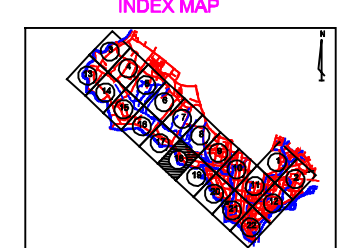


**LEGEND**

	Existing Triangulation Point Titik Tetap Triangulasi		Electric Power Line Jalur Tegangan Tinggi
	GPS Point Titik GPS		Cutting and Embankment Koridor dan Trotoar
	Existing Bench Mark Benteng Mark		Swamp Rawan
	Spot Height Titik Tinggi		Muslim graves Kuburan Muslim
	House / Building Bangunan		Christian cemetery Kuburan Kristen
	Factory Pabrik		Chinese graves Kuburan Cina
	Public Hall Balai Kota		Paddy field Sawah
	Police Station Kantor Polisi		Boundary of Vegetation Batas Tanaman
	Fire Station Stasiun Pemadam Kebakaran		Field Ladang
	Post Office Kantor POS		Forest Hutan
	Mosque Masjid		Grass Rumput
	Church Gereja		Tree Pohon
	Hospital Rumah Sakit		Water hole Lubang Air
	School Sekolah		Gulch Pondok
	Market Kantor Perdagangan		Pipe Culvert Gorong - gorong
	Telephone Office Kantor Telekomunikasi		Monuments Tugu
	Government Office Kantor Pemerintahan		Contour Line Garis Kontur
	Gasoline Pump Pompa Bensin		Pond, lake, reservoir, dam Waduk, kolam, bendung
	Road Jalan		Sand Pasir
	Path Jalan Sepak		Land Slide Tanjung
	Bridge Jembatan		River / Stream Sungai / Anak Sungai
	Station Stasiun		Direction of River / Stream Arah Sungai
	Subdistrict Boundary Batas Kecamatan		
	Village Boundary Batas Kelurahan		



- Aerial Photography ( 1 / 10.000 ) : August 2001  
 - Topographic map ( 1 / 1.000 ) : October 2001  
 - Horizontal System : UTM ( 81 Zone )  
 - Elevation System : MSL  
 - Contour Interval : 1 m

**DIRECTORATE GENERAL OF WATER RESOURCES,  
 MINISTRY OF SETTLEMENT AND REGIONAL INFRASTRUCTURE**

**THE STUDY ON FLOOD CONTROL AND WATER MANAGEMENT  
 IN LIMBOTO - BOLANGO - BONE BASIN**

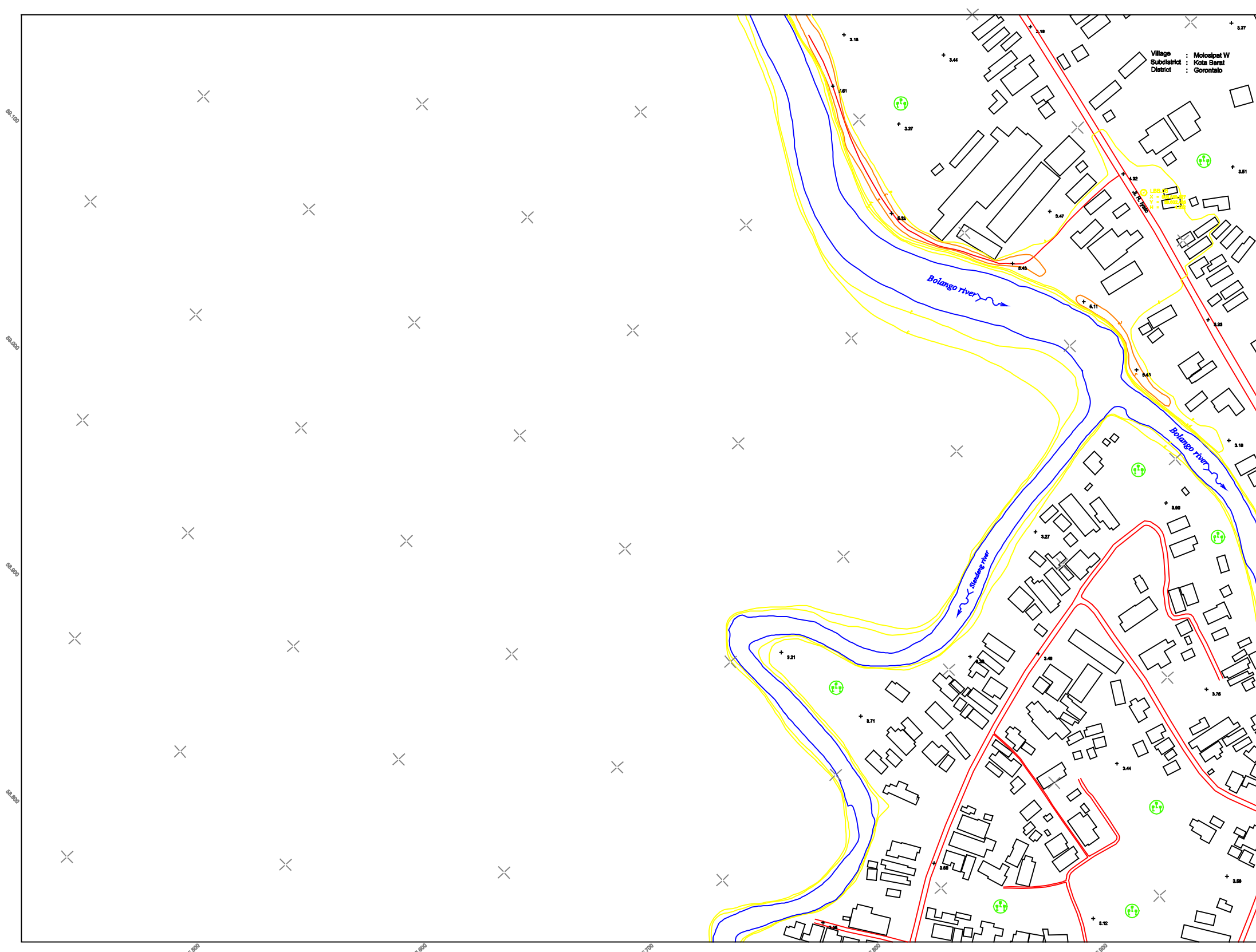
**TOPOGRAPHIC MAP : LOW-LYING AREA / GORONTALO**

Checked by		Approved by	
Name	PT. ATLAS DELTASATYA	Name	Iaini Saahine
Signature		Signature	
Date	October 9, 2001	Date	October 16, 2001

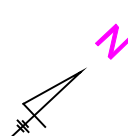
**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY


**PT. ATLAS DELTASATYA**  
 J. No. 44, Jl. Lingsar, Gorontalo, Sulawesi Utara  
 Telp. (0835) 4211111 Fax. (0835) 4211111

SHEET No. **18/22**



Village : Molospet W  
 Subdistrict : Kota Barat  
 District : Gorontalo

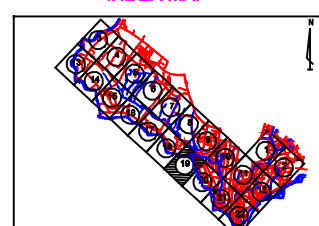




LEGEND

▲ Existing Triangulation Point	—+—+— Electric Power Line
△ TBM Tegal Tinggi	—+—+— Jalan Tegal Tinggi
○ GPS Point	—+—+— Cutting and Embankment
□ Existing Bench Mark	—+—+— KAWASAN TINDUKAN
⊕ Spot Height	—+—+— Swamp
⊕ TBM Tegal Tinggi	—+—+— "Mawa"
⊕ House / Building	⊕ Muslim graves
⊕ Factory	⊕ KUBUR MUSLIM
⊕ Public Hall	⊕ Christian cemetery
⊕ BSM KOTA	⊕ KUBUR KRISTEN
⊕ Police Station	⊕ Chinese graves
⊕ Kantor Polisi	⊕ KUBUR CINA
⊕ Fire Station	⊕ Public Field
⊕ Stasiun Pemadam Kebakaran	⊕ Swamp
⊕ Post Office	⊕ Boundary of Vegetation
⊕ Kantor Pos	⊕ Satah Tanaman
⊕ Mosque	⊕ Field
⊕ Church	⊕ Casing
⊕ Gereja	⊕ Forest
⊕ Hospital	⊕ TUGAS
⊕ Kantor RS	⊕ Grass
⊕ Sekolah	⊕ KUMPUL
⊕ Market	⊕ Tree
⊕ Kantor Telekomunikasi	⊕ Pohon
⊕ Telephone Office	⊕ Water hole
⊕ Kantor Telekomunikasi	⊕ Lubang Air
⊕ Government Office	⊕ Stone
⊕ Kantor Pemerintahan	⊕ PONDOK
⊕ Hotel	⊕ Pipe Culvert
⊕ Gasoline Pump	⊕ GORONG - gorong
⊕ Pompa Bensin	⊕ Monuments
⊕ Road	⊕ Tugu
⊕ Jalan	⊕ Contour Line
⊕ Path	⊕ Garis Kontur
⊕ Jalan sepi	⊕ Pond, lake
⊕ Bridge	⊕ Kolam, danau
⊕ Jembatan	⊕ Sand
⊕ Subdistrict Boundary	⊕ Pasir
⊕ Batas Kecamatan	⊕ Land Slide
⊕ Village Boundary	⊕ TEGAS
⊕ Batas Kelurahan	⊕ a. River / Sungai
	⊕ b. Rivulet / Anak Sungai
	⊕ c. Direction / Arah Sungai

**INDEX MAP**





- Aerial Photography (1/10,000)	: August 2001
- Topographic map (1/1,000)	: October 2001
- Horizontal System	: UTM (81 Zone)
- Elevation System	: MSL
- Contour Interval	: 1 m

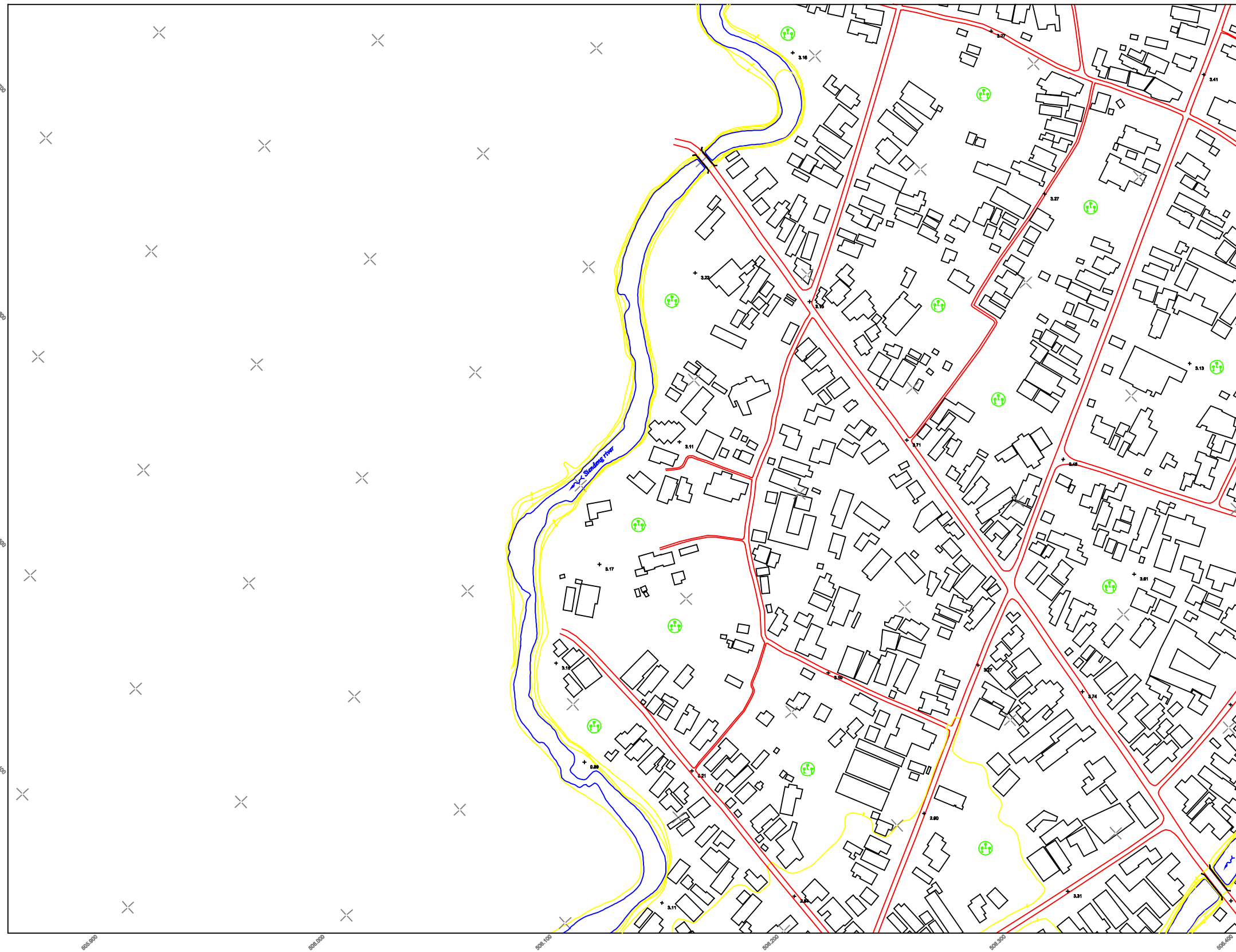
**DIRECTORATE GENERAL OF WATER RESOURCES,  
 MINISTRY OF SETTLEMENT AND REGIONAL INFRASTRUCTURE**

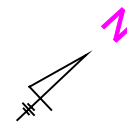
**THE STUDY ON FLOOD CONTROL AND WATER MANAGEMENT  
 IN LIMBOTO - BOLANGO - BONE BASIN**

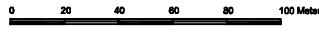
**TOPOGRAPHIC MAP : LOW-LYING AREA / GORONTALO**

Checked by		Approved by	
Name	PT. ATLAS DELTASATYA	Name	Isoo Roeslams
Signature		Signature	
Date	October 9, 2001	Date	October 19, 2001

 <b>JICA</b> JAPAN INTERNATIONAL COOPERATION AGENCY	 <b>PT. ATLAS DELTASATYA</b> <small>PT. ATLAS DELTASATYA adalah perusahaan swasta yang didirikan pada tanggal 15 Desember 1998 dengan modal dasar Rp. 100.000.000,00 dan modal disetor Rp. 100.000.000,00.</small>	SHEET NO.
		19/22





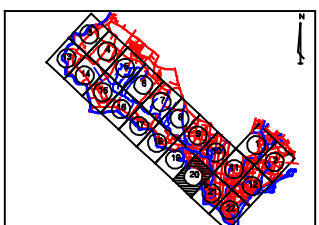


0 20 40 60 80 100 Meter

**LEGEND**

<ul style="list-style-type: none"> <li> Existing Triangulation Point Titik Tumpang Tindih</li> <li> GPS Point Titik GPS</li> <li> Existing Bench Mark Titik Benam</li> <li> Spot Height Titik Tinggi</li> <li> House / Building</li> <li> Factory</li> <li> Public Hall</li> <li> Police Station</li> <li> Fire Station</li> <li> Post Office</li> <li> Mosque</li> <li> Church</li> <li> Hospital</li> <li> School</li> <li> Market</li> <li> Telephone Office</li> <li> Government Office</li> <li> Hotel</li> <li> Gasoline Pump</li> <li> Road</li> <li> Path</li> <li> Bridge</li> <li> Station</li> <li> Subdistrict Boundary</li> <li> Village Boundary</li> </ul>	<ul style="list-style-type: none"> <li> Electric Power Line</li> <li> Cutting and Embankment</li> <li> Swamp</li> <li> Muslim grave</li> <li> Christian cemetery</li> <li> Chinese grave</li> <li> Paddy field</li> <li> Boundary of Vegetation</li> <li> Field</li> <li> Forest</li> <li> Grass</li> <li> Tree</li> <li> Water hole</li> <li> Pipeline</li> <li> Pipe Culvert</li> <li> Monuments</li> <li> Contour Line</li> <li> Pond</li> <li> Sand</li> <li> Land Slide</li> <li> a. River / Sungai</li> <li> b. Rivulet / Anak Sungai</li> <li> c. Direction / Arah Sungai</li> </ul>
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**INDEX MAP**




- Aerial Photography ( 1 / 10,000 ) : August 2001  
 - Topographic map ( 1 / 1,000 ) : October 2001  
 - Horizontal System : UTM ( 61 Zone )  
 - Elevation System : MSL  
 - Contour interval : 1 m

**DIRECTORATE GENERAL OF WATER RESOURCES,  
MINISTRY OF SETTLEMENT AND REGIONAL INFRASTRUCTURE**


**THE STUDY ON FLOOD CONTROL AND WATER MANAGEMENT  
IN LIMBOTO - BOLANGO - BONE BASIN**

**TOPOGRAPHIC MAP : LOW-LYING AREA / GORONTALO**

Checked by	Approved by
Name PT. ATLAS DELTASATYA	Isao Iwashima
Signature	
Date October 9, 2001	October 19, 2001

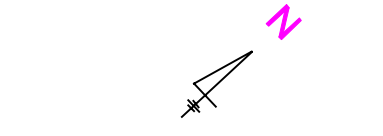
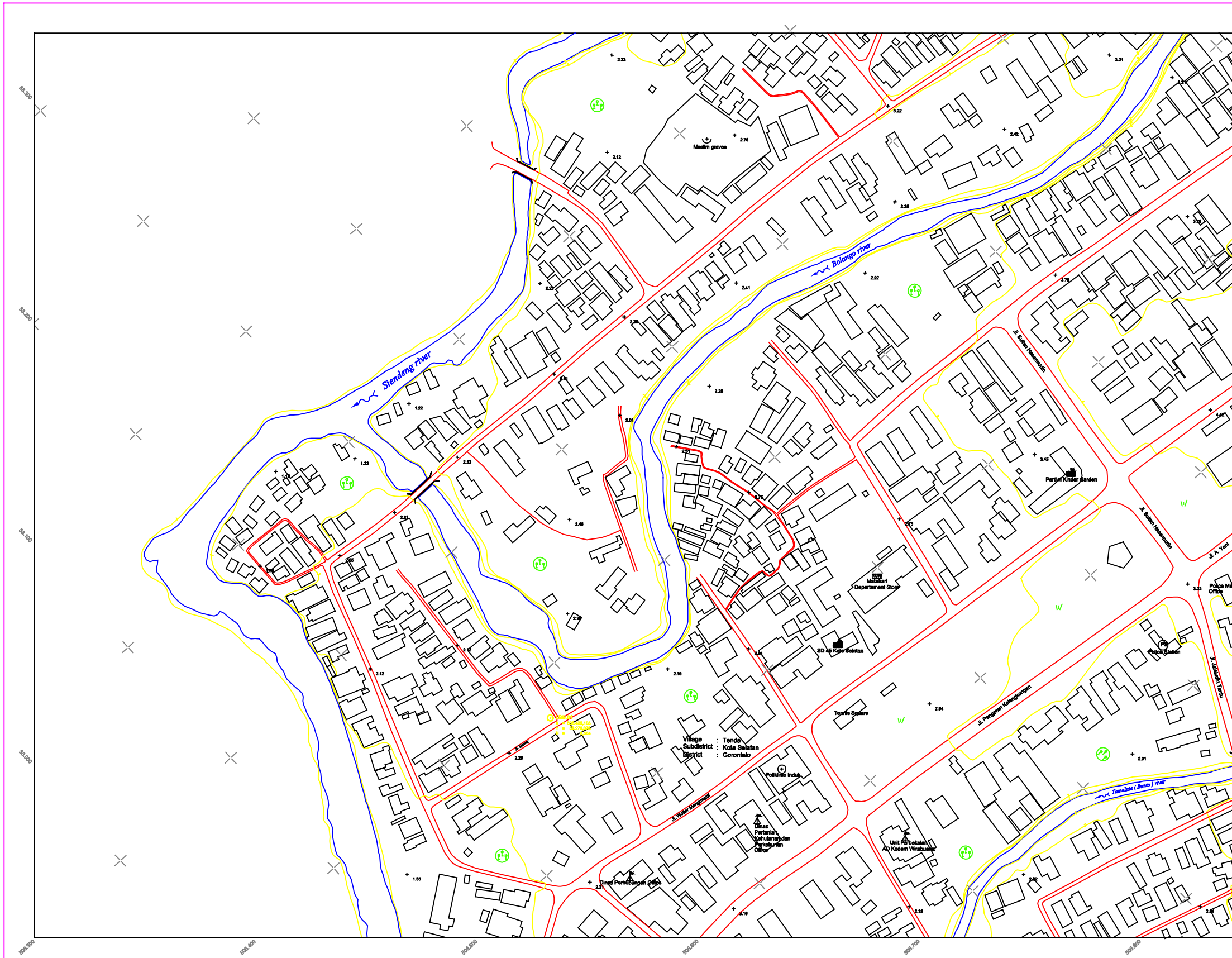


**PT. ATLAS DELTASATYA**  
JICA COOPERATION AGENCY



**JICA**  
JAPAN INTERNATIONAL  
COOPERATION AGENCY

SHEET No.  
**20/22**



LEGEND

△ Existing Triangulation Point	Electric Power Line
TTB Trip Triangulasi	Jalur Tegangan Tinggi
GPS Point	Cutting and Embankment
TTB OPK	Kanalisasi dan Tahanan
Existing Bench Mark	Swamp
BENTOL BAK	Rawai
+ 4.24 Spot Height	Muslim graves
TTB TPGR	KUBURAN MUSLIM
House / Building	Christian cemetery
BANGUNAN	KUBURAN KRISTEN
Factory	Chinese graves
PABRIK	KUBURAN CHINA
Public Hall	Paddy field
RUANG TUMBUH	Sawah
Police Station	Boundary of Vegetation
KORPORASI	batas Tanaman
Fire Station	Field
STASIUN PEMadam KAWASAN	Ladang
Post Office	Forest
KORPORASI	Hutan
Mosque	Grass
MASJID	KAWASAN
Church	Tree
GEREJA	Pohon
Hospital	Water hole
RUMAH SAKIT	LUBANG AIR
School	Sluice
SEKOLAH	PRANGGA
Market	Pipe Culvert
Pasar	Saluran air bawah tanah
Telephone Office	Monuments
KORPORASI	Tugu
Government Office	Contour Line
KORPORASI	garis Kontur
Hotel	
RESTORAN	
Gasoline Pump	
Pompa Bensin	
Road	Ford, lake
JALAN	KAWASAN, DAM
Path	Sand
Jalan Sepeda	Pass
Bridge	Land Slide
Jembatan	Talud
Station	a. River / Sungai
Stasiun	b. Rivulet / Anak Sungai
Subdistrict Boundary	c. Direction / Arah Sungai
batas Kecamatan	
Village Boundary	
batas Kelurahan	

**INDEX MAP**

- Aerial Photography (1/10,000) : August 2001  
 - Topographic map (1/1,000) : October 2001  
 - Horizontal System : UTM (61 Zone)  
 - Elevation System : MSL  
 - Contour Interval : 1 m

**DIRECTORATE GENERAL OF WATER RESOURCES,  
 MINISTRY OF SETTLEMENT AND REGIONAL INFRASTRUCTURE**

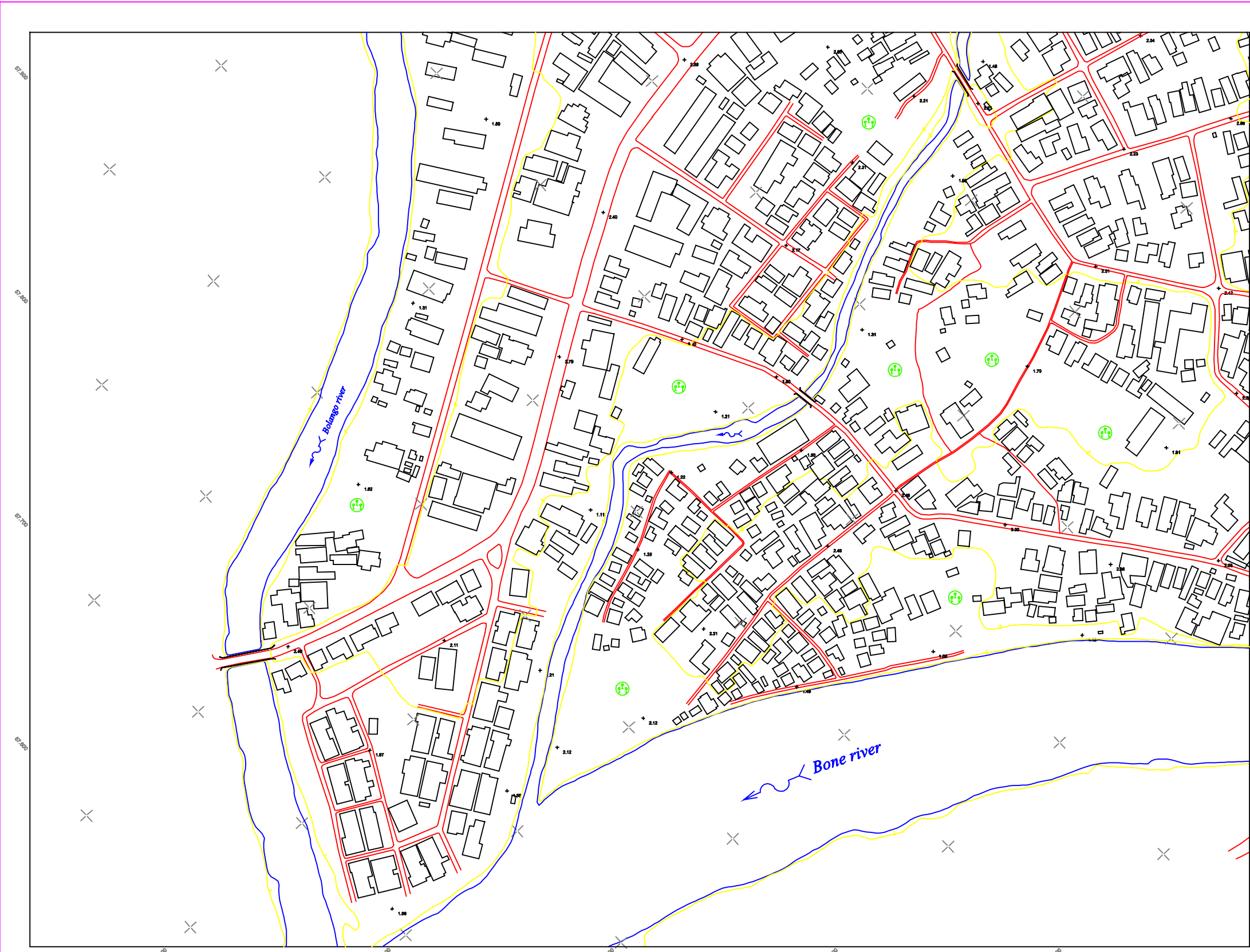
**THE STUDY ON FLOOD CONTROL AND WATER MANAGEMENT  
 IN LIMBOTO - BOLANGO - BONE BASIN**

**TOPOGRAPHIC MAP : LOW-LYING AREA / GORONTALO**

Checked by		Approved by	
Name	PT. ATLAS DELTASATYA	Name	leo boehime
Signature		Signature	
Date	October 9, 2001	Date	October 19, 2001

**JICA** JAPAN INTERNATIONAL COOPERATION AGENCY

PT. ATLAS DELTASATYA  
 JICA  
 SHEET No. 21/22



N

0 20 40 60 80 100 Meter

LEGEND

<ul style="list-style-type: none"> <li> Existing Triangulation Point</li> <li> GIPB Point</li> <li> Spot Height</li> <li> House/ Building</li> <li> Factory</li> <li> Public Hall</li> <li> Police Station</li> <li> Fire Station</li> <li> Post Office</li> <li> Mosque</li> <li> Church</li> <li> Hospital</li> <li> School</li> <li> Market</li> <li> Telephone Office</li> <li> Government Office</li> <li> Hotel</li> <li> Gasoline Pump</li> <li> Road</li> <li> Path</li> <li> Bridge</li> <li> Station</li> <li> Subdistrict Boundary</li> <li> Village Boundary</li> </ul>	<ul style="list-style-type: none"> <li> Electric Power Line</li> <li> Cutting and Embankment</li> <li> Swamp</li> <li> Mudflat</li> <li> Boundary of Vegetation</li> <li> Field</li> <li> Forest</li> <li> Grass</li> <li> Tree</li> <li> Water hole</li> <li> Sluice</li> <li> Pipe Culvert</li> <li> Monuments</li> <li> Tugu</li> <li> Contour Line</li> <li> Pond, lake</li> <li> Band</li> <li> Lead Slide</li> <li> a. River / Sungai</li> <li> b. Rivulet / Anak Sungai</li> <li> c. Direction / Arah Sungai</li> </ul>
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INDEX MAP

- Aerial Photography ( 1 / 10,000 ) : August 2001  
 - Topographic map ( 1 / 1,000 ) : October 2001  
 - Horizontal System : UTM ( S1 Zone )  
 - Elevation System : MSL  
 - Contour Interval : 1 m

**DIRECTORATE GENERAL OF WATER RESOURCES,  
MINISTRY OF SETTLEMENT AND REGIONAL INFRASTRUCTURE**

**THE STUDY ON FLOOD CONTROL AND WATER MANAGEMENT  
IN LIMBOTO - BOLANGO - BONE BASIN**

**TOPOGRAPHIC MAP : LOW-LYING AREA / GORONTALO**

Checked by		Approved by	
Name	PT. ATLAS DELTASATYA	Name	Isao Iwashima
Signature		Signature	
Date	October 9, 2001	Date	October 16, 2001

JAPAN INTERNATIONAL COOPERATION AGENCY
 PT. ATLAS DELTASATYA
 SHEET No. 22/22