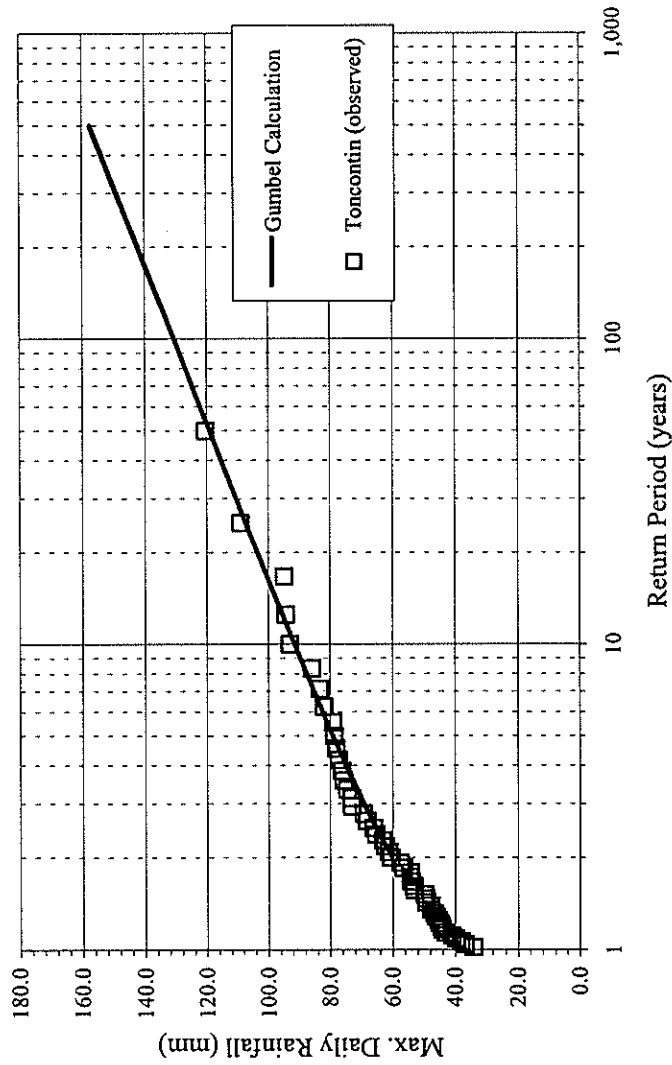


Maximum 1-Day Rainfall and Return Period at Toncontin Station  
(Data from 1951 to 1999)

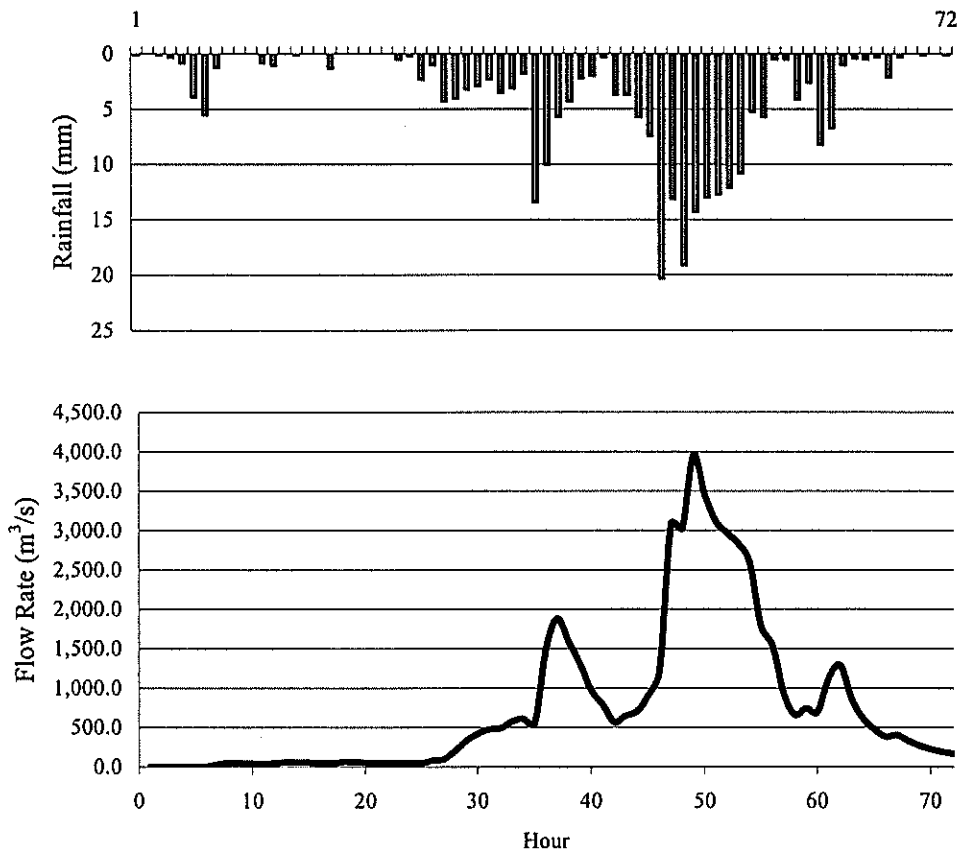


Return Period (yr)	Daily Rainfall (mm)
500	157.5
400	153.7
300	149.0
250	145.9
200	142.2
150	137.4
100	130.6
80	126.9
60	122.1
50	119.0
40	115.2
30	110.4
25	107.3
20	103.5
15	98.6
10	91.5
9	89.7
8	87.6
7	85.2
6	82.4
5	79.0
4	74.8
3	69.1
2	60.2

Figure 4.2

Maximum 1-Day Rainfall and Return Period at Toncontin Station

**Rainfall and Simulated Hydrograph  
during the Hurricane Mitch**



**Figure 4.3**

**Rainfall and Simulated Hydrograph during the Hurricane Mitch**

Maximum Flow Rate and Return Period in the Choluteca River Basin in Tegucigalpa

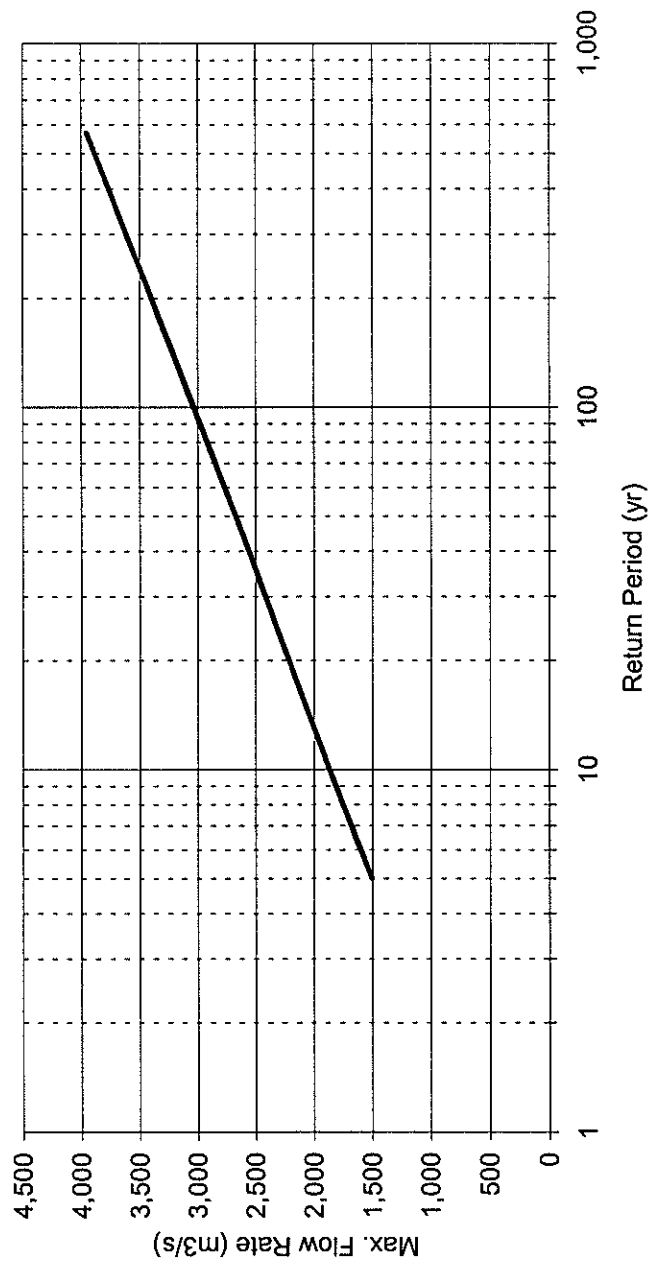


Figure 4.4

Maximum Flow Rate and Return Period in the Choluteca River Basin in Tegucigalpa

Total Drainage Basin Area = 819.7 km<sup>2</sup>

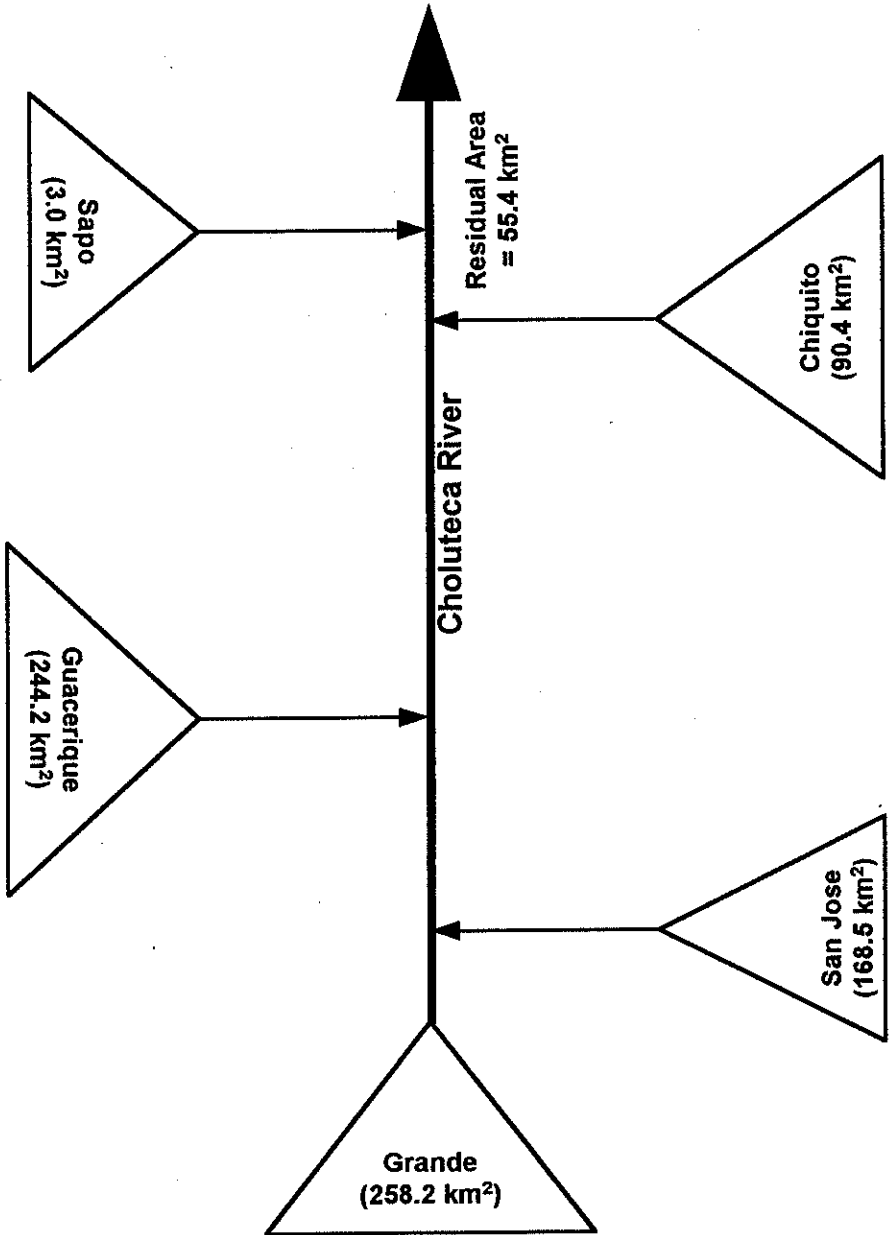


Figure 4.5

River Model

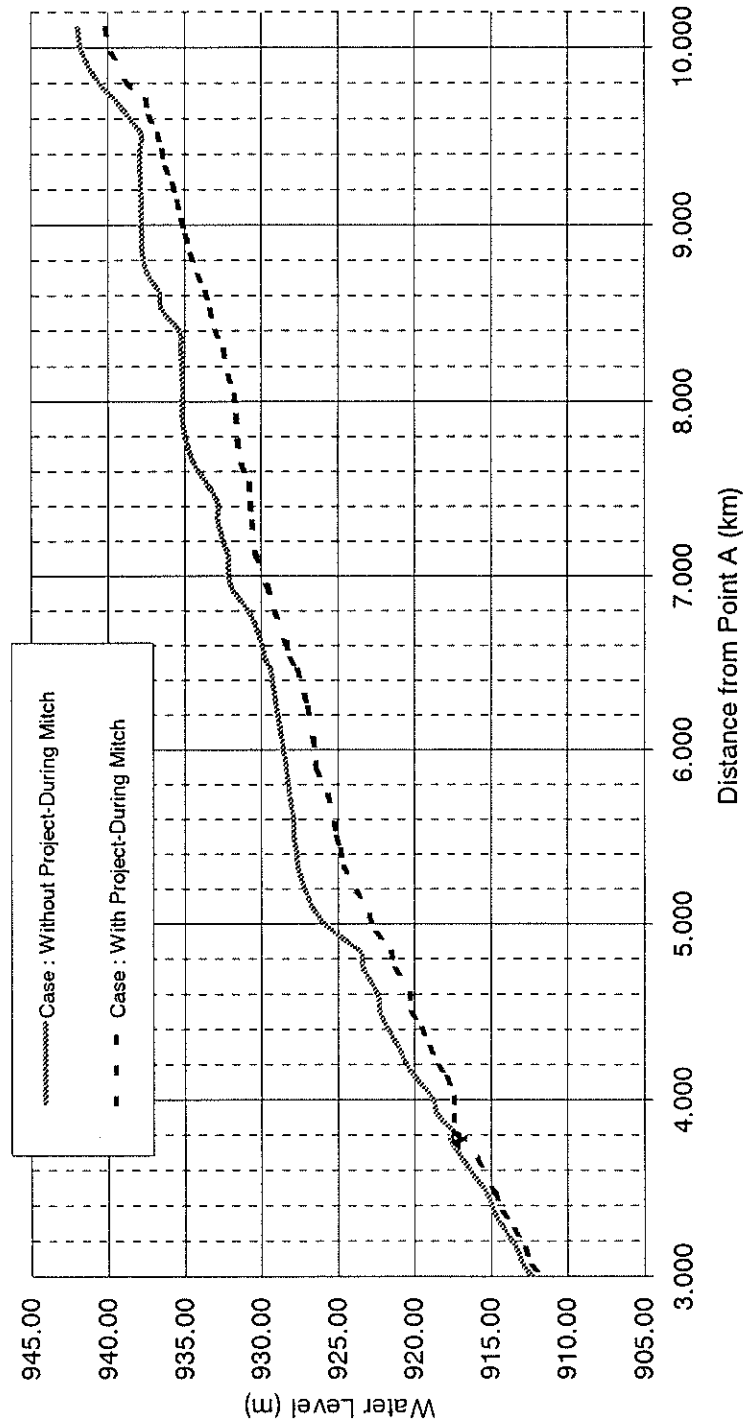
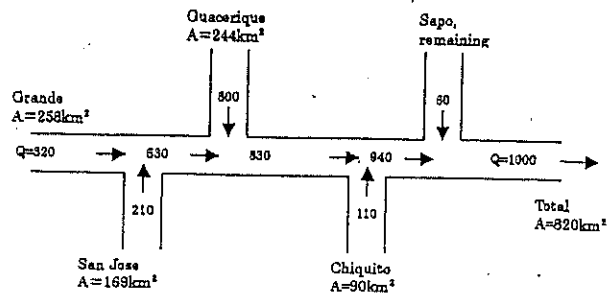


Figure 4.6

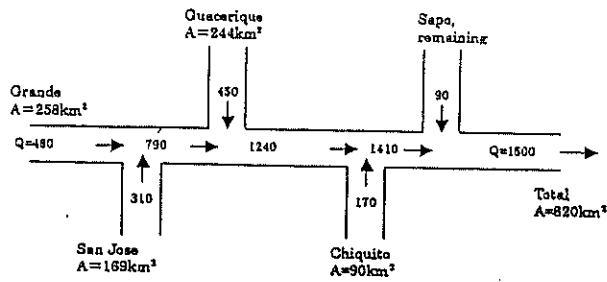
Water Level in Choluteca River during Hurricane Mitch

(1,000 m<sup>3</sup>/sec flood)

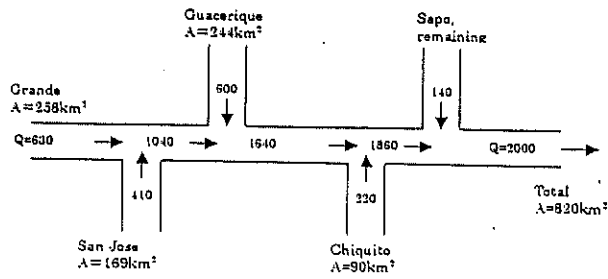
(Unit : m<sup>3</sup>/sec)



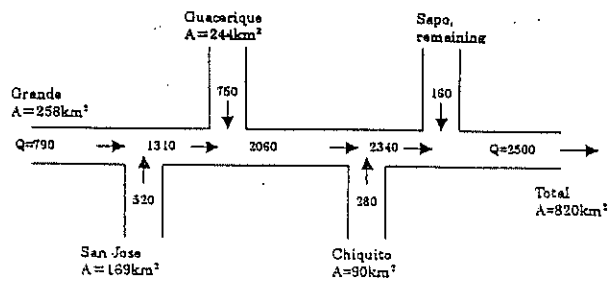
(1,500 m<sup>3</sup>/sec flood)



(2,000 m<sup>3</sup>/sec flood)



(2,500 m<sup>3</sup>/sec flood)



(3,000 m<sup>3</sup>/sec flood)

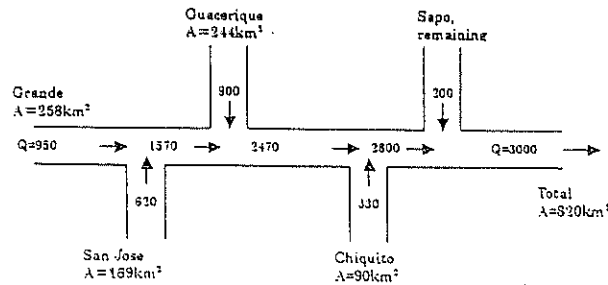


Figure 4.7

Design Flood Distribution

Choluteca River Profile

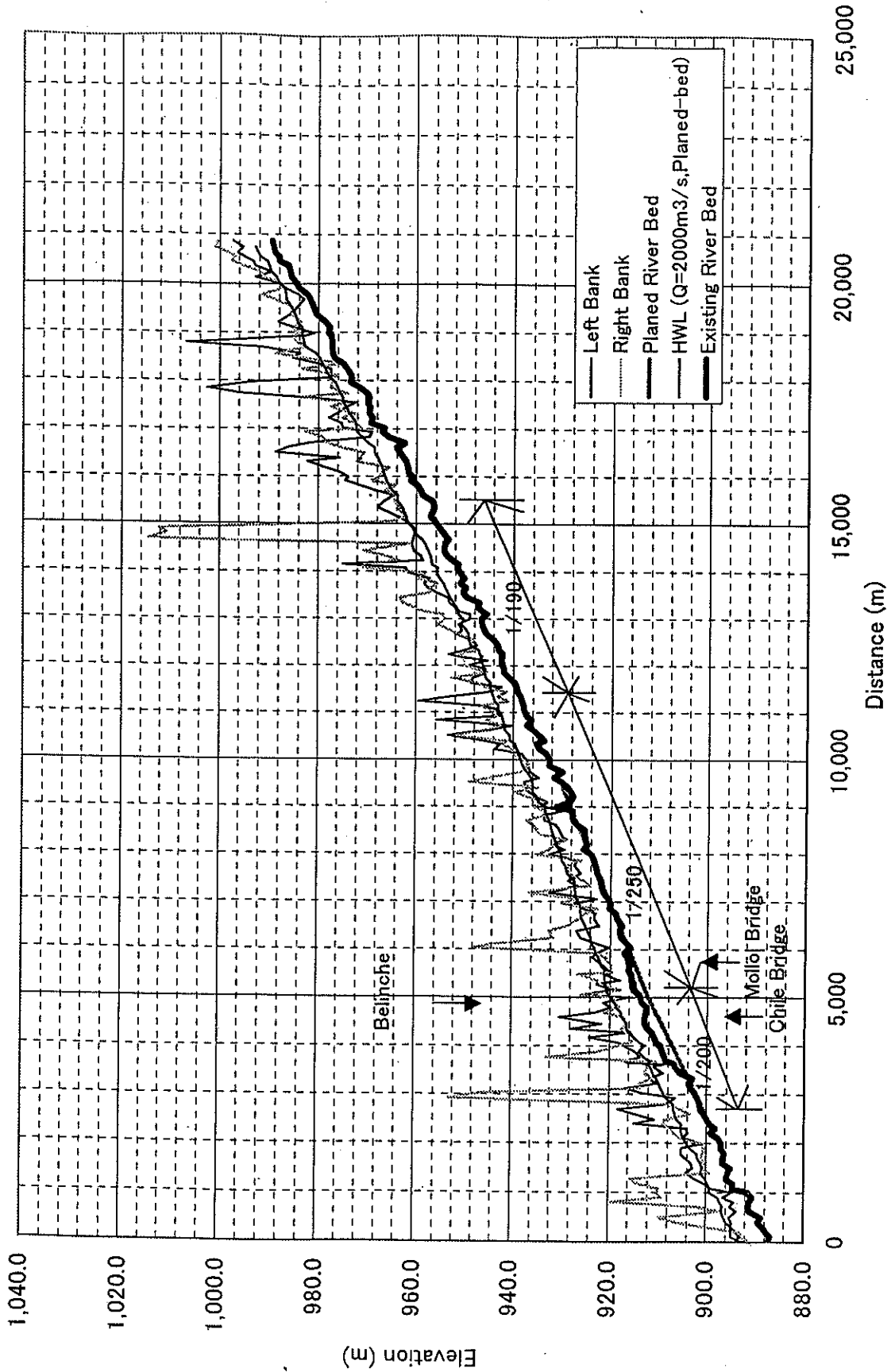


Figure 4.8

Profile of Planned River



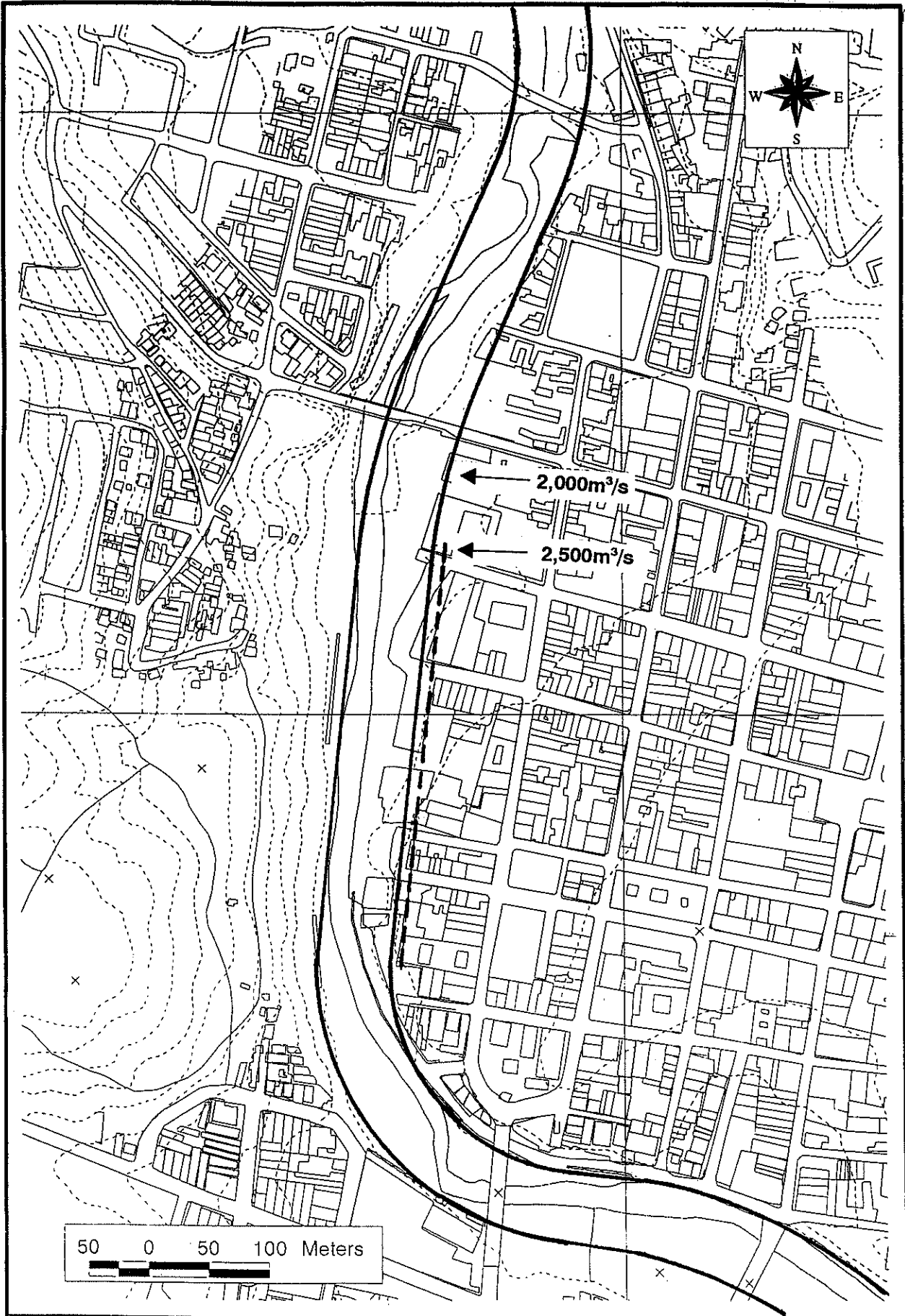


Figure 4.9 (1)

Planned Choluteca River Alignment at Berrinche

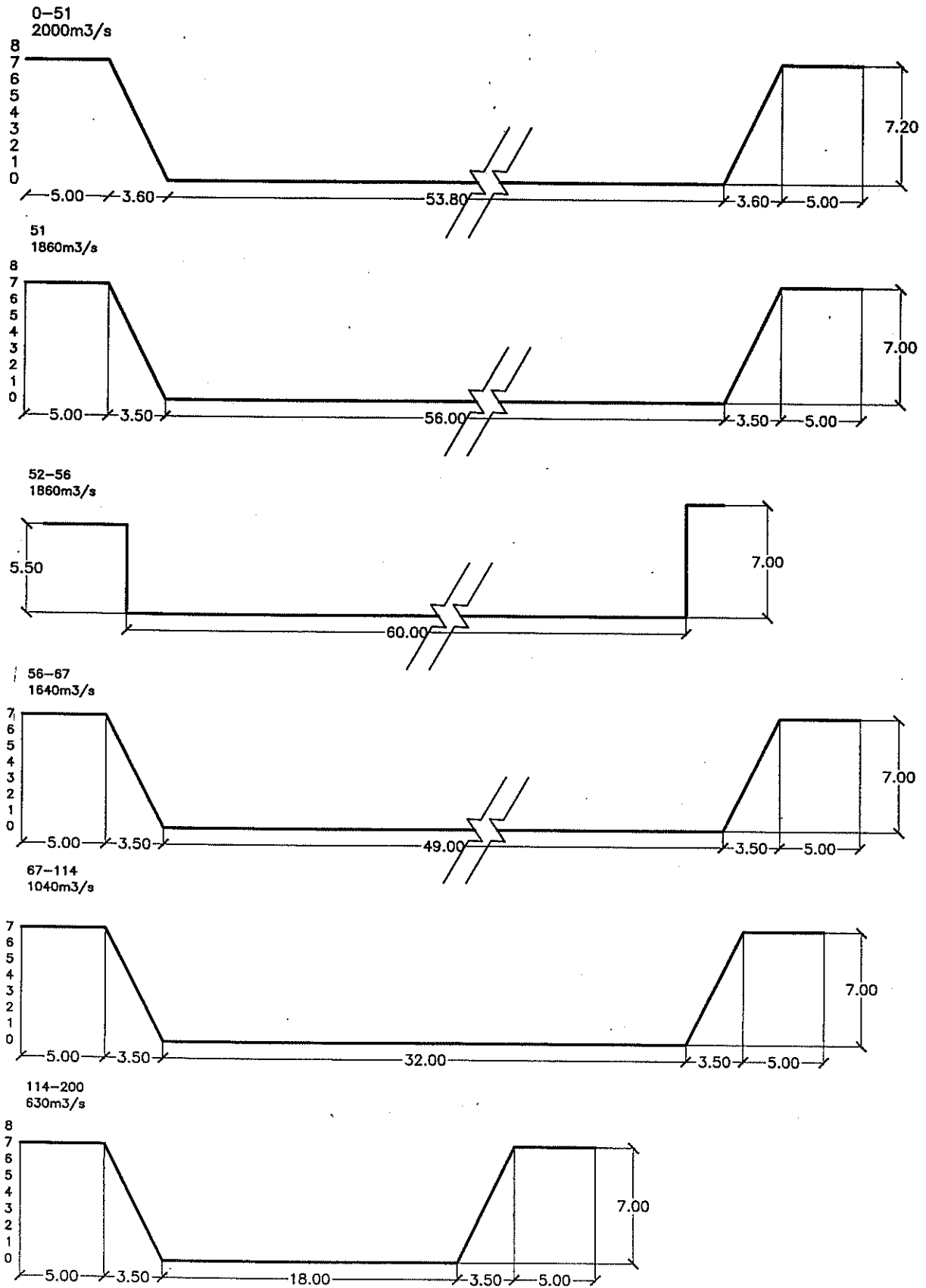


Figure 4.9 (2)

Design Cross Section

SHAFT WORKS & COUNTER WEIGHT FILL

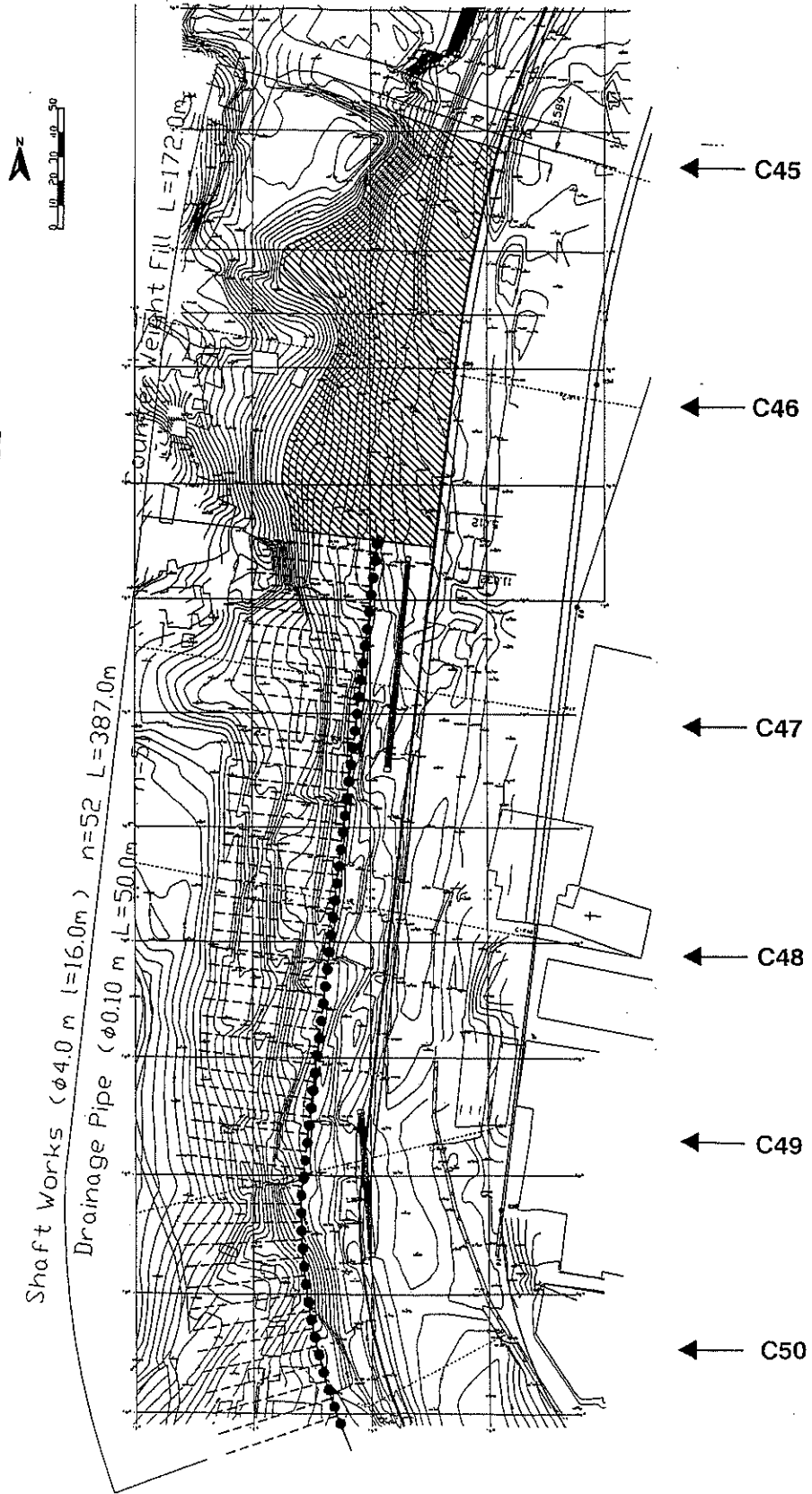
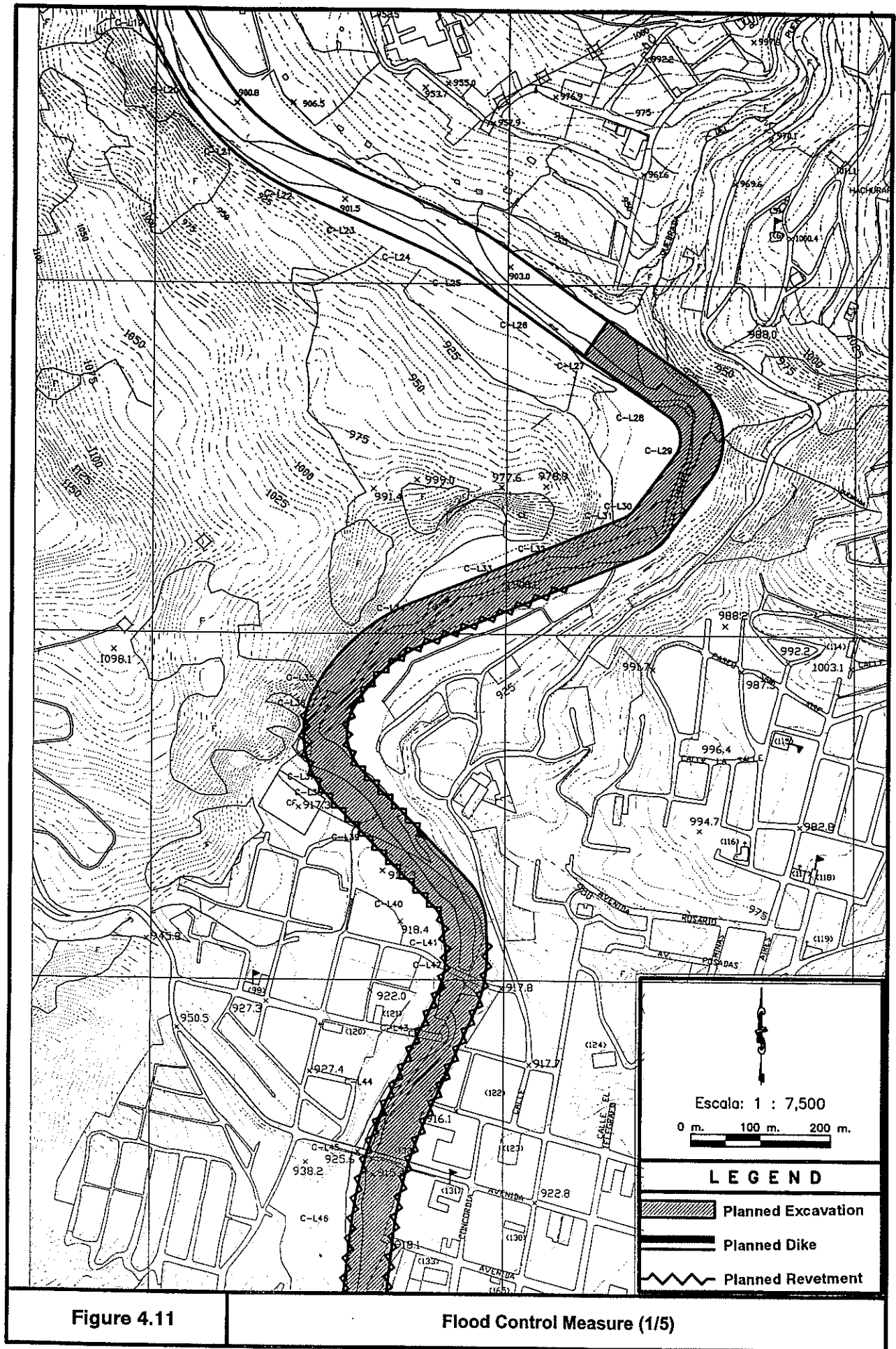


Figure 4.10

Planned Structures at Berrinche Landslide



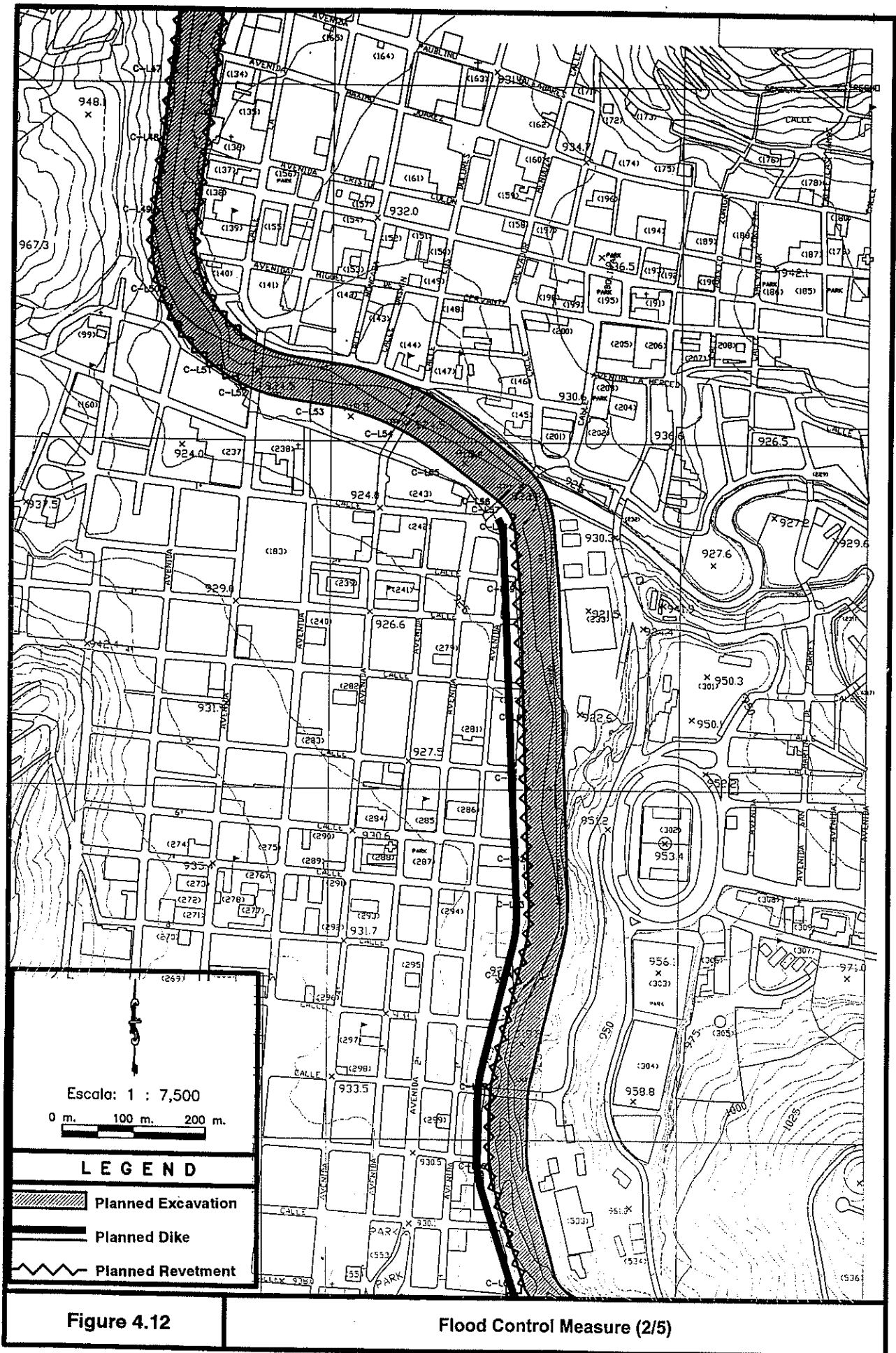
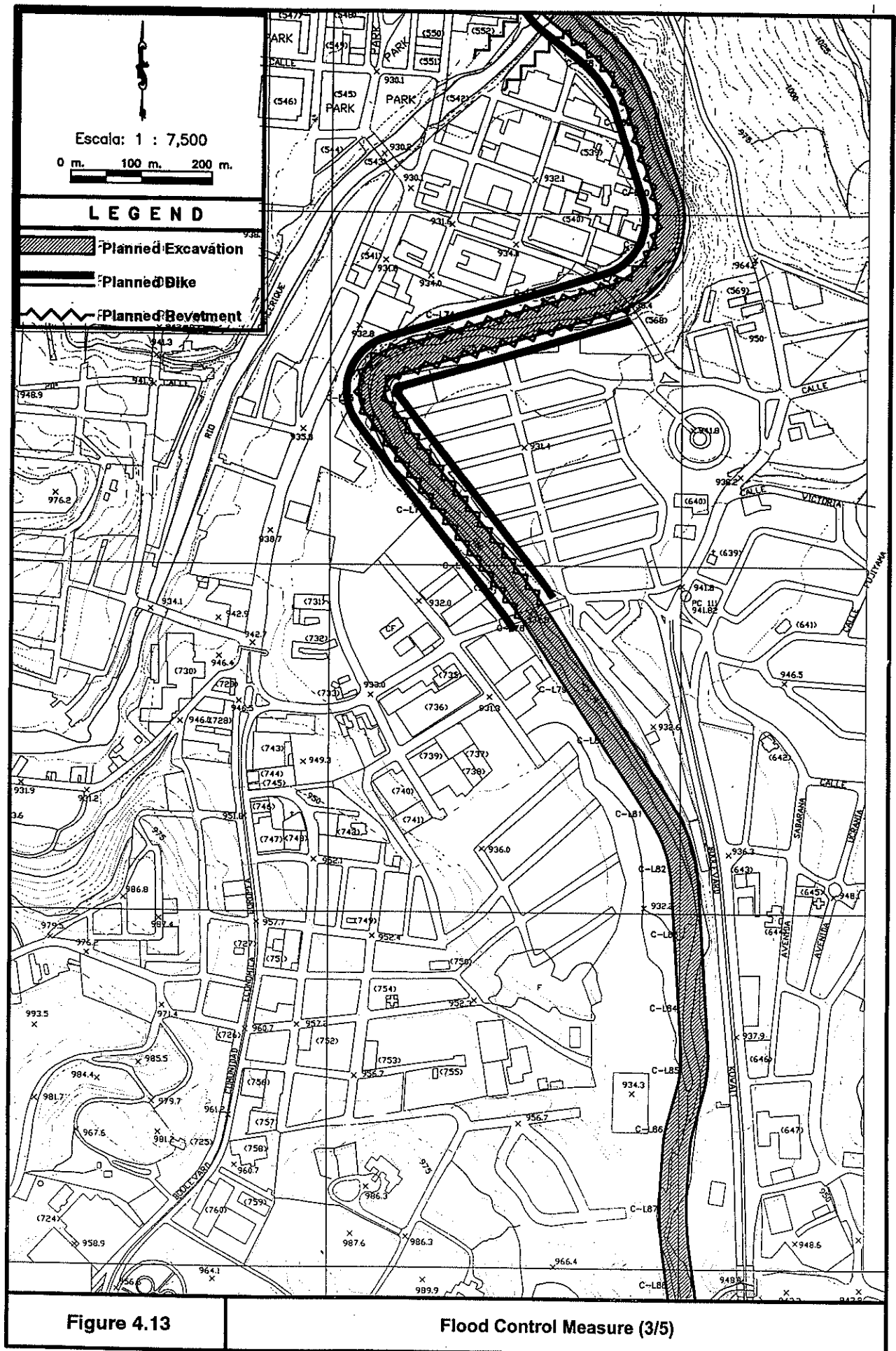
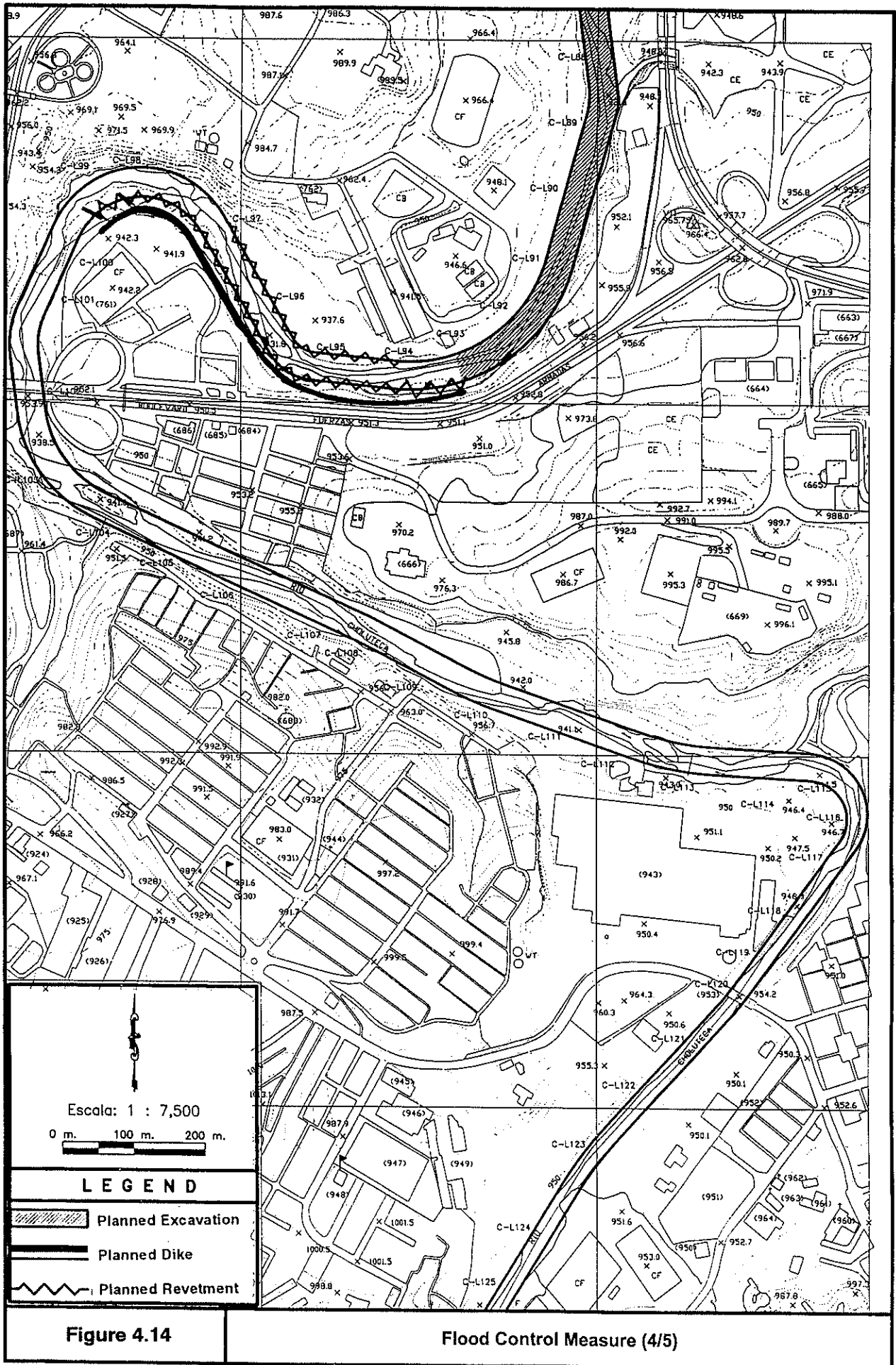
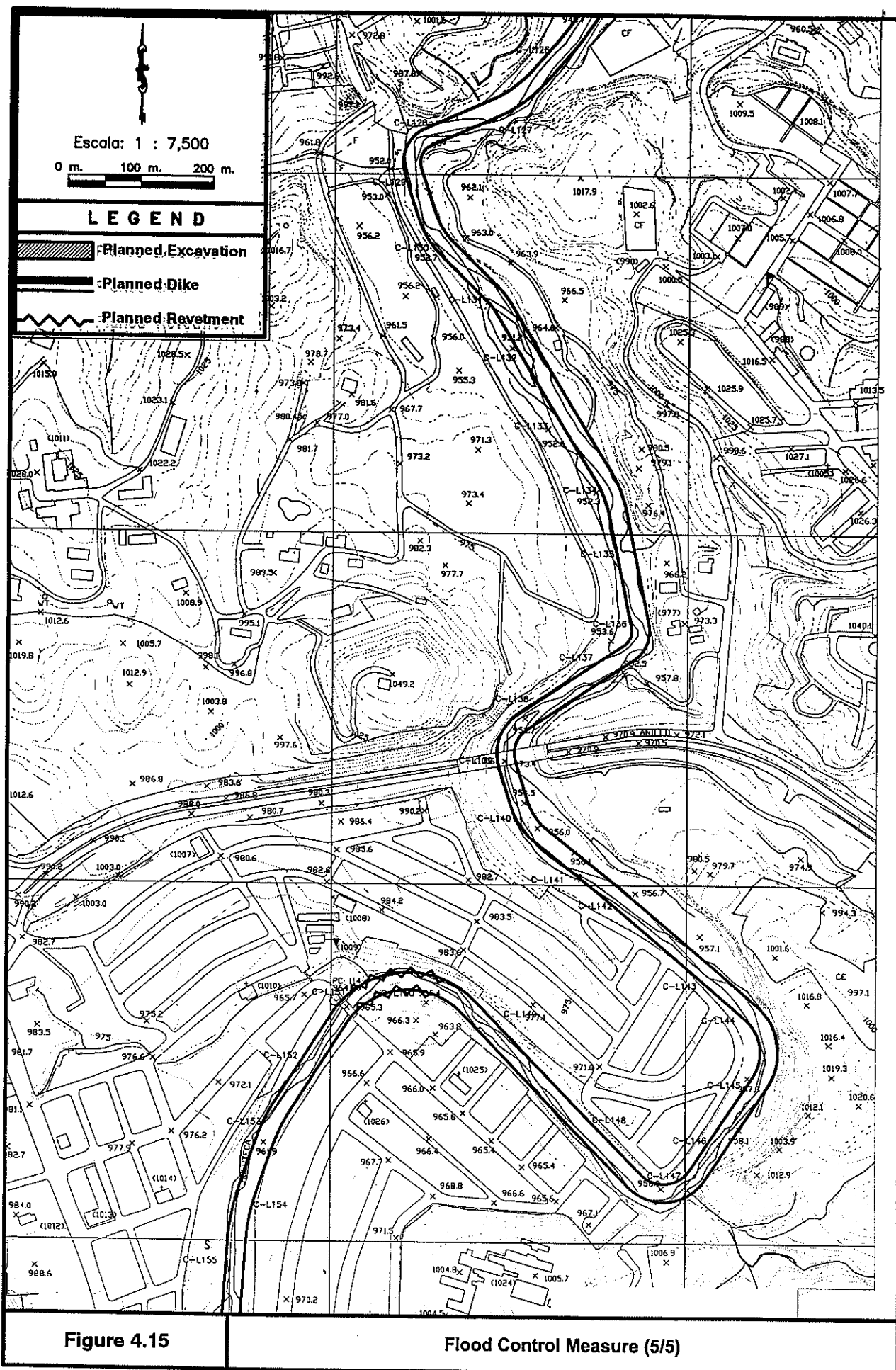


Figure 4.12

Flood Control Measure (2/5)







**Figure 4.15**

**Flood Control Measure (5/5)**



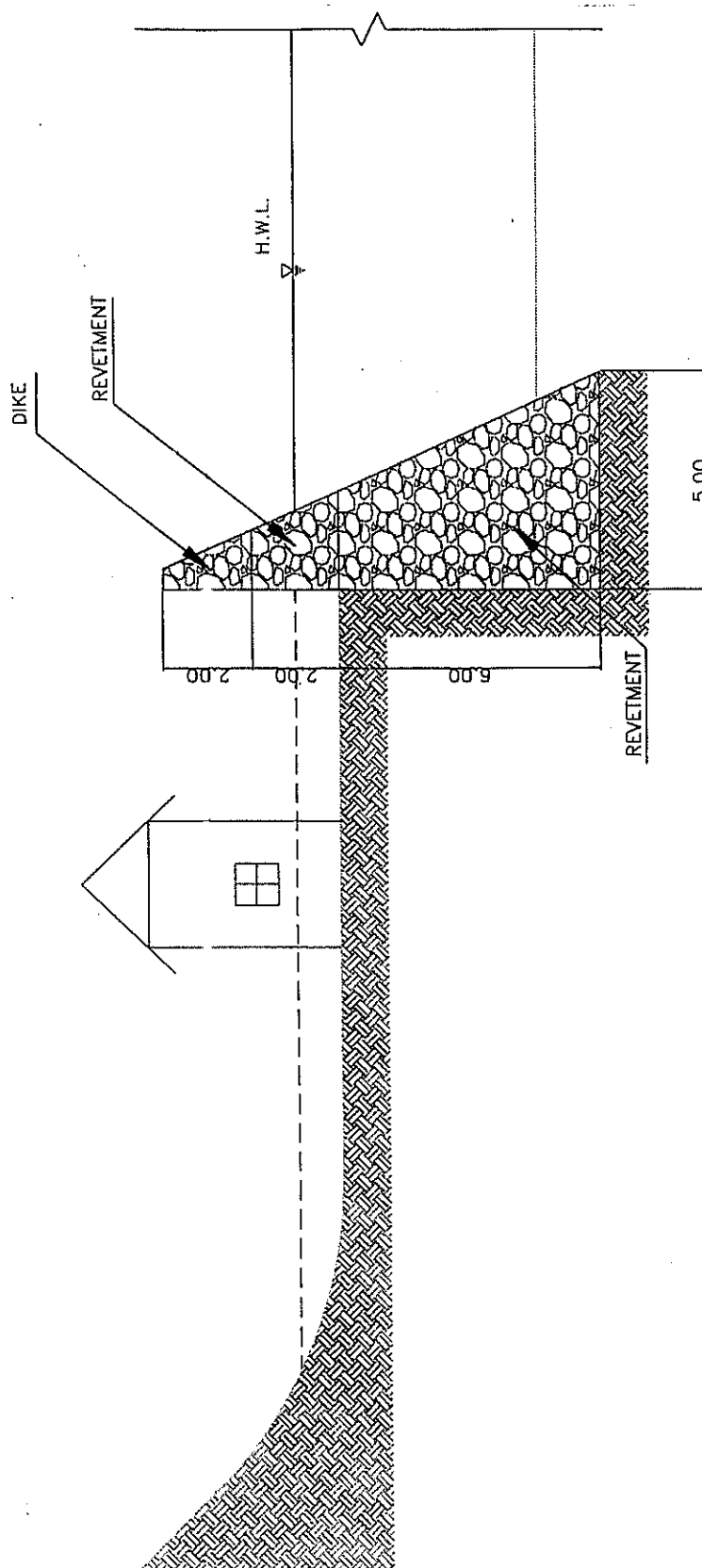


Figure 4.16

Revetment

LONGITUDINAL SECTION S=1:500  
 (C 56)

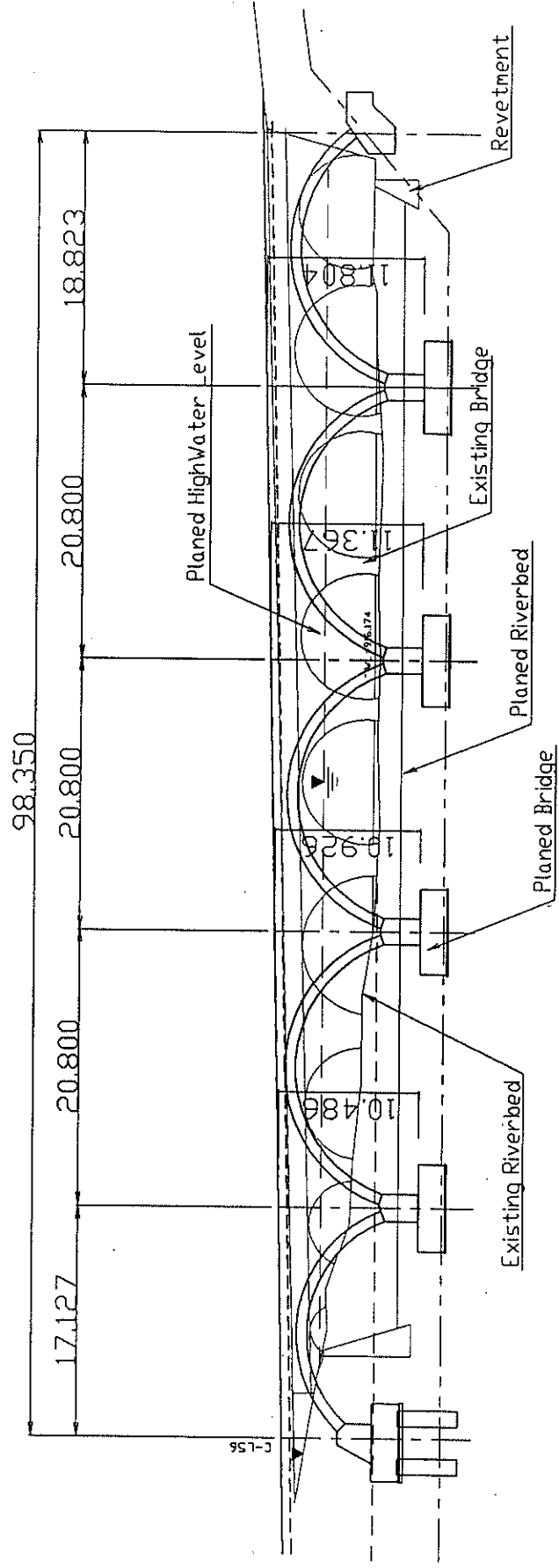


Figure 4.17

Proposed New Malloj Bridge

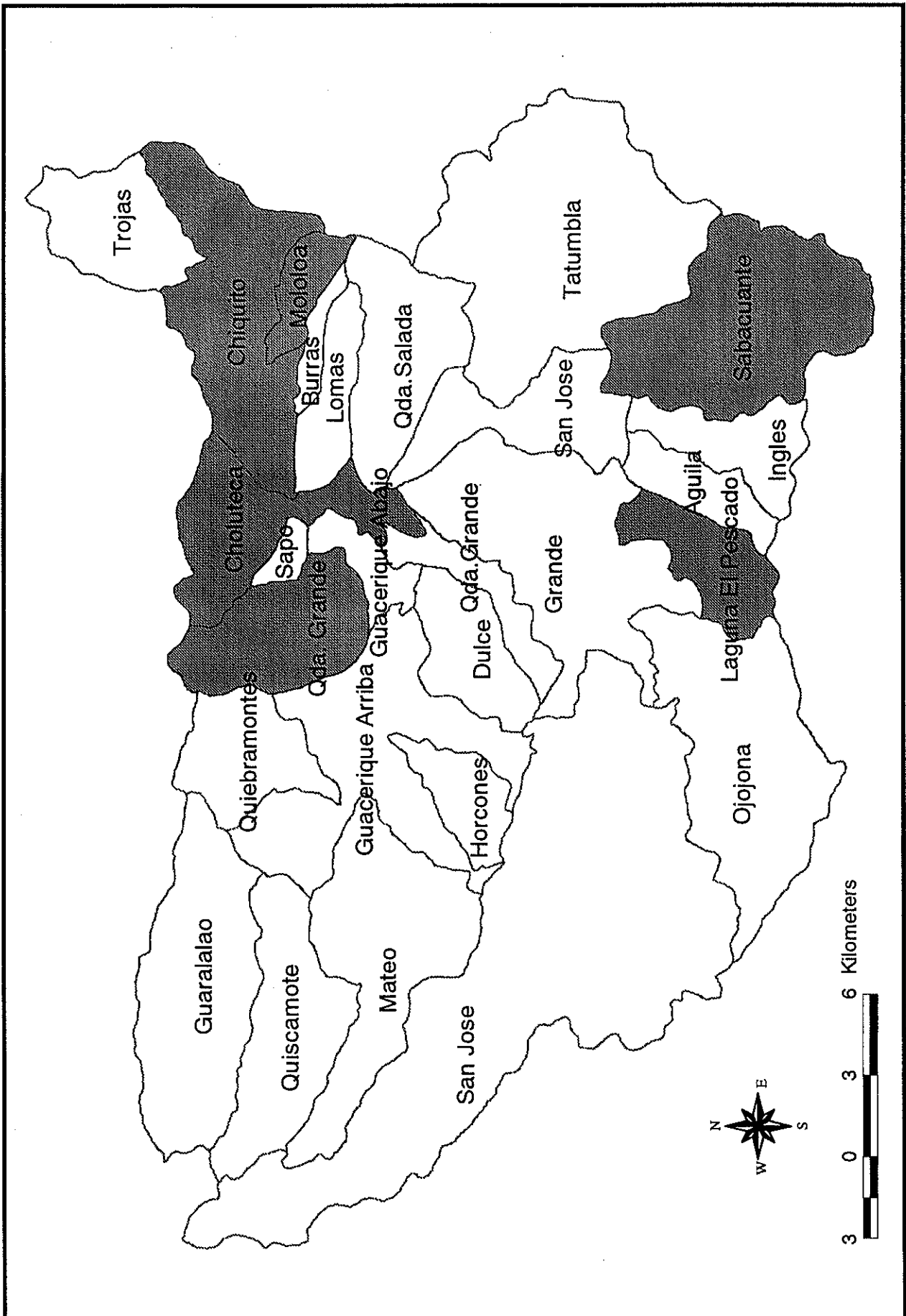


Figure 4.18

Locations of Micro-Basins

Sediment Load ( $Q=1,000\text{m}^3/\text{s}$ )

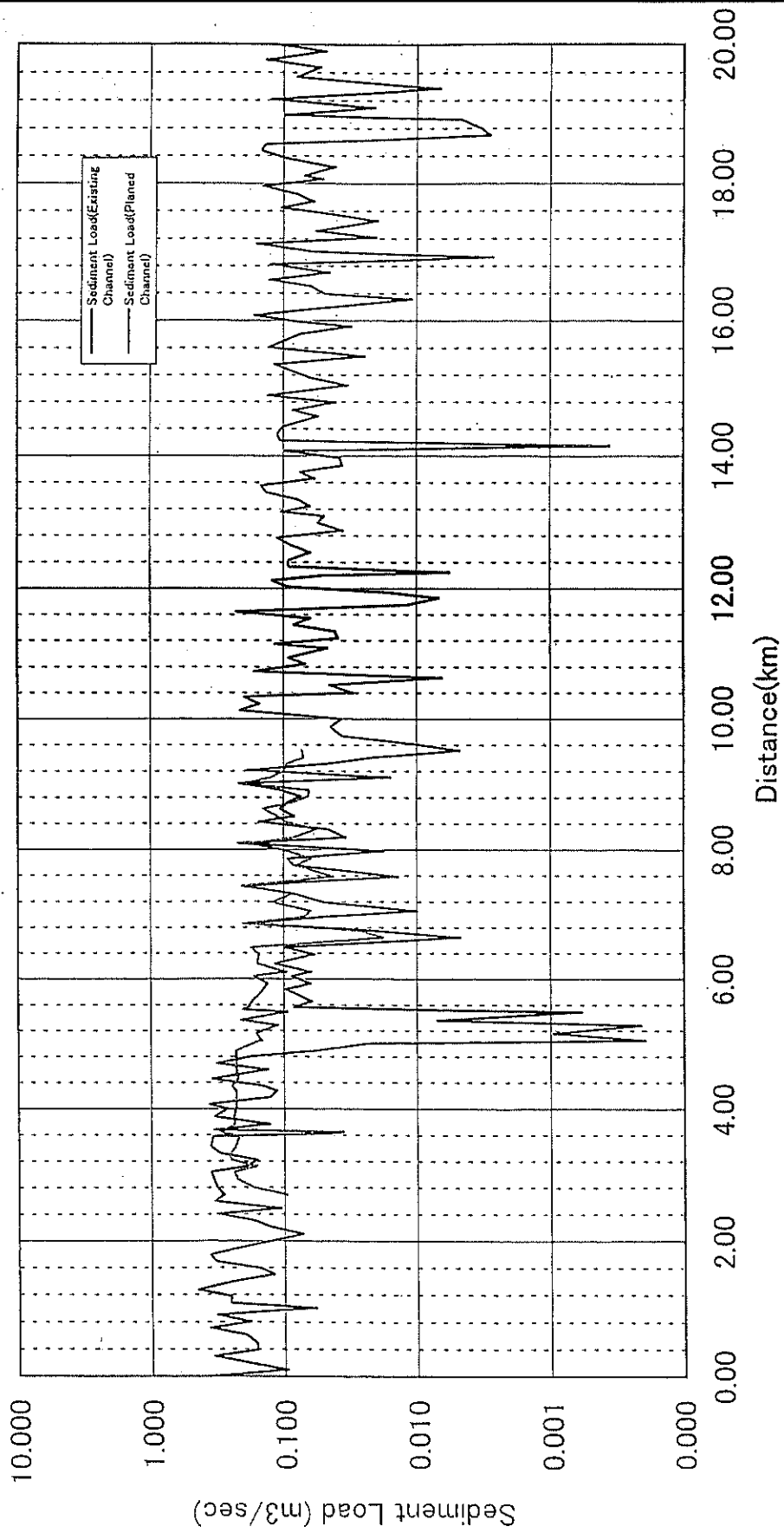


Figure 4.19

Sediment Transport Capacity

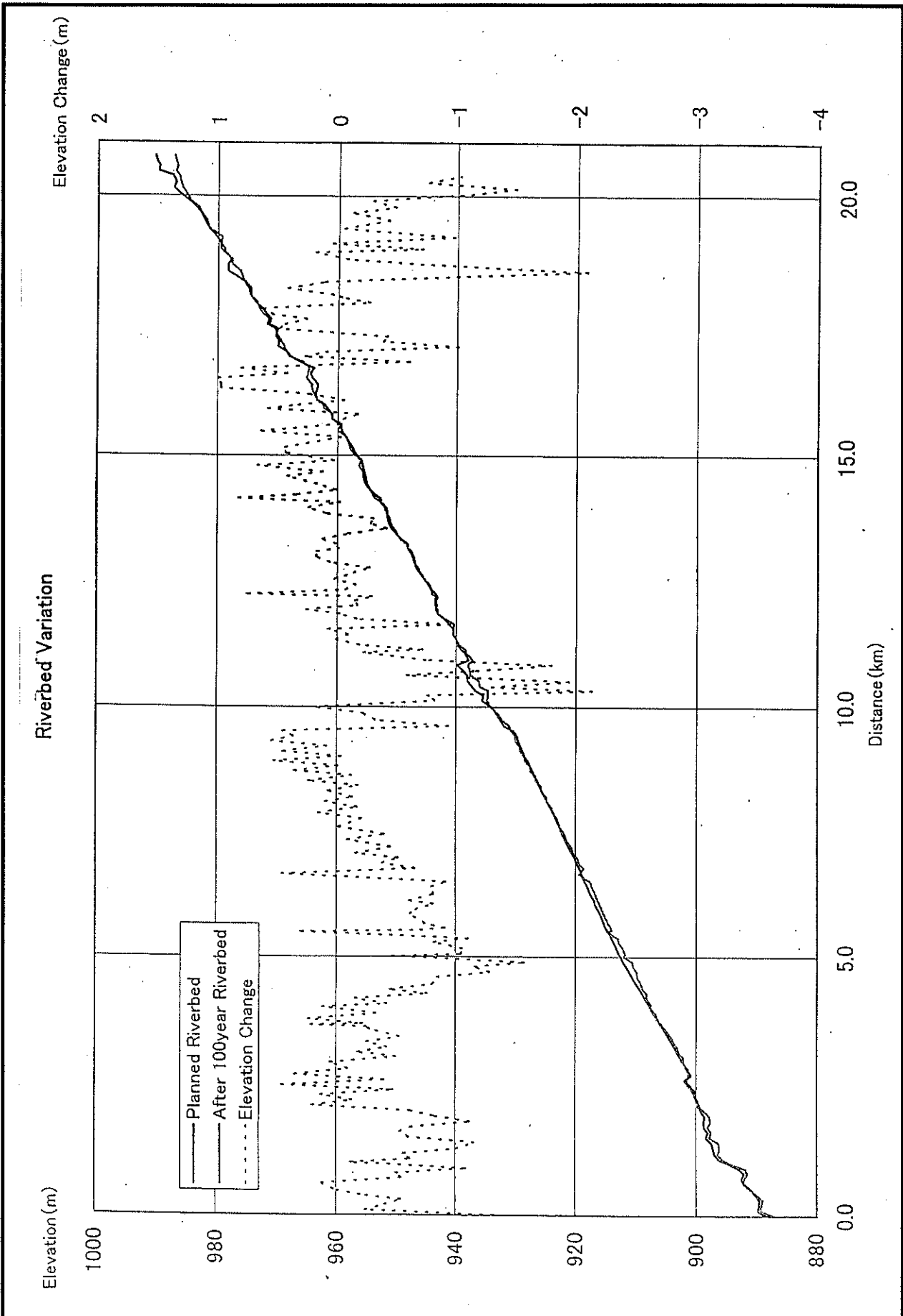
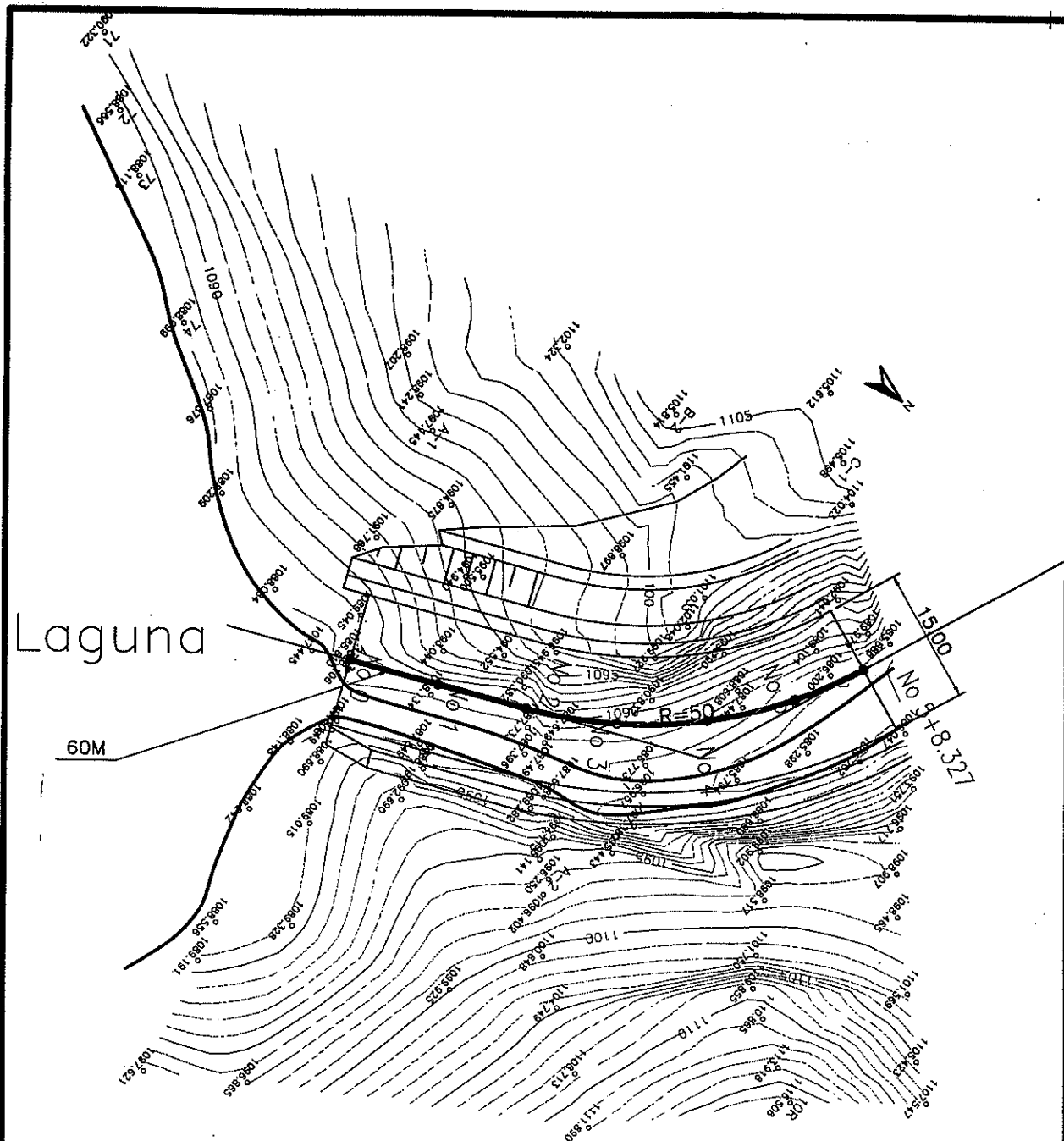


Figure 4.20

Riverbed Variation



No 2  
 GH=1,088.99  
 FH=1,086.711

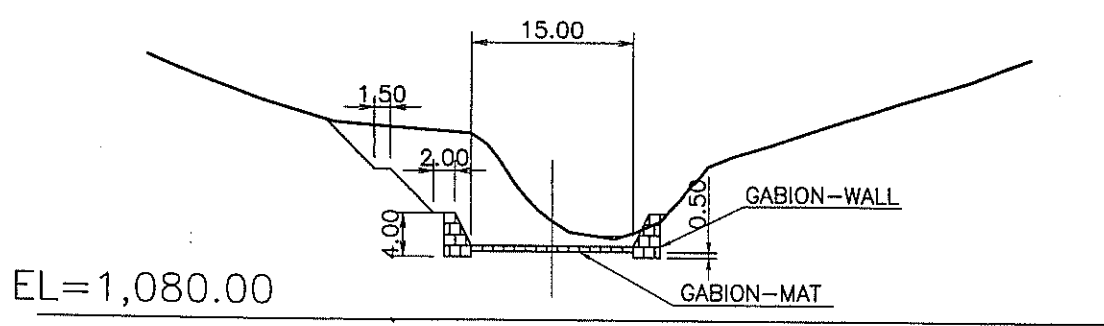


Figure 4.21

Improvement of Pescado Outlet

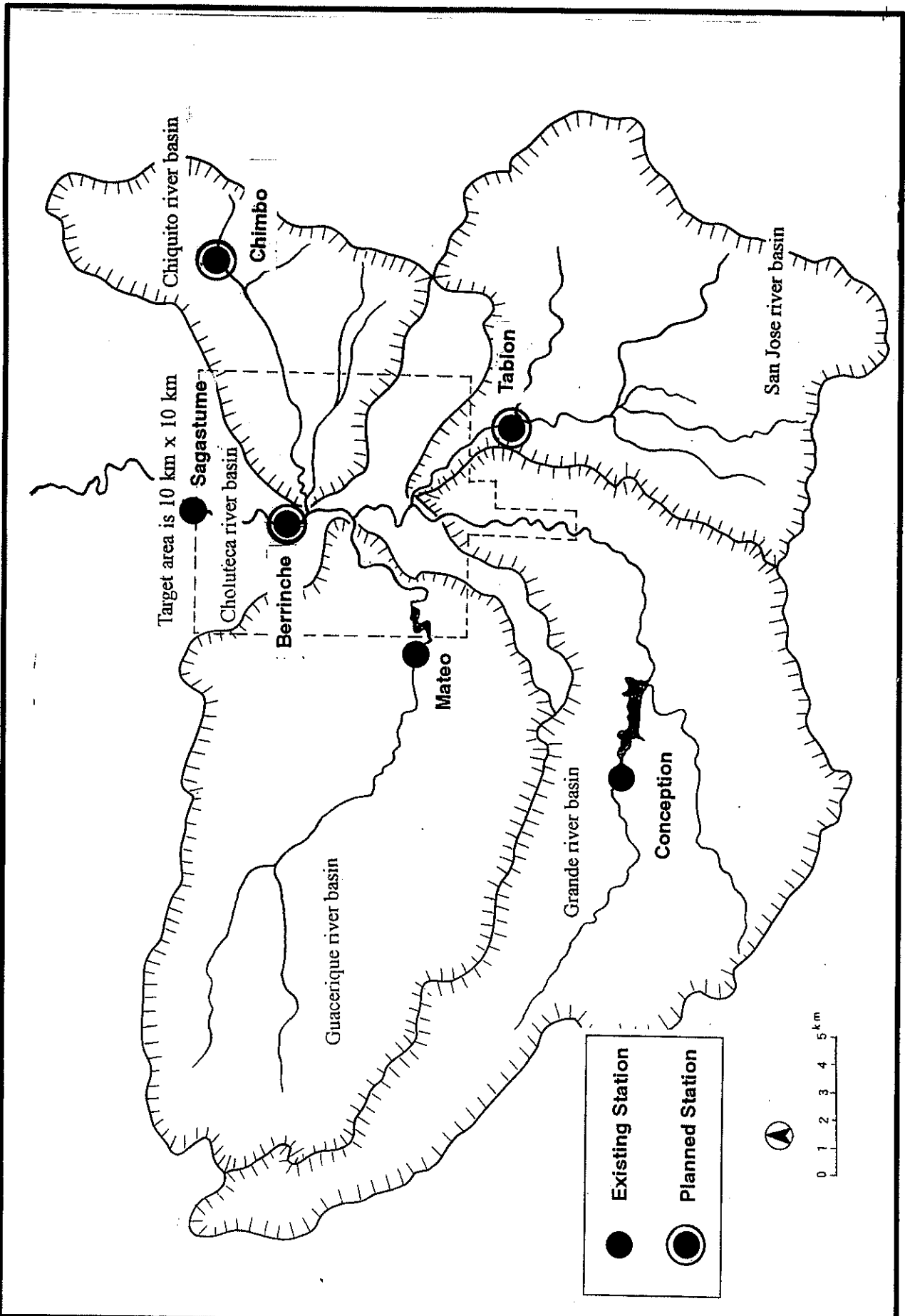


Figure 4.22

Location of Planned Gauging Station

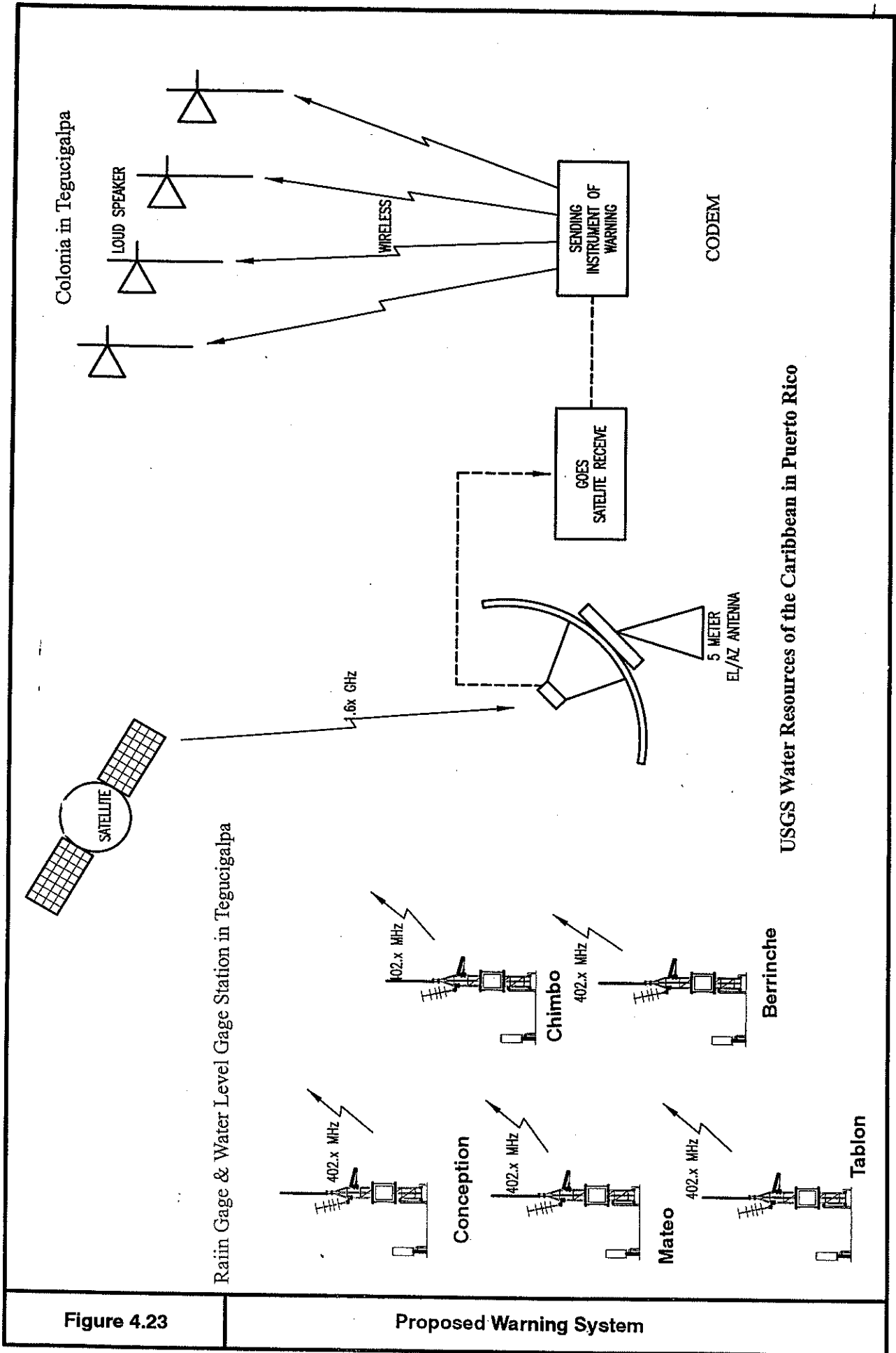


Figure 4.23

Proposed Warning System



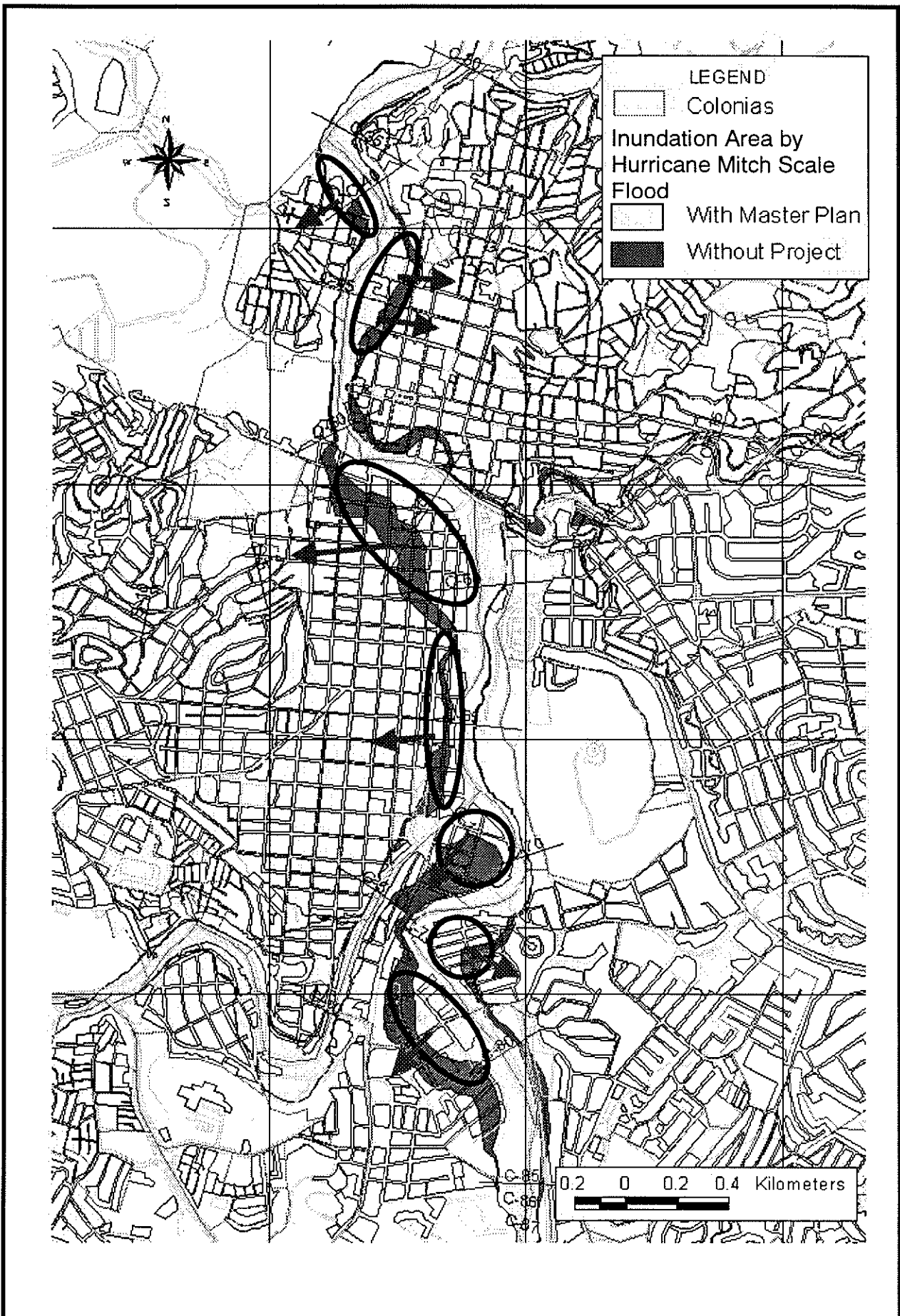
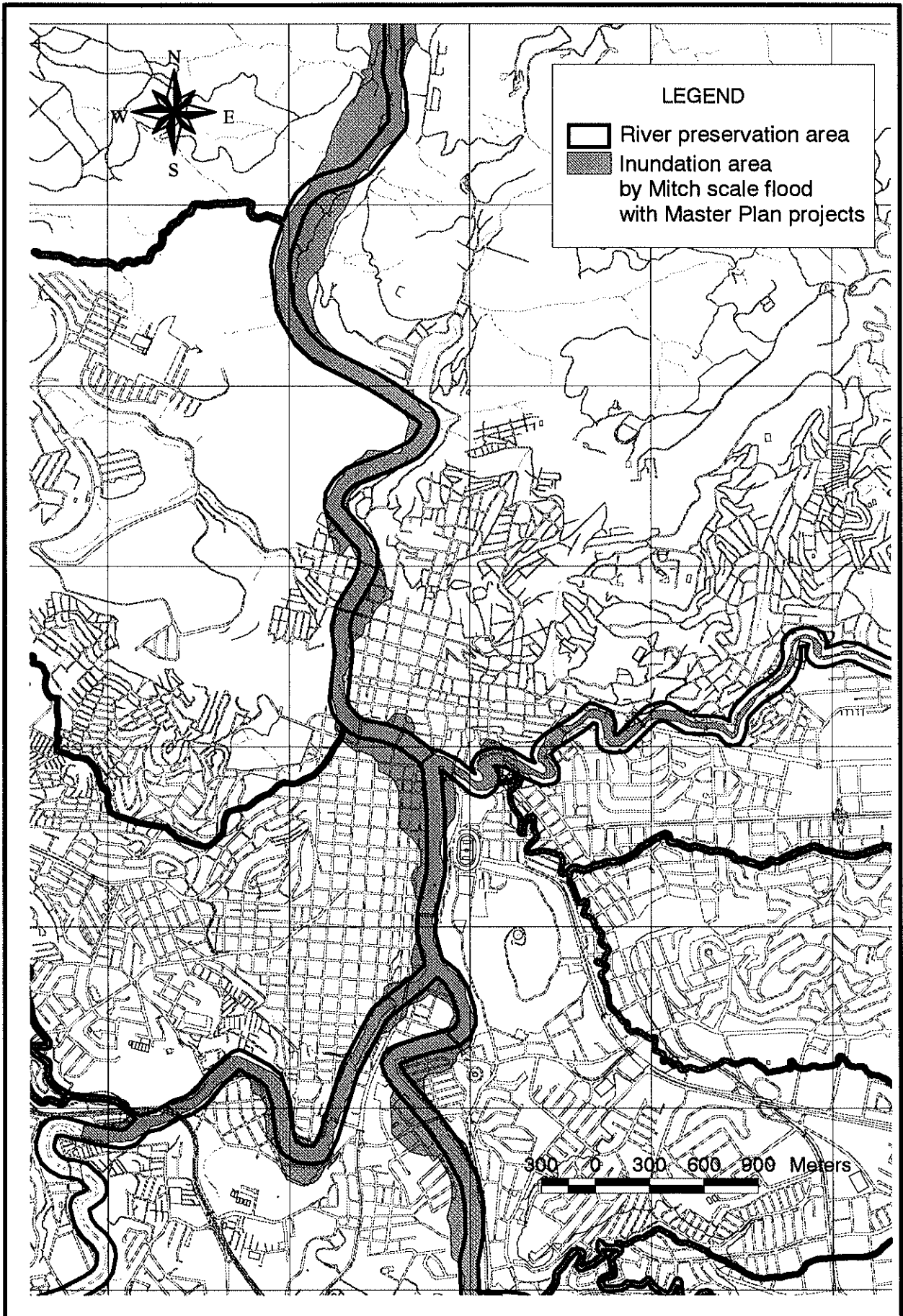


Figure 4.24

Evacuation Destination



**LEGEND**

- River preservation area
- Inundation area by Mitch scale flood with Master Plan projects

**Figure 4.25 (1)**

**Inundation Area by Mitch Scale Flood with Master Plan Structural Projects (1/2)**