

Table G.11(3) Design Discharge For Sluice Gate

Block No.	Drainage Area (km ²)	Velocity (m/s)	Time of Concentration (min)	Rainfall Intensity (mm/hr)	Run-off Coefficient	Areal Reduction Factor	Run-Off (m ³ /s)
Buriganga River Left Bank Zone (DA)							
DA-1	6.96	0.80	97.73	60.96	0.40	0.96	* 45.25
Turag River Left Bank Zone (DB)							
DB-1	5.88	0.80	91.44	63.67	0.40	0.96	* 39.93
DB-2	6.33	0.80	94.13	62.48	0.40	0.96	* 42.19
DB-3	13.81	0.80	129.49	50.17	0.40	0.93	* 71.59
DB-4	3.20	0.80	72.70	73.39	0.40	0.98	* 25.57
DB-5	13.88	0.80	129.77	50.09	0.40	0.93	* 71.85
DB-6	23.95	0.80	164.19	42.04	0.40	0.90	* 100.69
DB-7	37.52	0.80	200.47	35.95	0.40	0.85	* 127.40
DB-8	3.63	0.80	76.13	71.39	0.40	0.98	* 28.22
Balu River Right Bank Zone (DC-1)							
DC-1-1	5.79	0.80	90.89	63.91	0.40	0.96	* 39.47
DC-1-2	16.84	0.80	140.91	47.17	0.40	0.92	* 81.20
DC-1-3	5.78	0.80	90.83	63.94	0.40	0.96	* 39.42
DC-1-4	9.75	0.80	112.00	55.59	0.40	0.94	* 56.61
DC-1-5	11.49	0.80	119.87	53.01	0.40	0.94	* 63.62
DC-1-6	35.57	0.80	195.72	36.65	0.40	0.85	* 123.11
DC-1-7	5.21	0.80	87.25	65.61	0.40	0.97	* 36.84
DC-1-8	3.14	0.80	72.21	73.69	0.40	0.98	* 25.19
DC-1-9	1.94	0.80	61.04	81.10	0.40	0.99	* 17.31
Balu River Right Bank Zone (DC-2)							
DC-2-1	3.97	0.80	78.70	69.97	0.40	0.97	* 29.94
DC-2-2	4.94	0.80	85.48	66.47	0.40	0.97	* 35.39
DC-2-3	10.99	0.80	117.67	53.71	0.40	0.94	* 61.65
DC-2-4	3.22	0.80	72.87	73.29	0.40	0.98	* 25.70
DC-2-5	21.54	0.80	156.74	43.56	0.40	0.91	* 94.86
DC-2-6	3.04	0.80	71.37	74.19	0.40	0.98	* 24.56
DC-2-7	30.65	0.80	183.11	38.63	0.40	0.87	* 114.45
Balu River Right Bank Zone (DC-3)							
DC-3-1	8.81	1.00	87.83	65.33	0.40	1.00	* 66.65
DC-3-2	11.80	1.00	100.97	59.65	0.40	0.94	* 73.51
DC-3-3	17.64	0.80	143.74	46.48	0.40	0.92	* 83.81
DC-3-4	35.12	0.80	194.60	36.81	0.40	0.85	* 122.11
DC-3-5	5.36	0.80	88.21	65.15	0.40	0.97	* 37.64
DC-3-6	47.94	0.80	224.00	32.87	0.40	0.83	* 145.30
DC-3-7	6.59	1.00	86.67	65.89	0.42	1.00	* 52.17
DC-3-8	13.15	1.00	105.47	57.92	0.40	0.93	* 78.70
DC-3-9	7.39	0.80	100.09	60.00	0.40	0.95	* 46.80
DC-3-10	6.64	0.80	95.92	61.71	0.40	0.96	* 43.71
DC-3-11	16.99	0.80	141.44	47.04	0.40	0.92	* 81.69
DC-3-12	90.74	0.80	300.66	25.68	0.40	0.77	* 199.37
Tongi West Zone (TA)							
TA-1	4.13	0.80	79.88	69.34	0.40	0.97	* 30.86
TA-2	1.03	0.80	49.90	90.14	0.40	0.99	* 10.21
TA-3	4.89	0.80	85.15	66.63	0.40	0.97	* 35.12
TA-4	0.50	0.80	40.83	99.14	0.40	1.00	* 5.51
TA-5	2.78	0.80	69.12	75.59	0.40	0.98	* 22.88
TA-6	1.44	0.80	55.36	85.47	0.40	0.99	* 13.54
Tongi East Zone (TB)							
TB-1	4.64	0.80	83.46	67.47	0.40	0.97	* 33.74
TB-2	2.72	0.80	68.59	75.93	0.40	0.98	* 22.49
TB-3	3.53	0.80	75.36	71.84	0.40	0.98	* 27.61
TB-4	5.69	0.80	90.28	64.19	0.40	0.96	* 38.96
TB-5	0.81	0.80	46.52	93.30	0.40	1.00	* 8.40

Note: (1) Block No. are shown in FIG.H.23

(2) Figures with (*) show Design Discharge at Sluice Gates

(Contd.) Design Discharge For Sluice Gate

Block No.	Drainage Area (km ²)	Velocity (m/s)	Time of Concentration (min)	Rainfall Intensity (mm/hr)	Run-off Coefficient	Areal Reduction Factor	Run-Off (m ³ /s)
Savar Zone (S)							
S-1	6.23	0.80	93.54	62.74	0.40	0.97	42.12
S-2	10.70	0.80	116.38	54.12	0.40	0.94	60.49
S-3	4.60	0.80	83.19	67.61	0.40	0.97	33.52
S-4	4.16	0.80	80.09	69.22	0.40	0.98	31.66
S-5	14.21	0.80	131.06	49.73	0.40	0.93	73.03
S-6	26.47	0.80	171.58	40.64	0.40	0.88	105.18
S-7	4.94	0.80	85.48	66.47	0.40	0.97	35.39
S-8	6.08	0.80	92.65	63.13	0.40	0.96	40.94
S-9	2.01	0.80	61.77	80.57	0.40	0.99	17.81
S-10	2.87	0.80	69.91	75.10	0.40	0.98	23.47
S-11	6.11	0.80	92.83	63.05	0.40	0.97	41.52
S-12	9.36	0.80	110.14	56.23	0.40	0.94	54.97
S-13	5.19	0.80	87.12	65.67	0.40	0.97	36.73
S-14	16.63	0.80	140.15	47.36	0.40	0.90	78.76
DND Project Area (NA-1)							
NA-1-1	8.81	0.80	96.89	61.31	0.40	0.96	44.53
NA-1-2	3.41	0.80	74.41	72.38	0.40	0.98	26.88
NA-1-3	17.68	0.80	143.88	46.45	0.40	0.92	83.94
NA-1-4	3.30	0.80	73.52	72.90	0.40	0.98	26.20
NA-1-5	24.42	0.80	165.60	41.77	0.40	0.90	102.00
NA-1-6	4.81	0.80	83.26	67.58	0.40	0.97	33.58
NA-1-7	30.17	0.80	181.83	38.84	0.40	0.87	113.28
DND Project Area (NA-2)							
NA-2-1	7.78	0.80	102.18	59.17	0.40	0.95	48.59
NA-2-2	2.36	0.80	65.26	78.13	0.40	0.98	20.08
NA-2-3	14.39	0.80	131.76	49.54	0.40	0.93	73.67
NA-2-4	4.54	0.80	82.78	67.82	0.40	0.97	33.19
NA-2-5	2.68	0.80	68.23	76.16	0.40	0.98	22.23
NA-2-6	11.18	0.80	118.51	53.44	0.40	0.94	62.40
NA-2-7	26.62	0.80	172.01	40.56	0.40	0.88	105.57
Narayanganj West Zone (NB)							
NB-1	2.45	0.80	66.12	77.55	0.40	0.98	20.69
NB-2	5.52	0.80	89.22	64.68	0.40	0.96	38.08
NB-3	1.11	0.80	51.04	89.12	0.40	0.99	10.88
NB-4	2.41	0.80	65.74	77.80	0.40	0.98	20.42
NB-5	0.88	0.80	47.64	92.23	0.40	1.00	9.02
NB-6	3.57	0.80	75.67	71.66	0.40	0.97	27.57
NB-7	2.69	0.80	68.32	76.11	0.40	0.98	22.29
Narayanganj East Zone (NC)							
NC-1	1.02	0.80	49.76	90.27	0.40	0.99	10.13
NC-2	0.60	0.80	42.82	97.01	0.40	1.00	6.47
NC-3	3.27	0.80	73.28	73.05	0.40	0.98	26.01
NC-4	2.31	0.80	64.78	78.45	0.40	0.99	19.94
NC-5	1.92	0.80	60.82	81.25	0.40	0.99	17.16
NC-6	3.68	0.80	76.52	71.17	0.40	0.97	28.23
Keraniganj Zone (K)							
K-1	2.19	0.80	63.60	79.27	0.40	0.98	18.90
K-2	2.70	0.80	68.41	76.05	0.40	0.98	22.36
K-3	0.68	0.80	44.30	95.50	0.40	1.00	7.22
K-4	4.23	0.80	80.60	68.95	0.40	0.97	31.44
K-5	2.28	0.80	64.49	78.65	0.40	0.99	19.73
K-6	4.14	0.80	79.95	69.30	0.40	0.97	30.92
K-7	0.73	0.80	45.17	94.62	0.40	1.00	7.67
K-8	11.01	0.80	117.76	53.68	0.40	0.94	61.73

Note: (1) Block No. are shown in FIG.H.23

(2) Figures with (*) show Design Discharge at Sluice Gates

Table G.12 Affected Population by 1987 and 1988 Floods in Future Unprotected Flood Plain

Flood Plain	Constituent Union	Affected Population		Flood Plain	Constituent Union	Affected Population		
		1987	1988			1987	1988	
Buriganga/ Dhaleswari	Konda	45,039	47,509	Savar North	Pathalia	4,484	21,268	
	Teguria	25,944	27,053		Total			
	Basta	27,250	27,637				4,484	21,268
	Ruhitpur	21,872	22,160	Buriganga Lower Left				
	Sakta	38,317	38,432					
	Taranagar	27,930	27,930			<u>12</u>	<u>12</u>	
	Kalatia	30,722	31,127		Enayetnagar	10,696	13,197	
	Sultanganj	62,981	70,448		Kashipur	16,734	16,734	
						<u>13</u>	<u>13</u>	
Total	280,055	292,296	Total	27,430	29,931			
Turag				Grand Total				
	Kaundia	23,718	24,301			490,083	583,655	
	Biralia	7,087	10,121					
	Ashulia	6,295	8,058					
	Yearpur	10,290	11,230					
	Kasimpur	7,461	9,012					
Total	54,851	62,722						
Savar South				Note: <u>1</u> 20% of whole Savoar <u>12</u> 50% of whole Enayetnagar <u>13</u> 50% of whole Kashipur				
	Amin Bazar	26,513	27,054					
	Bhakurta	35,473	35,904					
	Hazratpur	14,706	14,991					
	Tetuljhora	22,673	25,590					
	Banagram	14,195	20,789					
	Savar	9,703	53,110					
	Total	123,263	177,438					

Table G.13 Danger Water Level and Evacuation Facilities

Flood Plain	Population (2010)	Area (ha)	Danger Water Level (Flood frequency)	G. L. of Residence (Flood frequency)	EL of Evacuation Roads (Flood frequency)	Evacuation Shelter (Capacity)	Remarks (Gauging Sta.)
1. Buriganga/ Dhaleswari							Abdullahpur (Proposed Sta.)
BD -1	102,880	4,177	5.9 m (1/3)	6.2 m (1/5)	6.8 m (1/15)	6 places (12,000 people)	Sta. No. 43
BD -2	85,647	4,138	6.0 m (1/3)	6.3 m (1/5)	6.9 m (1/15)		Sta. No. 42
BD -3	164,322	5,987	6.4 m (1/3)	6.7 m (1/4)	7.3 m (1/10)		Sta. No. 302/70
Total	352,849	14,302			L = 45.0 km		
2. Turag River							
TL - 1	87,631	3,315	6.7 m (1/3)	7.0 m (1/5)	7.3 m (1/10)		Sta. No. 302 Qasipur
TL - 2	74,745	4,577	6.7 m (1/3)	7.0 m (1/5)	7.3 m (1/15), L = 5.0 km		(Proposed Sta.)
Total	162,376	7,892					
3. Savar South	183,273	6,760	6.5 m (1/3)	6.8 m (1/4)	7.4 m (1/15), L = 20.5 km		Sta. No. 302
4. Savar North	27,000	962	7.4 m (1/3)	7.7 m (1/4)	8.3 m (1/15), L = 6.5 km	3 places (6,000 people)	Sta. No. 14.5/69
5. Buriganga Lower	30,222	927	5.9 m (1/5)	6.2 m (1/10)	6.8 m (1/50), L = 2.5 km		Sta. No. 42

Note :

1. Mounded Ground Level of Evacuation Shelter : H.W.L + 1.2 m
2. Land of Evacuation Center per place : 3000 m²
3. Evacuation Roads : Raised and Improved of Existing Roads
4. Gauging Sta. : Expected Water Level Monitoring Station

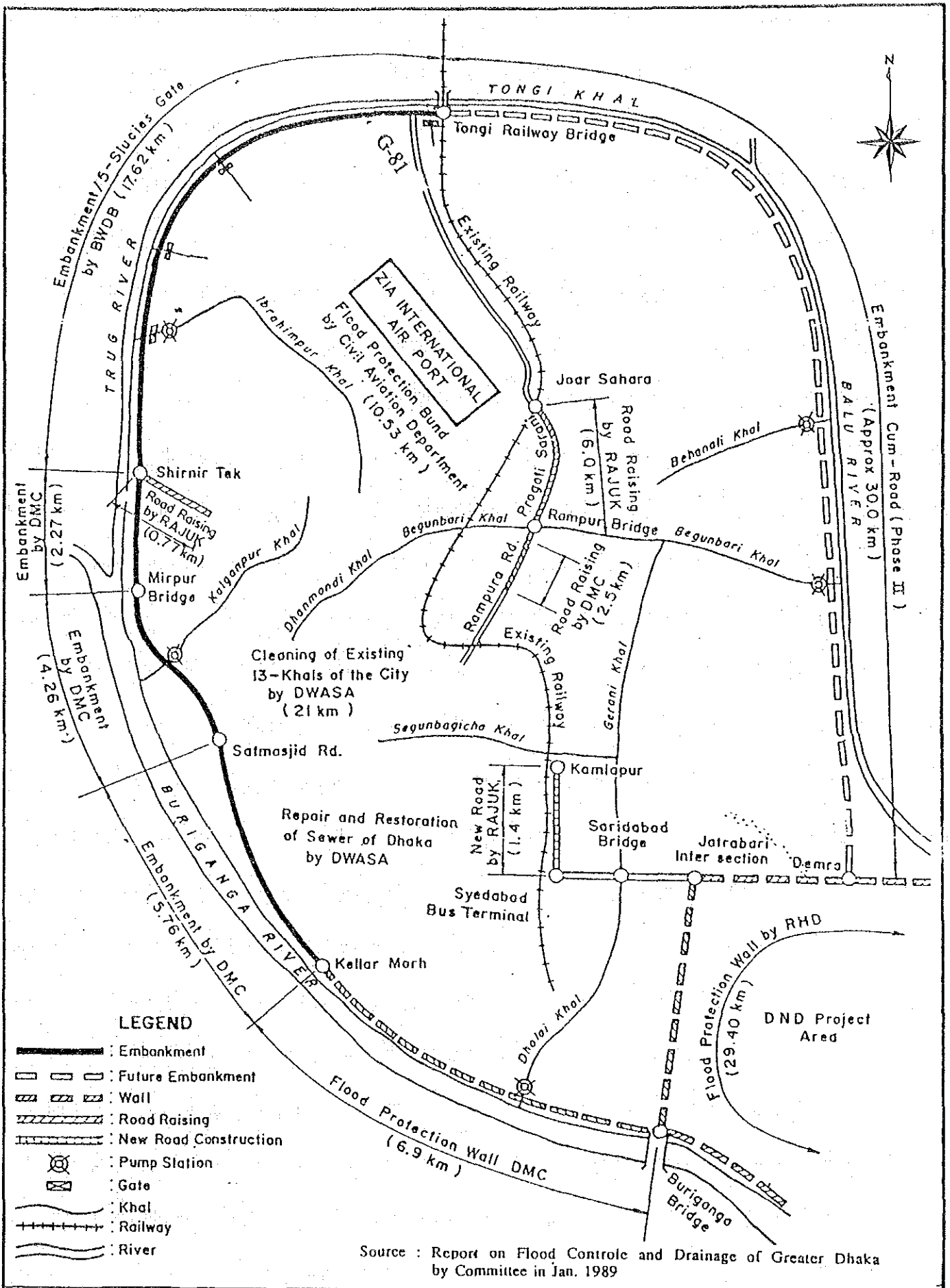


FIG. G.1

PROPOSED PROJECTS IN GDFCD PROJECT

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH

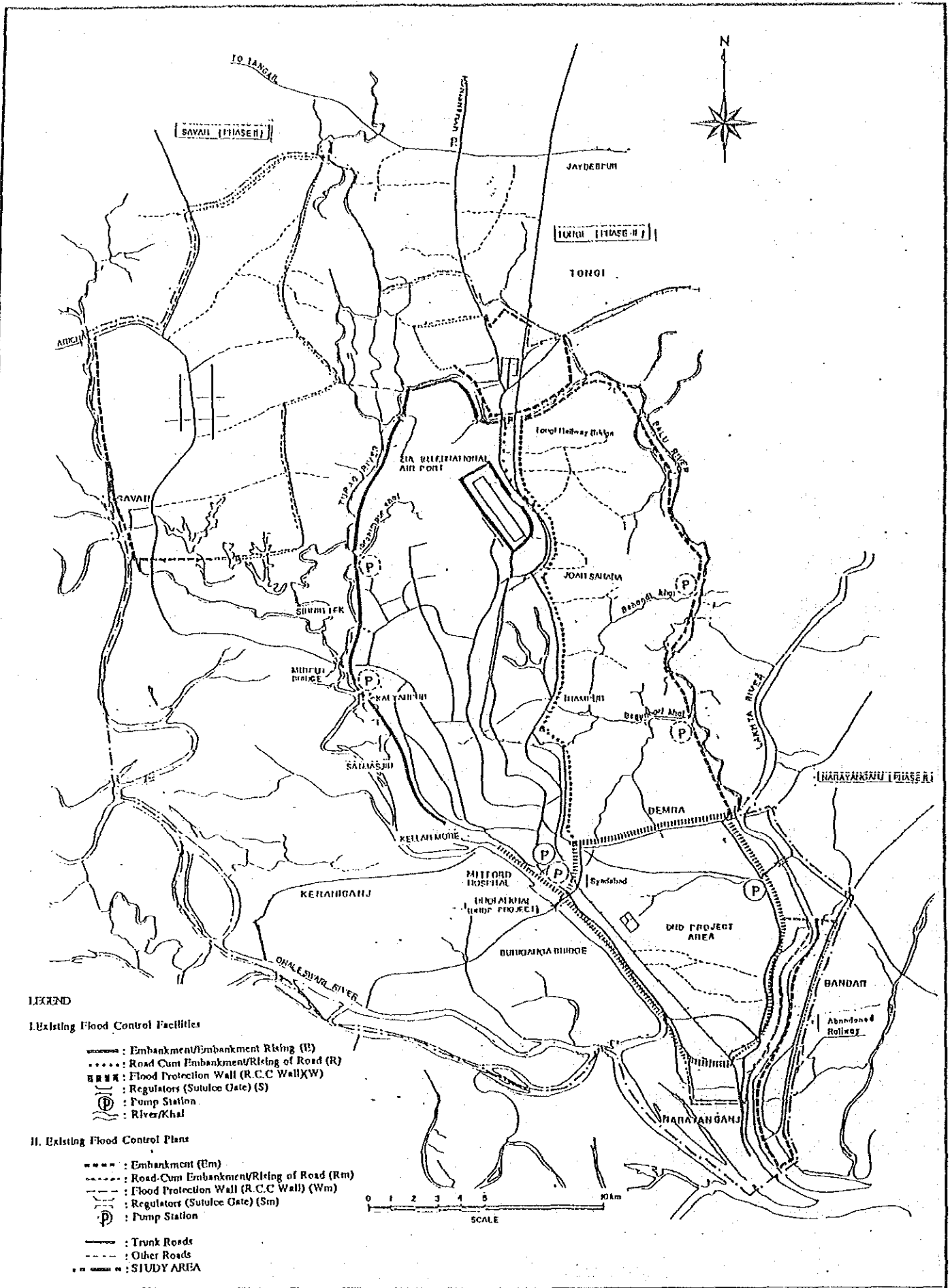


FIG. G.2

EXISTING (AND ON GOING) FLOOD CONTROL FACILITIES AND EXISTING FLOOD CONTROL PLANS

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH

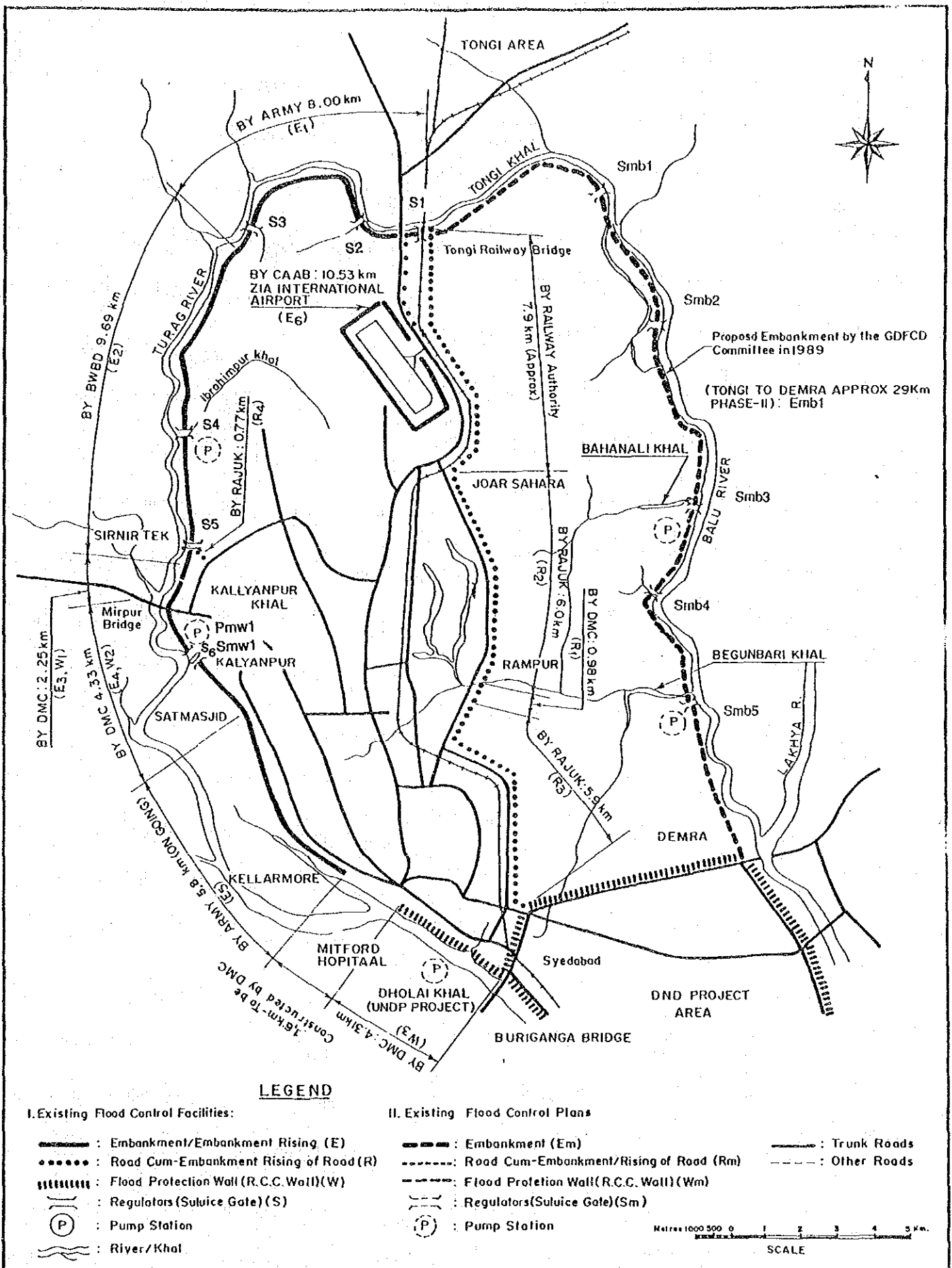
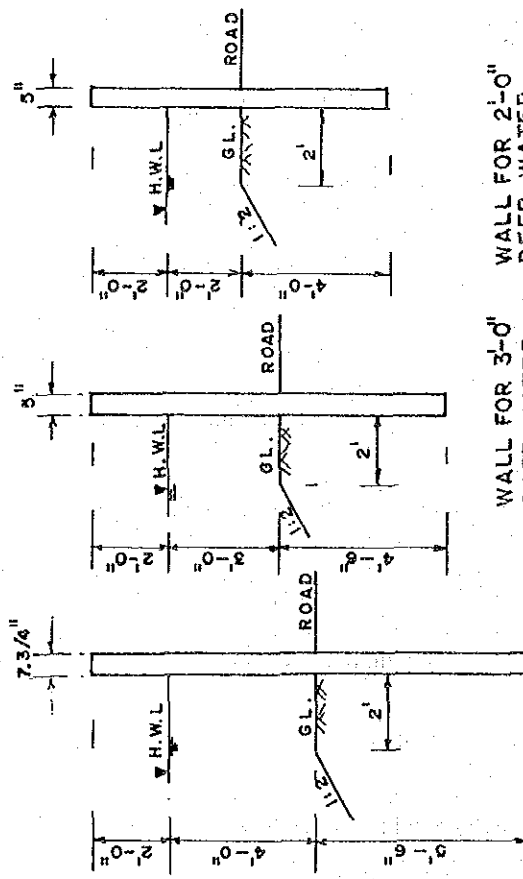
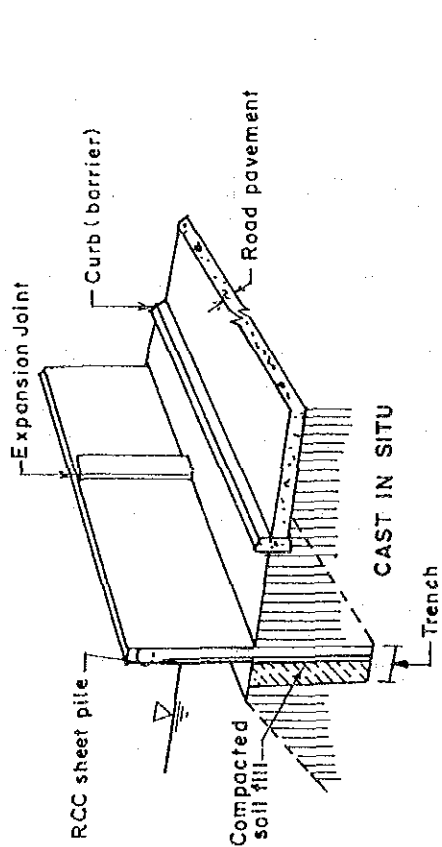


FIG. G.3

EXISTING (AND ON GOING) FLOOD CONTROL FACILITIES AND EXISTING FLOOD CONTROL PLANS - GREATER DHAKA

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH

FLOOD PROTECTION WALL (R.C.C WALL)



WALL FOR 4'-0" DEEP WATER

WALL FOR 3'-0" DEEP WATER

WALL FOR 2'-0" DEEP WATER

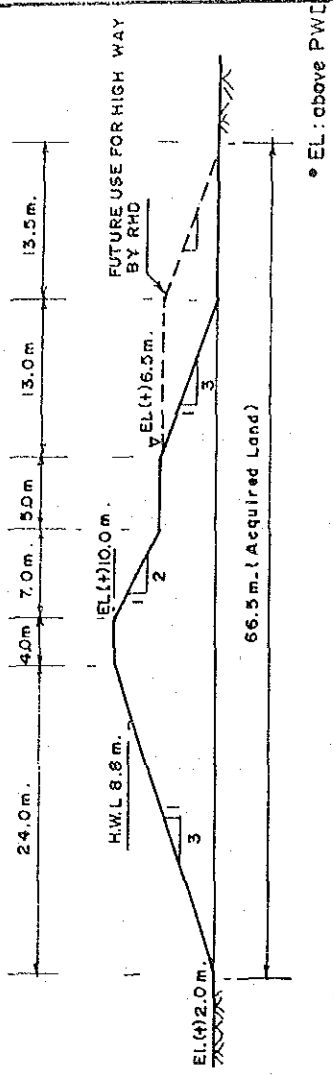
Typical Cross Section
DMC and RHD Construction

FIG. G.4

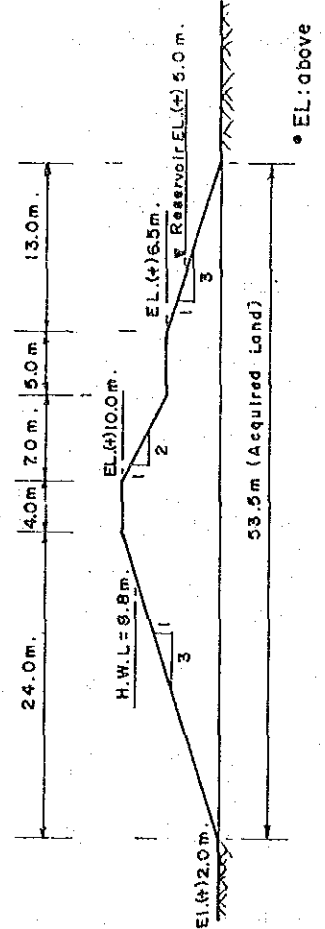
TYPICAL CROSS-SECTION OF EXISTING FLOOD PROTECTION
EMBANKMENT AND FLOOD WALL

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF
BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH

FLOOD PROTECTION EMBANKMENT



Typical Cross Section between Tongi To Shinir Tek
ARMY & BWDB Construction



Typical Cross Section between Shinir Tek to Keilar More
DMC and ARMY Construction

Source:
Information from BWDB, DMC, and RHD.



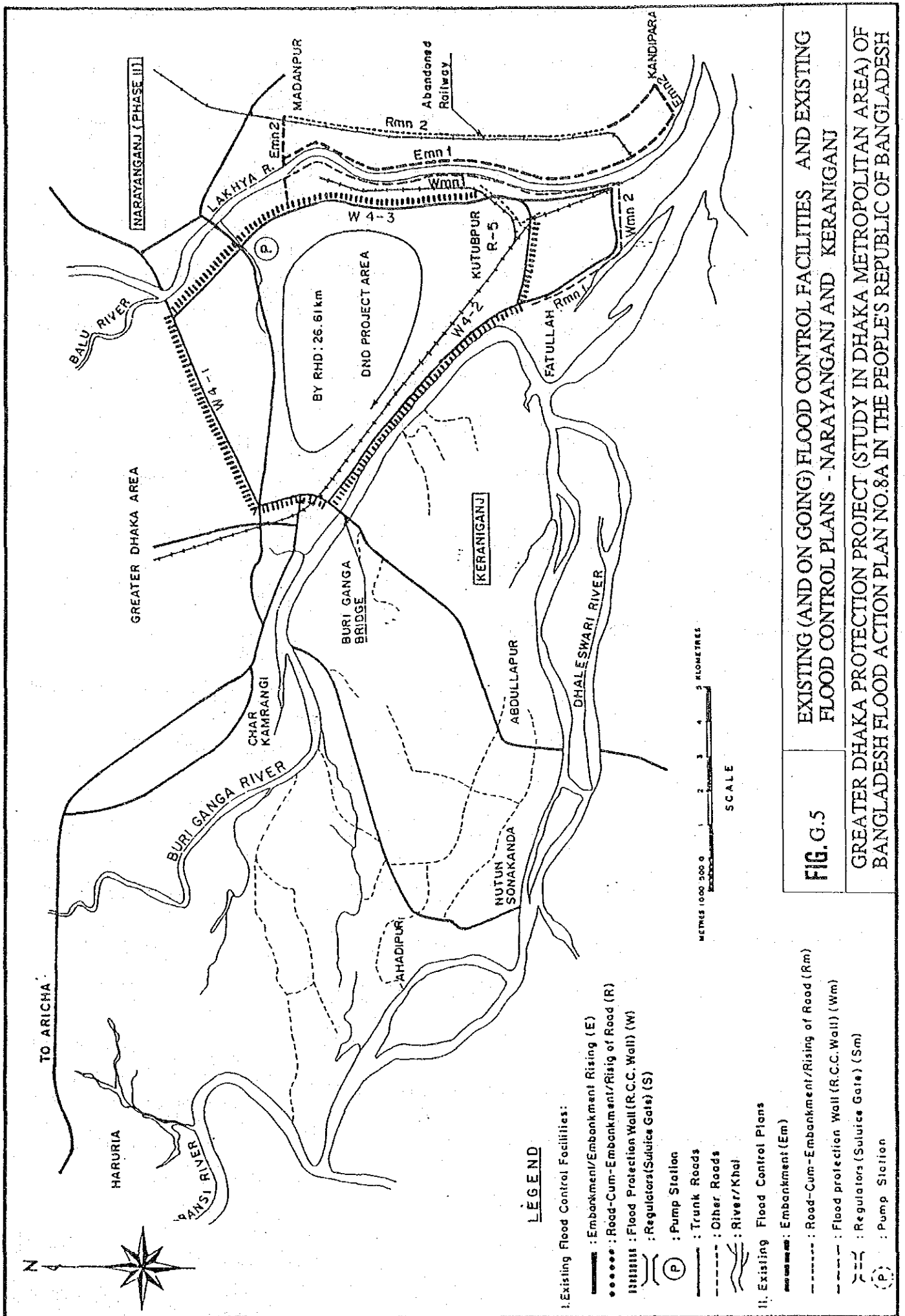
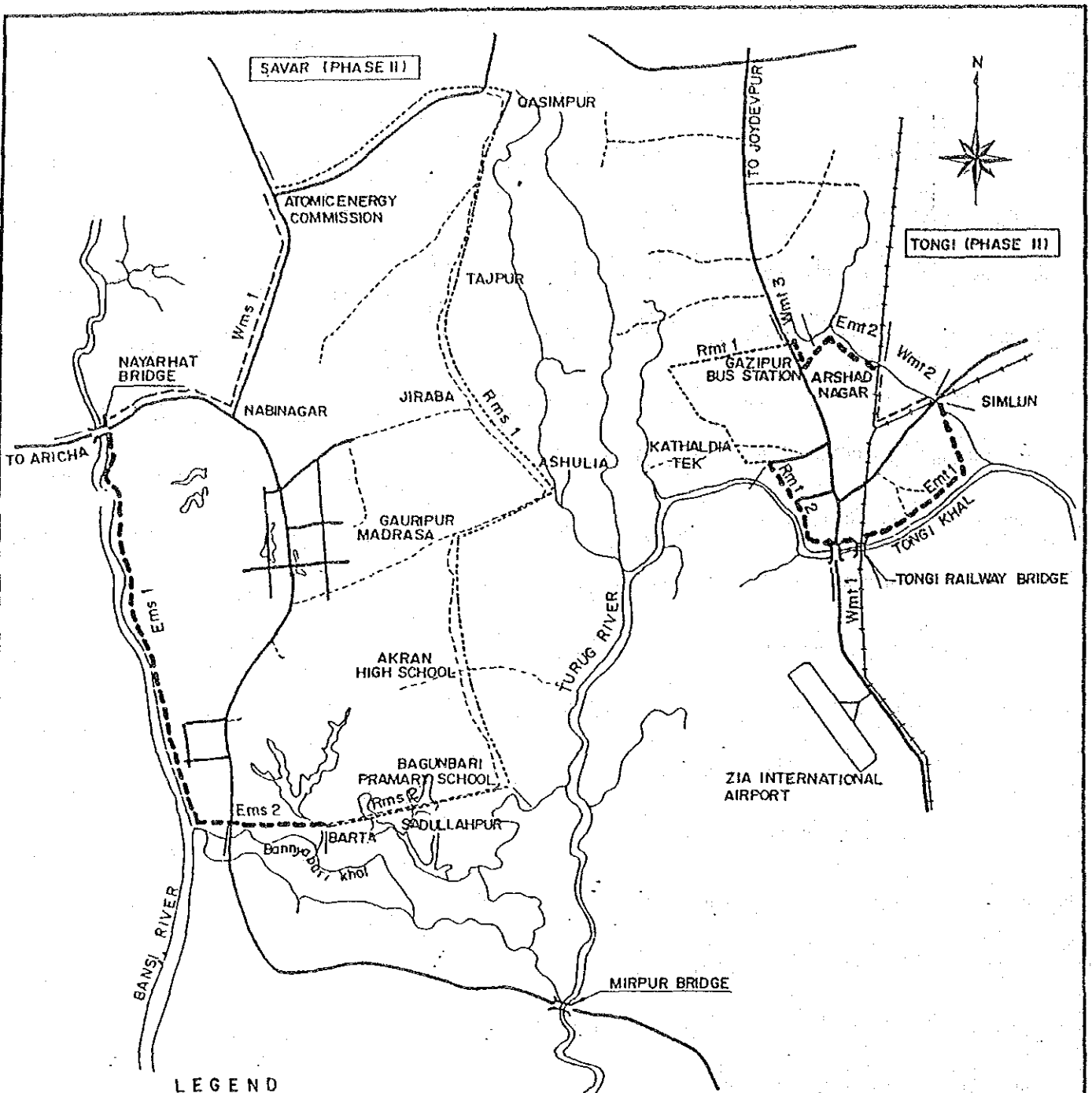


FIG. G.5 EXISTING (AND ON GOING) FLOOD CONTROL FACILITIES AND EXISTING FLOOD CONTROL PLANS - NARAYANGANJ AND KERANIGANJ

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH





LEGEND

I. Existing Flood Control Facilities

- : Embankment/Embankment Rising (E)
- : Road-Cum-Embankment/Rising of Road (R)
- |—|—| : Flood Protection Wall (R.C.C. Wall)(W)
- |—|—| : Regulators(Sluice Gate)(S)
- (P) : Pump Station
- |—|—| : River/Khal

II. Existing Flood Control Plans

- : Embankment (Em)
- : Road Cum-Embankment/Rising of Road (Rm)
- |—|—| : Flood Protection Wall(R.C.C. Wall)(Wm)
- |—|—| : Regulators(Sluice Gate (Sm)
- (P) : Pump Station
- : Trunk Road
- - - - : Other Road



FIG.G.6

EXISTING (AND ON GOING) FLOOD CONTROL FACILITIES AND EXISTING FLOOD CONTROL PLANS - TONGI AND SAVAR

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH

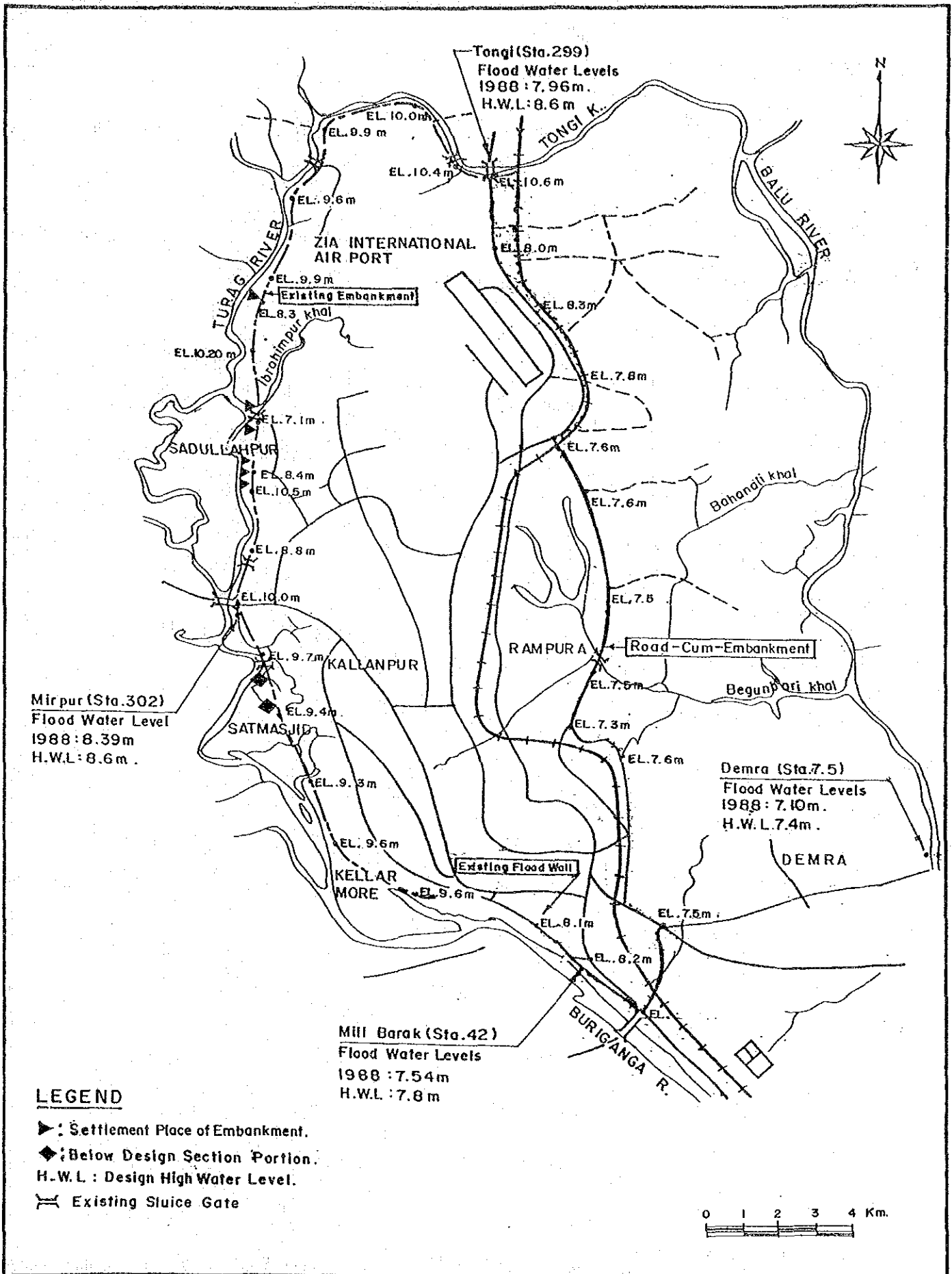
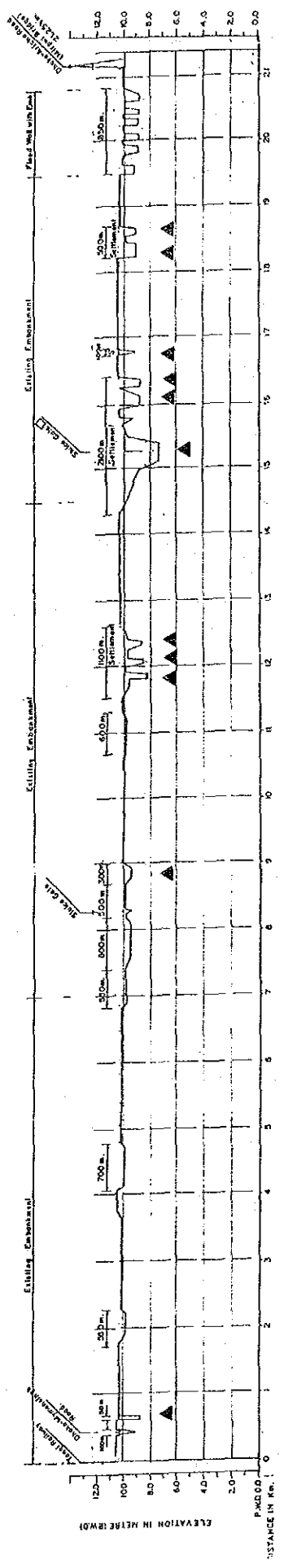


FIG. G.7(1)

SPOT LEVELS OF EXISTING FLOOD PROTECTION FACILITIES/TRUNK ROADS- GREATER DHAKA

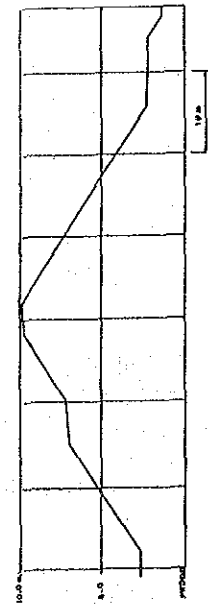
GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH

Tongi Railway Bridge-Mirpur Bridge
(Existing Embankment/Flood Wall)

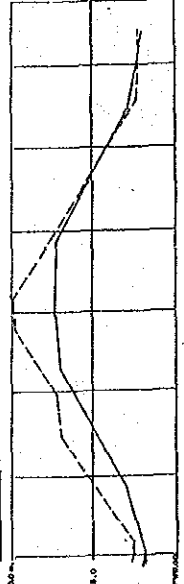


▲ : Location of Failed Section
Emb: Existing Embankment.

Tongi-Mirpur Standard Section



Failed Section



Failed Section

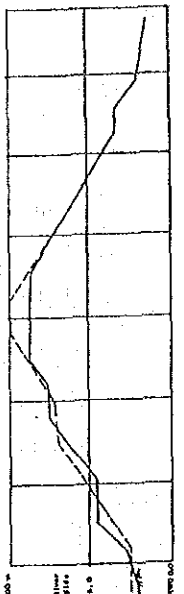
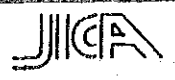
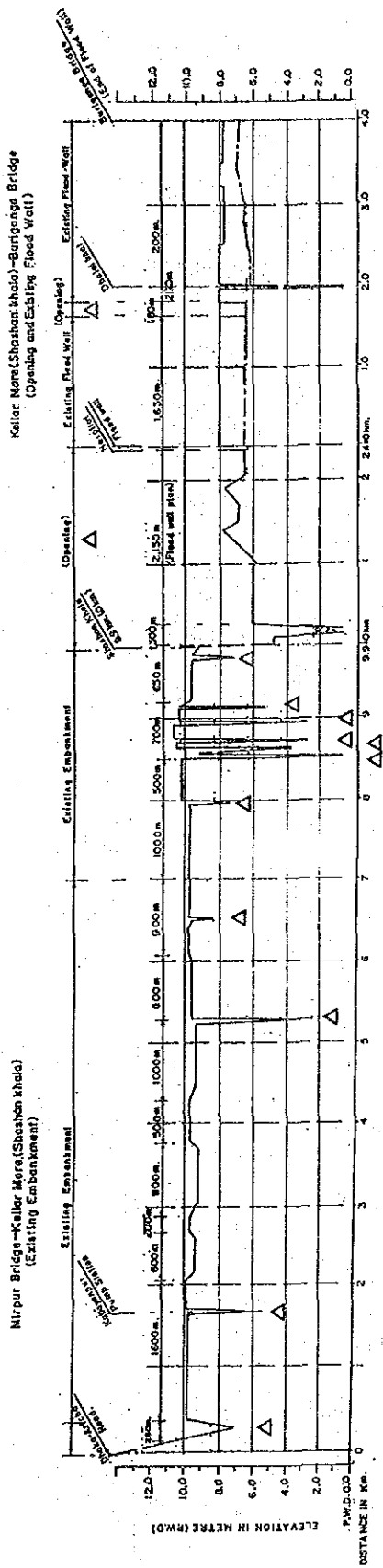


FIG. G.7(2) LONGITUDINAL AND CROSS SECTIONS OF EXISTING EMBANKMENT: TONGI RAILWAY TO MIRPUR BRIDGE

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH





Note: Δ : Incompleted Portion of the Survey Stage in June 1991

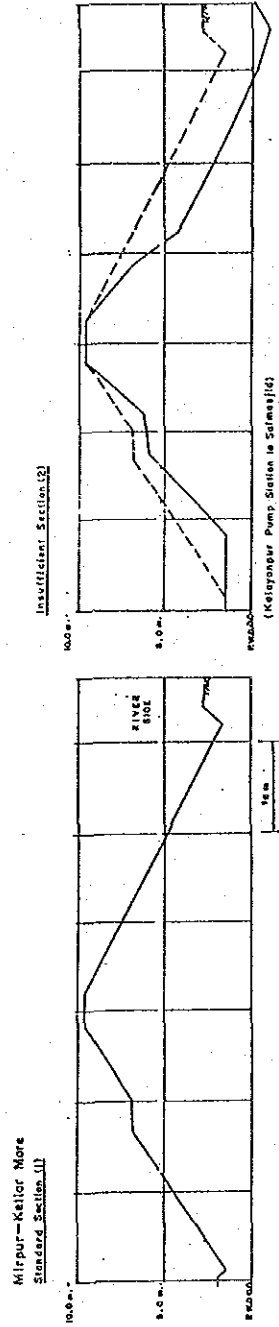


FIG. G.7(3) LONGITUDINAL AND CROSS SECTIONS OF EXISTING EMBANKMENT: MIRPUR BRIDGE TO BURIGANGA BRIDGE
 GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH



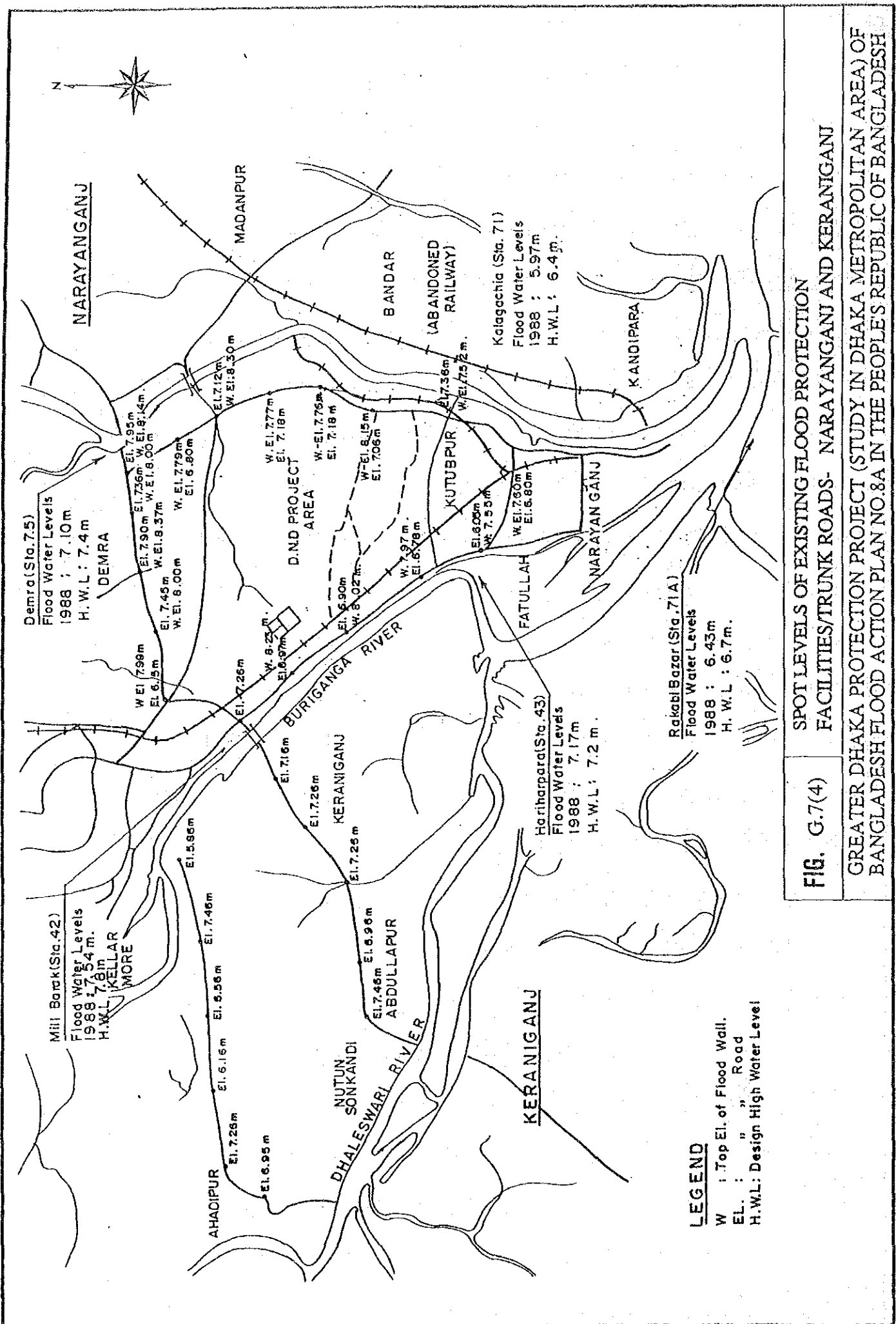


FIG. G.7(4) SPOT LEVELS OF EXISTING FLOOD PROTECTION FACILITIES/TRUNK ROADS- NARAYANGANJ AND KERANIGANJ

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH



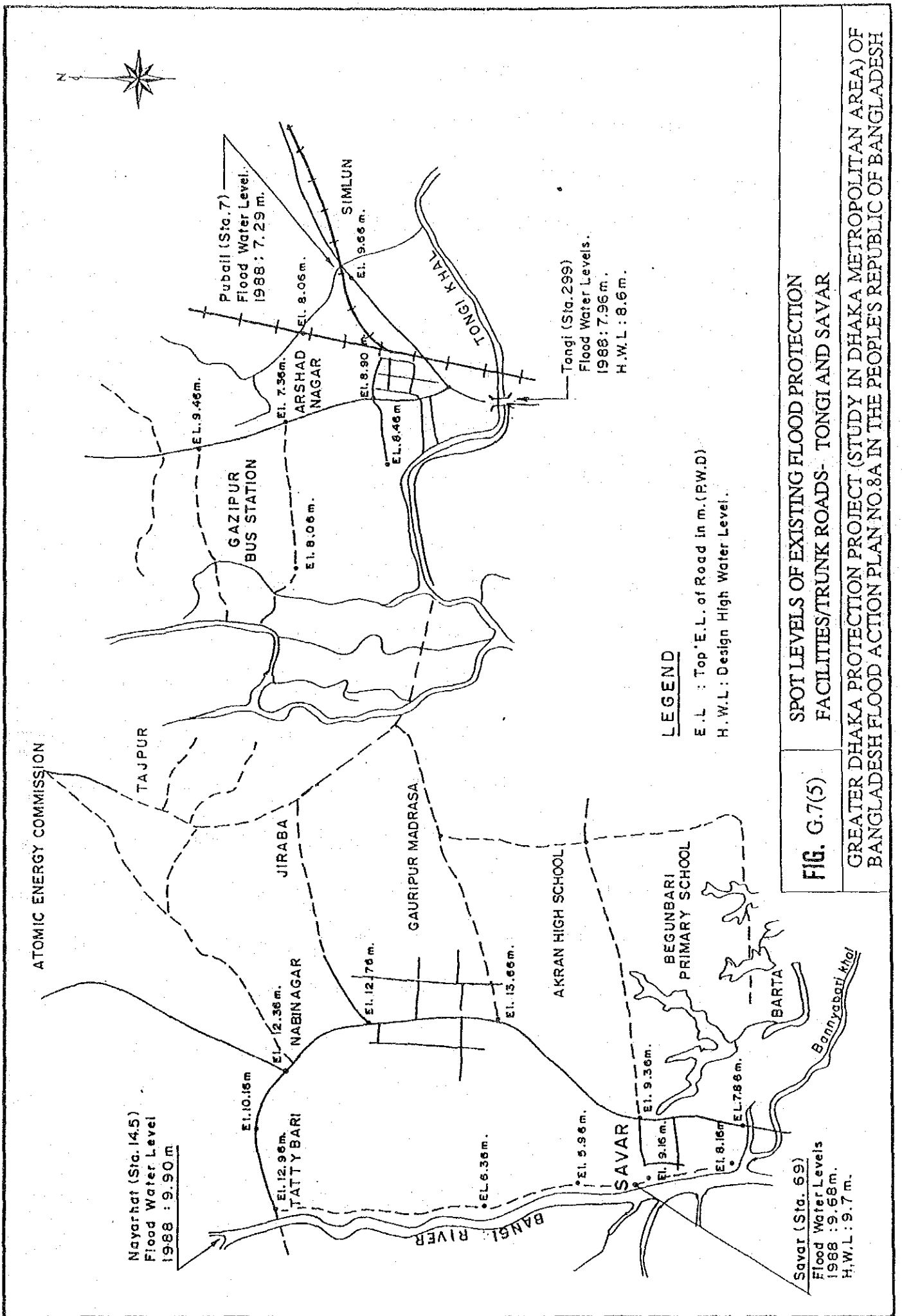


FIG. G.7(5) SPOT LEVELS OF EXISTING FLOOD PROTECTION FACILITIES/TRUNK ROADS- TONGI AND SAVAR

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH



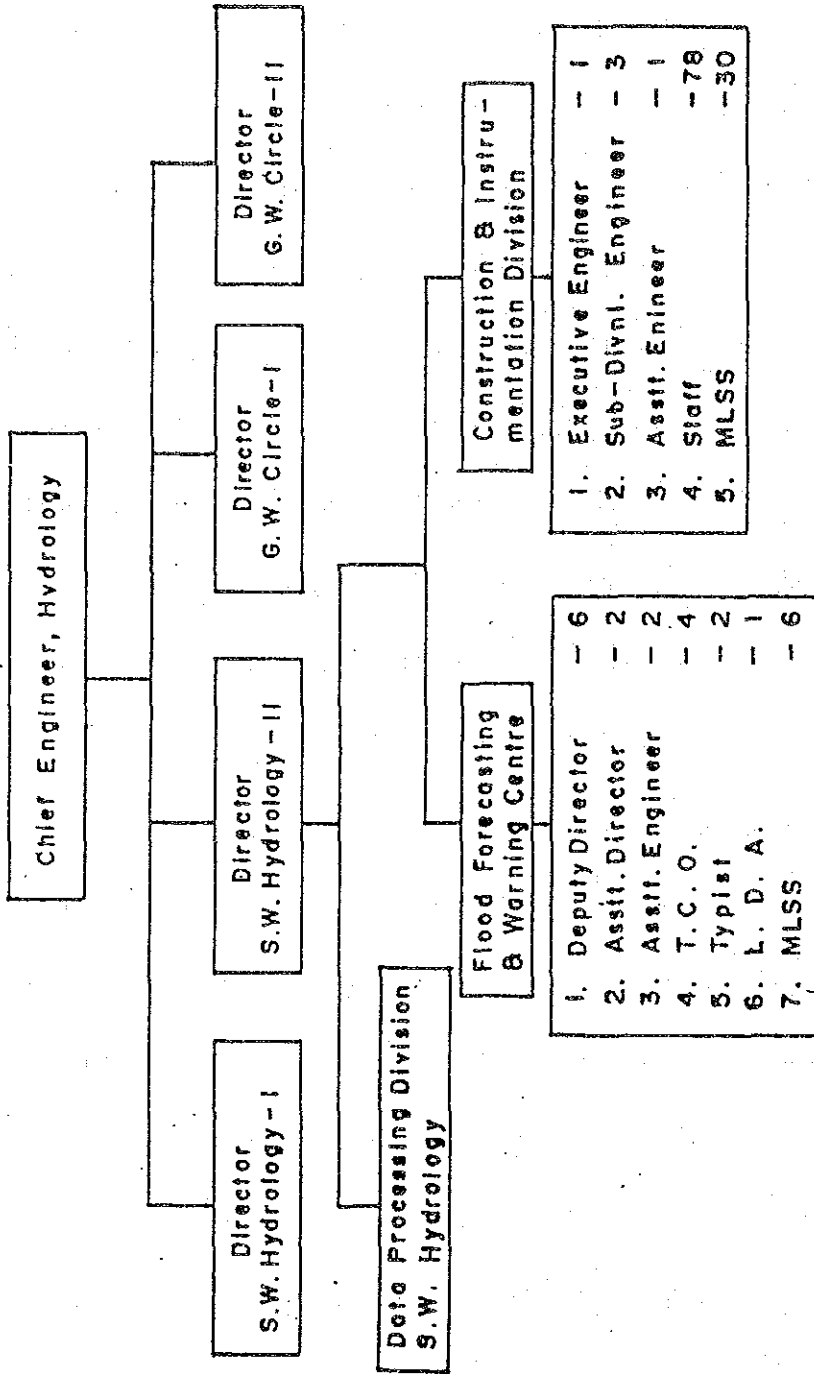
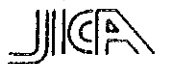
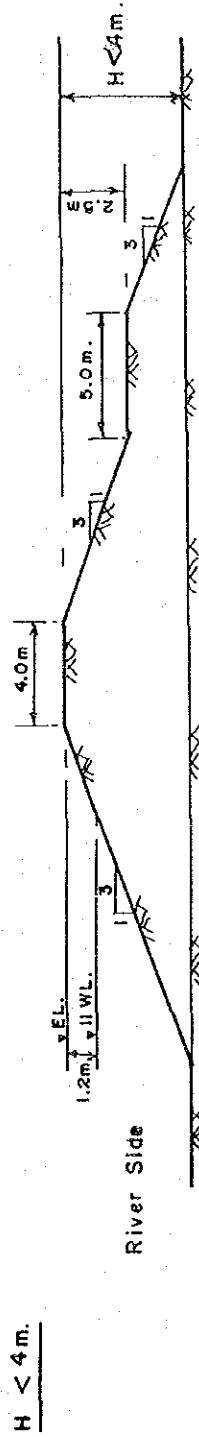
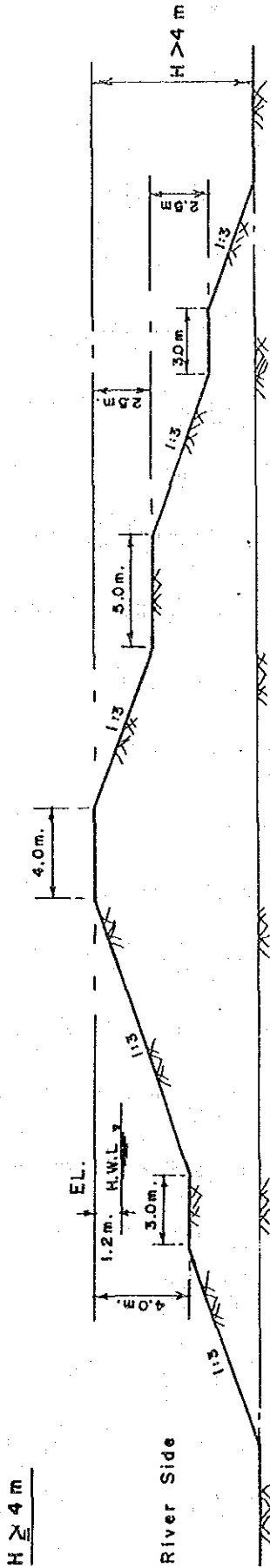


FIG. G.8 ORGANIZATION CHART OF EXISTING FLOOD FORECASTING AND WARNING SYSTEM

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH



EMBANKMENT



NOTE:

1. Embankment must be compacted over 90% of it's Max. Dry Density on Wet Side.
2. If Subsoil is Soft (N<5) Required Step Embankment or Step Embankment with Foundation Work (Sand Drain)

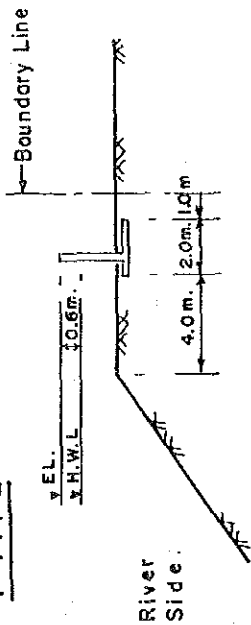
FIG. G.9(1) TYPICAL SECTIONS APPLIED TO ALIGNMENT ALTERNATIVE STUDY EMBANKMENT

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH

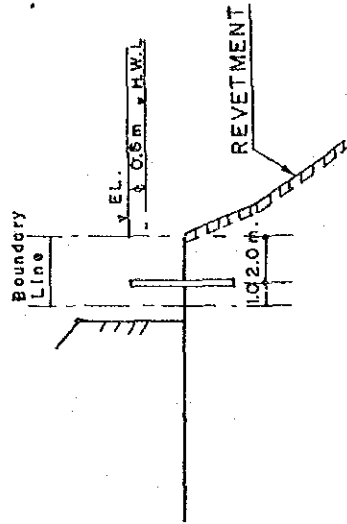


FLOOD WALL

T-TYPE

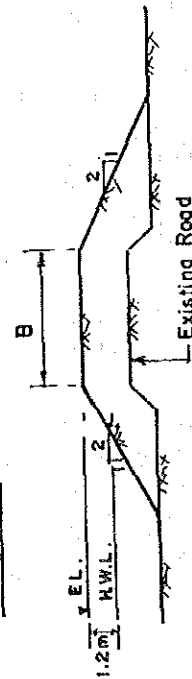


1-TYPE

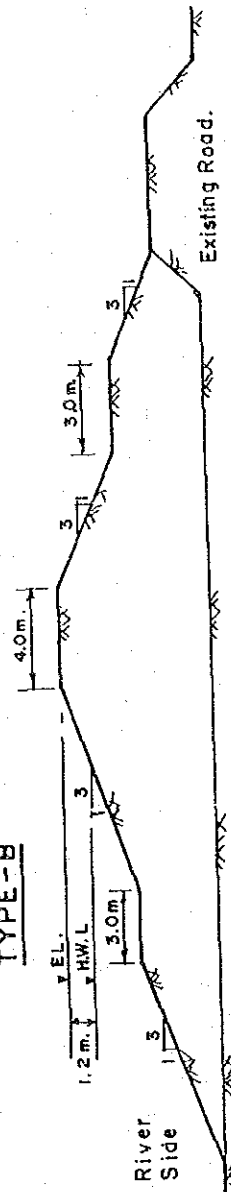


ROAD-CUM-EMBANKMENT

TYPE-A



TYPE-B



* B > 7 m. or Width of Existing Road

FIG. G.9(2)

TYPICAL SECTIONS APPLIED TO ALIGNMENT ALTERNATIVE STUDY
FLOOD WALL & ROAD-CUM-EMBANKMENT

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF
BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH



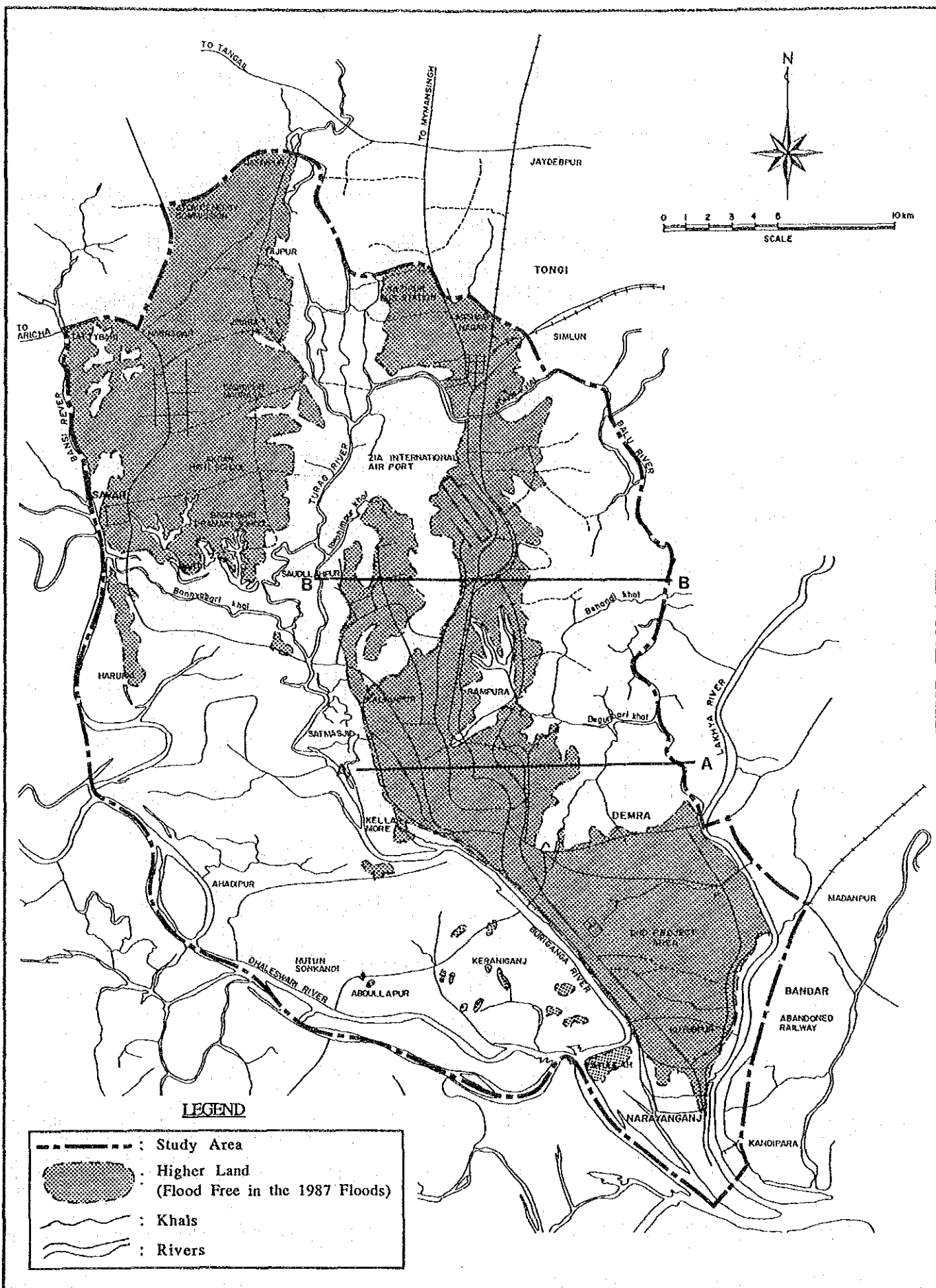
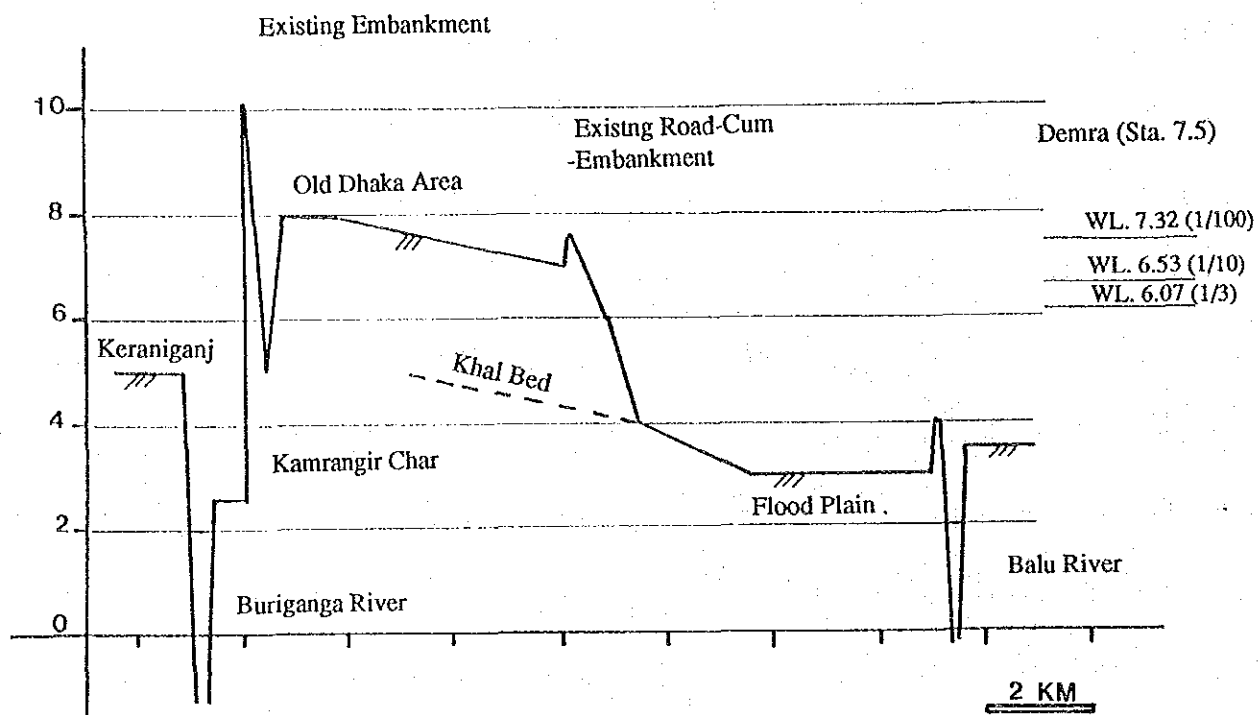


FIG. G.10

FLOOD FREE AREA

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH

SECTION A-A



SECTION B-B

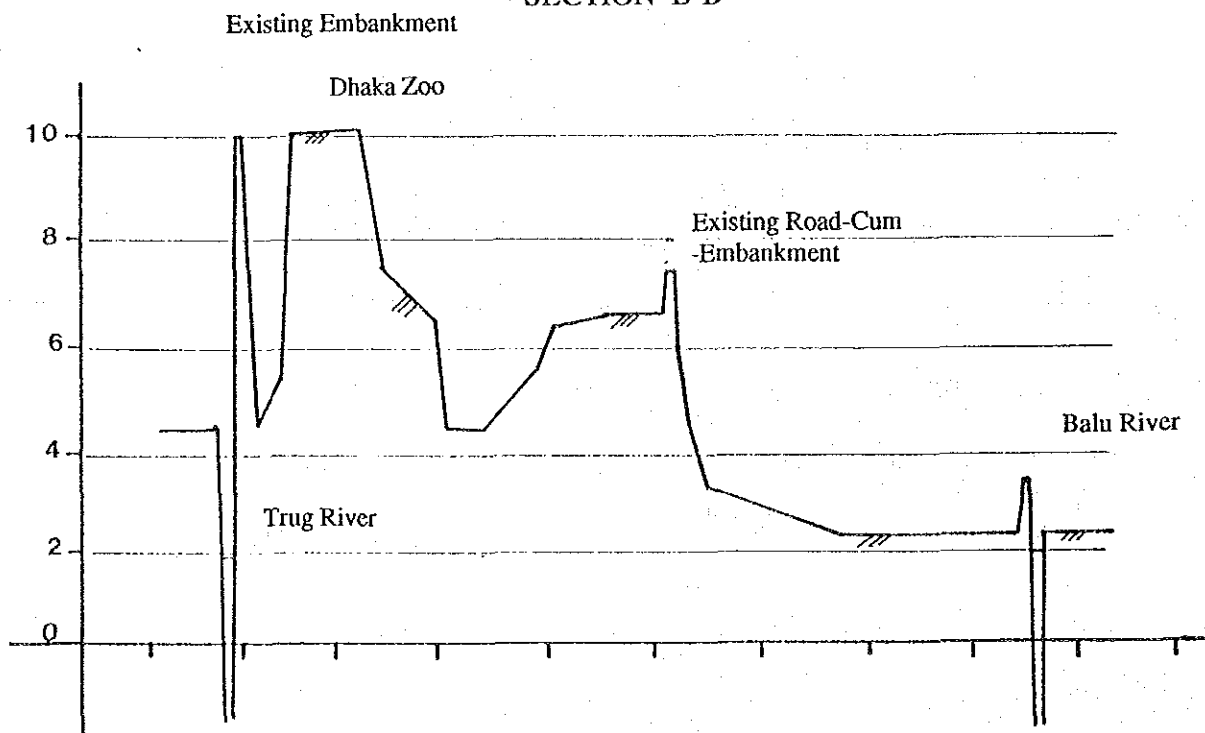
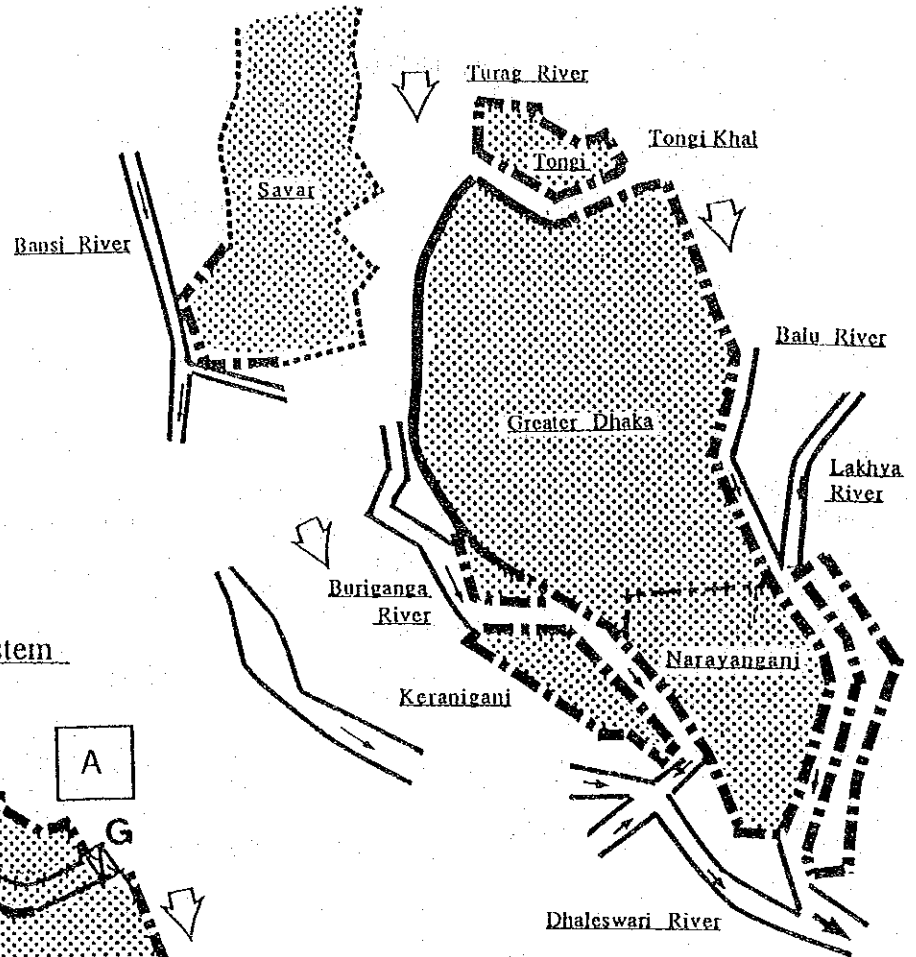


FIG. G.11

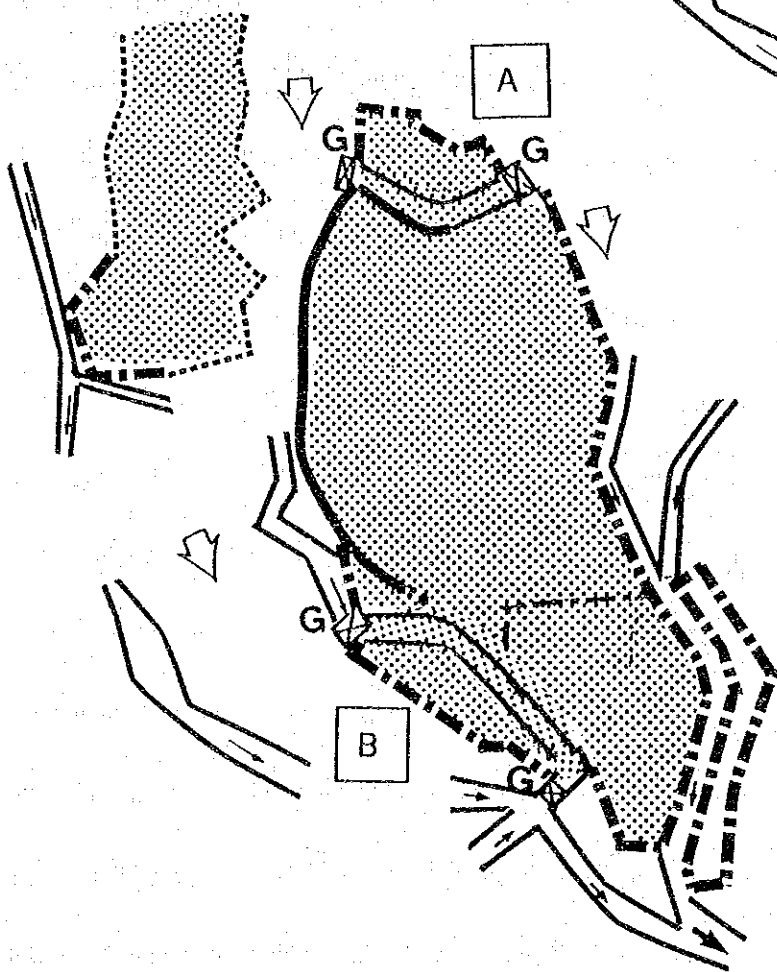
TYPICAL CROSS-SECTION OF GREATER DHAKA

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH

Case A : Independent System



Case B : Integrated System



LEGEND

G	⊠	: Gate
—		: Existing Embankment
- - -		: Proposed Polder
→		: Flood Flow

FIG. G.12

ALTERNATIVE OF FLOOD MITIGATION SYSTEM

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH

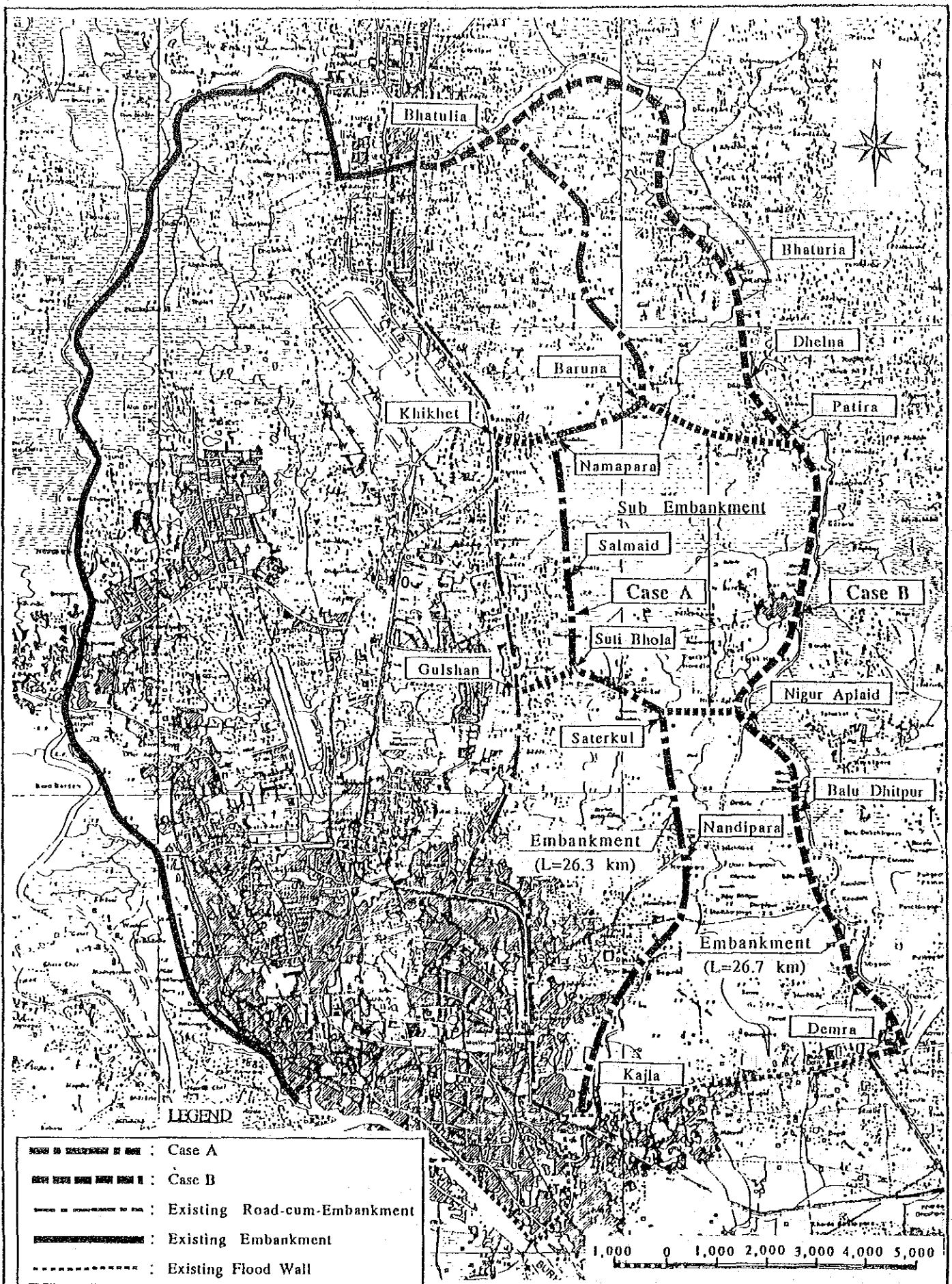


FIG. G.13(1)

ALIGNMENT ALTERNATIVE-GREATER DHAKA EAST

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH

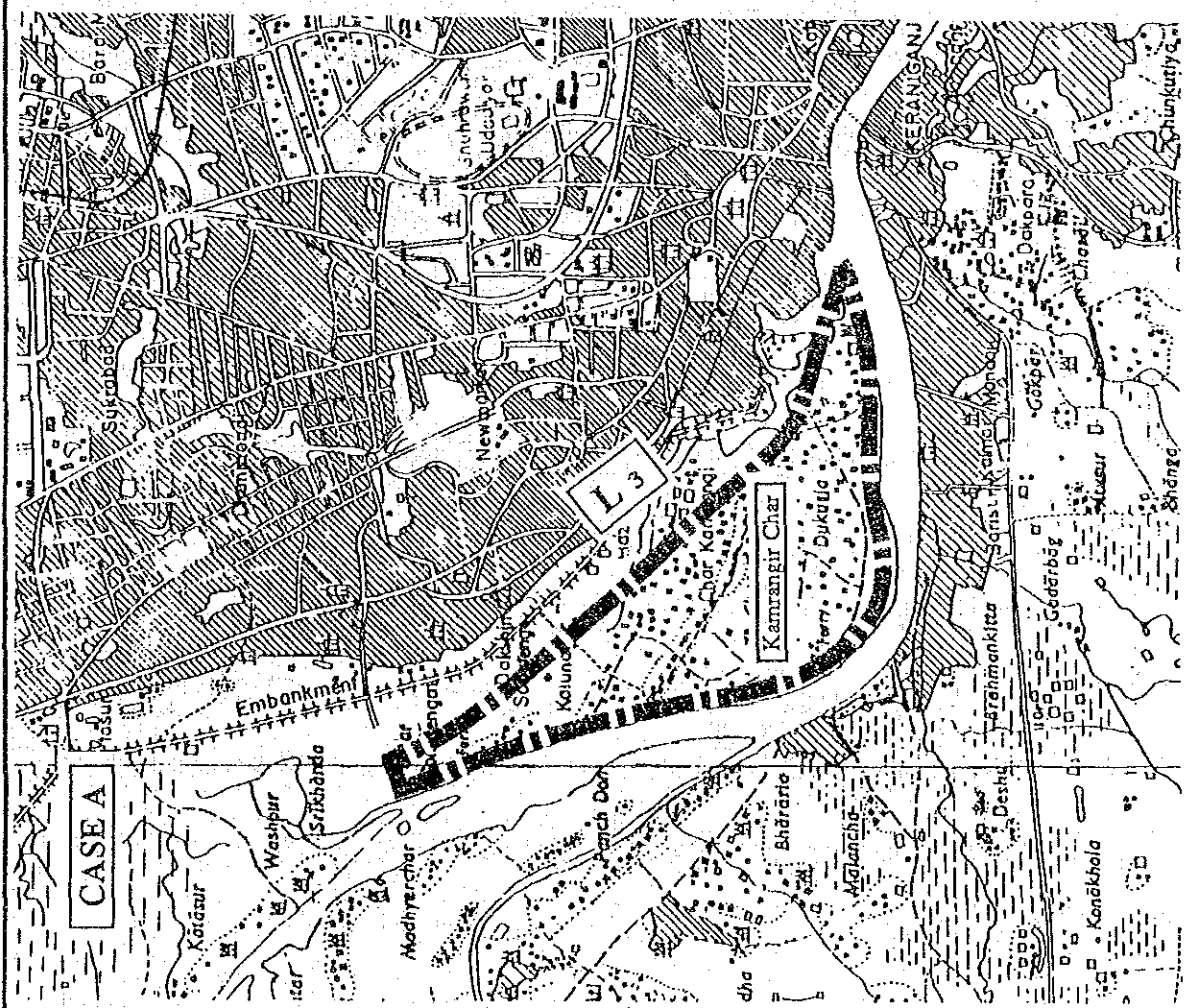
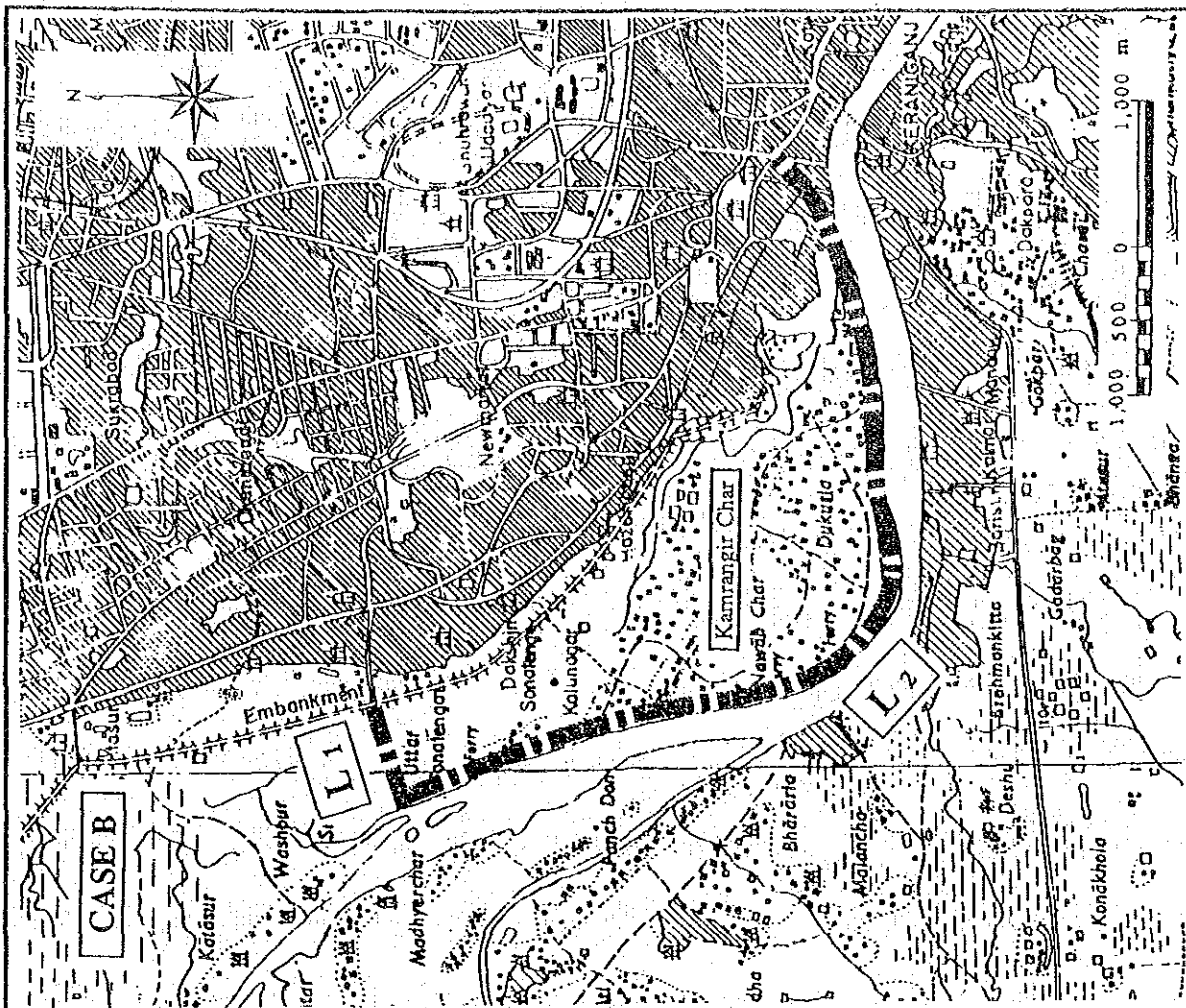
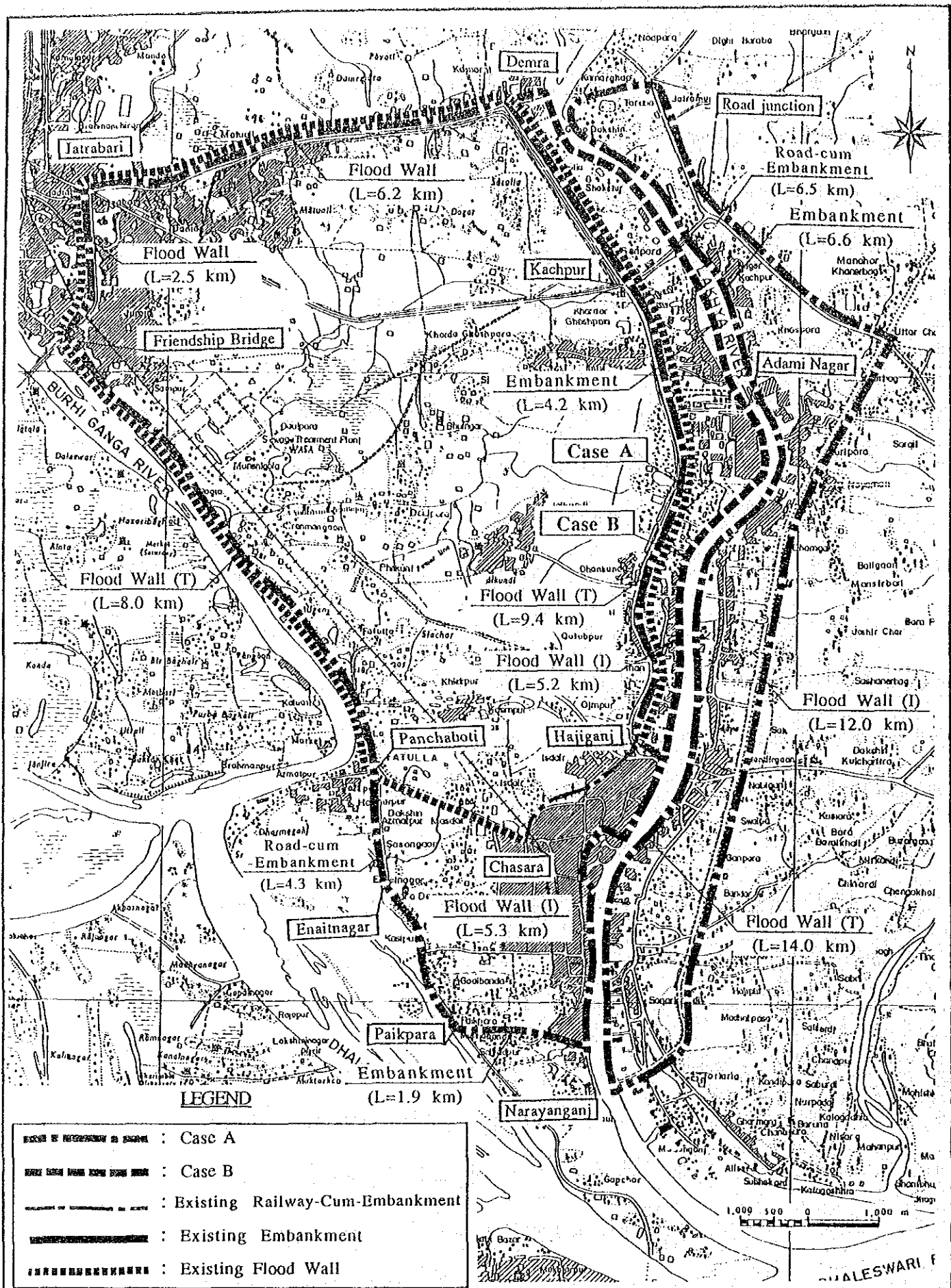


FIG. G.13(2) ALIGNMENT ALTERNATIVE-KAMRANGIR CHAR

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH





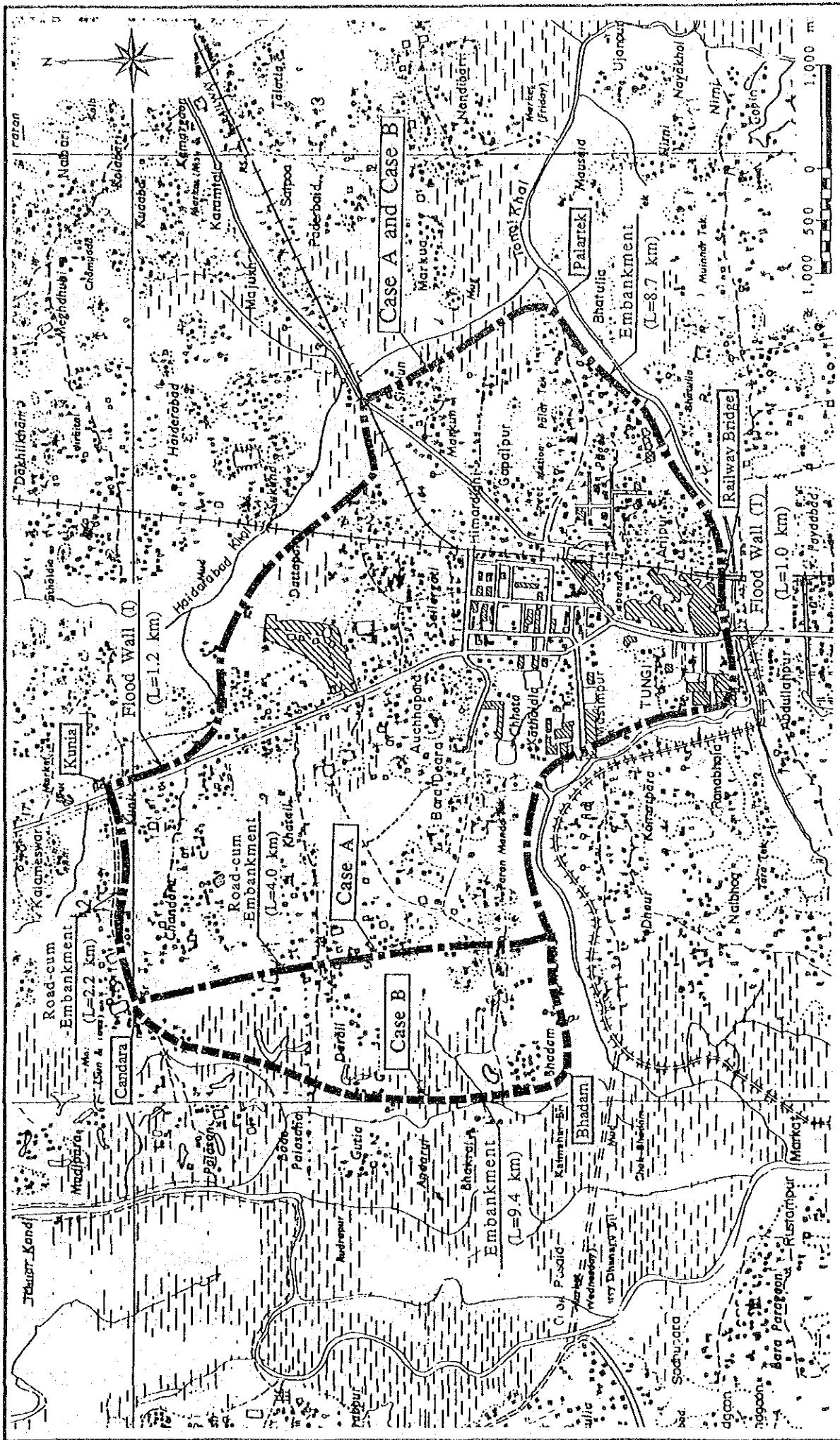


FIG. G.13(4) ALIGNMENT ALTERNATIVE-TONGI AREA

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH

LEGEND

	Case A
	Case B



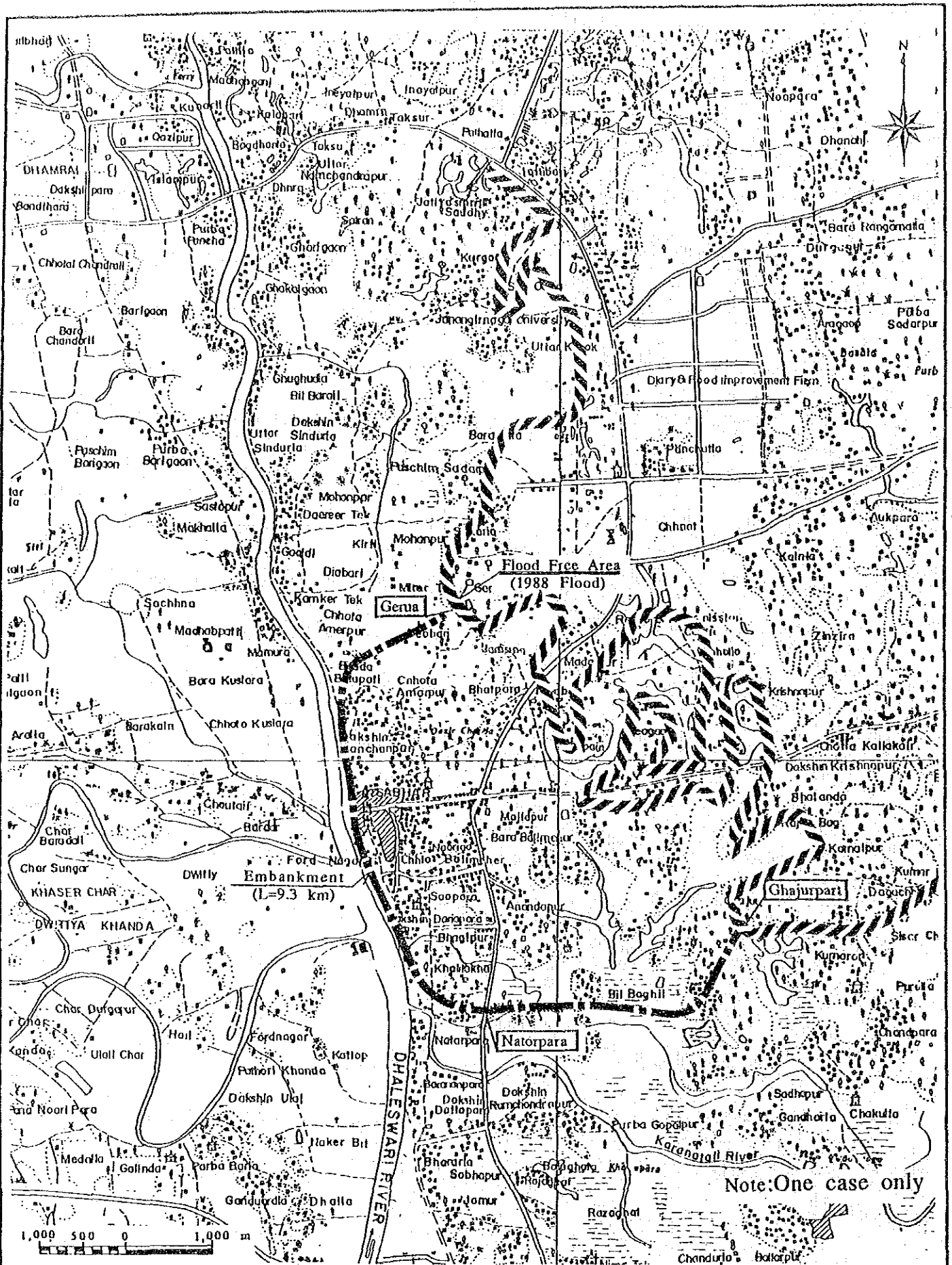


FIG. G.13(5)

ALIGNMENT ALTERNATIVE-SAVAR AREA

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH

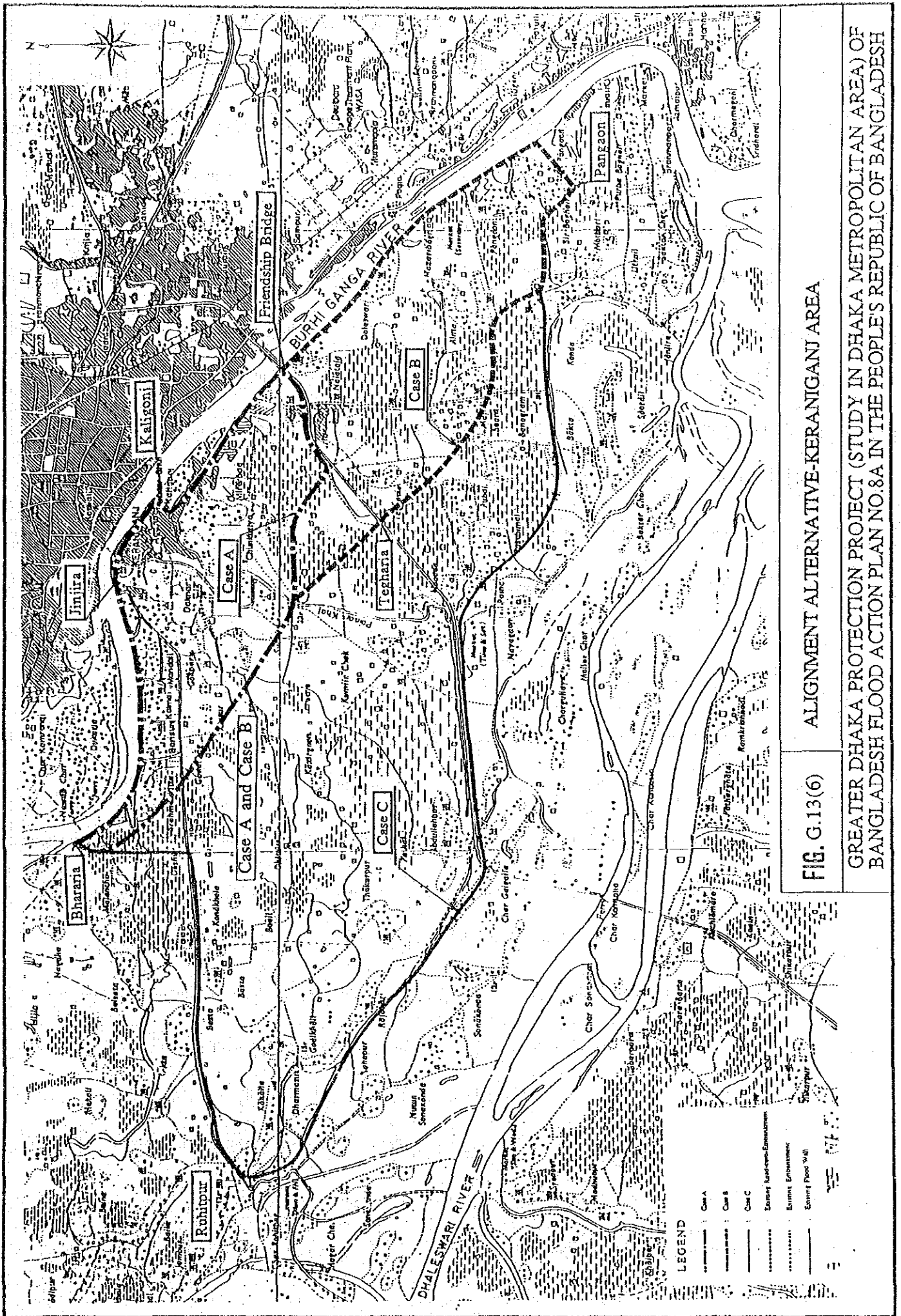
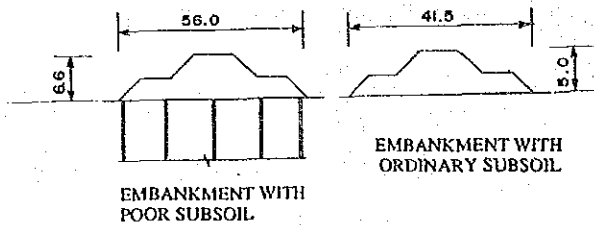
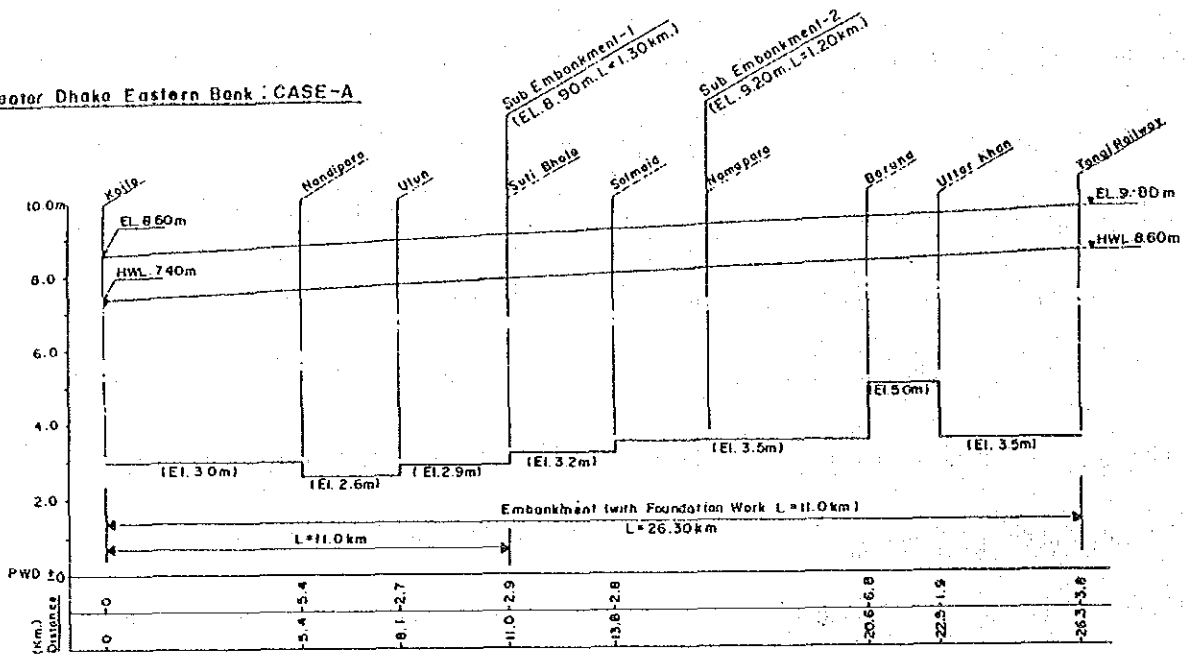


FIG. G.13(6) ALIGNMENT ALTERNATIVE-KERANIGANJ AREA

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH



Greater Dhaka Eastern Bank : CASE-A



Greater Dhaka Eastern Bank : CASE-B

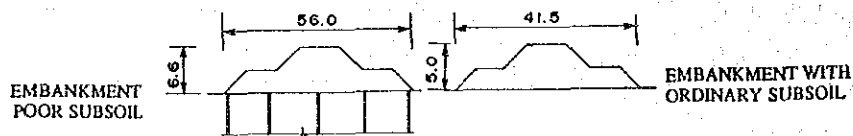
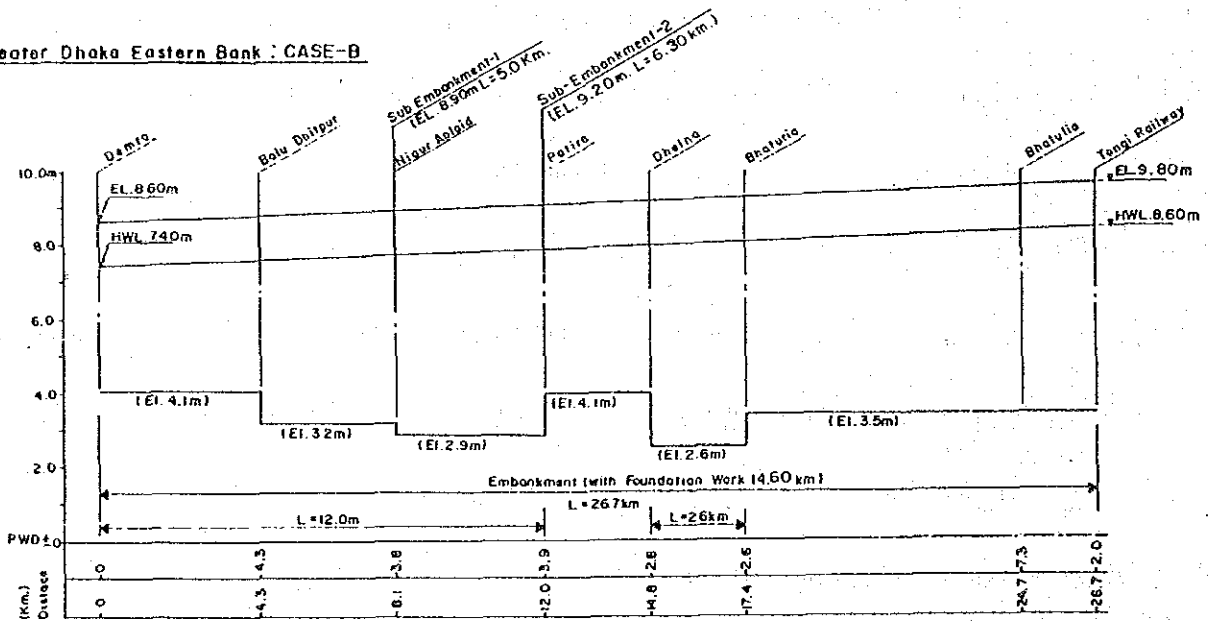


FIG. G.14(1)

LONGITUDINAL SECTION AND APPLIED FACILITY (SECTION) :
GREATER DHAKA(EAST), CASE - A AND CASE - B

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF
BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH

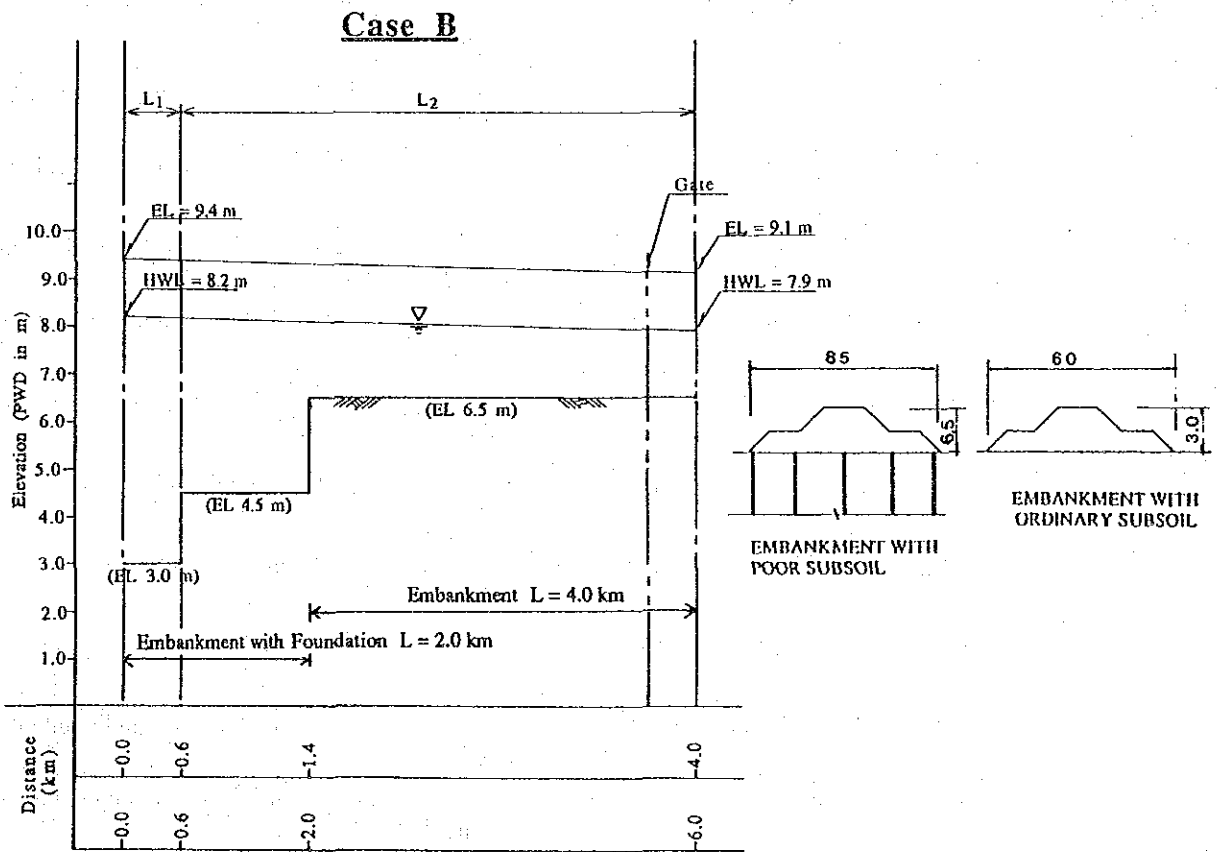
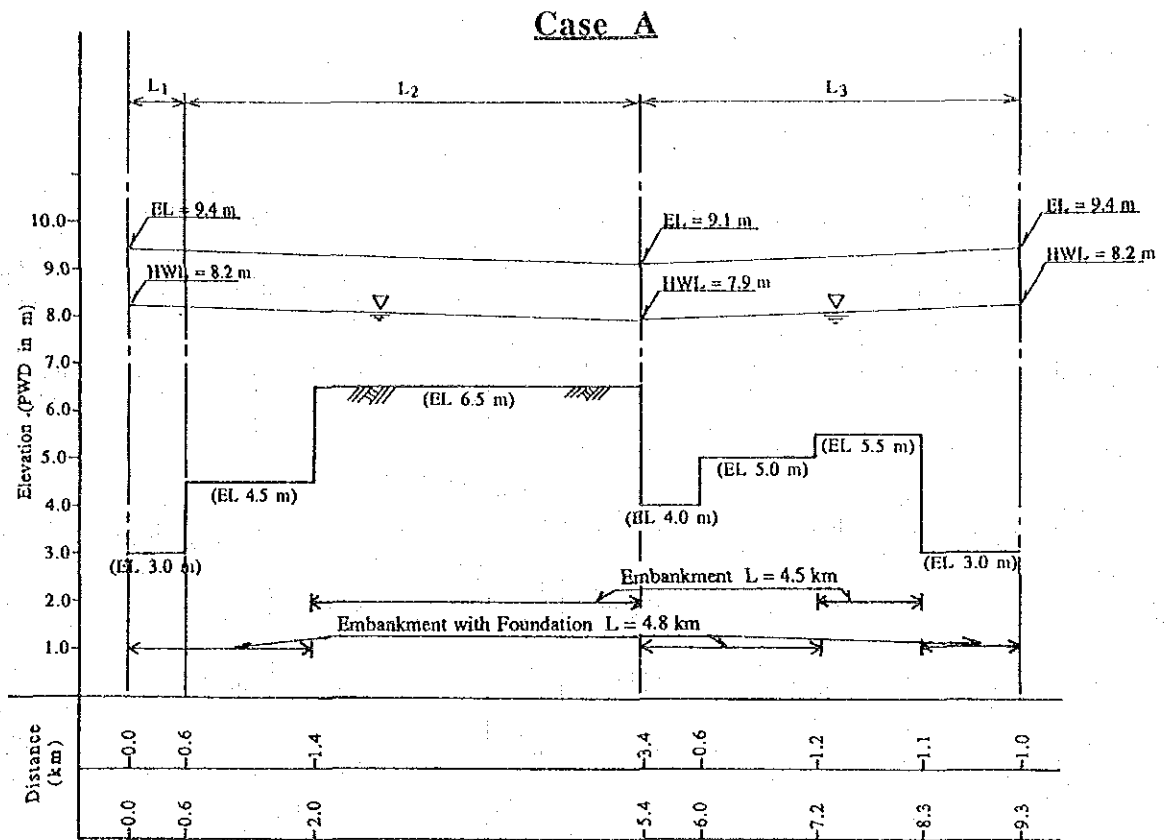


FIG. G.14(2)

**LONGITUDINAL SECTION AND APPLIED FACILITY (SECTION):
KAMRANGIR CHAR, CASE - A AND CASE - B**

**GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF
BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH**

Narayanganj - CASE-A

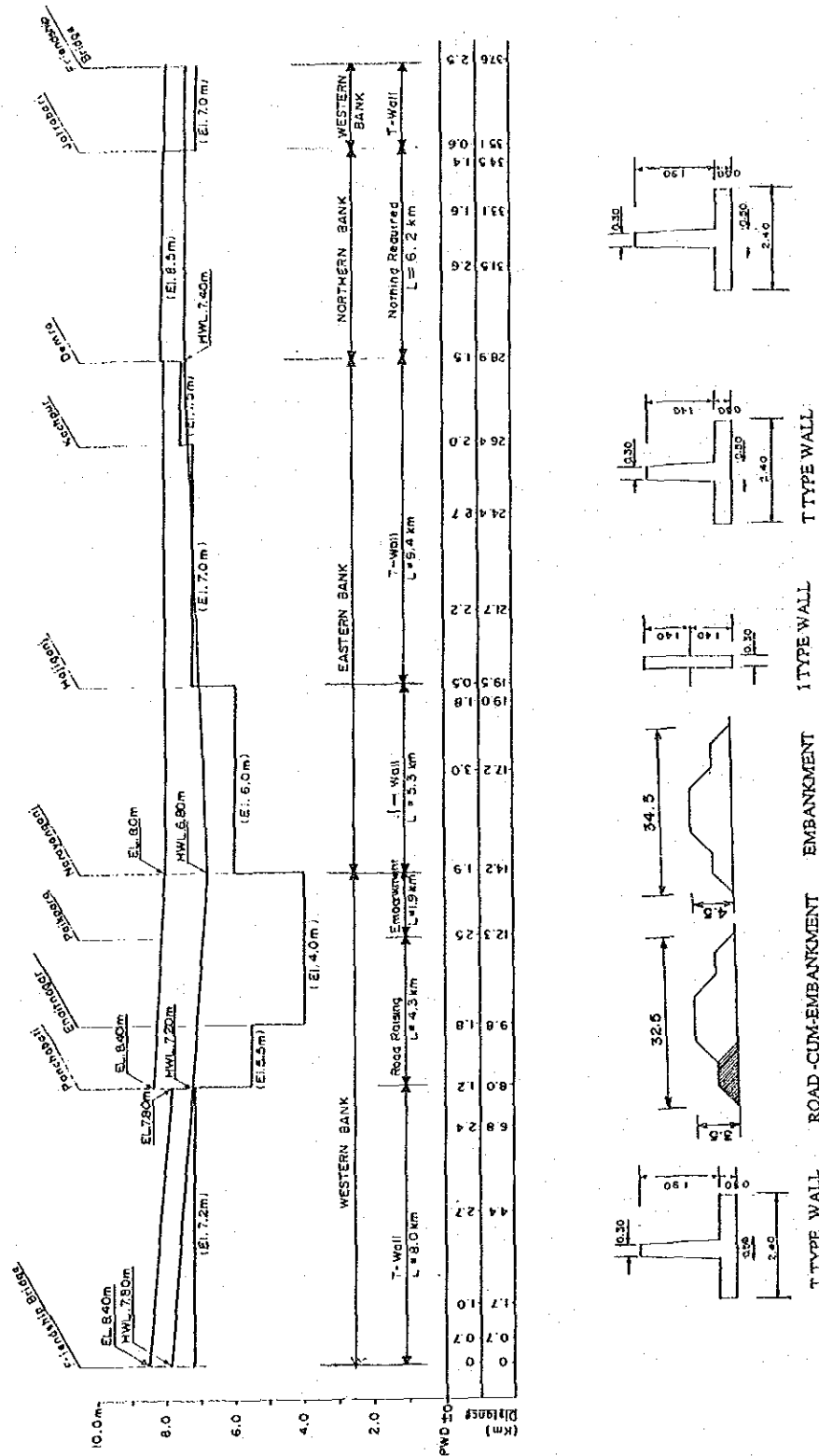


FIG. G.14(3)

LONGITUDINAL SECTION AND APPLIED FACILITY (SECTION) :
NARAYANGANJ AREA (WEST), CASE - A

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF
BANGLADESH FLOOD ACTION PLAN NO.8.A IN THE PEOPLE'S REPUBLIC OF BANGLADESH



Narayanganj: CASE-B

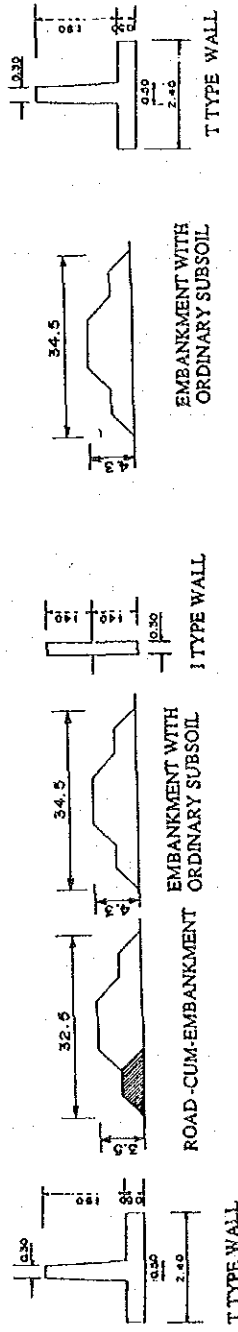
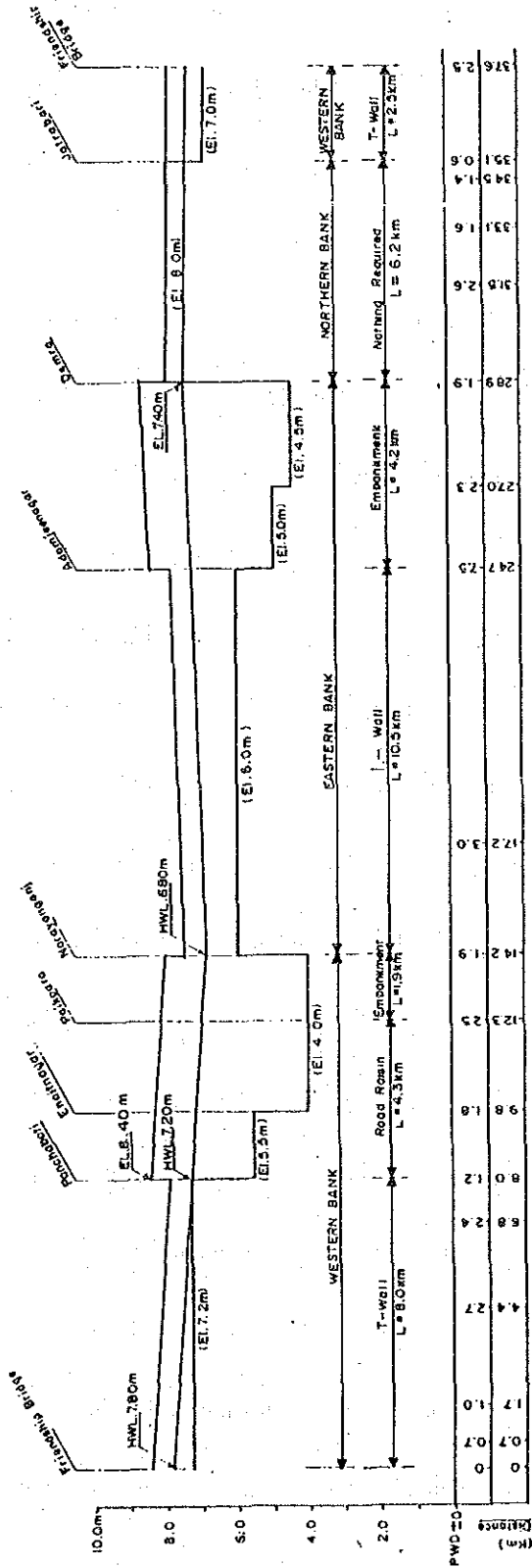
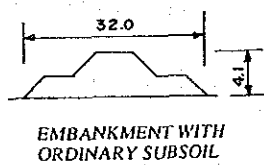
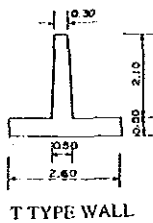
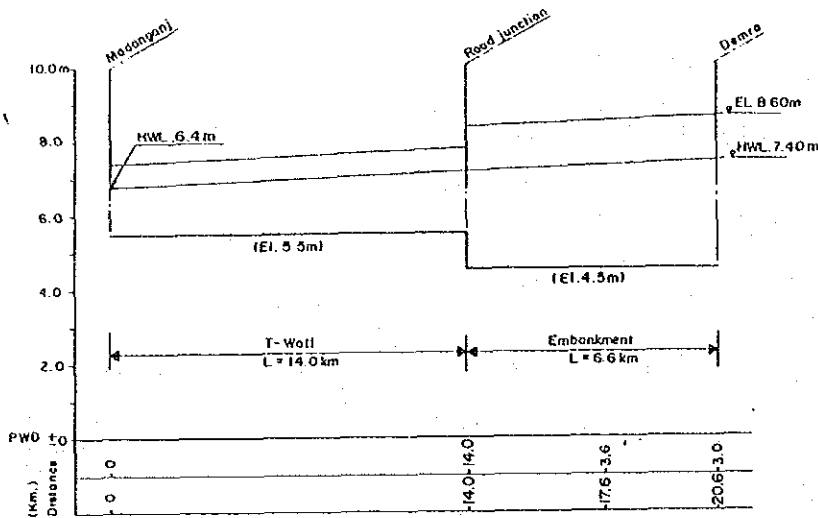


FIG. G.14(4) LONGITUDINAL SECTION AND APPLIED FACILITY (SECTION) : NARAYANGANJ AREA (WEST), CASE - B

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH



Narayanganj (Bandar): RIVER SIDE



Narayanganj (Bandar): RAILWAY SIDE

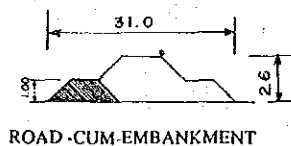
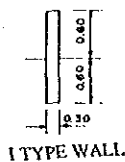
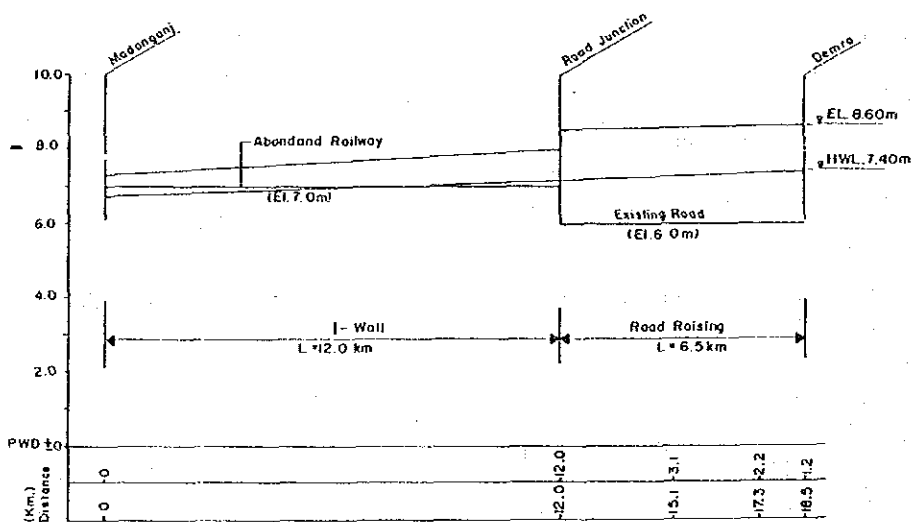
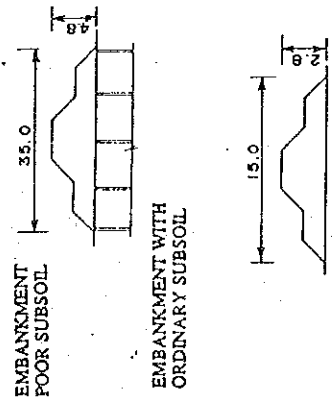
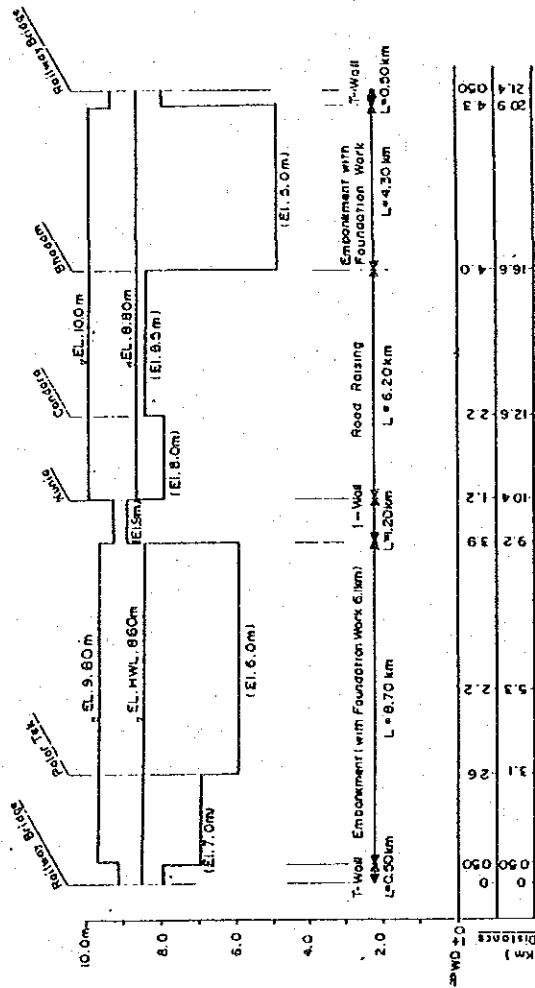


FIG. G.14(5)

**LONGITUDINAL SECTION AND APPLIED FACILITY (SECTION) :
NARAYANGANJ AREA (EAST)**

**GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF
BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH**

Tongi Area: CASE-A



CASE-B

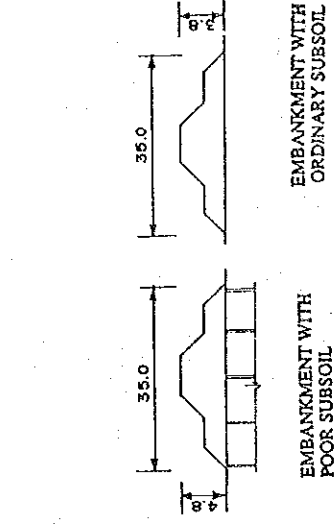
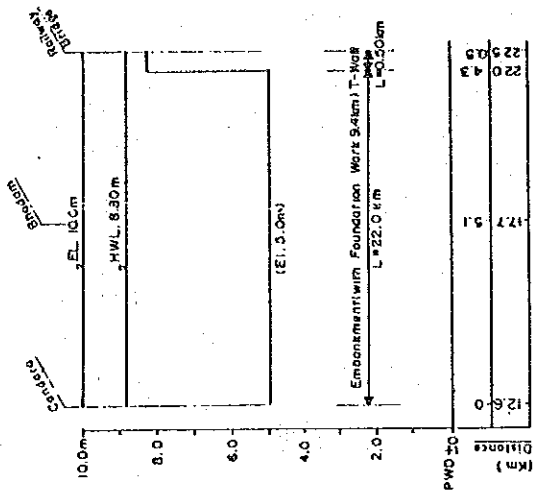
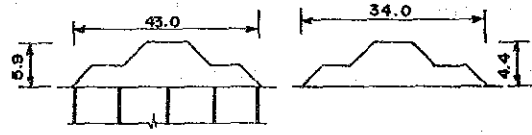
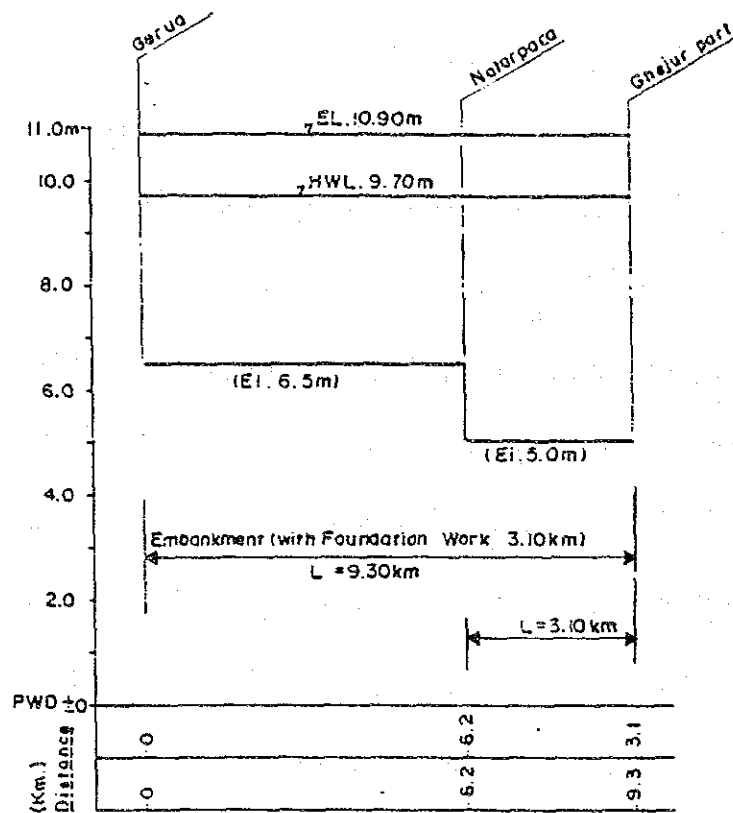


FIG. G.14(6) LONGITUDINAL SECTION AND APPLIED FACILITY (SECTION) : TONGI AREA, CASE - A AND CASE - B

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH





EMBANKMENT WITH POOR SUBSOIL

EMBANKMENT WITH ORDINARY SUBSOIL

FIG. G.14(7)

LONGITUDINAL SECTION AND APPLIED FACILITY (SECTION) : SAVAR AREA

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH

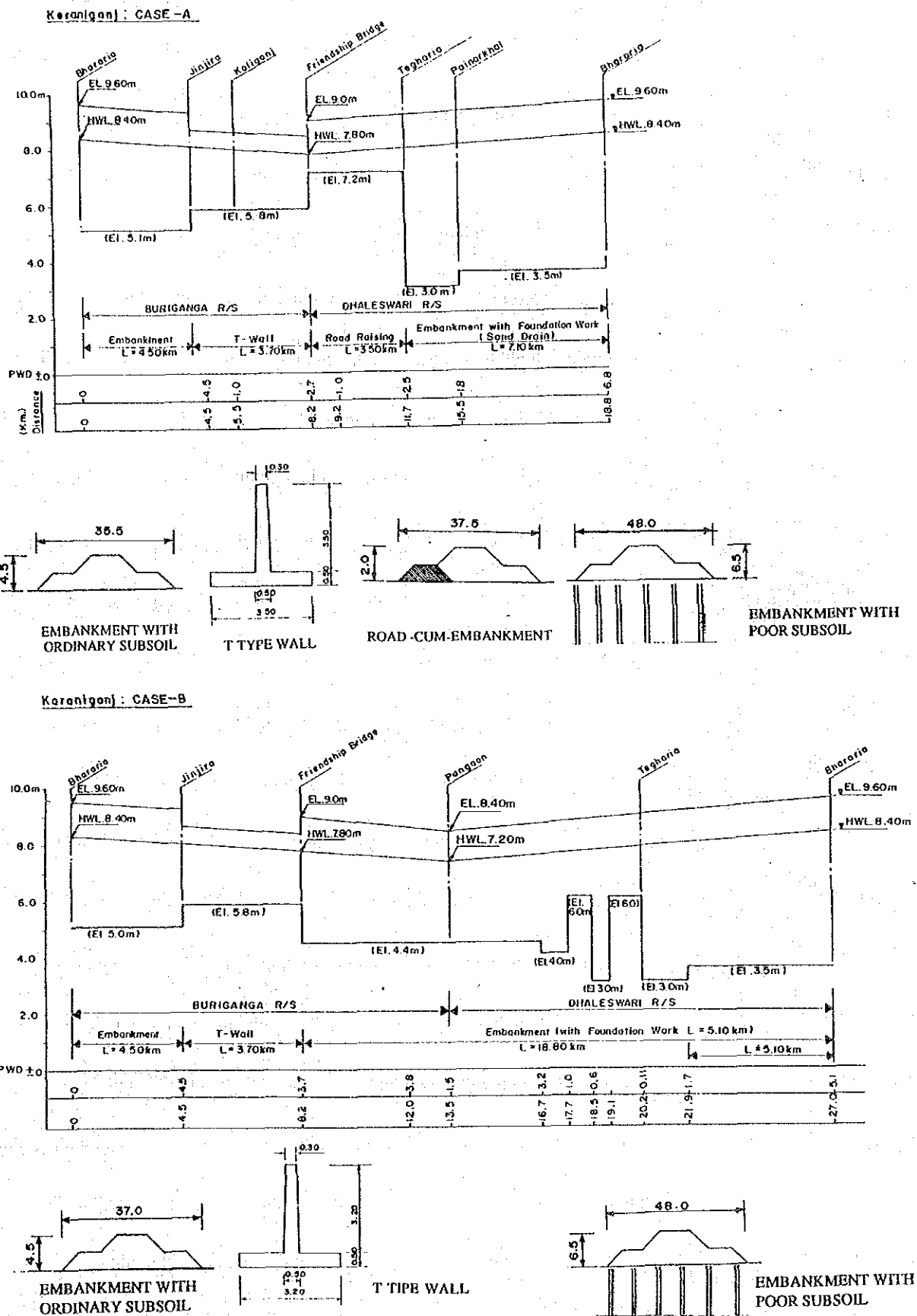


FIG. G.14(8)

**LONGITUDINAL SECTION AND APPLIED FACILITY (SECTION) :
KERANIGANJ AREA, CASE - A AND CASE - B**

**GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF
BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH**

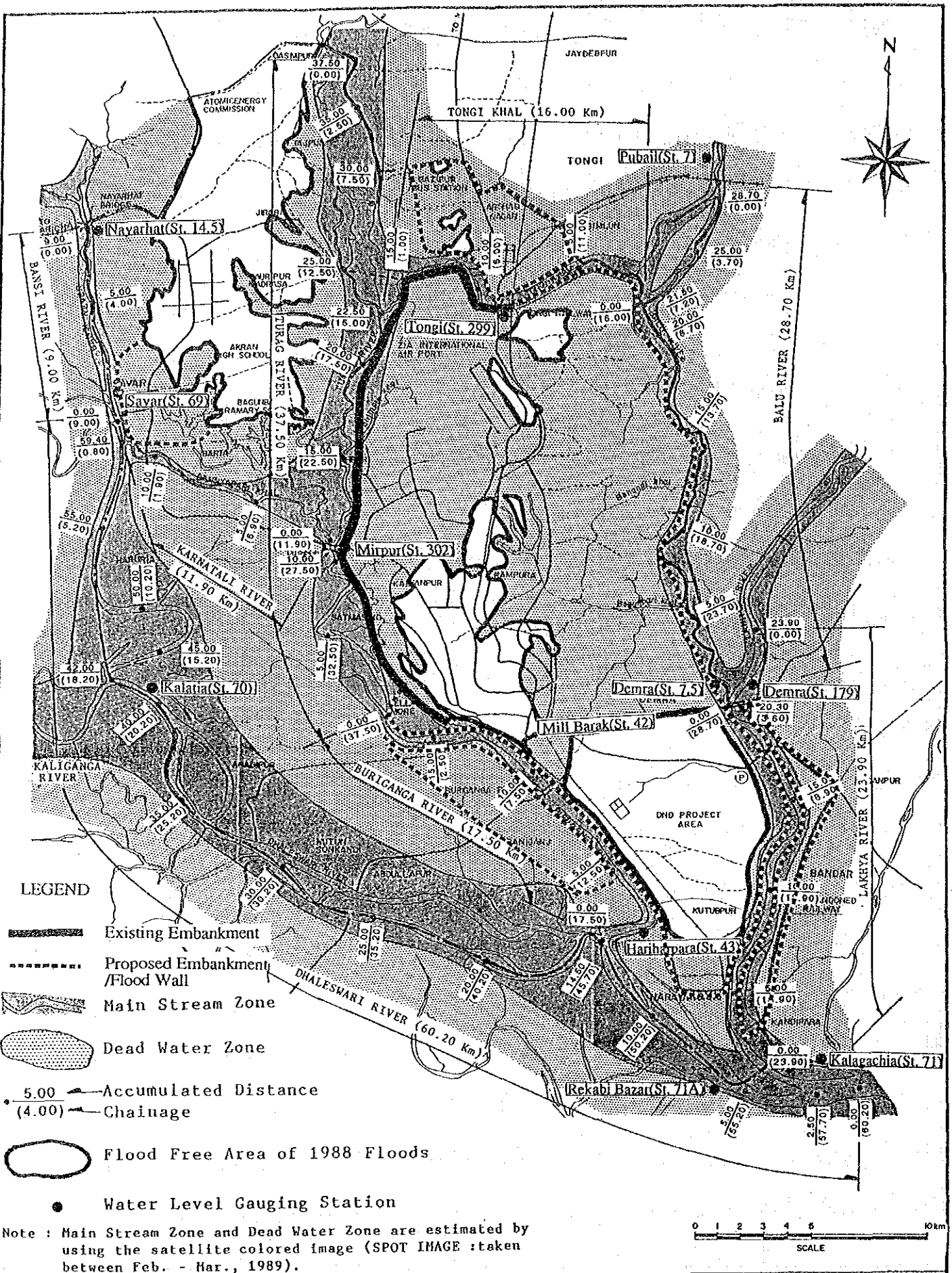
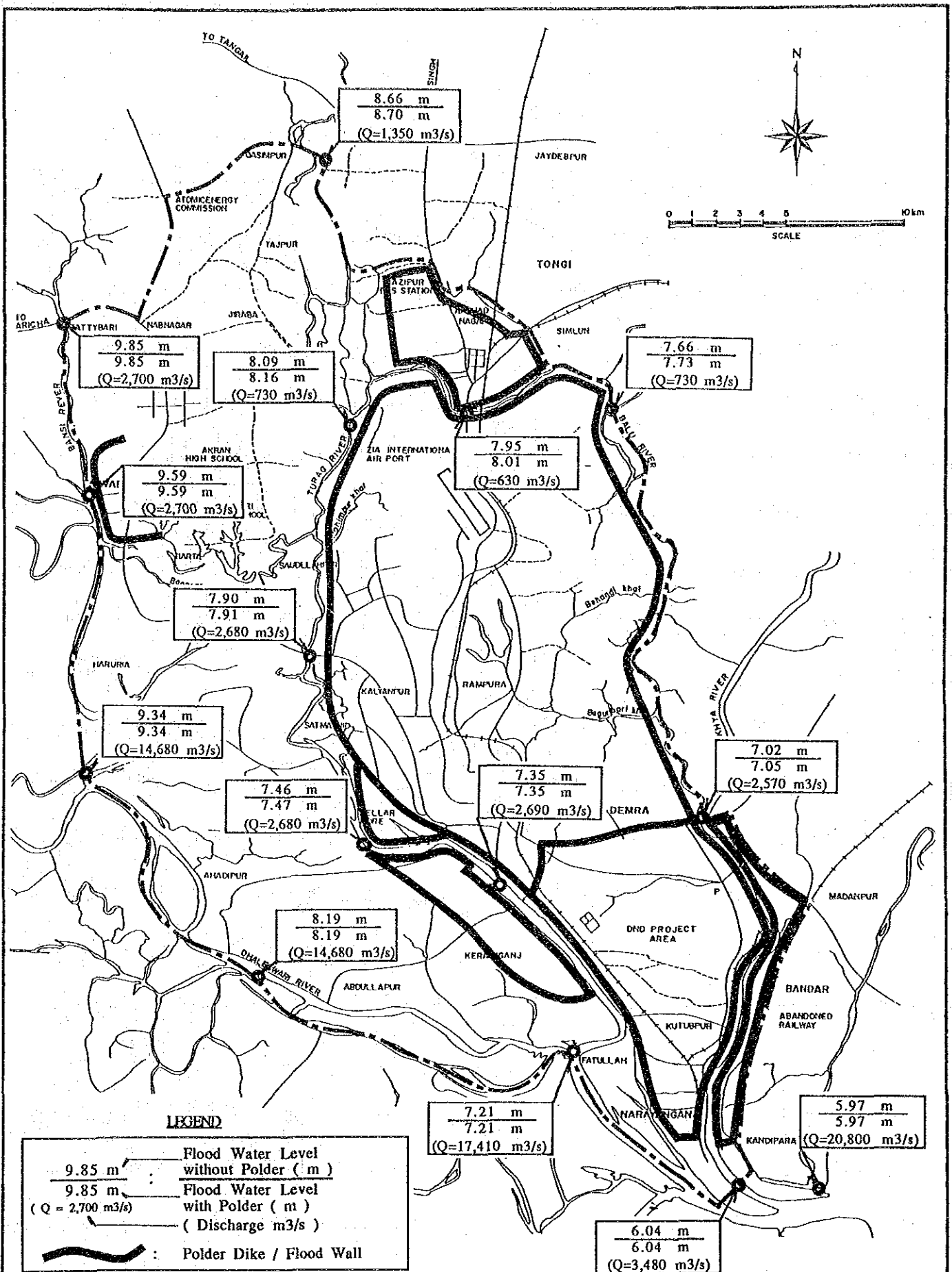


FIG. G.15 (1)

RIVER STREAM WITH PROPOSED POLDER

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH



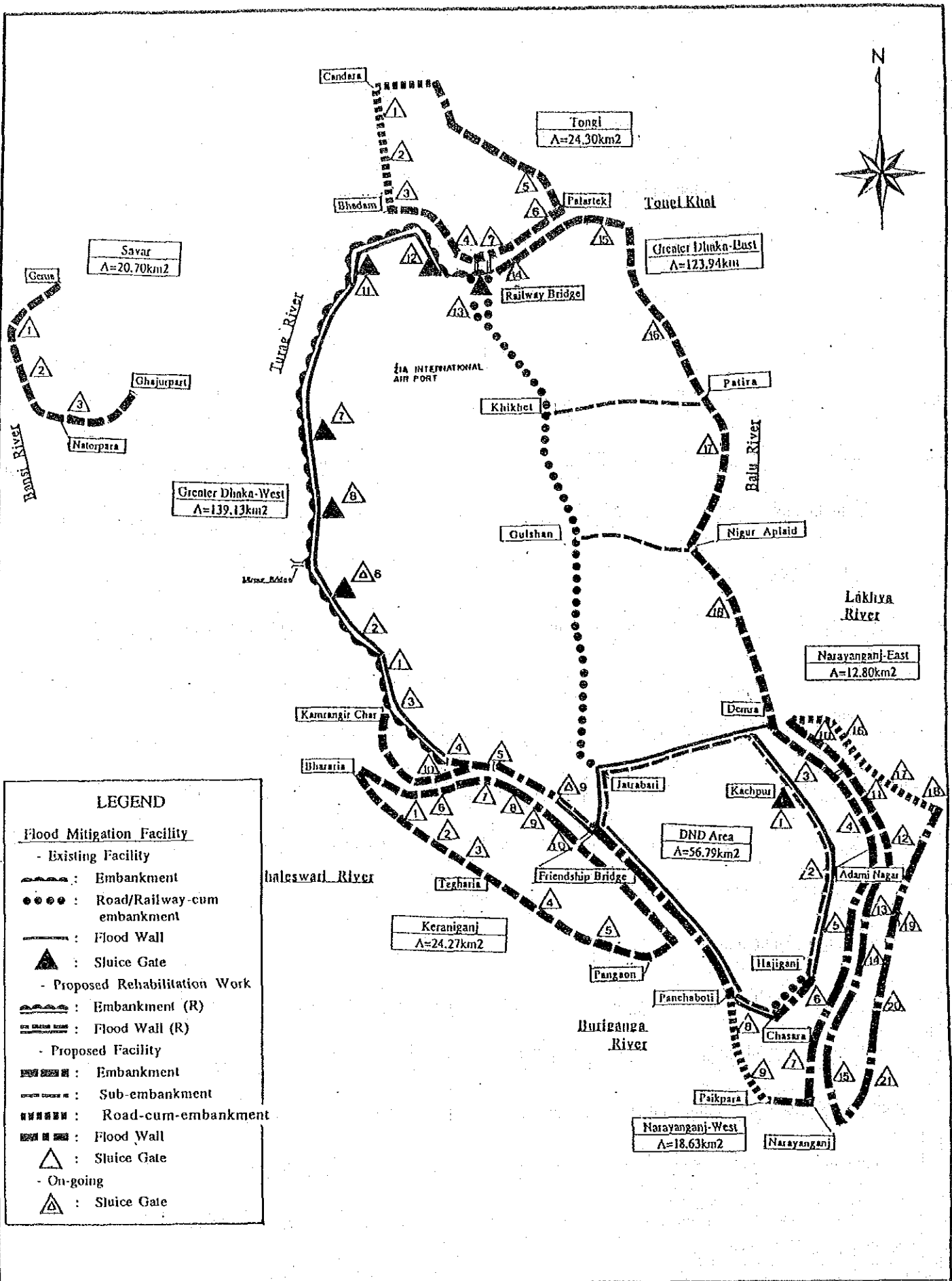
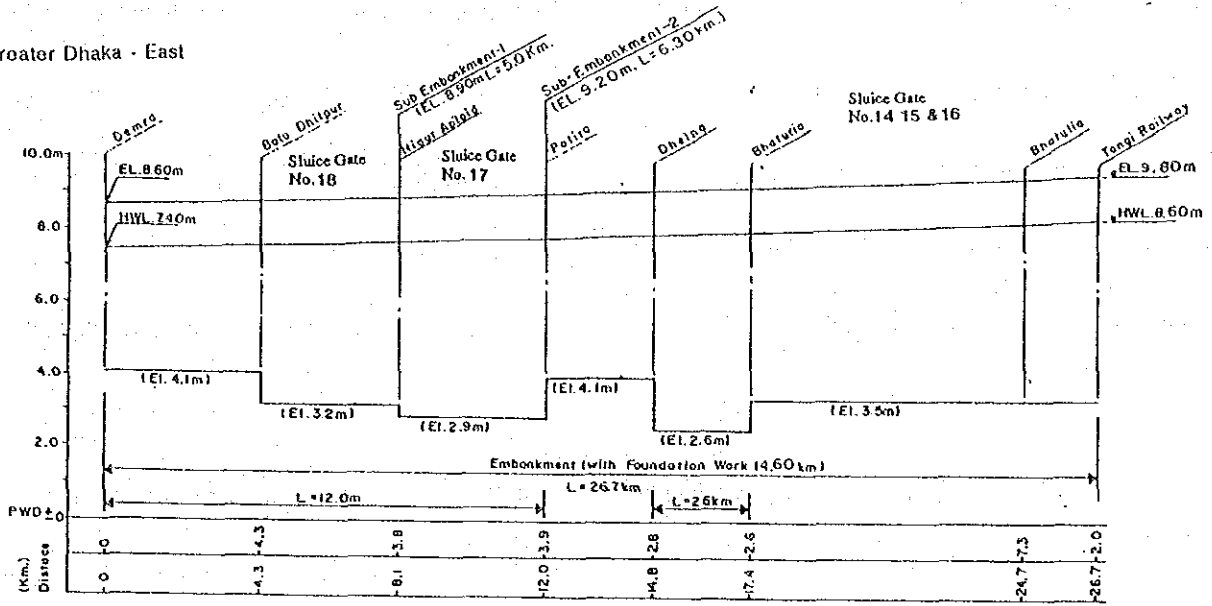


FIG. G.16(1)

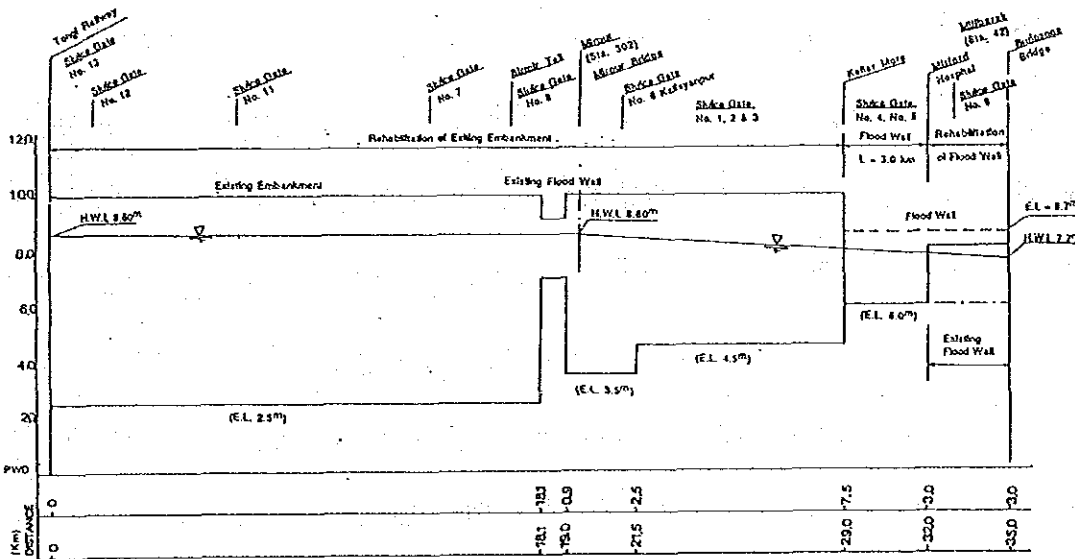
PROPOSED PROJECT AREAS WITH MAJOR FACILITIES

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH

Greater Dhaka - East



Greater Dhaka - West



Kamrangir Char

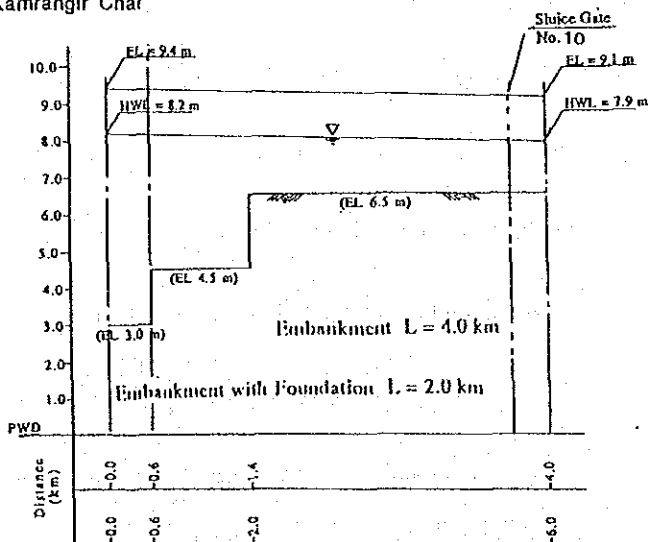


FIG. G.16(2)

PROPOSED LONGITUDINAL SECTIONS : GREATER DHAKA-EAST, GREATER DHAKA-WEST AND KAMRANGIR CHAR

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH

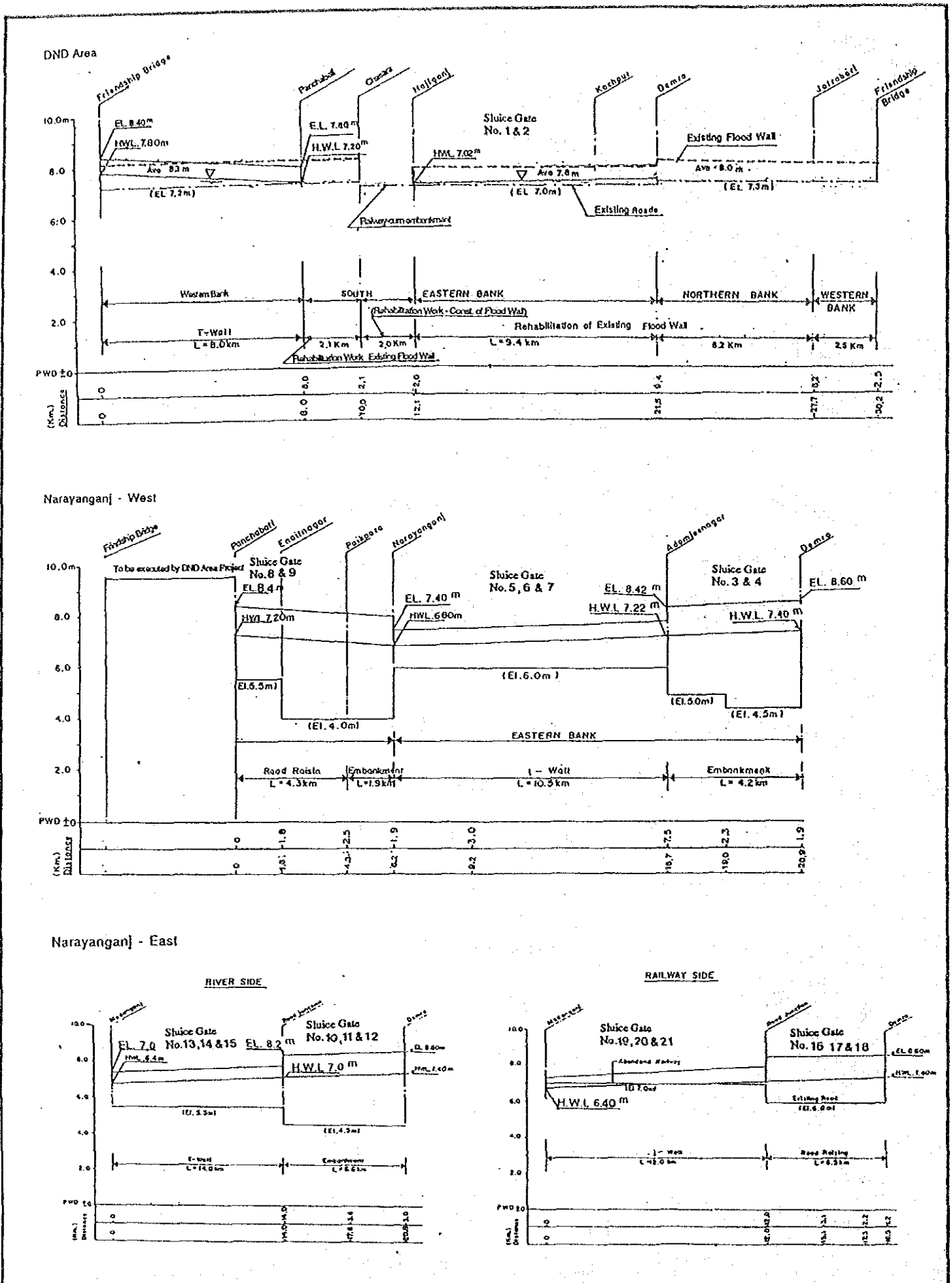
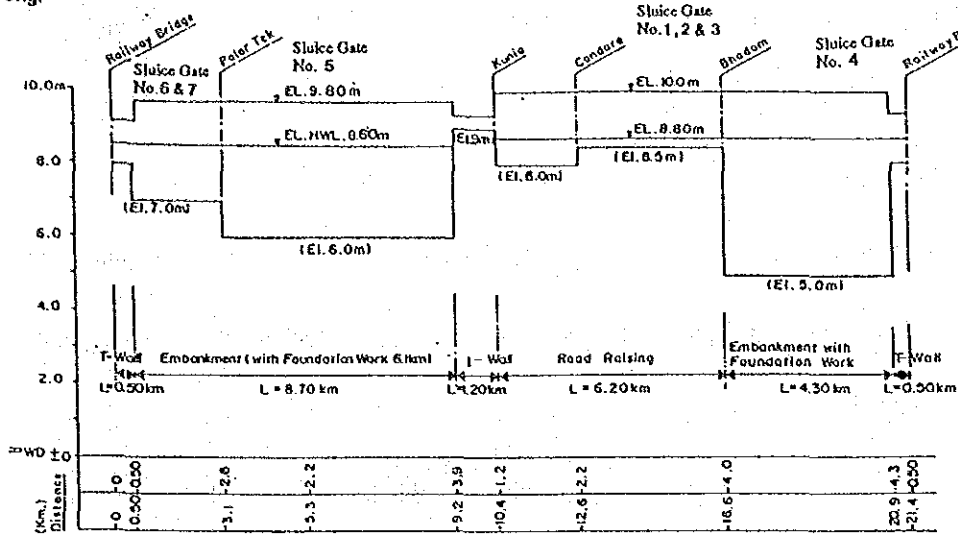


FIG. G.16(3)

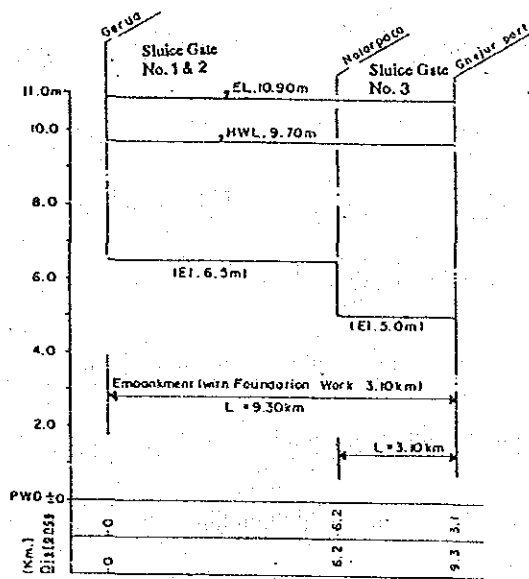
PROPOSED LONGITUDINAL SECTIONS : NARAYANGANJ -DND AREA, NARAYANGANJ-WEST AND NARAYANGANJ - EAST

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH

Tongi



Savar



Keraniganj

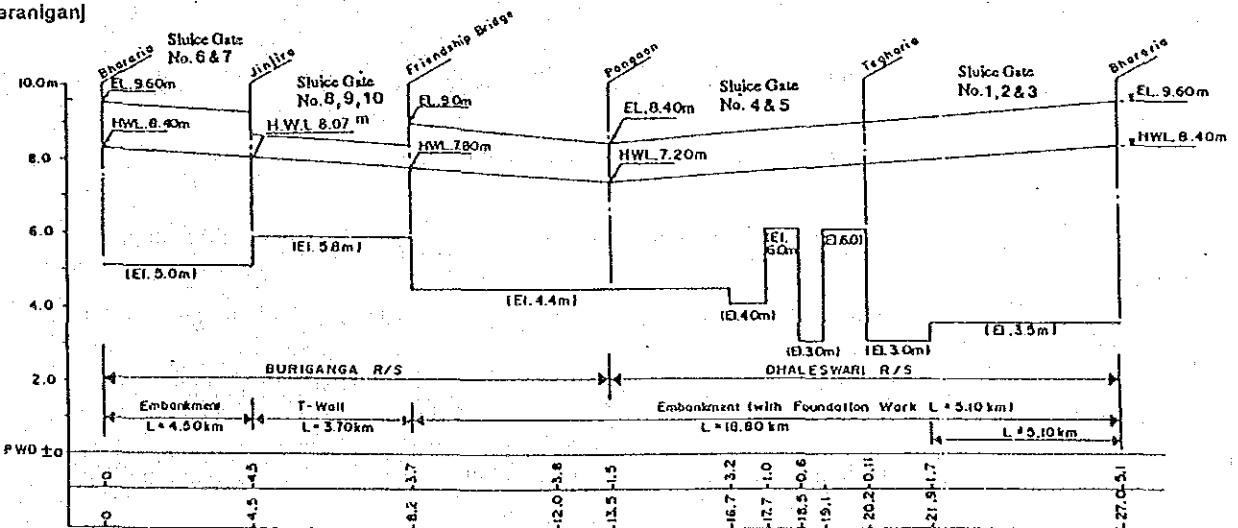


FIG. G.16(4)

PROPOSED LONGITUDINAL SECTIONS : TONGI, SAVAR AND KERANIGANJ

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH

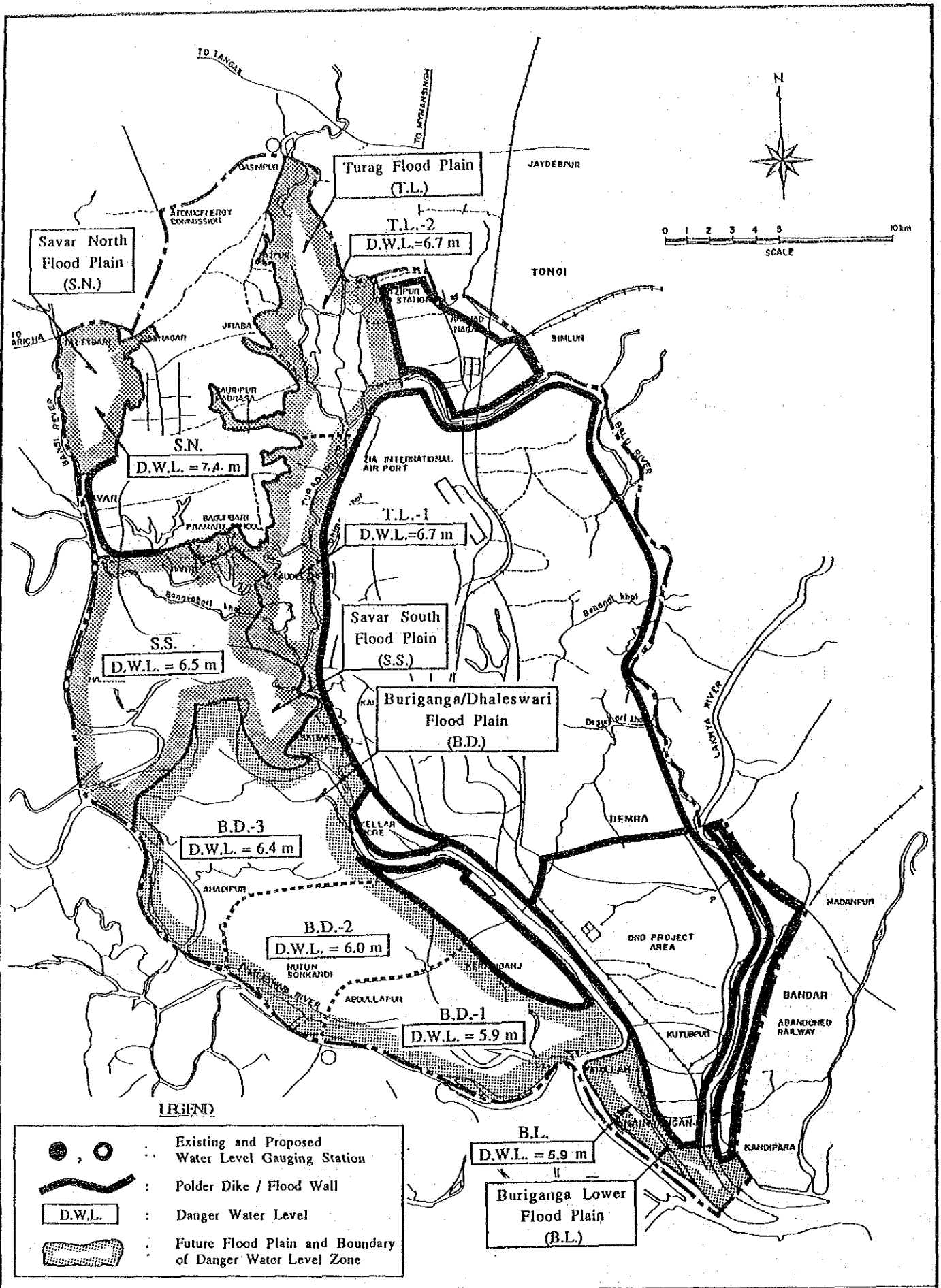


FIG. G.17

FUTURE FLOOD PLAIN & DANGER WATER LEVELS

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH

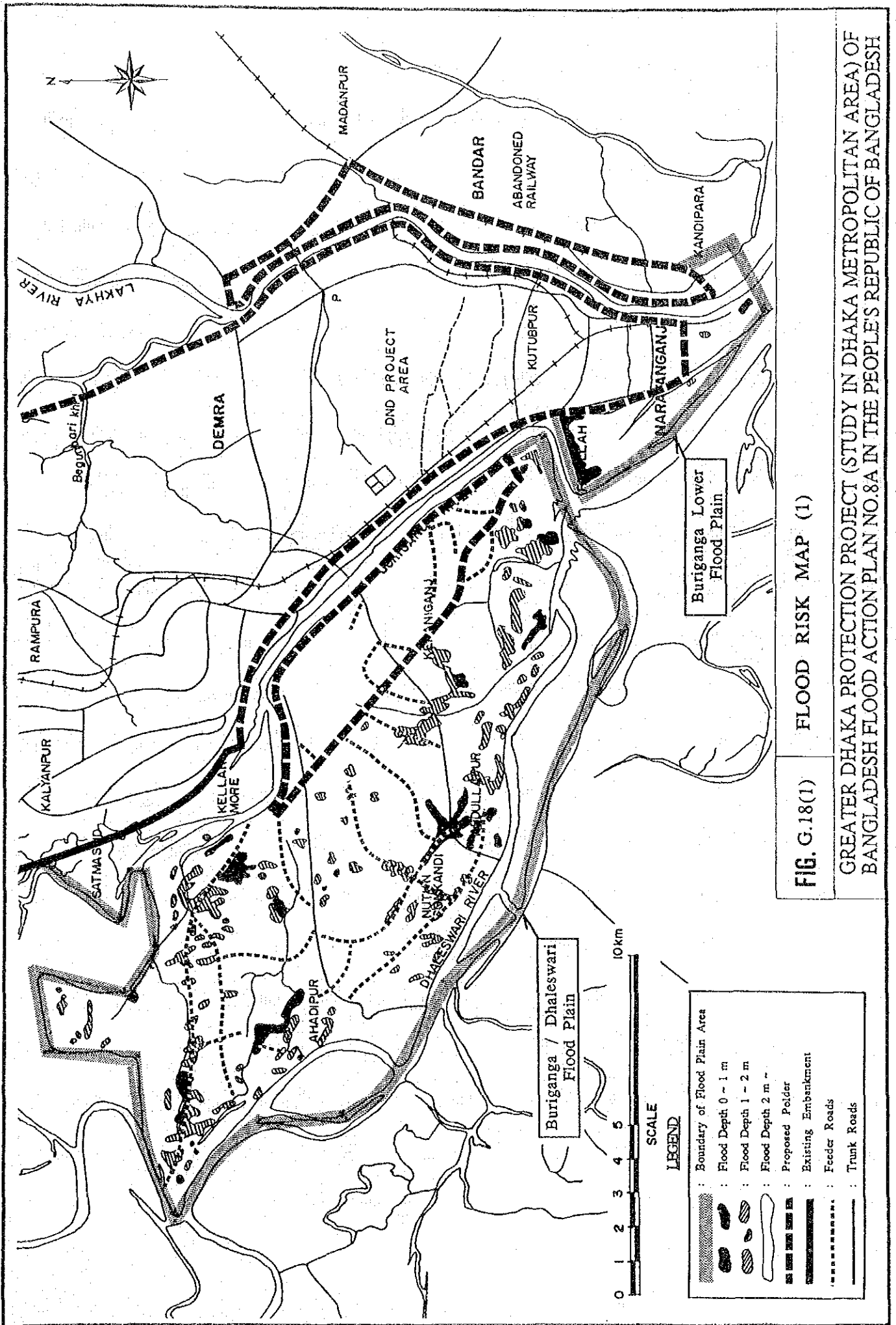


FIG. G.18(1) FLOOD RISK MAP (1)

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH



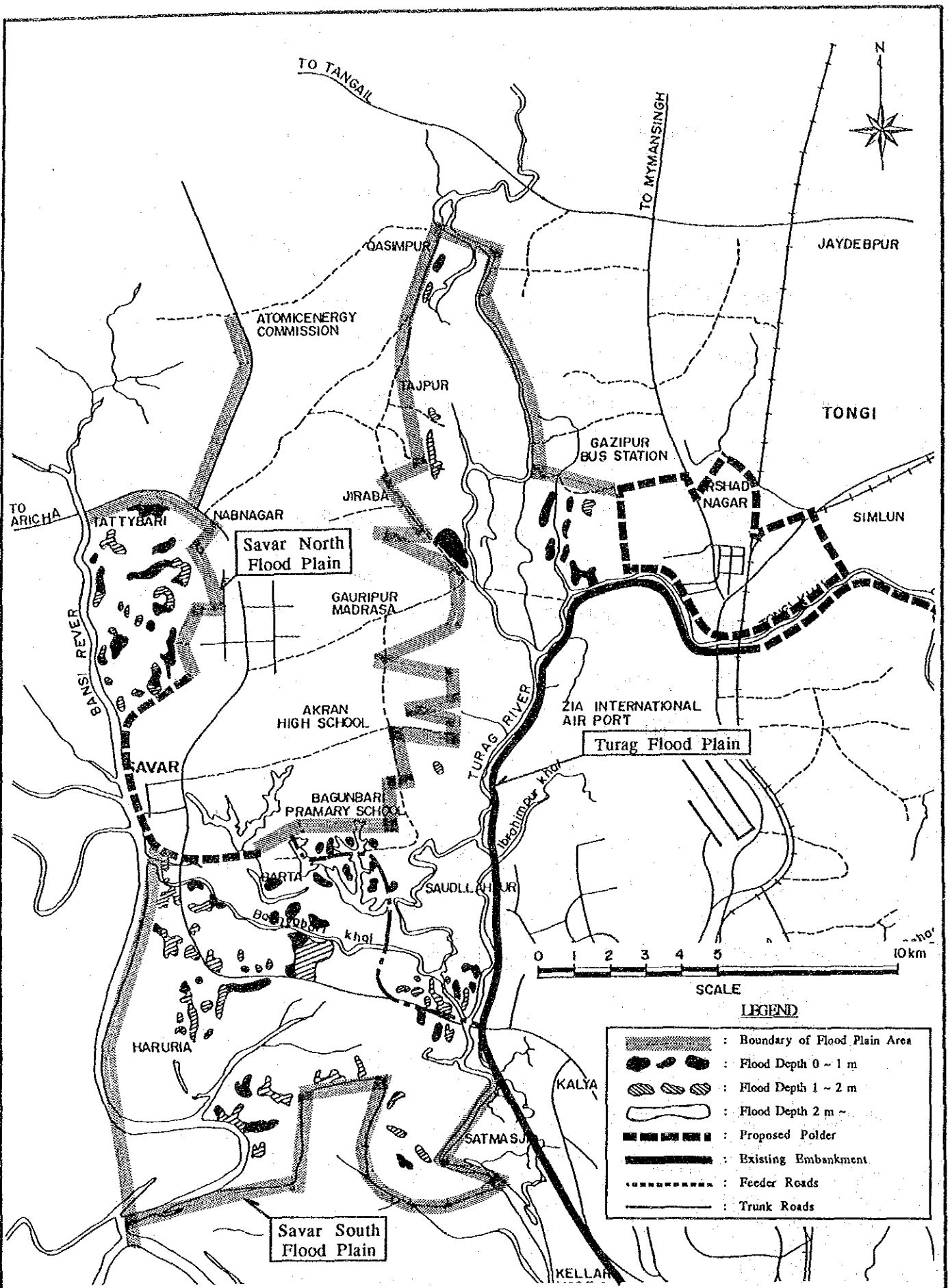


FIG. G.18(2)

FLOOD RISK MAP (2)

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH

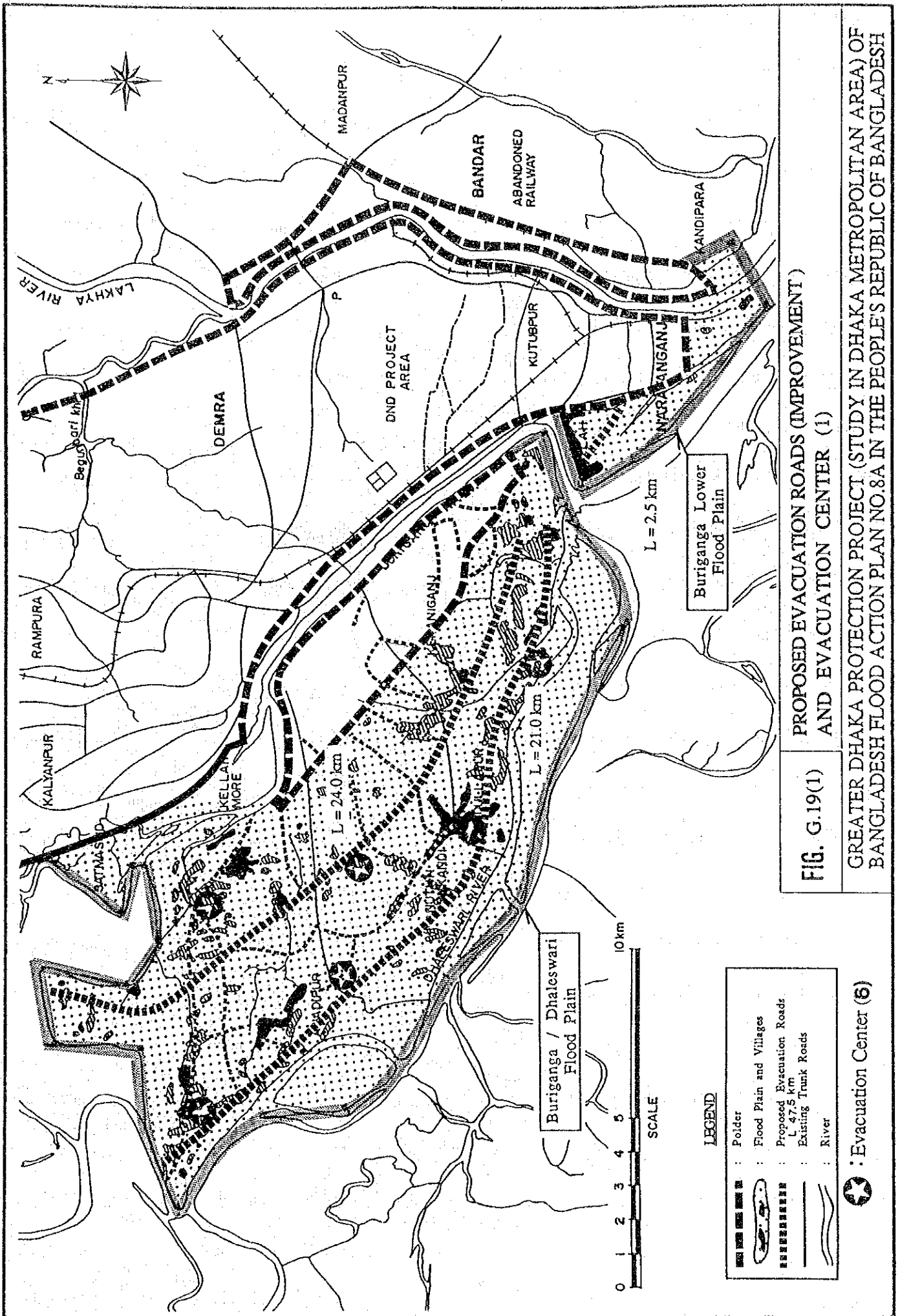
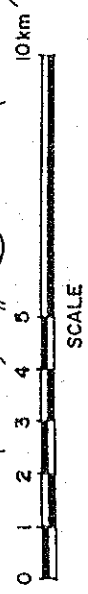


FIG. G.19(1) PROPOSED EVACUATION ROADS (IMPROVEMENT) AND EVACUATION CENTER (1)

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH

- LEGEND**
- : Polder
 - : Flood Plain and Villages
 - : Proposed Evacuation Roads L=47.5 km
 - : Existing Trunk Roads
 - : River
 - : Evacuation Center (6)



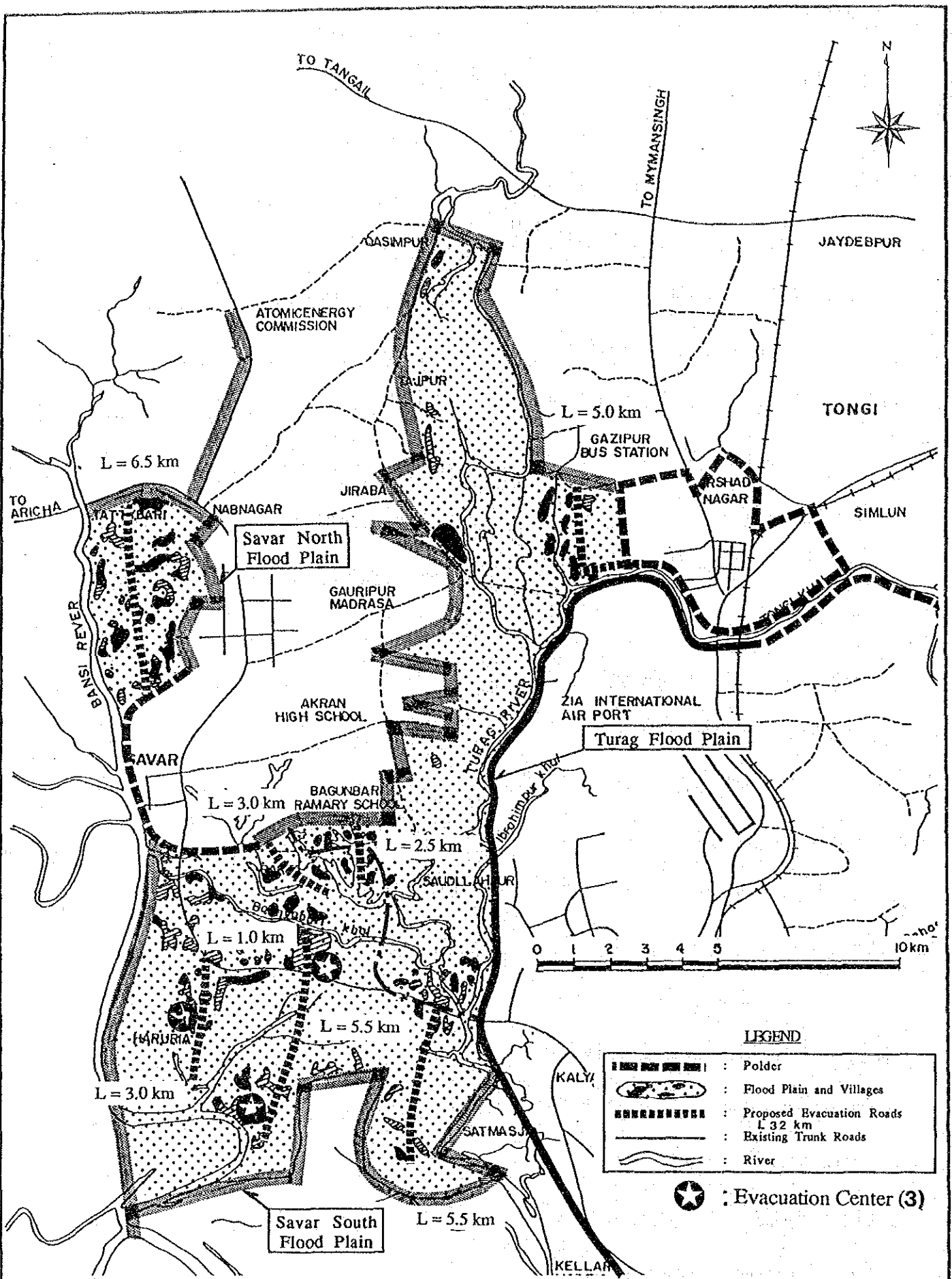


FIG. G.19(2)

PROPOSED EVACUATION ROADS (IMPROVEMENT)
AND EVACUATION CENTER (2)

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF
BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH

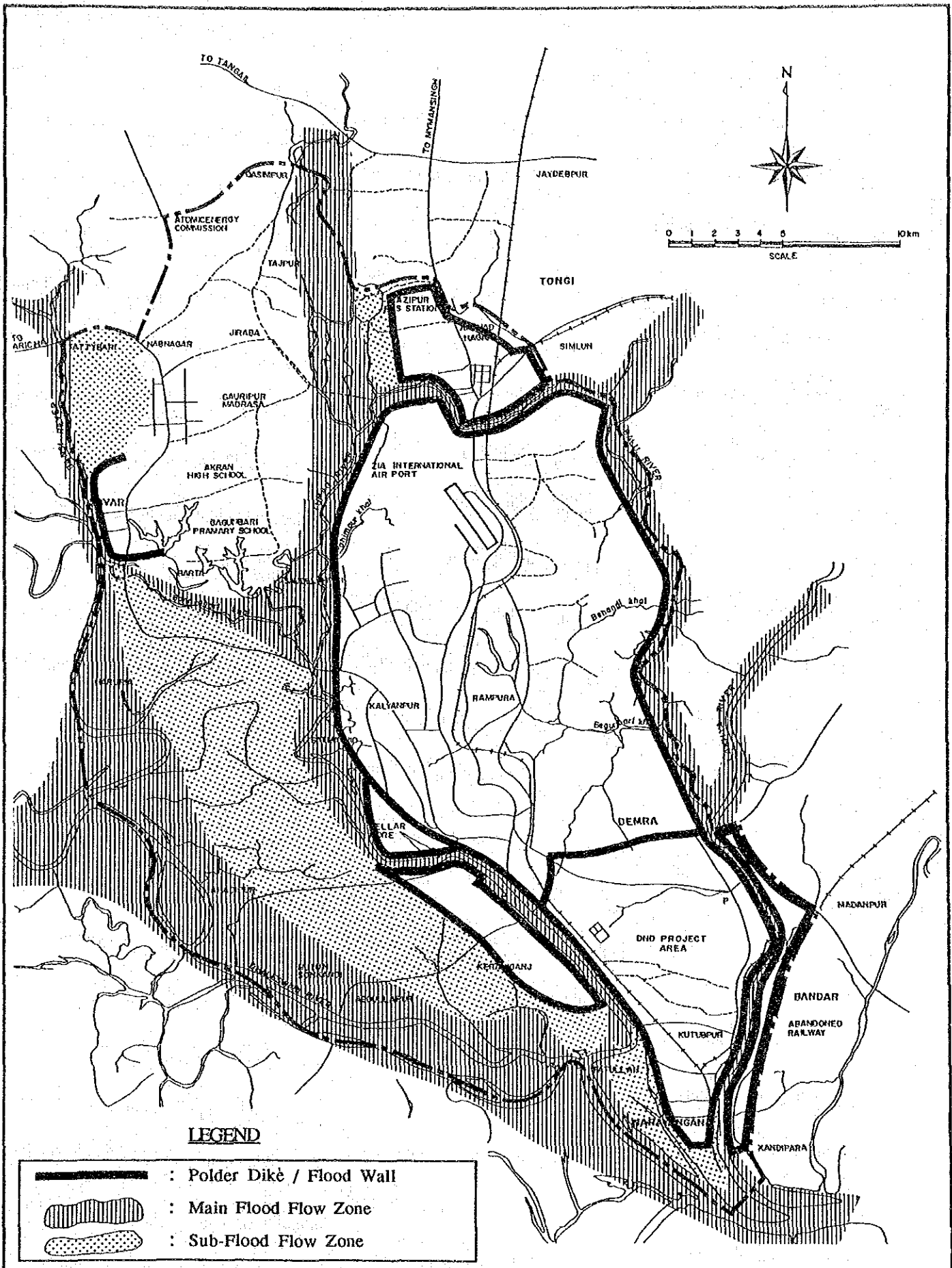


FIG. G.20

ZONING IN FLOOD PLAIN AREA

GREATER DHAKA PROTECTION PROJECT (STUDY IN DHAKA METROPOLITAN AREA) OF BANGLADESH FLOOD ACTION PLAN NO.8A IN THE PEOPLE'S REPUBLIC OF BANGLADESH

