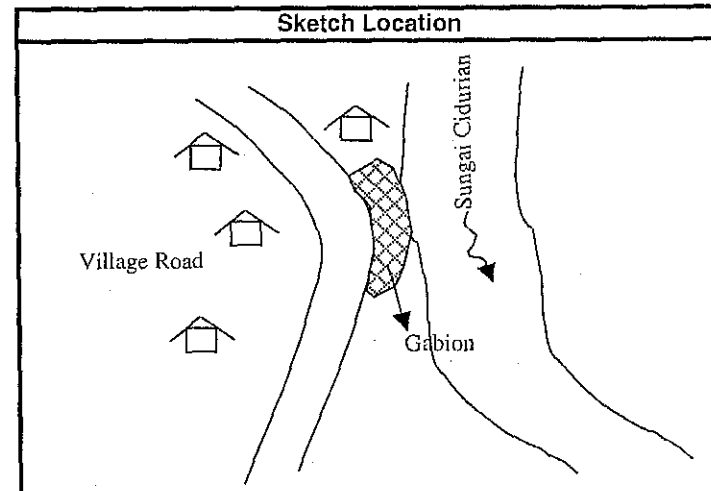
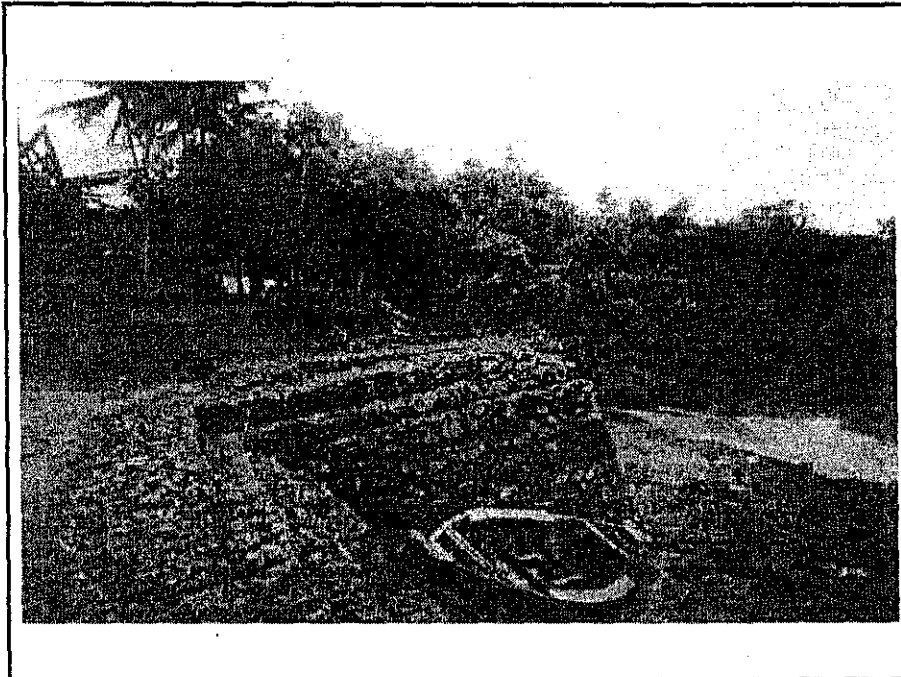
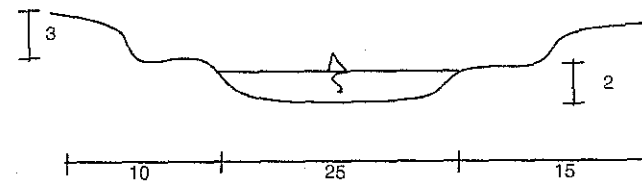


DOCUMENTATION OF RIVER SURVEY 2003

Name of River / Canal : Sungai Cidurian Date of Survey : 24-02-2003
Location : Desa Pasirampo, Kresek Filled by : PT. MITRAPACIFIC CONSULINDO INTERNATIONAL
No. of Picture :
Title :



Dimension of Canal / Structure

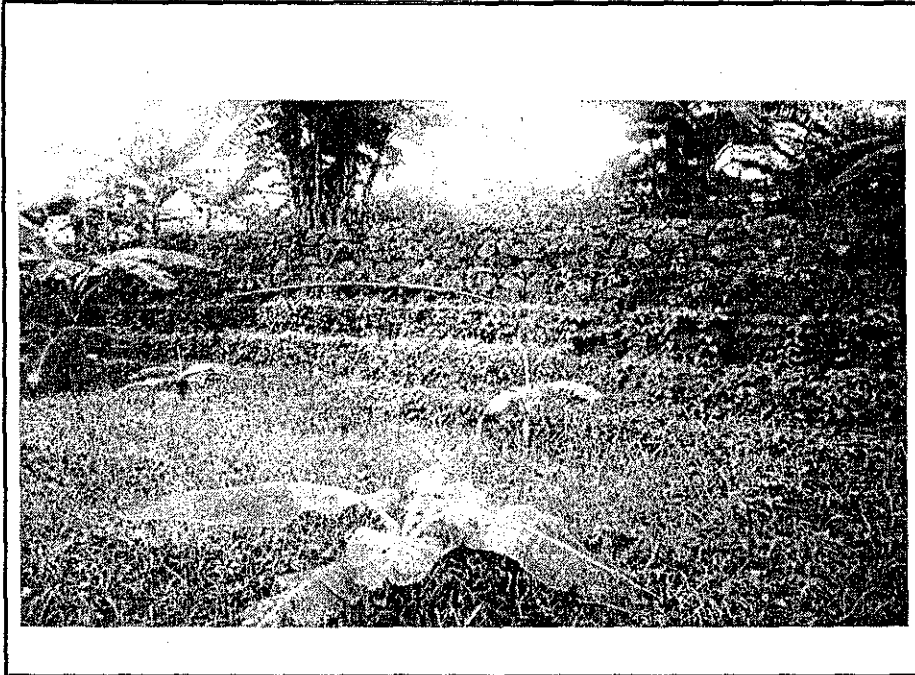


Remarks :

-Land slide occurred in river bend area, but some area was protected by gabion.

DOCUMENTATION OF RIVER SURVEY 2003

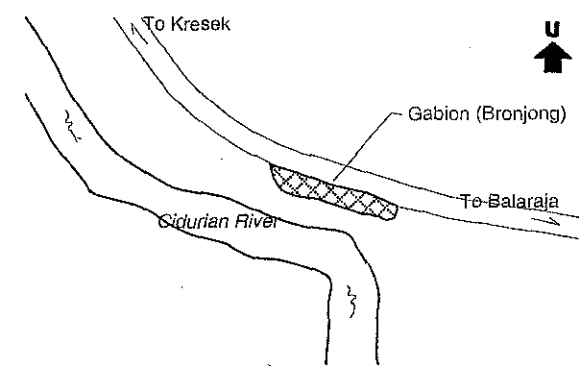
Name of River / Canal : Cidurian River Date of Survey : 22-03-2003
 Location : Kel. Renged, Kab. Tangerang Filled by : PT. MITRAPACIFIC CONSULINDO INTERNATIONAL
 No. of Picture :
 Title :



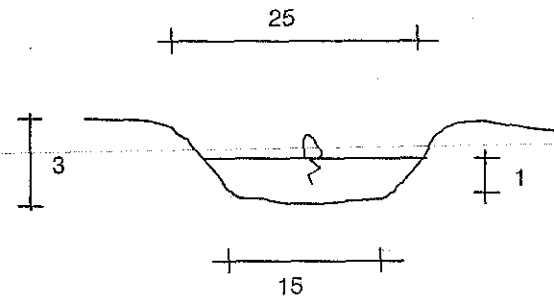
Remarks :

- Gabion as slope protection of Cidurian riverbank which is vulnerable for land slide and erosion.

Sketch Location



Dimension of Canal / Structure



DOCUMENTATION OF RIVER SURVEY 2003

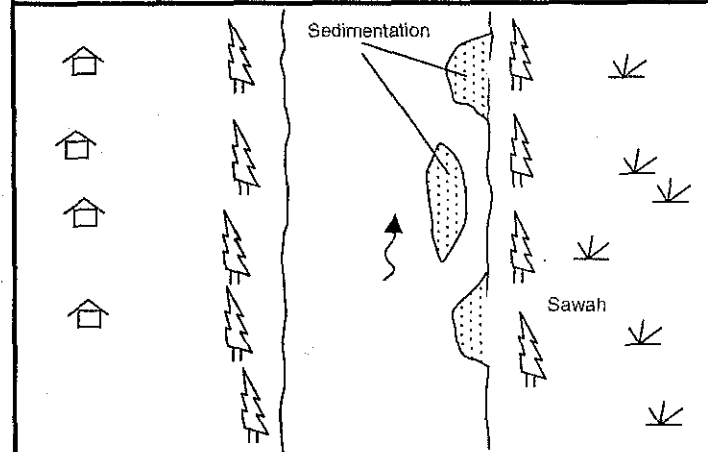
Name of River / Canal	: Sungai Cimanceuri	Date of Survey	: 4-03-2003
Location	: Ds. Gunung Kawi, Dago	Filled by	: PT. MITRAPACIFIC CONSULINDO INTERNATIONAL
No. of Picture	:		
Title	:		



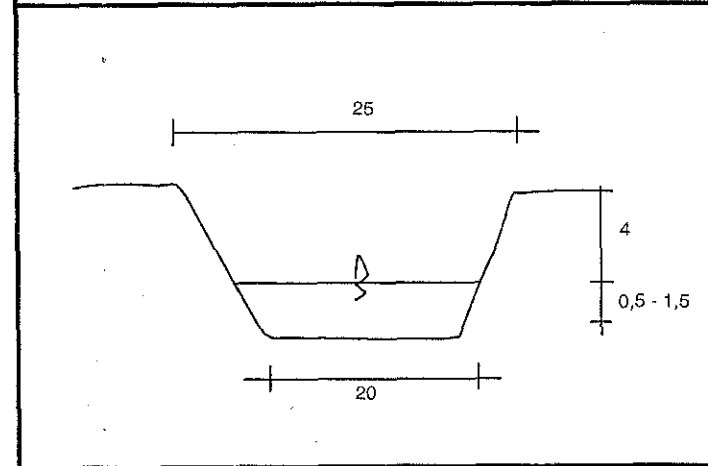
Remarks :

- Sand extraction and collection from the river sediment.
- The water level and flow are change from sand extraction.

Sketch Location

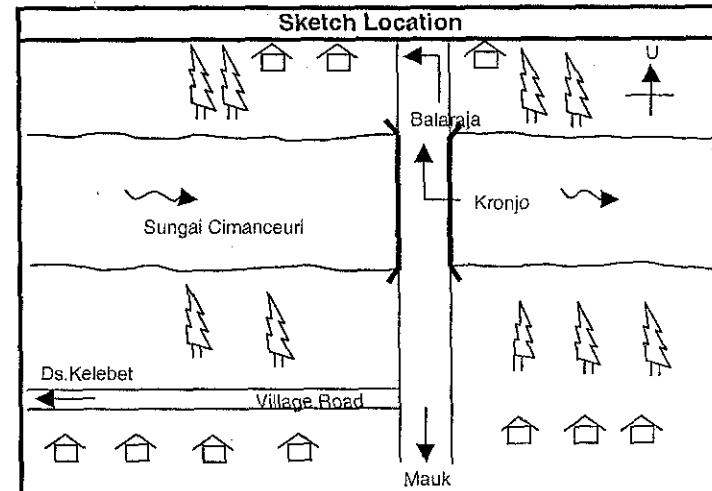
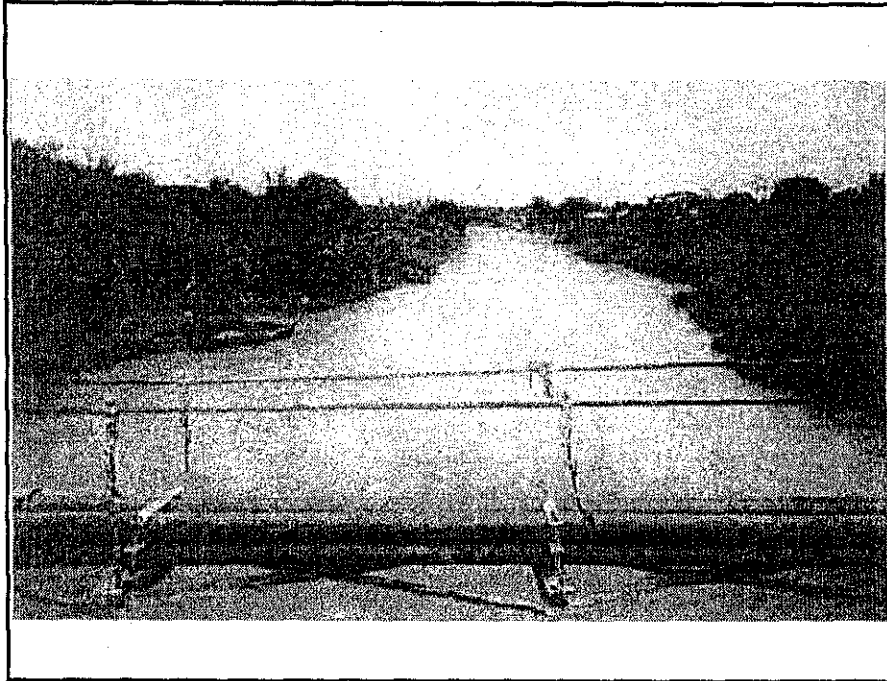


Dimension of Canal / Structure

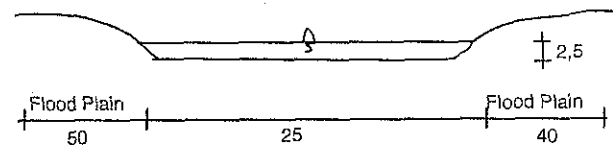


DOCUMENTATION OF RIVER SURVEY 2003

Name of River / Canal	: Sungai Cimanceuri	Date of Survey	: 1-03-2003
Location	: Ds. Kelebet, Tangerang	Filled by	: PT. MITRAPACIFIC CONSULINDO INTERNATIONAL
No. of Picture	:		
Title	:		



Dimension of Canal / Structure

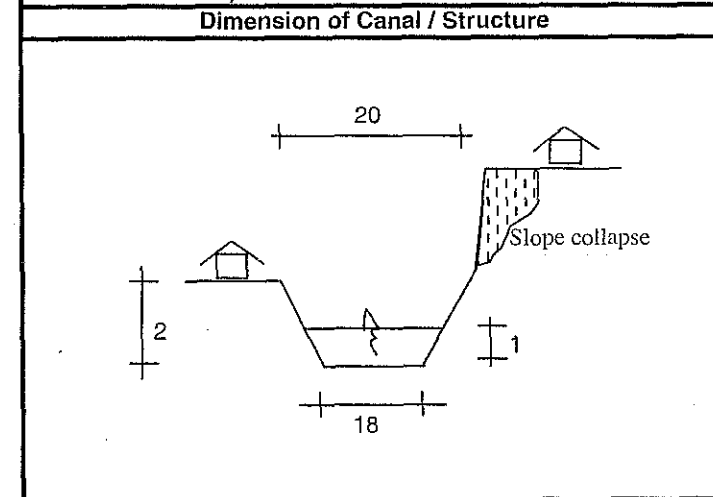
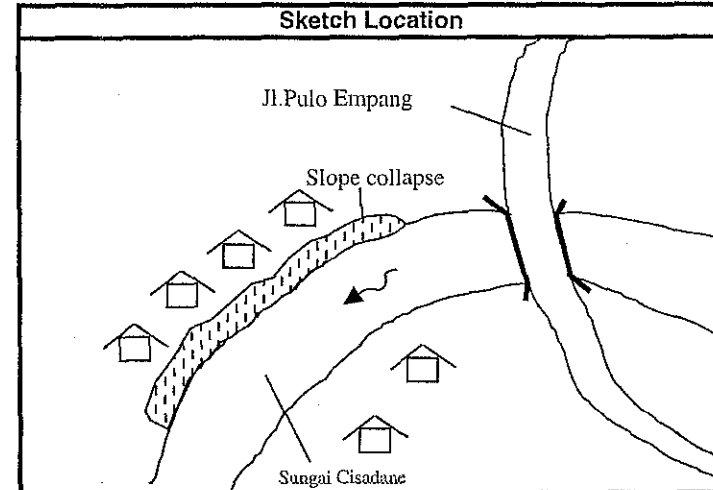
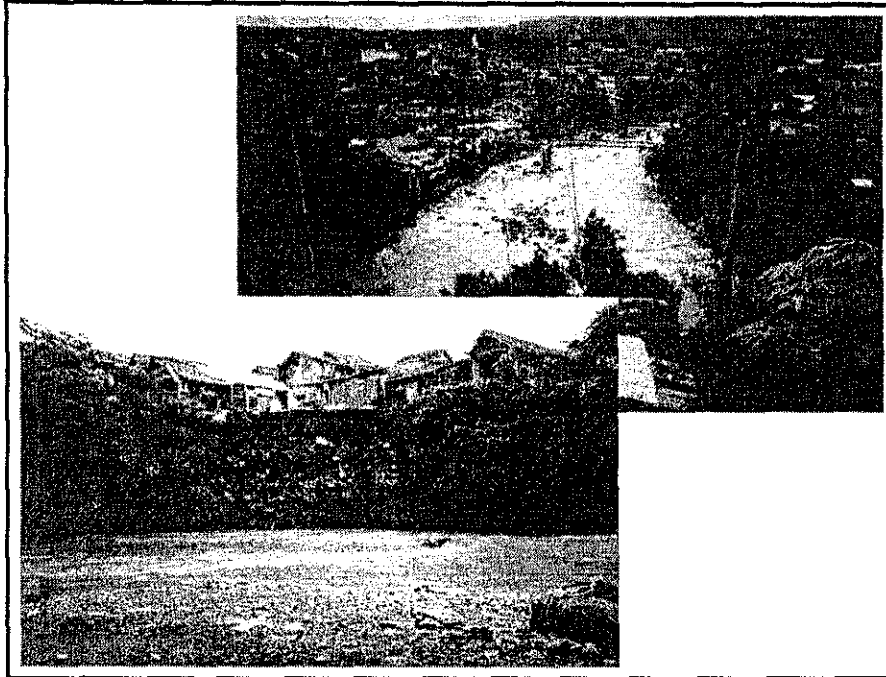


Remarks :

-Water level increase and inundated the settlement area during flood 2003 to a depth of 50 - 100 cm for 5-15 days.

DOCUMENTATION OF RIVER SURVEY 2003

Name of River / Canal	: Sungai Cisadane	Date of Survey	: 18-02-2003
Location	: Kel. Paedang, Bogor	Filled by	: PT. MITRAPACIFIC CONSULINDO INTERNATIONAL
No. of Picture	:		
Title	:		

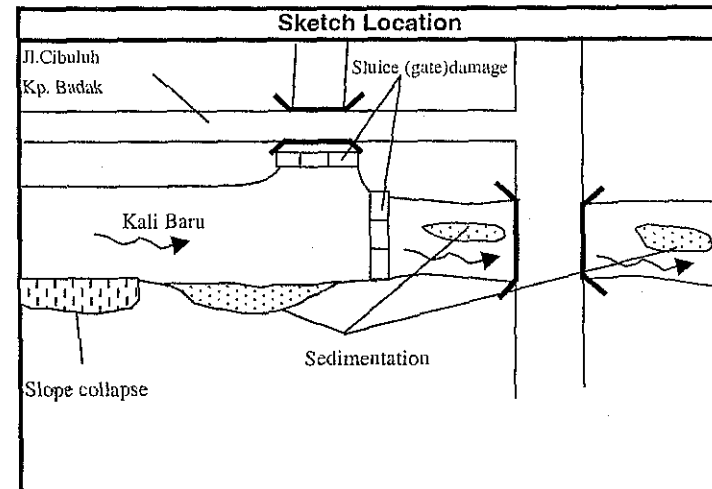
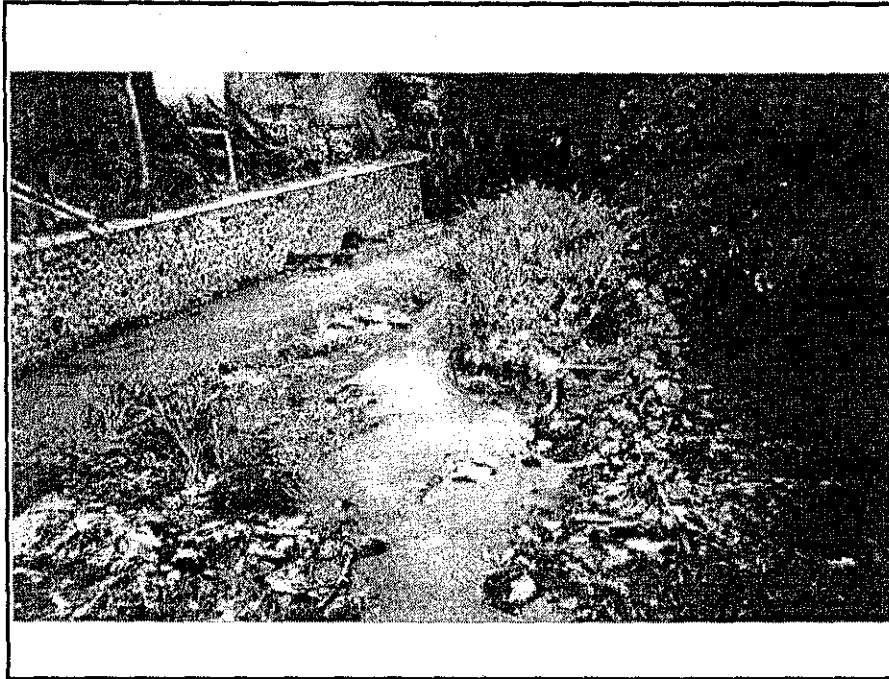


Remarks :

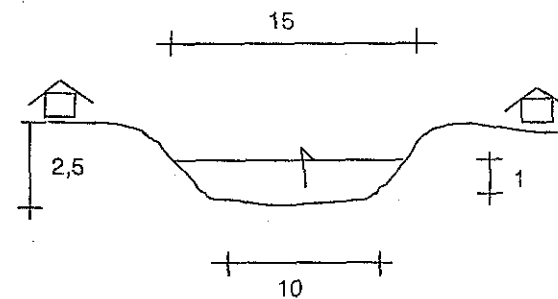
- Housing is restricted zone of river, cause erosion and sedimentation.

DOCUMENTATION OF RIVER SURVEY 2003

Name of River / Canal	: Kali Baru	Date of Survey	: 21-02-2003
Location	: Kel. Kebon Pedes Bogor	Filled by	: PT. MITRAPACIFIC CONSULINDO INTERNATIONAL
No. of Picture	:		
Title	:		



Dimension of Canal / Structure



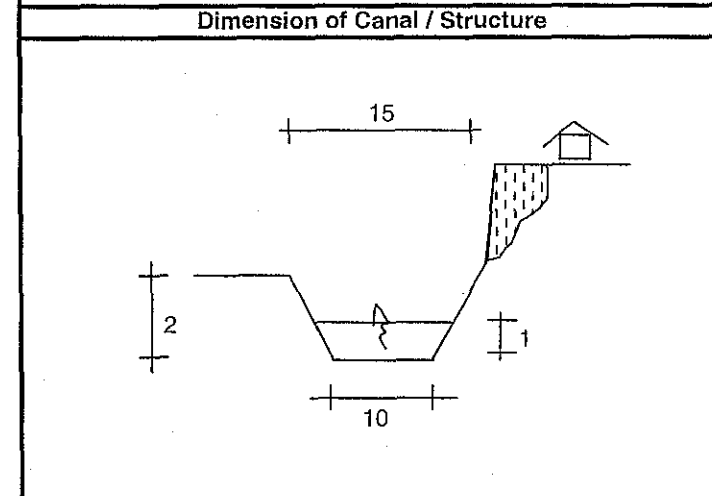
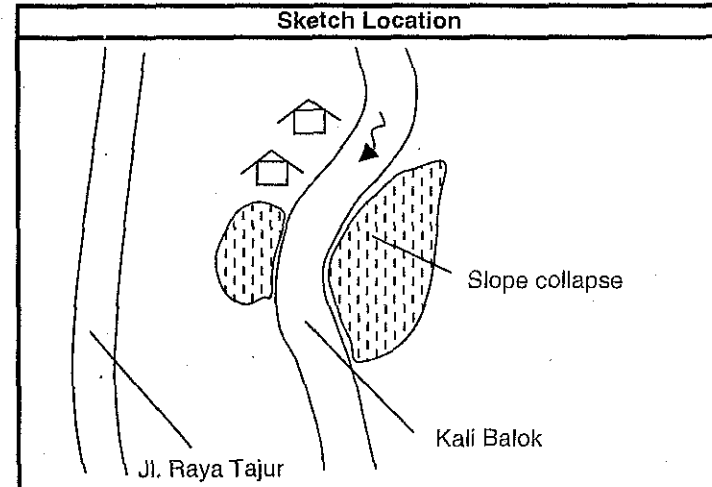
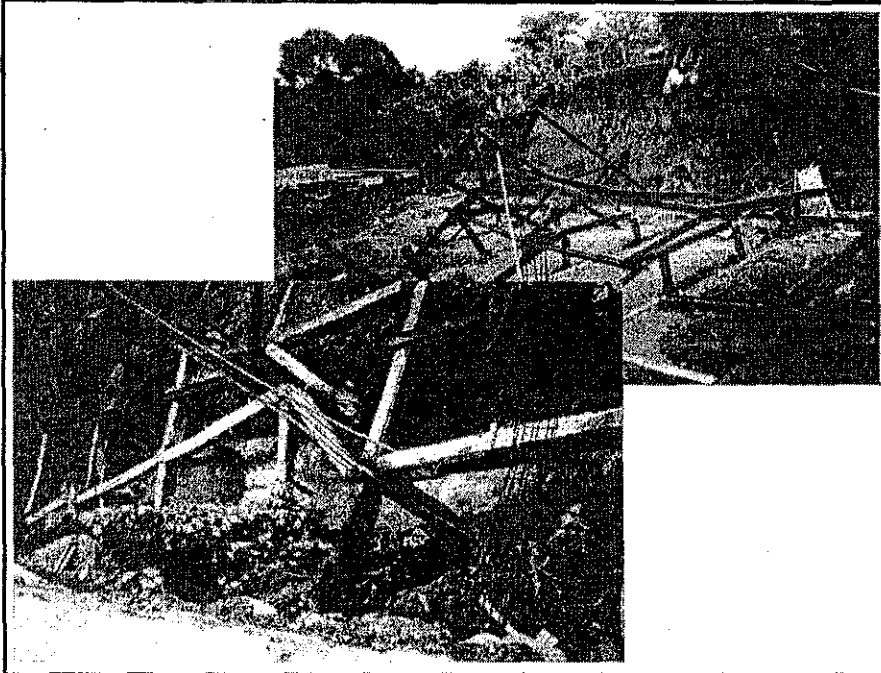
Remarks :

- Housing along river, and use the river as disposal area, no solid waste facilities in the housing area.
- Sediments and garbages appear in the river, decrease flow capacity of the river to increase flood area.

DOCUMENTATION OF RIVER SURVEY 2003

Name of River / Canal : Kali Cibalok
 Location : Jl. Raya Tajur
 No. of Picture :
 Title :

Date of Survey : 18-02-2003
 Filled by : PT. MITRAPACIFIC CONSULINDO INTERNATIONAL

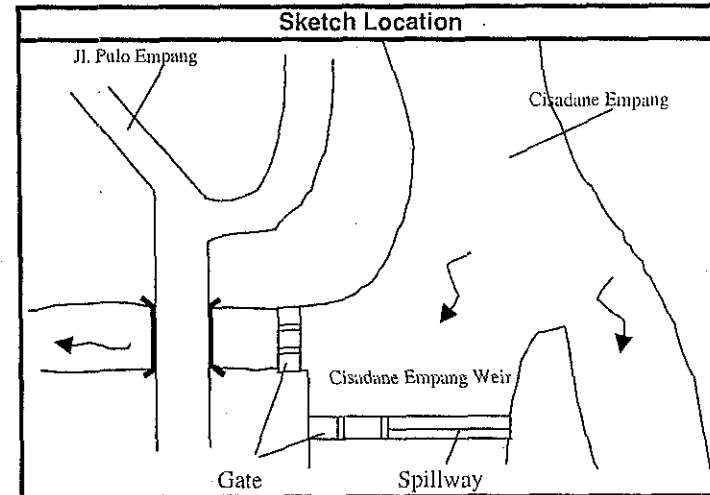
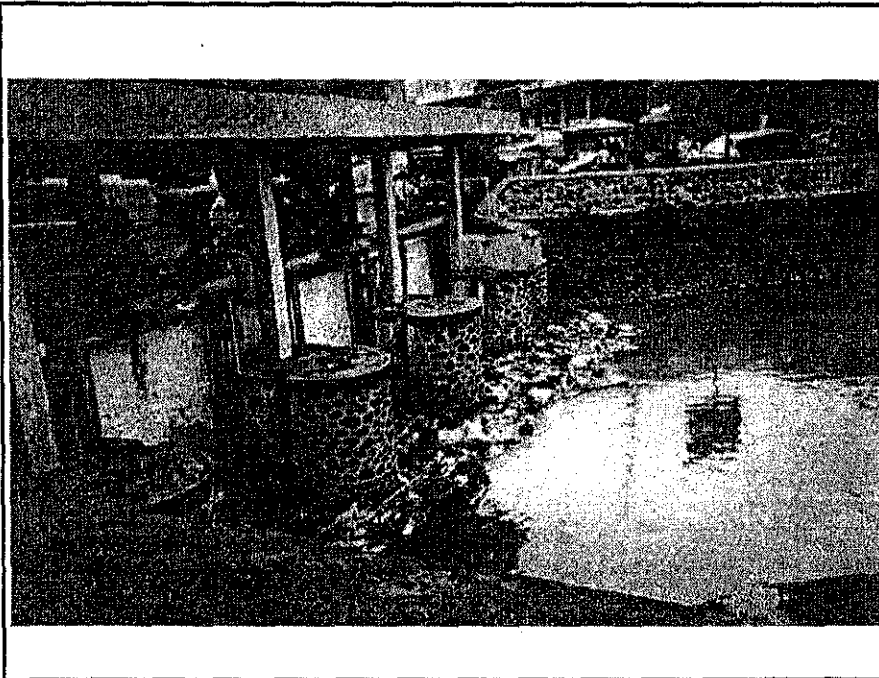


Remarks :

-House is constructed in the river! An extremely illegal development.
 House was broken by improper structure.

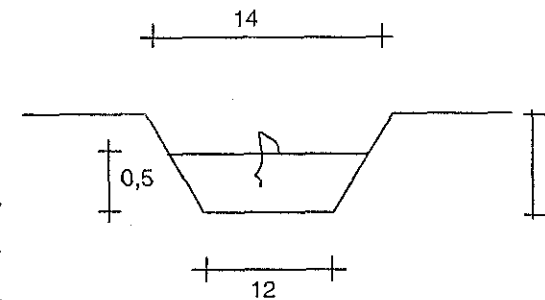
DOCUMENTATION OF RIVER SURVEY 2003

Name of River / Canal	: Sungai Cisadane	Date of Survey	: 21-02-2003
Location	: Cisadane Empang Weir	Filled by	: PT. MITRAPACIFIC CONSULINDO INTERNATIONAL
No. of Picture	:		
Title	:		



Dimension of Canal / Structure

Dimension of irrigation canal :

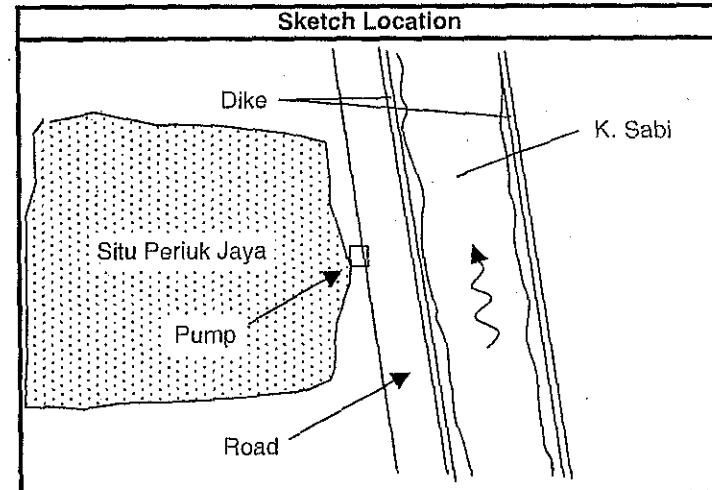
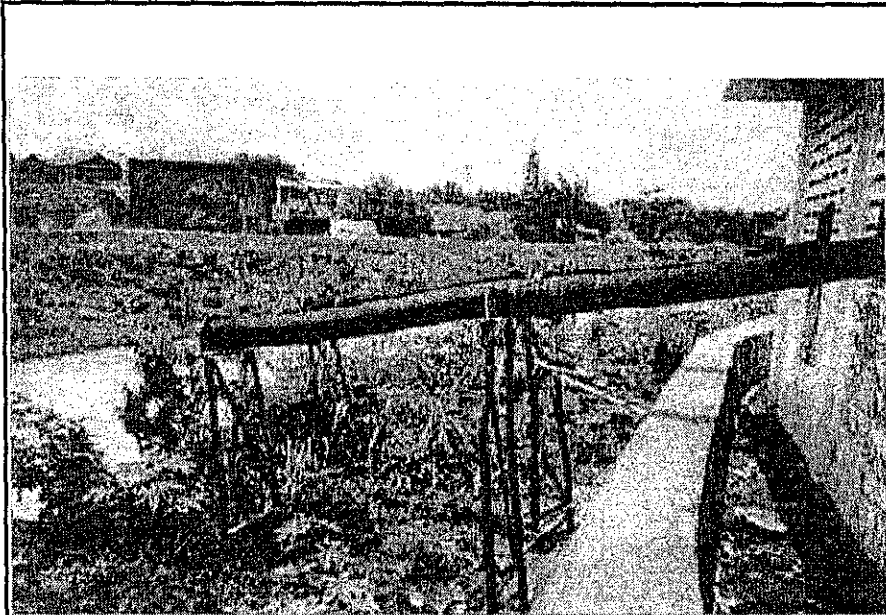


Remarks :

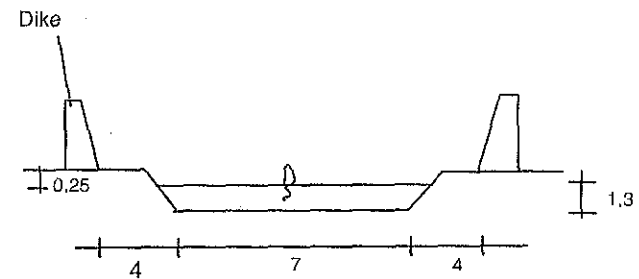
- Gate already rehabilitation, improve the pump height and dikes.
- Garbage accumulated at upstream gate.
- Large reduction of irrigation area, become 1250 ha from 4500 ha.

DOCUMENTATION OF RIVER SURVEY 2003

Name of River / Canal	: Kali Sabi	Date of Survey	: 27-02-2003
Location	: Kel. Periuk Jaya	Filled by	: PT. MITRAPACIFIC CONSULINDO INTERNATIONAL
No. of Picture	:		
Title	:		



Dimension of Canal / Structure

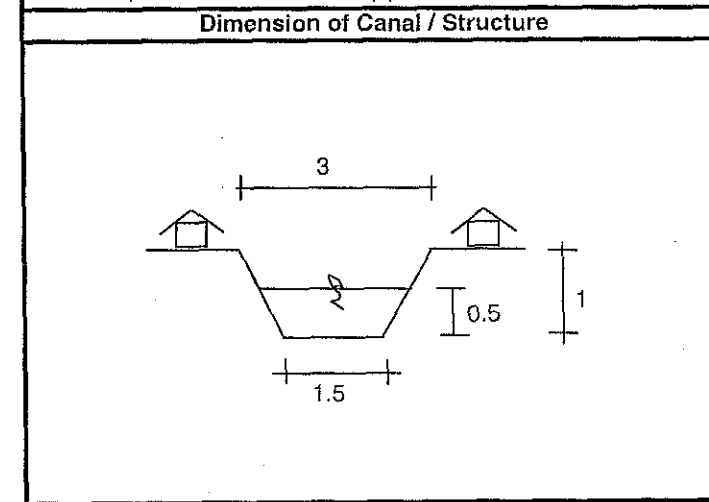
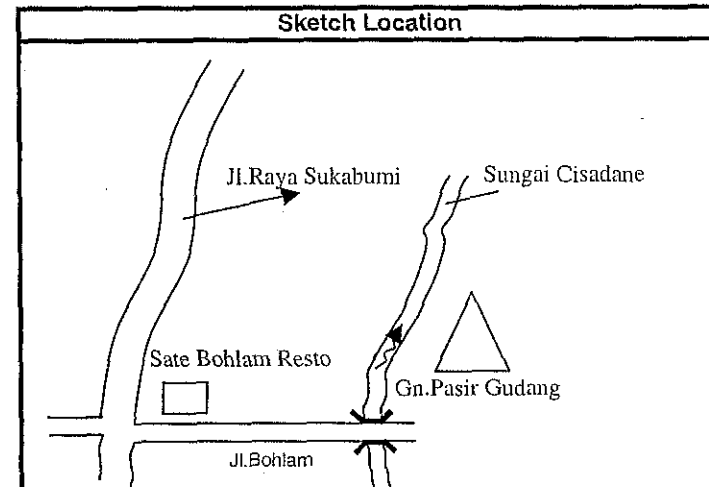
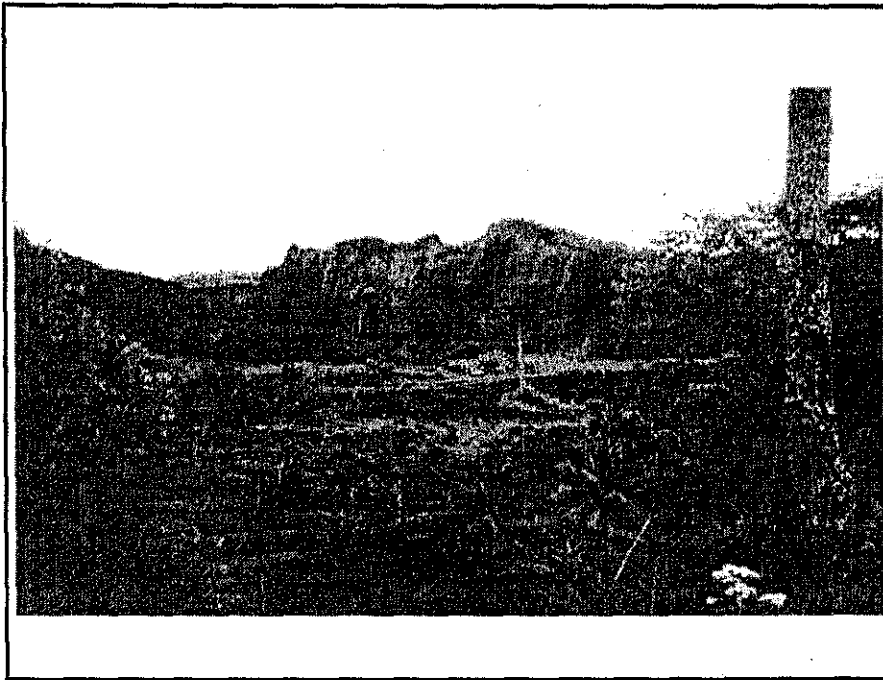


Remarks :

- Density housing around the situ (lake) . Pump operates to control flood in the reservoir to Kali Sabi . The housing suffers of annual flooding as it low lying area

DOCUMENTATION OF RIVER SURVEY 2003

Name of River / Canal	: Hulu S. Cisadane	Date of Survey	: 27-02-2003
Location	: Gn. Pasir Gudang	Filled by	: PT. MITRAPACIFIC CONSULINDO INTERNATIONAL
No. of Picture	:		
Title	:		

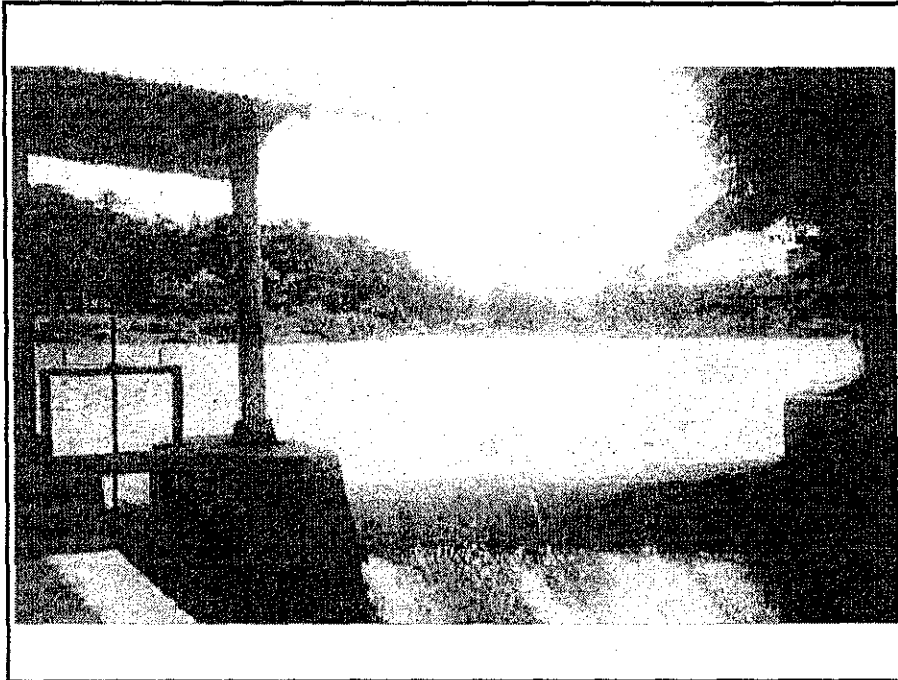


Remarks :

- Small scale quarrying without protection for keeping erosion away from river. Risk erosion and sedimentation to Cisadane river.

DOCUMENTATION OF RIVER SURVEY 2003

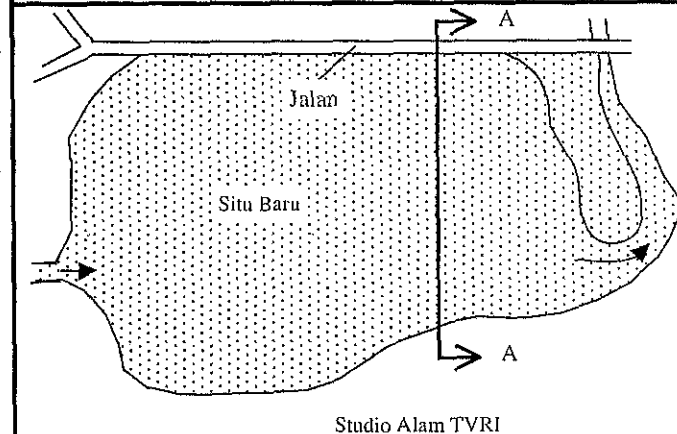
Name of River / Canal : Situ Baru Date of Survey : 14-02-2003
Location : Studio Alam TVRI, Depok Filled by : PT. MITRAPACIFIC CONSULINDO INTERNATIONAL
No. of Picture :
Title :



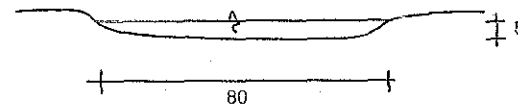
Remarks :

- Flooding condition in 2002 gate facilities not function

Sketch Location

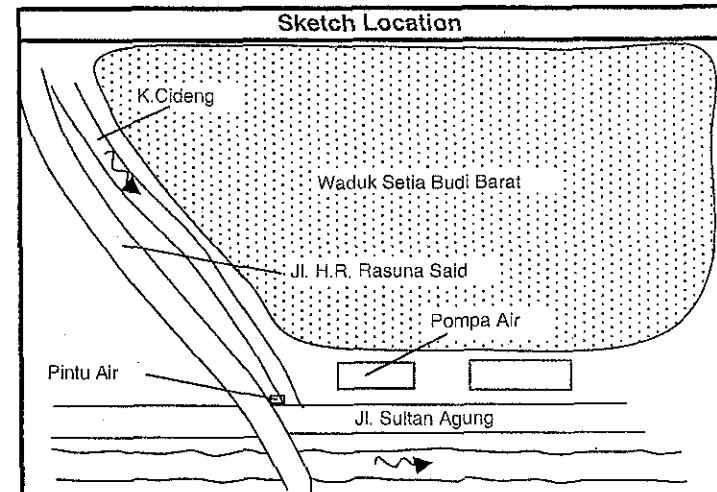
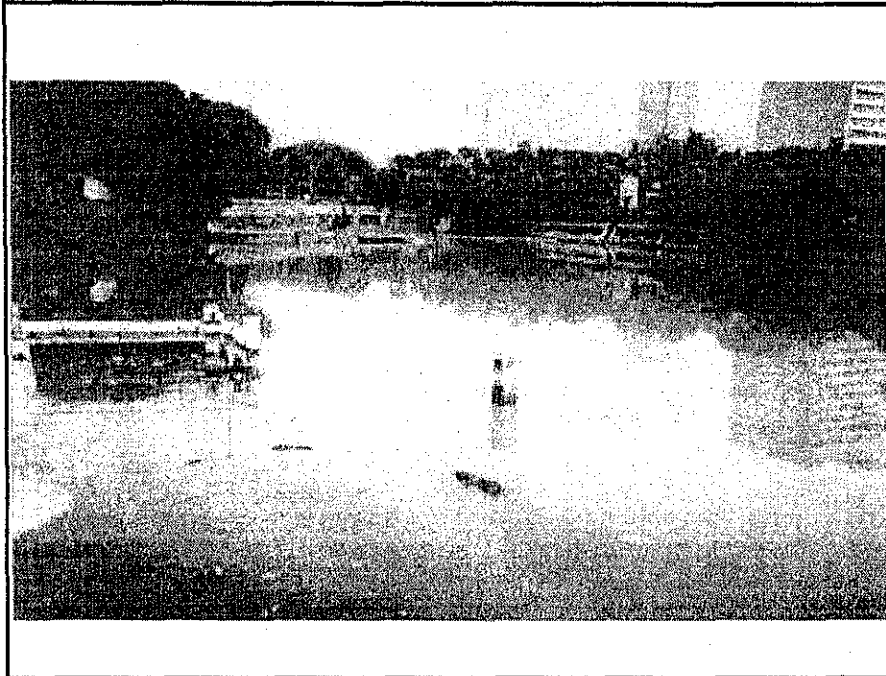


Dimension of Canal / Structure



DOCUMENTATION OF RIVER SURVEY 2003

Name of River / Canal : Kali Cideng Date of Survey : 13-02-2003
Location : Waduk Setiabudi Barat Filled by : PT. MITRAPACIFIC CONSULINDO INTERNATIONAL
No. of Picture :
Title :



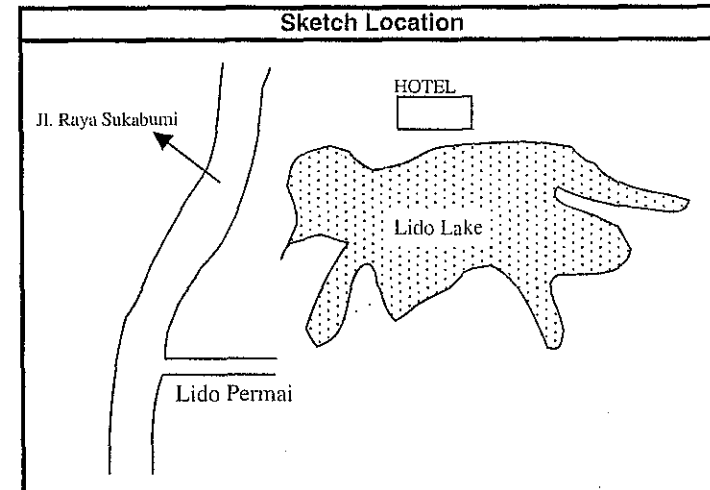
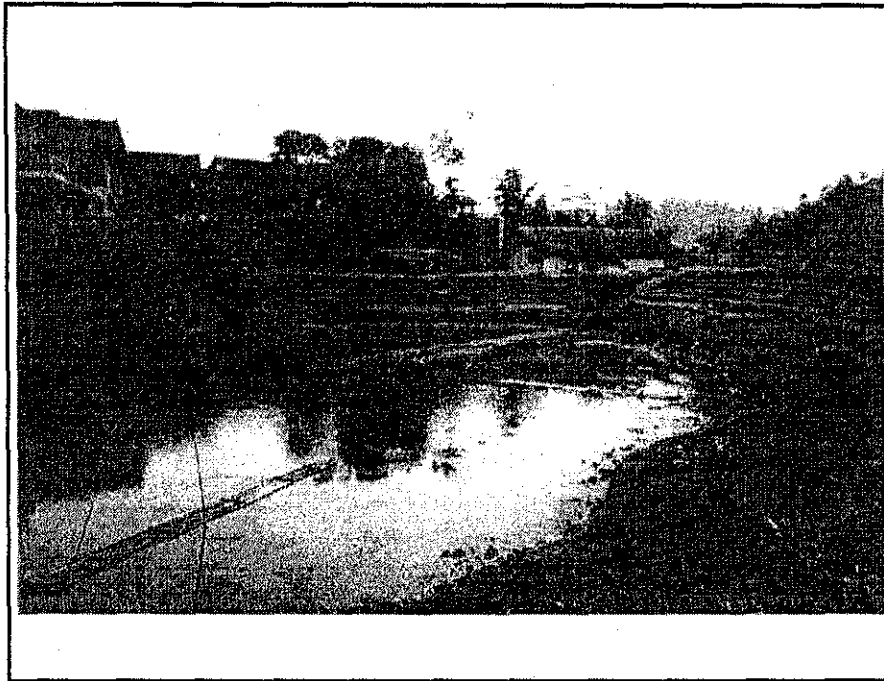
Dimension of Canal / Structure

Remarks :

- There is five old pumps and add two news pump

DOCUMENTATION OF RIVER SURVEY 2003

Name of River / Canal : Sungai Cisadane Date of Survey : 27-02-2003
Location : Danau Lido Filled by : PT. MITRAPACIFIC CONSULINDO INTERNATIONAL
No. of Picture :
Title :



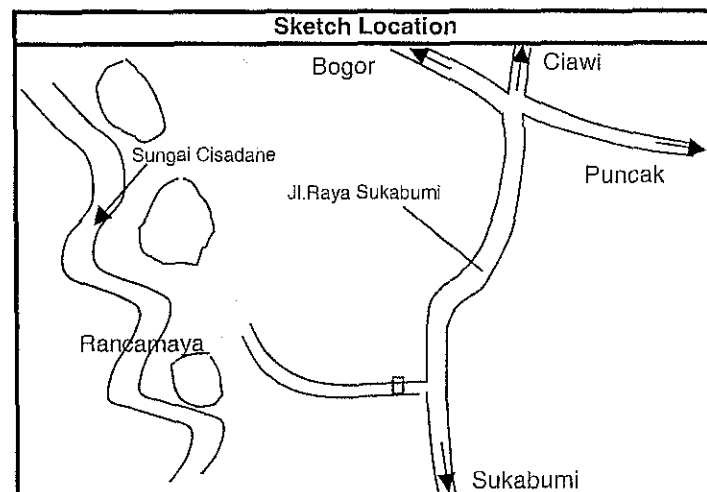
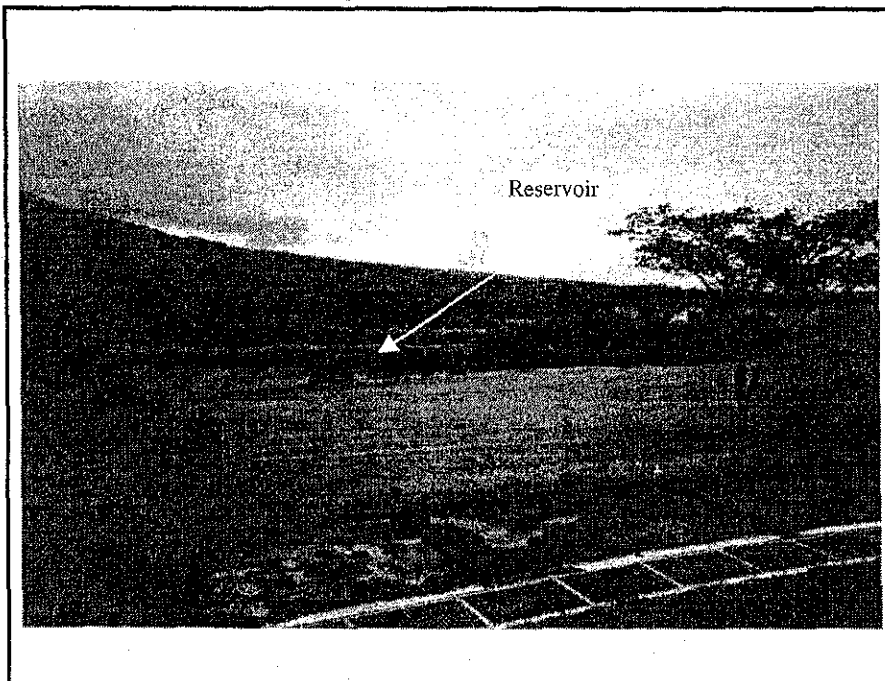
Dimension of Canal / Structure

Remarks :

- Lake is used by local people to change into rice field; will reduce also retention capacity of the lake

DOCUMENTATION OF RIVER SURVEY 2003

Name of River / Canal	: Sungai Cisadane	Date of Survey	: 19-02-2003
Location	: Rancamaya	Filled by	: PT. MITRAPACIFIC CONSULINDO INTERNATIONAL
No. of Picture	:		
Title	:		



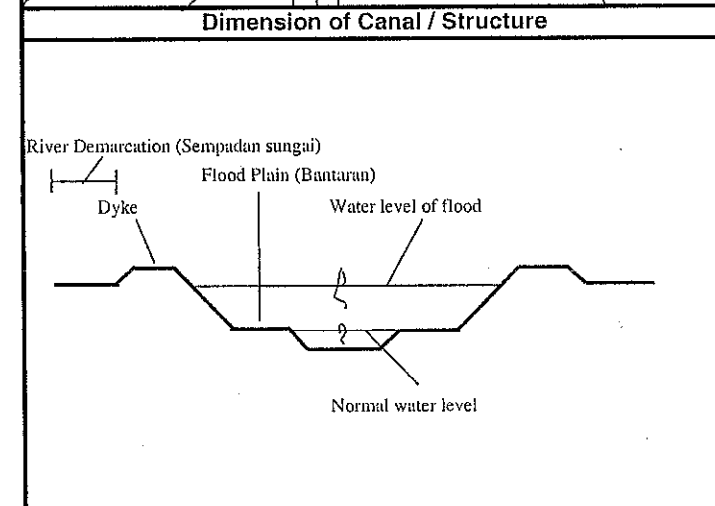
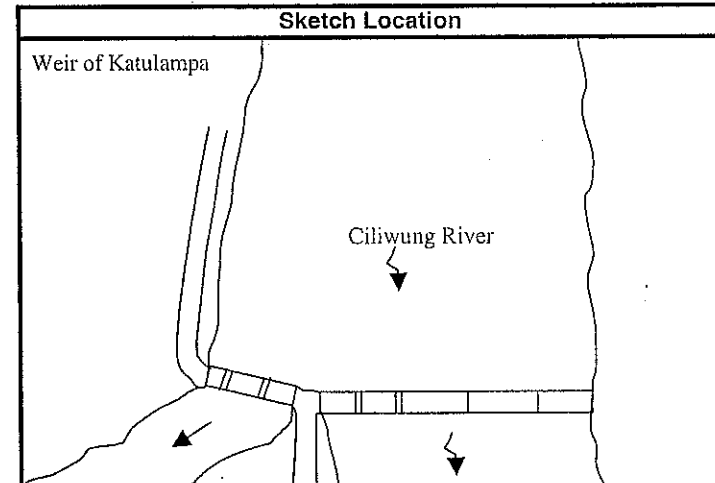
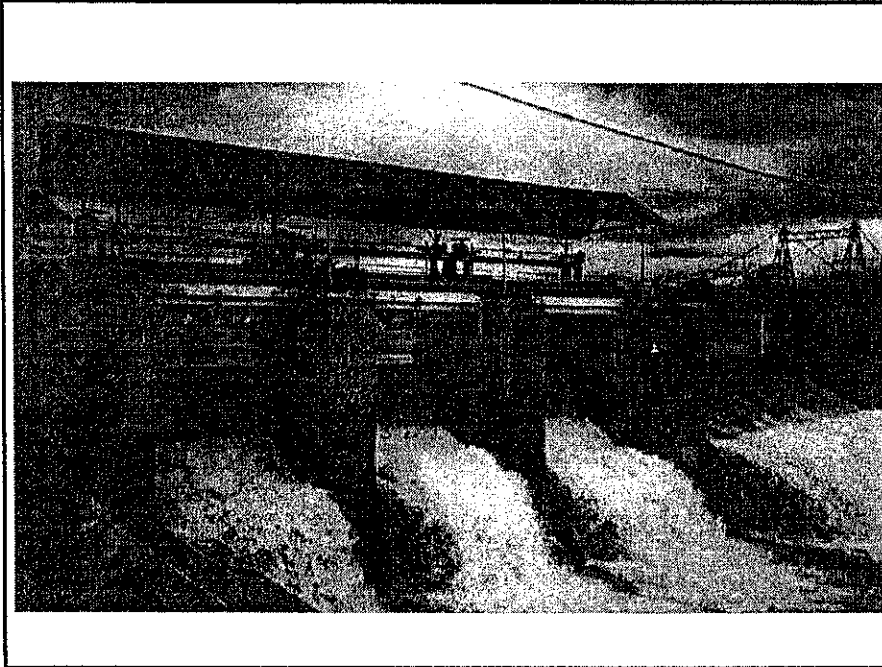
Dimension of Canal / Structure

Remarks :

Rancamaya golf property, lakes are provided as retension basin to keep runoff before flows to Cisadane

DOCUMENTATION OF RIVER SURVEY 2003

Name of River / Canal	: Sungai Ciliwung	Date of Survey	: 18-02-2003
Location	: Bendung Katulampa	Filled by	: PT. MITRAPACIFIC CONSULINDO INTERNATIONAL
No. of Picture	:		
Title	:		



Remarks :

- Coordinat of Katulampa Weir: 06° 38 ' 39 " LS
106° 50 ' 20" LT
- Height water level during survey 0.30 m
- Katulampa aquipped with AWLR and communication facilities, as it use for important reference control of flooding to the downstream.

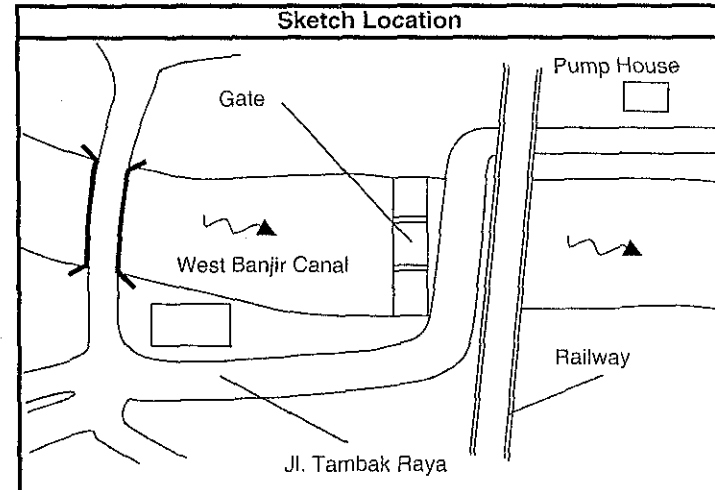
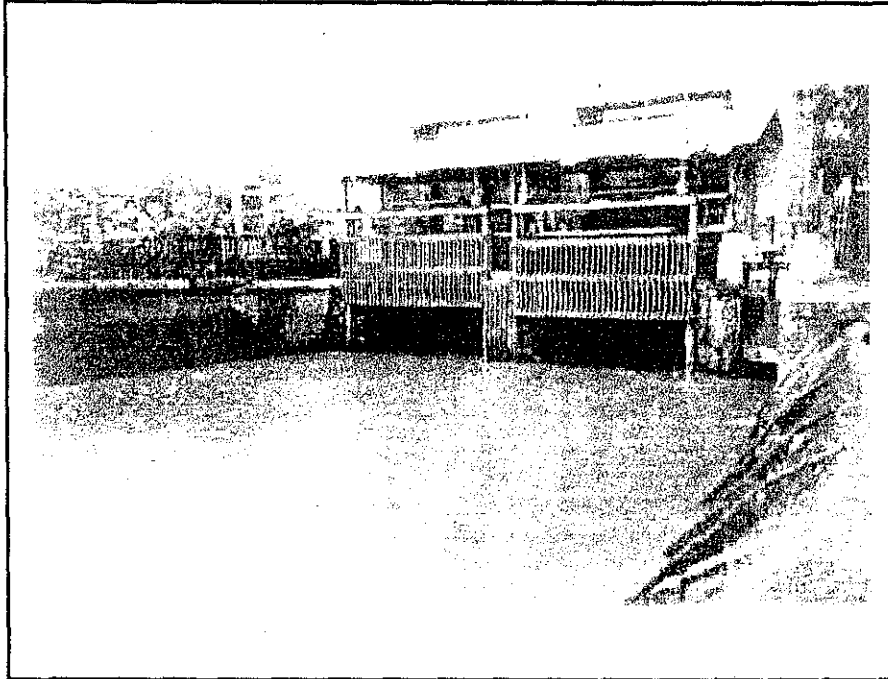
APPENDIX C
DOCUMENTATION
OF
PUMP & GATE SURVEY

List of Pump and Gate Survey Location 2003

	Location	River/ River System or Drainage
1	Manggarai Gate, Central Jakarta	West Banjir Canal/ Ciliwung
2	Setiabudi Reservoir, Central Jakarta	K. Cideng/ Ciliwung
3	K. Cideng Gate, Kabon Kacang, Central Jakarta	K. Cideng/ Ciliwung
4	K. Cideng Gate, Cideng Timur, Central Jakarta	K. Cideng/ Ciliwung
5	Kartini V Pump Station, North Jakarta	Ciliwung
6	North Mangga Dua Gate and Pump Station, North Jakarta	Ciliwung
7	WTC Mangga Dua Pump Station, North Jakarta	Ciliwung
8	Ancol Gate, North Jakarta	K. Ancol/ Ciliwung
9	Marina Ancol Gate, North Jakarta	Ciliwung
10	Ancol Pump Station, North Jakarta	K. Ancol/ Ciliwung
11	North Sunter Pump Station, North Sunter Reservoir Jakarta	K. Ancol/ Ciliwung
12	Sunter Drainage Gate, Griya Utama Jakarta	Sunter/ Cipinang
13	Gate in South Sunter Reservoir and Pump Station Jakarta	Sunter/ Cipinang
14	Simpang Tujuh Gate, Tangerang	Cisadane
15	Pintu 10, Koang Jaya, Tangerang	Cisadane
16	Aplat Luise Gate, Sukarasa, Tangerang	Mookervart/ Cisadane
17	Pulomas Reservoir, Pulomas Jakarta	Sunter/ Cipinang
18	Kartini Gate, Margahayu, Bekasi	Bekasi/ Cikarang
19	Marga Jaya Gate, Bekasi	Bekasi/ Cikarang
20	West Cisadane Drainage, Koang, Tangerang	Cisadane
21	Periuk Jaya Pump Station and Reservoir, Periuk Jaya Housing, Tangerang	K. Sabi/ Cisadane
22	Total Persada Housing Pump Station, Tangerang	K. Sabi/ Cisadane
23	Pondok Arum Housing Pump Station, Tangerang	K. Sabi/ Cisadane
24	Waduk Besar Cikokol, Modern Land Tangerang	Cisadane
25	Cipondoh Lake Gate, Tangerang	Mookervart/ Cisadane
26	K. Cirarab Gate, Sukadiri, Tangerang	K. Cirarab/ Cidurian
27	K. Item Gate, Sumur Batu, Jakarta	K. Item/ Cipinang
28	Rajawali Pump Station, Kartini Jakarta	K. Mati/ Ciliwung
29	Jati Pinggir Gate and Pump Station, Petamburan, Jakarta	West Banjir Canal/ Ciliwung
30	Pantai Indah Kapuk Pump Station and Reservoir, North Jakarta	Cengkareng Drain/ Pesanggrahan
31	Jembatan Merah Gate, Kartini Jakarta	Ciliwung
32	Kwitang Pump Station, Central Jakarta	Ciliwung (urban drainage)
33	Dukuh Atas Pump Station, Central Jakarta	Ciliwung (urban drainage)
34	Kalibaru Gate, Kebon Pedes, Bogor	Kalibaru/ Cisadane

DOCUMENTATION OF PUMP AND GATE SURVEY 2003

Name of River / Canal : West Banjir Canal Date of Survey : 22-02-2003
Location : Manggarai Gate Filled by : PT. MITRAPACIFIC CONSULINDO INTERNATIONAL
No. of Picture :
Title :



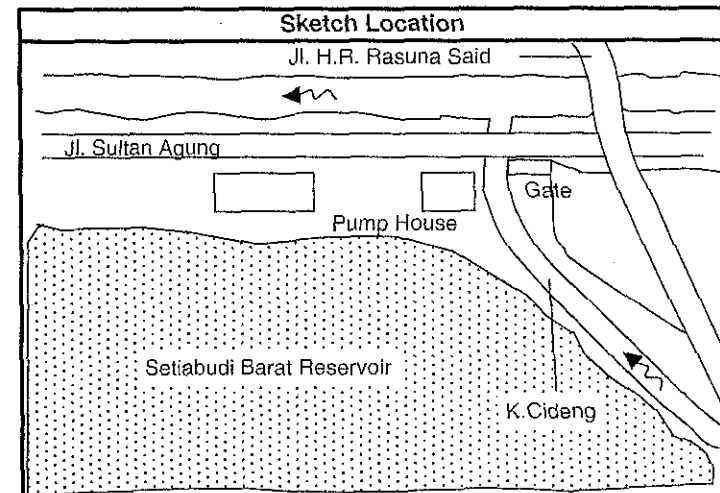
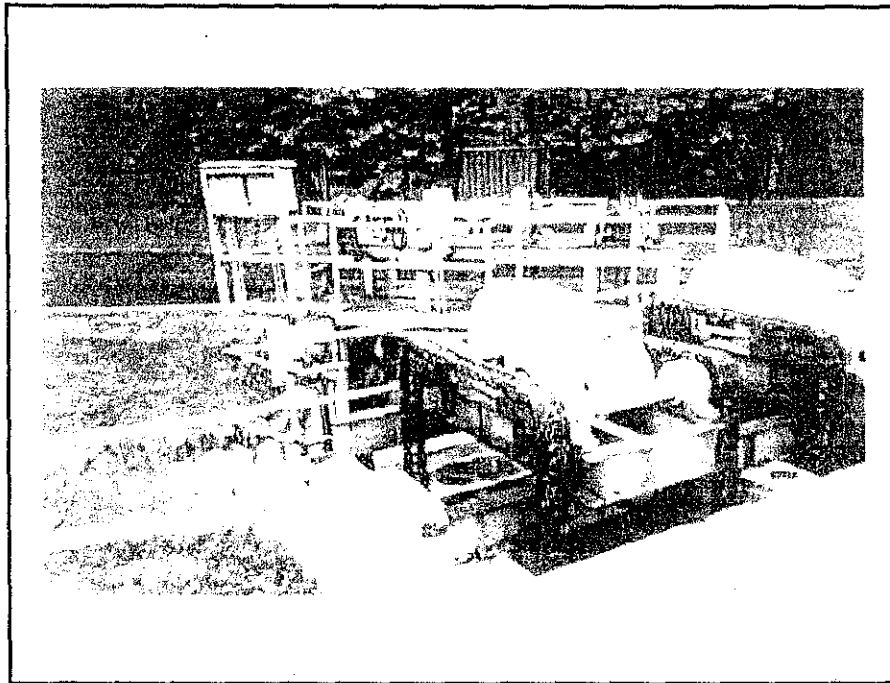
Dimension of Canal / Structure

Remarks :

- Gate works property width 5.20 m (2 Unit) attached with trash rack, electrically operated equipped with radio communication and warning system operated by PIPWSCC.

DOCUMENTATION OF PUMP AND GATE SURVEY 2003

Name of River / Canal	: Kali Cideng	Date of Survey	: 22-02-2003
Location	: Setiabudi Reservoir	Filled by	: PT. MITRAPACIFIC CONSULINDO INTERNATIONAL
No. of Picture	:		
Title	:		



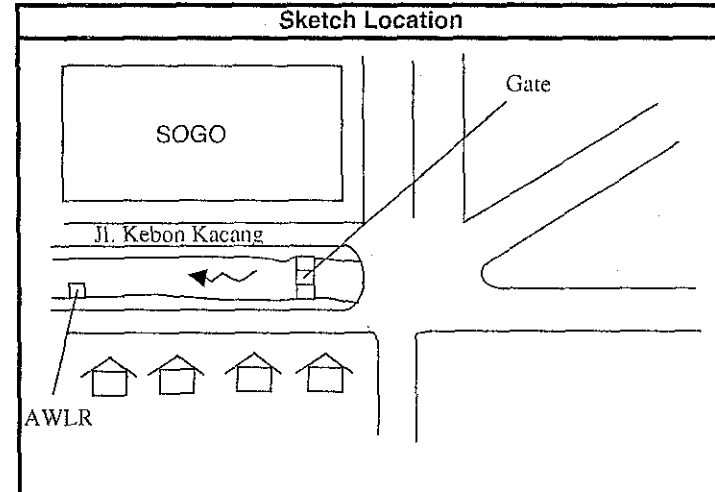
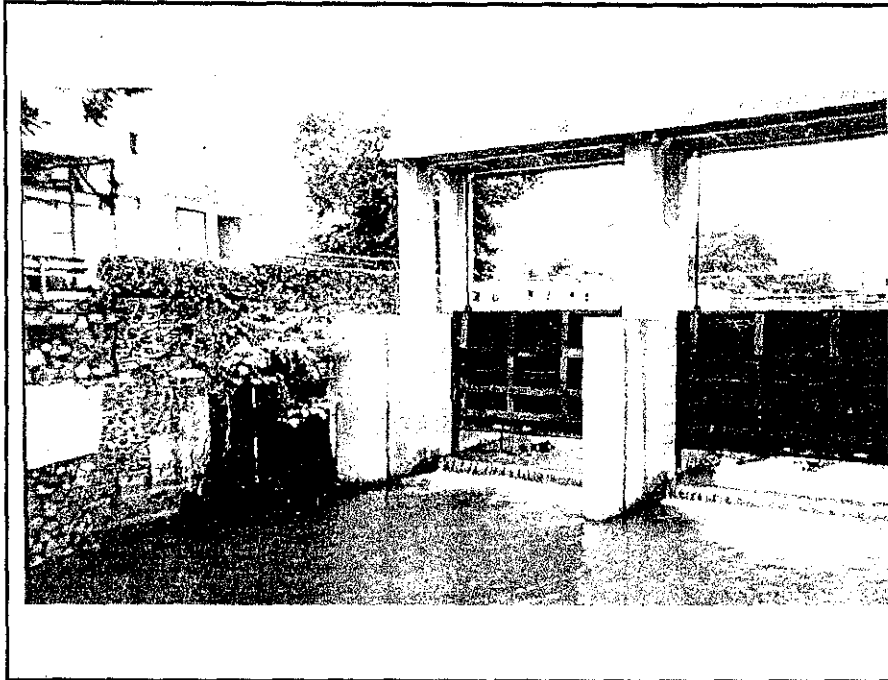
Dimension of Canal / Structure

Remarks :

- Condition of pump is good with capacity 1.1 m³/sec (5 Series) in West Setiabudi and 3 series pump (1.1 m³/sec) in East Setiabudi.
- Gate operated manually to control Setiabudi reservoir and flow to Cideng river. Operated under PU-DKI-JAKARTA.

DOCUMENTATION OF PUMP AND GATE SURVEY 2003

Name of River / Canal	: Kali Cideng	Date of Survey	: 22-02-2003
Location	: Jl. Kebon Kacang (SOGO)	Filled by	: PT. MITRAPACIFIC CONSULINDO INTERNATIONAL
No. of Picture	:		
Title	:		



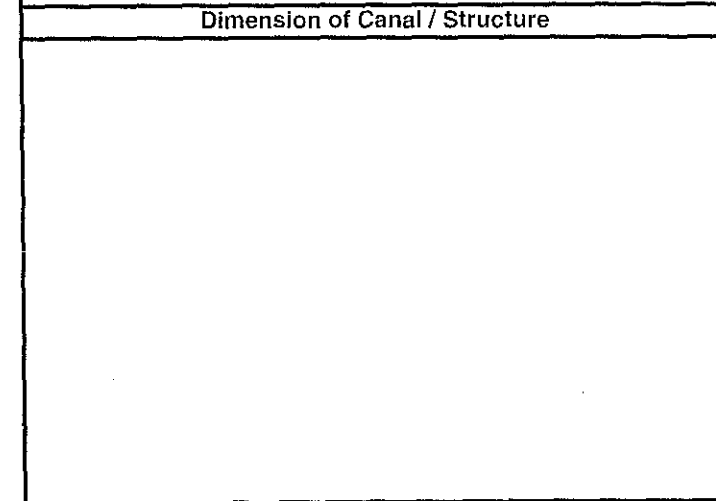
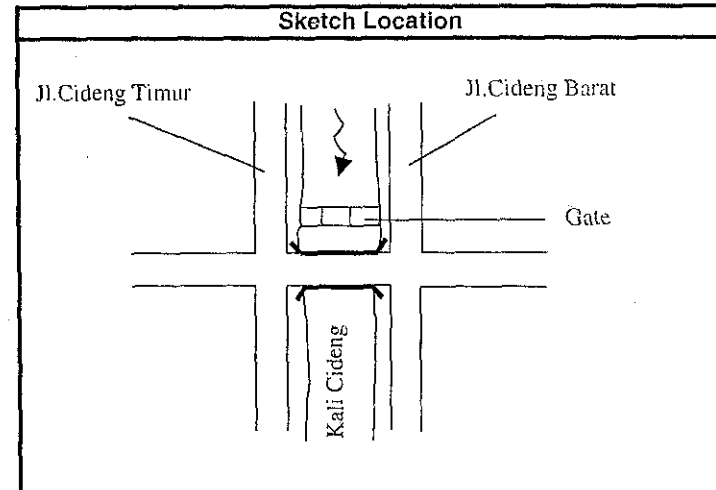
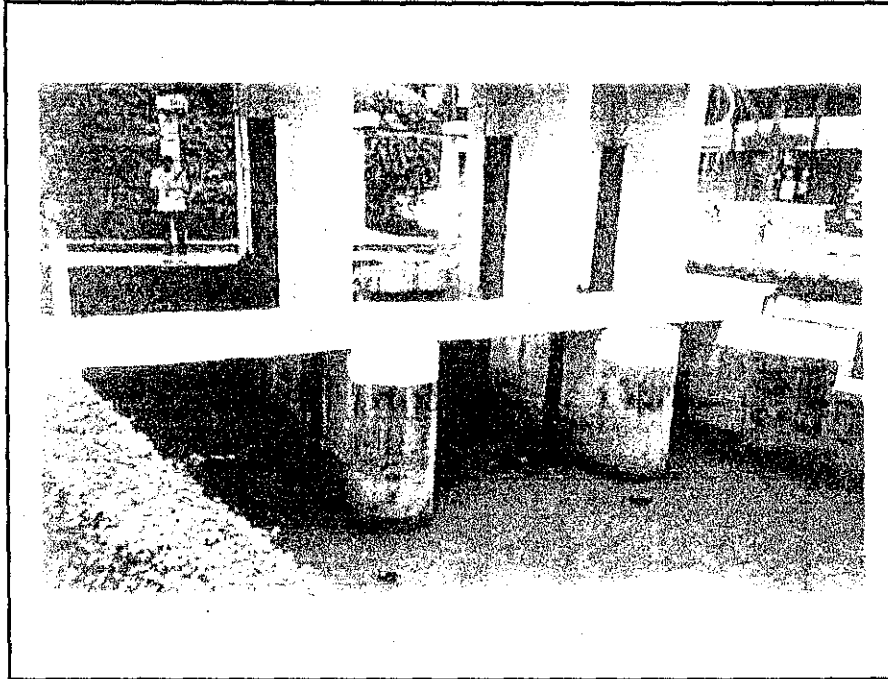
Dimension of Canal / Structure

Remarks :

- Sluice gate in function (2 gate at width of 2 m) ,electrical operated, AWLR and warning system through radio telecommunication are provided , under PU-DK1 JKT.

DOCUMENTATION OF PUMP AND GATE SURVEY 2003

Name of River / Canal	: Kali Cideng	Date of Survey	: 22-02-2003
Location	: Kali Cideng Gate	Filled by	: PT. MITRAPACIFIC CONSULINDO INTERNATIONAL
No. of Picture	:		
Title	:		

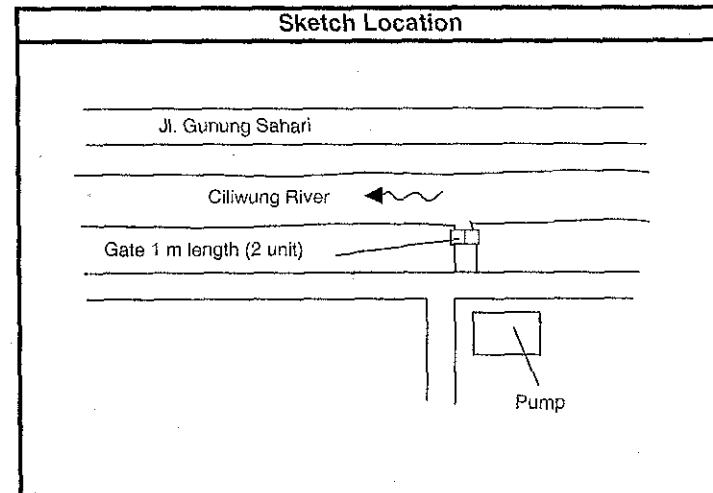
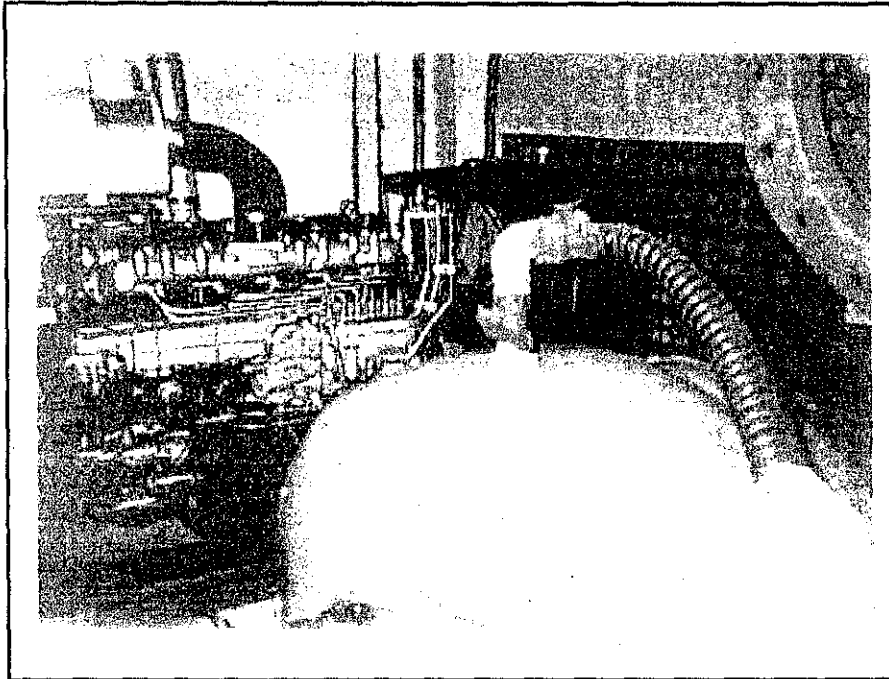


Remarks :

- Gate operates electrically in good function with width 3 m each (3 Unit), operated by PU - DKI JAKARTA

DOCUMENTATION OF PUMP AND GATE SURVEY 2003

Name of River / Canal	: Kali Ciliwung	Date of Survey	: 22-02-2003
Location	: Kartini V pump	Filled by	: PT. MITRAPACIFIC CONSULINDO INTERNATIONAL
No. of Picture	:		
Title	:		



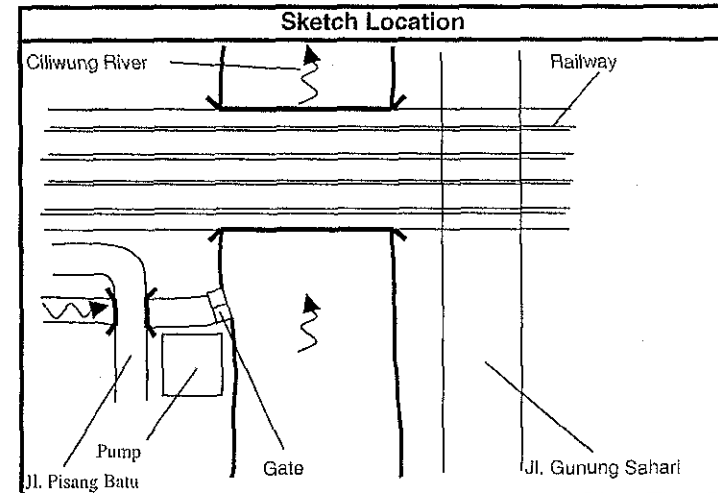
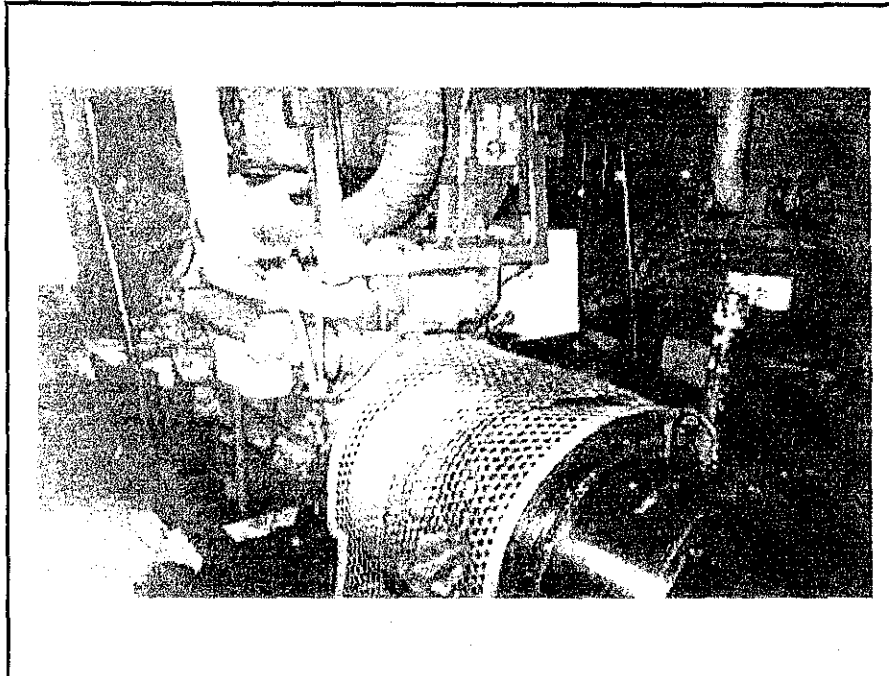
Dimension of Canal / Structure

Remarks :

- Sluice gate 1 m width (2 unit) and pump are in working condition capacity of the pump is not identified . the pump is operated to control inundation in Jl. Kartini area

DOCUMENTATION OF PUMP AND GATE SURVEY 2003

Name of River / Canal	: Kali Ciliwung	Date of Survey	: 22-02-2003
Location	: North Mangga dua Gate	Filled by	: PT. MITRAPACIFIC CONSULINDO INTERNATIONAL
No. of Picture	:		
Title	:		

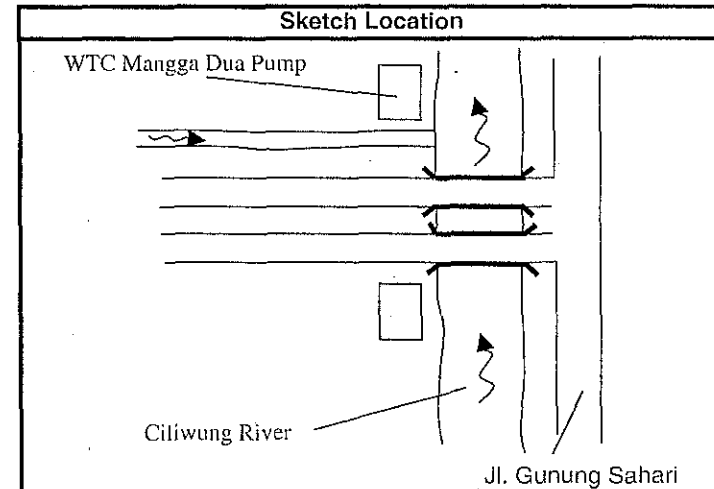
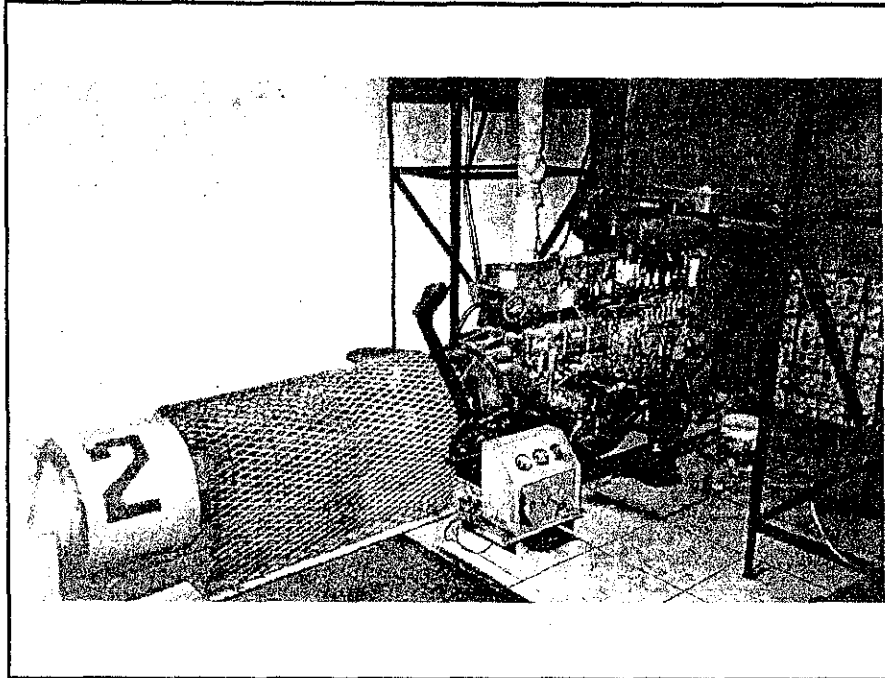


Remarks :

- Sluice gate (2 gate in 2m width) not stright but in function.
 Pump capacity 1.8 m³/sec x 2 , good condition operated when area around pump location flooded, under PU - DKI JAKARTA.

DOCUMENTATION OF PUMP AND GATE SURVEY 2003

Name of River / Canal : Kali Ciliung Date of Survey : 22-02-2003
Location : WTC Mangga Dua Pump Filled by : PT. MITRAPACIFIC CONSULINDO INTERNATIONAL
No. of Picture :
Title :



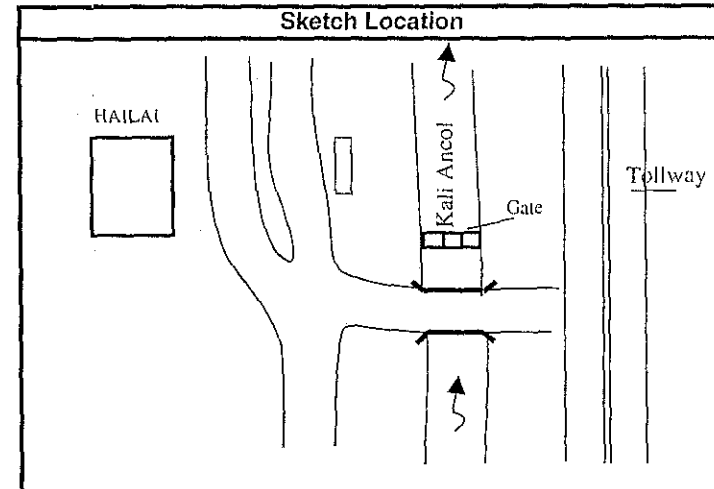
Dimension of Canal / Structure

Remarks :

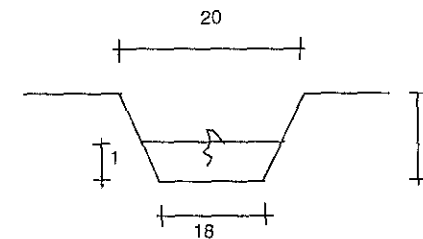
- Pump capacity is 1.5 m³/sec each, from total 2 unit at working condition
in the south, operate by Mangga Dua Square
in the north, operate by WTC Mangga Dua

DOCUMENTATION OF PUMP AND GATE SURVEY 2003

Name of River / Canal	: Kali Ancol	Date of Survey	: 1-03-2003
Location	: Pintu Air Ancol	Filled by	: PT. MITRAPACIFIC CONSULINDO INTERNATIONAL
No. of Picture	:		
Title	:		



Dimension of Canal / Structure

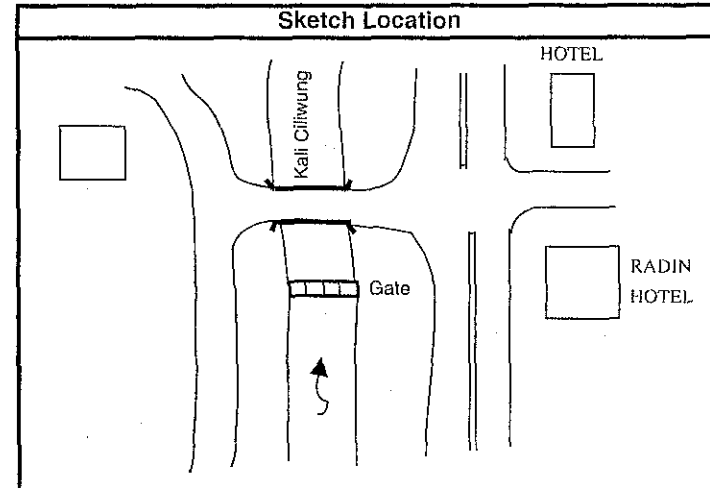
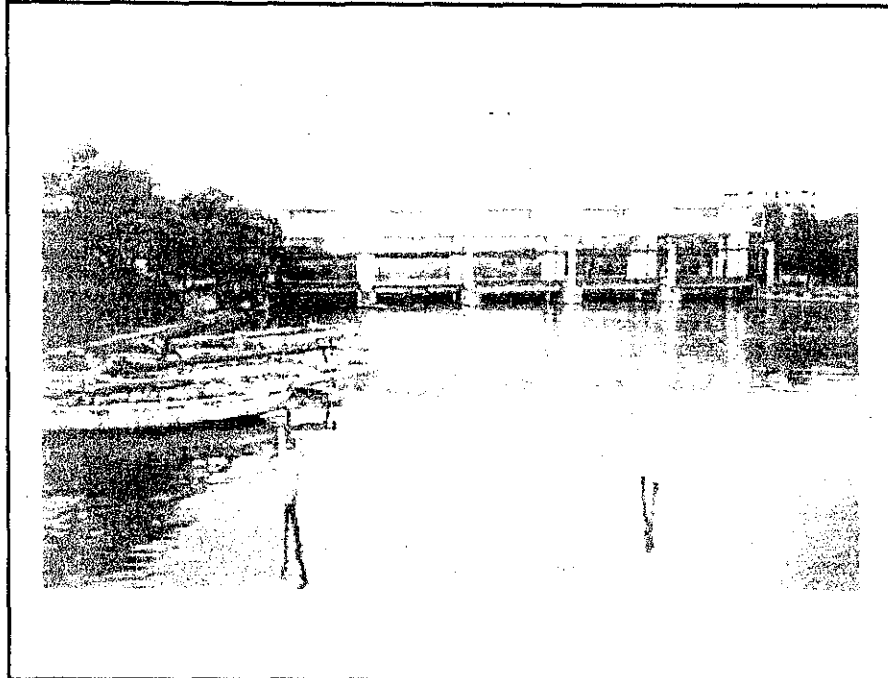


Remarks :

- Sluice gate (2 gate of 2.5 m width) and scholl balk are in good operation, in flushing Ancol river from Ciliwung operated by PU - DKI JAKARTA.

DOCUMENTATION OF PUMP AND GATE SURVEY 2003

Name of River / Canal	: Kali Ciliwung	Date of Survey	: 1-03-2003
Location	: Pintu Air Marina Ancol	Filled by	: PT. MITRAPACIFIC CONSULINDO INTERNATIONAL
No. of Picture	:		
Title	:		



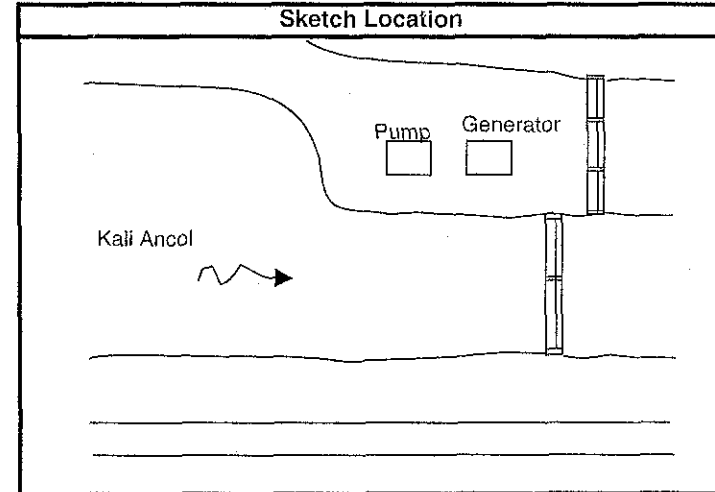
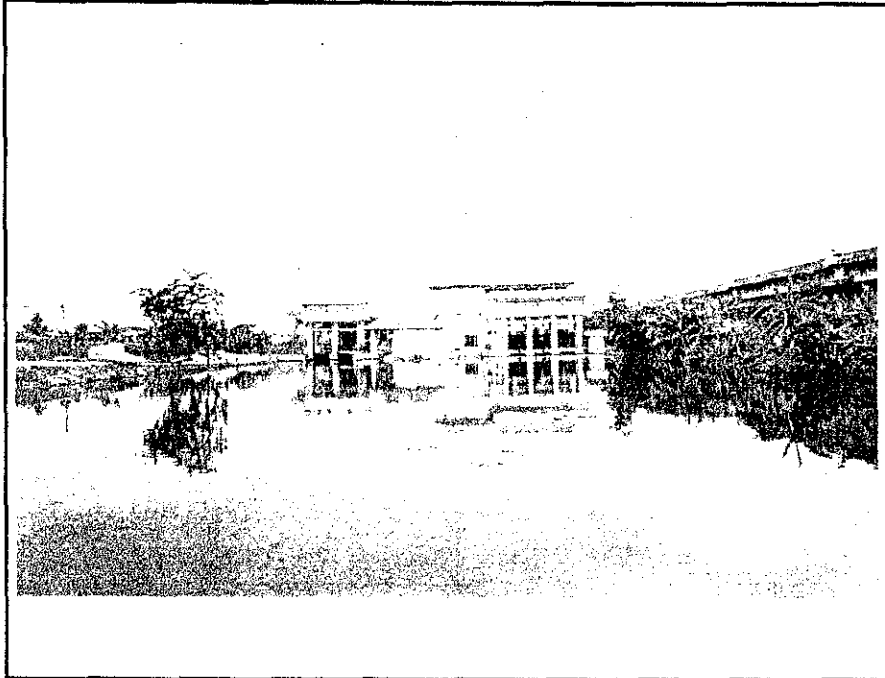
Dimension of Canal / Structure

Remarks :

- Gate in good operation but measuring level scale was damaged. The function is to regulate the tidal influence to Ciliwung river. Operated by PU- DKI JAKARTA.

DOCUMENTATION OF PUMP AND GATE SURVEY 2003

Name of River / Canal	: Kali Ancol	Date of Survey	: 1-03-2003
Location	: Ancol Pump Station	Filled by	: PT. MITRAPACIFIC CONSULINDO INTERNATIONAL
No. of Picture	:		
Title	:		



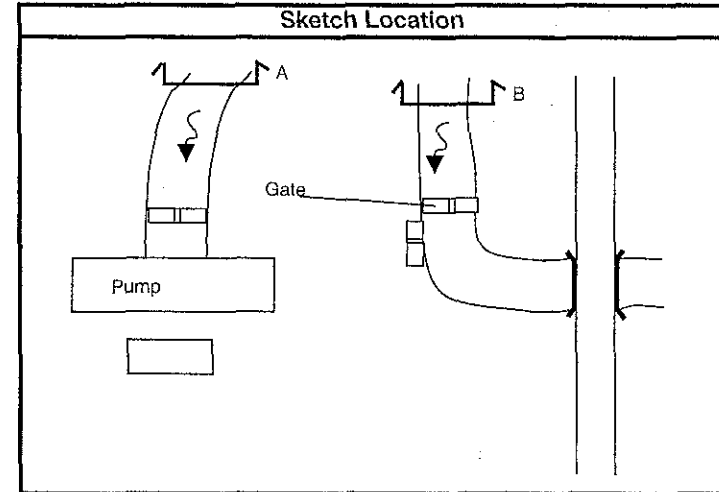
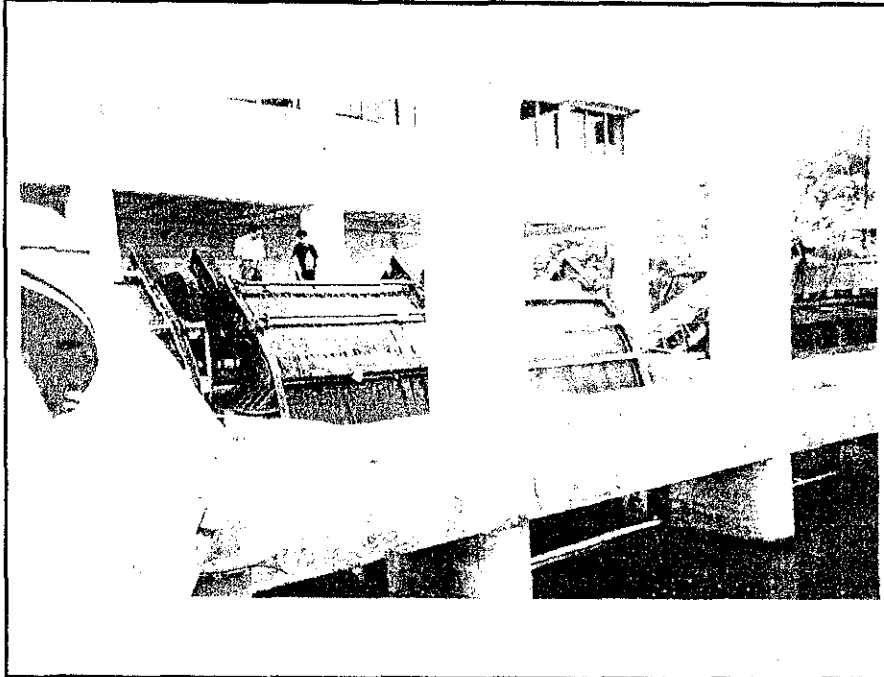
Dimension of Canal / Structure

Remarks :

- The gate working well . (2 gate each 3 m width). 3 Unit pumps are provided with each capacity 5 m³/sec. Equipped with radio communication operate under PU - DKI JAKARTA.

DOCUMENTATION OF PUMP AND GATE SURVEY 2003

Name of River / Canal	: North Sunter Reservoir	Date of Survey	: 1-03-2003
Location	: Sunter Utara Pump	Filled by	: PT. MITRAPACIFIC CONSULINDO INTERNATIONAL
No. of Picture	:		
Title	:		



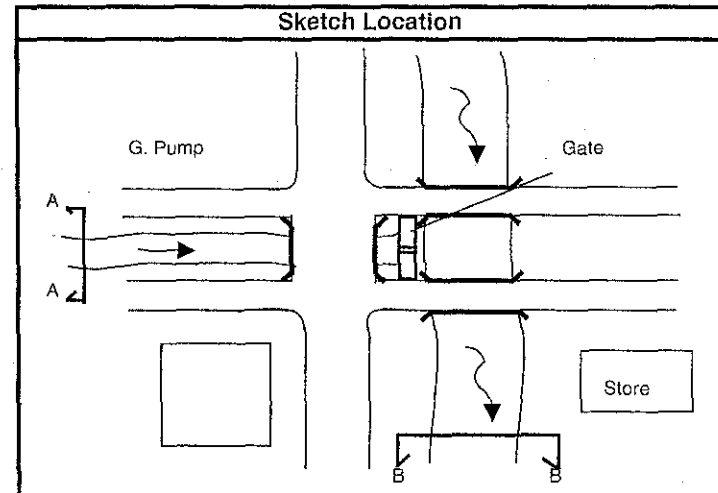
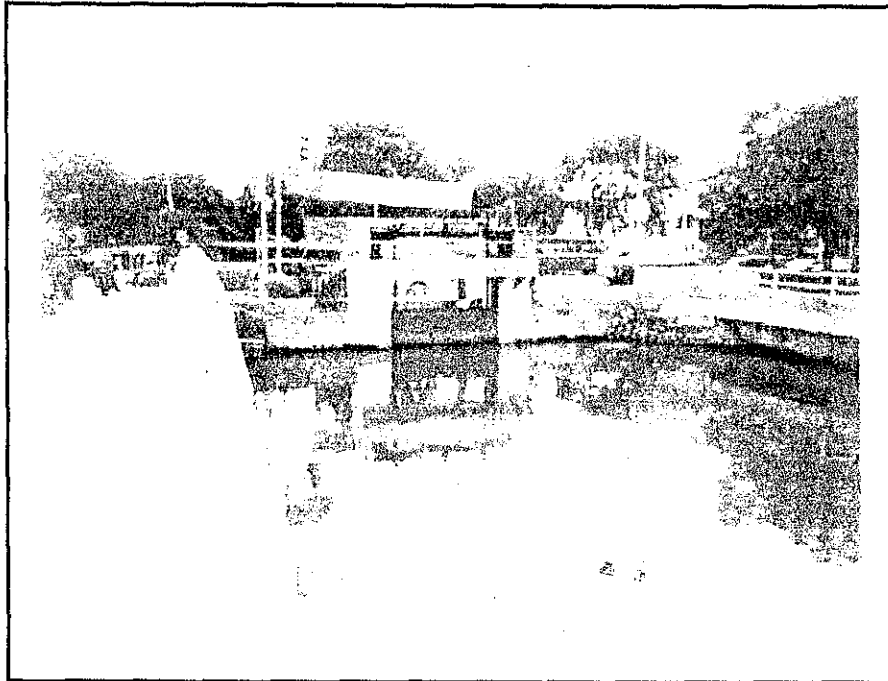
Dimension of Canal / Structure

Remarks :

- 3 unit station pump with capacity 3,3 m3/sec. New pump with 4 m3/sec will add in year 2004.
- 2 unit moveable pump , with capacity each 250 l/sec. Propided for emèrgency
- The pump conserve for 2000 Ha catchment of North Jakarta and will be in operation when water level above + 70 cm.
- Pump cannot control waterlevel for longperiod of rain (more than 4 hours).
- Operated under PU - DKI JAKARTA.

DOCUMENTATION OF PUMP AND GATE SURVEY 2003

Name of River / Canal	: Sunter Drainase	Date of Survey	: 1-03-2003
Location	: Jl.Griya Utama	Filled by	: PT. MITRAPACIFIC CONSULINDO INTERNATIONAL
No. of Picture	:		
Title	:		



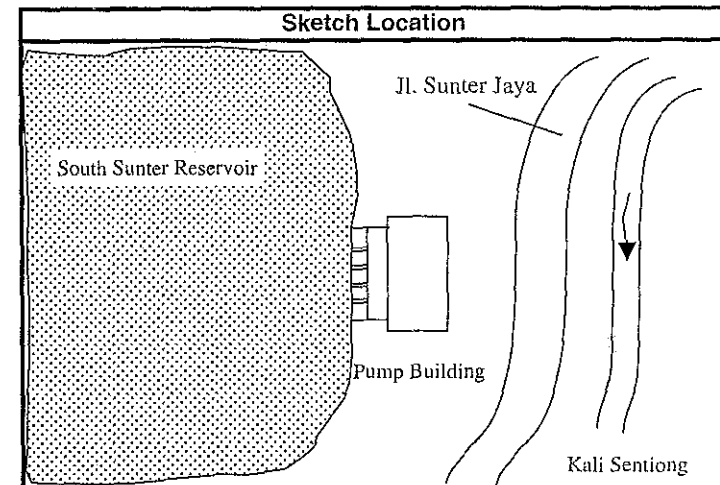
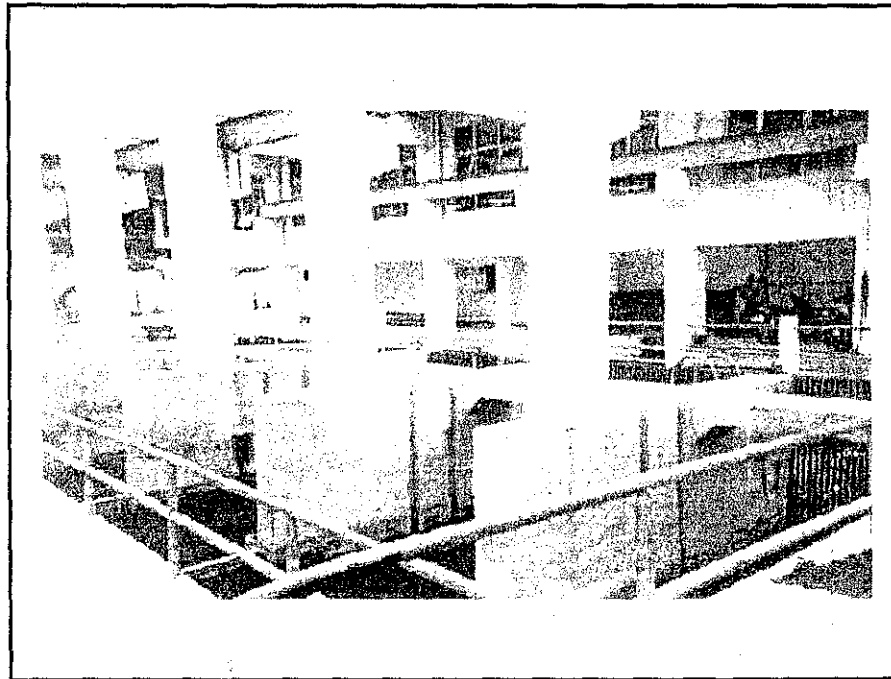
Dimension of Canal / Structure

Remarks :

- Sluice gate good condition
- The width of gate is 2 x 3 m
- Gate not completed with house gate

DOCUMENTATION OF PUMP AND GATE SURVEY 2003

Name of River / Canal	: South Sunter Reservoir	Date of Survey	: 1-03-2003
Location	: South Sunter Pump	Filled by	: PT. MITRAPACIFIC CONSULINDO INTERNATIONAL
No. of Picture	:		
Title	:		



Dimension of Canal / Structure

Remarks :

- Pump capacity is 6 x 2.5 m³/sec (6 series) in good operation, use to control water level on the south Sunter reservoir, cleaning garbage with manual.
Equipped with radio communication and operated by PU - DKI JAKARTA.