

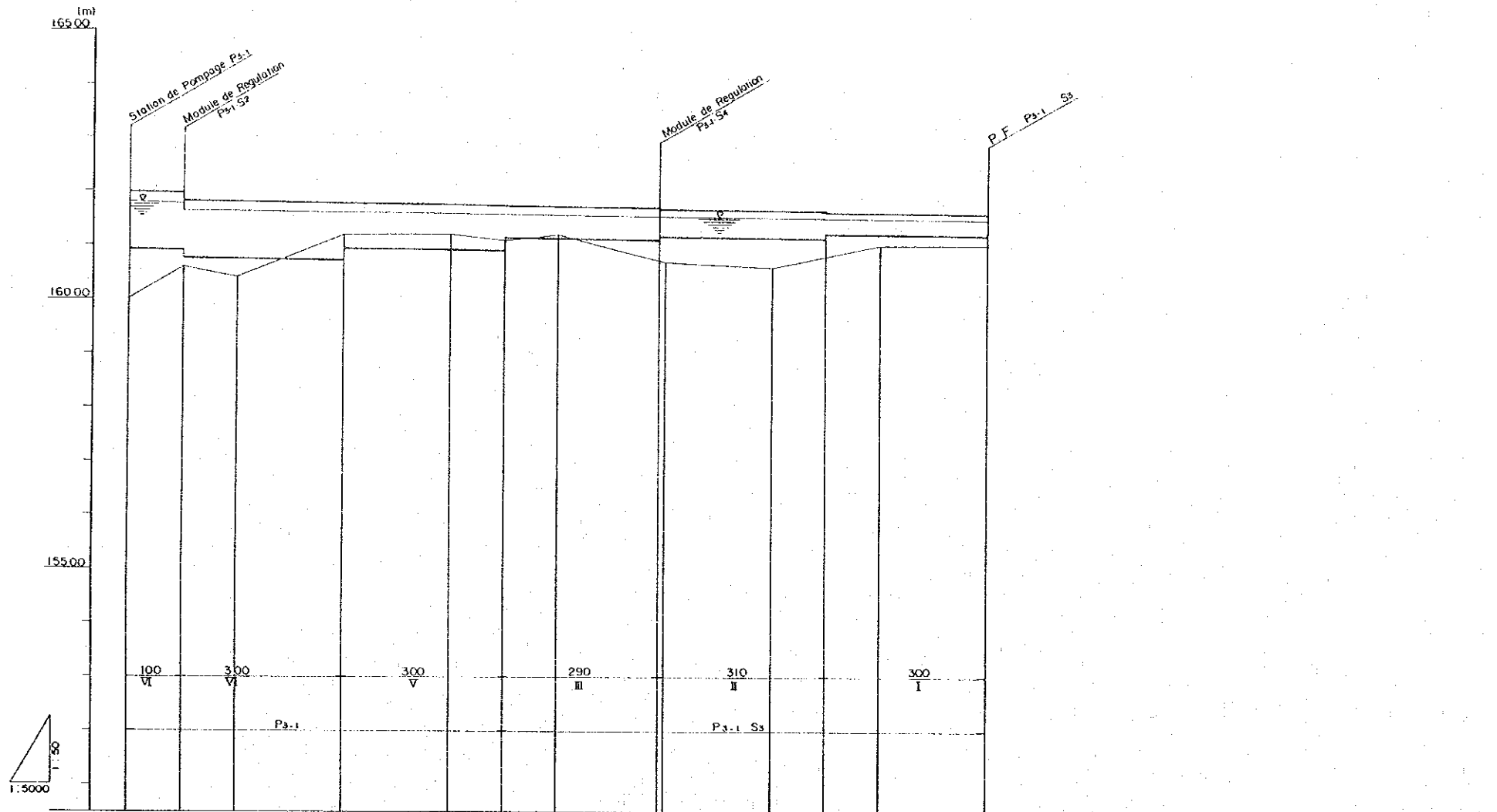
NUMERO DE PONT	DISTANCE PARTIELLE	DISTANCE DOMILEE	COTE DU TERRAIN NATUREL	COTE DU RADIER	COTE DU PLAN D'EAU	COTE DE LA CRETTE	HAUTEUR DE DEBLAI	LARGEUR DE FOND	PENTE
B.P.	0	0	160.7	161.33	162.21	162.38		1.68	
1	200	200	160.3	161.31	162.19	162.36		2.06	
2	200	400	161.3	161.29	162.17	162.34	0.01	1.04	
3	200	600	161.5	161.27	162.15	162.32	0.23	0.82	
4	200	800	161.5	161.25	162.13	162.30	0.25	0.80	
5	200	1000	161.3	161.44	162.11	162.29	0.06	0.99	
6	200	1200	161.4	161.42	162.09	162.27	0.87	0.87	
7	200	1400	160.9	161.40	162.07	162.25	1.35	1.35	
8	200	1600	160.9	161.53	162.05	162.23	1.35	1.35	
9	200	1800	161.0	161.51	162.03	162.21	1.21	1.21	
10	200	2000	161.0	161.49	162.01	162.19	1.19	1.19	
11	200	2200	161.3	161.62	161.99	162.12	0.82	0.82	
12	200	2400	161.2	161.60	161.97	162.10	0.89	0.89	
13	200	2600	161.2	161.67	161.95	162.07	0.87	0.87	
		2720	161.1	160.72	161.00	161.12	0.02	0.02	

REPUBLIQUE DU NIGER

**PROJET
D'AMENAGEMENT HYDRO-AGRICOLE
DE LA CUVETTE DE OUNA-KOUANZA**

PROFILS EN LONG DES CANAUX
P₂, P₂S₂ (1)

DATE	JUIN 1989	PLAN N°	40
AGENCE JAPONAISE DE COOPERATION INTERNATIONALE			



NUMERO DE POINT	DISTANCE PARTIELLE	DISTANCE (MILLIMETRES)	COTE DU TERRAIN NATUREL	COTE DU RADER	COTE DU PLAN D'EAU	COTE DE LA CRETTE	HAUTEUR DE DERLAI	LARGEUR DE FOND	PENTE
BP No 0	0	0	160.5	160.92	161.80	161.97		1.47	1/10000
	200	100	160.6	160.91 160.74	161.79 161.62	161.95 161.79		1.36 1.19	
1	200	200	160.4	160.73	161.61	161.78	1.38		
2	200	400	161.2	160.71 160.92	161.59	161.76 161.77	0.55 0.28		
3	200	600	161.2	160.90	161.57	161.75	0.30		
4	200	700	161.2	160.89 161.12	161.55	161.74 161.72	0.31		
5	200	800	161.2	161.11	161.55	161.71	0.09		
	200	990 1000	160.7 160.7	161.09 161.16	161.53 161.53	161.69 161.66	0.99 0.96 0.96		
6	200	1200	160.6	161.14	161.51	161.64	1.04		
7	200	1300	160.8	161.13 161.22	161.50	161.63 161.62	0.83 0.82		
8	200	1400	161.0	161.21	161.49	161.61	0.61		
	200	1600	161.0	161.19	161.47	161.59	0.59		

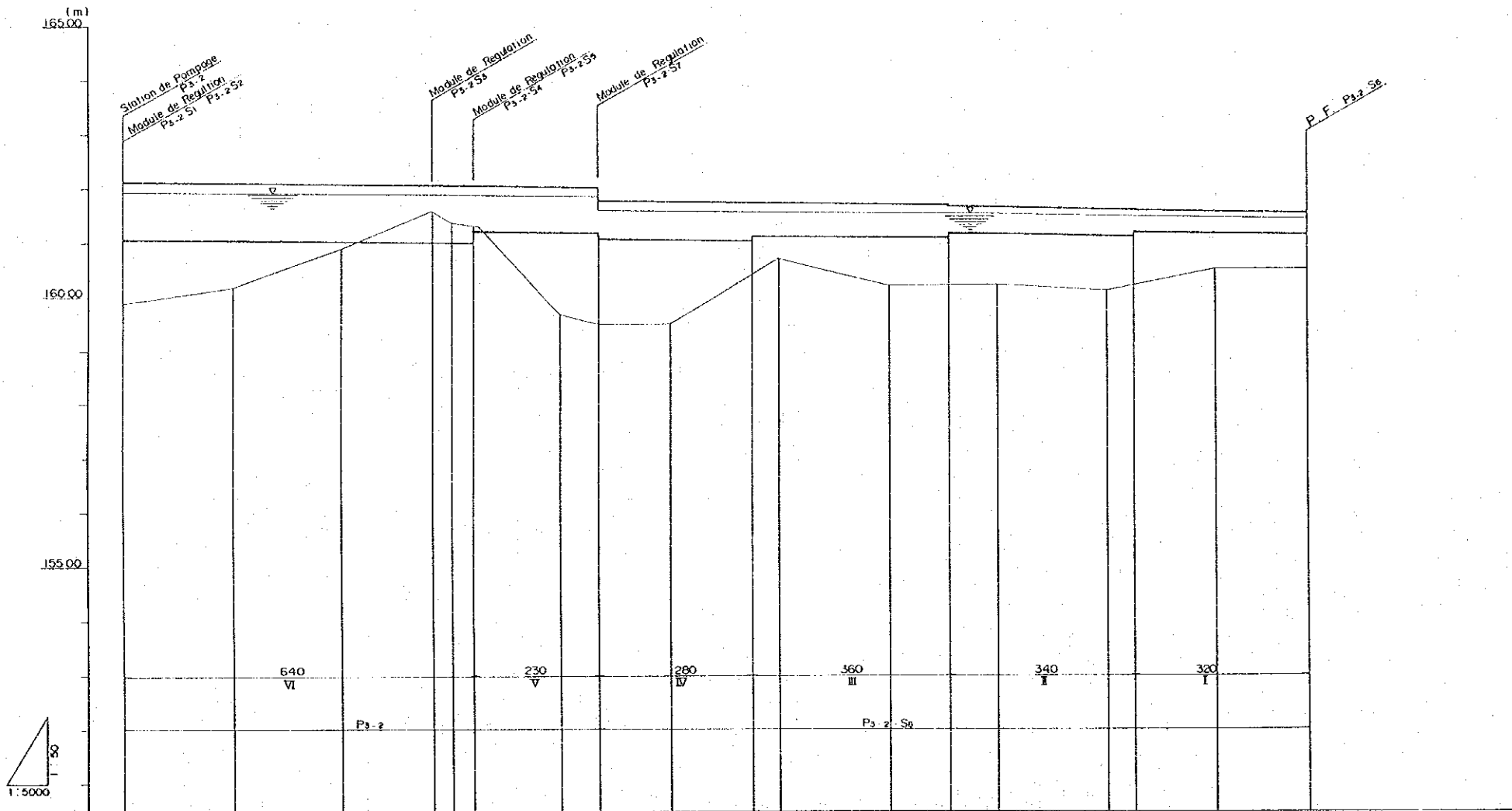
REPUBLIQUE DU NIGER

**PROJET
D'AMENAGEMENT HYDRO-AGRICOLE
DE LA CUVETTE DE OUNA-KOUANZA**

**PROFILS EN LONG DES CANAUX
P3-1, P3-1S3**

DATE	JUN 1989	PLAN N°	41
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AGENCE JAPONAISE DE COOPERATION INTERNATIONALE



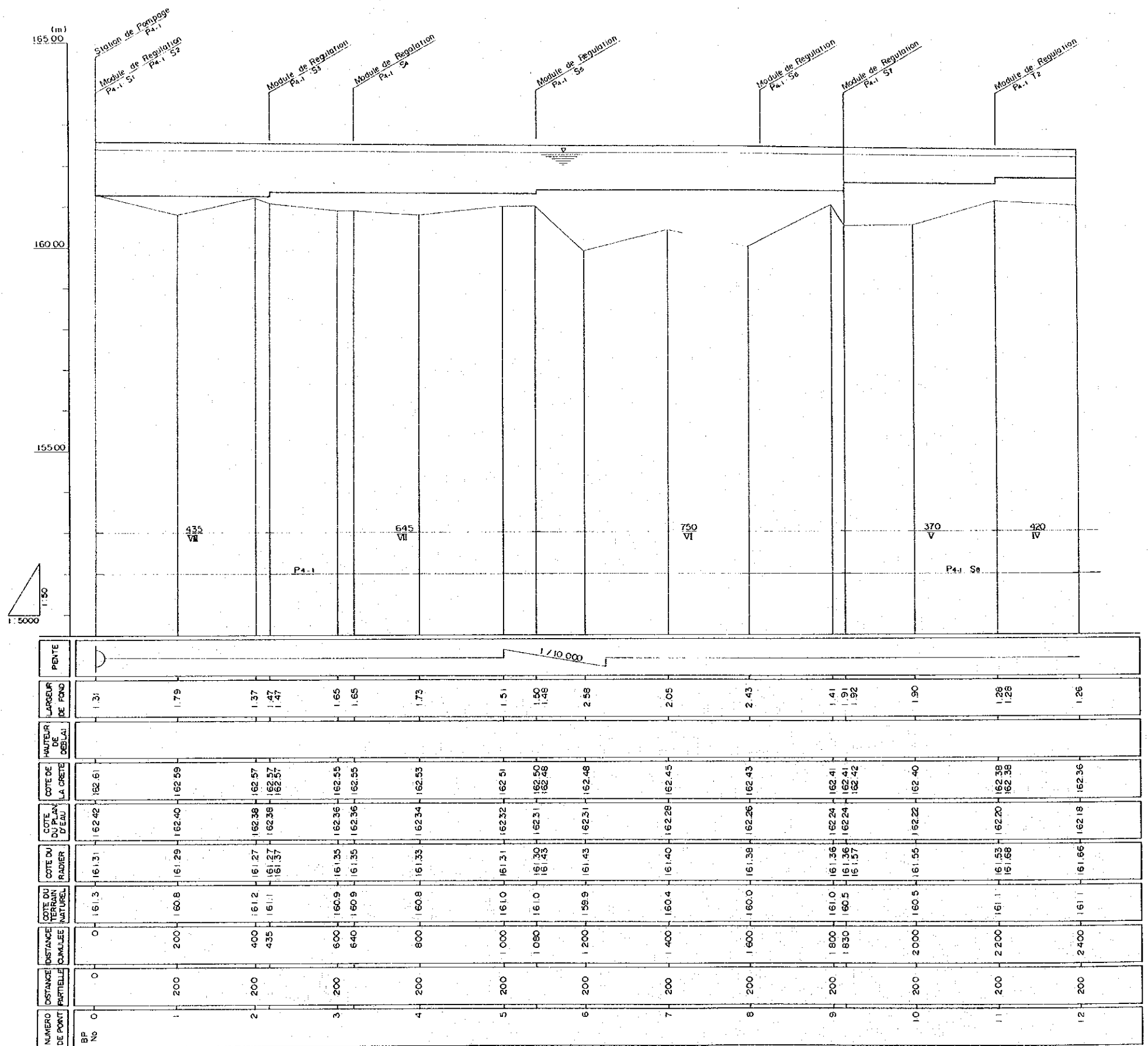
NUMERO DE PONT	DISTANCE PARTIELLE	DISTANCE CUMULEE	COTE DU TERRAIN NATUREL	COTE DU RADIEN	COTE DU PLAN D'EAU	COTE DE LA CRESTE	HAUTEUR DE DEBIL	LARGEUR DE FOND	PENTE
0	0	0	159.9	161.09	161.97	162.14		2.24	1/10000
1	200	200	160.2	161.07	161.95	162.12		1.92	
2	200	400	160.9	161.05	161.93	162.10		1.20	
3	200	600	161.6	161.02	161.90	162.07	0.58	0.47	
			161.4	161.02	161.90	162.07	0.38	0.67	
			161.3	161.02	161.90	162.07	0.28	0.77	
4	200	800	161.2	161.02	161.90	162.07	0.07	0.78	
			159.7	161.2	161.88	162.06	2.36		
5	200	1000	159.5	161.04	161.56	161.74		2.24	
			159.5	161.04	161.56	161.74			
6	200	1200	160.4	161.02	161.54	161.72		1.32	
			160.4	161.10	161.54	161.70		1.00	
7	200	1400	160.2	161.08	161.52	161.68		1.48	
			160.2	161.07	161.51	161.67		1.47	
8	200	1600	160.2	161.13	161.50	161.63		1.43	
			160.2	161.13	161.50	161.63			
9	200	1800	160.1	161.11	161.48	161.61		1.50	
			160.2	161.19	161.47	161.59		1.40	
10	200	2000	160.5	161.18	161.46	161.58		1.39	
			160.5	161.18	161.46	161.58		1.08	
11	200	2170	160.5	161.16	161.44	161.56		1.06	

REPUBLIQUE DU NIGER

**PROJET
D'AMENAGEMENT HYDRO-AGRICOLE
DE LA CUVETTE DE OUNA-KOUANZA**

PROFILS EN LONG DES CANAUX
P3-2, P3-2S6

DATE	JUIN 1989	PLAN N°	42
AGENCE JAPONAISE DE COOPERATION INTERNATIONALE			



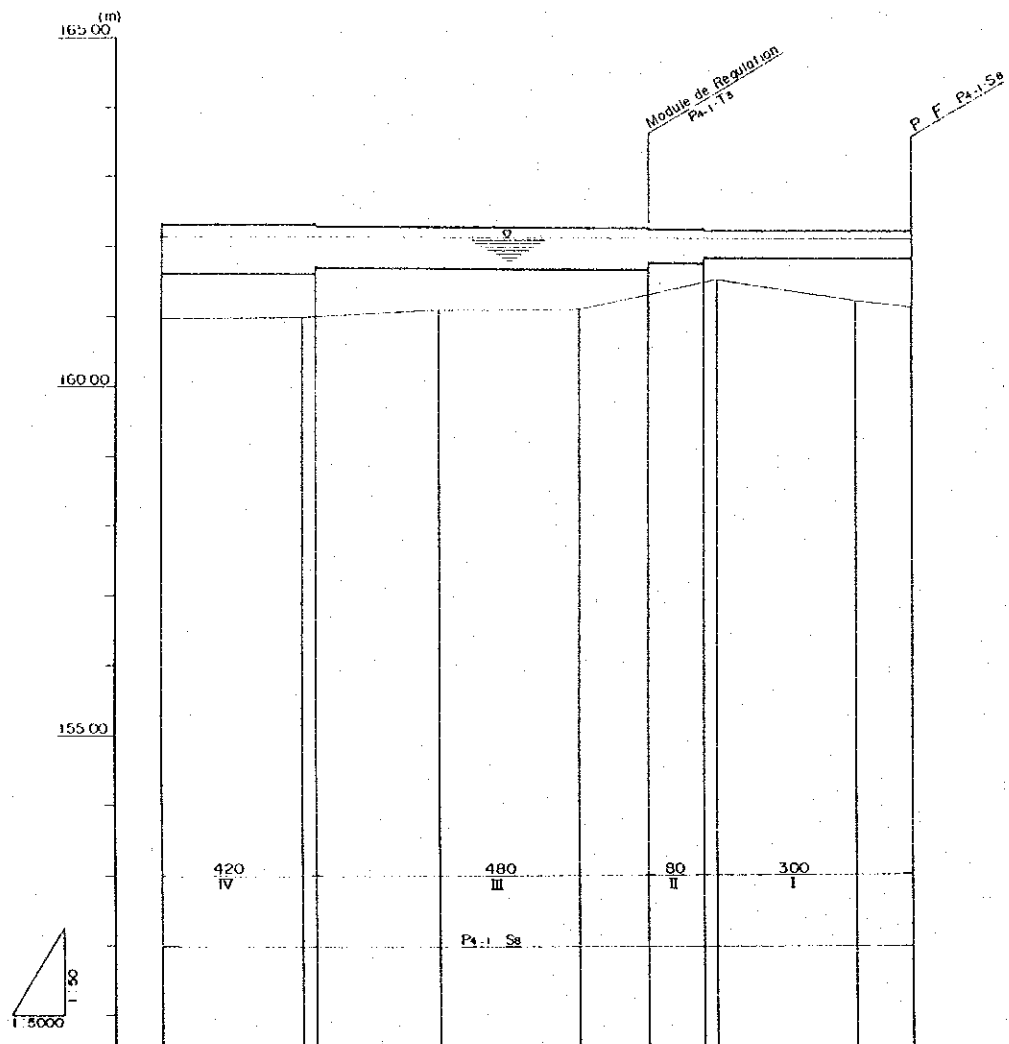
NUMERO DE POINT	DISTANCE PARTIELLE	DISTANCE CUMULEE	COTE DU TERRAIN NATUREL	COTE DU RABRIER	COTE DU PLAN D'EAU	COTE DE LA CRETE	HAUTEUR DE DEBLAI	LARGEUR DE FOND	PENTE
BP No 0	0	0	161.3	161.31	162.42	162.61		1.31	1 / 10 000
1	200	200	160.8	161.29	162.40	162.59		1.79	
2	200	400	161.2	161.27	162.38	162.57		1.37	
		435	161.1	161.27	162.38	162.57		1.47	
			161.37	161.37	162.38	162.57		1.47	
3	200	600	160.9	161.35	162.36	162.55		1.65	
		640	160.9	161.35	162.36	162.55		1.65	
4	200	800	160.8	161.33	162.34	162.53		1.73	
5	200	1000	161.0	161.31	162.32	162.51		1.51	
		1060	161.0	161.30	162.31	162.50		1.50	
			161.43	161.43	162.31	162.48		1.48	
6	200	1200	159.9	161.43	162.31	162.48		2.58	
7	200	1400	160.4	161.40	162.28	162.45		2.05	
8	200	1600	160.0	161.38	162.26	162.43		2.43	
9	200	1800	161.0	161.36	162.24	162.41		1.41	
		1830	160.5	161.36	162.24	162.41		1.91	
			161.37	161.37	162.24	162.42		1.92	
10	200	2000	160.5	161.55	162.22	162.40		1.90	
11	200	2200	161.1	161.53	162.20	162.38		1.28	
			161.66	161.66	162.20	162.38		1.28	
12	200	2400	161.1	161.66	162.18	162.36		1.26	

REPUBLIQUE DU NIGER

**PROJET
D'AMENAGEMENT HYDRO-AGRICOLE
DE LA CUVETTE DE OUNA-KOUANZA**

PROFILS EN LONG DES CANAUX
P4-1, P4-1S8 (1)

DATE	JUIN 1989	PLAN N°	43
AGENCE JAPONAISE DE COOPERATION INTERNATIONALE			



NUMERO DE POINT	DISTANCE PARTIELLE	DISTANCE CUMULEE	COTE DU COTE DE LA PARTIE NATURELLE	COTE DU RADER	COTE DE L'EAU	COTE DE LA CRETE	HAUTEUR DE DEBIL	LARGEUR DE FOND	PENTE
BP N° 12	200	2400	161.1	161.66	162.18	162.36		1.26	1/10,000
13	200	2600	161.0	161.64	162.16	162.34	1.34		
		2620	161.0	161.64	162.16	162.32	1.32		
14	200	2800	161.1	161.70	162.14	162.30	1.20		
15	200	3000	161.1	161.68	162.12	162.28	1.18		
		3100	161.3	161.67	162.11	162.27	0.97		
		3180	161.5	161.73	162.0	162.23	0.73		
16	200	3200	161.5	161.82	162.0	162.22	0.72		
		3400	161.2	161.80	162.08	162.20	1.00		
17	200	3400	161.1	161.79	162.07	162.19	1.09		

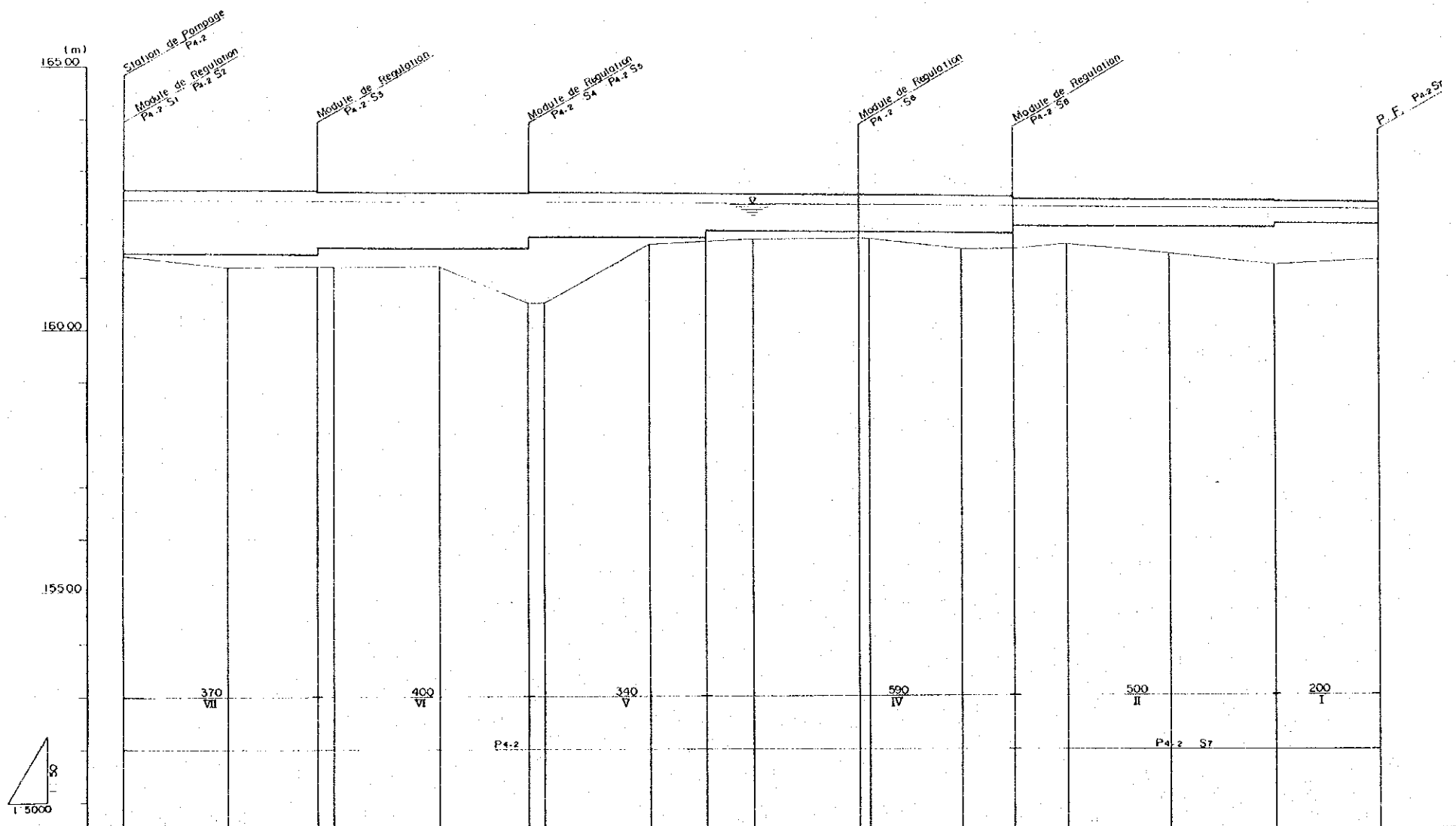
REPUBLIQUE DU NIGER

**PROJET
D'AMENAGEMENT HYDRO-AGRICOLE
DE LA CUVETTE DE OUNA-KOUANZA**

PROFILS EN LONG DES CANAUX
P4-1, S8 (2)

DATE	JUIN 1989	PLAN N°	44
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AGENCE JAPONAISE DE COOPERATION INTERNATIONALE



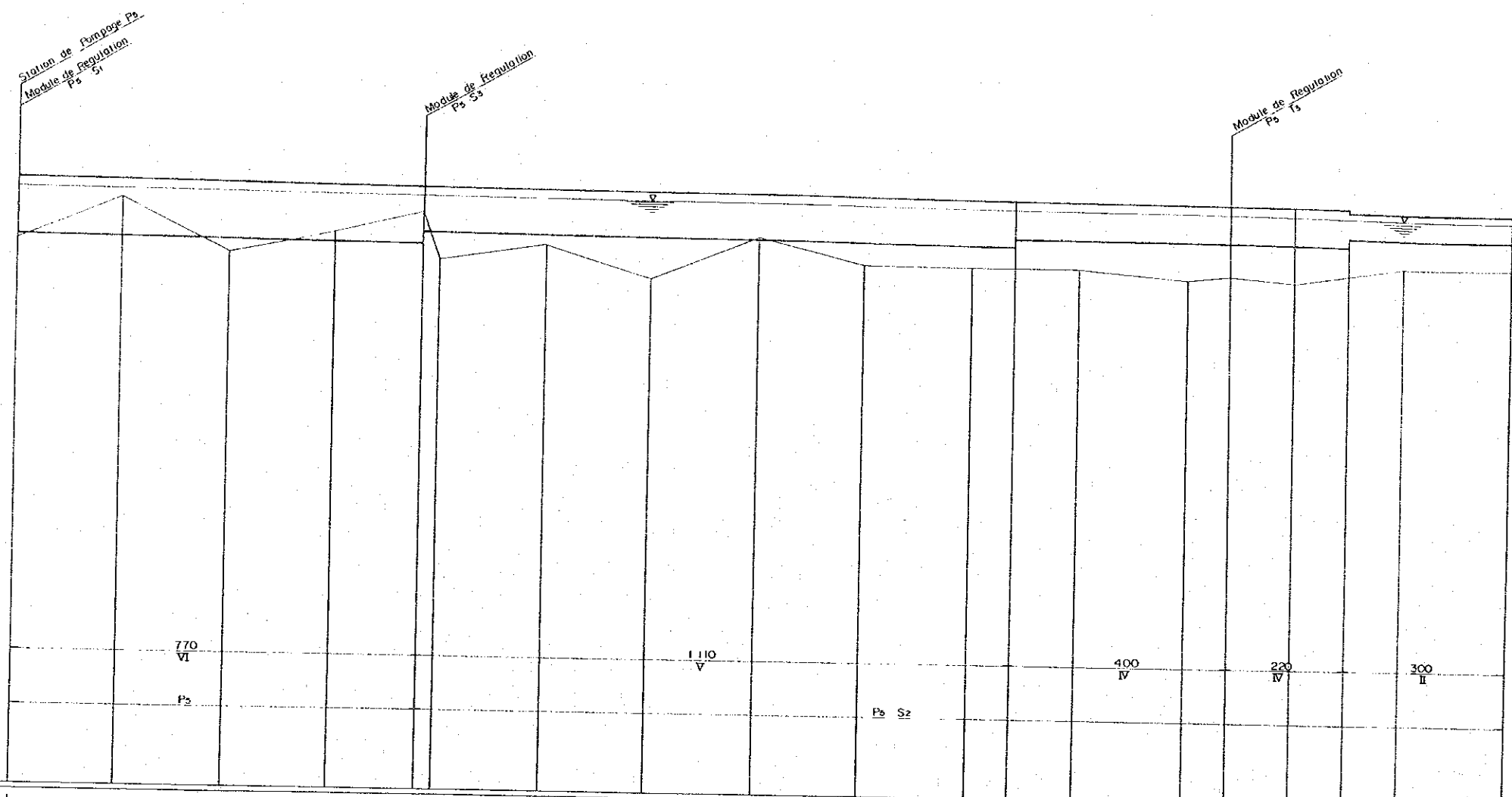
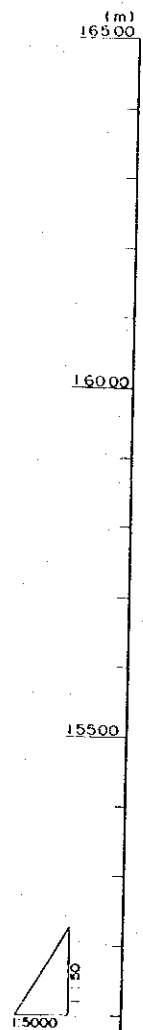
NUMERO DE POINT	DISTANCE PARTIELLE	DISTANCE CUMULEE	COTE DU COURS D'EAU NATUREL	COTE DU COURS D'EAU RADIÉ	COTE DE L'AN D'EAU	COTE DE LA CRÈTE	HAUTEUR DE DEBORD.	LARGEUR DE FOND	PENTE
BP 0	0	0	161.4	161.47	162.48	162.67		1.27	1/10,000
1	200	200	161.2	161.45	162.46	162.65		1.45	
2	200	370	161.2	161.43	162.44	162.63	0.43	1.4	
3	200	400	161.2	161.36	162.44	162.61	0.41		
4	200	600	161.2	161.54	162.42	162.59	1.39		
5	200	770	160.5	161.52	162.40	162.57	2.07	2.08	
6	200	800	160.3	161.75	162.40	162.58	2.08		
7	200	1000	161.6	161.71	162.38	162.56	0.96		
8	200	1100	161.7	161.84	162.36	162.54	0.84		
9	200	1200	161.7	161.82	162.34	162.52	0.82	0.82	
10	200	1400	161.7	161.82	162.34	162.52	0.82	1.04	
11	200	1600	161.5	161.84	162.36	162.54	0.84	0.82	
12	200	1700	161.5	161.73	162.31	162.49	0.83	0.83	
13	200	1800	161.6	161.93	162.30	162.43	0.83	1.01	
14	200	2000	161.4	161.91	162.28	162.41	1.19	1.19	
15	200	2200	161.2	161.89	162.26	162.39	1.18	1.18	
16	200	2400	161.3	161.96	162.24	162.36	1.06	1.06	

REPUBLIQUE DU NIGER

**PROJET
D'AMENAGEMENT HYDRO-AGRICOLE
DE LA CUVETTE DE OUNA-KOUANZA**

**PROFILS EN LONG DES CANAUX
P4-2, P4-2S7**

DATE	JUIN 1989	PLAN N°	45
AGENCE JAPONAISE DE COOPERATION INTERNATIONALE			



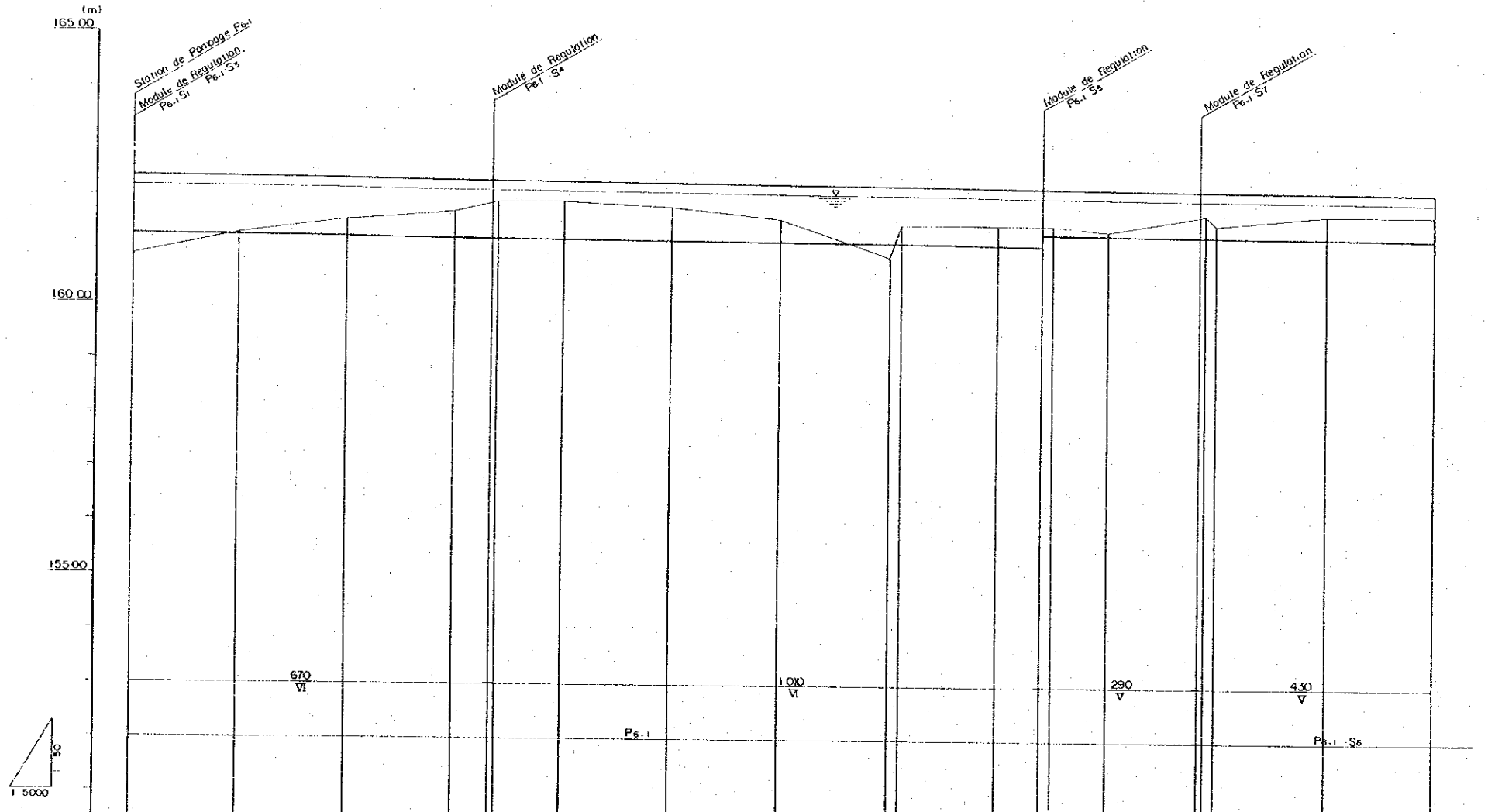
NUMERO DE POINT DE POINT	DISTANCE PARTIELLE	DISTANCE QUINZAIRES	COTE DU TERRAIN NATUREL	COTE DU RADIUS	COTE DU PLAN D'EAU	COTE DE LA CRETTE	HAUTEUR DE LA CRETTE	LARGEUR DE FOND	PENTE
BP 0	0	0	160.8	160.89	161.77	161.94		1.14	
1	200	200	161.8	160.87	161.75	161.92	0.93	0.12	
2	200	400	160.6	160.85	161.73	161.90		1.30	
3	200	600	161.0	160.83	161.71	161.88	0.17	0.88	
4	200	770	161.4	160.81	161.69	161.86	0.59	0.46	
		800	160.5	161.02	161.69	161.87	0.38	0.47	
				161.02	161.69	161.87		1.37	
5	200	1000	160.8	161.00	161.67	161.85		1.05	
6	200	1200	160.2	160.98	161.65	161.83		1.63	
7	200	1400	161.0	160.96	161.63	161.81	0.04	0.81	
8	200	1600	160.5	160.94	161.61	161.79		1.29	
9	200	1800	160.5	160.92	161.59	161.77		1.27	
		1880	160.5	160.91	161.58	161.76		1.26	
10	200	2000	160.5	161.05	161.57	161.75		1.25	
11	200	2200	160.3	161.03	161.55	161.73		1.43	
		2280	160.4	161.02	161.54	161.72		1.32	
12	200	2400	160.3	161.01	161.53	161.71		1.41	
		2500	160.45	161.00	161.52	161.70		1.25	
		2600	160.6	161.14	161.51	161.64		1.04	
14	200	2800	160.6	161.12	161.49	161.62		1.02	

REPUBLIQUE DU NIGER

**PROJET
D'AMENAGEMENT HYDRO-AGRICOLE
DE LA CUVETTE DE OUNA-KOUANZA**

PROFILS EN LONG DES CANAUX PsS2

DATE	JUIN 1989	PLAN N°	46
AGENCE JAPONAISE DE COOPERATION INTERNATIONALE			



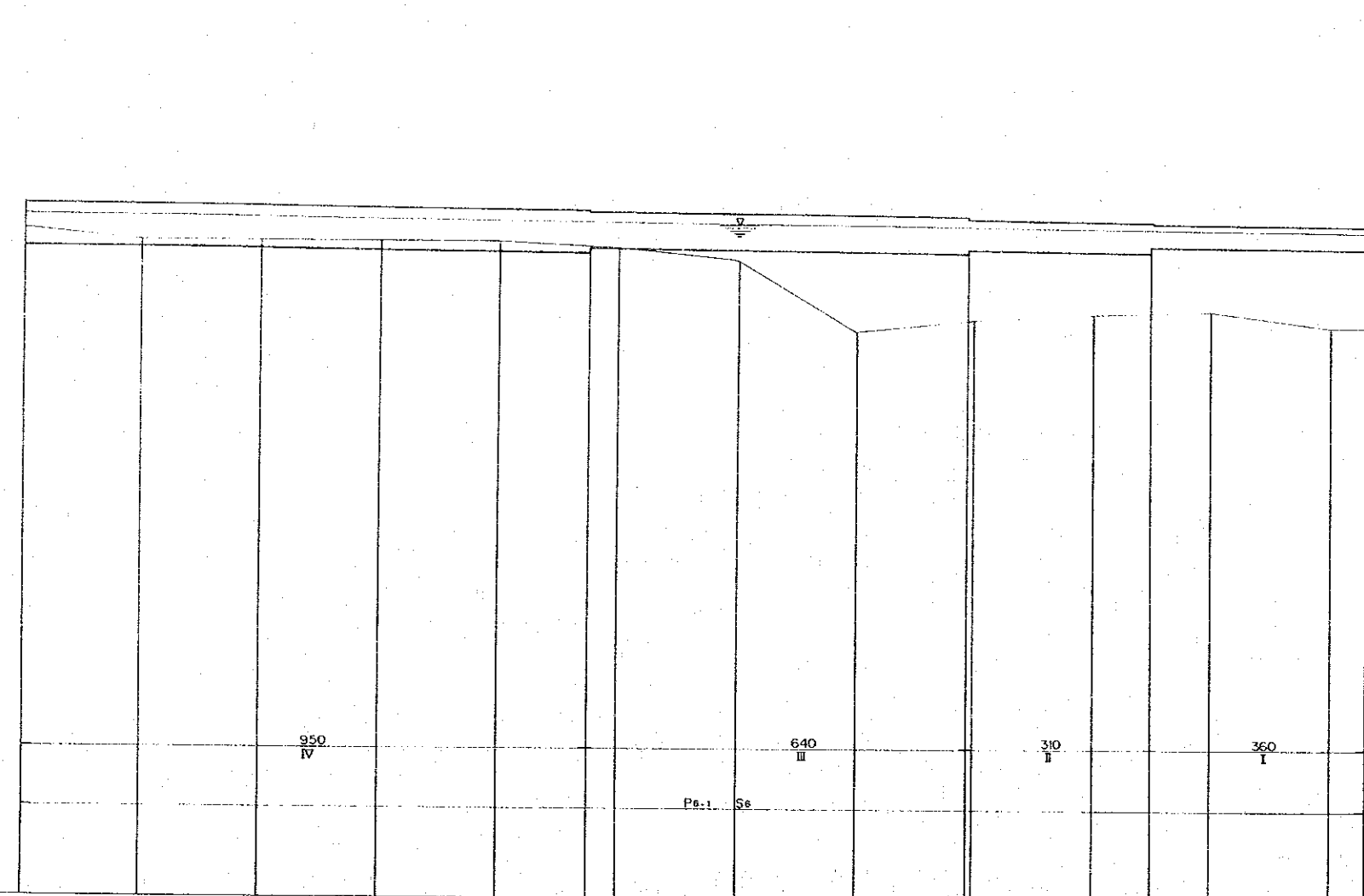
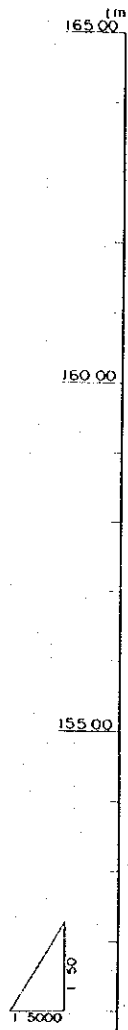
NUMERO DE POINT	DISTANCE PARTIELLE	DISTANCE CUMULEE	COTE DU TERRAIN NATUREL	COTE DU RADIEN	COTE DU PLAN D'EAU	COTE DE LA CRETTE	HAUTEUR DE DEBLAI	LAISSEUR DE FOND	PENTE
BP No 0	0	0	160.9	161.30	162.18	162.35		1.45	1/10,000
1	200	200	161.3	161.28	162.16	162.33	0.02	1.03	
2	200	400	161.6	161.26	162.14	162.31	0.34	0.71	
3	200	600	161.7	161.24	162.12	162.29	0.46	0.59	
		670	161.9	161.22	162.10	162.27	0.68	0.37	
		680	161.9	161.22	162.10	162.27	0.68	0.37	
4	200	800	161.9	161.20	162.08	162.25	0.20	0.35	
5	200	1000	161.8	161.18	162.06	162.23	0.62	0.43	
6	200	1200	161.6	161.16	162.04	162.21	0.44	0.61	
7	200	1400	160.9	161.14	162.02	162.19	1.29	0.69	
		1420	161.5	161.14	162.02	162.19	0.36	0.67	
8	200	1600	161.5	161.12	162.00	162.17	0.38	0.67	
		1680	161.5	161.11	161.99	162.17	0.38	0.67	
		1700	161.5	161.32	161.99	162.17	0.18	0.67	
9	200	1820	161.4	161.31	161.98	162.16	0.09	0.76	
10	200	1970	161.7	161.29	161.96	162.14	0.41	0.44	
		1980	161.7	161.29	161.96	162.14	0.41	0.44	
		2000	161.5	161.29	161.96	162.14	0.21	0.64	
11	200	2200	161.7	161.27	161.94	162.12	0.43	0.42	
12	200	2400	161.7	161.25	161.92	162.10	0.45	0.40	

REPUBLIQUE DU NIGER

**PROJET
D'AMENAGEMENT HYDRO-AGRICOLE
DE LA CUVETTE DE OUNA-KOUANZA**

PROFILS EN LONG DES CANAUX
Pe-1, Pe-1S6 (1)

DATE	JUIN 1989	PLAN N°	47
AGENCE JAPONAISE DE COOPERATION INTERNATIONALE			



NUMERO DE POINT	DISTANCE PARTIELLE	DISTANCE CUMULEE	COTE DU TERRAIN NATUREL	COTE DU RADIUS	COTE DU PLAN D'EAU	COTE DE LA CRETTE	HAUTEUR DE DEBILA	LARGEUR DE FOND	PENTE
BP No 12	200	2400	161.7	161.40	161.92	162.10	0.35	0.40	
13	200	2600	161.5	161.38	161.90	162.08	0.12	0.58	
14	200	2800	161.5	161.36	161.88	162.06	0.14	0.55	
15	200	3000	161.5	161.34	161.86	162.04	0.16	0.54	
16	200	3200	161.5	161.32	161.84	162.02	0.18	0.52	
17	200	3400	161.4	161.30	161.82	162.00	0.10	0.58	
			161.4	161.38	161.98	161.98	0.02	0.58	
18	200	3600	161.2	161.36	161.80	161.96		0.76	
19	200	3800	160.0	161.34	161.78	161.94		1.94	
20	200	4000	160.2	161.32	161.76	161.92		1.69	
			161.35	161.35	161.85	161.85			
21	200	4200	160.3	161.37	161.74	161.87		1.57	
22	200	4400	160.4	161.44	161.72	161.84		1.44	
23	200	4600	160.1	161.42	161.70	161.82		1.72	
			160.1	161.40	161.68	161.80		1.70	

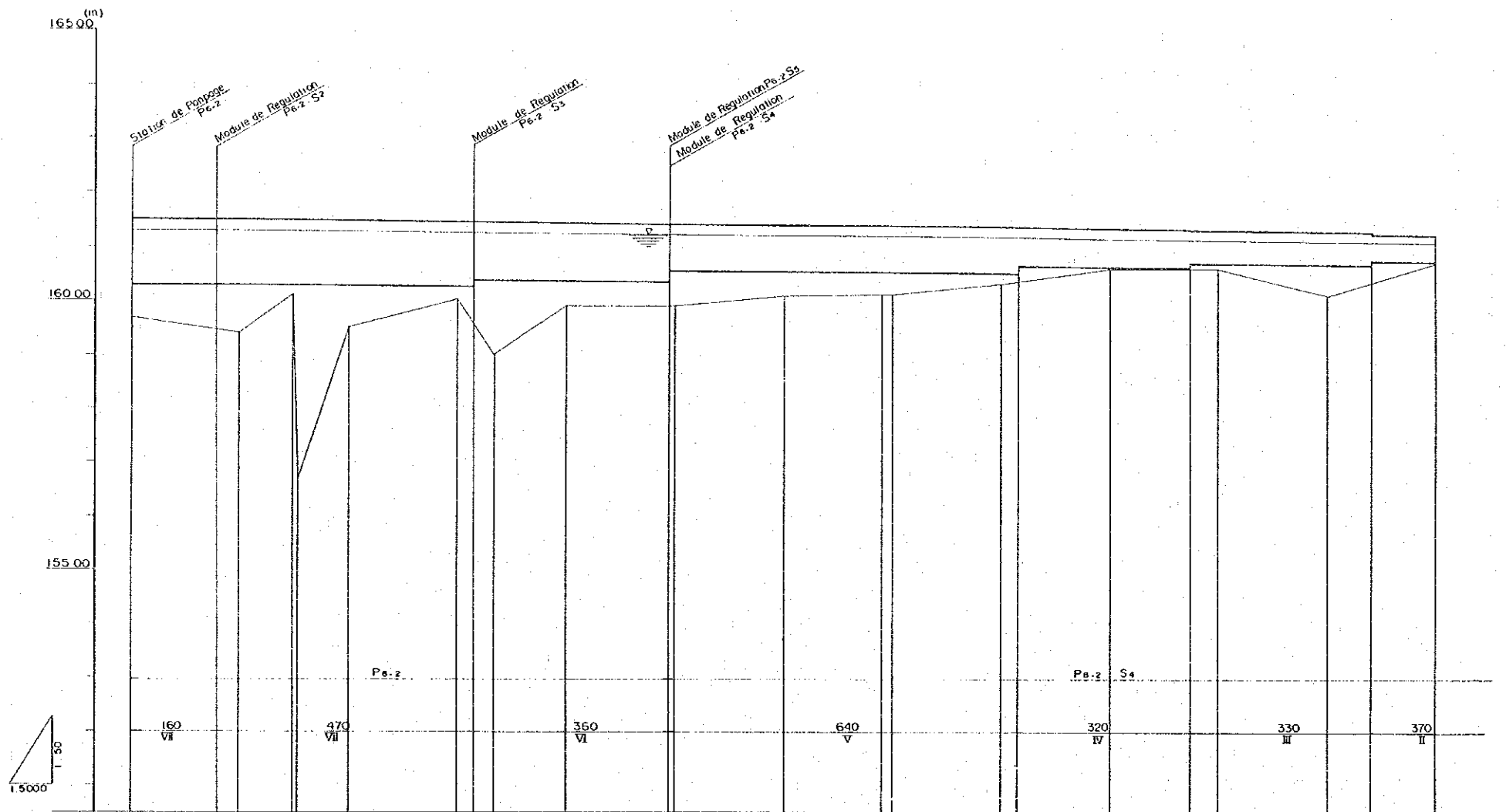
REPUBLIQUE DU NIGER

**PROJET
D'AMENAGEMENT HYDRO-AGRICOLE
DE LA CUVETTE DE OUNA-KOUANZA**

PROFILS EN LONG DES CANAUX
P6-1S6 (2)

DATE	JUIN 1989	PLAN N°	48
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AGENCE JAPONAISE DE COOPERATION INTERNATIONALE



NUMERO DE PONT	DISTANCE PARTIELLE	DISTANCE CUMULEE	COTE DU TERRAIN NATUREL	COTE DU RADIUS	COTE DU CANAL A LA COTE	COTE DE LA CRETTE	HAUTEUR DE DECAL	LARGEUR DE FOND	PENTE
BP No 0	0	0	159.7	160.29	161.30	161.49		1.79	
	200	160	159.46	160.27	161.28	161.47		2.01	
		200	159.4	160.27	161.29	161.47		2.07	
		300	159.7	160.26	161.28	161.46	1.36		
		310	159.6	160.26	161.28	161.46	4.76		
2	200	400	159.5	160.25	161.26	161.45	1.95		
3	200	600	160.0	160.23	161.24	161.43	1.43		
		630	159.57	160.23	161.24	161.43	1.86		
		670	159.0	160.26	161.23	161.41	2.41		
4	200	800	159.9	160.34	161.23	161.39	1.49		
5	200	1000	159.9	160.33	161.20	161.37	1.47		
6	200	1200	160.1	160.51	161.18	161.36	1.26		
7	200	1380	160.1	160.49	161.18	161.34	1.24		
		1400	160.1	160.49	161.18	161.34	1.24		
8	200	1600	160.3	160.47	161.14	161.32	1.02		
		1630	160.35	160.47	161.14	161.32	0.97		
				160.62					
9	200	1800	160.6	160.60	161.12	161.30	0.70		
10	200	1950	160.6	160.59	161.11	161.29	0.69		
		2000	160.6	160.57	161.11	161.27	0.67		
				160.86	161.10	161.26	0.66		
11	200	2200	160.1	160.64	161.08	161.24	1.14		
		2280	160.34	160.63	161.07	161.23	0.89		
				160.70	161.07	161.20	0.86		
12	200	2400	160.7	160.69	161.06	161.19	0.49		

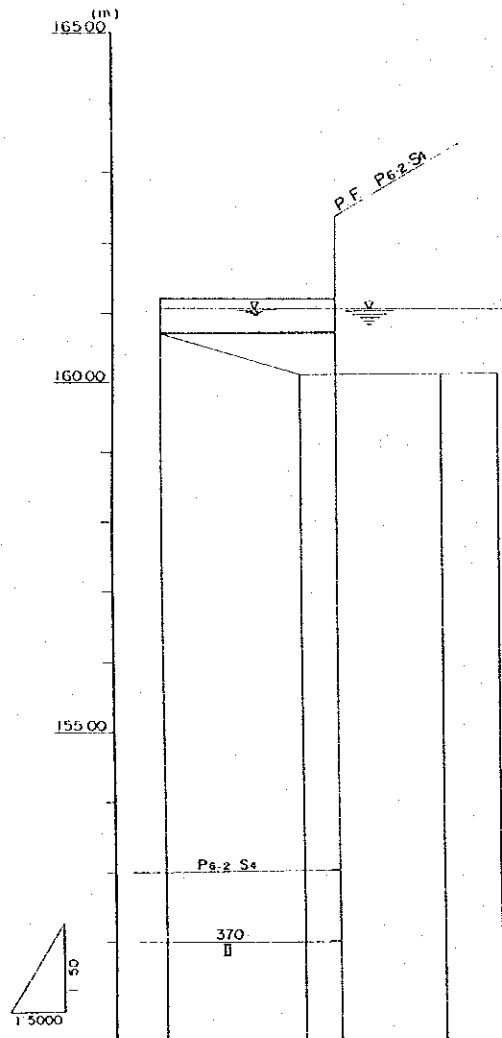
REPUBLIQUE DU NIGER

**PROJET
D'AMENAGEMENT HYDRO-AGRICOLE
DE LA CUVETTE DE OUNA-KOUANZA**

PROFILS EN LONG DES CANAUX
P6-2, P6-2S4 (1)

DATE	JUIN 1989	PLAN N°	49
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AGENCE JAPONAISE DE COOPERATION INTERNATIONALE



NUMERO DE POINT	DISTANCE PARTIELLE	DISTANCE CUMULEE	COTE DU COTE DU NATUREL	COTE DU RADIER	COTE DU PLAN D'EAU	COTE DE LA CRETTE	HAUTEUR DE DEBUT	LARGEUR DE FOND	PENTE
BP Nc 12	200	2 400	160.7	160.69	161.06	161.19		0.49	
13	200	2 600	160.1	160.67	161.04	161.17	0.94		
	50	2 650	160.1	160.66	161.03	161.16	0.93		
14	200	2 800	160.1	161.02					
		2 880	160.1	161.01					

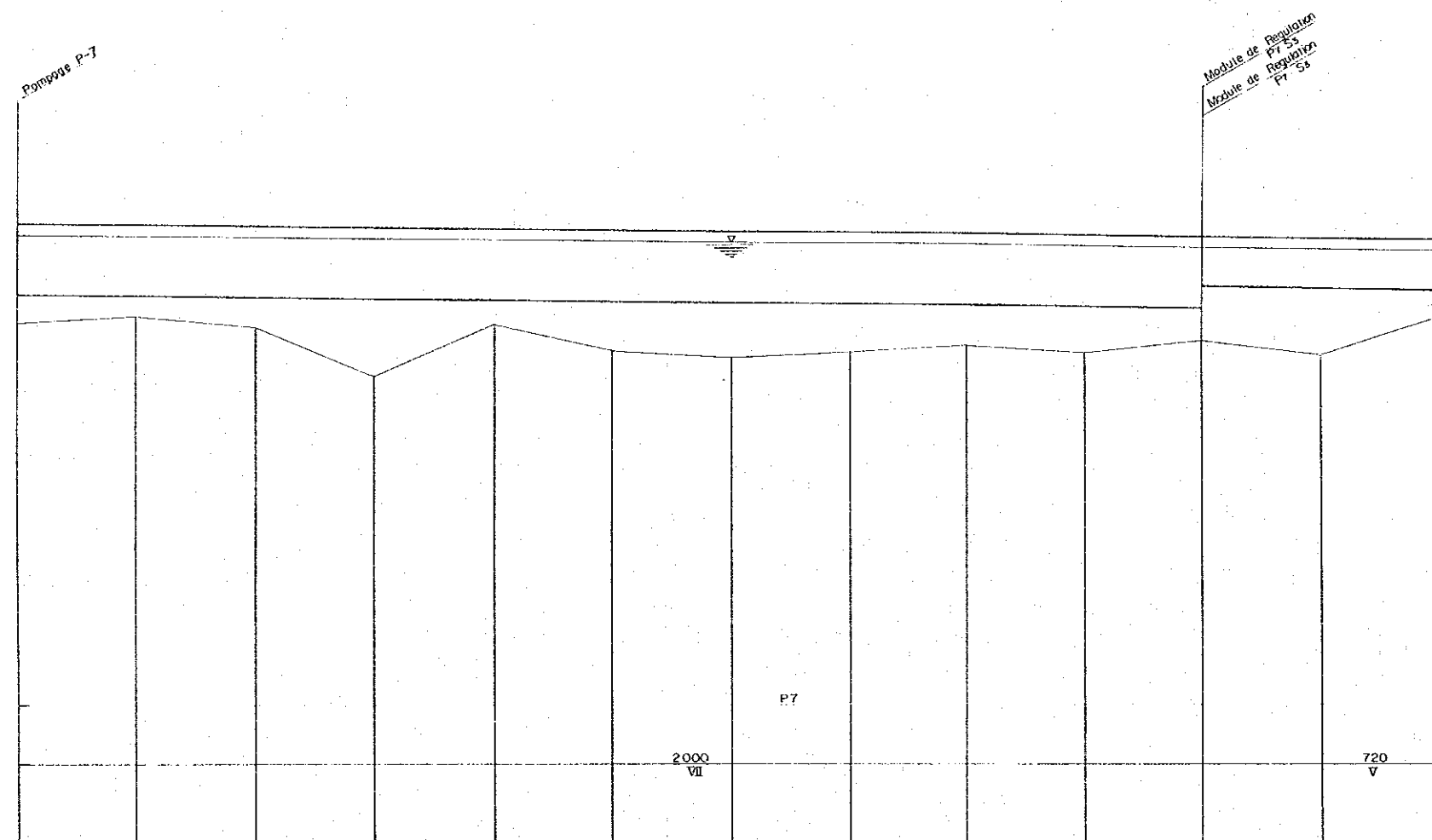
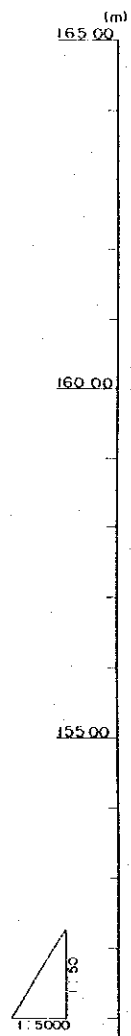
REPUBLIQUE DU NIGER

**PROJET
D'AMENAGEMENT HYDRO-AGRICOLE
DE LA CUVETTE DE OUNA-KOUANZA**

PROFILS EN LONG DES CANAUX
P6-2S4 (2)

DATE	JUIN 1989	PLAN N°	50
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AGENCE JAPONAISE DE COOPERATION INTERNATIONALE



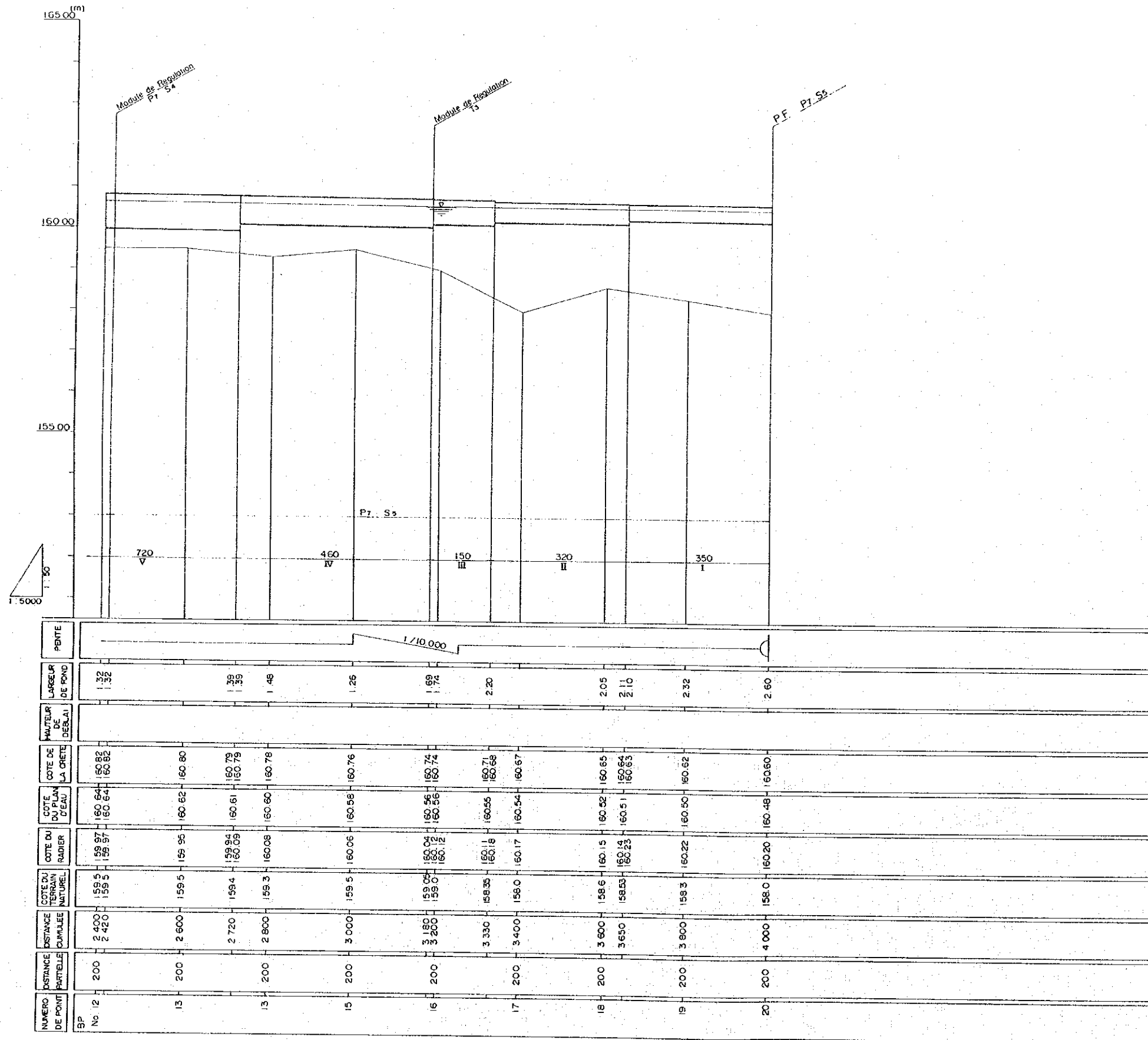
NUMERO DE POINT	DISTANCE PARTIELLE	DISTANCE CUMULEE	COTE DU TERRAIN NATUREL	COTE DU RADIERS	COTE DU CANAL A L'EAU	COTE DE LA CRETTE	HAUTEUR DE DEBUT	LARGEUR DE FOND	PERTE
BP 0	0	0	159.4	159.87	160.88	161.07		1.67	
1	200	200	159.5	159.85	160.86	161.05		1.55	
2	200	400	159.3	159.83	160.84	161.03		1.73	
3	200	600	158.5	159.81	160.82	161.01		2.51	
4	200	800	159.4	159.79	160.82	160.99		1.59	
5	200	1000	158.9	159.77	160.78	160.97		2.07	
6	200	1200	158.8	159.75	160.76	160.95		2.15	
7	200	1400	158.9	159.73	160.74	160.93		2.03	
8	200	1600	159.0	159.71	160.72	160.91		1.91	
9	200	1800	158.8	159.69	160.70	160.89		2.09	
10	200	2000	159.1	159.67	160.68	160.87		1.77	
11	200	2200	158.8	159.95	160.66	160.84		2.04	
12	200	2400	159.5	159.97	160.64	160.82		1.32	

REPUBLIQUE DU NIGER

**PROJET
D'AMENAGEMENT HYDRO-AGRICOLE
DE LA CUVETTE DE OUNA-KOUANZA**

PROFILS EN LONG DES CANAUX P7

DATE	JUIN 1989	PLAN N°	51
AGENCE JAPONAISE DE COOPERATION INTERNATIONALE			



REPUBLIQUE DU NIGER

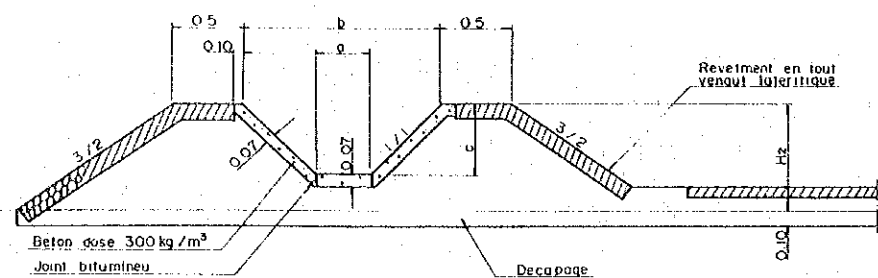
**PROJET
D'AMENAGEMENT HYDRO-AGRICOLE
DE LA CUVETTE DE OUNA-KOUANZA**

PROFILS EN LONG DES CANAUX P7/S₀

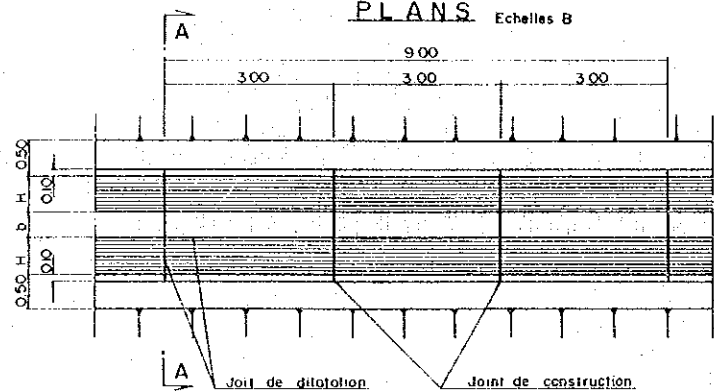
DATE	JUIN 1989	PLAN N°	52
AGENCE JAPONAISE DE COOPERATION INTERNATIONALE			

COUPE A Echelles A

TYPE I, II, III

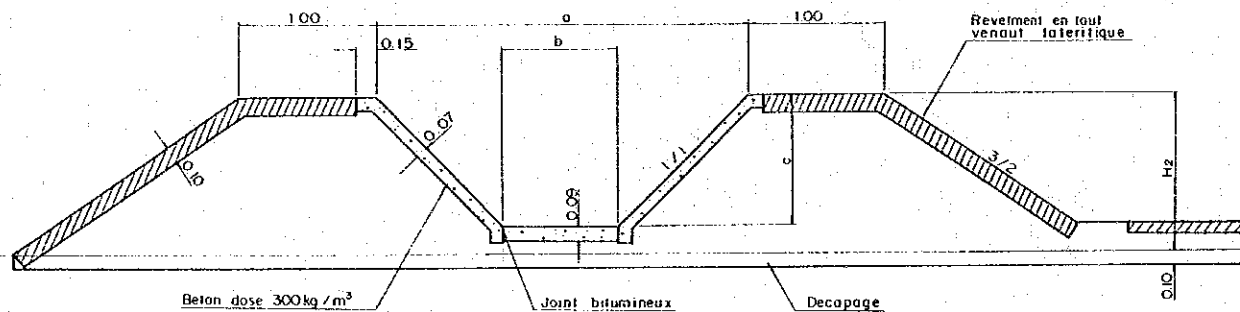


PLANS Echelles B

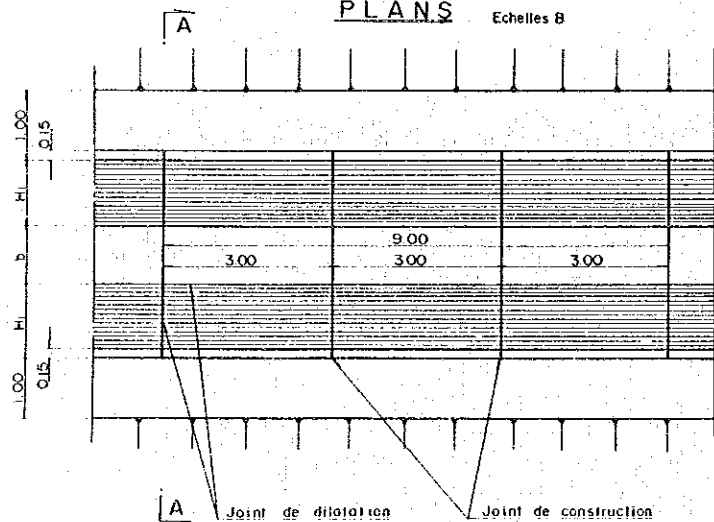


COUPE A Echelles A

TYPE IV, V, VI, VII, VIII

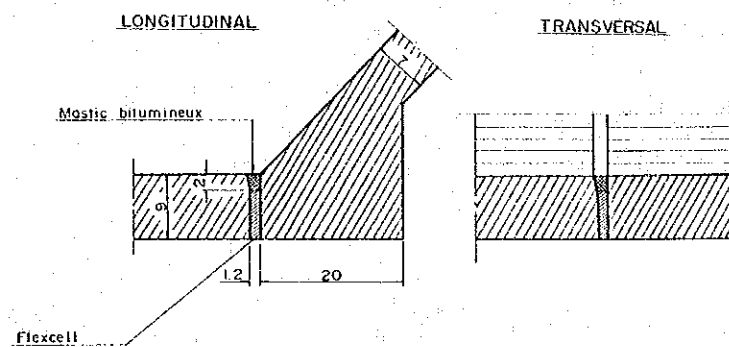


PLANS Echelles B



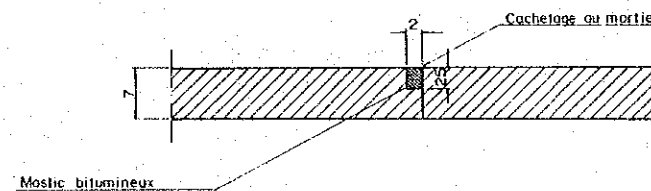
DETAIL DES JOINTS JOINT DE DILATATION

Echelles C



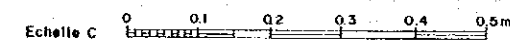
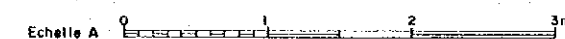
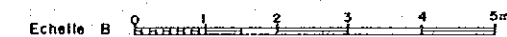
JOINT DE CONSTRUCTION TRANSAL

Echelles C



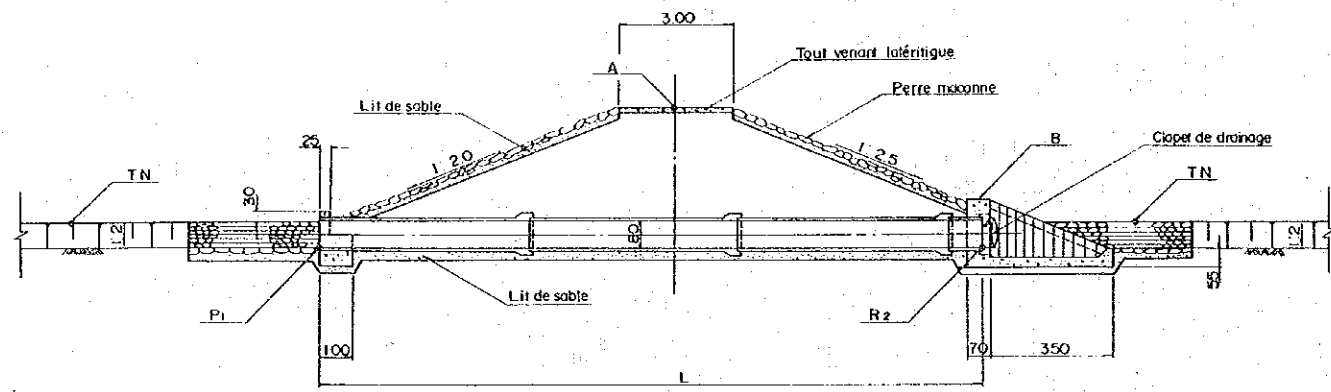
TABEAU DES COTES VARIABLES

TYPE	a	b	c
I	1.15	0.35	0.40
II	1.40	0.40	0.50
III	1.70	0.50	0.60
IV	2.00	0.60	0.70
V	2.50	0.80	0.85
VI	3.10	1.00	1.05
VII	3.60	1.20	1.20
VIII	4.00	1.40	1.30

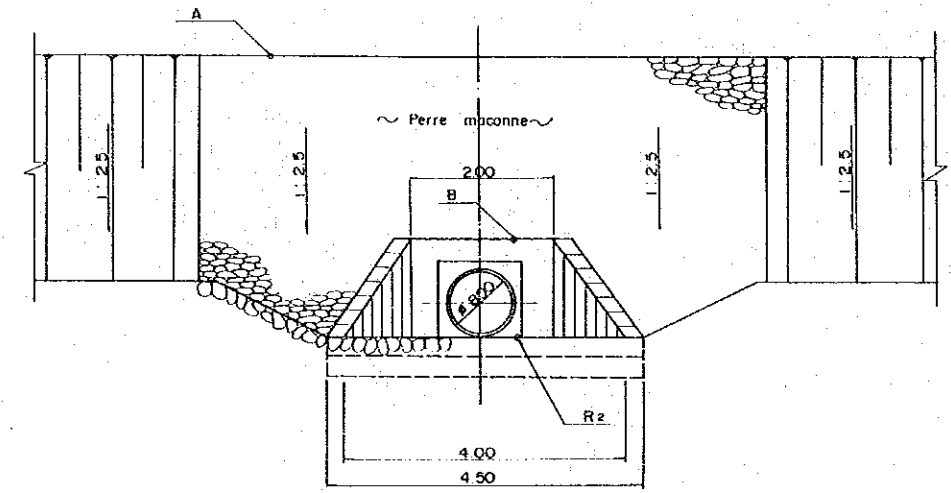


REPUBLIQUE DU NIGER			
PROJET D'AMENAGEMENT HYDRO-AGRICOLE DE LA CUVETTE DE OUNA-KOUANZA			
OUVRAGES DES CANAUX			
DATE	JUN 1989	PLAN N°	53
AGENCE JAPONAISE DE COOPERATION INTERNATIONALE			

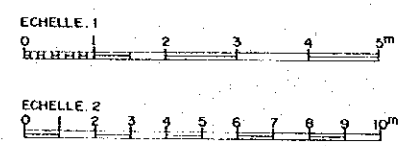
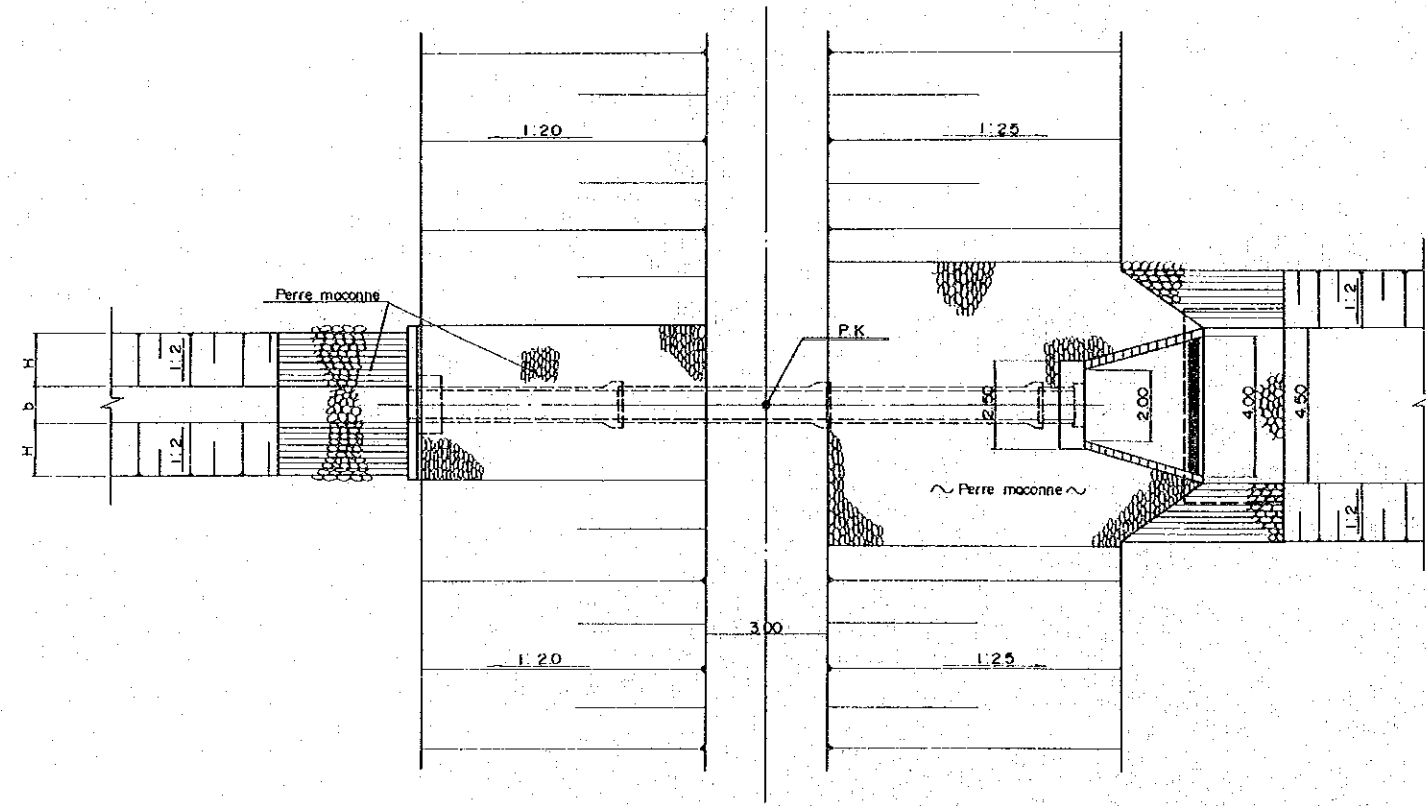
COUPE A
Ech=2



COUPE B
Ech=1

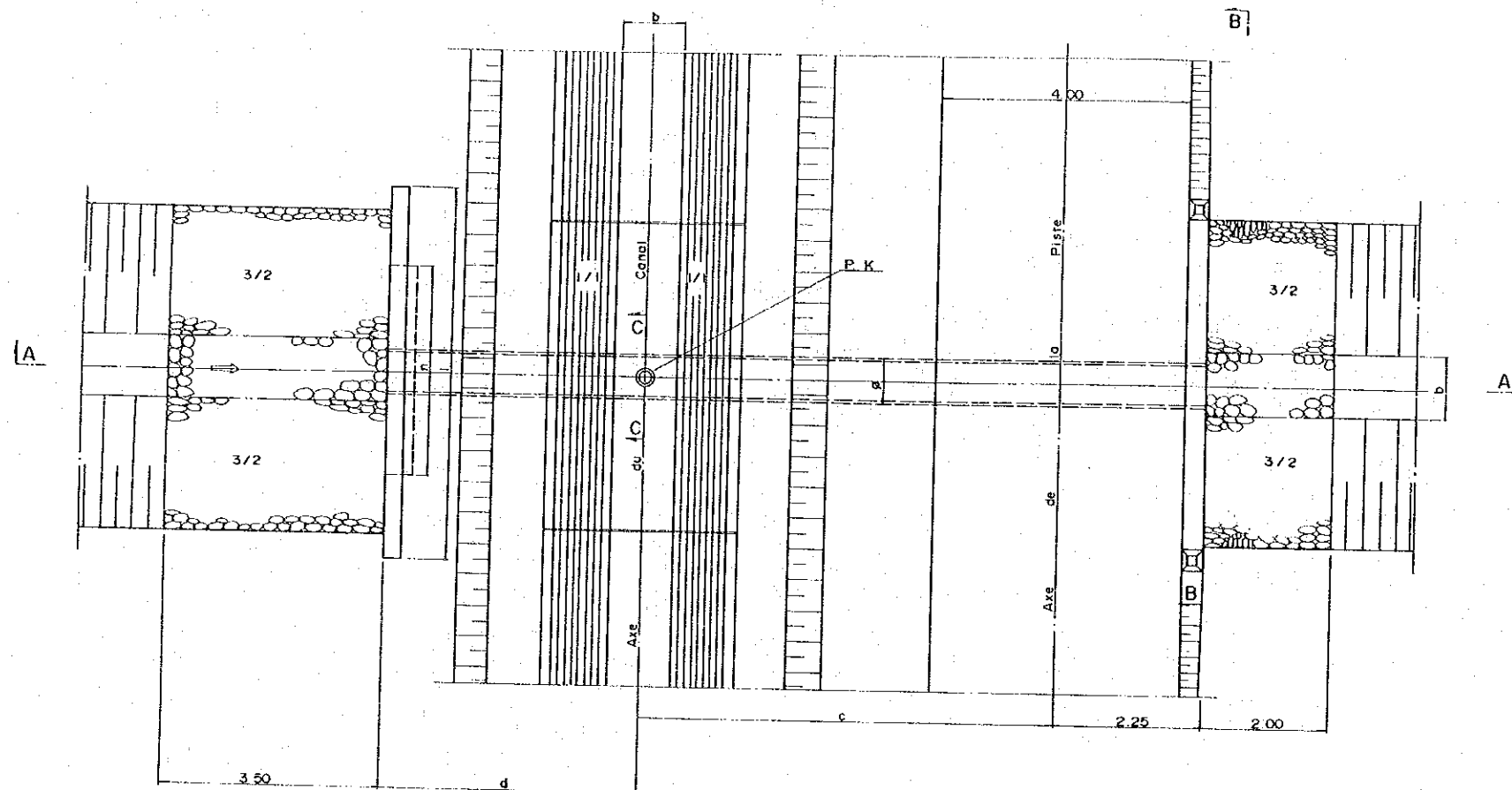


PLAN
Ech=2

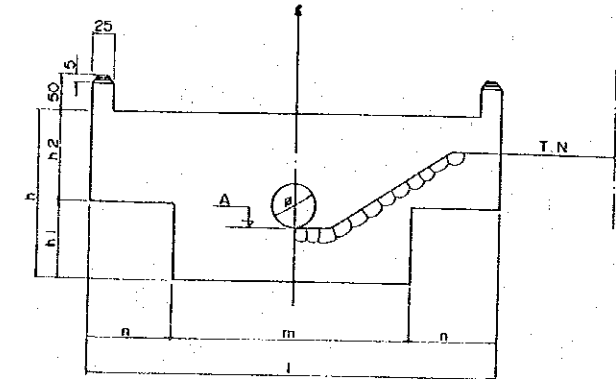


REPUBLIQUE DU NIGER			
PROJET D'AMENAGEMENT HYDRO-AGRICOLE DE LA CUVETTE DE OUNA-KOUANZA			
OUVRAGES À CIAPET TYPE 1			
DATE	JUIN 1989	PLAN N°	54
AGENCE JAPONAISE DE COOPERATION INTERNATIONALE			

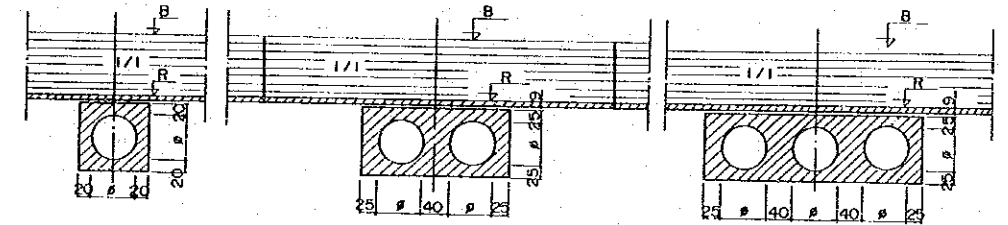
PLAN



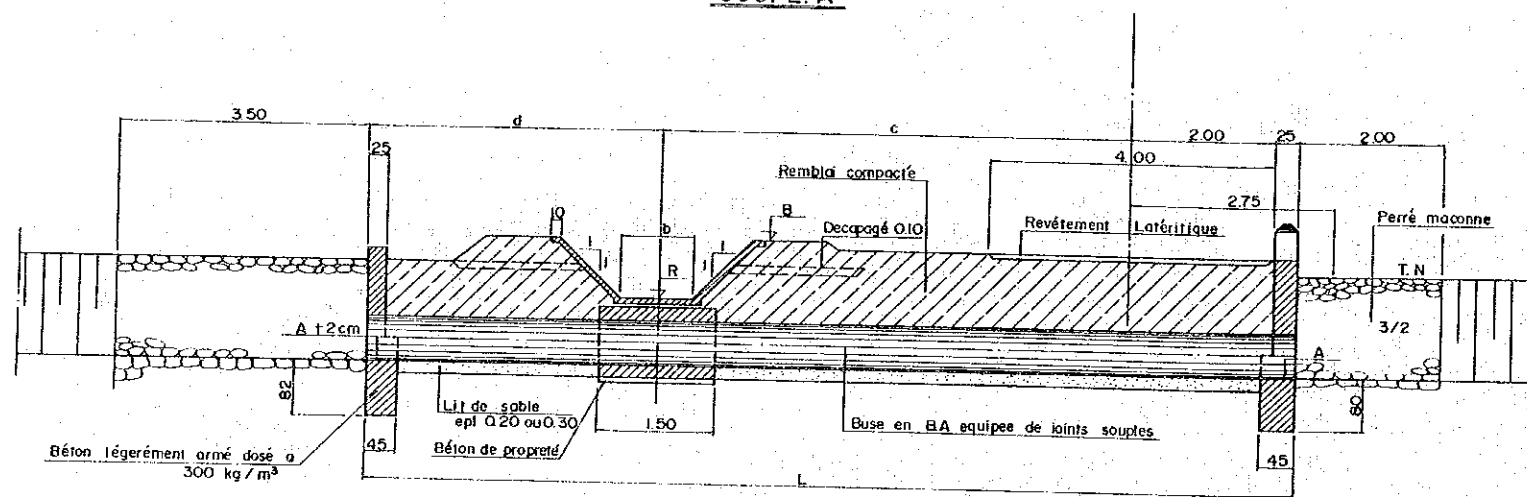
COUPE B



COUPE C

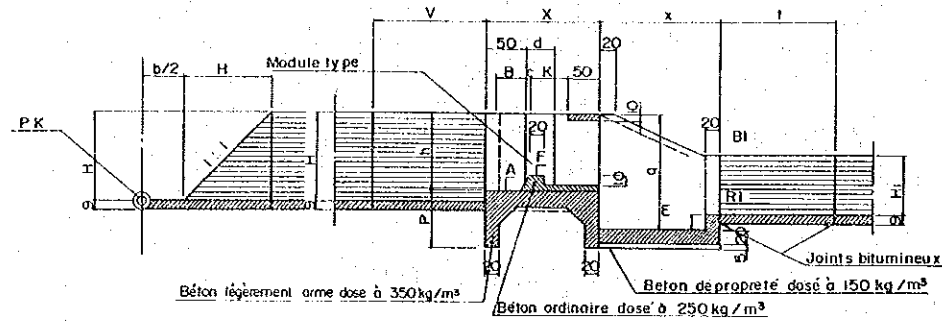


COUPE A

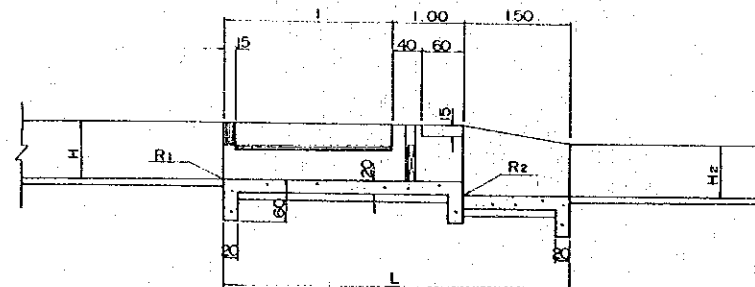


REPUBLIQUE DU NIGER			
PROJET D'AMENAGEMENT HYDRO-AGRICOLE DE LA CUVETTE DE OUNA-KOUANZA			
PASSAGES INFÉRIEURS			
DATE	JUIN 1989	PLAN N°	56
AGENCE JAPONAISE DE COOPERATION INTERNATIONALE			

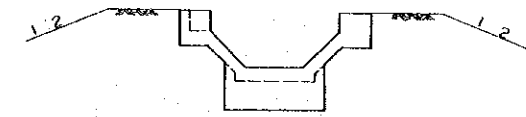
COUPE A



COUPE A



COUPE B



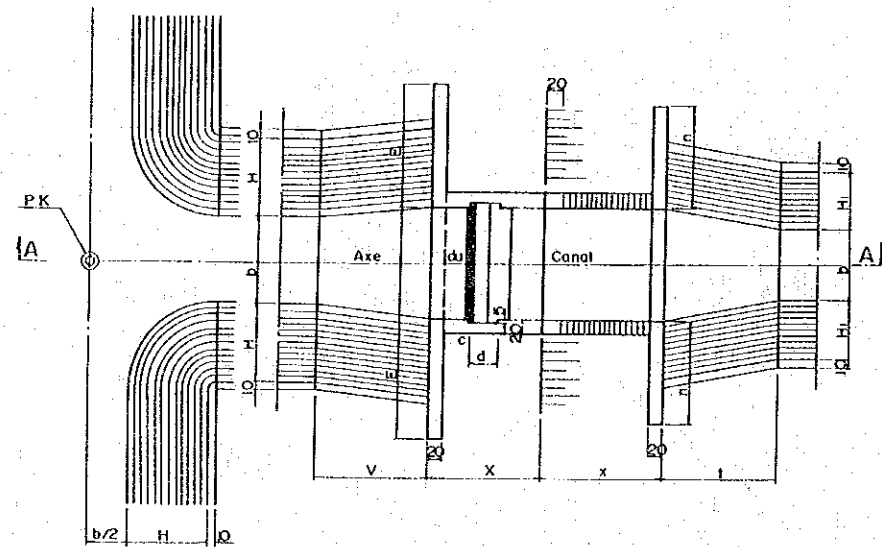
COUPE C



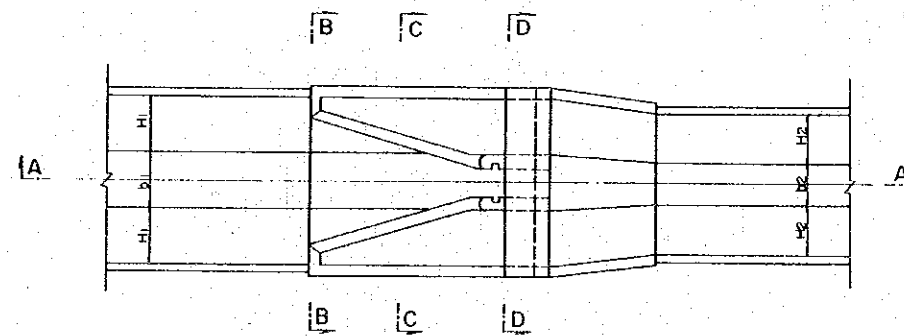
COUPE D



PLAN



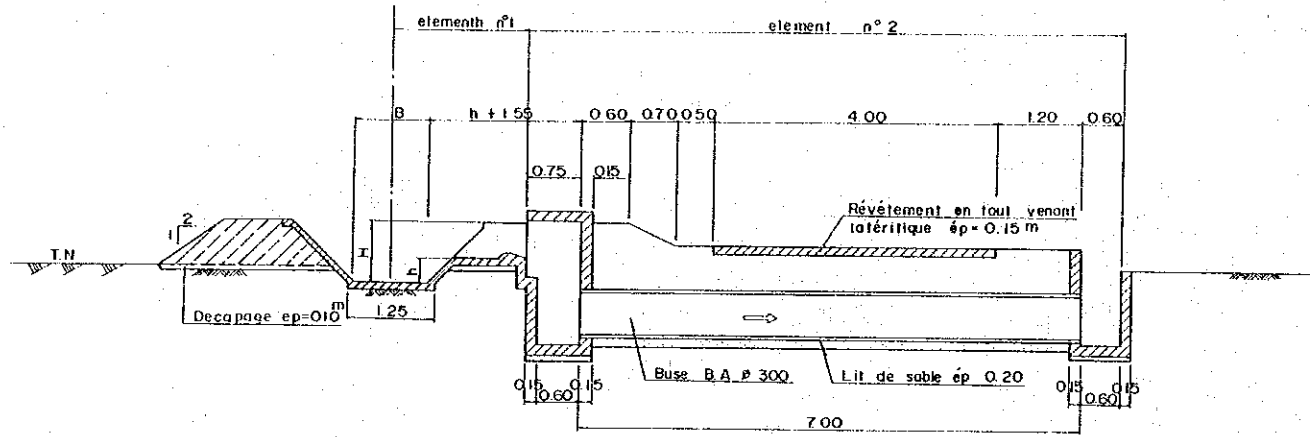
PLAN



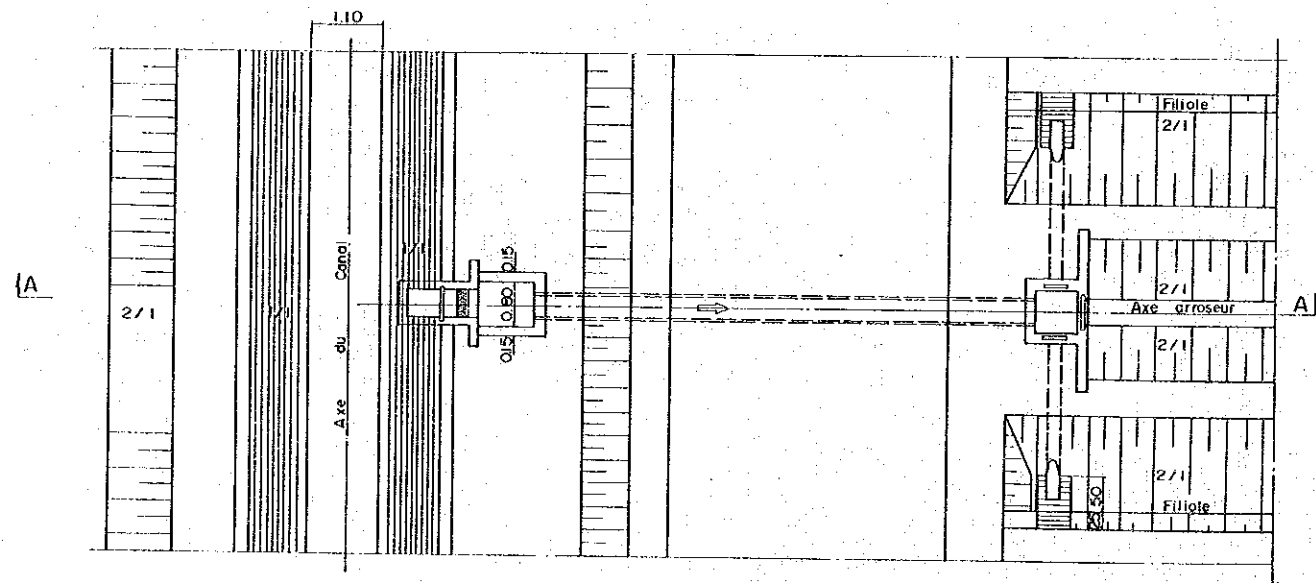
ECHELLE 0 1 2 3 4 5m

REPUBLIQUE DU NIGER			
PROJET D'AMENAGEMENT HYDRO-AGRICOLE DE LA CUVETTE DE OUNA-KOUANZA			
MODULES DE REGULATION ET REGULATORS STATIQUES			
DATE	JUIN 1989	PLAN N°	57
AGENCE JAPONAISE DE COOPERATION INTERNATIONALE			

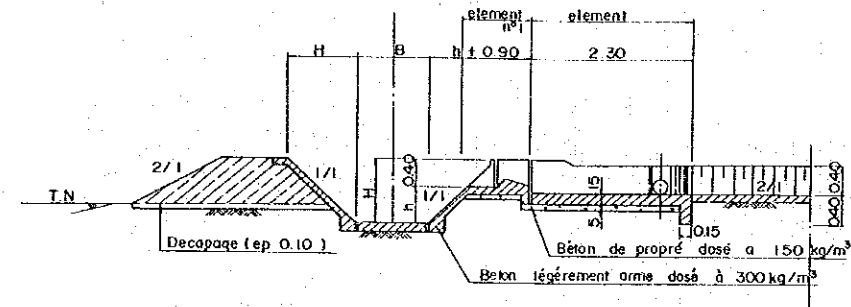
COUPE A



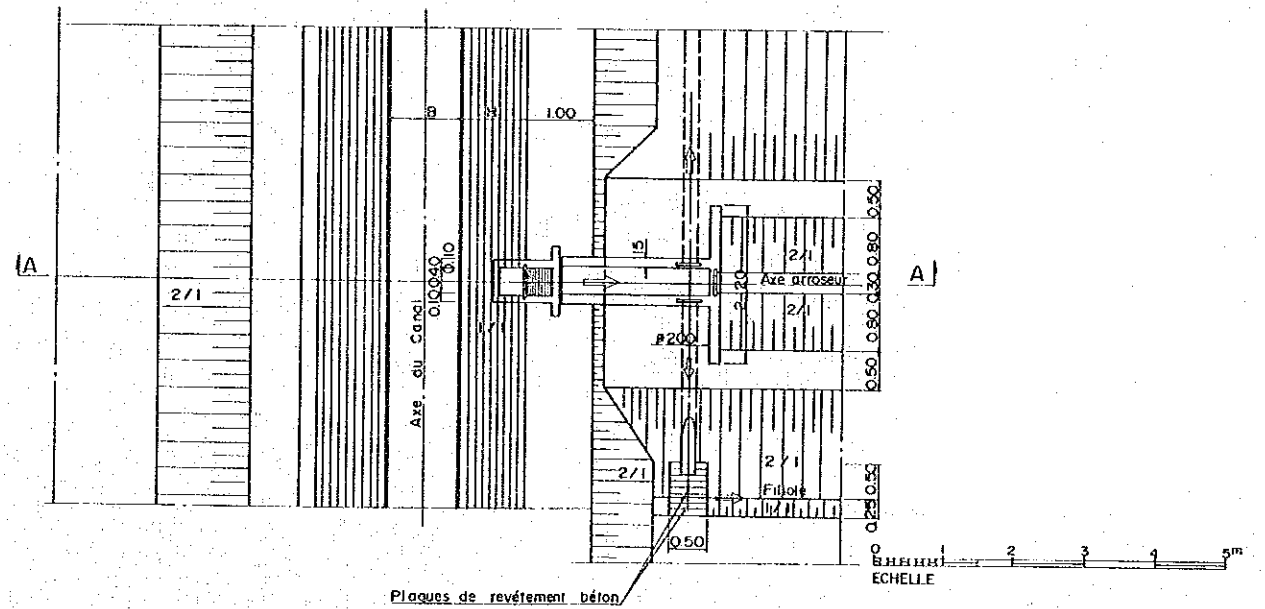
PLAN



COUPE A

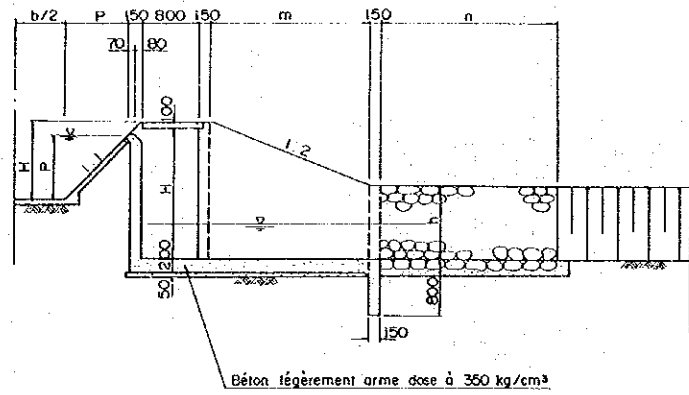


PLAN

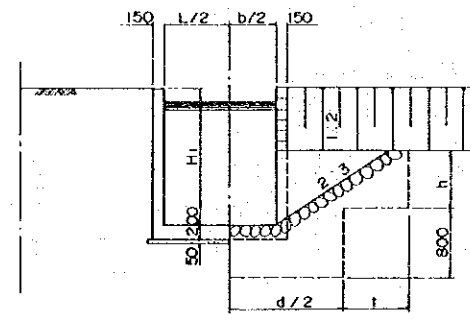


REPUBLIQUE DU NIGER			
PROJET D'AMENAGEMENT HYDRO-AGRICOLE DE LA CUVETTE DE OUNA-KOUANZA			
PRISES MODULES TYPE 1 ET TYPE 2			
DATE	JUN 1989	PLAN N°	58
AGENCE JAPONAISE DE COOPERATION INTERNATIONALE			

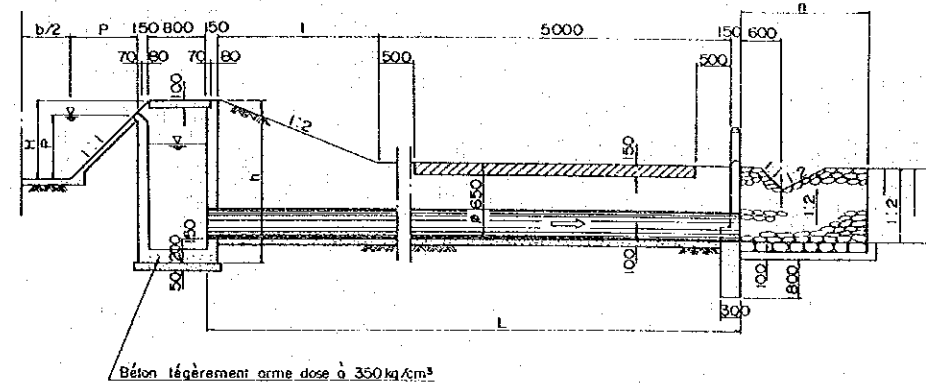
COUPE A



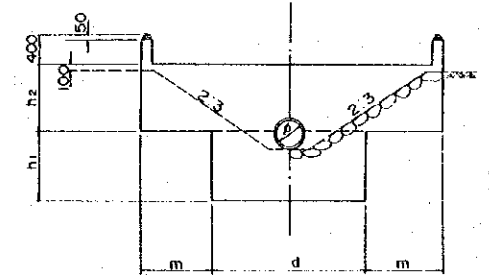
COUPE B



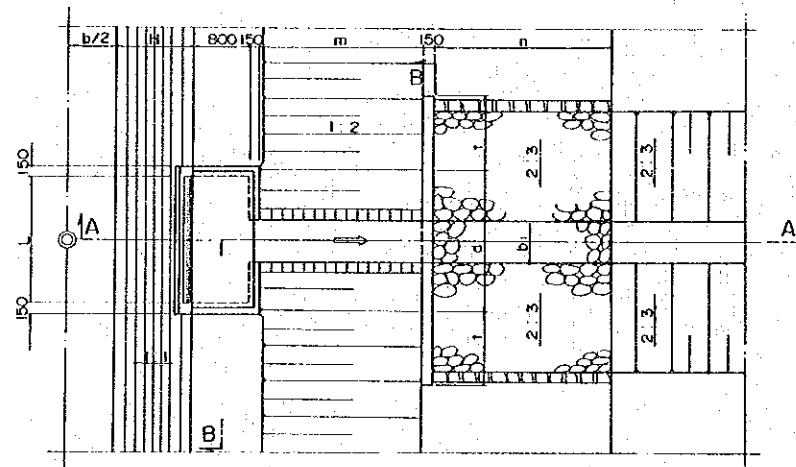
COUPE A



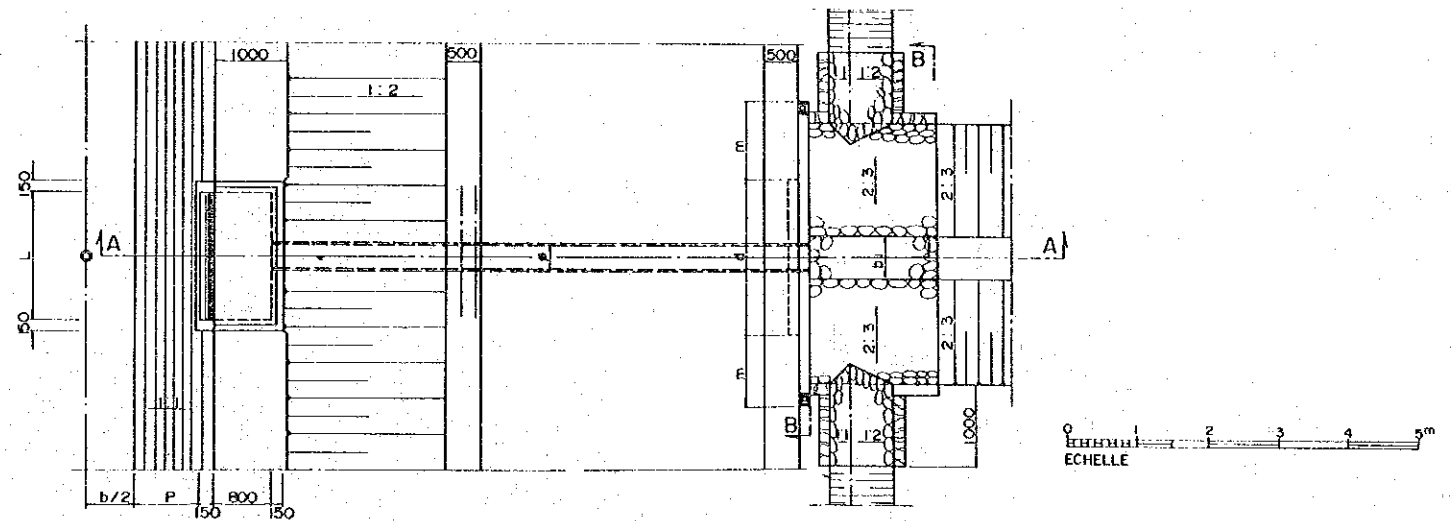
COUPE B



PLAN



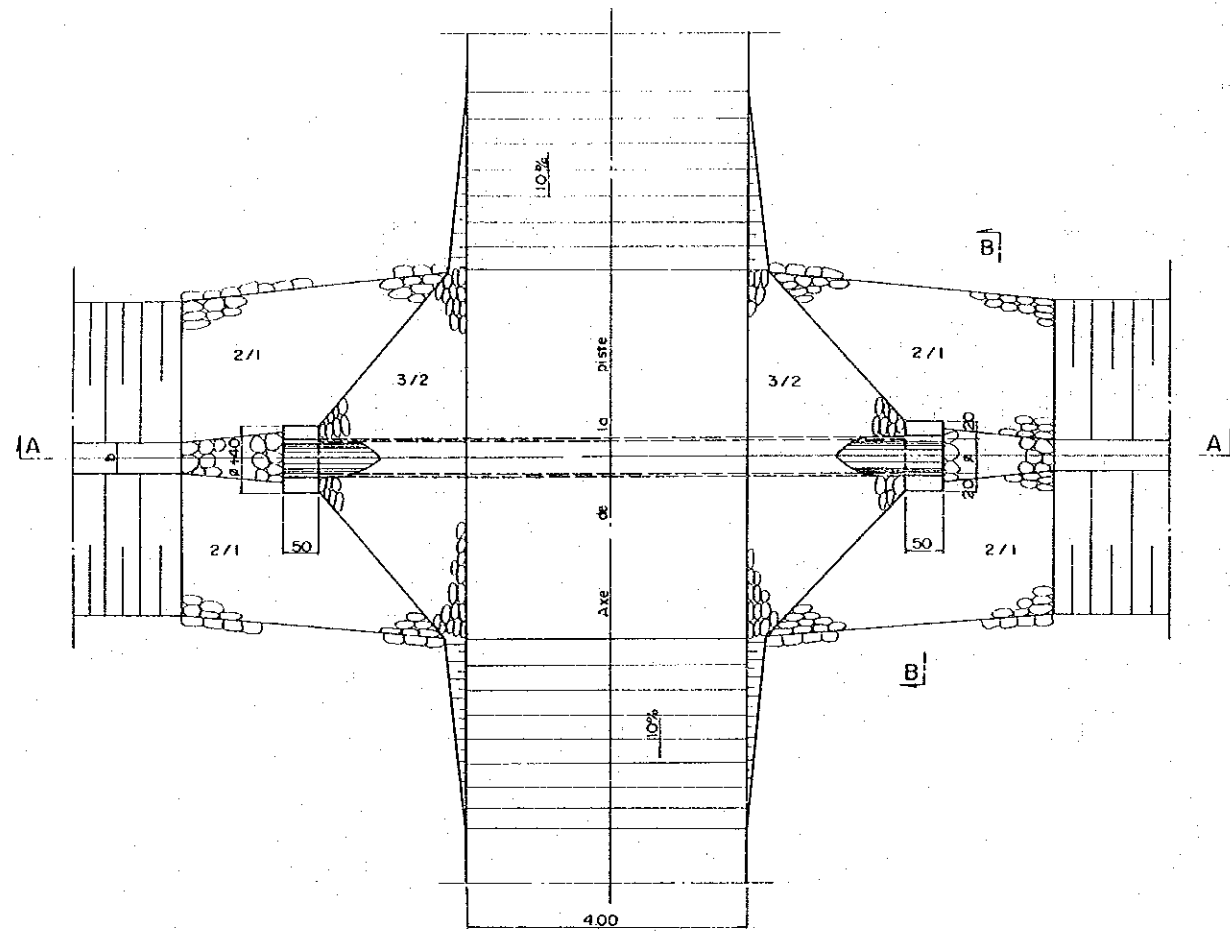
PLAN



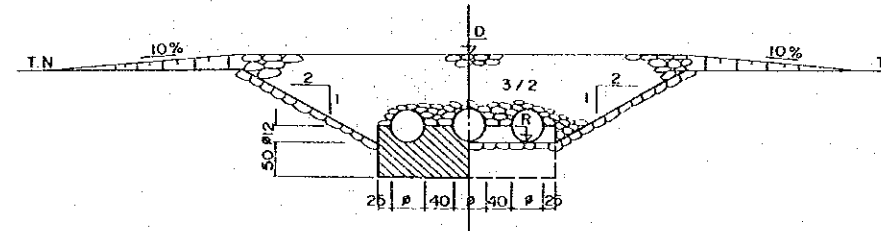
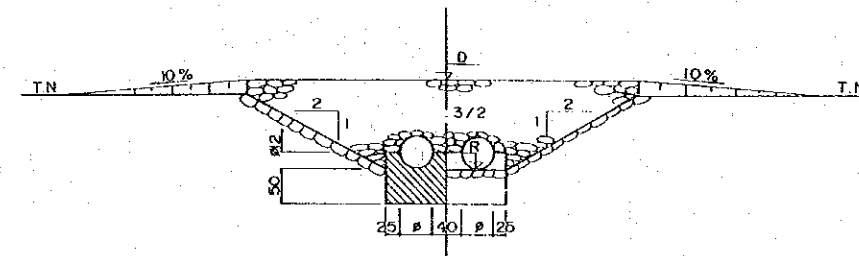
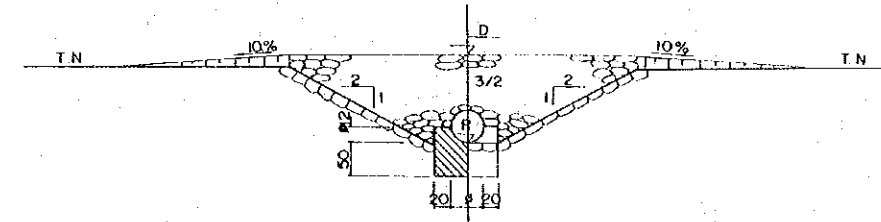
0 1 2 3 4 5m
ECHELLE

REPUBLIQUE DU NIGER			
PROJET D'AMENAGEMENT HYDRO-AGRICOLE DE LA CUVETTE DE OUNA-KOUANZA			
DEVERSOIRS DE DECHARGE			
DATE	JUIN 1989	PLAN N°	59
AGENCE JAPONAISE DE COOPERATION INTERNATIONALE			

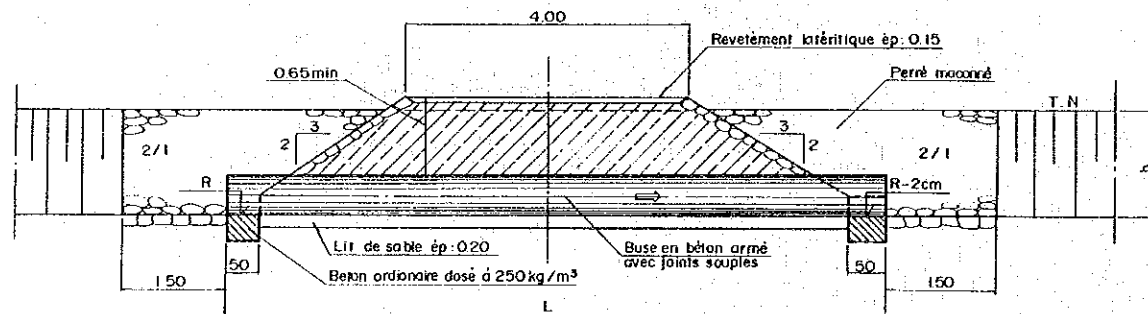
PLAN



COUPE B

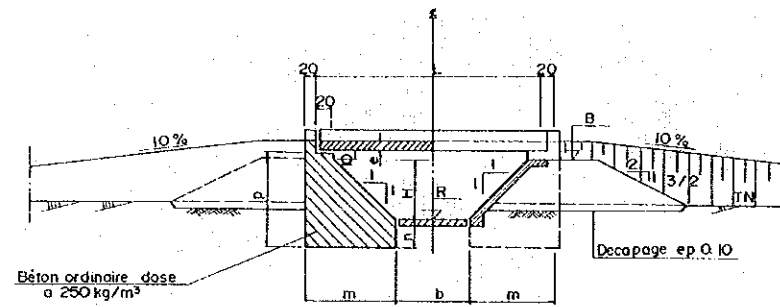


COUPE A

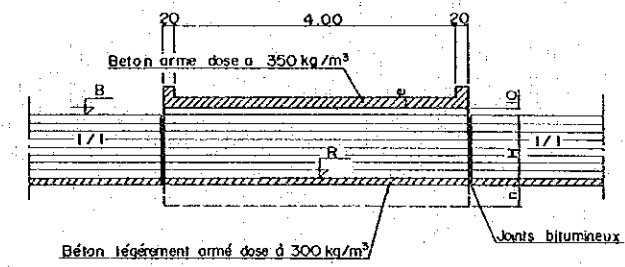


REPUBLIQUE DU NIGER			
PROJET D'AMENAGEMENT HYDRO-AGRICOLE DE LA CUVETTE DE OUNA-KOUANZA			
PASSAGES BUSES			
DATE	JUIN 1989	PLAN N°	60
AGENCE JAPONAISE DE COOPERATION INTERNATIONALE			

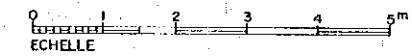
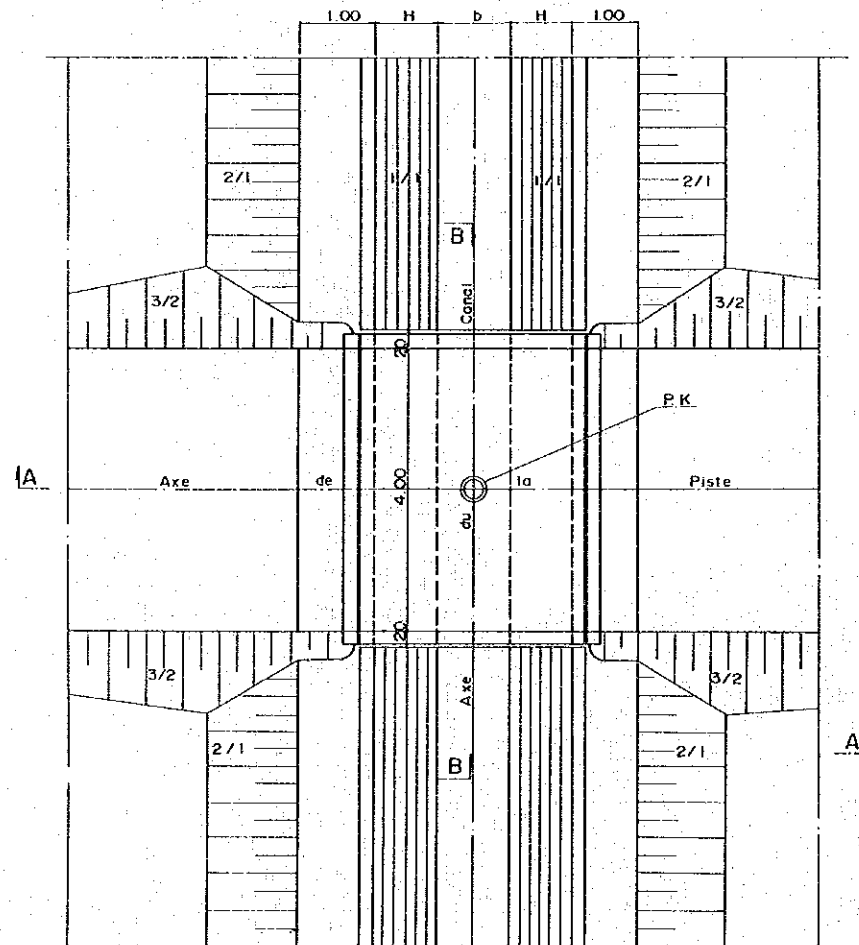
COUPE A



COUPE B

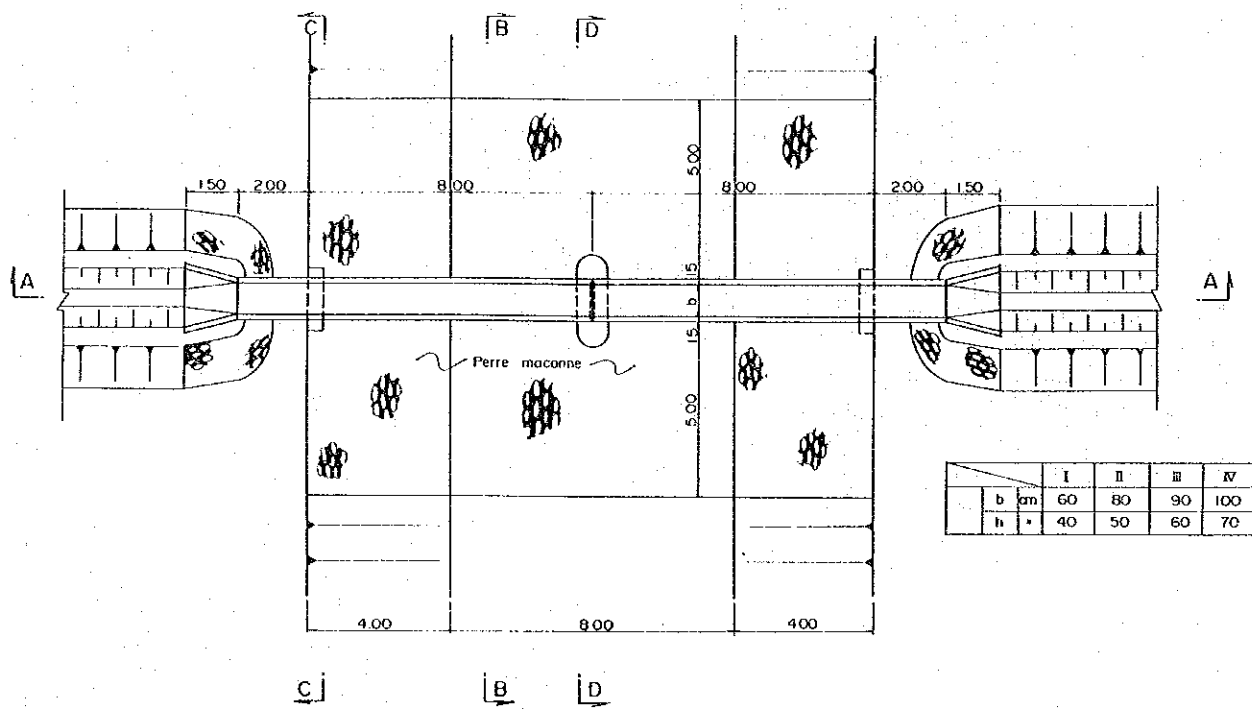


PLAN

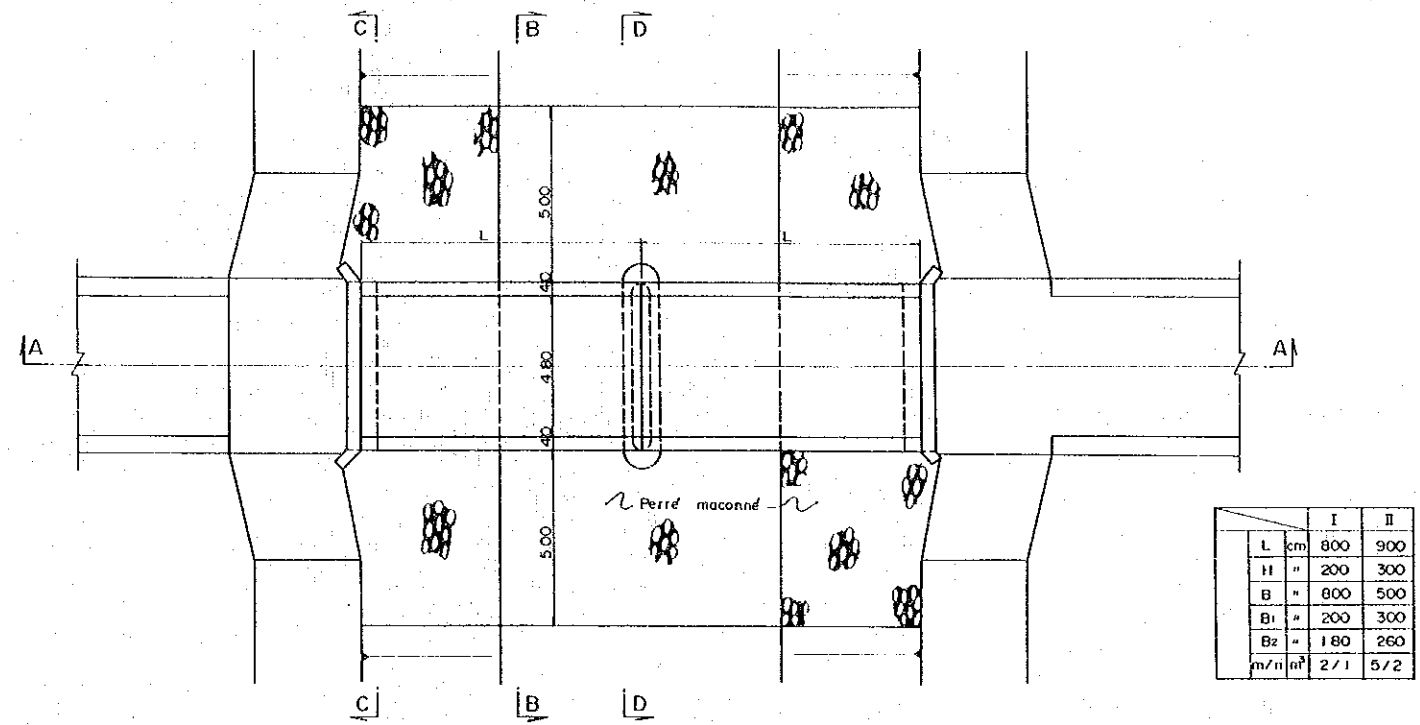


REPUBLIQUE DU NIGER			
PROJET D'AMENAGEMENT HYDRO-AGRICOLE DE LA CUVETTE DE OUNA-KOUANZA			
PONCEUX TYPE 1			
DATE	JUIN 1989	PLAN N°	61
AGENCE JAPONAISE DE COOPERATION INTERNATIONALE			

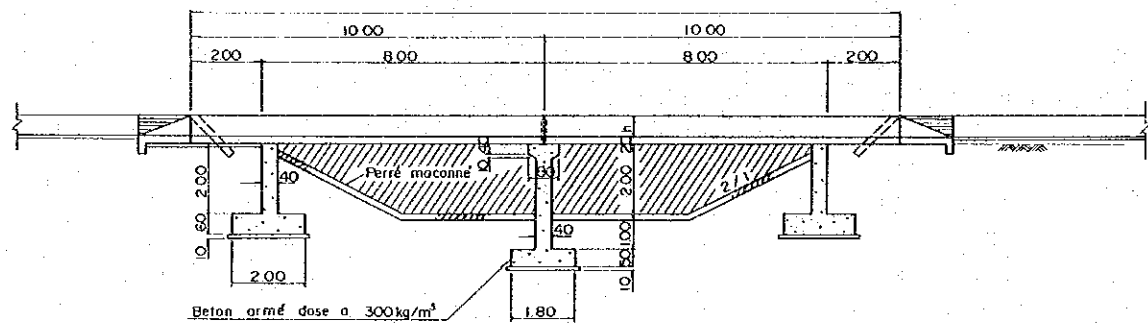
PLAN
Echelle A



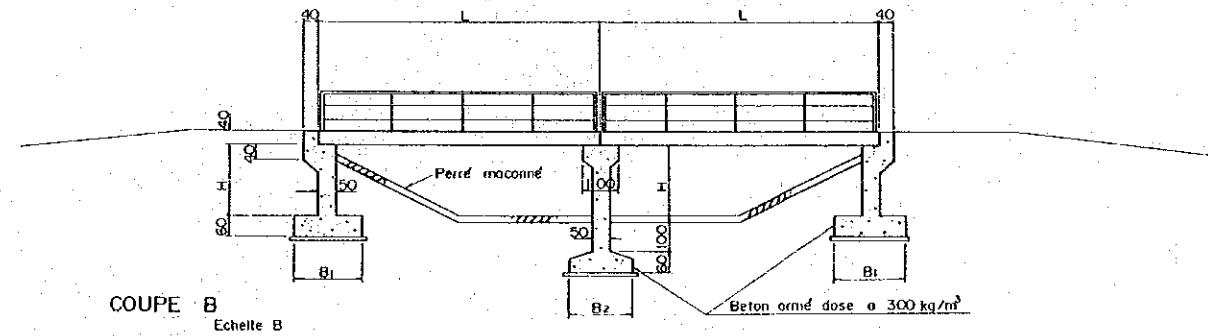
PLAN
Echelle A



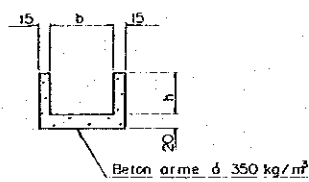
COUPE A
Echelle A



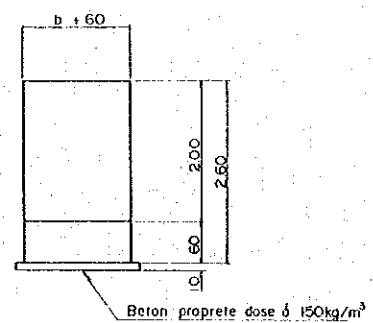
COUPE A
Echelle A



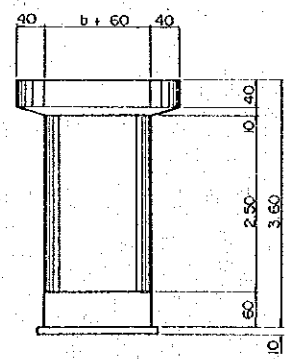
COUPE B
Echelle B



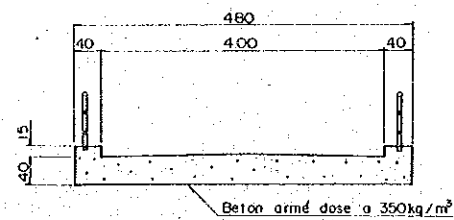
COUPE C
Echelle B



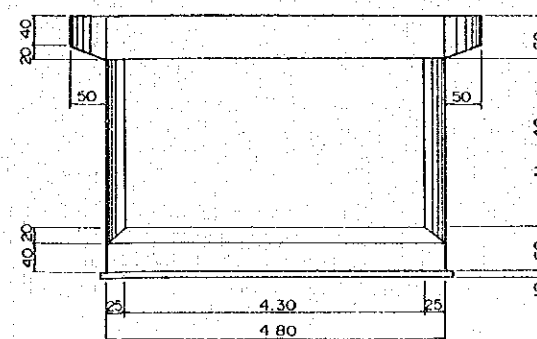
COUPE D
Echelle B



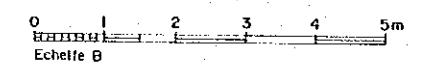
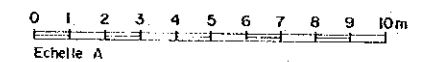
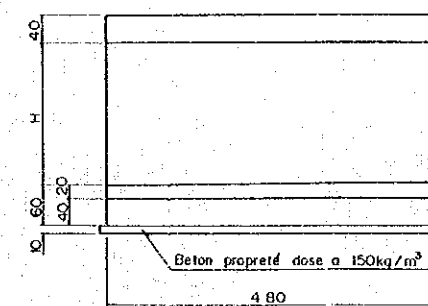
COUPE B
Echelle B



COUPE D
Echelle B



COUPE C
Echelle B



REPUBLIQUE DU NIGER

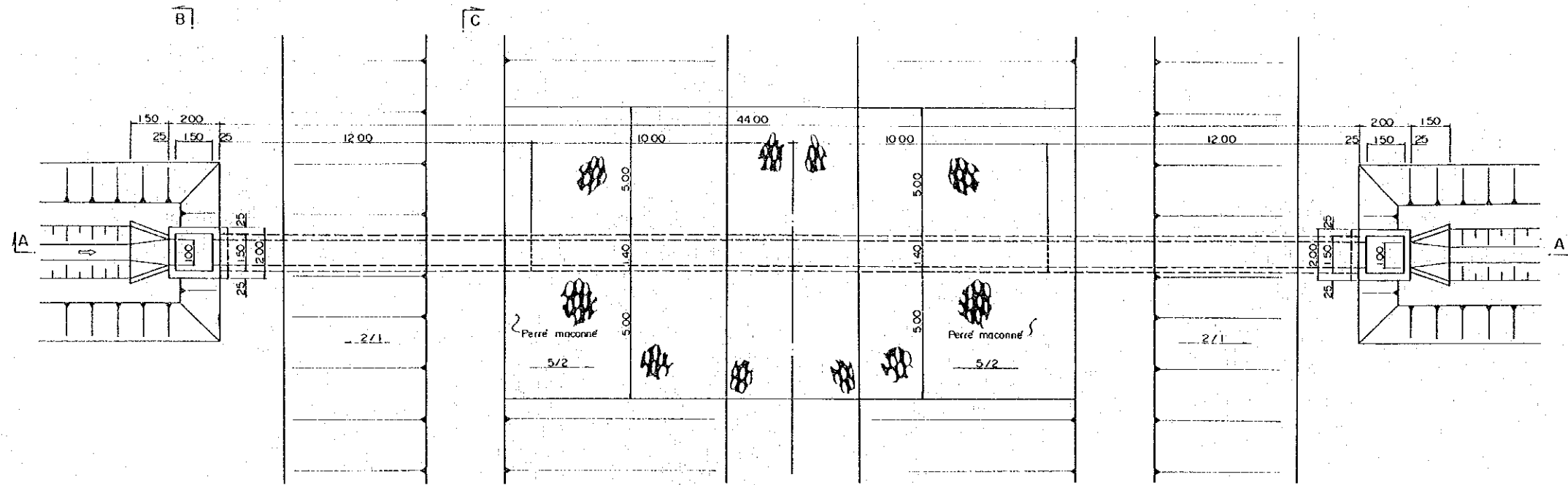
PROJET
D'AMENAGEMENT HYDRO-AGRICOLE
DE LA CUVETTE DE OUNA-KOUANZA

AQUADUK ET PONCEUX TYPE 2

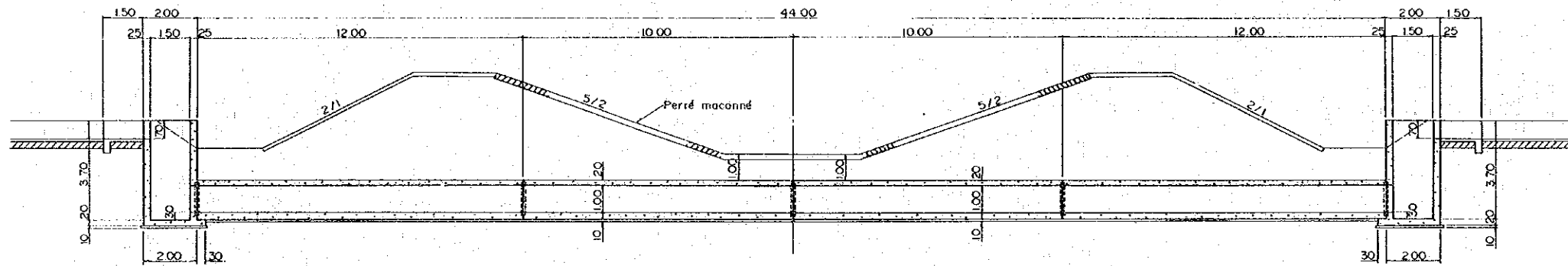
DATE	JUIN 1989	PLAN N°	62
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AGENCE JAPONAISE DE COOPERATION INTERNATIONALE

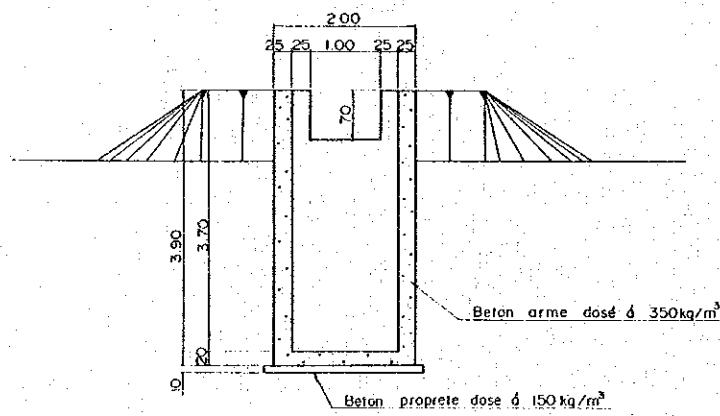
PLAN
Echelle A



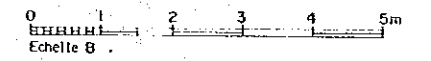
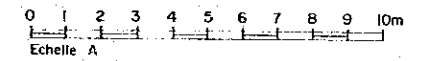
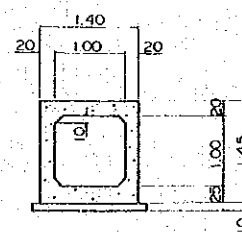
COUPE A
Echelle A



COUPE B
Echelle B

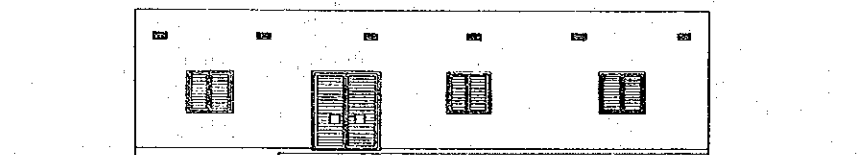


COUPE C
Echelle B

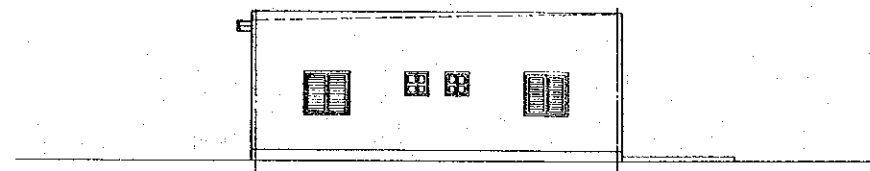


REPUBLIQUE DU NIGER			
PROJET D'AMENAGEMENT HYDRO-AGRICOLE DE LA CUVETTE DE OUNA-KOUANZA			
SIPHON			
DATE	JUIN	1989	PLAN N° 63
AGENCE JAPONAISE DE COOPERATION INTERNATIONALE			

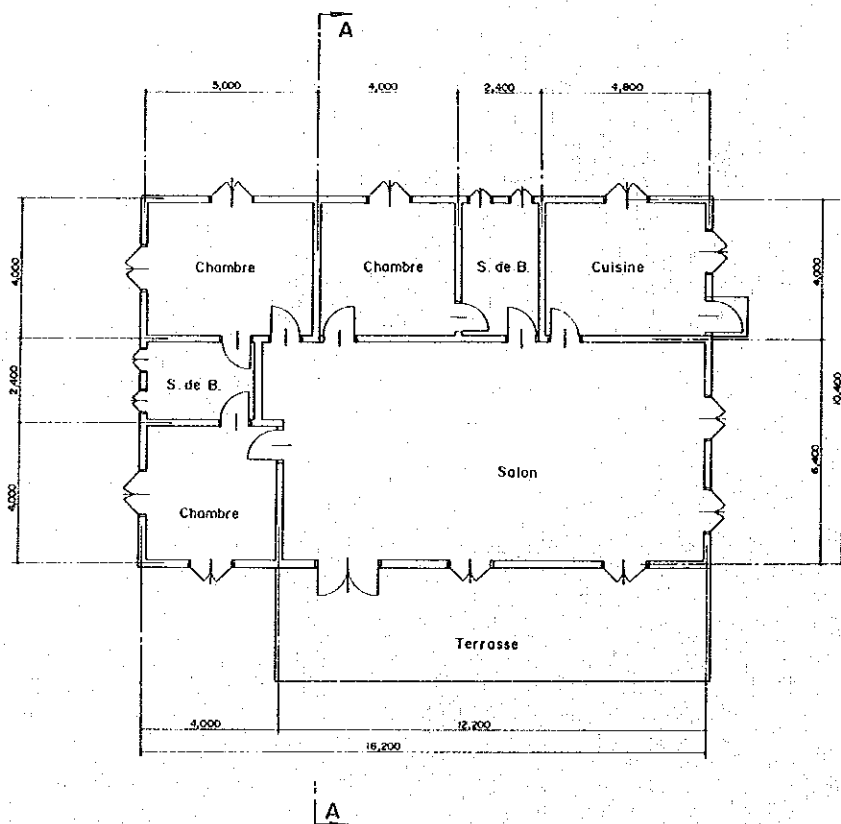
FACADE PRINCIPALE E = 1:100



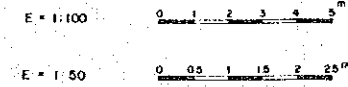
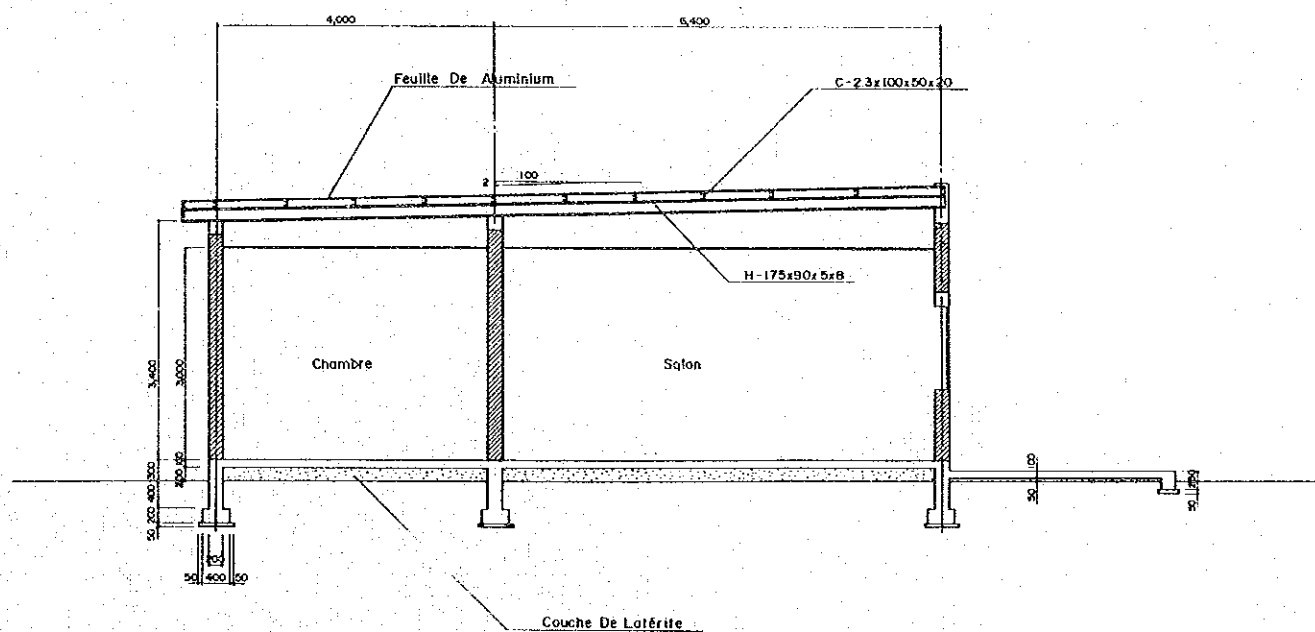
PIGNON GAUCHE E = 1:100



VUE EN PLAN E = 1:100

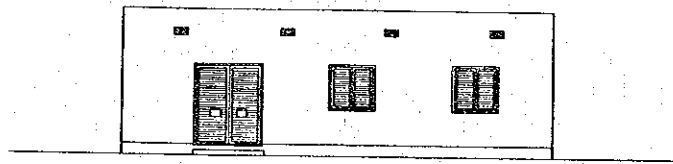


COUPE A-A E = 1:50

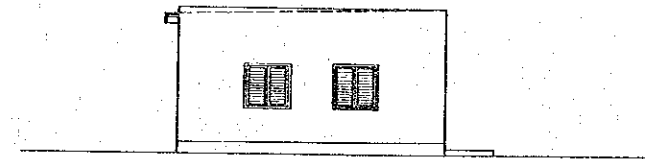


REPUBLIQUE DU NIGER			
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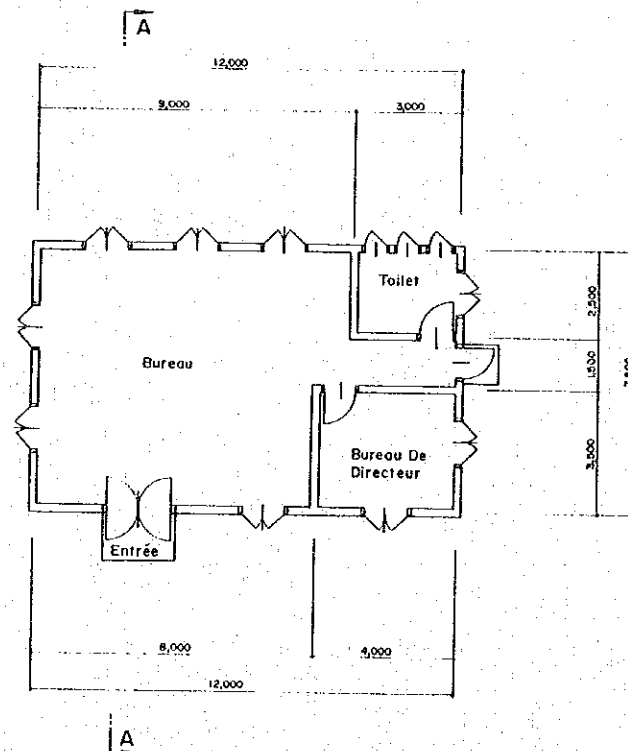
FACADE PRINCIPALE E=1:100



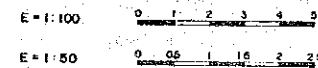
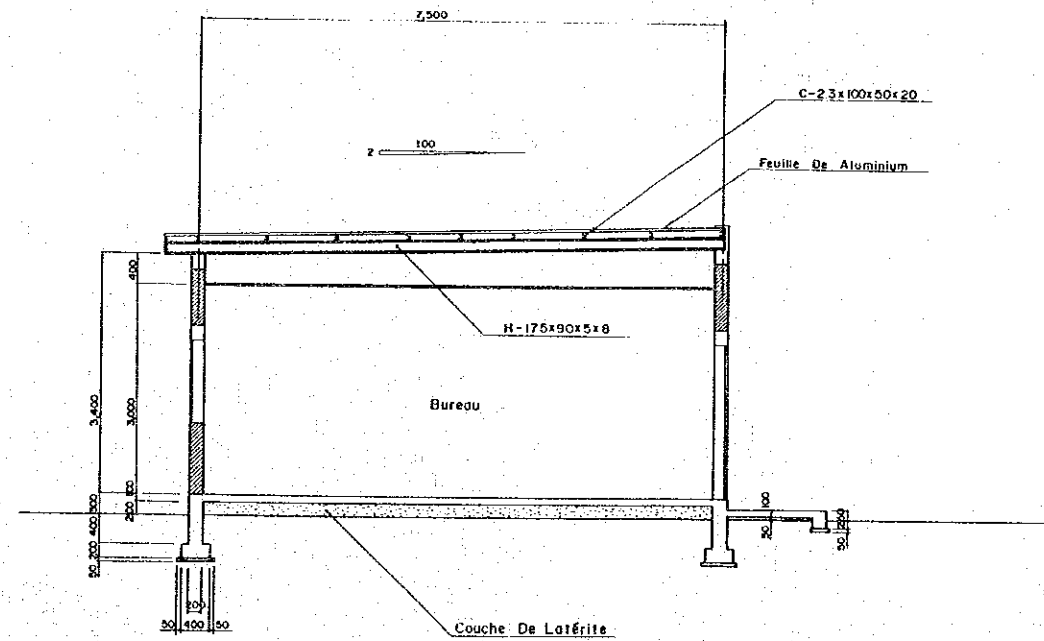
PIGNON GAUCHE E=1:100



VUE EN PLAN E=1:100

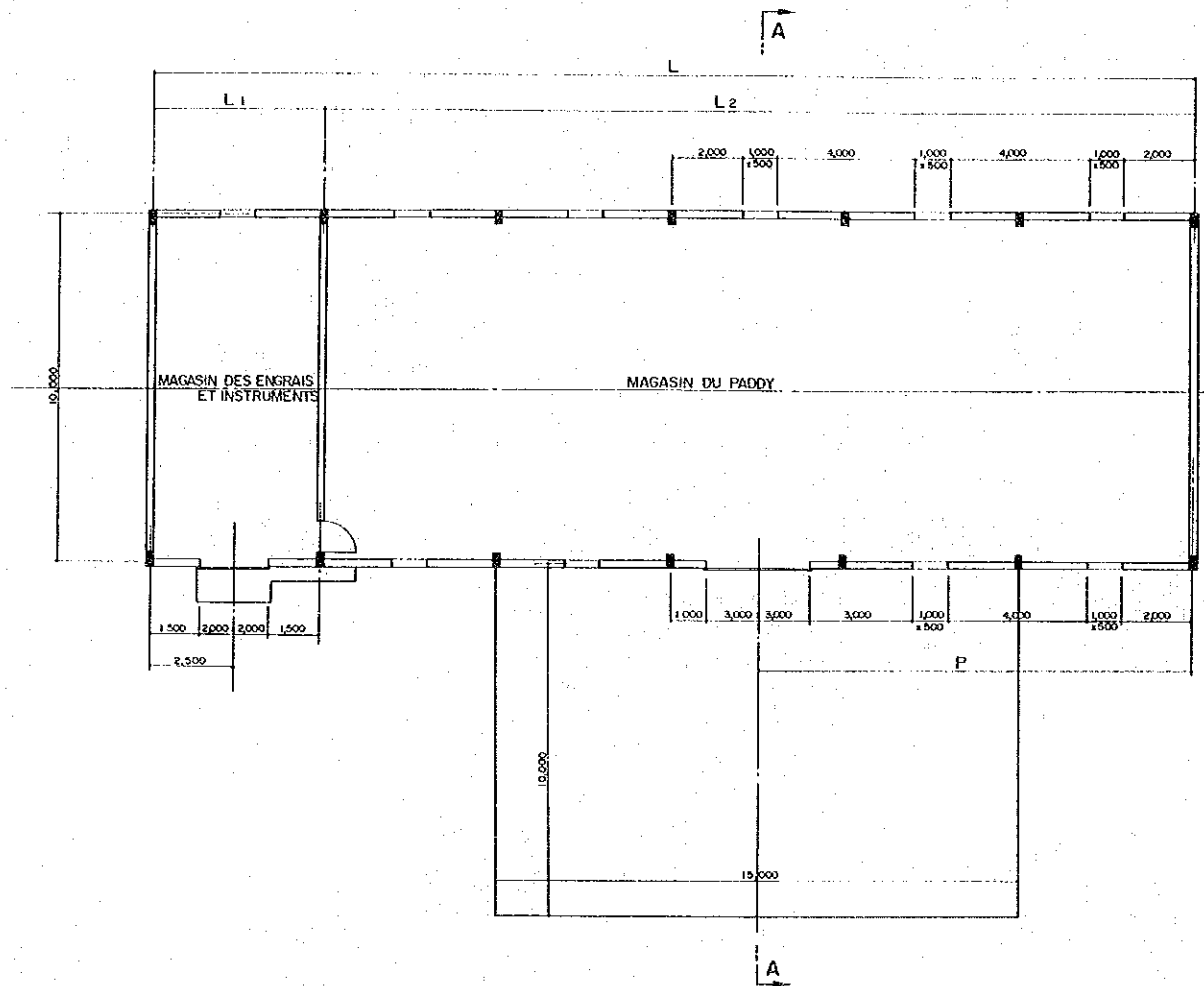


COUPE A-A E=1:50



REPUBLIQUE DU NIGER			
PROJET D'AMENAGEMENT HYDRO-AGRICOLE DE LA CUVETTE DE OUNA-KOUANZA			
BUREAU			
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AGENCE JAPONAISE DE COOPERATION INTERNATIONALE			

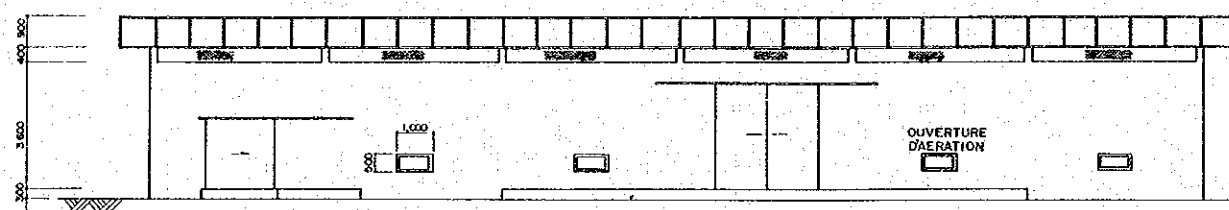
VUE EN PLAN E = 1:100



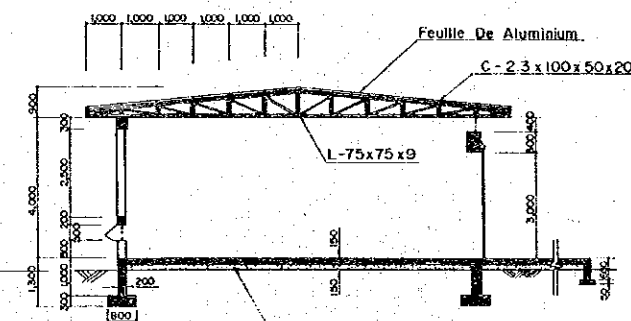
TYPE	L	L1	L2	P
A	20,000	5,000	15,000	7,500
B	25,000	0	25,000	12,500
C	30,000	0	30,000	17,500
D	30,000	10,000	20,000	7,500
E	40,000	0	40,000	22,500
F	40,000	10,000	30,000	17,500
G	40,000	15,000	25,000	12,500

ZONE	TYPE
Z-1	A
Z-2	A
Z-3	B, G
Z-4	E, G
Z-5	D
Z-6	C, G
Z-7	F

FACADE PRINCIPALE E = 1:100



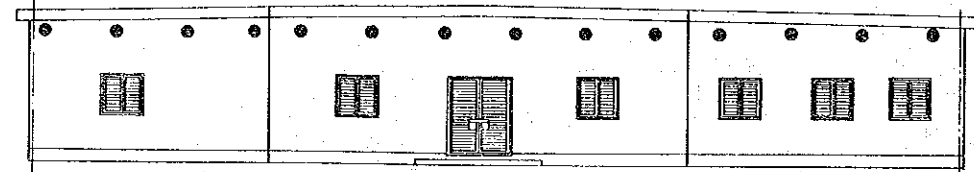
COUPE A-A E = 1:100



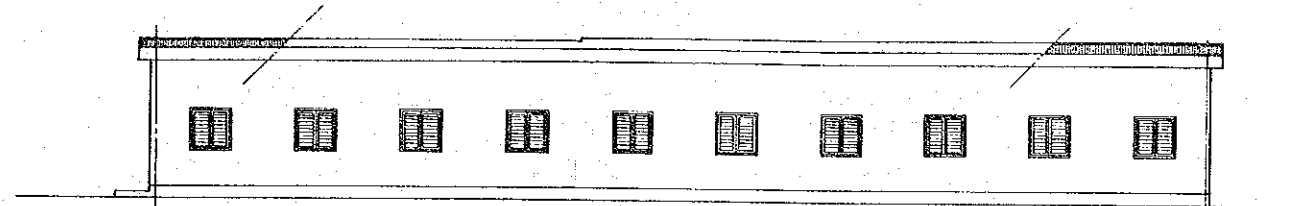
E = 1:100 0 1 2 3 4 5 m

REPUBLIQUE DU NIGER			
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DE LA CUVETTE DE OUNA-KOUANZA			
MAGASIN			
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AGENCE JAPONAISE DE COOPERATION INTERNATIONALE			

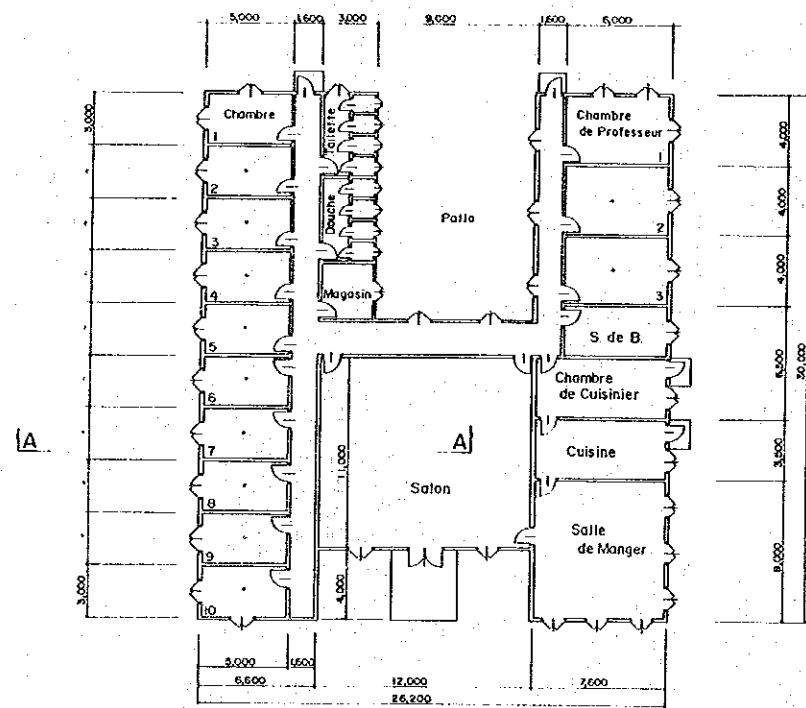
FACADE PRINCIPAL E=1:100



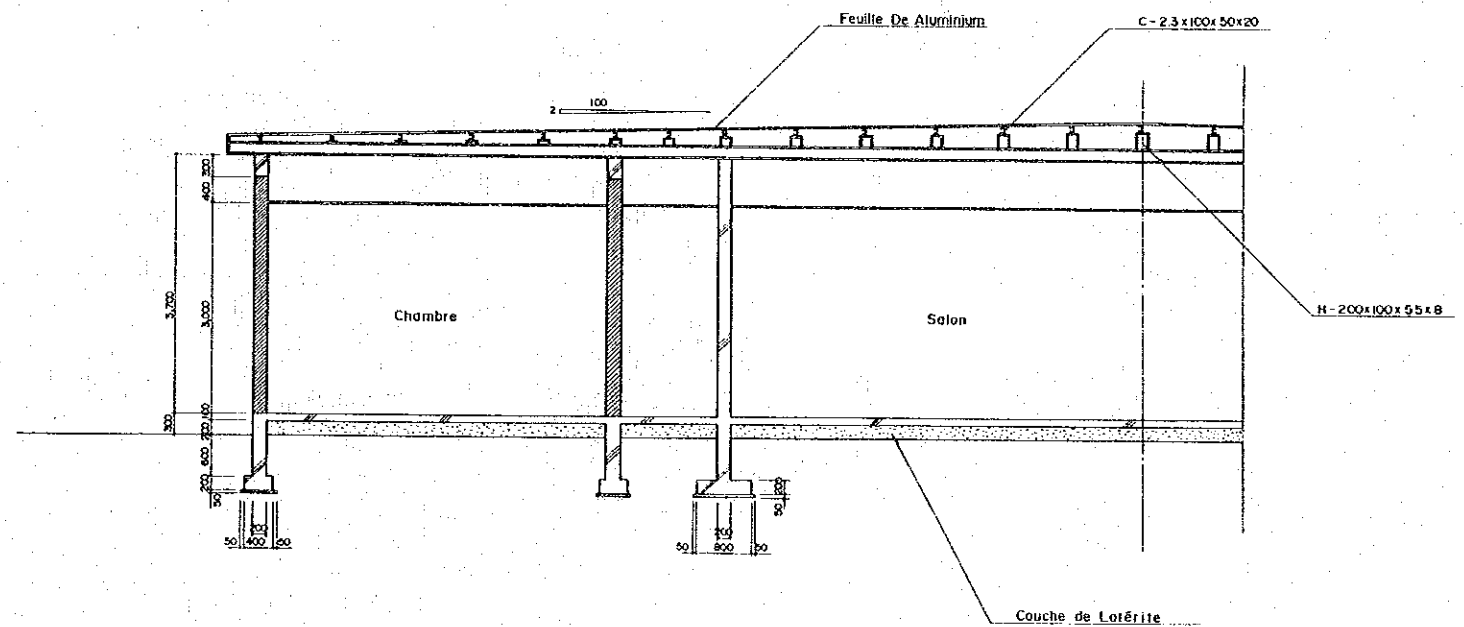
PIGNON GAUCHE E=1:100



VUE EN PLAN E=1:200



COUPE A-A E=1:50



E = 1:100 0 1 2 3 4 5 m

E = 1:50 0 0.5 1 1.5 2 2.5 m

REPUBLIQUE DU NIGER			
PROJET D'AMENAGEMENT HYDRO-AGRICOLE DE LA CUVETTE DE OUNA-KOUANZA			
DORTOIR			
DATE	JUIN 1989	PLAN N°	68
AGENCE JAPONAISE DE COOPERATION INTERNATIONALE			

JICA