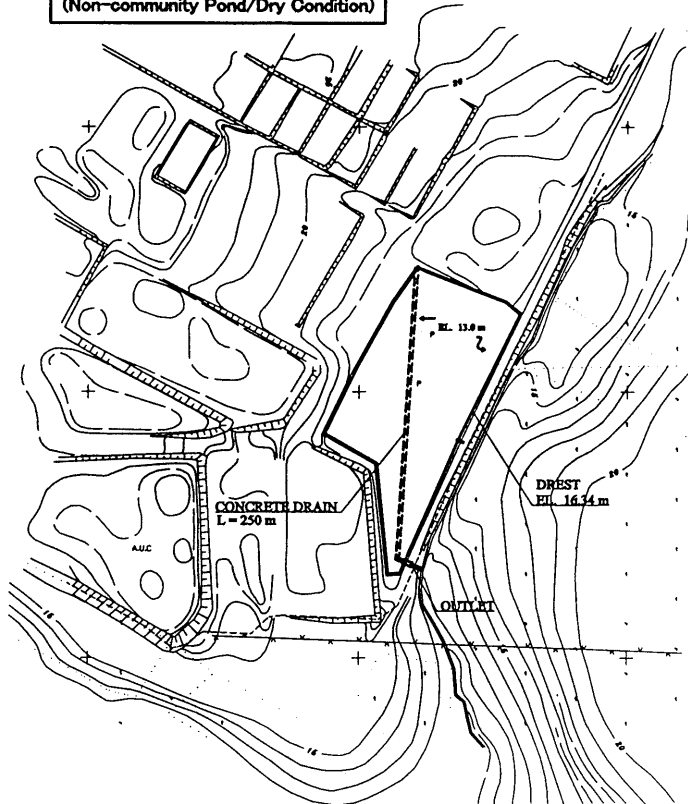
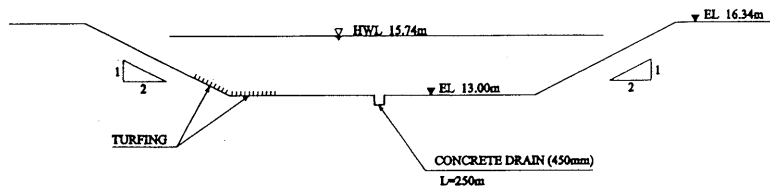


TG.MINYAK (1)
(Non-community Pond/Dry Condition)



Surface Area : 24,850m²
Max Depth : 3.34m
Effective Depth : 2.74m
Storage Capa. : 63,600m³

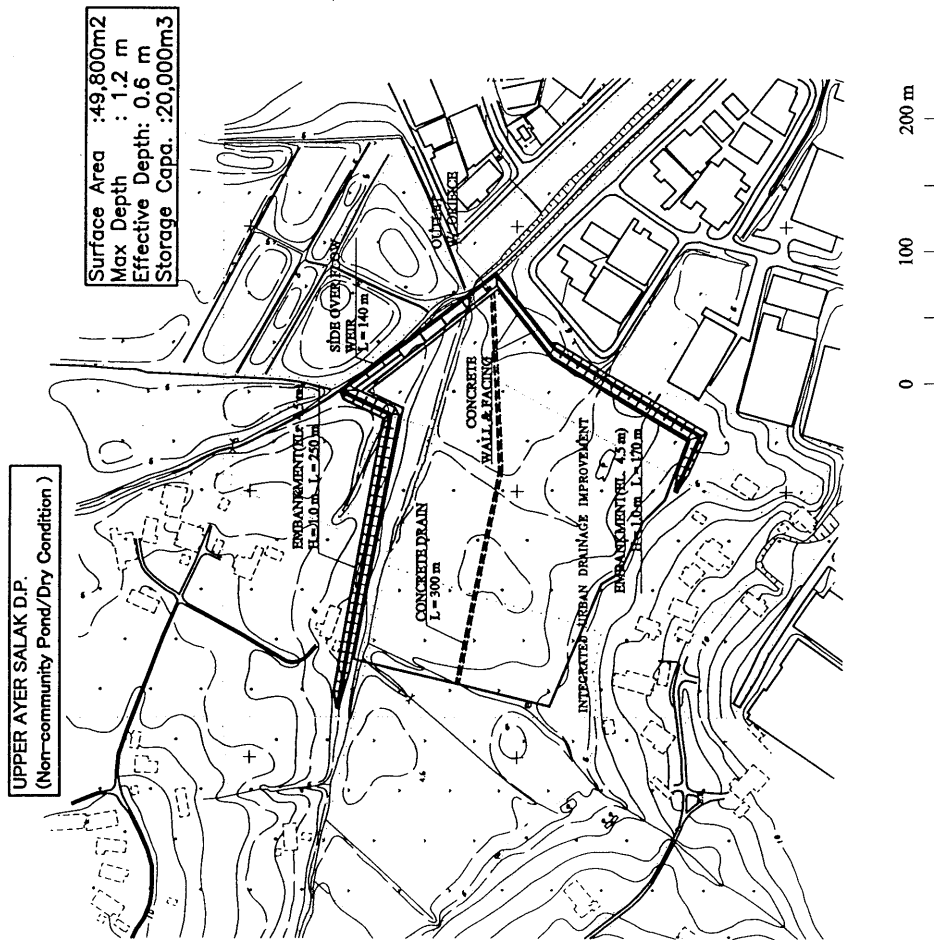
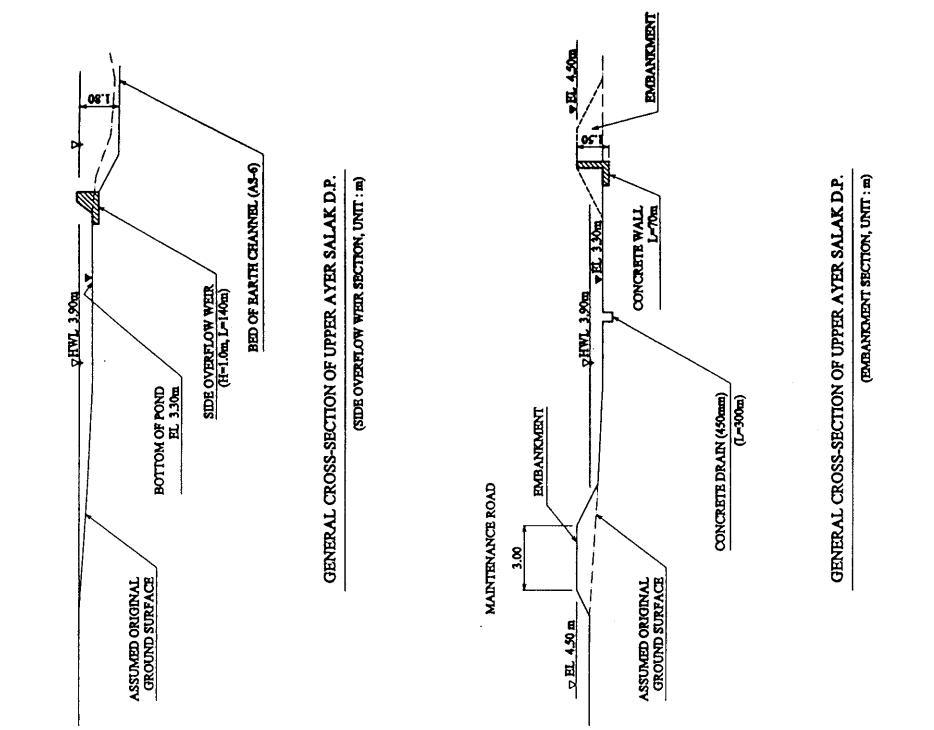
0 100 200 m



GENERAL CROSS-SECTION OF TG. MINYAK (1) D.P.
UNIT : m

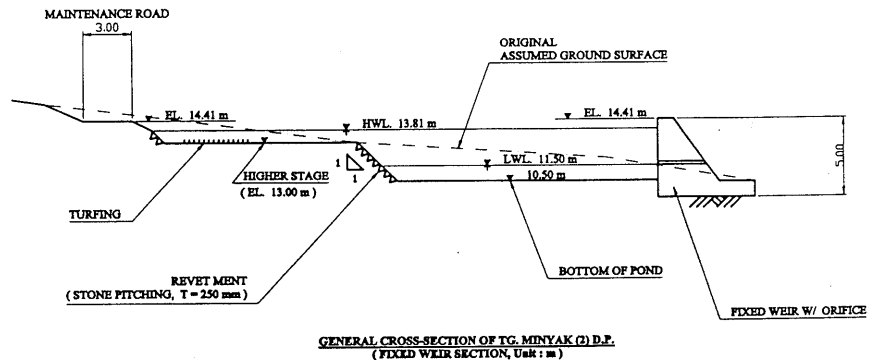
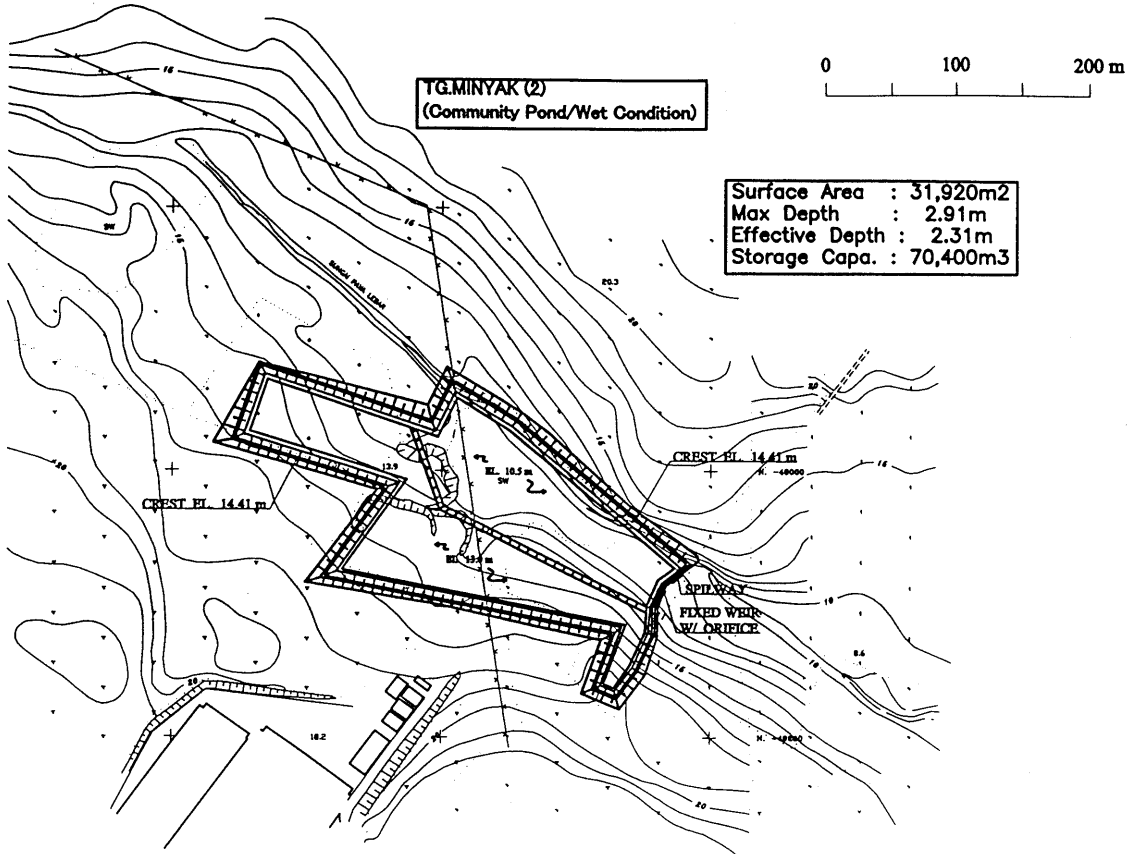
THE STUDY ON
INTEGRATED URBAN DRAINAGE IMPROVEMENT
FOR MELAKA AND SUNGAI PETANI IN MALAYSIA
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 4-17 (1/5)
General Layout of Proposed Detention
Facilities in Sg. Ayer Salak Basin
(Melaka)

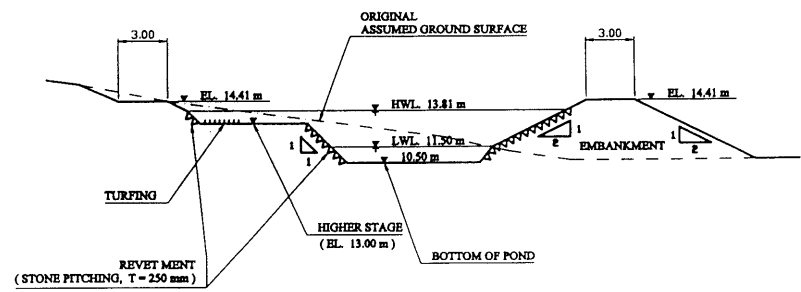


THE STUDY ON
 INTEGRATED URBAN DRAINAGE IMPROVEMENT
 FOR MELAKA AND SUNGAI PETANI IN MALAYSIA
 JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 4-17 (2/5)
 General Layout of Proposed Detention
 Facilities in Sg. Ayer Salak Basin
 (Melaka)



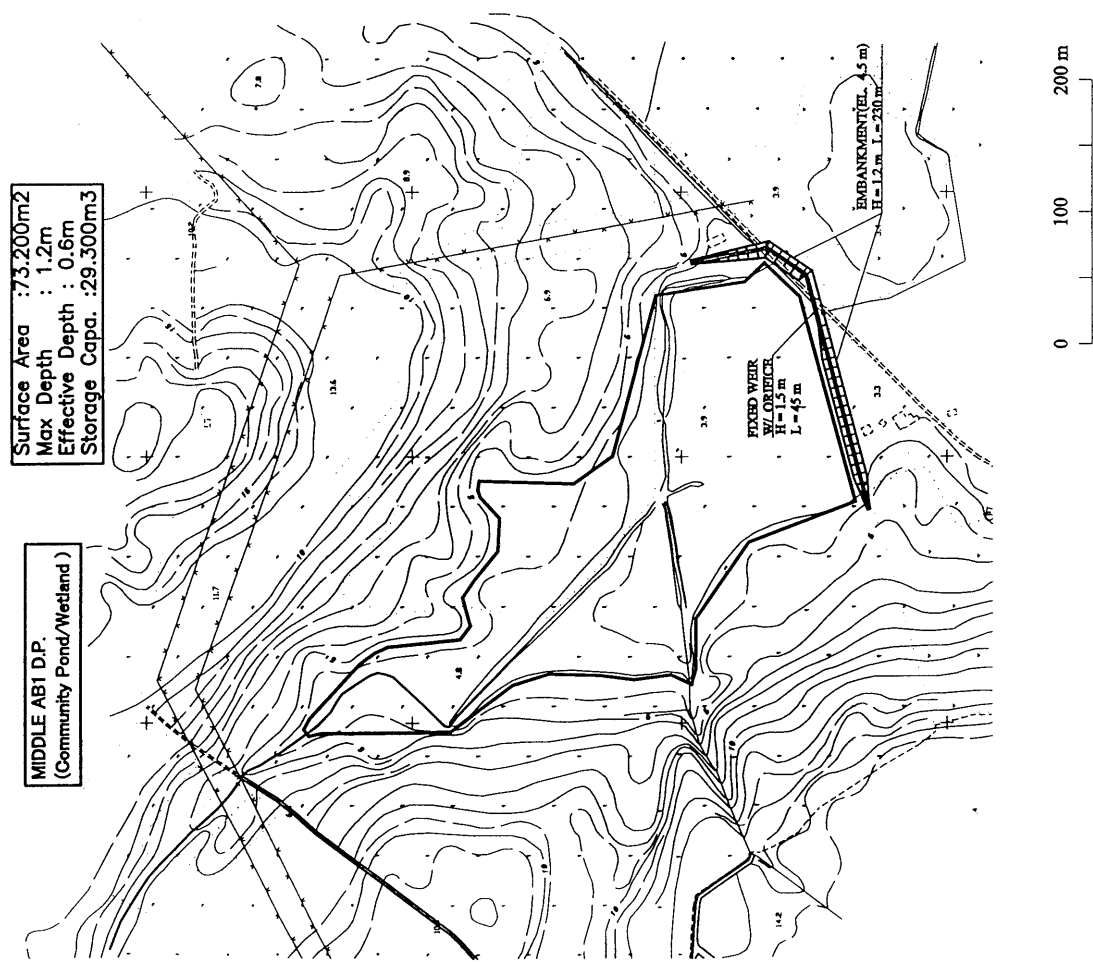
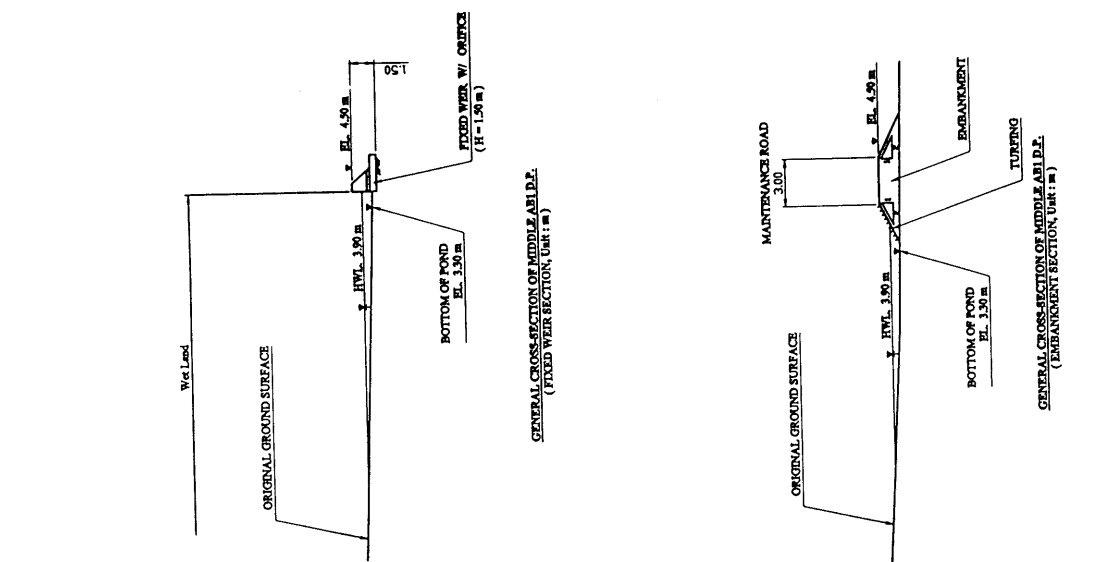
GENERAL CROSS-SECTION OF TG. MINYAK (2) D.P.
(FIXED WEIR SECTION, Unit : m)



GENERAL CROSS-SECTION OF TG. MINYAK (2) D.P.
(EMBANKMENT SECTION, Unit : m)

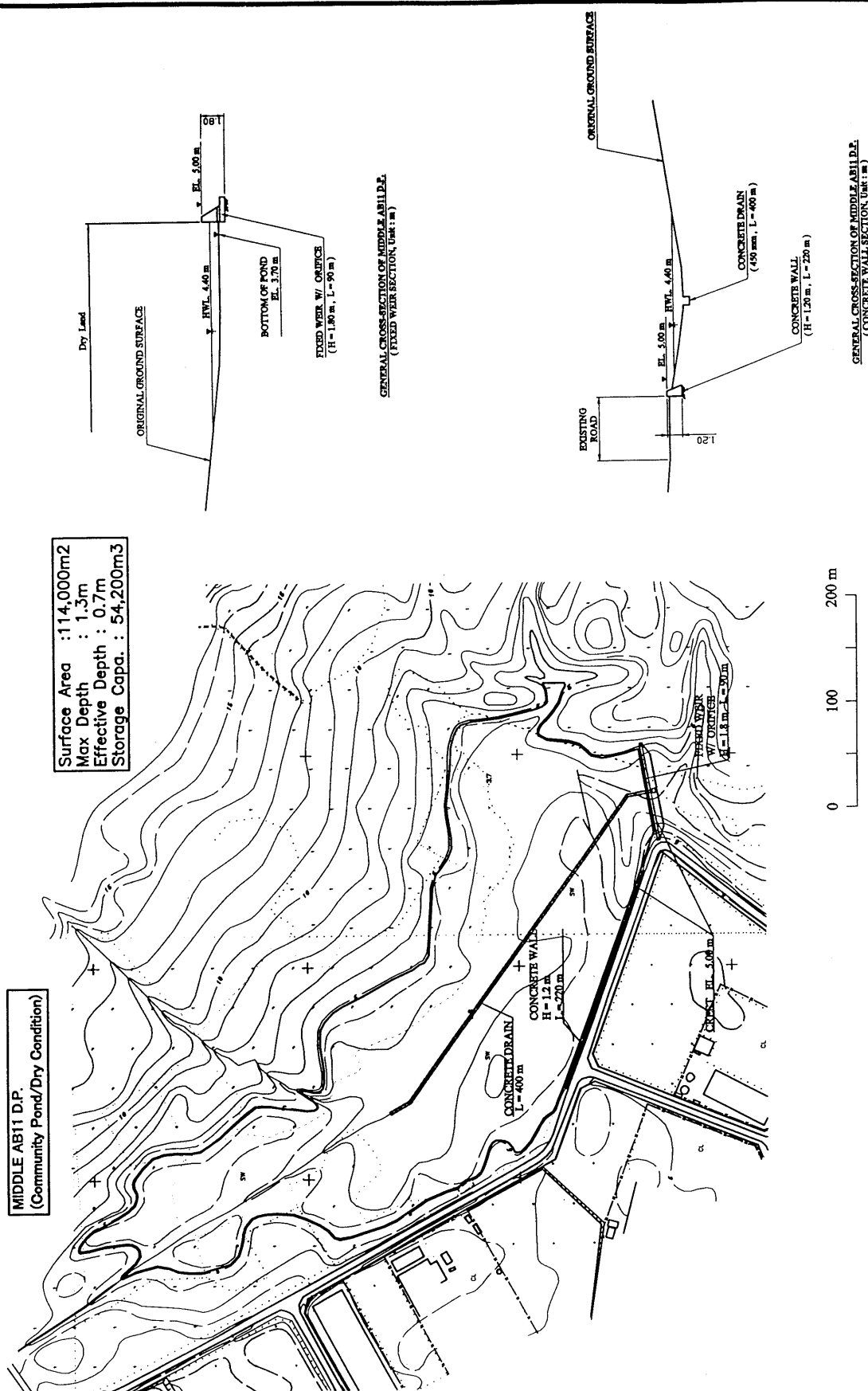
THE STUDY ON
INTEGRATED URBAN DRAINAGE IMPROVEMENT
FOR MELAKA AND SUNGAI PETANI IN MALAYSIA
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 4-17 (3/5)
General Layout of Proposed Detention
Facilities in Sg. Ayer Salak Basin
(Melaka)



THE STUDY ON
 INTEGRATED URBAN DRAINAGE IMPROVEMENT
 FOR MELAKA AND SUNGAI PETANI IN MALAYSIA
 JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 4-17 (4/5)
 General Layout of Proposed Detention
 Facilities in Sg. Ayer Salak Basin
 (Melaka)

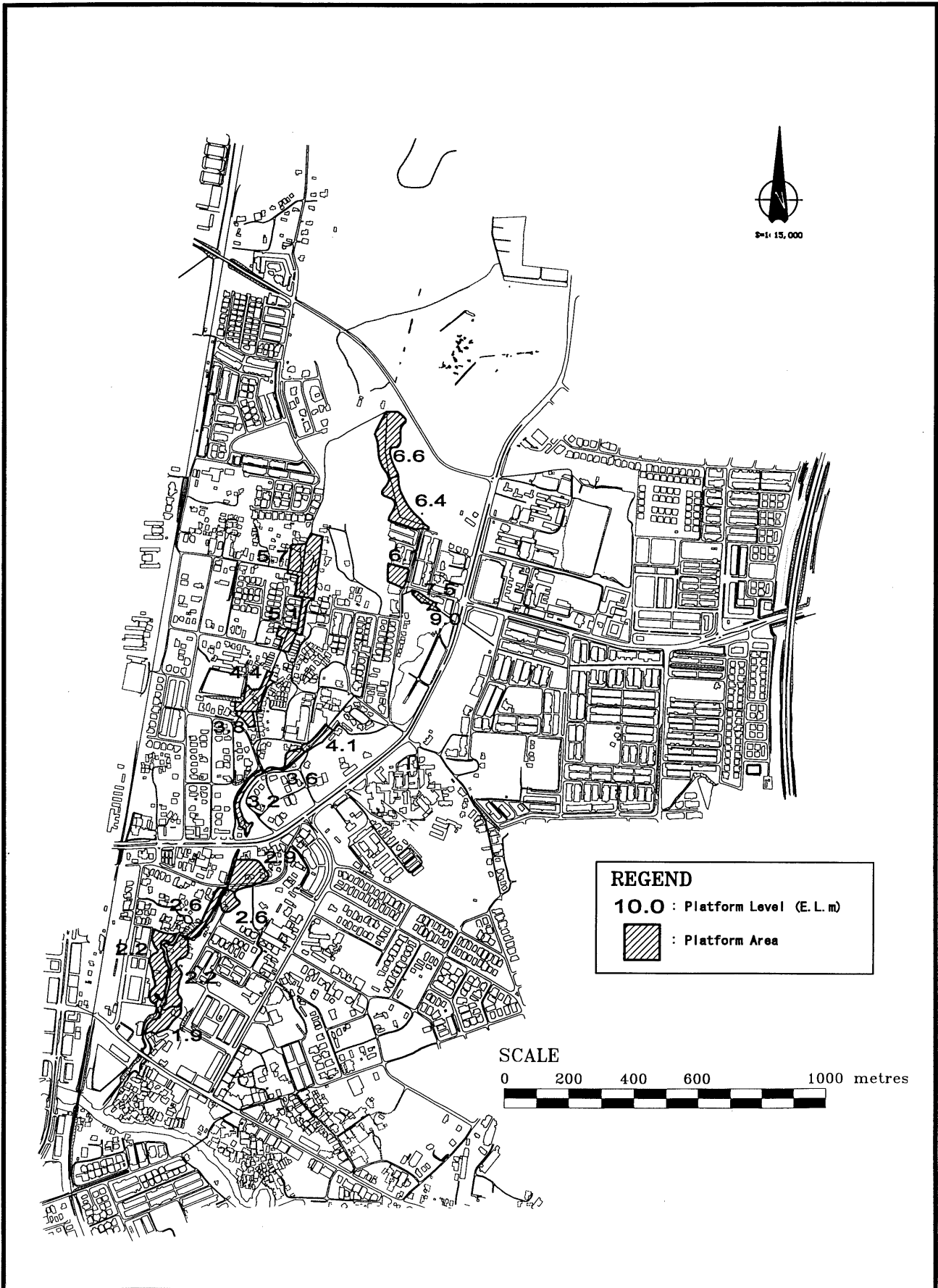


MIDDLE AB11 D.P.
(Community Pond/Dry Condition)

Surface Area : 114,000m²
Max Depth : 1.3m
Effective Depth : 0.7m
Storage Capa. : 54,200m³

THE STUDY ON
INTEGRATED URBAN DRAINAGE IMPROVEMENT
FOR MELAKA AND SUNGAI PETANI IN MALAYSIA
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 4-17 (5/5)
General Layout of Proposed Detention
Facilities in Sg. Ayer Salak Basin
(Melaka)

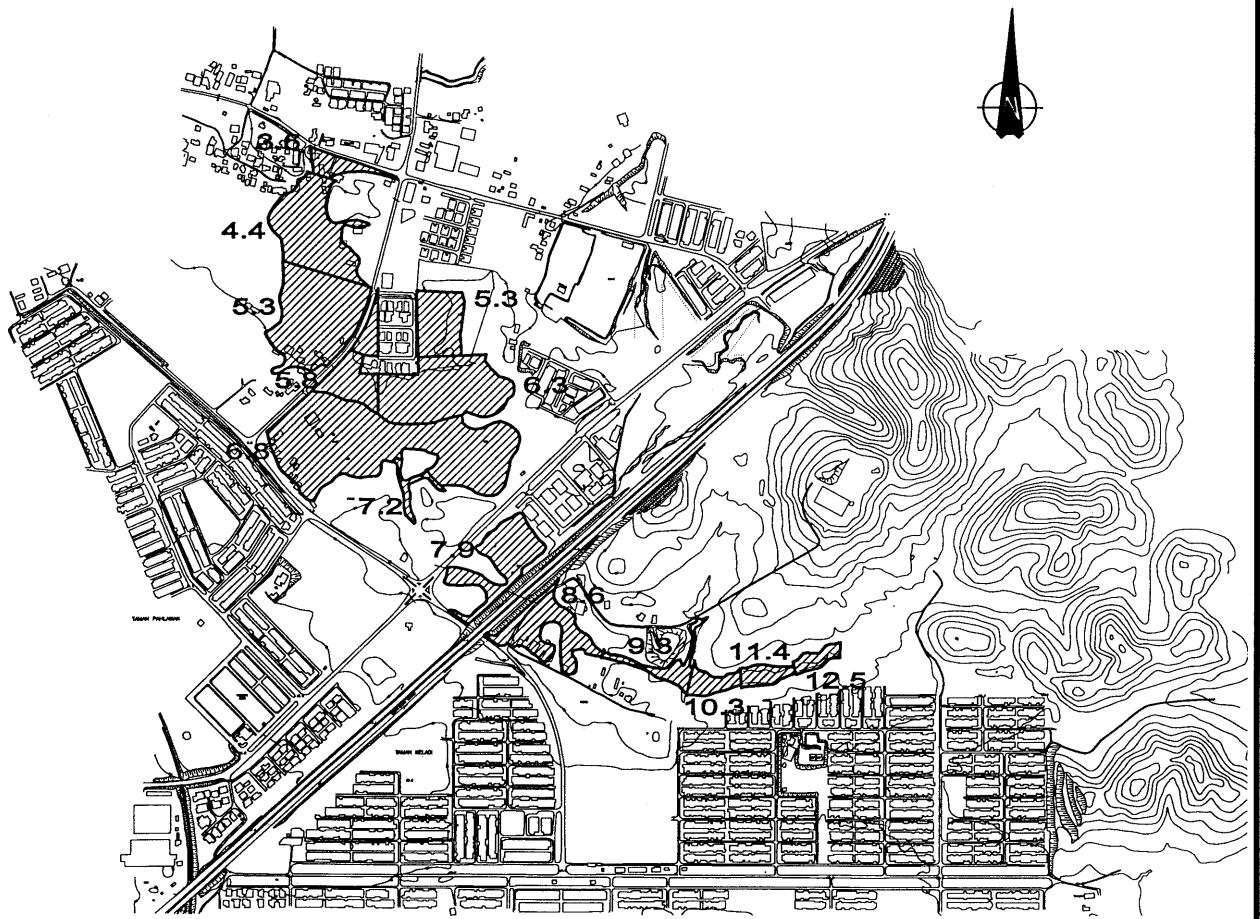


REGEND
 10.0 : Platform Level (E.L. m)
 [Shaded Area] : Platform Area

SCALE
 0 200 400 600 1000 metres


THE STUDY ON
 INTEGRATED URBAN DRAINAGE IMPROVEMENT
 FOR MELAKA AND SUNGAI PETANI IN MALAYSIA
 JAPAN INTERNATIONAL COOPERATION AGENCY

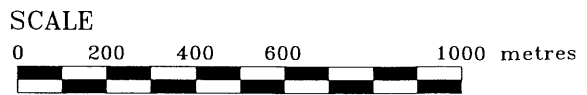
Fig. 4-18 (1/4)
 Area for Rising of Platform Level
 (Sg. Air Mendidih Basin in Sungai Petani)



REGEND

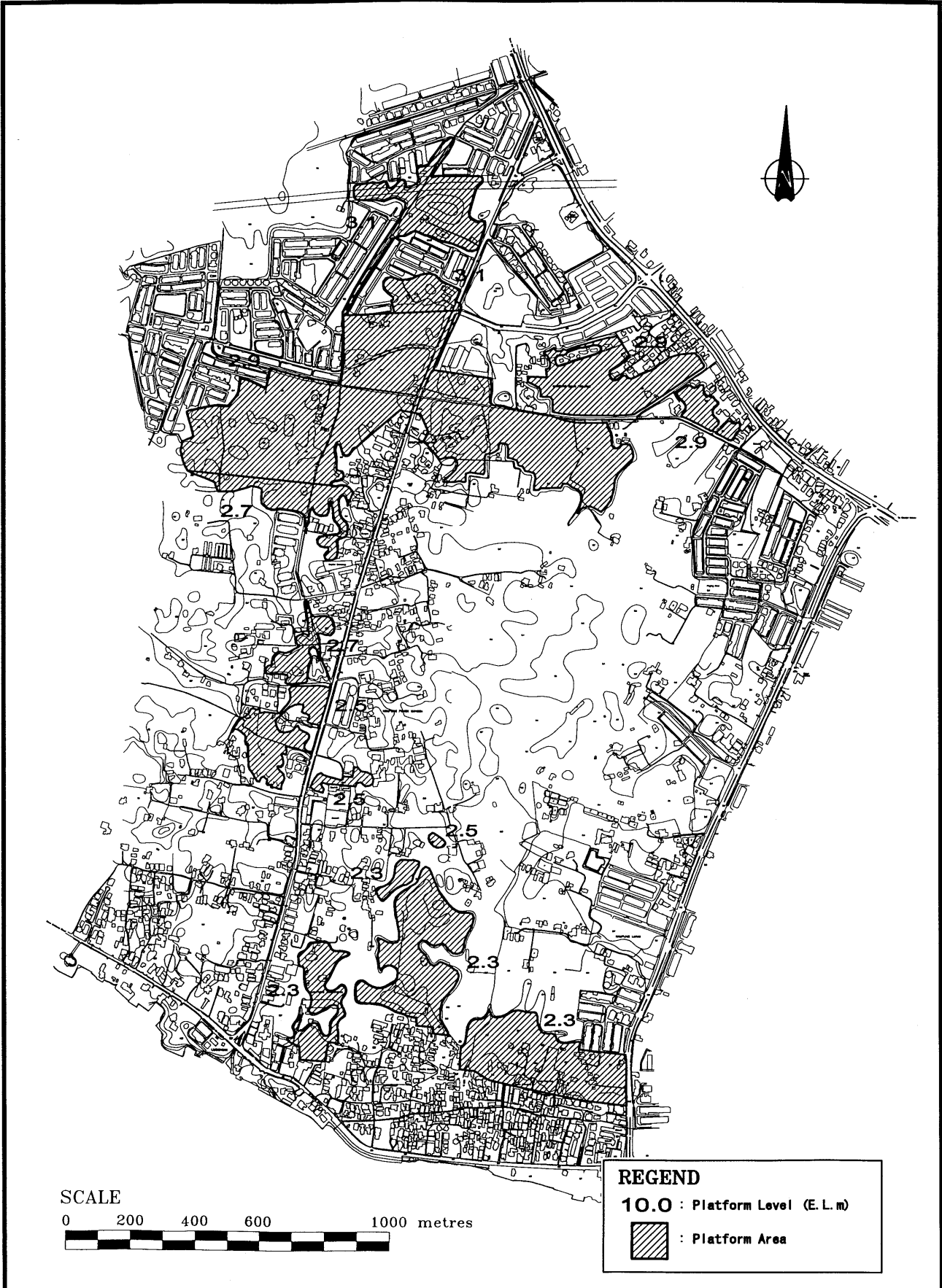
10.0 : Platform Level (E. L. m)

 : Platform Area



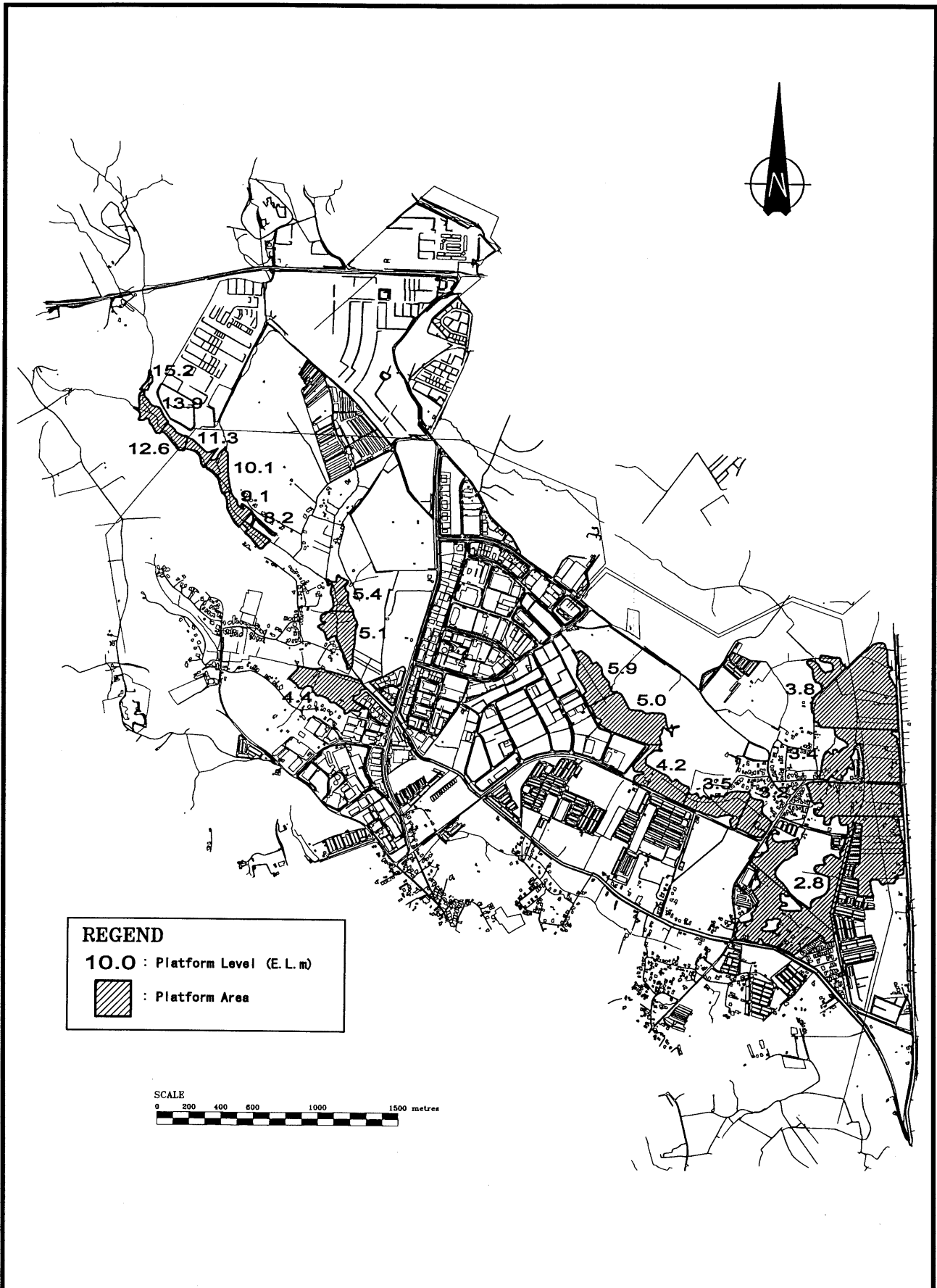
THE STUDY ON
 INTEGRATED URBAN DRAINAGE IMPROVEMENT
 FOR MELAKA AND SUNGAI PETANI IN MALAYSIA
 JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 4-18 (2/4)
 Area for Rising of Platform Level
 (Line-G Basin in Sungai Petani)



THE STUDY ON
 INTEGRATED URBAN DRAINAGE IMPROVEMENT
 FOR MELAKA AND SUNGAI PETANI IN MALAYSIA
 JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 4-18 (3/4)
 Area for Rising of Platform Level
 (Prt. Pokok Mangga Basin in Melaka)



THE STUDY ON
 INTEGRATED URBAN DRAINAGE IMPROVEMENT
 FOR MELAKA AND SUNGAI PETANI IN MALAYSIA
 JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 4-18 (4/4)
 Area for Rising of Platform Level
 (Sg. Ayer Salak Basin in Melaka)

Sg. Petani (Air Mendidih)

Work Items	Quantities	1999	2000	2001	2002	2003	2004	2005
1. Feasibility Study		—						
2. Detailed Design & Const. Supervision				—	—	—	—	—
3. Land Acquisition	8.6 ha				—	—	—	
4. Construction						—	—	—
(1) Channel Improvement	Length							
Segment : AM-1 to AM-5	1,310 m					—		
Segment : N-1 to N-3	1,090 m						—	
Segment : O-1 to P-4	2,040 m						—	—
(2) Detention Facilities	Earth work							
Polis Hutan D.P.	51,300 m3					—	—	—
Upper Line P D.P.	18,900 m3						—	—
Sek. Men. Sains. S.P.O.S.	20,000 m3					—	—	
IKM S.P.O.S.	3,300 m3					—		
Line N channel storage	4,800 m3					—		

Note : D.P. (Detention Pond)

S.P.O.S. (Storage in Public Open Space)

Sg. Petani (Line G)

Work Items	Quantities	1999	2000	2001	2002	2003	2004	2005
1. Feasibility Study		—						
2. Detailed Design & Const. Supervision				—	—	—	—	—
3. Land Acquisition	9.0 ha				—	—	—	
4. Construction						—	—	—
(1) Channel Improvement	Length							
Segment : G-1 to G-5	1,500 m					—	—	
Segment : G-6 to G-8 & TK-1	1,240 m							—
Diversion channel : D-1	280 m						—	
(2) Detention Facilities	Earth work							
Taman Keladi D.P.(rehabilitation)	28,000 m3					—	—	
T. Sri Wang D.P.(rehabilitation)	4,700 m3					—		
Upper Line G D.P.	24,100 m3						—	—
Middle Line G D.P.	35,700 m3					—	—	

Note : D.P. (Detention Pond)

S.P.O.S. (Storage in Public Open Space)

THE STUDY ON
INTEGRATED URBAN DRAINAGE IMPROVEMENT
FOR MELAKA AND SUNGAI PETANI IN MALAYSIA
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 4-19 (1/2)
Implementation Schedule of Priority
Project

Melaka (Pokok Mangga)

Work Items	Quantities	1999	2000	2001	2002	2003	2004	2005
1. Feasibility Study		—						
2. Detailed Design & Const. Supervision				—	—	—	—	—
3. Land Acquisition	6.3 ha				—	—	—	
4. Construction						—	—	—
Channel Improvement	Length							
Segment : PM-1 to AM-4	3,270 m					—	—	—
Segment : LP-1 to LP-2 & BL-1	2,790 m					—	—	
Segment : M-1 to M-2	2,230 m						—	—
New trunk drain : FW-1 to FW-3	2,550 m						—	—

Melaka (Ayer Salak)

Work Items	Quantities	1999	2000	2001	2002	2003	2004	2005
1. Feasibility Study		—						
2. Detailed Design & Const. Supervision				—	—	—	—	—
3. Land Acquisition	51.9 ha				—	—	—	
4. Construction						—	—	—
(1) Channel Improvement	Length							
Segment : AS-3 to AS-4	850 m					—	—	
Segment : AS-5 to AS-8	3,930 m					—	—	—
Segment : A1-1 to A1-3	3,910 m					—	—	—
Segment : A2-1 to A2-2	2,950 m						—	—
Segment : T1-1 to T5-1	4,100 m					—	—	—
(2) Detention Facilities	Earth work							
Bukit Rambai D.P.(rehabilitation)	12,900 m ³					—	—	
Tg.Minyak (1) D.P.	63,100 m ³					—	—	—
Tg.Minyak (2) D.P.	51,500 m ³					—	—	—
Upper Ayer Salak D.P.	4,300 m ³						—	—
Middle AB1 D.P.	2,200 m ³							—
Middle AB11D.P.	100 m ³						—	—

Note : D.P. (Detention Pond)

S.P.O.S. (Storage in Public Open Space)

THE STUDY ON
INTEGRATED URBAN DRAINAGE IMPROVEMENT
FOR MELAKA AND SUNGAI PETANI IN MALAYSIA
JAPAN INTERNATIONAL COOPERATION AGENCY

Fig. 4-19 (2/2)
Implementation Schedule of Priority
Project