

SYSTEME DE DRAINAGE URBAIN



Basin Code	Basin Code	Name of Basin	Drainage Area (ha)	Name of Channel	Length (m)
A-1	W	W.C.1	27.9	W.C.1	1607.4
	W	W.C.2	14.8	W.C.2	107.9
	W	W.C.3	4.4	W.C.3	1.9
	W	W.C.4	1.9	W.C.4	1.9
	W	W.C.5	3.2	W.C.5	1.2
	W	W.C.6	3.8	W.C.6	1.2
	W	W.C.7	0.5	W.C.7	0.5
	W	W.C.8	3.5	W.C.8	1.1
	W	W.C.9	4.8	W.C.9	1.1
	W	W.C.10	3.0	W.C.10	0.8
A-2	W	W.C.11	0.8	W.C.11	0.8
	W	W.C.12	0.8	W.C.12	0.8
	W	W.C.13	0.8	W.C.13	0.8
	W	W.C.14	0.8	W.C.14	0.8
	W	W.C.15	0.8	W.C.15	0.8
	W	W.C.16	0.8	W.C.16	0.8
	W	W.C.17	0.8	W.C.17	0.8
	W	W.C.18	0.8	W.C.18	0.8
	W	W.C.19	0.8	W.C.19	0.8
	W	W.C.20	0.8	W.C.20	0.8
A-3	W	W.C.21	0.8	W.C.21	0.8
	W	W.C.22	0.8	W.C.22	0.8
	W	W.C.23	0.8	W.C.23	0.8
	W	W.C.24	0.8	W.C.24	0.8
	W	W.C.25	0.8	W.C.25	0.8
	W	W.C.26	0.8	W.C.26	0.8
	W	W.C.27	0.8	W.C.27	0.8
	W	W.C.28	0.8	W.C.28	0.8
	W	W.C.29	0.8	W.C.29	0.8
	W	W.C.30	0.8	W.C.30	0.8
A-4	W	W.C.31	0.8	W.C.31	0.8
	W	W.C.32	0.8	W.C.32	0.8
	W	W.C.33	0.8	W.C.33	0.8
	W	W.C.34	0.8	W.C.34	0.8
	W	W.C.35	0.8	W.C.35	0.8
	W	W.C.36	0.8	W.C.36	0.8
	W	W.C.37	0.8	W.C.37	0.8
	W	W.C.38	0.8	W.C.38	0.8
	W	W.C.39	0.8	W.C.39	0.8
	W	W.C.40	0.8	W.C.40	0.8
A-5	W	W.C.41	0.8	W.C.41	0.8
	W	W.C.42	0.8	W.C.42	0.8
	W	W.C.43	0.8	W.C.43	0.8
	W	W.C.44	0.8	W.C.44	0.8
	W	W.C.45	0.8	W.C.45	0.8
	W	W.C.46	0.8	W.C.46	0.8
	W	W.C.47	0.8	W.C.47	0.8
	W	W.C.48	0.8	W.C.48	0.8
	W	W.C.49	0.8	W.C.49	0.8
	W	W.C.50	0.8	W.C.50	0.8
A-6	W	W.C.51	0.8	W.C.51	0.8
	W	W.C.52	0.8	W.C.52	0.8
	W	W.C.53	0.8	W.C.53	0.8
	W	W.C.54	0.8	W.C.54	0.8
	W	W.C.55	0.8	W.C.55	0.8
	W	W.C.56	0.8	W.C.56	0.8
	W	W.C.57	0.8	W.C.57	0.8
	W	W.C.58	0.8	W.C.58	0.8
	W	W.C.59	0.8	W.C.59	0.8
	W	W.C.60	0.8	W.C.60	0.8
A-7	W	W.C.61	0.8	W.C.61	0.8
	W	W.C.62	0.8	W.C.62	0.8
	W	W.C.63	0.8	W.C.63	0.8
	W	W.C.64	0.8	W.C.64	0.8
	W	W.C.65	0.8	W.C.65	0.8
	W	W.C.66	0.8	W.C.66	0.8
	W	W.C.67	0.8	W.C.67	0.8
	W	W.C.68	0.8	W.C.68	0.8
	W	W.C.69	0.8	W.C.69	0.8
	W	W.C.70	0.8	W.C.70	0.8

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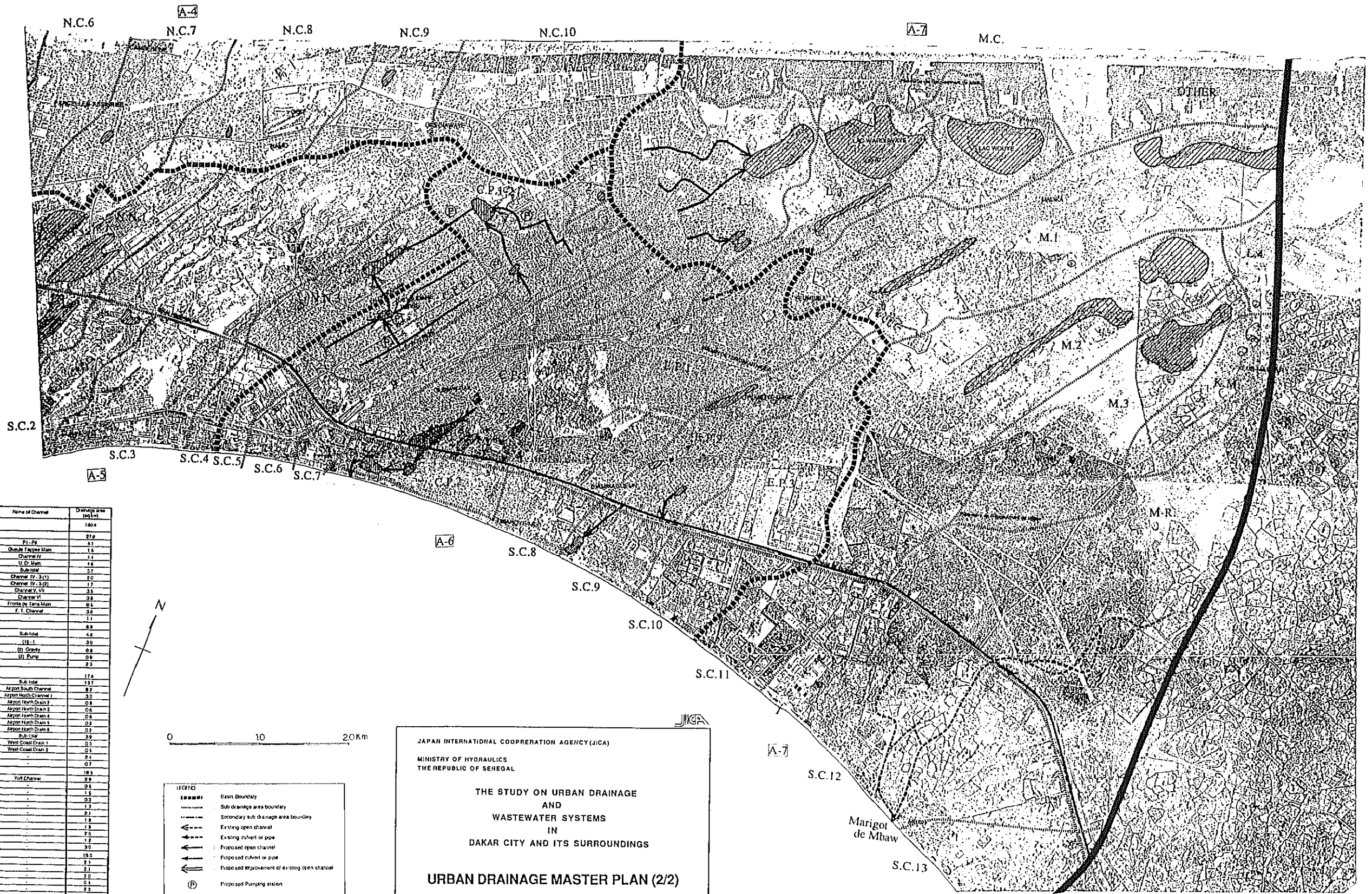
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 IN
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URBAN DRAINAGE MASTER PLAN (1/2)

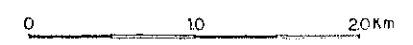
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CAP MANUEL



Drain Code	Sub Drain Code	Name of Basin	Name of Channel	Drainage area (ha)
Study Area				
				1604
A-1	Older Urban			
	P	Plateau	P1-P6	27.2
	Q1	Quatre Foyes	Quatre Foyes Main	1.3
	V	Channel V	Channel V1	1.2
	M.D	Marabout Dakar	U.D. Main	1.4
	N-1	Channel N-1	Subtotal	3.7
			Channel (V-2 (1))	2.0
			Channel (V-2 (2))	1.7
			Channel V1	3.1
			Channel V1	3.8
			F.T.1	0.1
			F.T. Channel	3.6
			South Channel	1.1
A-2	Grand Yoff & Quaker			
	Q.Y.	Grand Yoff	Subtotal	4.6
			(1) - 1	3.0
			(2) Grady	0.8
		(3) Pump	0.8	
		Quaker Basin	2.2	
A-3	Dakar - Yoff Airport and its surrounding			
	Dakar - Yoff Airport Basin			
			Sub total	12.1
	AJ 8	Airport South	Airport South Channel	8.7
	AJ 10	Airport North 1	Airport North Channel 1	3.0
	AJ 11	Airport North 2	Airport North Channel 2	0.8
	AJ 12	Airport North 3	Airport North Channel 3	0.6
	AJ 13	Airport North 4	Airport North Channel 4	0.6
	AJ 14	Airport North 5	Airport North Channel 5	0.5
	AJ 15	Airport North 6	Airport North Channel 6	0.5
	AJ 16	Airport North 7	Airport North Channel 7	0.5
	Coastal Area			
	W.C. 1	West Coast 1	West Coast Drain 1	0.5
	W.C. 2	West Coast 2	West Coast Drain 2	0.5
	W.C. 3	West Coast 3	West Coast Drain 3	0.4
N.C.	North Coast		0.7	
A-4	Yoff - Quaker area			
	Q.Y.	Yoff Channel	Yoff Channel	2.9
	NC 1	North Coast 1		0.6
	NC 2	North Coast 2		1.6
	NC 3	North Coast 3		0.3
	NC 4	North Coast 4		1.7
	NC 5	North Coast 5		2.1
	NC 6	North Coast 6		1.8
	NC 7	North Coast 7		1.9
	NC 8	North Coast 8		7.0
NC 9	North Coast 9		1.7	
NC 10	North Coast 10		3.0	
A-5	Grand Mars			
	SC 1	South 1		15.0
	SC 2	South 2		7.1
	SC 3	South 3		3.1
	SC 4	South 4		0.8
	SC 5	South 5		0.1
	SC 6	South 6		0.1
	MS 1	Mars North 1		7.3
	MS 2	Mars North 2		1.6
MS 3	Mars North 3		1.8	
A-6	Pisina			
	C.P.	Centre P-11		21.0
	S.P.	Eastern P-2		8.8
	B.C.P.	South Coast P-10		7.7
A-7	Eastern - Plateau			
	M.C.	Marks Coast		5.3
	S. 1	S.E. Area 1		3.8
	S. 2	S.E. Area 2		2.2
	S. 3	S.E. Area 3		1.6
	M. 1	Marks 1		8.8
	M. 2	Marks 2		9.7
	M. 3	Marks 3		3.3
S.C.	South Coast 11-12		7.1	
Others				19.8



LEGEND

- Basin Boundary
- Sub drainage area boundary
- Secondary sub drainage area boundary
- Existing open channel
- Existing culvert or pipe
- Proposed open channel
- Proposed culvert or pipe
- Proposed improvement of existing open channel
- ⊕ Proposed Pumping station
- ▨ Area recommended to be reserved for retention and utilization of stormwater
- ▨ Proposed retention/Utilization Pond

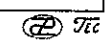
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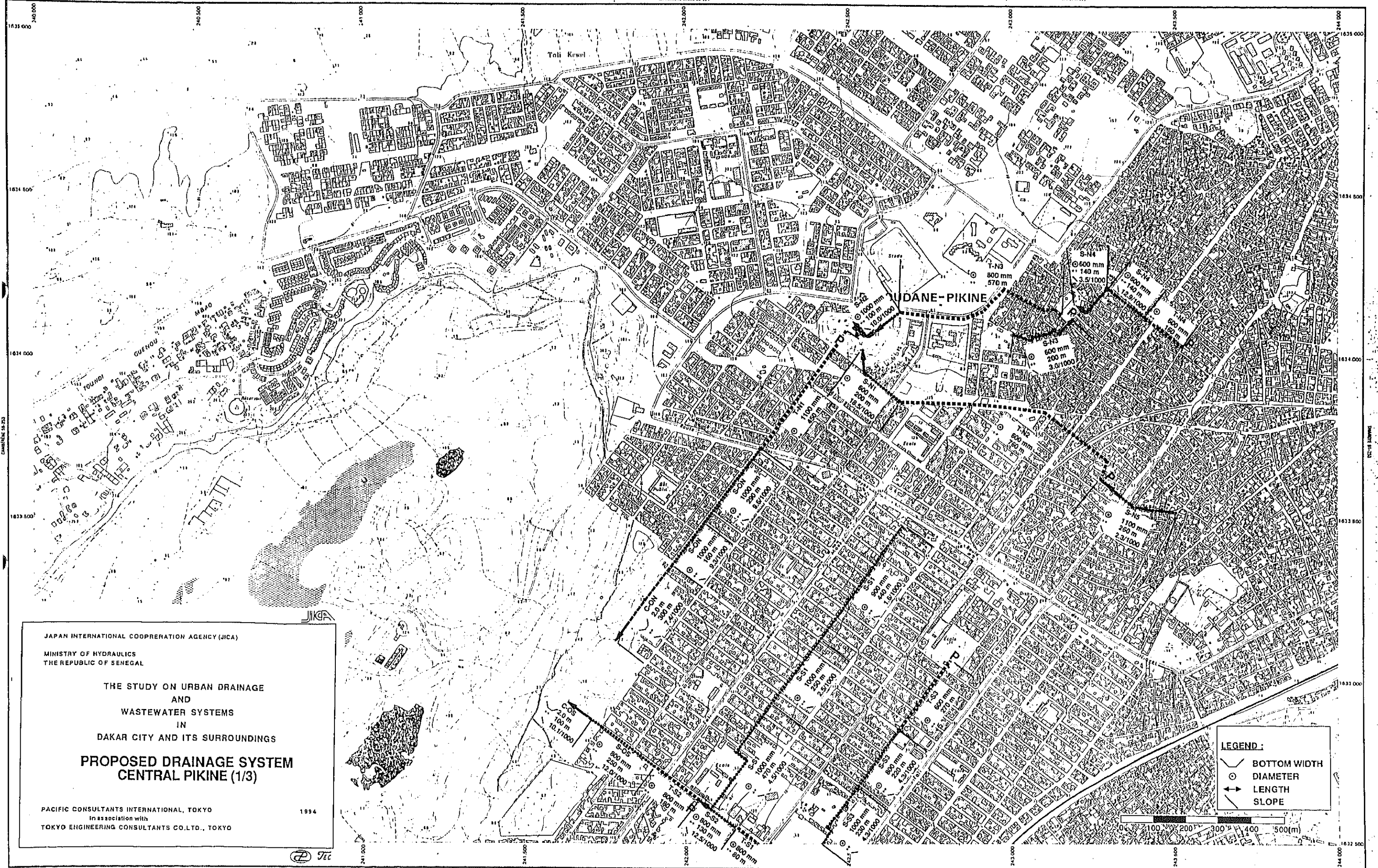
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URBAN DRAINAGE MASTER PLAN (2/2)

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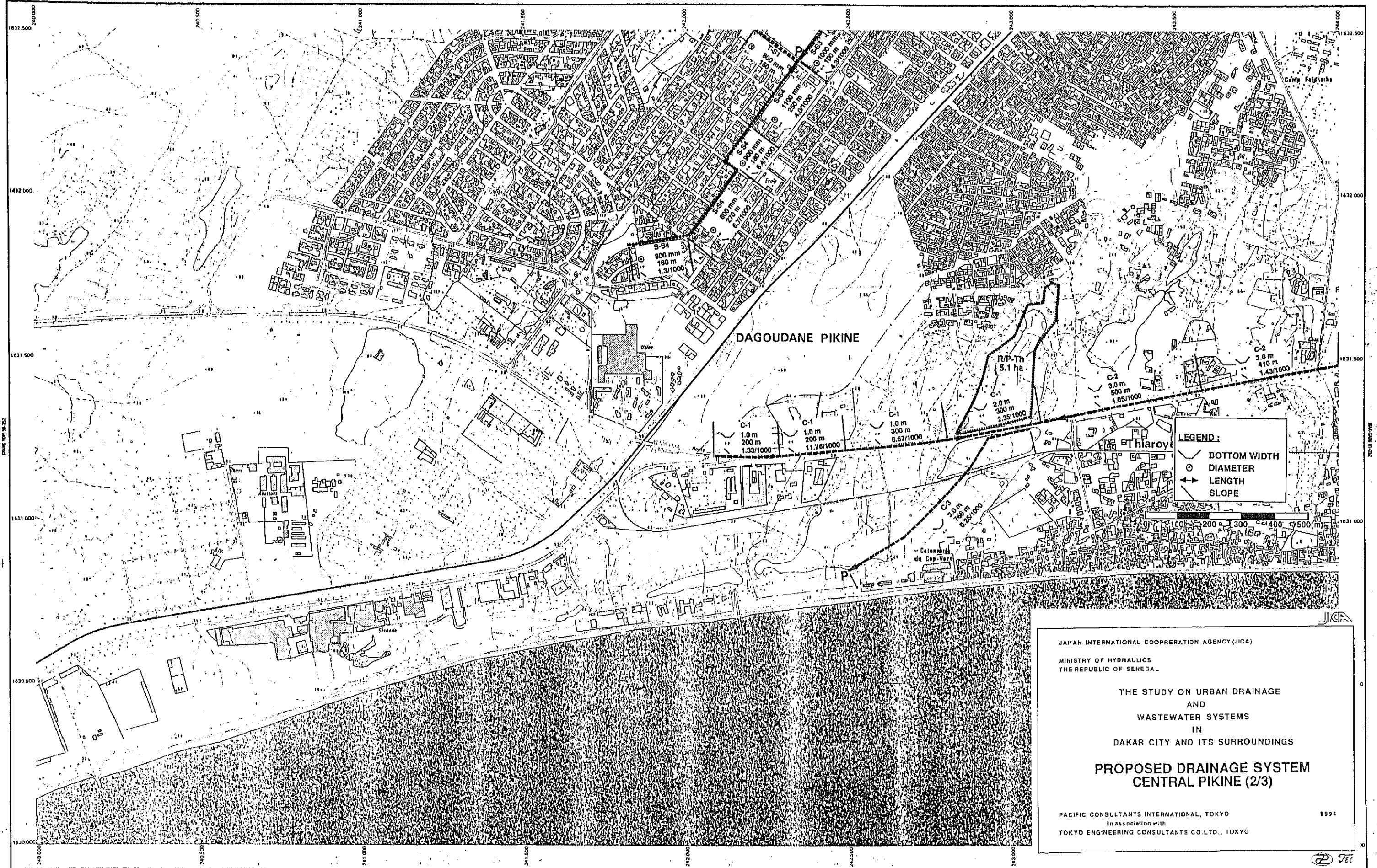
**PROPOSED DRAINAGE SYSTEM
CENTRAL PIKINE (1/3)**

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LEGEND :

- BOTTOM WIDTH
- DIAMETER
- LENGTH
- ▲ SLOPE



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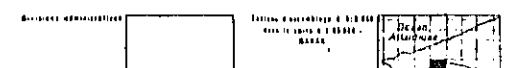
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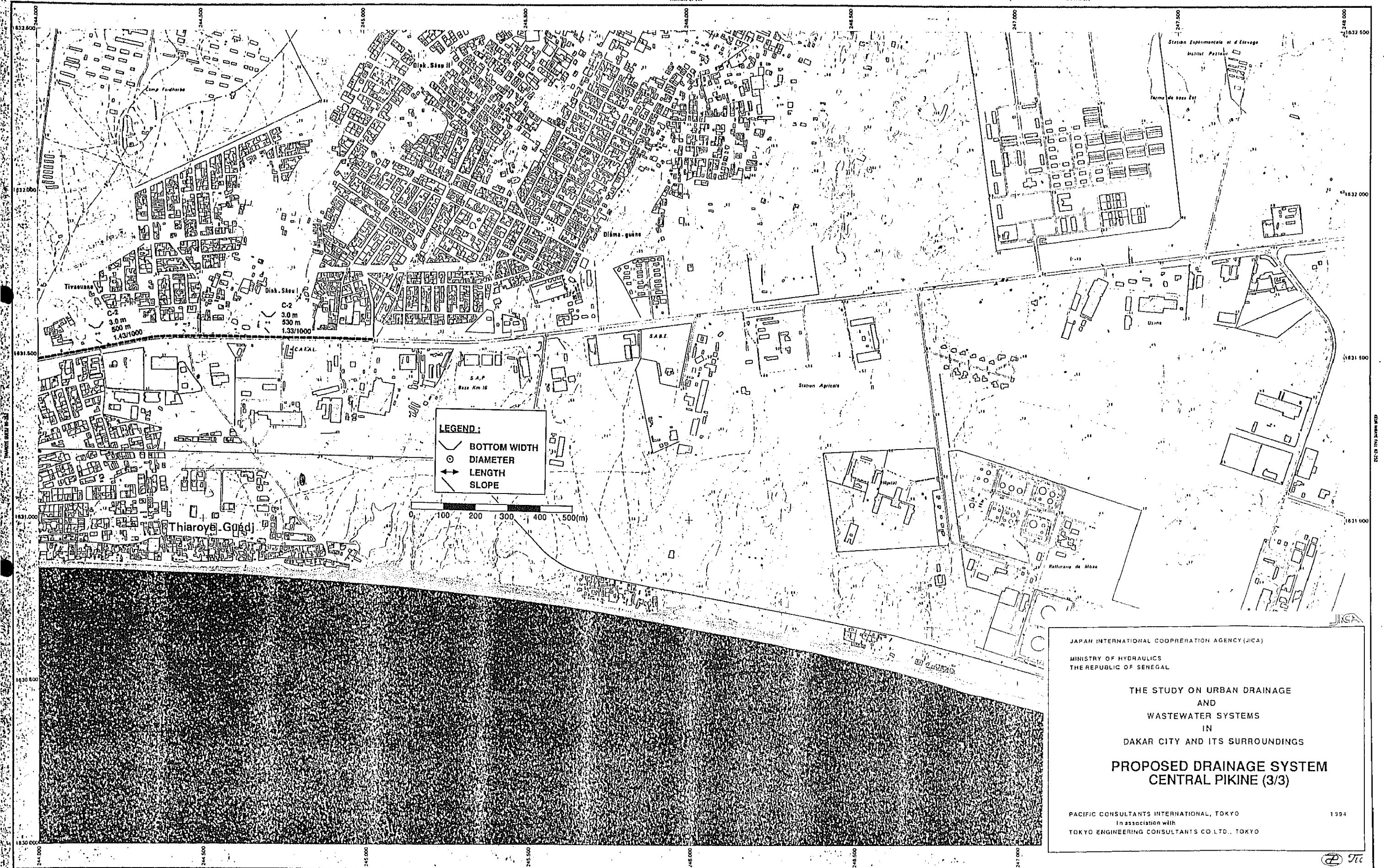
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Les photos aériennes effectuées par l'IGN FRANCE en 1981
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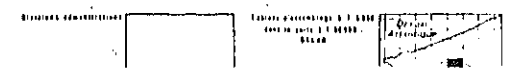
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**PROPOSED DRAINAGE SYSTEM
 CENTRAL PIKINE (3/3)**

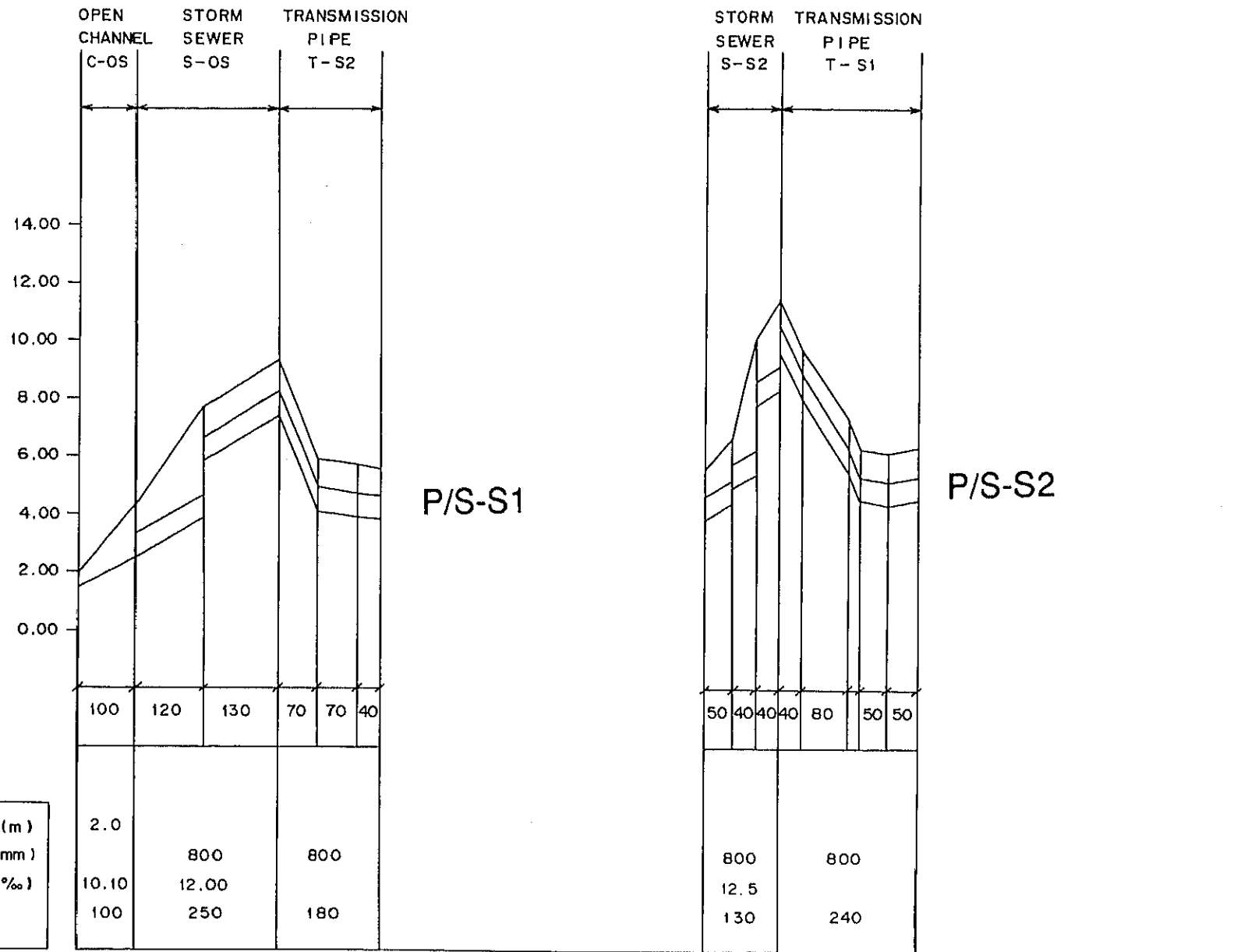
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Levé photographique effectué par l'IGN FRANCE en 1981
 Restauration planimétrique et altimétrique
 des photographies aériennes de 1980 à l'échelle de 1:20 000
 - Mesures non corrigées sur le terrain



Projection UTM Niveau 281
 Carroyage géocentrique
 Equivalence des courbes 2 mètres
 Nivellement Général de l'Afrique de l'Ouest



BOTTOM WIDTH (m)	2.0
DIAMETER (mm)	800
BED SLOPE (‰)	10.10
LENGTH	100

ELEVATION (m)	2.00
GROUND SURFACE	4.25

EARTH COVERING (m)	1.00
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BED ELEVATION (m)	1.44
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TOTAL LENGTH (m)	0
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ELEVATION (m)	2.00	4.25	7.80	9.23	5.92	5.65	5.61	5.61	6.76	10.07	11.41	9.82	7.33	6.09	6.31
EARTH COVERING (m)		1.00	3.11	1.00	1.00	1.00	1.00	1.00	1.52	3.81	2.35	1.00	1.00	1.00	1.00
BED ELEVATION (m)	1.44	2.45	3.89	7.43	4.12	3.85	3.81	3.81	4.44	8.26	9.61	8.02	5.53	4.29	4.51
TOTAL LENGTH (m)	0	100	220	350	420	490	530	0	50	90	130	170	270	320	370

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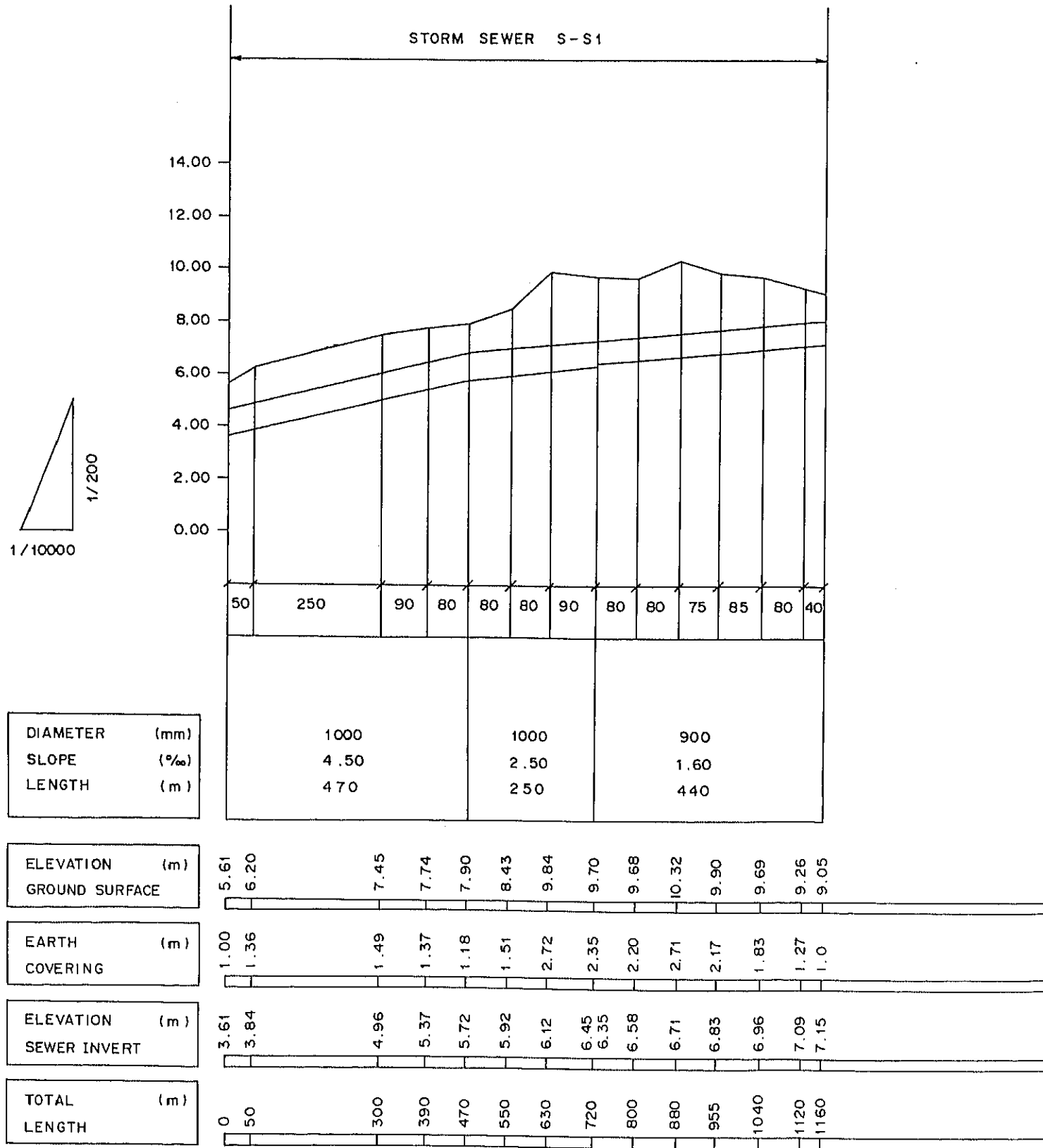
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**PROFILES OF DRAINAGE CHANNEL
 CENTRAL PIKINE (1/10)**

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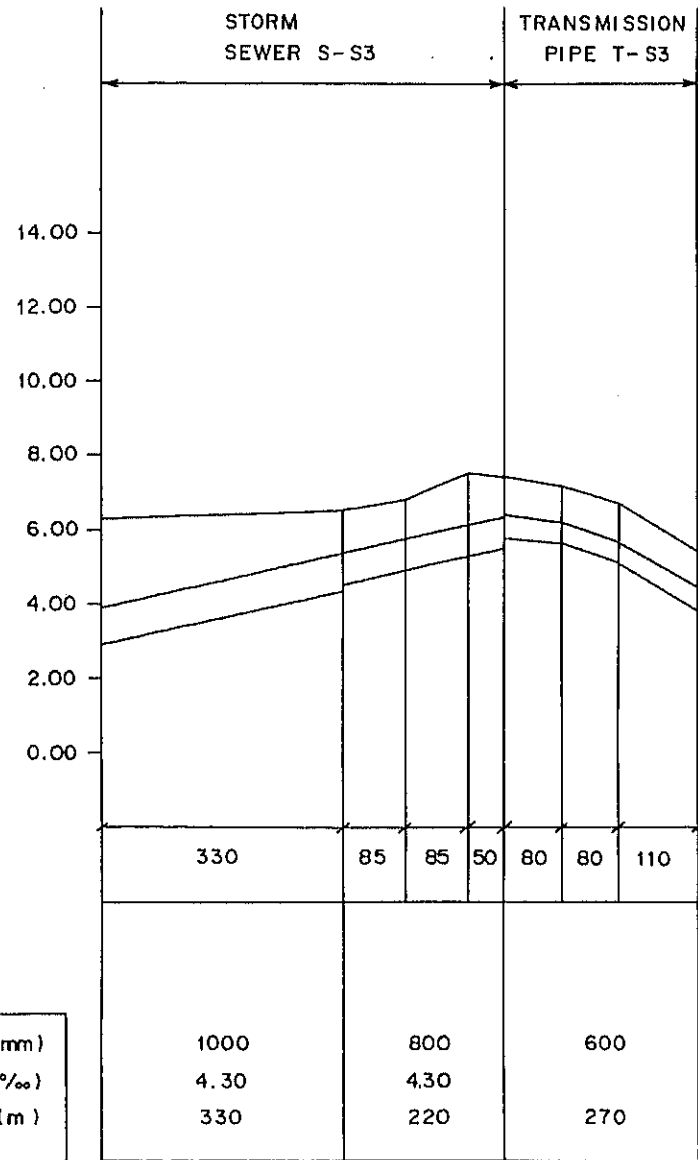
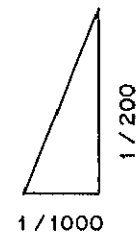
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PROFILES OF DRAINAGE CHANNEL
 CENTRAL PIKINE (2/10)

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DIAMETER	(mm)	1000	800	600
SLOPE	(‰)	4.30	4.30	4.30
LENGTH	(m)	330	220	270

ELEVATION	(m)	6.31	6.49	6.73	7.46	7.40	7.20	6.73	5.44
GROUND SURFACE									

EARTH	(m)	2.38	1.14	1.01	1.37	1.11	1.00	1.00	1.00
COVERING									

ELEVATION	(m)	2.93	4.35	4.55	4.92	5.29	5.49	5.80	5.60	5.13	3.84
SEWER INVERT											

TOTAL	(m)	0	330	415	500	550	630	710	820
LENGTH									

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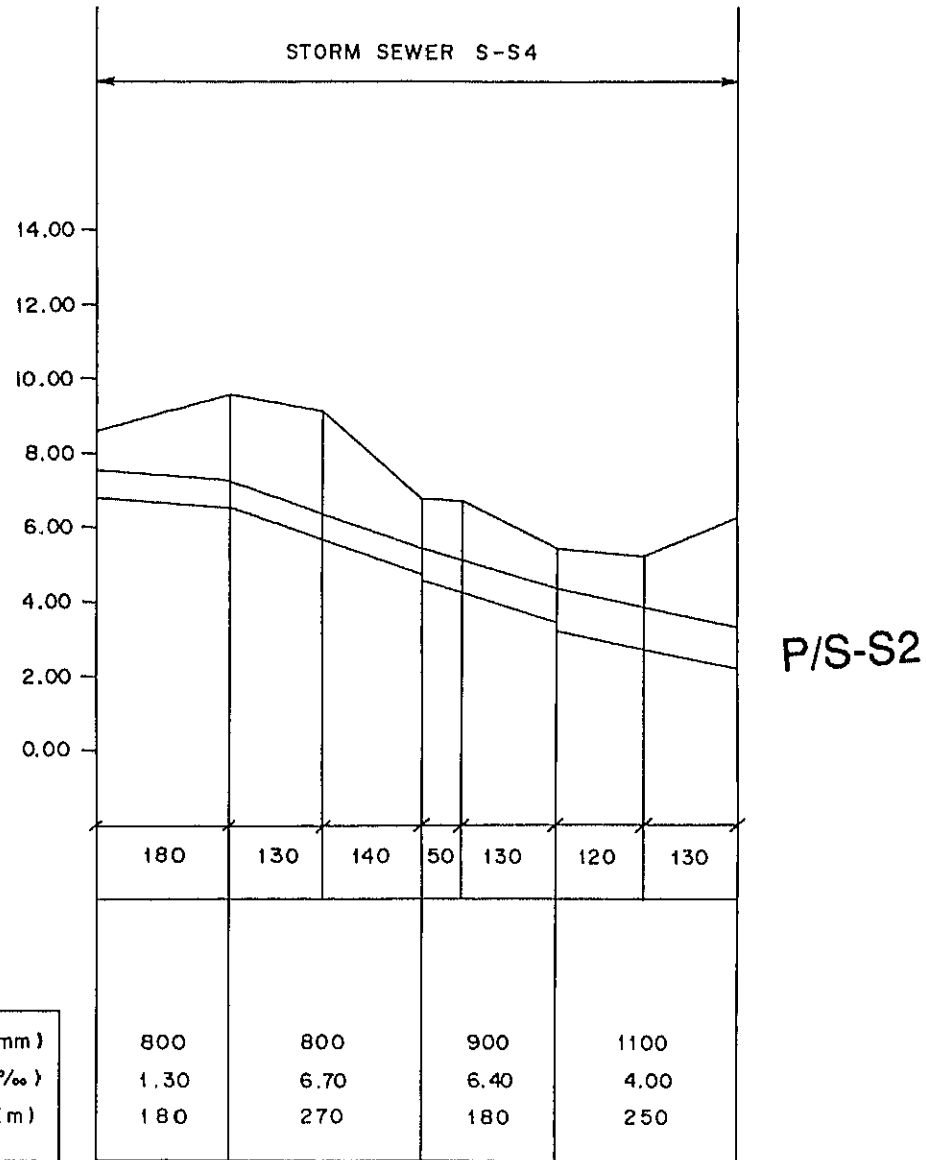
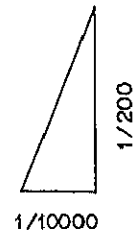
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**PROFILES OF DRAINAGE CHANNEL
 CENTRAL PIKINE (3/10)**

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DIAMETER	(mm)	800	800	900	1100
SLOPE	(‰)	1.30	6.70	6.40	4.00
LENGTH	(m)	180	270	180	250

ELEVATION	(m)	8.6	9.59	9.16	6.75	6.72	5.41	5.33	6.31
GROUND SURFACE									

EARTH COVERING	(m)	1.00	2.22	2.66	1.20	1.49	1.01	1.41	2.91
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ELEVATION	(m)	6.80	6.57	5.70	4.75	4.65	3.50	3.30	2.82	2.30
SEWER INVERT										

TOTAL LENGTH	(m)	0	180	310	450	500	630	750	880
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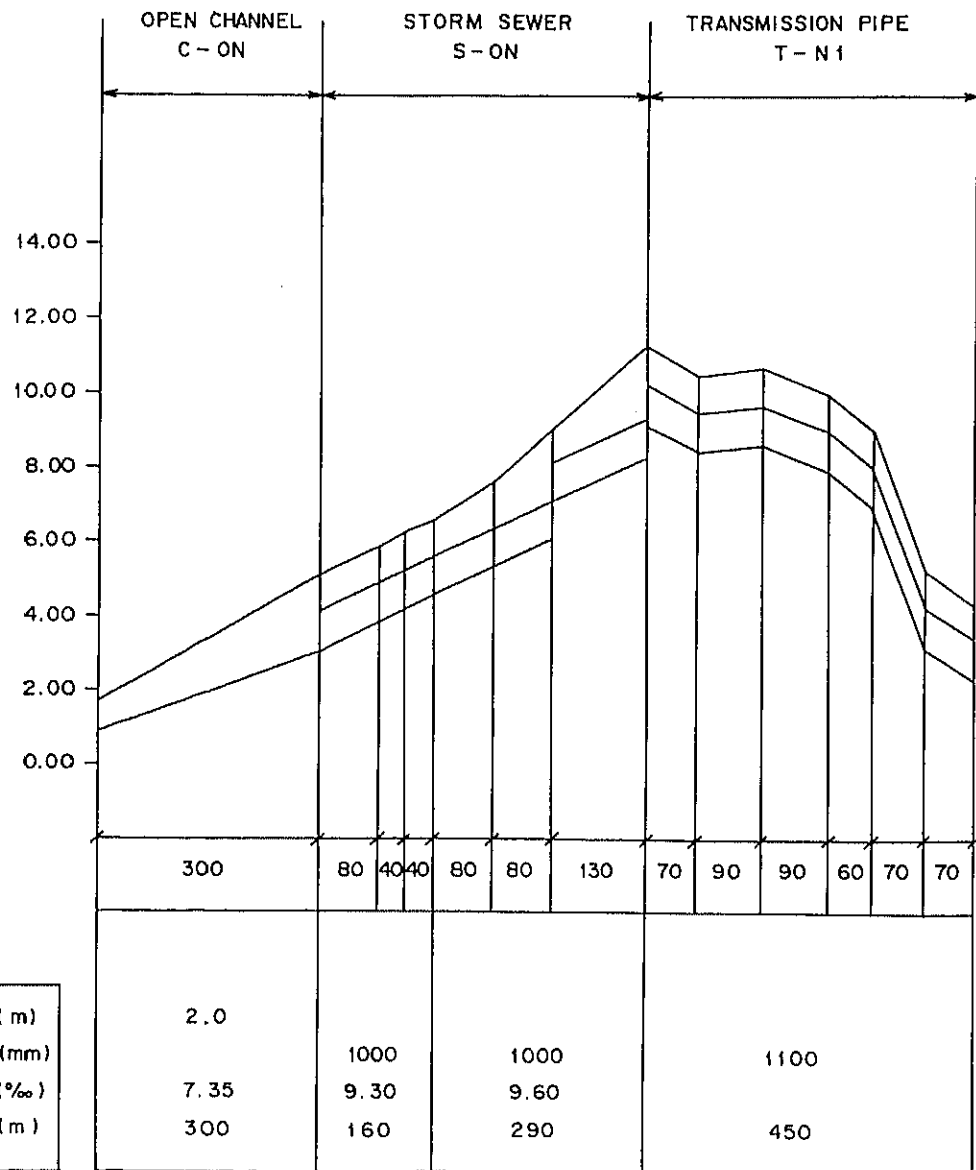
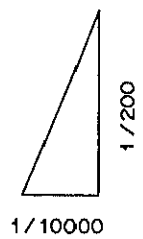
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**PROFILES OF DRAINAGE CHANNEL
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BOTTOM WIDTH (m)	2.0
DIAMETER (mm)	1000
BED SLOPE (‰)	7.35
LENGTH (m)	300

ELEVATION (m)	1.67
GROUND SURFACE	

EARTH COVERING (m)	1.00
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BED ELEVATION (m)	0.89
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TOTAL LENGTH (m)	0
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ELEVATION (m)	5.10	5.85	6.29	6.59	7.67	9.07	11.25	10.53	10.68	10.00	8.99	5.24	4.32
EARTH COVERING (m)	1.00	1.01	1.07	1.00	1.31	1.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00
BED ELEVATION (m)	3.10	3.84	4.22	4.59	5.36	6.13	8.32	8.43	8.58	7.90	6.89	3.14	2.22
TOTAL LENGTH (m)	300	380	420	460	540	620	750	820	910	1000	1060	1130	1200

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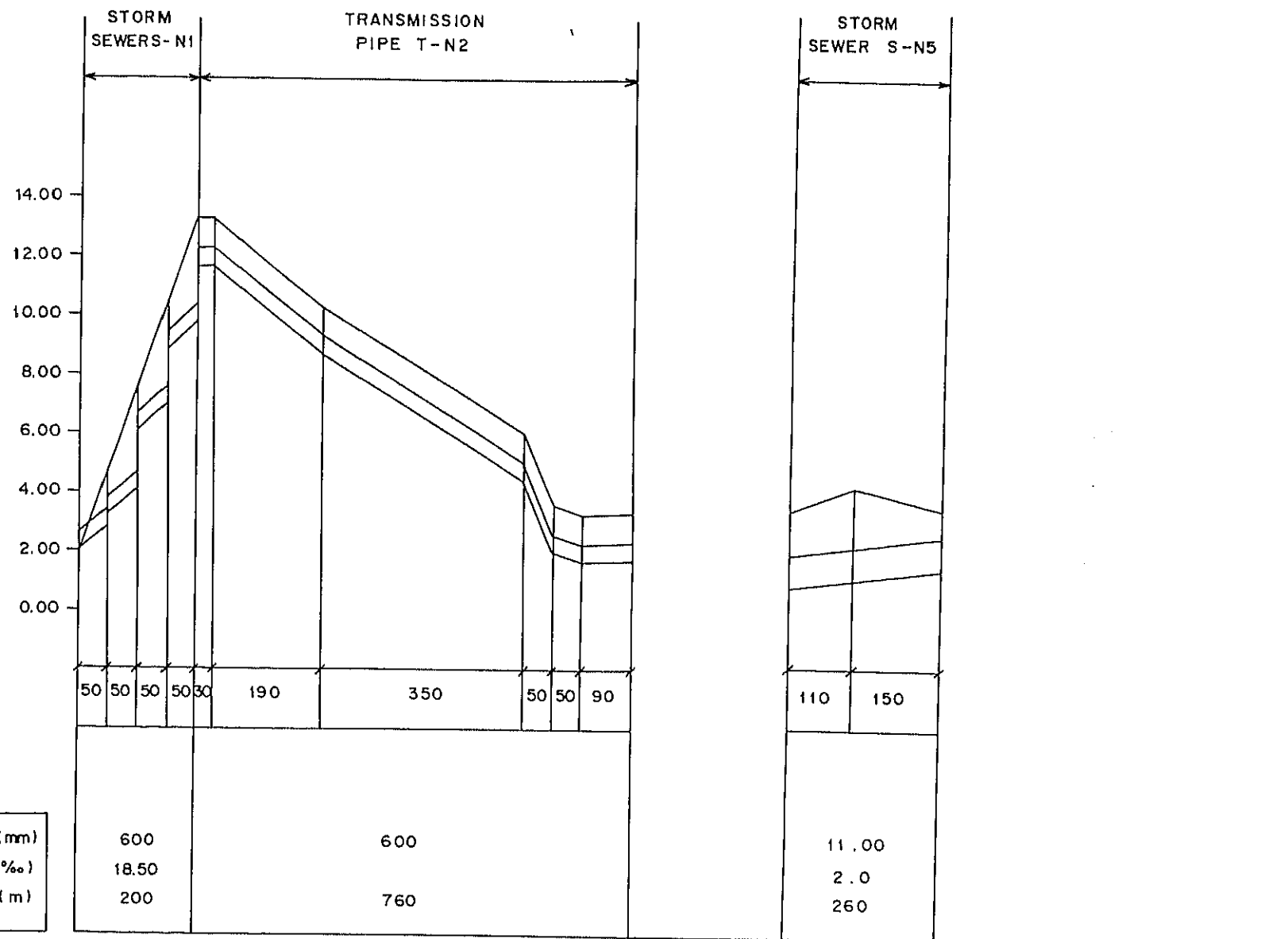
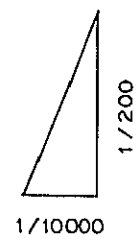
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**PROFILES OF DRAINAGE CHANNEL
CENTRAL PIKINE (5/10)**

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DIAMETER	(mm)	600
SLOPE	(%)	18.50
LENGTH	(m)	200

ELEVATION	(m)	2.00
GROUND SURFACE		4.86

EARTH COVERING	(m)	1.33
		1.00
		2.88
		1.00
		2.86
		1.00
		2.86
		1.00
		1.00
		1.00
		1.00

ELEVATION	(m)	2.00
SEWER INVERT		3.93
		3.26
		4.19
		6.07
		7.00
		8.86
		9.78
		11.65
		8.68
		4.40
		2.02
		1.68
		1.76
		0.80
		1.06
		1.40

TOTAL LENGTH	(m)	0
		50
		100
		150
		200
		230
		420
		770
		820
		870
		960
		0
		110
		260

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**PROFILES OF DRAINAGE CHANNEL
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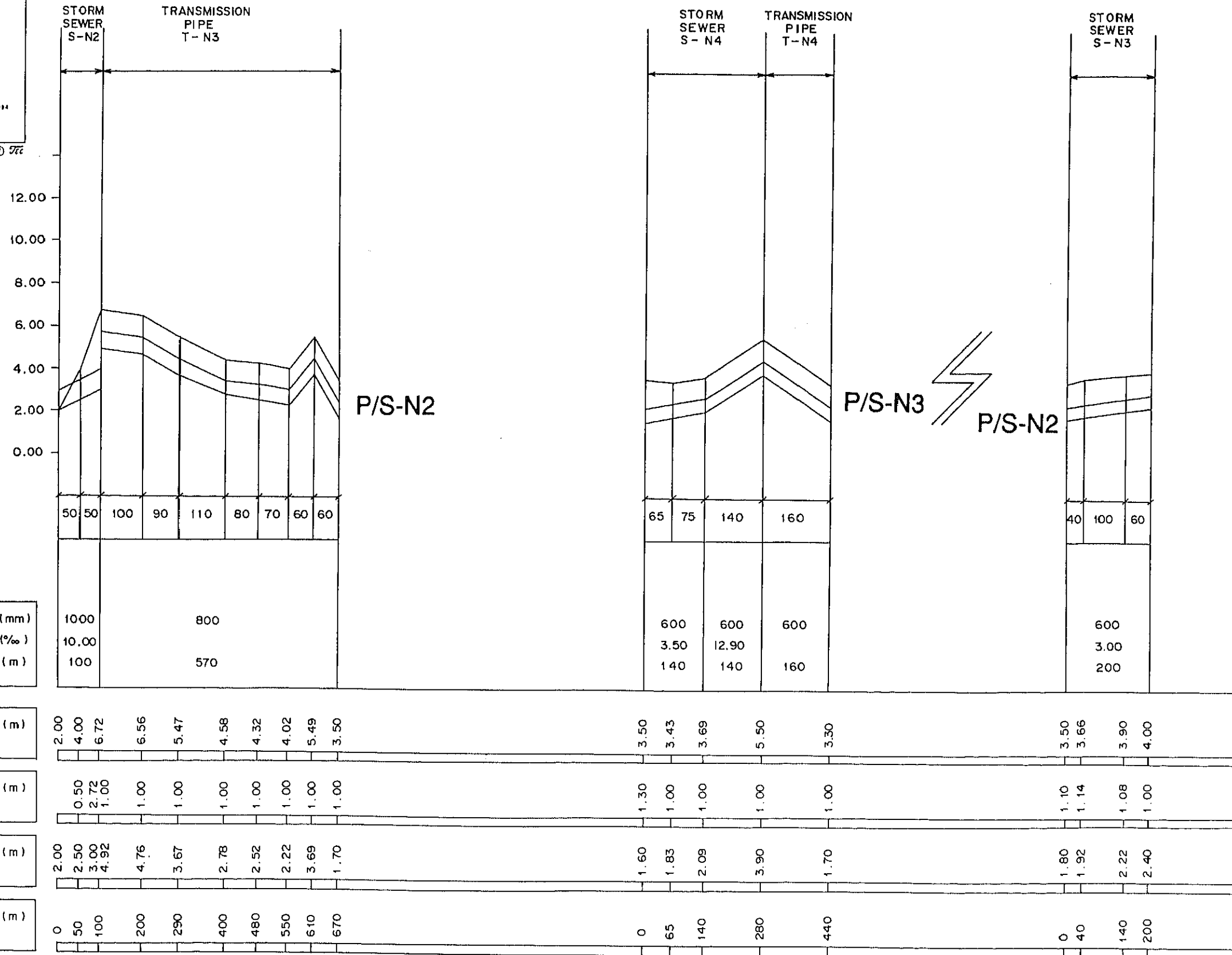
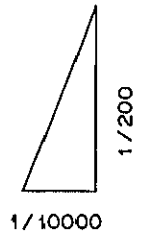
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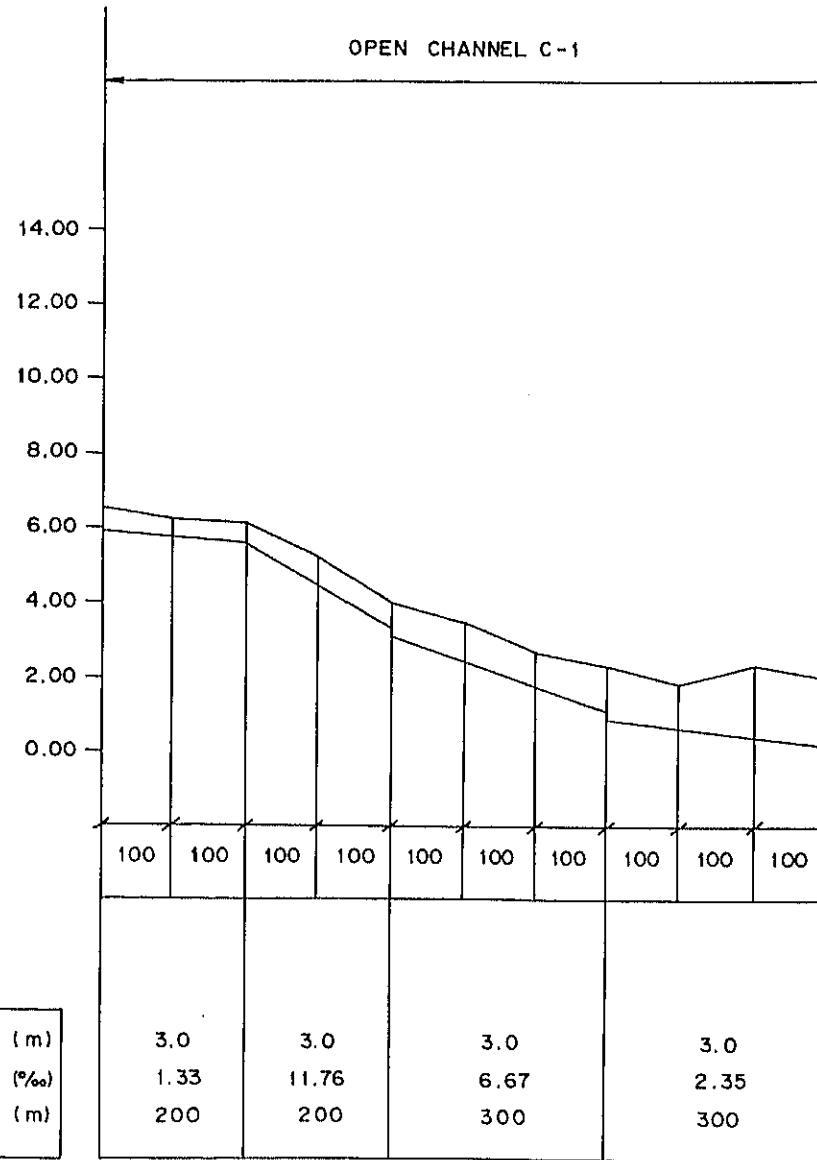
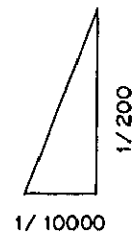
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THE STUDY ON URBAN DRAINAGE
AND
WASTEWATER SYSTEMS
IN
DAKAR CITY AND ITS SURROUNDINGS

PROFILES OF DRAINAGE CHANNEL
CENTRAL PIKINE (7/10)





BOTTOM WIDTH (m)	3.0	3.0	3.0	3.0
BED SLOPE (‰)	1.33	11.76	6.67	2.35
LENGTH (m)	200	200	300	300

ELEVATION (m)	6.47	6.27	6.17	5.22	3.99	3.45	2.69	2.36	1.82	2.33	2.03
GROUND SURFACE											

EARTH (m)											
COVERING											

ELEVATION (m)	5.88	5.75	5.62	4.44	3.27	3.09	2.42	1.75	1.09	0.91	0.67	0.44	0.2
CHANNEL BED													

TOTAL (m)	0	100	200	300	400	500	600	700	800	900	1000
LENGTH											

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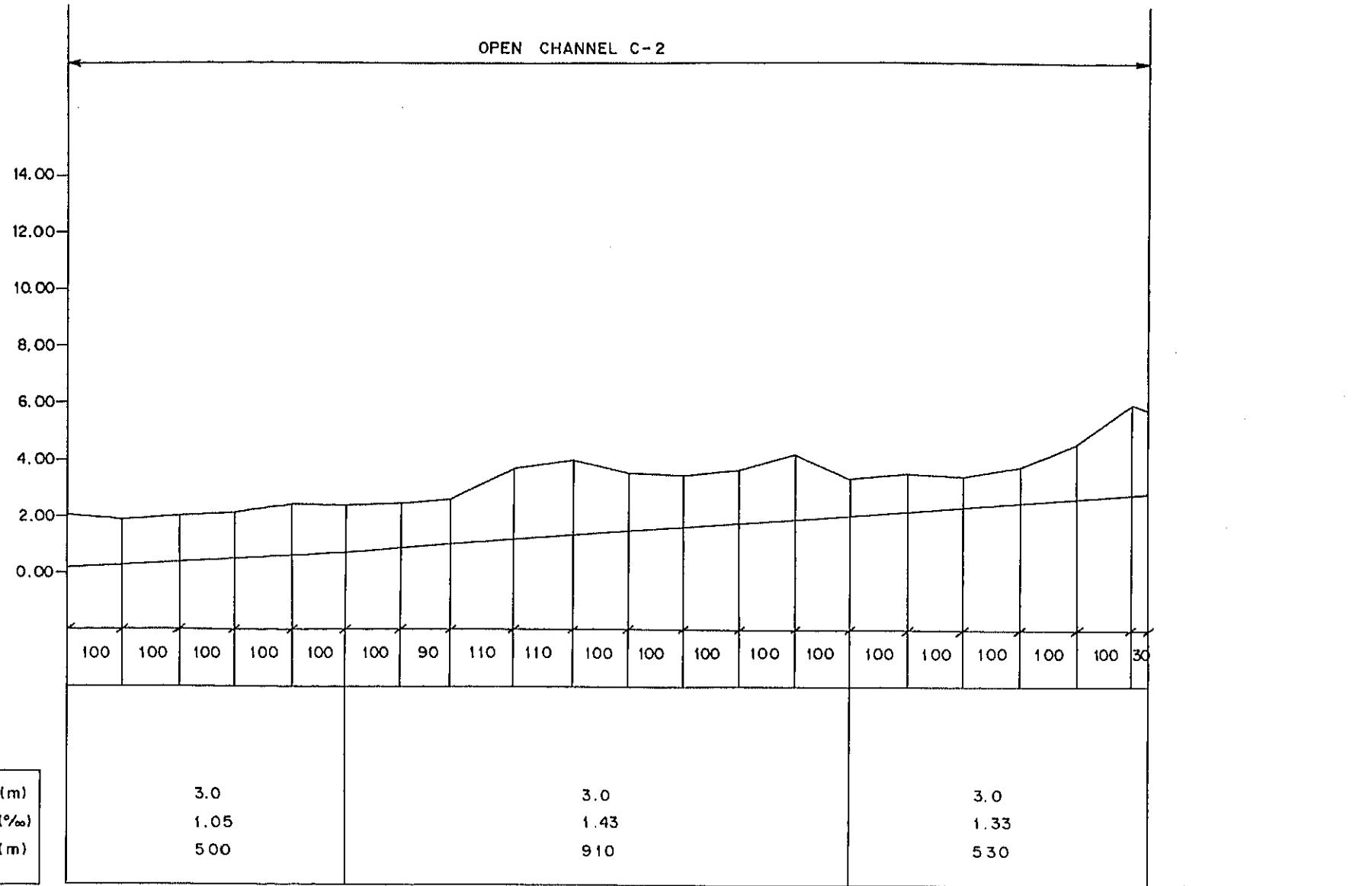
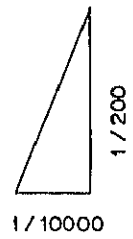
THE STUDY ON URBAN DRAINAGE
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PROFILES OF DRAINAGE CHANNEL
CENTRAL PIKINE (8/10)

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BOTTOM WIDTH (m)	3.0	3.0	3.0
BED SLOPE (‰)	1.05	1.43	1.33
LENGTH (m)	500	910	530

ELEVATION (m)	2.03	1.94	2.01	2.11	2.40	2.37	2.39	2.52	3.63	3.97	3.53	3.44	3.61	4.17	3.33	3.43	3.40	3.63	4.54	5.87	5.74	
GROUND SURFACE																						

EARTH COVERING (m)																						
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ELEVATION (m)	0.2	0.31	0.41	0.52	0.62	0.73	0.87	1.00	1.16	1.32	1.46	1.60	1.74	1.89	2.03	2.16	2.30	2.43	2.57	2.70	2.74	
CHANNEL BED																						

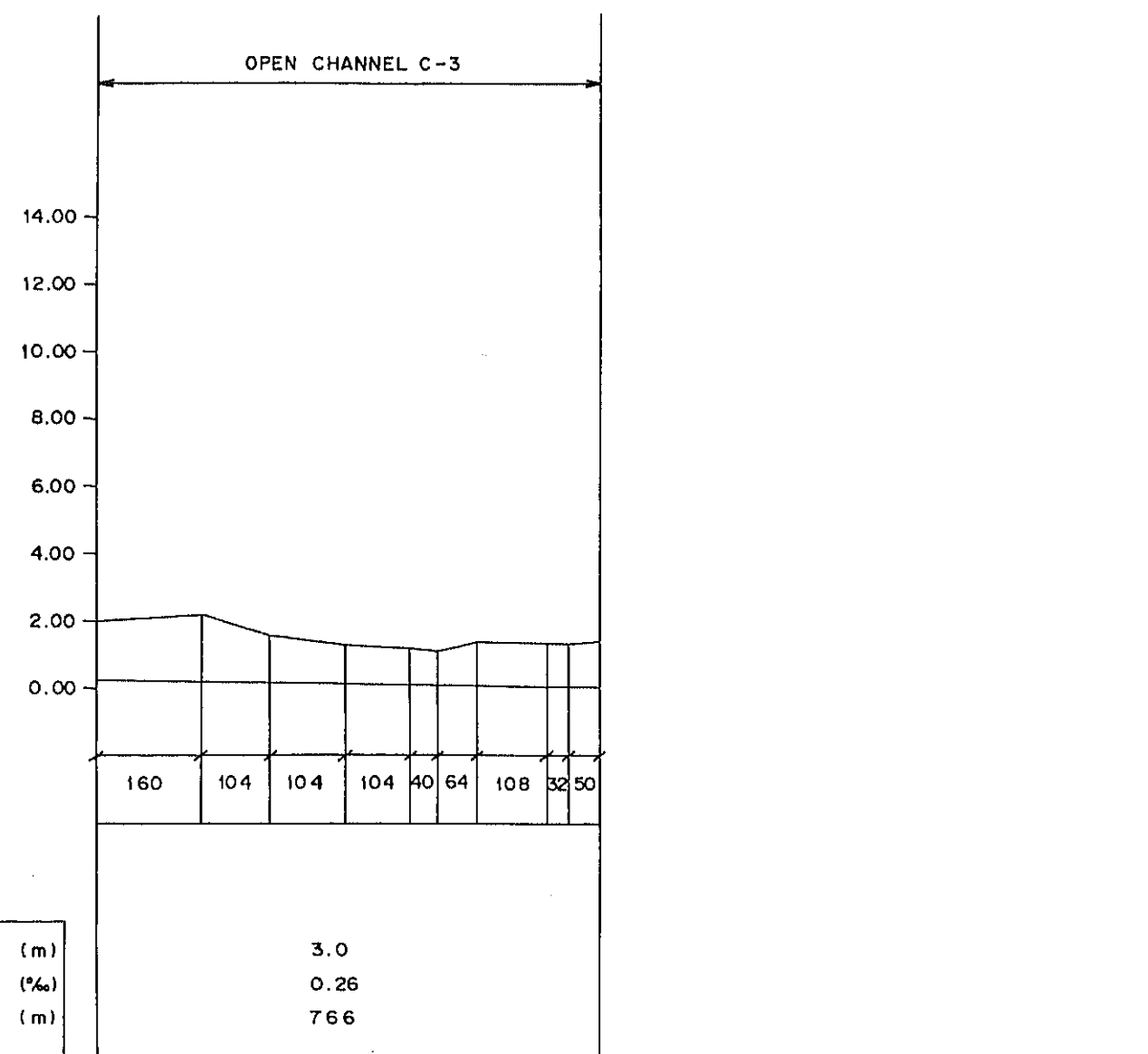
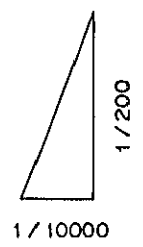
TOTAL LENGTH (m)	0	100	200	300	400	500	600	690	800	910	1010	1110	1210	1310	1410	1510	1610	1710	1810	1910	1940
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**PROFILES OF DRAINAGE CHANNEL
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BOTTOM WIDTH (m)	3.0
BED SLOPE (%)	0.26
LENGTH (m)	766

ELEVATION (m) GROUND SURFACE	2.03	2.14	1.53	1.35	1.25	1.18	1.35	1.30	1.30	1.37
EARTH COVERING (m)										
ELEVATION (m) CHANNEL BED	0.20	0.16	0.13	0.10	0.08	0.07	0.05	0.02	0.01	0.00
TOTAL LENGTH (m)	0	160	264	368	472	512	576	684	716	766

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