

Explanation

		Descriptions	Thickness	
Alluvium	Riverbed Deposits	Rg	Silt, sand and gravel. 15 to 40 m in the main channel	
	Terrace Deposits	Lower Terrace	Tr-Ia Tr-Ib	Silt, sand, gravel and cemented conglomerates. Silt, sand and gravel.
		Middle Terrace	Tr-II	Thick deposits of clay, silt, sand and gravel and cemented conglomerates; including large boulders.
		Higher Terrace	Tr-IIIa	Brownish color clay, silt and sand with basal gravel.
			Tr-IIIb	Brownish color clay, silt and sand with soft pebbles and underlying residual soil.
Siwalik Group	Sst Formation (200 m+)	Mudstone Bed Conglomerate Bed	Massive and pebbly, medium to coarse sandstones; with interbeds of 3 to 7 m-thick pebble conglomerate beds and argillaceous rock beds. 200 m+	
	Bst Formation (600 m+)	Ms-8 Member	Ms-8	Massive and pebbly sandstones. 7 m
		At-7 Member	At-7	Bedded calcareous shales, muddy sandstones and fine sandstones; interbedding a intraformational breccia. 15 to 20 m
		Ms-7 Member	Ms-7	Massive medium to coarse sandstones; including laminations and concretions. 25 m
		At-6 Member	At-6	Bedded calcareous shales, greenish mudstones and sandstones; the lower half is thickly bedded fine sandstones. 30 m
		Ms-6 Member	Ms-6	Massive medium to coarse sandstones; including pebbles and concretions; fine sandstones are interbedded in the lower. 30 m
		At-5 Member	At-5	Bedded shales, mudstones, fine sandstones and breccias; argillaceous rocks and fine sandstones are alternated. 35 m
		Ms-5 Member	Ms-5	Massive medium to very coarse sandstones separated in three units by two layers of greenish thin mudstones; pebble layers are in the lower. 25 to 30 m
		At-4 Member	At-4	Bedded shales, mudstones, fine to very fine sandstones and breccias; shales are calcareous and hard with thick bedding. 65 m
		Ms-4 Member	Ms-4	Massive medium to very coarse sandstones with a few intercalations of calcareous shales, mudstones and fine sandstones. 45 to 60 m
		At-3 Member	At-3	Bedded shales, mudstones, fine to very fine sandstones and breccias; a few meter thick calcareous shales are striking in the middle part. 50 to 65 m
		Ms-3 Member	Ms-3	Massive sandstones with scattered pebbles; laminations and concretion layers are included. 30 m
		At-2 Member	At-2	Bedded shales, mudstones and fine to very fine sandstones with intraformational fragments; fine sandstones are predominant. 35 m
		Ms-2 Member	Ms-2	A thick bed of medium to coarse sandstone. 10 m
		At-1 Member	At-1	Bedded shales, mudstones, very fine to medium sandstones and breccias; generally calcareous except greenish color sandy mudstone. 45 m
		Ms-1 Member	Ms-1	Massive medium to coarse sandstones with pebbles; a few meter thick intraformational breccia interbedden in the middle. 105 m
		At-0 Member	At-0	Bedded shales, mudstones and fine sandstones. 15 m+

Marks in the Sections

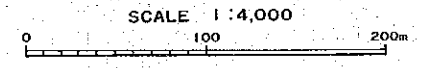
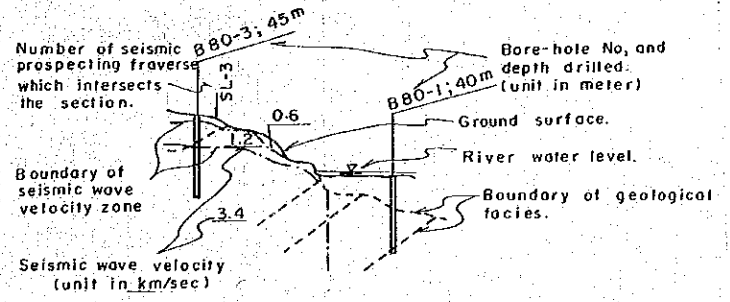
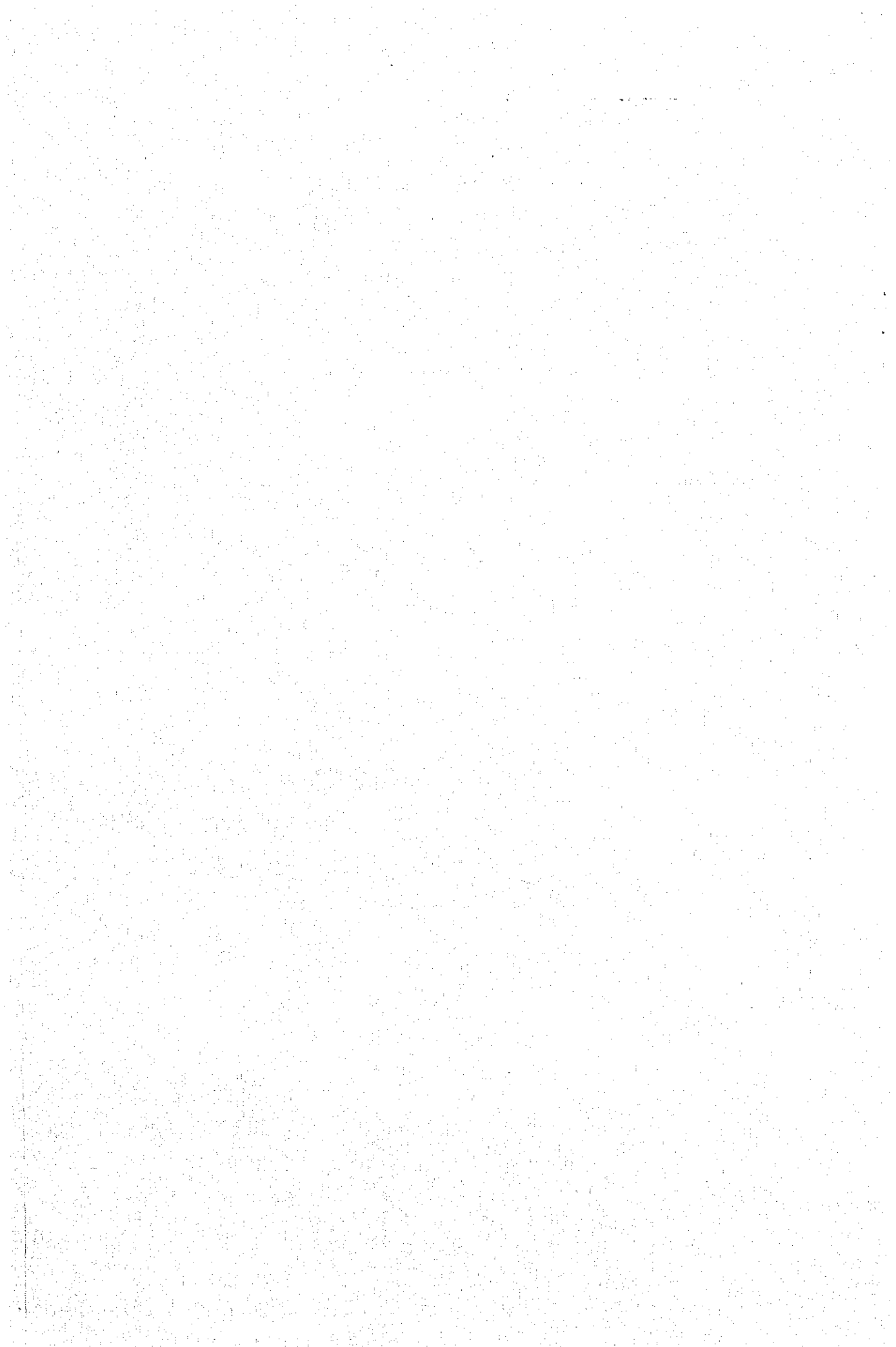


図-4.4.2 ダム地点地質図

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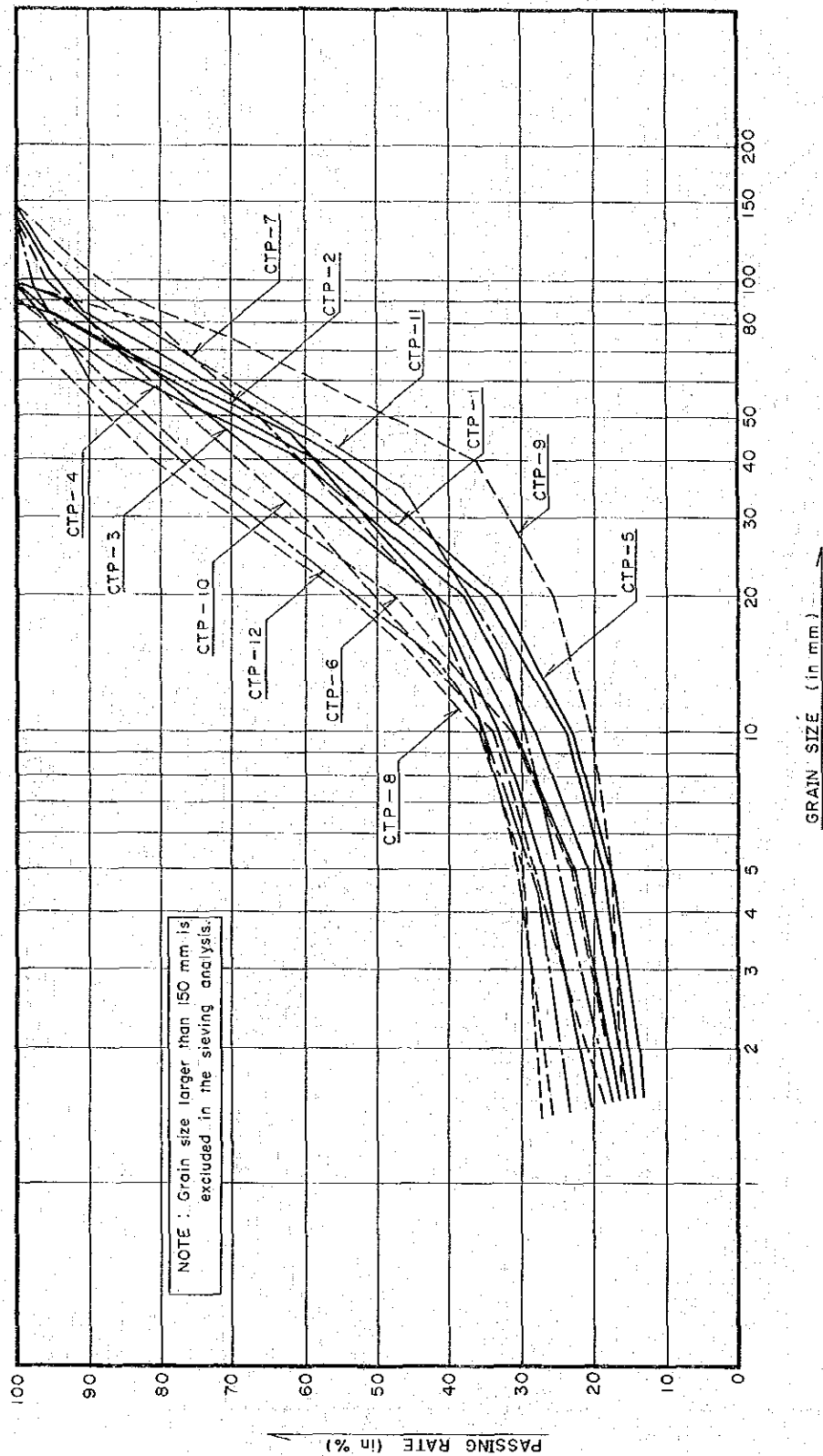
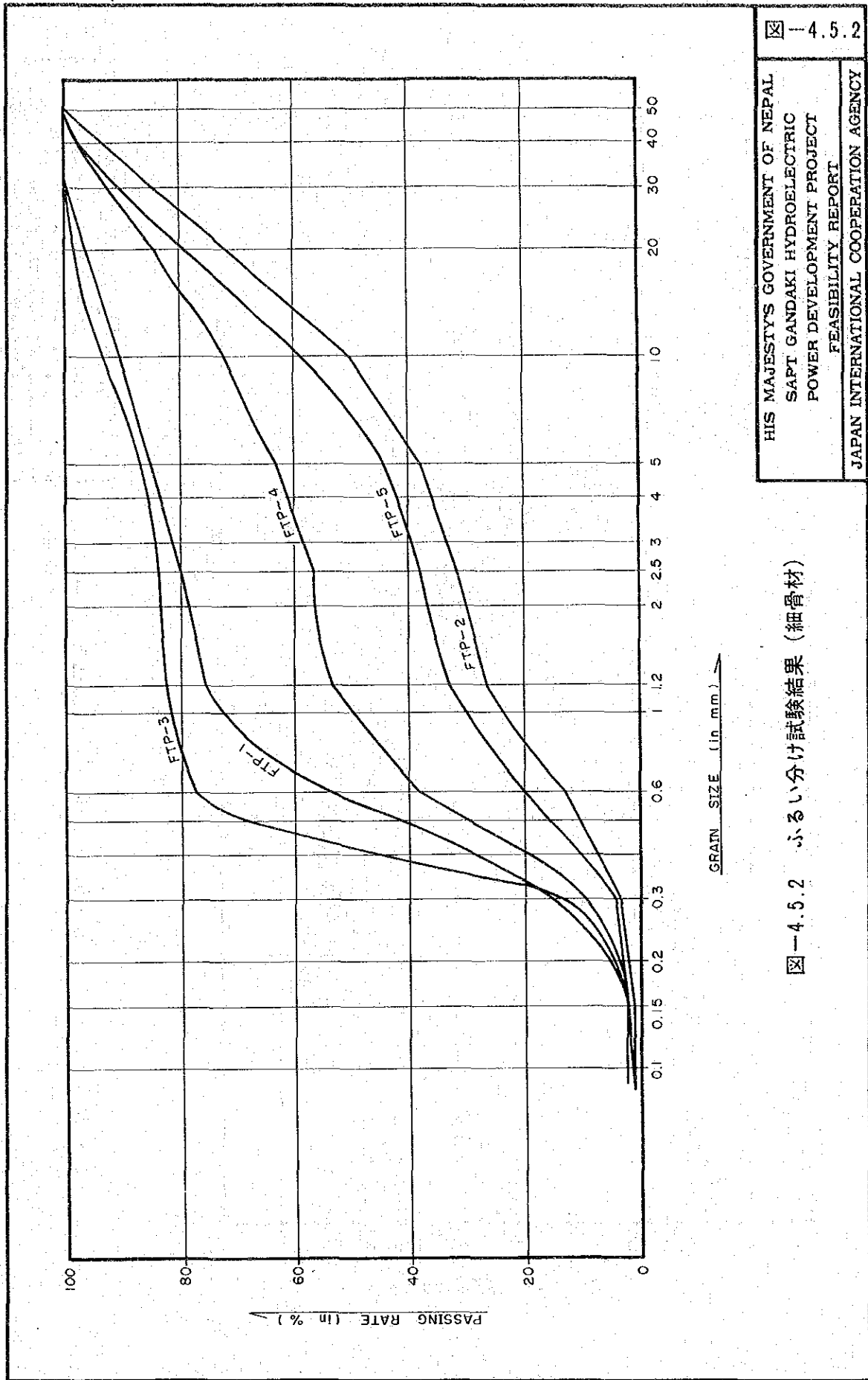


図-4.5.1 ふるい分け試験結果 (粗骨材)



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図-4.5.2 ふるい分け試験結果 (細骨材)

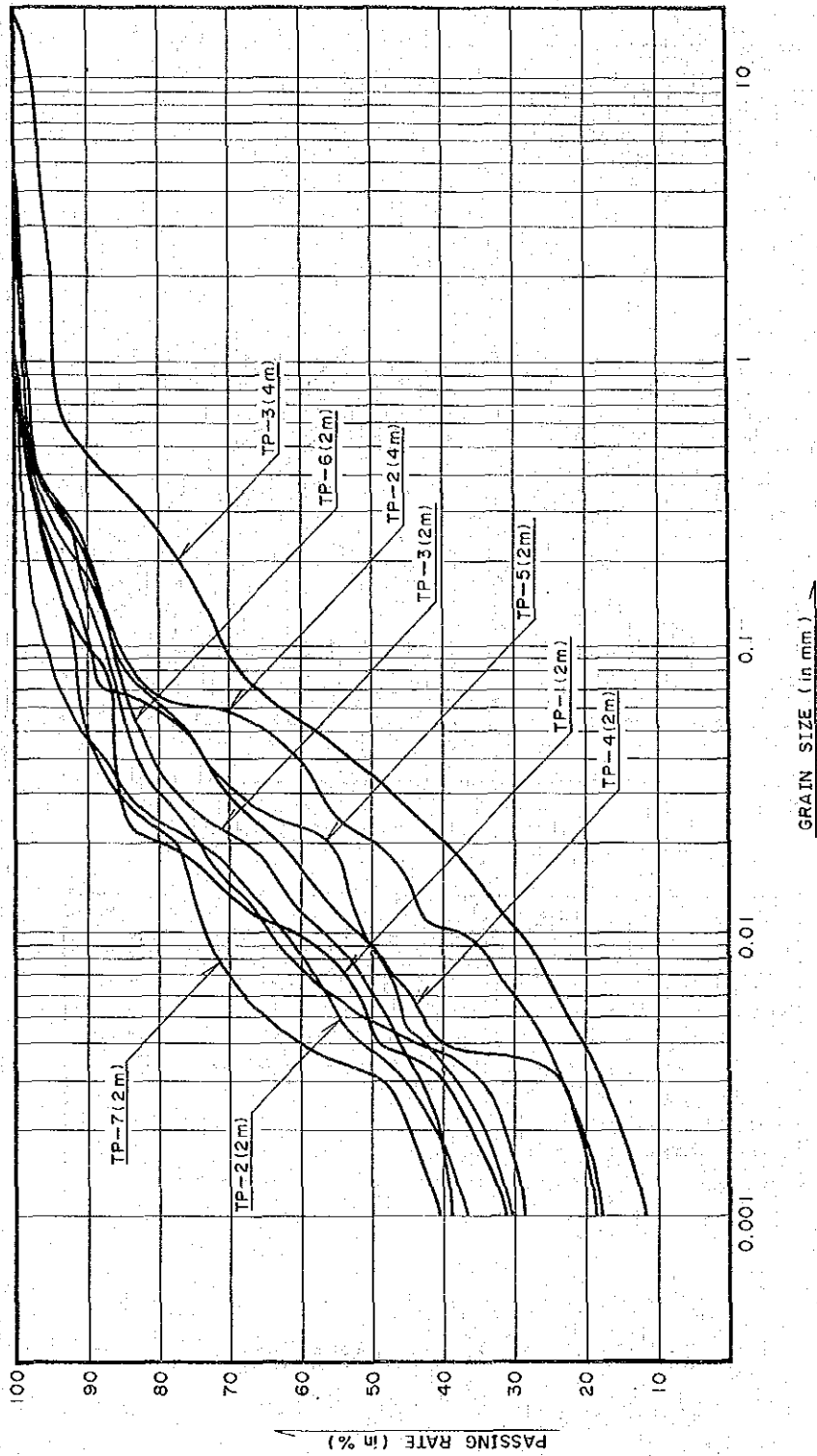
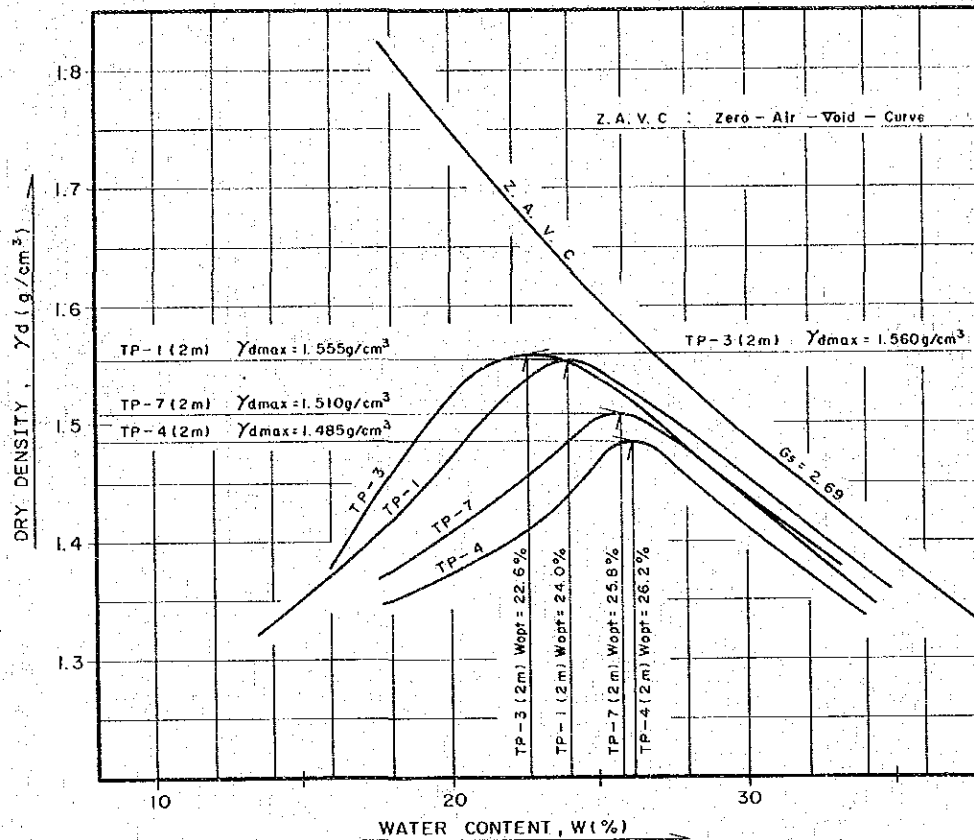


図-4.5.3

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図-4.5.3 ふるい分け試験結果 (コア材)



	Energy Ec (%)	γ_d max (g/cm ³)	W_{opt} (%)	$W_1 - W_{opt}$ (%)
TP-1 (2m)	100	1.555	24.0	-6.2
TP-3 (2m)	"	1.560	22.6	-2.4
TP-4 (2m)	"	1.485	26.2	-5.7
TP-7 (2m)	"	1.510	25.8	-1.8

図-4.5.4 コア材締固め試験結果

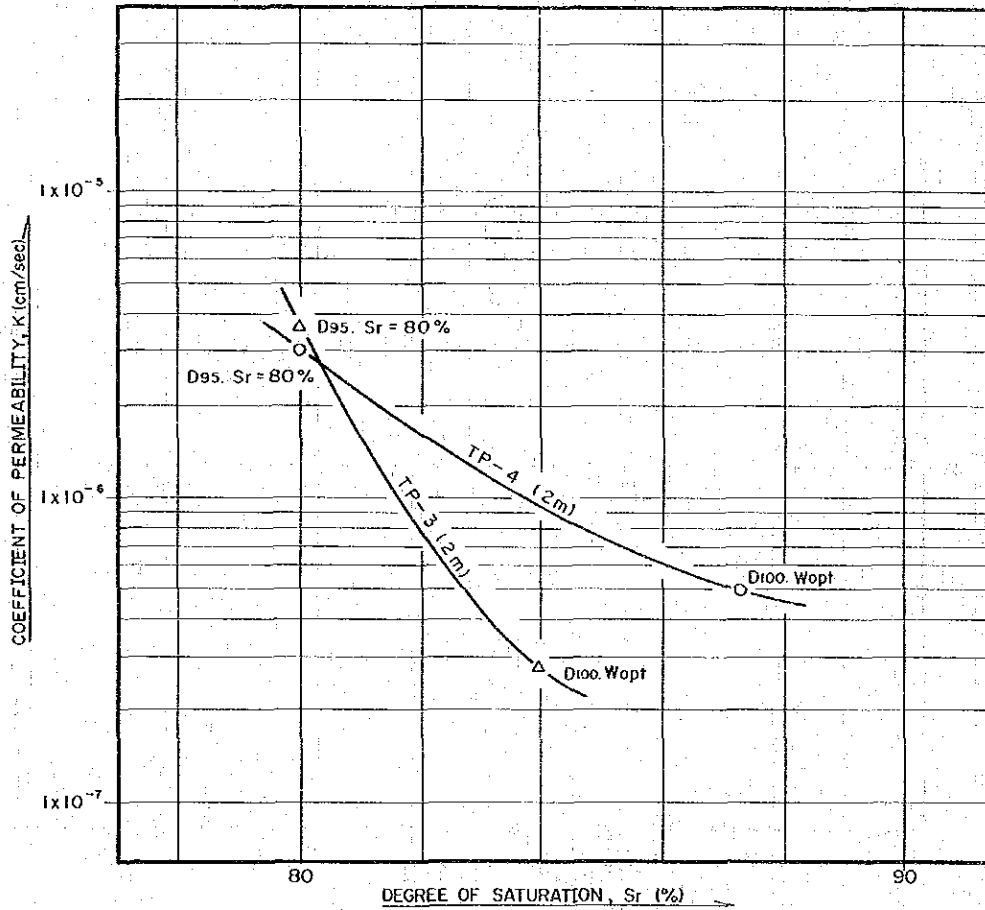
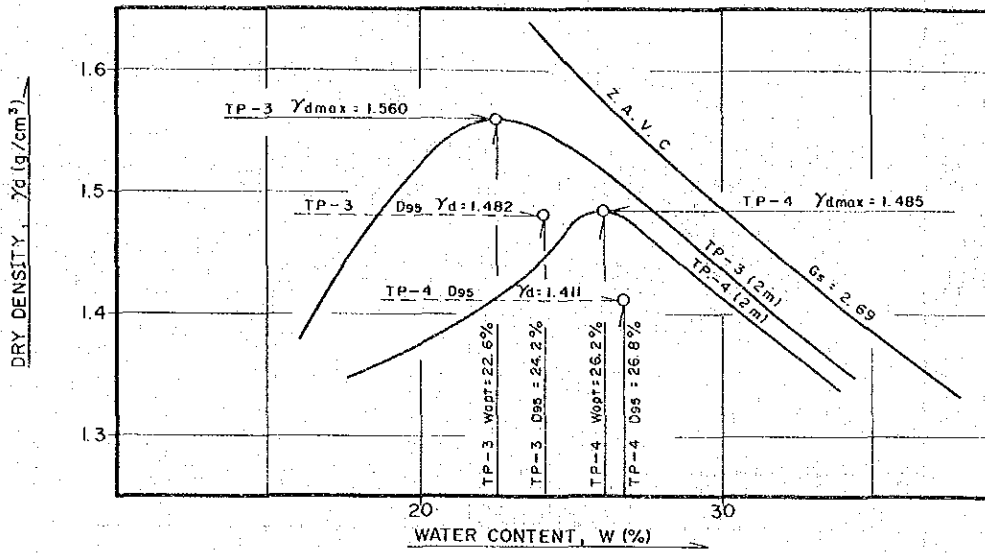


図-4.5.5 コア材透水試験結果

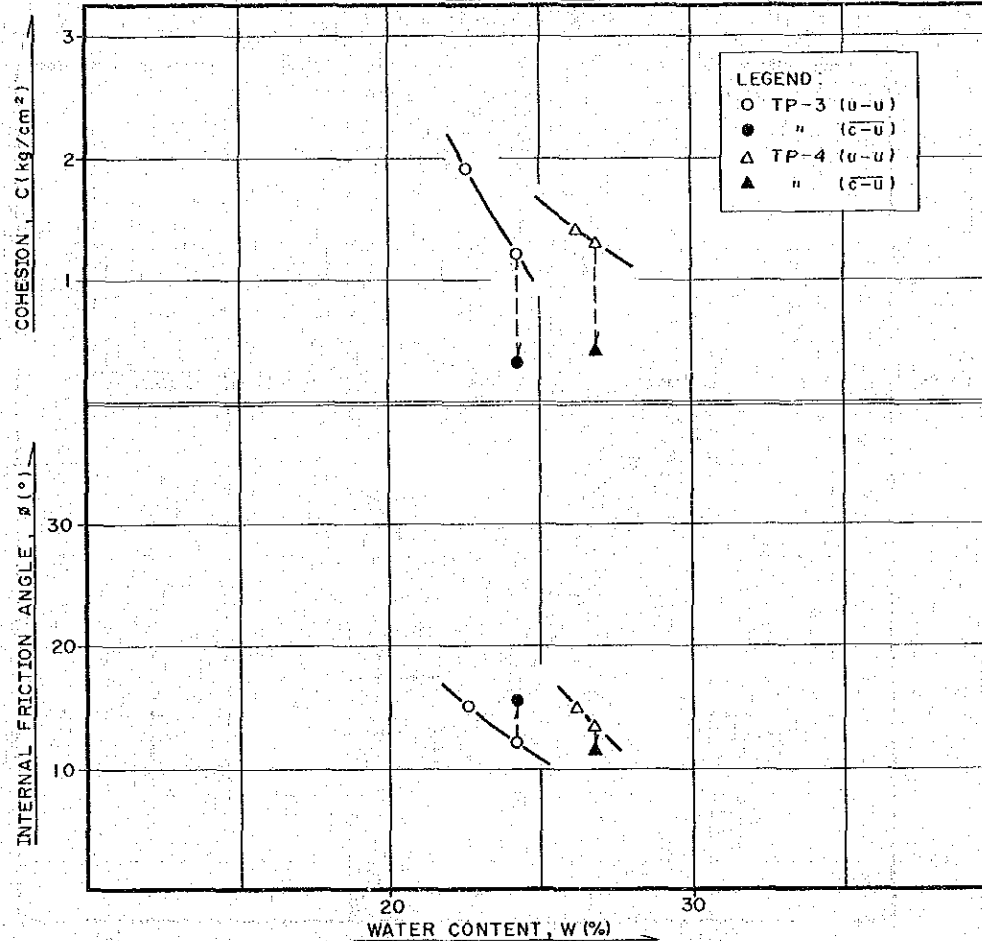
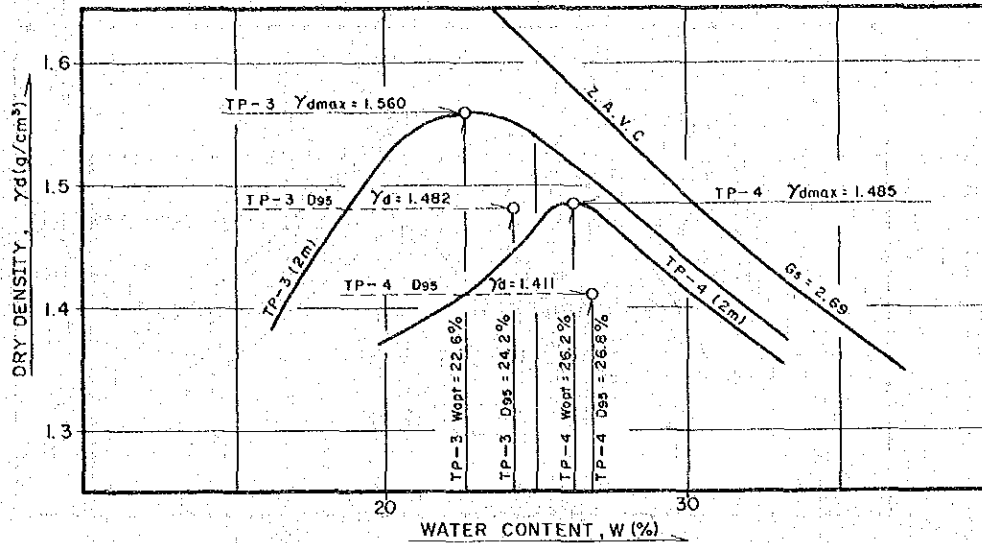
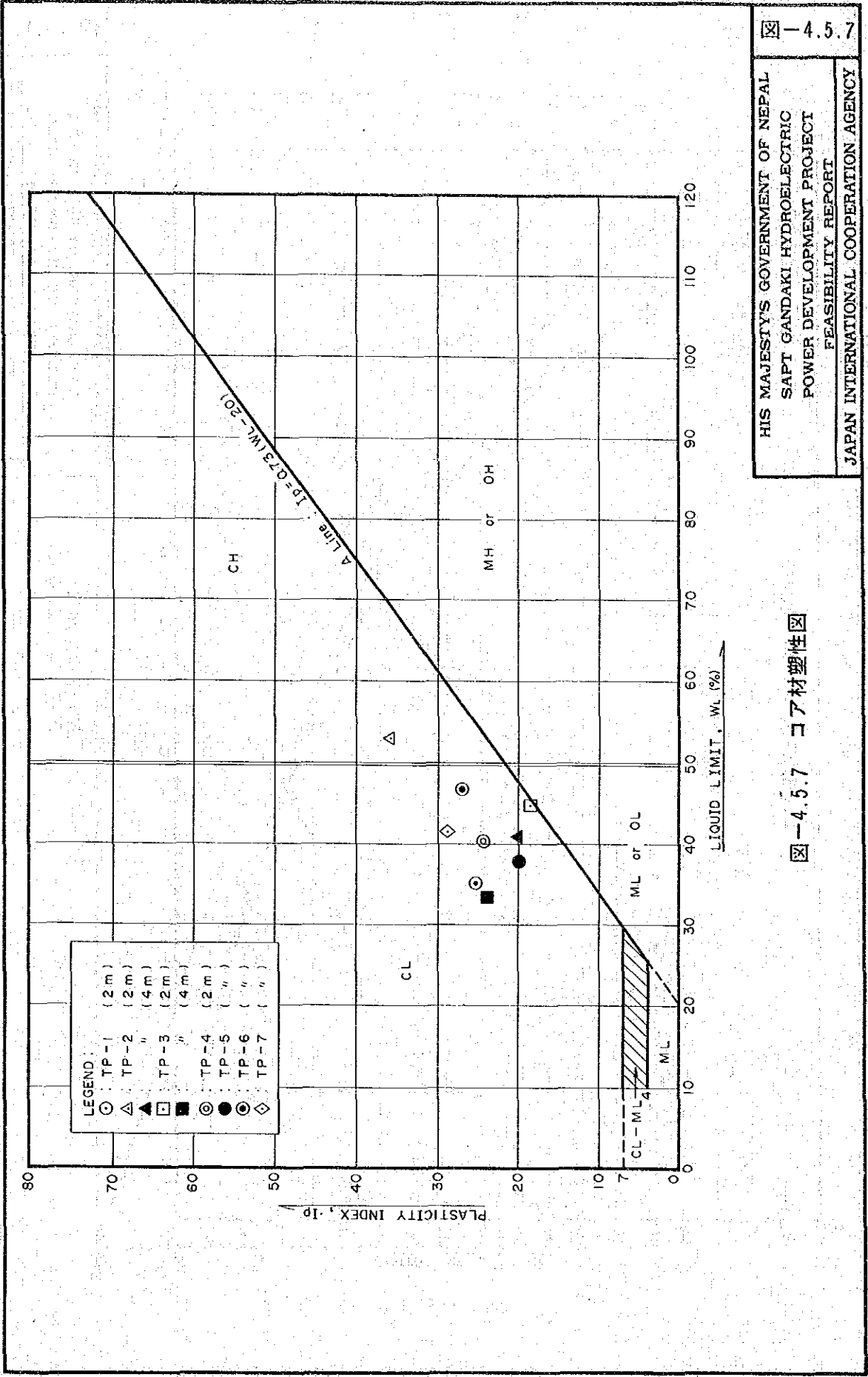


図-4.5.6 コア材三軸圧縮試験結果



☒ - 4.5.7

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図-4.5.7 コア材塑性性図

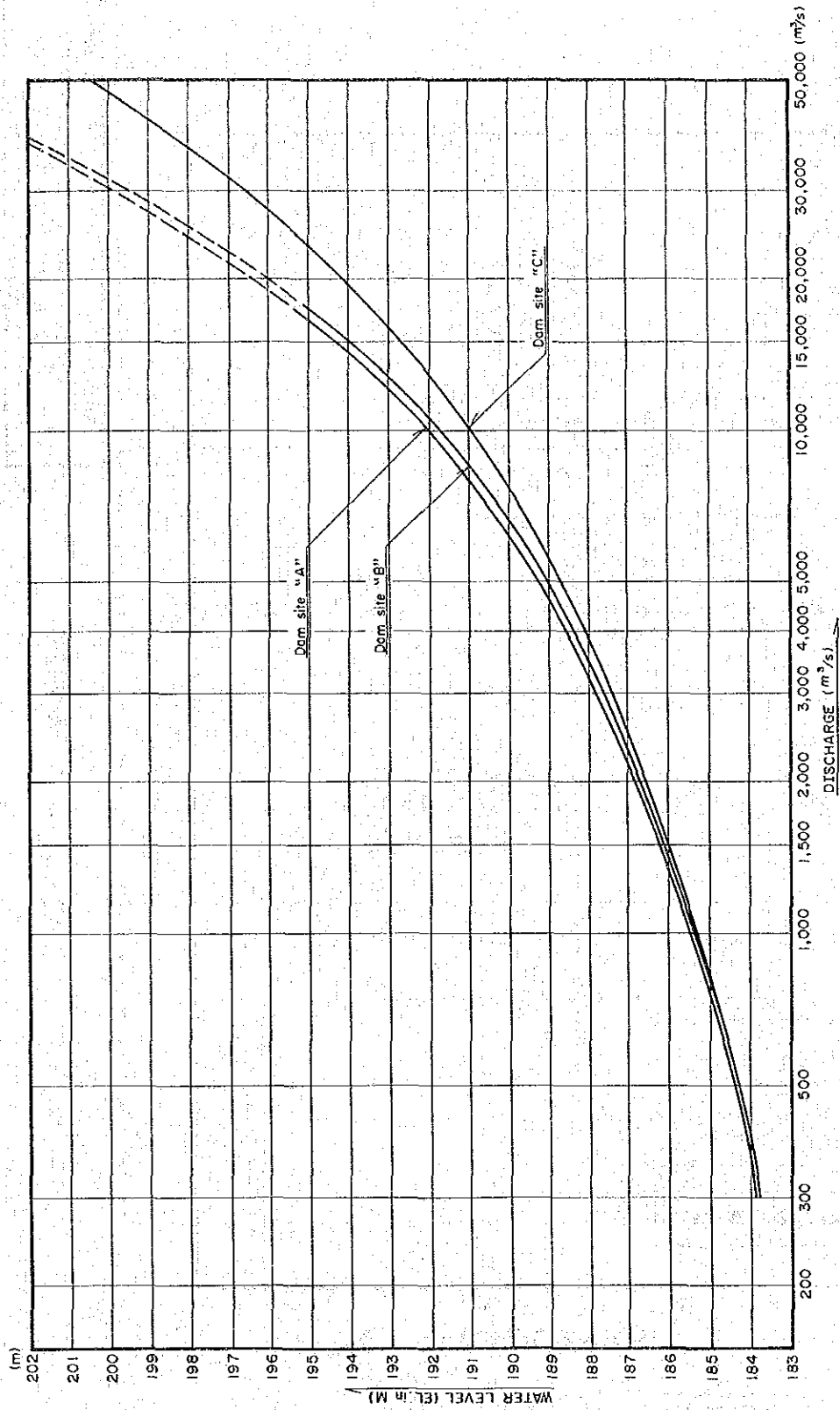
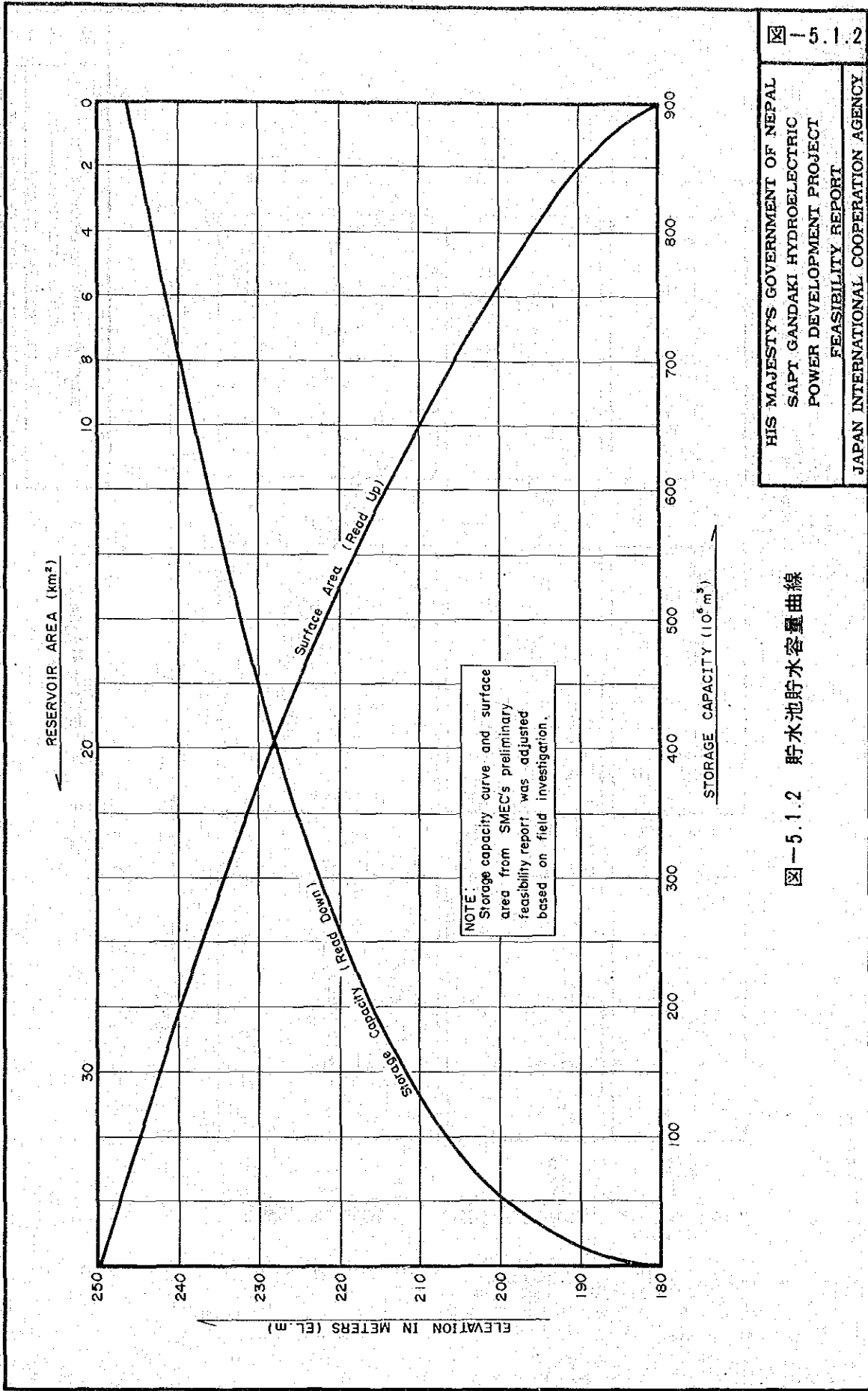


図-5.1.1 放水流量曲線



5.1.2

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図-5.1.2 貯水池貯水容量曲線

REMARKS : R.W.L. : Reservoir Water Level.
 F.S.L. : Full Supply Level.
 M.O.L. : Minimum Operation Level.
 Rated W.L. : Rated Water Level.
 Pmax : Max. Output Power (Installed Capacity)
 Qr : Rated Turbine Discharge

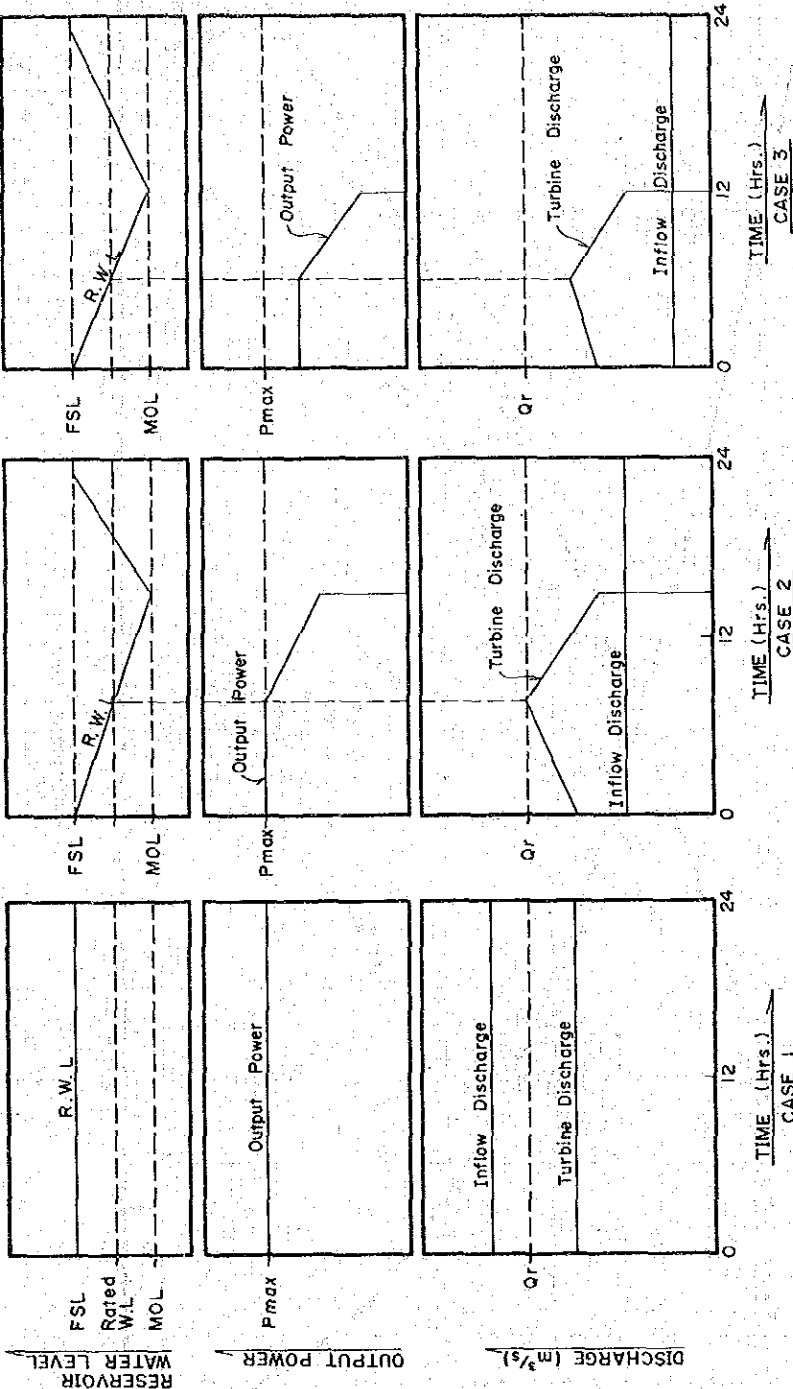


図-5.1.3 使用水量説明図

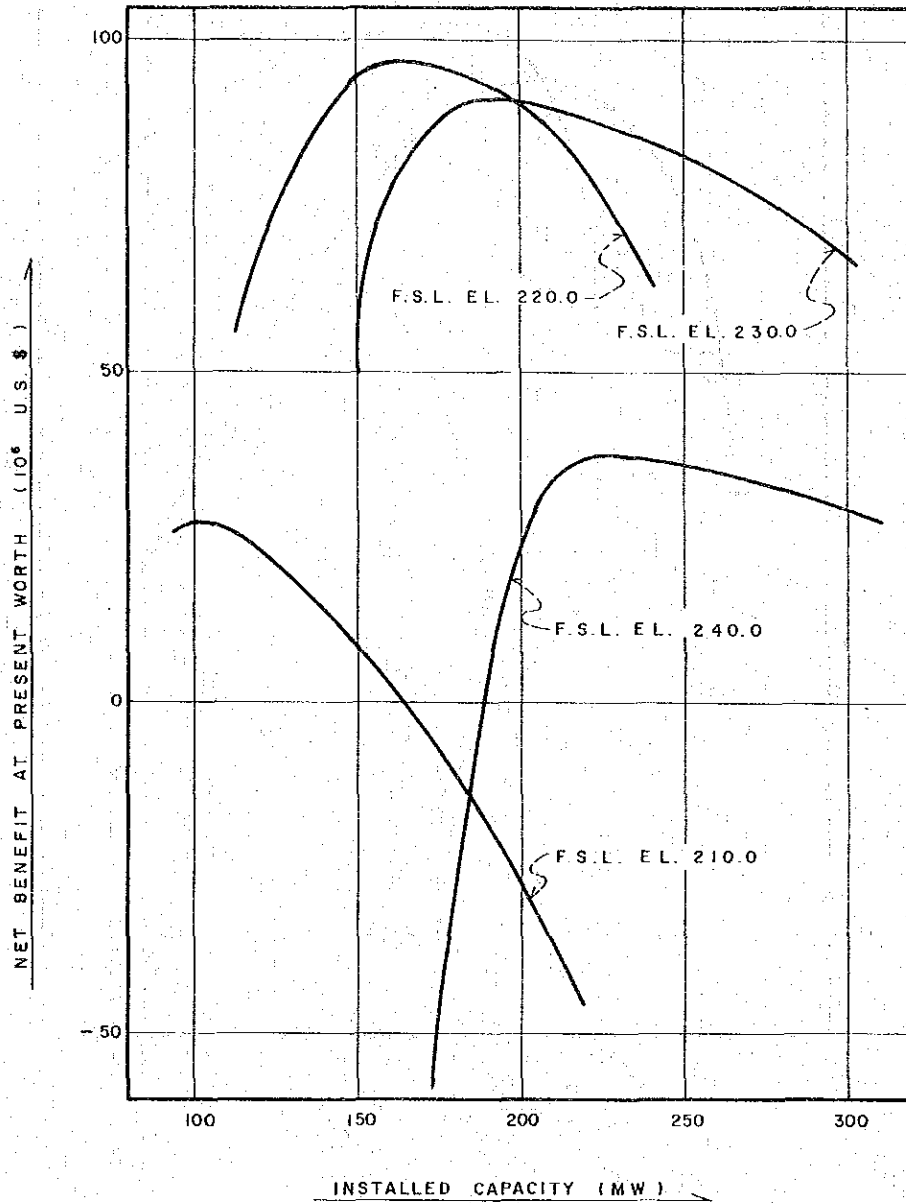


図-5.1.4 最適計画検討結果(1) (A地点、ロックフィルダム)

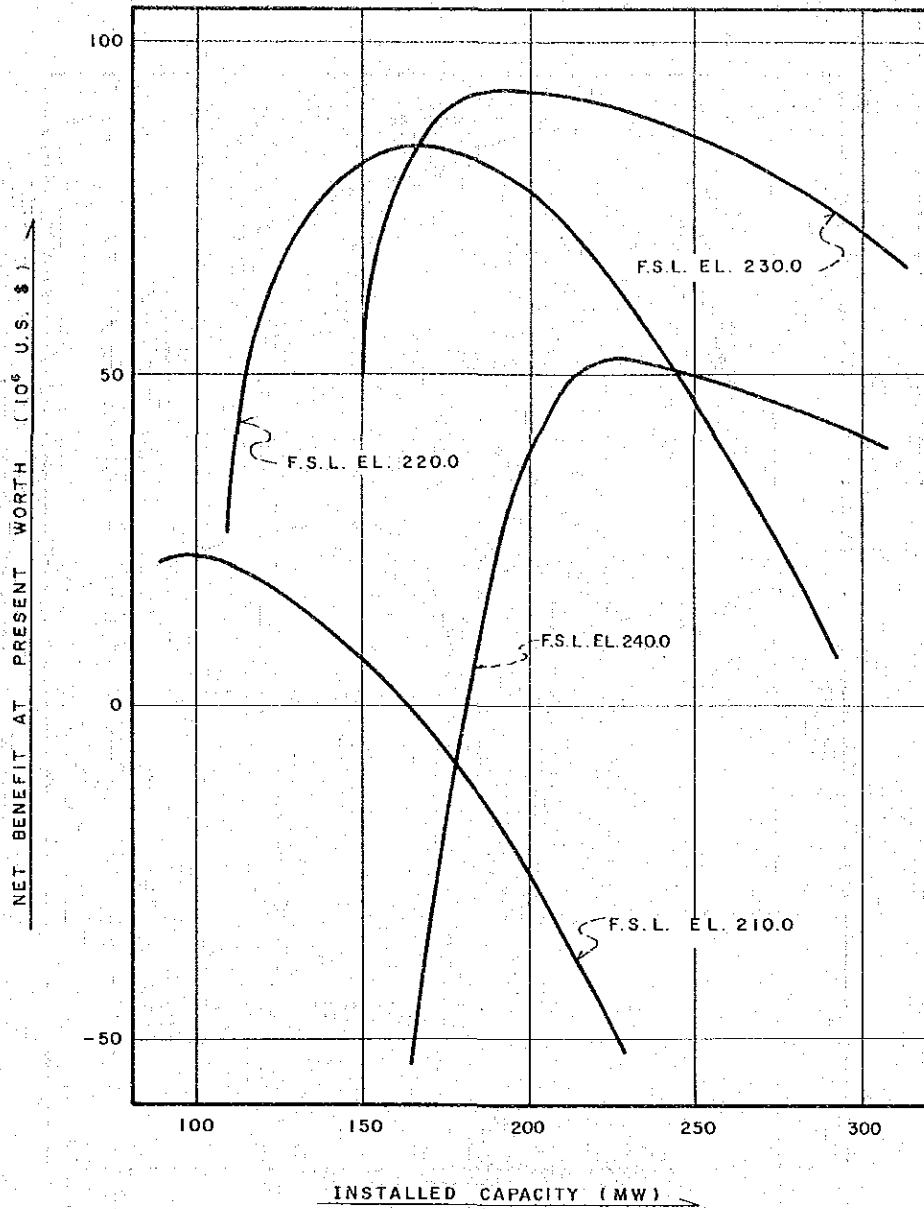


図-5.1.5 最適計画検討結果(2)、(A地点、重力ダム)

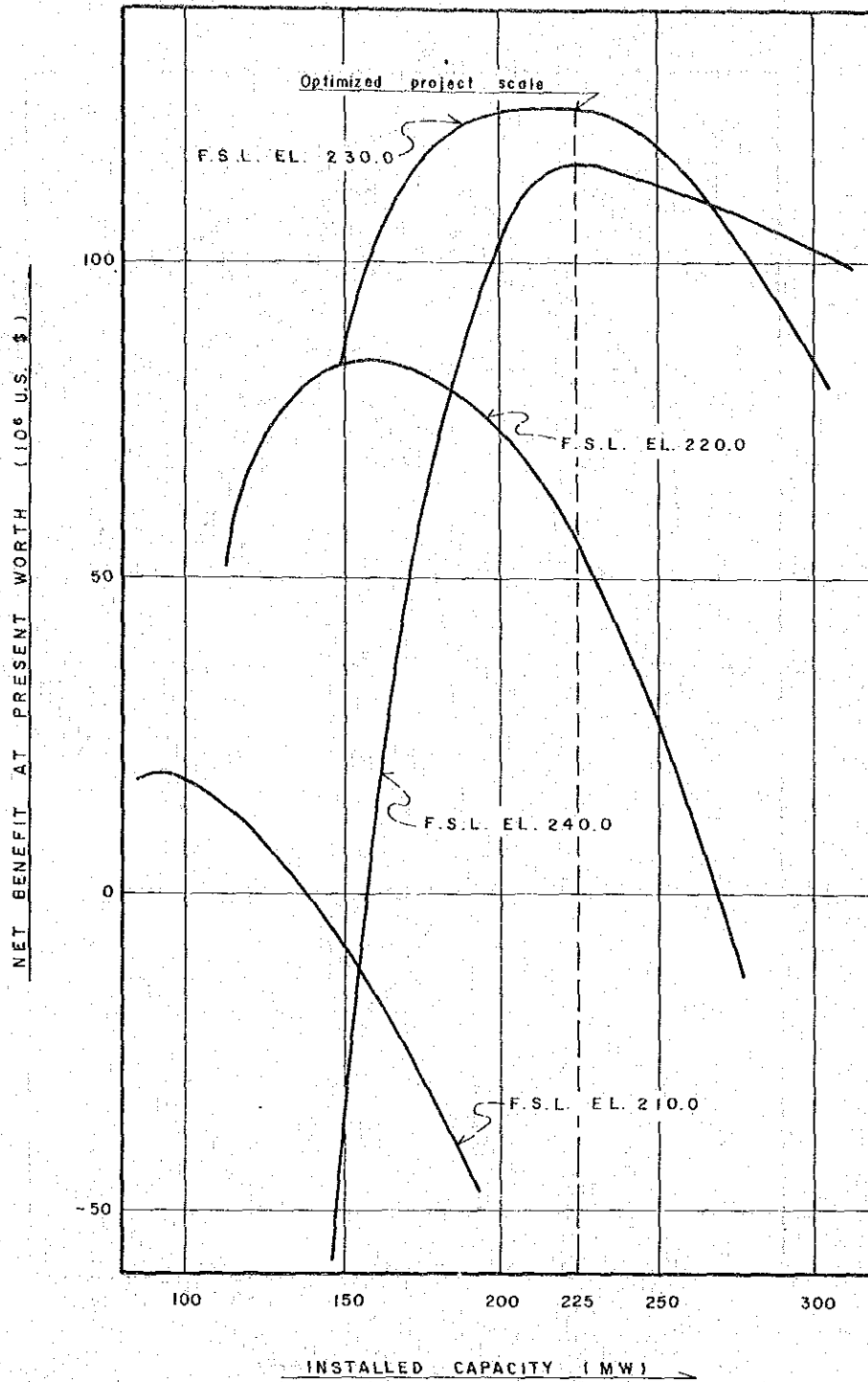


図-5.1.6 最適計画検討結果(3)、(B地点、ロックフィルダム)

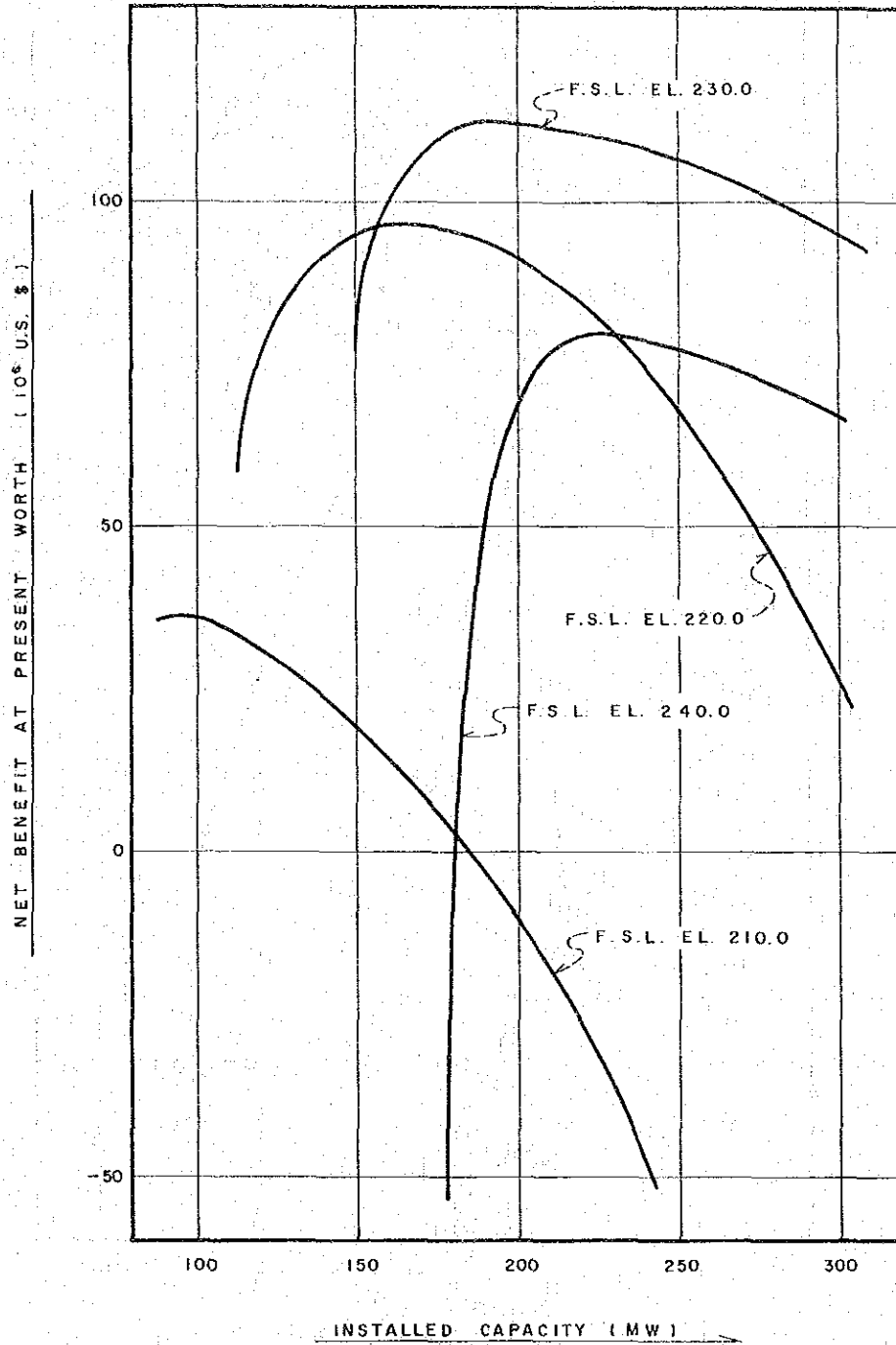
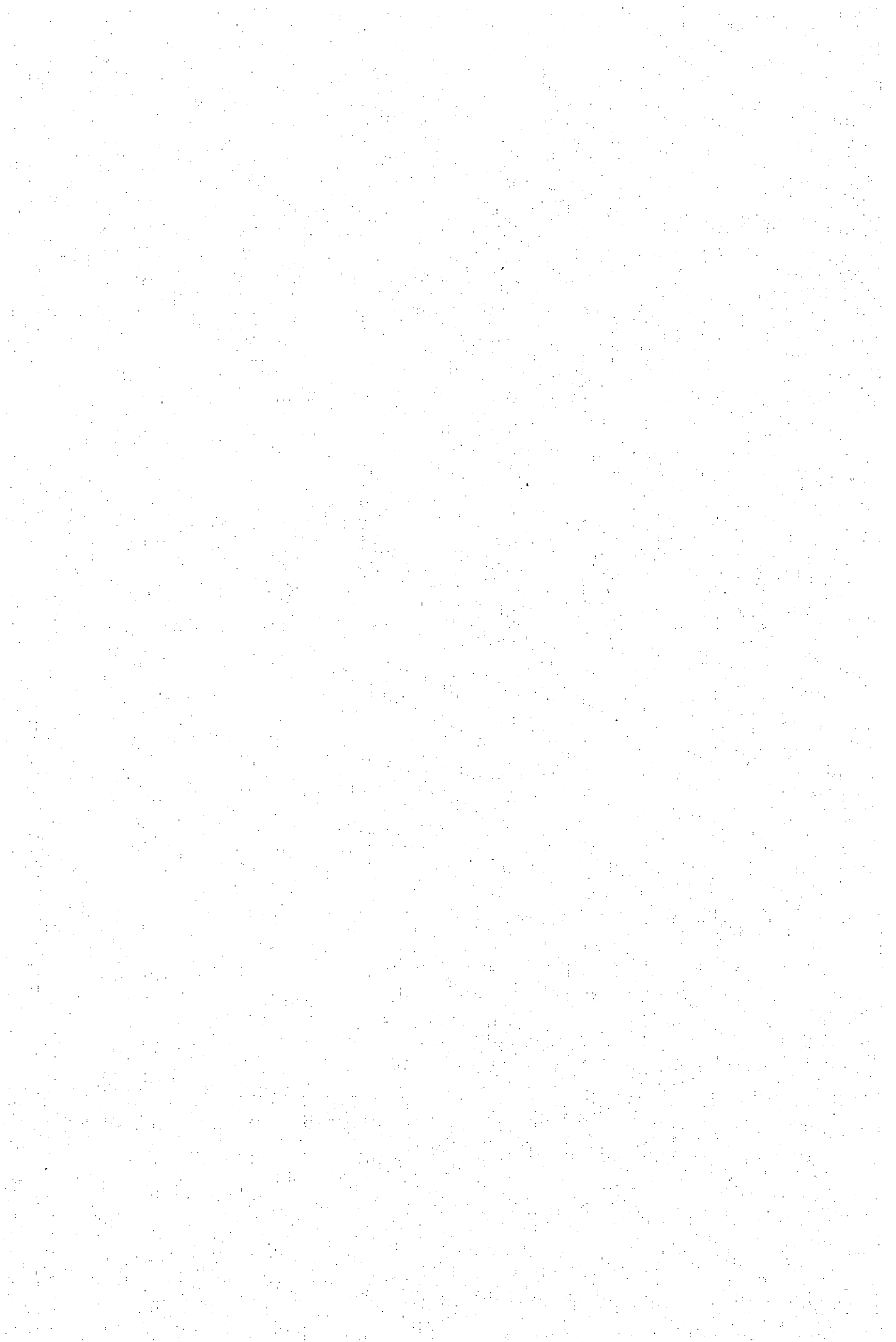
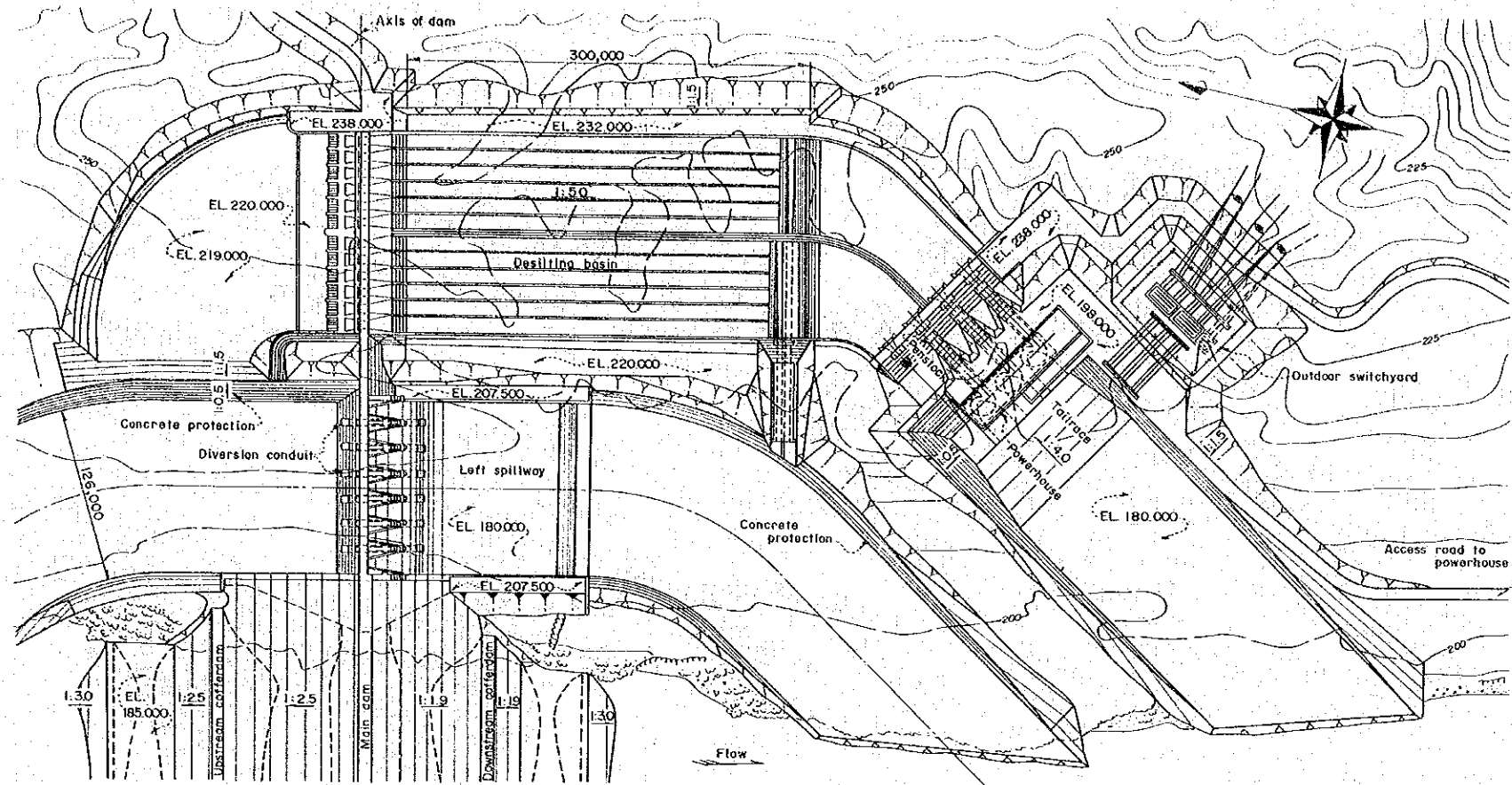
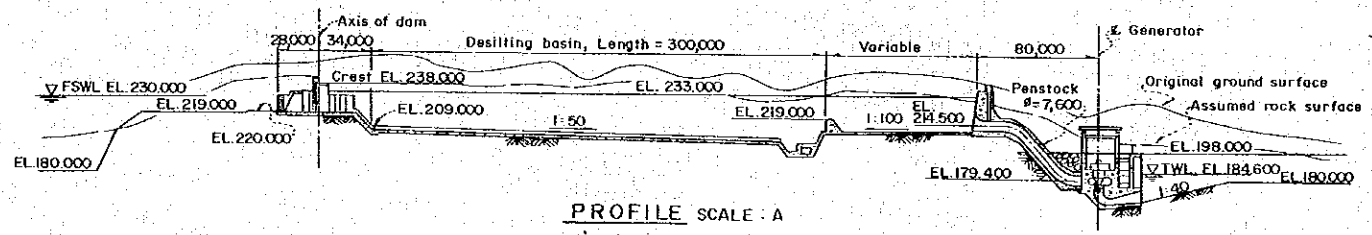


図-5.1.7 最適計画検討結果(4)、(B地点、重力ダム)

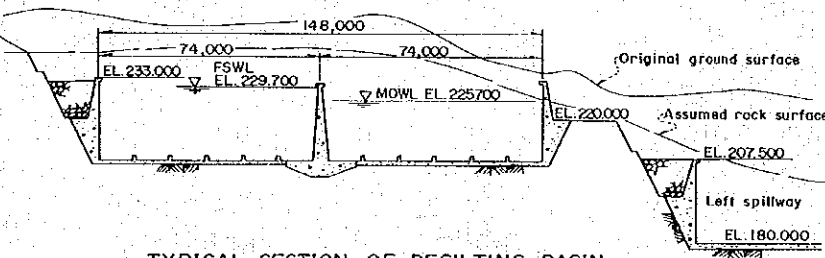




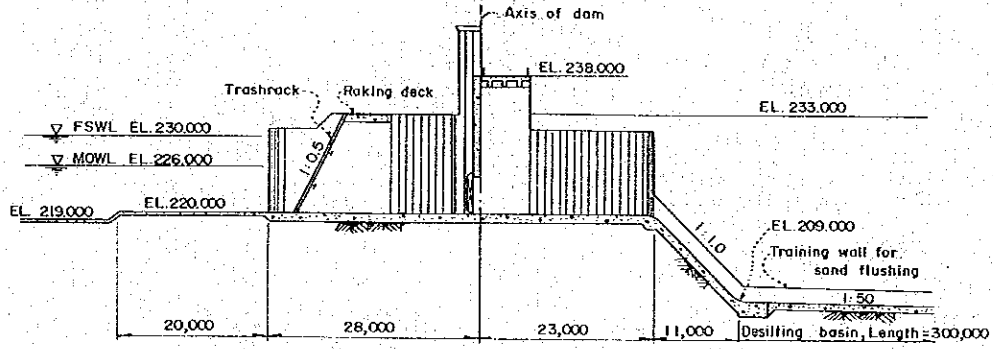
PLAN SCALE : A



PROFILE SCALE : A



TYPICAL SECTION OF DESILTING BASIN SCALE : B



ENTRANCE PORTION OF DESILTING BASIN SCALE : C

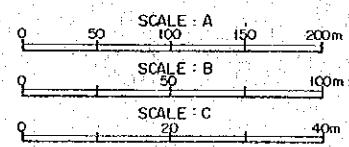


図-5.1.8 沈砂池計画案 (フィルダム、B地点、常時満水位230、設備容量225MW)

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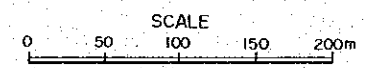
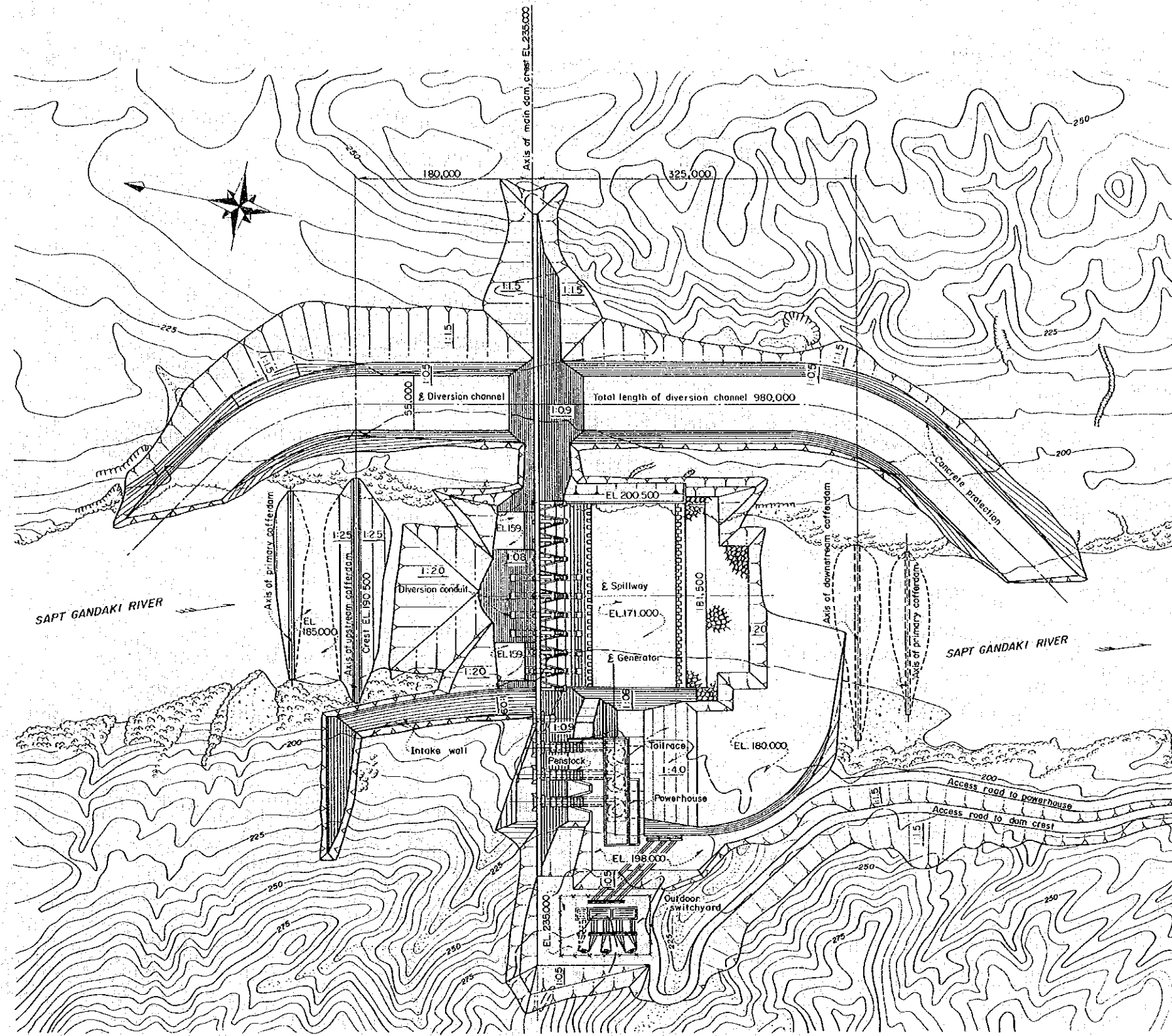


図-5.1.9 一般配置図 (計画案: 重力ダム、B地点、常時満水位230、設備容量225MW)

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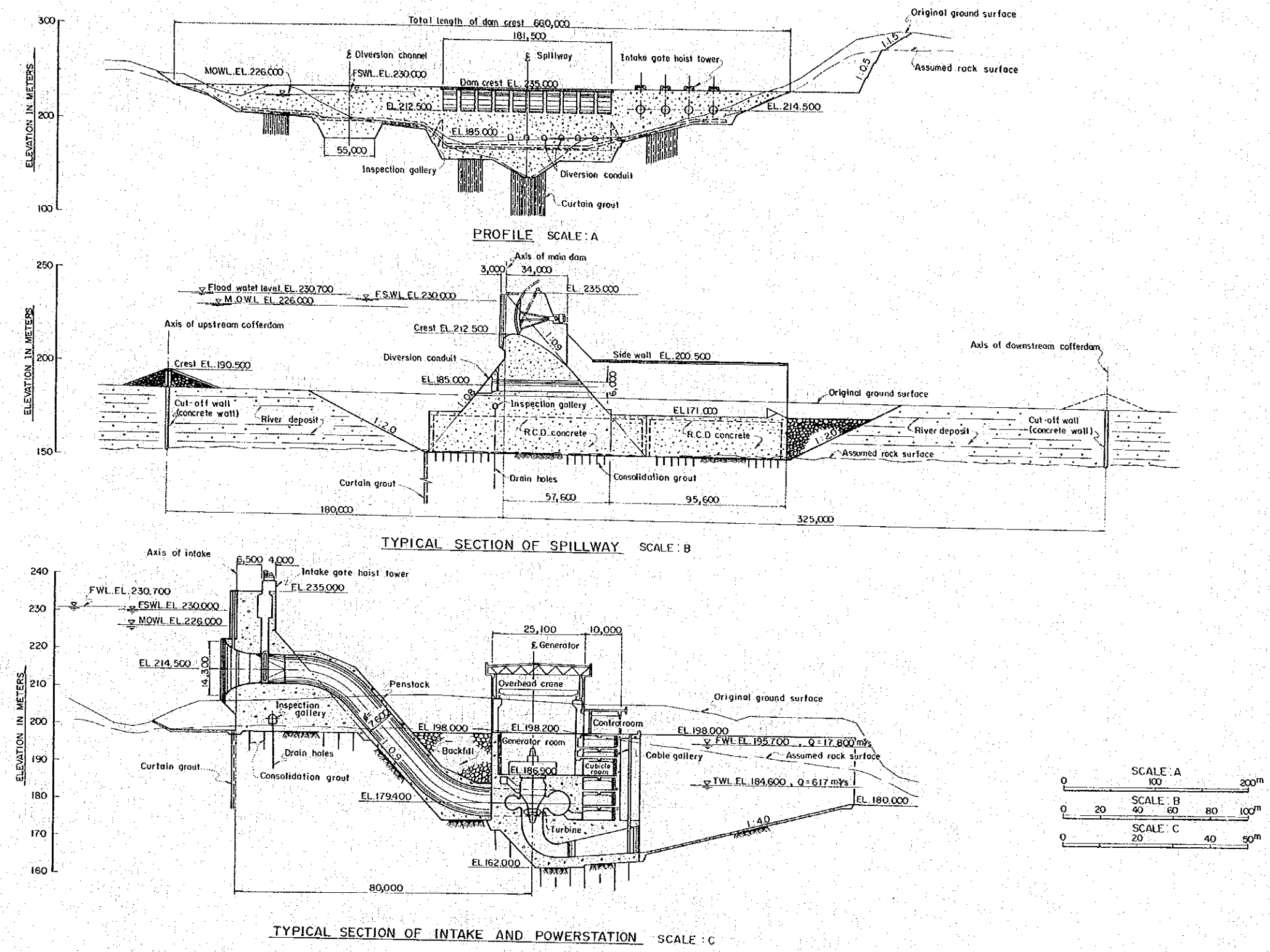


図-5.1.10 断面図 (計画案: 重力ダム、B地点、常時満水位230、設備容量225MW)

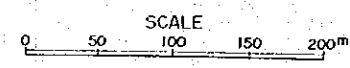
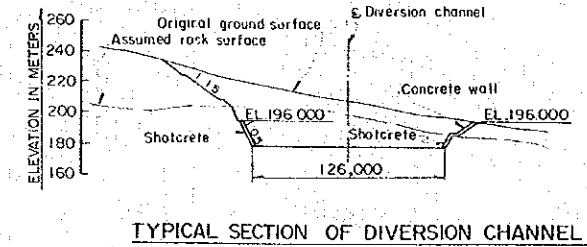
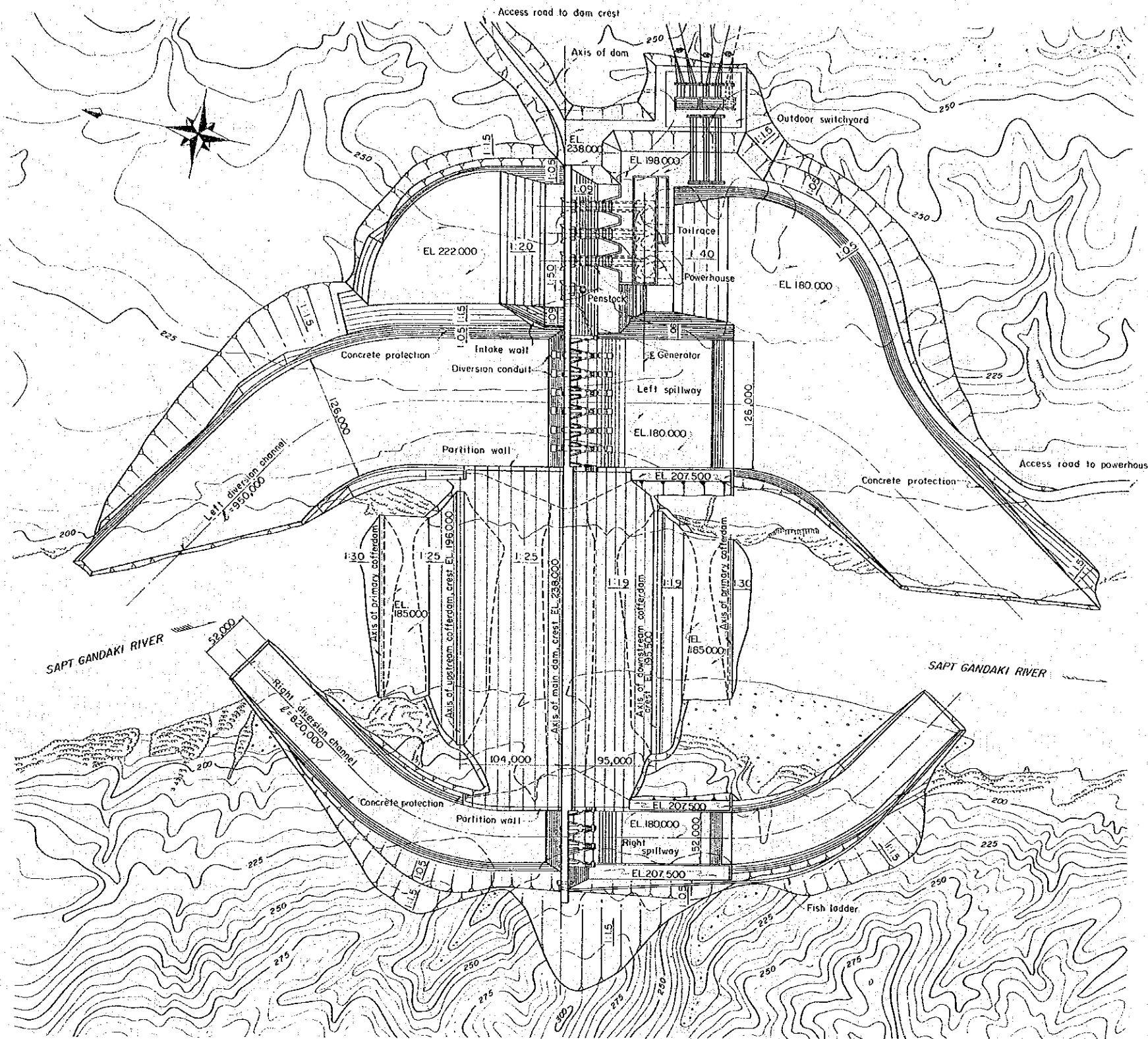


図-6.1 一般配置図 (最適計画案: フィルダム、B地点、常時満水位230、設備容量225MW)

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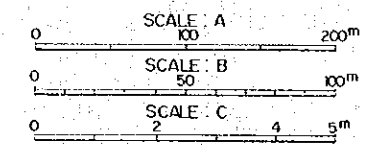
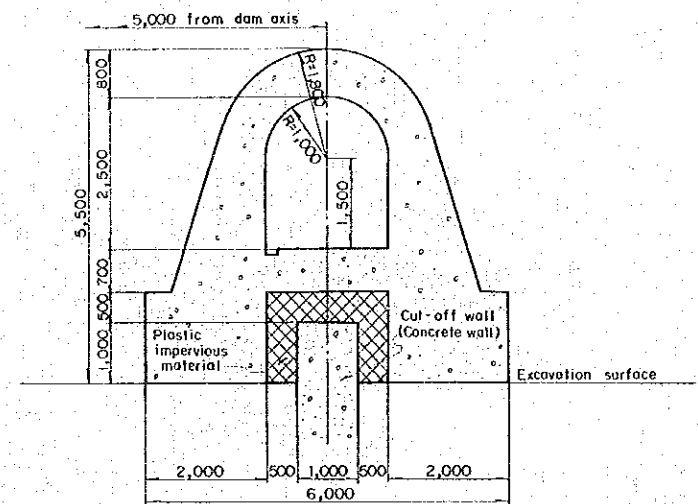
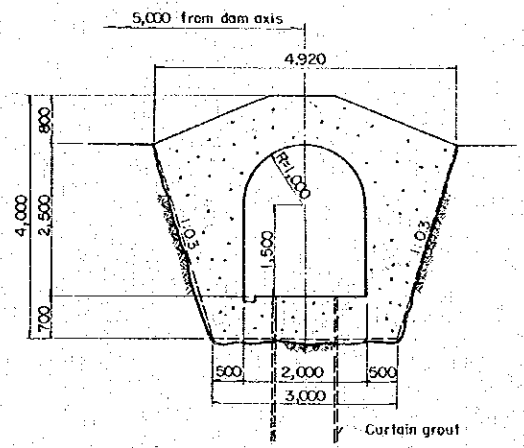
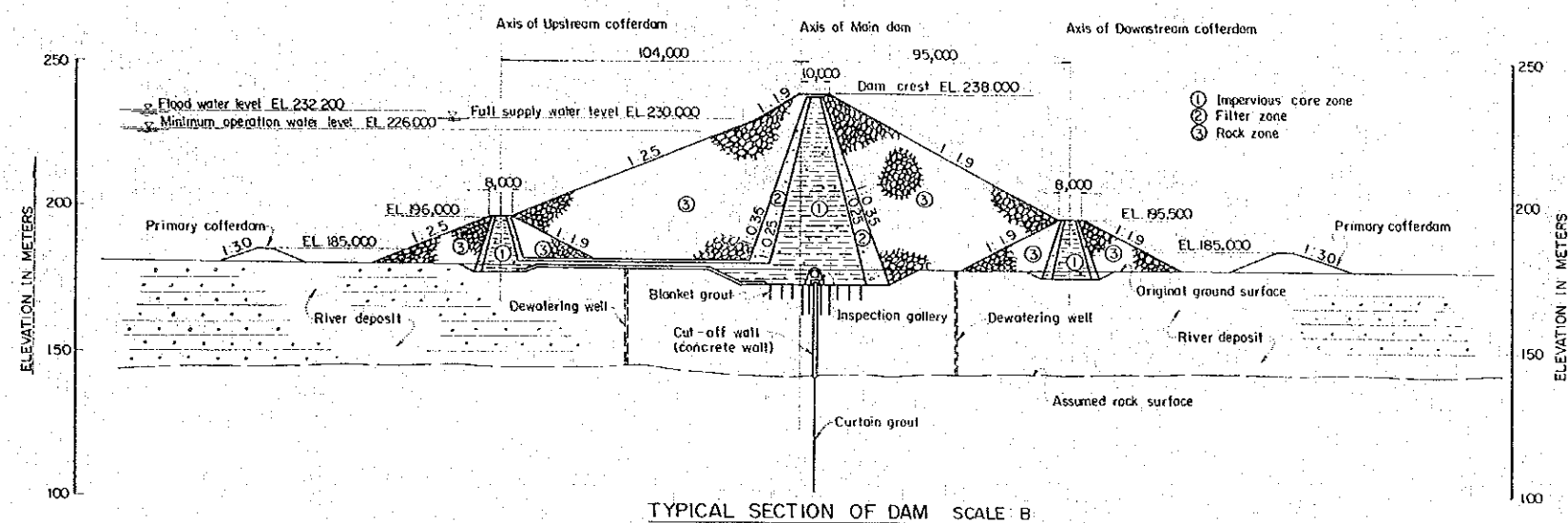
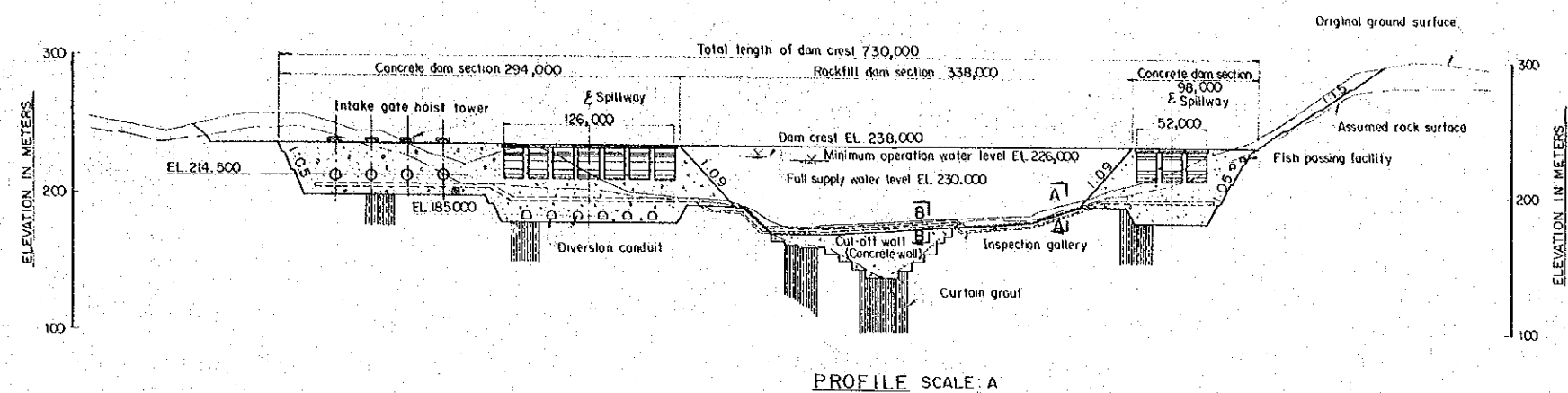
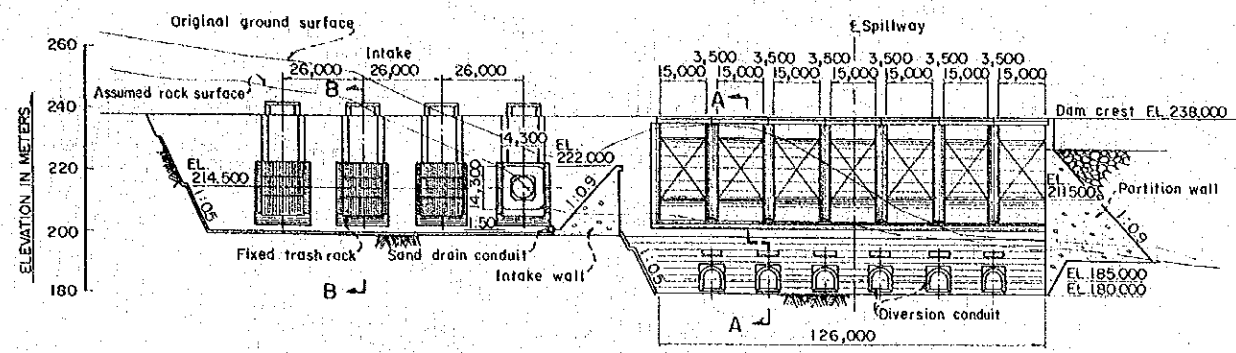
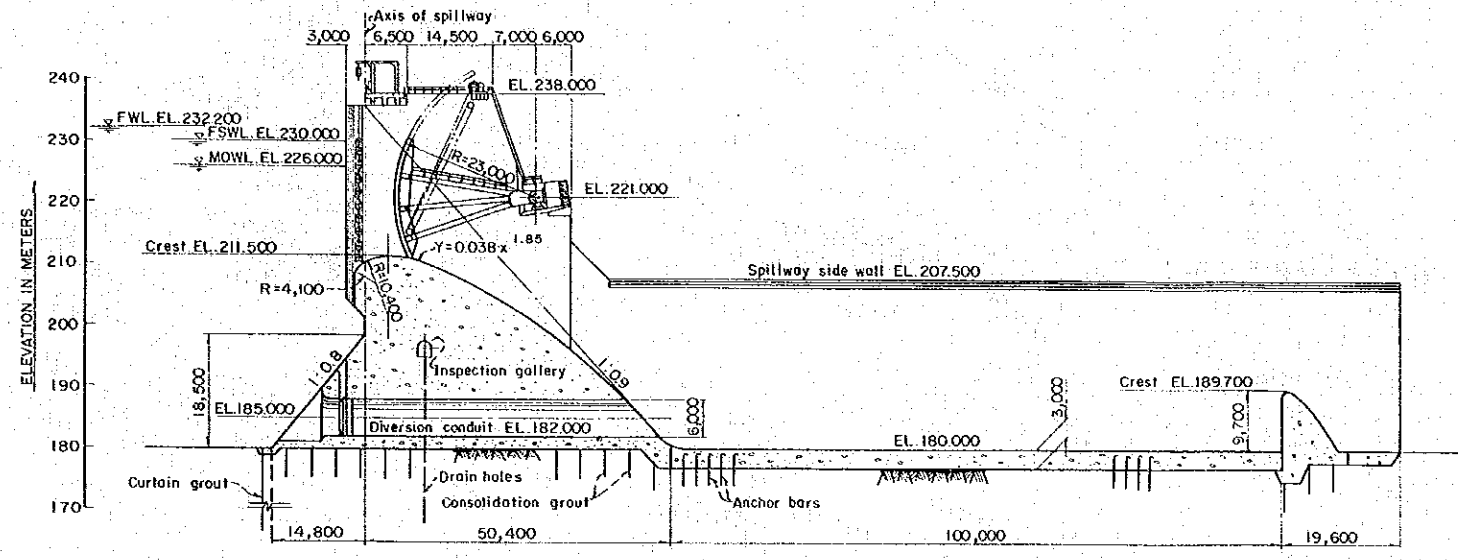


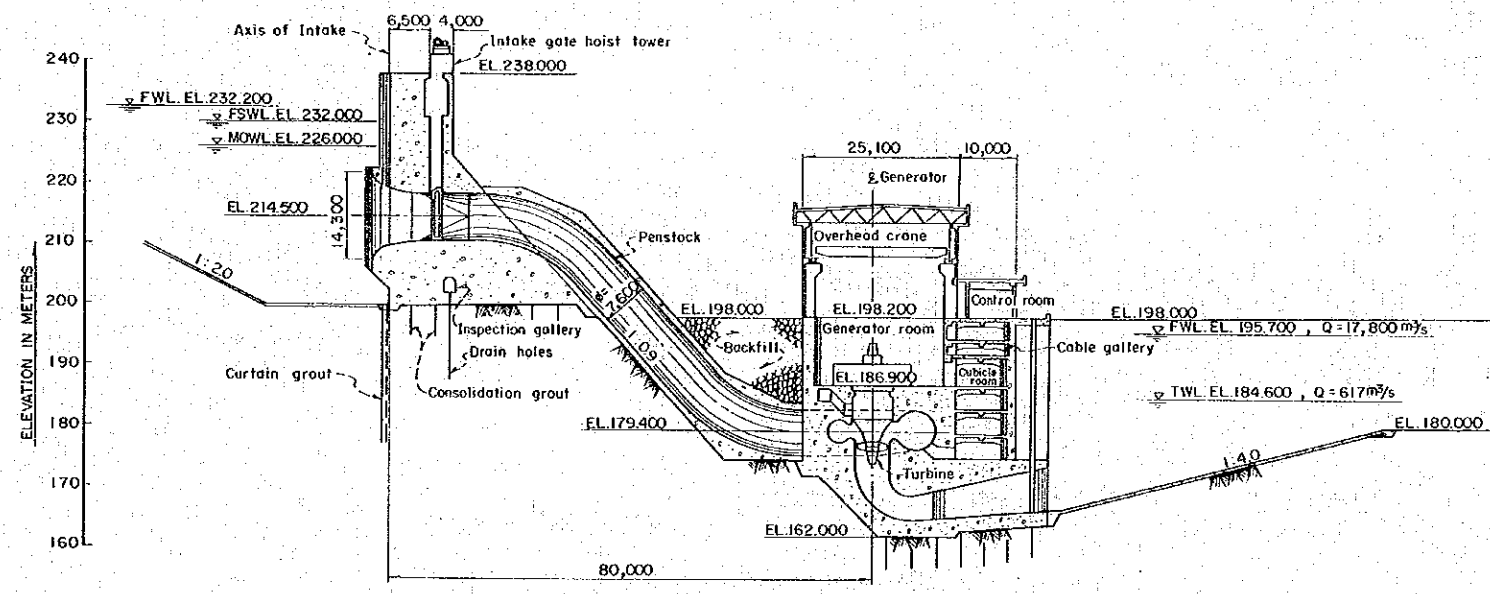
図-6.2 断面図 (最適計画案: フィルダム、B地点、常時満水位230、設備容量225MW)



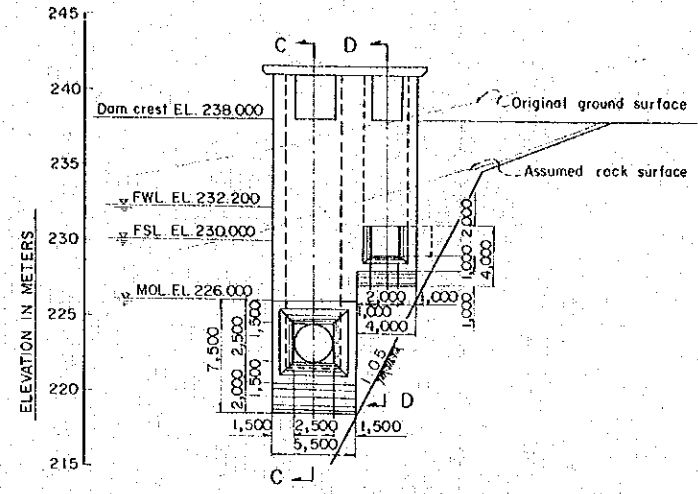
FRONT VIEW OF INTAKE AND SPILLWAY SCALE : A



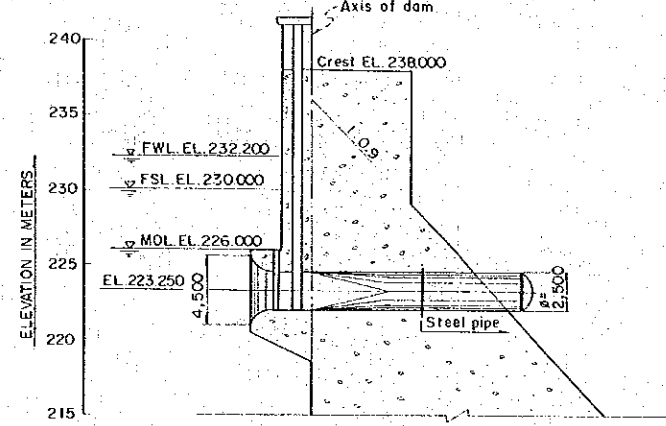
TYPICAL SECTION OF SPILLWAY, SECTION A-A SCALE : B



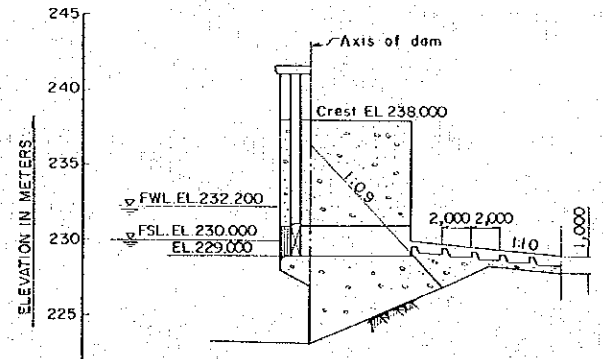
TYPICAL SECTION OF INTAKE AND POWERSTATION, SECTION B-B SCALE : B



FRONT VIEW OF RIGHT BANK IRRIGATION INTAKE AND FISH PASSING FACILITY SCALE : C



TYPICAL SECTION OF RIGHT BANK IRRIGATION INTAKE, SECTION C-C SCALE : C



TYPICAL SECTION OF FISH PASSING FACILITY, SECTION D-D SCALE : C

NOTE: For the left bank irrigation intake, see FIG-12.1

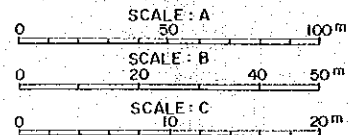
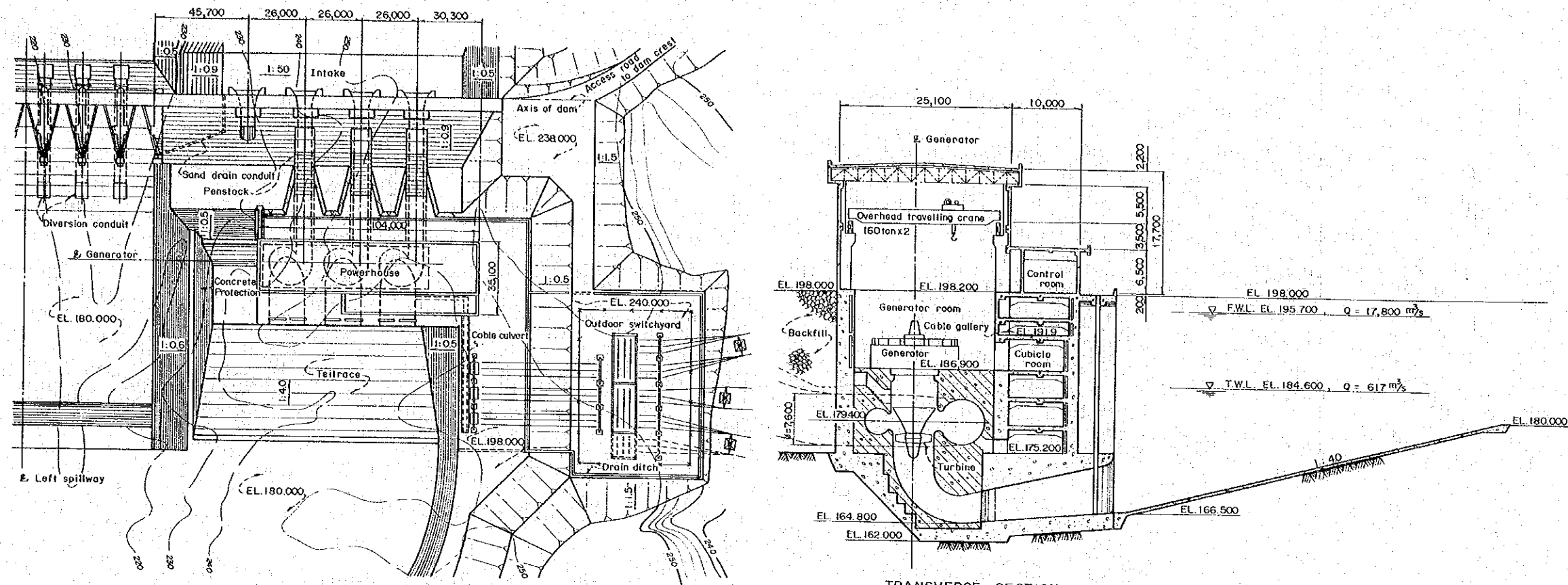
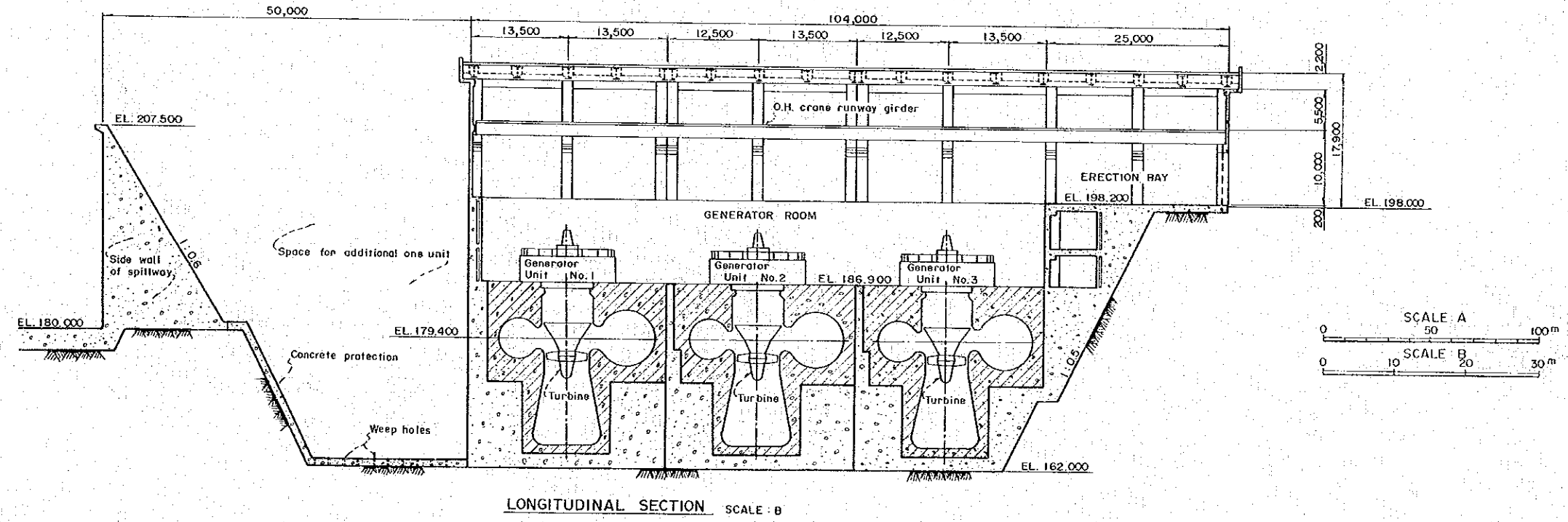


図-6.3 洪水吐・発電水路断面図 (最適計画案: フィルダム、B地点、常時満水位230、設備容量225MW)



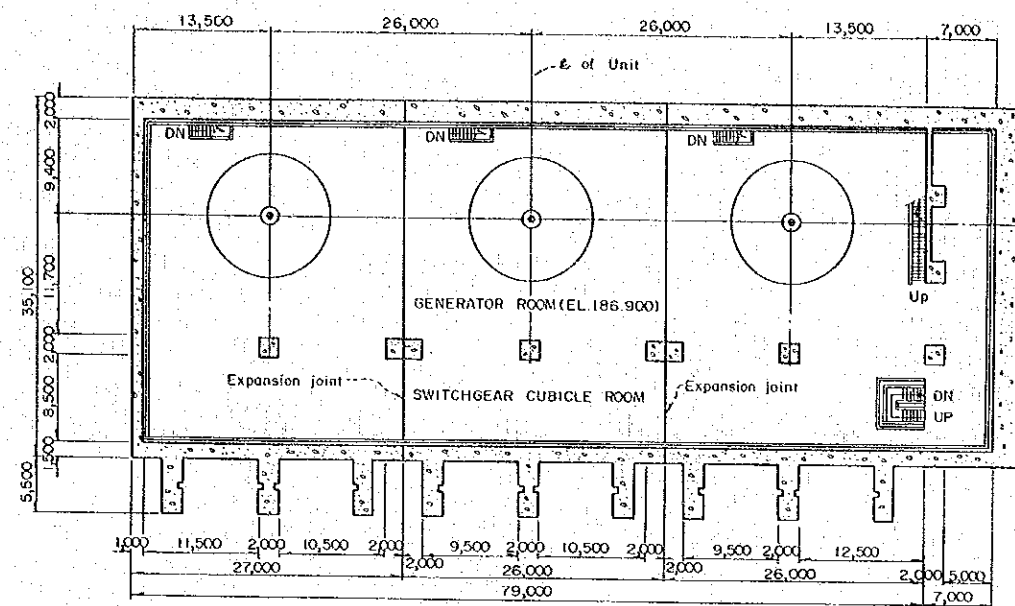
PLAN OF POWERHOUSE AND SWITCHYARD SCALE : A

TRANSVERSE SECTION SCALE : B

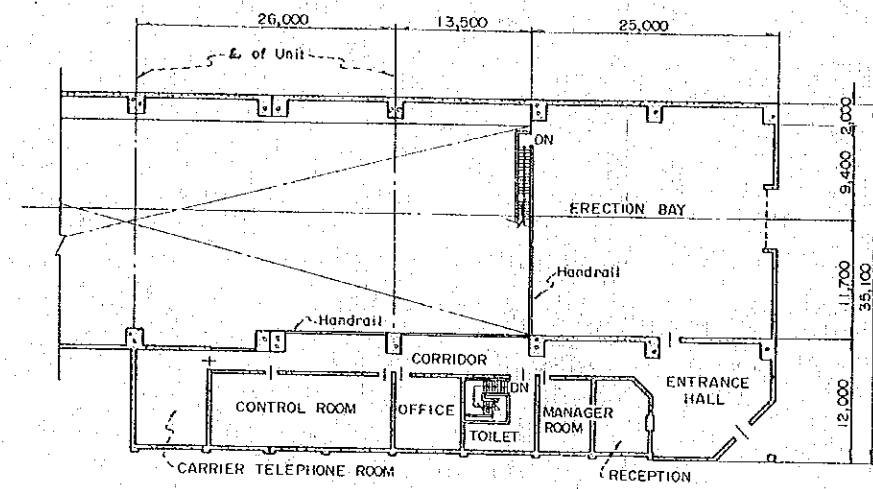


LONGITUDINAL SECTION SCALE : B

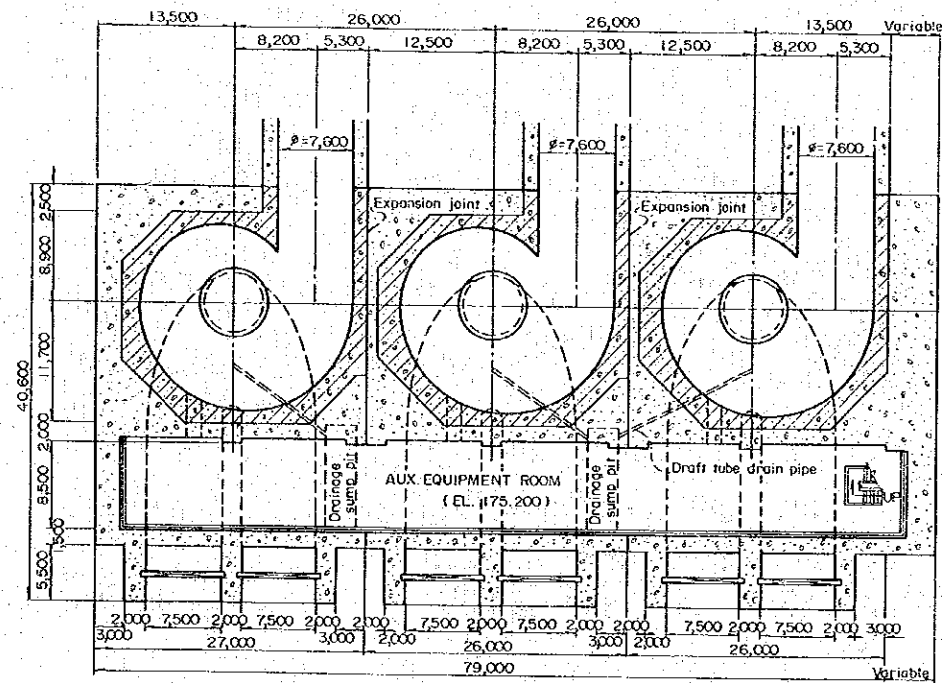
図-6.4 発電所断面図 (最適計画案: フィルダム、B地点、常時満水位230、設備容量225MW)



PLAN AT EL. 186.900



GROUND FLOOR (EL. 198.200)



PLAN AT EL. 179.400

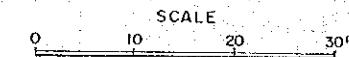


図-6.5 発電所平面図 (最適計画案: フィルダム、B地点、常時満水位230、設備容量225MW)

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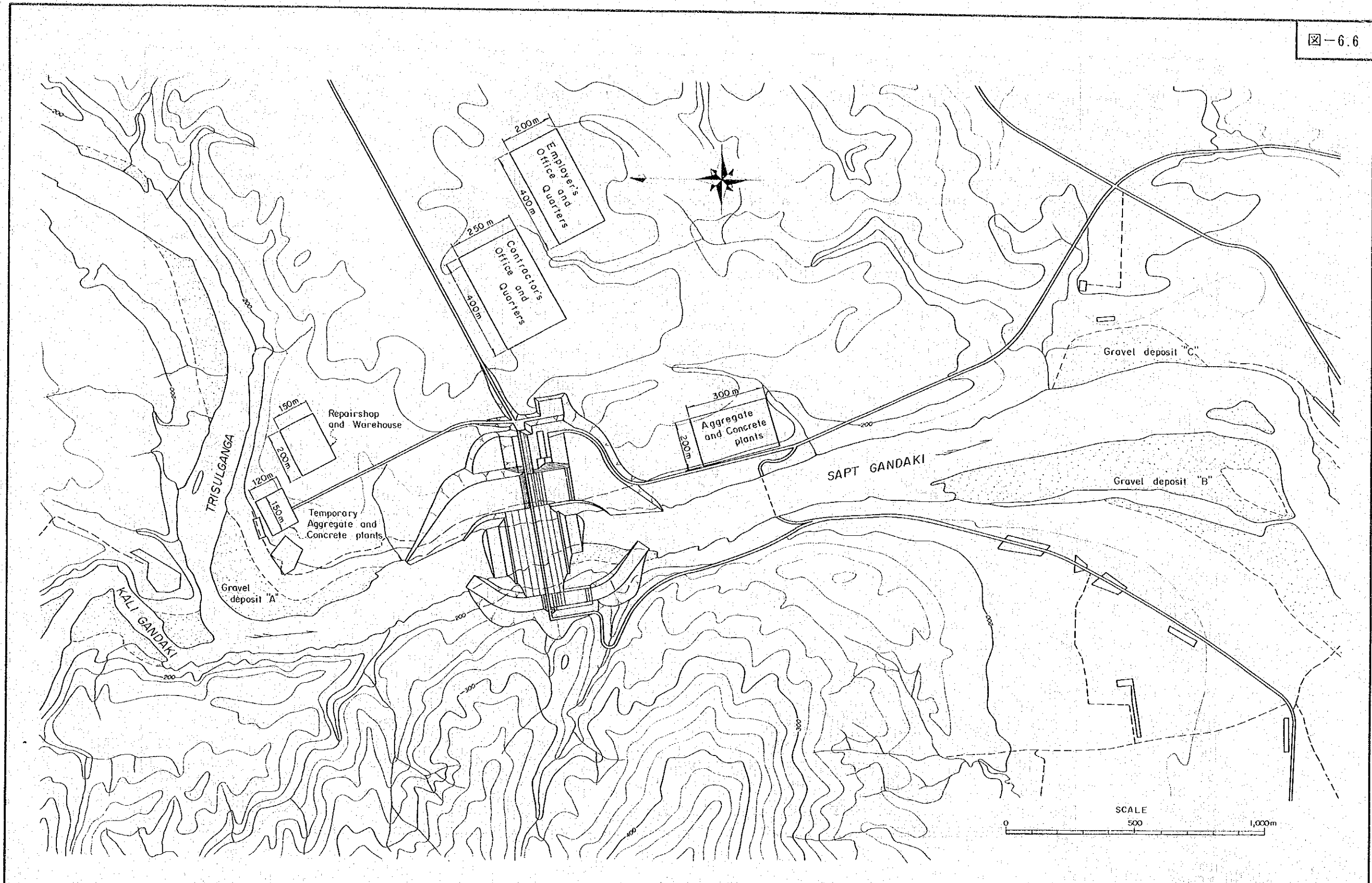


図-6.6 工事仮設備配置図

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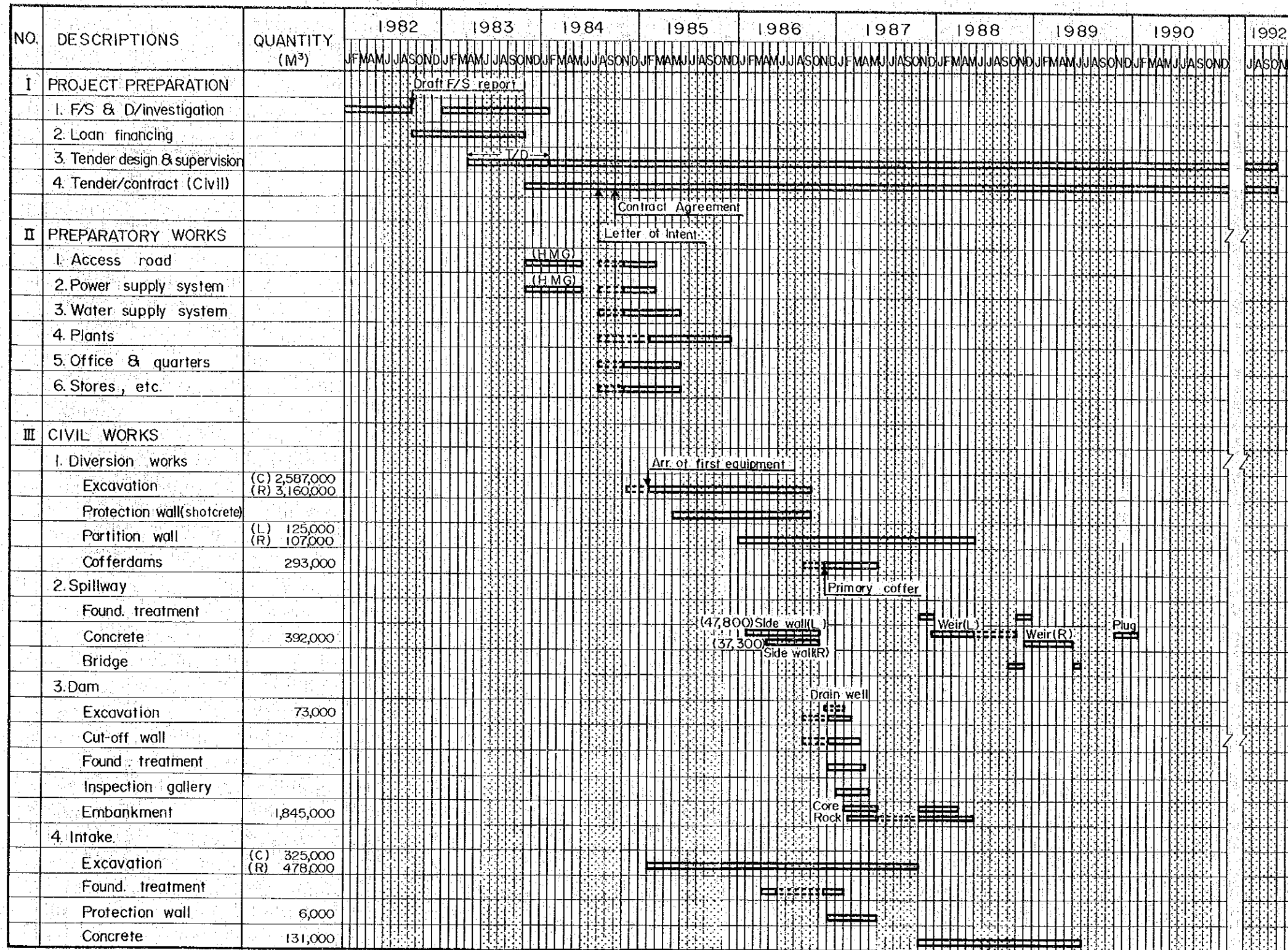
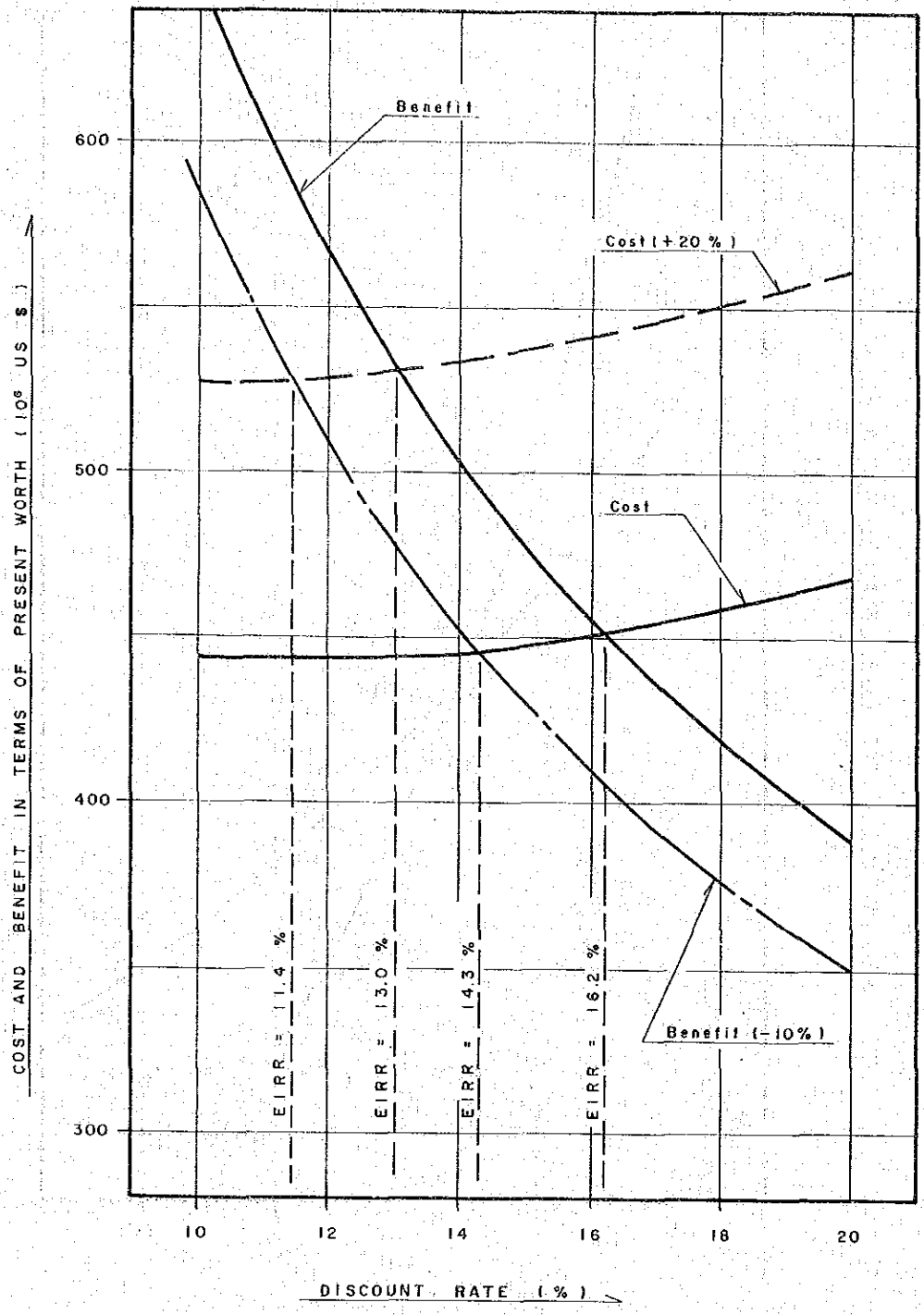


図-7.1 サプトガンダキ工事工程表(1)



☒-9.1 經濟的内部收益率