pond, lake
- Canal
- Land Slide



K. 1 : Dessel JTM Zone 48
 M : Mean sea level (MSL)

Index contour : 10 meter
 Main contour : 2 meter
 Supplemental contour : 1 meter
 Aerial photography : 1:20,000 May 1994

MINISTRY OF PUBLIC WORKS
 DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT
 CILUNGJANG RIVER BASIN DEVELOPMENT PROJECT
 THE STUDY ON COMPREHENSIVE RIVER WATER MANAGEMENT PLAN IN JABOTABEK

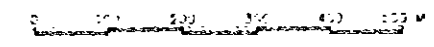
TOPOGRAPHIC MAP

Drawn by	Checked by	Scale	Date
Supriatna	Y. H. H. H.	1:5000	6-2-94
Supriatna	Y. H. H. H.	1:5000	6-2-94
Supriatna	Y. H. H. H.	1:5000	6-2-94

JICA JAPAN INTERNATIONAL COOPERATION AGENCY
 PT. ARAS DELTASATYA

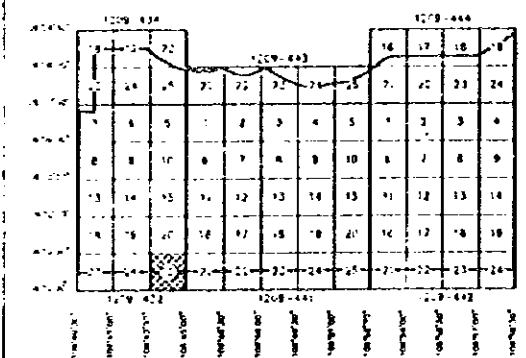


SCALE 1:50,000



LEGEND

- ⊙ Existing Irrigation Point
- ⊙ OPS Point
- ⊙ Existing Bench Mark
- Spot height
- ~ River
- ▭ Concrete Building (more than 100m²)
- ▭ House
- ▭ Mosque
- ▭ Church
- ▭ Hospital
- ▭ School
- ▭ Government Office
- ▭ Field
- ▭ Forest
- ▭ Grass
- ▭ Water line
- ▭ Road line
- ▭ Canal
- ▭ East Side
- ⊙ Station
- Electric Power Line
- ▭ Cutting and Embankment
- ▭ Swamp
- ▭ Market place
- ▭ Muslim cemetery
- ▭ Chinese graves
- ▭ Hilly field
- ▭ Boundary of vegetation
- ▭ Field
- ▭ Water line
- ▭ Canal
- ▭ East Side



U.T.M. Zone 48
Mean Sea Level (1970)

Index contour : 10 meter
 Main contour : 2 meter
 Supplementary contour : 1 meter
 Aerial photography : 1:20,000
 May 1994

MINISTRY OF PUBLIC WORKS
 DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT
 CIKURUNG OSADANE RIVER BASIN DEVELOPMENT PROJECT

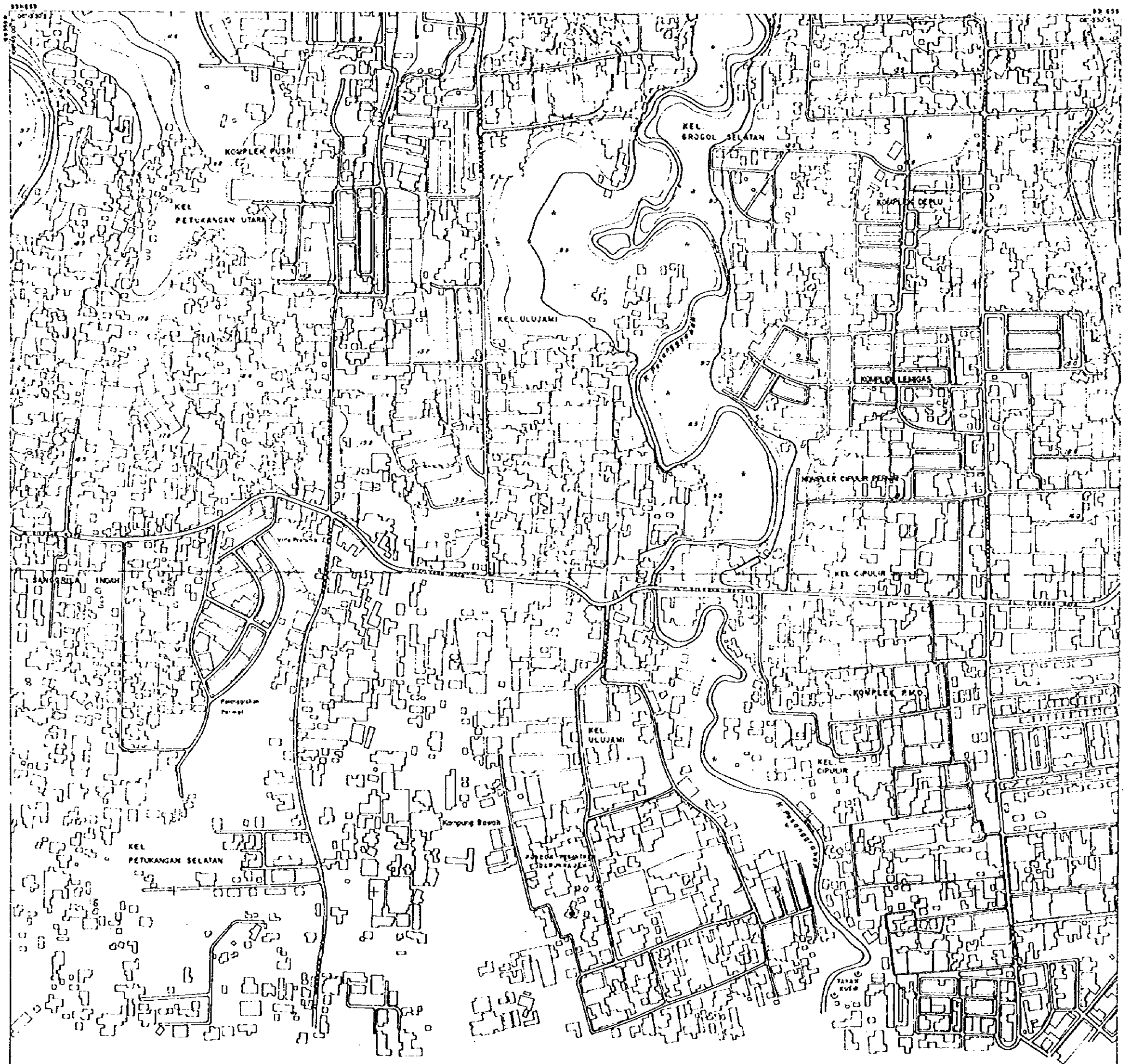
THE STUDY ON COMPREHENSIVE RIVER WATER MANAGEMENT PLAN IN JABOTABEK

Working Title: **TOPOGRAPHIC MAP**

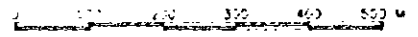
Checked by	Approved by	Field Survey
Signature: <i>[Signature]</i>	Signature: <i>[Signature]</i>	April 19, 1994
Date: 10-1-94	Date: 10-1-94	Field Drawing: 10-01

JICA JAPAN INTERNATIONAL COOPERATION AGENCY

PT. ATLAS DELTAASATRA 1208-432 33



SCALE 1 : 5000



LEGEND

- △ Triangulation Point
- Station
- Electric Power Line
- Existing Bench Mark
- Cutting and Embankment
- Spot Height
- Seam
- River
- Motion gages
- Concrete Building (more than 4m high)
- Christian cemetery
- House
- Grass gages
- Mosque
- Paddy field
- Church
- Boundary of Vegetation
- Hospital
- Field
- School
- Forest
- Government Office
- Grass
- Ford
- Water hole
- Path
- Pond hole
- Bridge
- Sand
- Railway
- Land Slide

1220-434	1220-435	1220-436	1220-437	1220-438	1220-439	1220-440	1220-441	1220-442
19	20	21	22	23	24	25	26	27
28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45
46	47	48	49	50	51	52	53	54
55	56	57	58	59	60	61	62	63
64	65	66	67	68	69	70	71	72
73	74	75	76	77	78	79	80	81
82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99
100	101	102	103	104	105	106	107	108

K. Y. Base UTM Zone 48
Mean sea level (TTO)

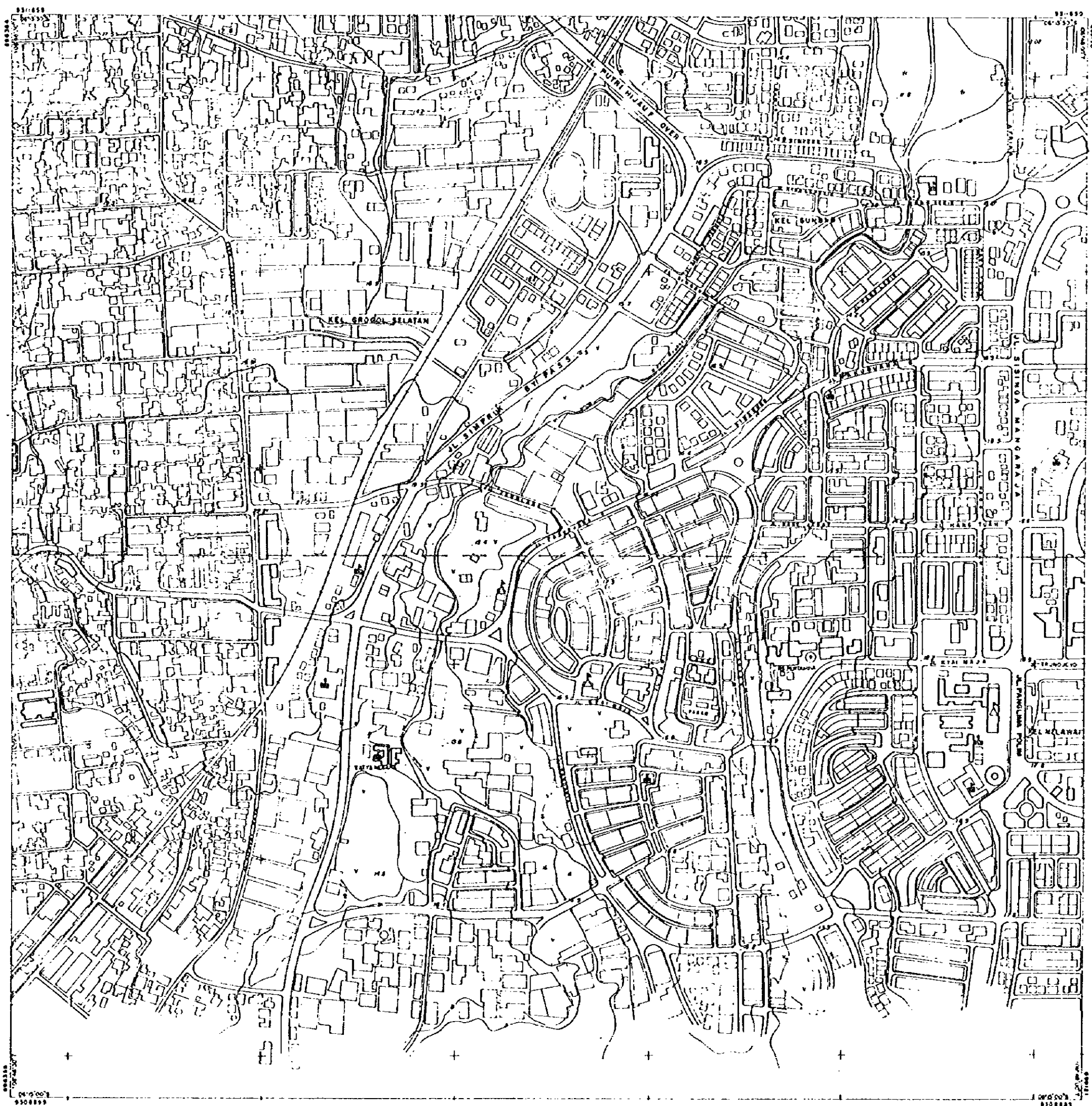
Index contour : 10 meter
 Main contour : 2 meter
 Supplementary contour : 1 meter
 Aerial photography : 1 : 20 000
 May 1994

MINISTRY OF PUBLIC WORKS
 DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT
 OLUKUNG DISAJANE RIVER BASIN DEVELOPMENT PROJECT
 THE STUDY ON COMPREHENSIVE RIVER WATER
 MANAGEMENT PLAN IN JABOTABEK

Sheet No. 21

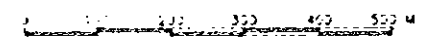
Drawing Title		TOPOGRAPHIC MAP	
Drawn by	Checked by	Approved by	Date Survey '85 28
Signature	Signature	Signature	April 19 85 10
Date	Date	Date	June 28 85 10

JICA JAPAN INTERNATIONAL COOPERATION AGENCY
 DPL ARAS DELASATA



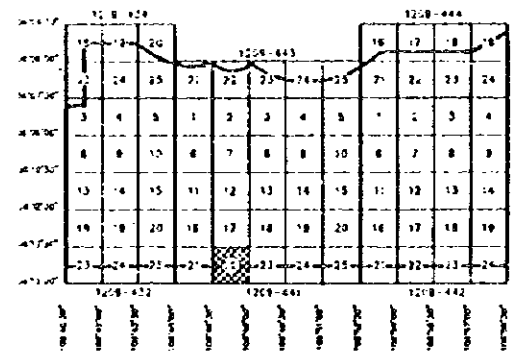
U

SCALE 1:5000



LEGEND

- Existing Transportation Point
- GPS Point
- ⊖ Existing Bench Mark
- Spot height
- ~ River
- ▭ Concrete Building (more than 4 floor)
- House
- ▭ Mosque
- ⊕ Church
- ⊕ Hospital
- ⊕ School
- ⊕ Government Office
- ▭ Road
- ▭ Path
- ⊕ Bridge
- ⊕ Railway
- ⊕ Station
- ⊕ Electric Power line
- ▭ Cutting and Embankment
- ▭ Swamp
- ⊕ Mason yards
- ⊕ Christian cemetery
- ⊕ Chinese graves
- ⊕ Paddy field
- ▭ Boundary of vegetation
- ▭ Field
- ▭ Forest
- ▭ Grass
- ⊕ Water hole
- ⊕ Pond, lake
- ⊕ Sand
- ⊕ Land Slide



X, Y - Based on Zone 48
H - Mean sea level (TTG)

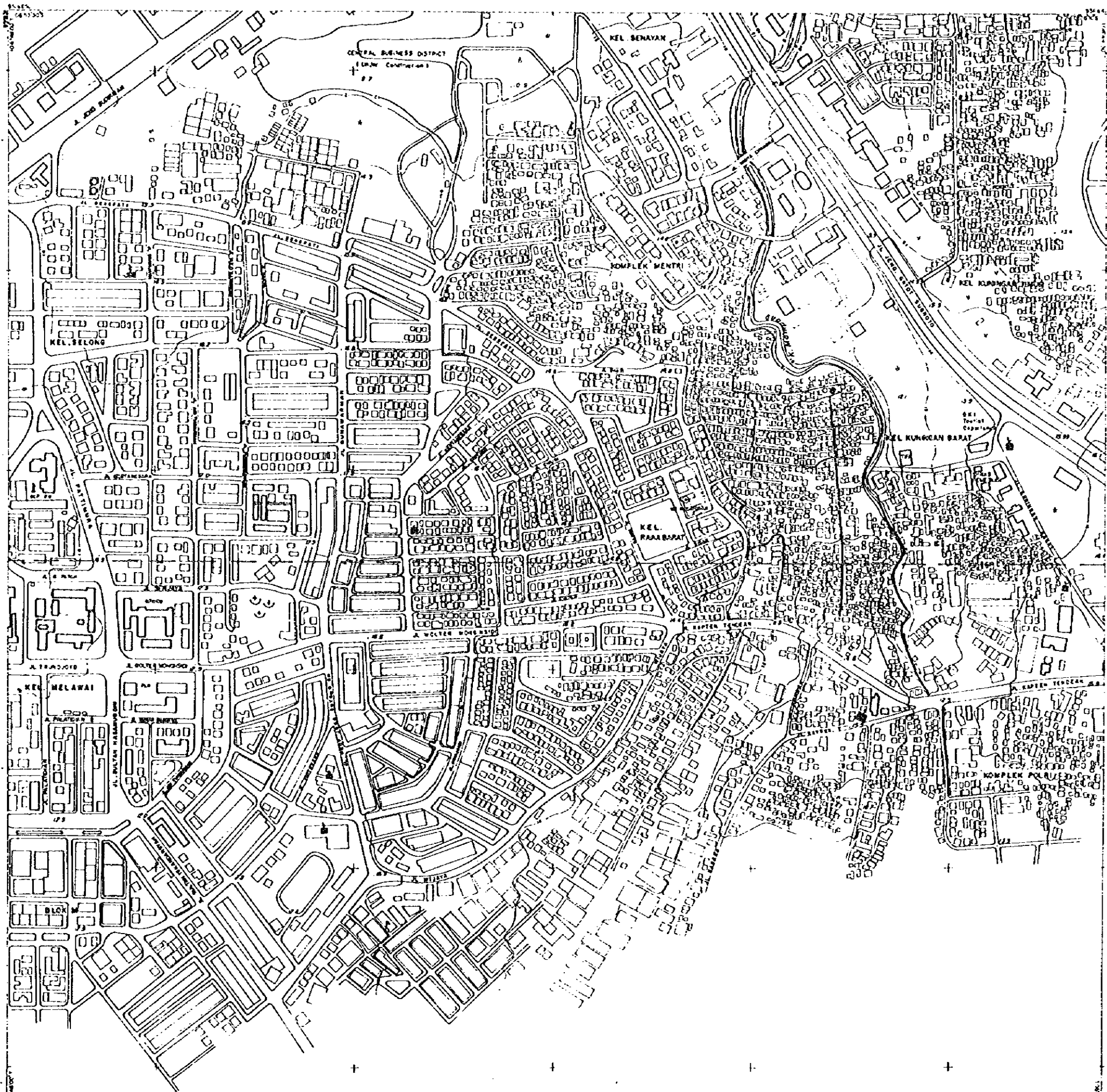
Index contour : 10 meter
Main contour : 2 meter
Supplement contour : 1 meter
Aerial photography : 1:20,000 May 1974

MINISTRY OF PUBLIC WORKS
DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT
CILIMUNG OSADANE RIVER BASIN DEVELOPMENT PROJECT
THE STUDY ON COMPREHENSIVE RIVER WATER MANAGEMENT PLAN IN JABOTABEK

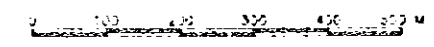
Drawing File: **TOPOGRAPHIC MAP**

Checked by	Approved by		Field Survey '85 '86
Sumarto	Sumarto	Sumarto	April '85 '86
Signature	Signature	Signature	Field Survey '84 '85
Date	Date	Date	Sheet No.
8-2-78	8-2-78	8-2-78	1209-441

JICA JAPAN INTERNATIONAL COOPERATION AGENCY **PT. ARAS DELTASATYA** 1209-441 22

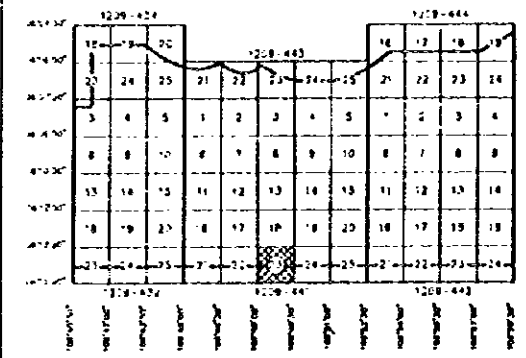


SCALE 1:5000



LEGEND

- Existing Mangrove Forest
- GPS Point
- Existing Drain Mark
- Spot Height
- River
- Structure Building (more than 4th floor)
- House
- Mosque
- Church
- Temples
- NSCC
- Government Office
- Road
- Path
- Bridge
- Railway
- Slot in
- Electric Power Line
- Cutting and Embankment
- Swamp
- Mossy grove
- Christian cemetery
- Chinese graves
- Paddy field
- Boundary of Vegetation
- Field
- Forest
- Grass
- Water hole
- Pond / lake
- Sand
- Land Slide



4, 7 Basis: UTM Zone 48
 n Mean sea level (TTC)

10 meter
 50m contour 2 meter
 Supplemental contour 1 meter
 Aerial photography 1:20,000
 May 1994

MINISTRY OF PUBLIC WORKS
 DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT
 CILIWUNG BASIN DEVELOPMENT PROJECT
 THE STUDY ON COMPREHENSIVE RIVER WATER
 MANAGEMENT PLAN IN JABOTABEK

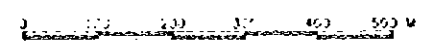
Drawing No. **TOPOGRAPHIC MAP**

Checked by	Approved by	Field Survey '95 '96
Supervisor	1. B. Satrio	Field '95 '96
1. Satrio	1. B. Satrio	Field '95 '96
2. Satrio	1. B. Satrio	Field '95 '96
3. Satrio	1. B. Satrio	Field '95 '96

JICA JAPAN INTERNATIONAL COOPERATION AGENCY
 DEPT. ARAS DELTA/ARAF 1209-441
 21



SCALE 1:50,000



LEGEND

- ⊙ Existing Irrigation Point
- ⊙ GPS Point
- ⊙ Existing Bench Mark
- Spot Height
- ⊙ River
- ⊙ Concrete Building (more than 400sqm)
- ⊙ House
- ⊙ Mosque
- ⊙ Church
- ⊙ Hospital
- ⊙ School
- ⊙ Government Office
- ⊙ Road
- ⊙ Path
- ⊙ Bridge
- ⊙ Railway
- ⊙ Station
- ⊙ Electric Power Line
- ⊙ Culvert and Embankment
- ⊙ Canal
- ⊙ Moslem graves
- ⊙ Christian cemetery
- ⊙ Chinese graves
- ⊙ Paddy field
- ⊙ Boundary of vegetation
- ⊙ Field
- ⊙ Forest
- ⊙ Grass
- ⊙ Water hole
- ⊙ Park area
- ⊙ Field
- ⊙ Land Slide

	1208-424										1208-444									
1208-424	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
1208-425	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1208-426	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
1208-427	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
1208-428	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
1208-429	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
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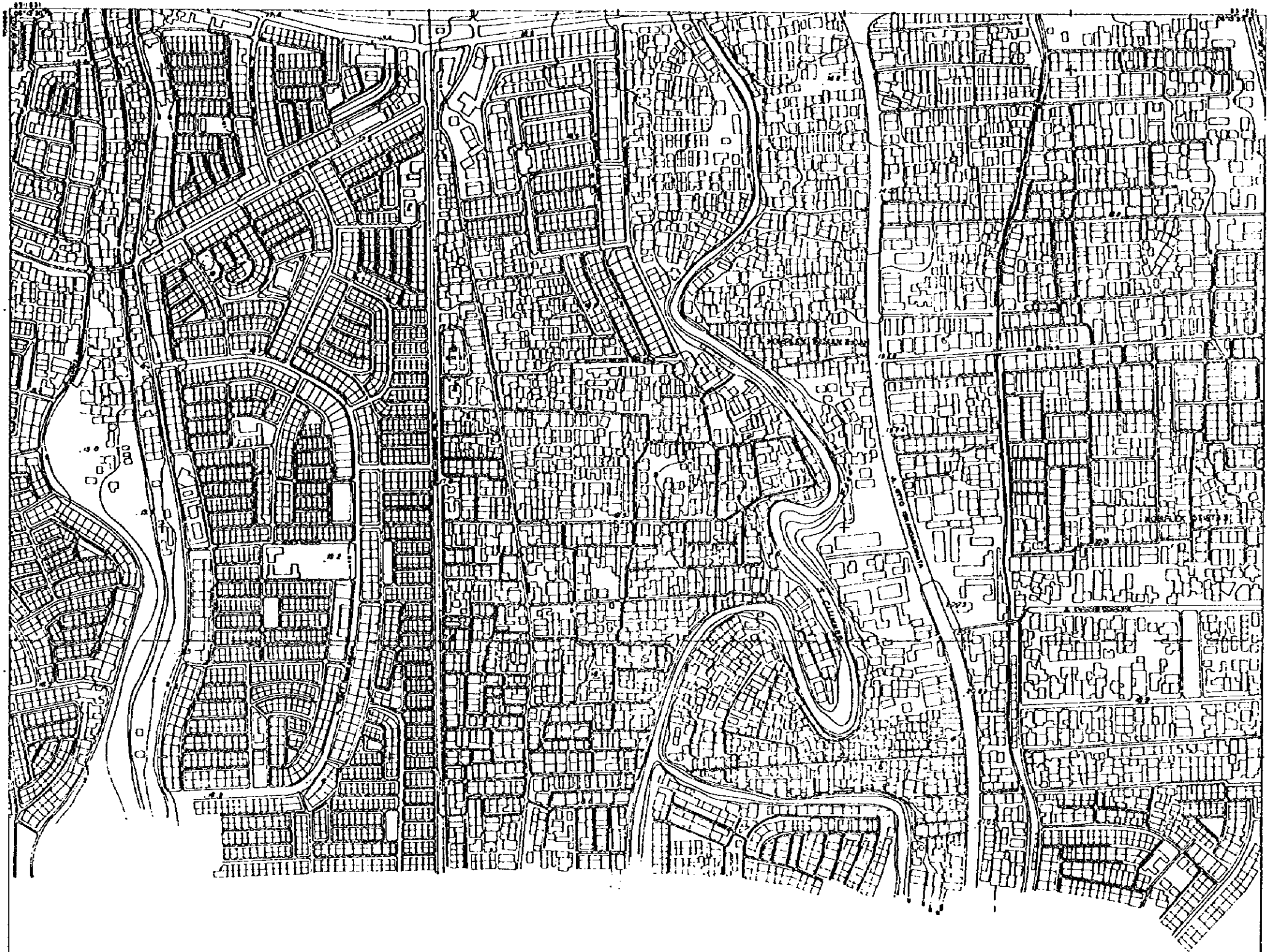
X, Y : Boss' JTM Zone 48
 Z : Mean sea level (TTG)
 Index contour : 10 meter
 Main contour : 2 meter
 Supplementary contour : 1 meter
 Aerial photography : 1:20,000
 May 1994

MINISTRY OF PUBLIC WORKS
 DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT
 DRINKING CISADANE RIVER BASIN DEVELOPMENT PROJECT
 THE STUDY ON COMPREHENSIVE RIVER WATER
 MANAGEMENT PLAN IN JABOTABEK

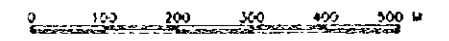
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Drawn by	Checked by	Approved by	Field Survey '85 '86
Survei	Survei	Survei	Survei
Survei	Survei	Survei	Survei
Survei	Survei	Survei	Survei

JICA JAPAN INTERNATIONAL COOPERATION AGENCY
 PT. ARAS DEL'ANATYA

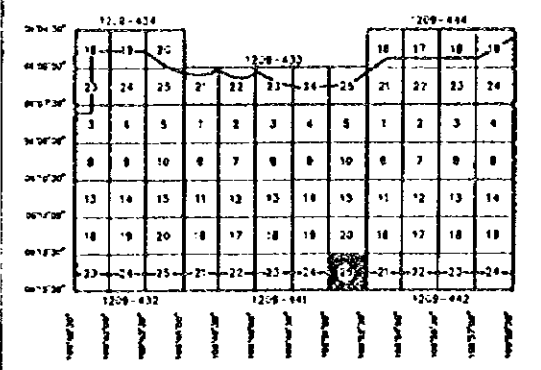


SCALE 1 : 5 000



LEGEND

- △ Existing Triangulation Point
- ⊙ GPS Point
- ⊕ Existing Bench Mark
- Spot Height
- ~ River
- ▭ Concrete Building more than 4th floor
- ▭ House
- ⊕ Mosque
- ⊕ Church
- ⊕ Hospital
- ⊕ School
- ⊕ Government Office
- ~ Pond
- - - Track
- ≡ Bridge
- ≡≡≡ Rail Road
- ⊕ Station
- +— Electric Power Line
- ▨▨▨▨ Cutting and Embankment
- ▨▨▨▨ Swamp
- ~ Moisture grass
- ↑ Chikate cementari
- ~ Chikate grass
- ▭ Rice field
- ~ Boundary of Vegetation
- ∇ Field
- ∆ Forest
- W Grass
- ⊕ Water hole
- ⊕ Ponds, lake
- ~ Sand
- ~ Land Slide



X, Y : UTM Zone 48
 h : Mean sea level (TTC)

index contour : 10 meter
 Main contour : 2 meter
 Supplemental contour : 1 meter
 Contour interval : 20 000
 May 1974

MINISTRY OF PUBLIC WORKS
 DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT
 CILWUNG CIGADANE RIVER BASIN DEVELOPMENT PROJECT

THE STUDY COMPREHENSIVE RIVER WATER MANAGEMENT PLAN IN JABOTABEK

Drawing Title : **TOPOGRAPHIC MAP**

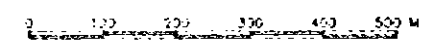
Drawn by	Checked by	Approved by	Date Survey 28.08
Signature	Signature	Signature	Date 1974.10
Scale	Scale	Scale	Date Drawing 28.08

JICA JAPAN INTERNATIONAL COOPERATION AGENCY

PE. ARAS DELTASATYA



SCALE 1 : 5000



LEGEND

- ⊙ Existing Triangulation Point
- ⊙ GPS Point
- ⊙ Existing Bench Mark
- Spot Height
- ⊙ River
- ⊙ Concrete Building (more than 100 m²)
- ⊙ House
- ⊙ Mosque
- ⊙ Church
- ⊙ Hospital
- ⊙ School
- ⊙ Government Office
- ⊙ Road
- ⊙ Path
- ⊙ Bridge
- ⊙ Footway
- ⊙ Station
- ⊙ Electric Power Line
- ⊙ Cutting and Embankment
- ⊙ Swamp
- ⊙ Muslim graves
- ⊙ Christian cemetery
- ⊙ Chinese graves
- ⊙ Paddy field
- ⊙ Boundary of vegetation
- ⊙ Field
- ⊙ Forest
- ⊙ Grass
- ⊙ Water hole
- ⊙ Ford hole
- ⊙ Ford
- ⊙ Land Slide

	1203-424					1203-444						
120300	23	24	25	25	22	22	21	25	21	22	23	24
120400	2	4	5	1	3	3	6	5	1	5	3	4
120500	8	8	0	8	7	8	8	10	6	7	8	8
120600	13	14	15	11	12	13	14	13	11	12	13	14
120700	16	18	20	8	17	16	19	20	18	17	18	19
120800	23	24	25	27	22	23	24	25	22	23	24	24
	1203-424					1203-444						
120300	meter	meter	meter	meter	meter	meter	meter	meter	meter	meter	meter	meter

X, Y : Base UTM Zone 48
 H : Mean sea level (TTG)

Index contour : 10 meter
 Main contour : 2 meter
 Supplemental contour : 1 meter
 Aerial photography : 1 : 20 000
 May 1994

MINISTRY OF PUBLIC WORKS
 DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT
 DIVISION OASANE RIVER BASIN DEVELOPMENT PROJECT

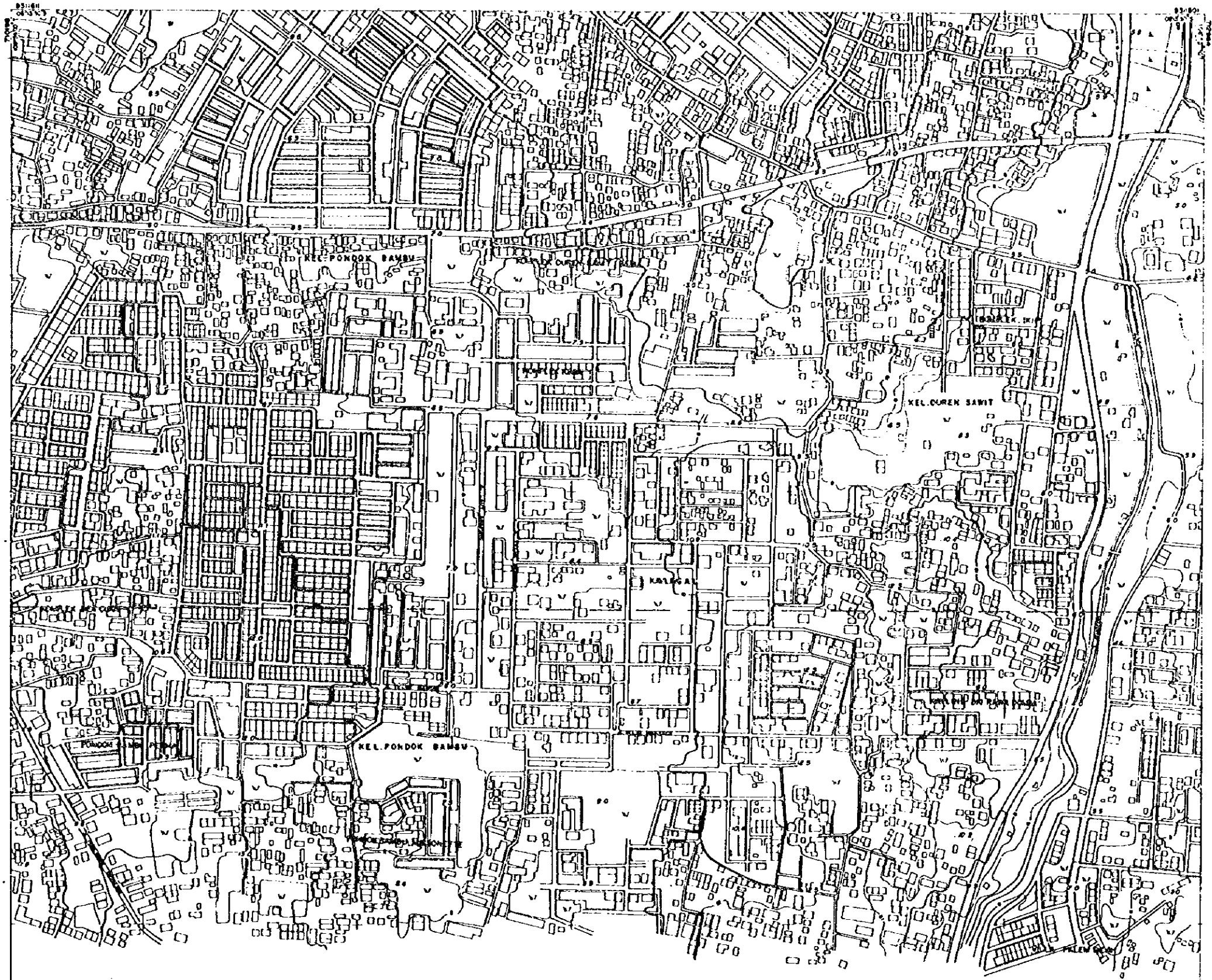
THE STUDY ON COMPREHENSIVE RIVER WATER MANAGEMENT PLAN IN JABOTASEK

Drawing Title: **TOPOGRAPHIC MAP**

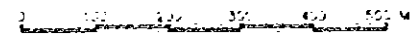
Name	Created by	Checked by	Scale	Drawn by	Date
Signature	Signature	Signature	1:5000	Signature	21-1-94
Date	21-1-94	21-1-94		21-1-94	21-1-94

JICA JAPAN INTERNATIONAL COOPERATION AGENCY

PE. ARAS DELTASATIA



SCALE 1:5000



LEGEND

- Existing Transportation Point
- SPN Point
- Existing Bench Mark
- Spot height
- River
- Concrete Building on 48 foot
- House
- Mosque
- Church
- Hospital
- School
- Government Office
- Road
- Path
- Bridge
- Railway
- Station
- Electric Power Line
- Cutting and Embankment
- Swamp
- Mosses grass
- Crest on cemetery
- Crest on grass
- Paddy field
- Boundary of vegetation
- Field
- Forest
- Grass
- Water hole
- Pond, lake
- Sand
- Land Slide

1209-436	1209-440	1209-444
18	19	20
21	24	25
22	23	24
25	26	25
21	22	23
24	25	26
8	9	10
6	7	8
9	10	11
6	7	8
13	14	15
11	12	13
14	15	16
11	12	13
16	17	18
17	18	19
23	24	25
21	22	23
24	25	26
21	22	23
24	25	26
1209-432	1209-440	1209-448

X, Y Based UTM Zone 48
N Mean sea level (TTG)

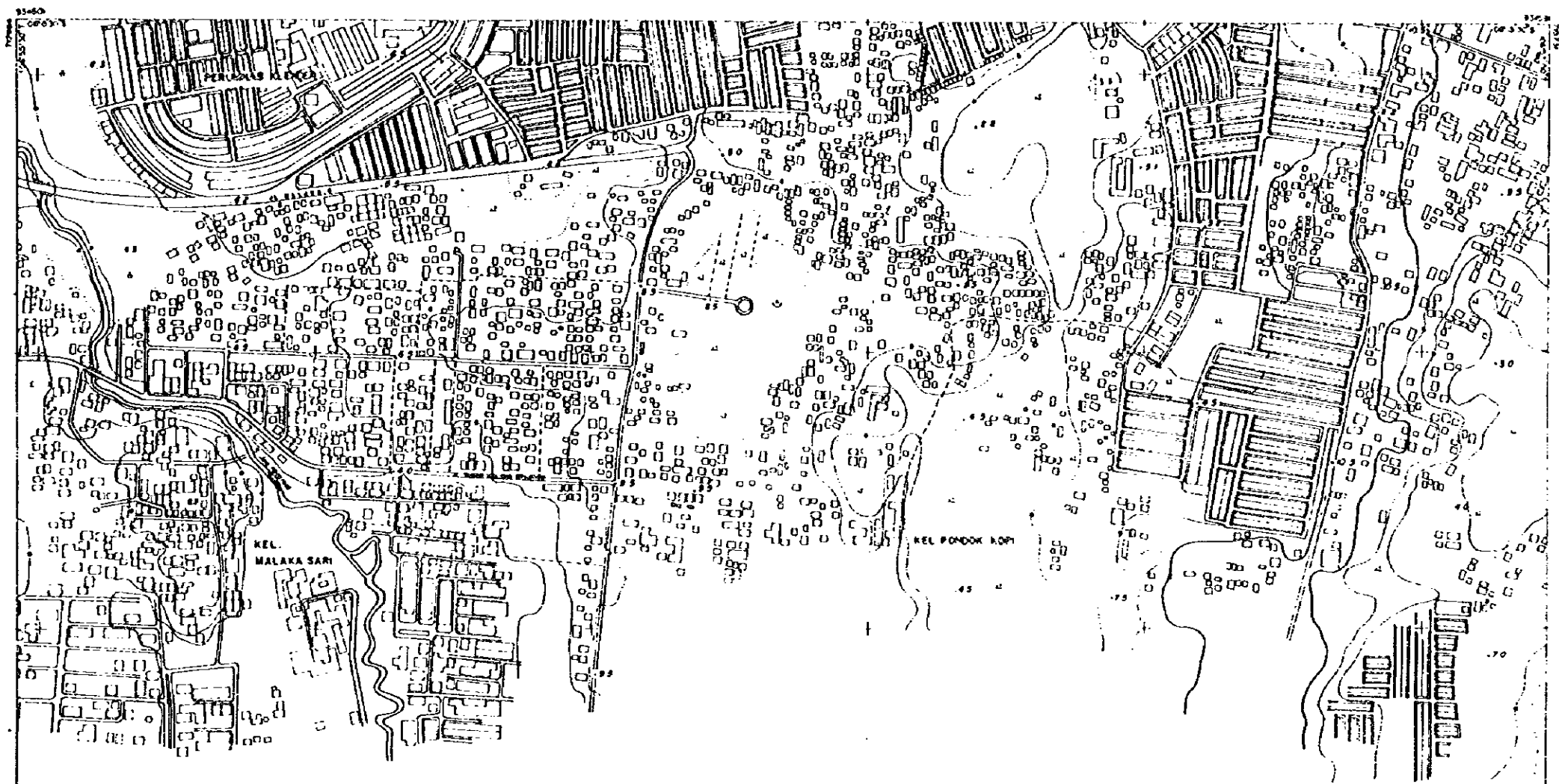
Index contour : 10 meter
Main contour : 2 meter
Supplemental contour : 1 meter
Aerial photography : 1:20 000
May 1994

MINISTRY OF PUBLIC WORKS
DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT
CELIKUNG OSADANE RIVER BASIN DEVELOPMENT PROJECT
THE STUDY ON COMPREHENSIVE RIVER WATER MANAGEMENT PLAN IN JABOTABEK

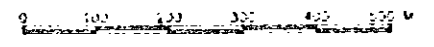
Drawing Title: **TOPOGRAPHIC MAP**

Checked by	Approved by	Date Survey '95 08
Signature	Signature	Date of M '95 10
Date	Date	Date

JICA JAPAN INTERNATIONAL COOPERATION AGENCY
 PE. ARAS DELTARASTA
 Sheet No. 1209-443
 22

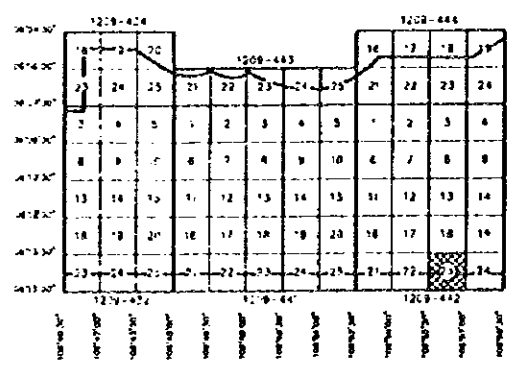


SCALE 1:5000



LEGEND

- Existing Transportation Point
- GPS Point
- Existing Bench Mark
- Spot height
- River
- Concrete Building (more than 40 sq.m)
- House
- Mosque
- Orang
- House lot
- School
- Government Office
- Road
- Path
- Bridge
- Road cut
- Station
- Electric Power Line
- Culvert and Embankment
- Swamp
- Marshy grass
- Christian cemetery
- Chinese graves
- Paddy field
- Boundary of vegetation
- Field
- Forest
- Grass
- Water Hole
- Pond, Lake
- Sand
- Land Slide



X, Y : Basic UTM Zone 48
 H : Mean sea level (TTG)

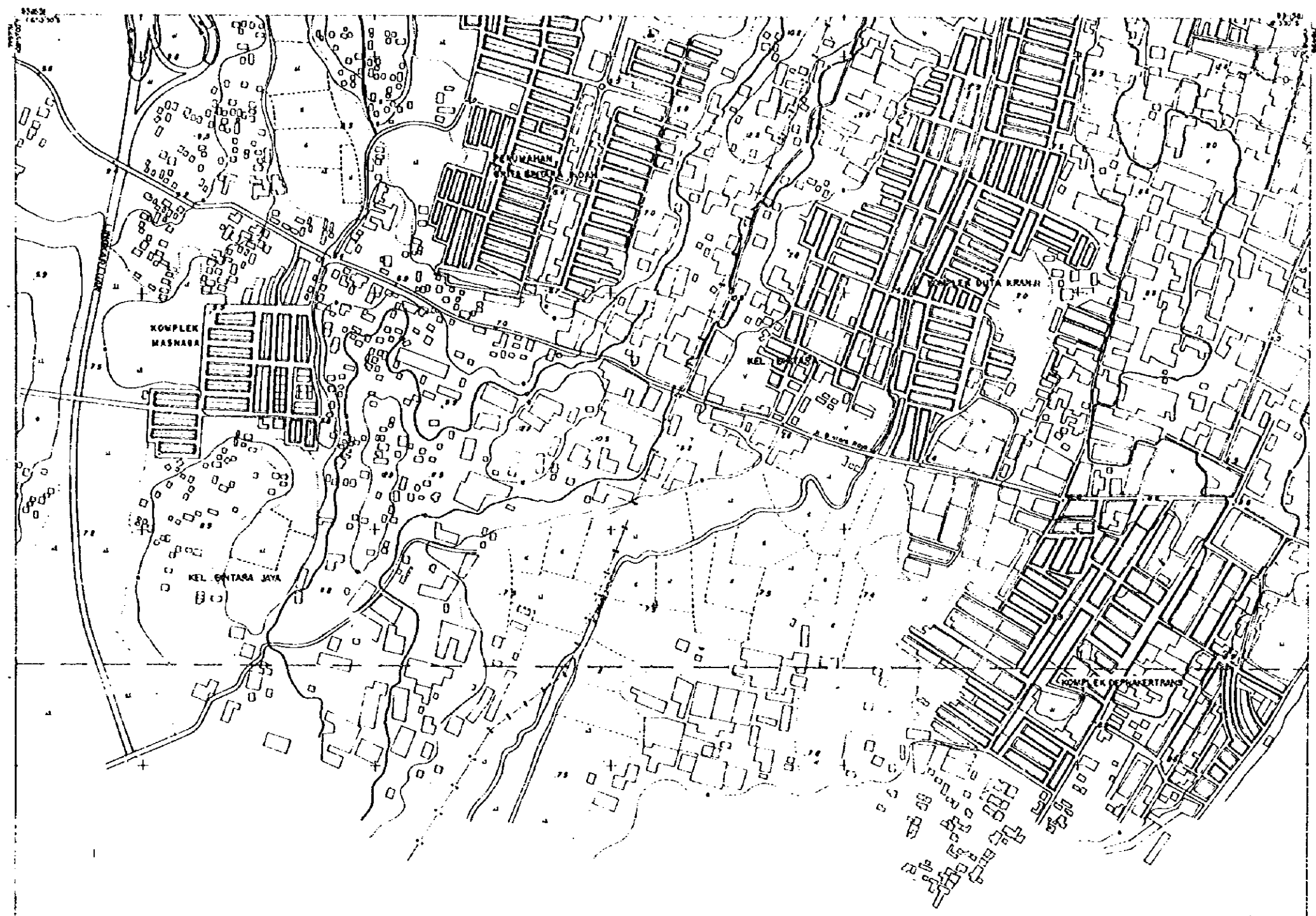
Inset contour : 10 meter
 Main contour : 2 meter
 Supplemental contour : 1 meter
 Aerial photography : 1:20,000
 May 1994

MINISTRY OF PUBLIC WORKS
 DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT
 CUKUMUNG OSADANE RIVER BASIN DEVELOPMENT PROJECT
 THE STUDY ON COMPREHENSIVE RIVER WATER MANAGEMENT PLAN IN JABOTABEK

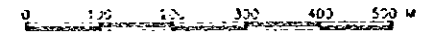
Drawing No. : **TOPOGRAPHIC MAP**

Checked by	Approved by	Date Survey '93
Signature	Signature	April '93
Date	Date	April '93
30-1-94	30-1-94	April '93
		May '94

JICA JAPAN INTERNATIONAL COOPERATION AGENCY PT. ATLAS DILSATANA



SCALE 1:5000



LEGEND

- 1. Existing Termination Point
- 2. GPS Point
- 3. Existing Bench Mark
- 4. Spot height
- 5. River
- 6. Concrete Building (with or without wall)
- 7. House
- 8. Mosque
- 9. Church
- 10. Necessity
- 11. School
- 12. Government Office
- 13. Road
- 14. Path
- 15. Sidewalk
- 16. Railway
- 17. Station
- 18. Electric Power Line
- 19. Culvert and Embankment
- 20. Swamp
- 21. Moslem grave
- 22. Christian cemetery
- 23. Chinese graves
- 24. Paddy field
- 25. Boundary of vegetation
- 26. Field
- 27. Forest
- 28. Grass
- 29. Water Tole
- 30. Pond, Lake
- 31. Sand
- 32. Land Slide

	1208-434				1208-444			
1208-434	18	19	20	21	22	23	24	25
1208-435	26	27	28	29	30	31	32	33
1208-436	34	35	36	37	38	39	40	41
1208-437	42	43	44	45	46	47	48	49
1208-438	50	51	52	53	54	55	56	57
1208-439	58	59	60	61	62	63	64	65
1208-440	66	67	68	69	70	71	72	73
1208-441	74	75	76	77	78	79	80	81
1208-442	82	83	84	85	86	87	88	89
1208-443	90	91	92	93	94	95	96	97
1208-444	98	99	100	101	102	103	104	105

S. R. Basah UTM Zone 48
 N. Meon 600 West (TTG)
 index contour : 10 meter
 Main contour : 2 meter
 Supplementa contour : 1 meter
 Aerial photography : 1:20 000
 May 1994

MINISTRY OF PUBLIC WORKS
 DIRECTORATE GENERAL OF WATER RESOURCES DEVELOPMENT
 CILIMUNG OSADANE RIVER BASIN DEVELOPMENT PROJECT
 THE STUDY ON COMPREHENSIVE RIVER WATER
 MANAGEMENT PLAN IN JABOTABEK

Drawing Title: **TOPOGRAPHIC MAP**

Checked by:	Approved by:	Date: 25/05/94
Signature: <i>Rahm. Nishin</i>	Signature: <i>Shaban</i>	Date: 25/05/94
Date: 30/05/94	Date: 26/05/94	Date: 24/05/94

JICA JAPAN INTERNATIONAL COOPERATION AGENCY
 PE. ARAS DELASATYA
 Sheet No. 1208-442

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