

Fig. X-9-21 Structural Plan of Qda Redonda (S2)

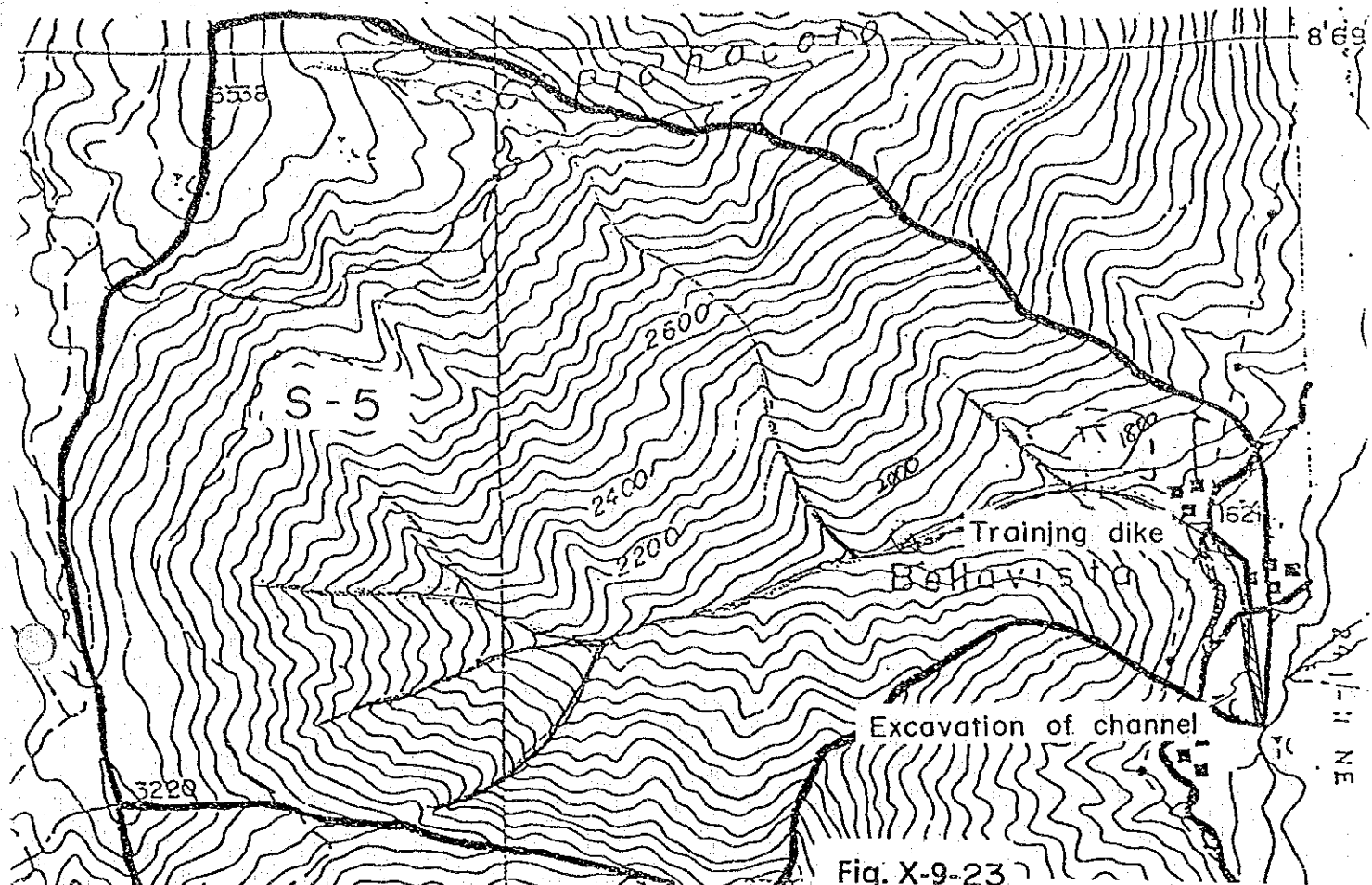


Fig. X-9-23
Structural Plan of Qda Lucuma (S5)

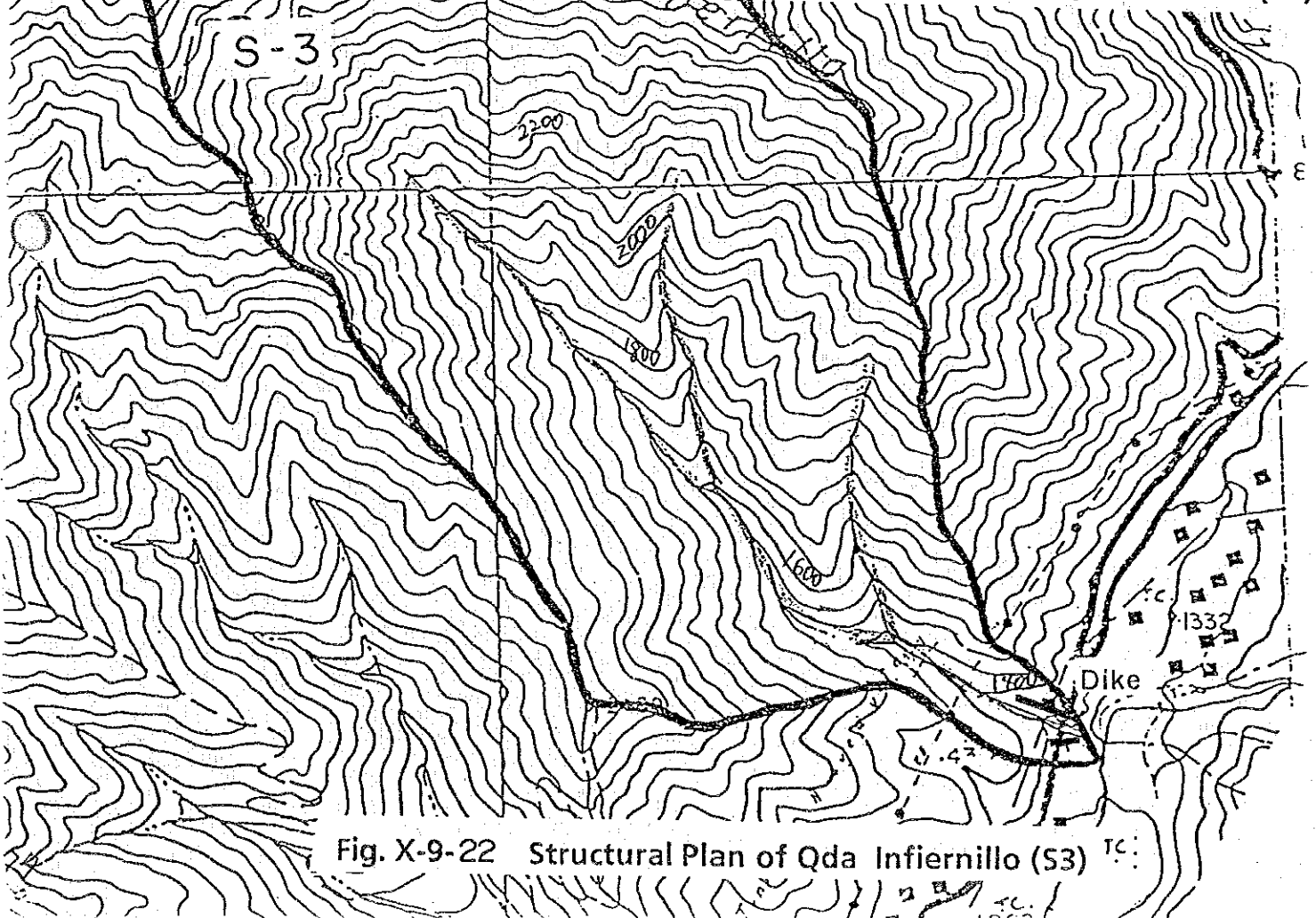


Fig. X-9-22 Structural Plan of Qda Infiernillo (S3)

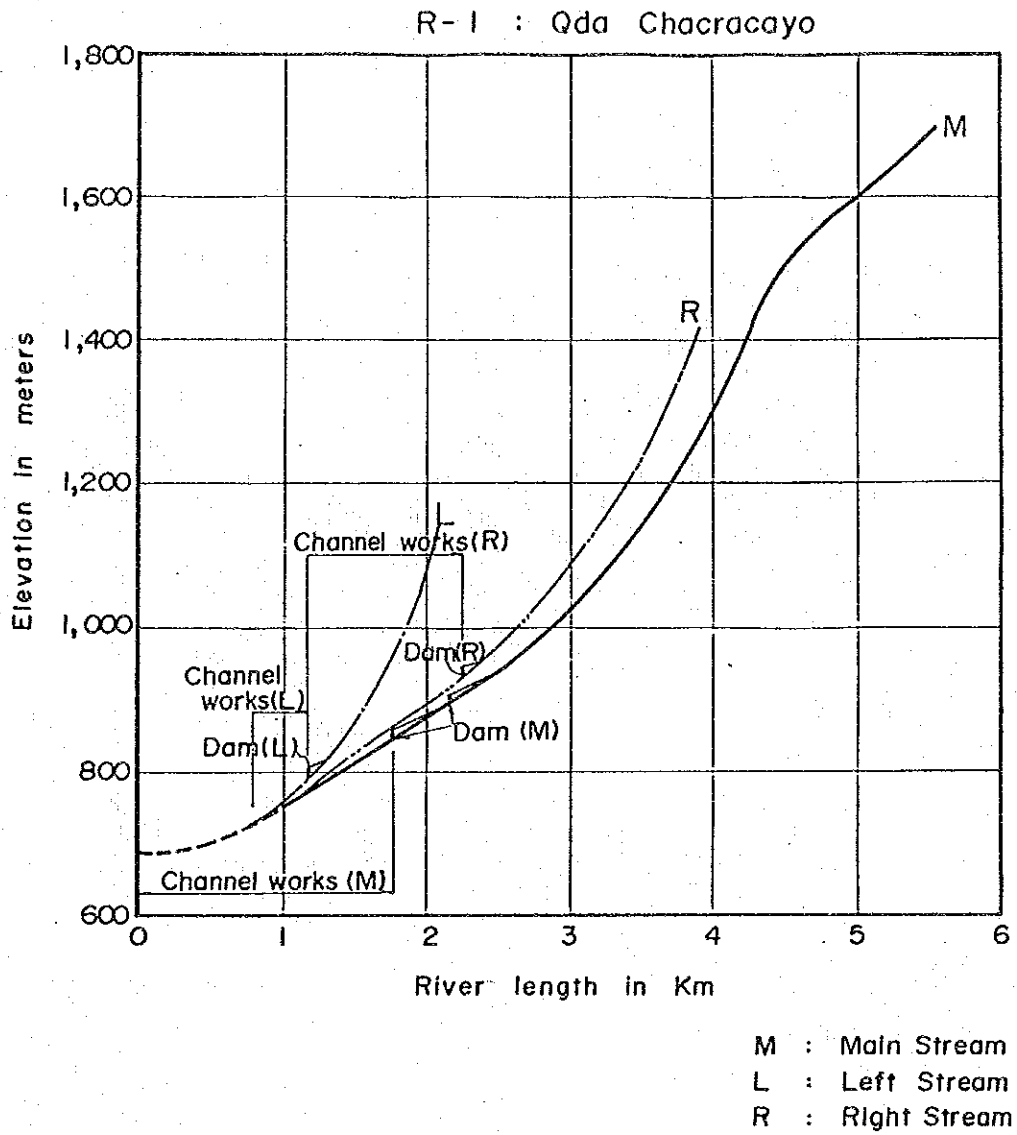


Fig. X-9-24 Structural Plan on Profile of Qda Chacracayo (R1)

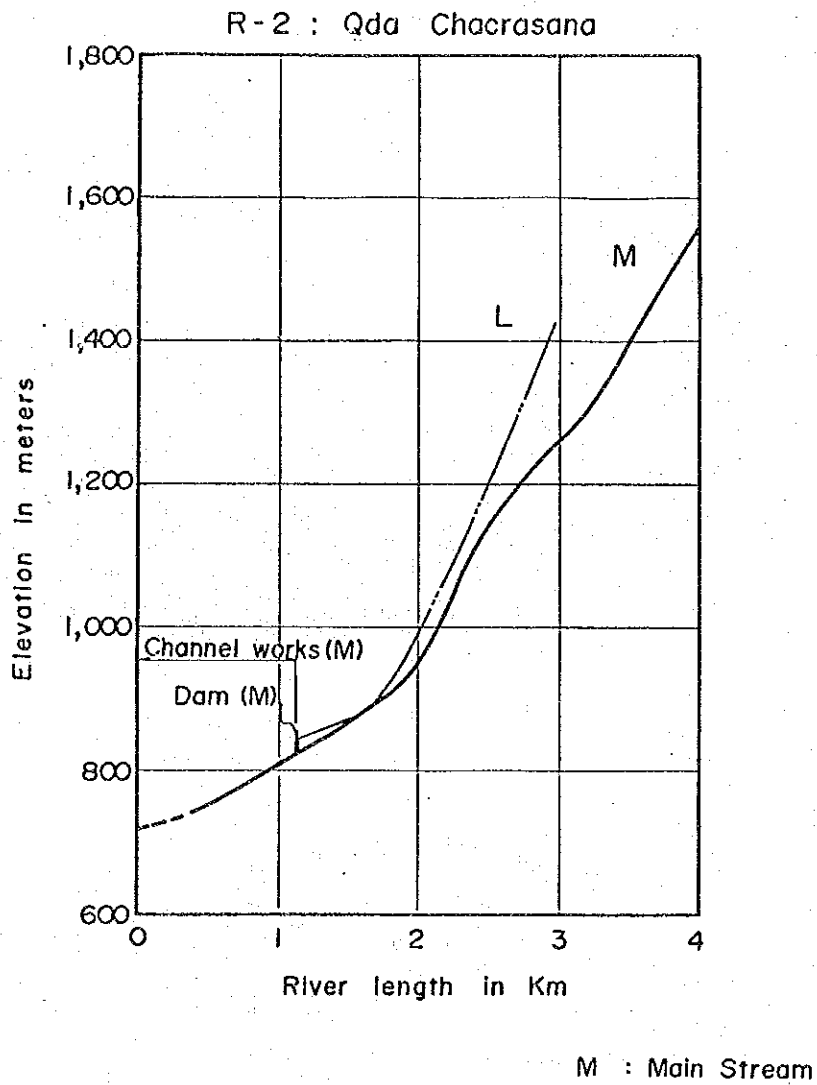


Fig. X-9-25 Structural Plan on Profile of Qda Chacrasana (R2)

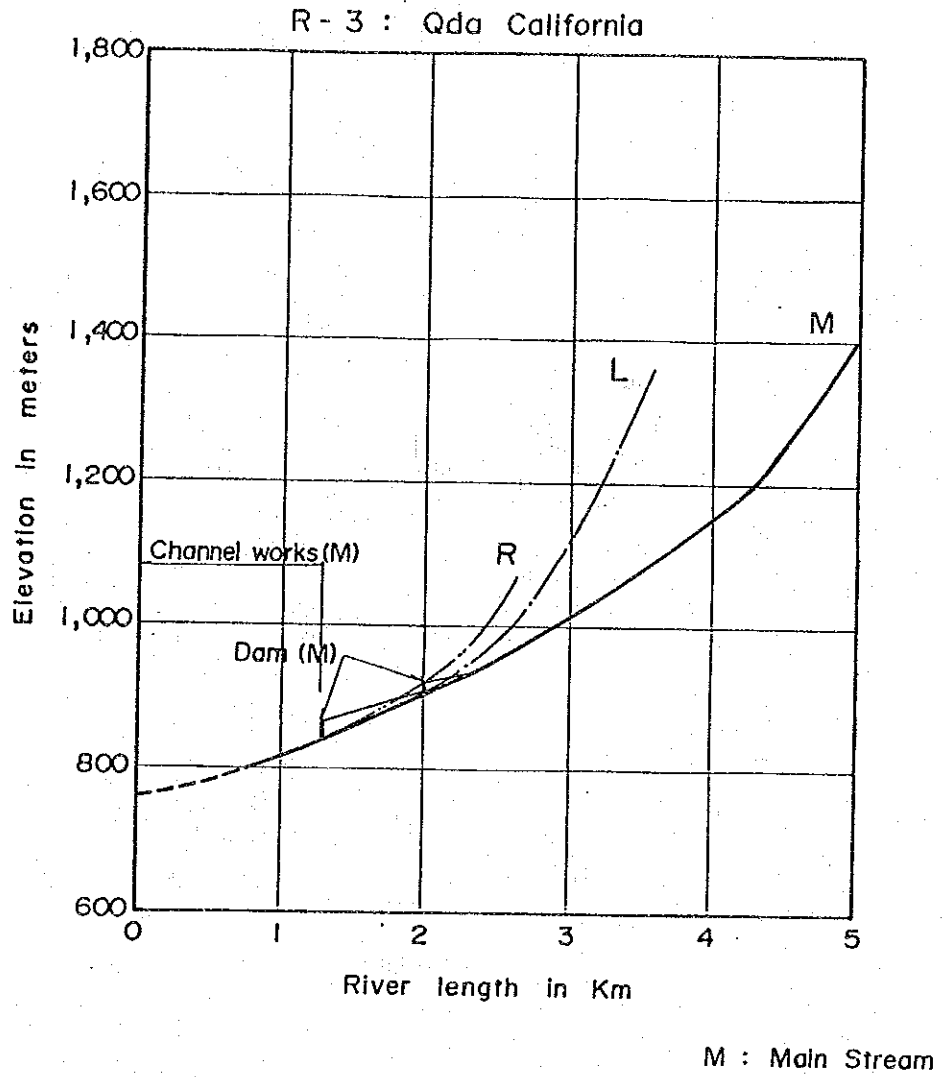


Fig. X-9-26 Structural Plan on Profile of Qda California (R3)

80
9

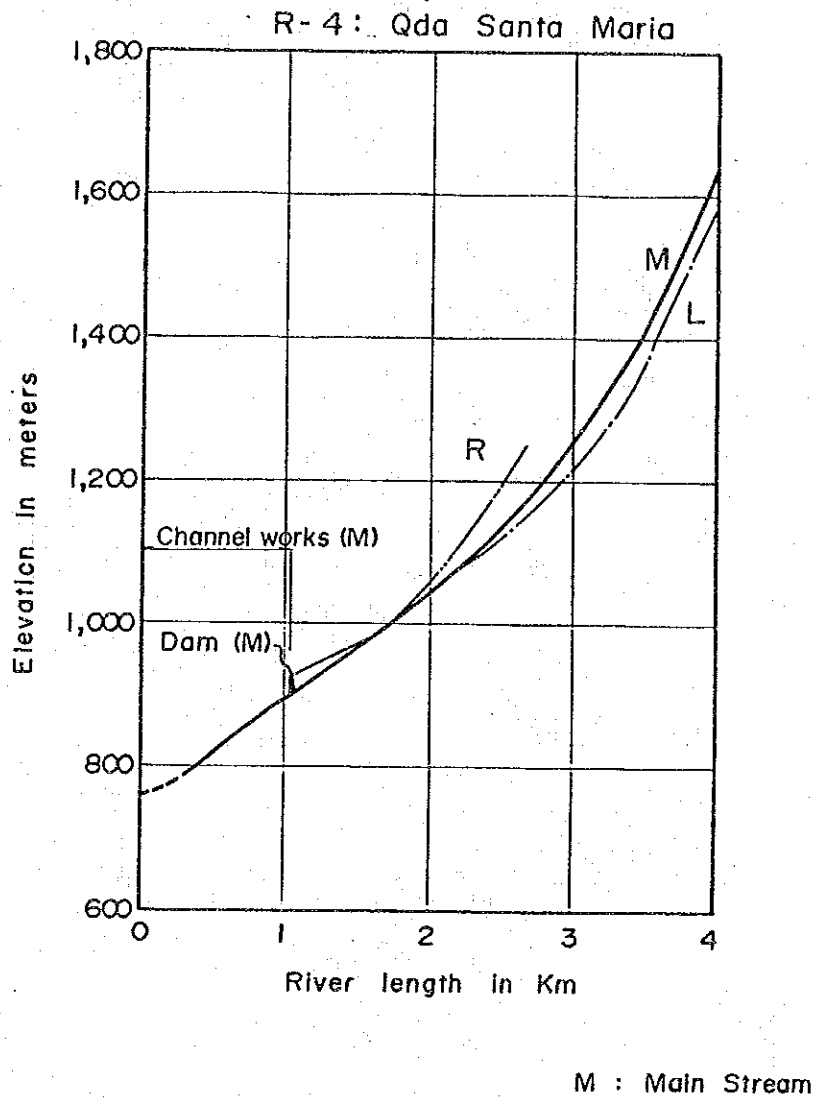


Fig. X-9-27 Structural Plan on Profile of Qda Santa Maria (R4)

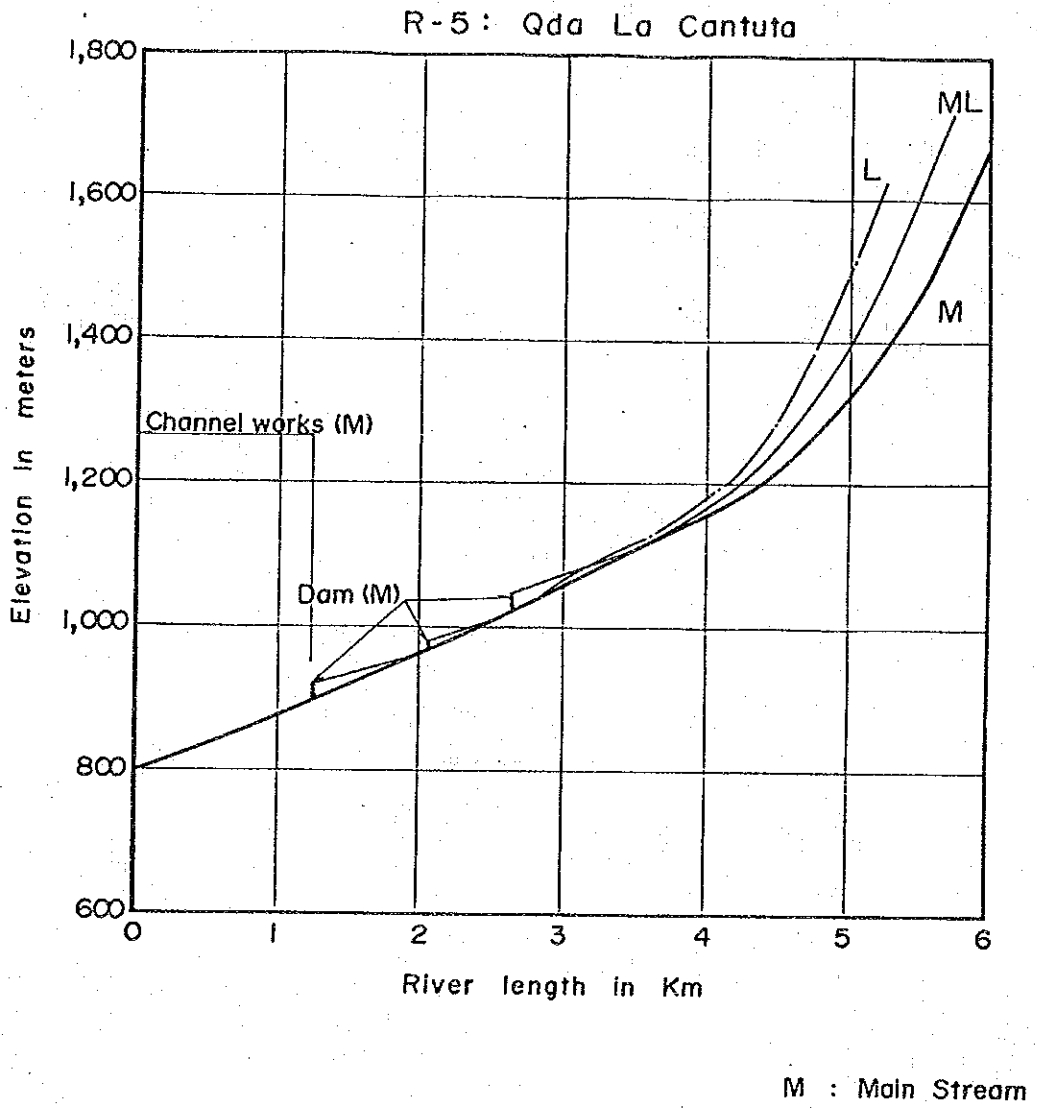


Fig. X-9-28 Structural Plan on Profile of Qda La Cantuta (R5)

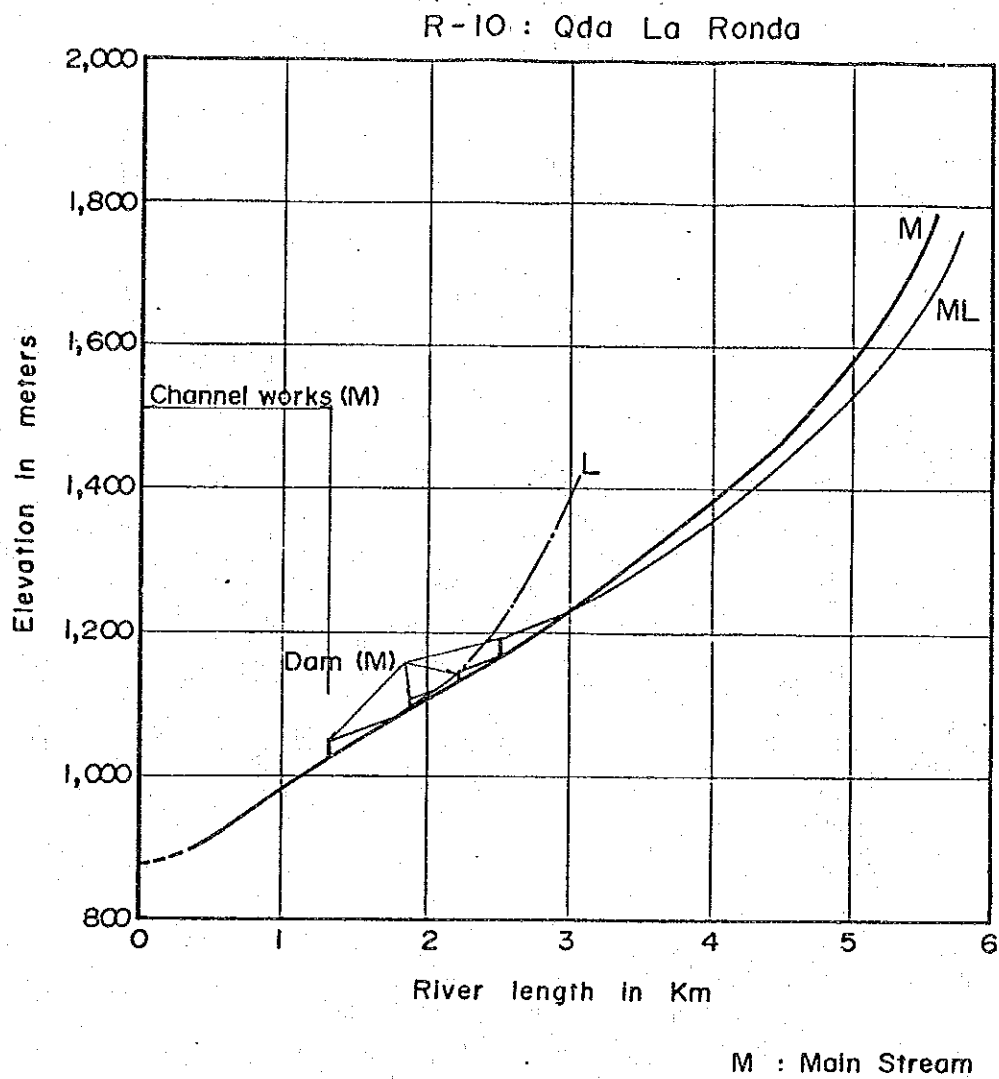


Fig. X-9-29 Structural Plan on Profile of Qda La Ronda (R10)

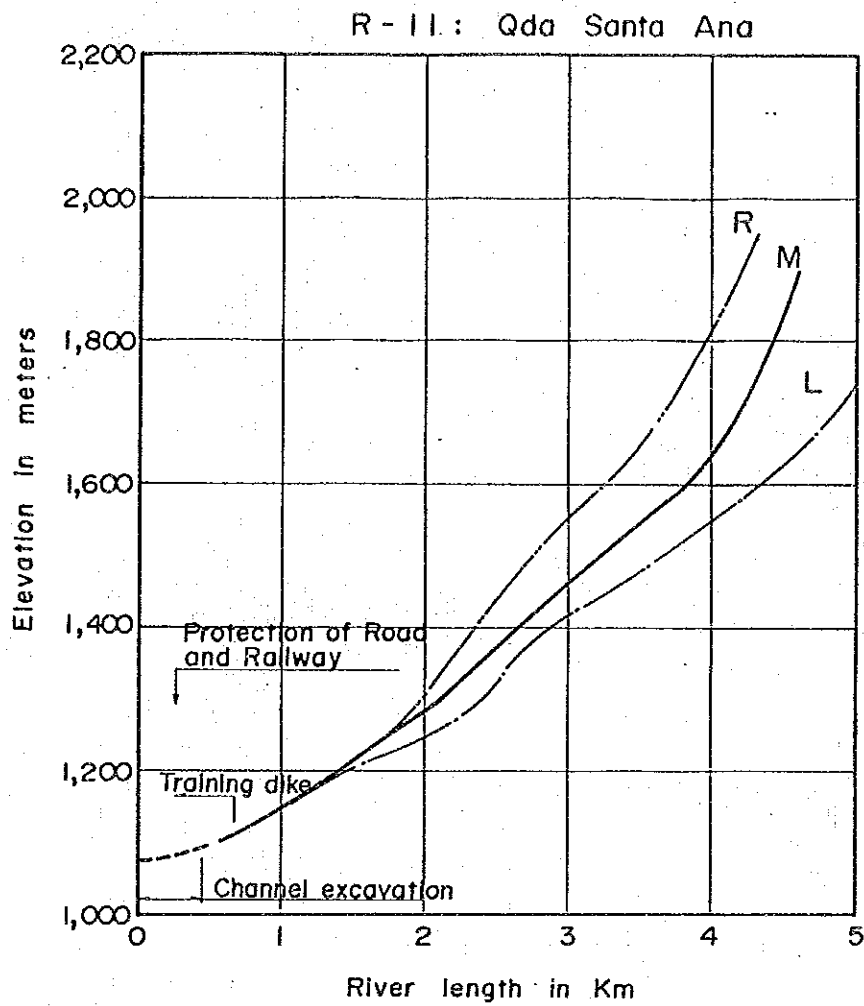


Fig. X-9-30 Structural Plan on Profile of Qda Santa Ana (R11)

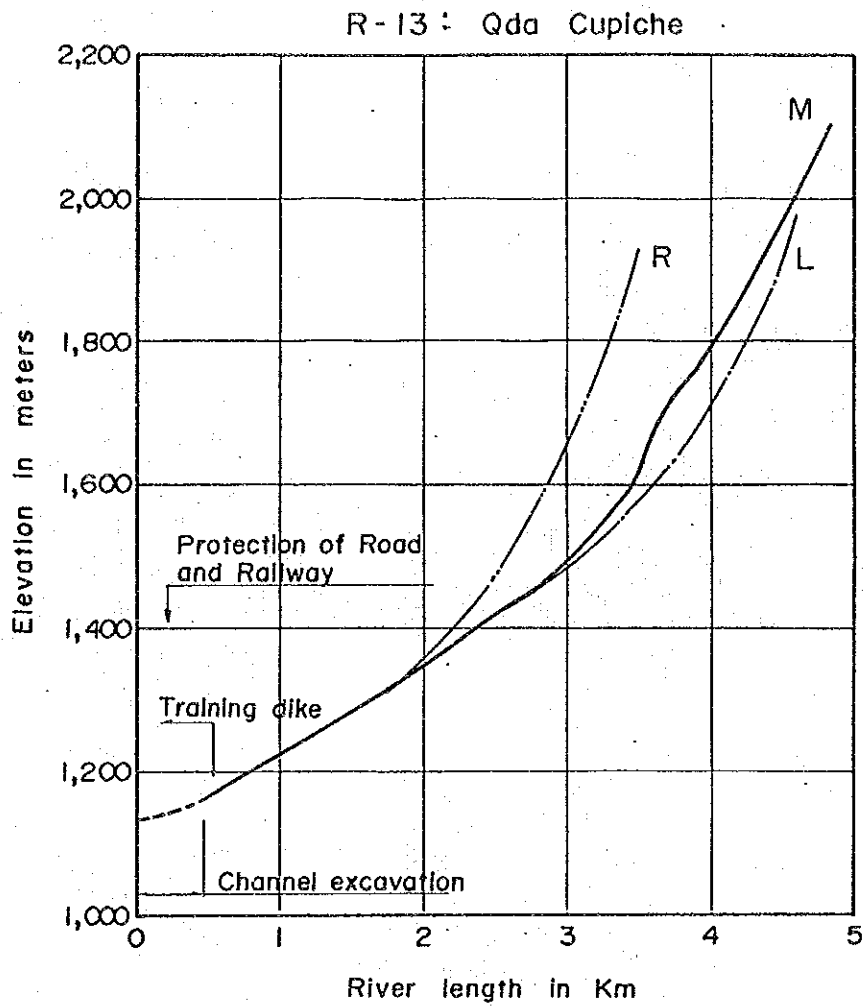


Fig. X-9-31 Structural Plan on Profile of Qda Cupiche (R13)

R-15 : Qda Rio Canchocalla

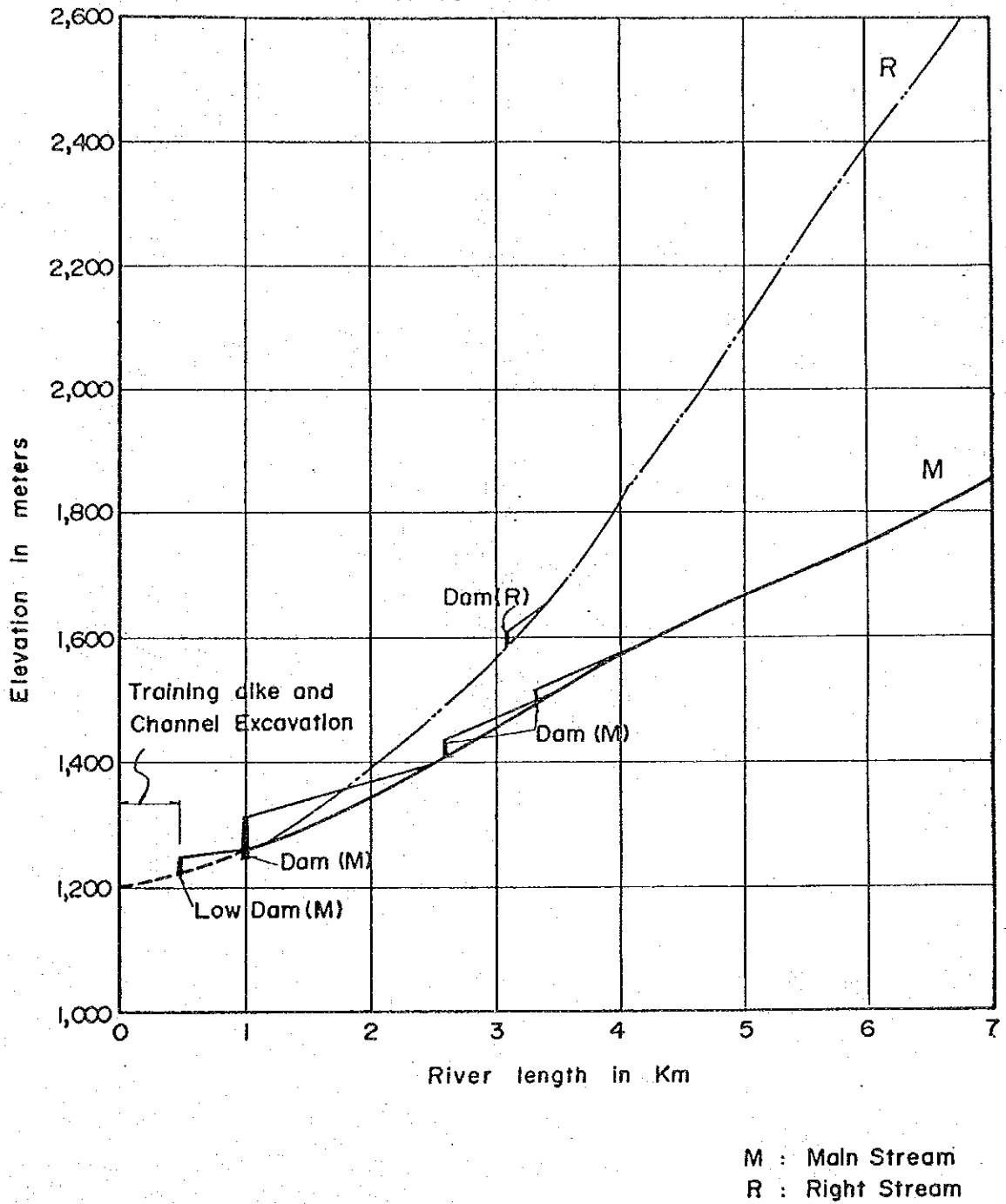


Fig. X-9-32 Structural Plan on Profile of Qda Rio Canchacalla (R15)

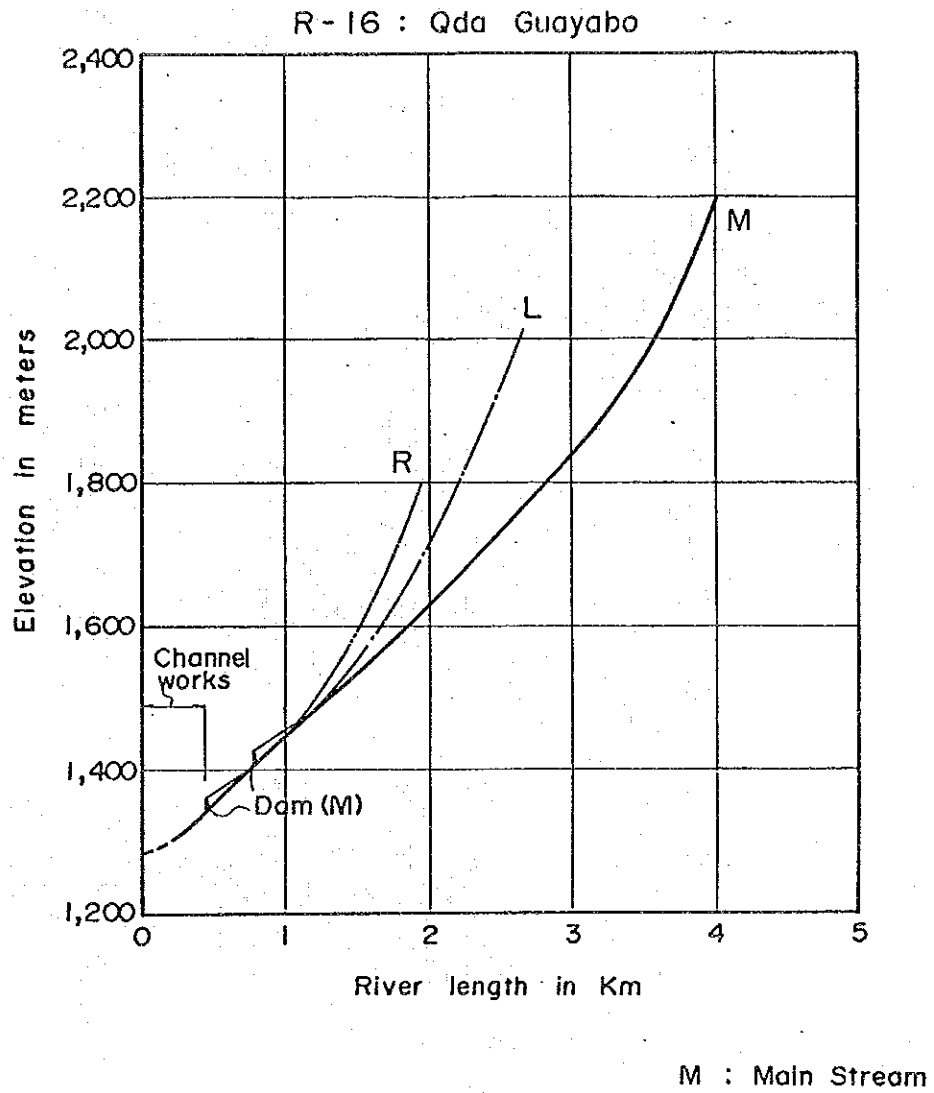


Fig. X-9-33 Structural Plan on Profile of Qda Guayabo (R16)

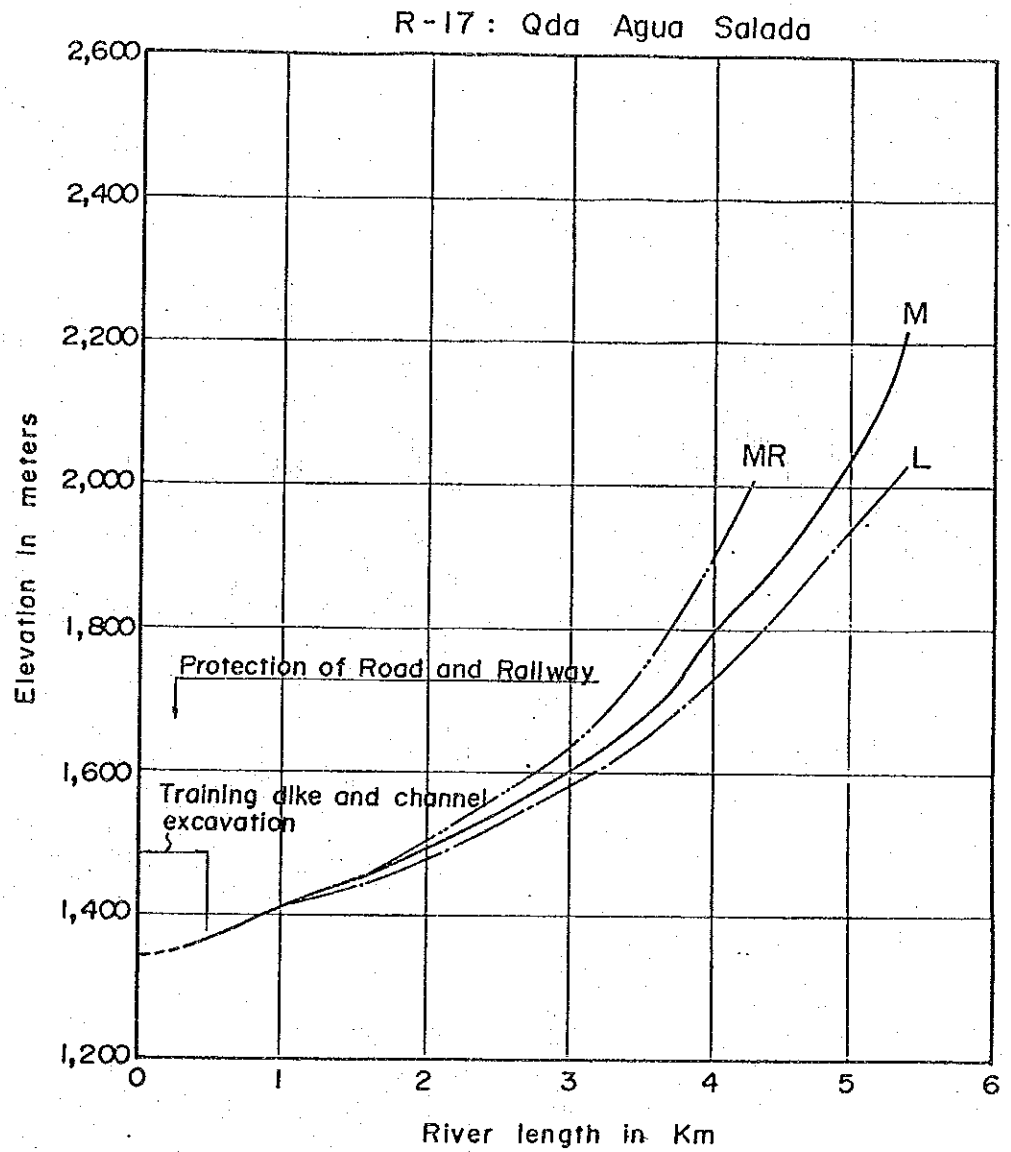


Fig. X-9-34 Structural Plan on Profile of Qda Agua Salada (R17)

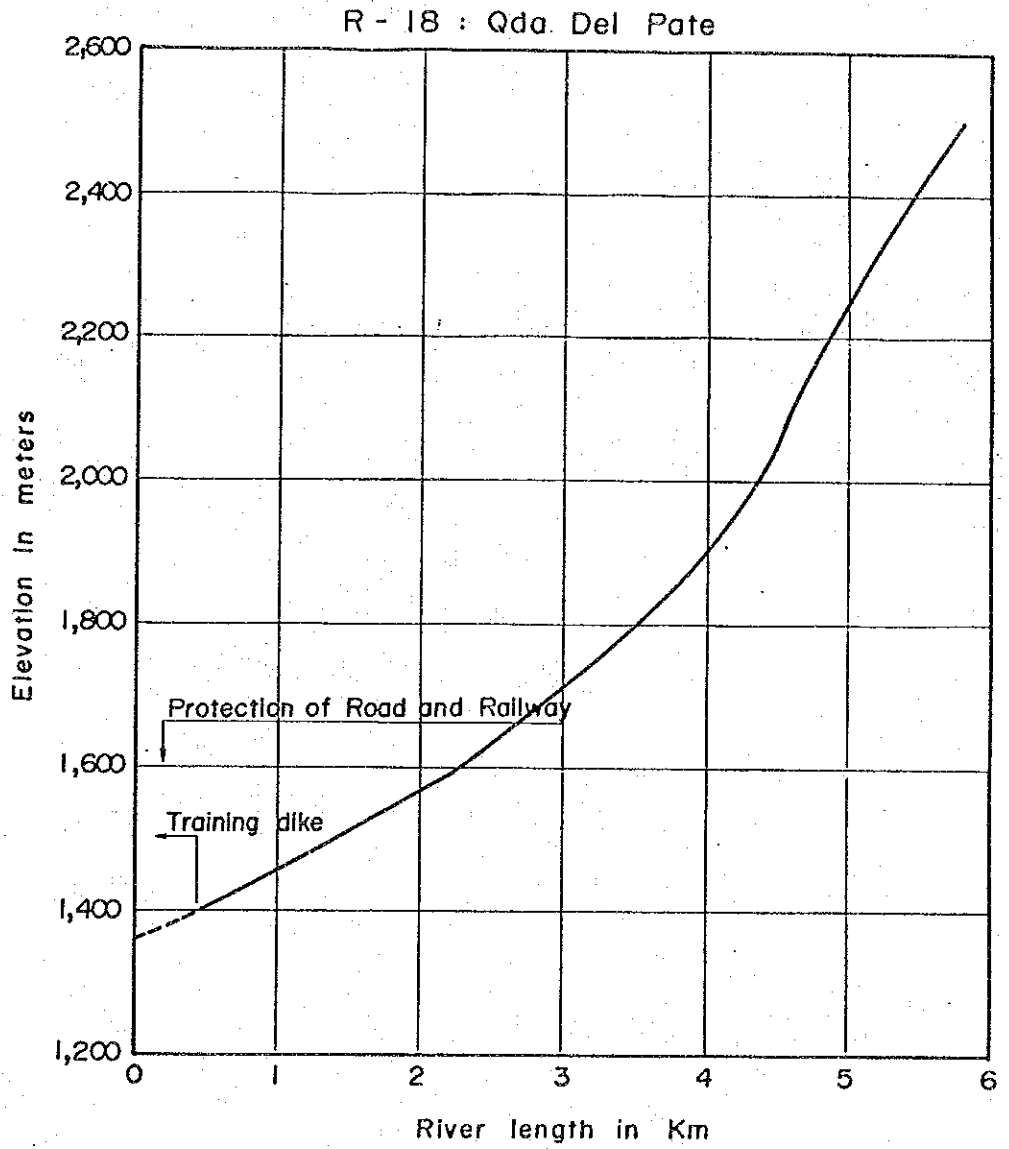


Fig. X-9-35 Structural Plan on Profile of Qda Del Pate (R18)

R-23 : Qda Huacre

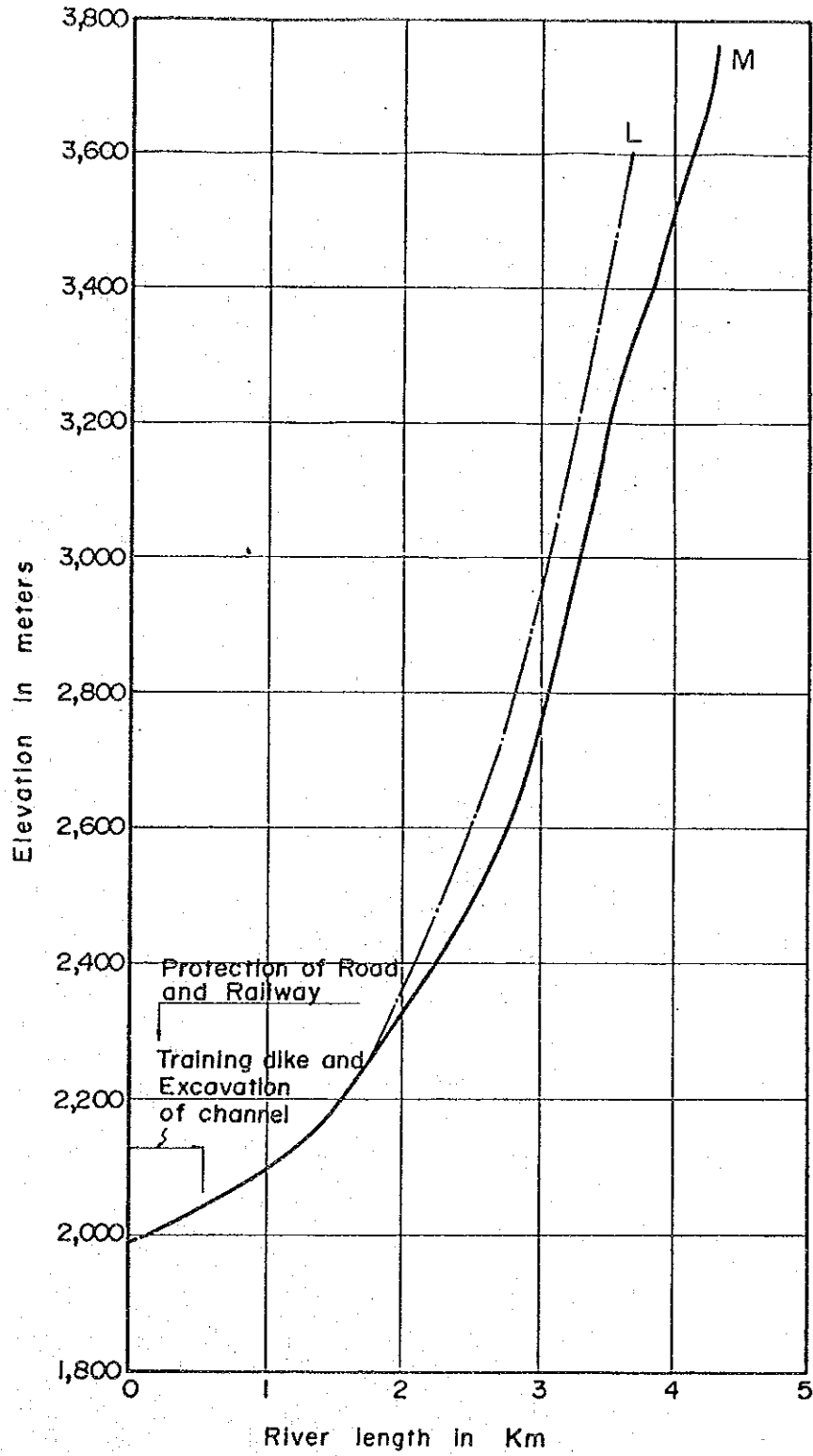


Fig. X-9-36 Structural Plan on Profile of Qda Huacre (R23)

90
28

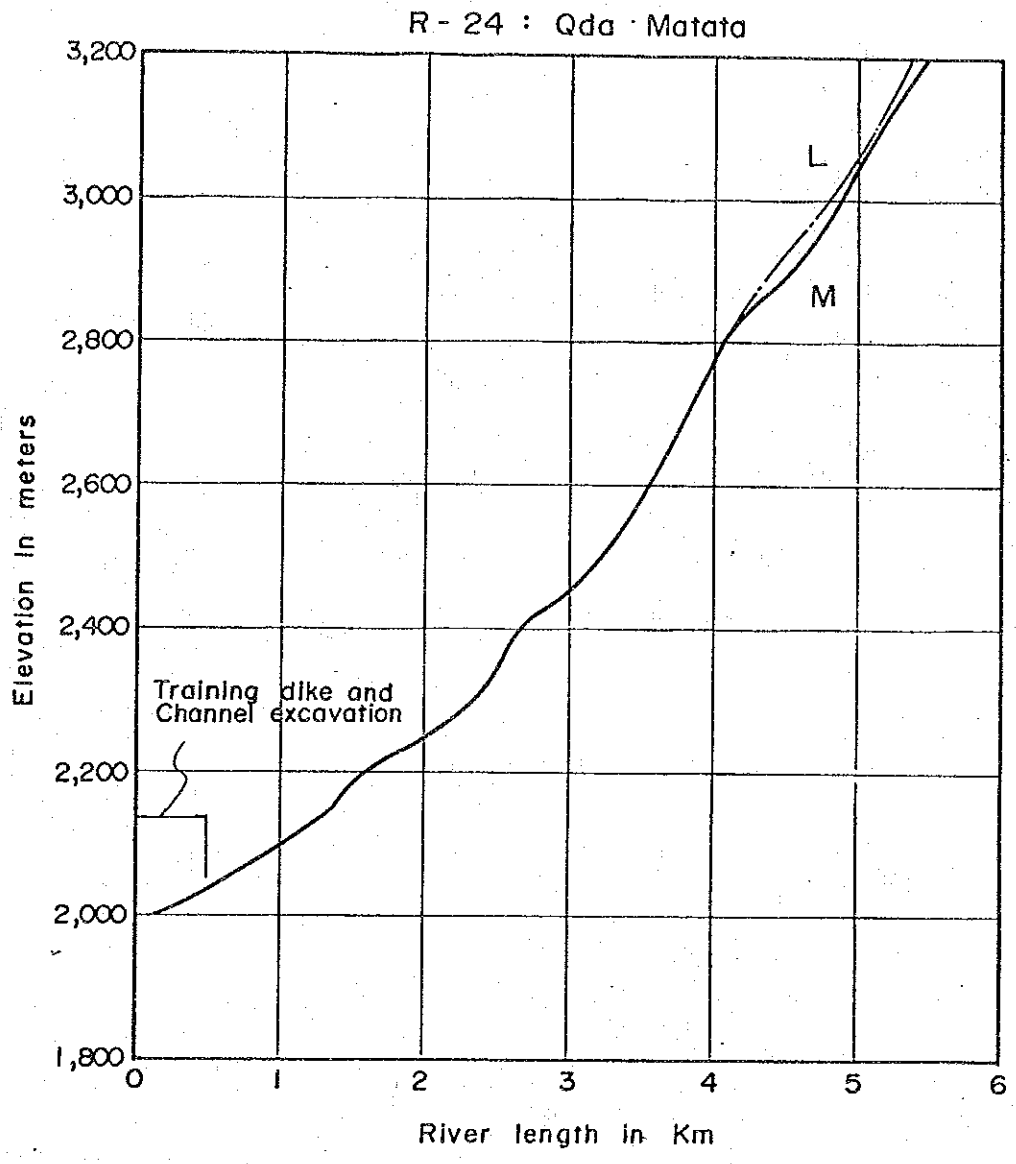


Fig. X-9-37 Structural Plan on Profile of Qda Matata (R24)

R-25 : Qda Cuchimachay

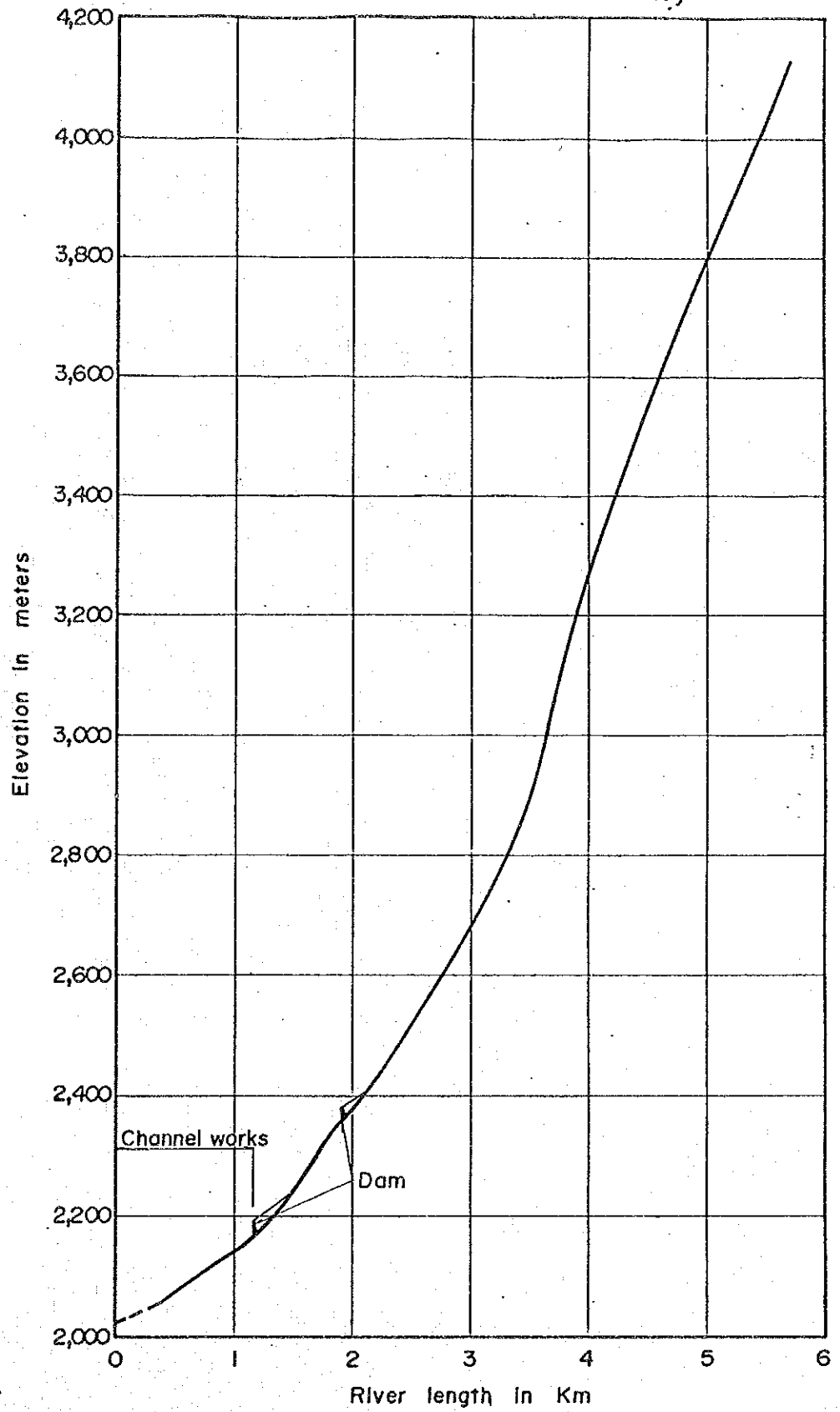


Fig. X-9-38 Structural Plan on Profile of Qda Cuchimachay (R25)

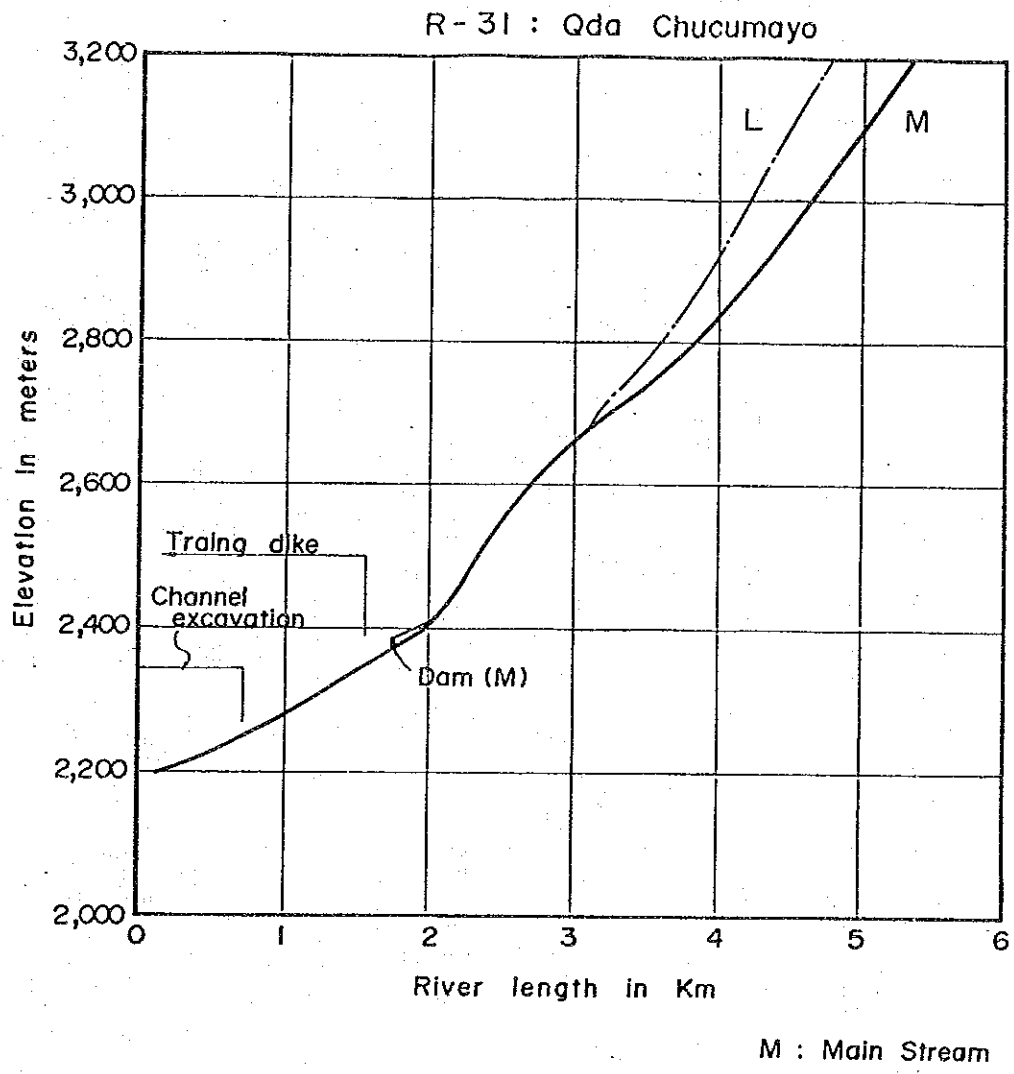


Fig. X-9-39 Structural Plan on Profile of Qda Chucumayo (R31)

93
2

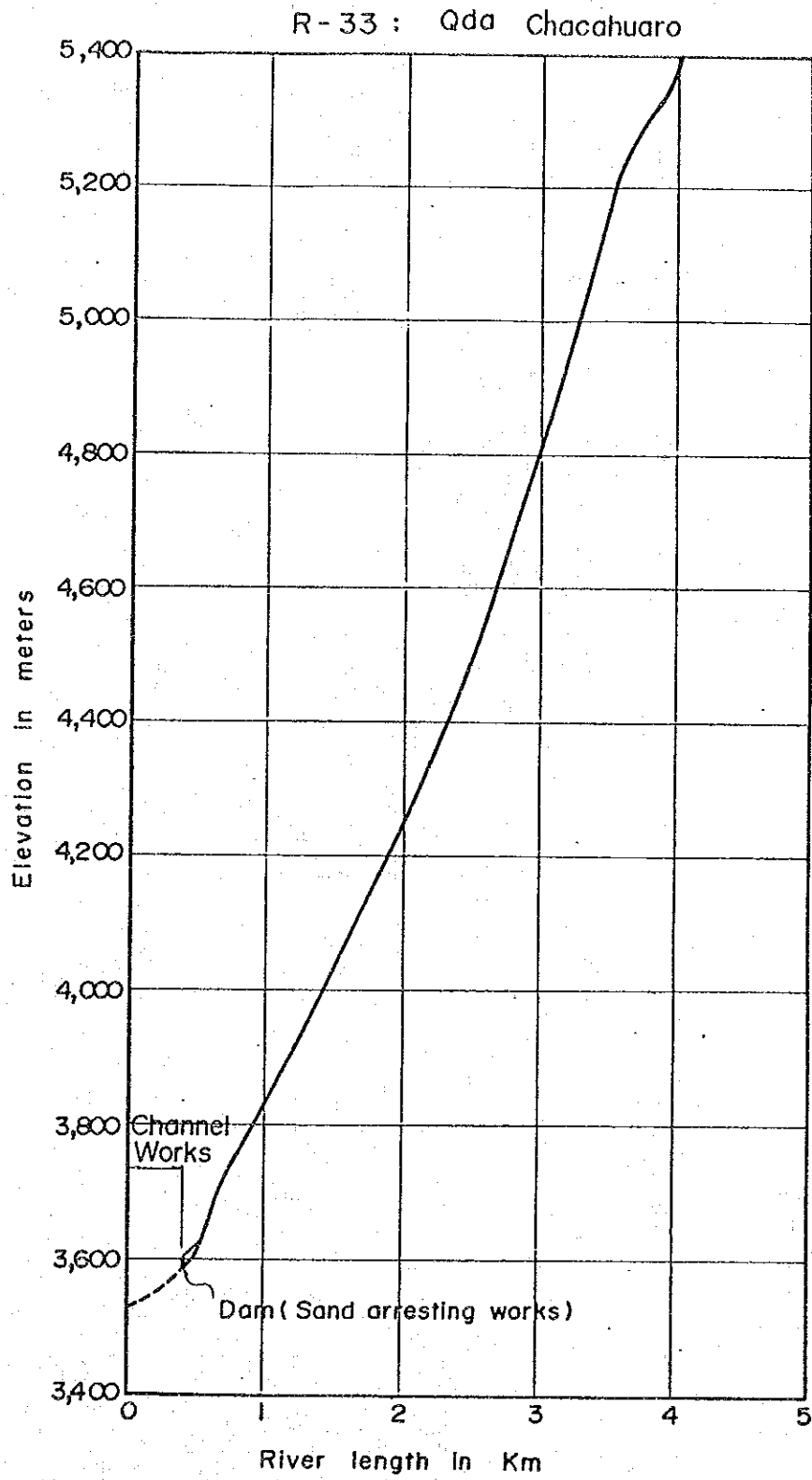
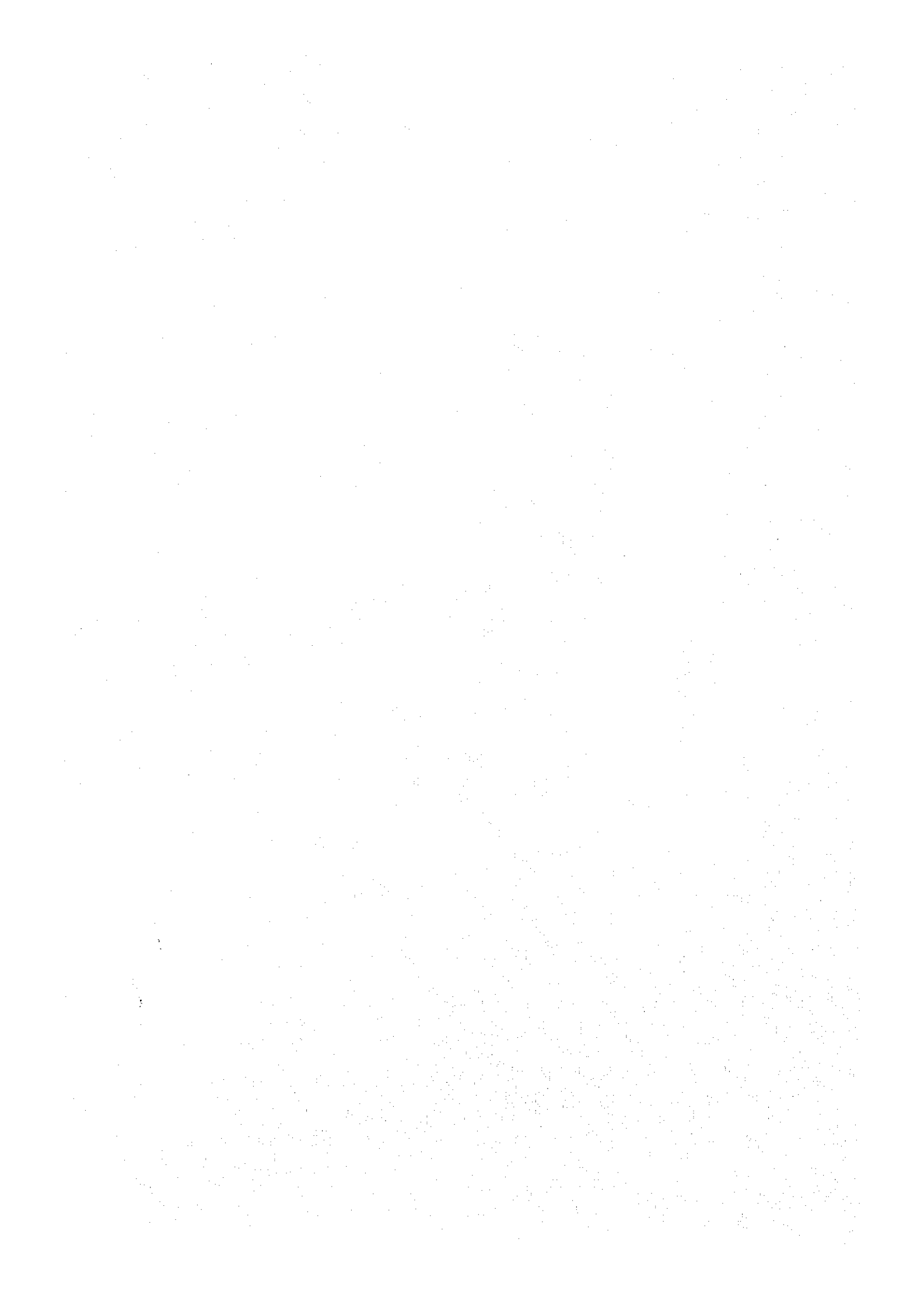


Fig. X-9-40 Structural Plan on Profile of Qda Chacahuacra (R33)

94
88



R-34 : Qda Pancha

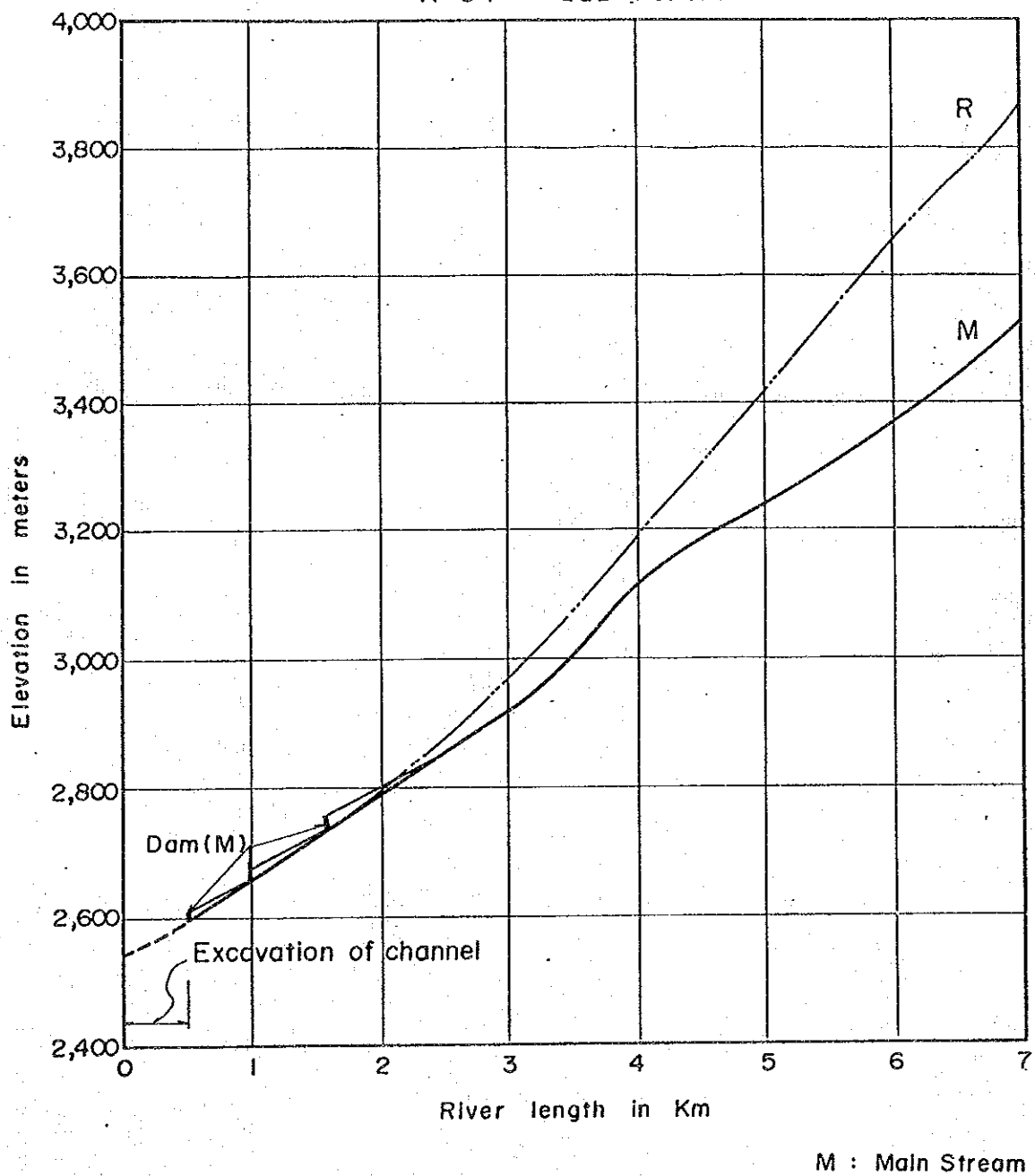


Fig. X-9-41 Structural Plan on Profile of Qda Pancha (R34)

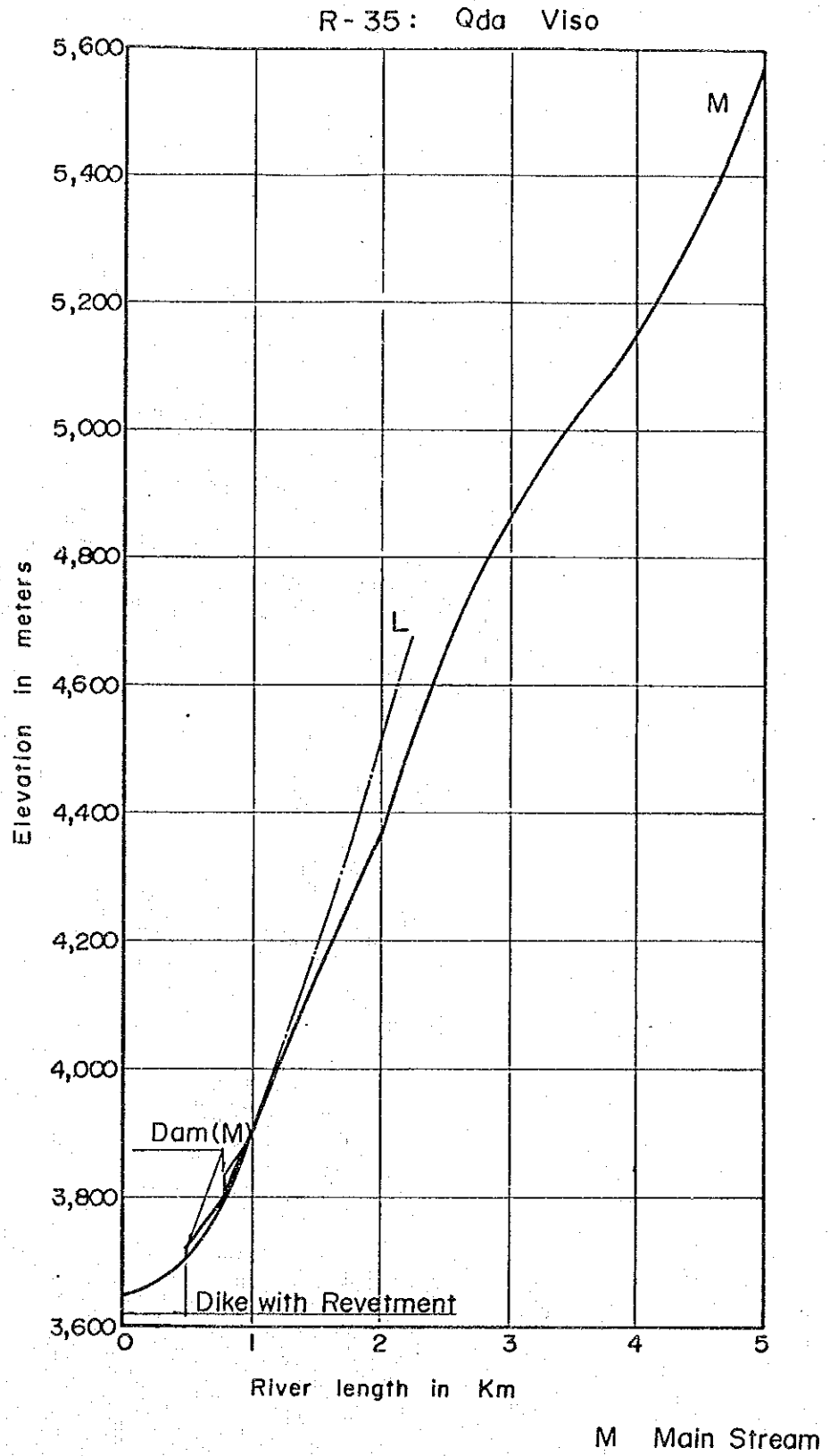
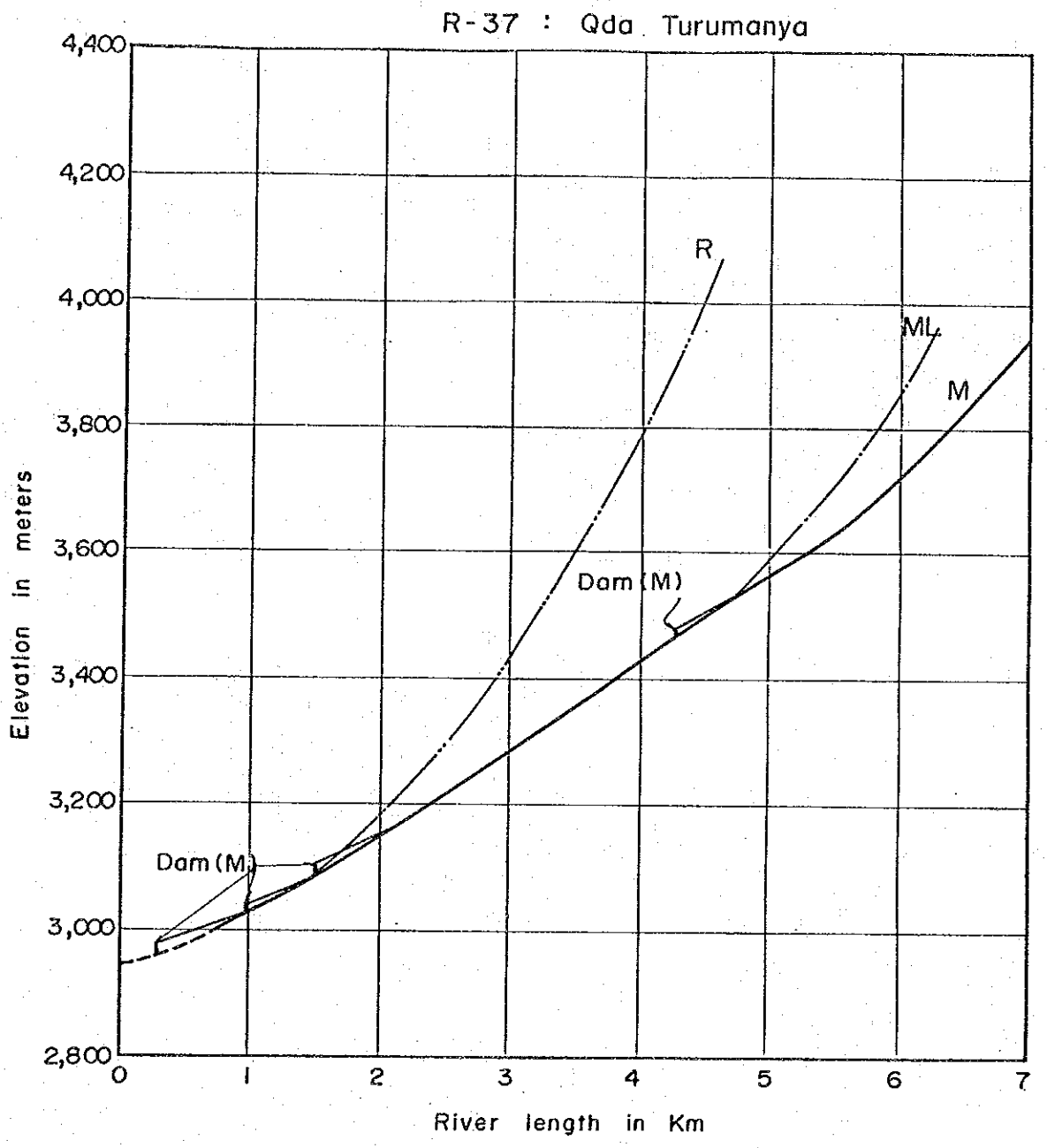


Fig. X-9-42 Structural Plan on Profile of Qda Viso (R35)



M : Main Stream

Fig. X-9-43 Structural Plan on Profile of Qda Turumanya

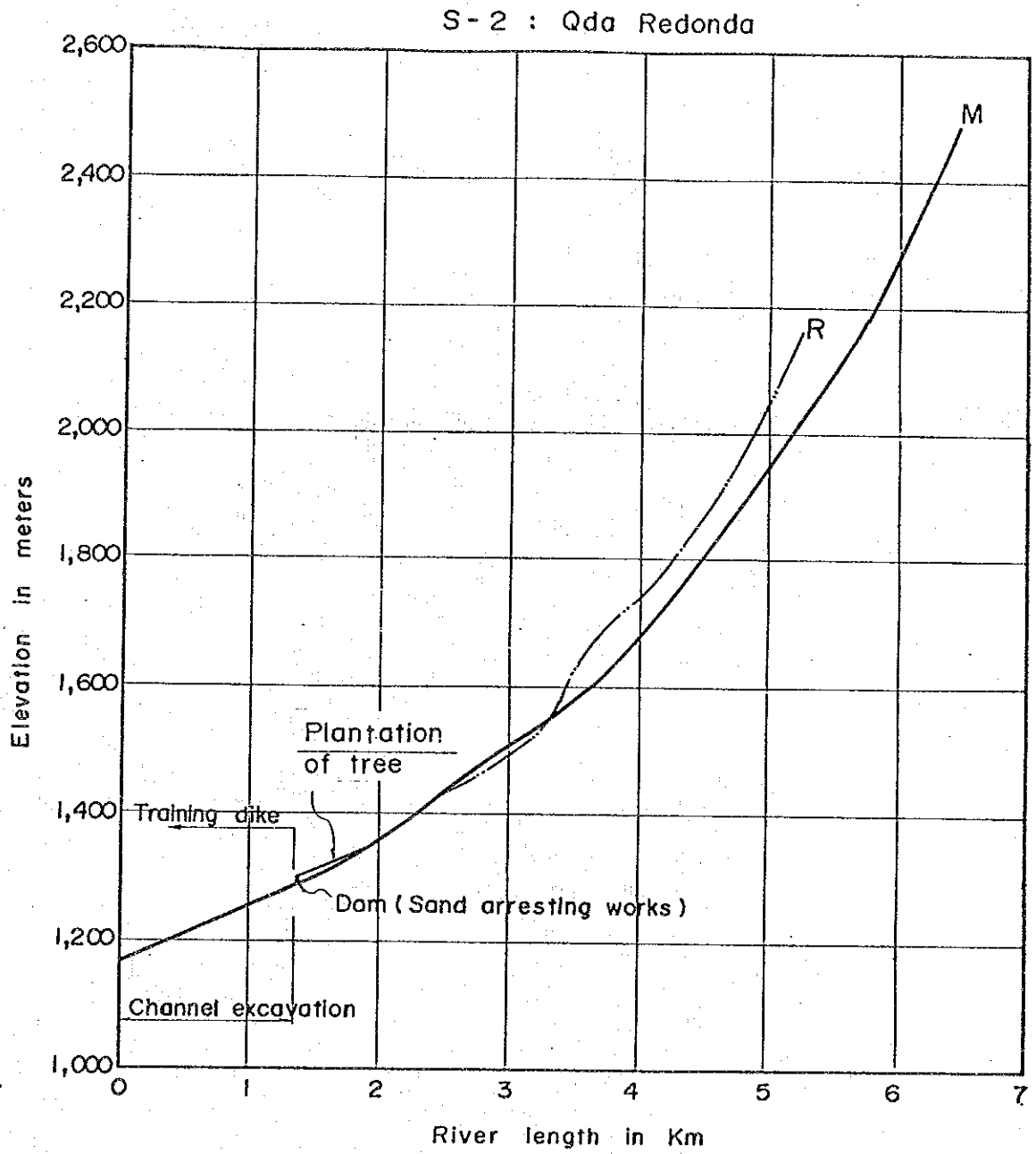


Fig. X-9-44 Structural Plan on Profile of Qda Redonda (S2)

98
 7

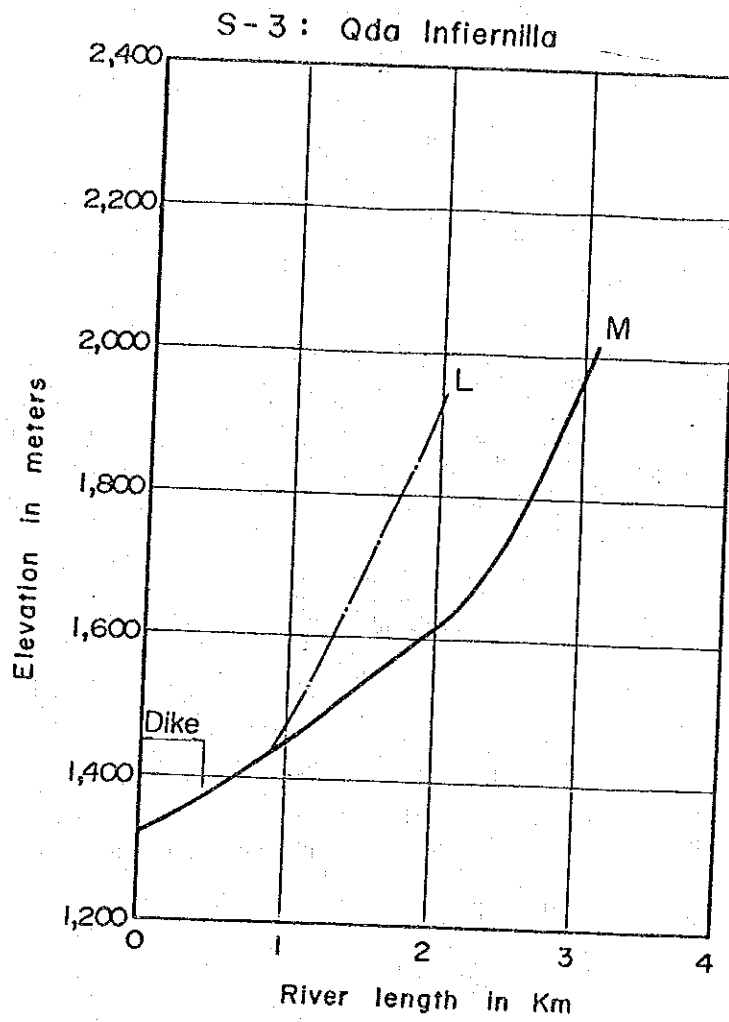


Fig. X-9-45 Structural Plan on Profile of Qda Infiernillo (S3)

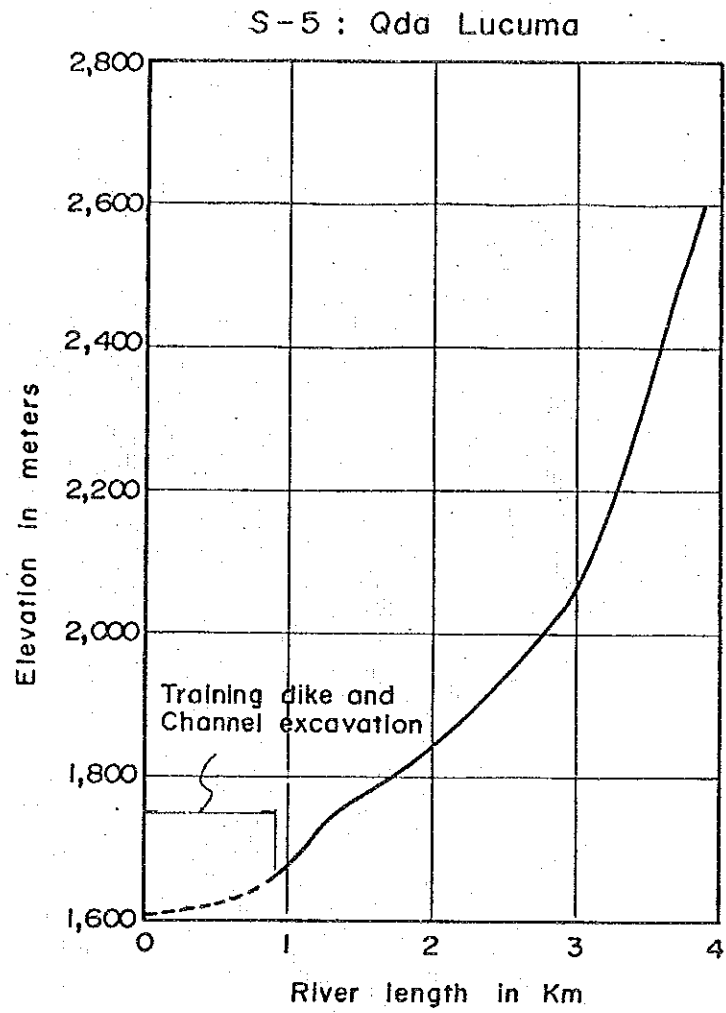
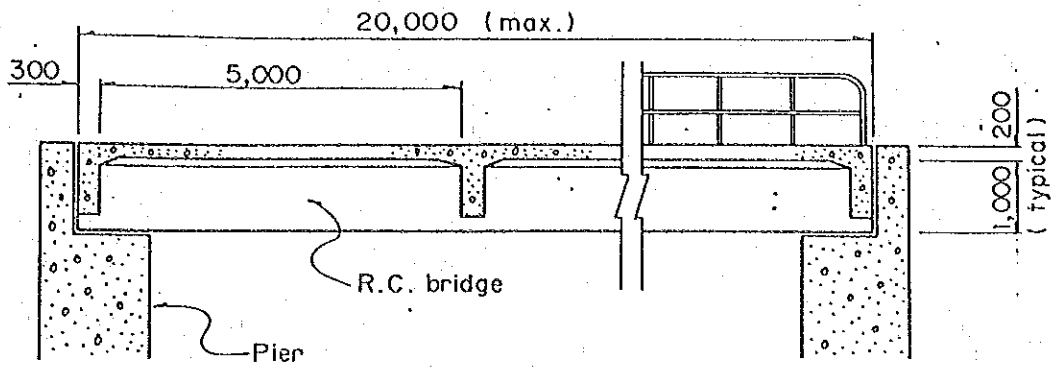
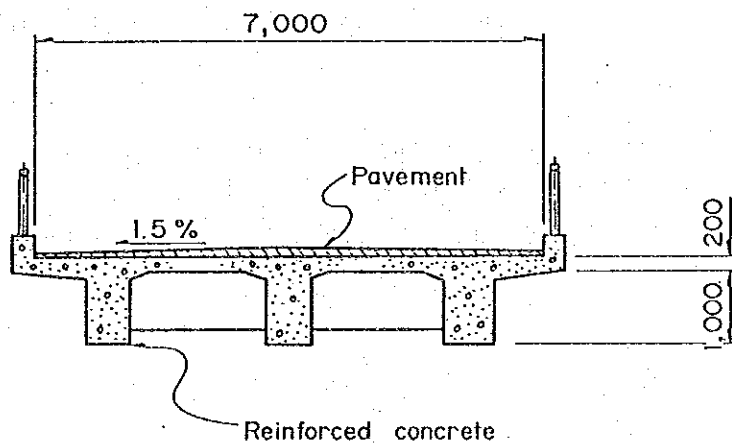


Fig. X-9-46 Structural Plan on Profile of Qda Lucuma (S5)

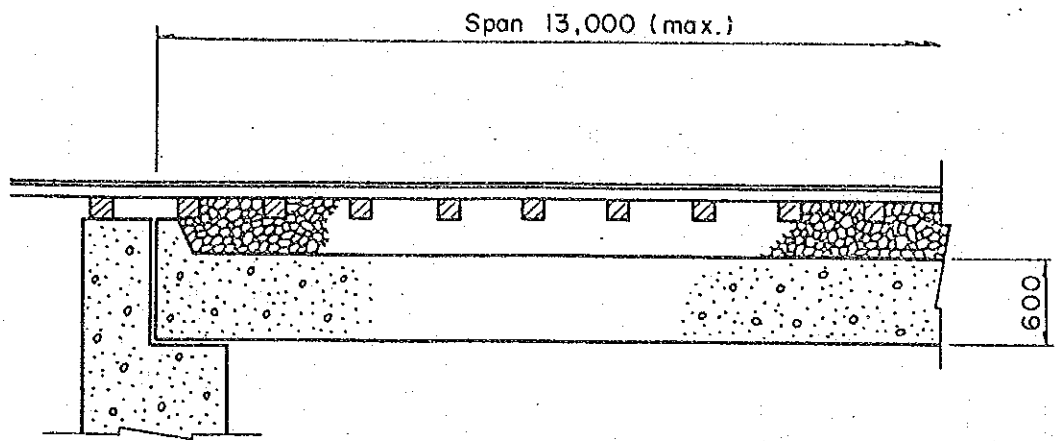


PROFILE

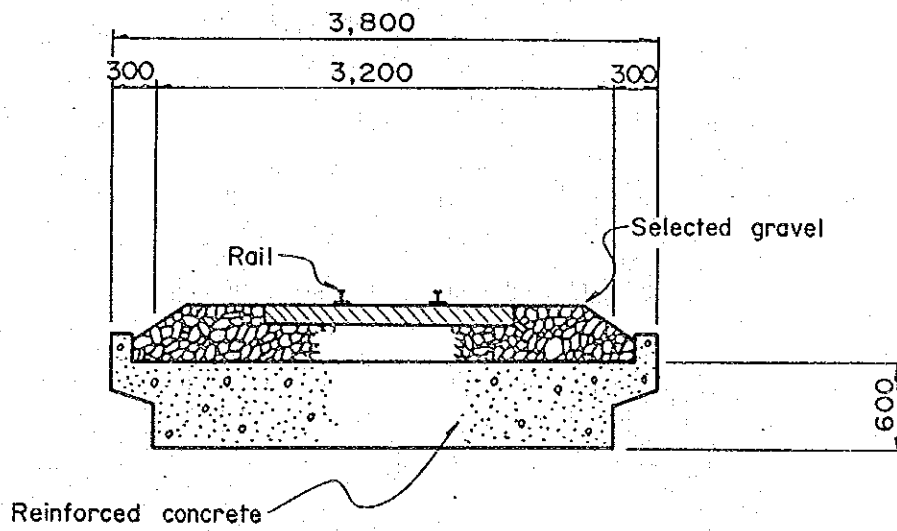


SECTION

Fig. X-9-47 Typical Design of Bridge (Roadway Type)

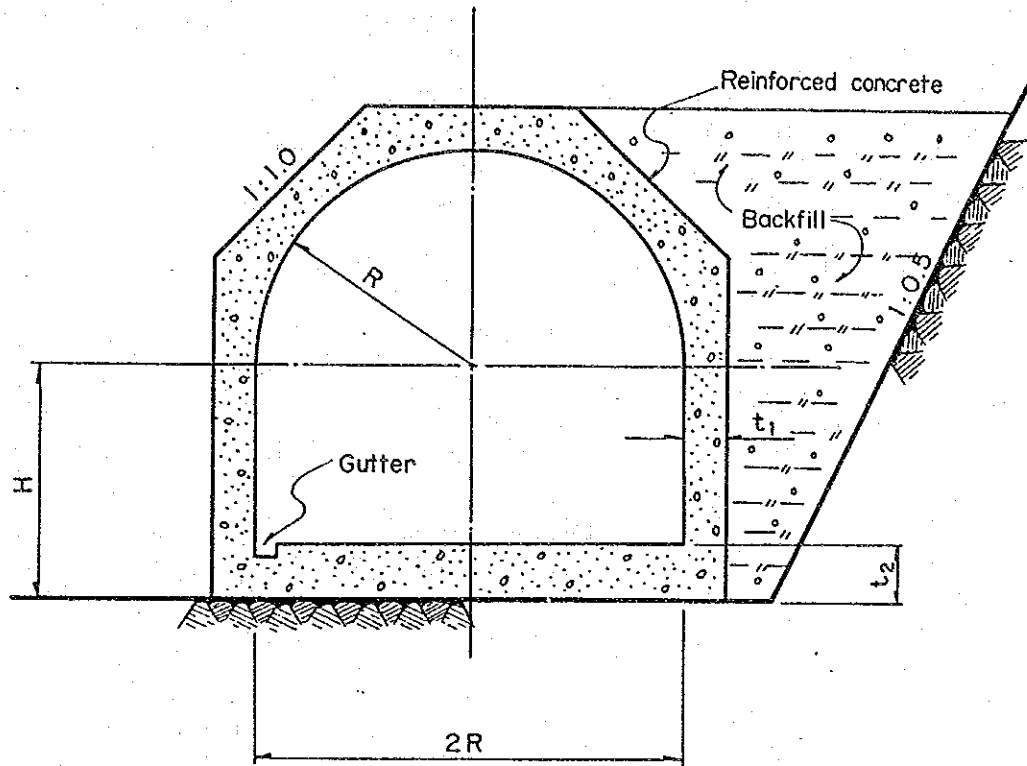


PROFILE



SECTION

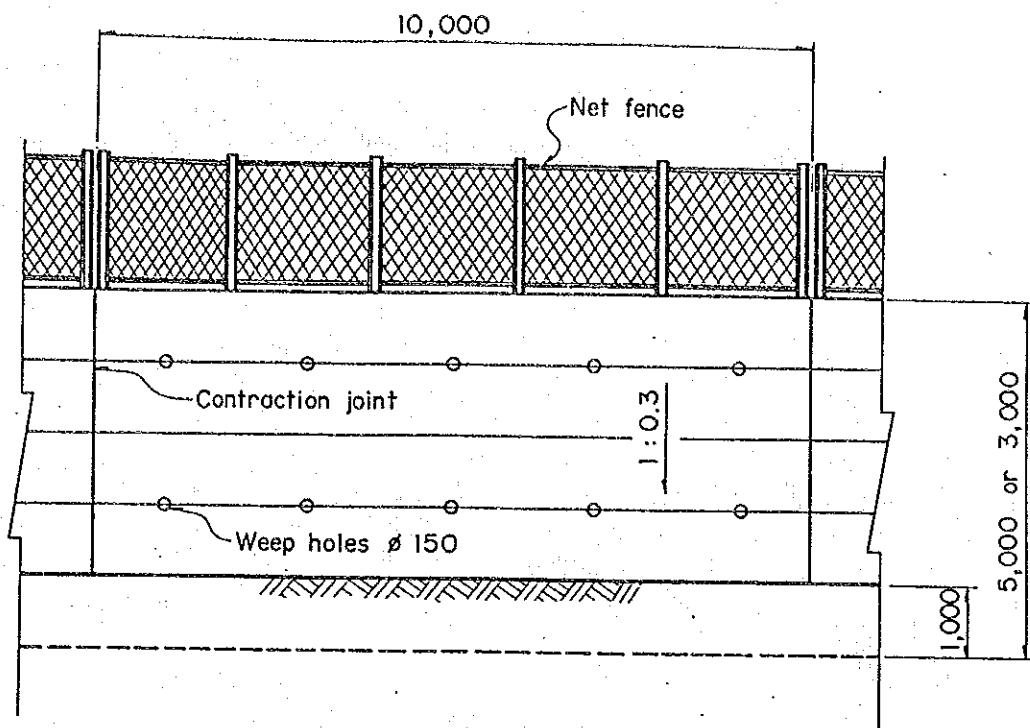
Fig. X-9-48 Typical Design of Bridge (Railway Type)



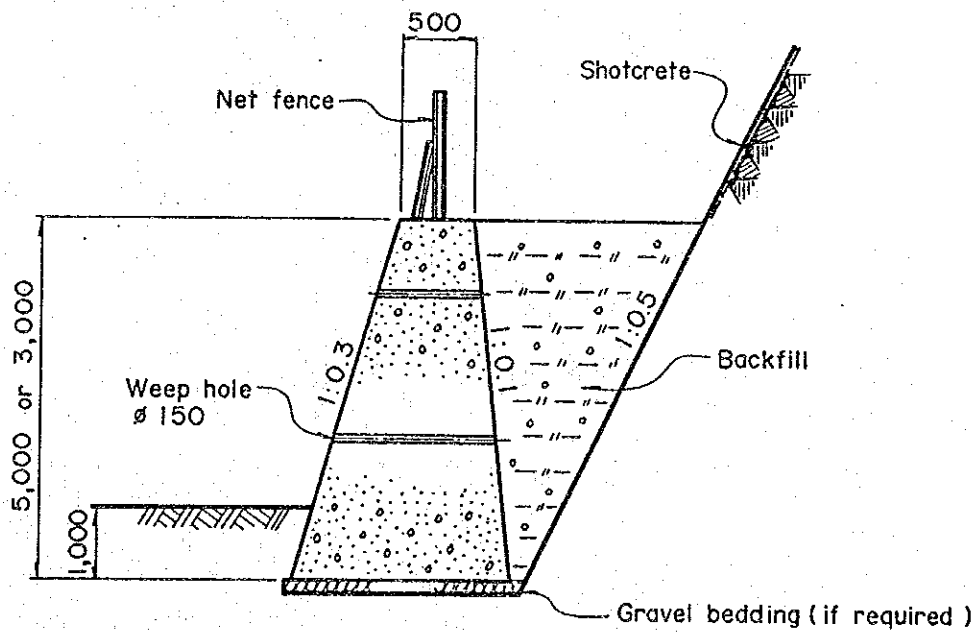
DIMENSIONS

	R (m)	H (m)	t ₁ (m)	t ₂ (m)
Roadway	3.5	2.5	0.6	0.8
Railway	1.9	1.9	0.4	0.6

Fig. X-9-49 Typical Design of Rock-shed Tunnel



ELEVATION



SECTION

Fig. X-9-50 Typical Design of Retaining Wall

204
B

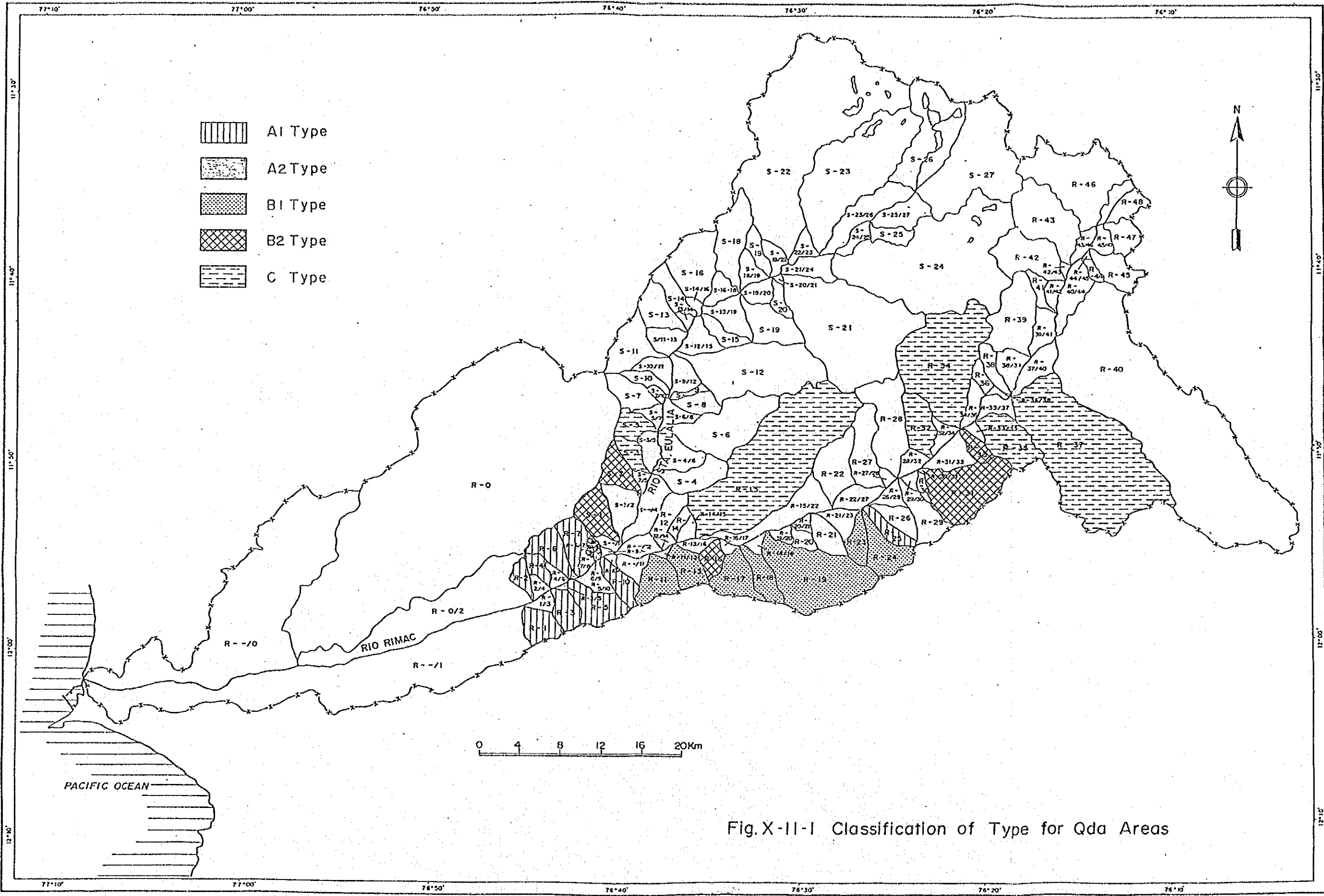
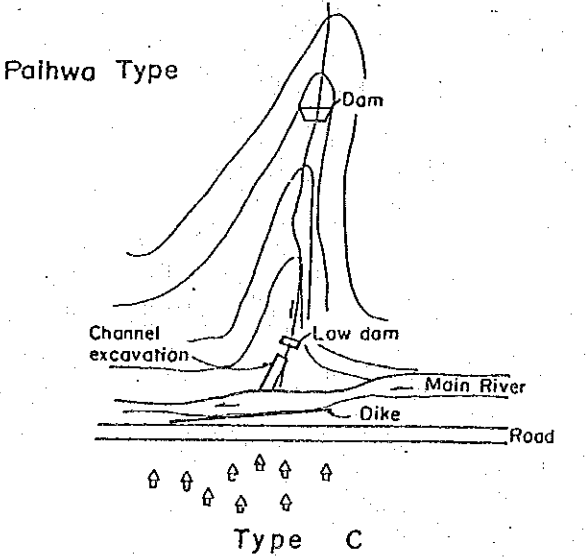
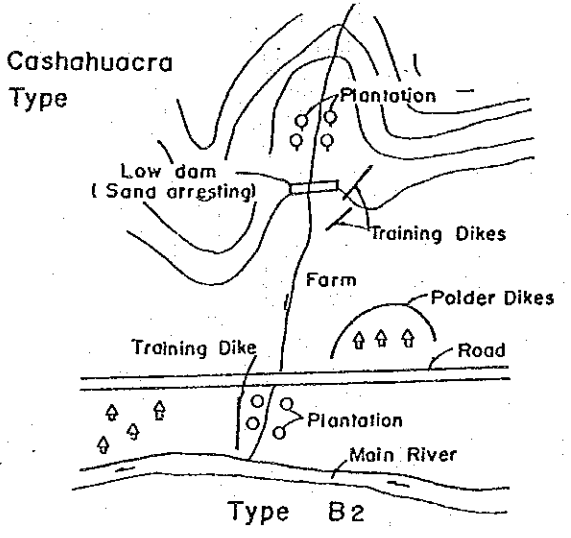
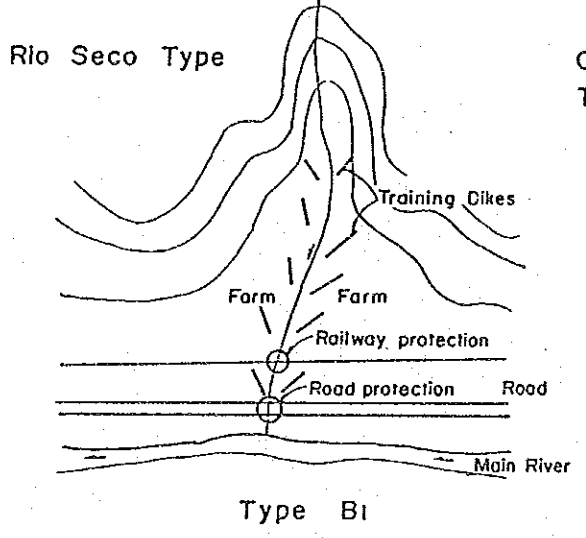
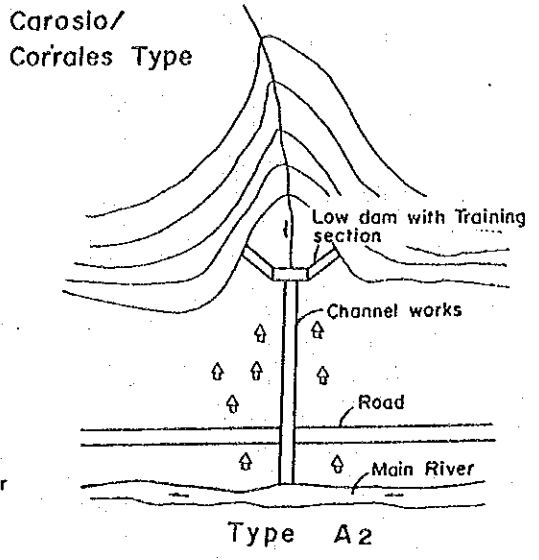
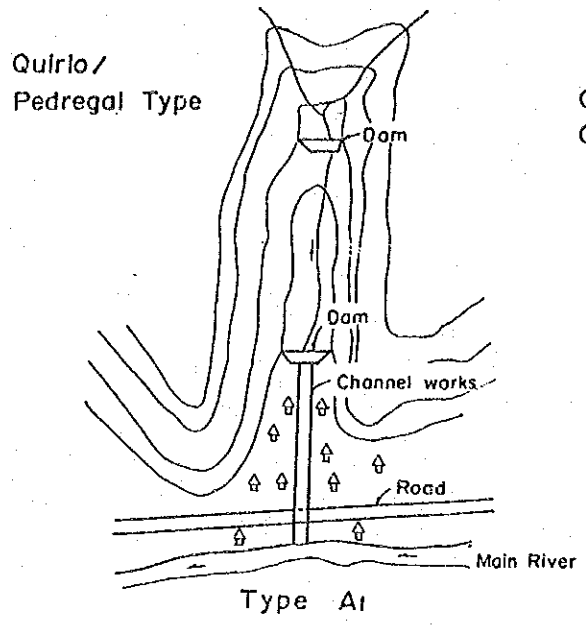
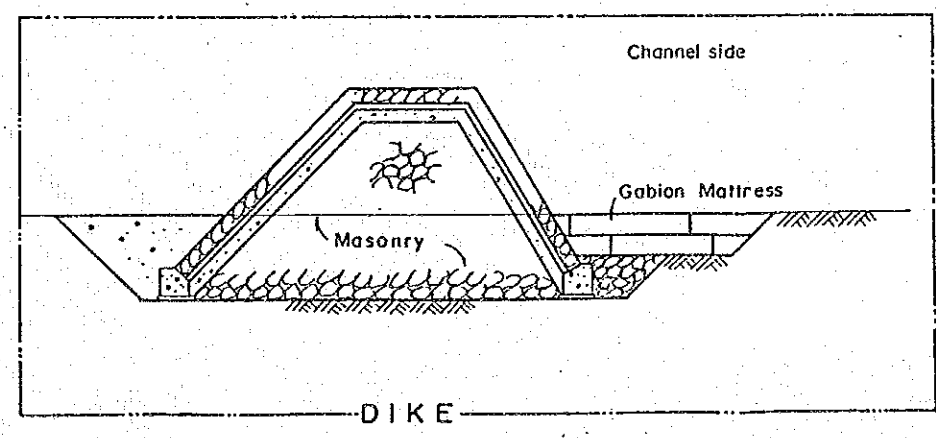
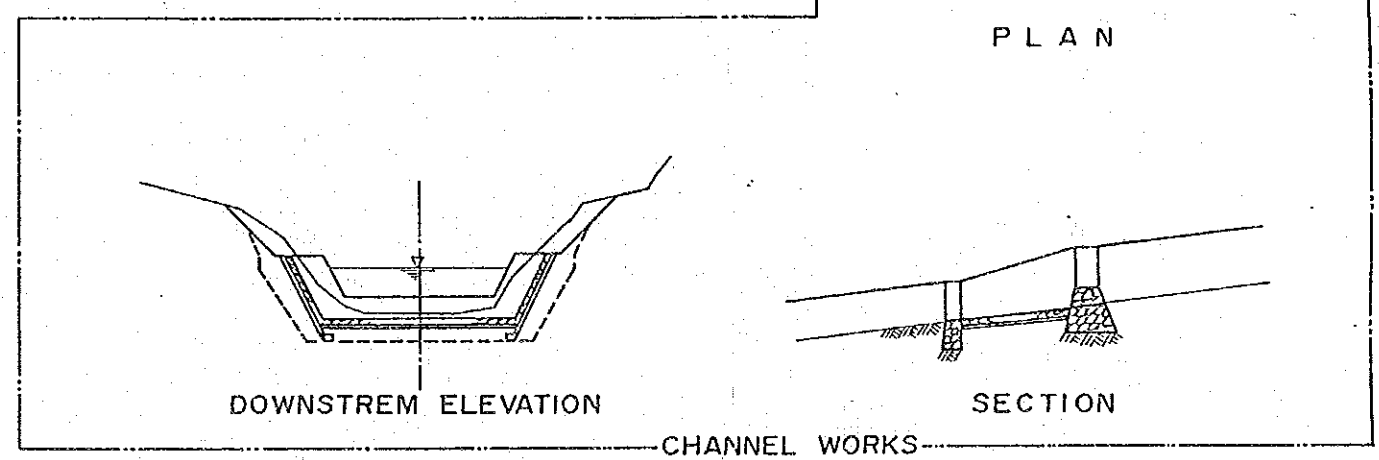
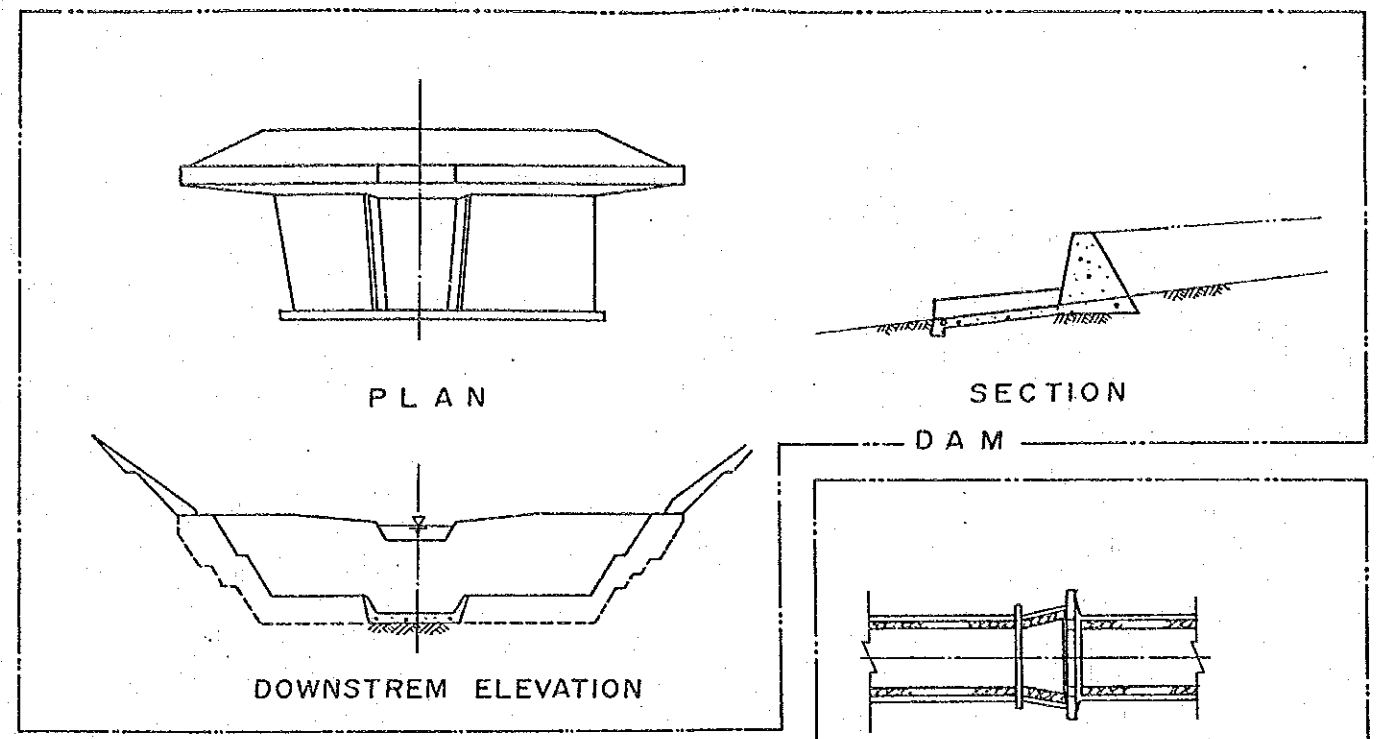


Fig. X-II-1 Classification of Type for Qda Areas

106
13

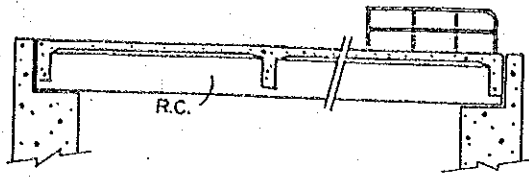


(1) Schematical Feature of 5 Types of Structural plan in Quebrada

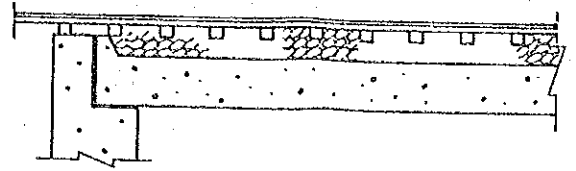


(2) Rough Schetch of Main Structures used in Qda Areas

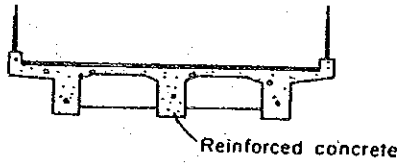
Fig. X-II-2 Proposed Structural plans for Quebrada Areas



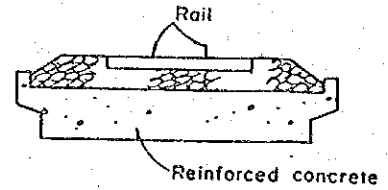
Profile



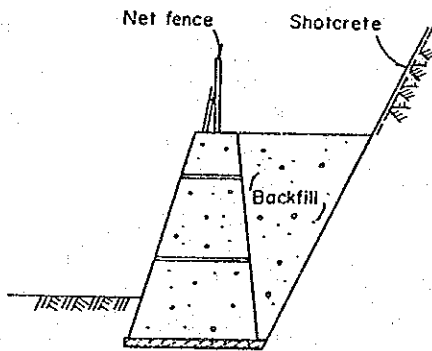
Profile



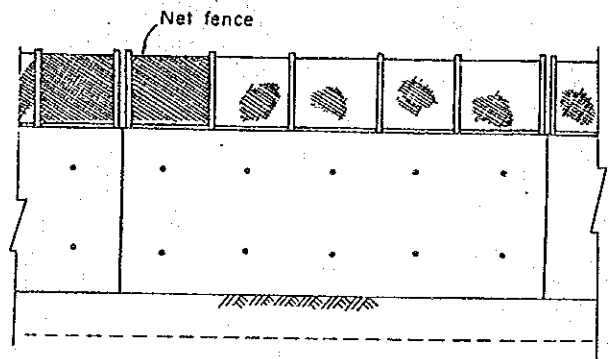
Section
Bridge (Road)



Section
Bridge (Railway)

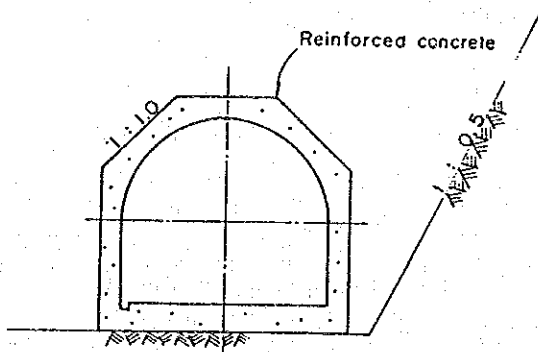


Section



Elevation

Retaining wall



Rockshed Tunnel

Fig. X-II-3
Proposed Structures
for Spe Areas

