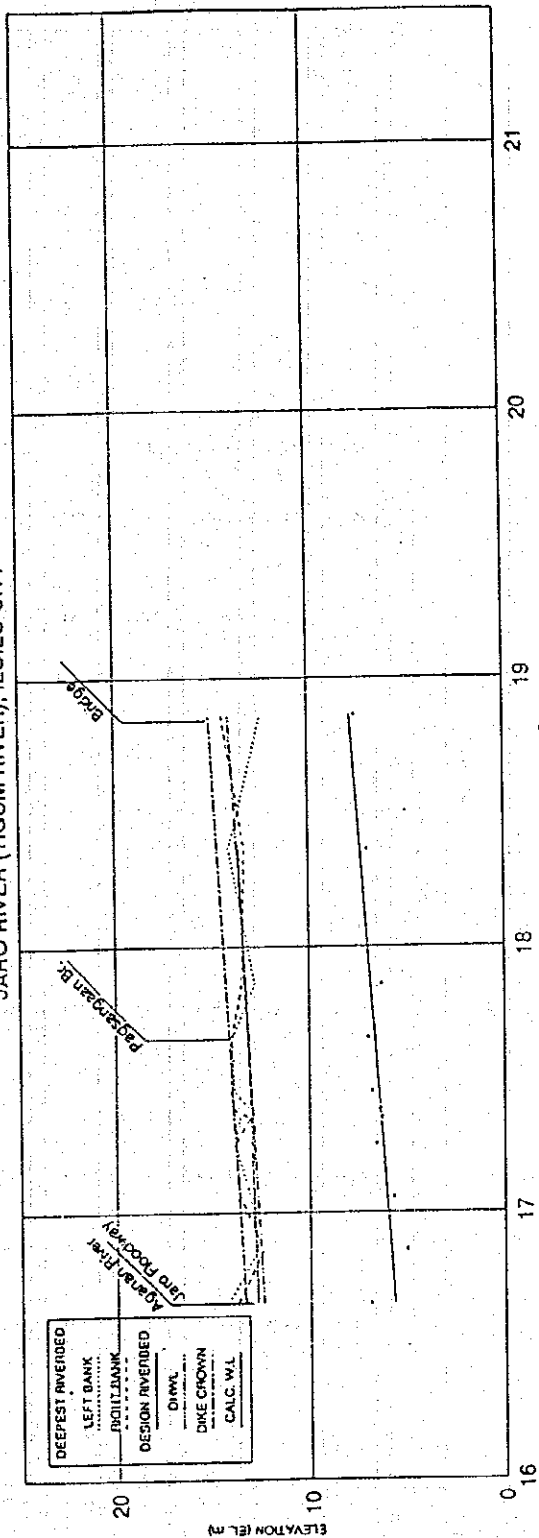


LONGITUDINAL PROFILE
JARO RIVER (TIGUM RIVER), ILOILO CITY

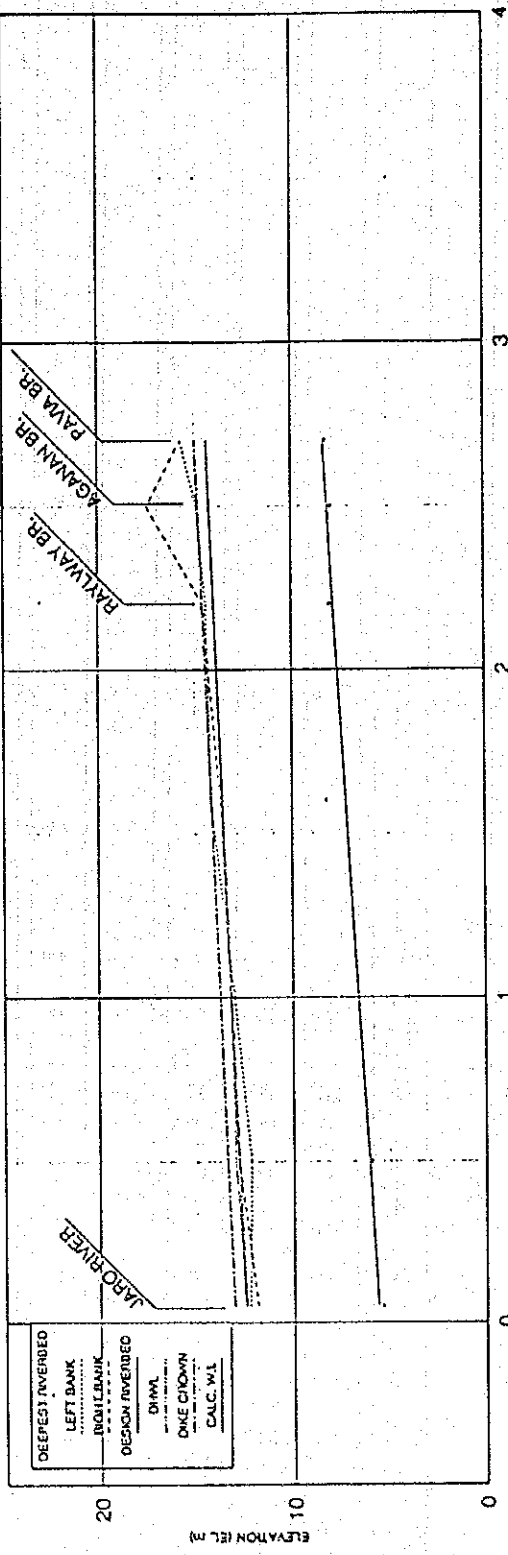


	16	17	18	19	20	21
GRADIENT OF RIVERBED			1/1,000			
DIKE CROWN	13.50	13.65	13.81	14.01	14.19	15.19
DESIGN HWL	12.50	12.65	12.81	13.01	13.27	14.19
DESIGN RIVERBED	5.822	5.822	6.232	6.532	7.232	7.832
DEEPEST RIVERBED	6.9	5.0	5.7	7.0	7.0	7.6
LEFT BANK	13.8	12.5	13.7	14.0	13.4	14.5
RIGHT BANK	14.4	12.8	13.2	14.1	14.2	12.5
STATION No.	16.66	16.96	17.06	17.26	17.86	18.66

THE STUDY ON THE FLOOD CONTROL FOR RIVERS
IN THE SELECTED URBAN CENTERS
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 4.6(5/7)
Longitudinal Profile of Jaro River
(Tigum River)

LONGITUDINAL PROFILE
JARO RIVER (AGANAN RIVER), LOILOI CITY

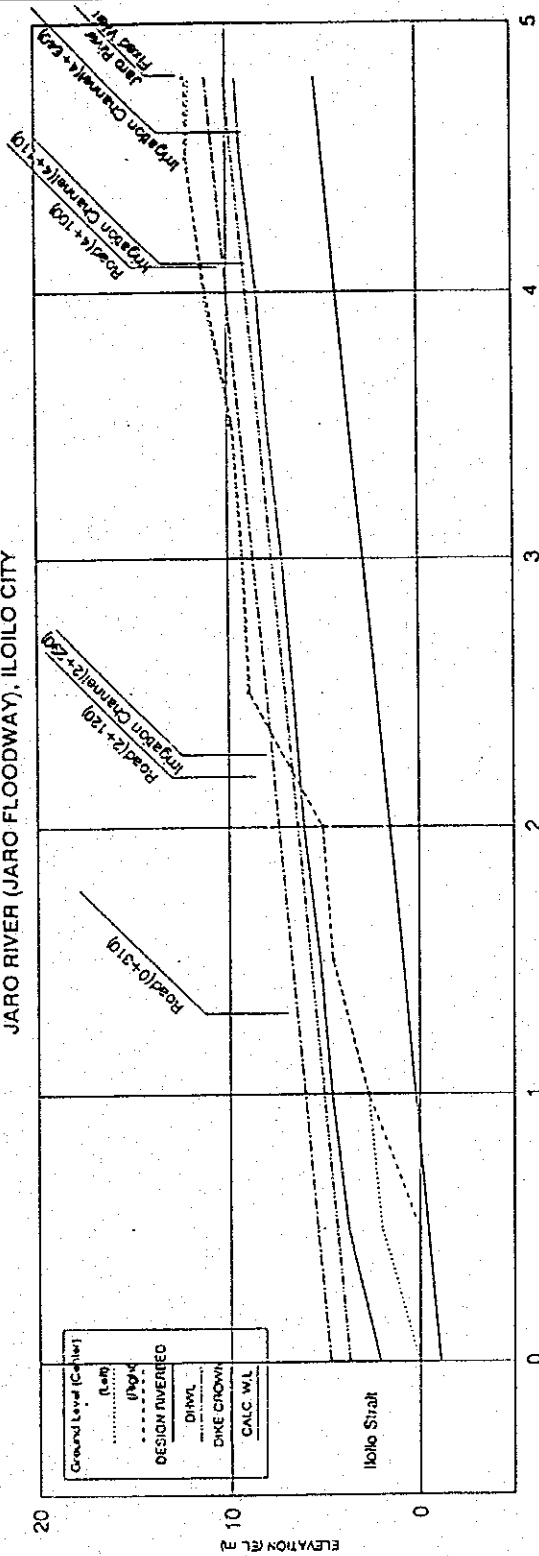


GRADIENT OF RIVERBED	DIKE CROWN	DESIGN HWL	DESIGN RIVERBED	DEEPEST RIVERBED	LEFT BANK	RIGHT BANK	STATION No.
13.10	13.42	12.82	8.082	5.4	12.8	12.3	0.05
13.28	13.78	13.16	6.582	2.5	13.2	13.0	1.00
14.21	14.21	13.61	7.182	8.2	13.7	14.2	1.00
14.64	14.64	14.04	7.782	8.0	14.8	14.4	2.20
14.85	14.85	14.25	8.082	7.8	17.4	16.8	2.50
14.98	14.98	14.38	8.282	8.2	15.7	15.7	2.70

THE STUDY ON THE FLOOD CONTROL FOR RIVERS
IN THE SELECTED URBAN CENTERS
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 4.6(6/7)
Longitudinal Profile of Jaro River
(Aganan River)

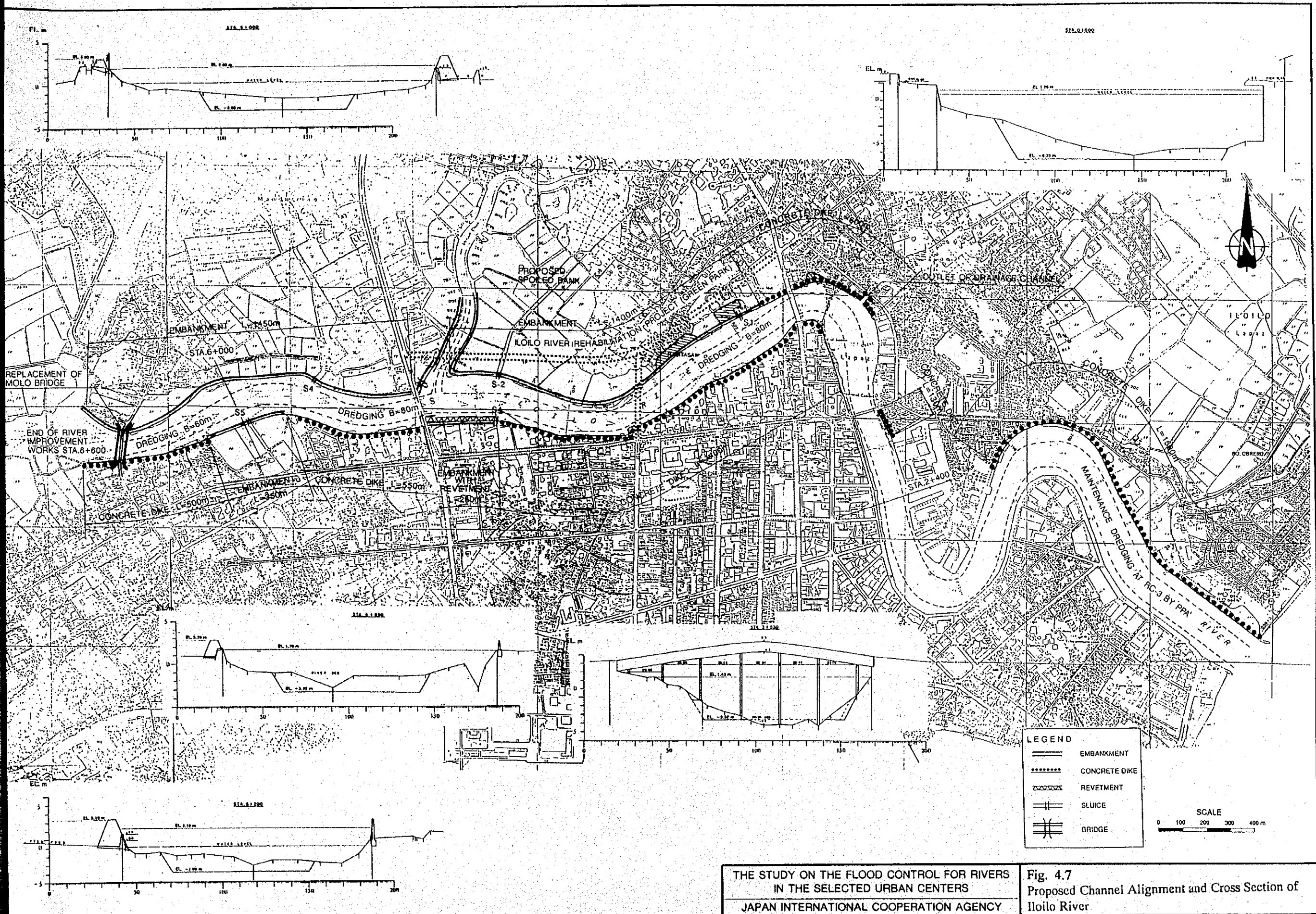
LONGITUDINAL PROFILE
JARO RIVER (JARO FLOODWAY), ILOILO CITY



STATION No.	GROUND LEVEL Left	GROUND LEVEL Right	GROUND LEVEL CENTER	DESIGN RIVERBED	DESIGN HWL	DIKE CROWN	GRADIENT OF RIVERBED
0+00	0.00	0.00	0.00	1.20	3.00	4.00	
0+50	2.00	0.00	0.00	4.27	5.93	5.27	
1+00	2.70	2.70	2.70	0.13	4.53	5.93	
1+50	4.50	4.50	4.50	0.80	5.60	6.60	
2+00	5.00	5.00	5.00	1.47	6.27	7.27	1/750
2+50	9.00	8.90	9.00	2.13	6.93	7.93	
3+00	9.00	9.20	9.50	2.80	7.60	8.60	
3+50	9.80	9.70	9.80	3.47	8.27	9.27	
4+00	11.20	11.10	11.10	4.13	8.93	9.93	
4+50	12.00	12.10	12.10	4.80	9.60	10.60	
5+00	11.90	12.10	12.20	5.50	10.30	11.30	
5+50	12.10	12.10	12.20	6.17	11.00	12.00	
6+00	11.00	12.10	12.20	6.84	11.70	12.70	
6+50	10.00	11.00	11.00	7.51	12.40	13.40	
7+00	11.00	12.10	12.20	8.18	13.10	14.10	

THE STUDY ON THE FLOOD CONTROL FOR RIVERS
IN THE SELECTED URBAN CENTERS
JAPAN INTERNATIONAL COOPERATION AGENCY

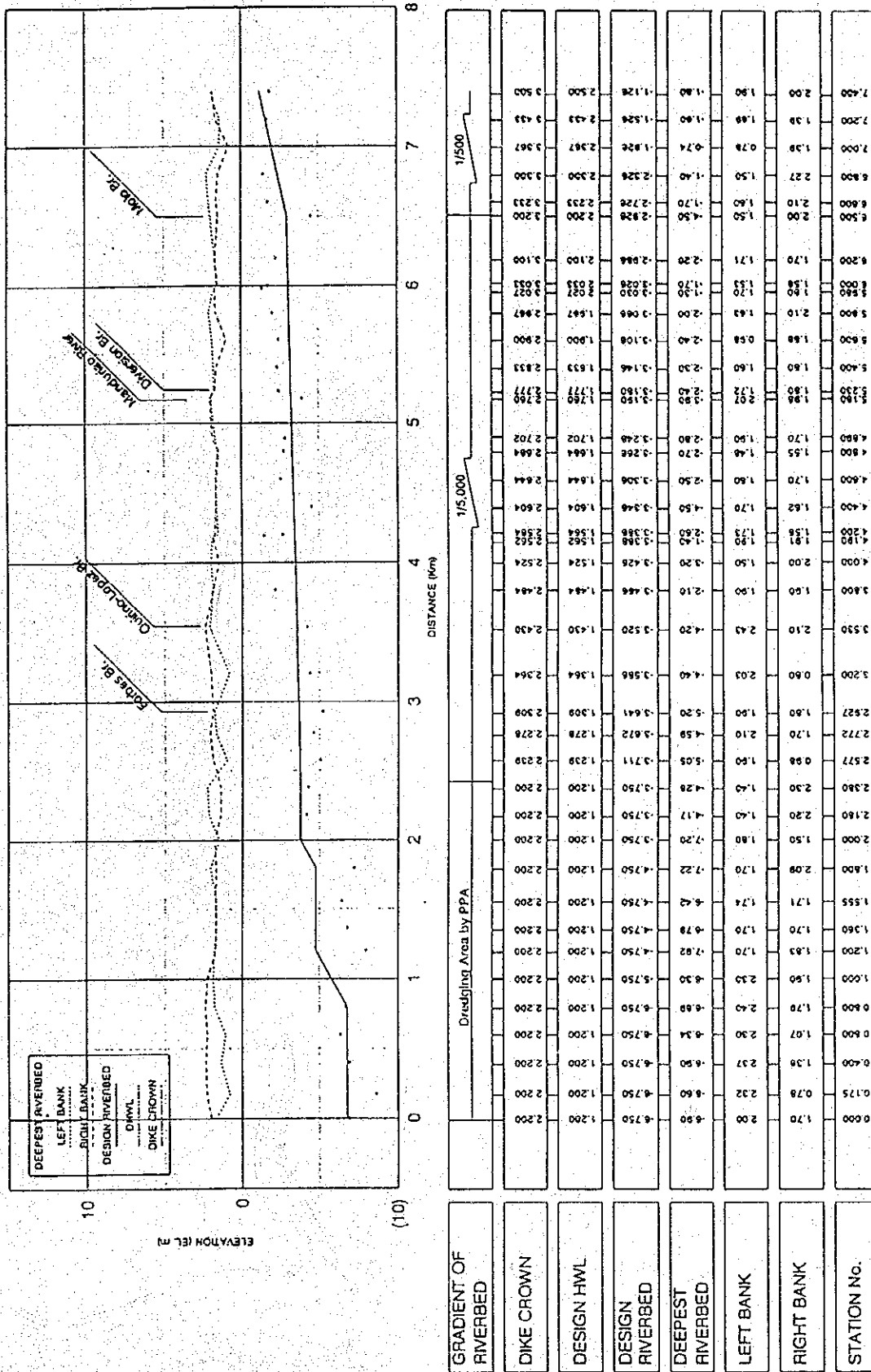
Fig. 4.6(7/7)
Longitudinal Profile of Jaro River
(Jaro Floodway)



THE STUDY ON THE FLOOD CONTROL FOR RIVERS
IN THE SELECTED URBAN CENTERS
JAPAN INTERNATIONAL COOPERATION AGENCY

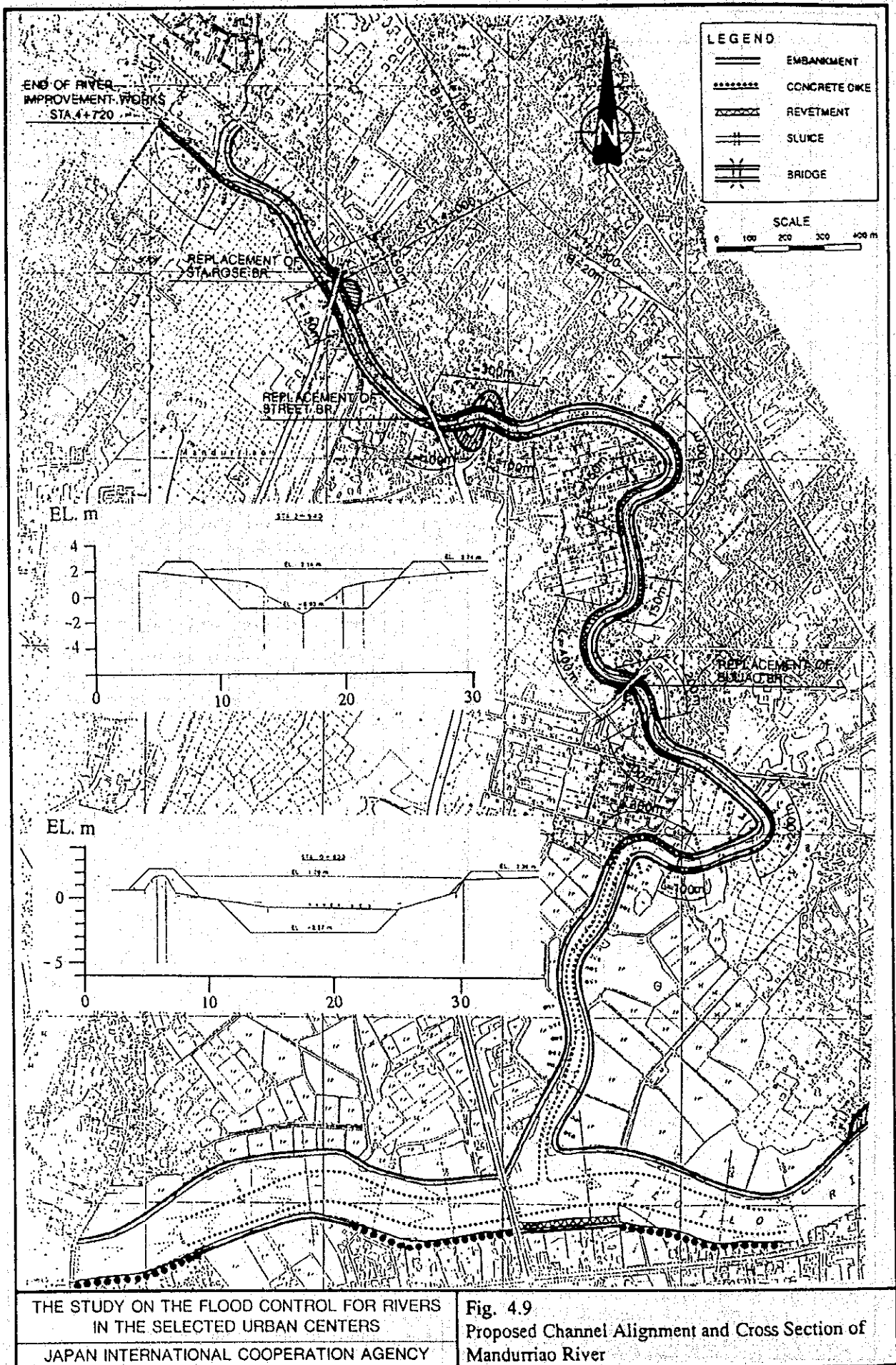
Fig. 4.7
Proposed Channel Alignment and Cross Section of
Iloilo River

LONGITUDINAL PROFILE
ILOILO RIVER, ILOILO CITY



THE STUDY ON THE FLOOD CONTROL FOR RIVERS
IN THE SELECTED URBAN CENTERS
JAPAN INTERNATIONAL COOPERATION AGENCY

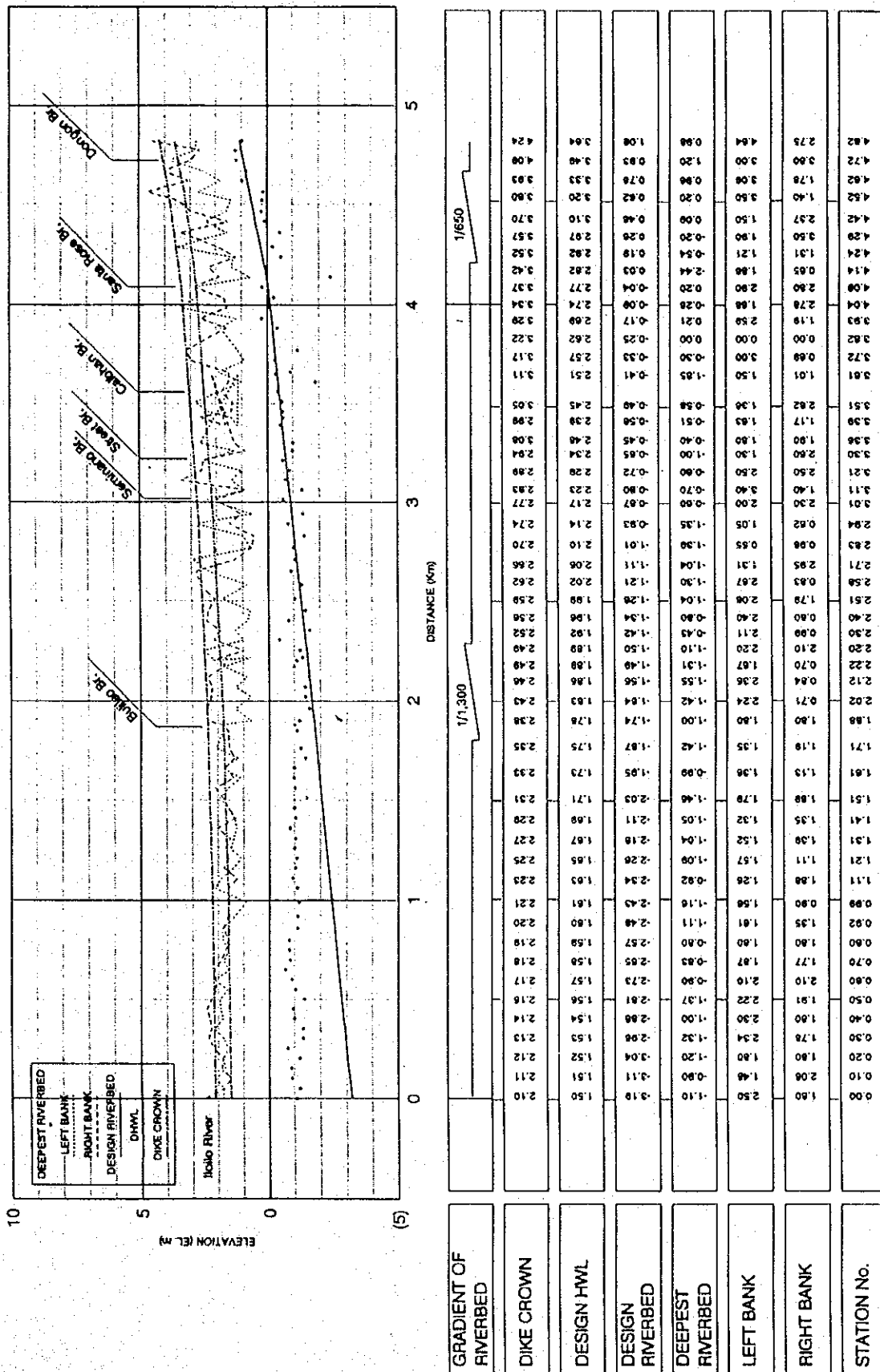
Fig. 4.8
Longitudinal Profile of Iloilo River



THE STUDY ON THE FLOOD CONTROL FOR RIVERS
 IN THE SELECTED URBAN CENTERS
 JAPAN INTERNATIONAL COOPERATION AGENCY

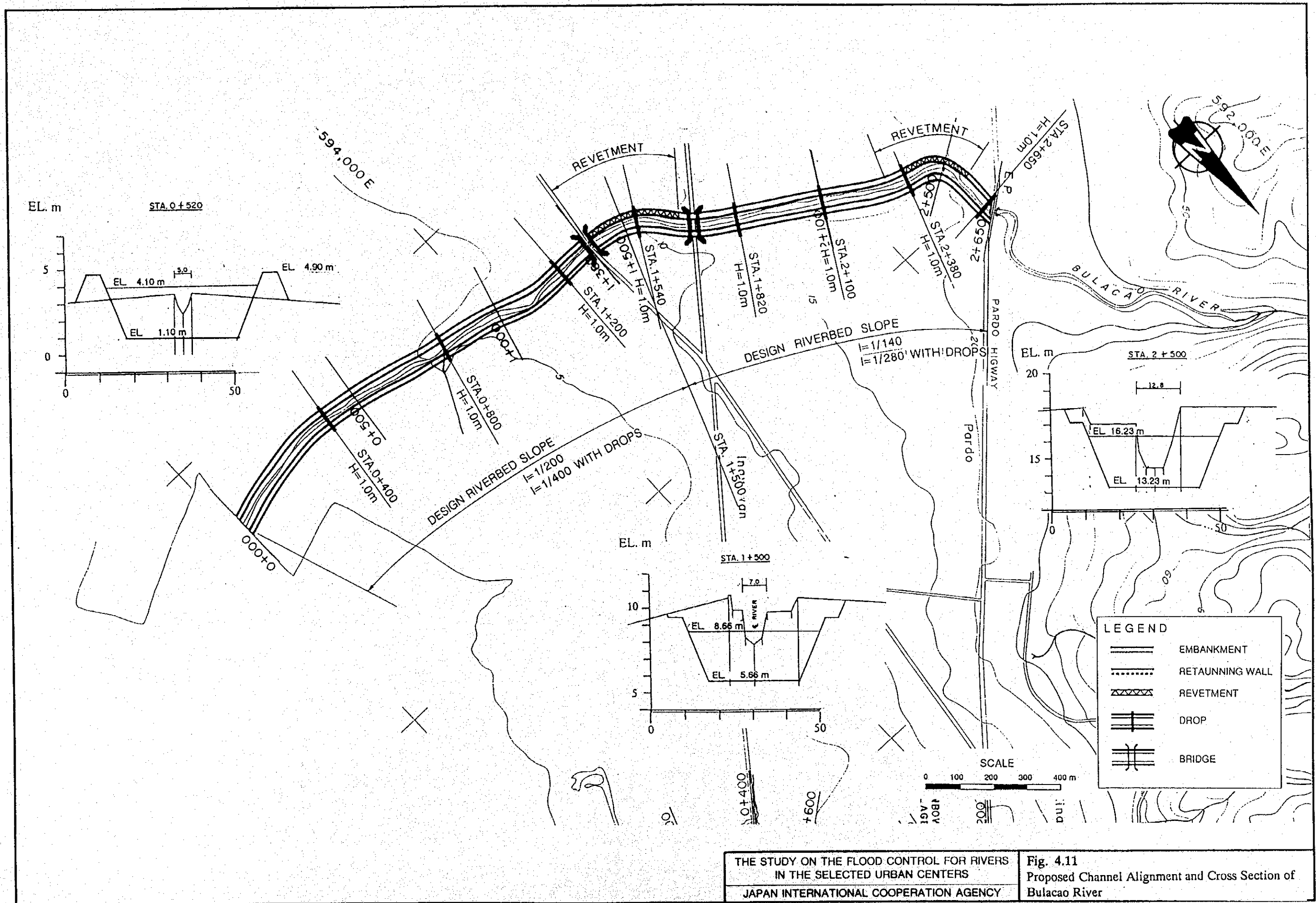
Fig. 4.9
 Proposed Channel Alignment and Cross Section of
 Mandurriao River

LONGITUDINAL PROFILE
MANDURRIAO RIVER, ILOILO CITY



THE STUDY ON THE FLOOD CONTROL FOR RIVERS
IN THE SELECTED URBAN CENTERS
JAPAN INTERNATIONAL COOPERATION AGENCY

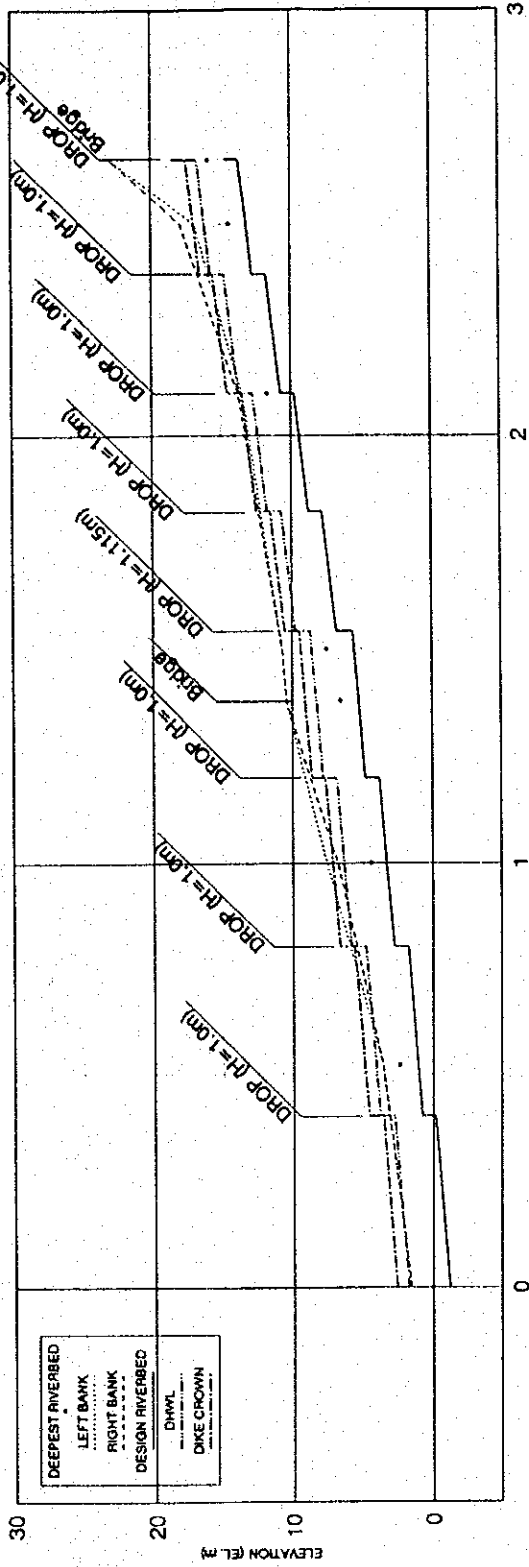
Fig. 4.10
Longitudinal Profile of Mandurriao River



THE STUDY ON THE FLOOD CONTROL FOR RIVERS
 IN THE SELECTED URBAN CENTERS
 JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 4.11
 Proposed Channel Alignment and Cross Section of
 Bulacao River

LONGITUDINAL PROFILE
BULACAO RIVER, CEBU CITY



STATION No.	RIGHT BANK	LEFT BANK	DEEPEST RIVERBED	DESIGN RIVERBED	DESIGN HWL	DIKE CROWN	GRADIENT OF RIVERBED
0.000	1.500	0.000	0.200	0.800	1.200	1.800	1/200
0.400	3.000	2.400	0.800	1.100	1.500	2.800	1/400, with Drops
0.520	3.000	2.400	0.800	1.100	1.500	2.800	1/400, with Drops
0.800	7.500	6.700	1.800	2.800	3.300	4.900	1/200
1.000	10.400	10.400	3.800	4.800	5.300	7.100	1/200
1.200	10.400	10.400	3.800	4.800	5.300	7.800	1/200
1.380	10.700	10.700	4.500	5.500	6.000	8.050	1/200
1.540	10.700	10.700	4.500	5.500	6.000	8.450	1/200
1.540	10.700	10.700	4.500	5.500	6.000	8.450	1/200
1.820	11.565	11.565	5.265	6.265	6.765	9.565	1/140
1.820	11.565	11.565	5.265	6.265	6.765	9.565	1/140
2.100	13.500	13.500	7.265	8.265	8.765	11.565	1/280, with Drops
2.100	13.500	13.500	7.265	8.265	8.765	11.565	1/280, with Drops
2.300	14.765	14.765	8.565	9.565	10.065	12.765	1/280, with Drops
2.300	14.765	14.765	8.565	9.565	10.065	12.765	1/280, with Drops
2.500	16.904	16.904	10.704	11.704	12.204	14.994	1/280, with Drops
2.500	16.904	16.904	10.704	11.704	12.204	14.994	1/280, with Drops
2.650	17.729	17.729	11.529	12.529	13.029	15.829	1/280, with Drops
2.650	17.729	17.729	11.529	12.529	13.029	15.829	1/280, with Drops

THE STUDY ON THE FLOOD CONTROL FOR RIVERS
IN THE SELECTED URBAN CENTERS
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 4.12
Longitudinal Profile of Bulacao River

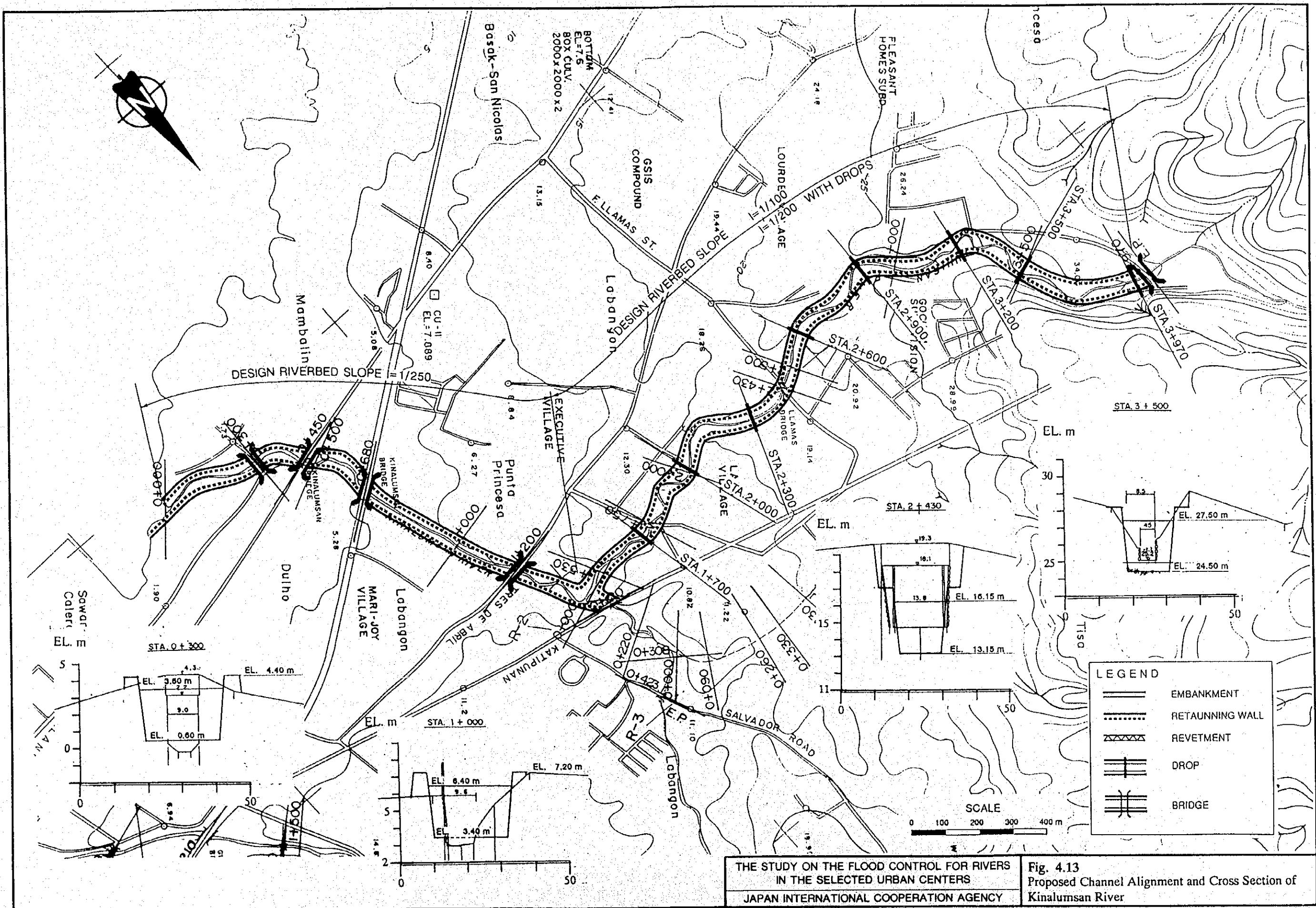
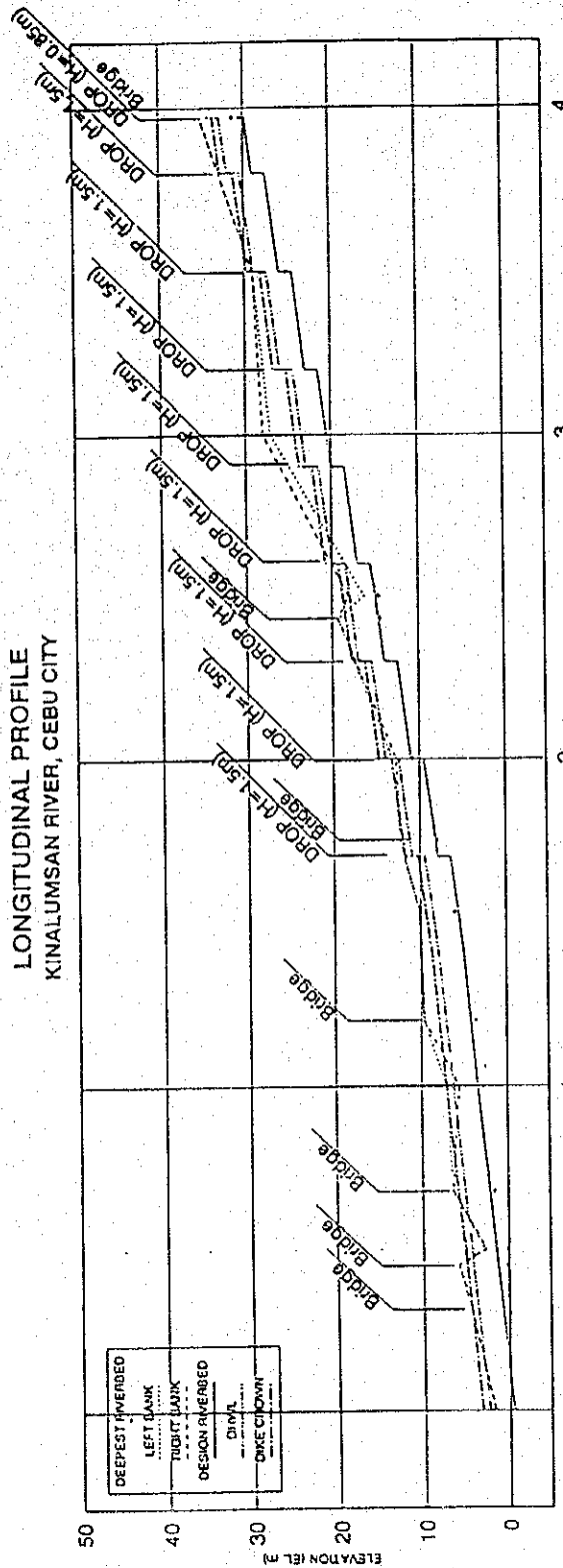


Fig. 4.13 Proposed Channel Alignment and Cross Section of Kinalumsan River

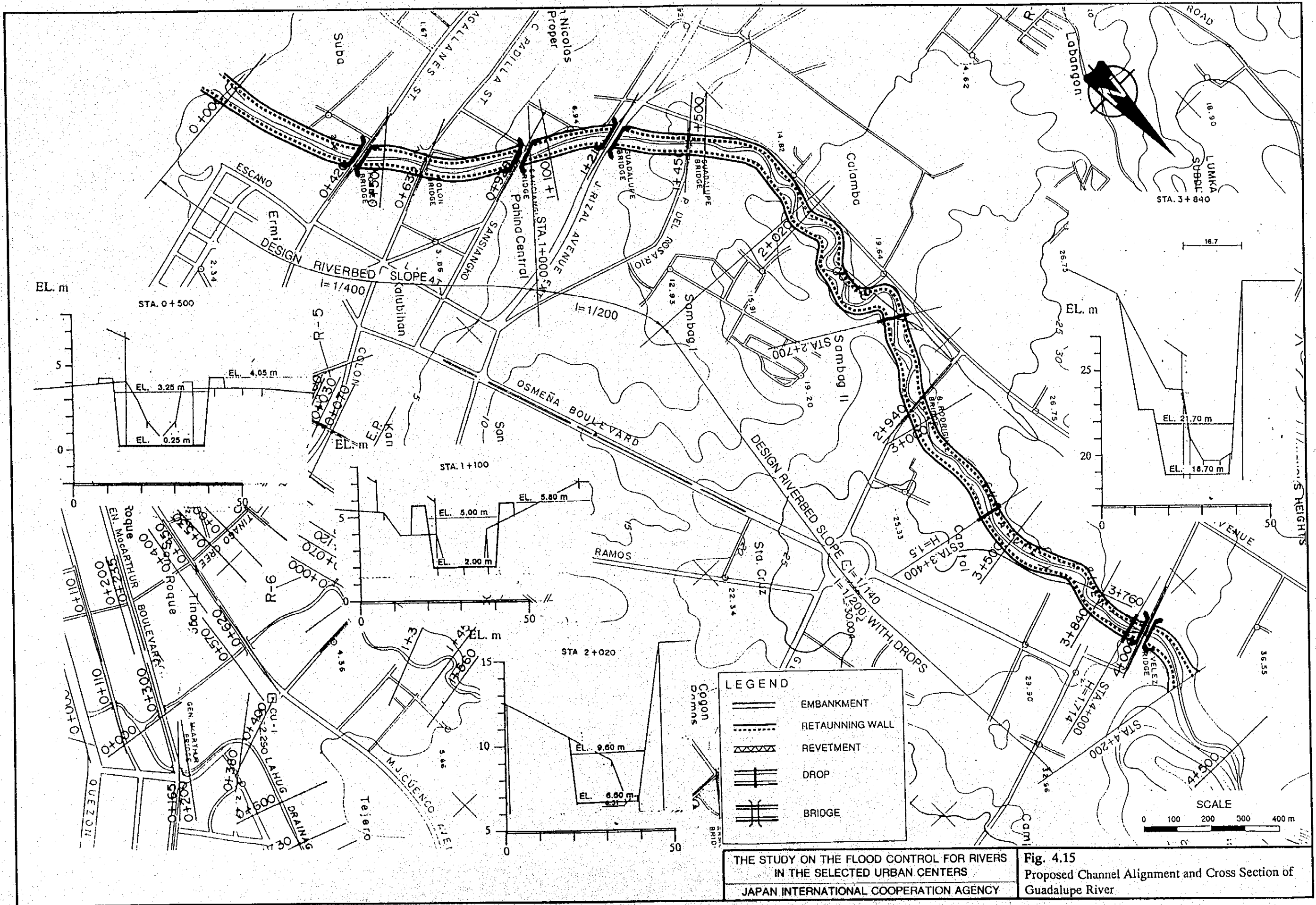
LONGITUDINAL PROFILE
KINALUMSAN RIVER, CEBU CITY



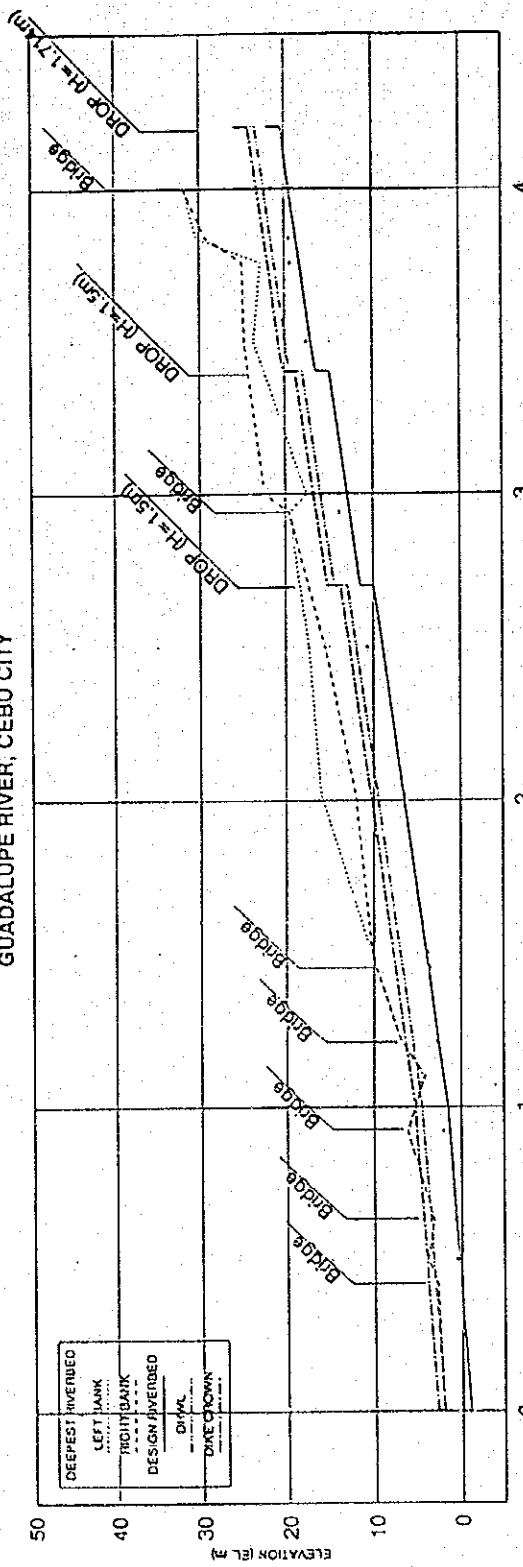
DISTANCE (KM)	GRADIENT OF RIVERBED	DIKE CROWN	DESIGN HWL	DESIGN RIVERBED	DEEPEST RIVERBED	LEFT BANK	RIGHT BANK	STATION No.
0.00	2.40	2.40	3.60	0.60	0.10	4.30	4.30	0.00
0.20	4.40	4.20	4.20	1.20	0.15	5.80	5.80	0.45
0.45	5.20	5.00	5.00	1.20	0.10	2.80	2.80	0.50
0.50	5.20	5.20	4.40	1.40	0.10	2.80	2.80	0.50
0.68	5.80	5.80	5.12	1.20	1.50	6.50	6.50	0.68
1.00	7.20	7.20	3.40	2.80	2.80	5.70	7.20	1.00
1.20	8.00	7.20	4.20	3.60	3.60	9.80	9.80	1.20
1.40	8.00	8.00	5.00	6.00	5.00	10.10	10.10	1.40
1.50	8.45	8.45	5.65	6.85	6.10	10.10	10.10	1.50
1.70	10.30	11.80	8.50	9.50	8.00	12.34	12.34	1.70
1.75	12.05	12.25	8.25	11.25	8.15	12.34	12.34	1.75
2.00	14.80	14.80	11.00	12.50	9.50	13.20	13.20	2.00
2.30	16.30	16.30	14.00	15.50	12.50	14.50	14.50	2.30
2.50	18.80	18.80	17.65	18.00	15.00	18.10	18.30	2.50
2.60	19.30	19.30	18.50	18.50	15.50	18.10	18.30	2.60
2.80	20.80	20.80	20.00	20.00	17.00	20.00	20.00	2.80
2.90	21.30	21.30	21.50	21.50	17.50	21.50	21.50	2.90
3.00	22.80	22.80	23.00	23.00	18.00	23.00	23.00	3.00
3.20	25.30	25.30	24.50	24.50	18.50	24.50	24.50	3.20
3.30	26.80	26.80	26.00	26.00	19.00	26.00	26.00	3.30
3.50	28.30	28.30	27.50	27.50	19.50	27.50	27.50	3.50
3.80	31.80	31.80	30.50	30.50	22.00	29.00	29.10	3.80
3.90	32.30	32.30	32.00	32.00	22.50	29.00	29.10	3.90
4.10	33.80	33.80	33.50	33.50	23.00	31.00	31.00	4.10
4.20	34.30	34.30	34.00	34.00	23.50	31.00	31.00	4.20

THE STUDY ON THE FLOOD CONTROL FOR RIVERS
IN THE SELECTED URBAN CENTERS
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 4.14
Longitudinal Profile of Kinalumsan River



LONGITUDINAL PROFILE
GUADALUPE RIVER, CEBU CITY



	0	0.420	0.500	0.530	0.580	1.000	1.100	1.210	1.250	1.450	1.500	2.000	2.020	2.500	2.700	2.940	3.000	3.400	3.500	3.780	3.840	4.000	4.200		
GRADIENT OF RIVERBED		1/200	1/200	1/200	1/200	1/200	1/200	1/200	1/200	1/200	1/200	1/200	1/1140	1/280	1/280	1/280	1/280	1/280	1/280	1/280	1/280	1/280	1/280	1/280	
DIKE CROWN	2.800	3.850	4.050	4.375	4.500	5.100	5.300	5.800	6.350	7.800	7.500	8.500	9.500	12.000	13.600	15.700	16.800	18.800	20.000	21.500	22.500	23.300	24.200	26.014	
DESIGN HWL	2.000	3.050	3.250	3.575	4.300	4.500	5.000	5.500	6.050	7.500	7.200	8.200	9.200	12.000	13.000	15.000	16.000	18.000	19.500	20.500	21.500	22.500	23.500	25.300	27.100
DESIGN RIVERBED	1.000	0.050	0.250	0.575	1.300	1.500	2.000	2.500	3.050	4.500	4.200	5.200	6.200	9.000	10.000	12.000	13.000	15.000	16.500	17.500	18.500	19.500	20.500	22.300	24.100
DEEPEST RIVERBED	-0.870	0.000	0.500	0.830	2.000	2.000	2.000	2.660	3.590	4.900	4.600	5.600	6.600	9.800	10.800	12.800	13.800	15.800	17.300	18.300	19.300	20.300	21.300	23.100	24.900
LEFT BANK	2.000	2.700	3.800	3.150	6.100	6.100	4.000	8.800	9.700	10.200	10.200	12.100	16.000	15.500	17.300	18.500	17.500	19.300	20.800	23.700	23.000	24.800	25.800	28.600	29.500
RIGHT BANK	2.000	2.700	3.800	3.150	6.100	6.100	4.300	8.800	9.700	10.200	10.200	12.100	16.000	15.500	17.300	18.500	17.500	19.300	20.800	23.700	23.000	24.800	25.800	28.600	29.500
STATION No.	0.000	0.420	0.500	0.530	0.580	1.000	1.100	1.210	1.250	1.450	1.500	2.000	2.020	2.500	2.700	2.940	3.000	3.400	3.500	3.780	3.840	4.000	4.200		

THE STUDY ON THE FLOOD CONTROL FOR RIVERS
IN THE SELECTED URBAN CENTERS
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 4.16
Longitudinal Profile of Guadalupe River

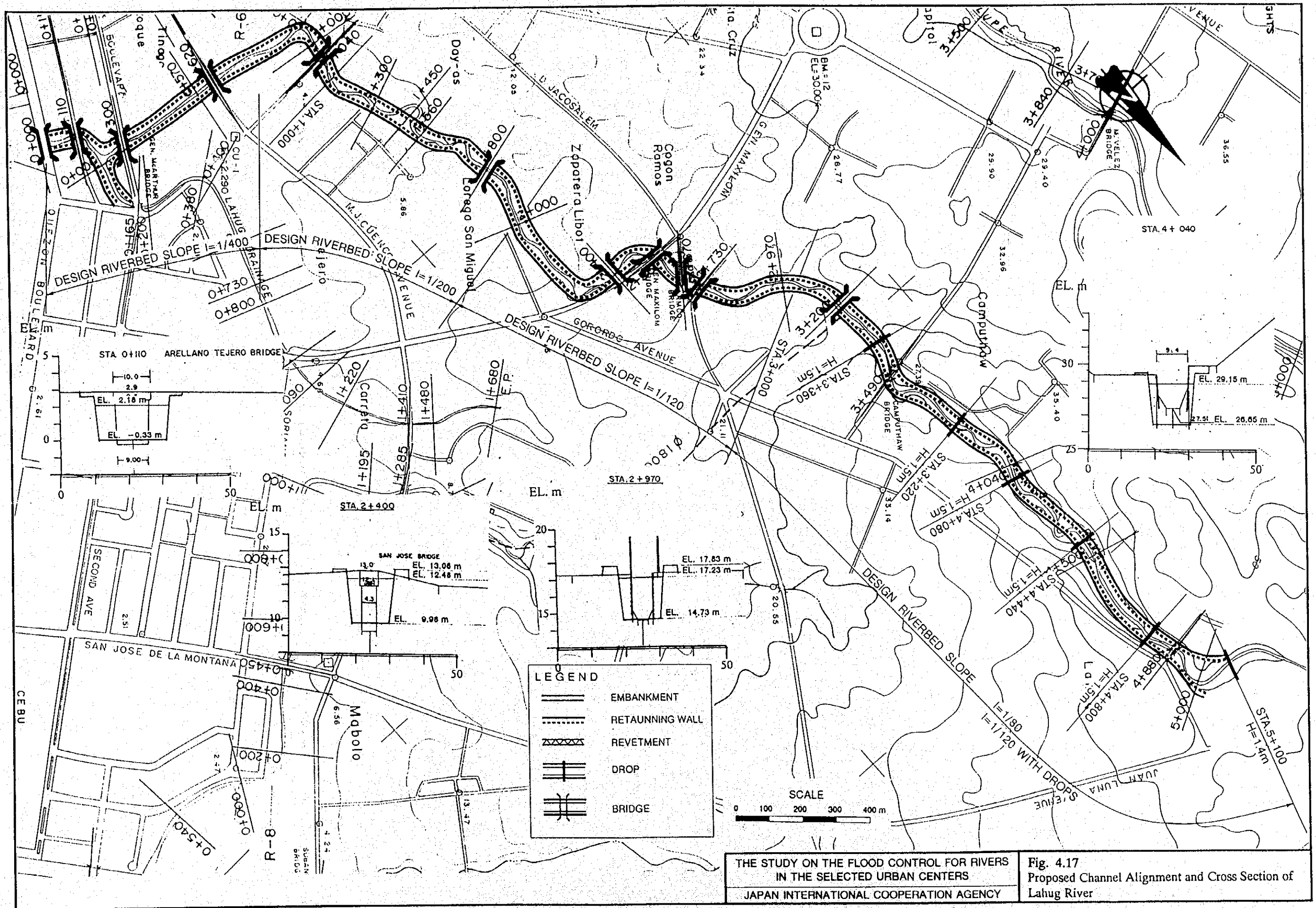
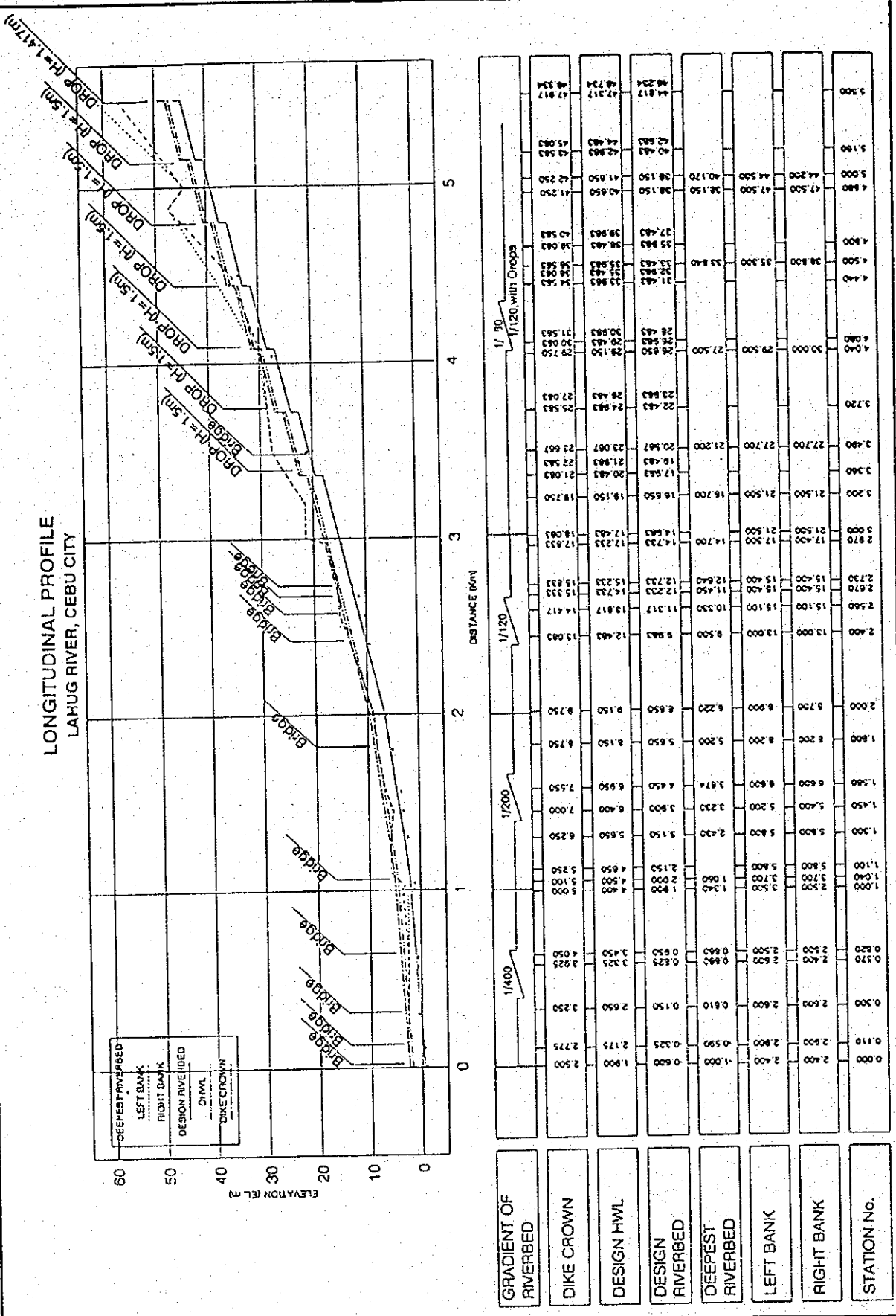
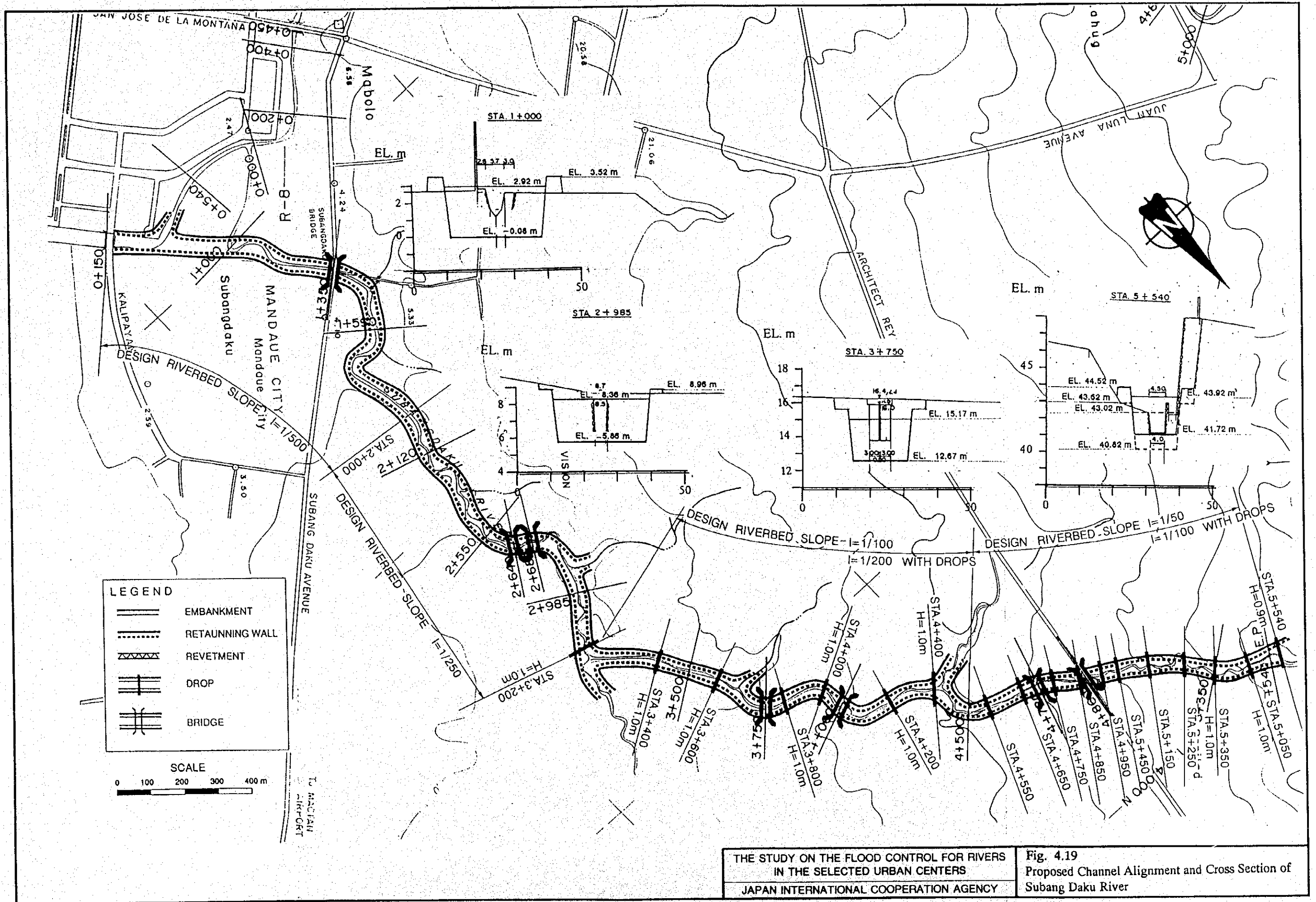


Fig. 4.17
Proposed Channel Alignment and Cross Section of
Lahug River

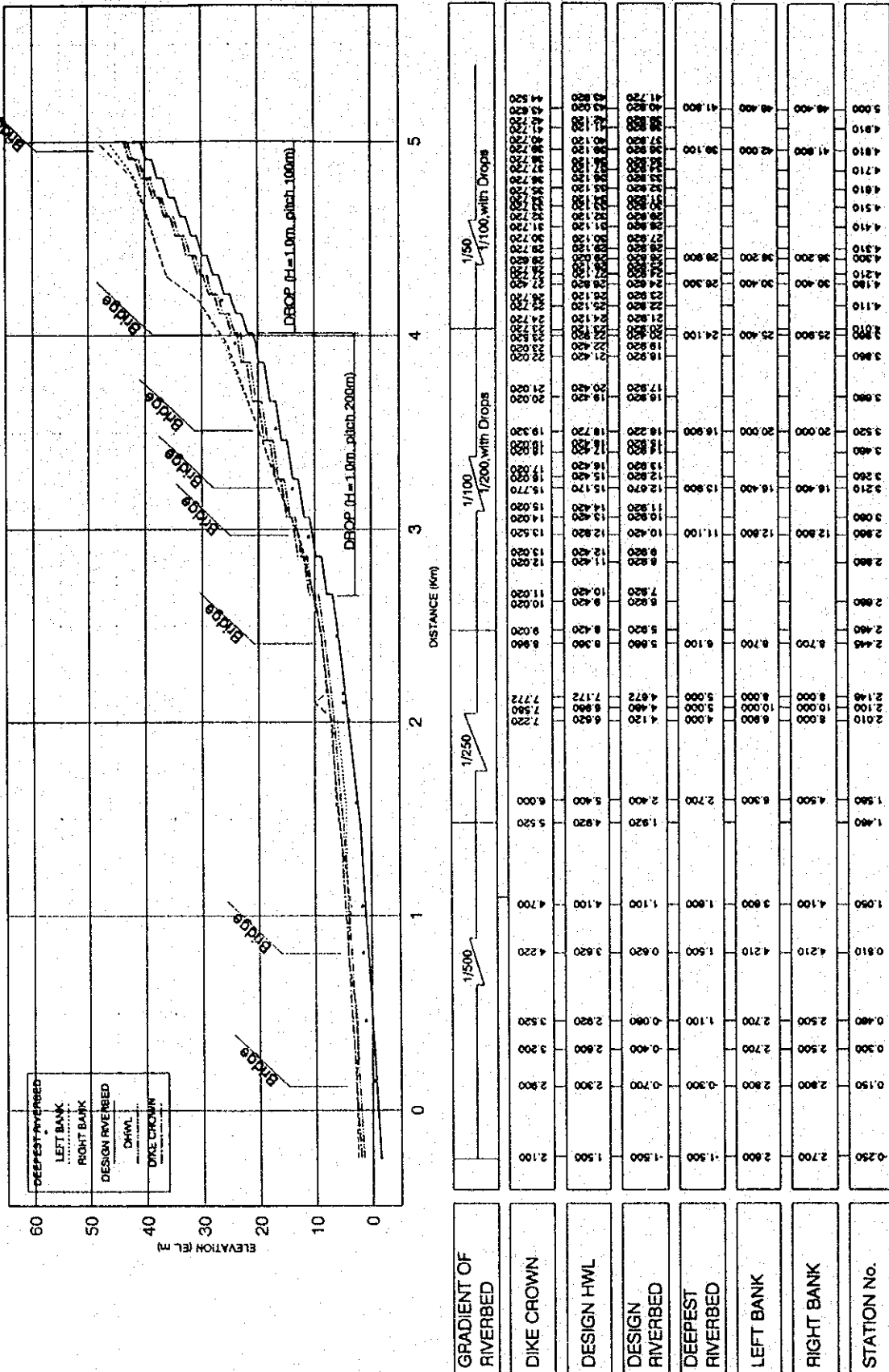


THE STUDY ON THE FLOOD CONTROL FOR RIVERS
IN THE SELECTED URBAN CENTERS
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 4.18
Longitudinal Profile of Lahug River

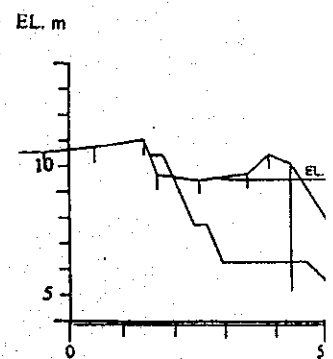
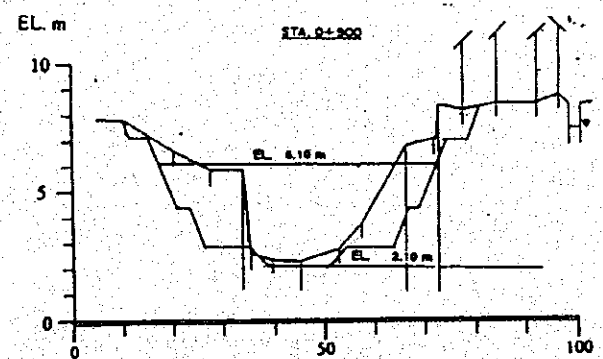
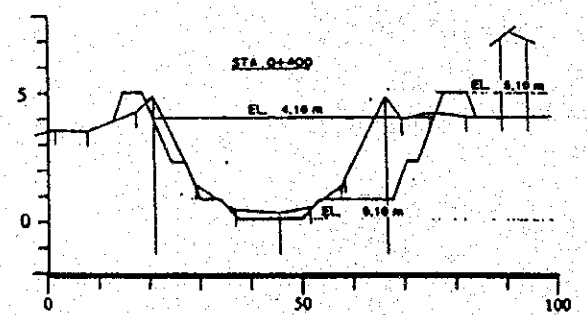
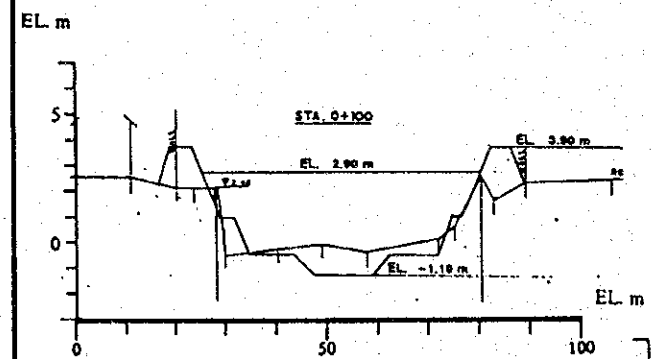
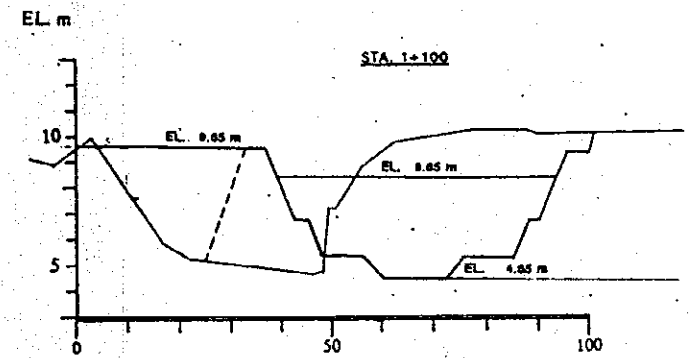
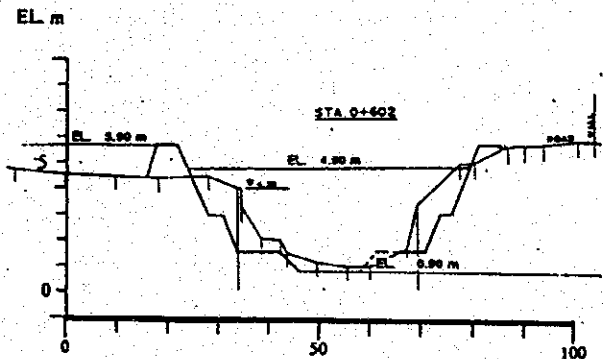
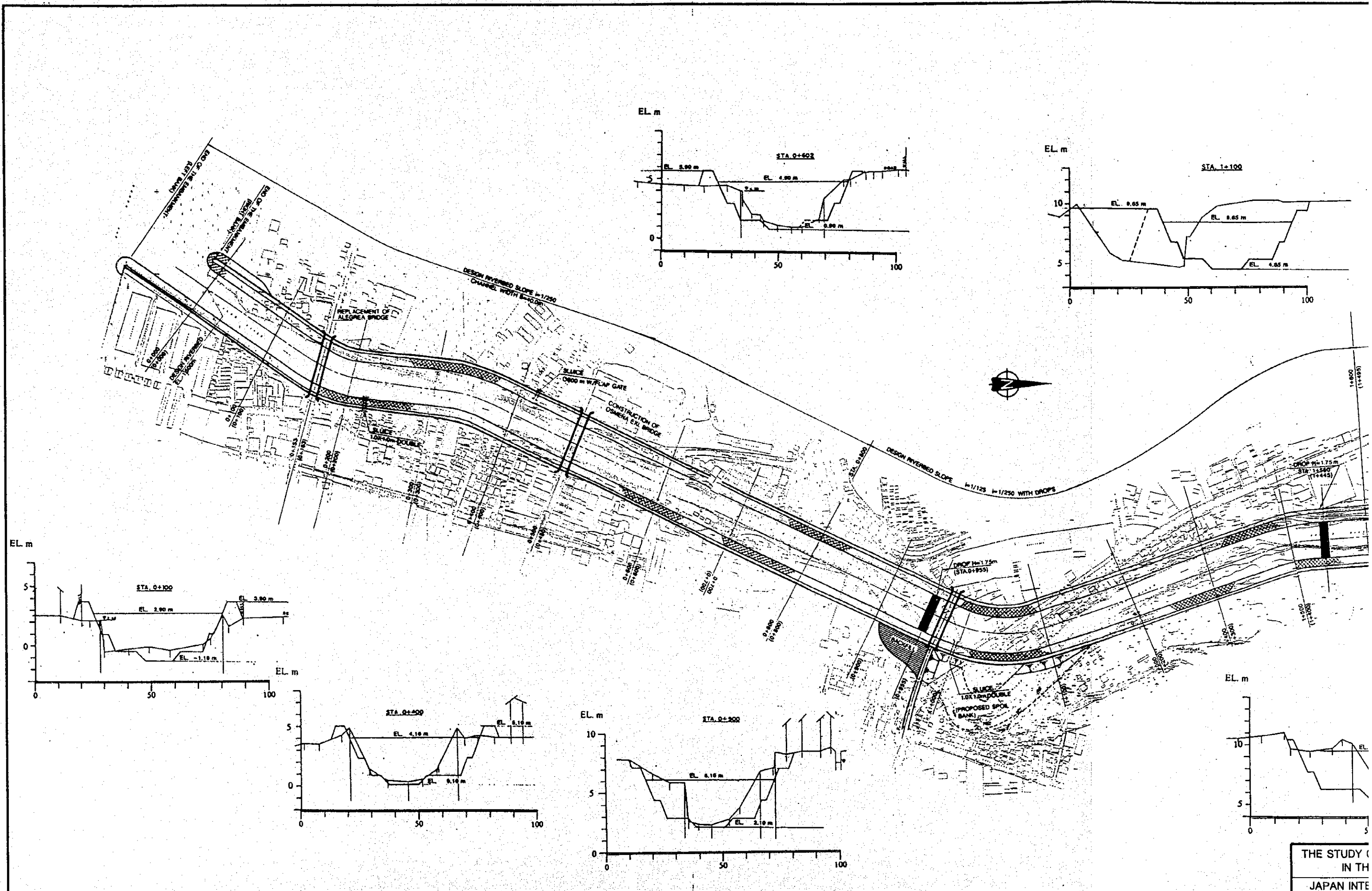


LONGITUDINAL PROFILE
SUBANG DAKU RIVER, CEBU CITY

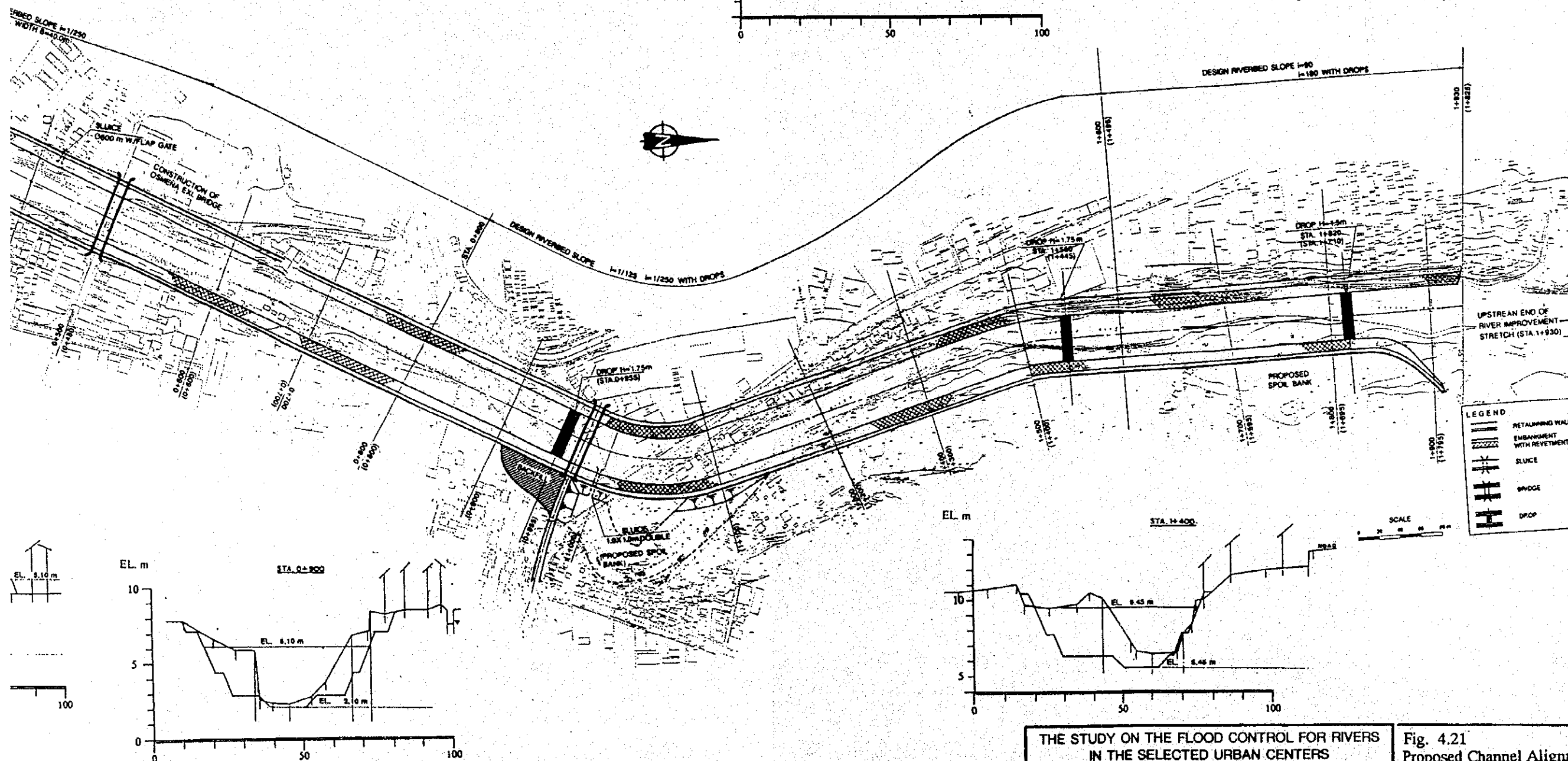
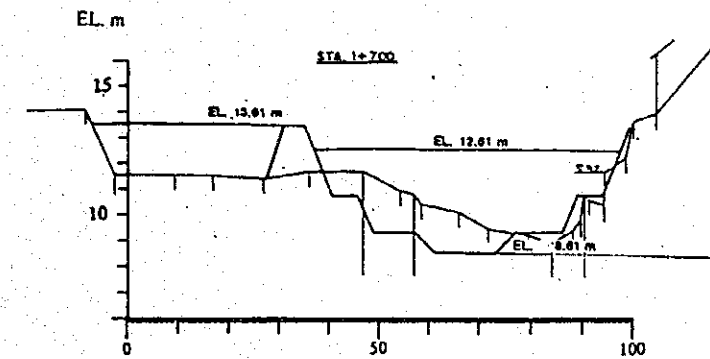
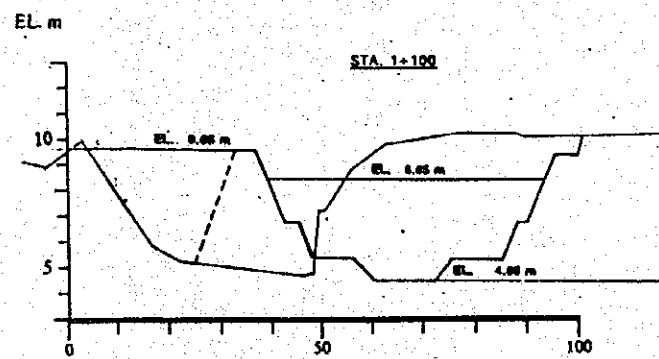
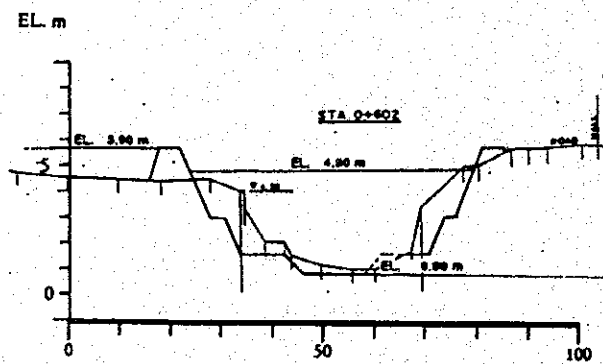


THE STUDY ON THE FLOOD CONTROL FOR RIVERS
IN THE SELECTED URBAN CENTERS
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 4.20
Longitudinal Profile of Subang Daku River



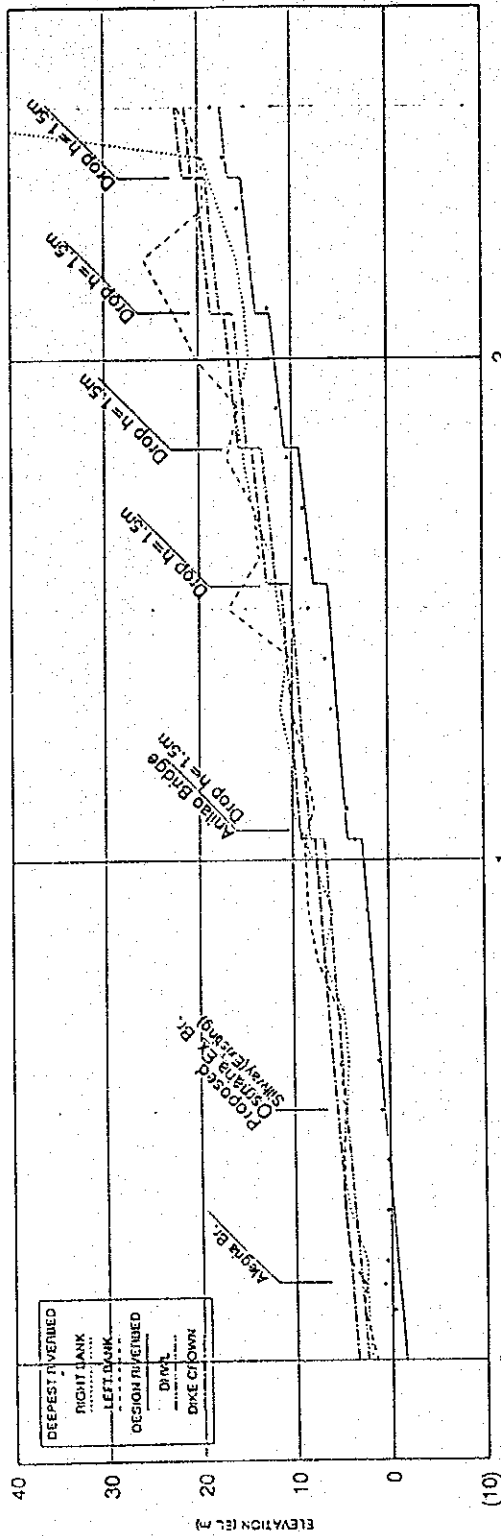
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THE STUDY ON THE FLOOD CONTROL FOR RIVERS
IN THE SELECTED URBAN CENTERS
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 4.21
Proposed Channel Alignment and Cross Section of
Anilao River

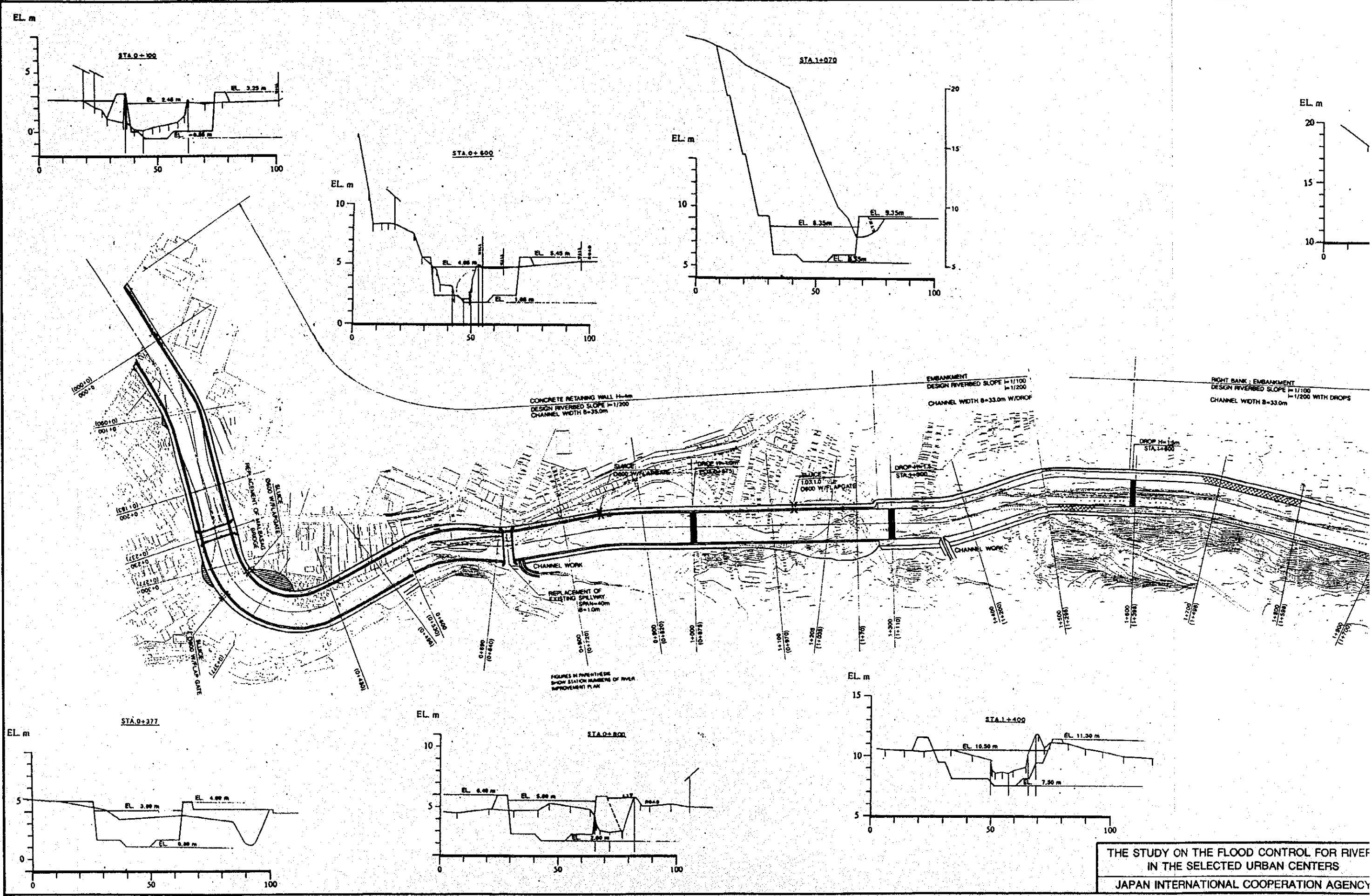
LONGITUDINAL PROFILE
ANILAO RIVER, ORMOC CITY



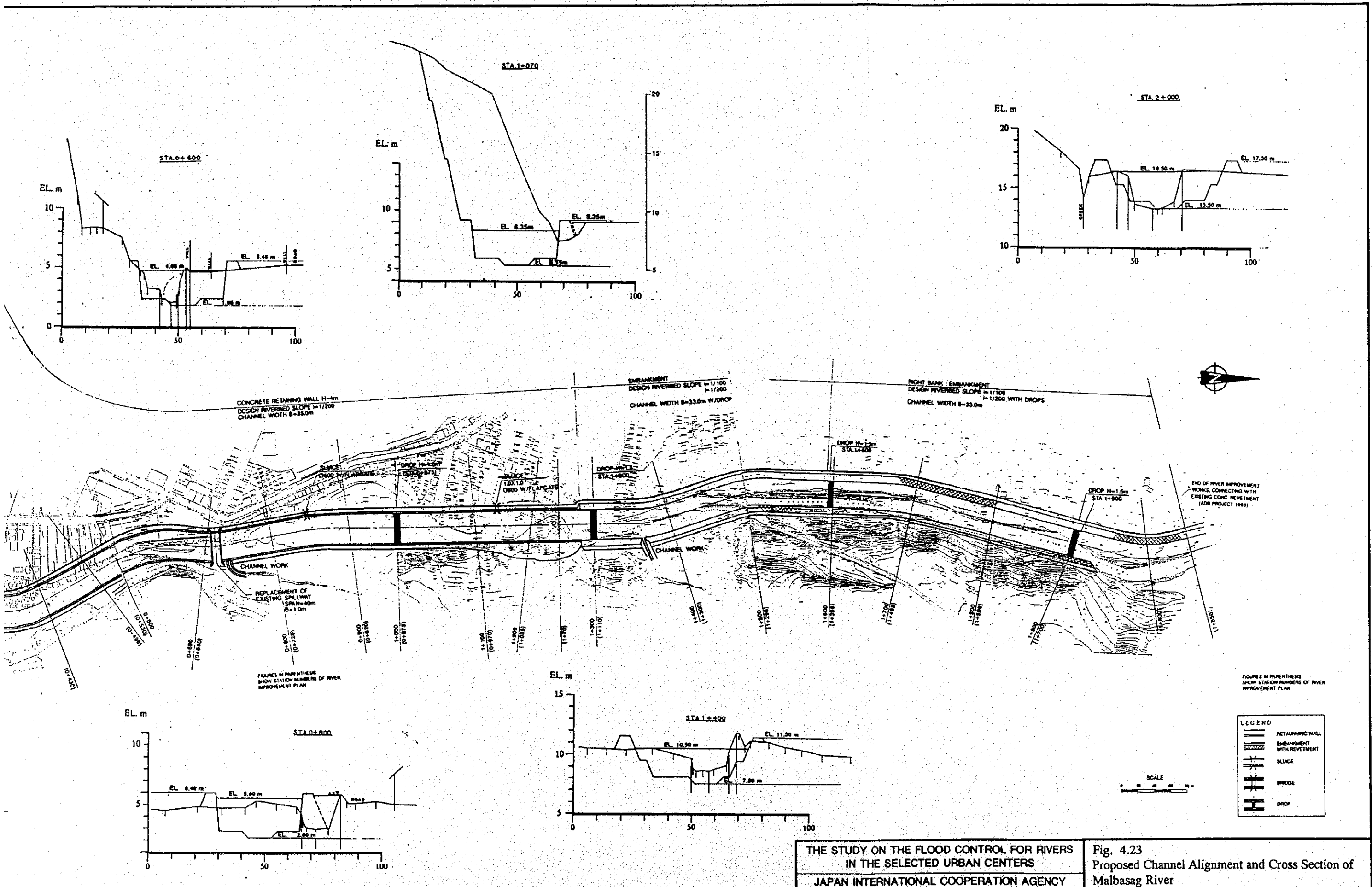
STATION No.	RIGHT BANK	LEFT BANK	DEEPEST RIVERBED	DESIGN RIVERBED	DIKE CROWN	GRADIENT OF RIVERBED
0.000	2.10	1.80	-1.0	1.500	2.500	3.500
0.100	2.8	2.66	0.32	1.100	2.800	3.900
0.150	2.50	2.70	0.60	0.888	3.112	4.112
0.200	2.51	2.70	0.51	0.700	3.300	4.300
0.300	4.20	4.00	0.35	0.300	3.700	4.700
0.400	4.86	4.74	0.25	0.100	4.100	5.100
0.500	4.40	4.70	0.90	0.500	4.500	5.500
0.600	4.22	5.10	1.14	0.800	4.900	5.900
0.650	4.60	5.00	1.24	1.260	5.250	6.250
0.680	6.50	7.46	1.78	1.700	5.700	6.700
0.900	5.61	8.38	2.22	2.100	6.100	7.100
1.040	6.70	6.70	3.47	2.660	6.660	7.660
1.100	10.20	7.70	4.20	4.400	8.400	9.400
1.205	10.20	8.60	4.80	4.820	8.820	9.820
1.300	11.30	10.20	5.93	5.200	9.200	10.200
1.400	10.60	10.10	6.50	5.600	9.600	10.600
1.500	11.40	16.80	8.30	6.000	10.000	11.000
1.550	12.10	13.40	8.52	7.578	11.578	12.578
1.600	12.10	13.40	8.52	7.578	11.578	12.578
1.700	14.10	14.00	8.84	8.533	12.533	13.533
1.800	15.10	16.90	10.56	9.088	13.088	14.088
1.820	15.10	16.90	10.56	9.088	13.088	14.088
1.900	16.00	15.60	11.81	11.44	15.144	16.144
2.000	14.50	20.20	12.41	11.700	15.700	16.700
2.090	14.50	22.90	12.51	12.200	16.200	17.200
2.100	14.50	22.90	12.51	12.200	16.200	17.200
2.200	15.60	25.80	14.29	14.311	18.311	19.311
2.300	17.70	19.40	15.06	14.867	18.867	19.867
2.360	18.50	18.60	15.822	15.700	19.700	20.700
2.400	18.50	18.60	15.822	15.700	19.700	20.700
2.500	19.80	17.478	17.478	17.478	21.478	22.478

THE STUDY ON THE FLOOD CONTROL FOR RIVERS
IN THE SELECTED URBAN CENTERS
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 4.22
Longitudinal Profile of Anilao River



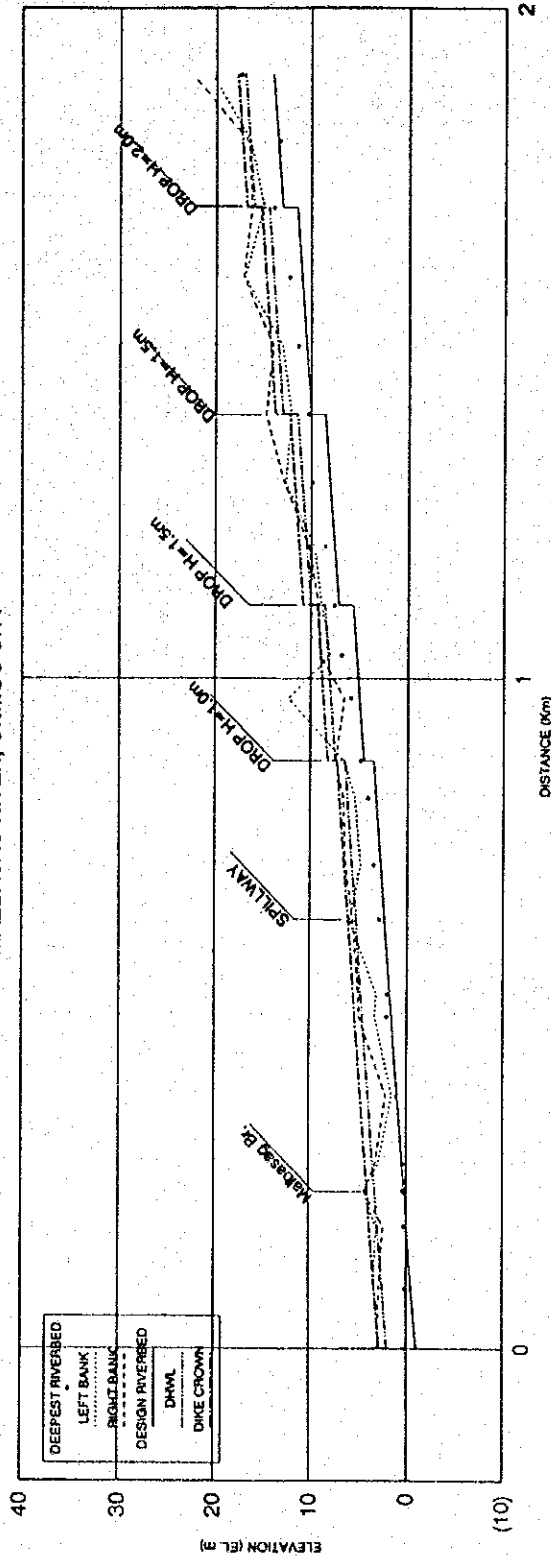
THE STUDY ON THE FLOOD CONTROL FOR RIVER IN THE SELECTED URBAN CENTERS
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THE STUDY ON THE FLOOD CONTROL FOR RIVERS
 IN THE SELECTED URBAN CENTERS
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Fig. 4.23
 Proposed Channel Alignment and Cross Section of
 Malbasag River

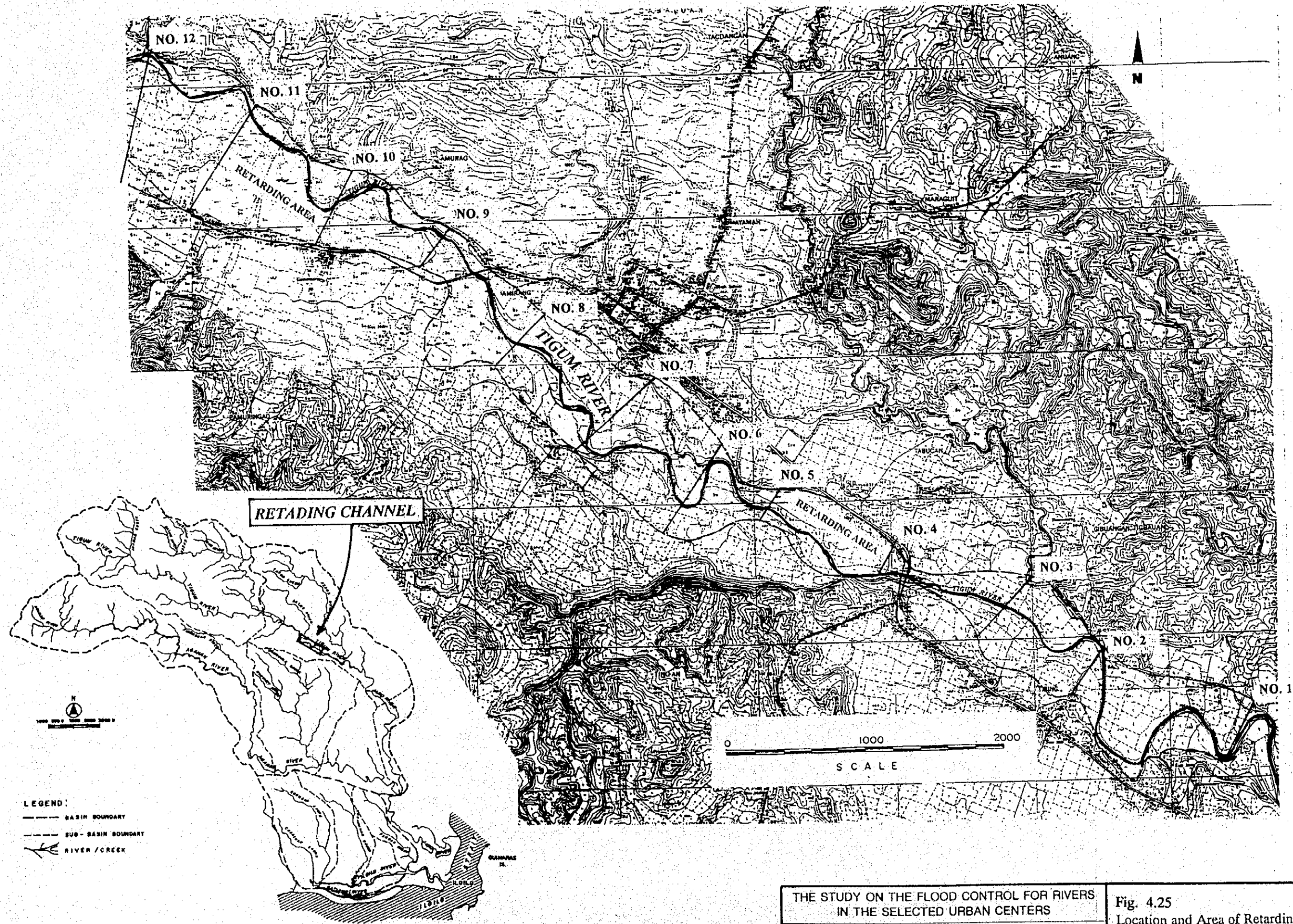
**LONGITUDINAL PROFILE
MALBASAG RIVER, ORMOC CITY**



STATION No.	LEFT BANK	DEEPEST RIVERBED	DESIGN RIVERBED	DESIGN HWL	DIKE CROWN	GRADIENT OF RIVERBED
0.000	2.90	2.70	0.17	0.90	2.00	2.80
0.080	3.25	3.07	0.23	0.95	2.45	2.25
0.180	3.07	2.90	0.08	0.85	2.95	3.75
0.237	4.30	4.30	0.40	0.10	3.10	3.95
0.277	2.78	3.00	0.38	0.35	4.15	4.15
0.377	1.30	2.04	0.97	0.65	3.65	4.65
0.430				1.15	4.15	4.95
0.486	3.15	4.80	2.00	1.40	4.40	5.20
0.530	3.05	4.87	1.95	1.65	4.65	5.45
0.640	5.90	5.50	2.80	2.20	5.20	6.00
0.720	4.66	6.26	3.38	2.60	5.60	6.40
0.820	5.30	6.51	3.94	3.10	6.10	6.80
0.875	6.40	7.30	4.70	4.375	7.375	8.175
0.875	6.40	7.30	4.375	4.375	7.375	8.175
0.970	12.34	6.41	5.77	4.65	7.65	8.65
1.035	7.83	8.88	6.76	5.55	8.175	8.875
1.110	8.84	9.15	7.54	7.05	10.05	10.85
1.200	9.98	10.28	8.52	7.50	11.30	11.30
1.298	12.70	12.90	9.80	7.80	11.75	11.75
1.398	12.14	14.76	10.32	8.90	12.20	12.20
1.498	12.98	14.00	11.42	9.60	13.70	13.70
1.508	17.01	12.33	12.33	9.90	13.90	14.70
1.598	15.01	18.26	13.95	11.50	15.30	15.30
1.600	18.40	16.80	13.30	13.50	16.50	17.30
1.800	20.46	22.54	17.41	14.00	17.00	17.80

THE STUDY ON THE FLOOD CONTROL FOR RIVERS
IN THE SELECTED URBAN CENTERS
JAPAN INTERNATIONAL COOPERATION AGENCY

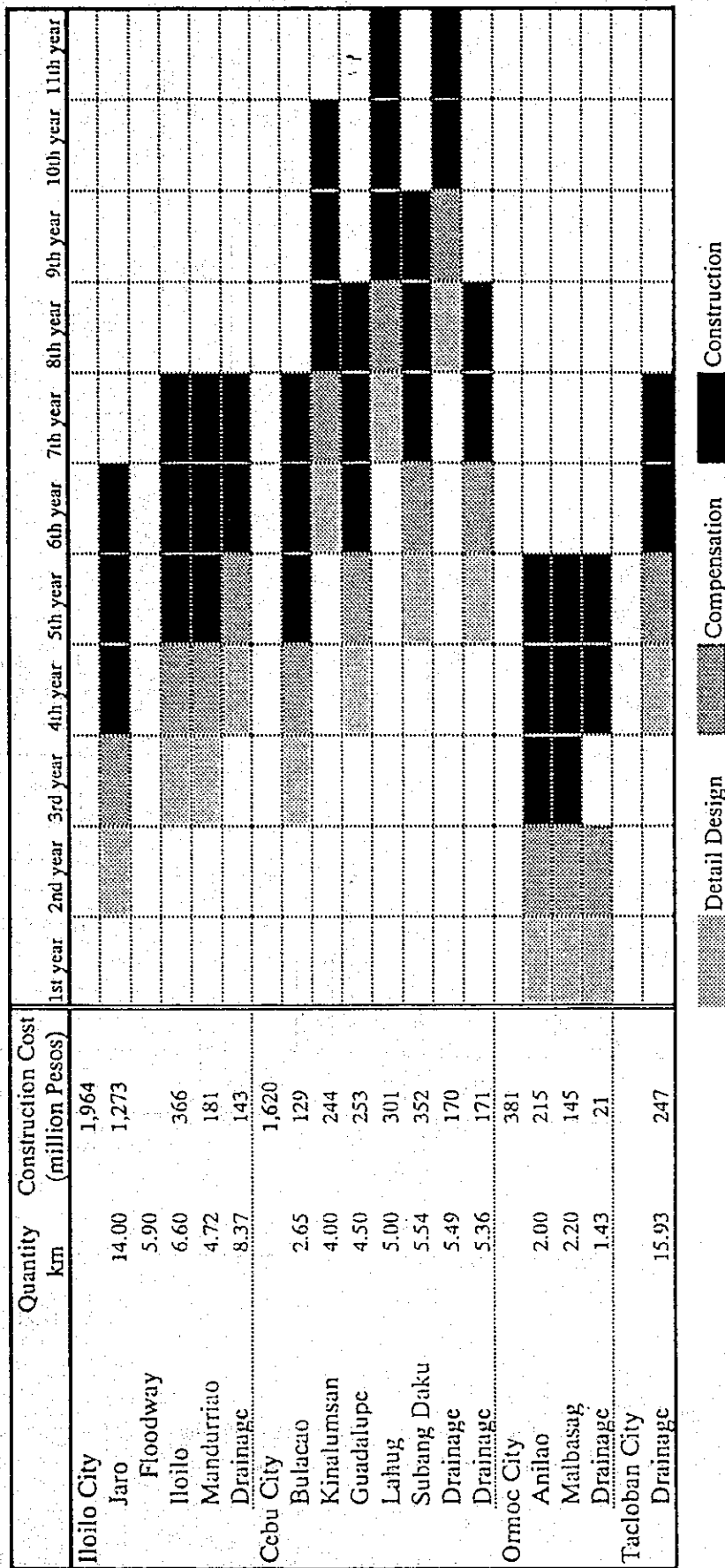
Fig. 4.24
Longitudinal Profile of Malbasag River



THE STUDY ON THE FLOOD CONTROL FOR RIVERS
 IN THE SELECTED URBAN CENTERS
 JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 4.25
 Location and Area of Retarding Channel

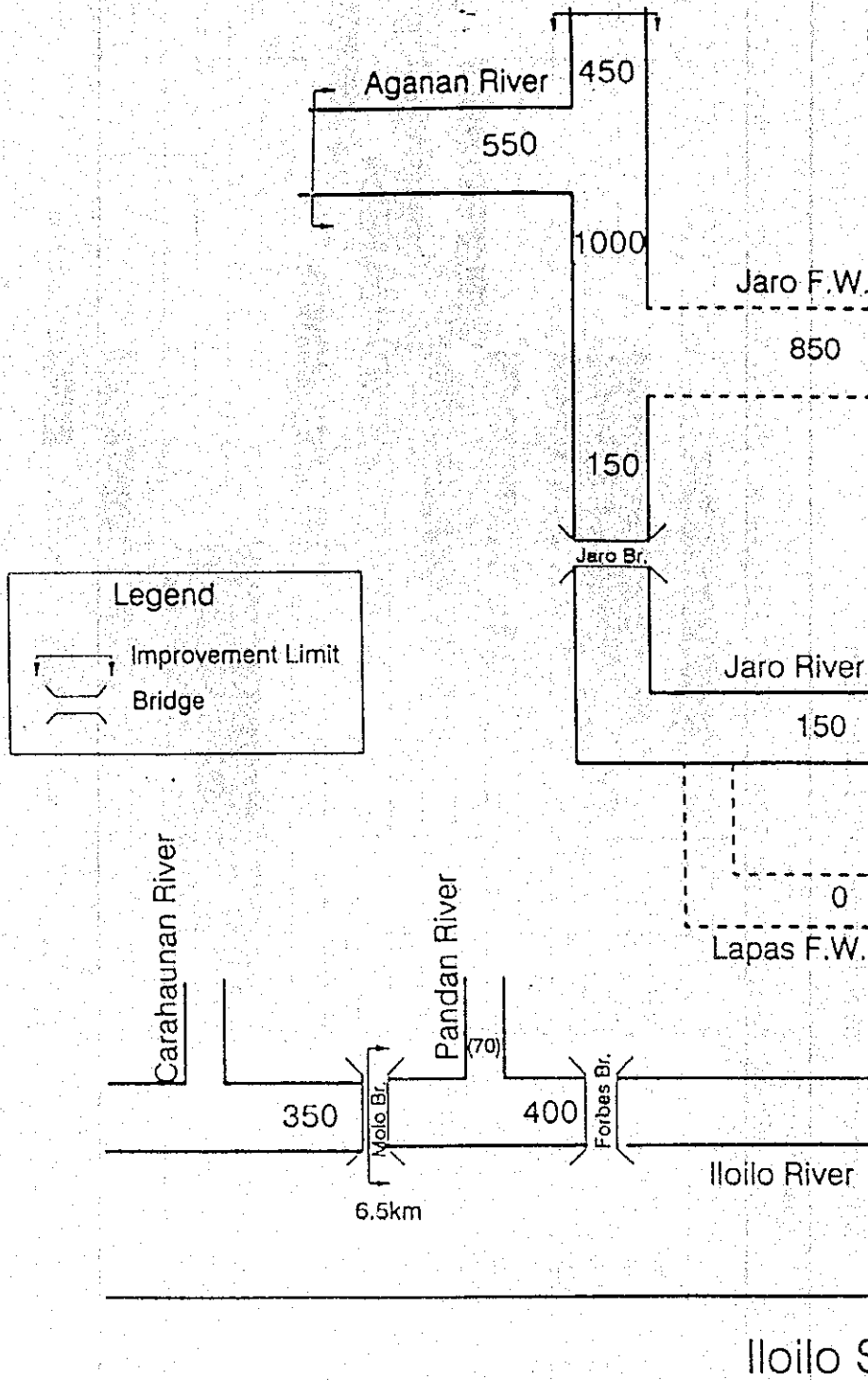
Implementation Schedule for Master Plan



Detail Design
 Compensation
 Construction

THE STUDY ON THE FLOOD CONTROL FOR RIVERS
IN THE SELECTED URBAN CENTERS
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 4.26
Implementation Schedule for Master Plan



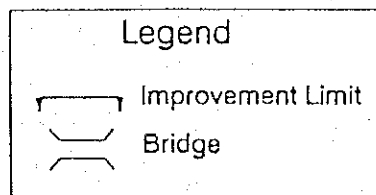
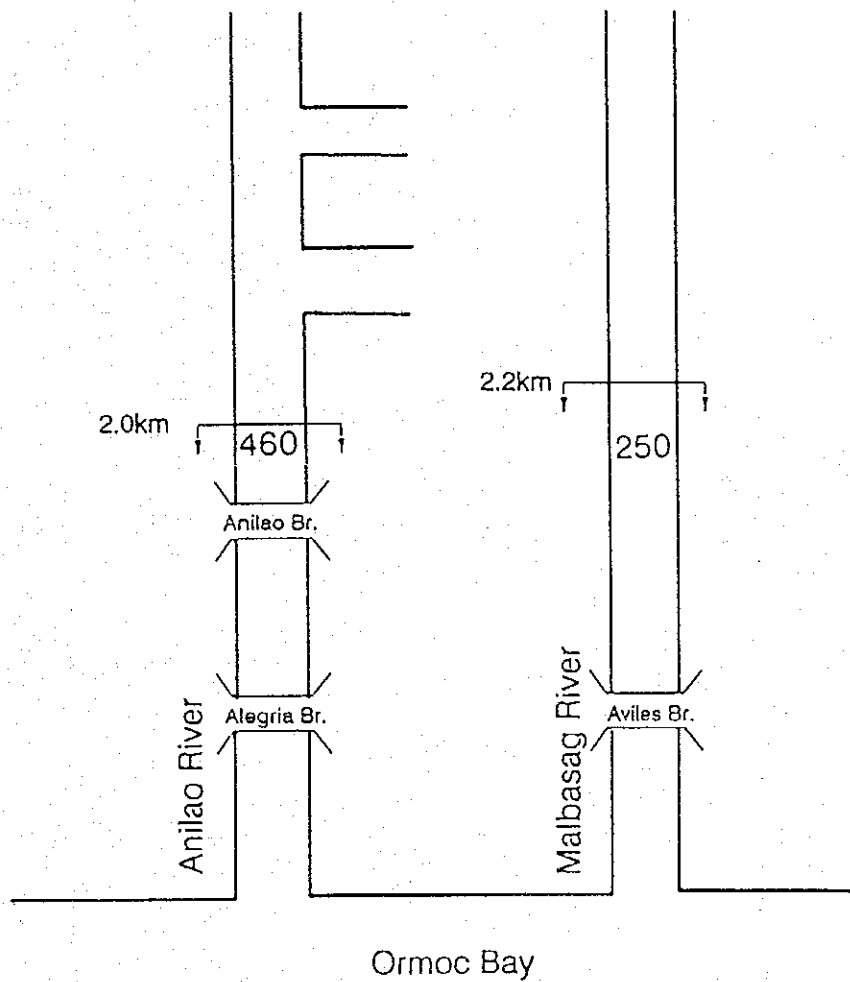
Legend

— Improvement Limit

— Bridge

- Note: 1. Unit: m³/s
2. The Figures show probable Flood Discharge of 50-Year Return Period
3. (.) shows probable Flood Discharge of 20-Year Return Period

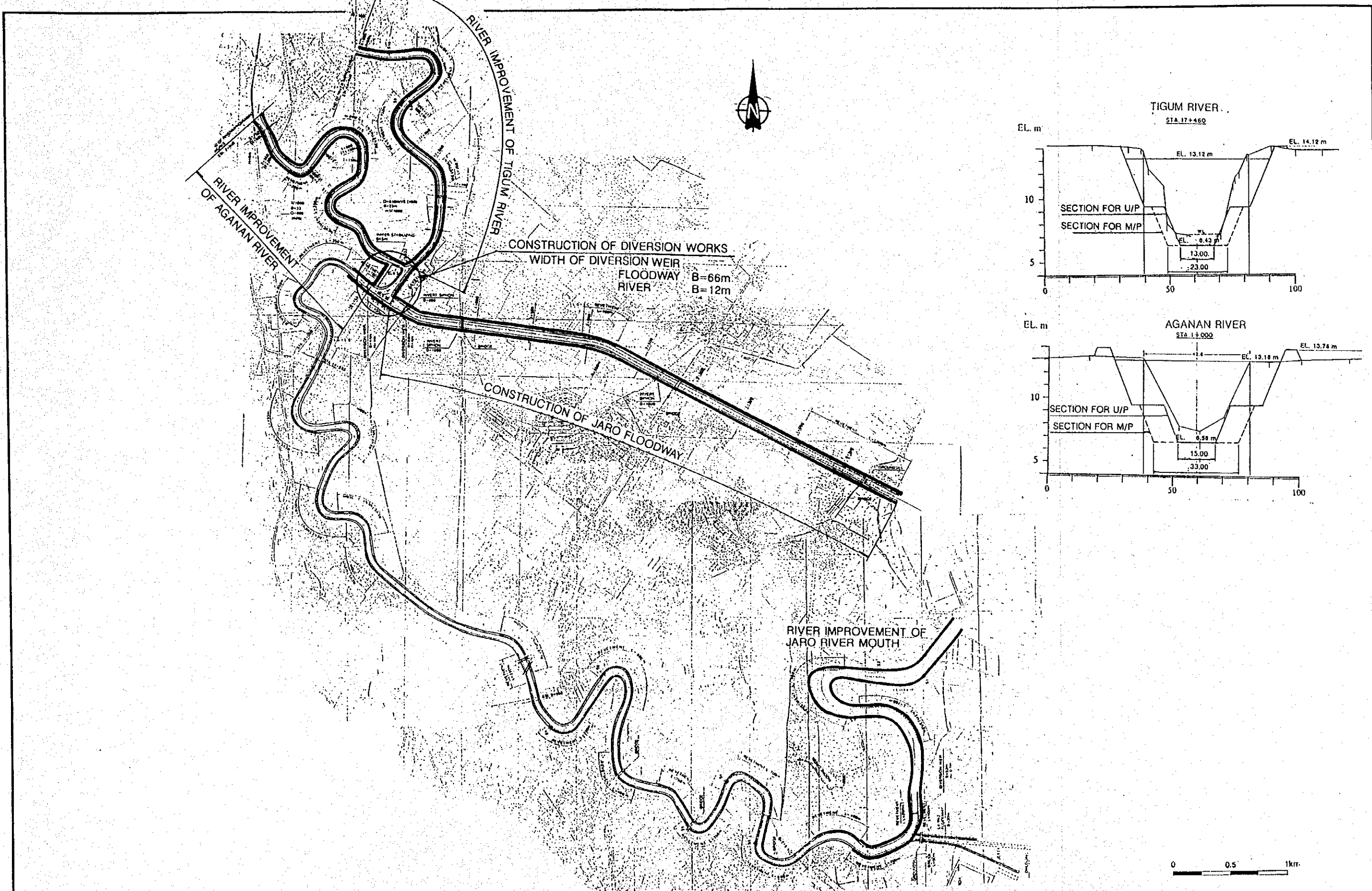
THE STUDY ON THE FLOOD CONTROL FOR RIVERS IN THE SELECTED URBAN CENTERS	Fig. 5.1(1/2) Distribution of Design Discharge for Urgent Plan (Iloilo)
JAPAN INTERNATIONAL COOPERATION AGENCY	



Note: 1. Unit: m³/s

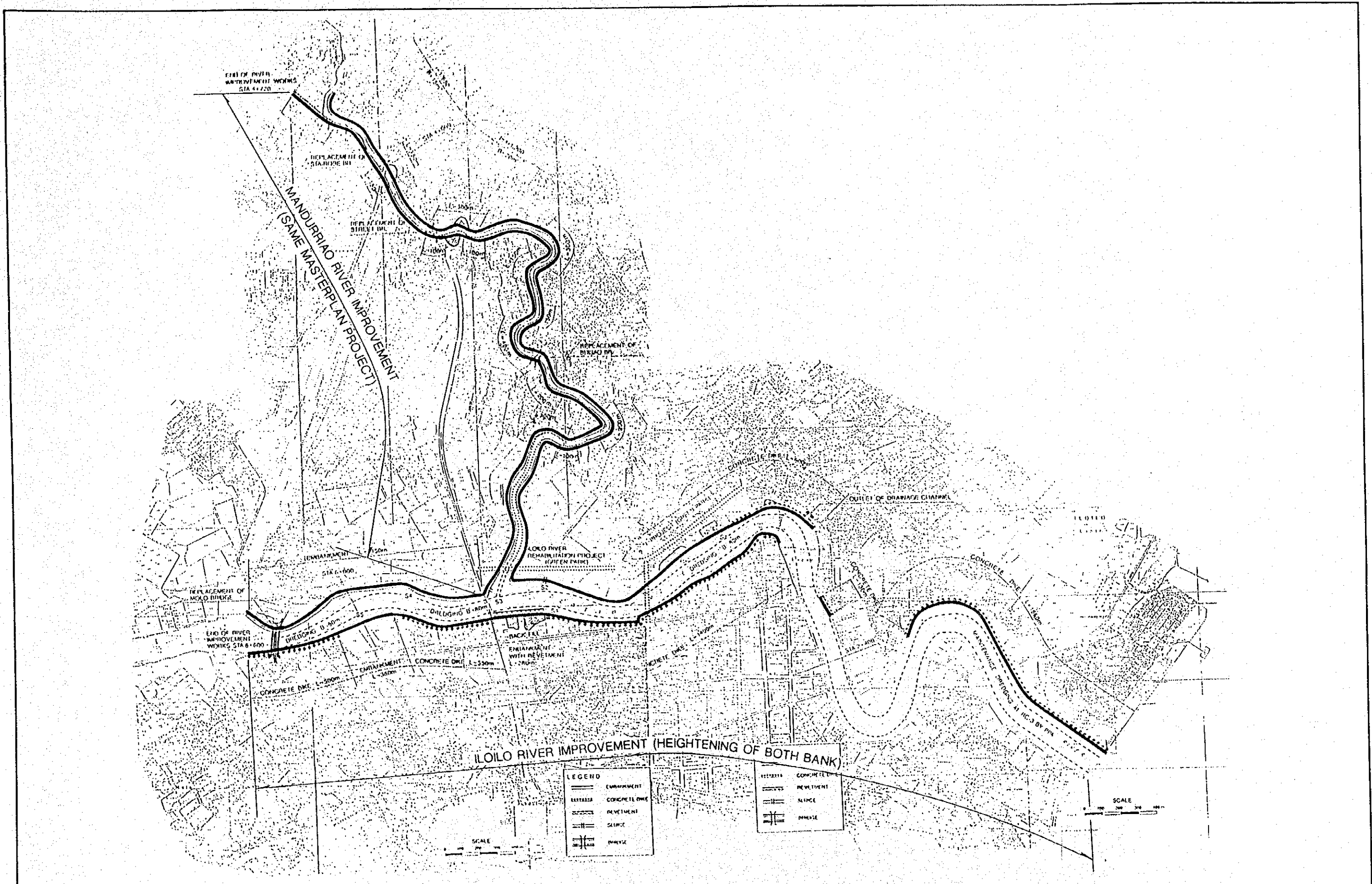
2. The Figures show probable Flood Discharge of 50-Year Return Period

THE STUDY ON THE FLOOD CONTROL FOR RIVERS IN THE SELECTED URBAN CENTERS JAPAN INTERNATIONAL COOPERATION AGENCY	Fig. 5.1(2/2) Distribution of Design Discharge for Urgent Plan (Ormoc)
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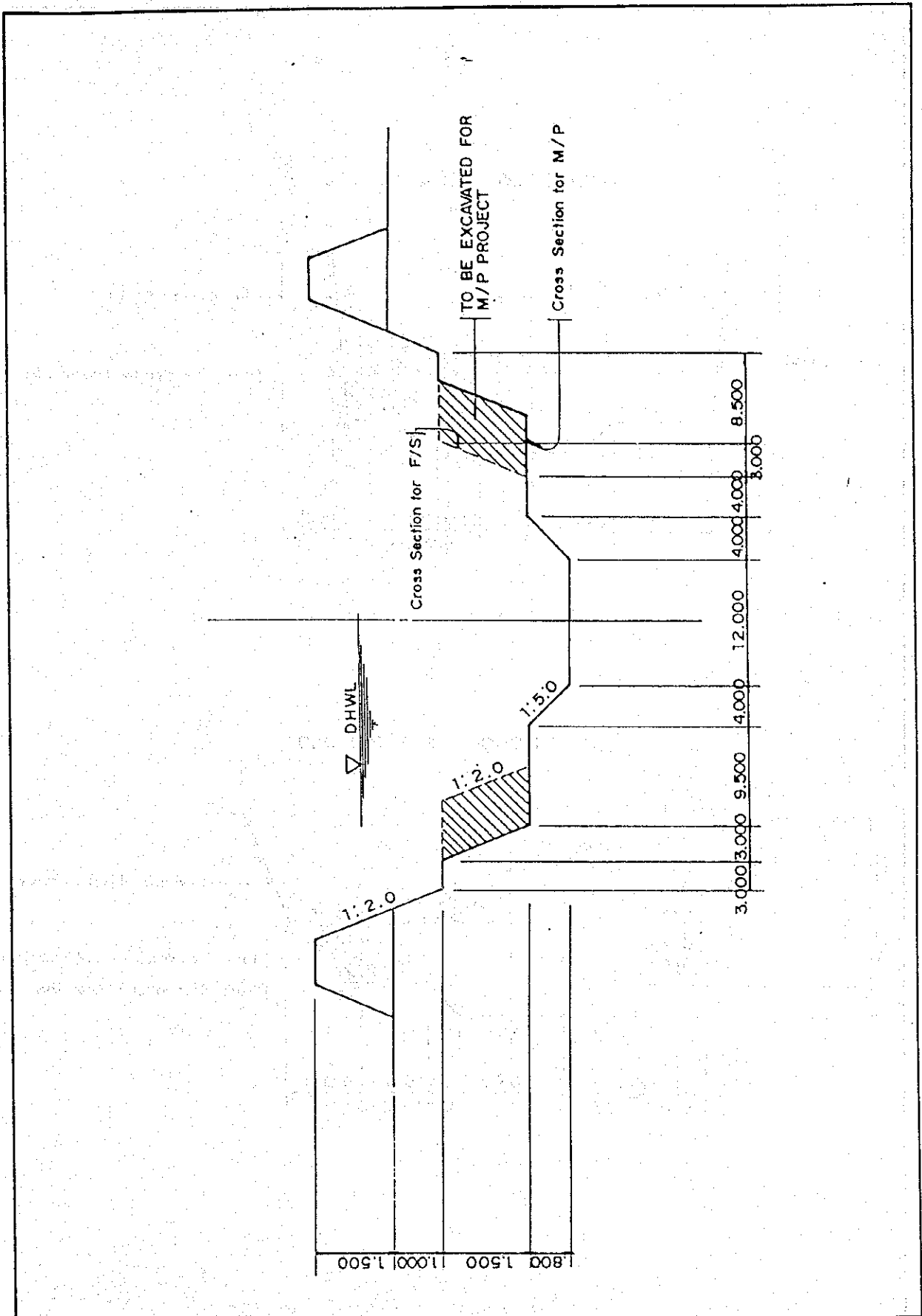
THE STUDY ON THE FLOOD CONTROL FOR RIVERS
 IN THE SELECTED URBAN CENTERS
 JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 5.2
 Urgent Plan of Jaro River Improvement

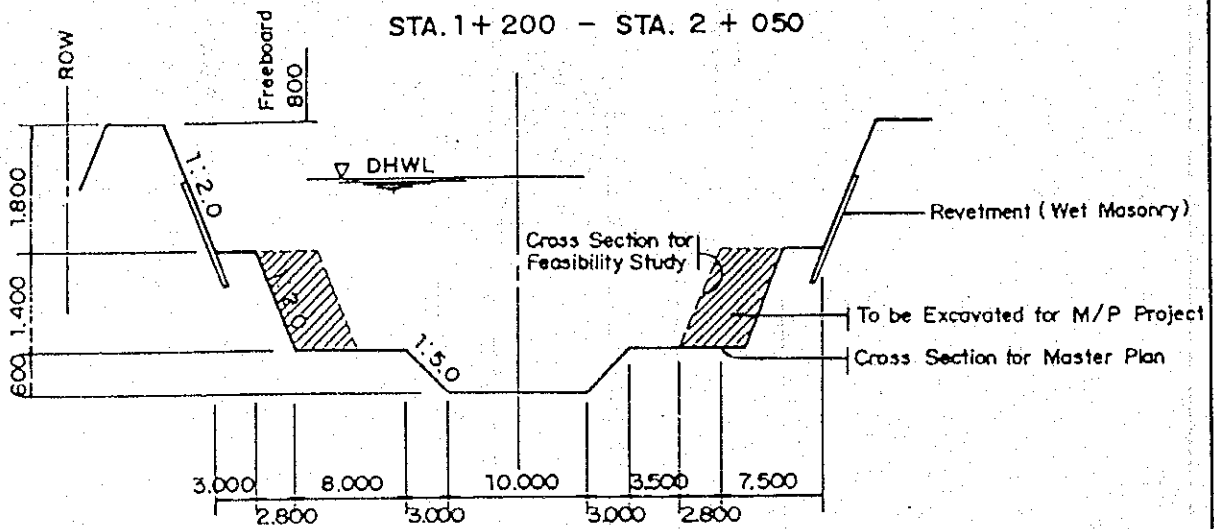
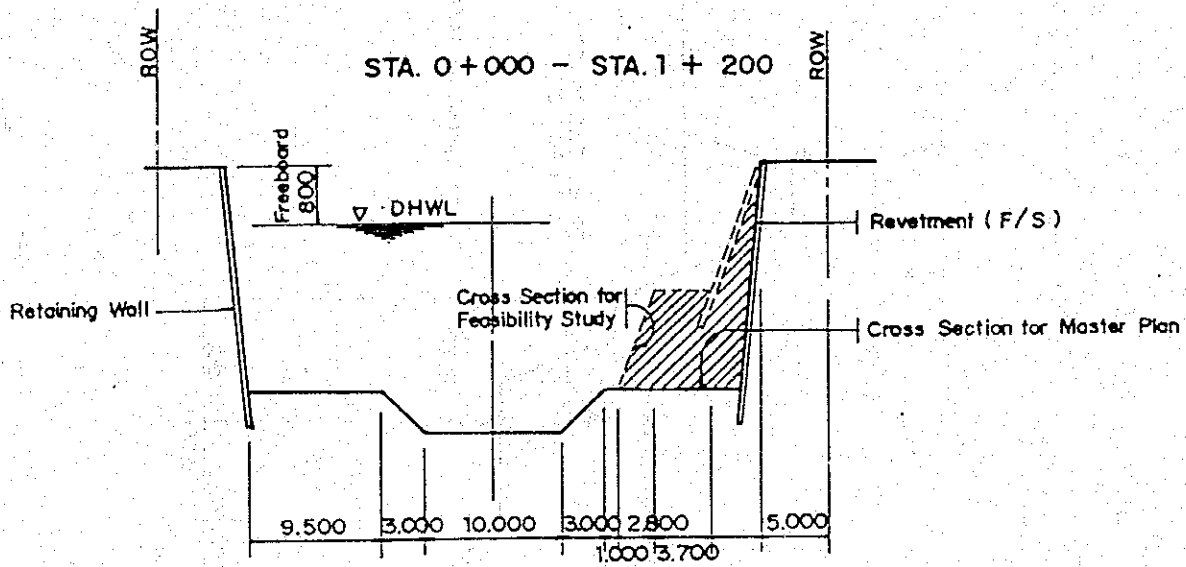


THE STUDY ON THE FLOOD CONTROL FOR RIVERS
 IN THE SELECTED URBAN CENTERS
 JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 5.3
 Urgent Plan of Iloilo River Improvement



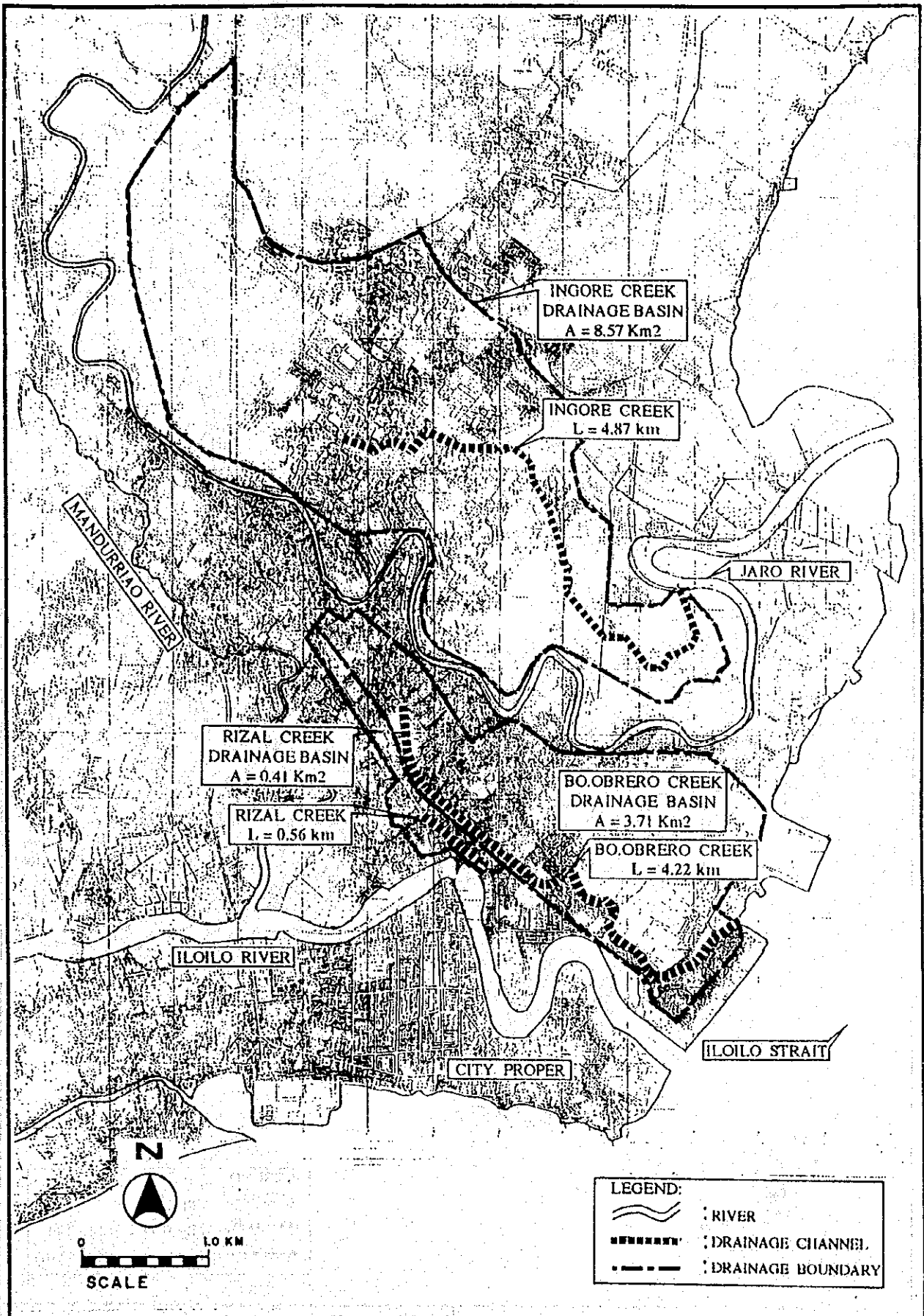
<p>THE STUDY ON THE FLOOD CONTROL FOR RIVERS IN THE SELECTED URBAN CENTERS</p>	<p>Fig. 5.4 Cross Section for Master Plan and Urgent Plan (Anilao River)</p>
<p>JAPAN INTERNATIONAL COOPERATION AGENCY</p>	



THE STUDY ON THE FLOOD CONTROL FOR RIVERS
IN THE SELECTED URBAN CENTERS

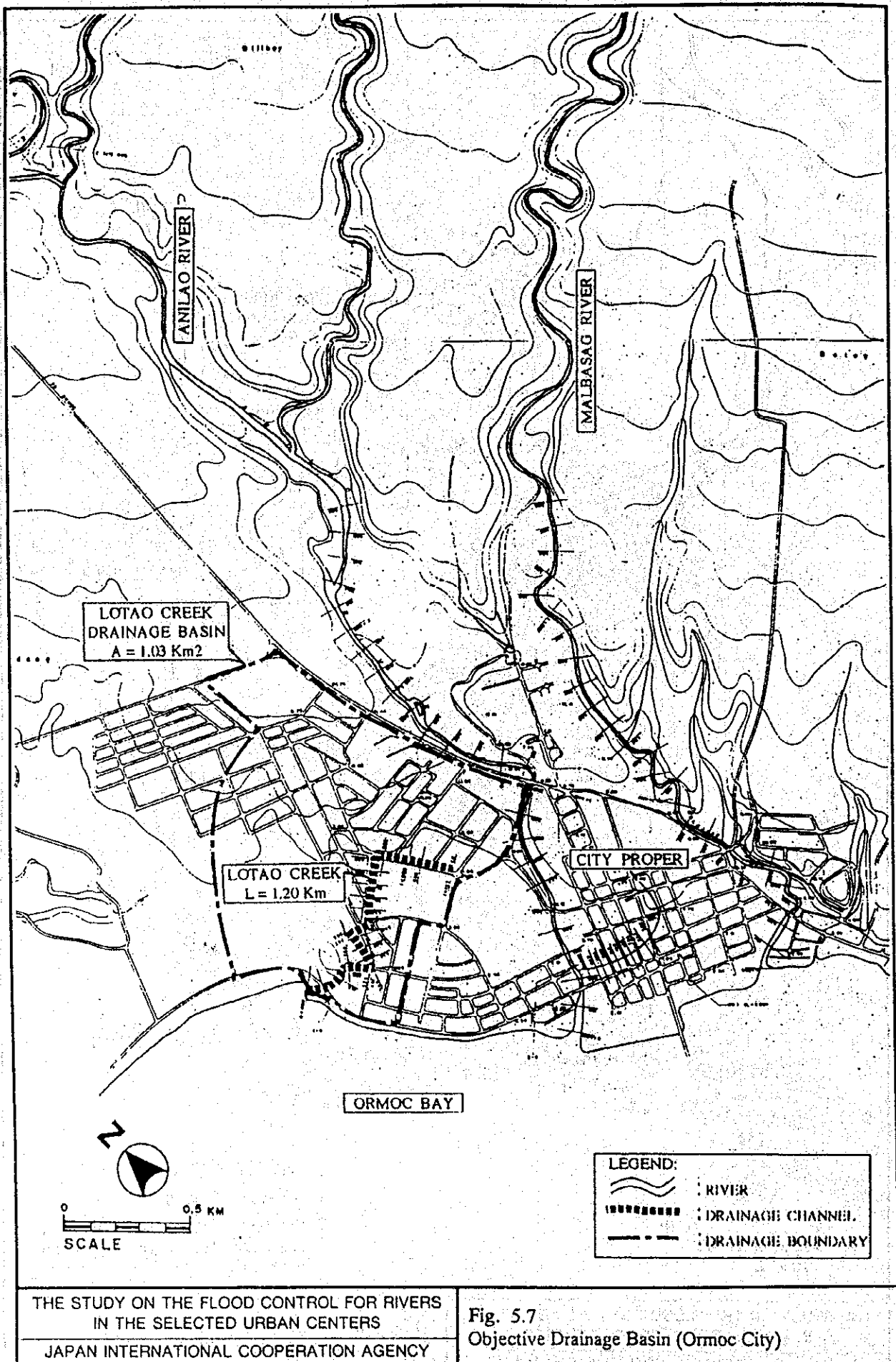
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 5.5
Cross Section for Master Plan and Urgent Plan.
(Malbasag River)



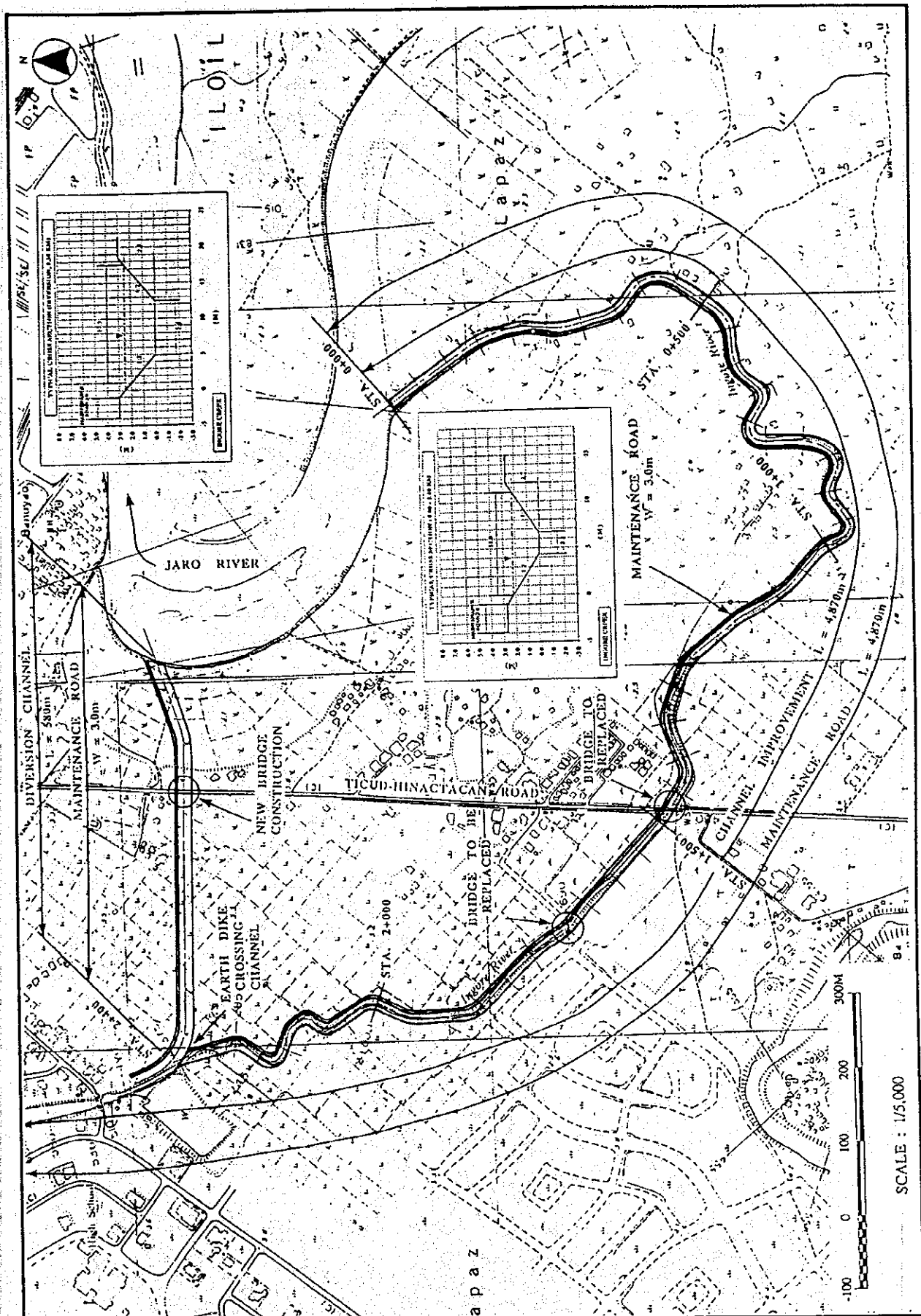
THE STUDY ON THE FLOOD CONTROL FOR RIVERS
 IN THE SELECTED URBAN CENTERS
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Fig. 5.6
 Objective Drainage Basin (Iloilo City)



THE STUDY ON THE FLOOD CONTROL FOR RIVERS
 IN THE SELECTED URBAN CENTERS
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Fig. 5.7
 Objective Drainage Basin (Ormoc City)



THE STUDY ON THE FLOOD CONTROL FOR RIVERS
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Fig. 5.8(1/2)
 Proposed Channel Alignment and Typical Cross
 Section, Incore Creek