

## f 1 等解析地点の位置

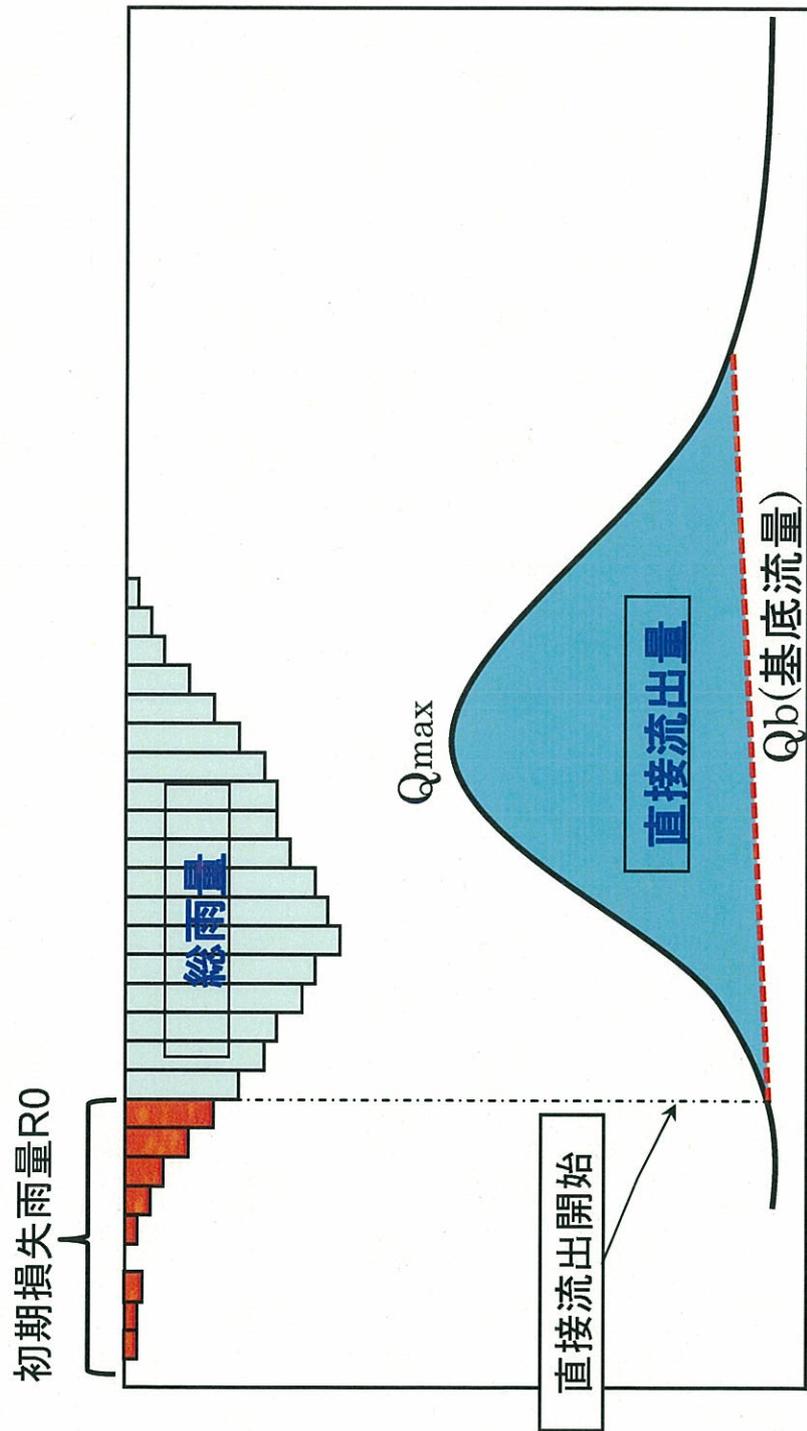
No.	地点名	河川名	位置			所在地
			北緯※	東経※	測地系	
1	矢木沢ダム	利根川	36° 54' 42"	139° 03' 14"	世	群馬県利根郡みなかみ町藤原
2	奈良俣ダム	檜俣川	36° 52' 57"	139° 04' 46"	世	群馬県利根郡みなかみ町藤原
3	藤原ダム	利根川	36° 48' 15"	139° 02' 12"	世	群馬県利根郡みなかみ町藤原
4	相俣ダム	赤谷川	36° 42' 45"	138° 53' 33"	世	群馬県利根郡みなかみ町相俣
5	小袖橋	赤谷川	36° 42' 38"	138° 53' 50"	日	群馬県利根郡みなかみ町月夜野
6	千鳥	片品川	36° 42' 18"	139° 12' 40"	日	群馬県沼田市利根町高戸谷
7	菌原ダム	片品川	36° 38' 20"	139° 10' 30"	世	群馬県沼田市利根町穴原
8	上久屋	片品川	36° 39' 12"	139° 05' 40"	日	群馬県沼田市上久屋町
9	岩島	吾妻川	36° 33' 01"	138° 47' 01"	世	群馬県吾妻郡東吾妻町大字三島
10	四万川ダム	四万川	36° 41' 48"	138° 46' 54"	世	群馬県吾妻郡中之条町大字四万
11	村上	吾妻川	36° 32' 50"	138° 55' 29"	日	群馬県渋川市村上
12	上里見	烏川	36° 22' 38"	138° 53' 07"	日	群馬県高崎市下室田町
13	霧積ダム	霧積川	36° 22' 07"	138° 42' 02"	世	群馬県碓氷郡松井田町大字坂本
14	安中	碓氷川	36° 19' 16"	138° 53' 21"	世	群馬県安中市安中町
15	高松	烏川	36° 19' 18"	139° 00' 01"	世	群馬県高崎市高松町
16	道平川ダム	道平川	36° 14' 06"	138° 40' 41"	世	群馬県甘楽郡下仁田町大字南野牧
17	岩井	鑄川	36° 15' 28"	139° 01' 45"	日	群馬県高崎市吉井町岩井
18	岩鼻 (全流域)	烏川	36° 17' 30"	139° 04' 36"	世	群馬県高崎市岩鼻町
19	万場	神流川	36° 06' 56"	138° 55' 10"	世	群馬県多野郡神流町大字万場
20	下久保ダム	神流川	36° 07' 57"	139° 01' 21"	世	埼玉県児玉郡神川町矢納、 群馬県藤岡市保美濃山
21	若泉	神流川	36° 10' 25"	139° 03' 28"	世	埼玉県児玉郡神川町大字渡瀬

※収集した資料に記載されている緯度・経度を転記した。資料に記載がない場合は、住所等の所在地情報をもとに設定した作業値を記入した。

# R0の設定

別添資料7-9

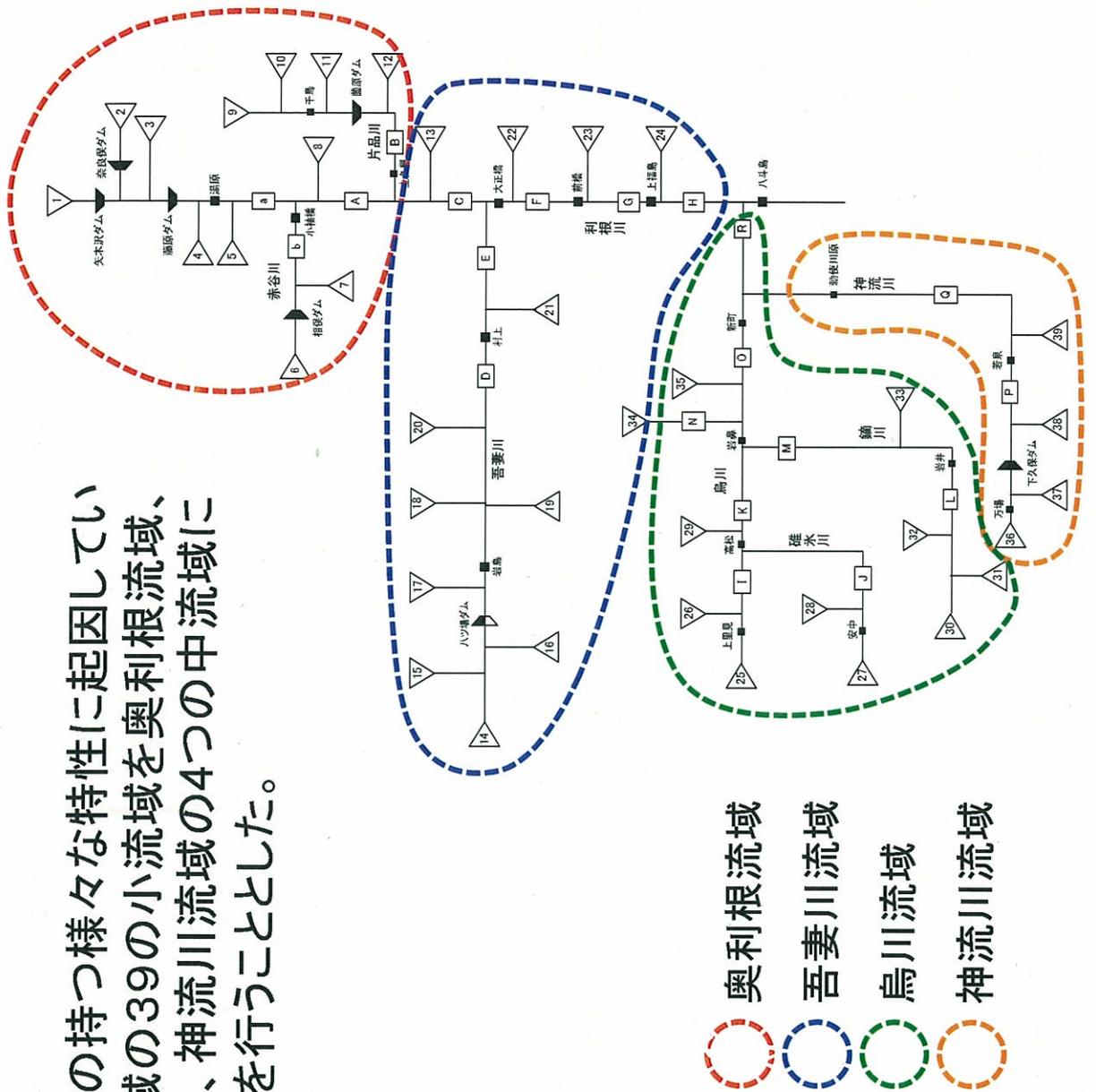
f1等解析地点ごとに、流域定数解析洪水ごとに、直接流出開始以前の降雨を初期損失雨量(R0)と設定。各f1等解析地点における各流域定数解析洪水において、降り始めからR0分の雨量を控除して総雨量を求めめる。



# 中流域

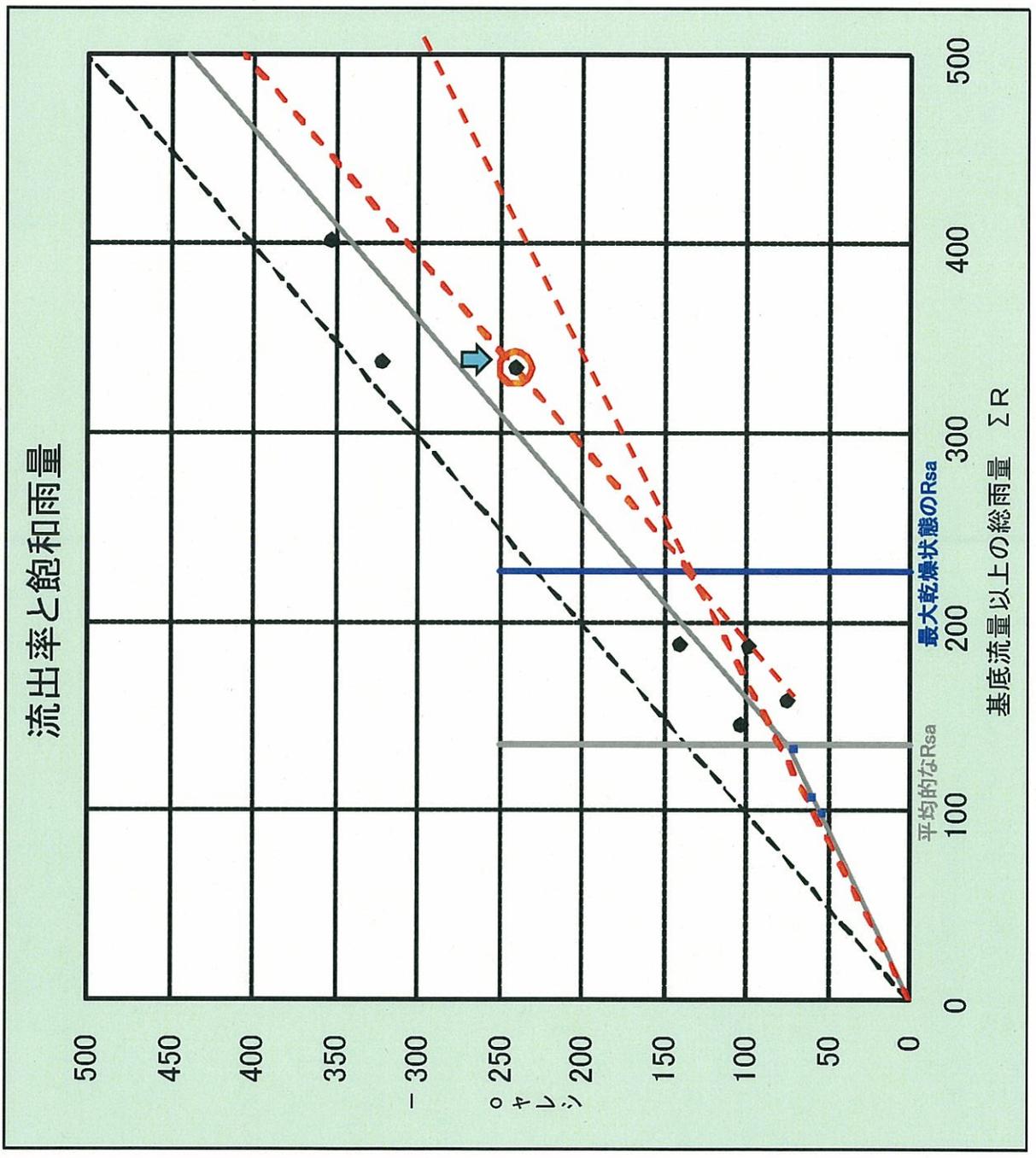
別添資料7-10

流域定数の値は流域の持つ様々な特性に起因していると考え、八斗島上流域の39の小流域を奥利根流域、吾妻川流域、烏川流域、神流川流域の4つの中流域に分け、流域定数の解析を行うこととした。



# f1、Rsaの概念図

別添資料7-11



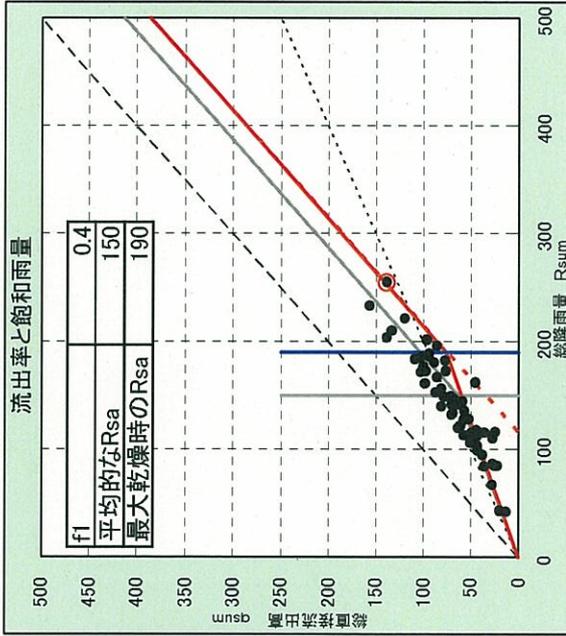
# f1、Rsa

別添資料7-12

## 奥利根流域

流域面積	1,667
第四紀 火山岩地帯	319
非第四紀 火山岩地帯	1,347
第四紀 占有率(%)	19.2%

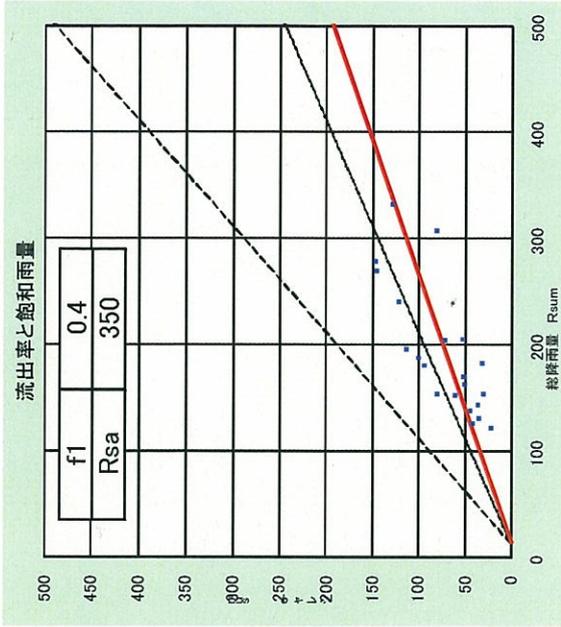
※面積は小数点以下四捨五入



## 吾妻流域

流域面積	1,738
第四紀 火山岩地帯	1,041
非第四紀 火山岩地帯	696
第四紀 占有率(%)	59.9%

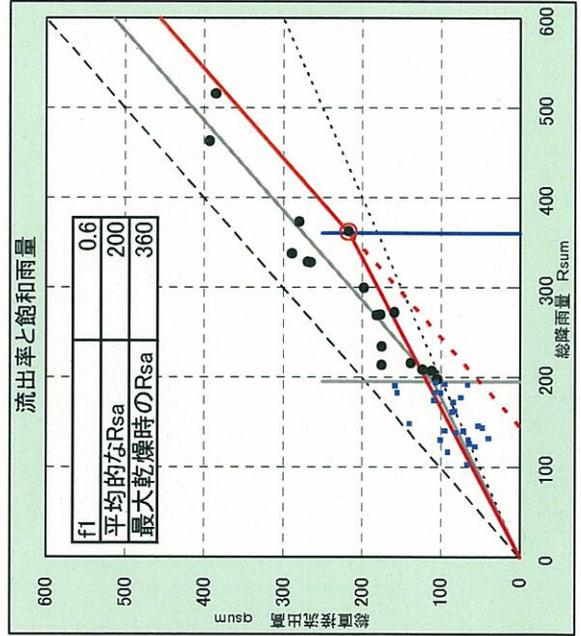
※面積は小数点以下四捨五入



## 烏川流域

流域面積	1,291
第四紀 火山岩地帯	266
非第四紀 火山岩地帯	1,025
第四紀 占有率(%)	20.6%

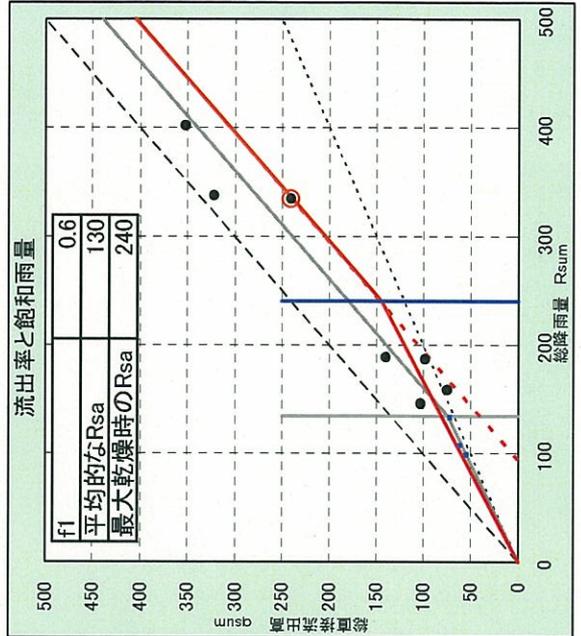
※面積は小数点以下四捨五入



## 神流川流域

流域面積	412
第四紀 火山岩地帯	0
非第四紀 火山岩地帯	412
第四紀 占有率(%)	0.0%

※面積は小数点以下四捨五入





























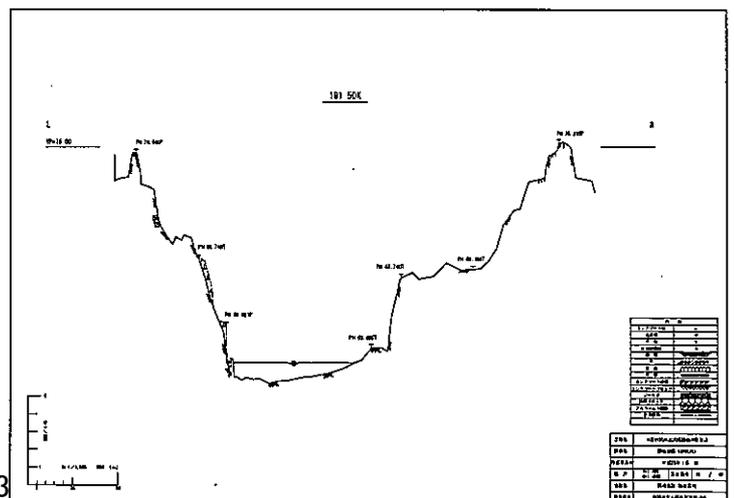
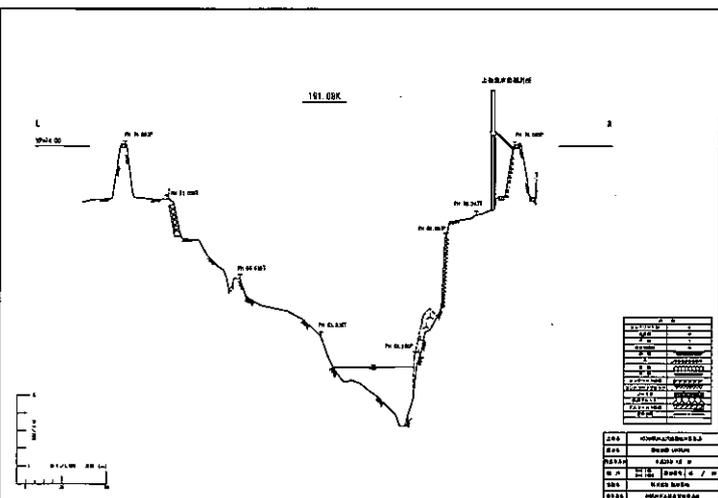
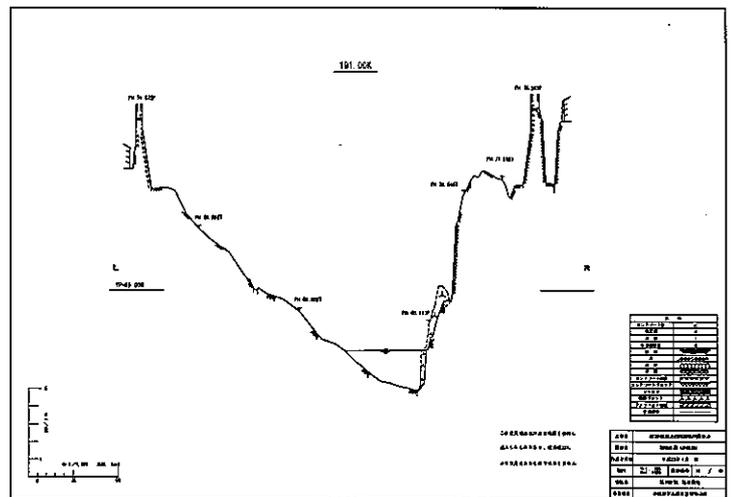
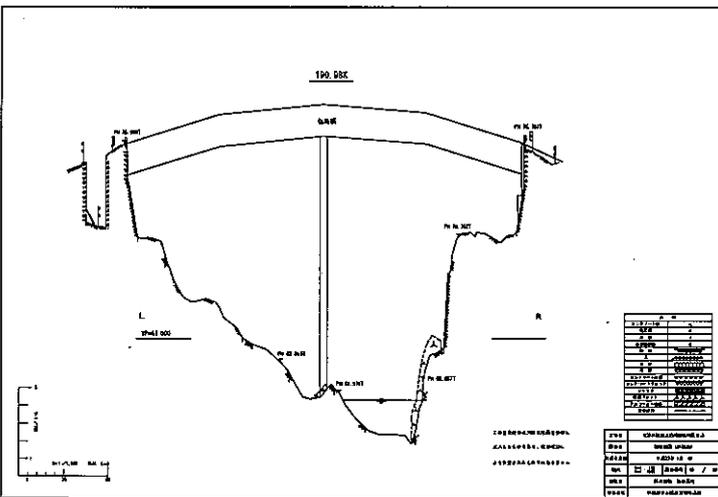
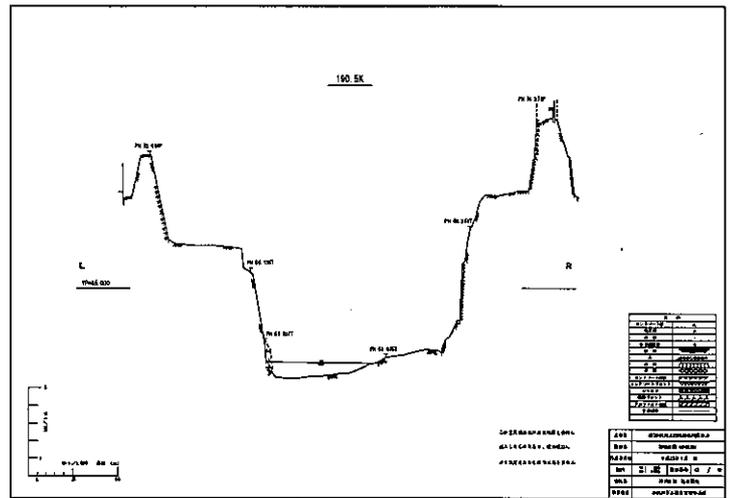
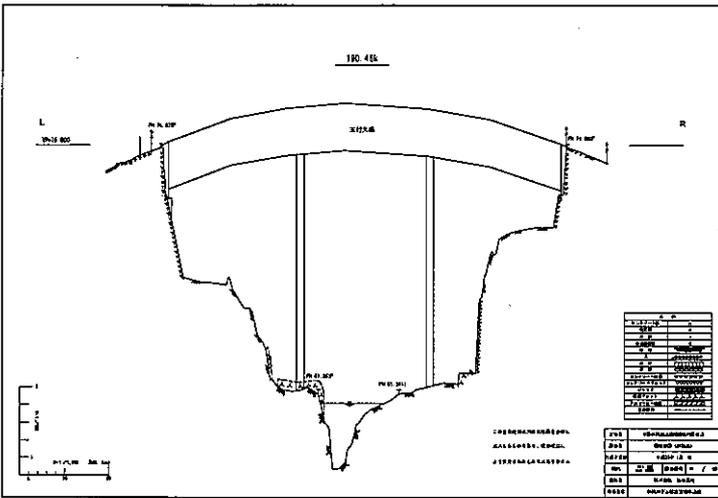
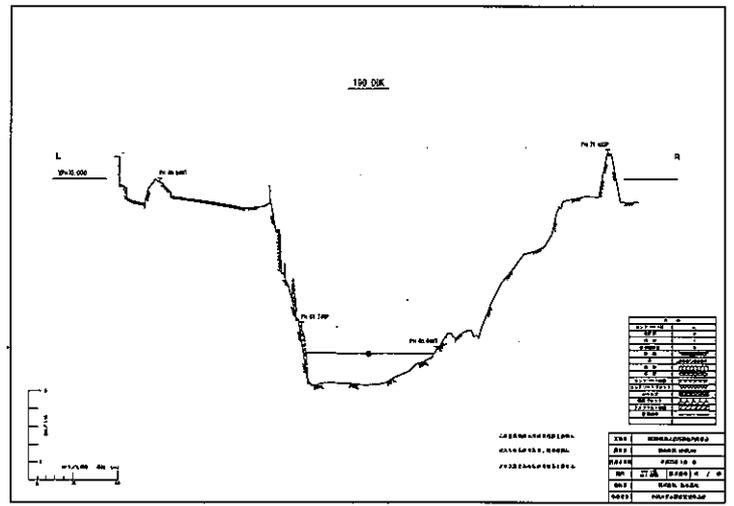
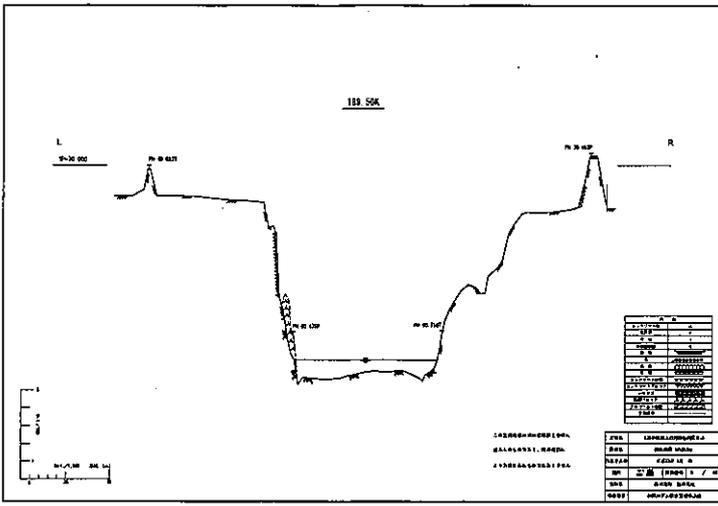


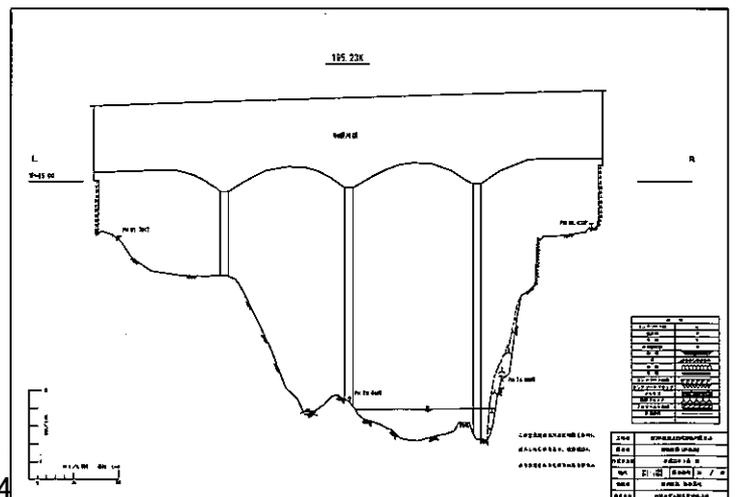
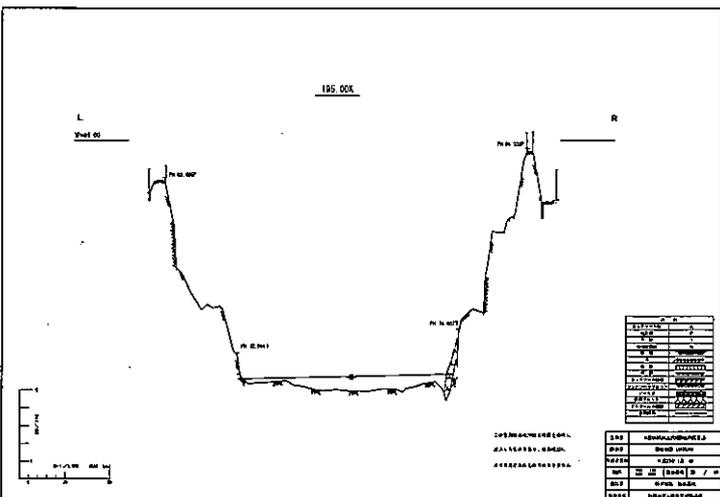
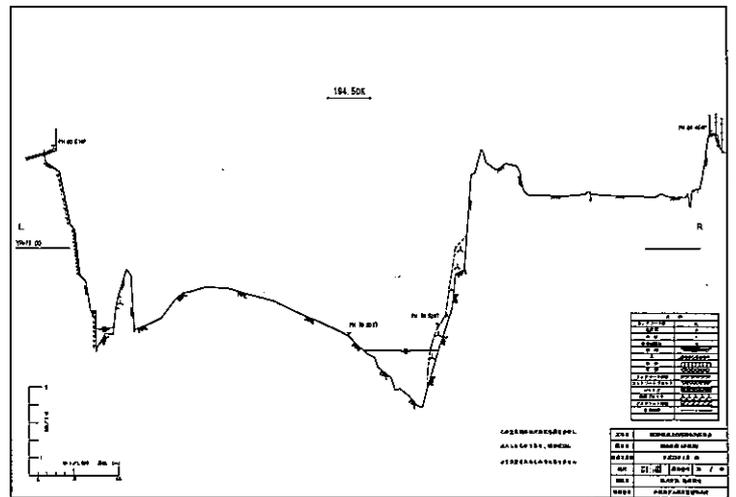
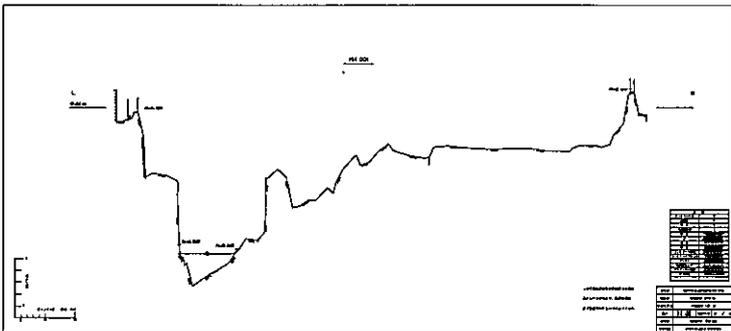
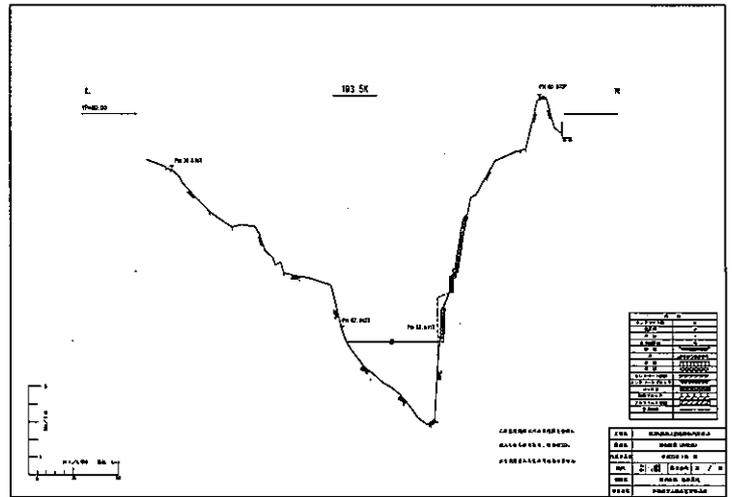
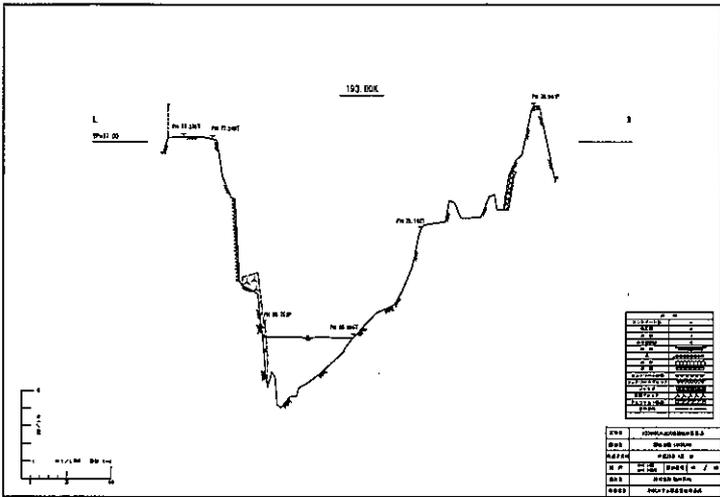
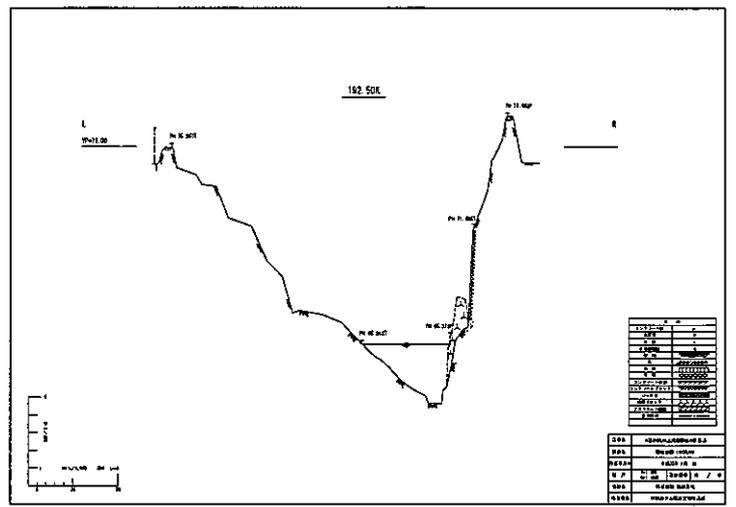
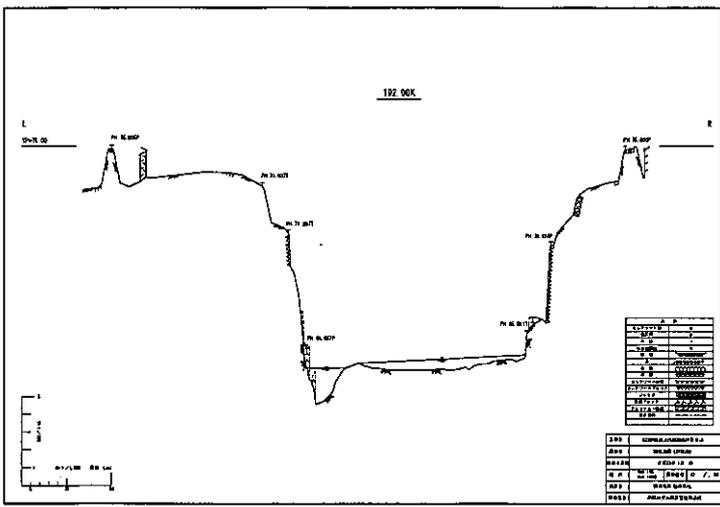


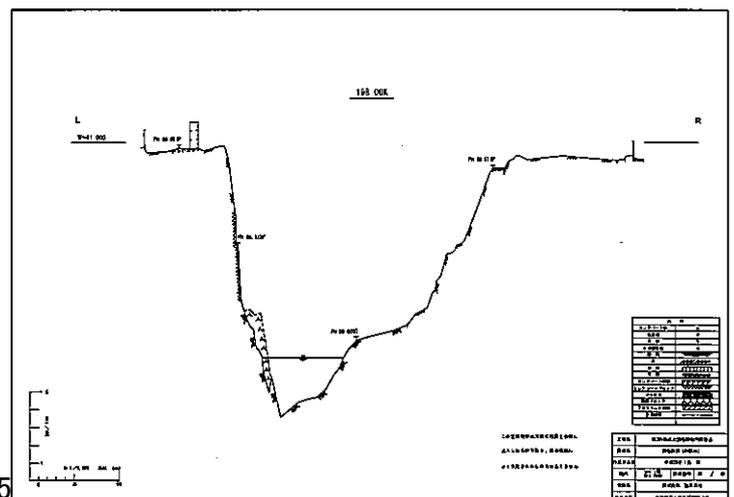
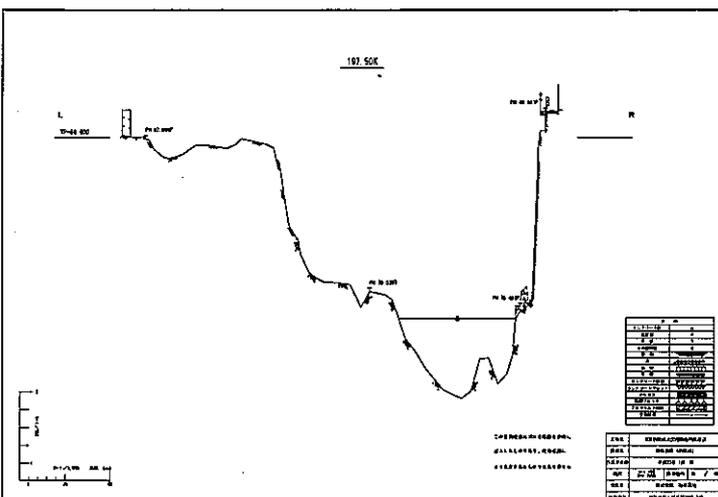
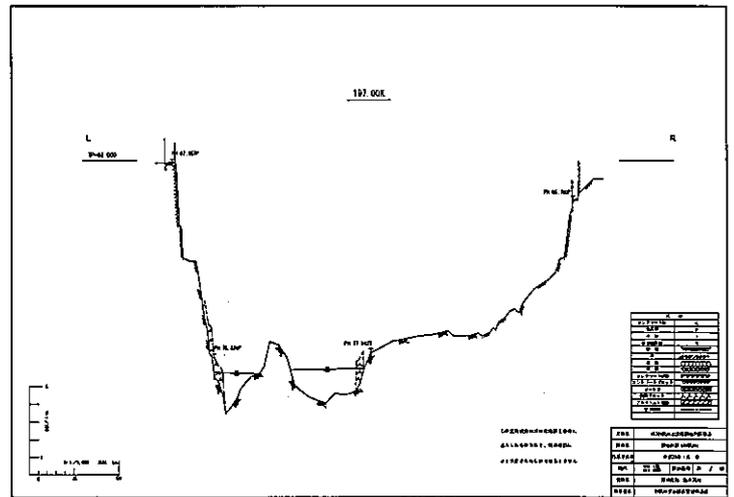
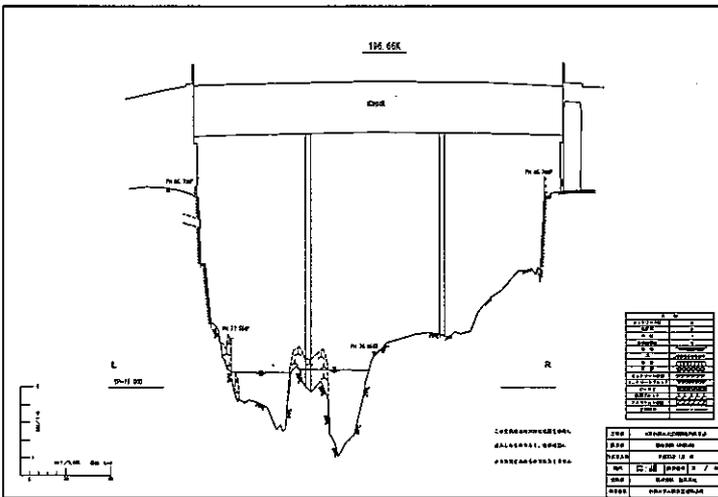
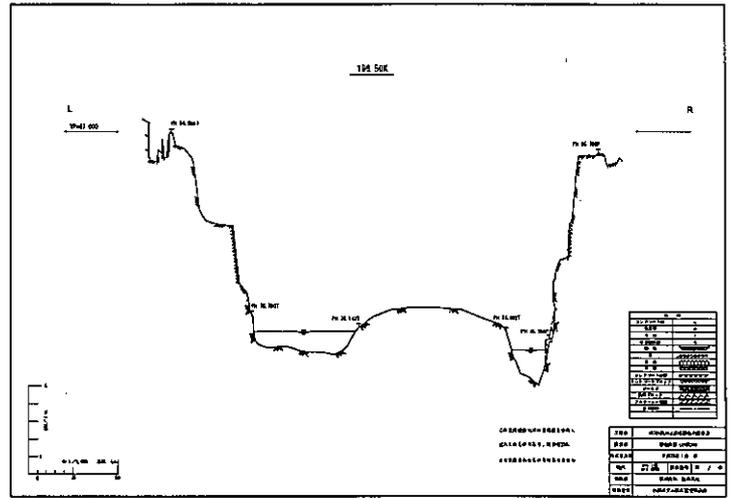
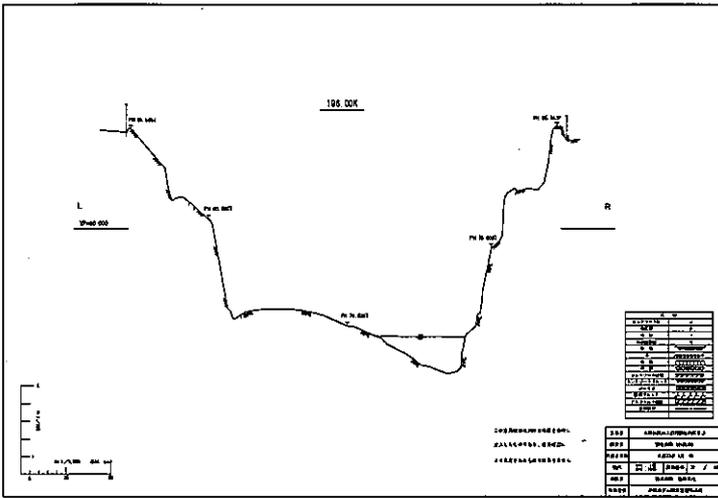
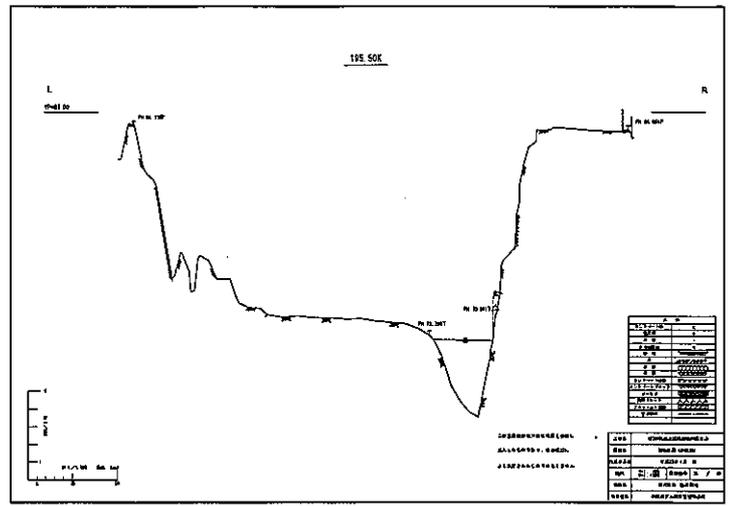
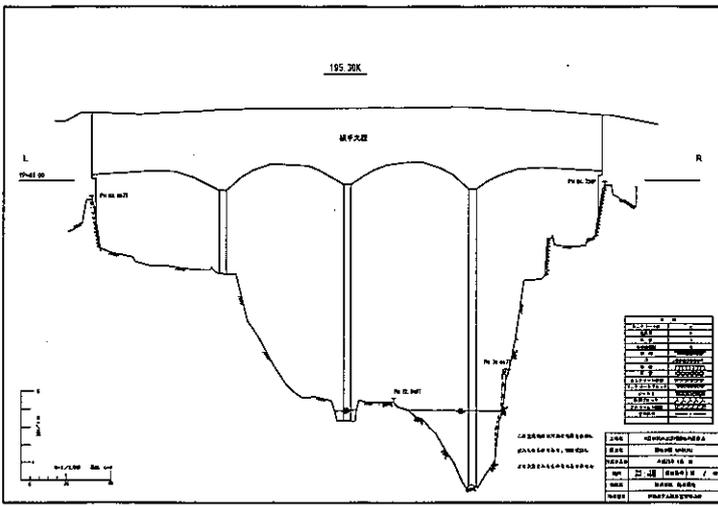


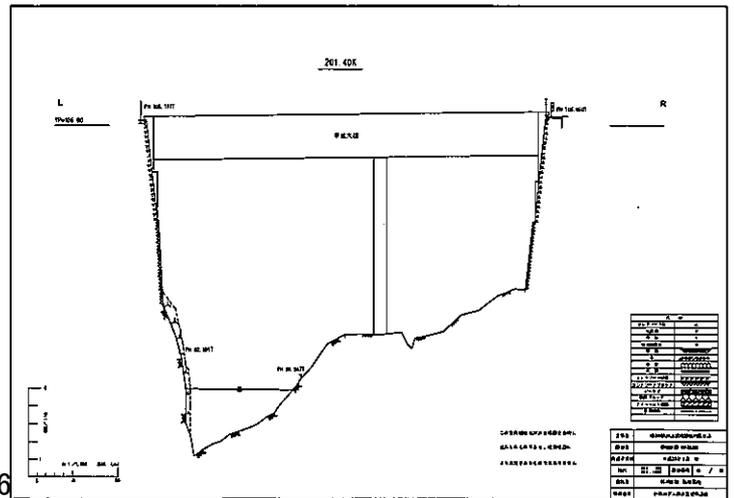
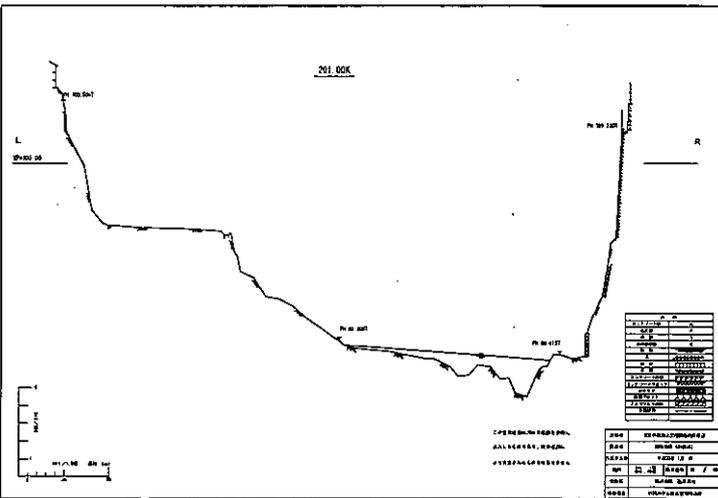
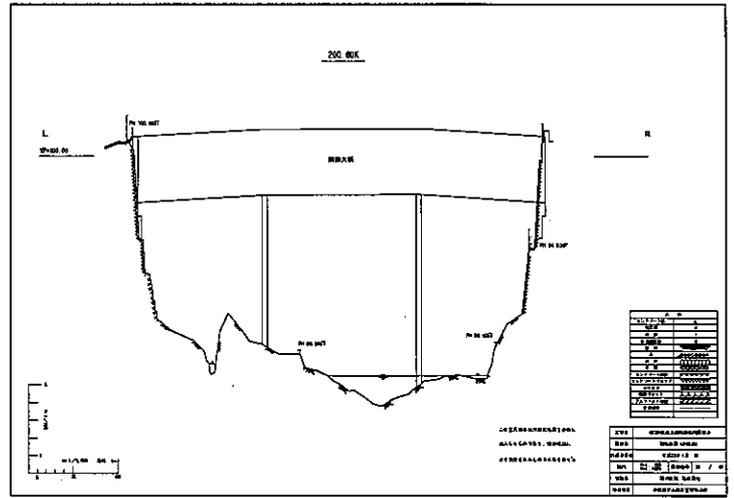
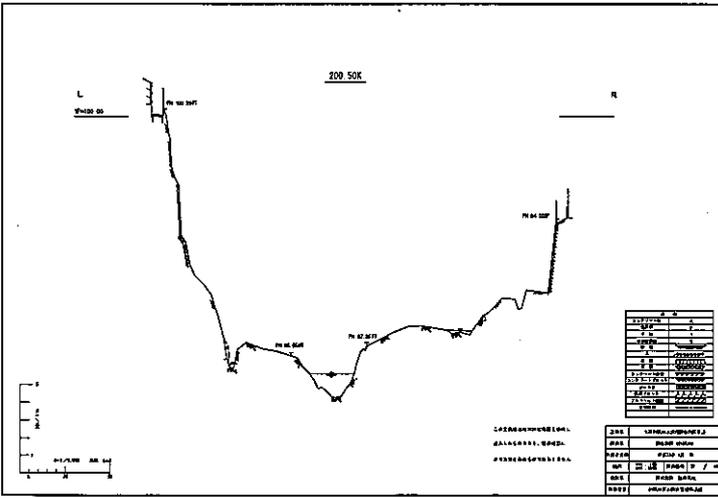
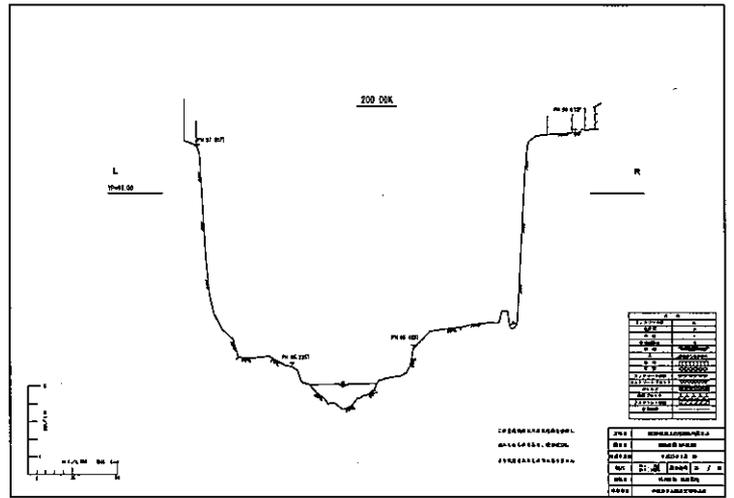
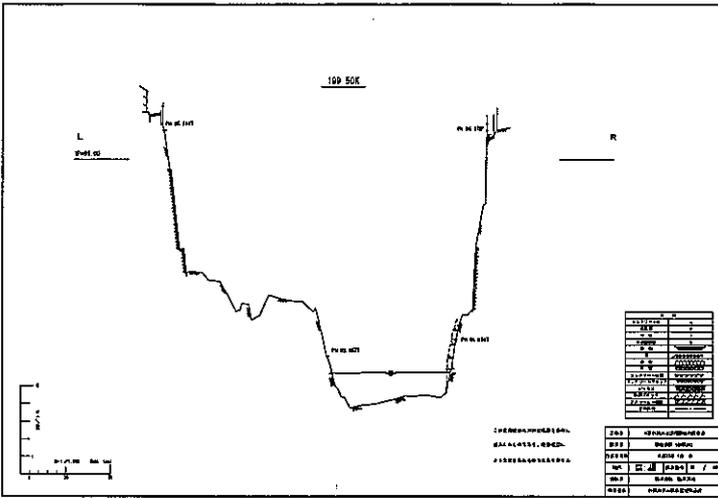
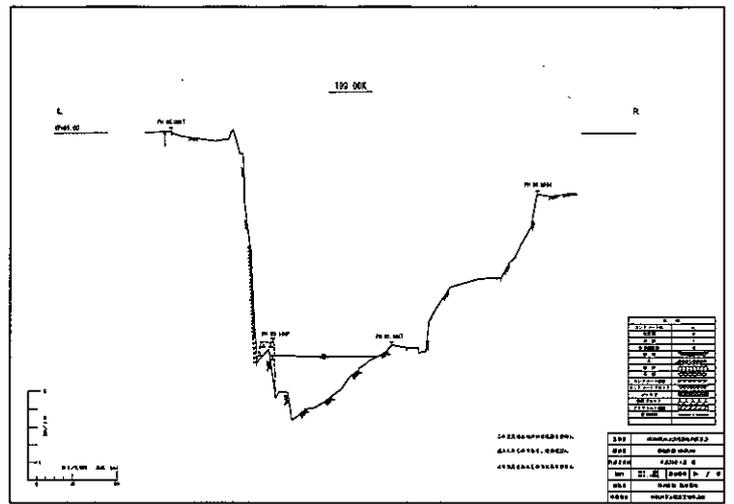
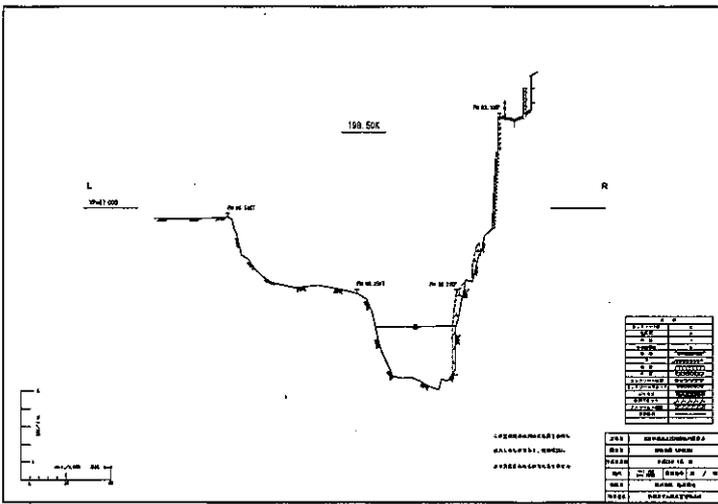


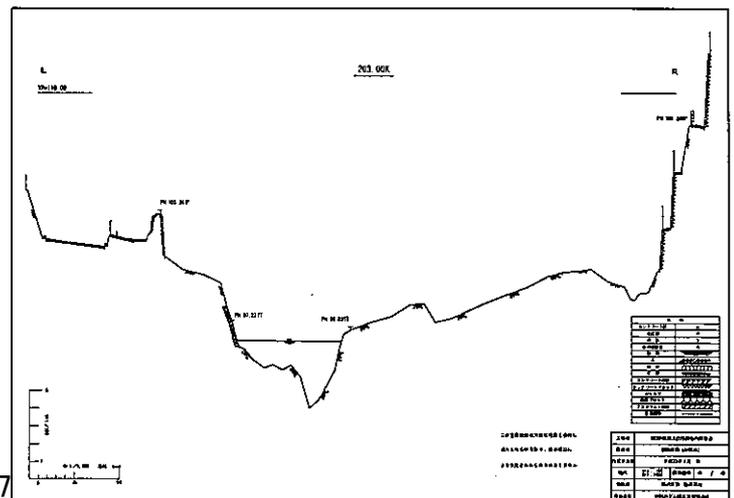
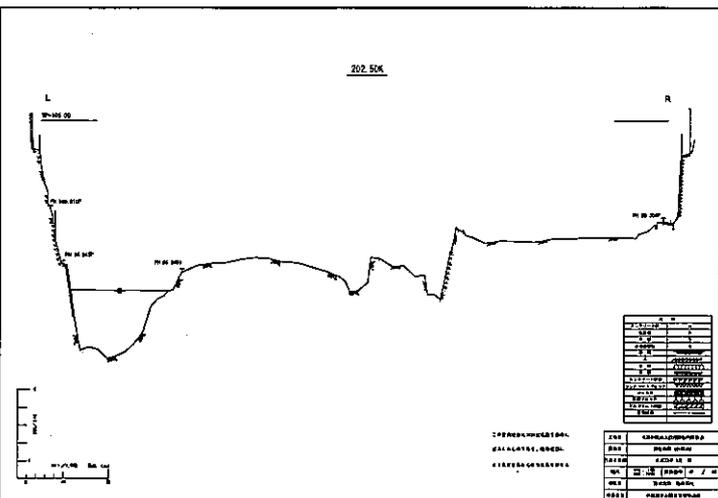
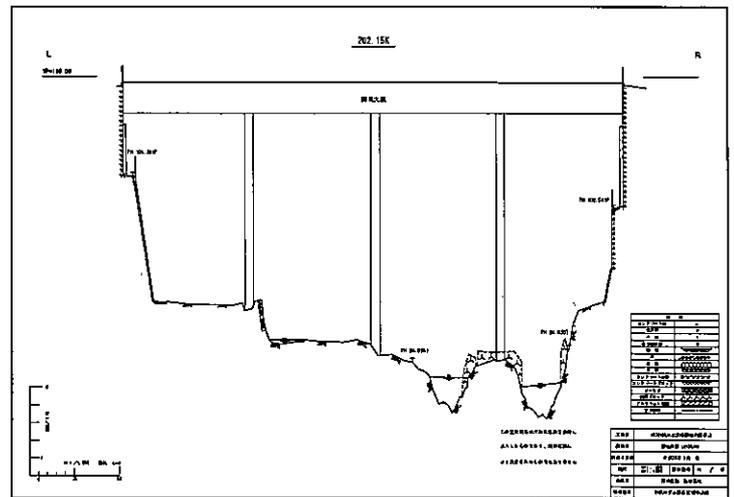
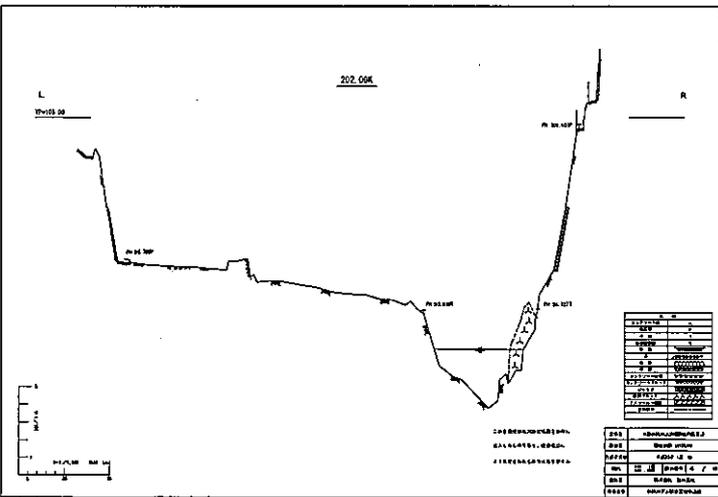
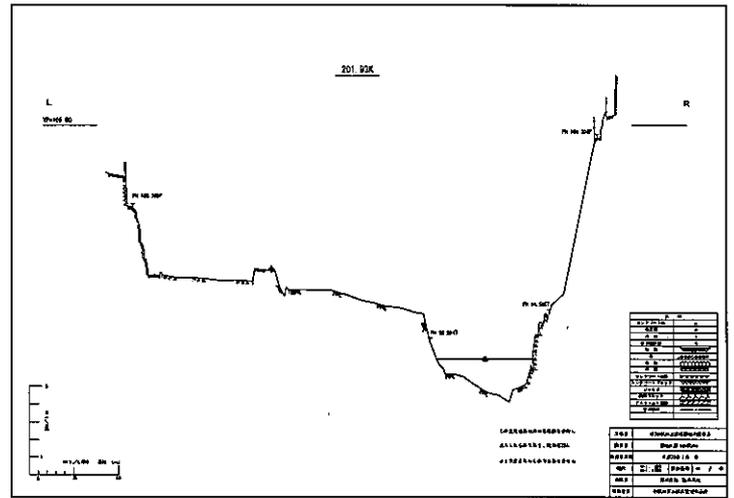
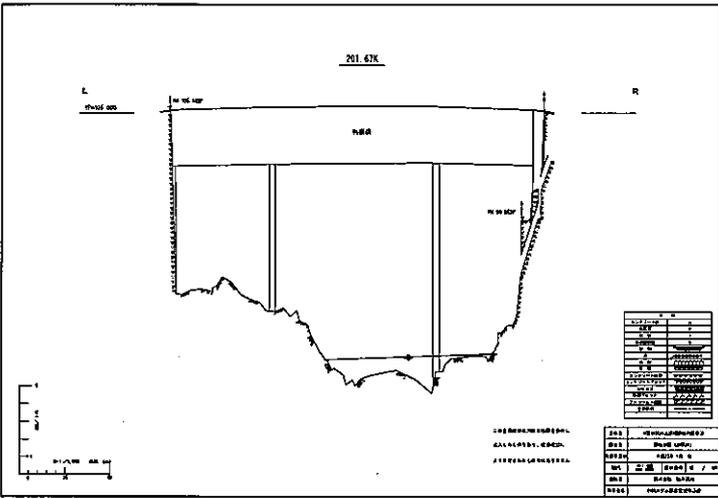
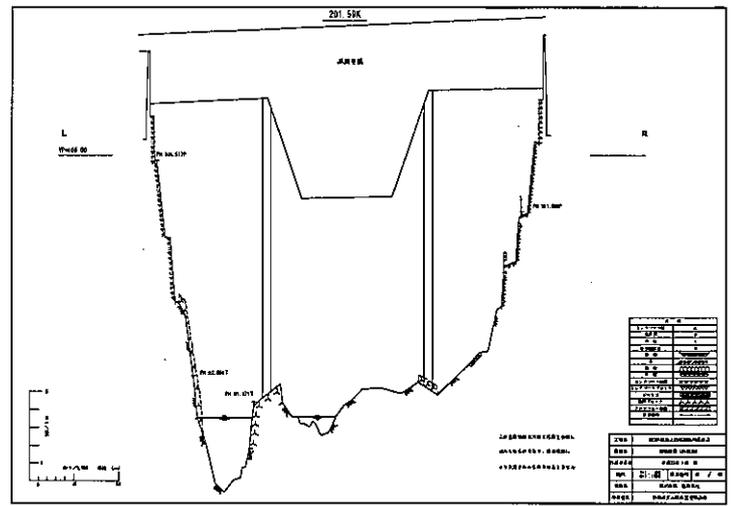
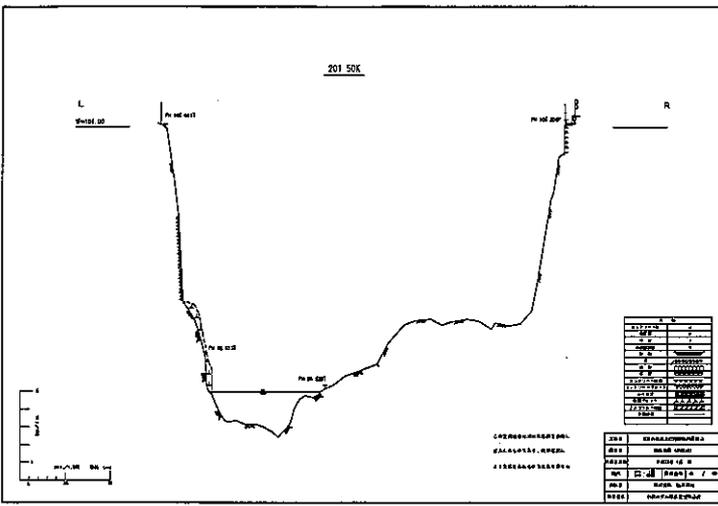


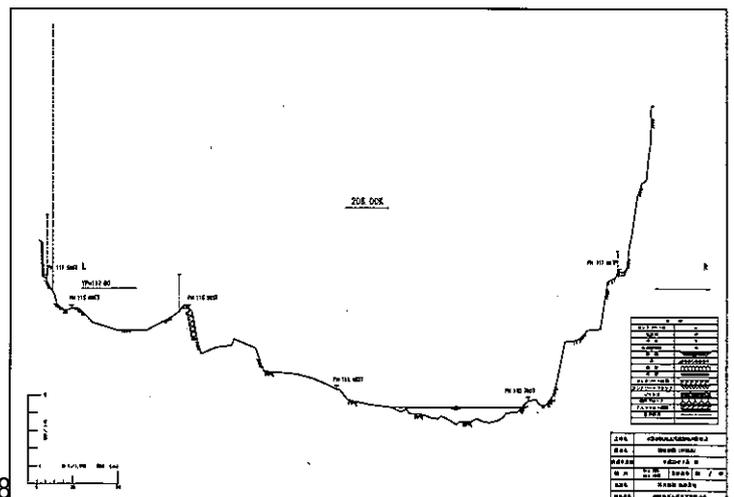
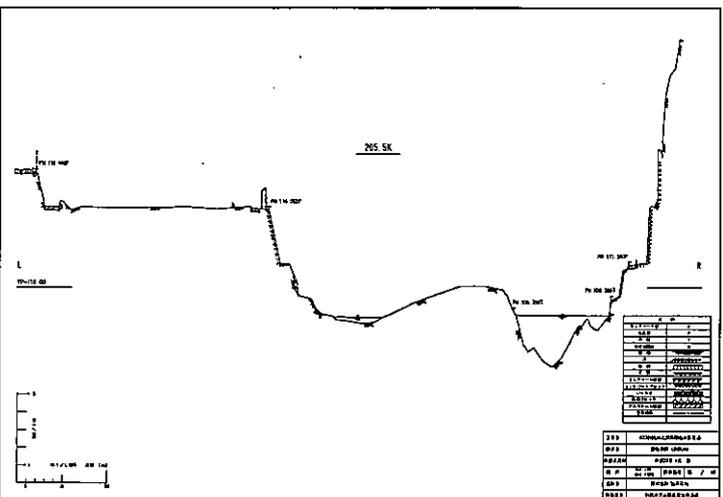
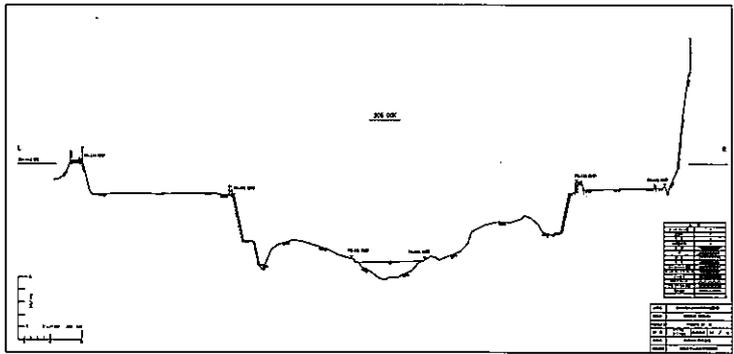
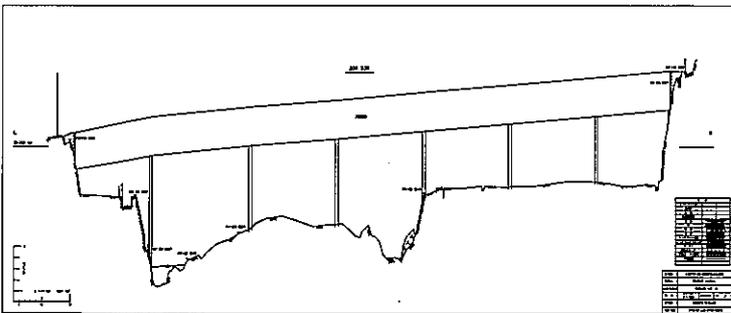
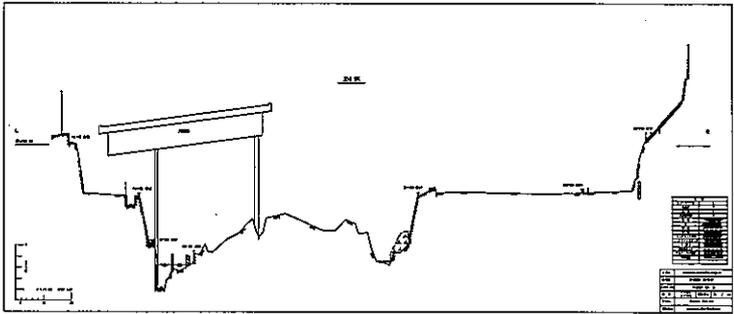
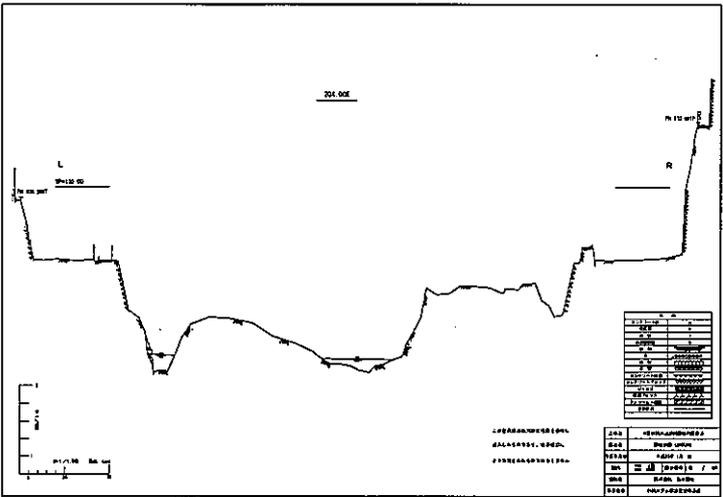
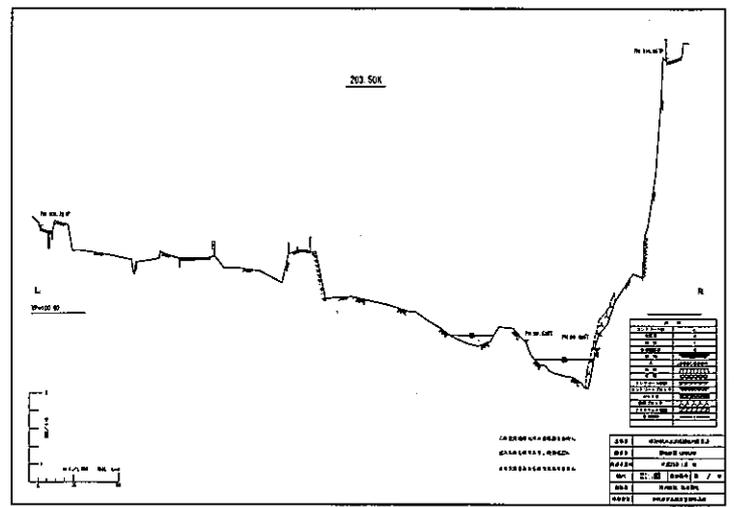
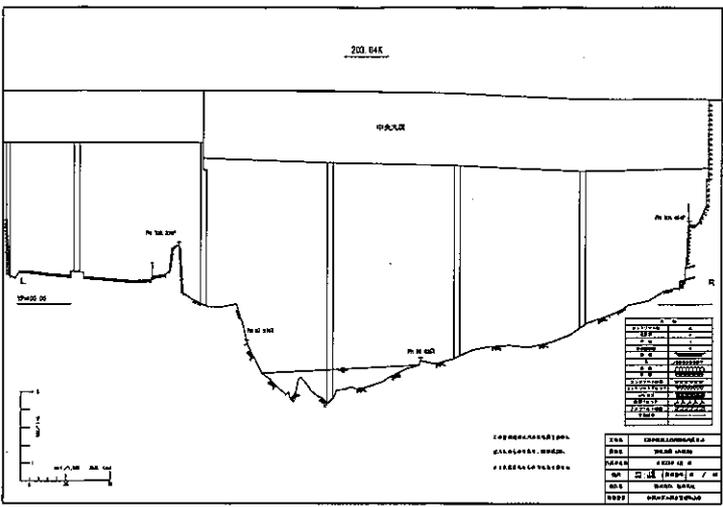


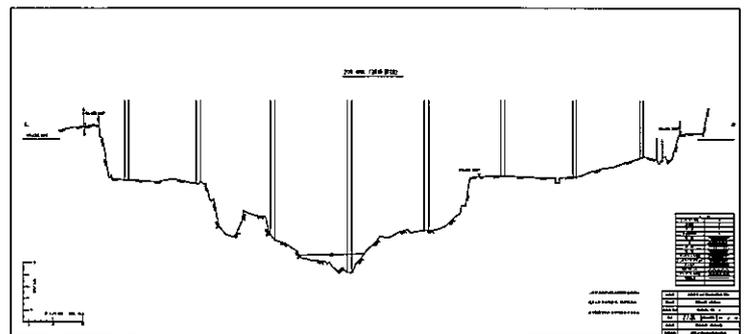
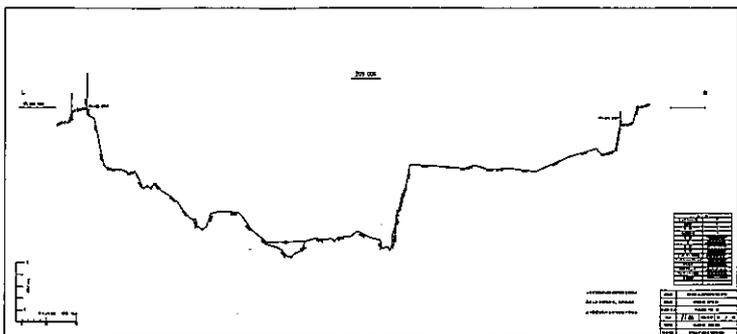
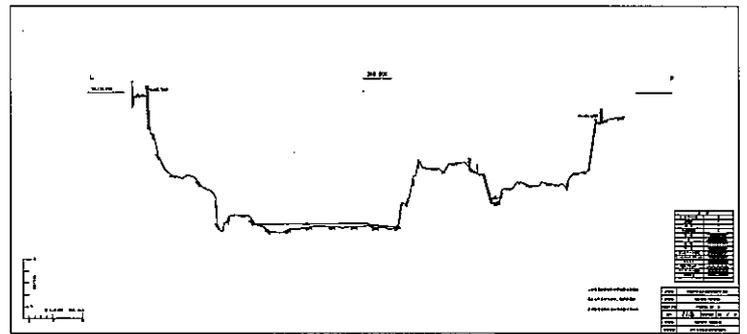
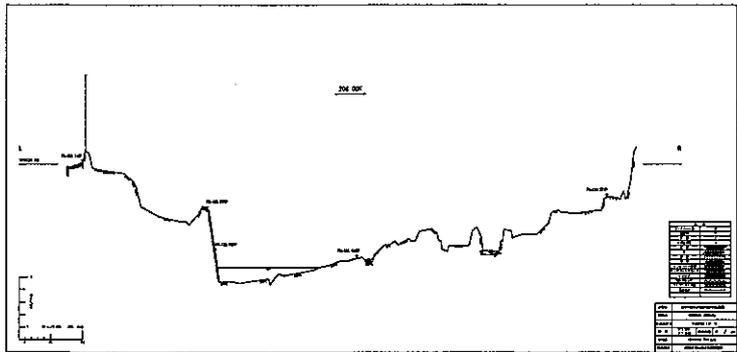
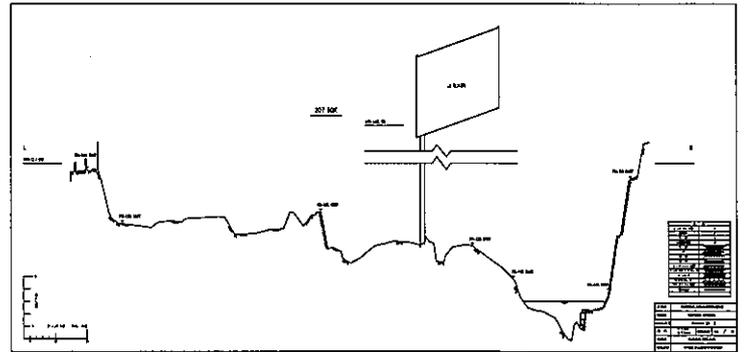
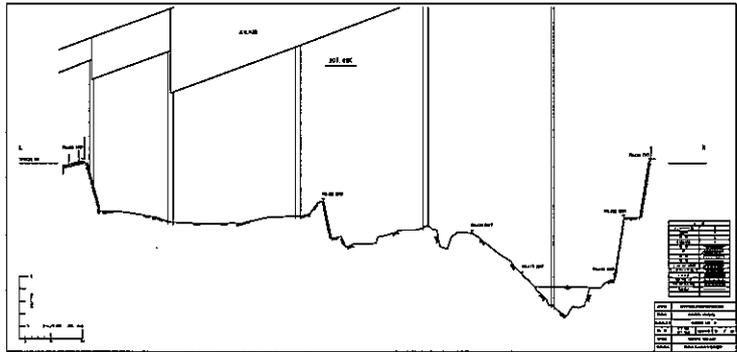
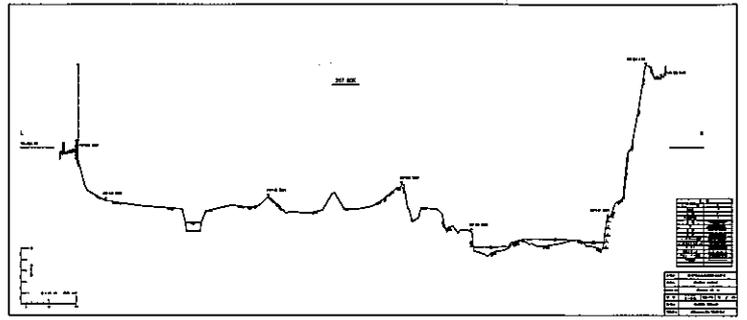
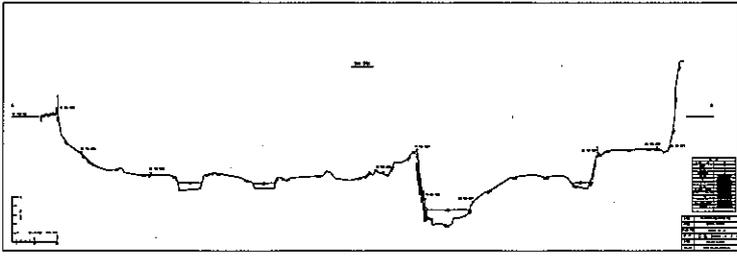


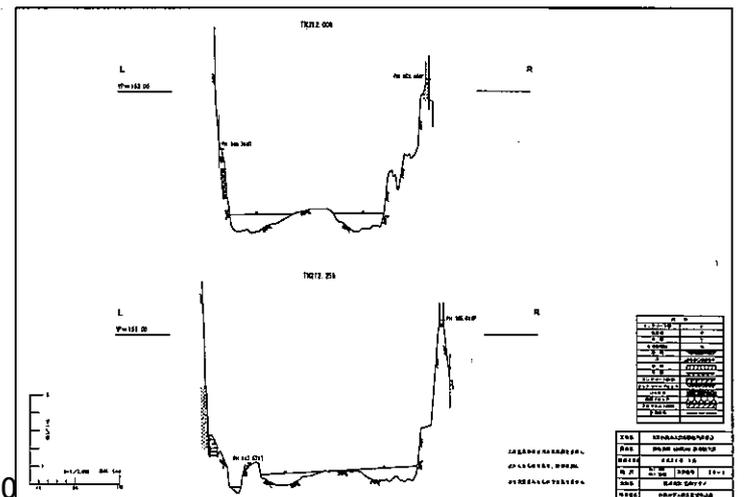
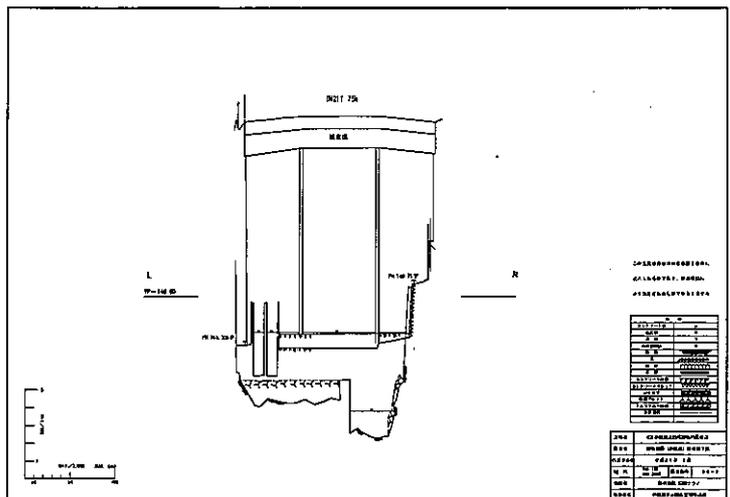
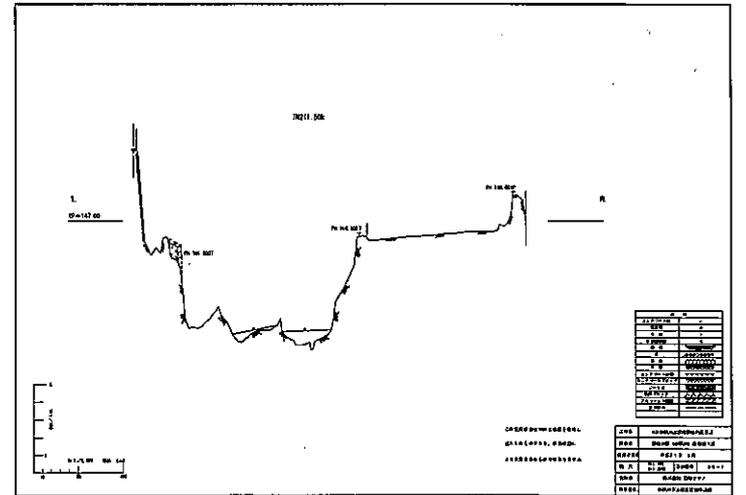
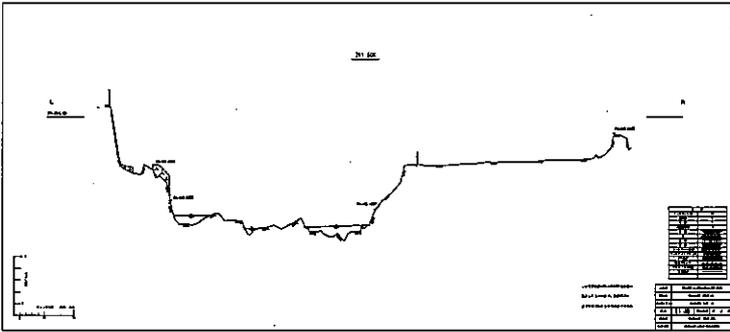
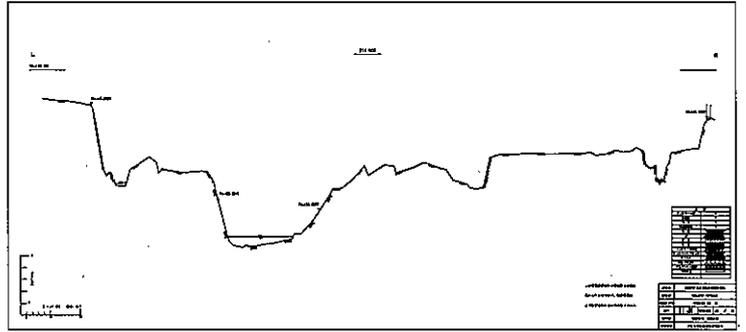
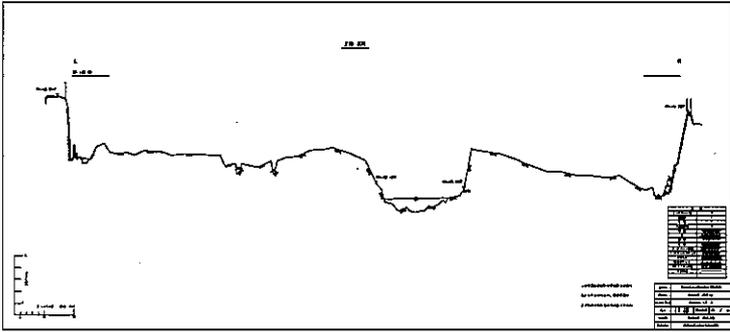
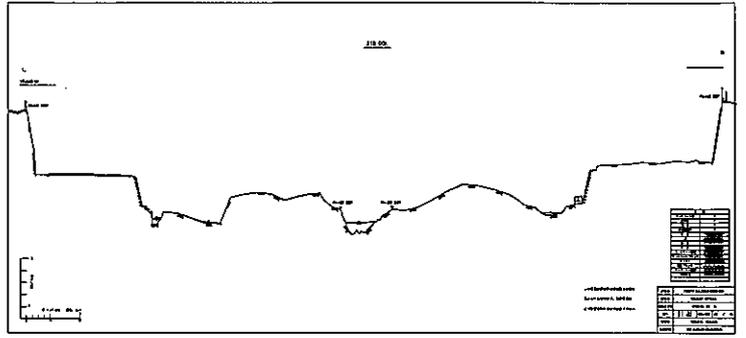
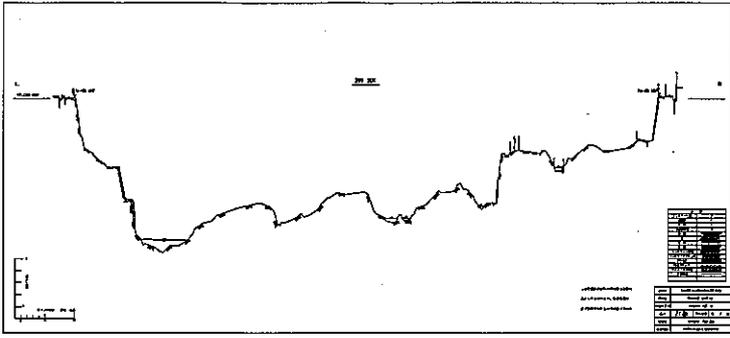


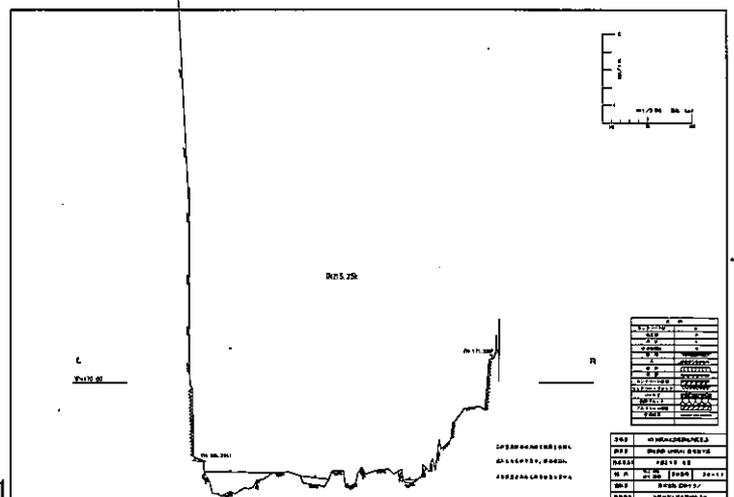
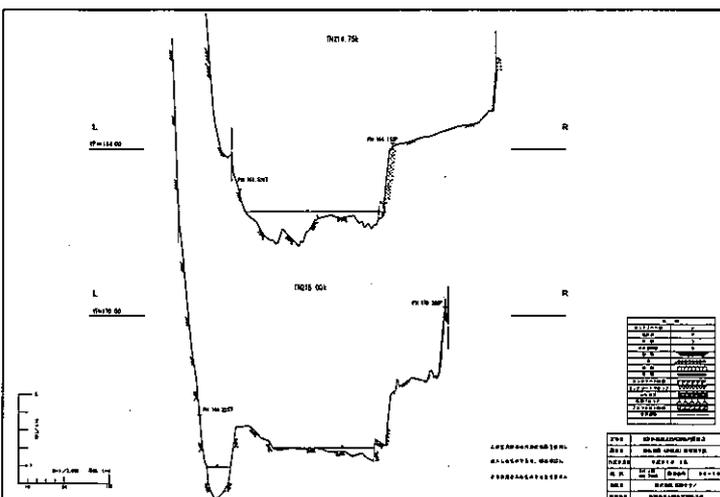
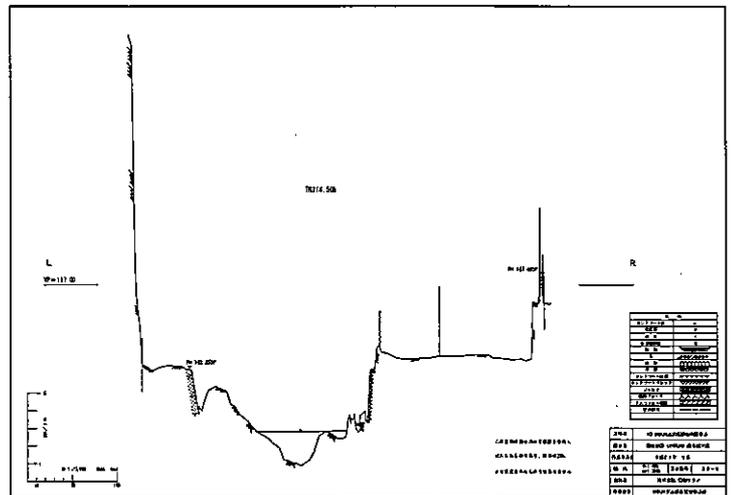
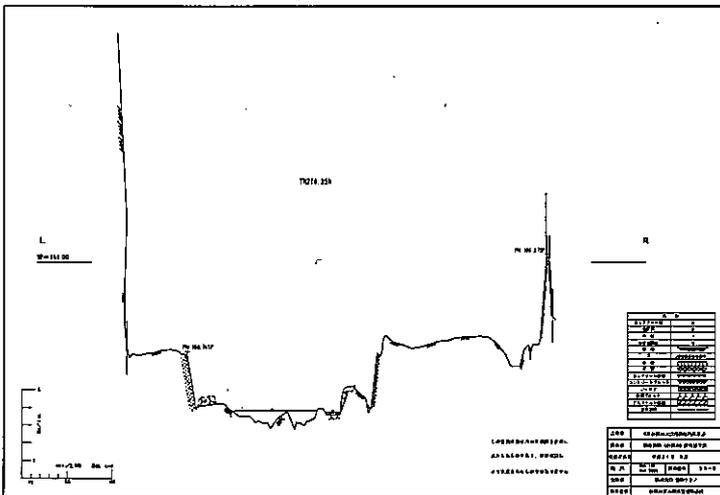
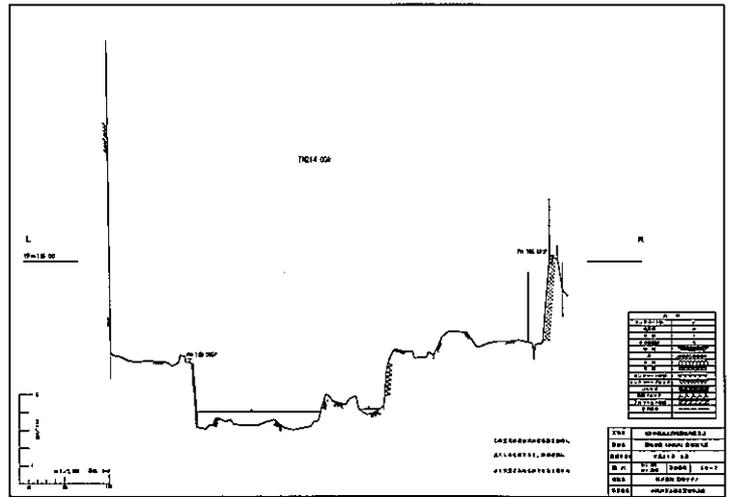
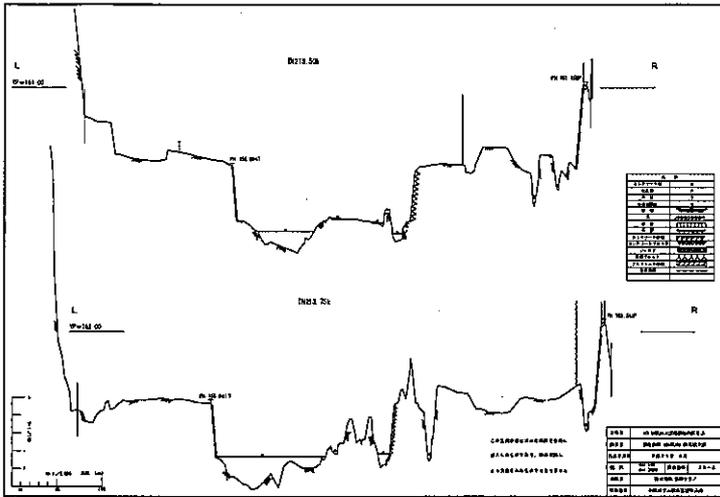
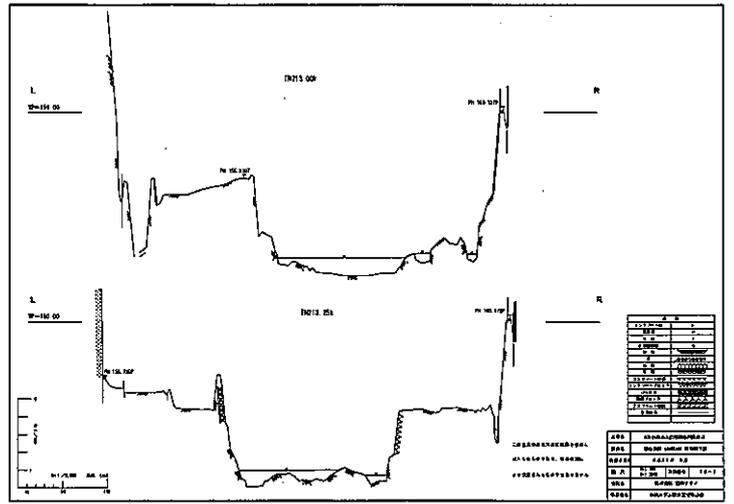
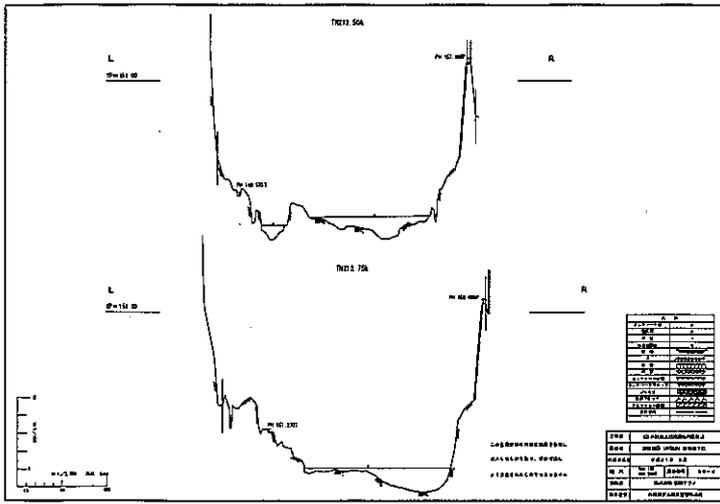


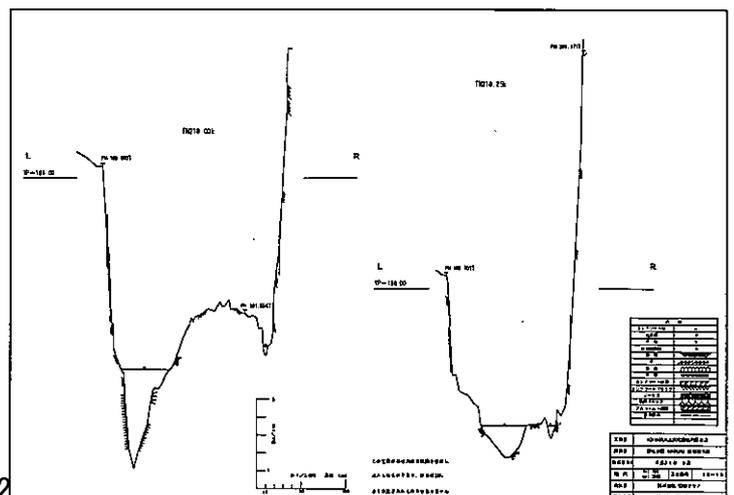
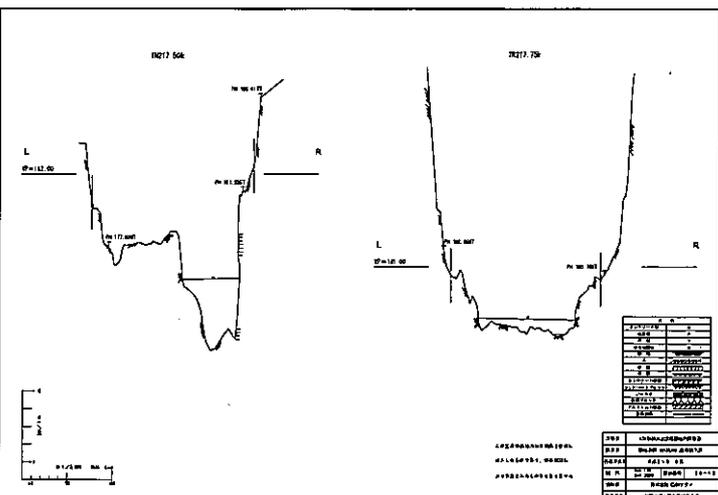
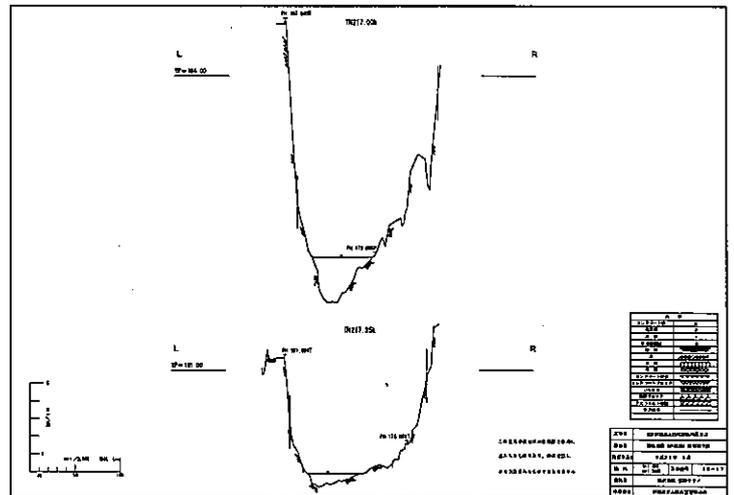
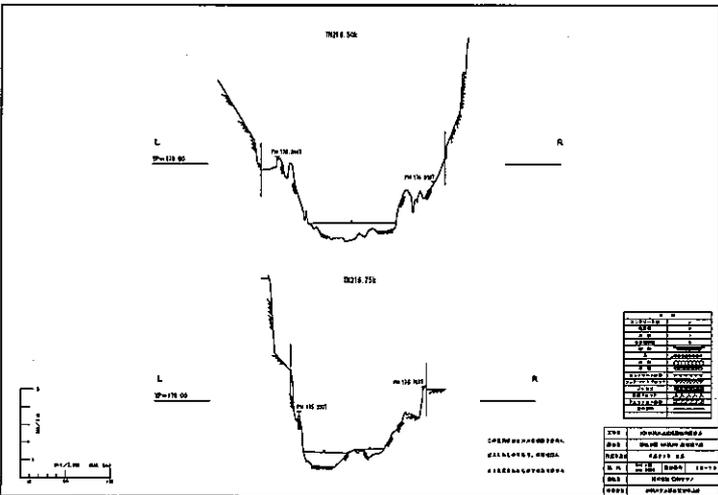
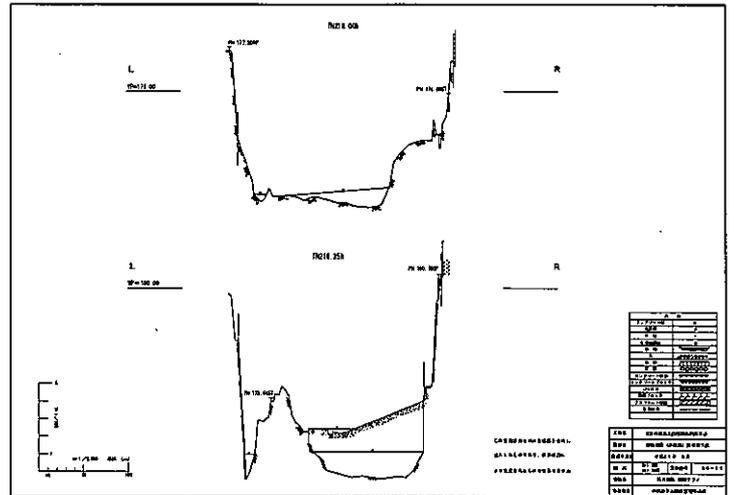
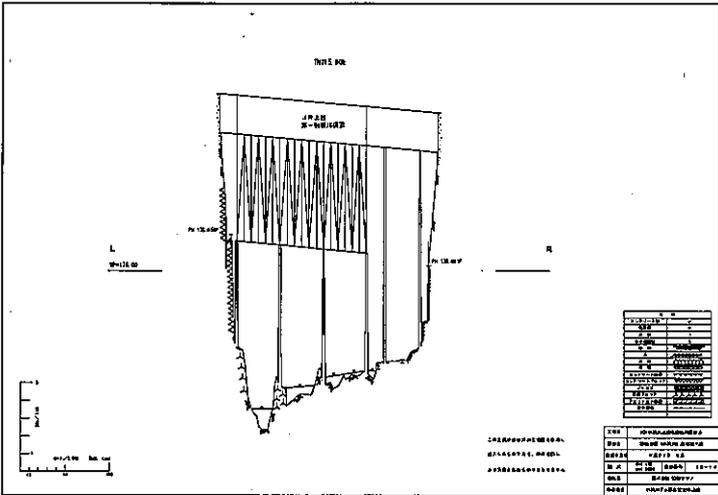
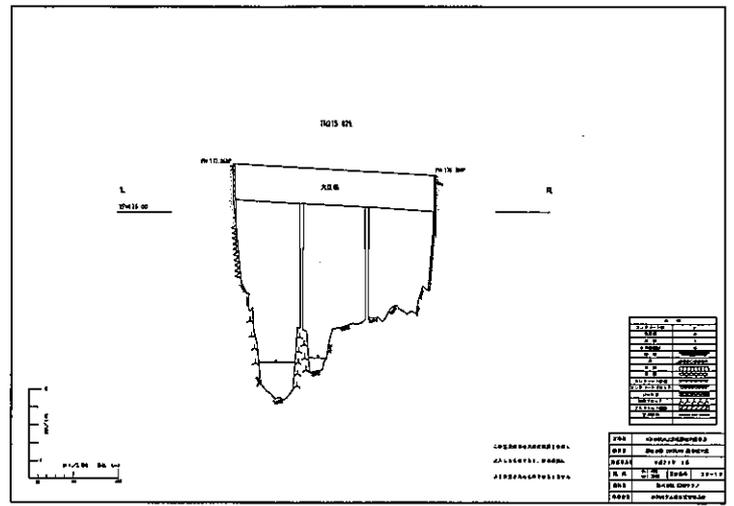
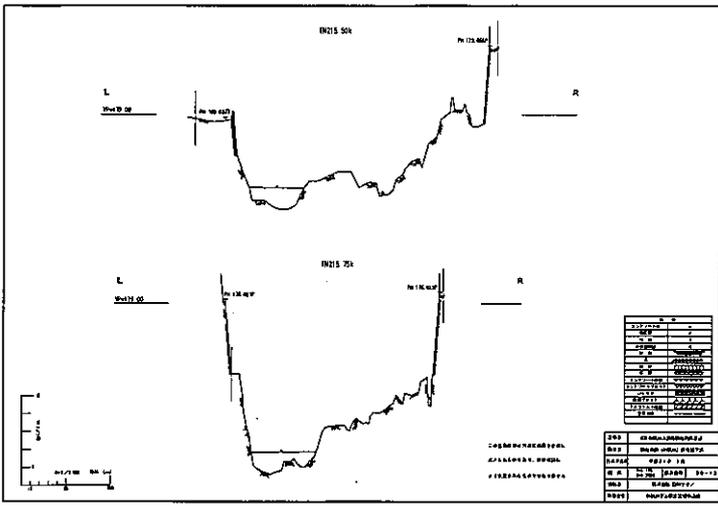


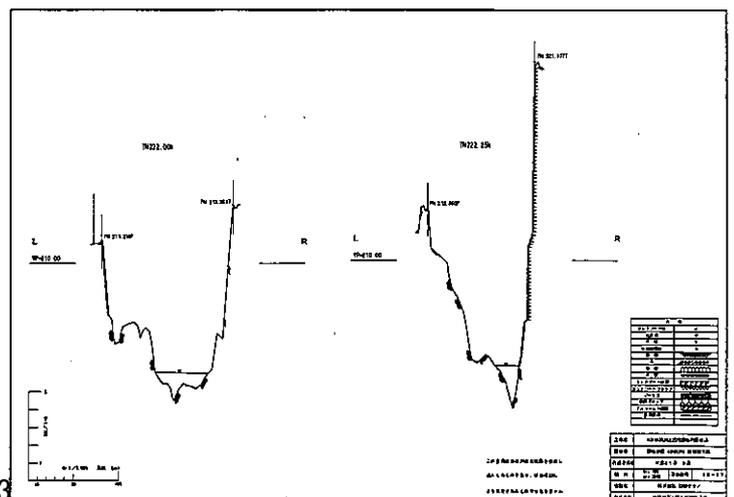
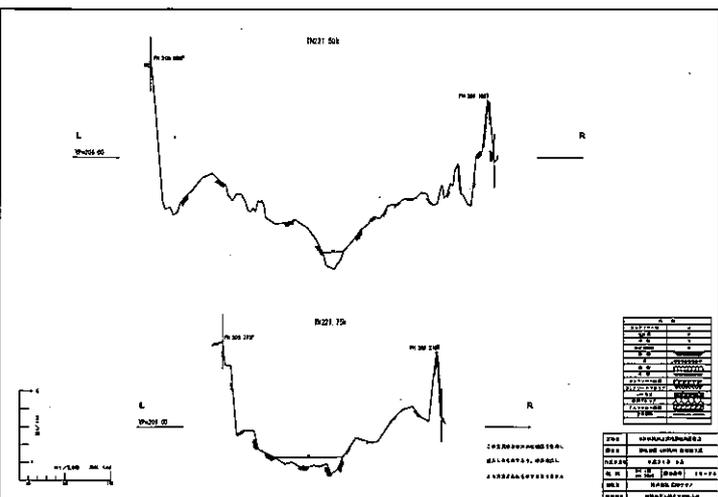
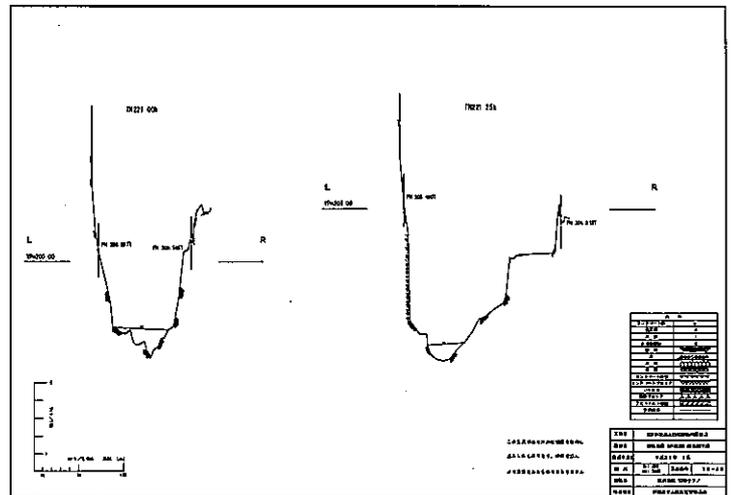
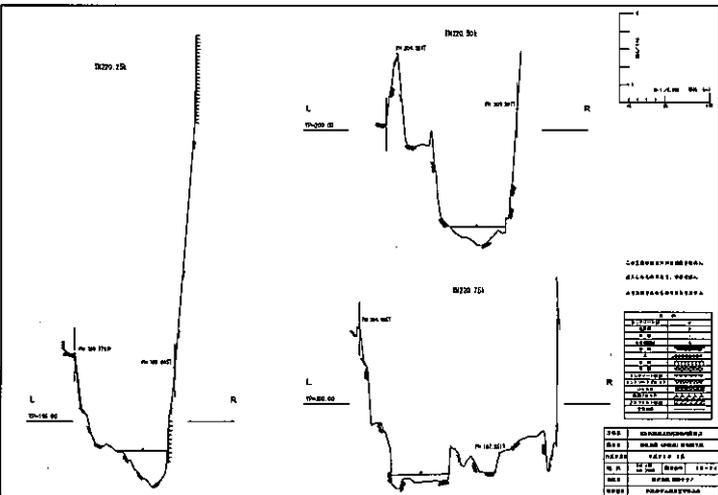
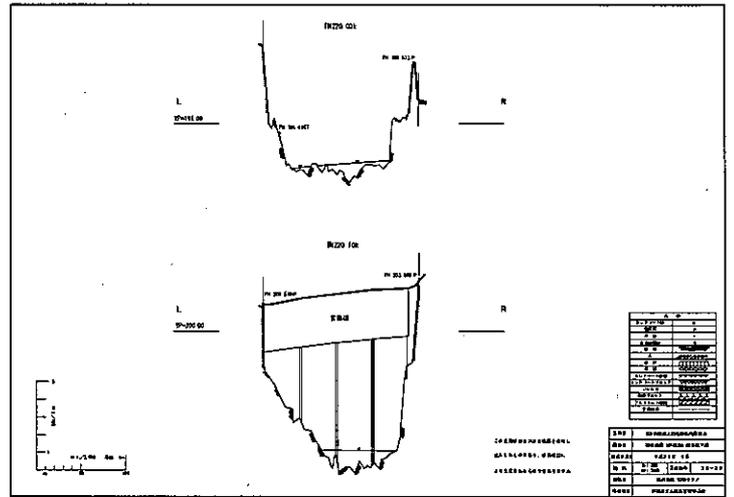
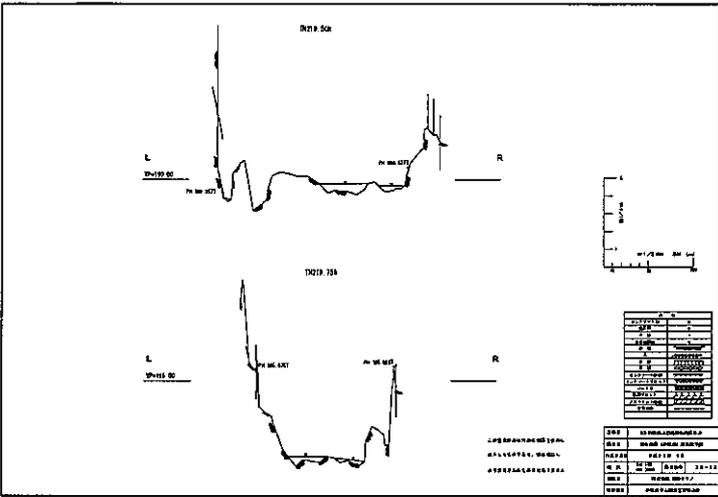
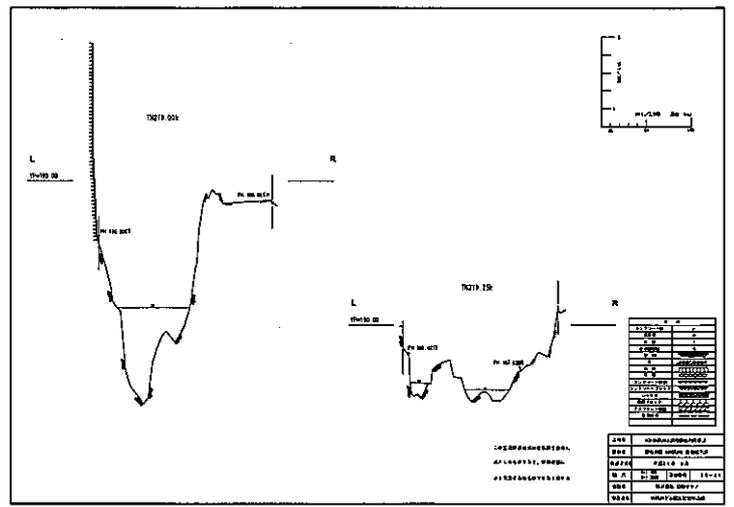
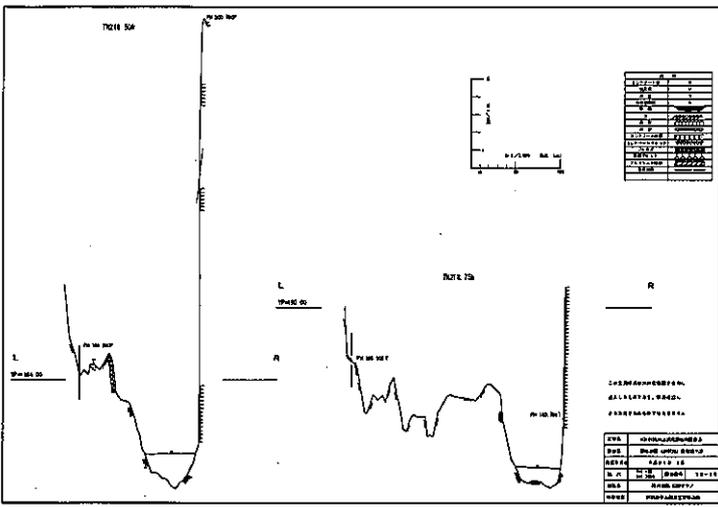


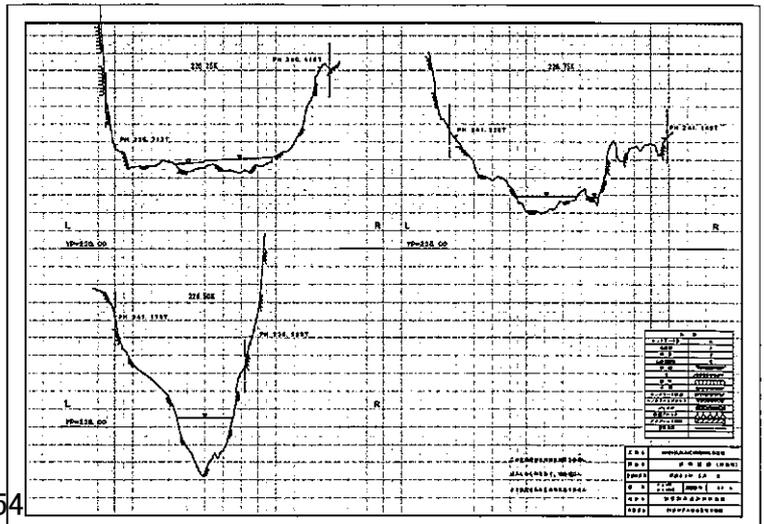
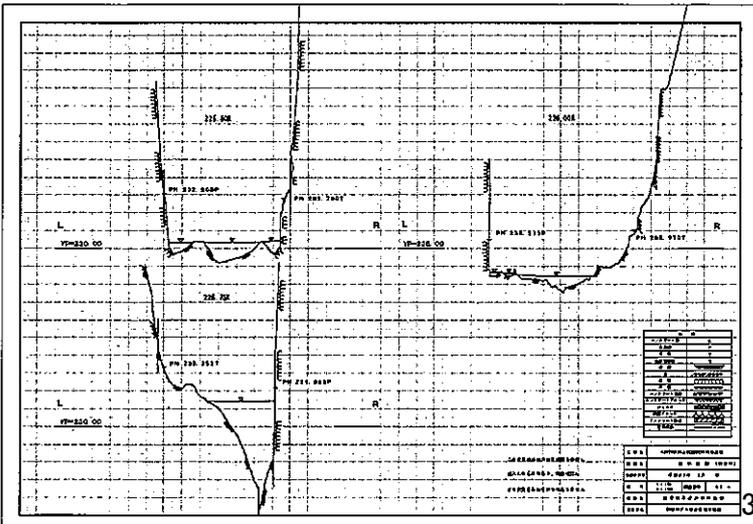
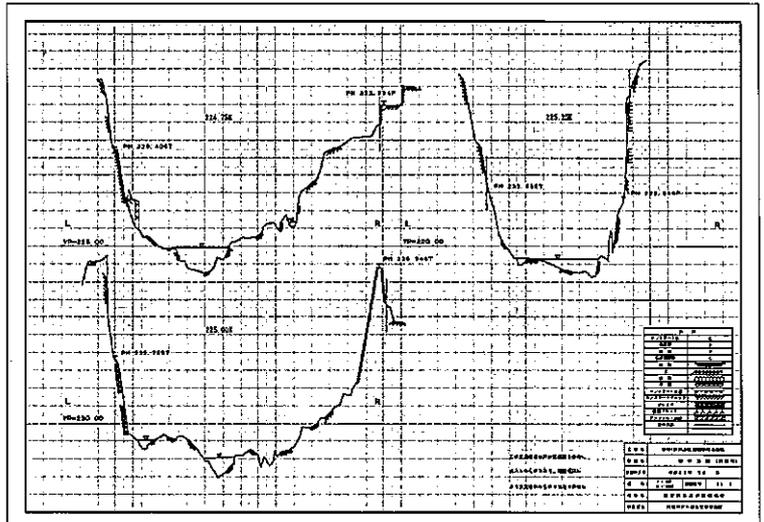
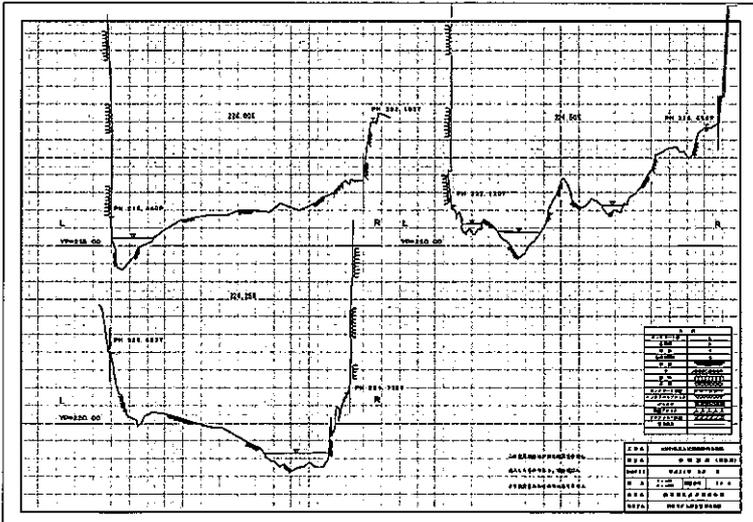
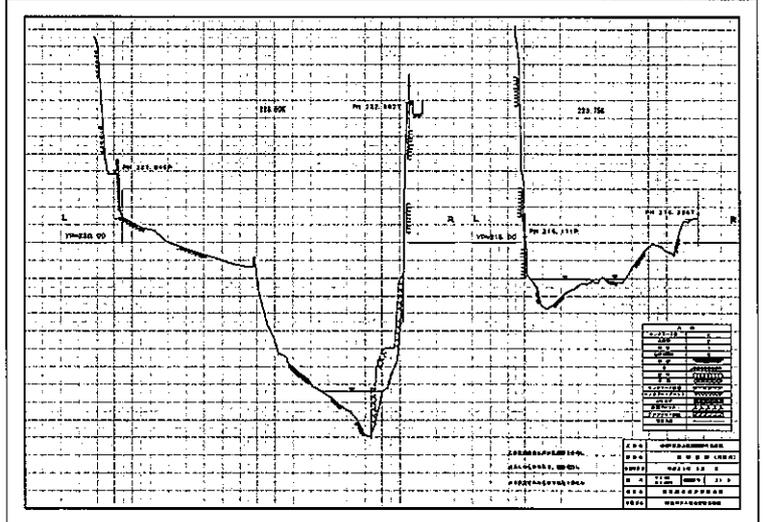
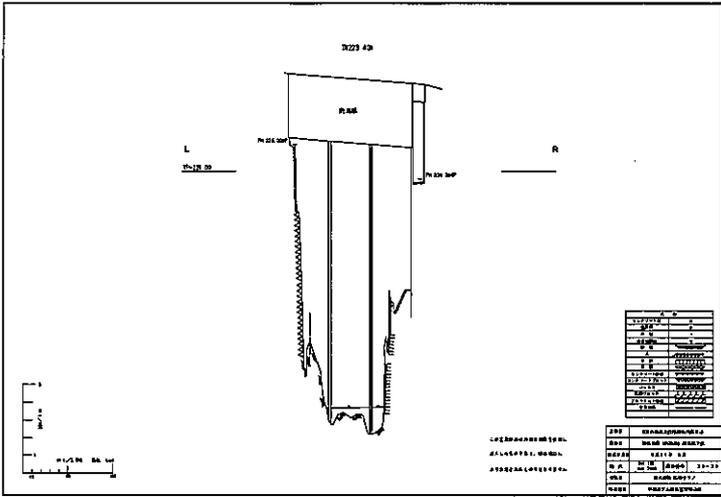
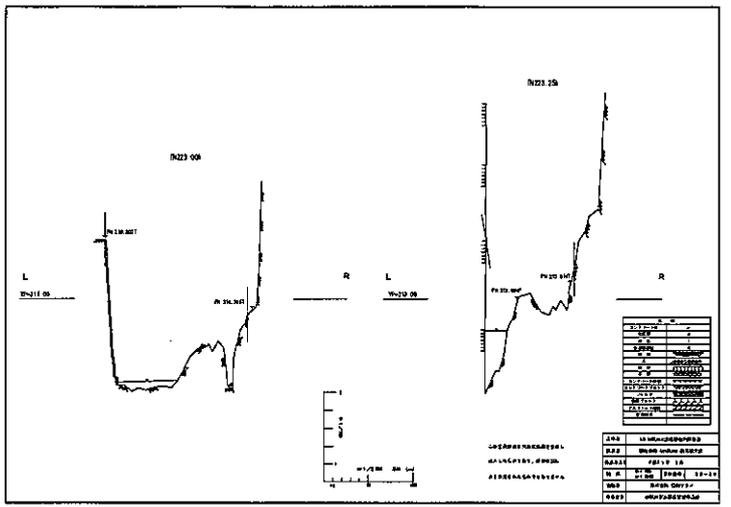
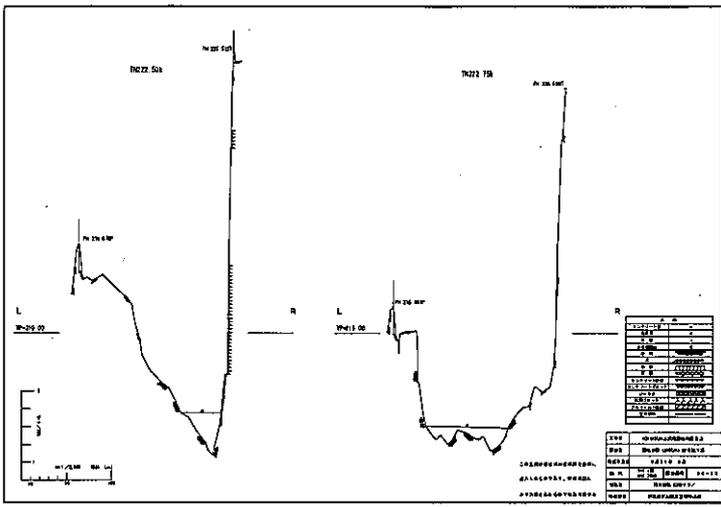






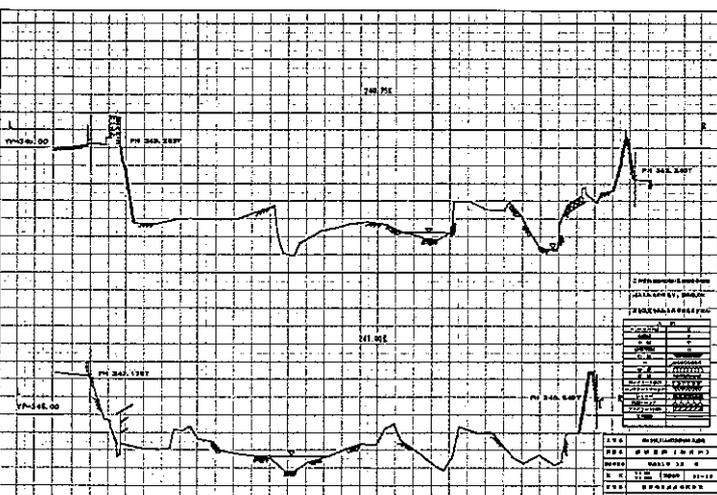
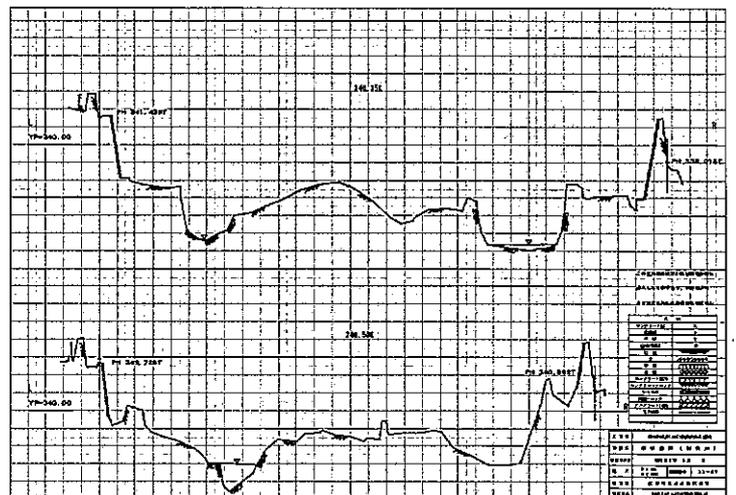
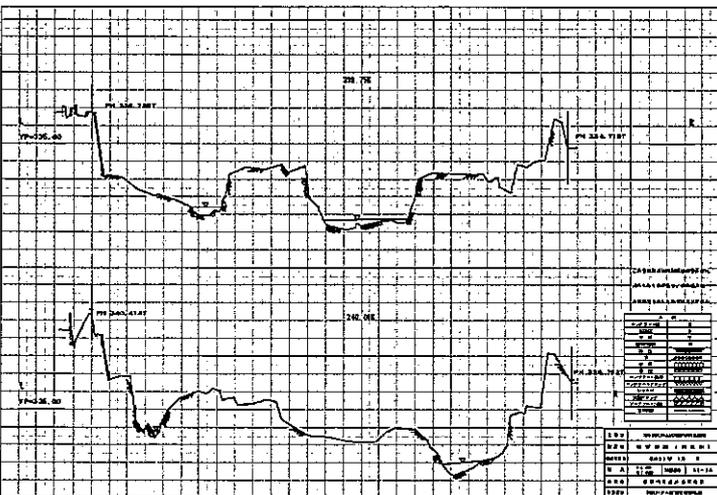
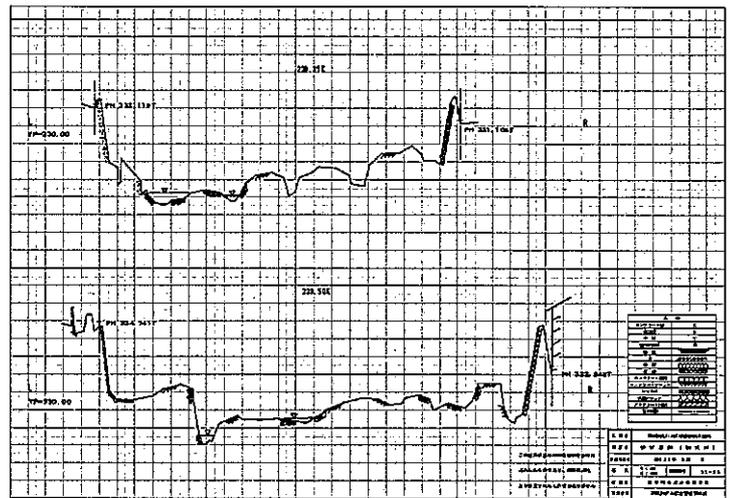
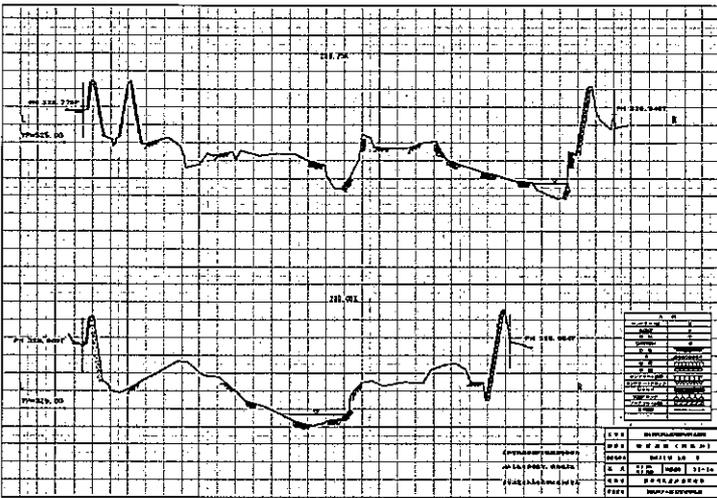
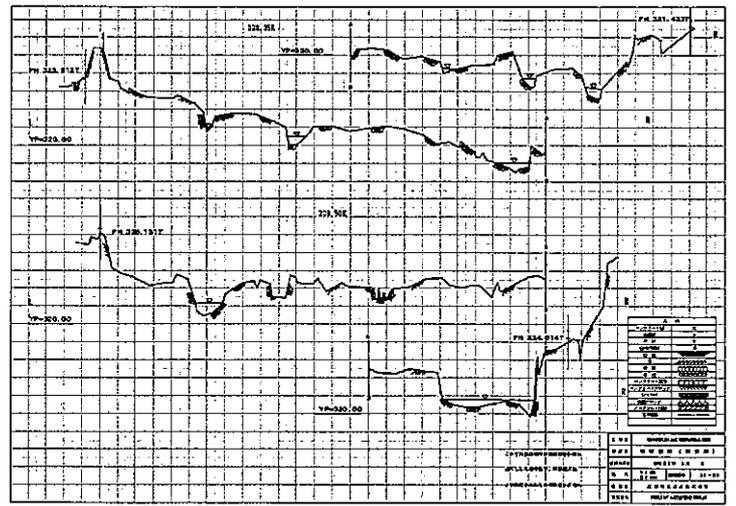
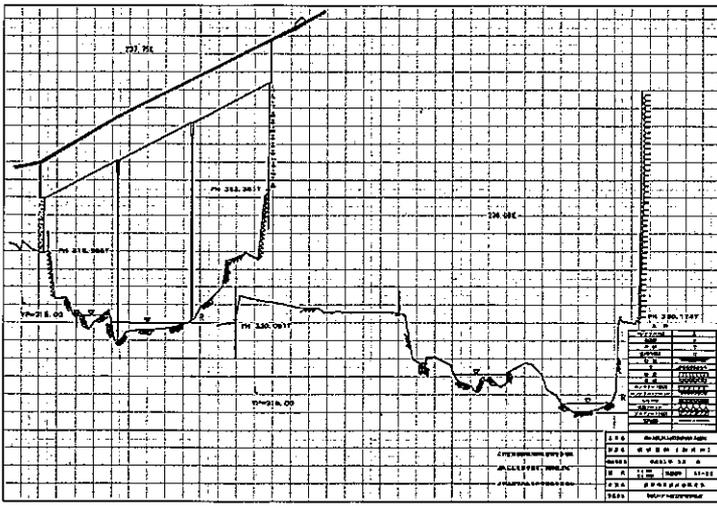




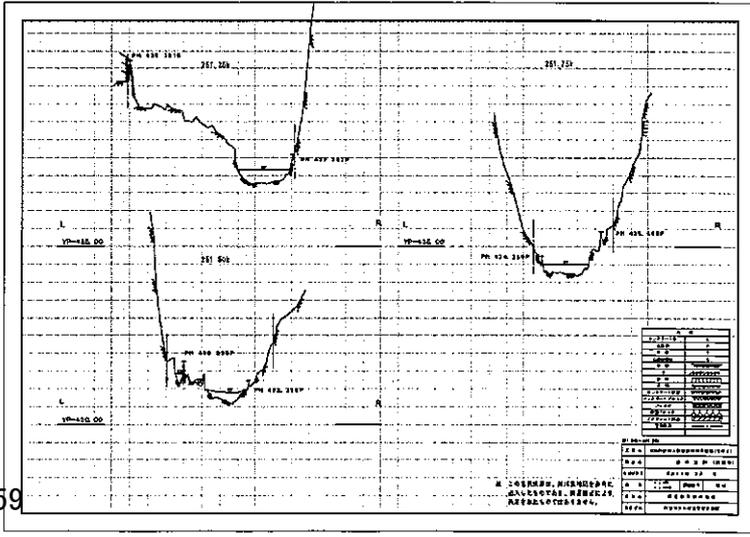
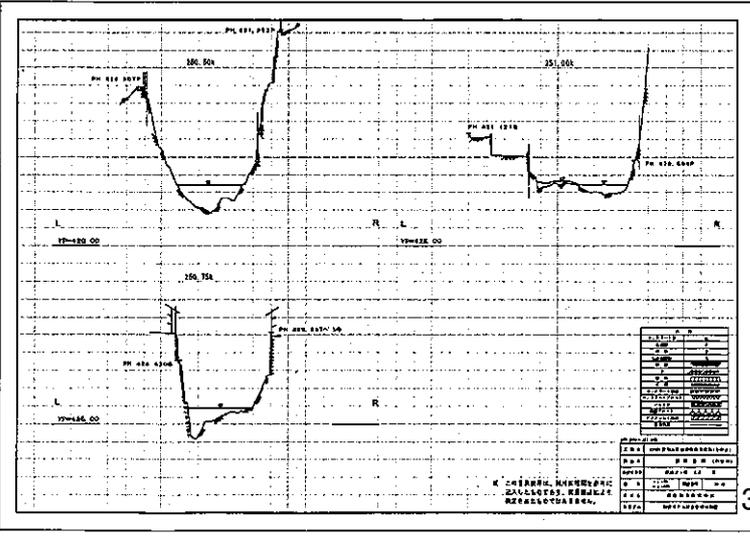
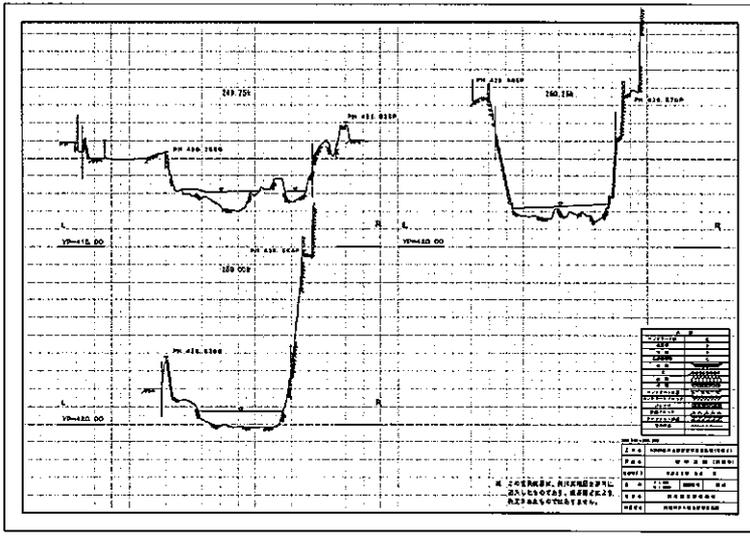
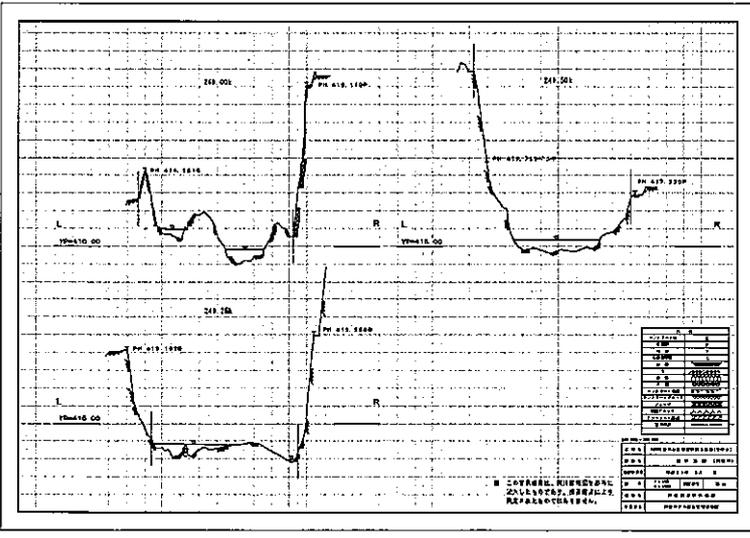
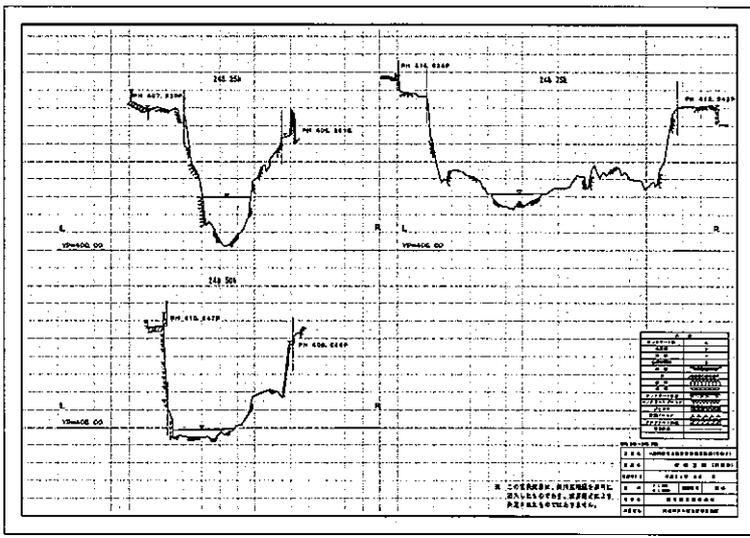
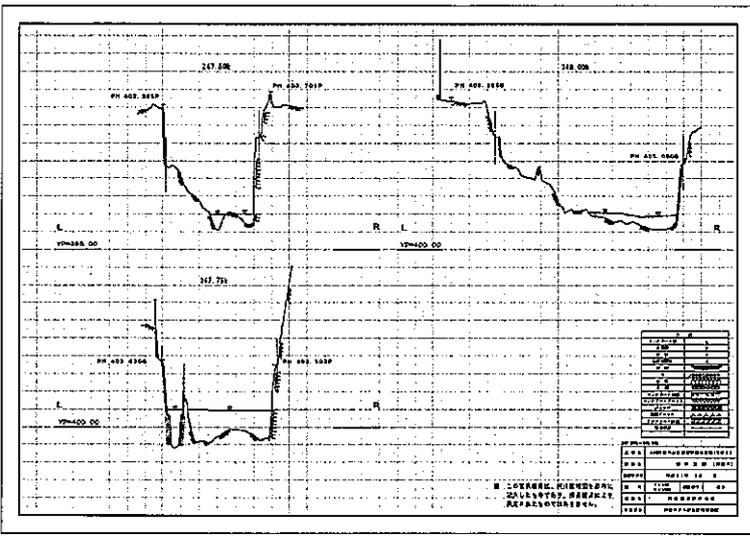
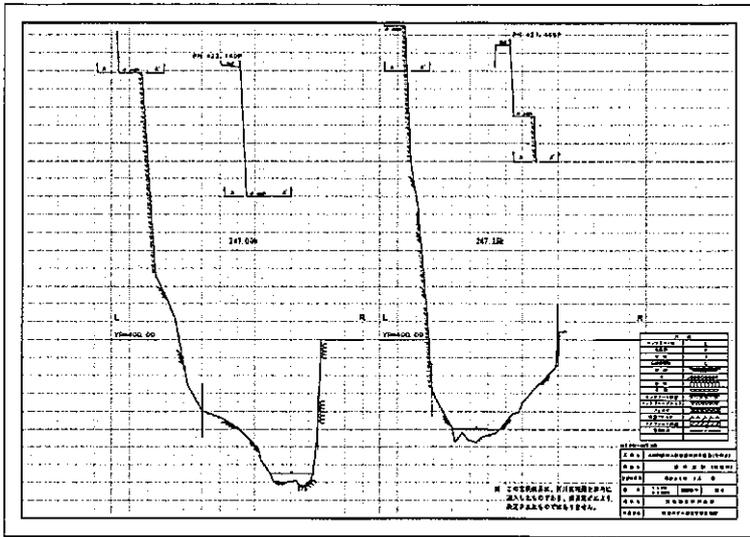
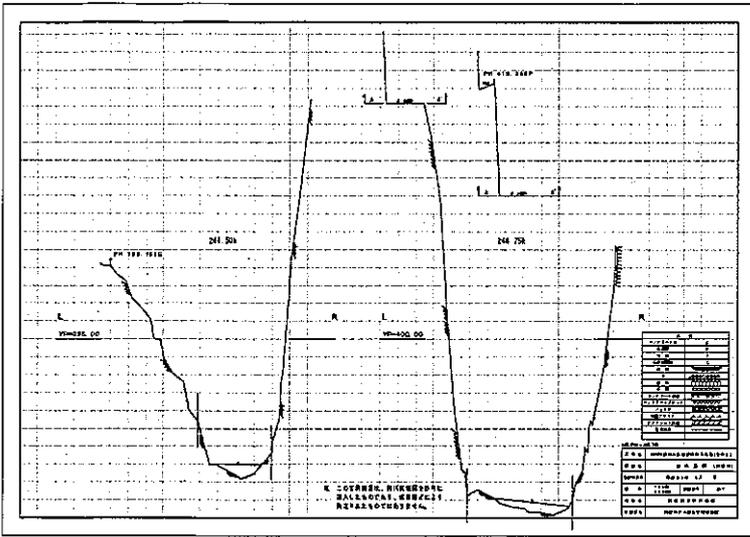


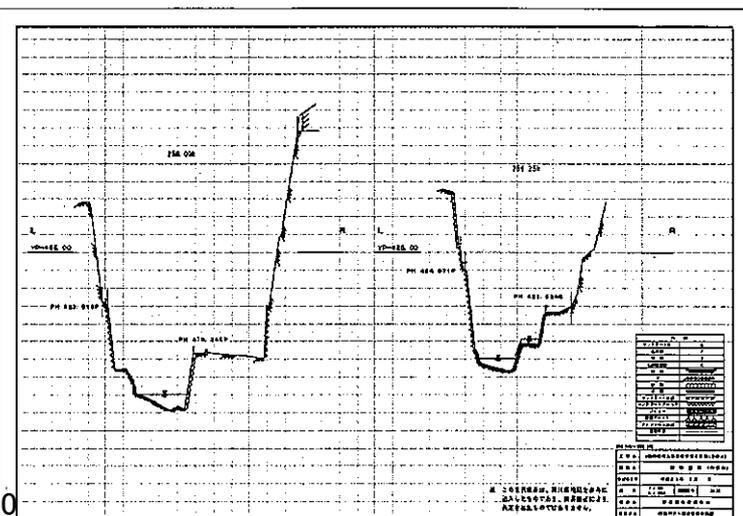
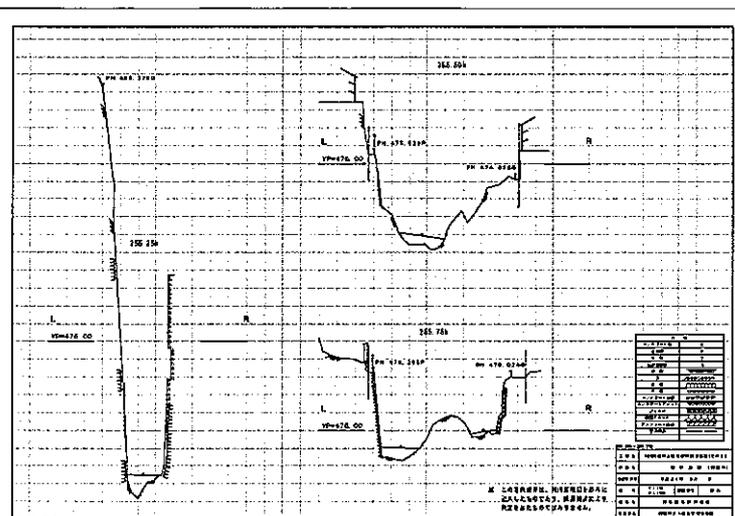
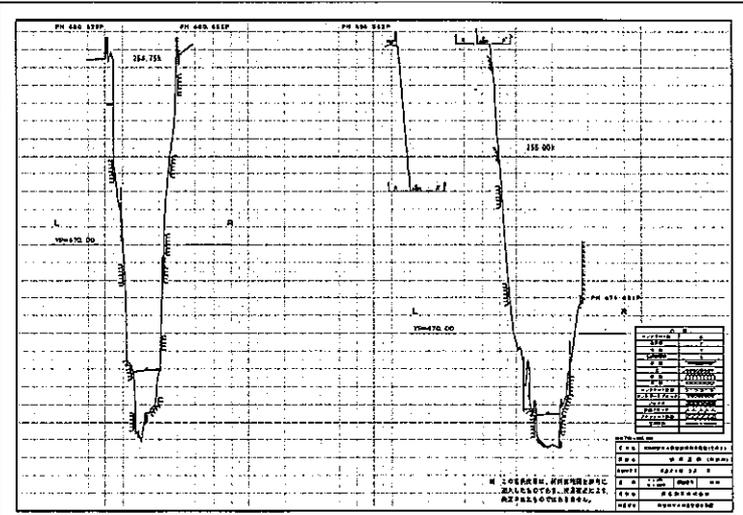
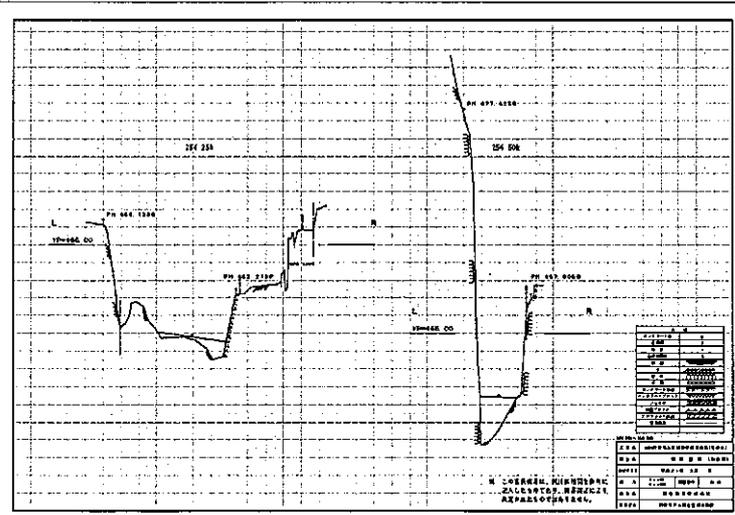
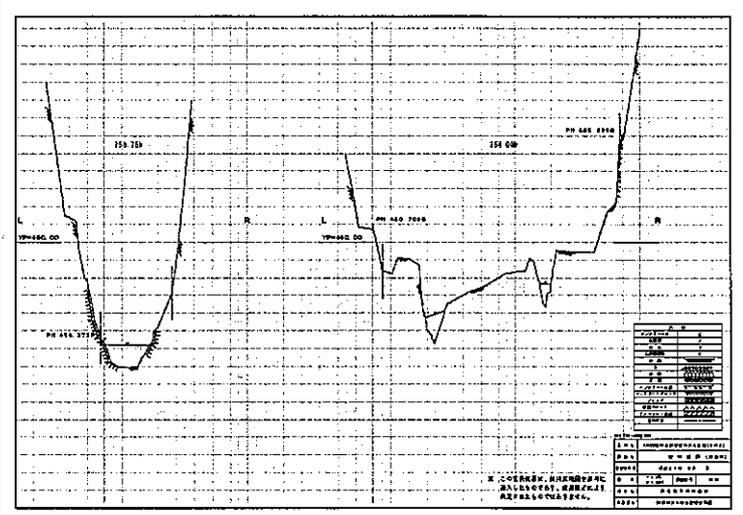
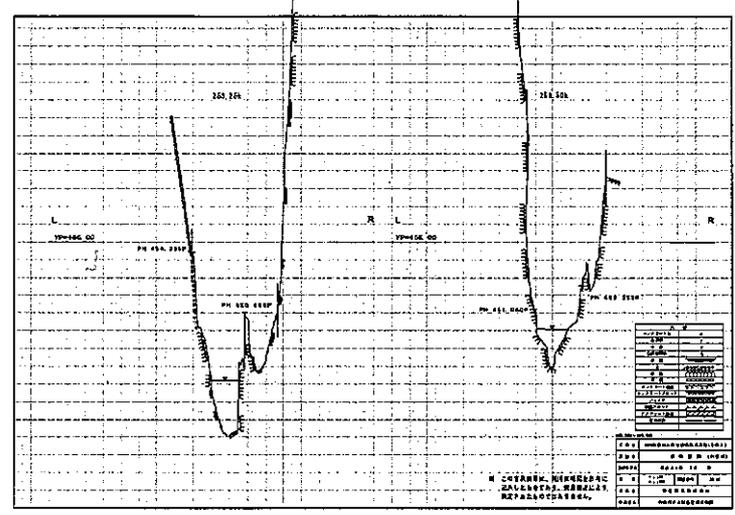
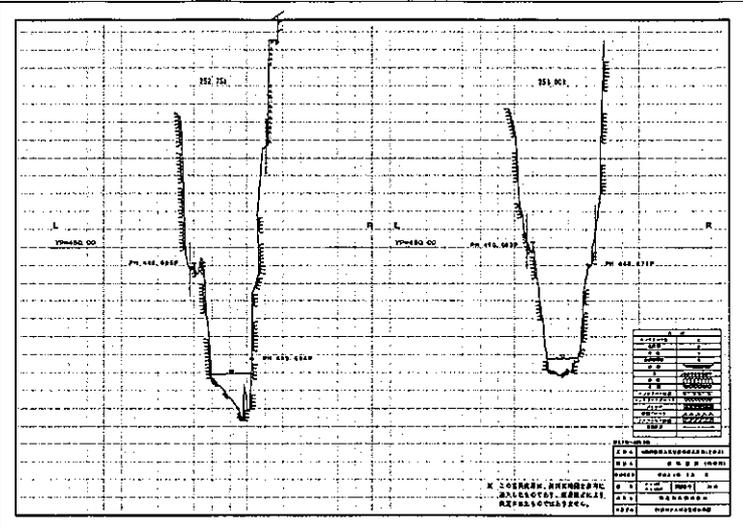
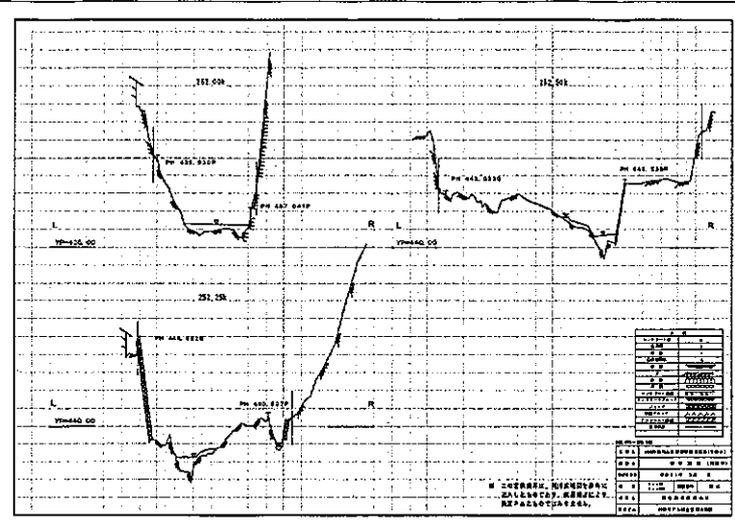


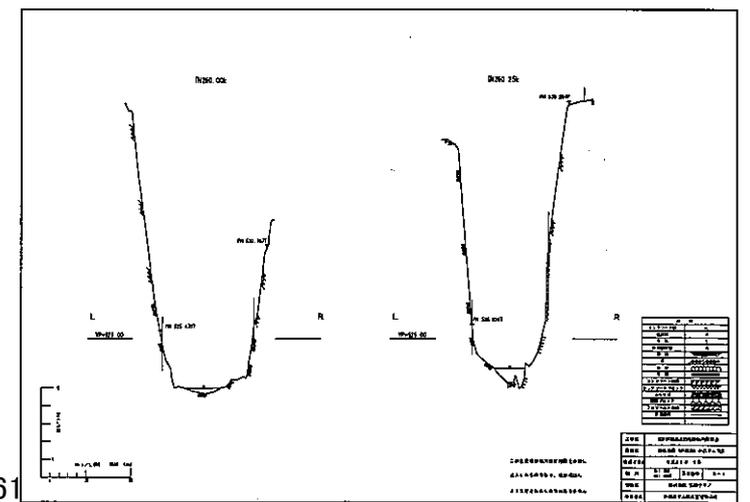
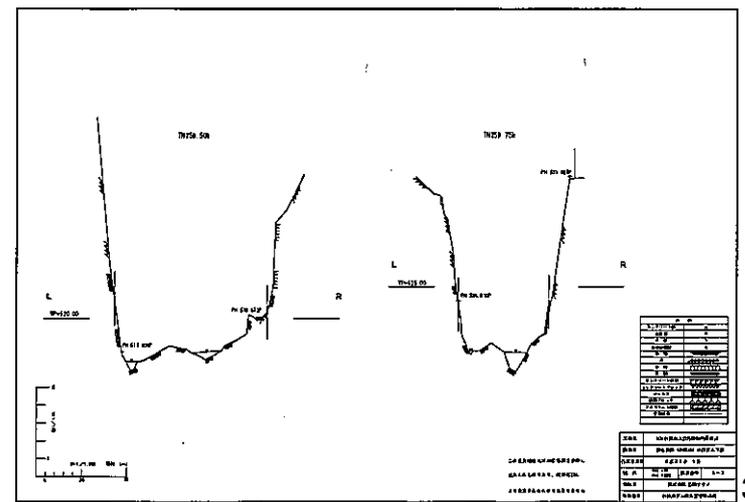
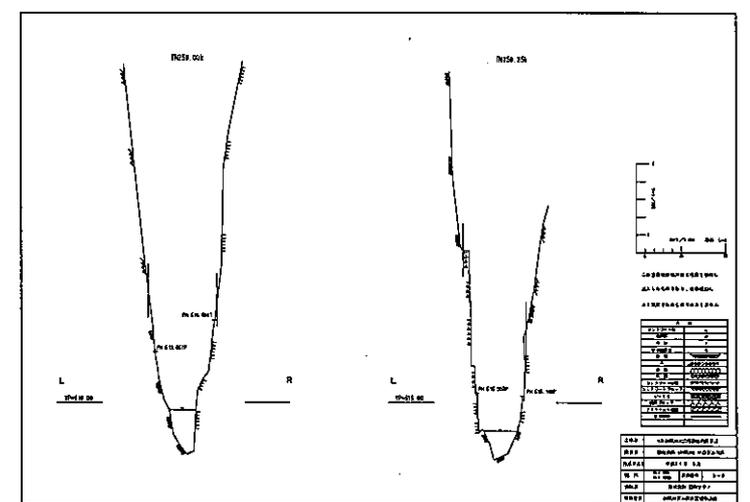
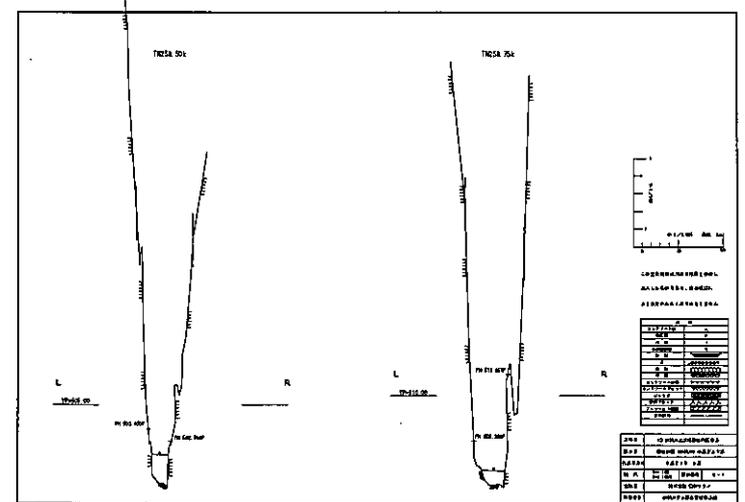
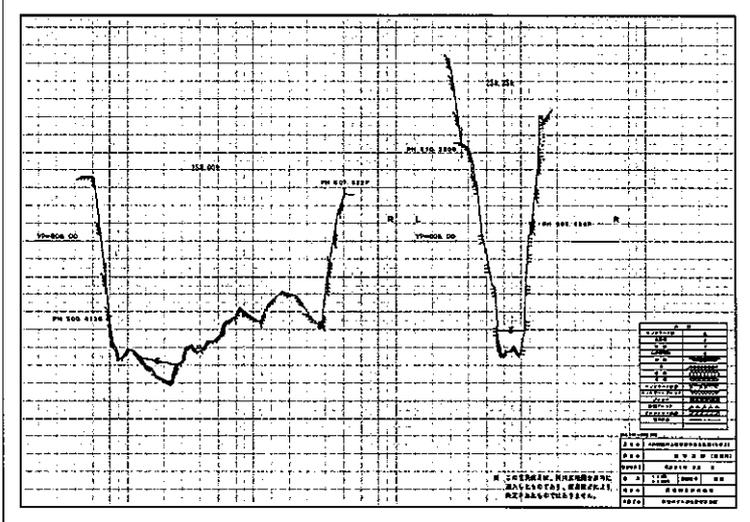
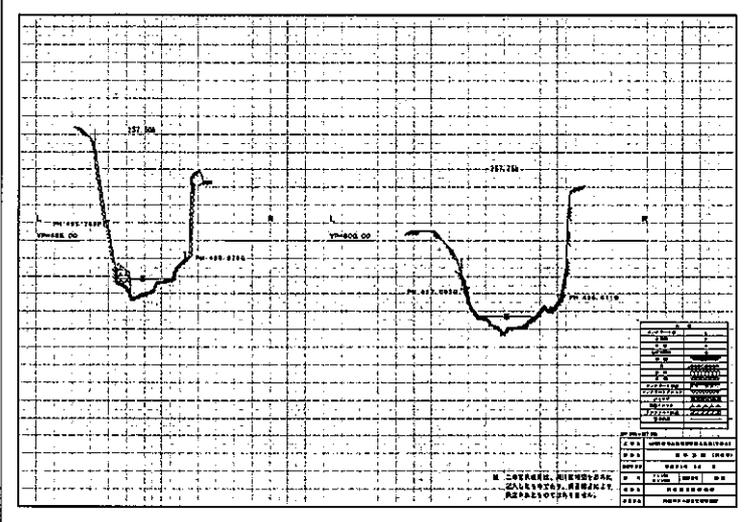
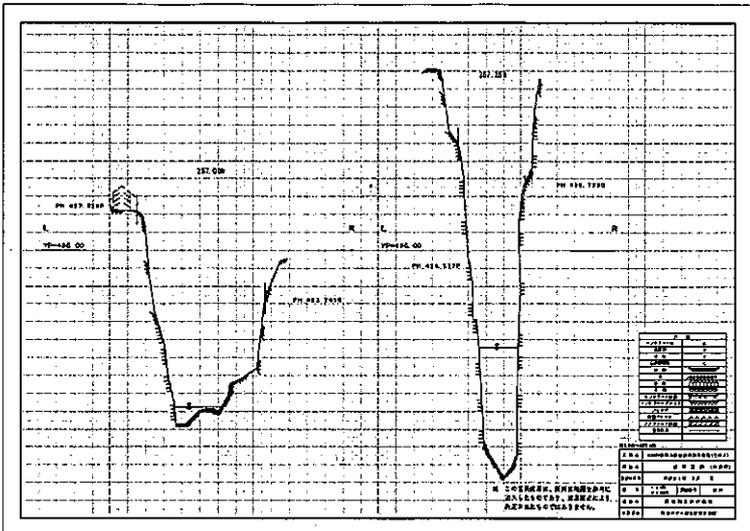
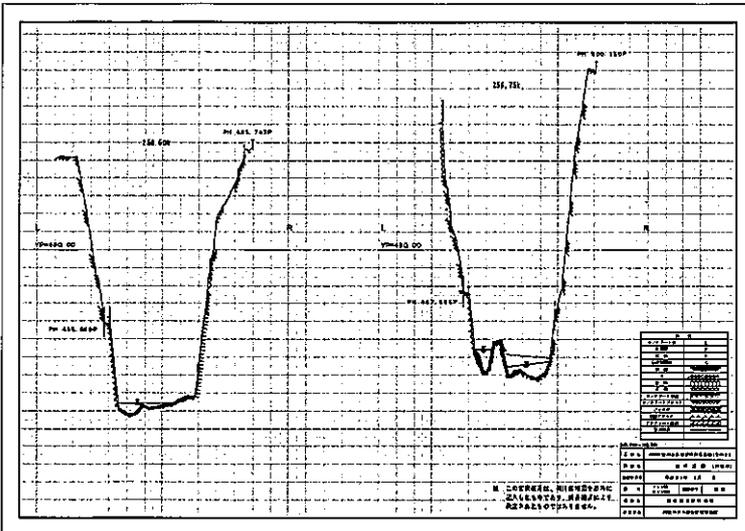


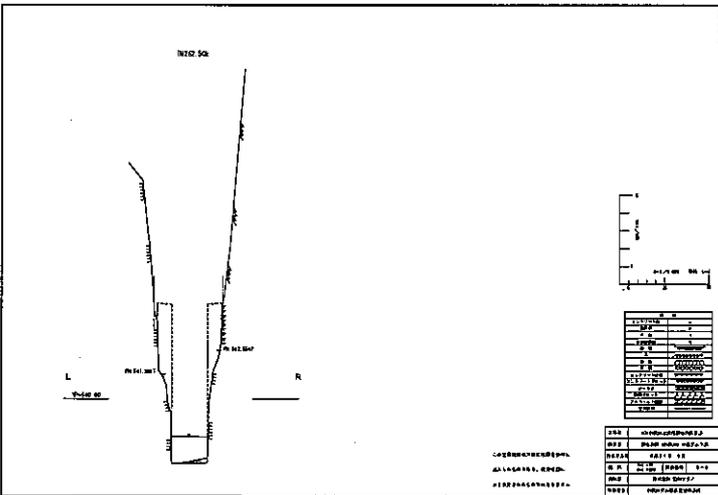
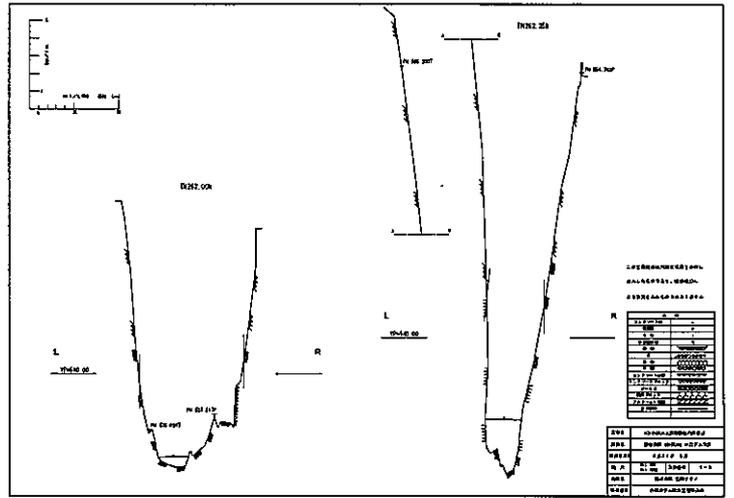
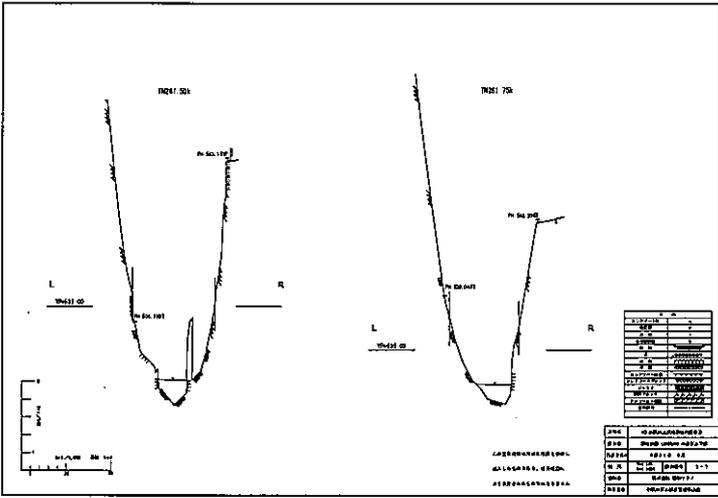
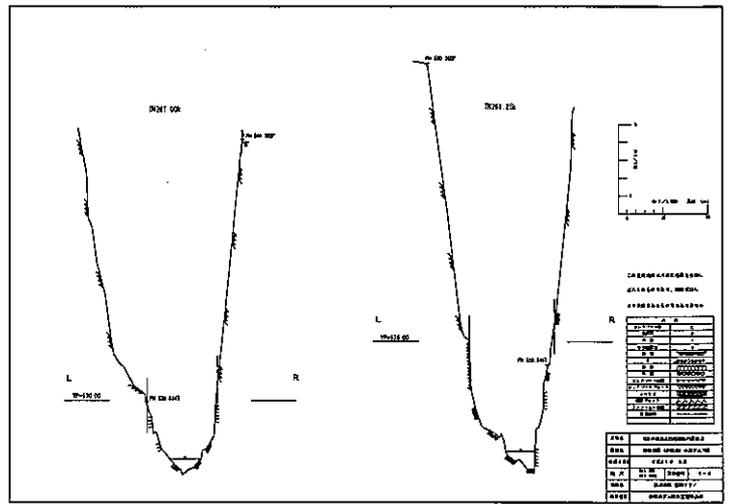
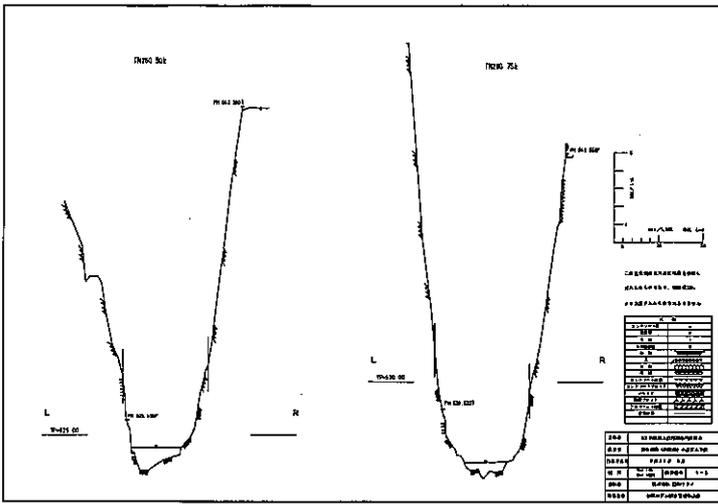


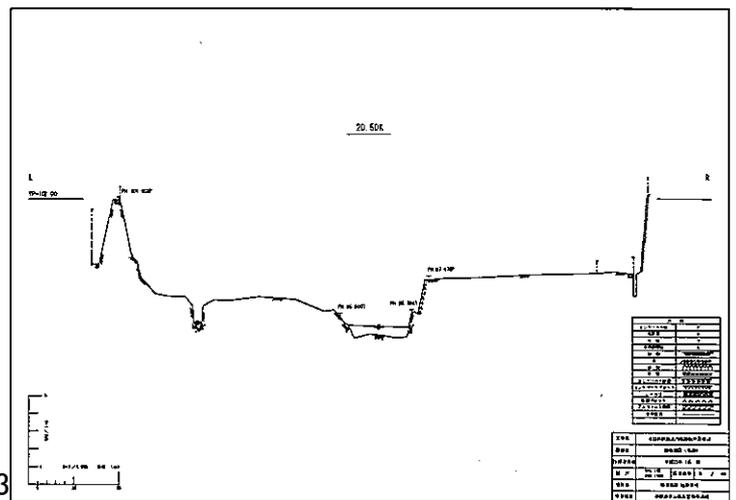
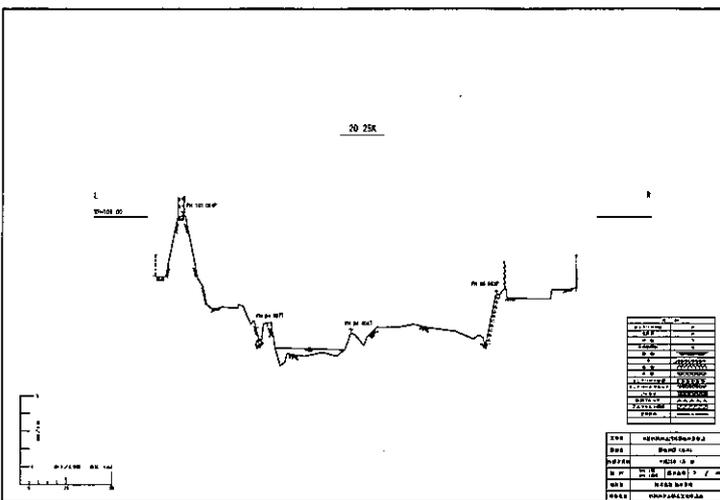
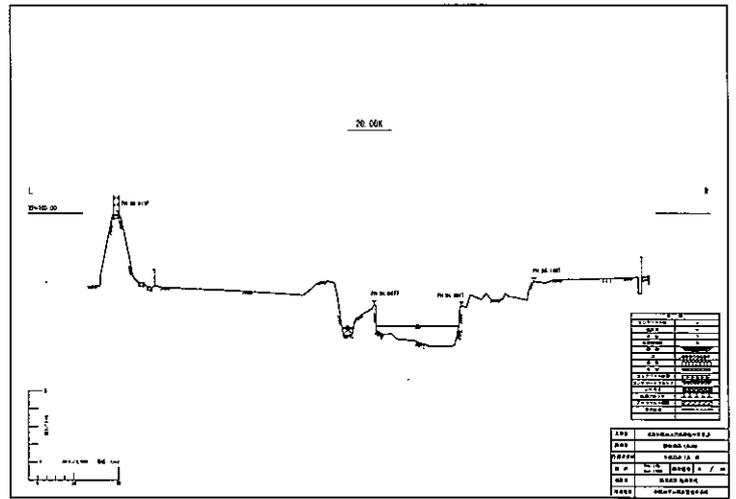
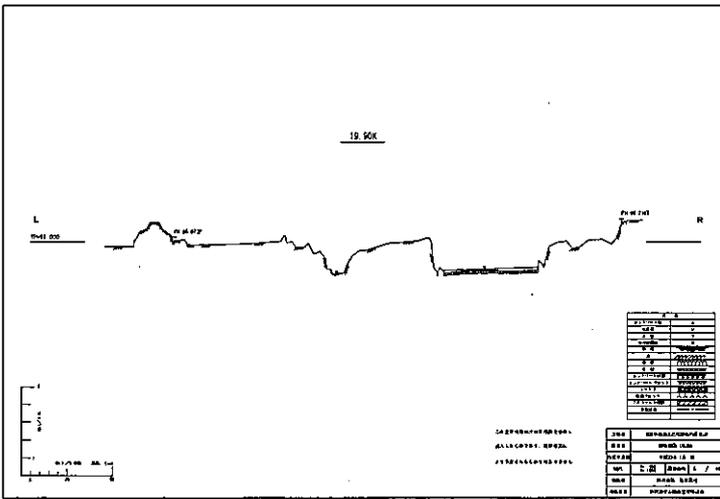
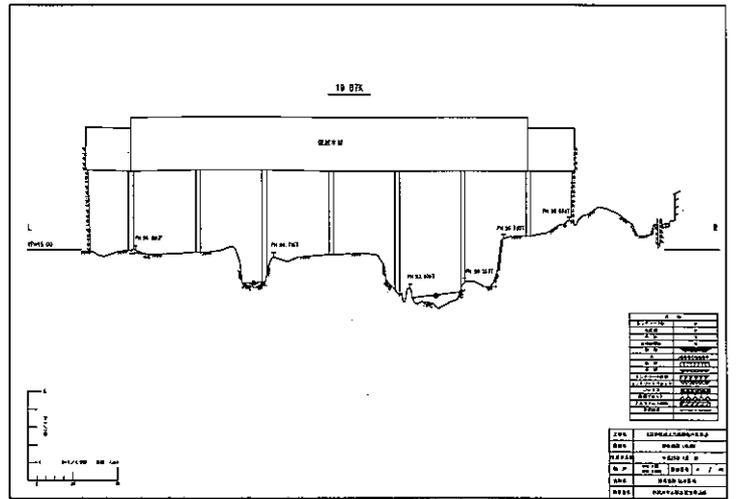
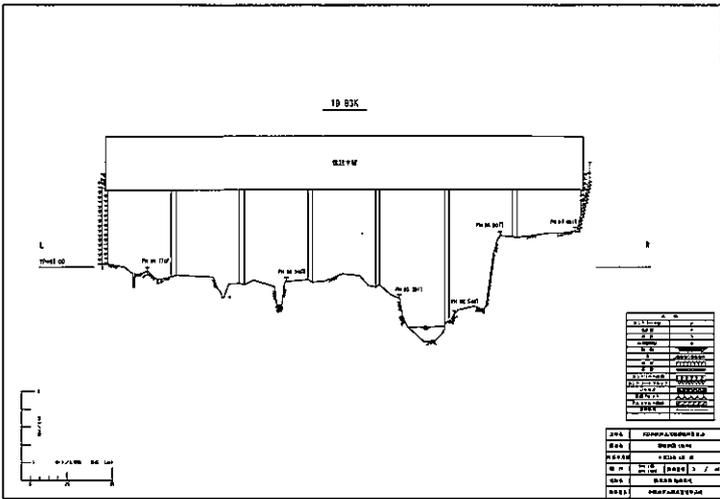
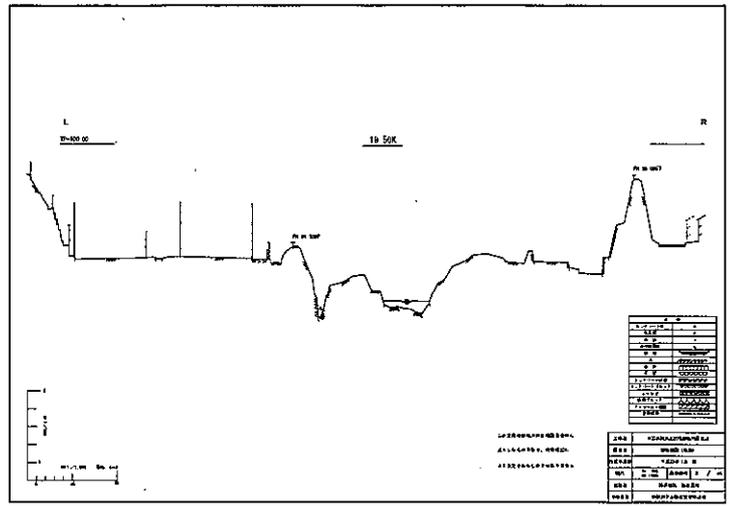
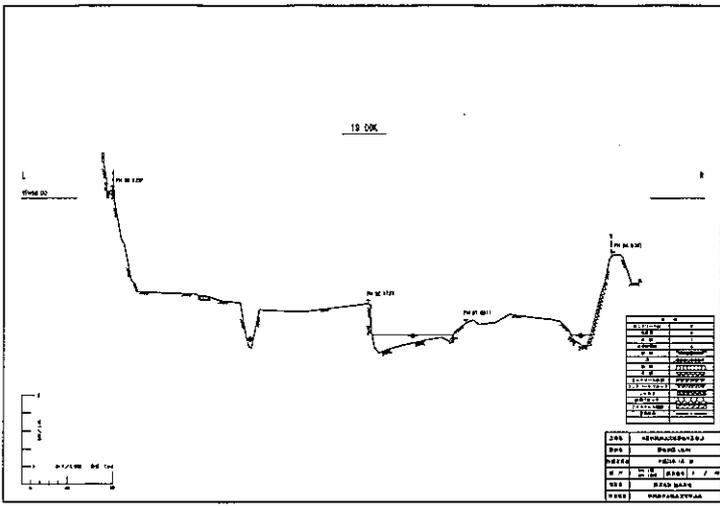


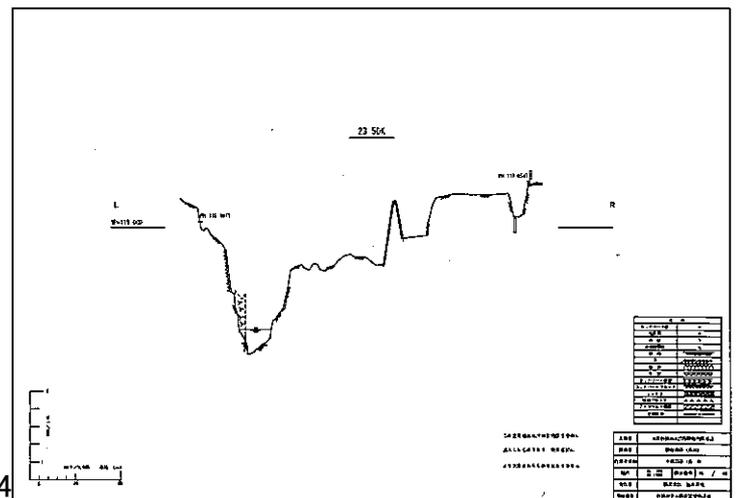
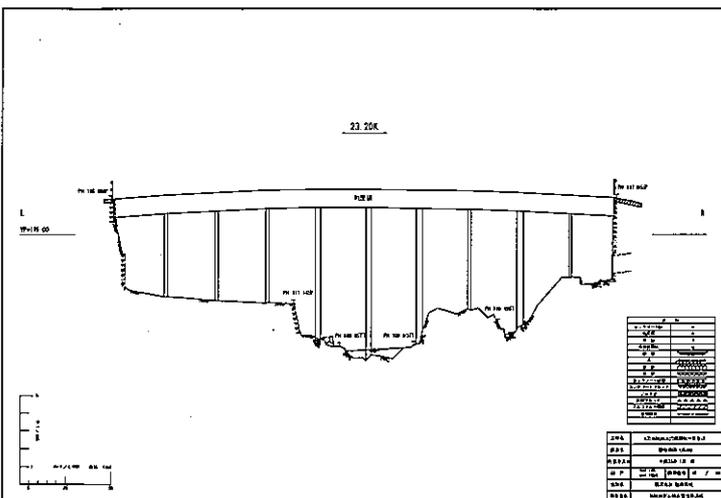
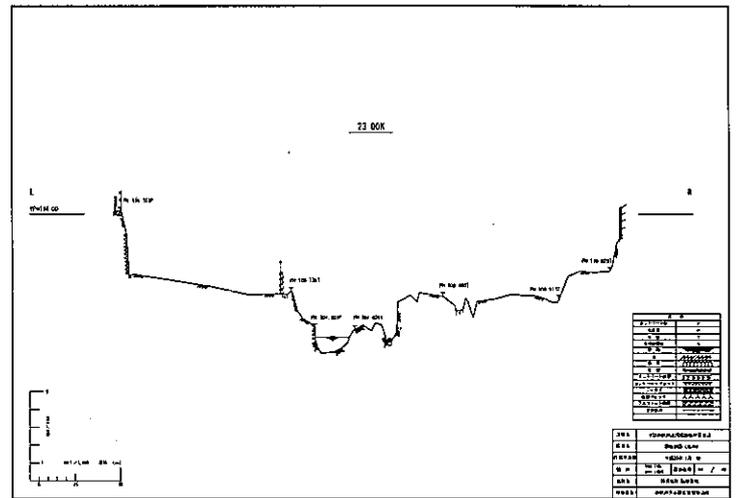
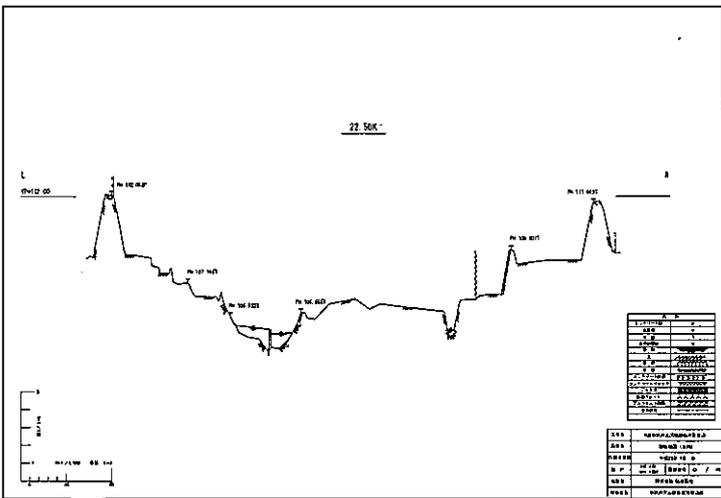
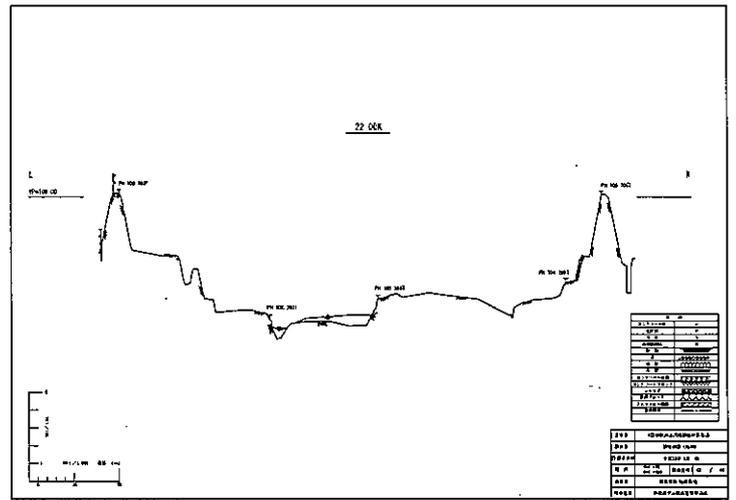
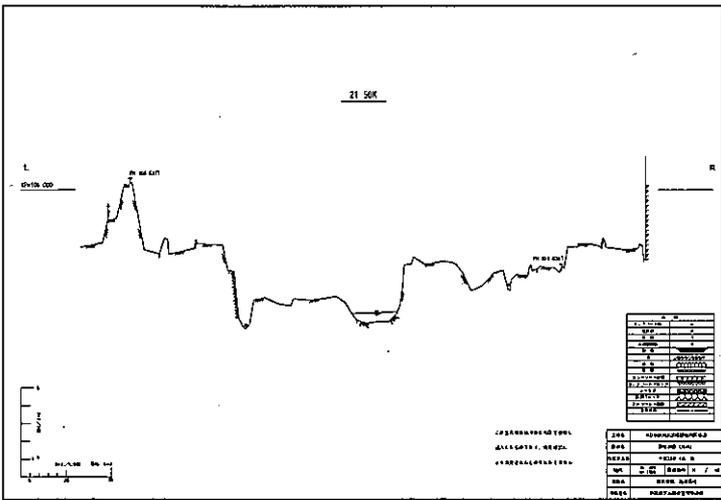
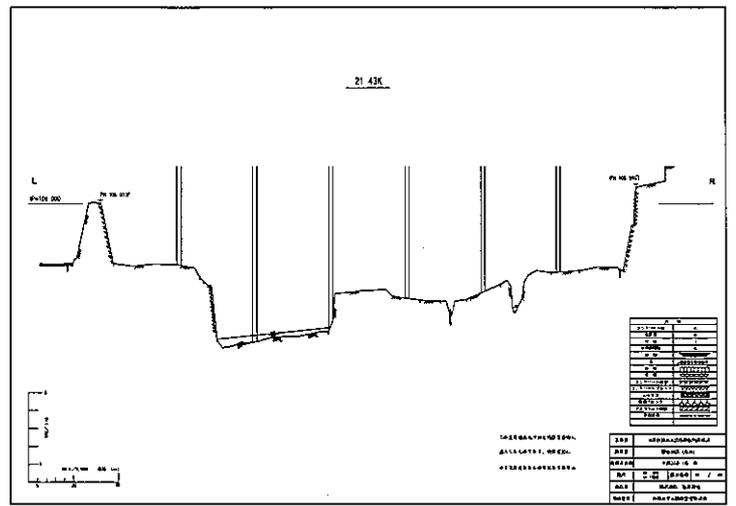
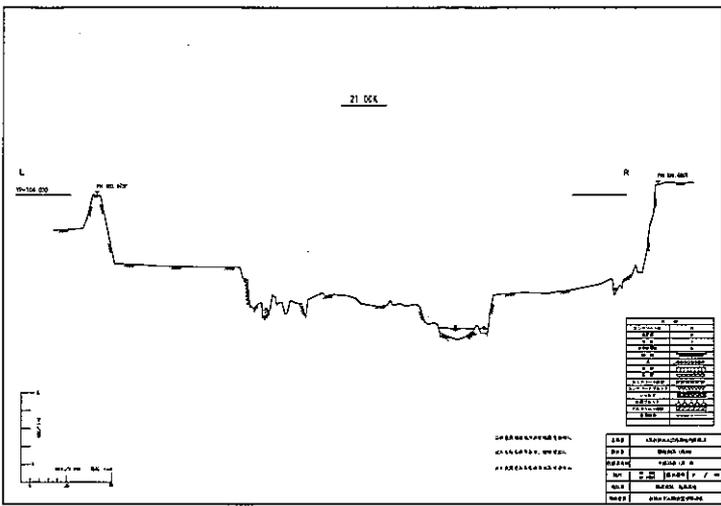


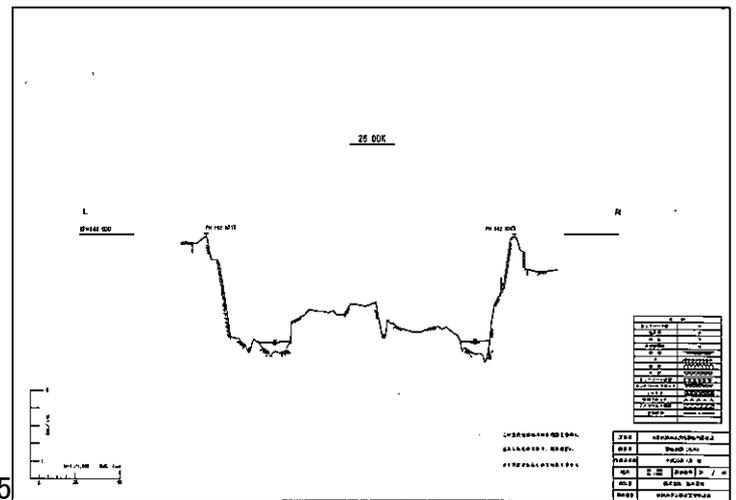
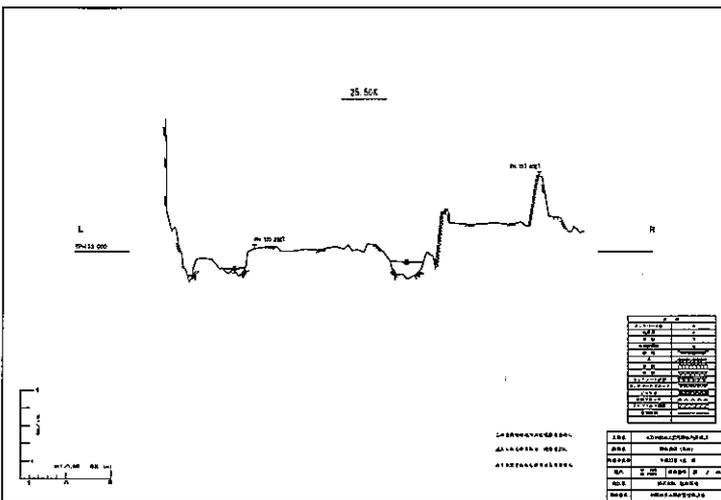
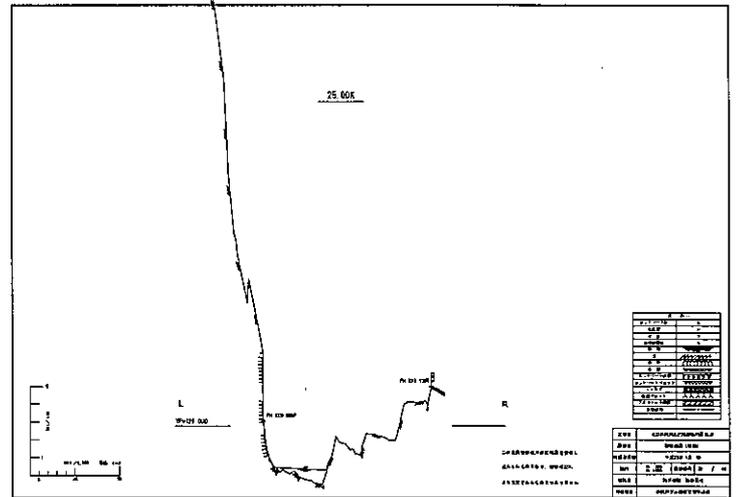
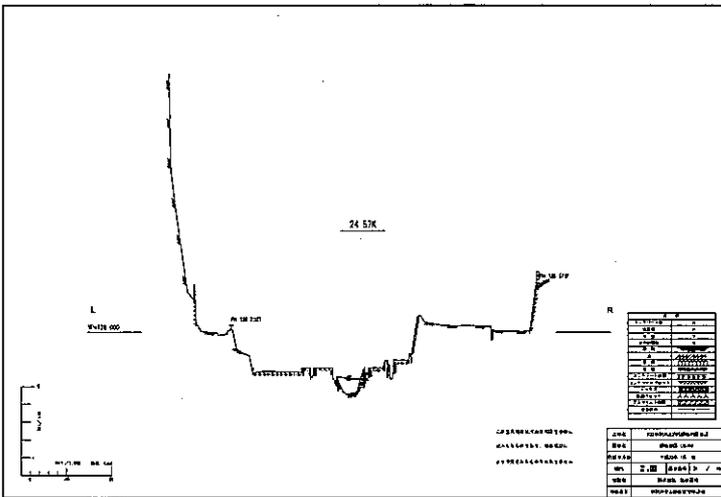
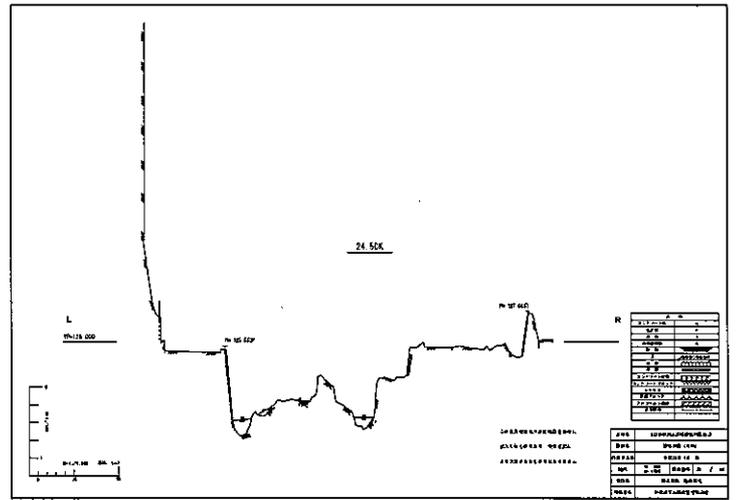
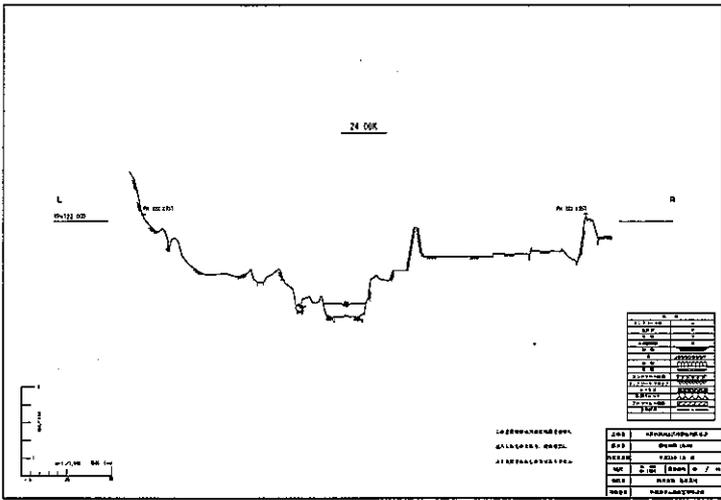
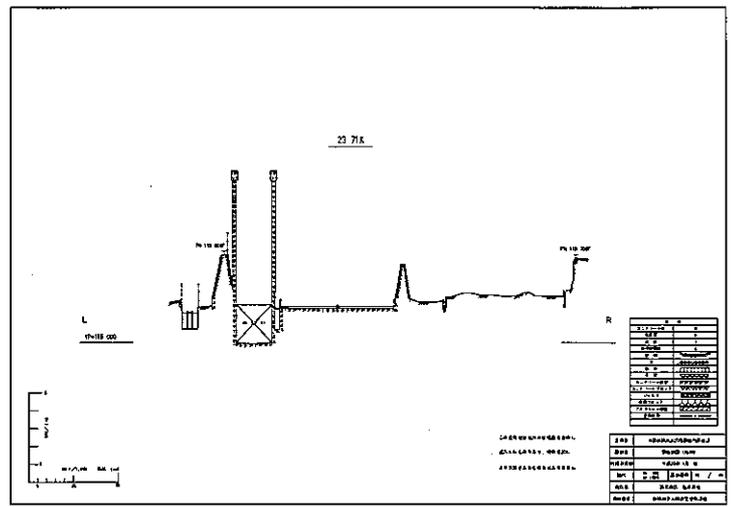
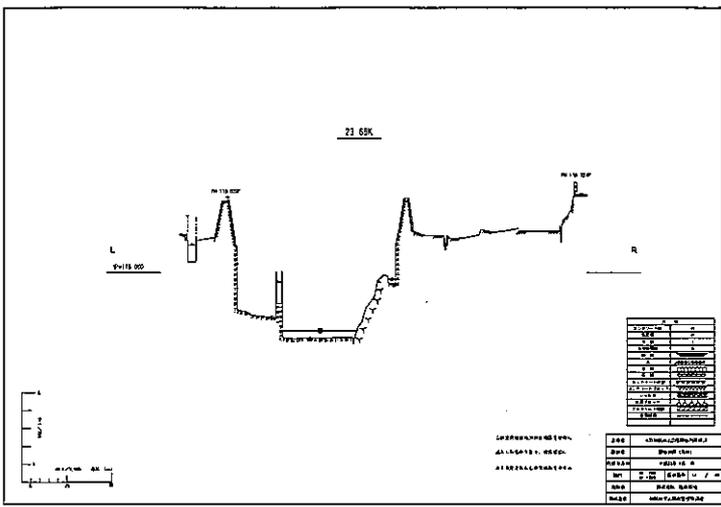


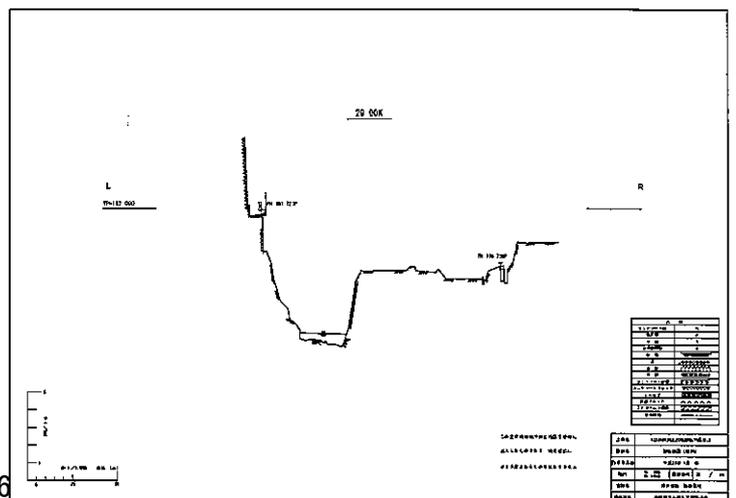
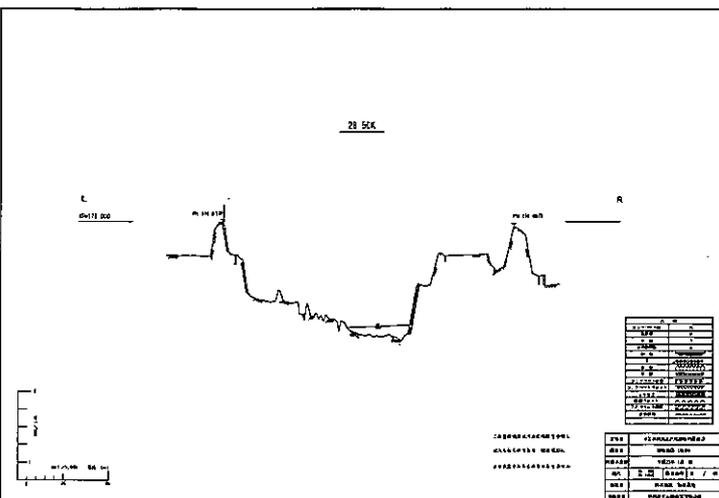
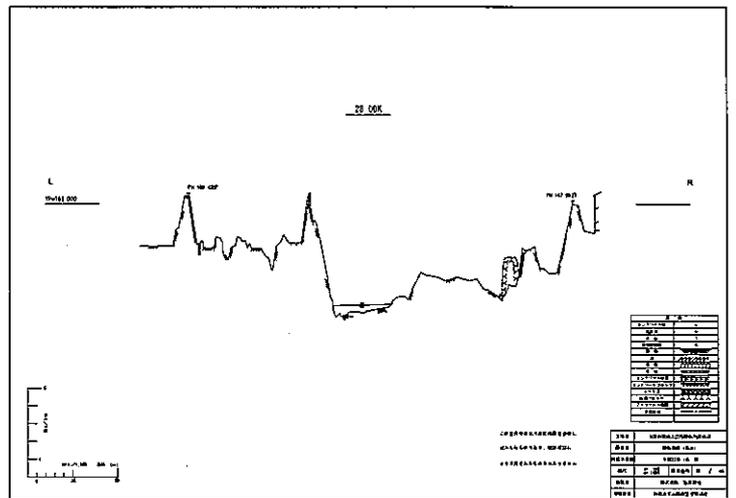
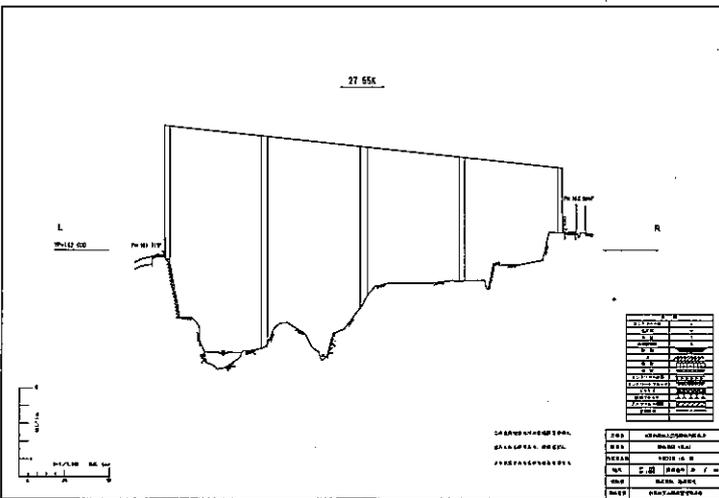
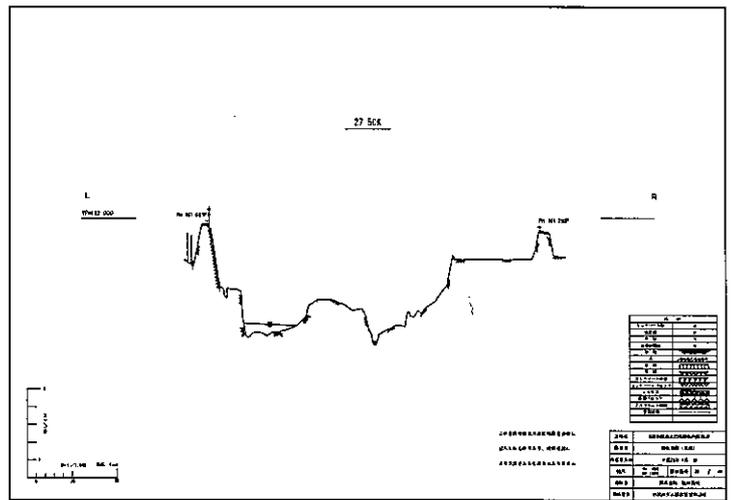
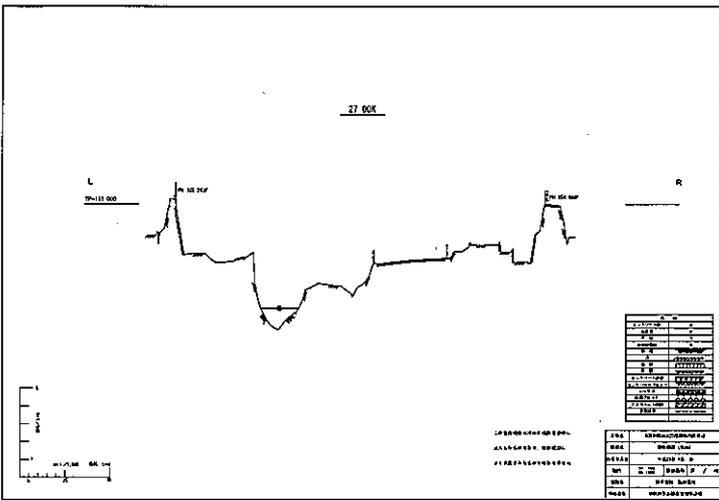
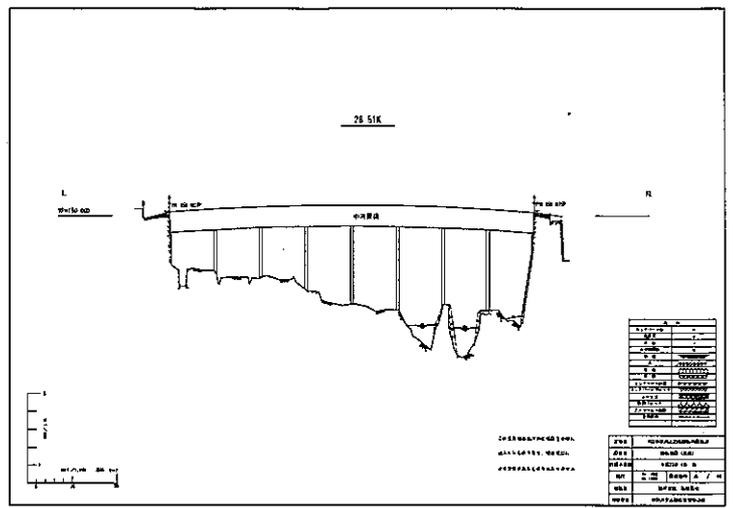
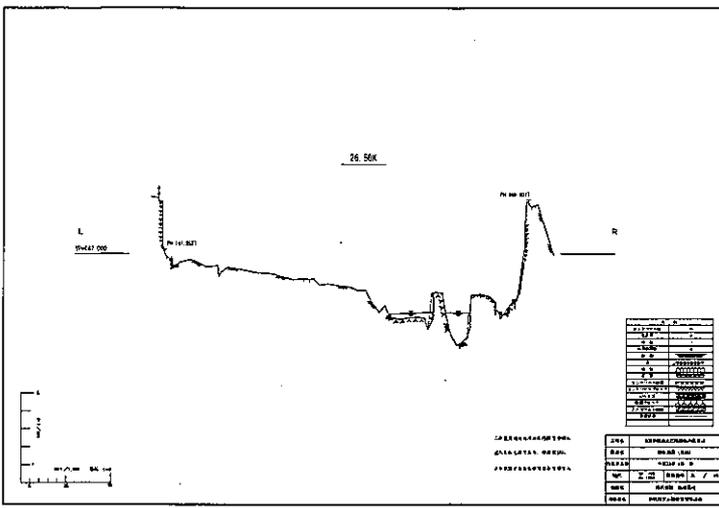


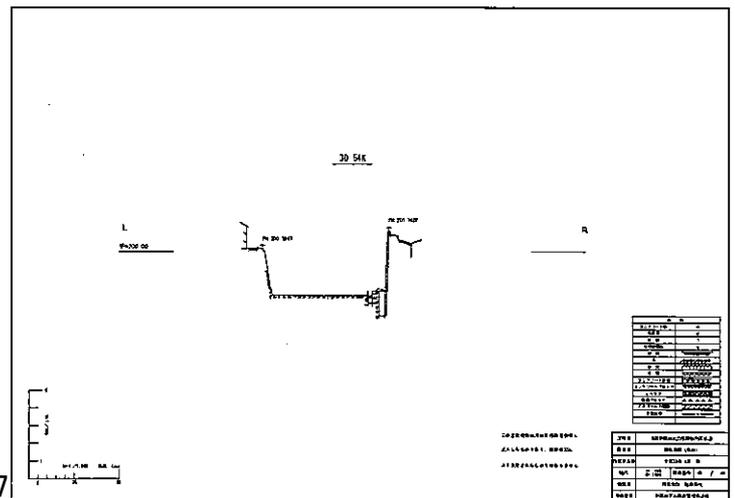
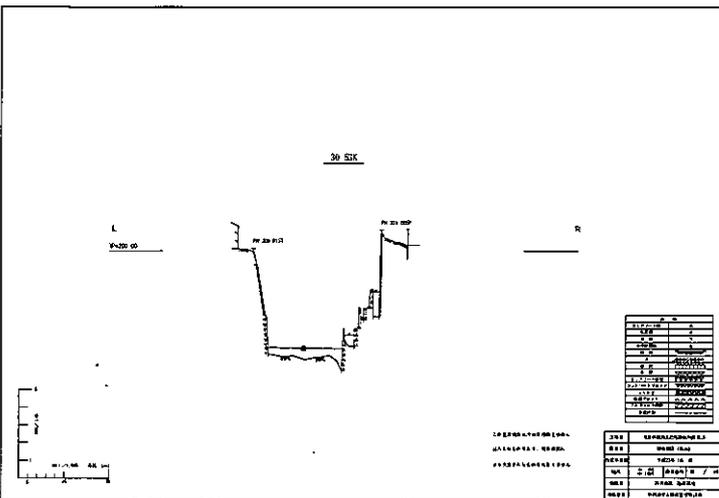
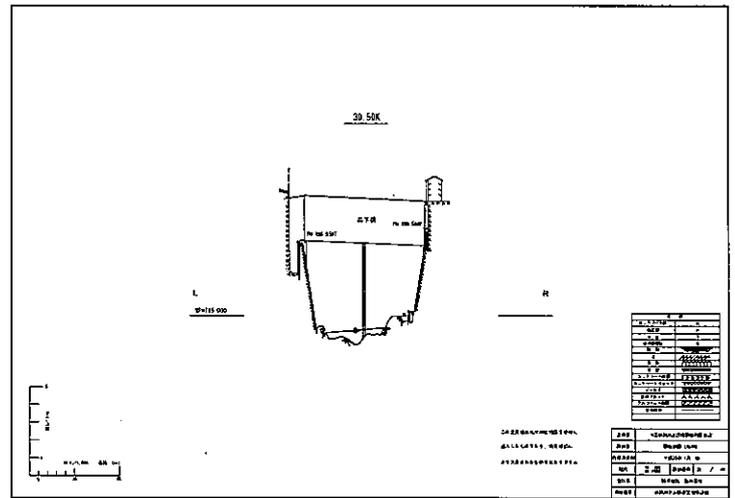
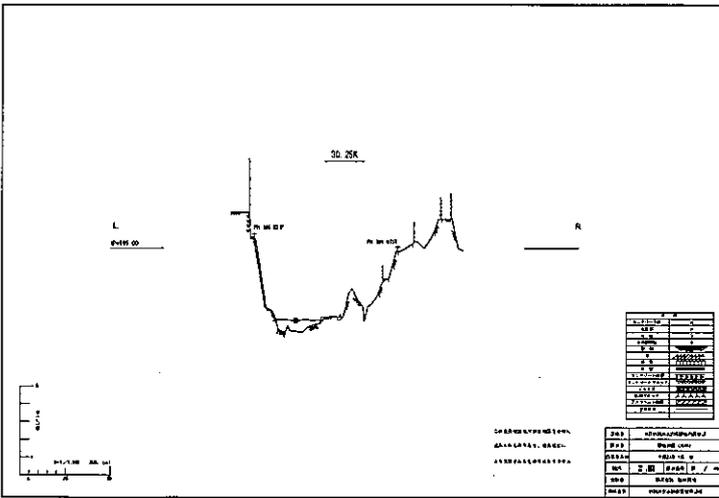
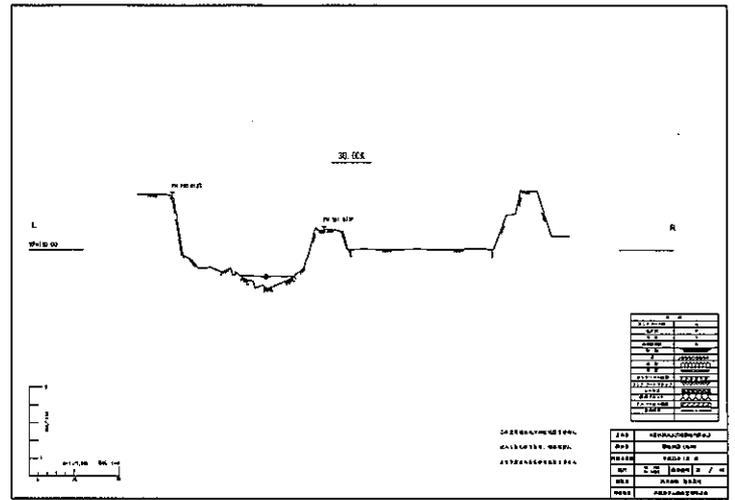
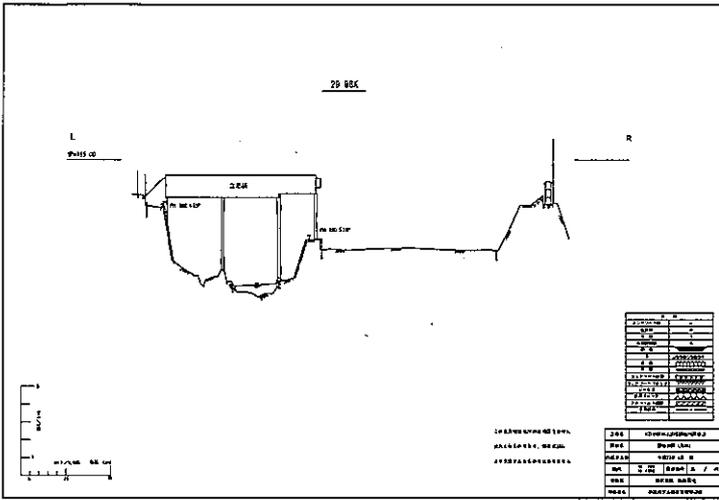
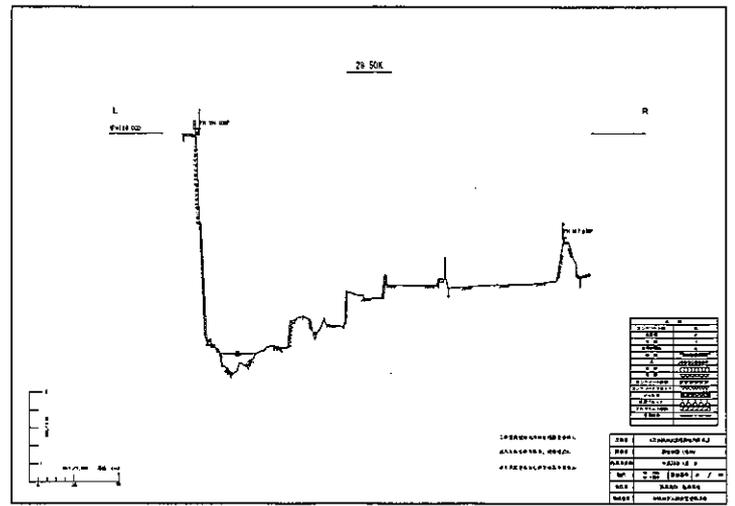
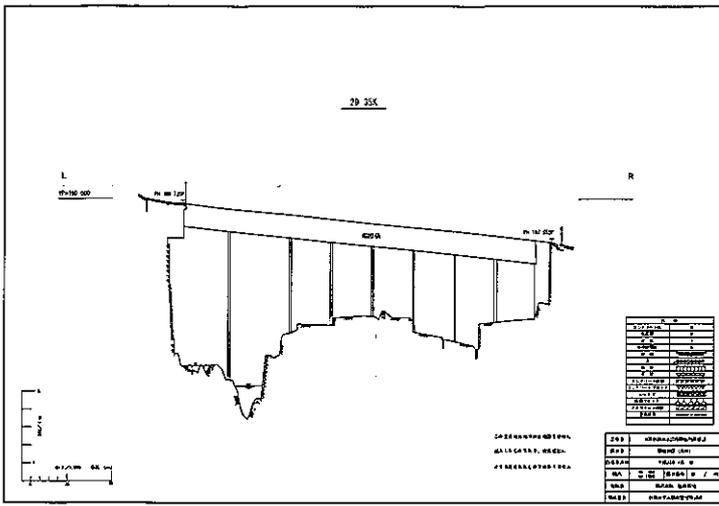


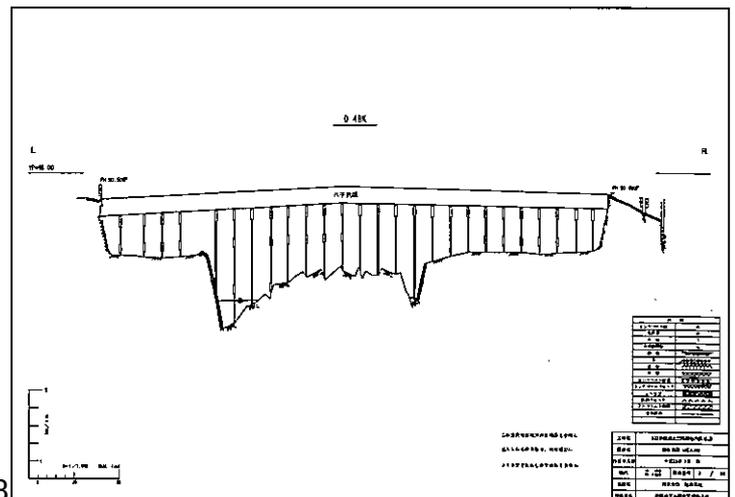
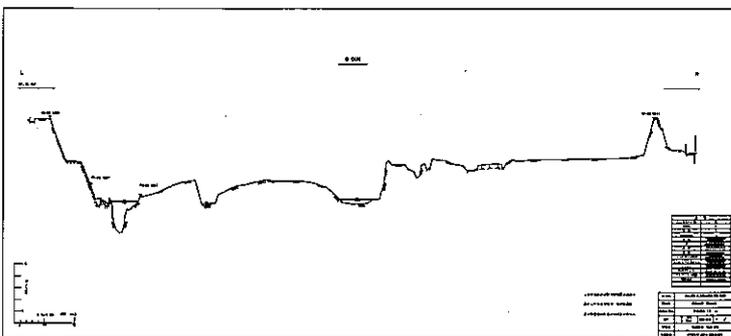
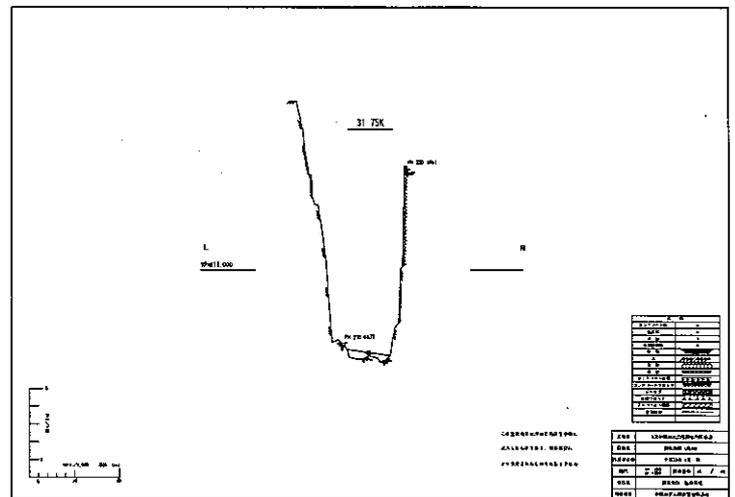
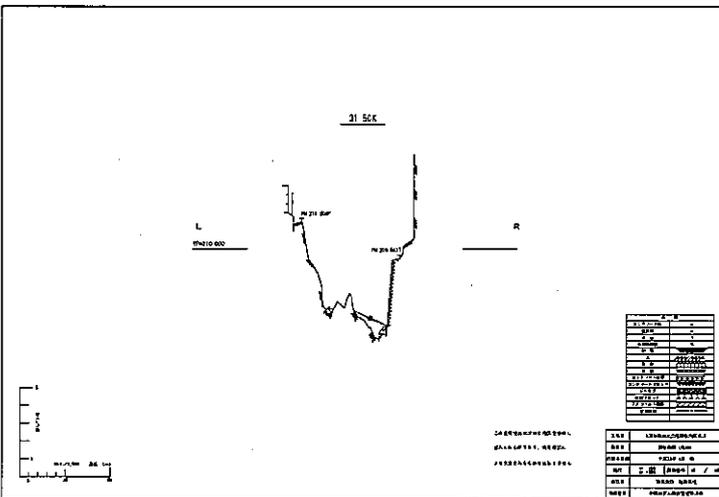
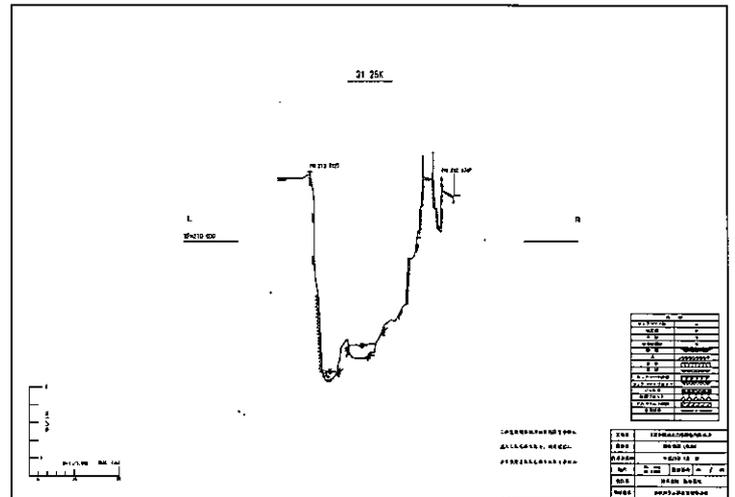
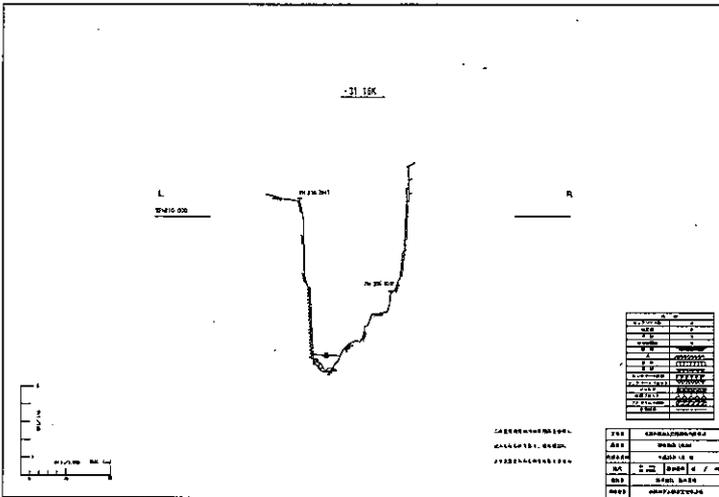
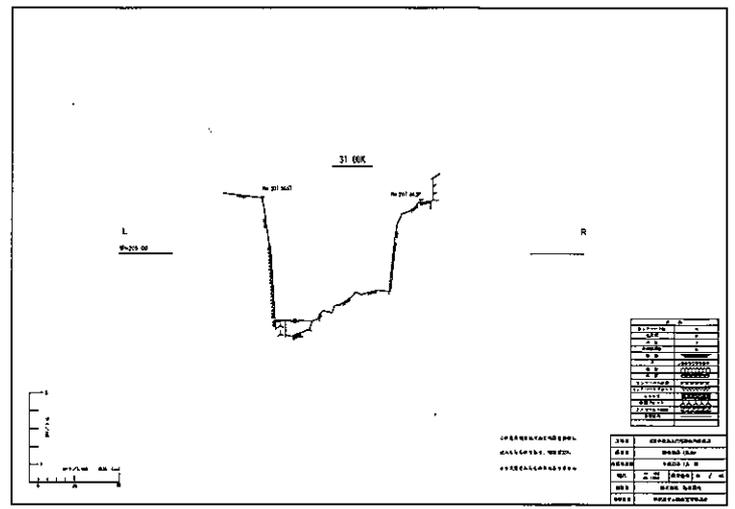
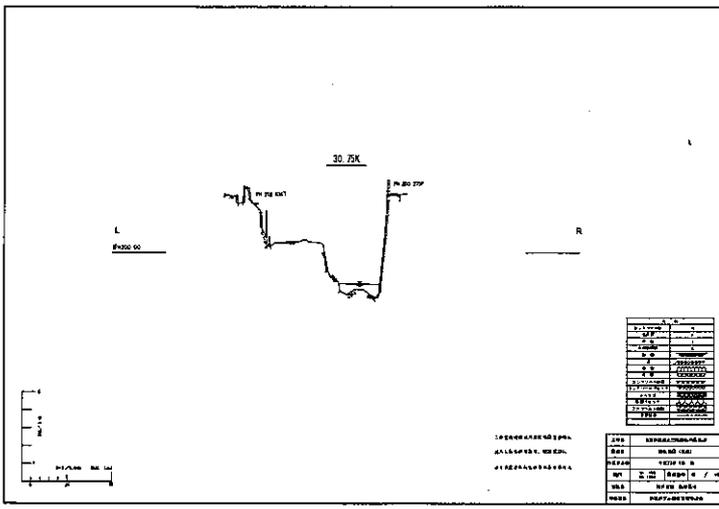


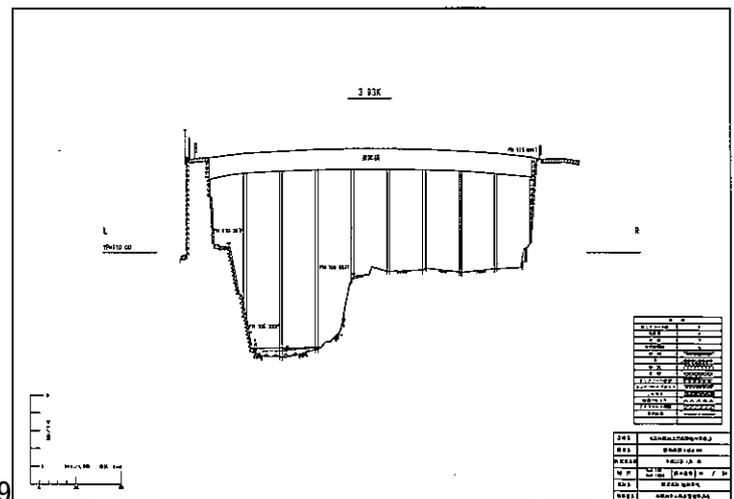
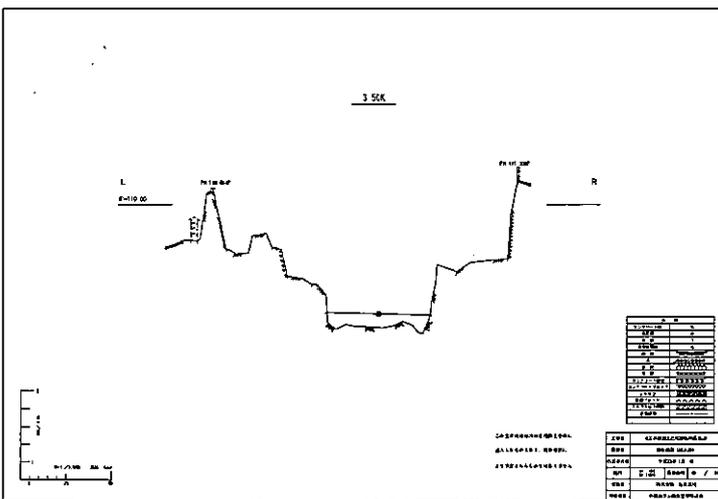
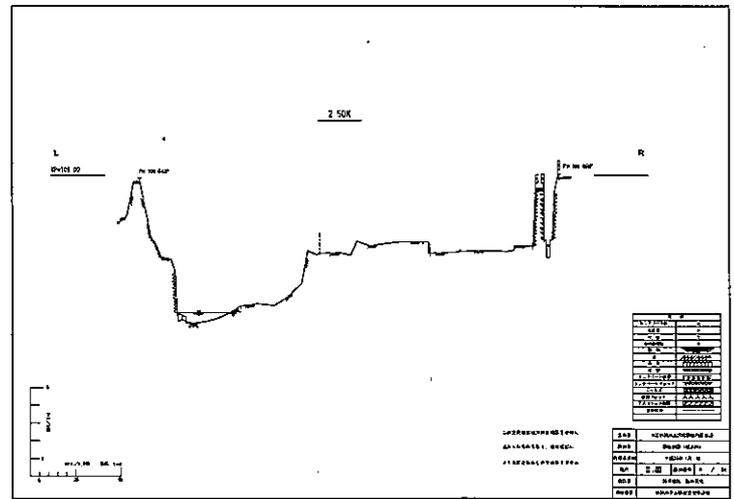
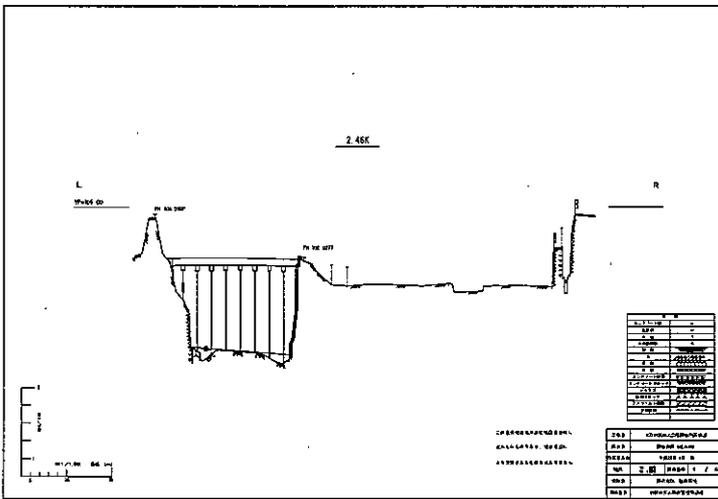
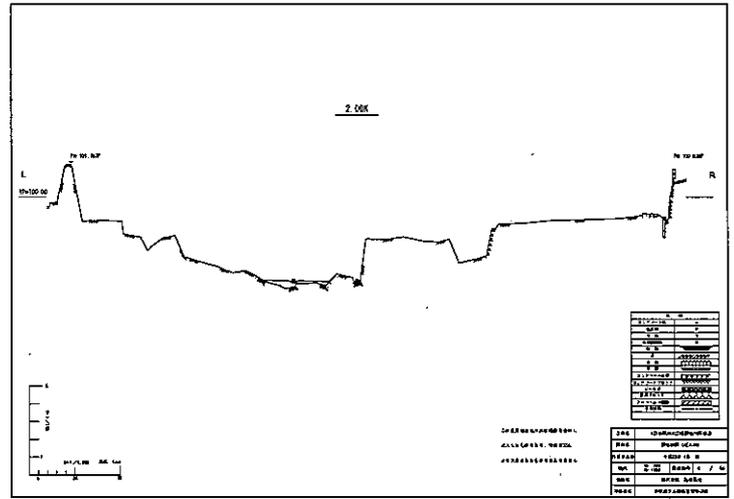
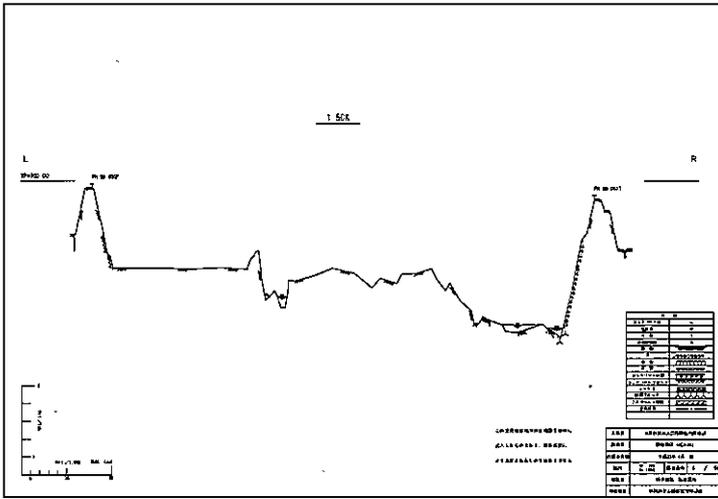
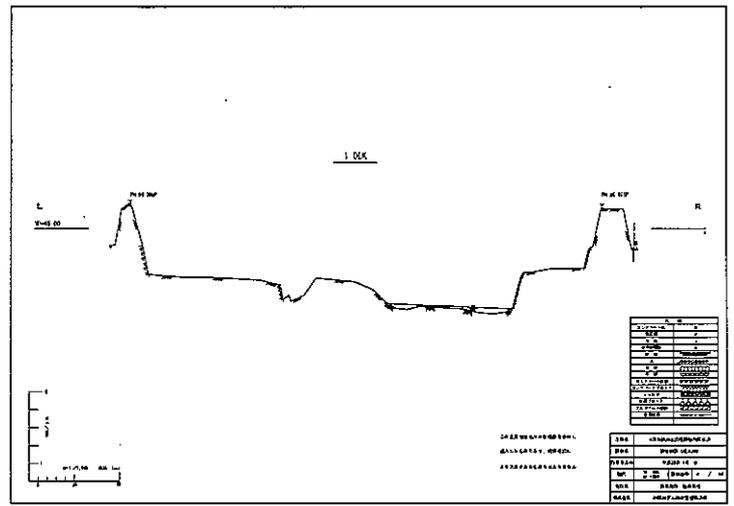
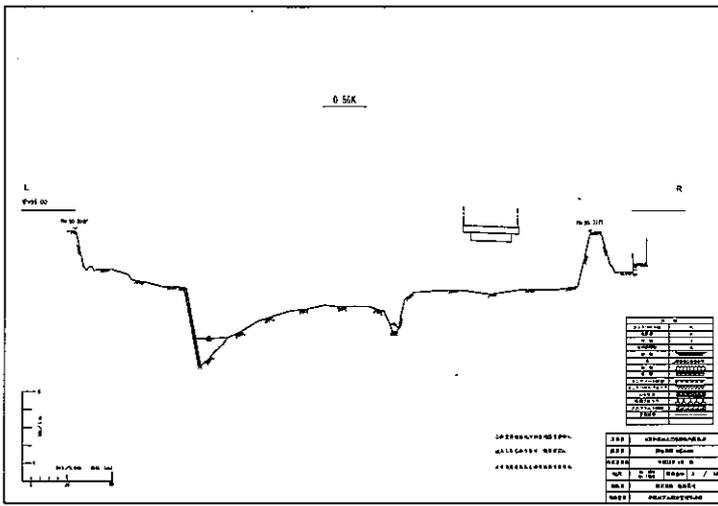


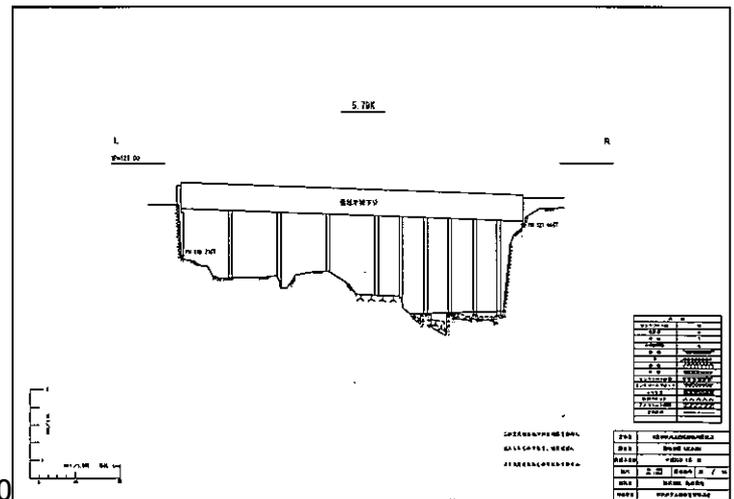
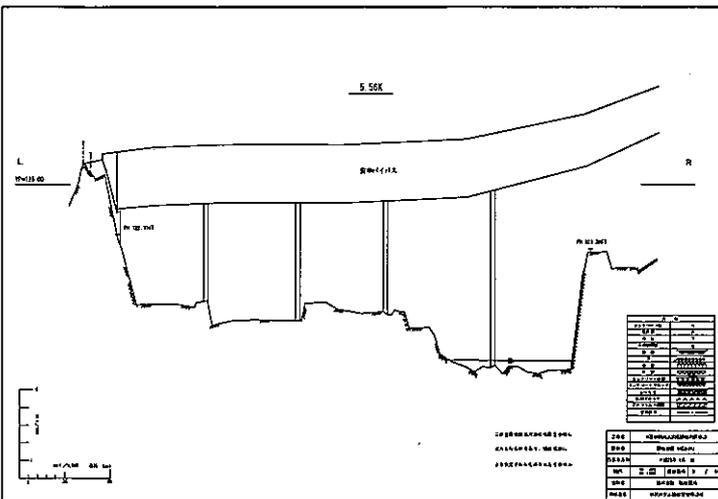
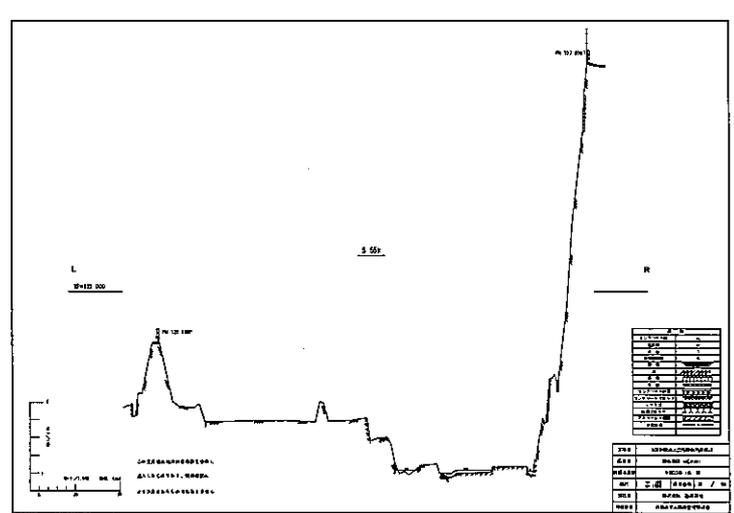
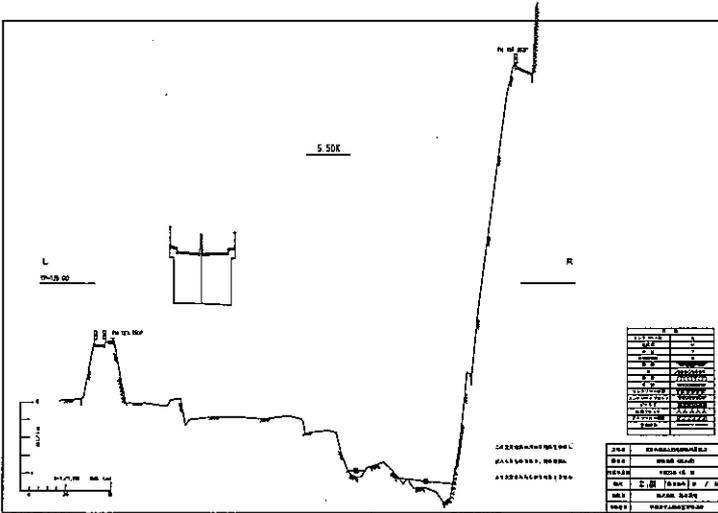
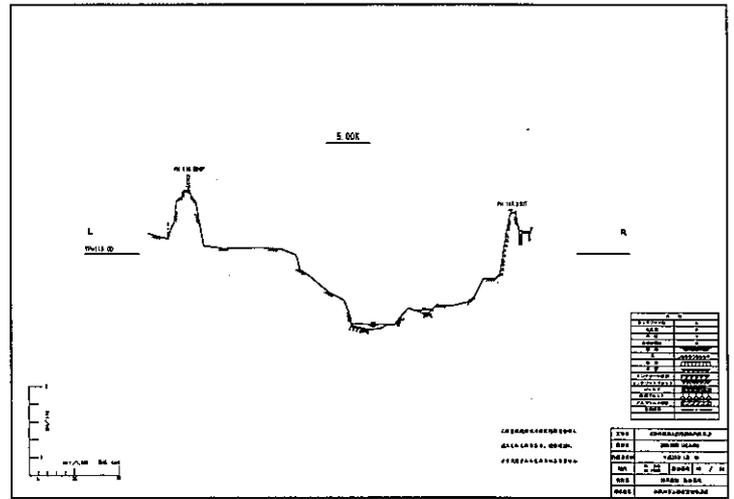
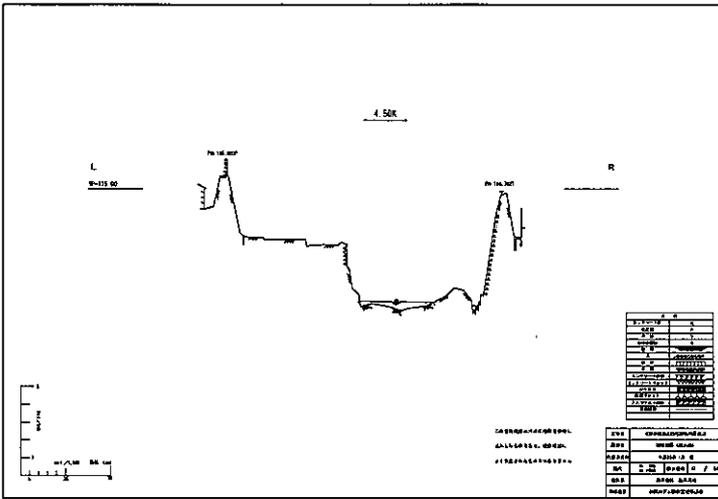
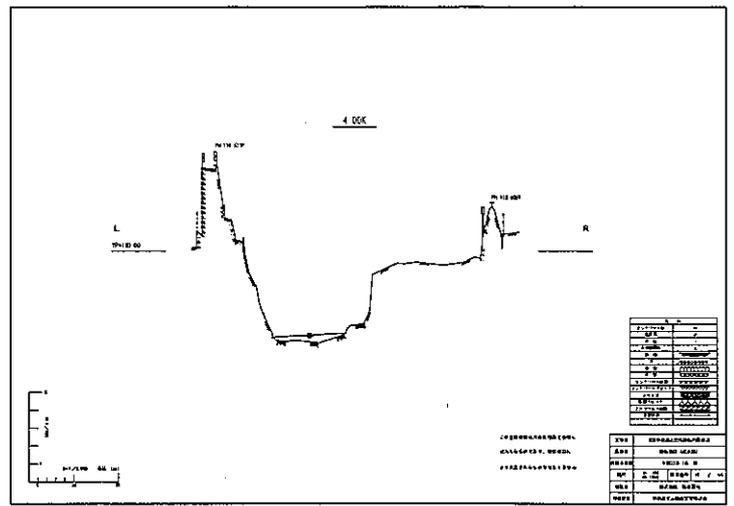
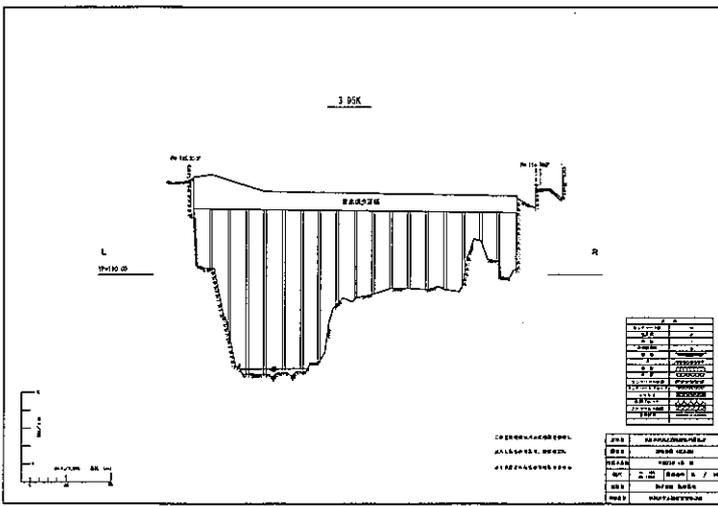


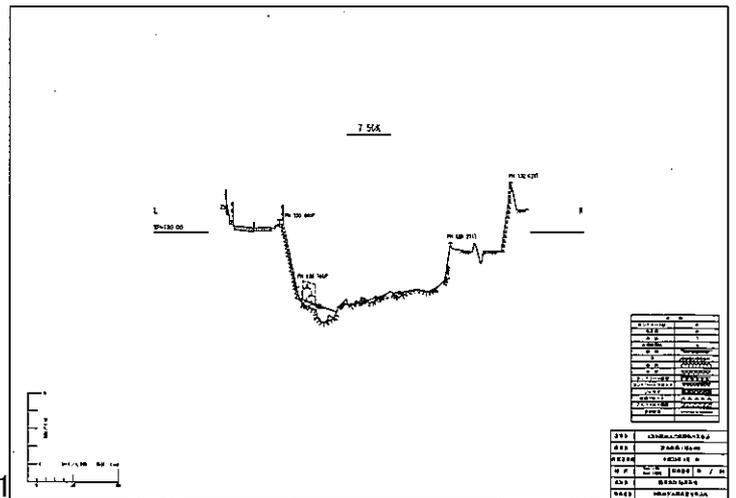
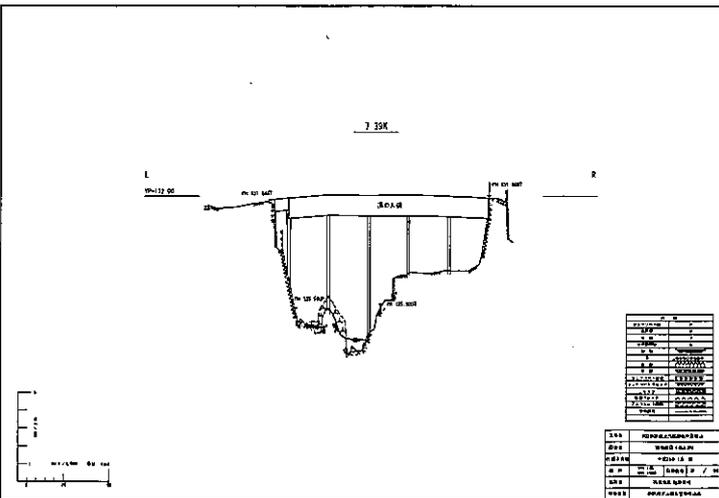
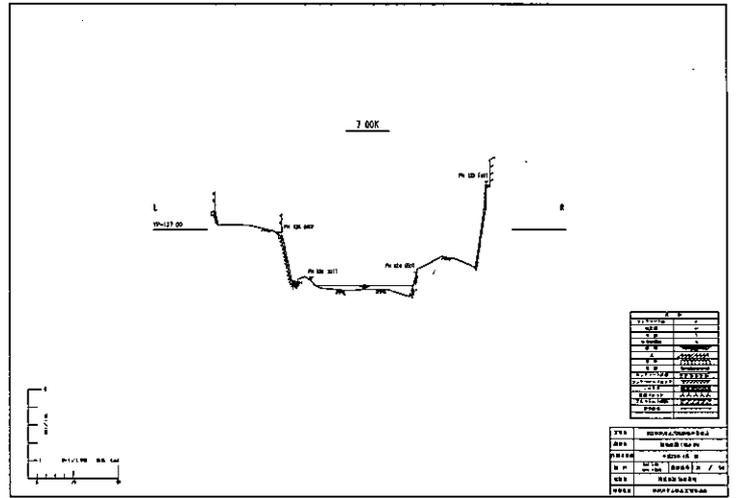
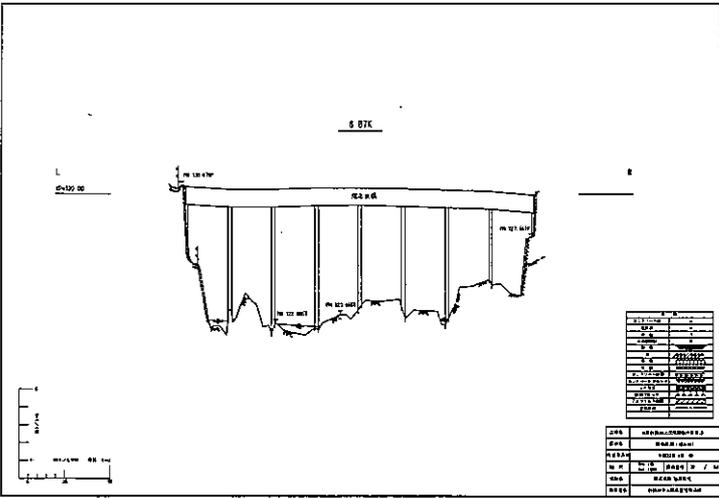
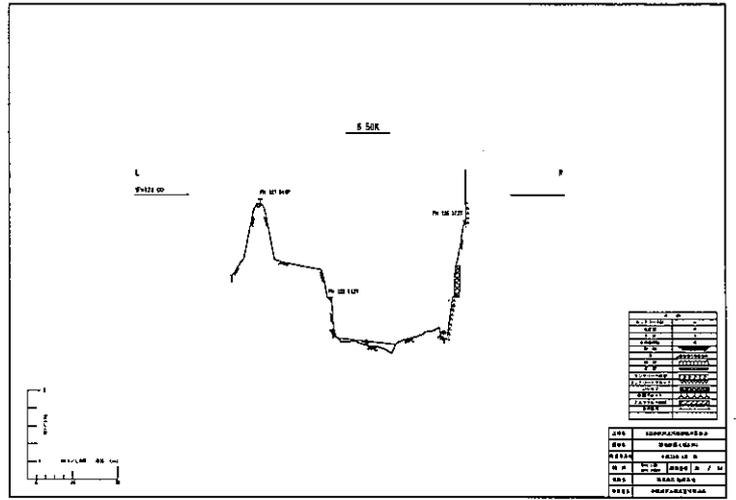
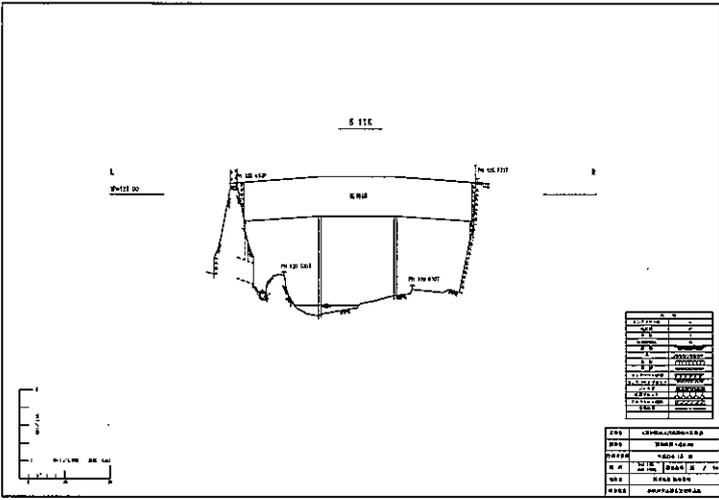
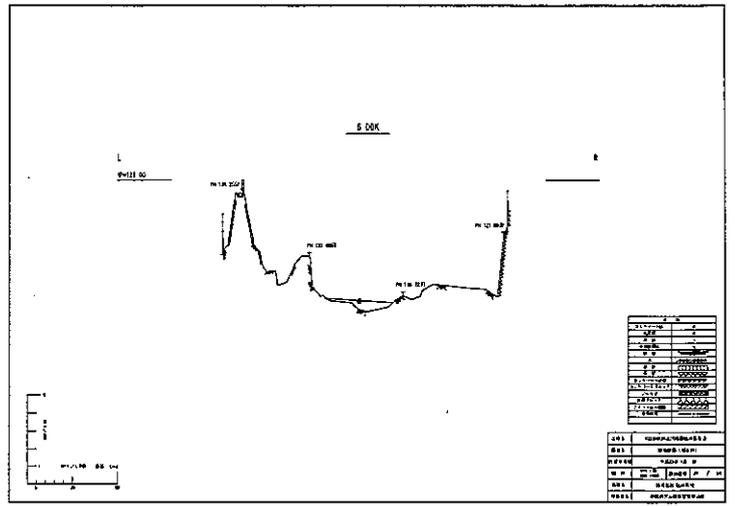
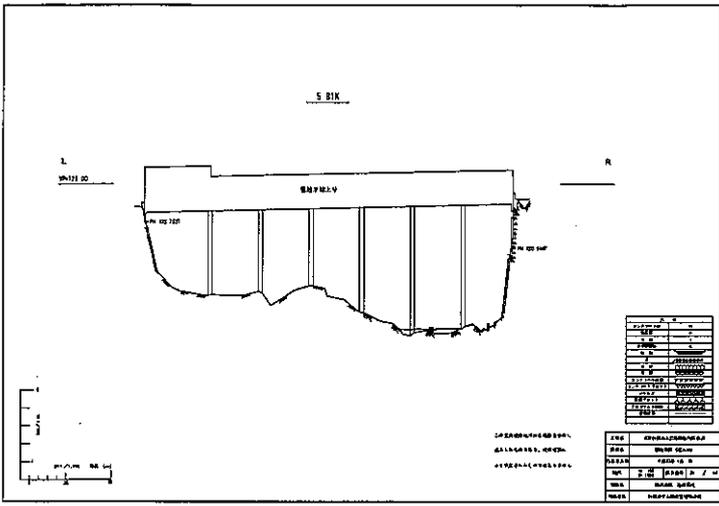


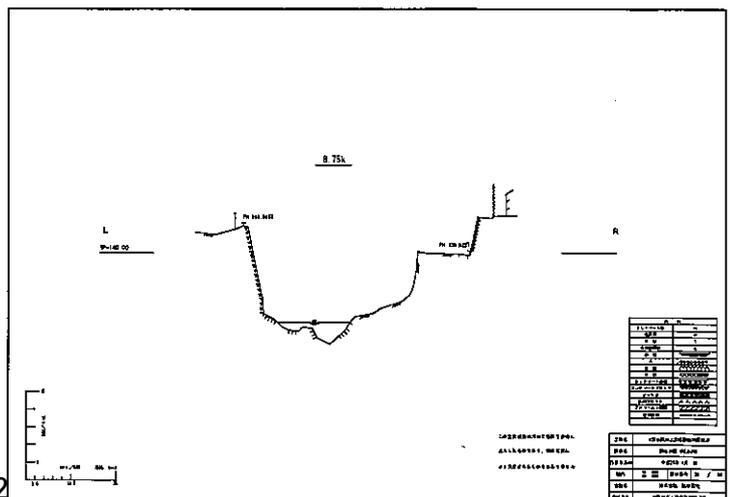
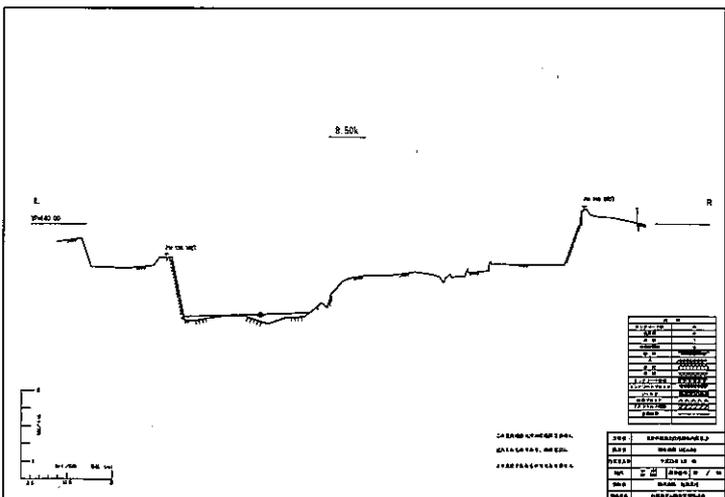
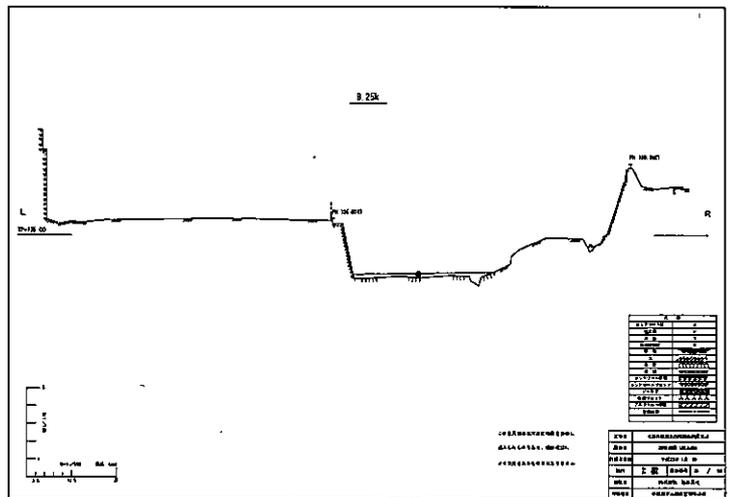
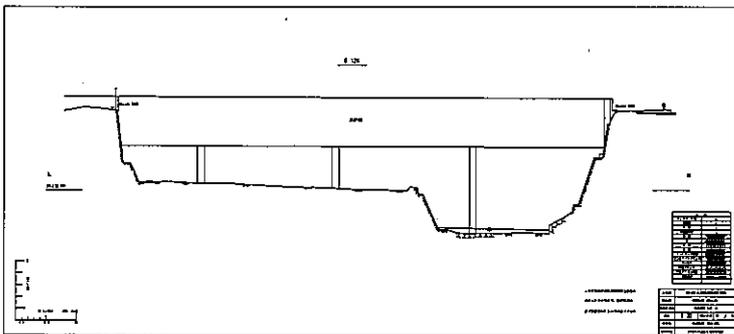
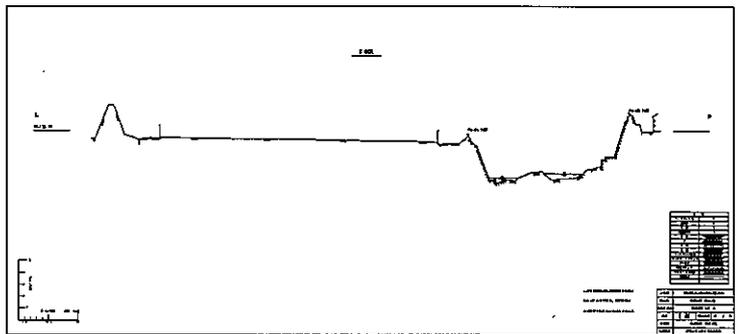
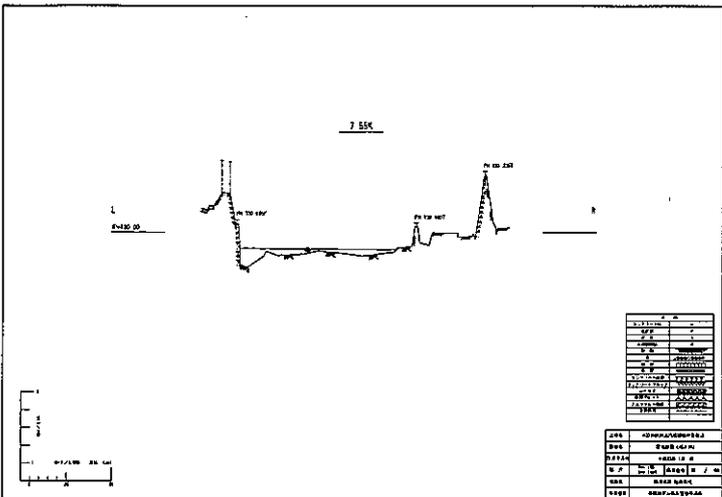
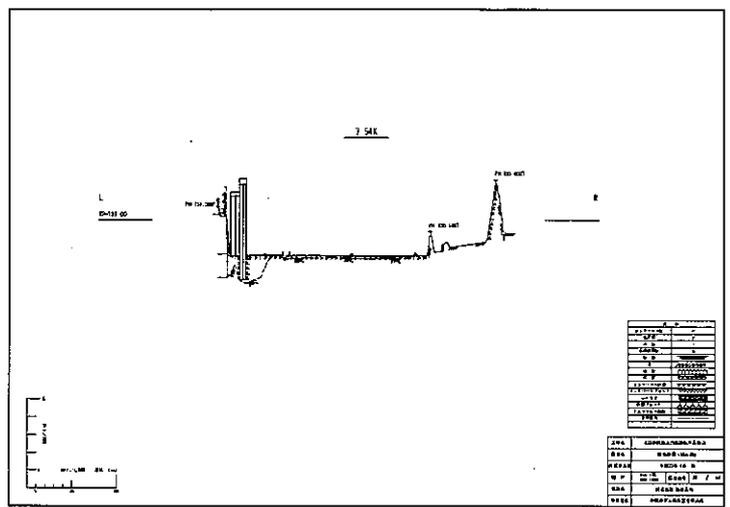
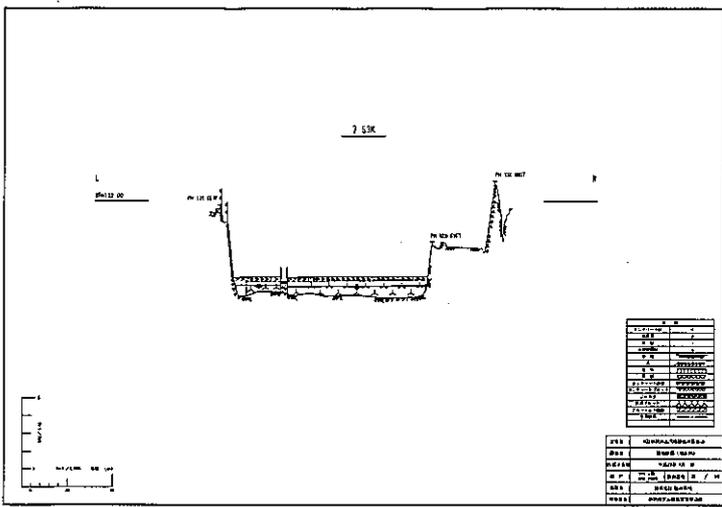




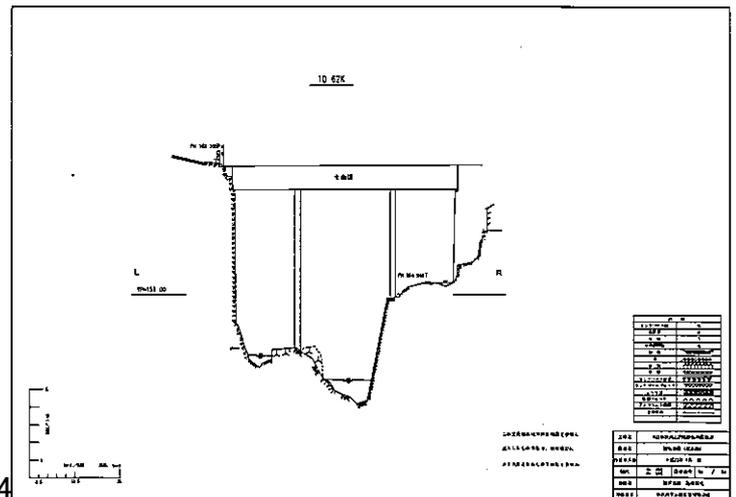
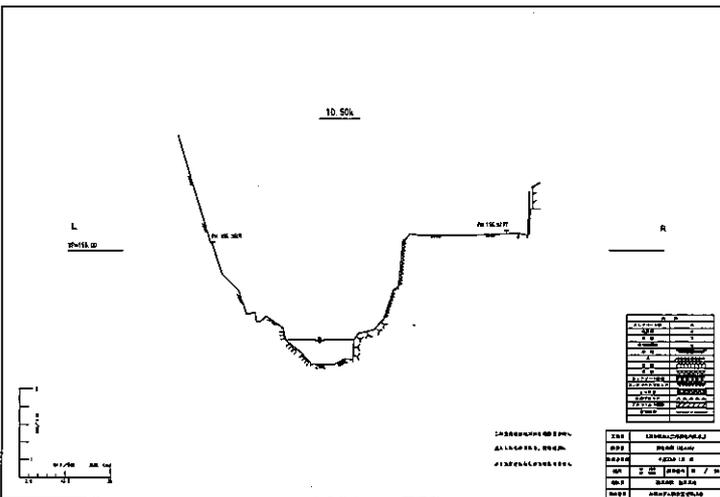
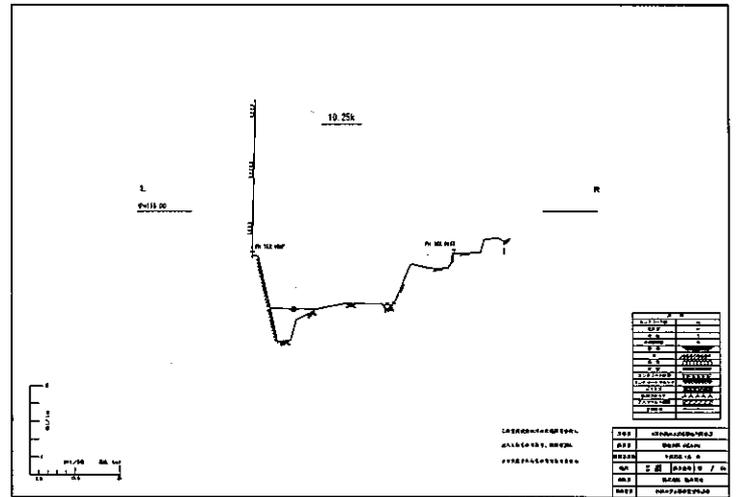
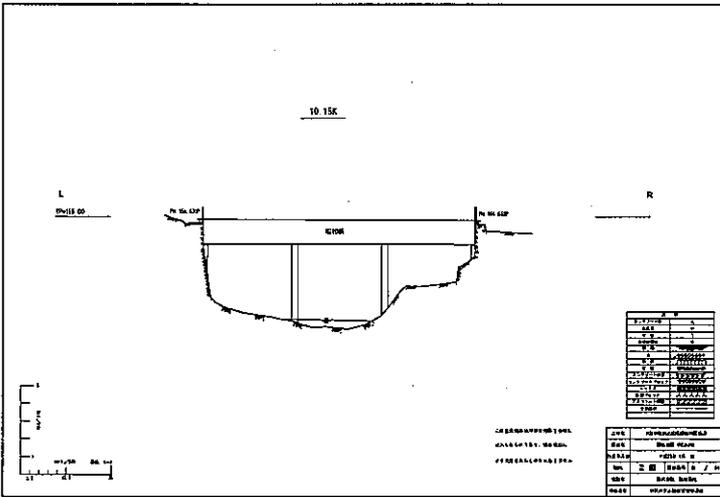
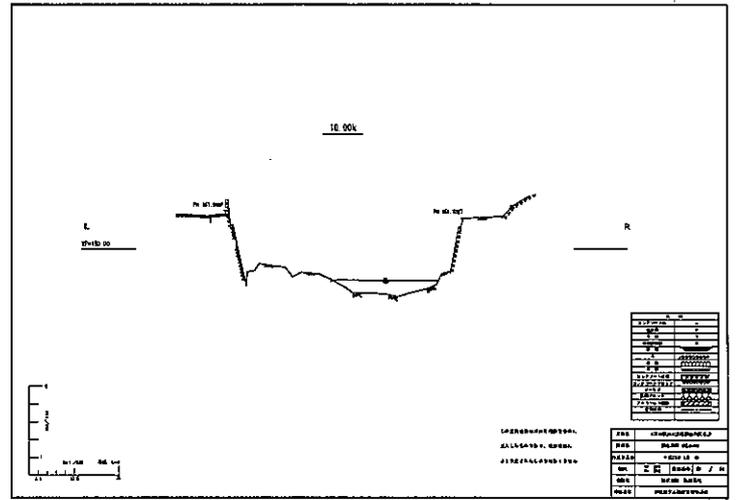
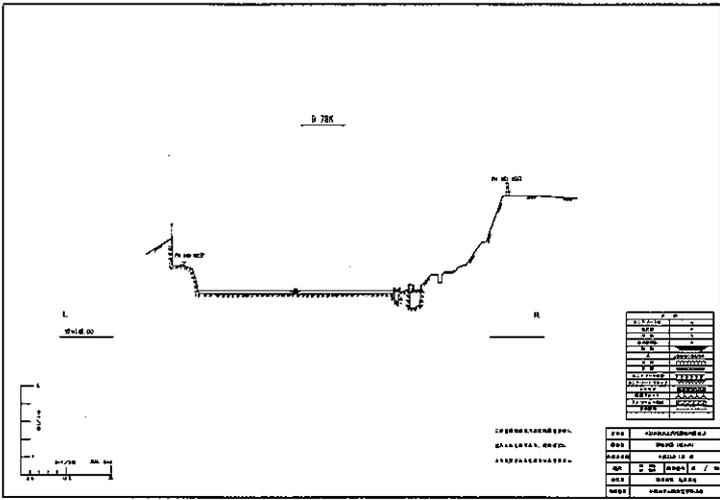
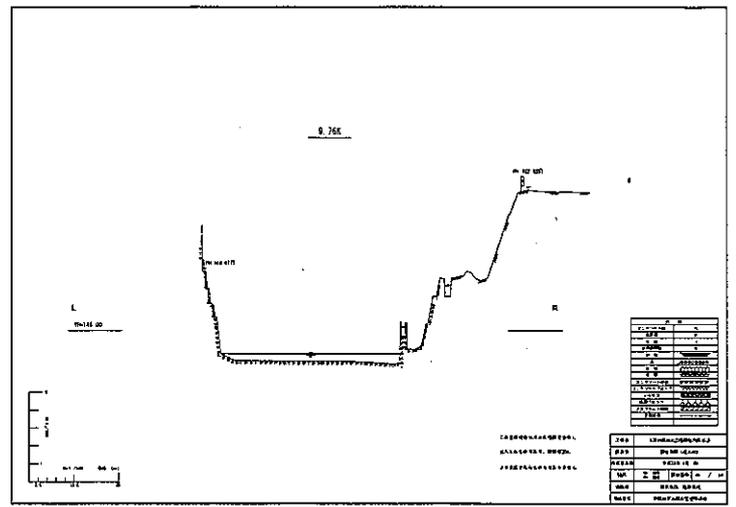
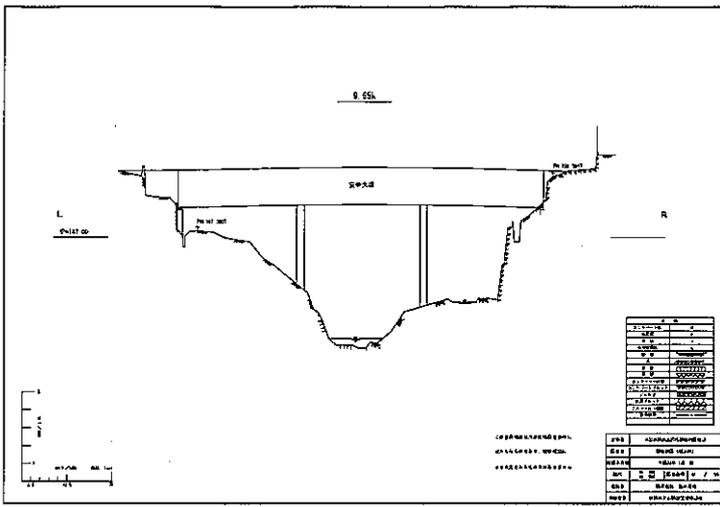


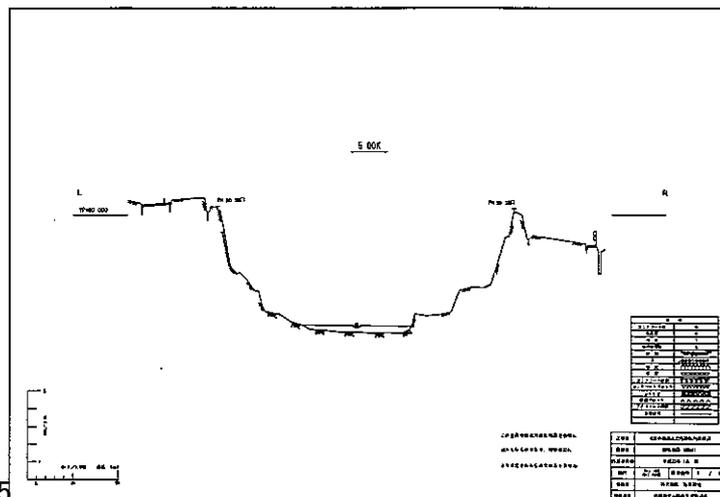
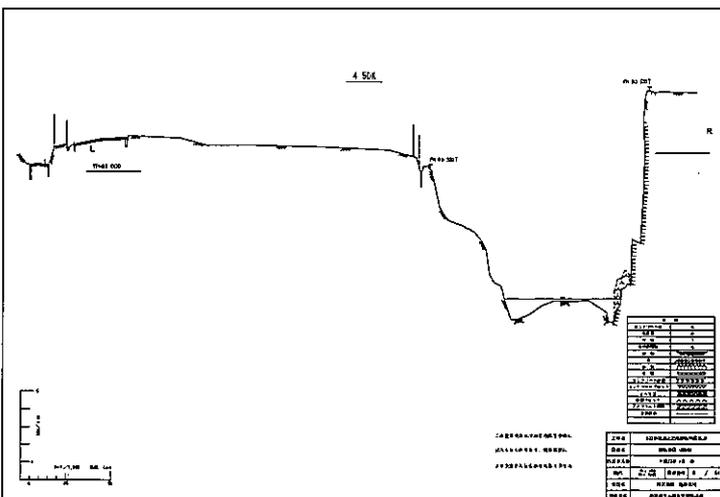
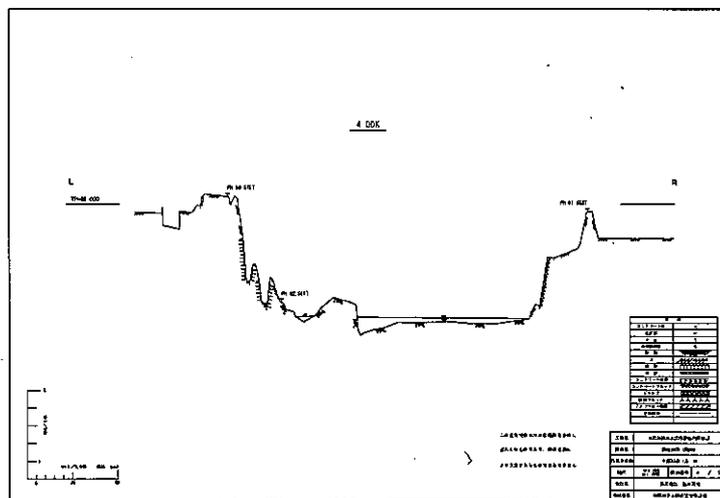
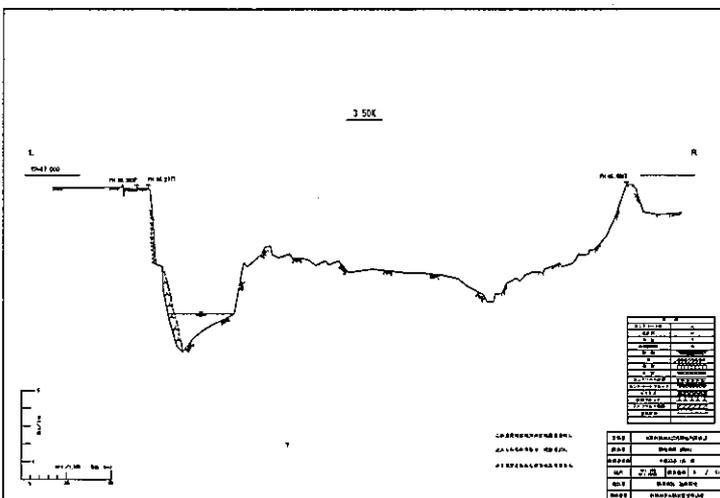
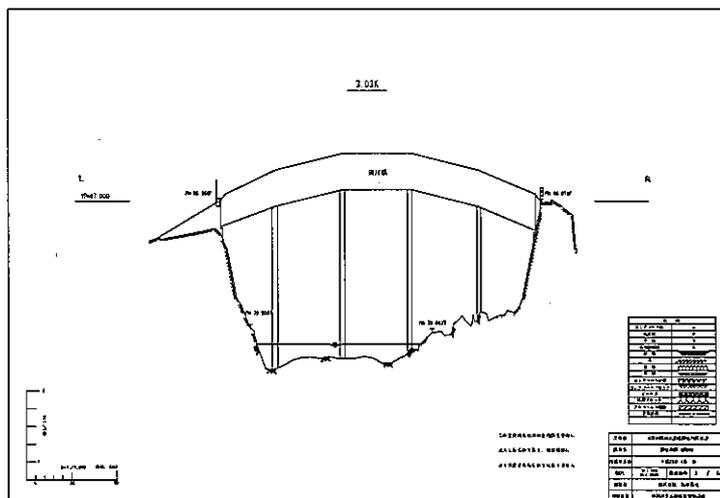
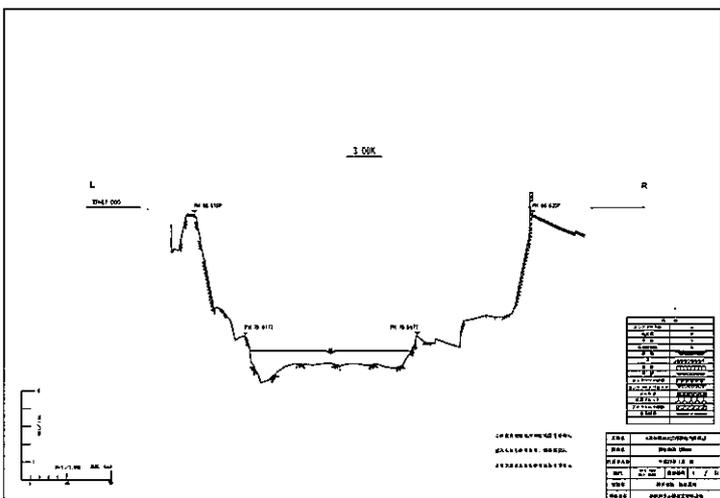
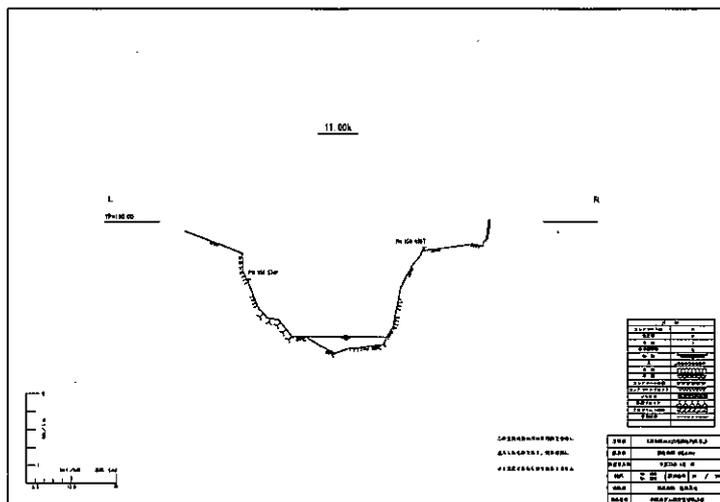
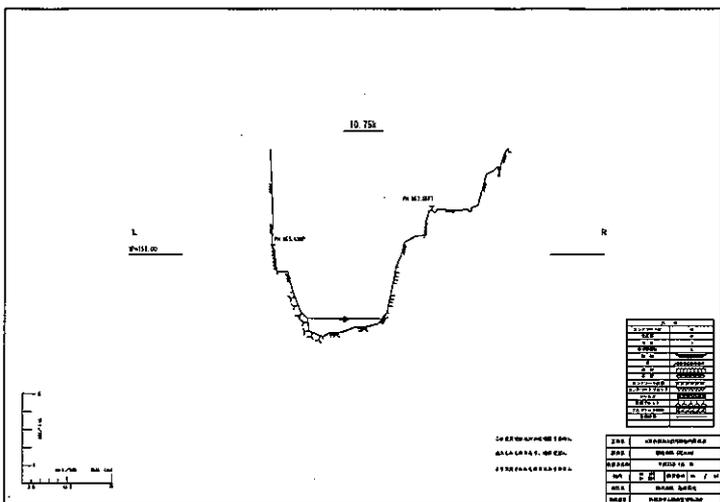


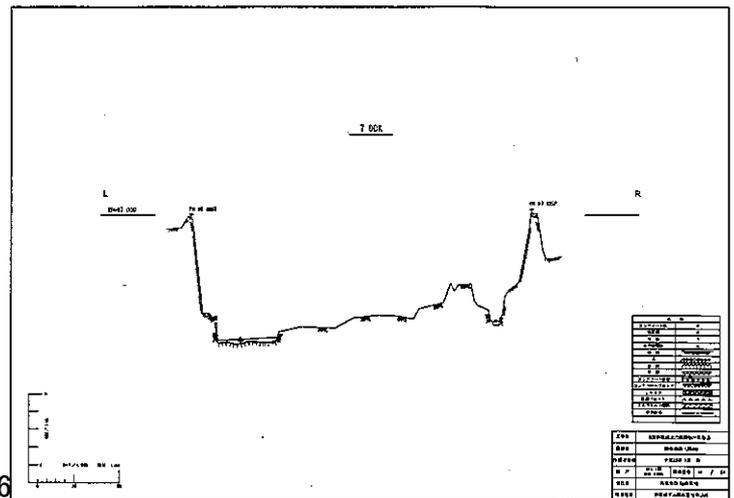
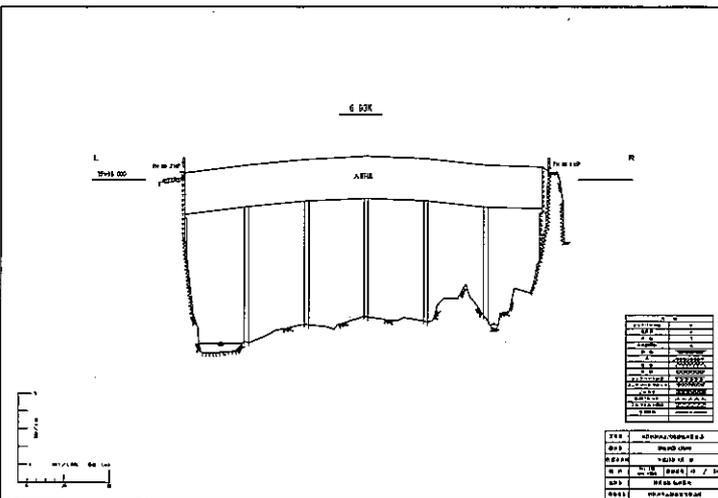
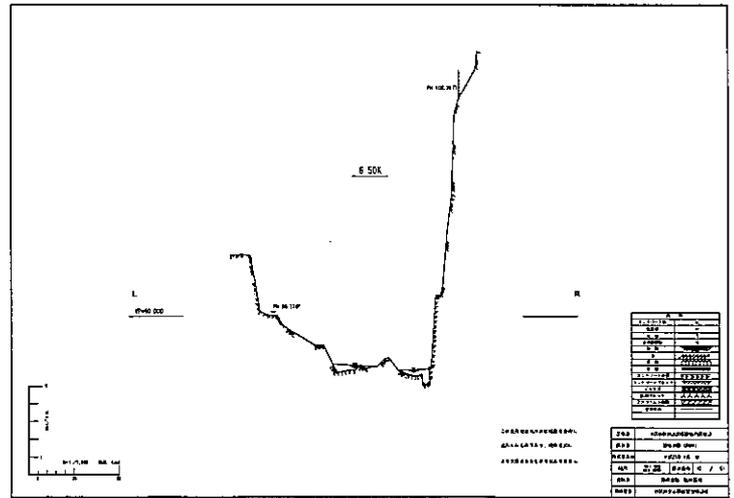
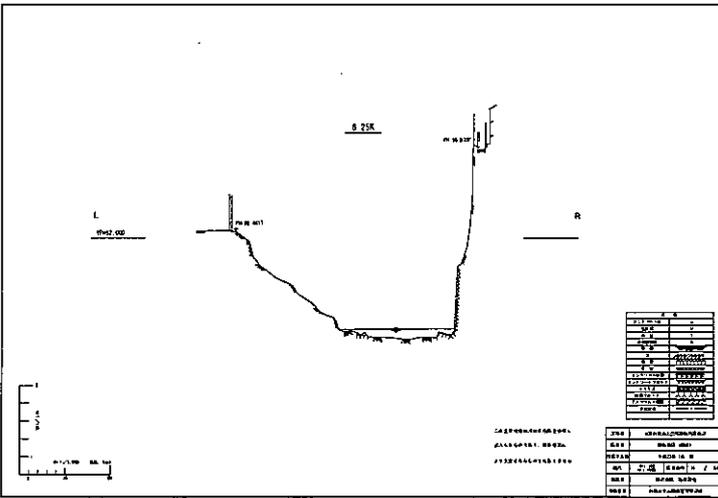
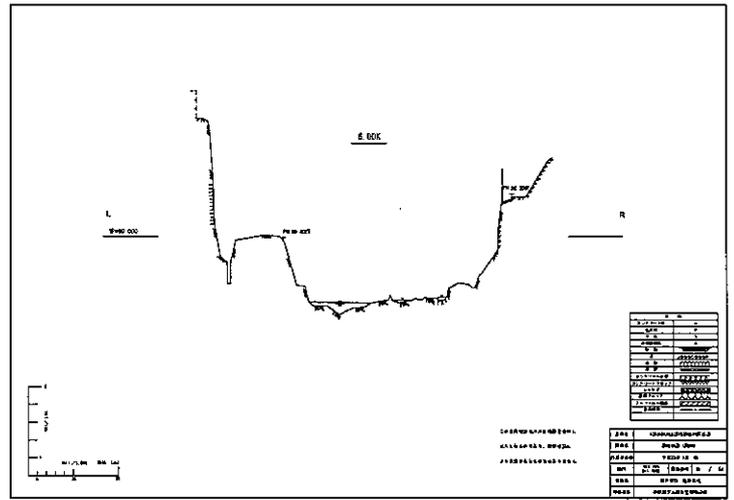
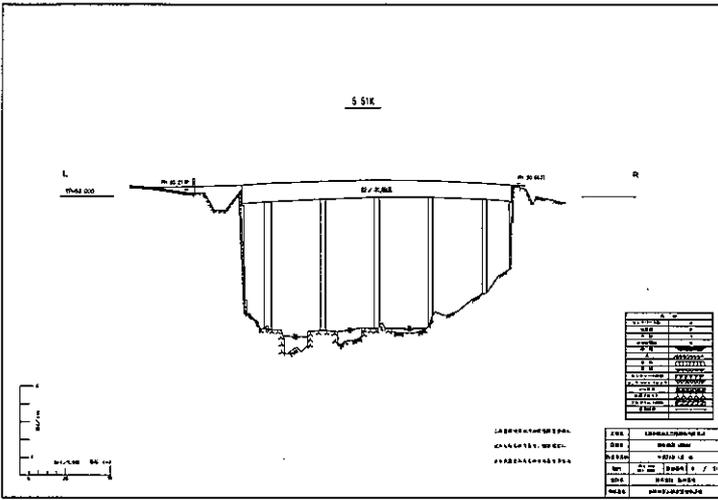
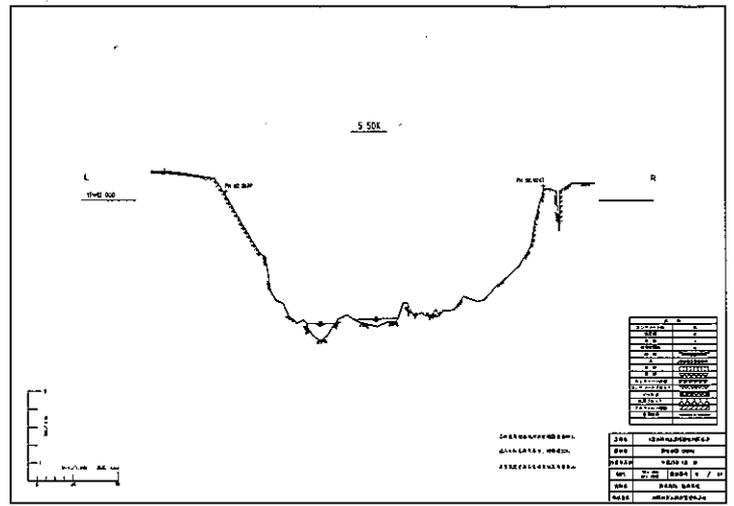
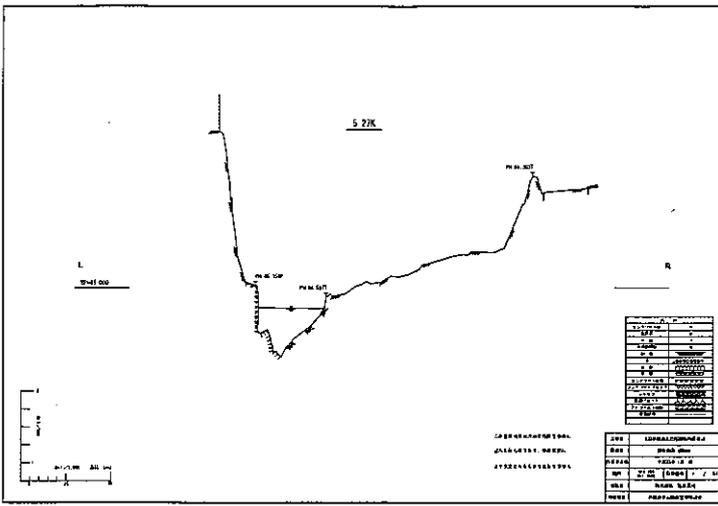


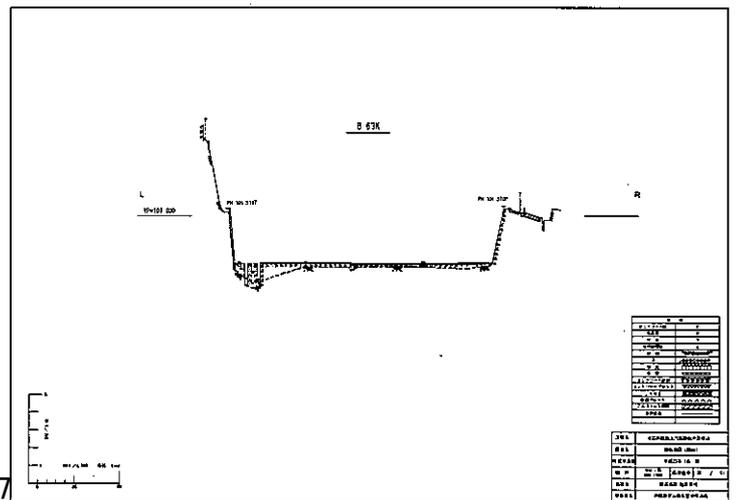
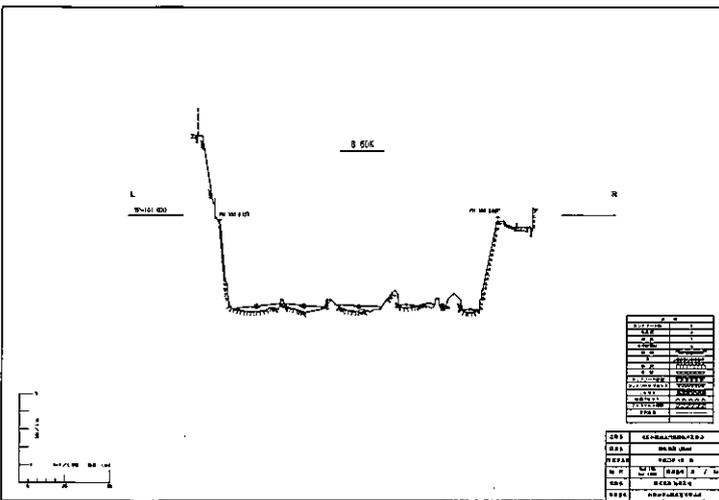
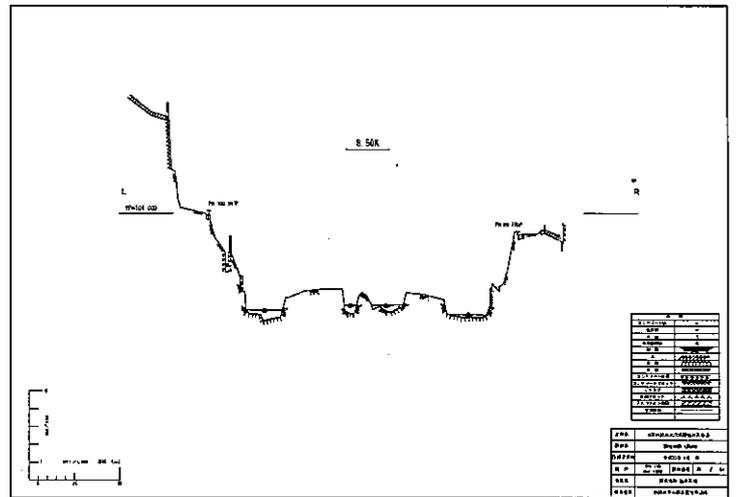
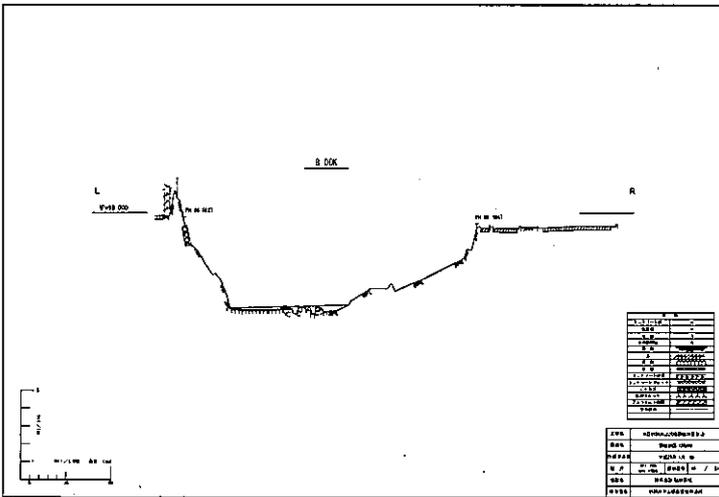
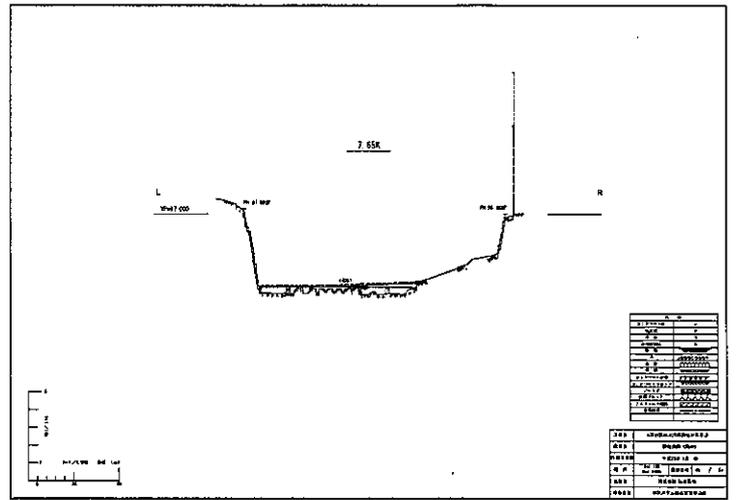
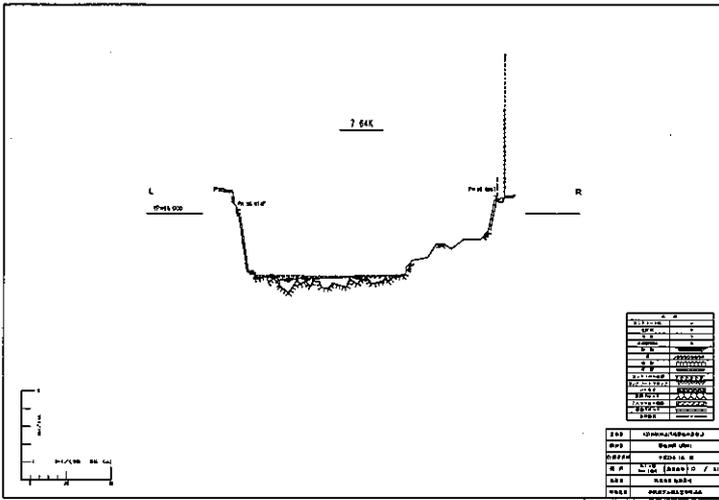
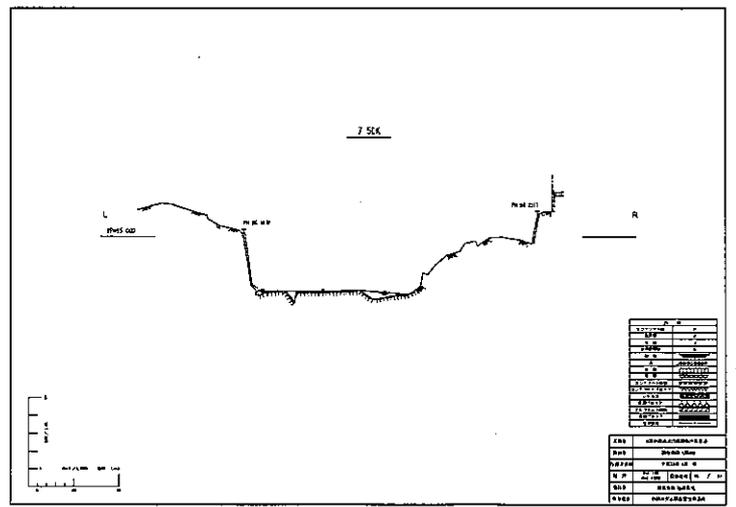
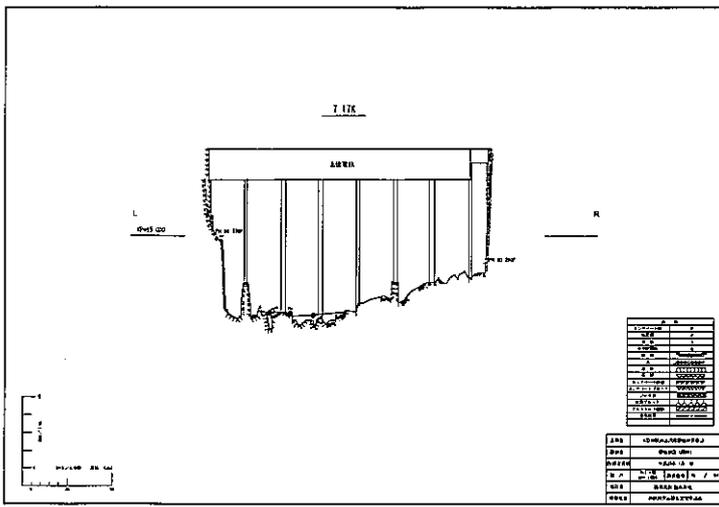




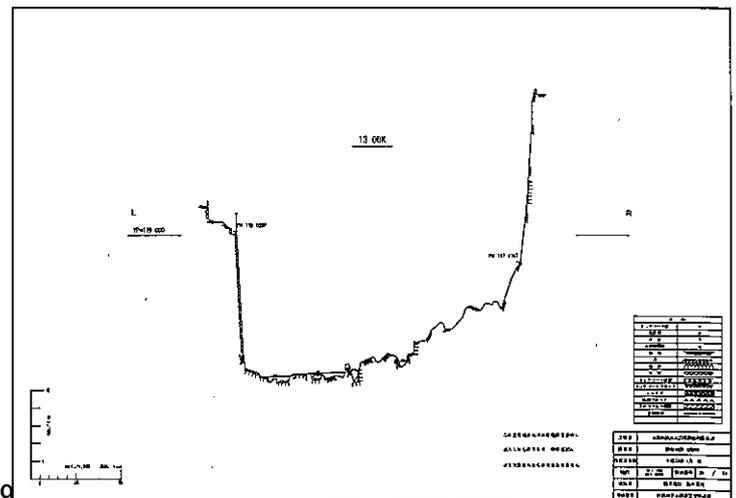
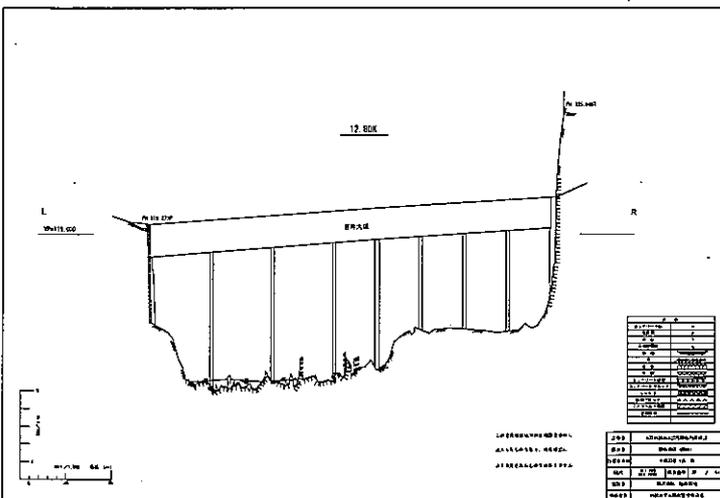
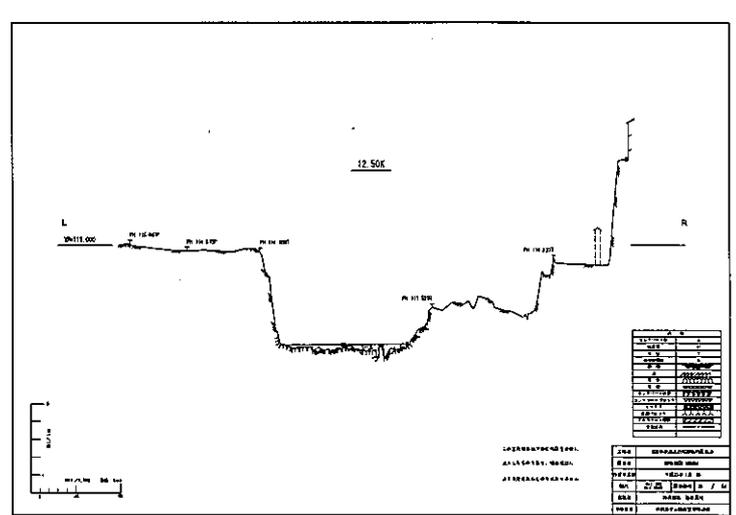
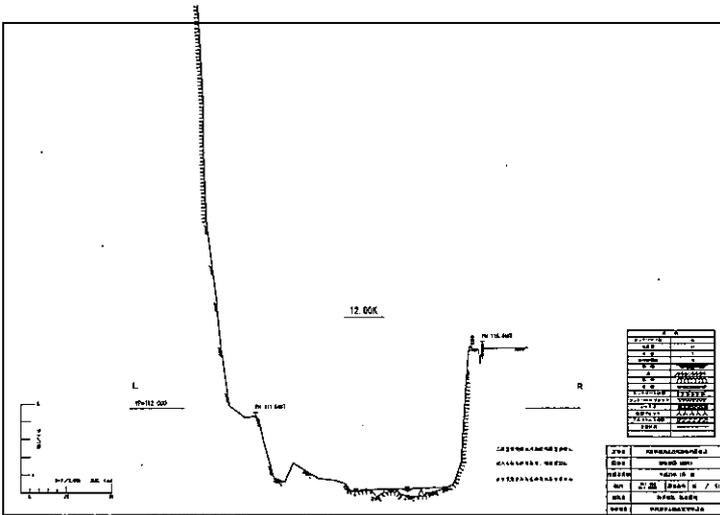
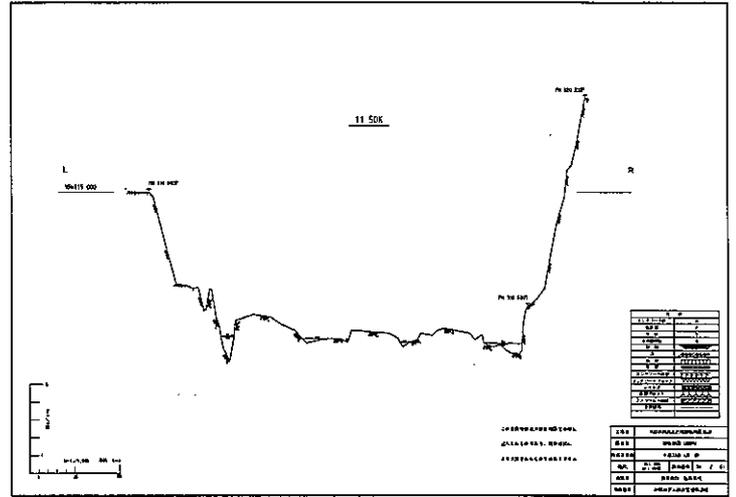
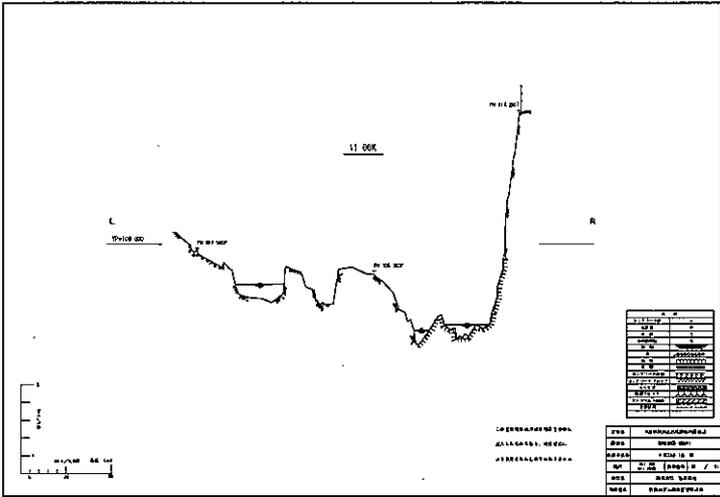
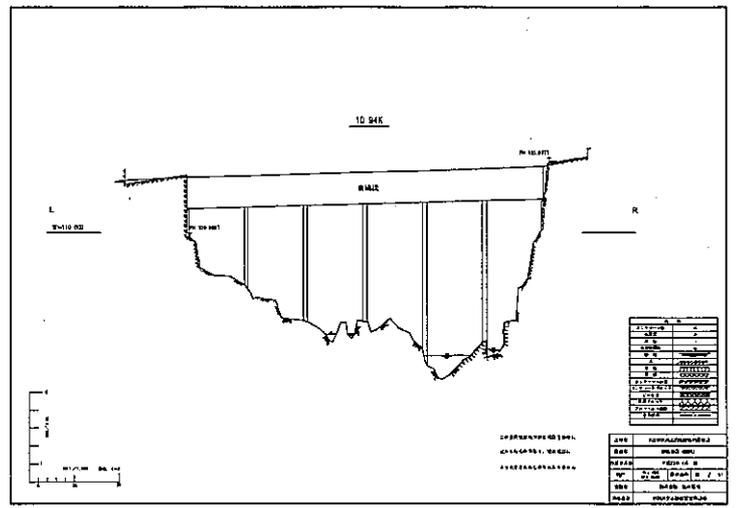
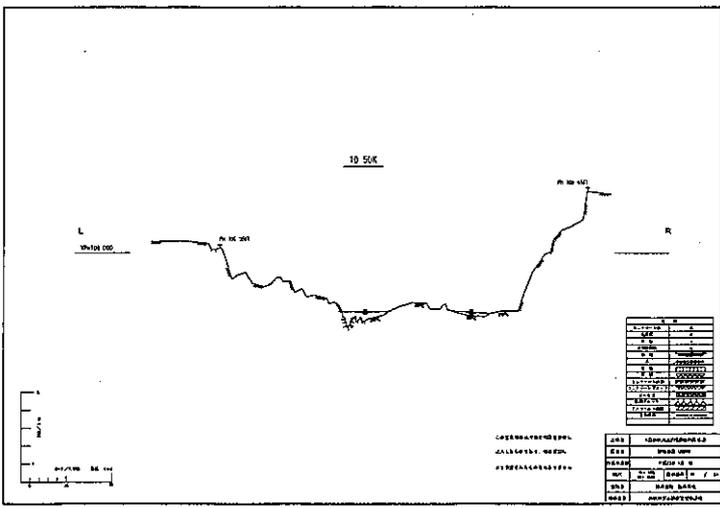


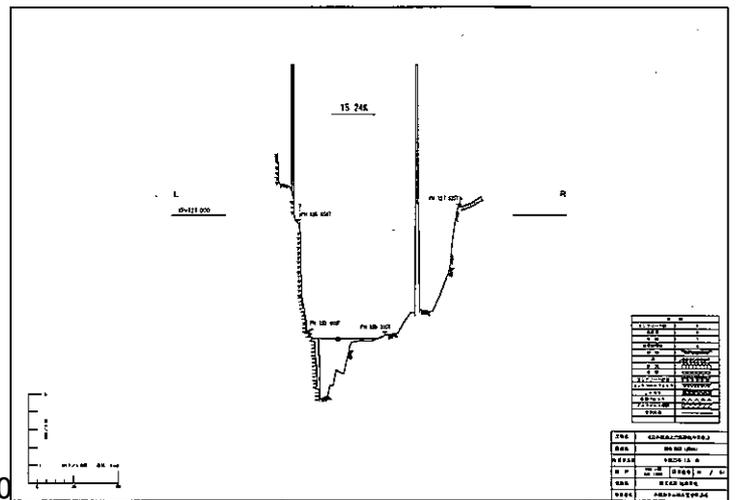
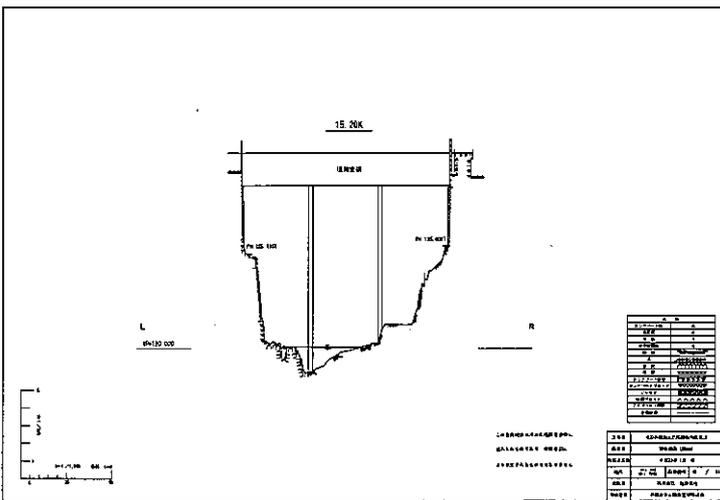
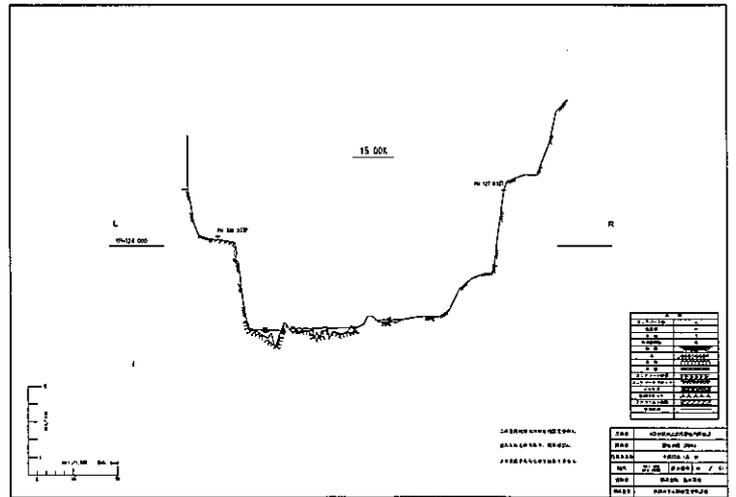
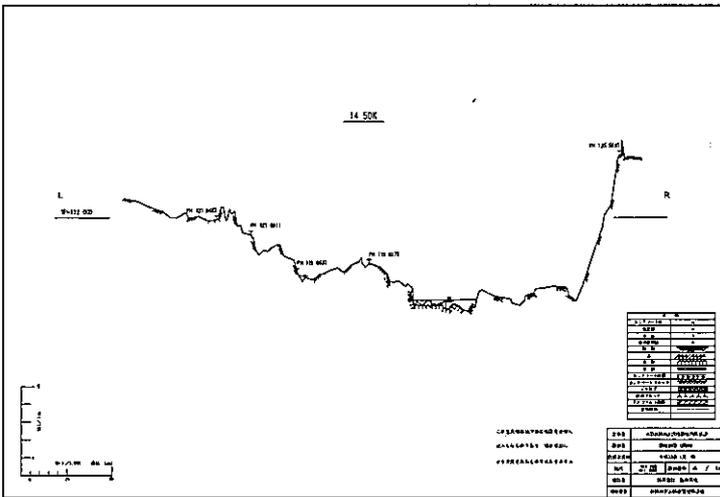
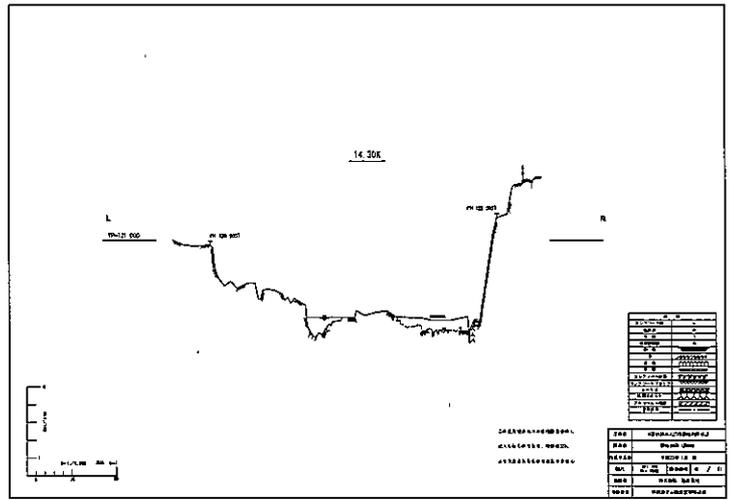
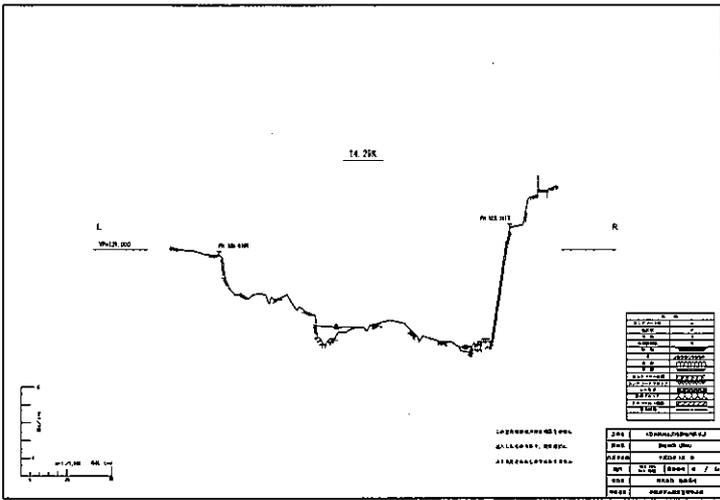
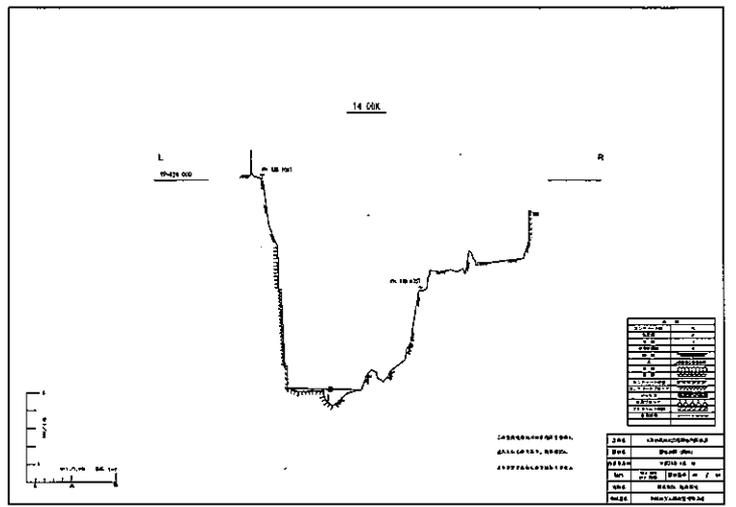
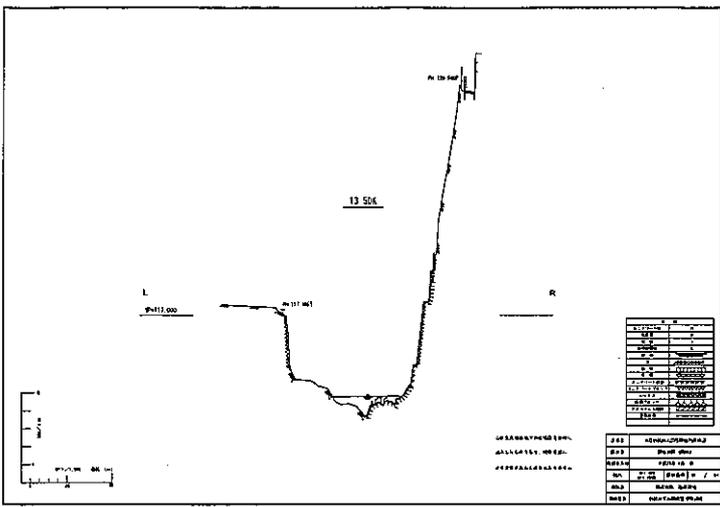


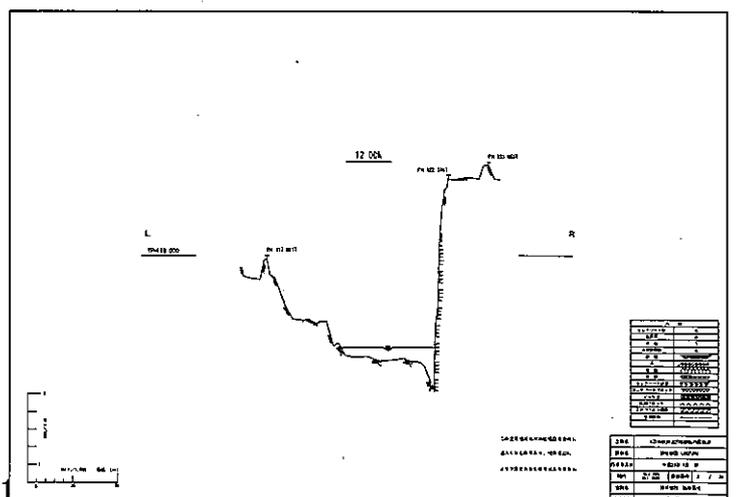
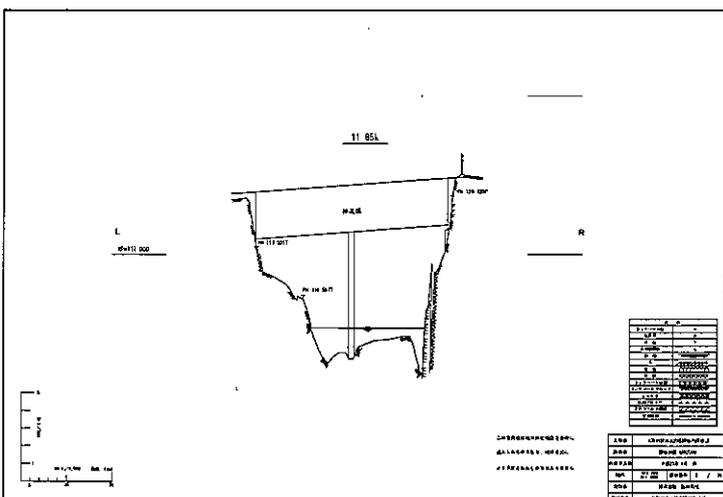
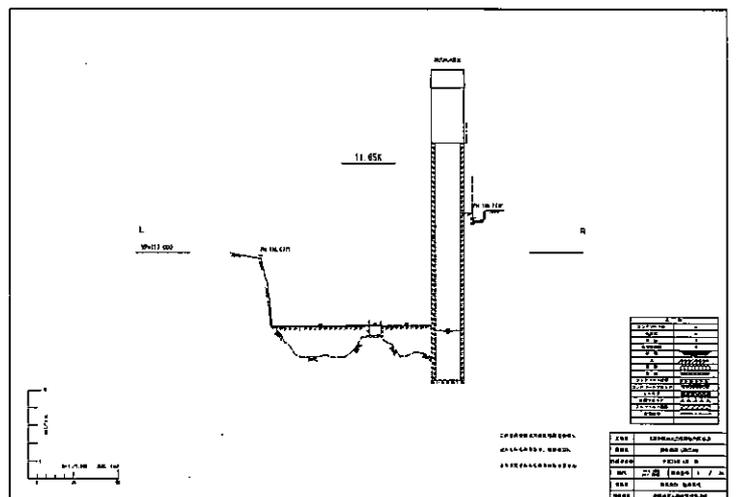
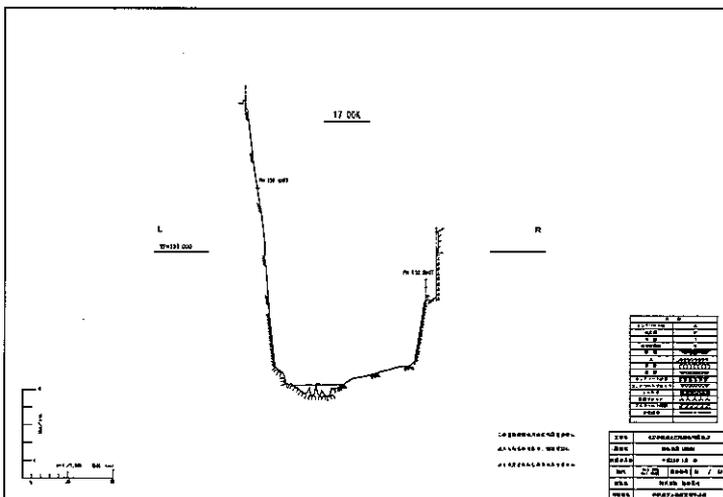
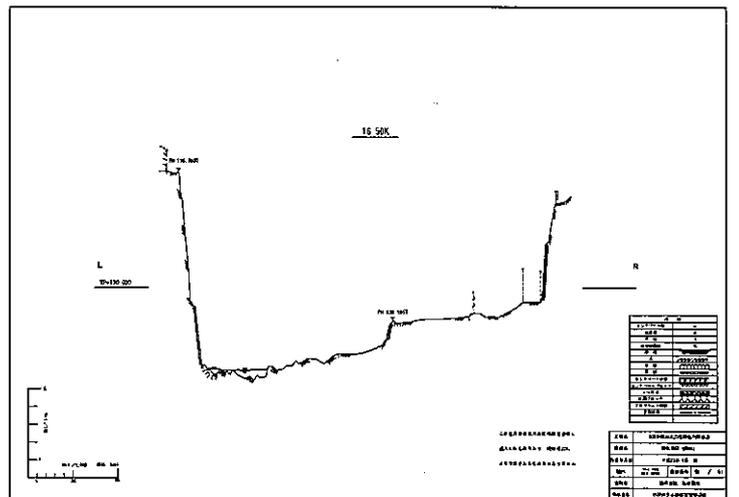
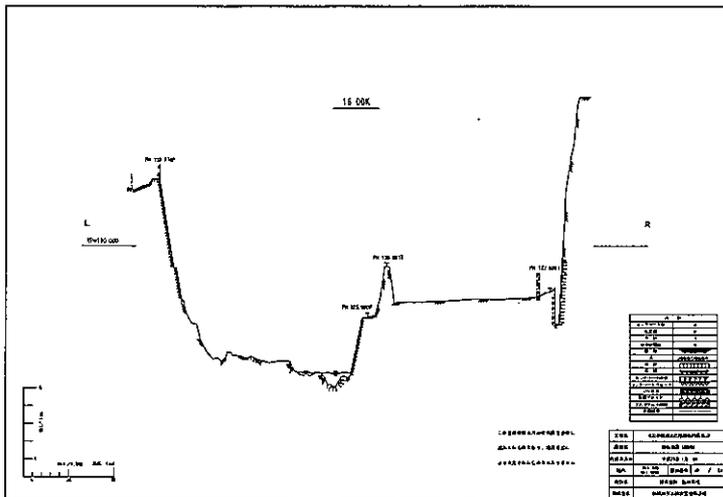
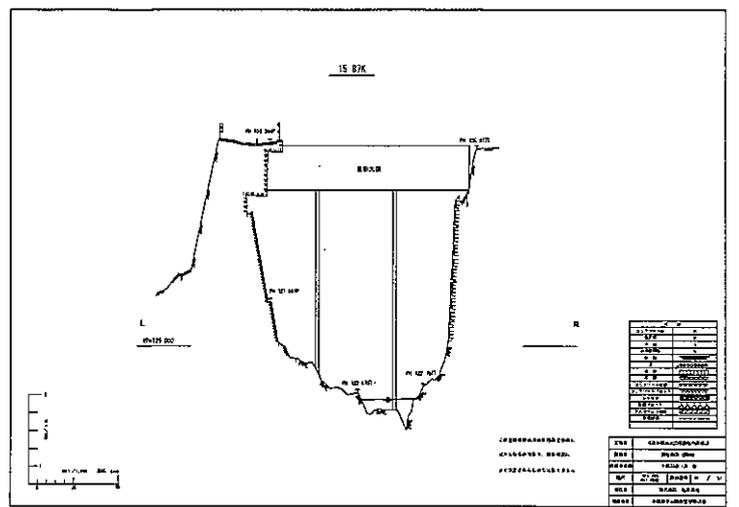
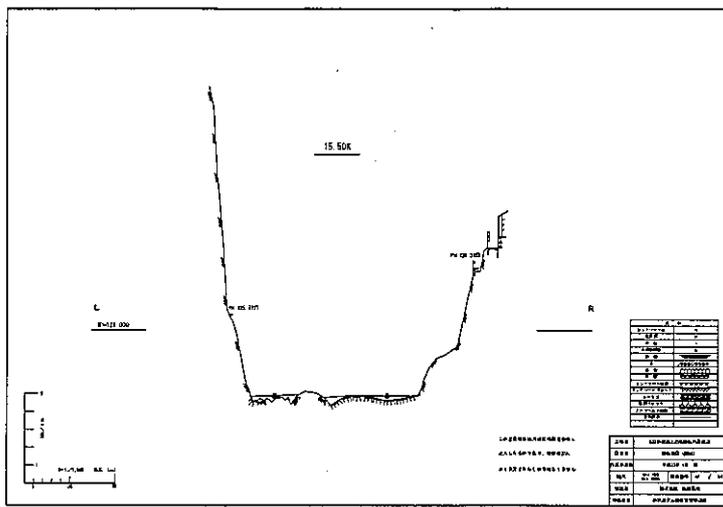


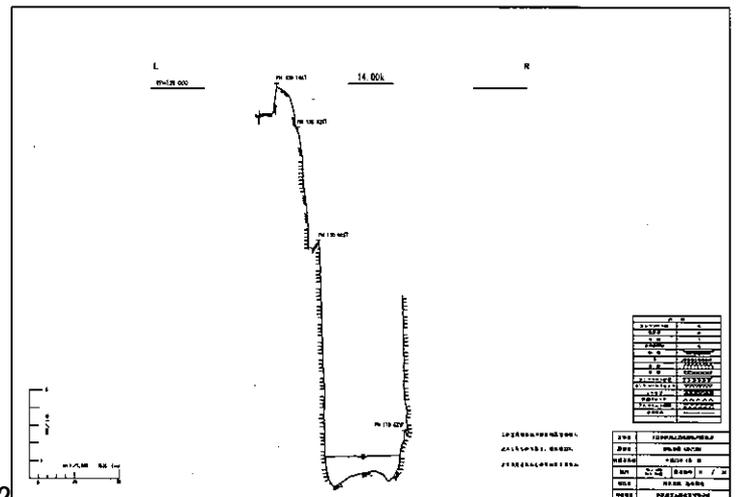
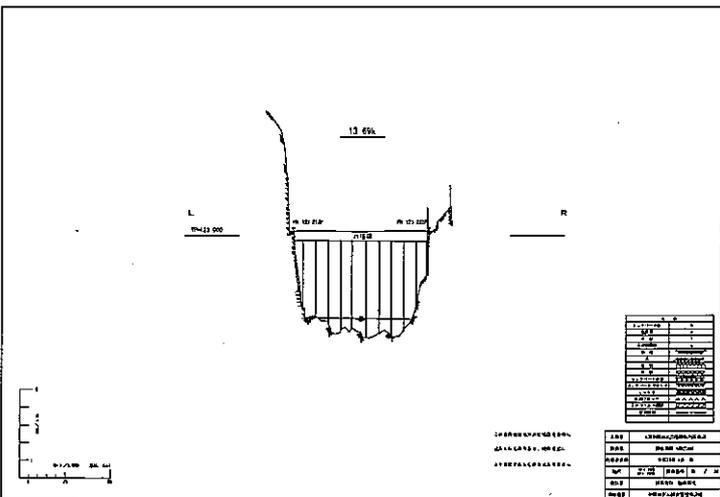
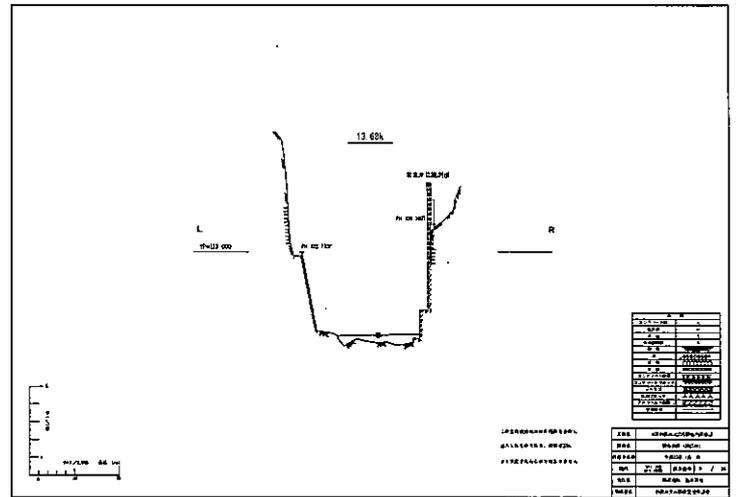
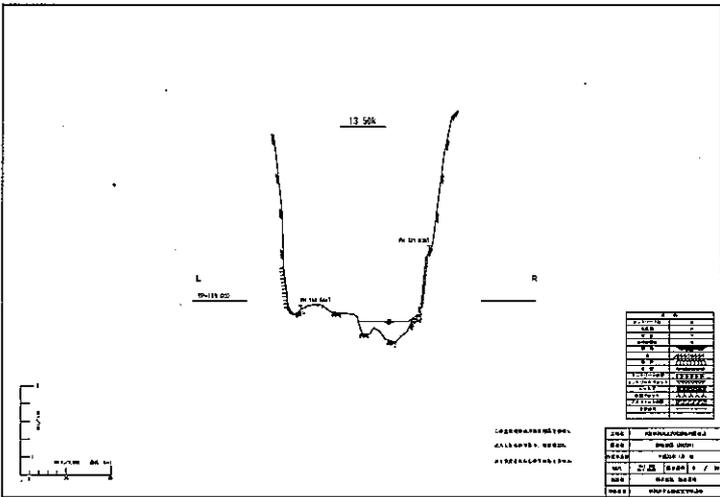
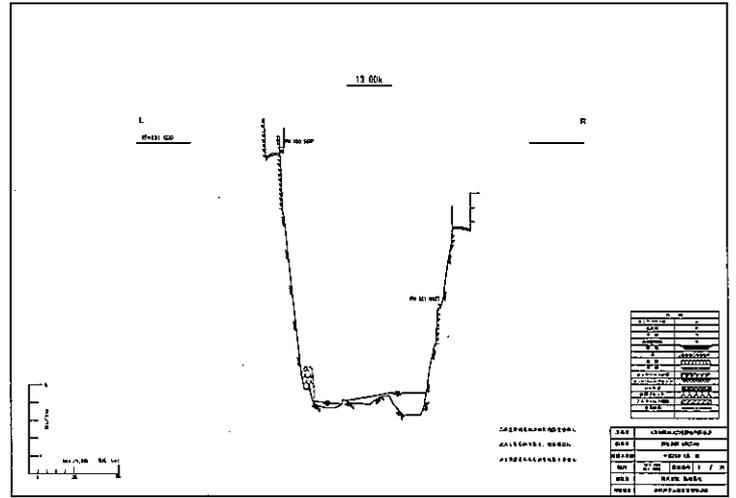
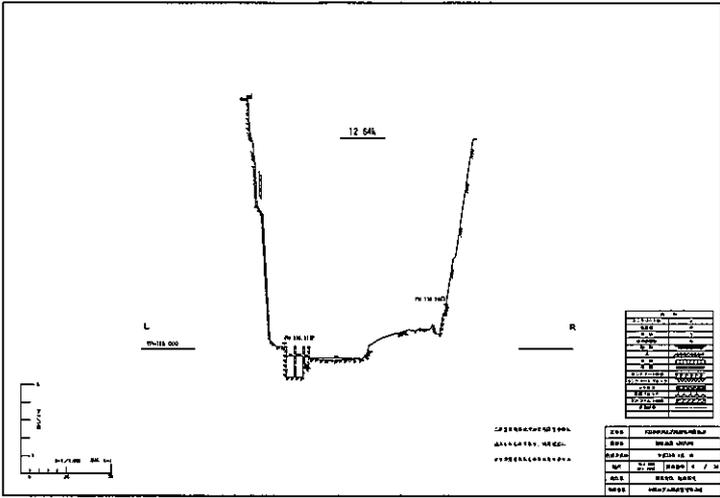
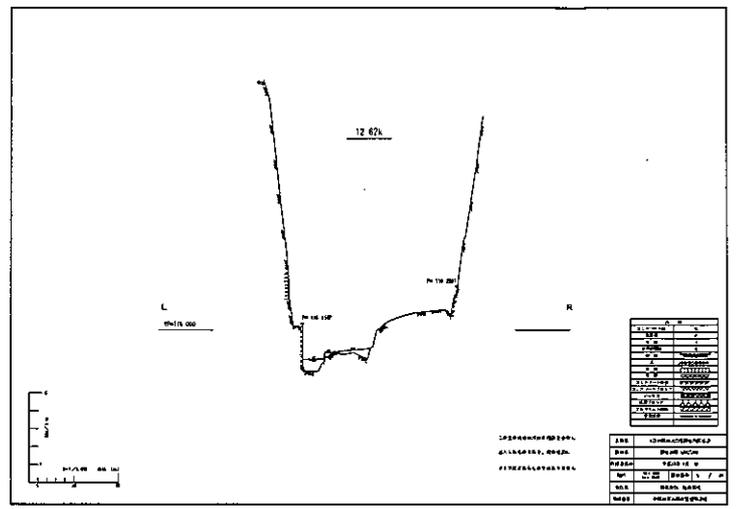
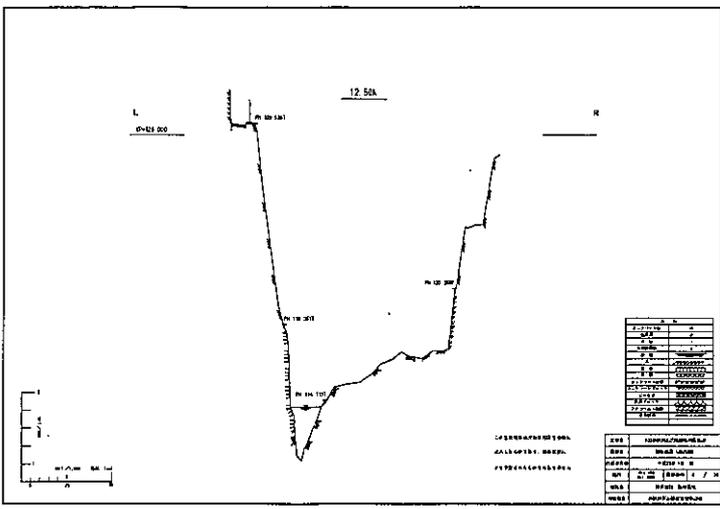


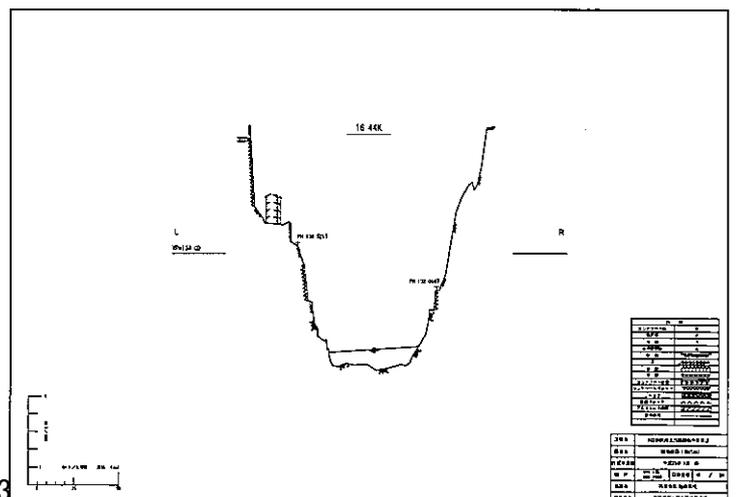
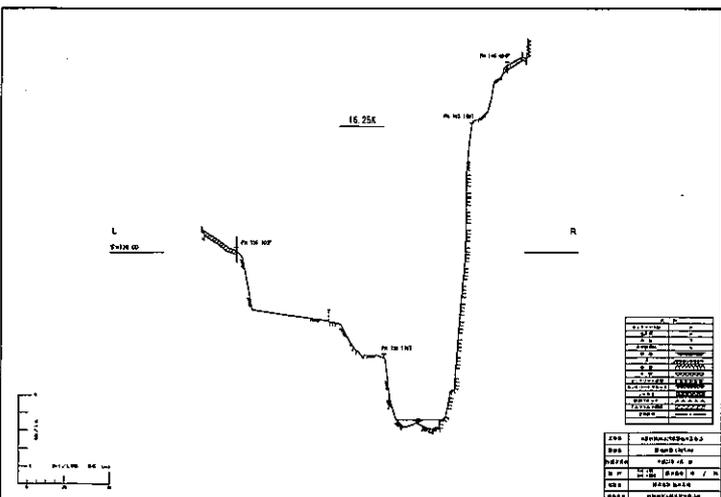
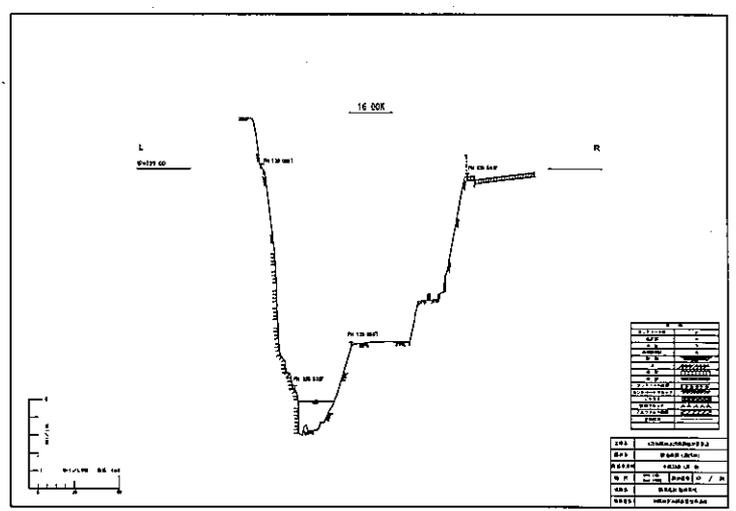
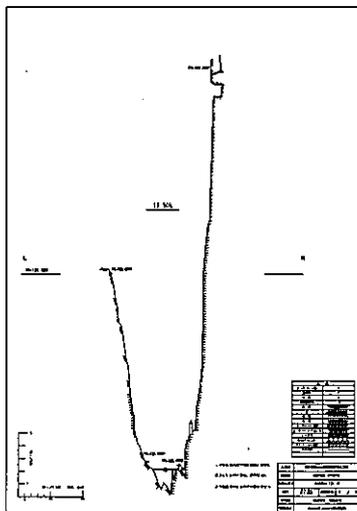
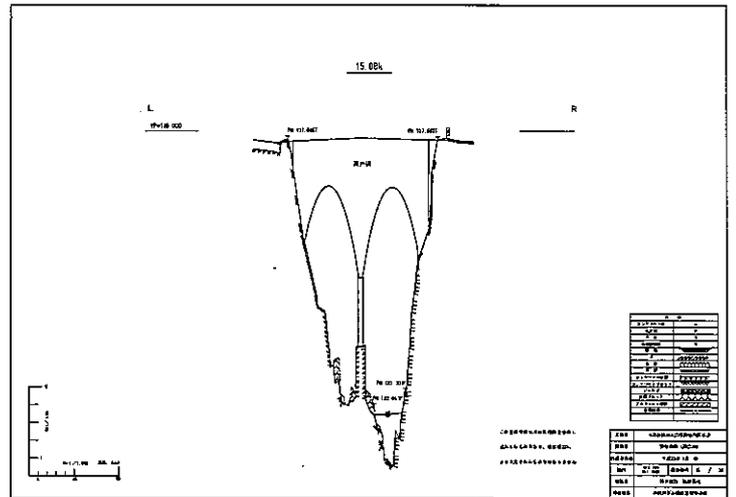
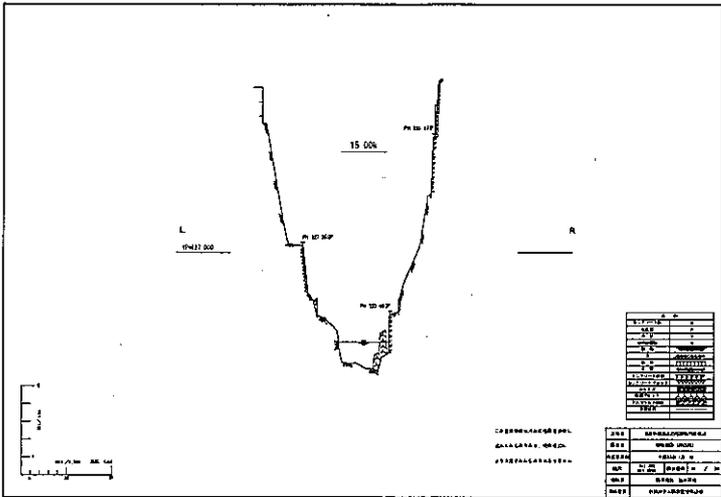
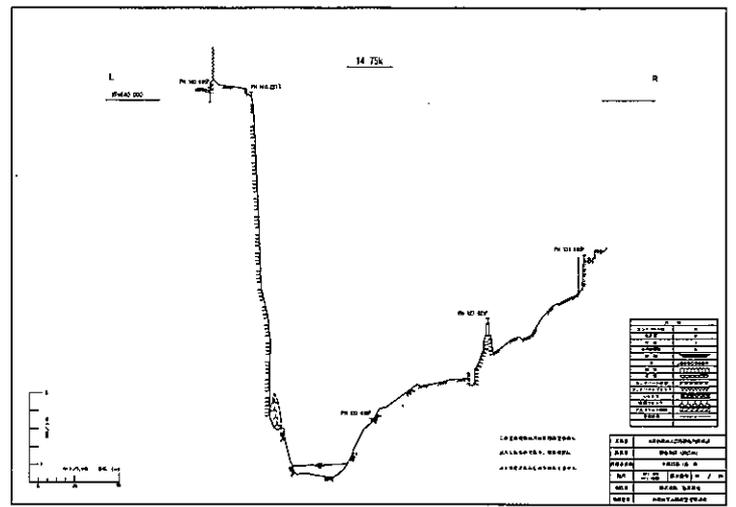
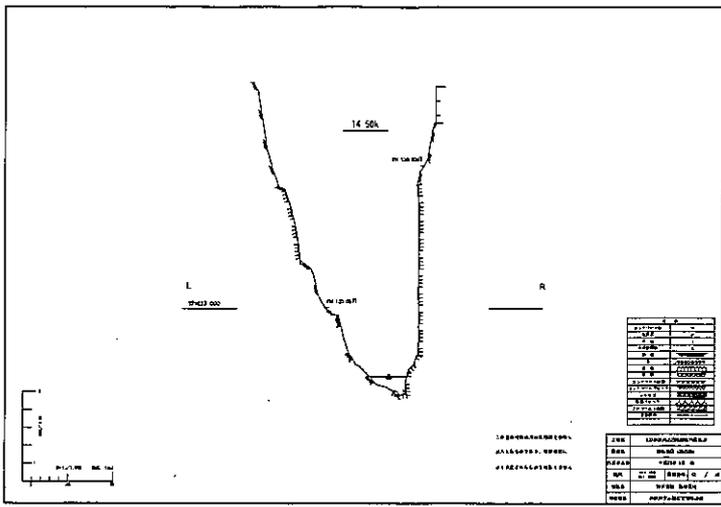


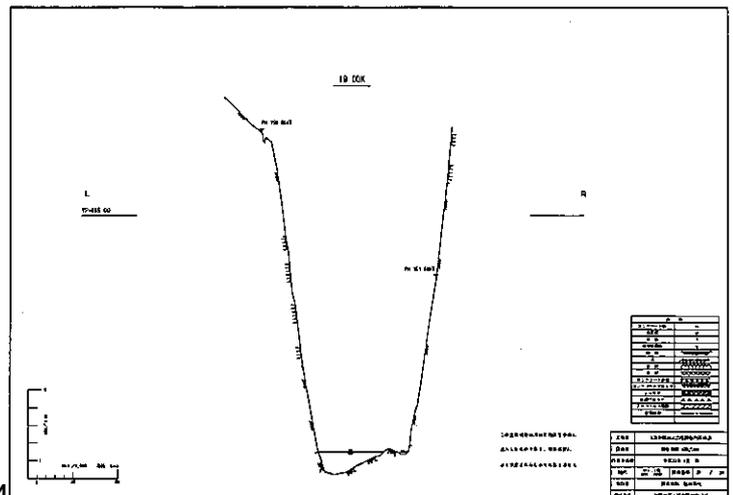
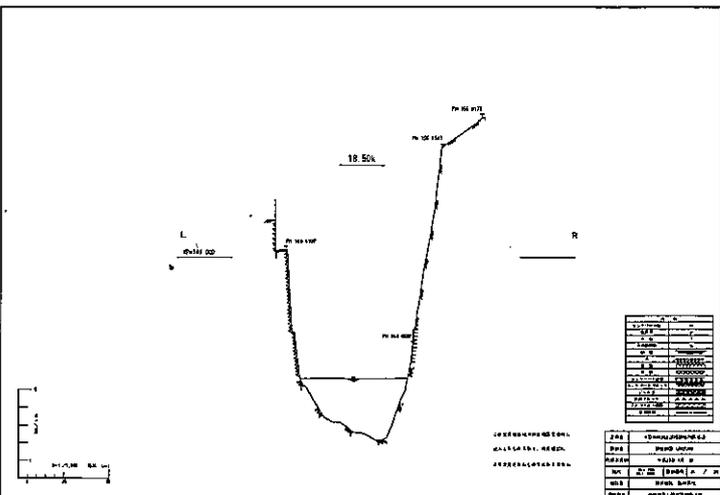
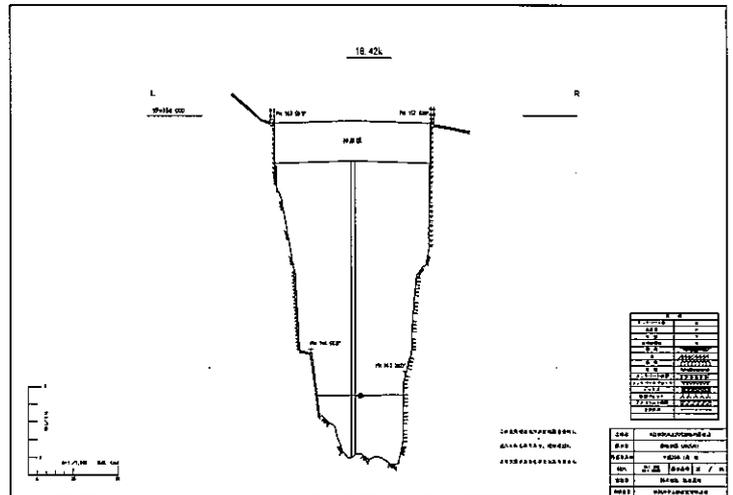
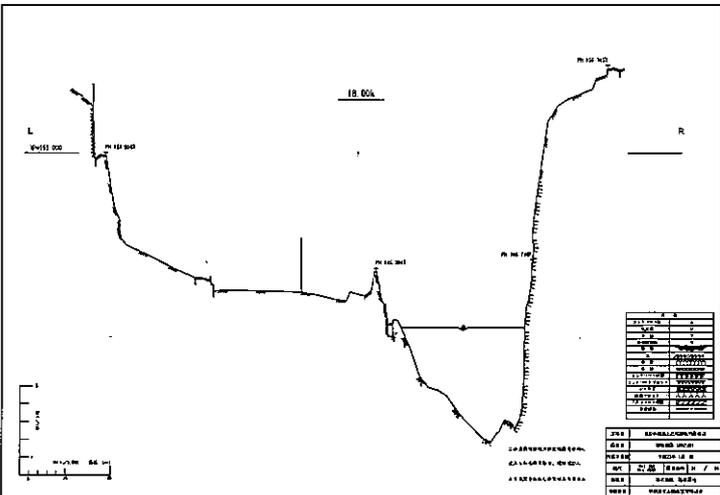
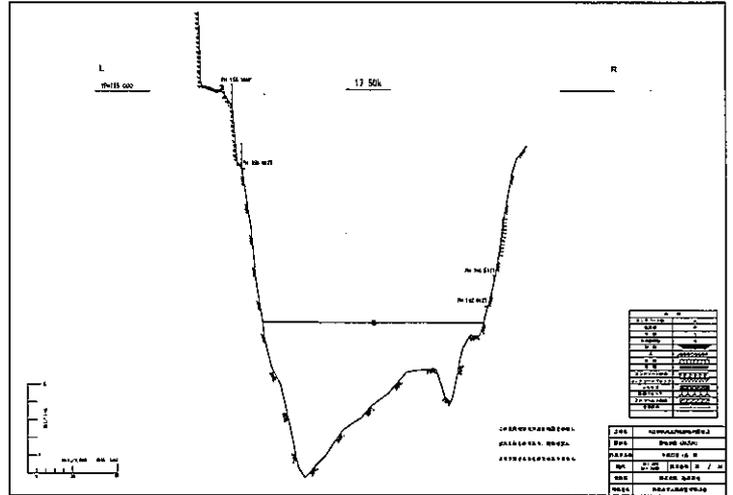
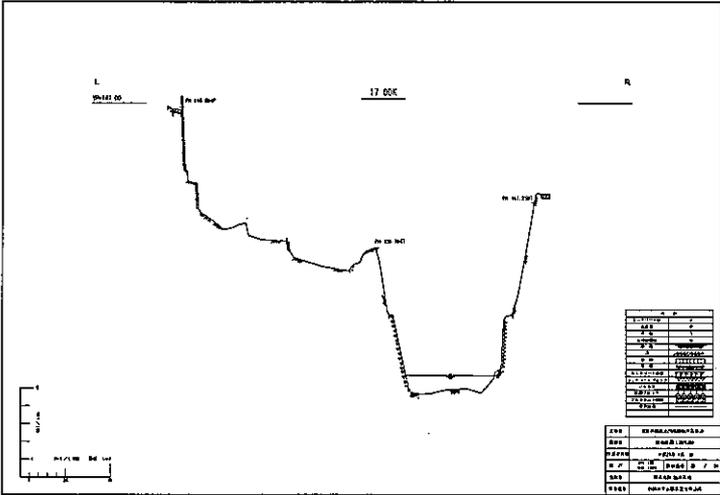
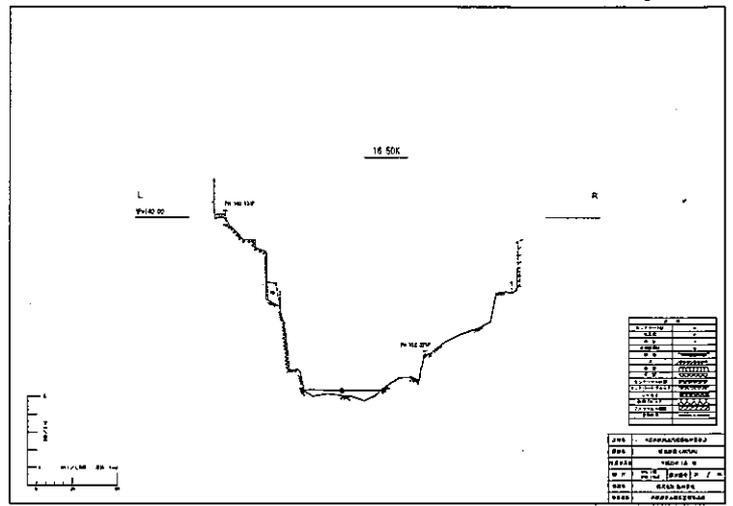
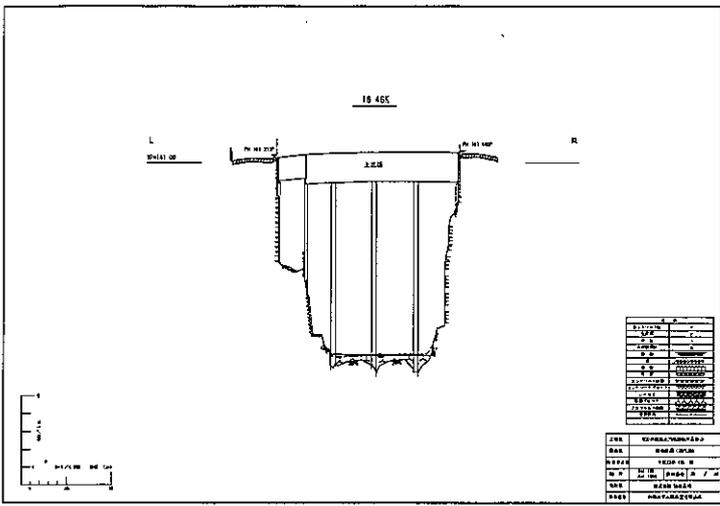




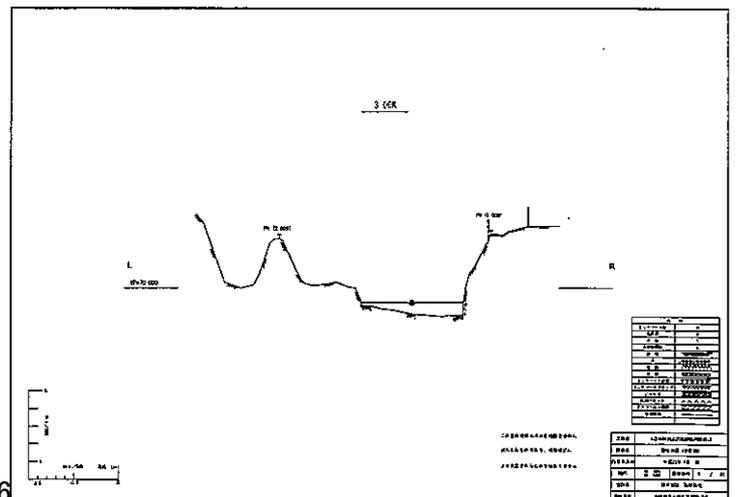
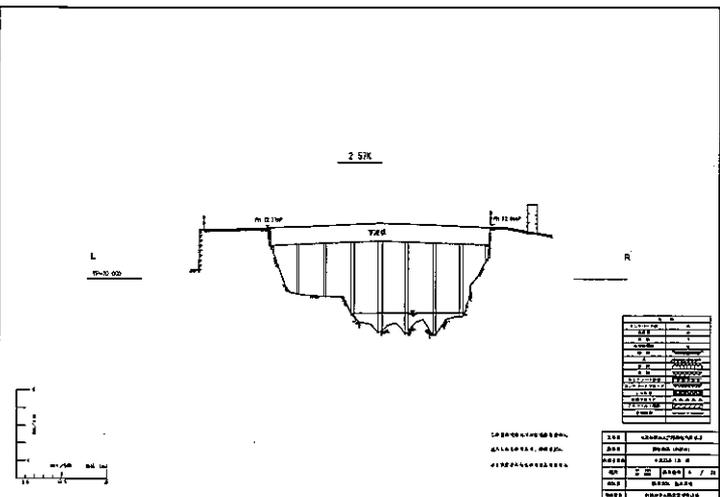
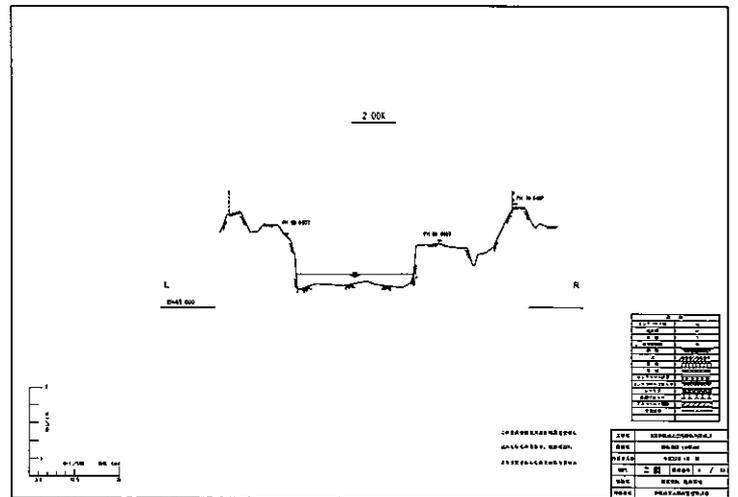
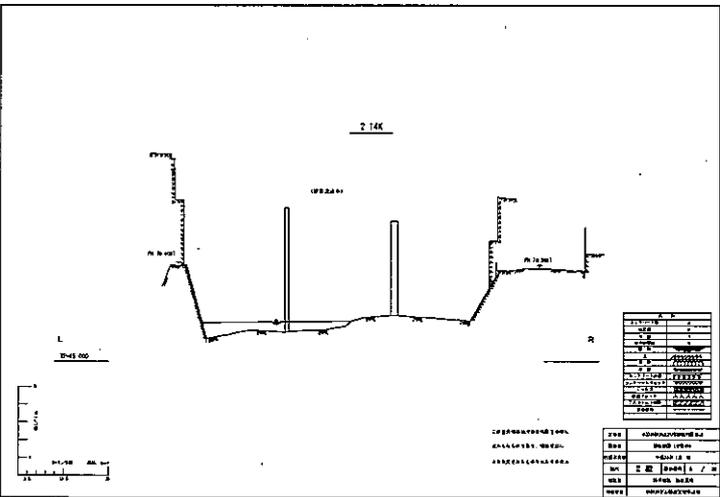
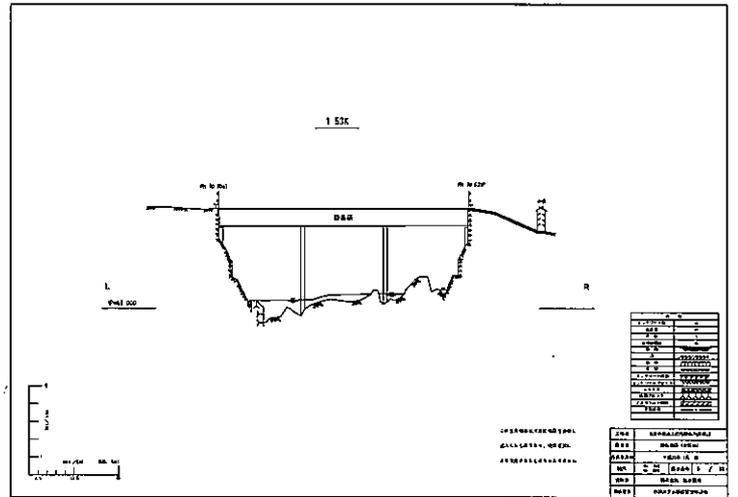
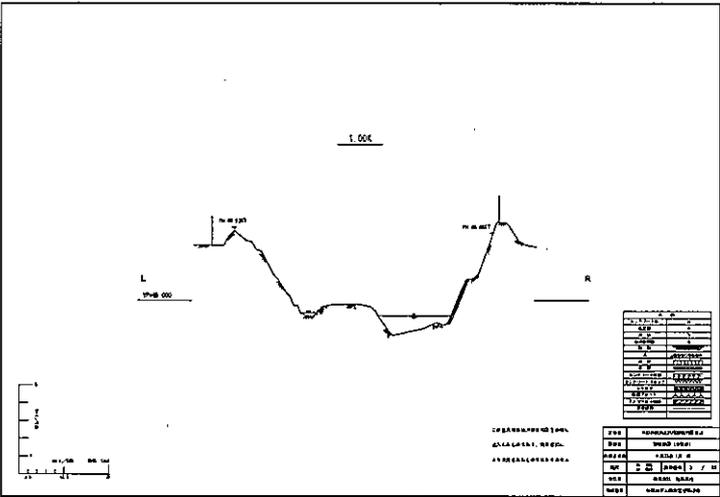
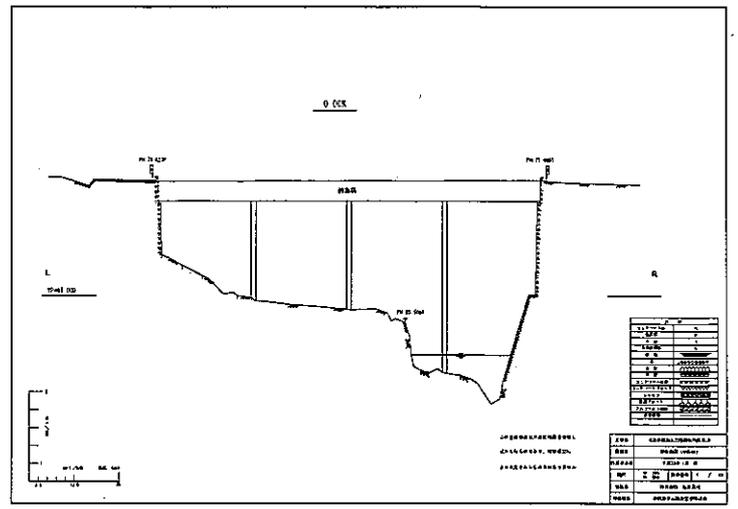
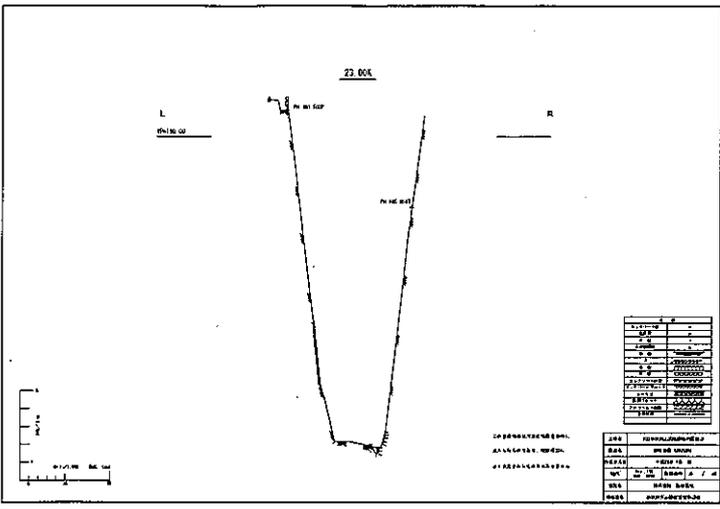


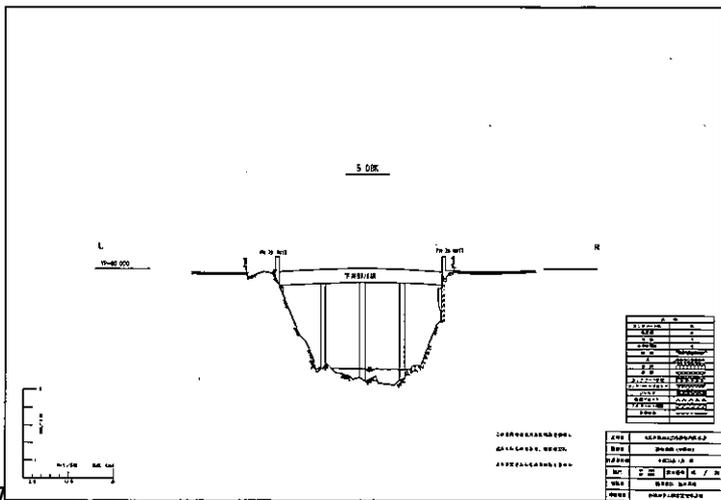
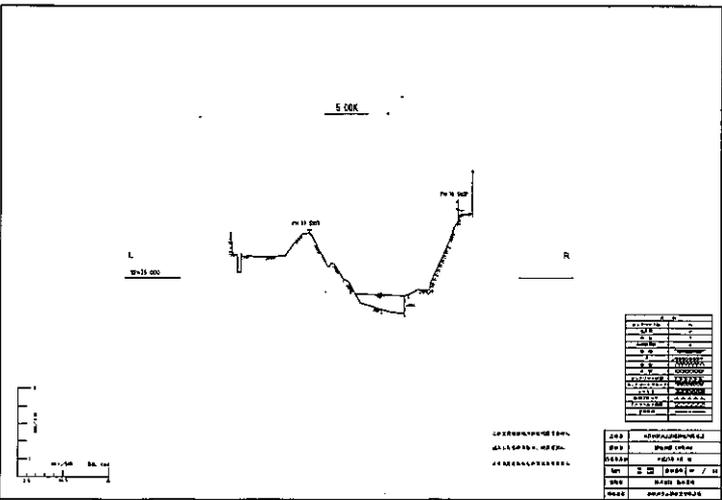
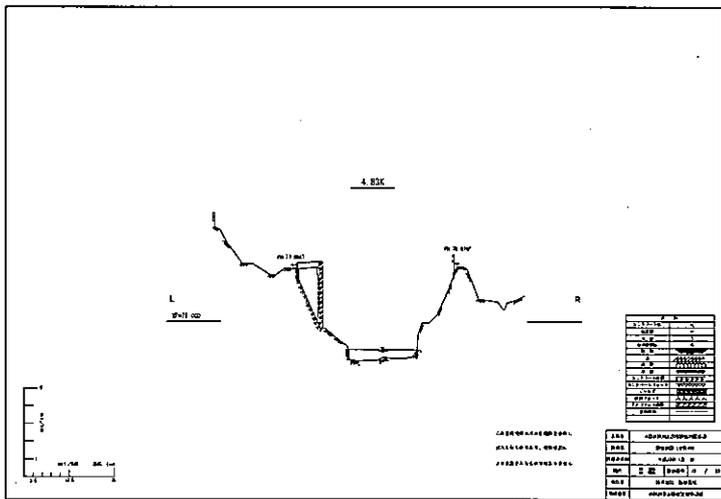
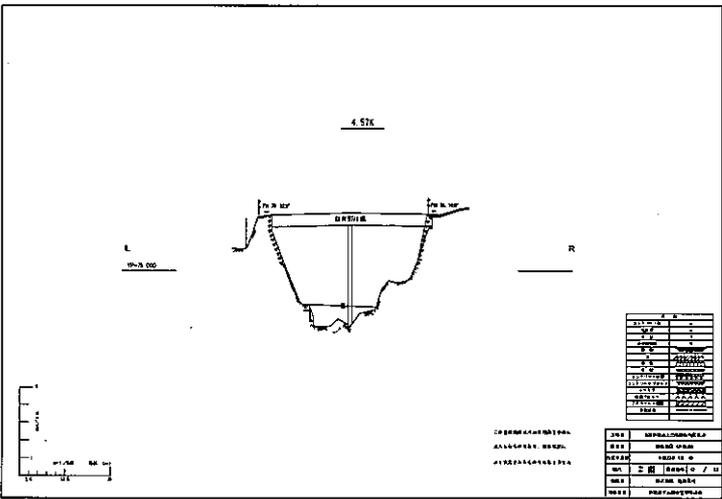
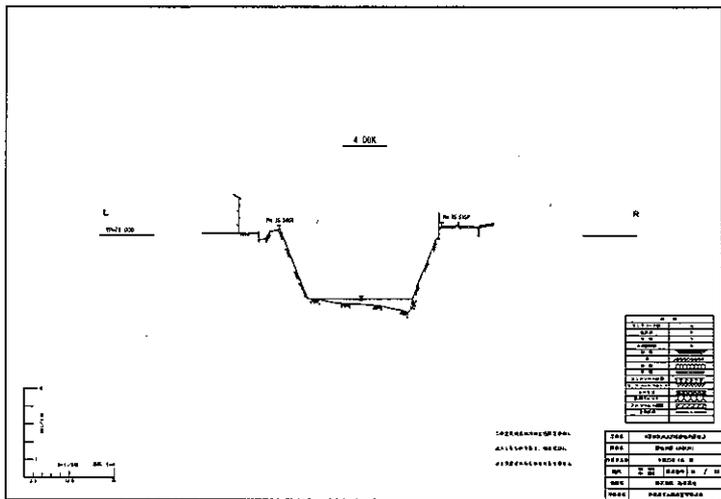
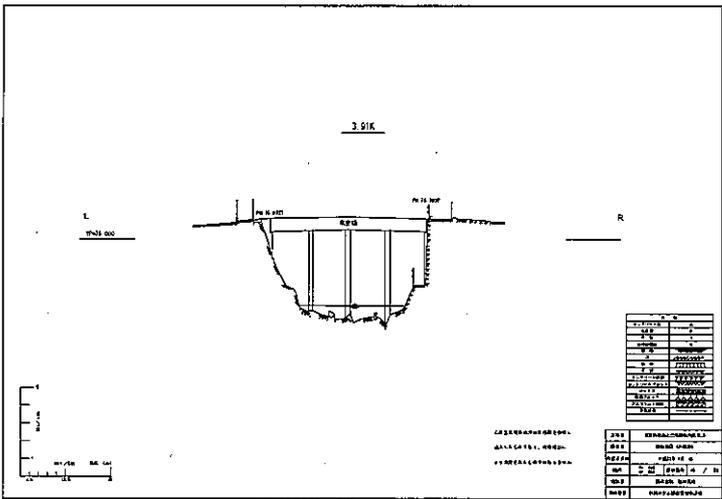
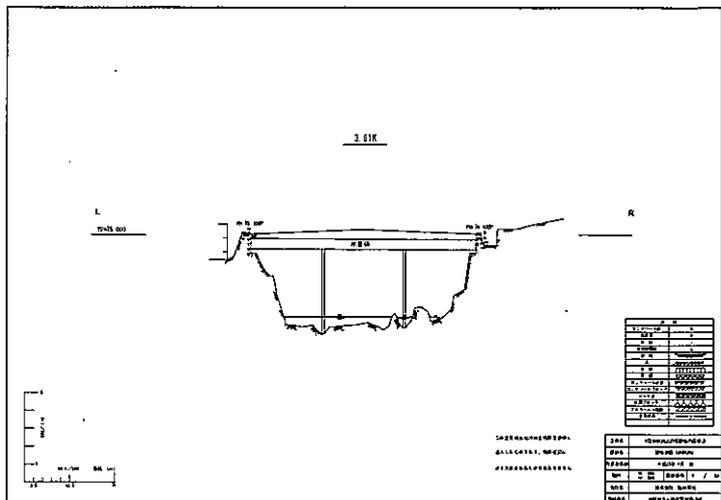
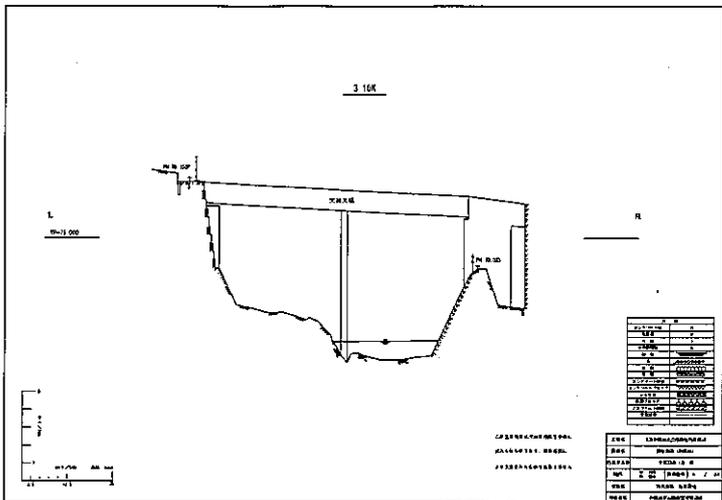




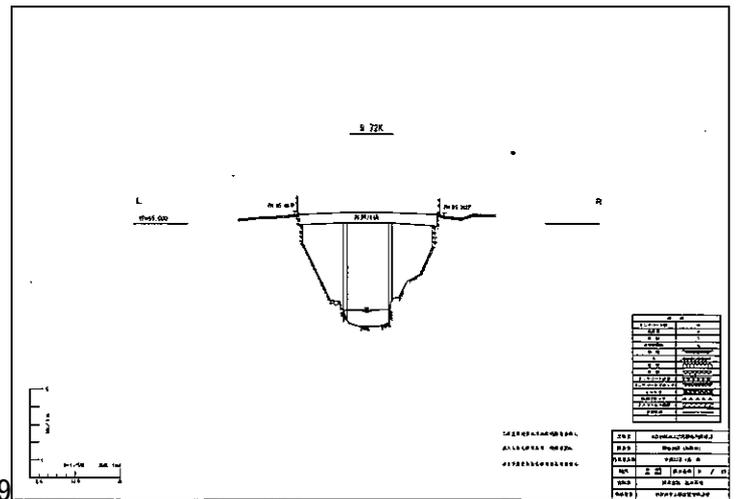
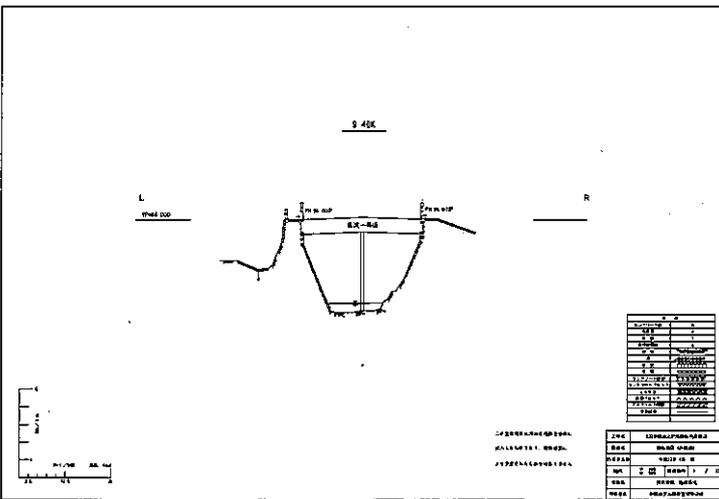
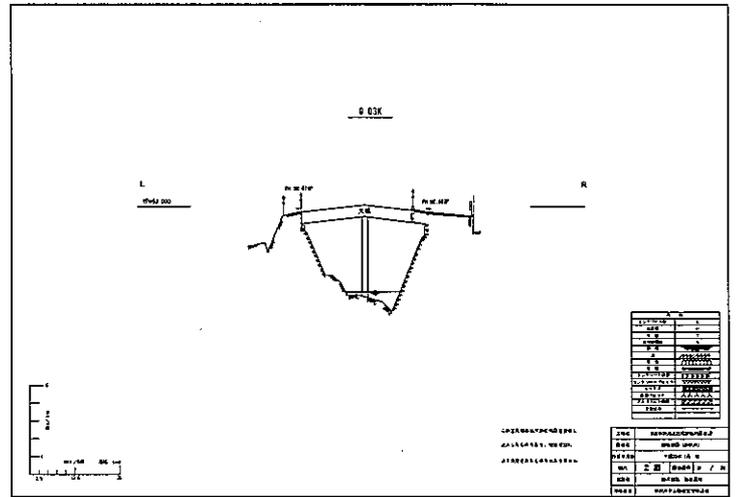
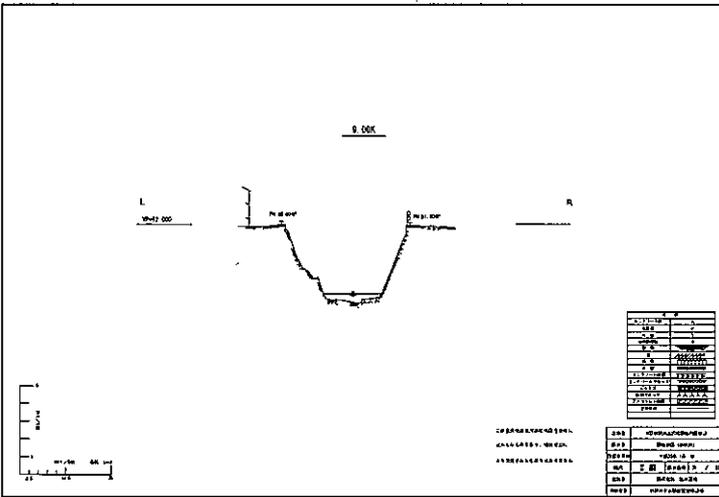
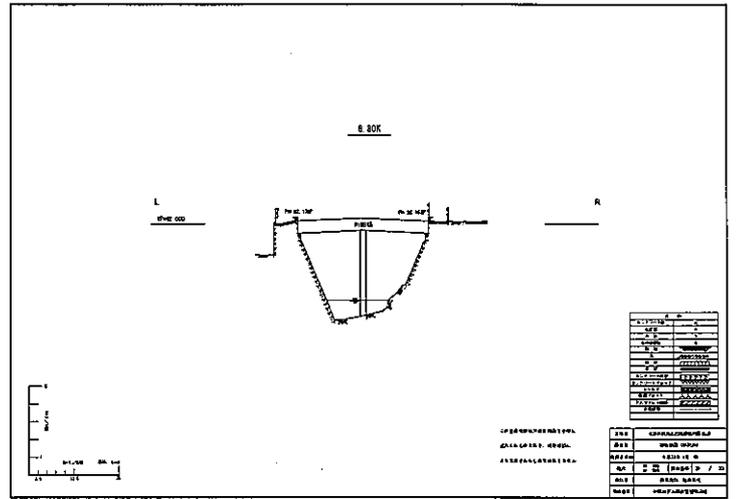
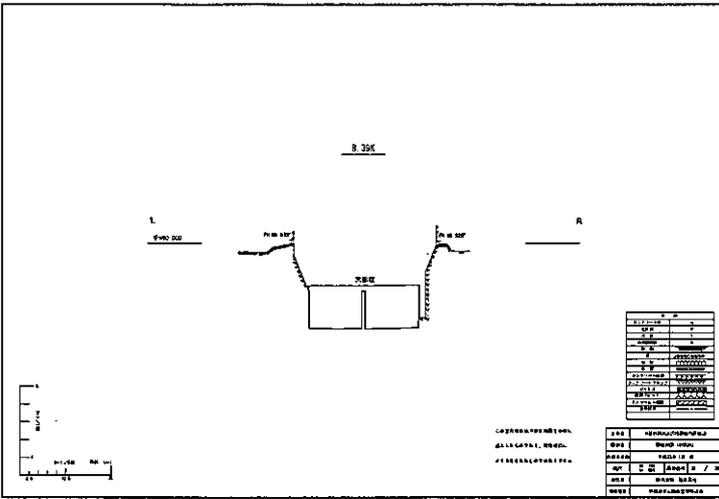
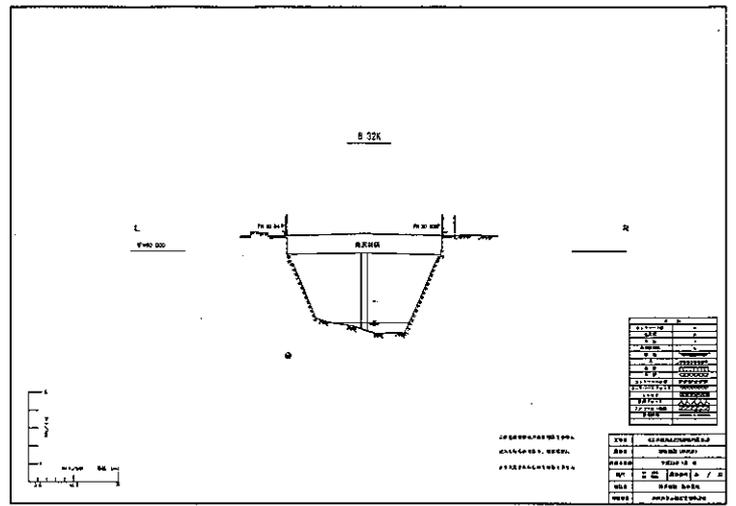
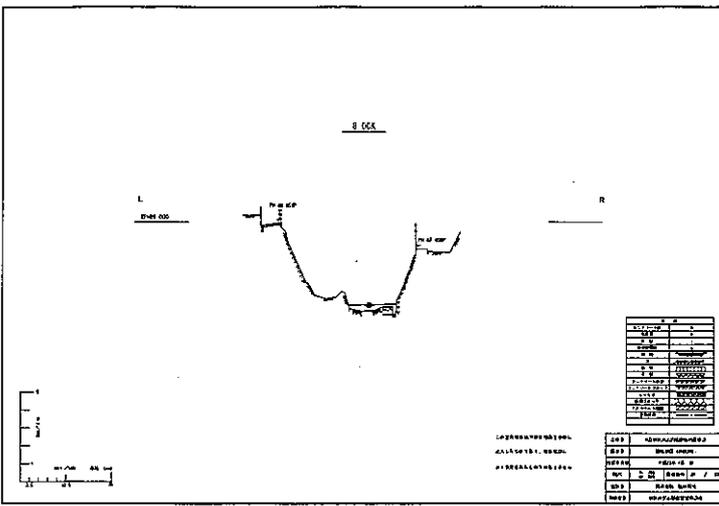


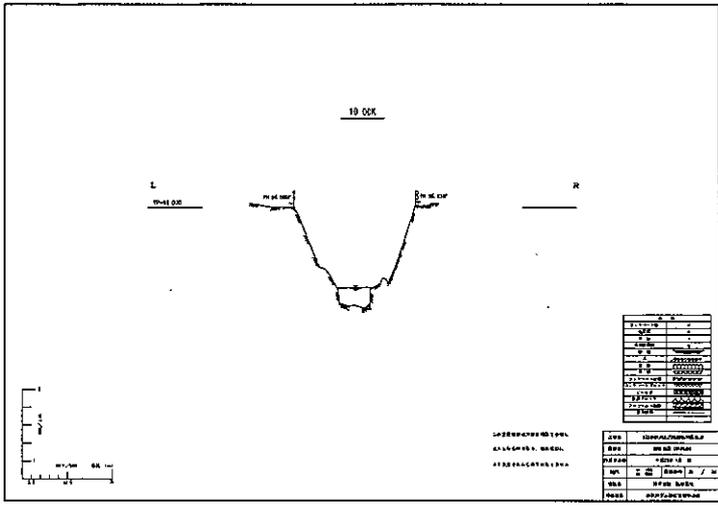
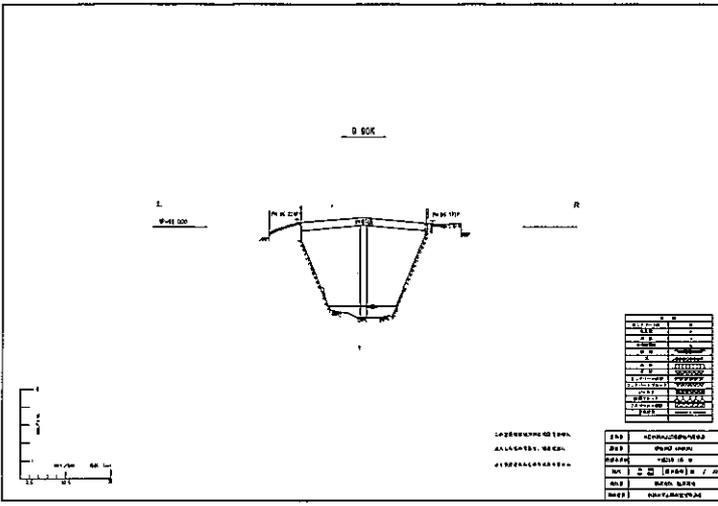


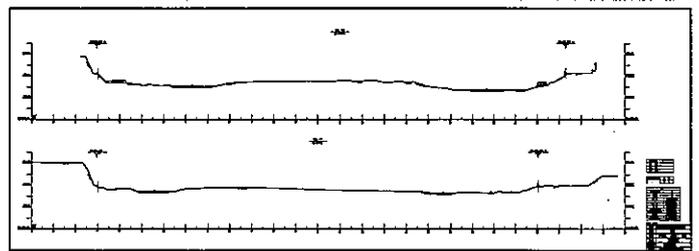
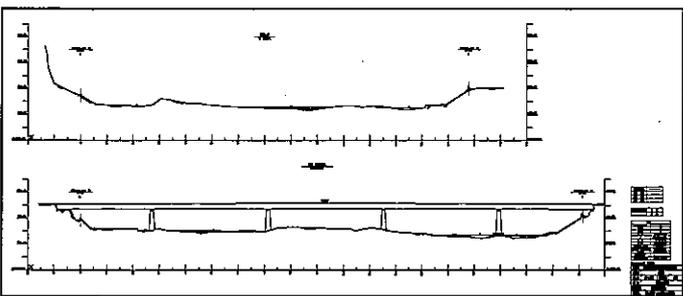
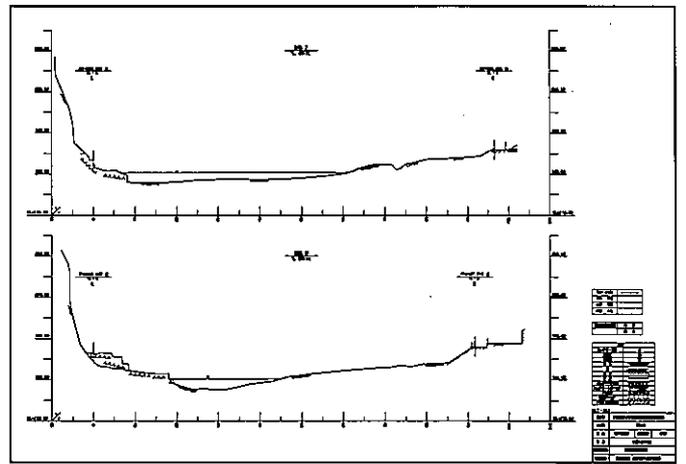
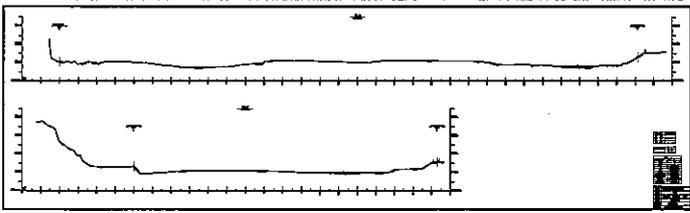
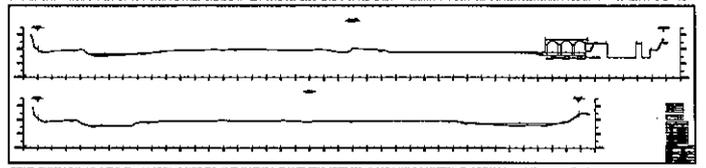
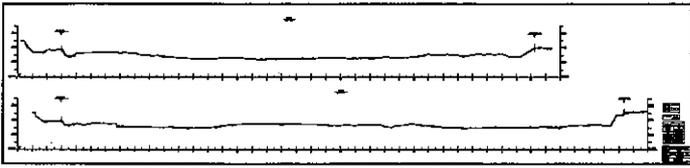
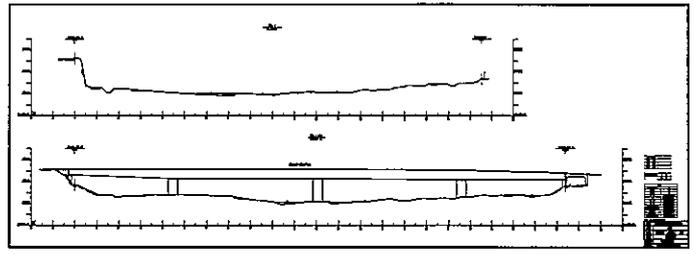
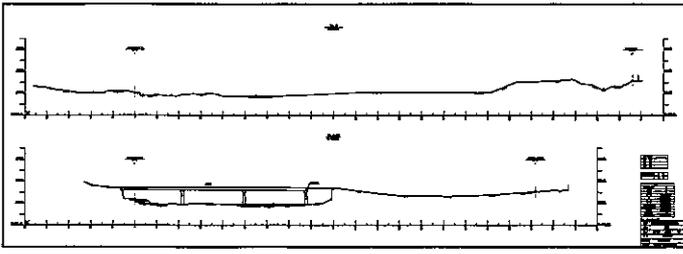


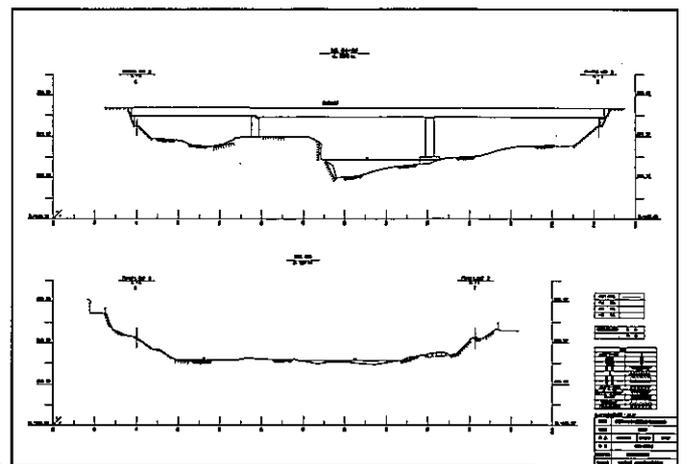
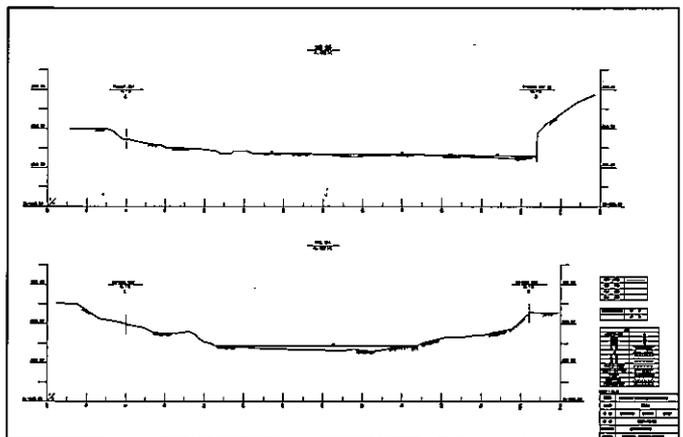
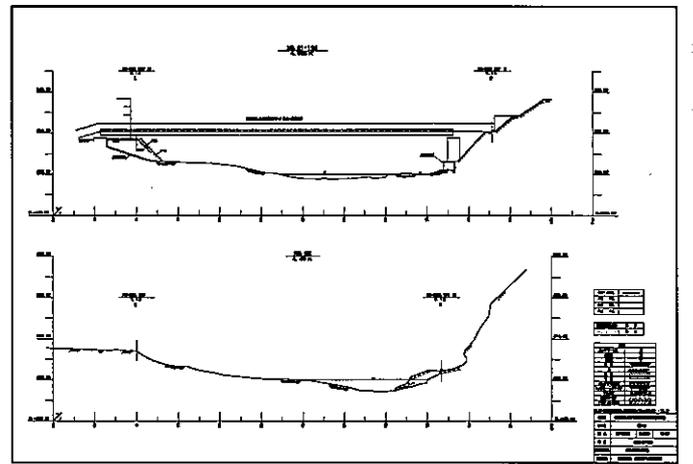
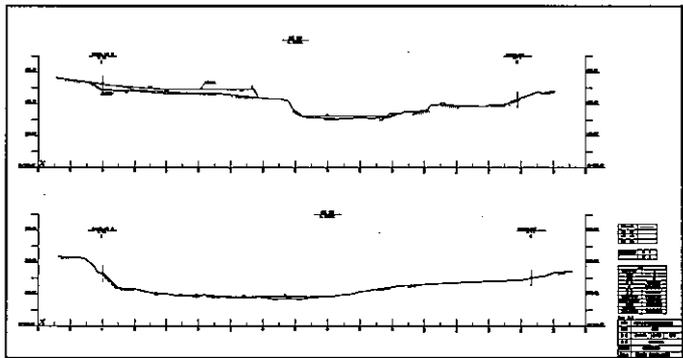
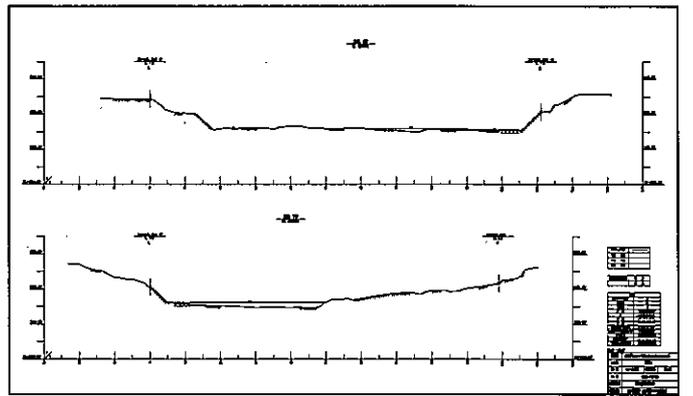
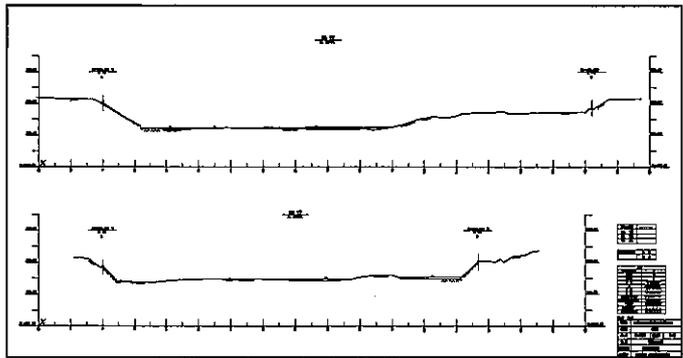
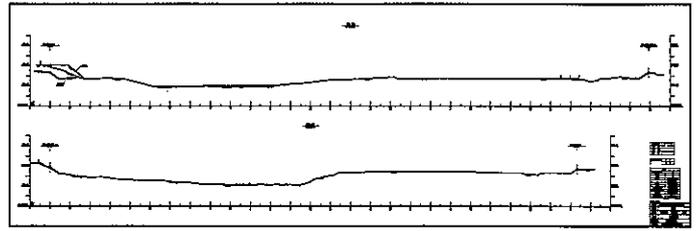
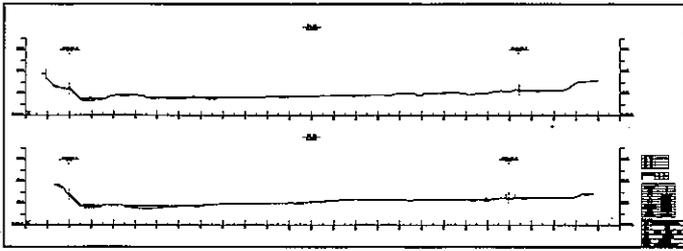


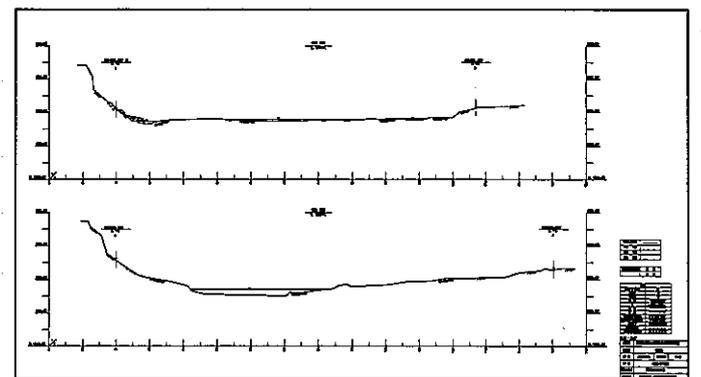
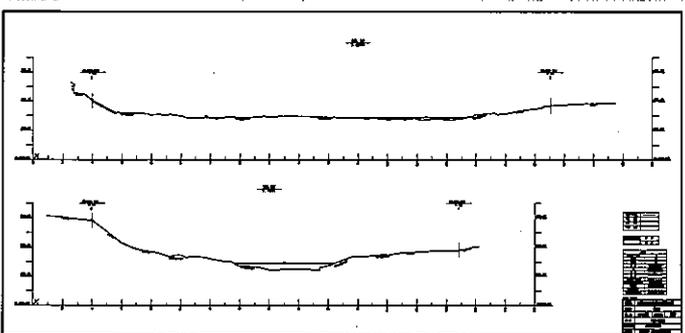
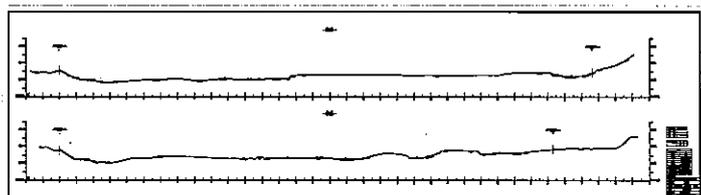
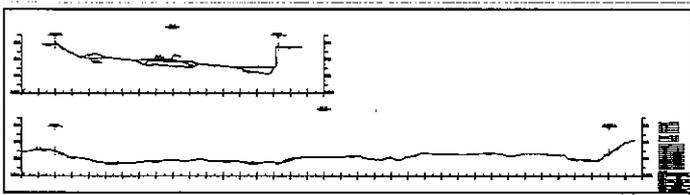
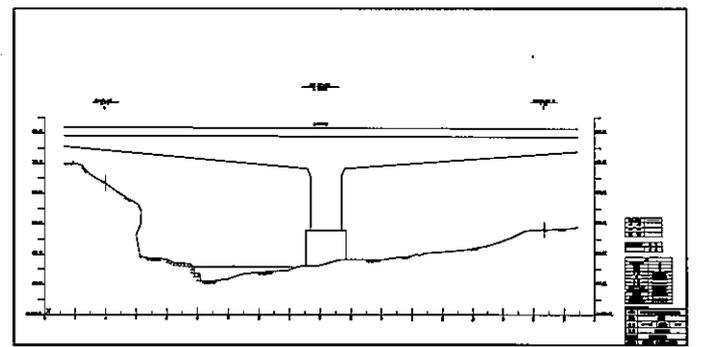
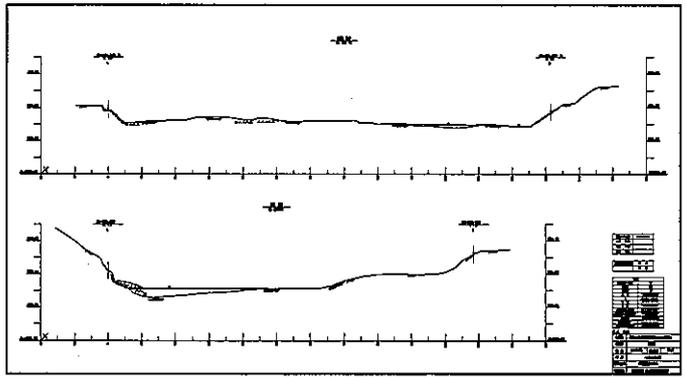
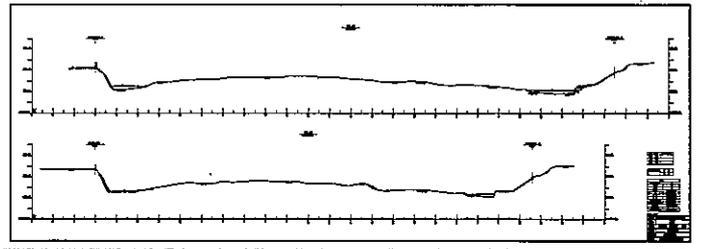
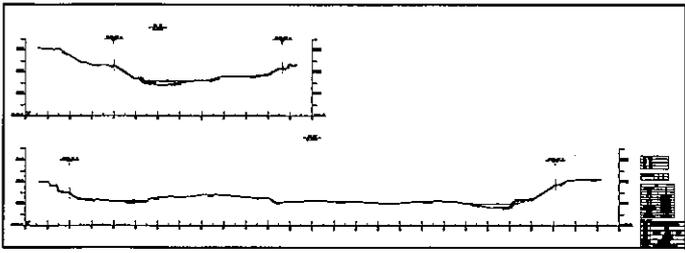


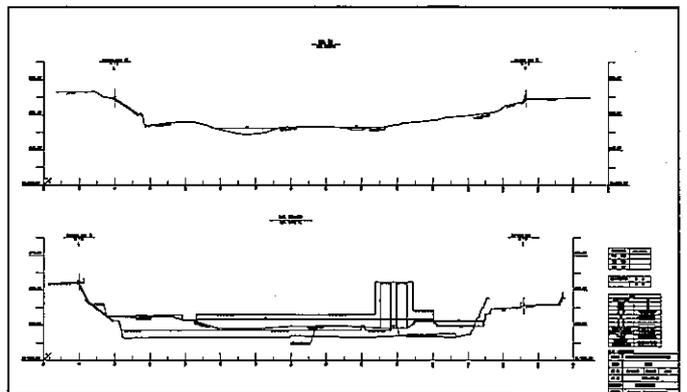
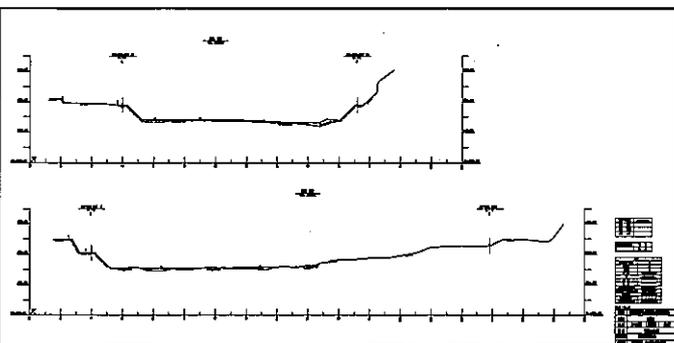
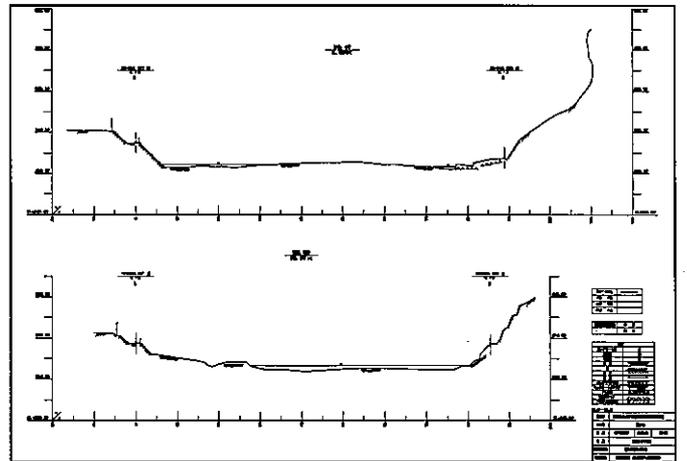
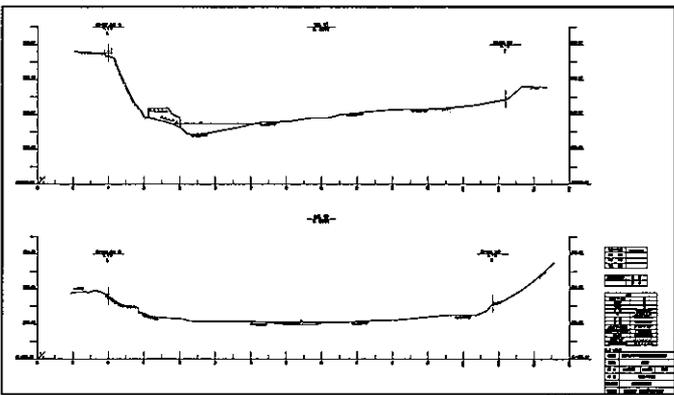
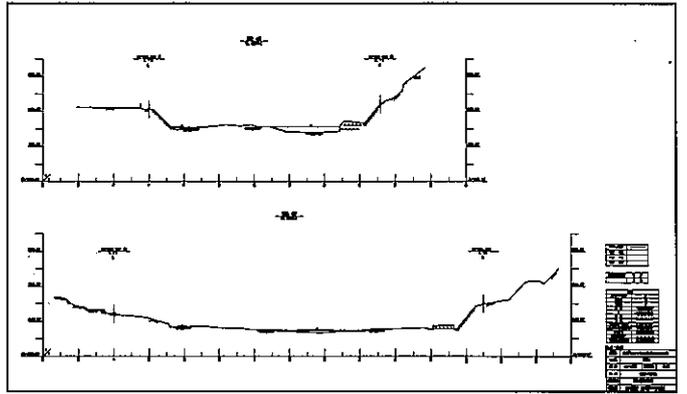
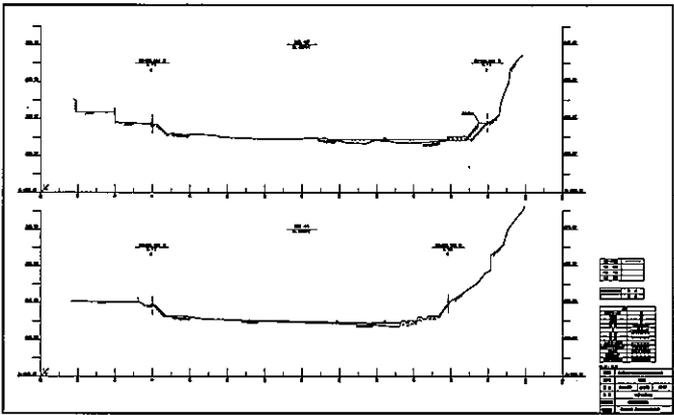
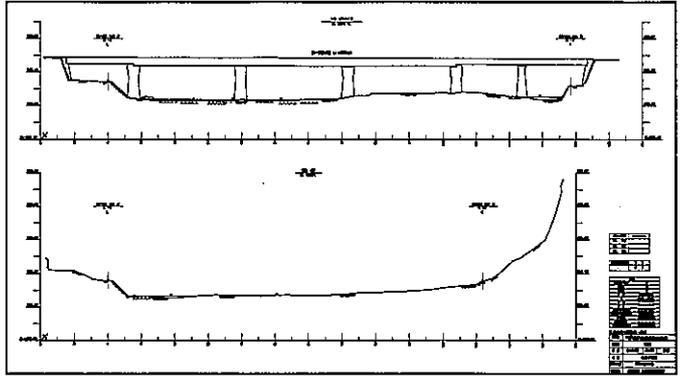
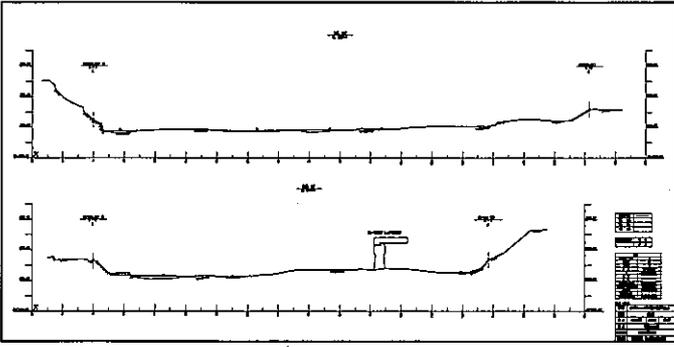


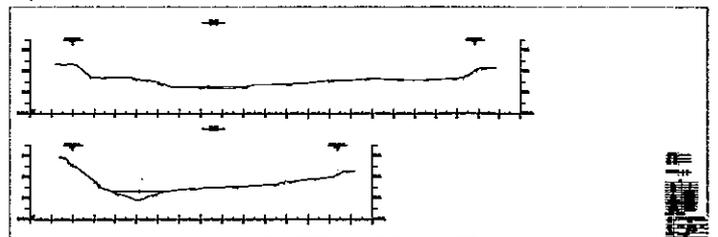
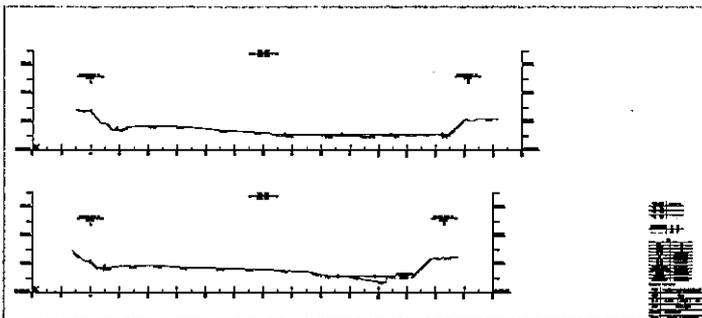
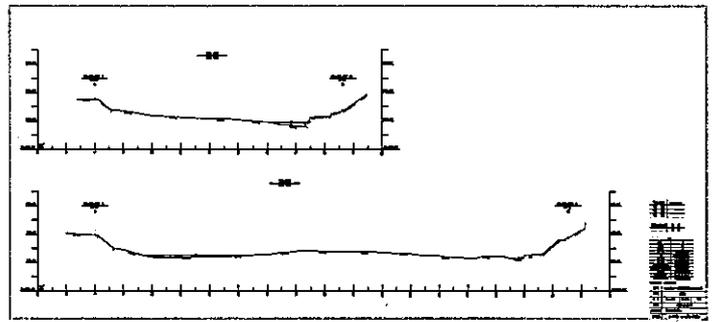
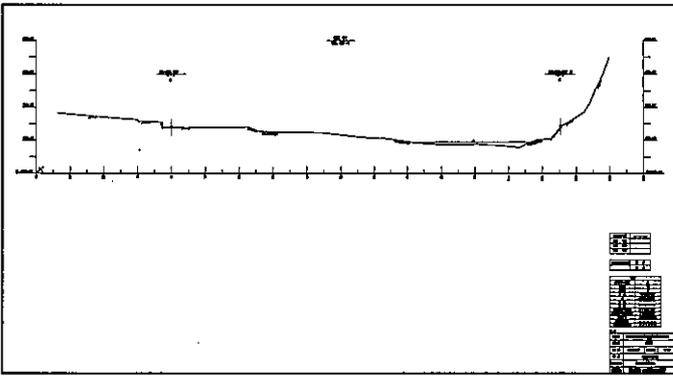
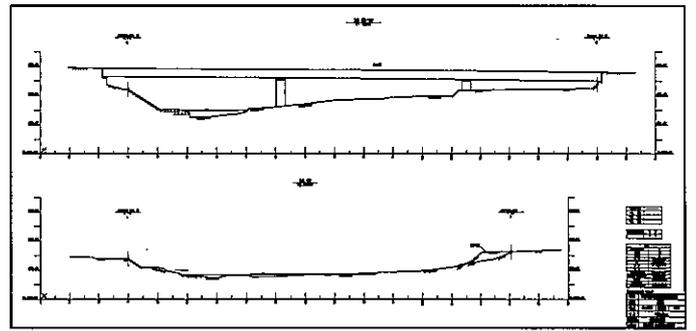
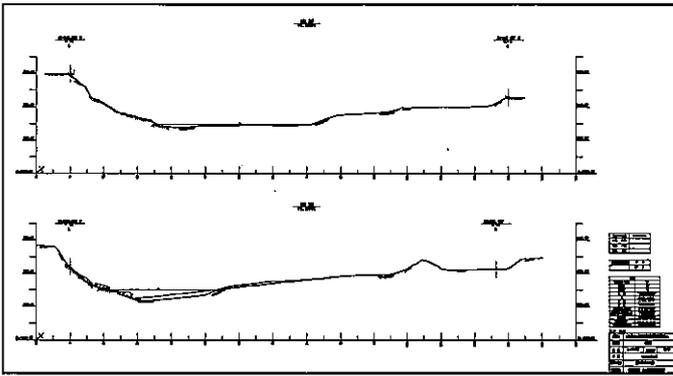
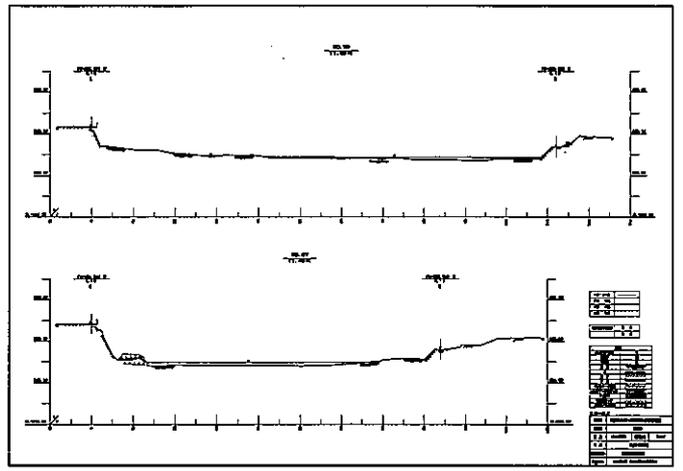
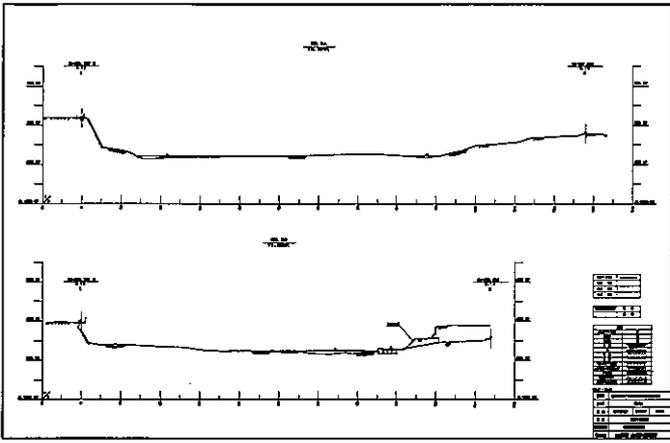


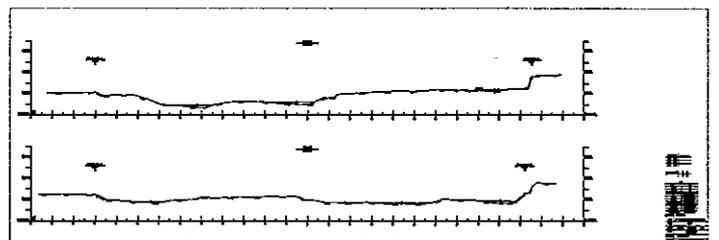
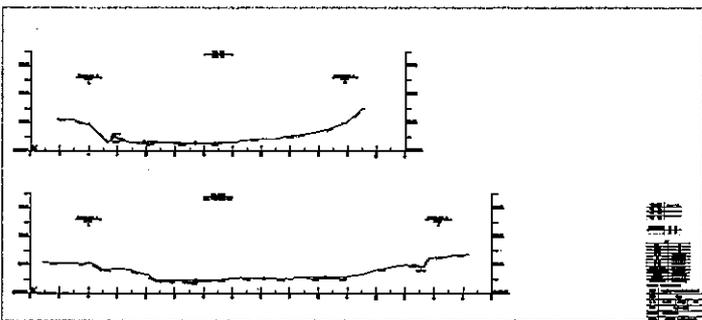
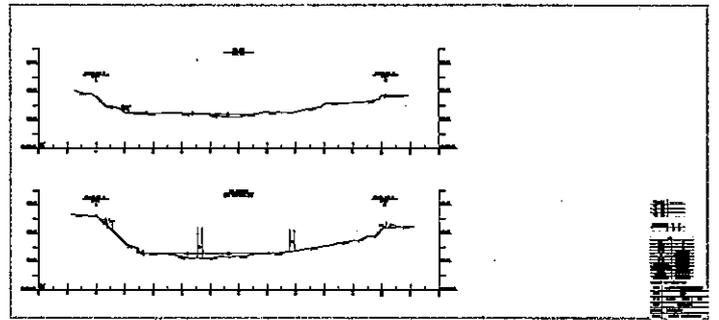
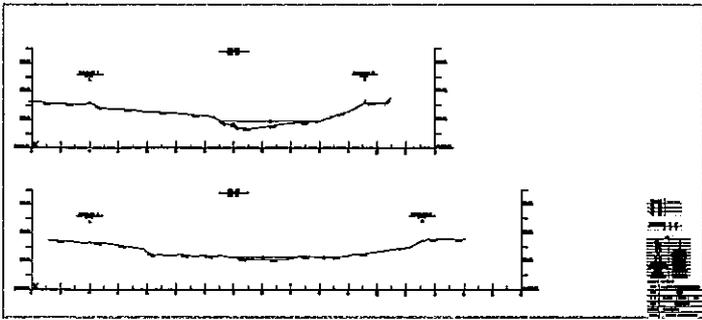
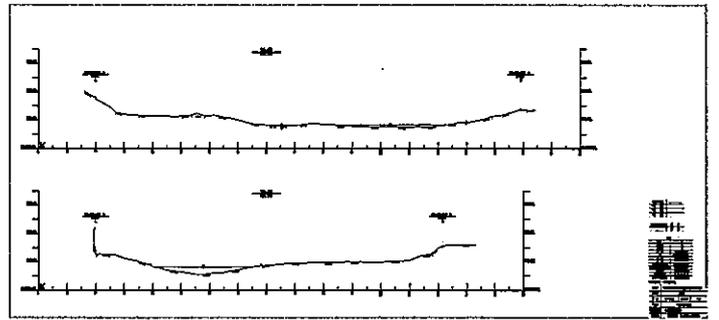
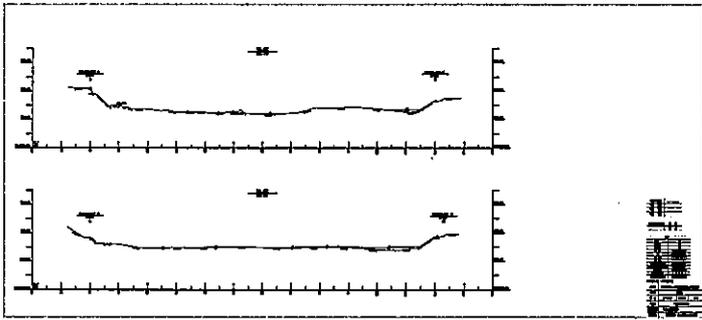
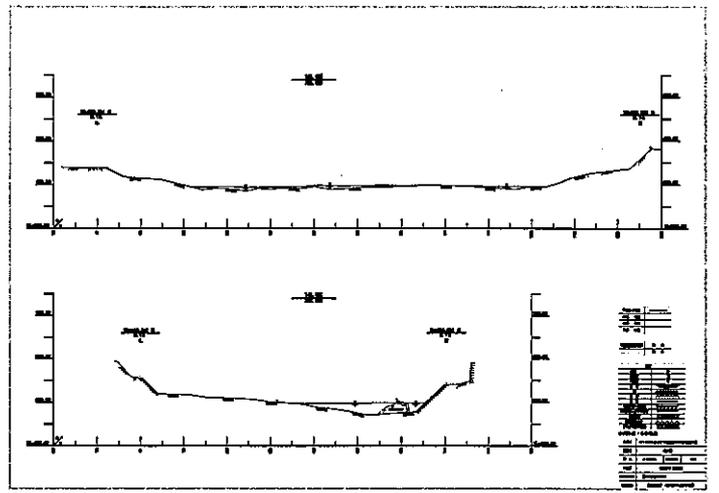
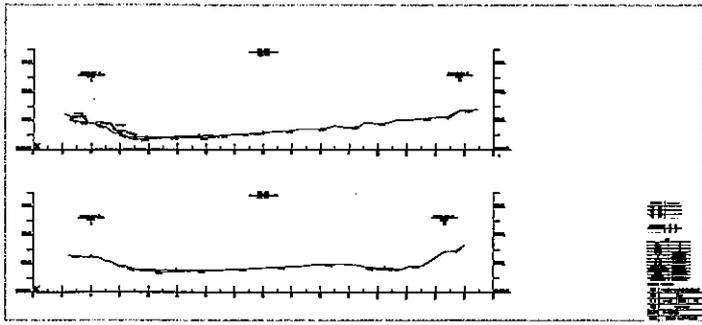


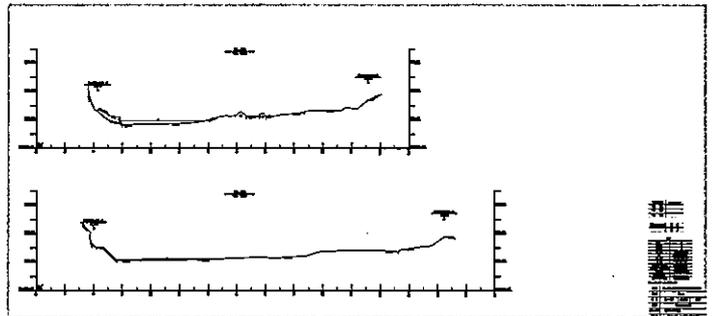
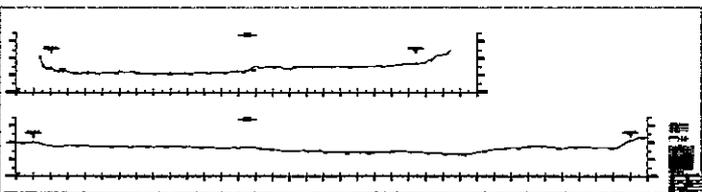
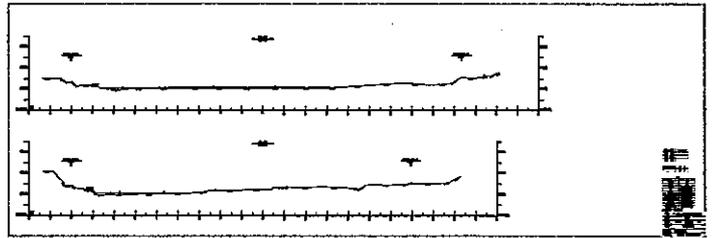
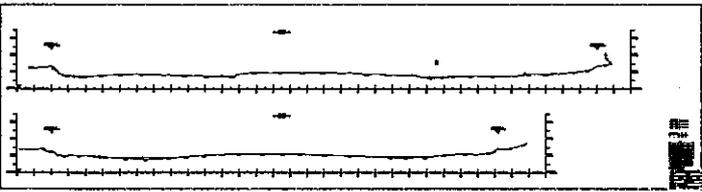
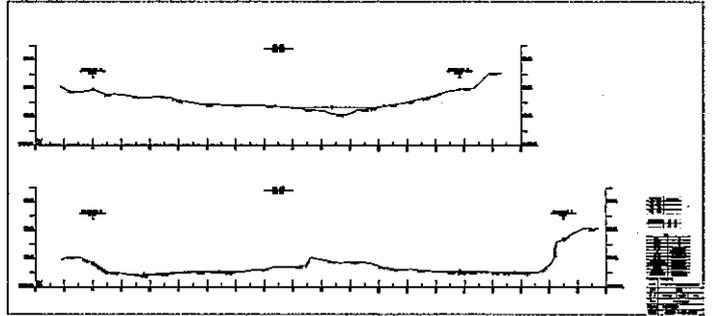
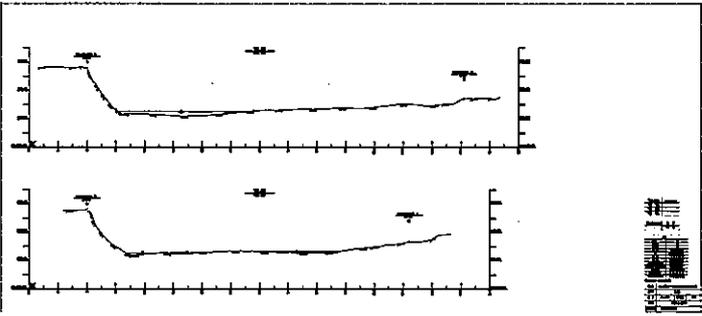
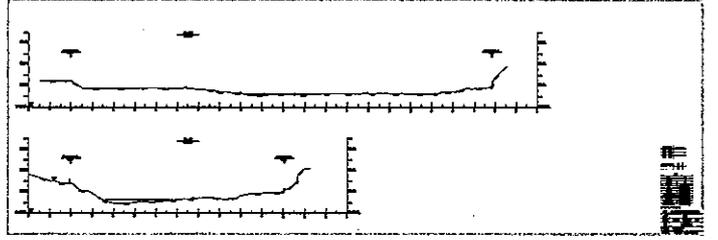
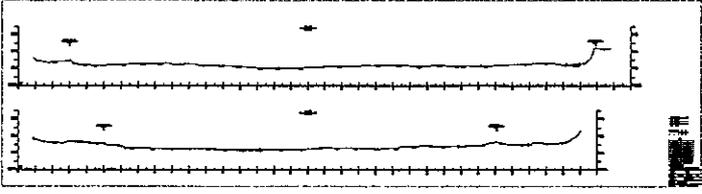


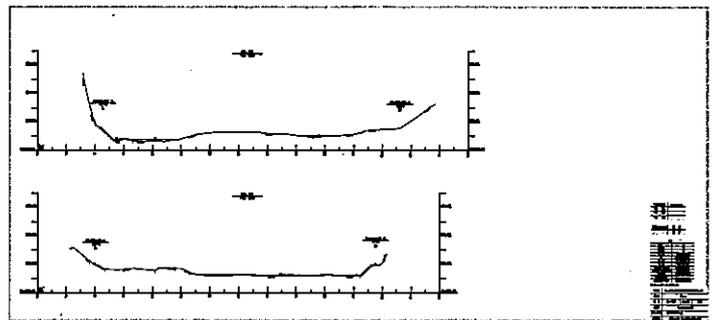
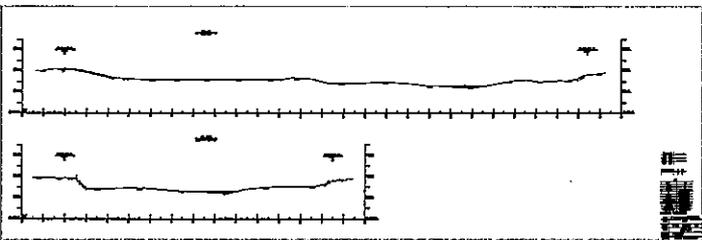
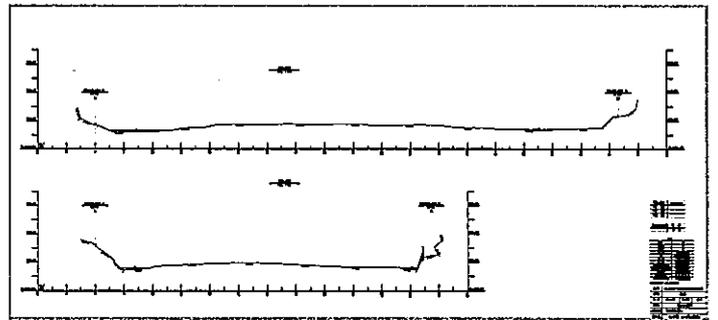
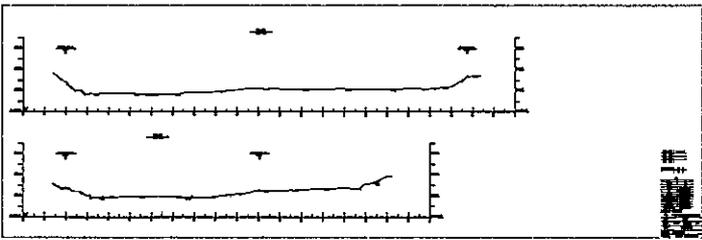
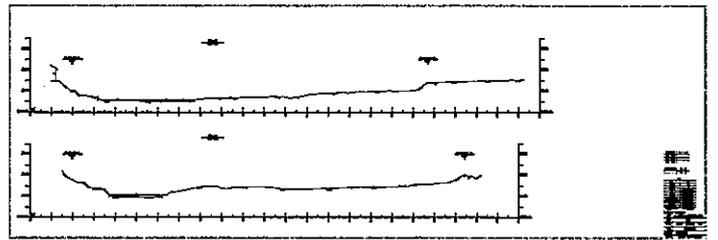
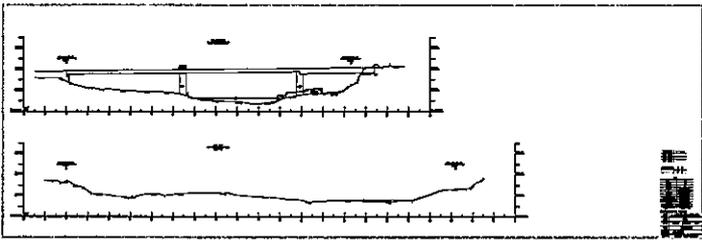
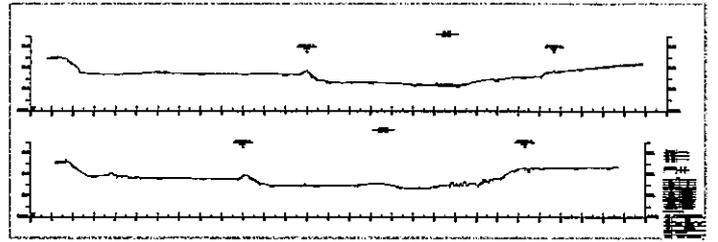
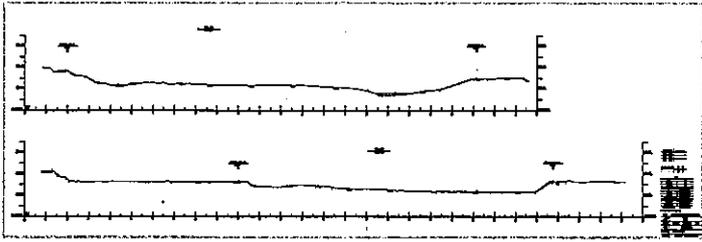


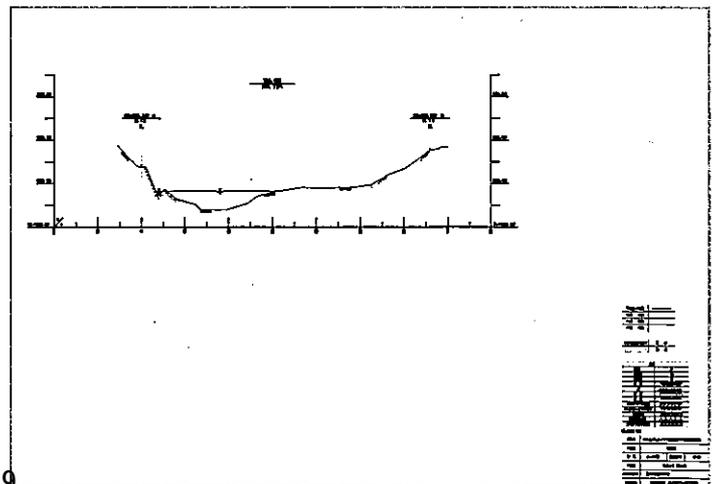
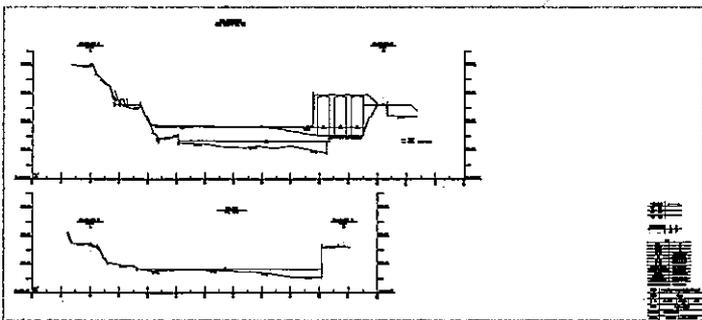
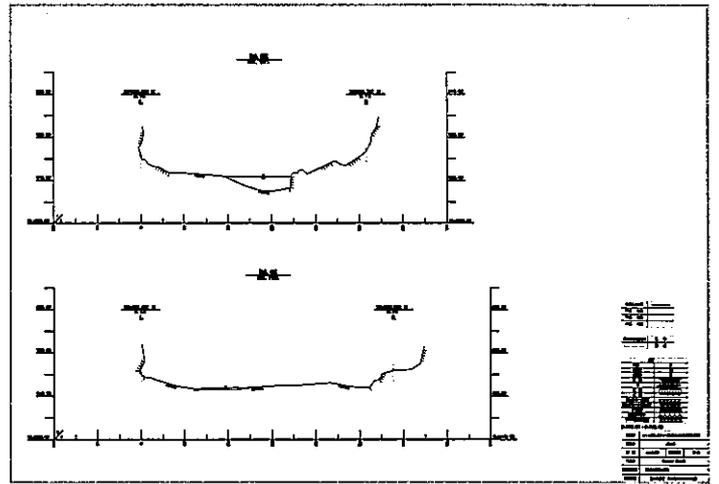
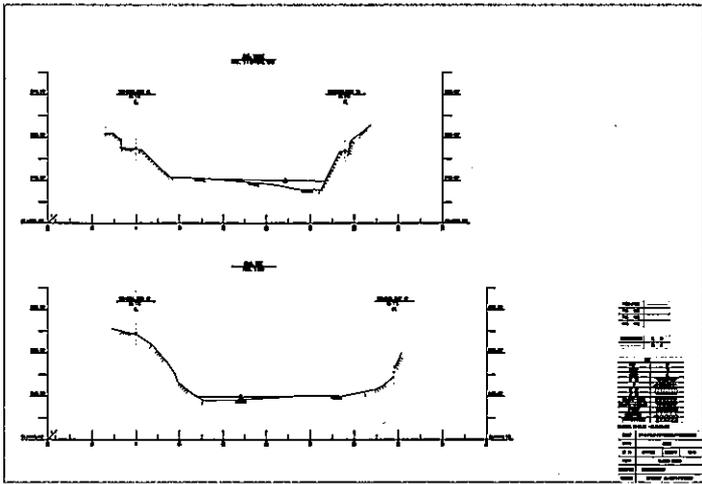
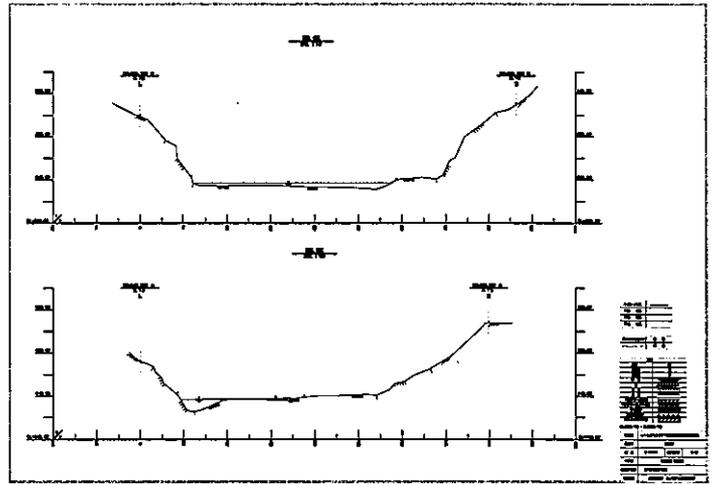
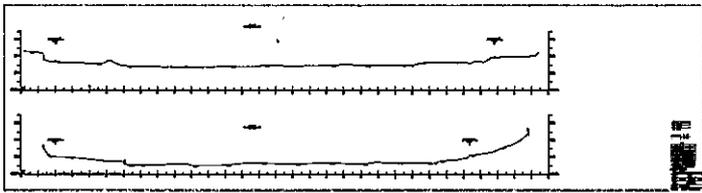
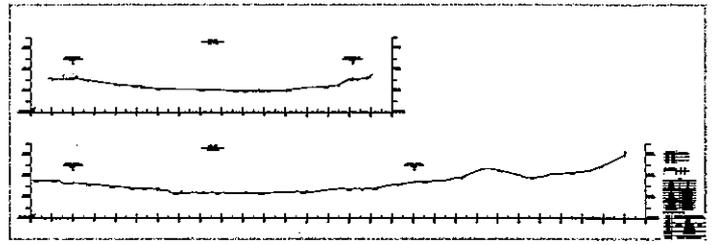
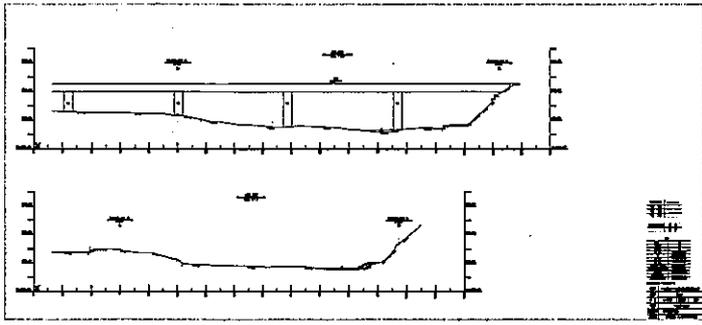


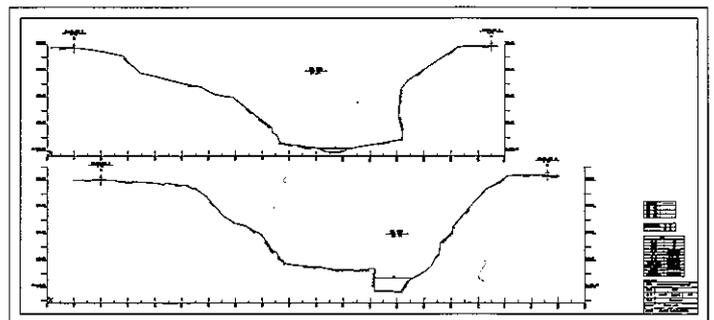
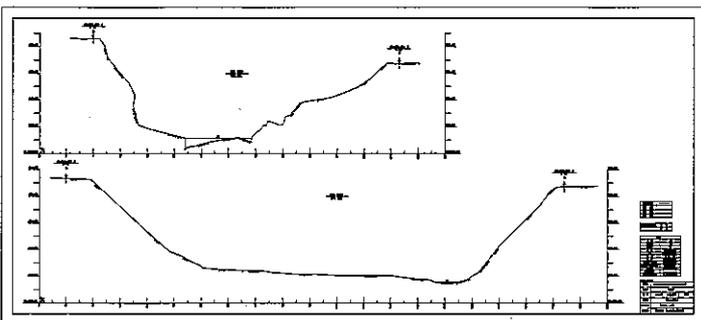
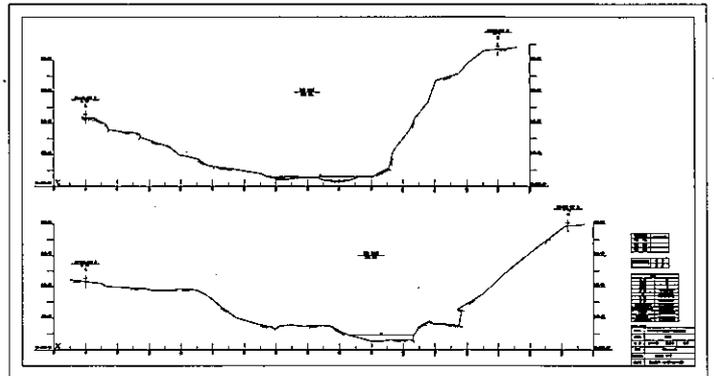
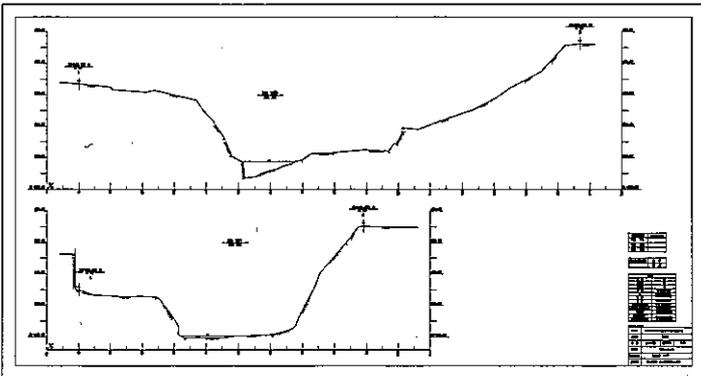
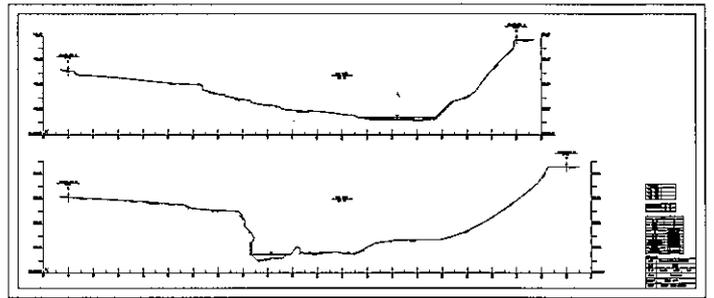
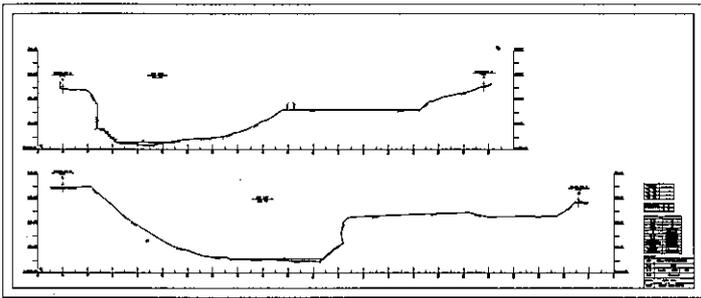
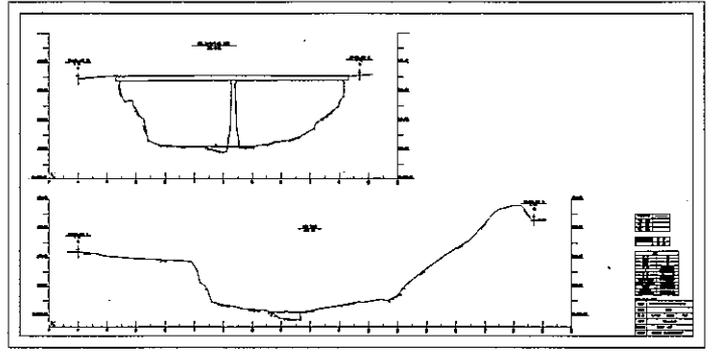
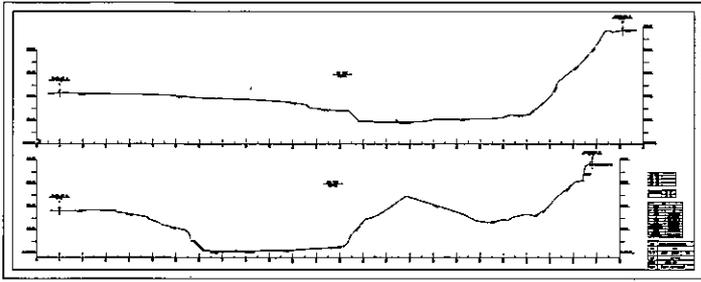


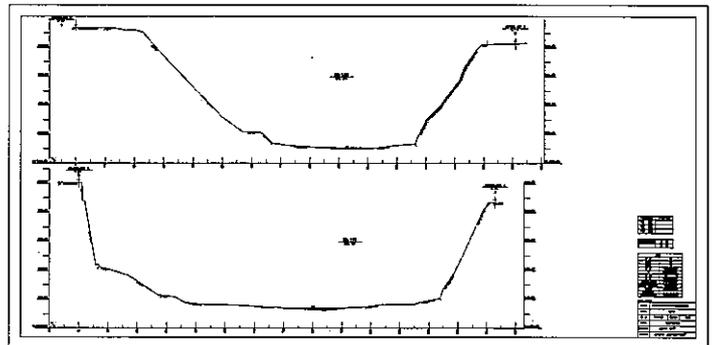
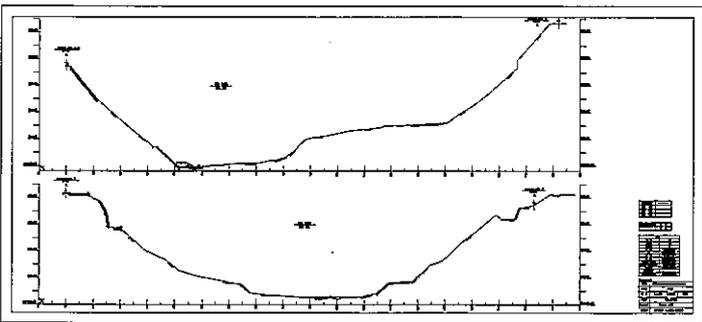
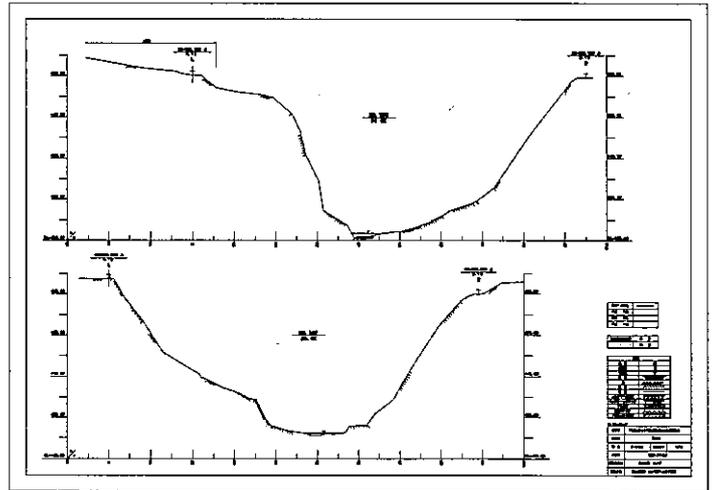
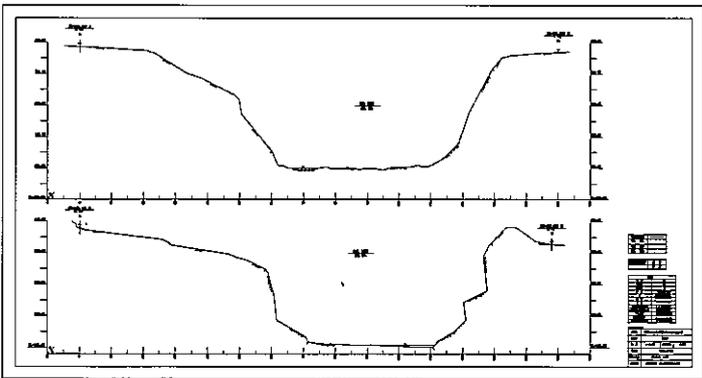
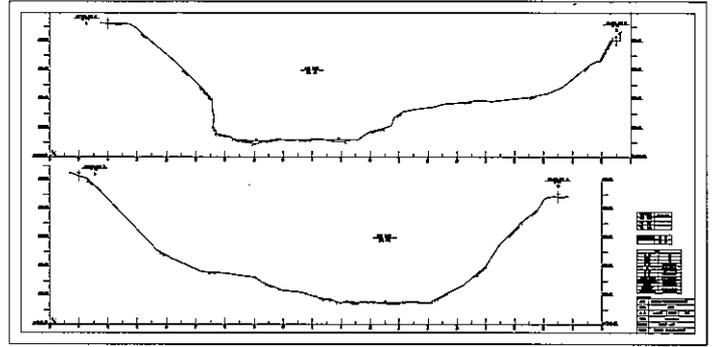
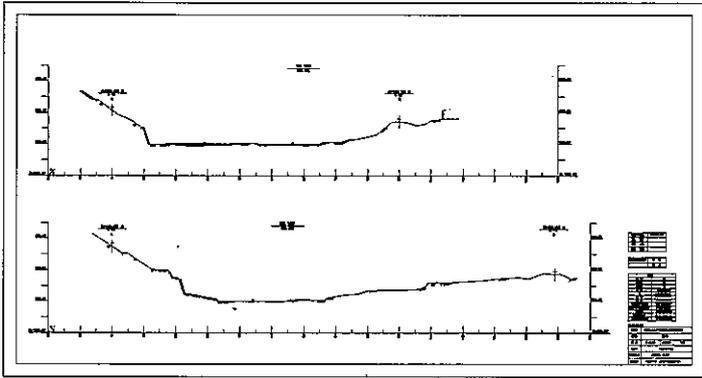
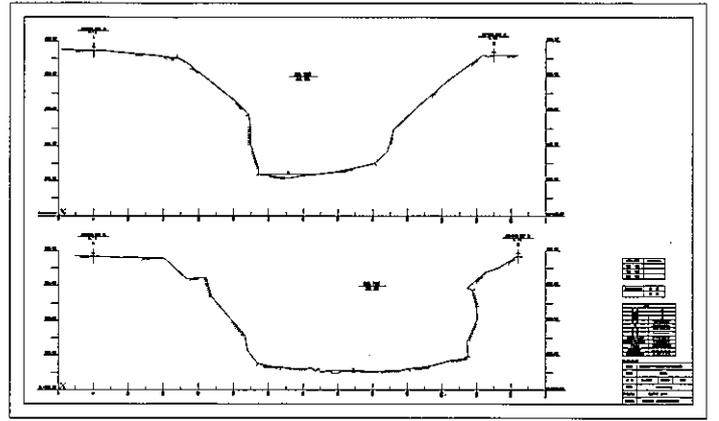
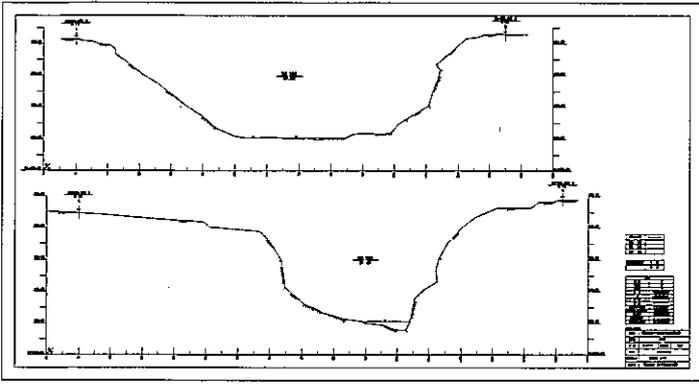


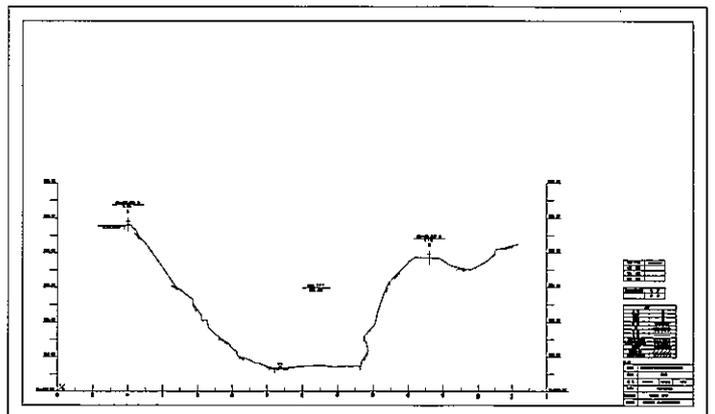
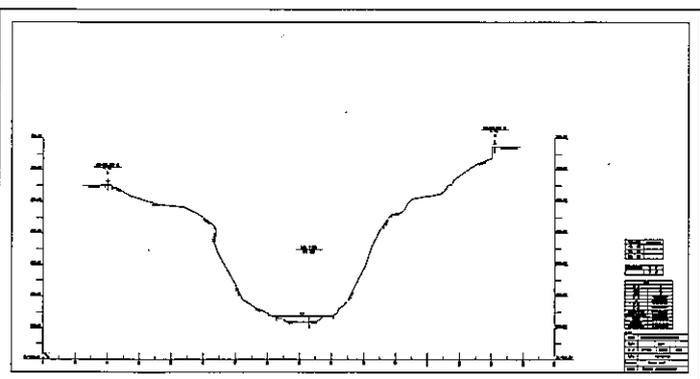
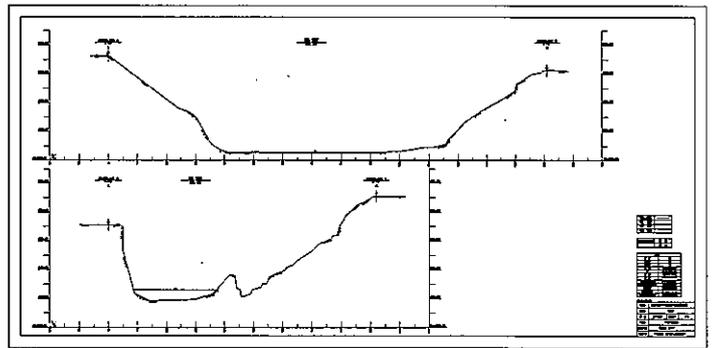
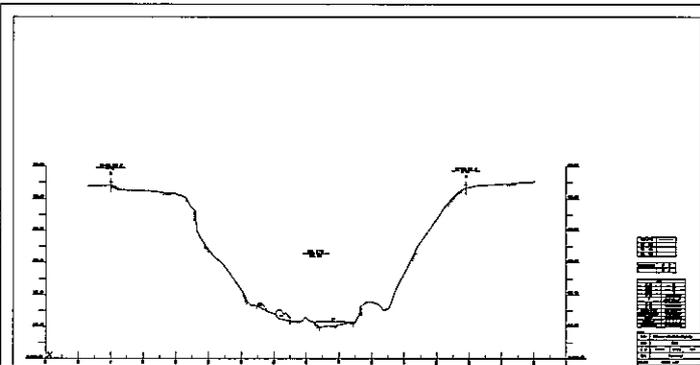
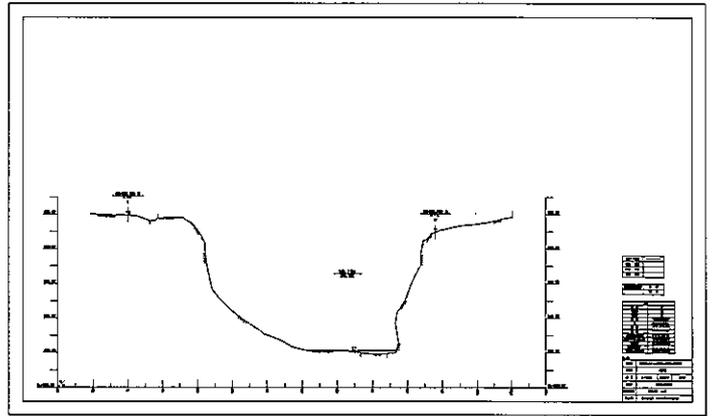
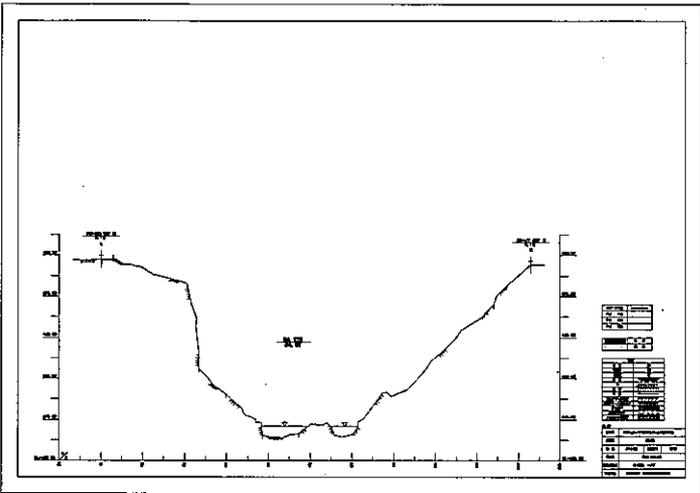
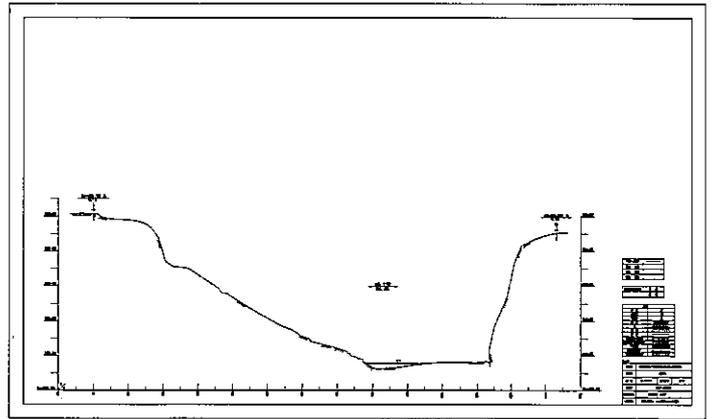
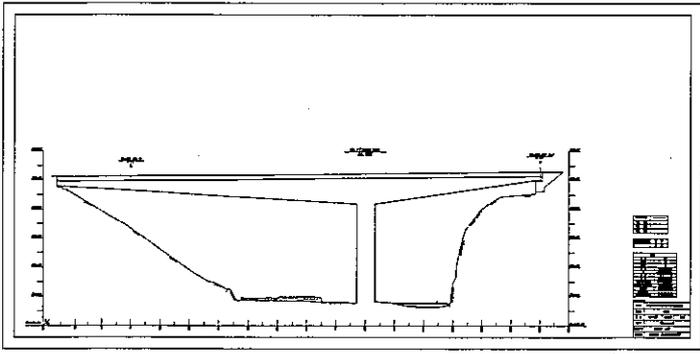


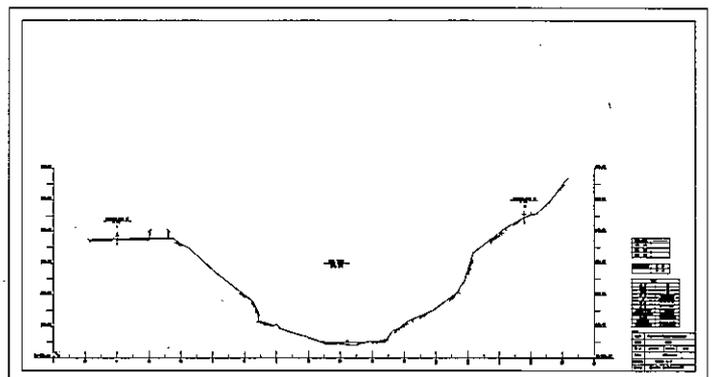
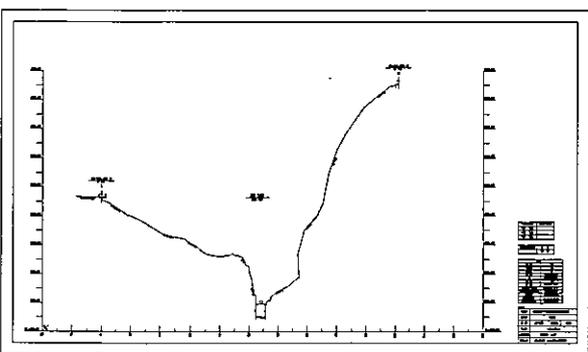
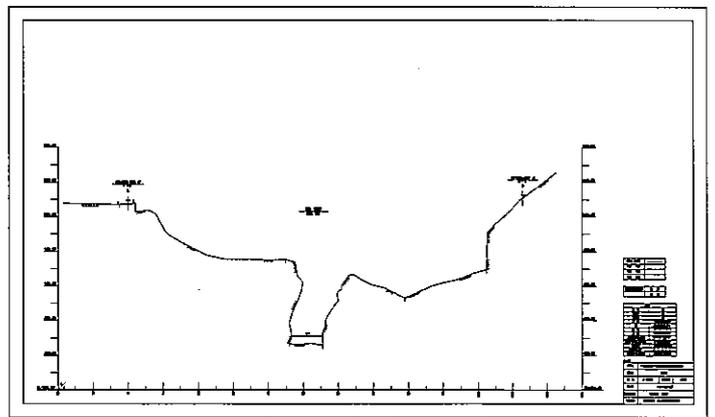
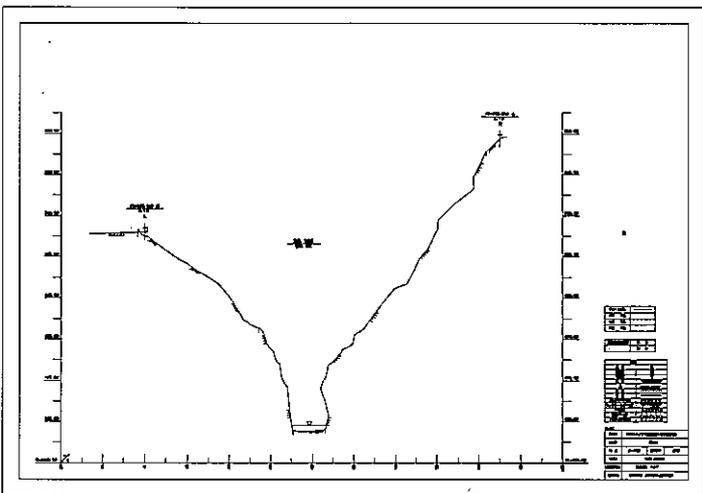
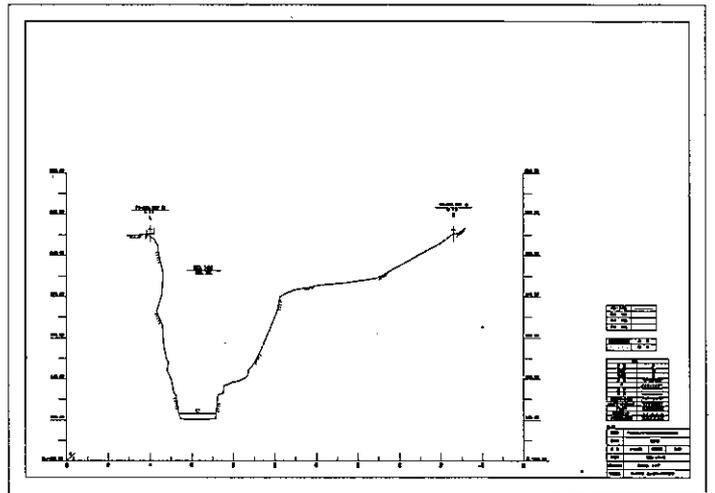
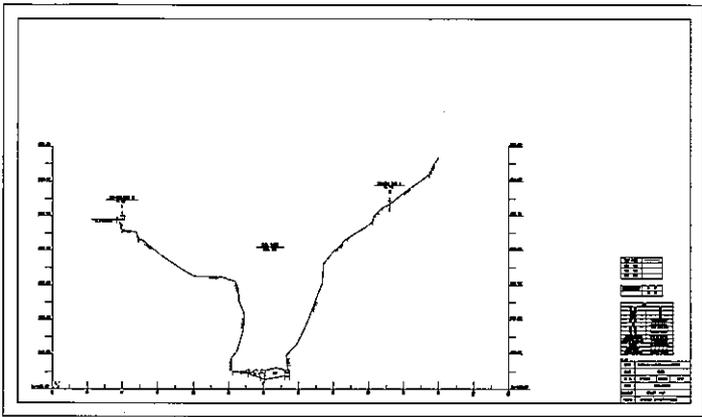
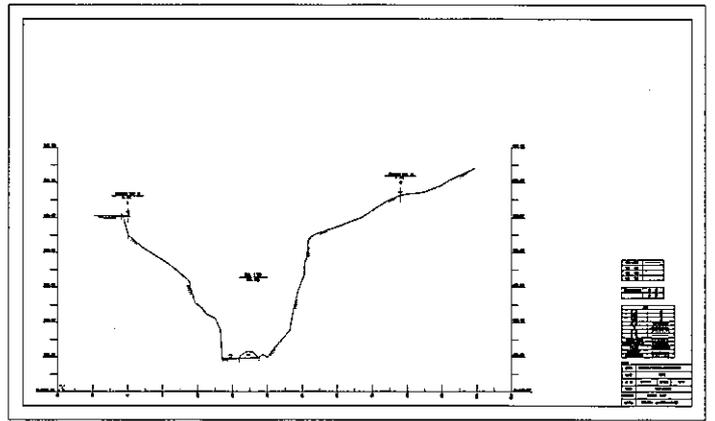
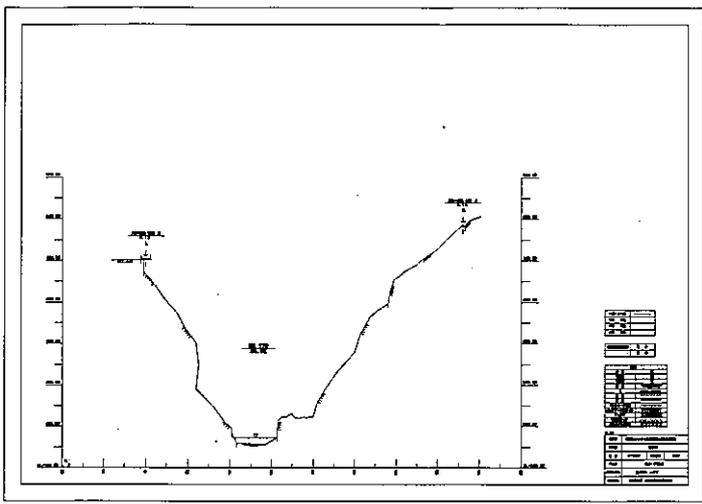


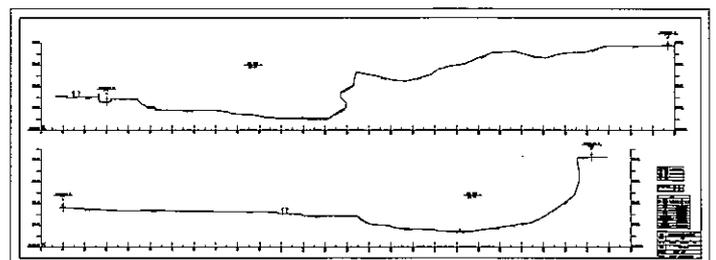
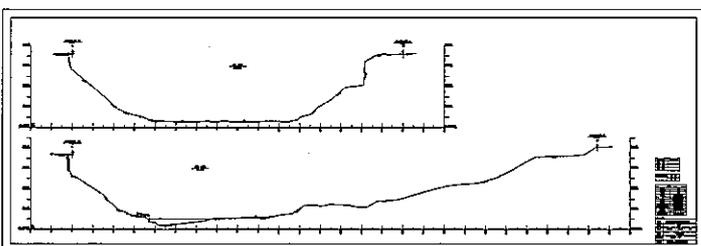
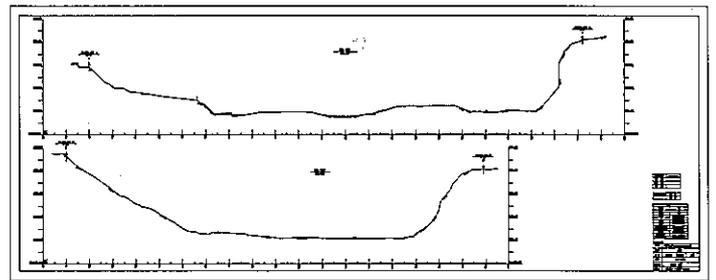
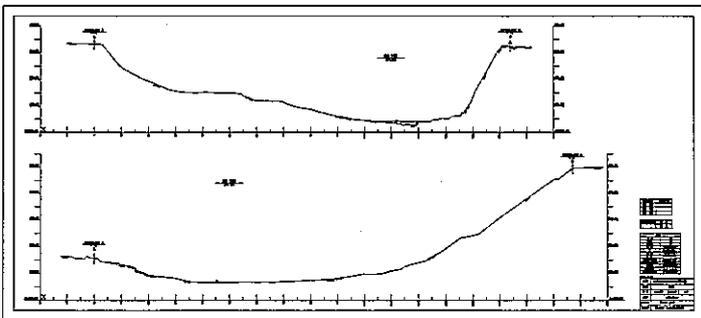
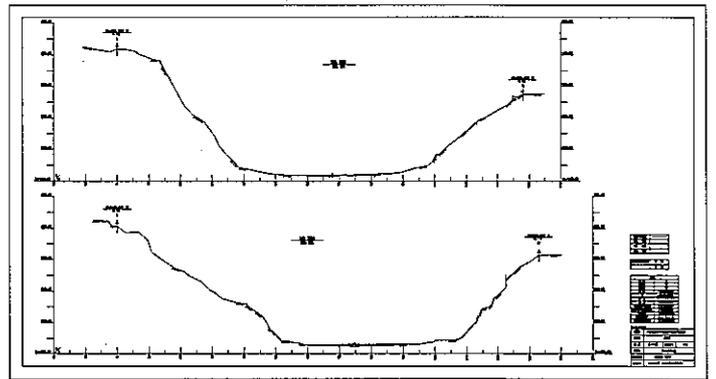
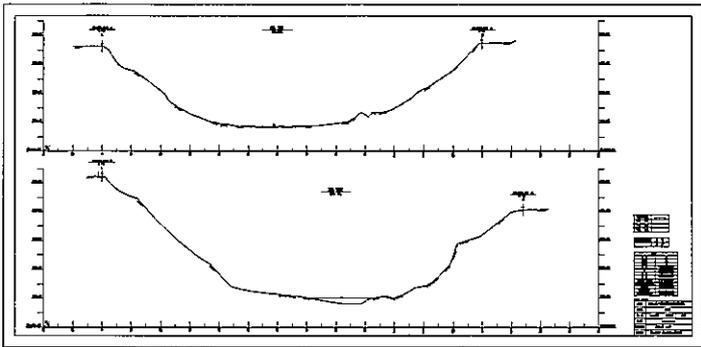
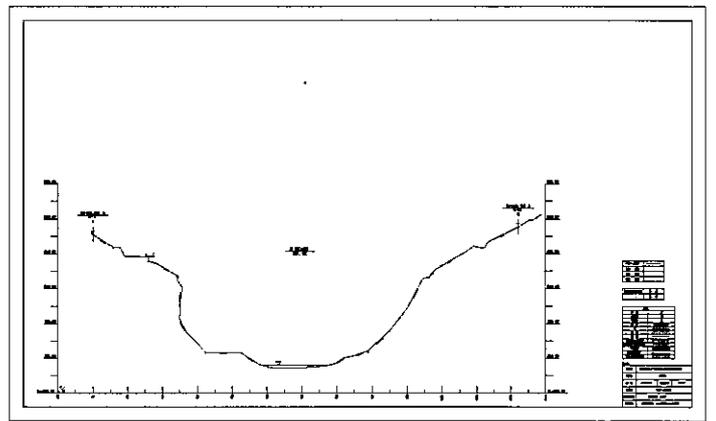
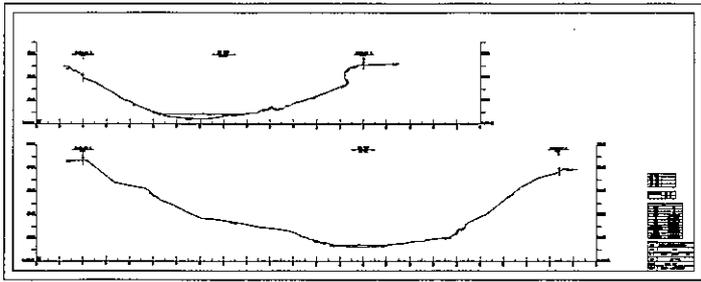




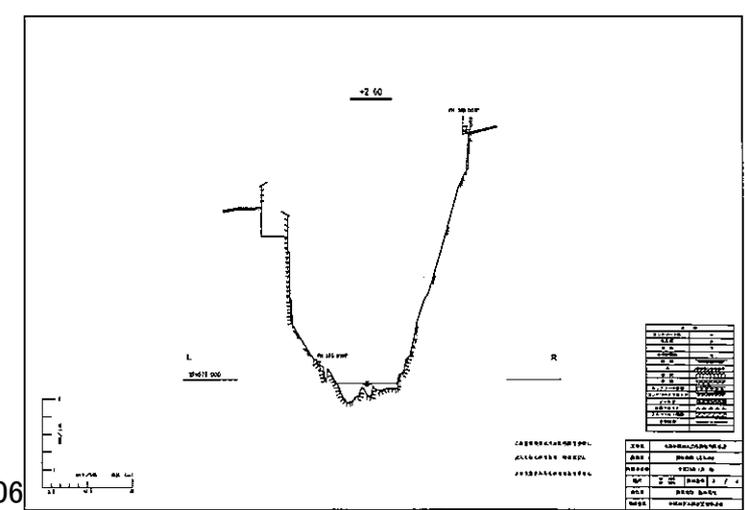
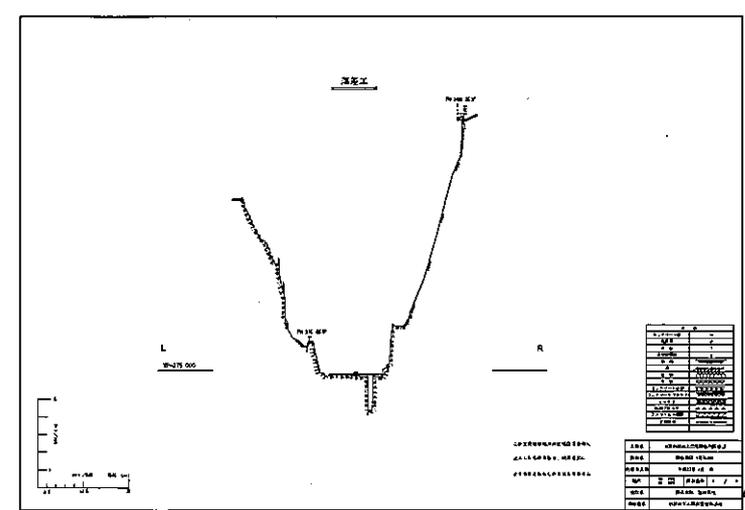
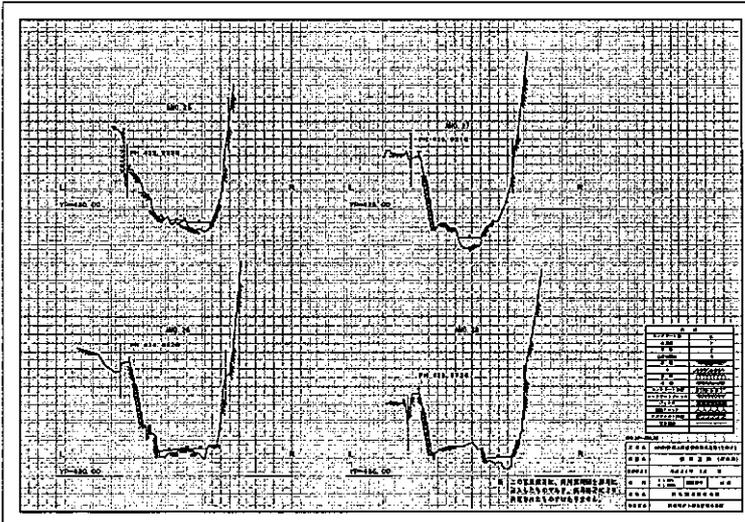
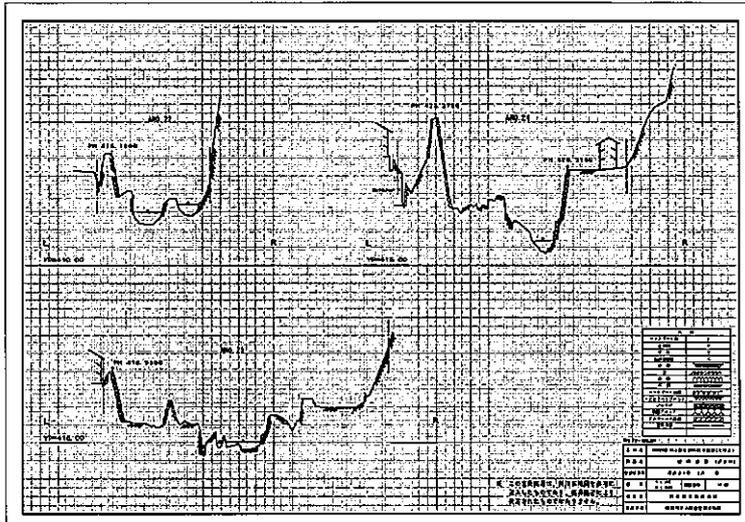
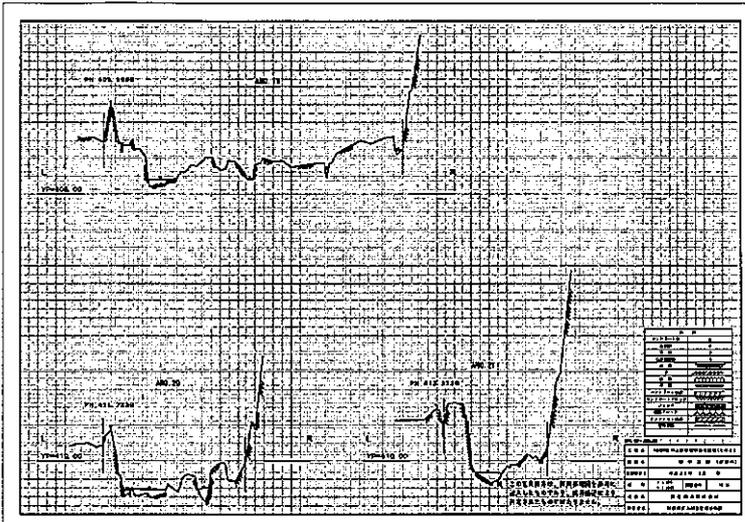
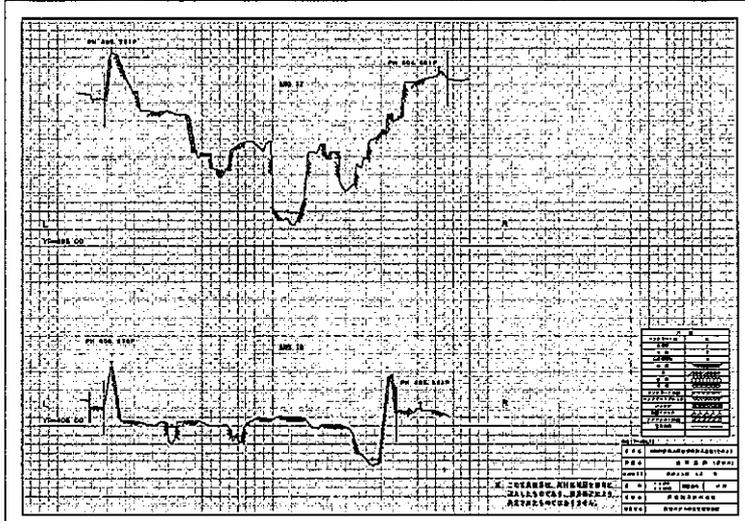
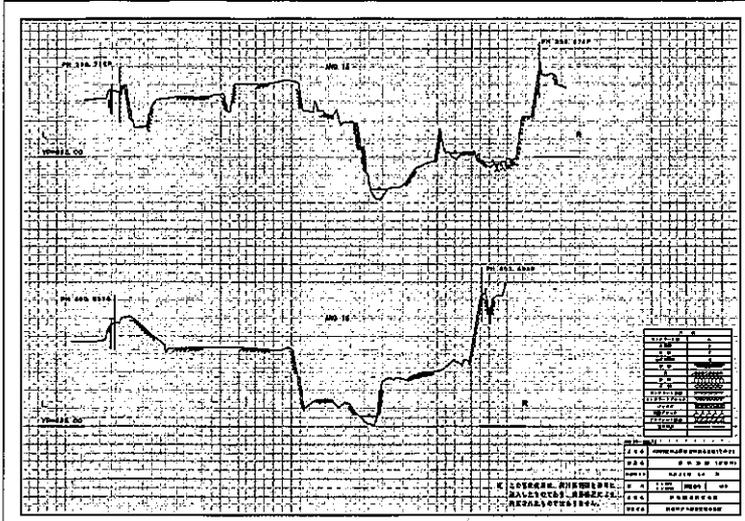


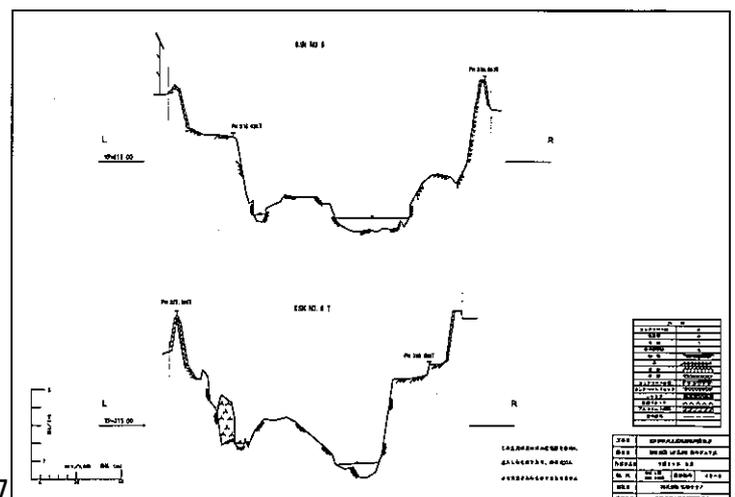
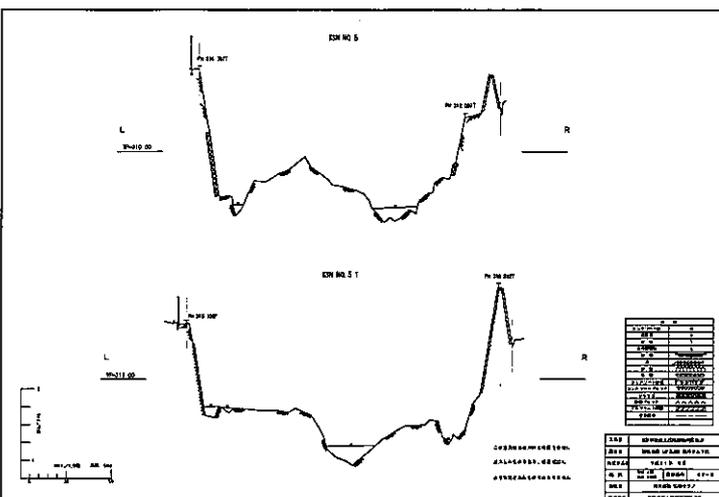
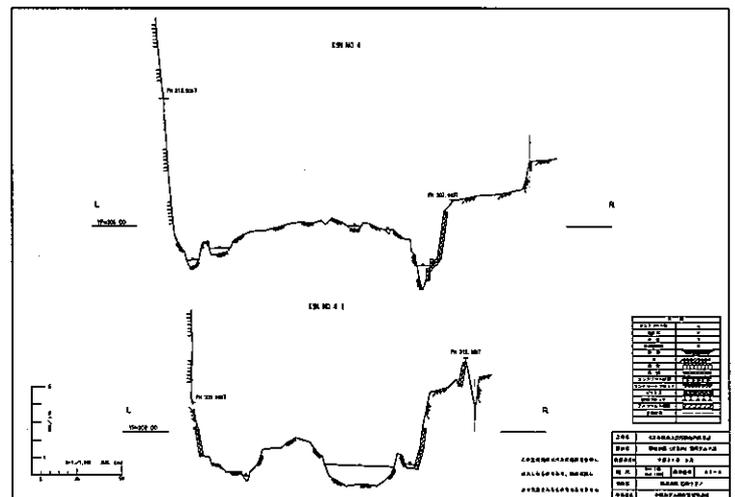
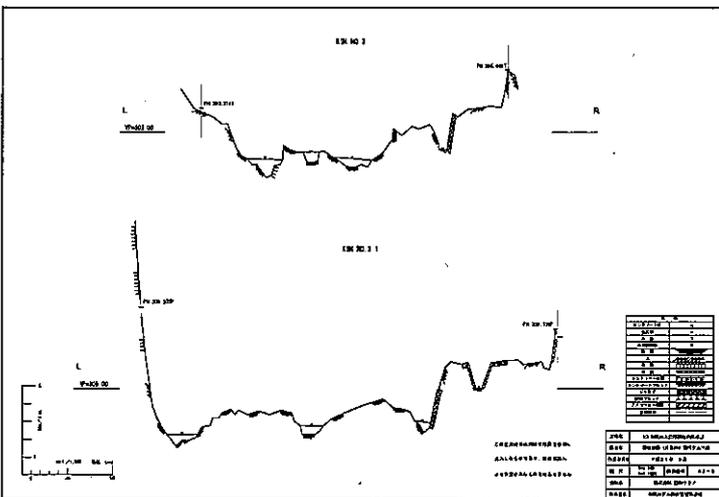
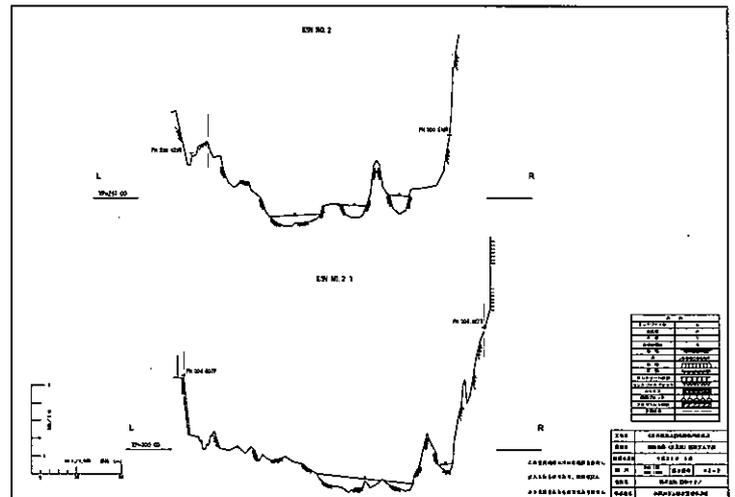
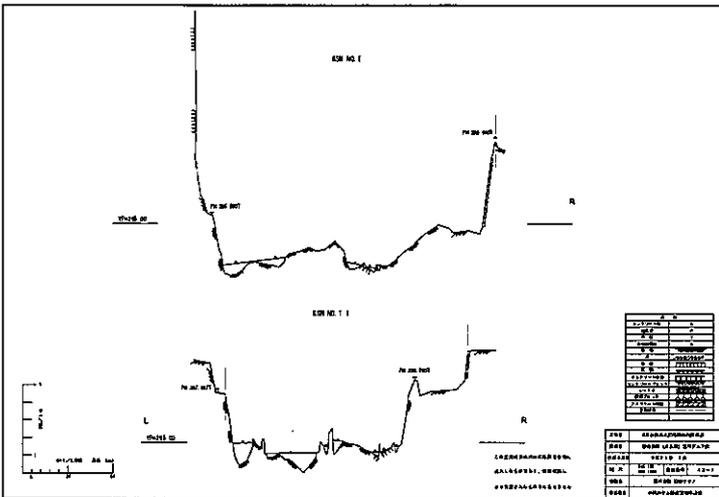
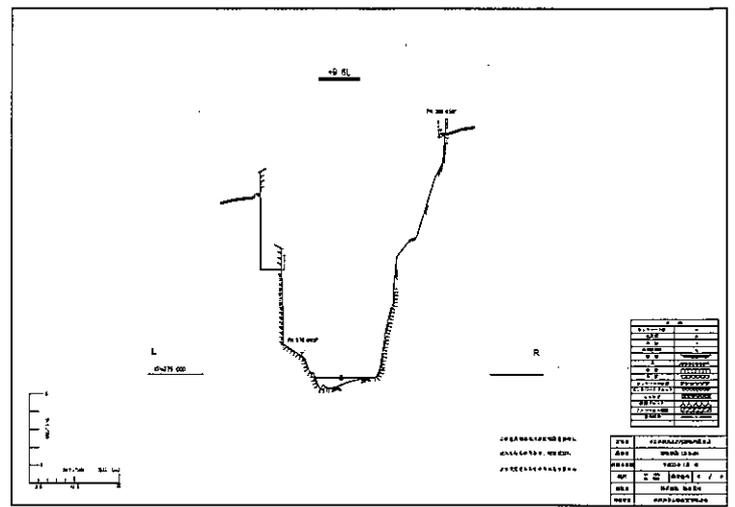
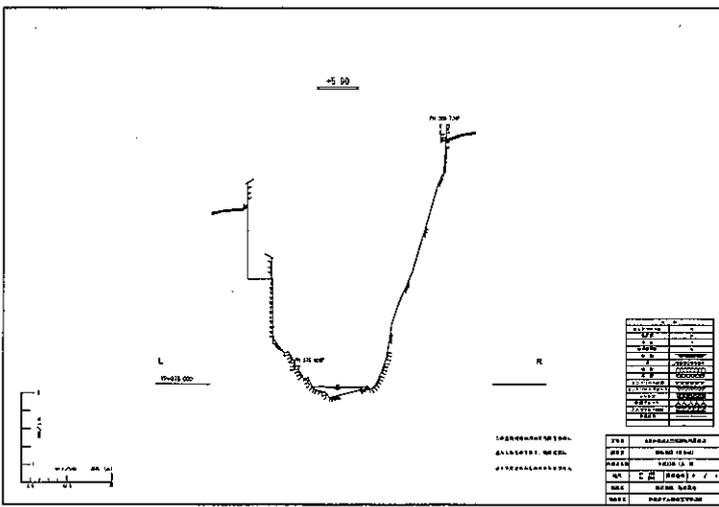


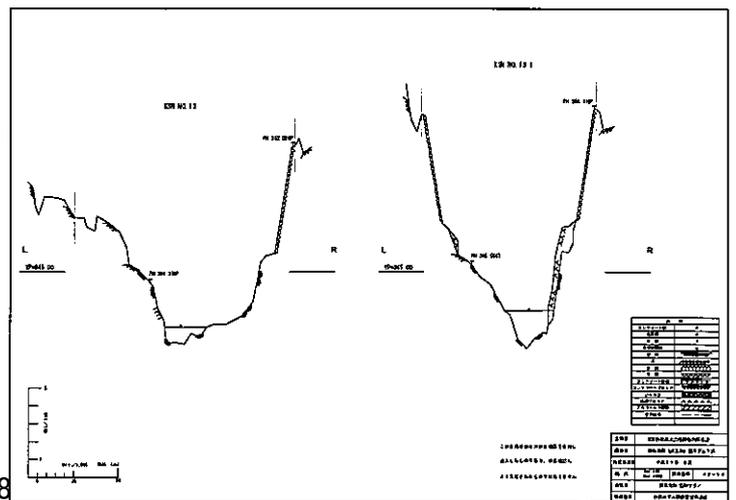
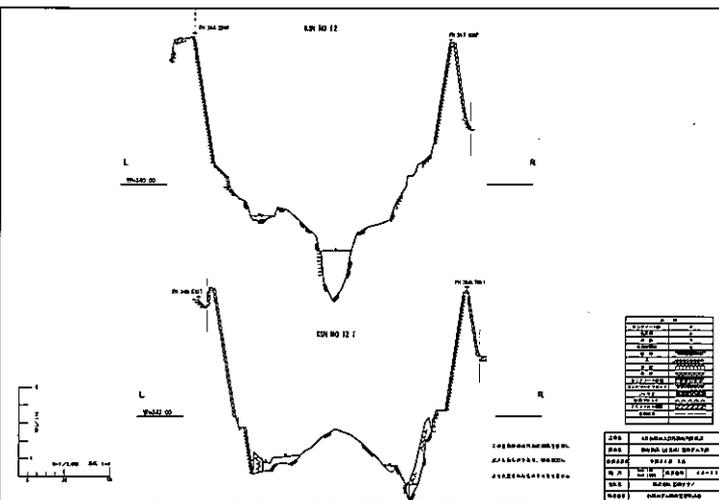
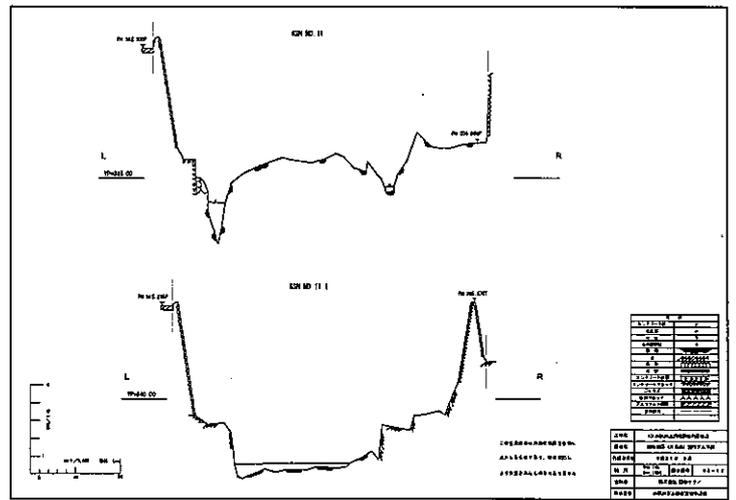
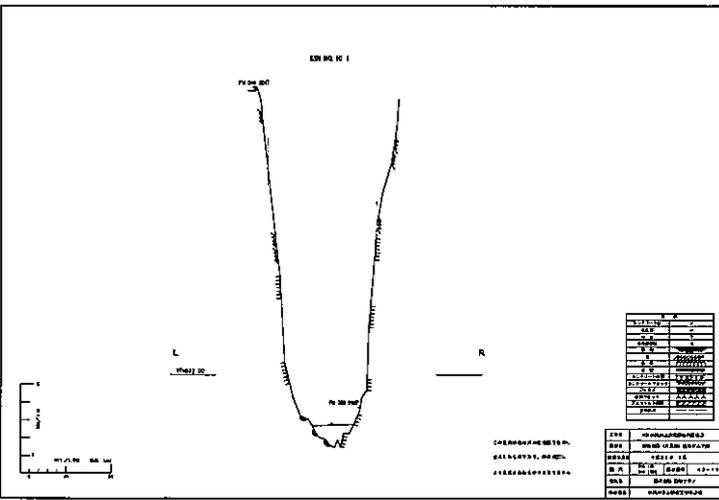
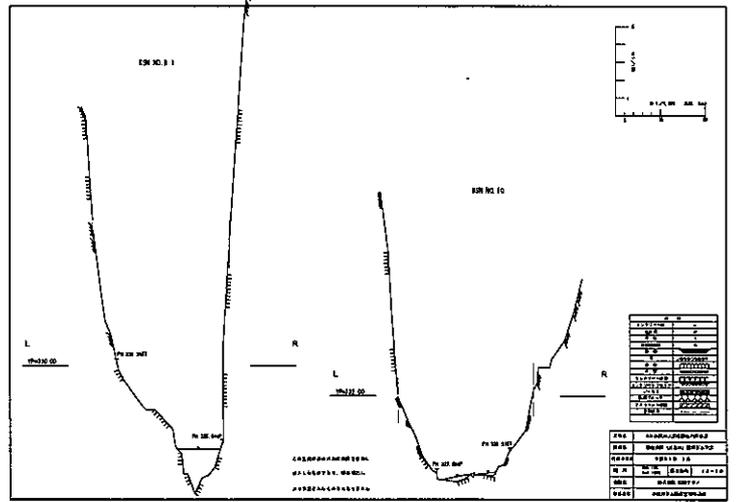
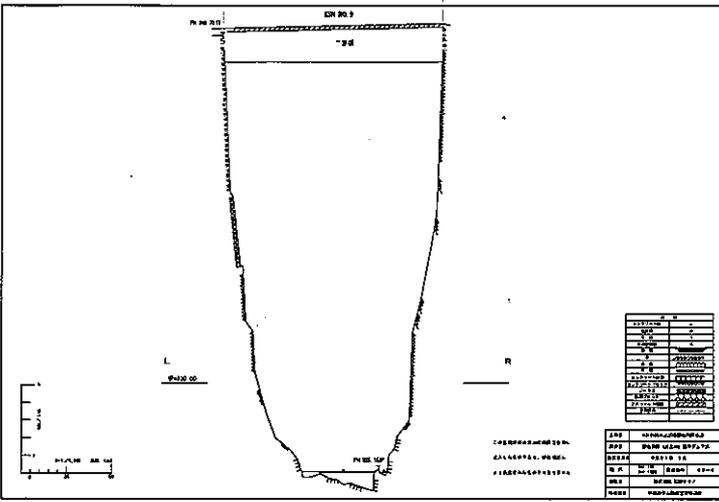
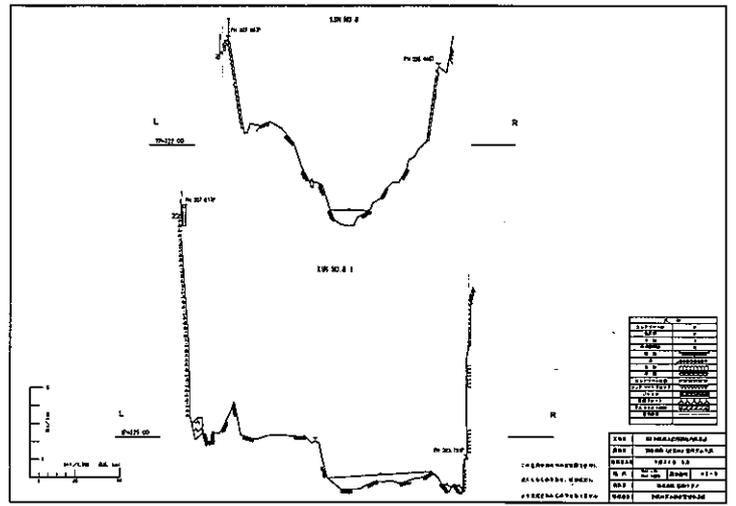
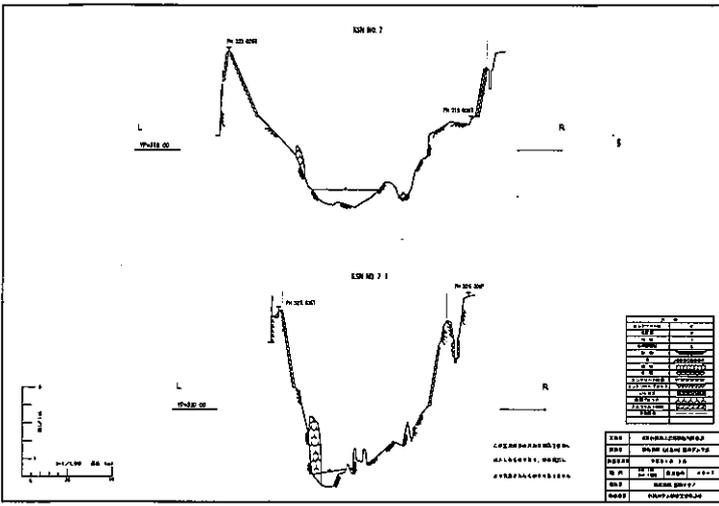


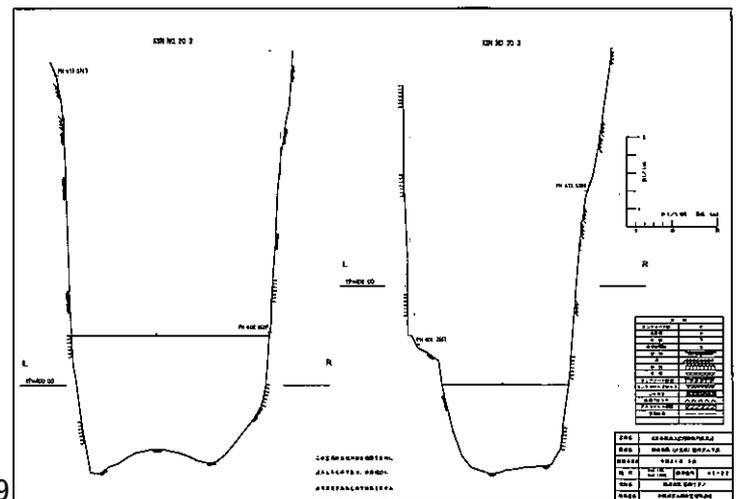
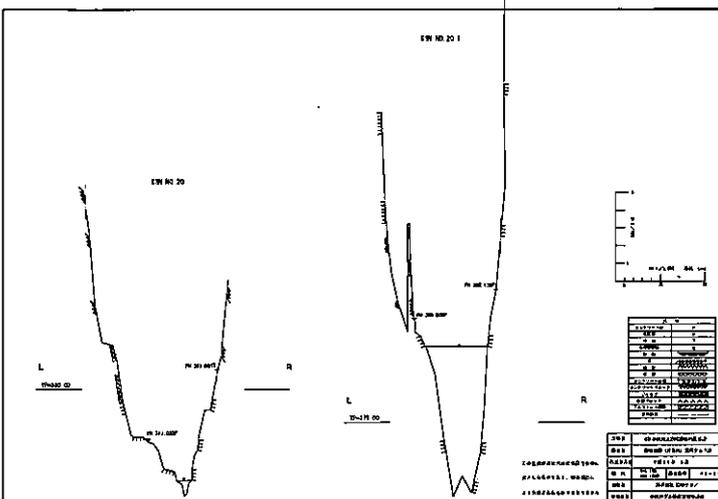
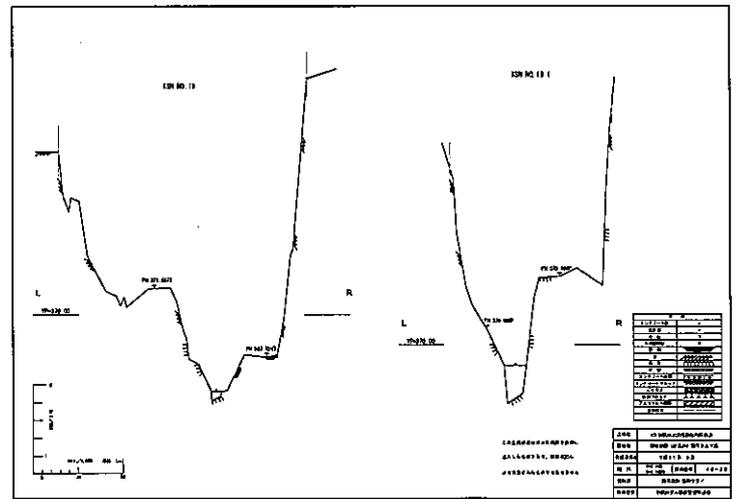
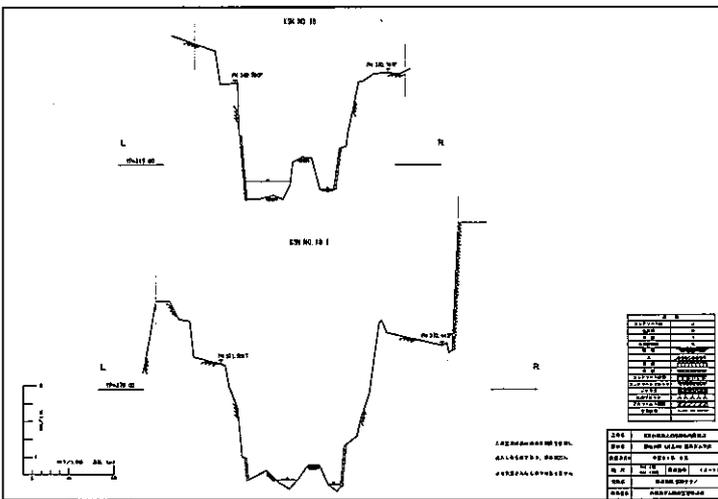
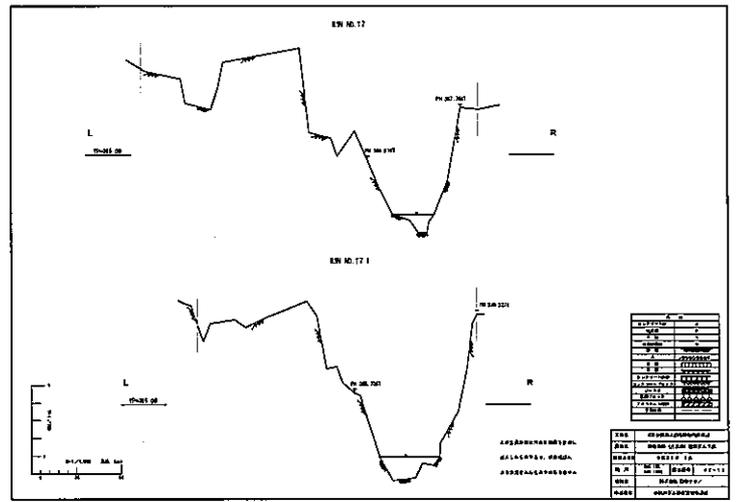
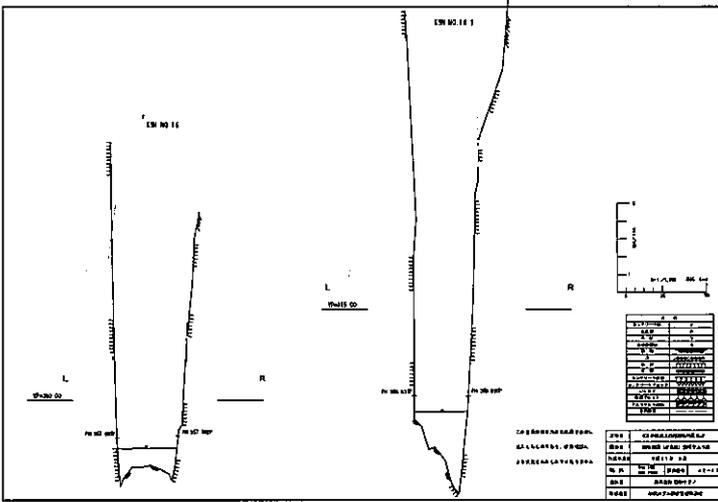
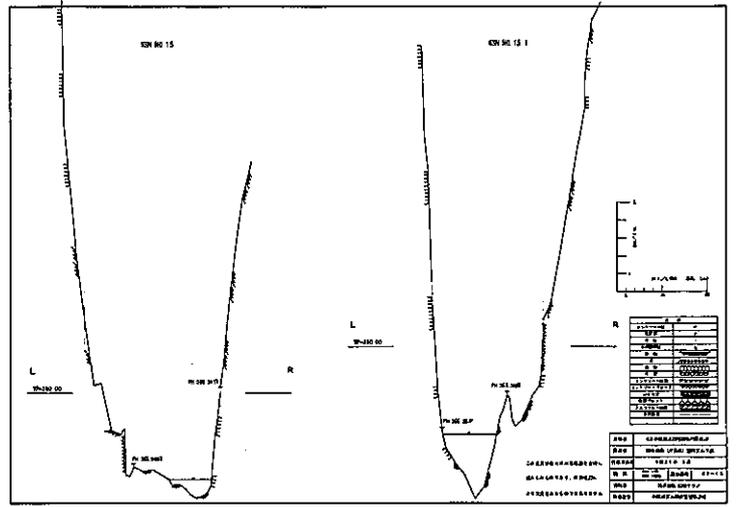
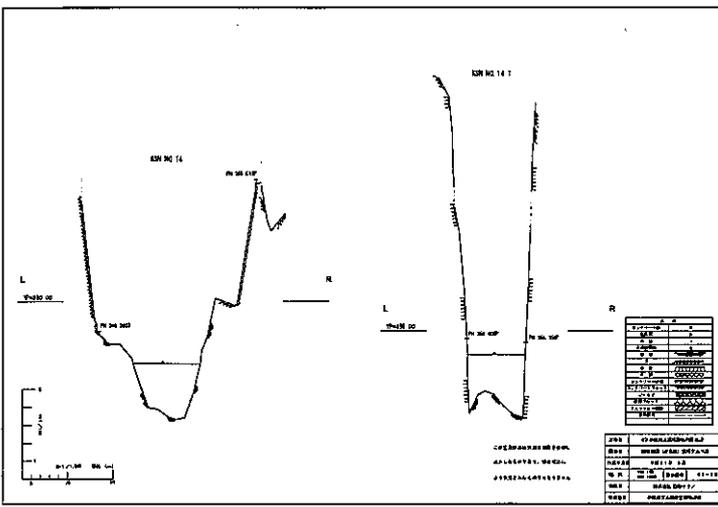




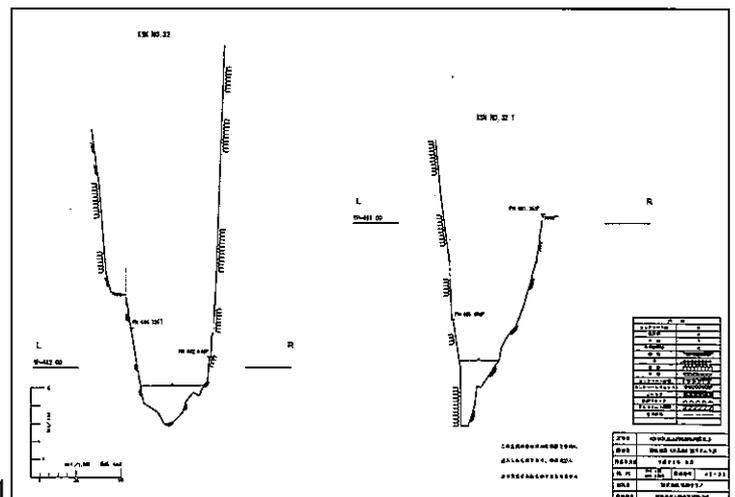
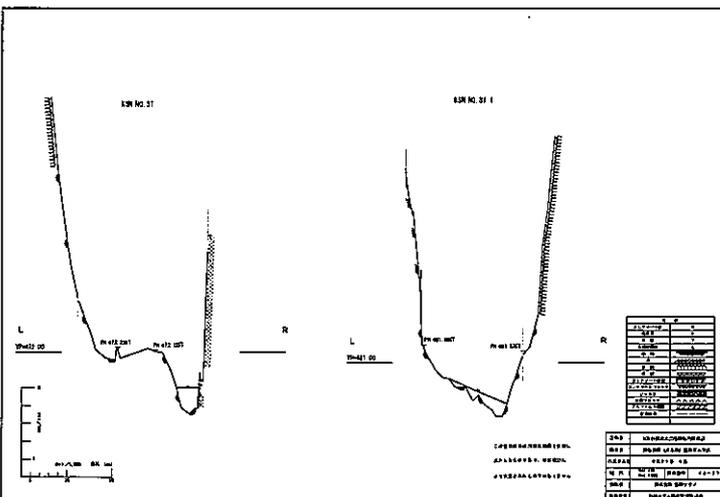
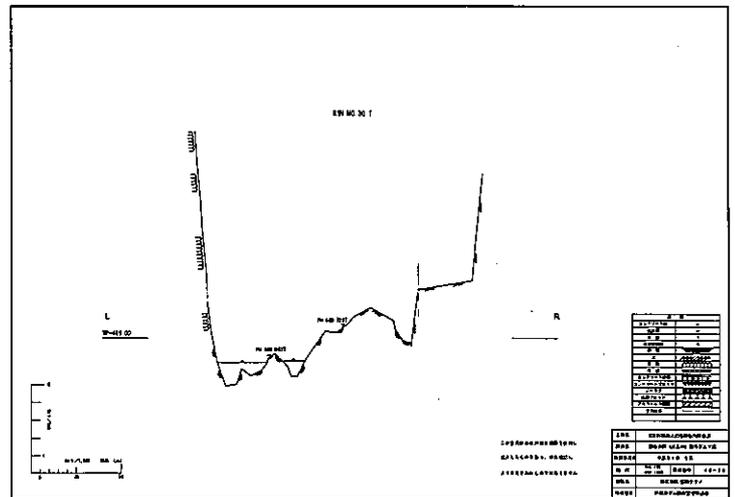
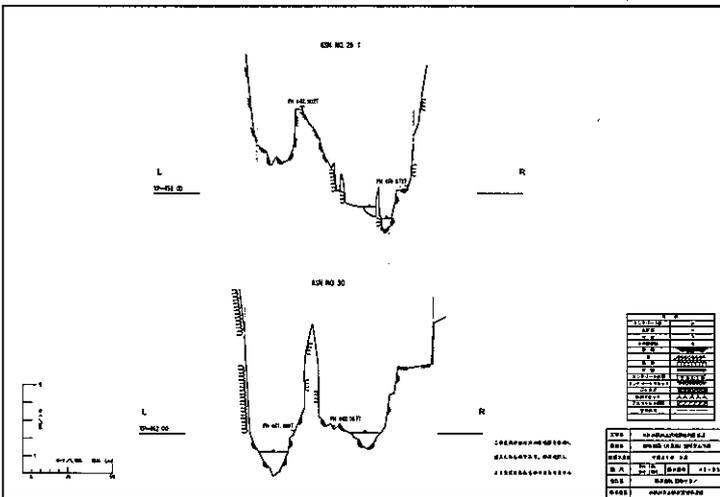
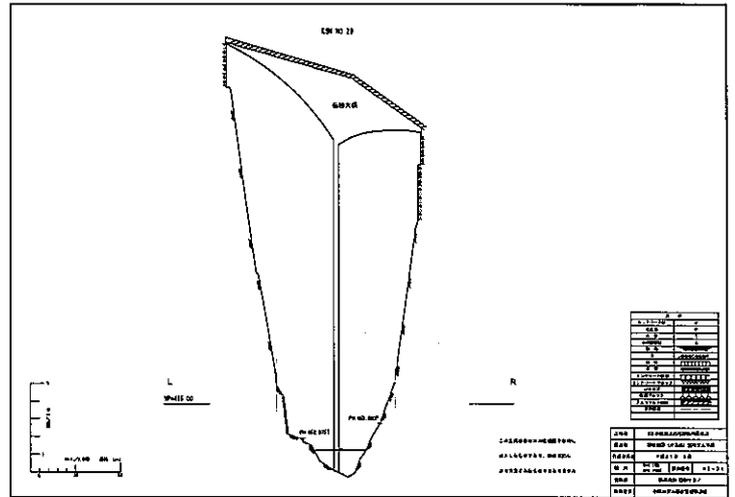
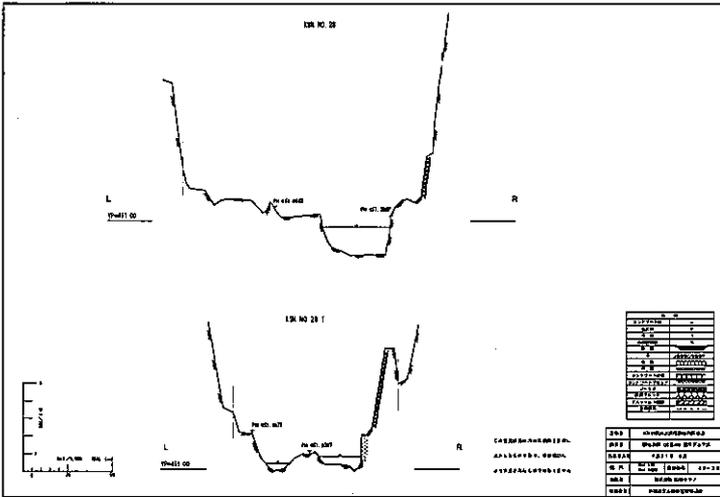
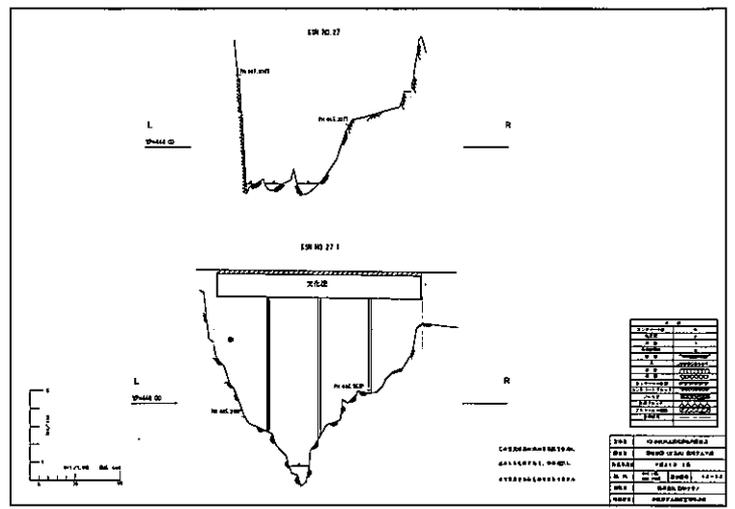
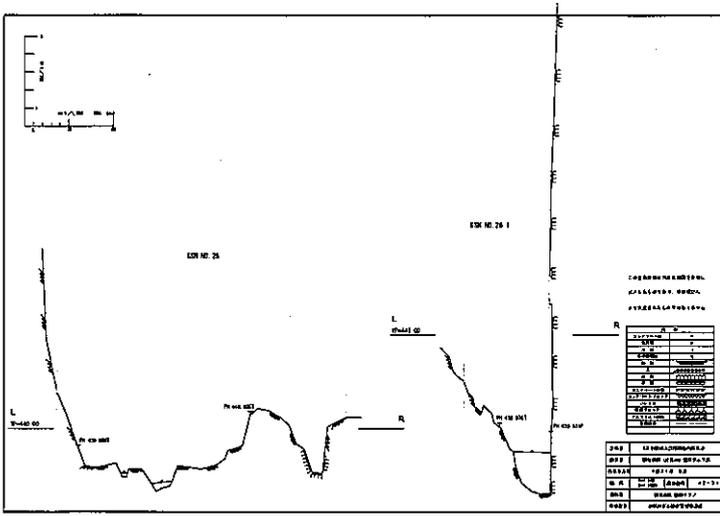


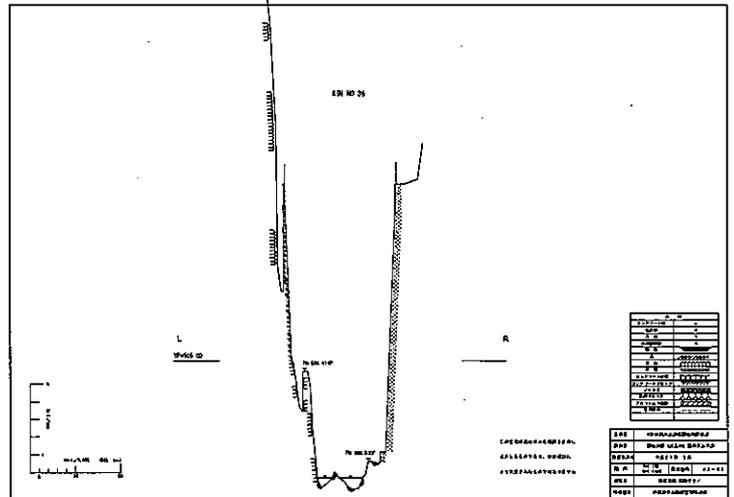
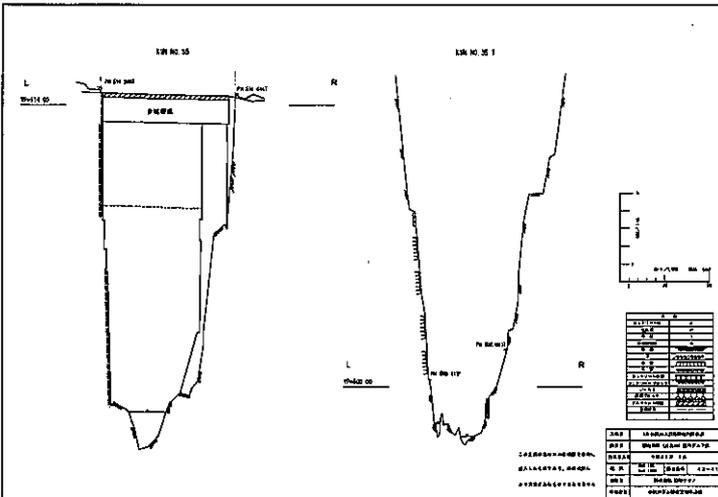
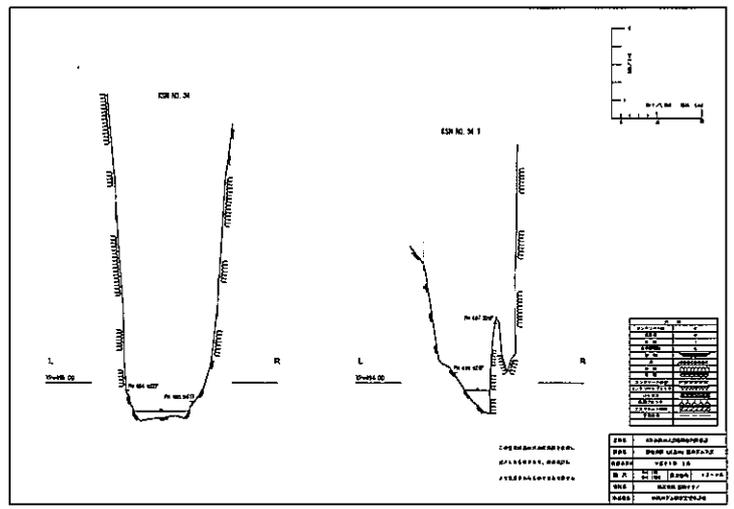
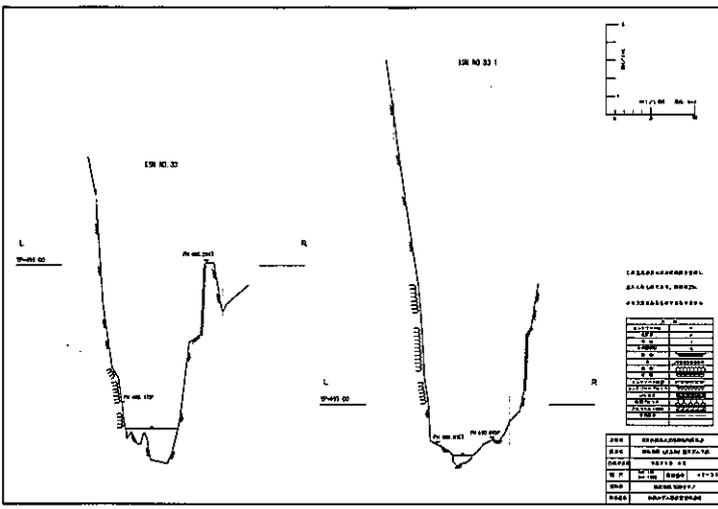










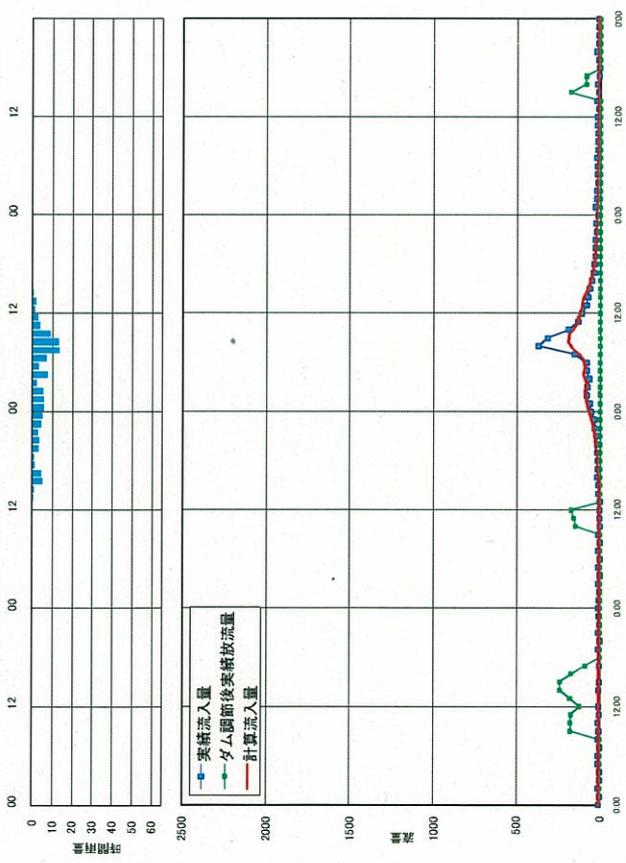


流出計算に用いた定数

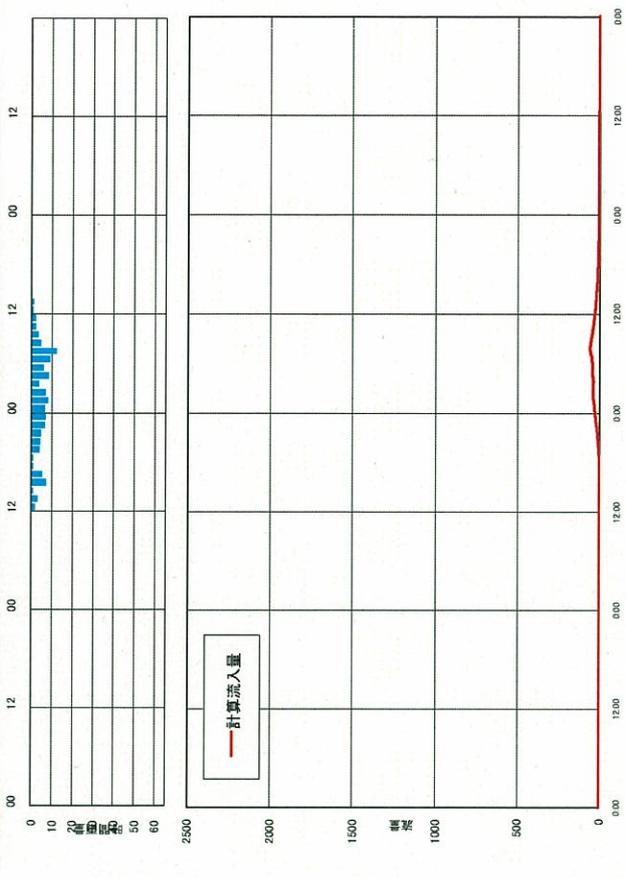
洪水名 昭和56年8月洪水

流域 No	流域定数		一次 流出率 f1	飽和 雨量 Rsa (mm)	流入係数 fsa	初期 損失 雨量 R0 (mm)	遅滞 時間 Tl (分)	係数		開始 基底 流量 Qb1 (m <sup>3</sup> /s)	河道定数	運滞 時間 Tl (時間)
	A (km <sup>2</sup> )	R0 (mm)						k	P			
1	165.48	110	0.4	110	1.0	2.0	30	7.587	0.528	4.1	a	0.217
2	60.59	140	0.4	140	1.0	16.0	50	6.252	0.656	1.5	b	0.234
3	165.77	140	0.4	140	1.0	16.0	50	9.480	0.592	4.2	A	0.165
4	103.07	140	0.4	140	1.0	16.0	50	9.480	0.592	2.6	B	0.350
5	81.80	140	0.4	140	1.0	16.0	50	9.480	0.592	2.1	C	0.273
6	110.19	180	0.4	180	1.0	14.0	40	10.591	0.655	2.8	D	0.160
7	79.19	140	0.4	140	1.0	16.0	50	9.480	0.592	2.0	E	0.180
8	226.00	140	0.4	140	1.0	16.0	50	9.480	0.592	5.7	F	0.250
9	252.05	130	0.4	130	1.0	45.0	90	13.487	0.530	6.3	G	0.170
10	161.64	130	0.4	130	1.0	45.0	90	13.487	0.530	4.1	H	0.143
11	78.78	130	0.4	130	1.0	45.0	90	13.487	0.530	2.0	K	0.281
12	182.31	140	0.4	140	1.0	16.0	50	9.480	0.592	4.6	O	0.208
13	144.49	—	0.4	—	—	14.0	50	35.239	0.300	3.6	Q	0.509
14	269.24	—	0.4	—	—	14.0	100	29.321	0.305	6.7	R	0.127
15	289.00	—	0.4	—	—	14.0	100	29.321	0.305	7.2	N	0.306
16	153.20	—	0.4	—	—	14.0	100	29.321	0.305	3.8	I	0.318
17	38.30	—	0.4	—	—	14.0	100	29.321	0.305	1.0	J	0.269
18	164.22	—	0.4	—	—	14.0	50	35.239	0.300	4.1	M	0.654
19	157.01	—	0.4	—	—	14.0	50	35.239	0.300	3.9	L	0.752
20	188.37	—	0.4	—	—	14.0	50	35.239	0.300	4.7	P	0.614
21	97.12	—	0.4	—	—	14.0	50	35.239	0.300	2.4		0.684
22	93.33	—	0.4	—	—	14.0	50	35.239	0.300	2.3		
23	24.68	—	0.4	—	—	14.0	50	35.239	0.300	0.6		
24	23.88	—	0.4	—	—	14.0	50	35.239	0.300	0.6		
25	155.13	200	0.6	200	1.0	5.0	30	29.519	0.428	3.9		
26	110.02	200	0.6	200	1.0	5.0	40	18.623	0.572	2.8		
27	121.39	200	0.6	200	1.0	5.0	60	10.765	0.680	3.0		
28	165.39	200	0.6	200	1.0	5.0	40	18.623	0.572	4.1		
29	43.27	200	0.6	200	1.0	5.0	40	18.623	0.572	1.1		
30	190.64	200	0.6	200	1.0	5.0	40	18.623	0.572	4.8		
31	158.74	200	0.6	200	1.0	5.0	40	18.623	0.572	4.0		
32	201.63	200	0.6	200	1.0	5.0	40	18.623	0.572	5.1		
33	75.00	200	0.6	200	1.0	5.0	40	18.623	0.572	1.9		
34	94.85	—	0.4	—	—	14.0	50	35.239	0.300	2.4		
35	70.05	200	0.6	200	1.0	5.0	40	18.623	0.572	1.8		
36	269.56	130	0.6	130	1.0	22.0	80	29.976	0.476	6.8		
37	53.25	130	0.6	130	1.0	22.0	80	29.976	0.476	1.3		
38	51.68	130	0.6	130	1.0	22.0	80	29.976	0.476	1.3		
39	37.50	130	0.6	130	1.0	22.0	80	29.976	0.476	0.9		
	5,107.81									128.0		

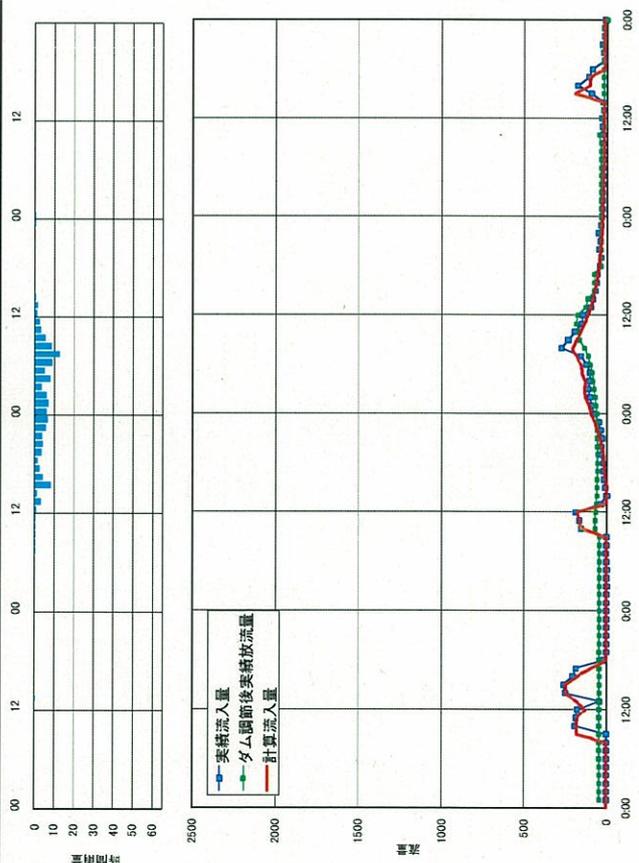
流出計算結果 昭和56年8月洪水 矢木沢ダム (利根川)



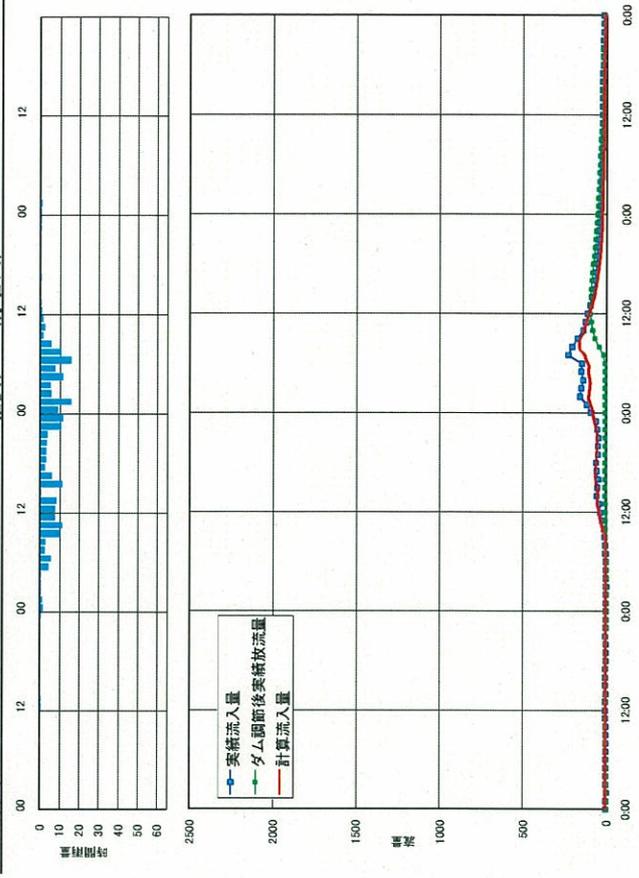
流出計算結果 昭和56年8月洪水 奈良俣ダム (槽俣川)



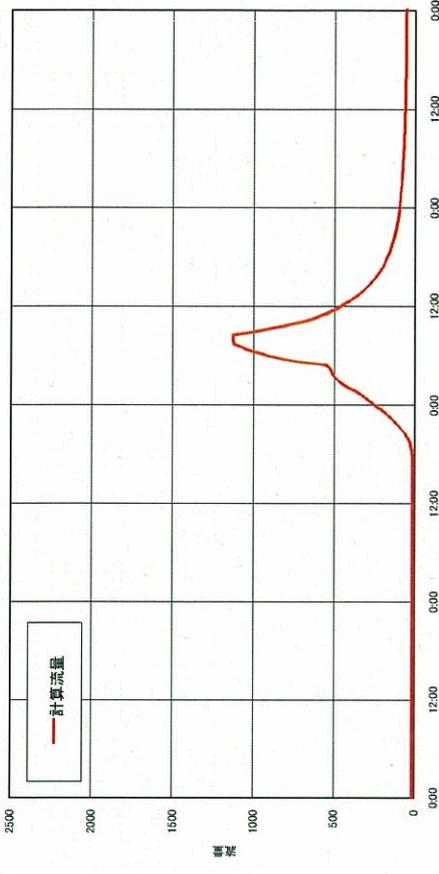
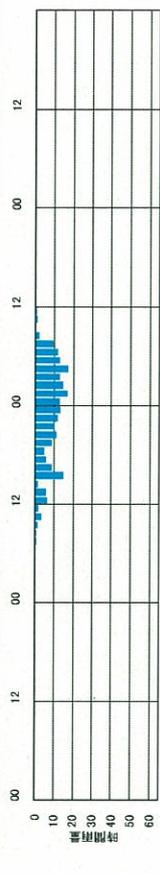
流出計算結果 昭和56年8月洪水 藤原ダム (利根川)



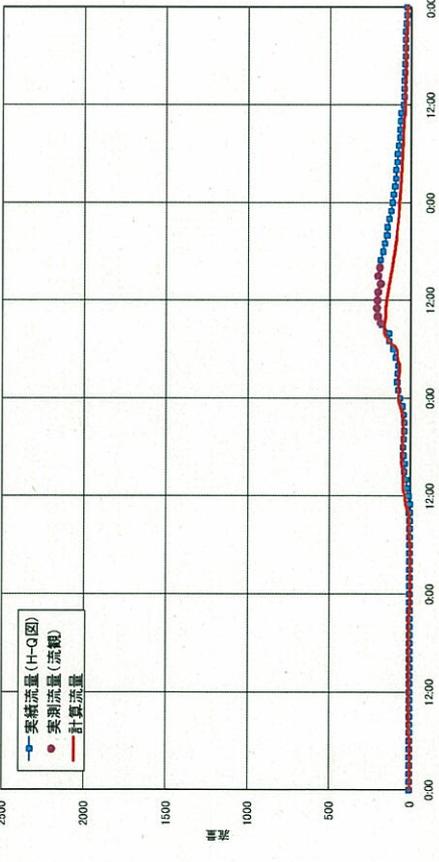
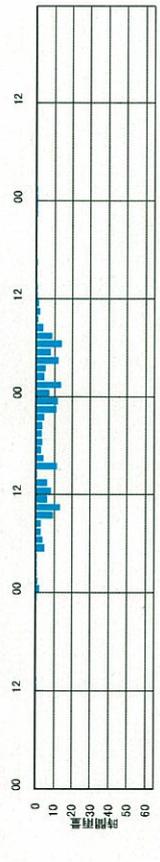
流出計算結果 昭和56年8月洪水 相模ダム (赤谷川)



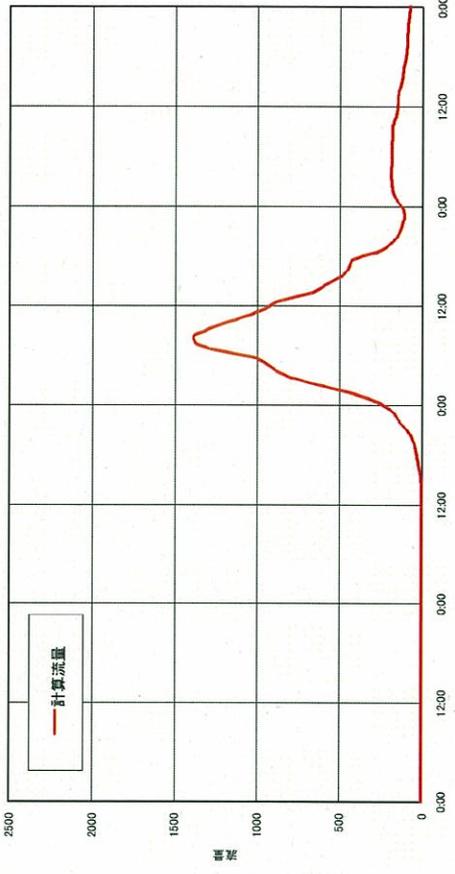
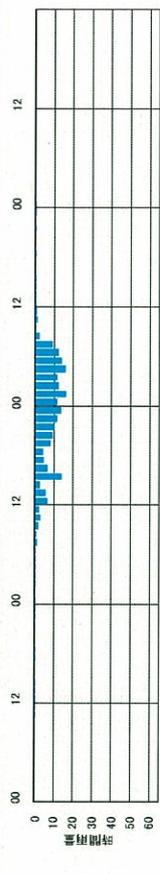
流出計算結果 昭和56年8月洪水 千鳥 (片品川)



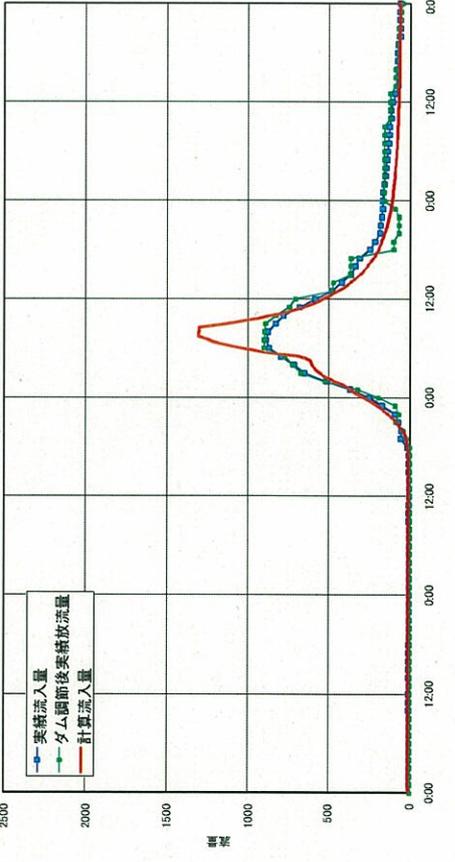
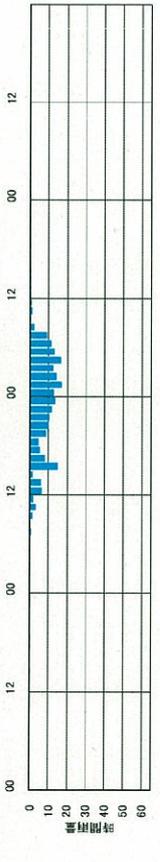
流出計算結果 昭和56年8月洪水 小袖橋 (赤谷川)



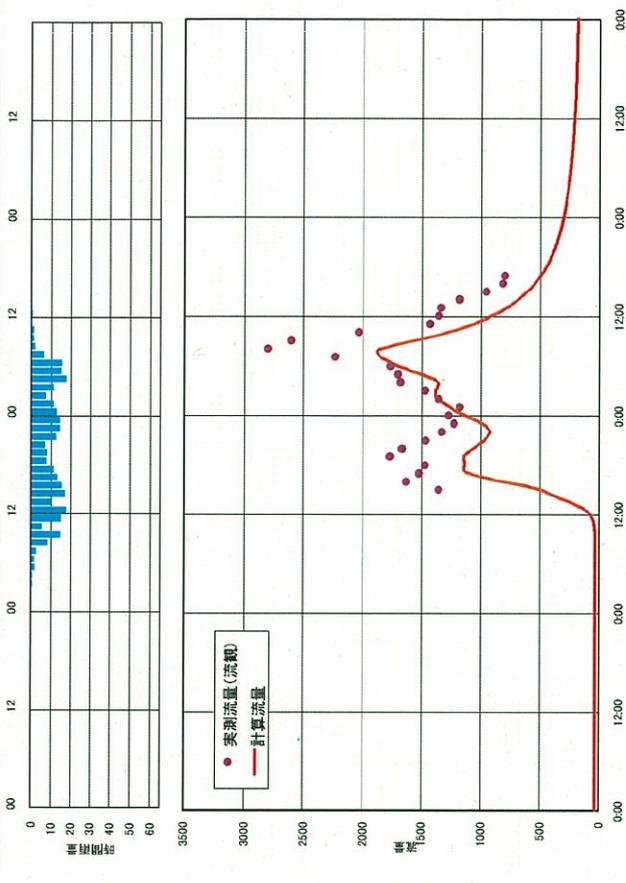
流出計算結果 昭和56年8月洪水 上久屋 (片品川)



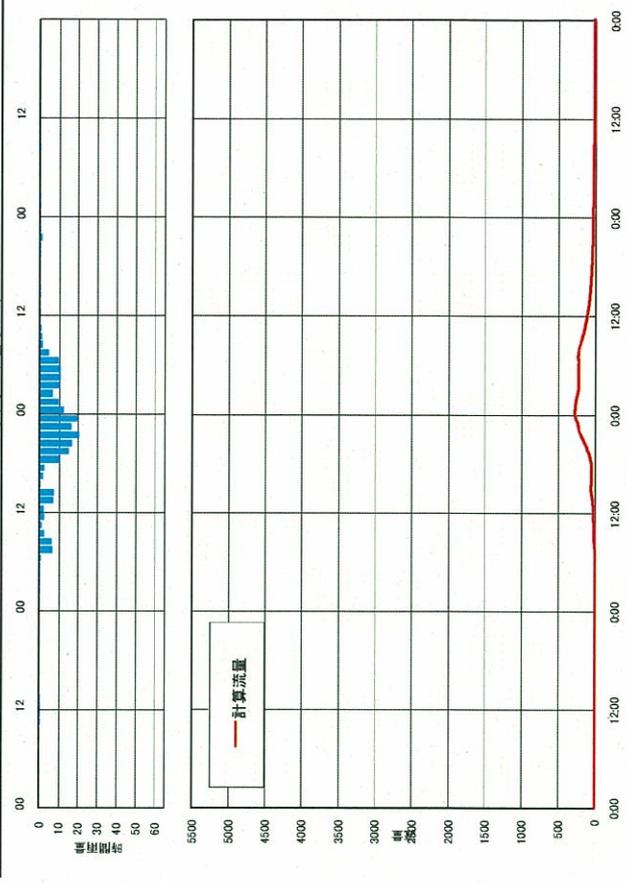
流出計算結果 昭和56年8月洪水 蘭原ダム (片品川)



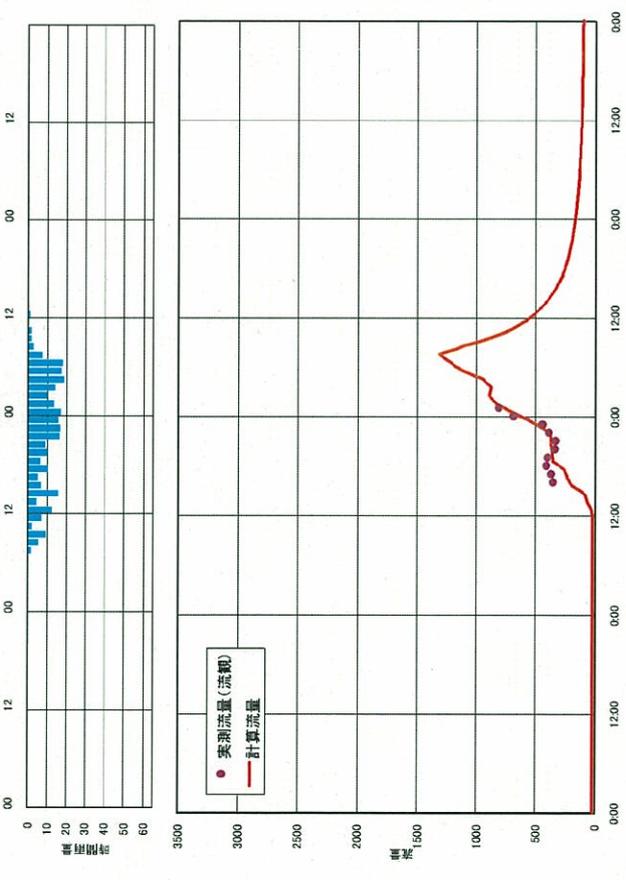
流出計算結果 昭和56年8月洪水 村上(吾妻川)



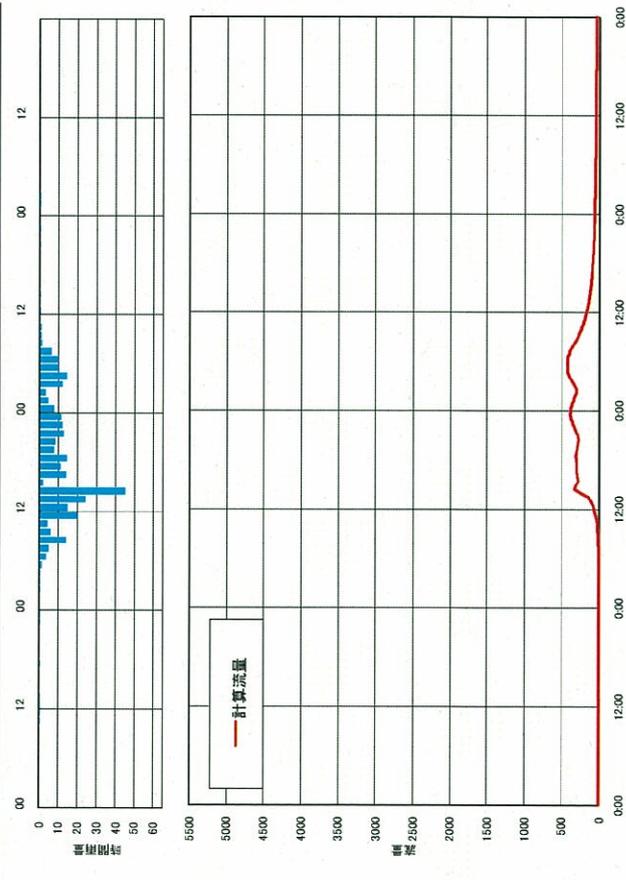
流出計算結果 昭和56年8月洪水 安中(碓氷川)

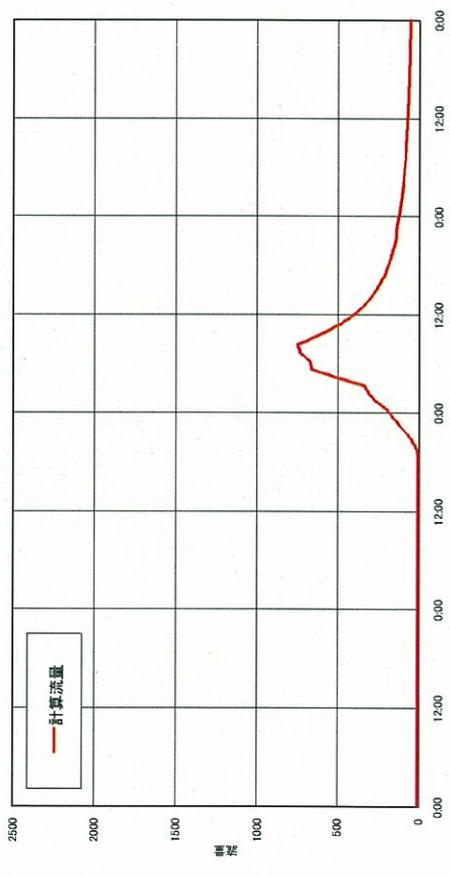
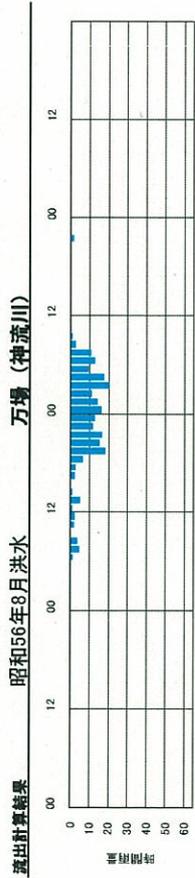
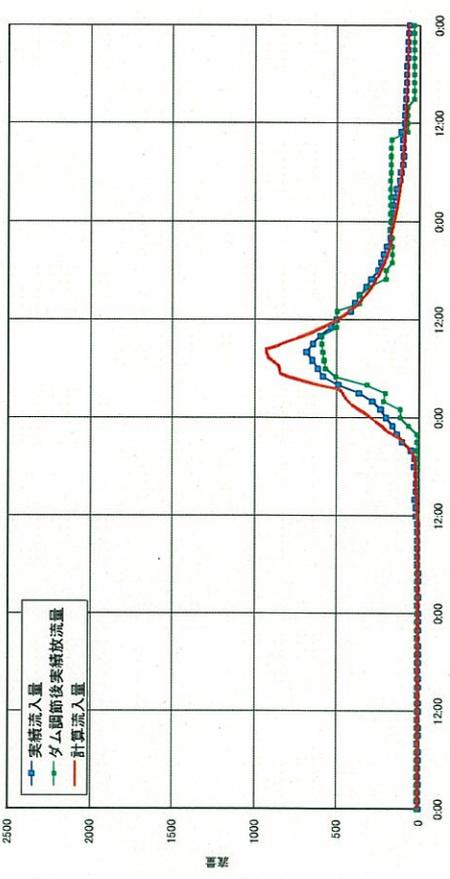
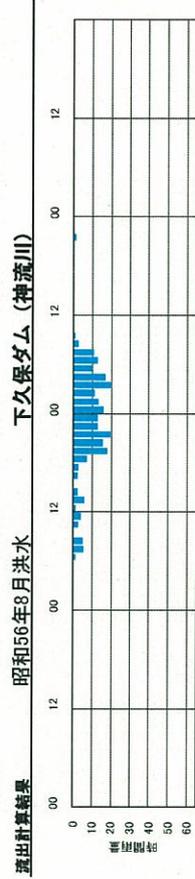
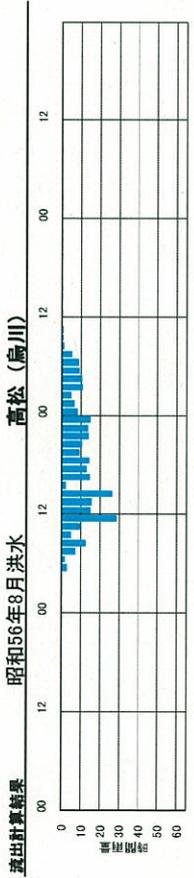
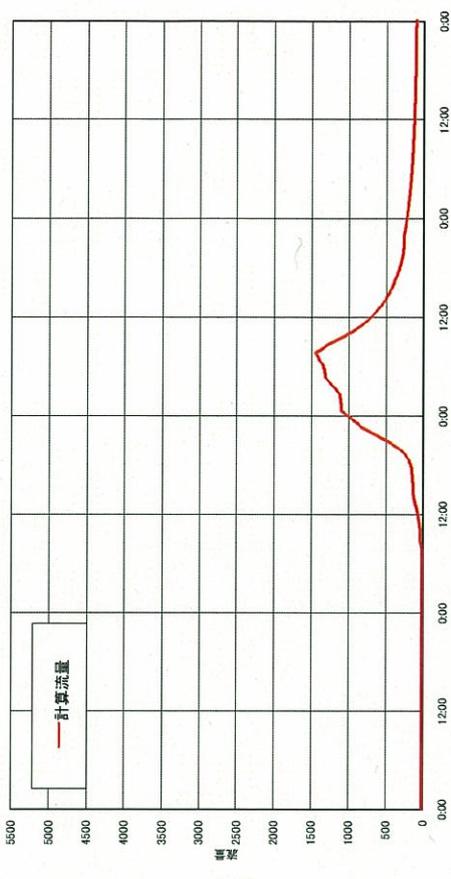
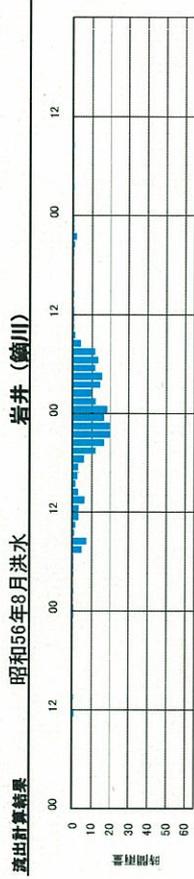


流出計算結果 昭和56年8月洪水 岩島(吾妻川)

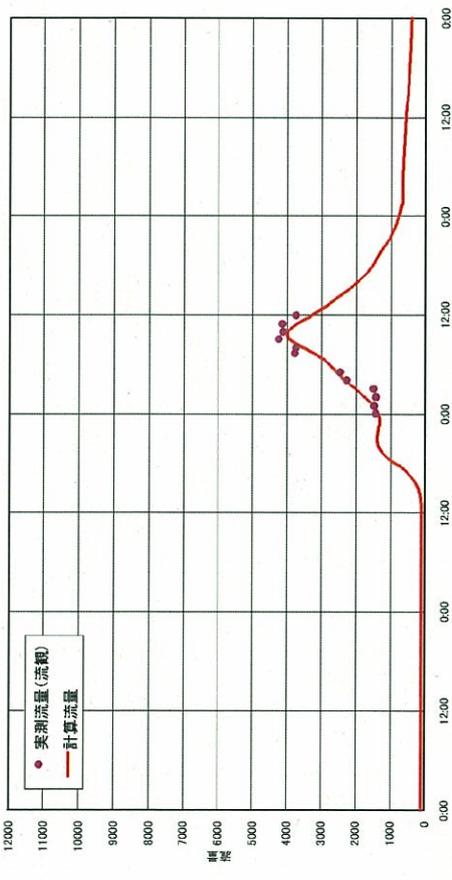
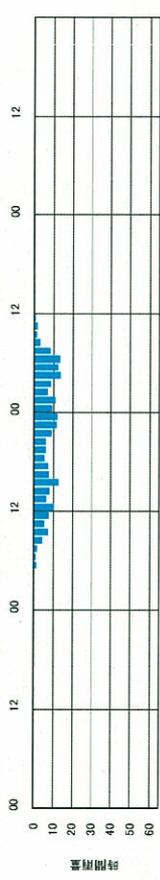


流出計算結果 昭和56年8月洪水 上黒尾(碓氷川)

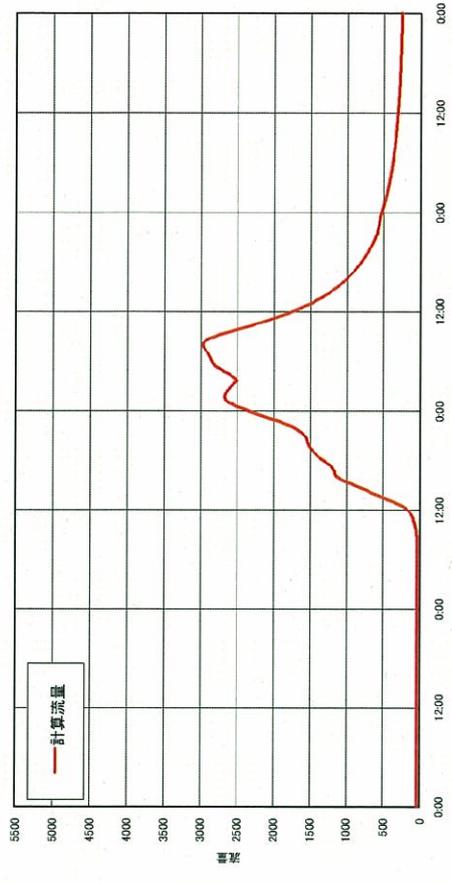
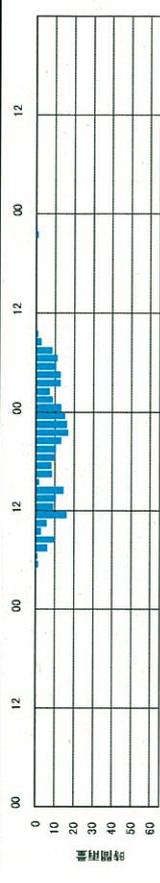




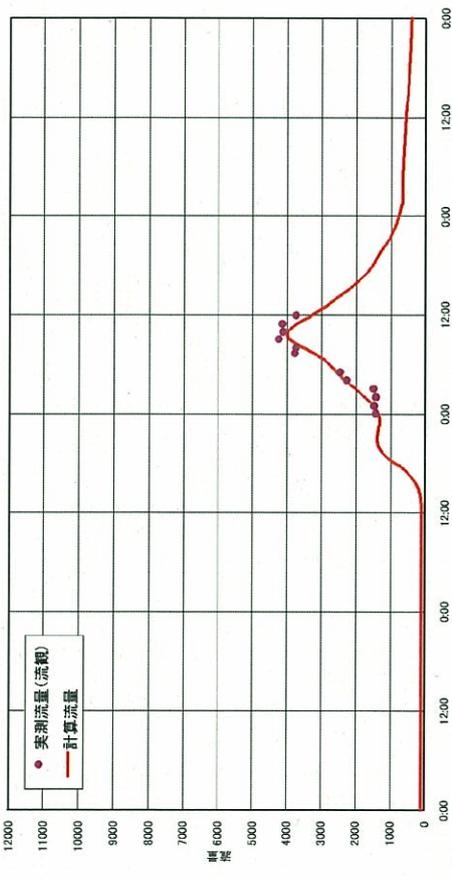
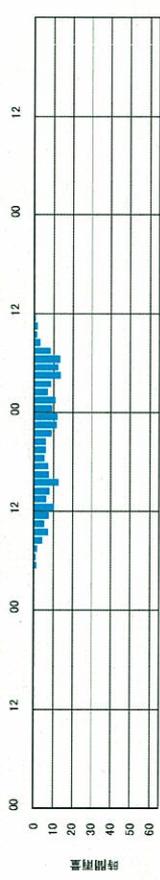
流出計算結果 昭和56年8月洪水 上福島(利根川)



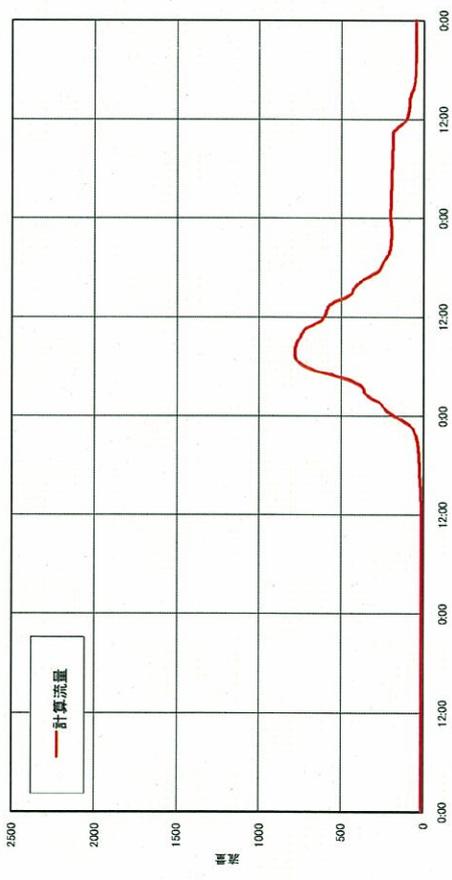
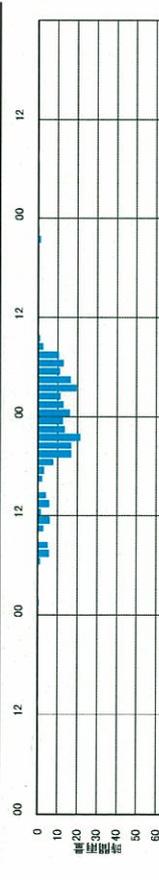
流出計算結果 昭和56年8月洪水 岩鼻(高川)



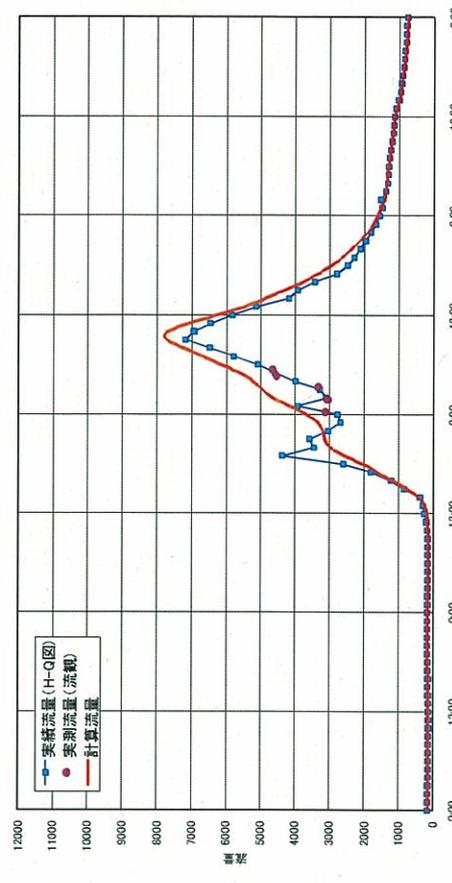
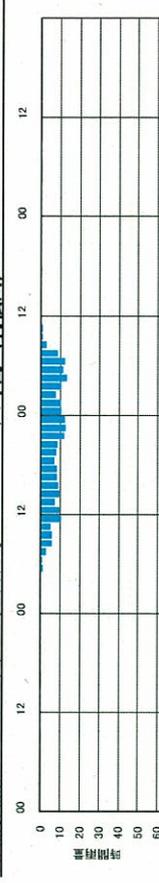
流出計算結果 昭和56年8月洪水 上福島(利根川)



流出計算結果 昭和56年8月洪水 若泉(神流川)



流出計算結果 昭和56年8月洪水 八斗島(利根川)



流出計算に用いた定数

洪水名 昭和57年7月洪水

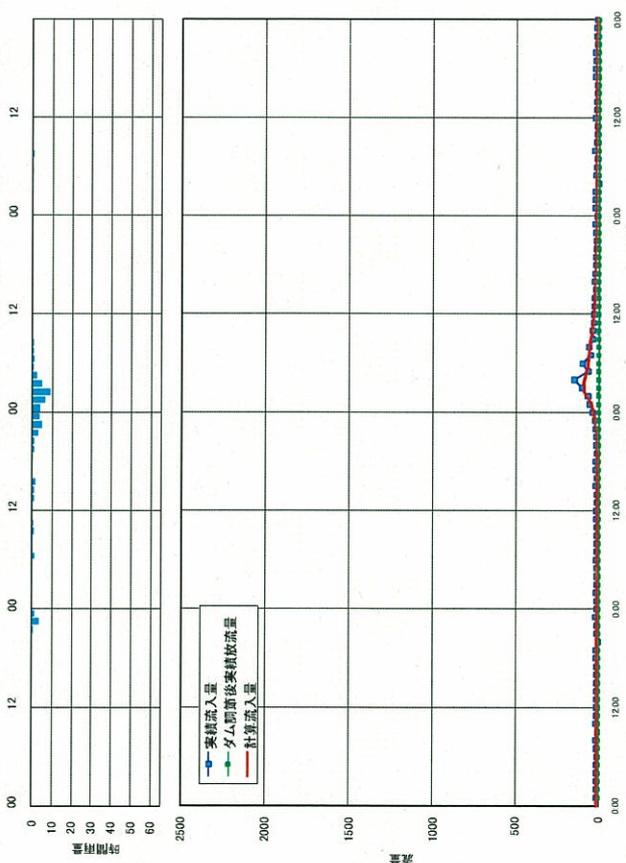
流域定数

流域 No	流域 面積 A (km <sup>2</sup> )	一次 流出率 f1	飽和 雨量 Rsa (mm)	流入係数 fsa	初期 損失 雨量 R0 (mm)	遅滞 時間 Tl (分)	係数		開始 基底 流量 Qb1 (m <sup>3</sup> /s)
							k	p	
1	165.48	0.4	40	1.0	130	30	7.587	0.528	11.3
2	60.59	0.4	110	1.0	7.0	50	6.252	0.656	4.1
3	165.77	0.4	110	1.0	7.0	50	9.480	0.592	11.3
4	103.07	0.4	110	1.0	7.0	50	9.480	0.592	7.0
5	81.80	0.4	110	1.0	7.0	50	9.480	0.592	5.6
6	110.19	0.4	130	1.0	5.0	40	10.591	0.655	7.5
7	79.19	0.4	110	1.0	7.0	50	9.480	0.592	5.4
8	226.00	0.4	110	1.0	7.0	50	9.480	0.592	15.4
9	252.05	0.4	170	1.0	4.0	90	13.487	0.530	17.2
10	161.64	0.4	170	1.0	4.0	90	13.487	0.530	11.0
11	78.78	0.4	170	1.0	4.0	90	13.487	0.530	5.4
12	182.31	0.4	110	1.0	7.0	50	9.480	0.592	12.4
13	144.49	0.4	-	-	14.0	50	35.239	0.300	9.8
14	269.24	0.4	-	-	14.0	100	29.321	0.305	18.3
15	289.00	0.4	-	-	14.0	100	29.321	0.305	19.7
16	153.20	0.4	-	-	14.0	100	29.321	0.305	10.4
17	38.30	0.4	-	-	14.0	50	35.239	0.300	2.6
18	164.22	0.4	-	-	14.0	50	35.239	0.300	11.2
19	157.01	0.4	-	-	14.0	50	35.239	0.300	10.7
20	188.37	0.4	-	-	14.0	50	35.239	0.300	12.8
21	97.12	0.4	-	-	14.0	50	35.239	0.300	6.6
22	93.33	0.4	-	-	14.0	50	35.239	0.300	6.4
23	24.68	0.4	-	-	14.0	50	35.239	0.300	1.7
24	23.88	0.4	-	-	14.0	50	35.239	0.300	1.6
25	155.13	0.6	100	1.0	7.0	30	29.519	0.428	10.6
26	110.02	0.6	100	1.0	7.0	40	18.623	0.572	7.5
27	121.39	0.6	100	1.0	7.0	60	10.765	0.680	8.3
28	165.39	0.6	100	1.0	7.0	40	18.623	0.572	11.3
29	43.27	0.6	100	1.0	7.0	40	18.623	0.572	2.9
30	190.64	0.6	100	1.0	5.0	40	18.623	0.572	13.0
31	158.74	0.6	100	1.0	5.0	40	18.623	0.572	10.8
32	201.63	0.6	100	1.0	5.0	40	18.623	0.572	13.7
33	75.00	0.6	100	1.0	7.0	40	18.623	0.572	5.1
34	94.85	0.4	-	-	14.0	50	35.239	0.300	6.5
35	70.05	0.6	100	1.0	7.0	40	18.623	0.572	4.8
36	269.56	0.6	130	1.0	22.0	80	29.976	0.476	18.4
37	53.25	0.6	130	1.0	22.0	80	29.976	0.476	3.6
38	51.68	0.6	130	1.0	22.0	80	29.976	0.476	3.5
39	37.50	0.6	130	1.0	22.0	80	29.976	0.476	2.6
	5,107.81								348.0

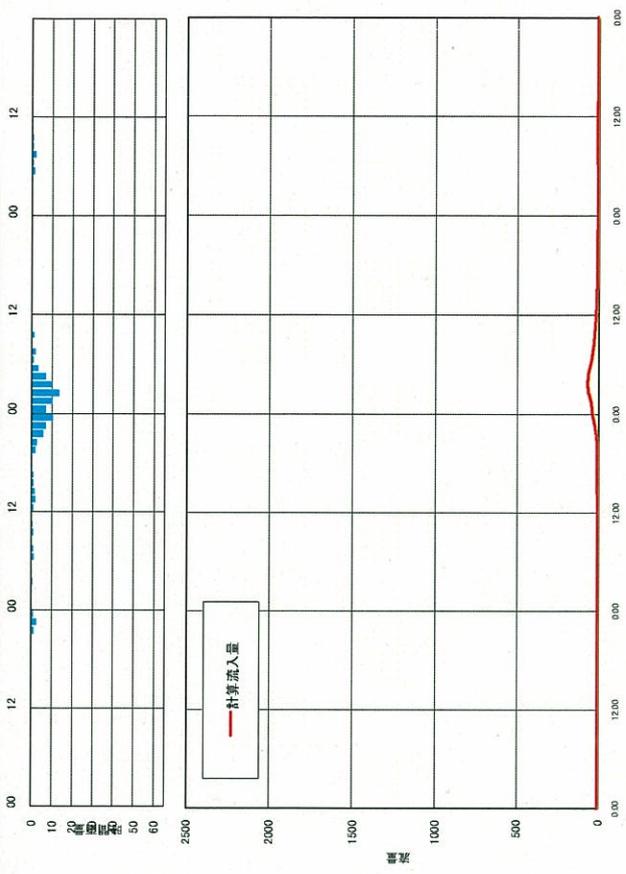
河道定数

河道 No.	K	P	遅滞 時間	
			Tl (時間)	Tl (時間)
a	-	-	-	0.217
b	-	-	-	0.234
A	4.476	0.699	-	0.165
B	12.030	0.665	-	0.350
C	13.878	0.665	-	0.273
D	7.381	0.663	-	0.160
E	4.966	0.729	-	0.180
F	4.831	0.797	-	0.250
G	6.405	0.724	-	0.170
H	6.223	0.681	-	0.143
K	8.039	0.712	-	0.281
O	12.928	0.627	-	0.208
Q	9.401	0.727	-	0.509
R	7.492	0.632	-	0.127
N	7.515	0.644	-	0.306
I	6.235	0.742	-	0.318
J	8.598	0.654	-	0.269
M	1.660	0.752	-	0.095
L	16.279	0.614	-	0.333
P	6.775	0.684	-	0.268

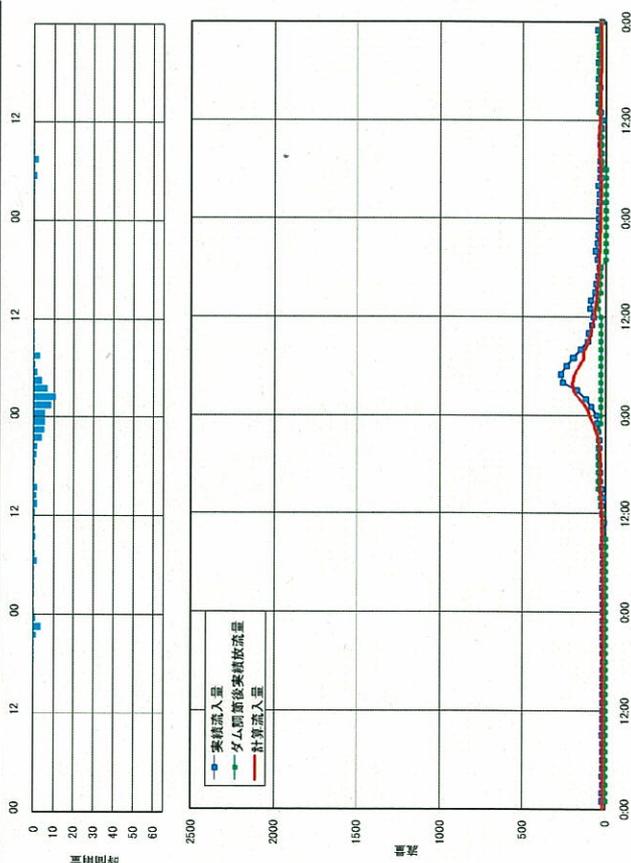
流出計算結果 昭和57年7月洪水 矢木沢ダム (利根川)



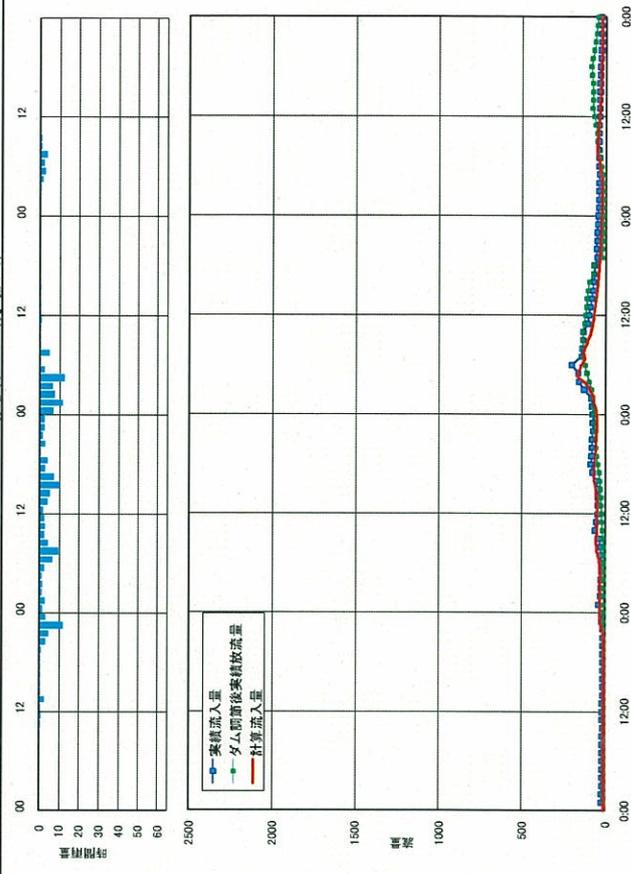
流出計算結果 昭和57年7月洪水 奈良俣ダム (槽俣川)



流出計算結果 昭和57年7月洪水 藤原ダム (利根川)



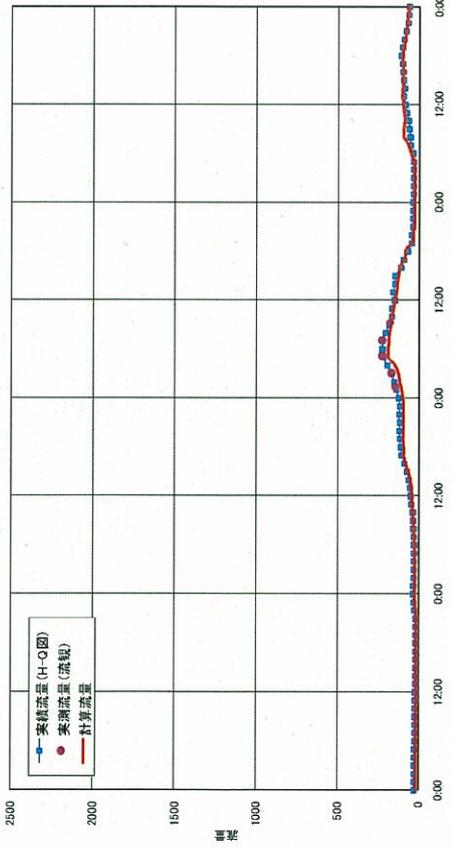
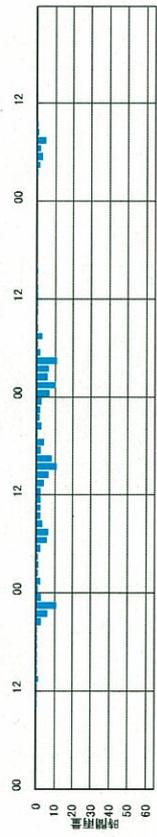
流出計算結果 昭和57年7月洪水 相俣ダム (赤谷川)



流出計算結果

昭和57年7月洪水

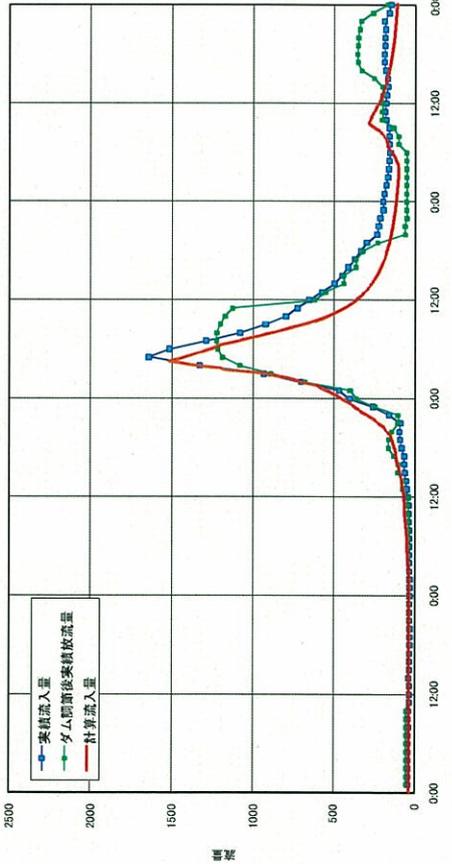
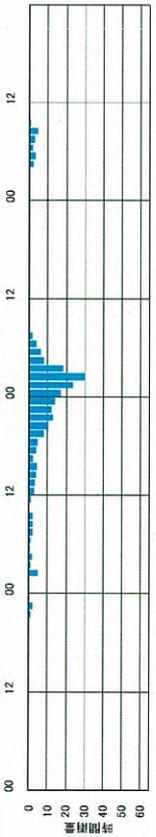
小袖橋 (赤谷川)



流出計算結果

昭和57年7月洪水

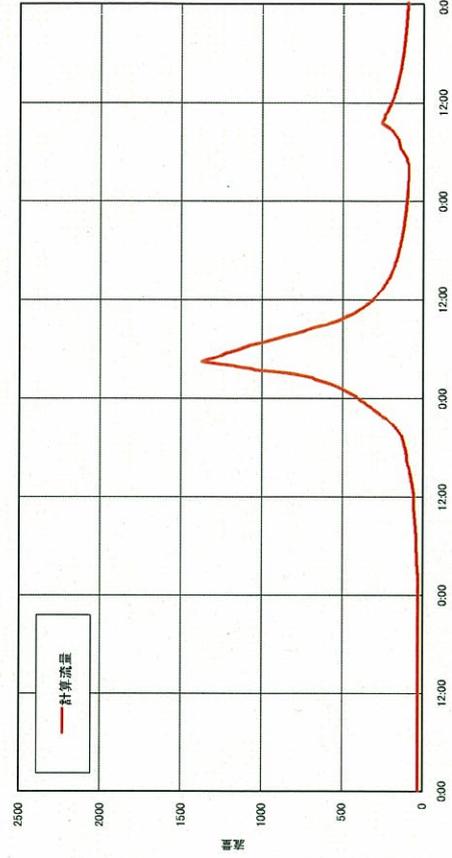
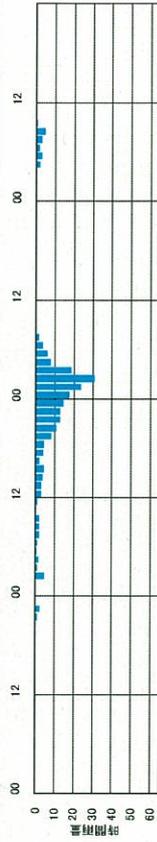
蘆原ダム (片品川)



流出計算結果

昭和57年7月洪水

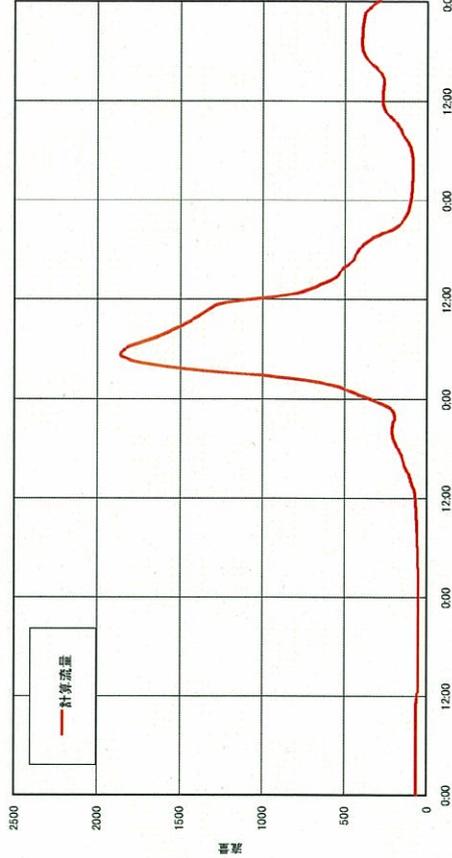
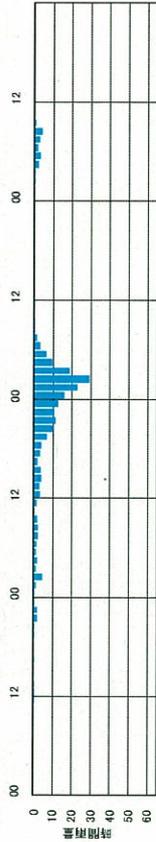
千鳥 (片品川)



流出計算結果

昭和57年7月洪水

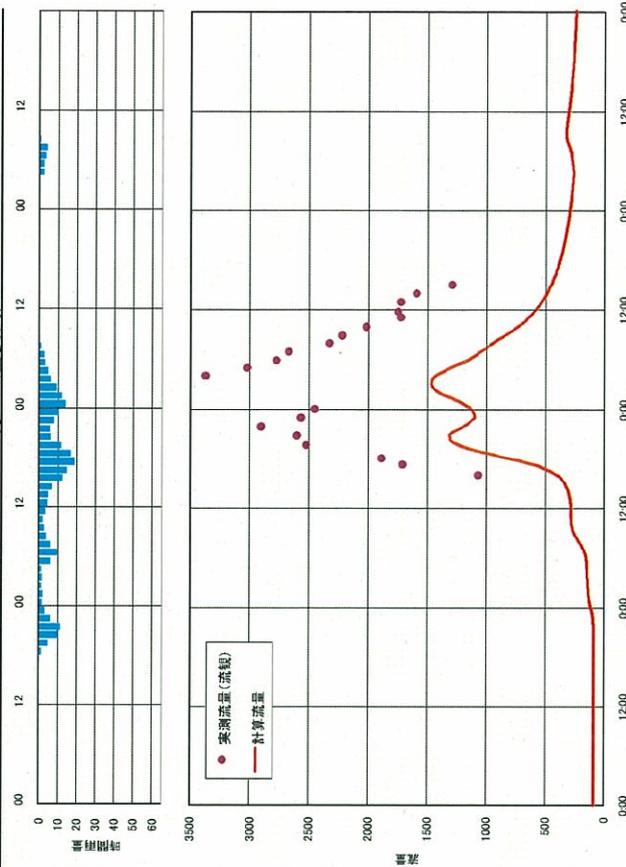
上久屋 (片品川)



流出計算結果

昭和57年7月洪水

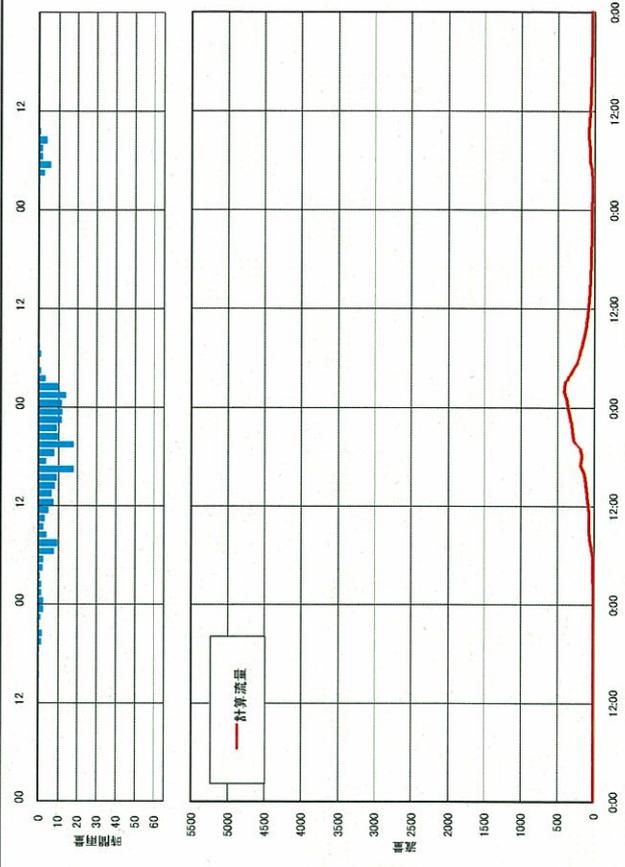
村上 (香妻川)



流出計算結果

昭和57年7月洪水

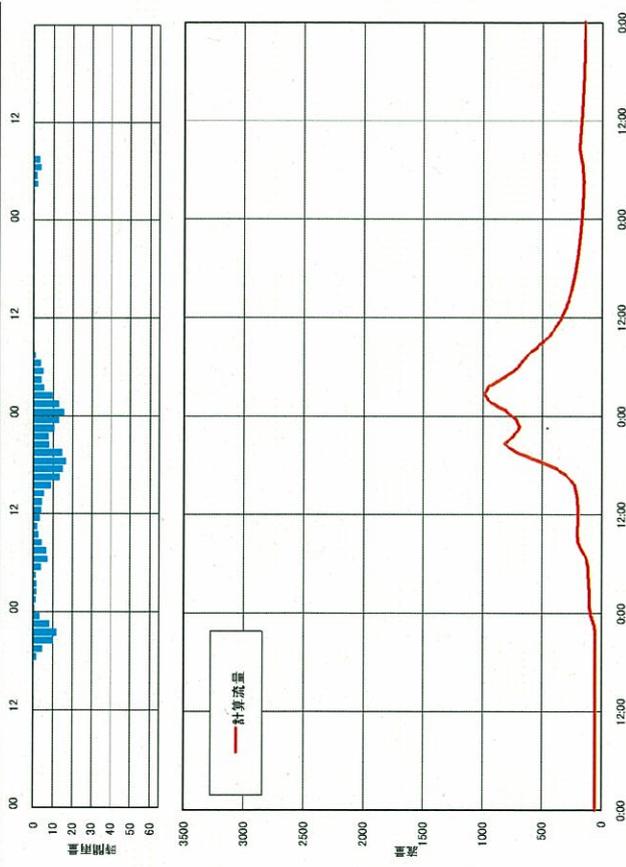
安中 (碓氷川)



流出計算結果

昭和57年7月洪水

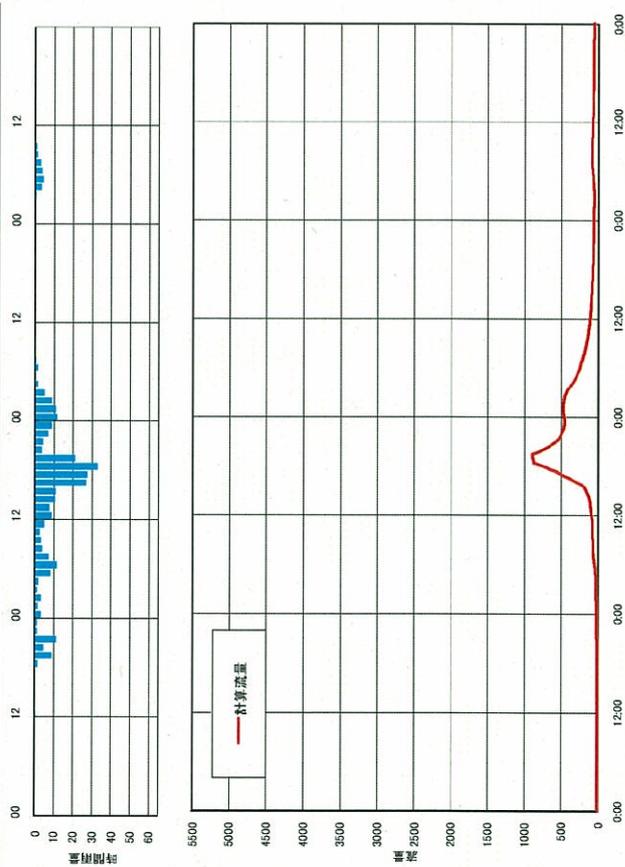
岩島 (香妻川)

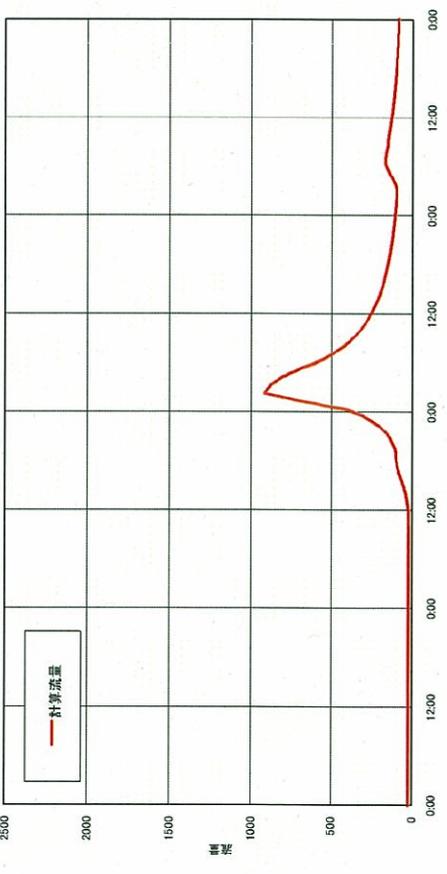
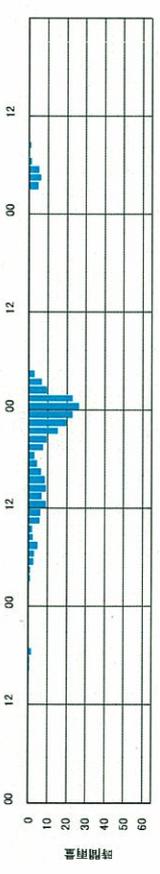
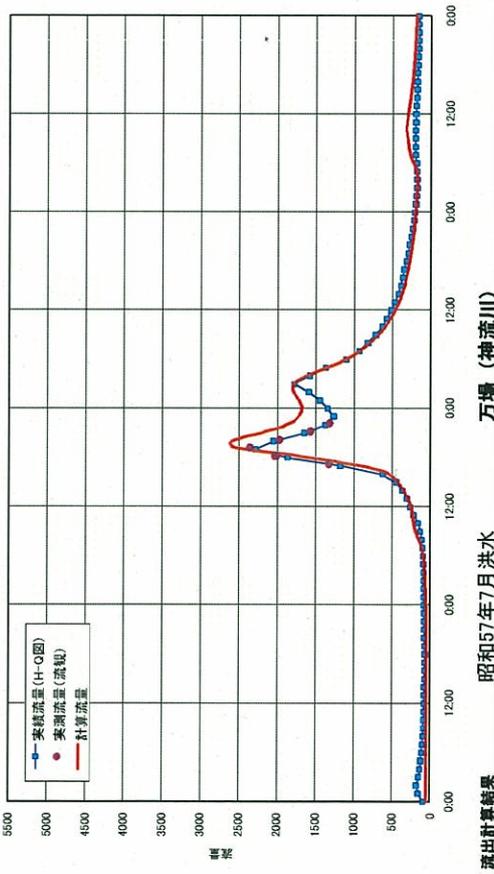
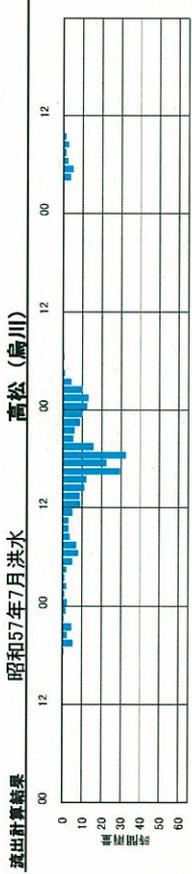
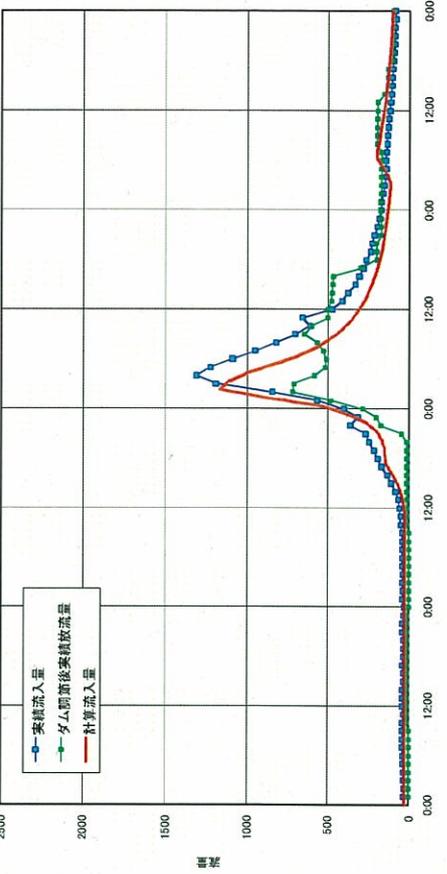
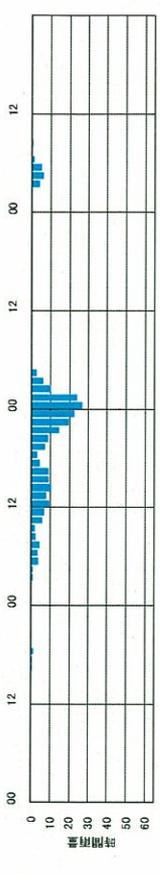
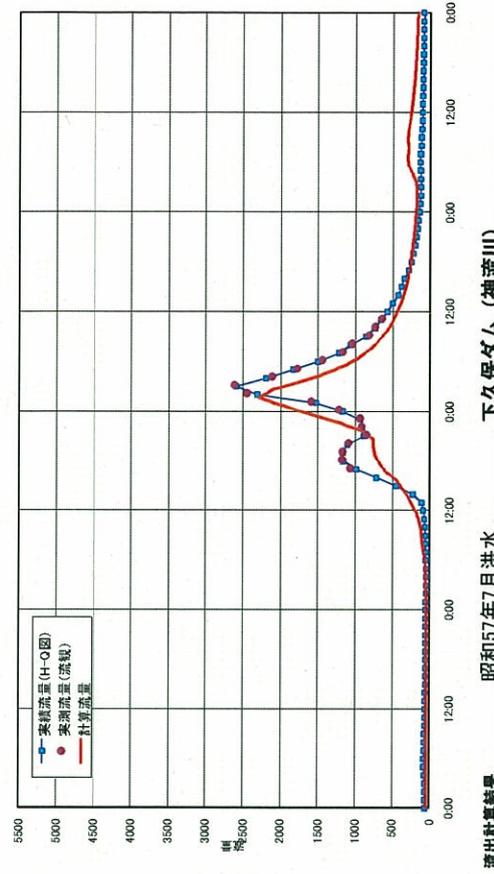
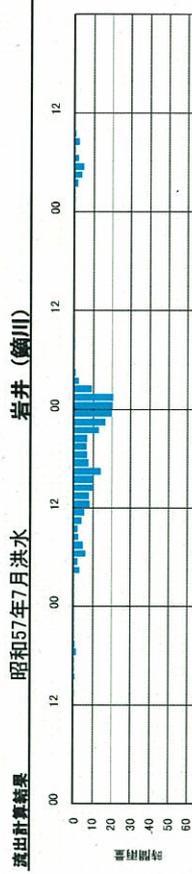


流出計算結果

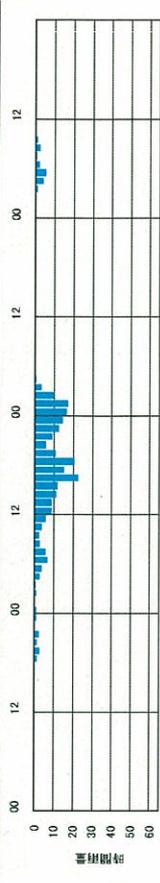
昭和57年7月洪水

上里厚 (碓氷川)

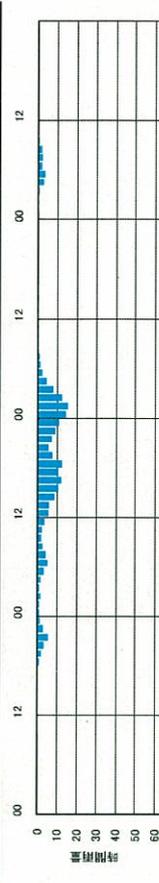




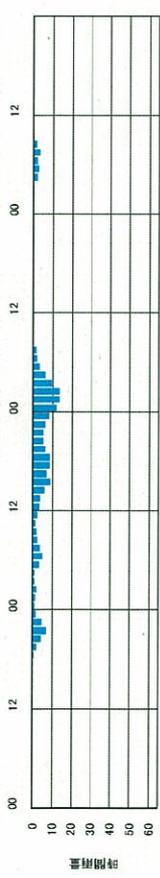
流出計算結果 昭和57年7月洪水 岩鼻 (高川)



流出計算結果 昭和57年7月洪水 八斗島 (利根川)



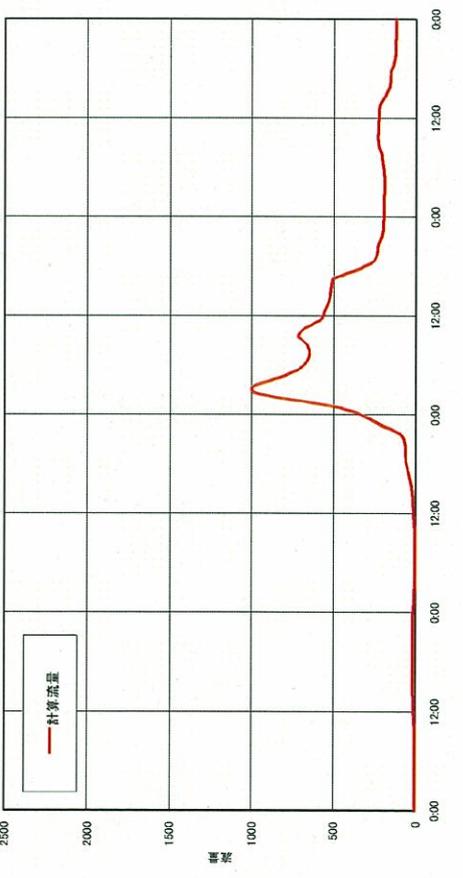
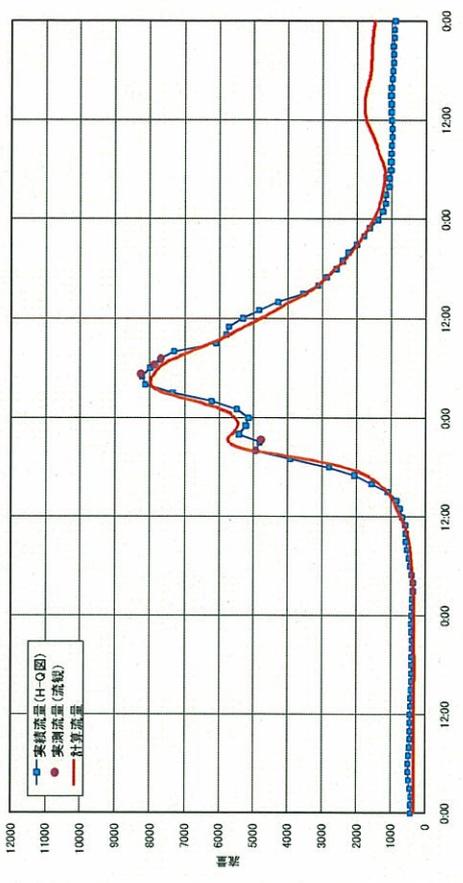
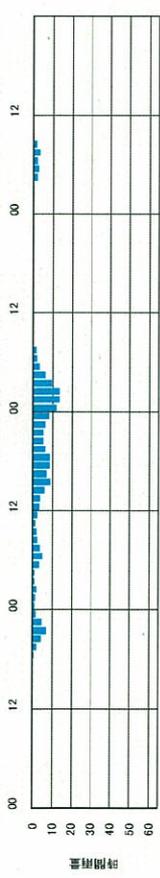
流出計算結果 昭和57年7月洪水 上福島 (利根川)



流出計算結果 昭和57年7月洪水 若泉 (神流川)



流出計算結果



流出計算に用いた定数

洪水名 昭和57年9月洪水

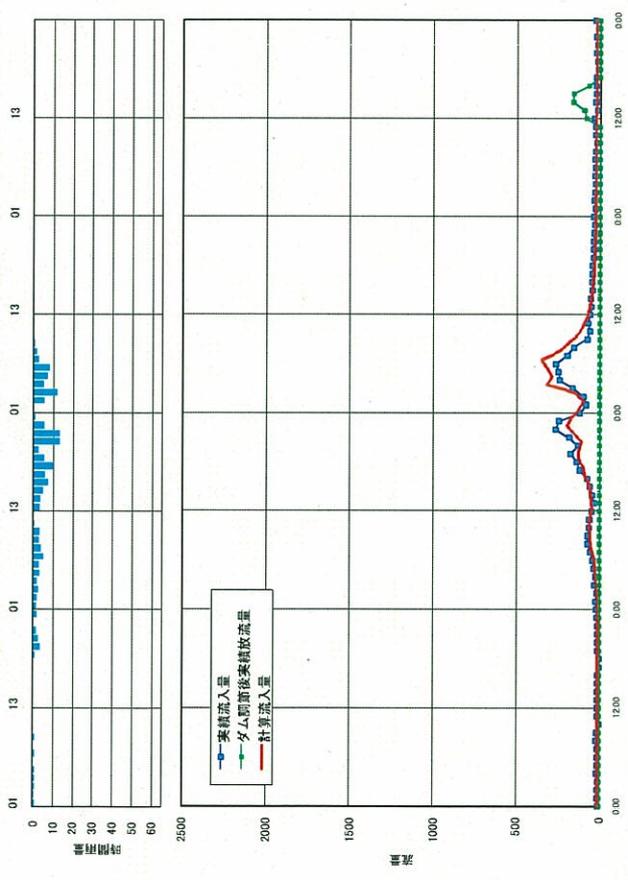
流域定数

流域 No	流域 面積 A (km <sup>2</sup> )	一次 流出率 f1	飽和 雨量 Rsa (mm)	流入係数 fsa	初期 損失 雨量 R0 (mm)	遅滞 時間 Tl (分)	係数		開始 基底 流量 Qb1 (m <sup>3</sup> /s)
							k	p	
1	165.48	0.4	110	1.0	24.0	30	7.587	0.528	10.9
2	60.59	0.4	120	1.0	19.0	50	6.252	0.656	4.0
3	165.77	0.4	120	1.0	19.0	50	9.480	0.592	10.9
4	103.07	0.4	120	1.0	19.0	50	9.480	0.592	6.8
5	81.80	0.4	120	1.0	19.0	50	9.480	0.592	5.4
6	110.19	0.4	100	1.0	30.0	40	10.591	0.655	7.2
7	79.19	0.4	120	1.0	19.0	50	9.480	0.592	5.2
8	226.00	0.4	120	1.0	19.0	50	9.480	0.592	14.8
9	252.05	0.4	140	1.0	18.0	90	13.487	0.530	16.5
10	161.64	0.4	140	1.0	18.0	90	13.487	0.530	10.6
11	78.78	0.4	140	1.0	18.0	90	13.487	0.530	5.2
12	182.31	0.4	120	1.0	19.0	50	9.480	0.592	12.0
13	144.49	0.4	—	—	22.0	50	35.239	0.300	9.5
14	269.24	0.4	—	—	22.0	100	29.321	0.305	17.7
15	289.00	0.4	—	—	22.0	100	29.321	0.305	19.0
16	153.20	0.4	—	—	22.0	100	29.321	0.305	10.0
17	38.30	0.4	—	—	22.0	100	29.321	0.305	2.5
18	164.22	0.4	—	—	22.0	50	35.239	0.300	10.8
19	157.01	0.4	—	—	22.0	50	35.239	0.300	10.3
20	188.37	0.4	—	—	22.0	50	35.239	0.300	12.4
21	97.12	0.4	—	—	22.0	50	35.239	0.300	6.4
22	93.33	0.4	—	—	22.0	50	35.239	0.300	6.1
23	24.68	0.4	—	—	22.0	50	35.239	0.300	1.6
24	23.88	0.4	—	—	22.0	50	35.239	0.300	1.6
25	155.13	0.6	120	1.0	18.0	30	29.519	0.428	10.2
26	110.02	0.6	120	1.0	18.0	40	18.623	0.572	7.2
27	121.39	0.6	80	1.0	22.0	60	10.765	0.680	8.0
28	165.39	0.6	120	1.0	18.0	40	18.623	0.572	10.8
29	43.27	0.6	120	1.0	18.0	40	18.623	0.572	2.8
30	190.64	0.6	150	1.0	12.0	40	18.623	0.572	12.5
31	158.74	0.6	150	1.0	12.0	40	18.623	0.572	10.4
32	201.63	0.6	150	1.0	12.0	40	18.623	0.572	13.2
33	75.00	0.6	120	1.0	18.0	40	18.623	0.572	4.9
34	94.85	0.4	—	—	22.0	50	35.239	0.300	6.2
35	70.05	0.6	120	1.0	18.0	40	18.623	0.572	4.6
36	269.56	0.6	130	1.0	22.0	80	29.976	0.476	17.7
37	53.25	0.6	130	1.0	22.0	80	29.976	0.476	3.5
38	51.68	0.6	130	1.0	22.0	80	29.976	0.476	3.4
39	37.50	0.6	130	1.0	22.0	80	29.976	0.476	2.5
	5,107.81								335.0

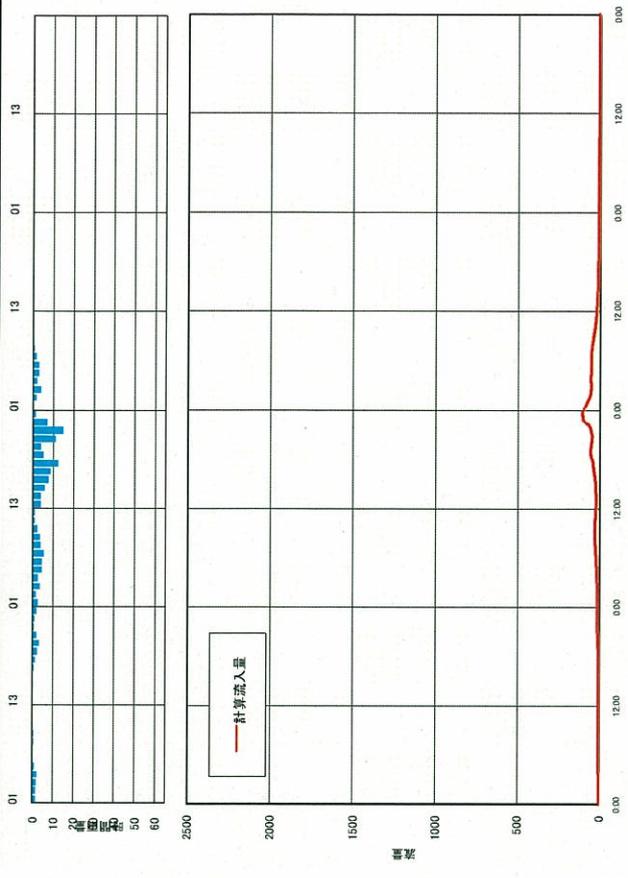
河道定数

河道 No.	K	P	遅滞 時間	
			Tl (時間)	Tl (時間)
a	—	—	—	0.217
b	—	—	—	0.234
A	4.476	0.699	—	0.165
B	12.030	0.665	—	0.350
C	13.878	0.665	—	0.273
D	7.381	0.663	—	0.160
E	4.966	0.729	—	0.180
F	4.831	0.797	—	0.250
G	6.405	0.724	—	0.170
H	6.223	0.681	—	0.143
K	8.039	0.712	—	0.281
O	12.928	0.627	—	0.208
Q	9.401	0.727	—	0.509
R	7.492	0.632	—	0.127
N	7.515	0.644	—	0.306
I	6.235	0.742	—	0.318
J	8.598	0.654	—	0.269
M	1.660	0.752	—	0.095
L	16.279	0.614	—	0.333
P	6.775	0.684	—	0.268

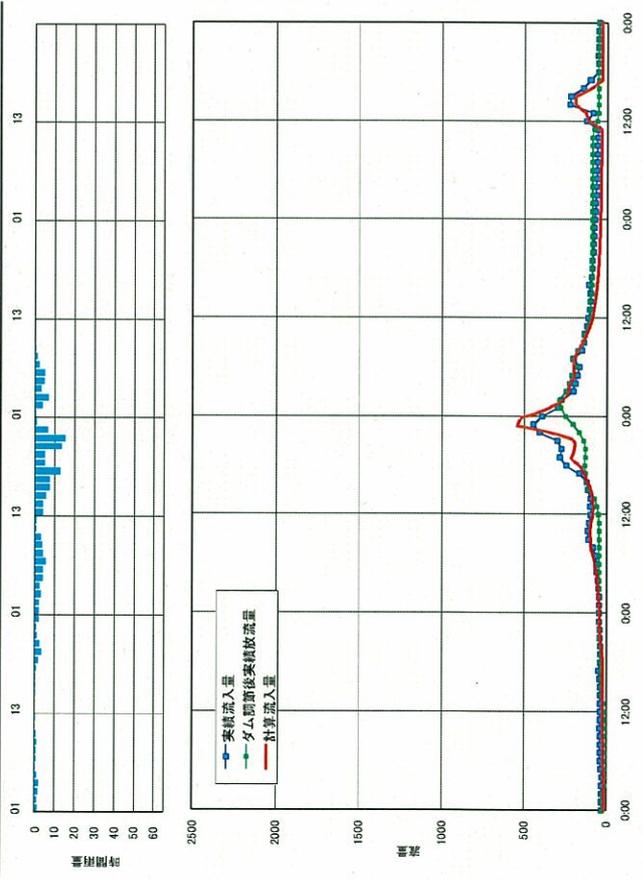
流出計算結果 昭和57年9月洪水 矢木沢ダム (利根川)



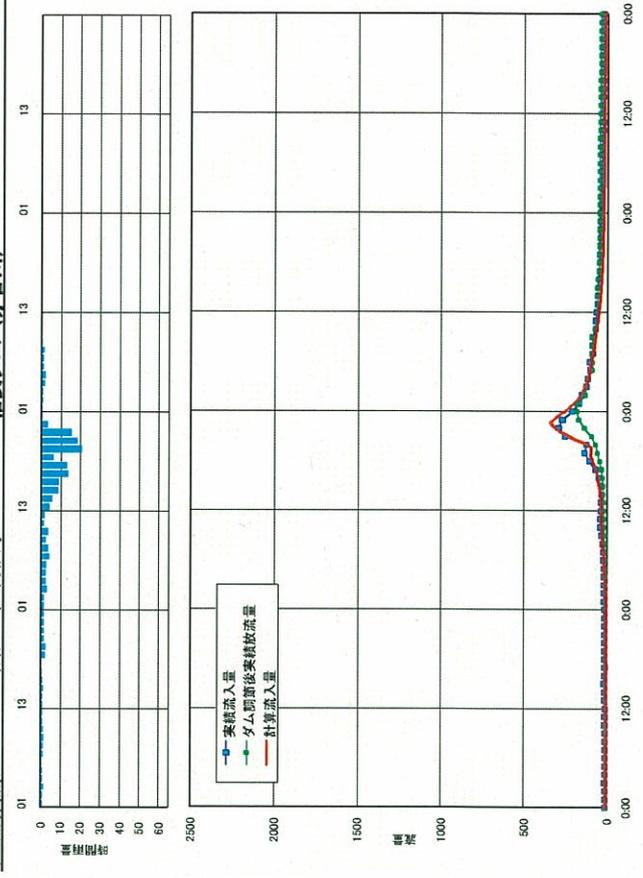
流出計算結果 昭和57年9月洪水 奈良原ダム (増良川)



流出計算結果 昭和57年9月洪水 藤原ダム (利根川)



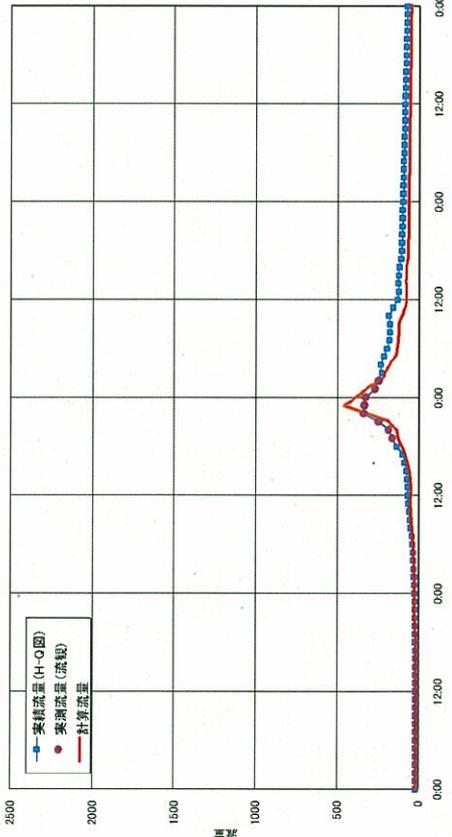
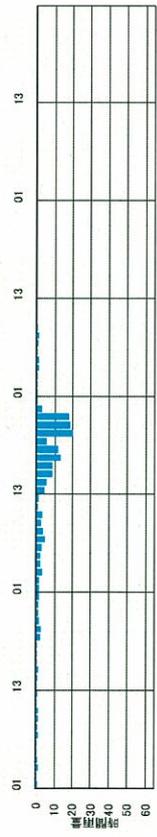
流出計算結果 昭和57年9月洪水 相模ダム (赤谷川)



流出計算結果

昭和57年9月洪水

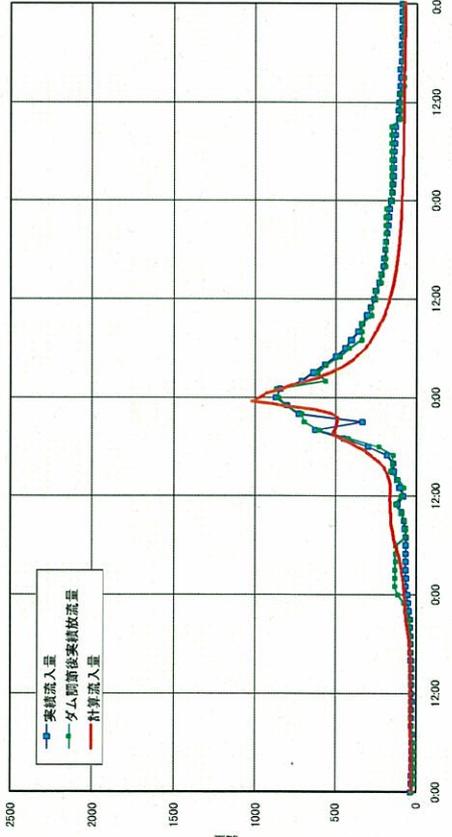
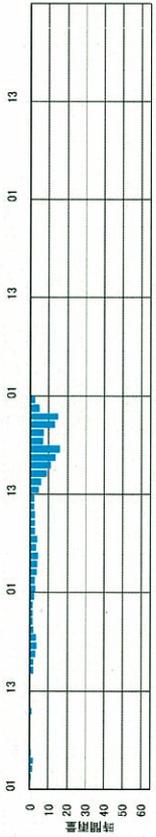
小袖橋 (赤谷川)



流出計算結果

昭和57年9月洪水

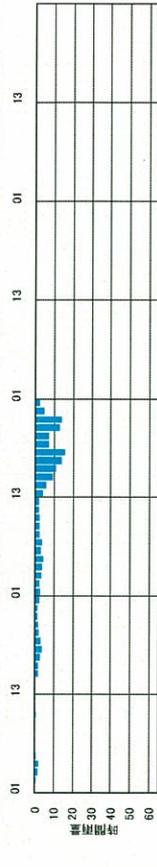
蘆原ダム (片品川)



流出計算結果

昭和57年9月洪水

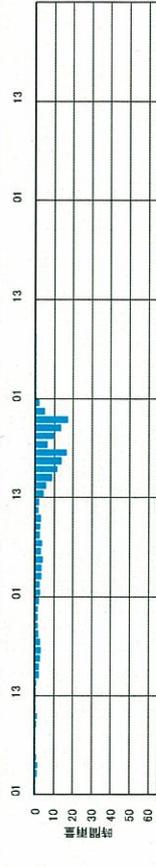
千鳥 (片品川)



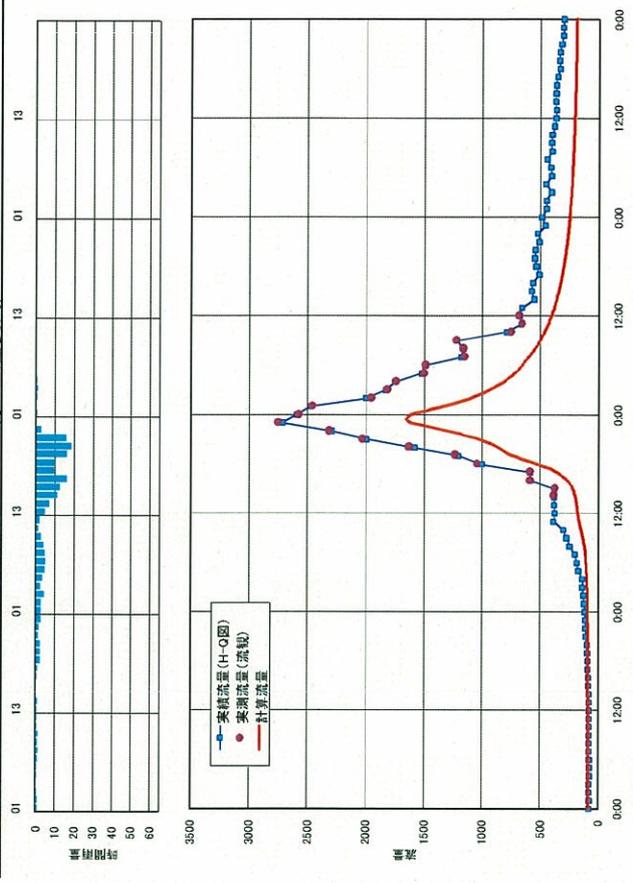
流出計算結果

昭和57年9月洪水

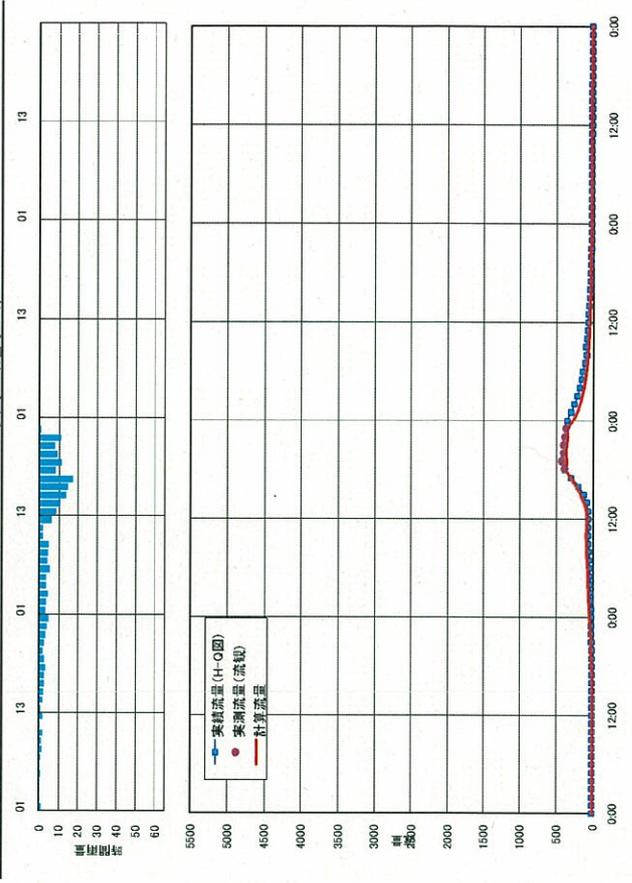
上久屋 (片品川)



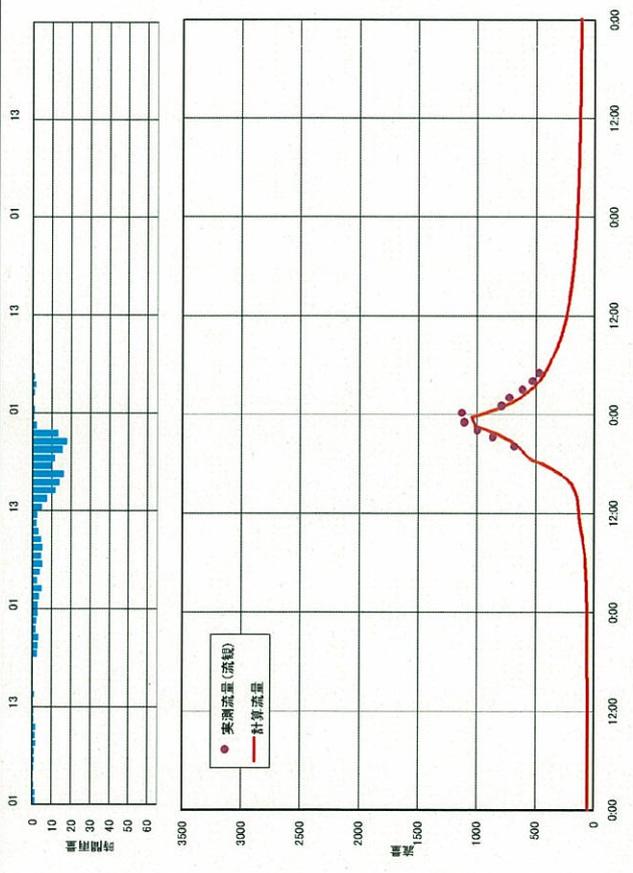
流出計算結果 昭和57年9月洪水 村上(吾妻川)



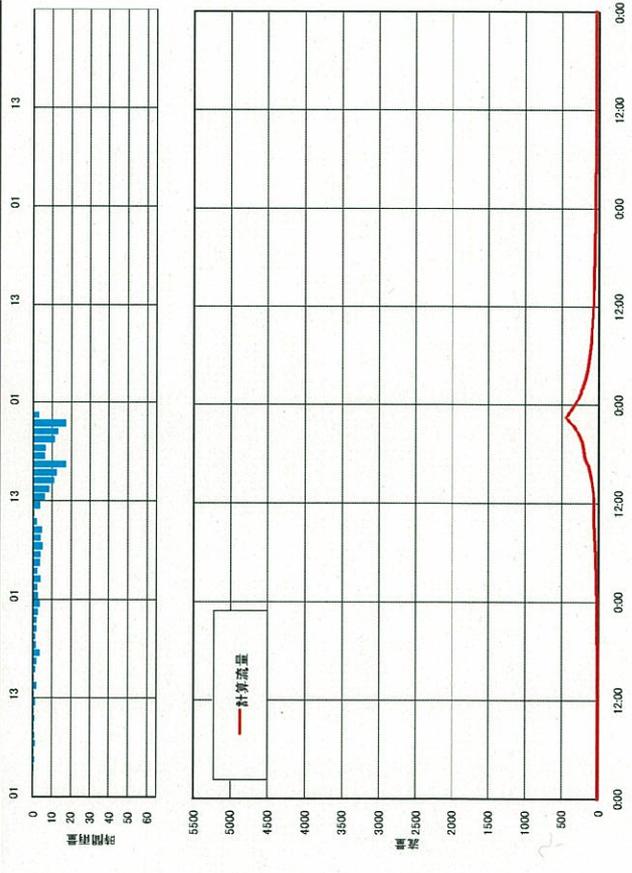
流出計算結果 昭和57年9月洪水 安中(碓氷川)



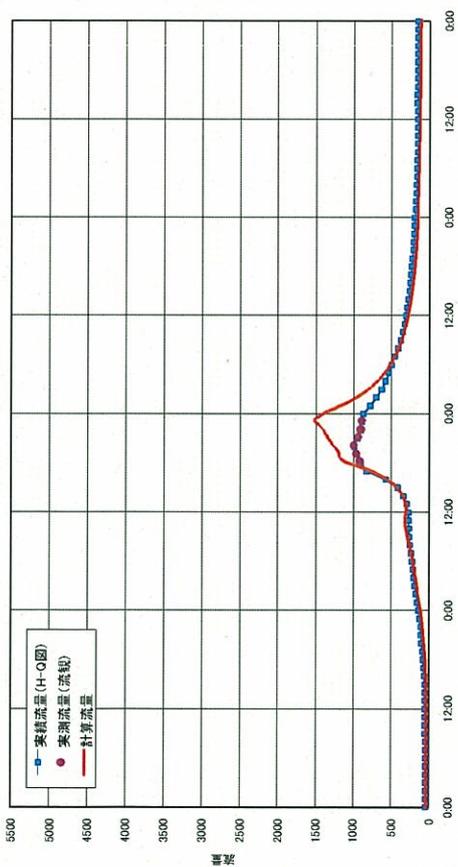
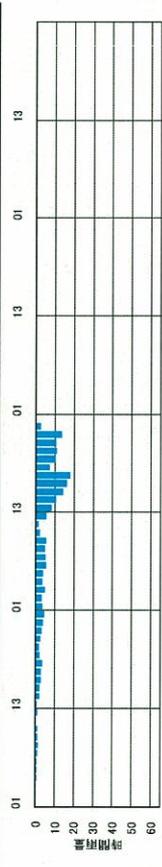
流出計算結果 昭和57年9月洪水 岩島(吾妻川)



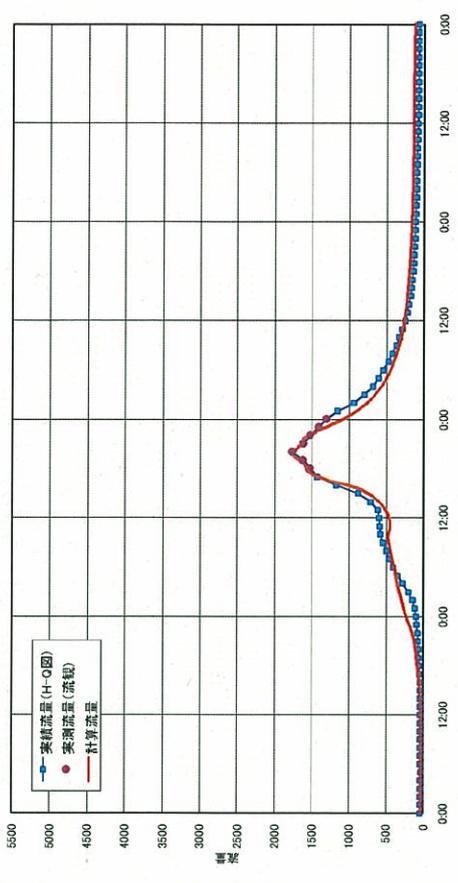
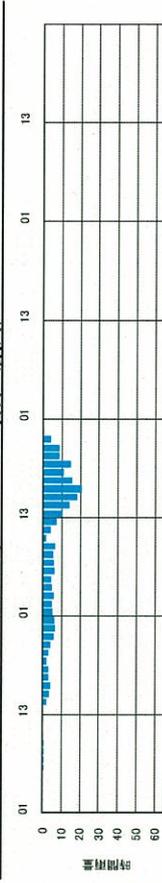
流出計算結果 昭和57年9月洪水 上里原(烏川)



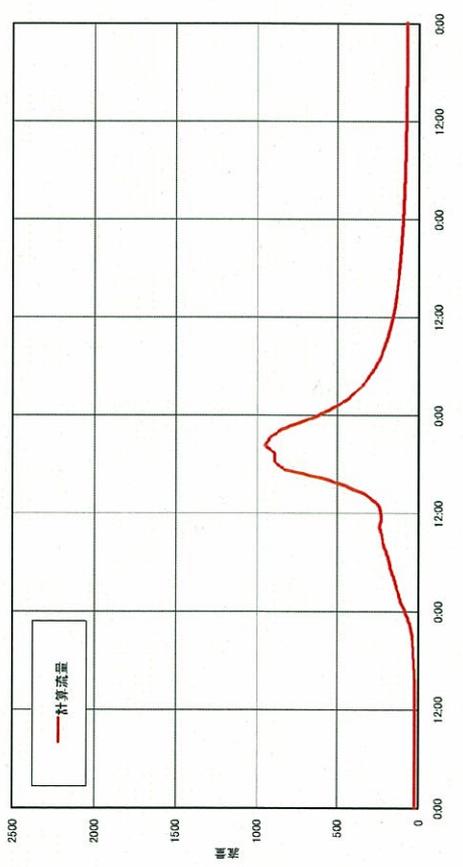
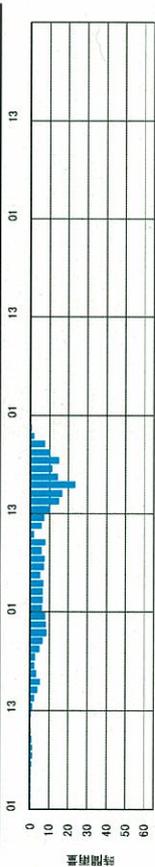
流出計算結果 昭和57年9月洪水 高松 (島川)



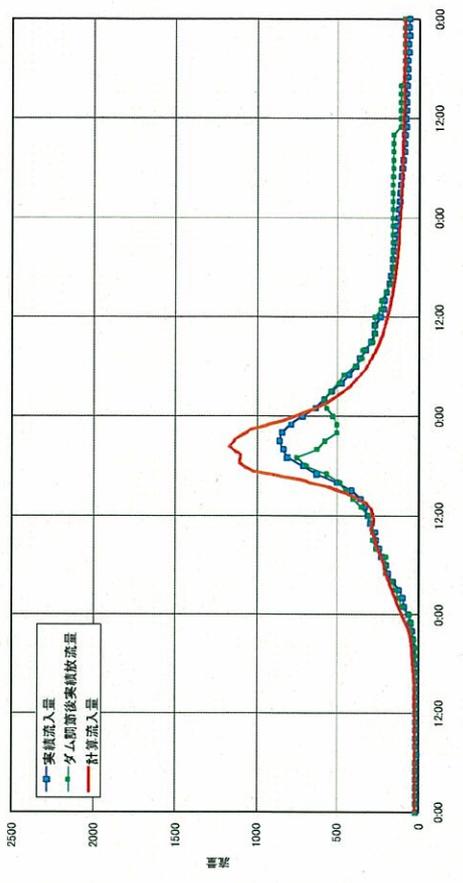
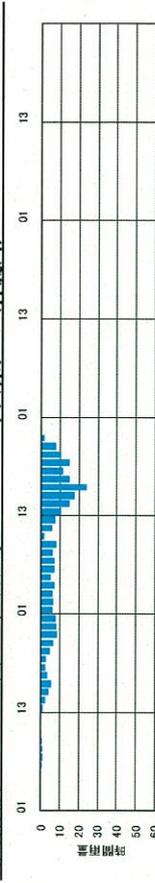
流出計算結果 昭和57年9月洪水 岩井 (鑿川)



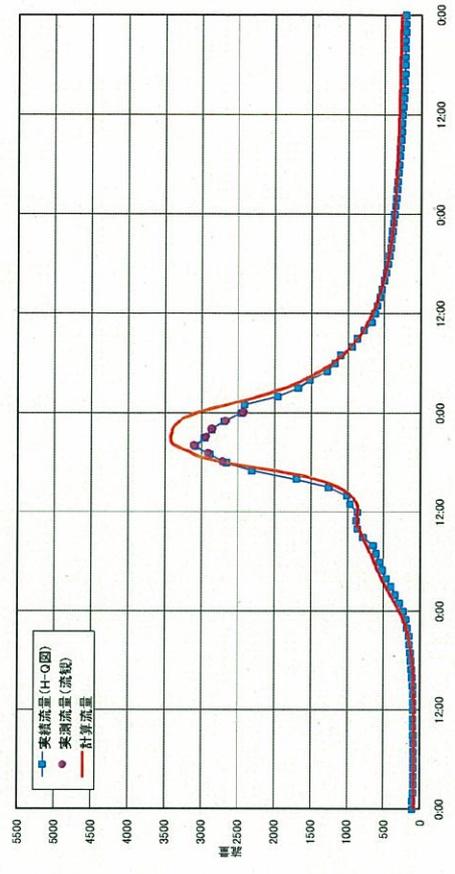
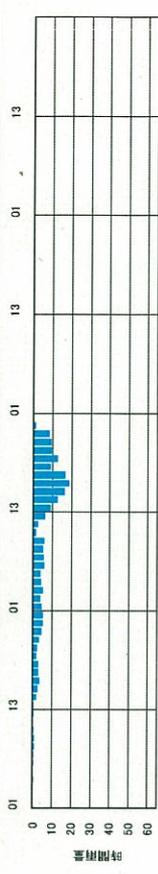
流出計算結果 昭和57年9月洪水 万場 (神流川)



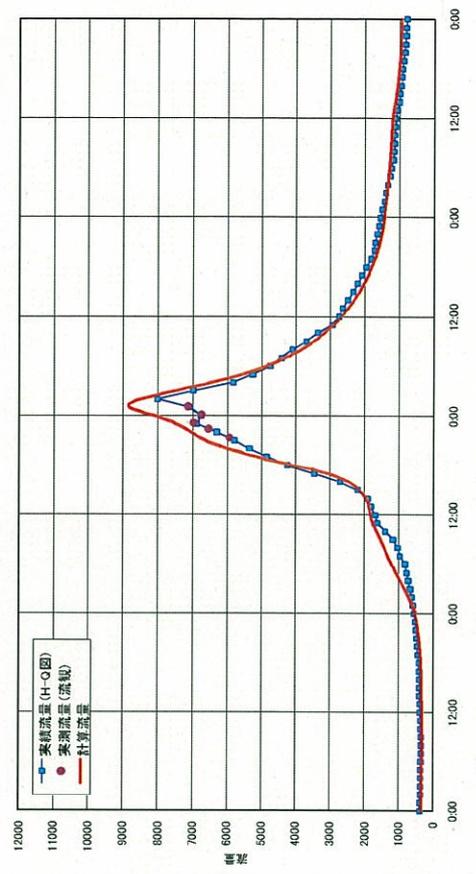
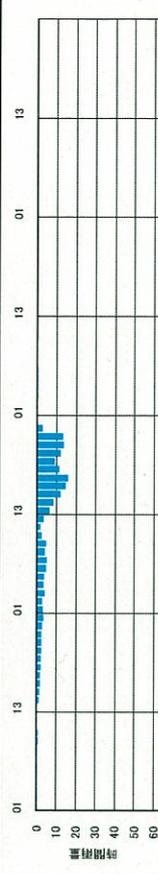
流出計算結果 昭和57年9月洪水 下久保ダム (神流川)



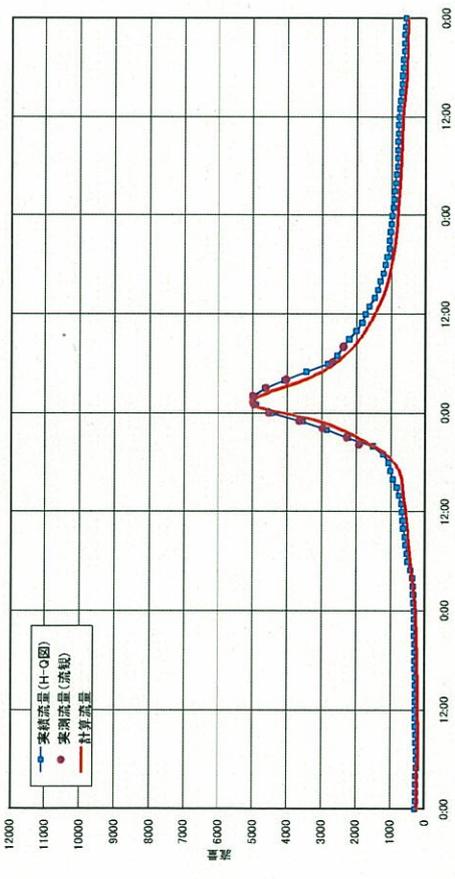
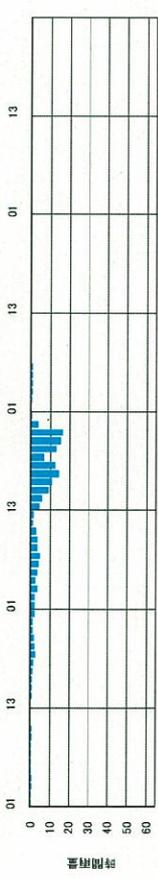
流出計算結果 昭和57年9月洪水 岩鼻 (高川)



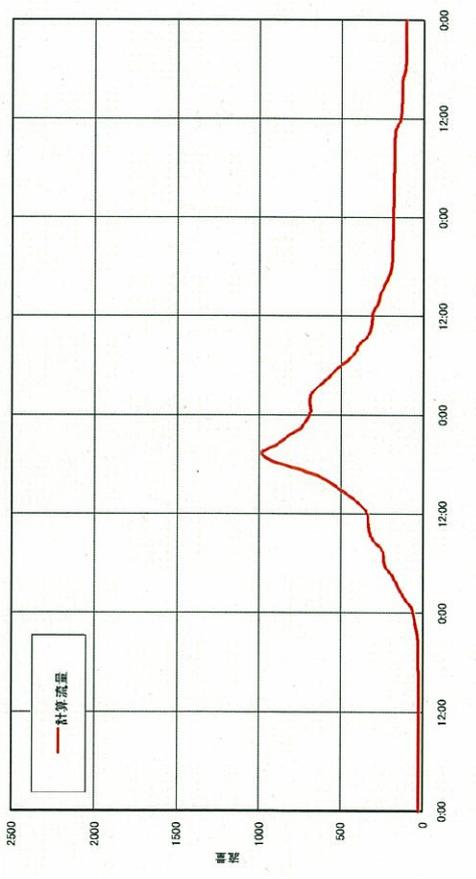
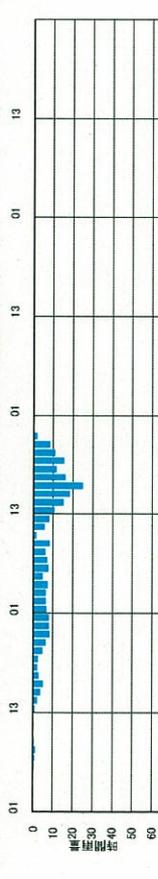
流出計算結果 昭和57年9月洪水 八斗島 (利根川)



流出計算結果 昭和57年9月洪水 上福島 (利根川)



流出計算結果 昭和57年9月洪水 若泉 (神流川)



流出計算に用いた定数

洪水名 平成10年9月洪水

流域定数

流域 No	流域面積 (km <sup>2</sup> )	一次流出率 f1	飽和雨量 Rsa (mm)	流入係数 fsa	初期損失雨量 R0 (mm)	遅滞時間 TI (分)	係数		開始基底流量 Qb1 (m <sup>3</sup> /s)
							k	p	
1	165.48	0.4	130	1.0	16.0	30	7.587	0.528	5.1
2	60.59	0.4	100	1.0	14.0	50	6.252	0.656	1.9
3	165.77	0.4	140	1.0	11.0	50	9.480	0.592	5.1
4	103.07	0.4	140	1.0	11.0	50	9.480	0.592	3.1
5	81.80	0.4	140	1.0	11.0	50	9.480	0.592	2.5
6	110.19	0.4	160	1.0	23.0	40	10.591	0.655	3.4
7	79.19	0.4	140	1.0	11.0	50	9.480	0.592	2.4
8	226.00	0.4	140	1.0	11.0	50	9.480	0.592	6.9
9	252.05	0.4	180	1.0	7.0	90	13.487	0.530	7.7
10	161.64	0.4	180	1.0	7.0	90	13.487	0.530	4.9
11	78.78	0.4	180	1.0	7.0	90	13.487	0.530	2.4
12	182.31	0.4	140	1.0	11.0	50	9.480	0.592	5.6
13	144.49	0.4	—	—	4.0	50	35.239	0.300	4.4
14	269.24	0.4	—	—	4.0	100	29.321	0.305	8.2
15	289.00	0.4	—	—	4.0	100	29.321	0.305	8.8
16	153.20	0.4	—	—	4.0	100	29.321	0.305	4.7
17	38.30	0.4	—	—	4.0	100	29.321	0.305	1.2
18	164.22	0.4	—	—	4.0	50	35.239	0.300	5.0
19	157.01	0.4	—	—	4.0	50	35.239	0.300	4.8
20	188.37	0.4	—	—	4.0	50	35.239	0.300	5.8
21	97.12	0.4	—	—	4.0	50	35.239	0.300	3.0
22	93.33	0.4	—	—	4.0	50	35.239	0.300	2.9
23	24.68	0.4	—	—	4.0	50	35.239	0.300	0.8
24	23.88	0.4	—	—	4.0	50	35.239	0.300	0.7
25	155.13	0.6	170	1.0	6.0	30	29.519	0.428	4.7
26	110.02	0.6	150	1.0	5.0	40	18.623	0.572	3.4
27	121.39	0.6	70	1.0	1.0	60	10.765	0.680	3.7
28	165.39	0.6	150	1.0	5.0	40	18.623	0.572	5.1
29	43.27	0.6	150	1.0	5.0	40	18.623	0.572	1.3
30	190.64	0.6	210	1.0	10.0	40	18.623	0.572	5.8
31	158.74	0.6	210	1.0	10.0	40	18.623	0.572	4.8
32	201.63	0.6	210	1.0	10.0	40	18.623	0.572	6.2
33	75.00	0.6	150	1.0	5.0	40	18.623	0.572	2.3
34	94.85	0.4	—	—	4.0	50	35.239	0.300	2.9
35	70.05	0.6	150	1.0	5.0	40	18.623	0.572	2.1
36	269.56	0.6	130	1.0	22.0	80	29.976	0.476	8.2
37	53.25	0.6	130	1.0	22.0	80	29.976	0.476	1.6
38	51.68	0.6	130	1.0	22.0	80	29.976	0.476	1.6
39	37.50	0.6	130	1.0	22.0	80	29.976	0.476	1.1
	5,107.81								156.0

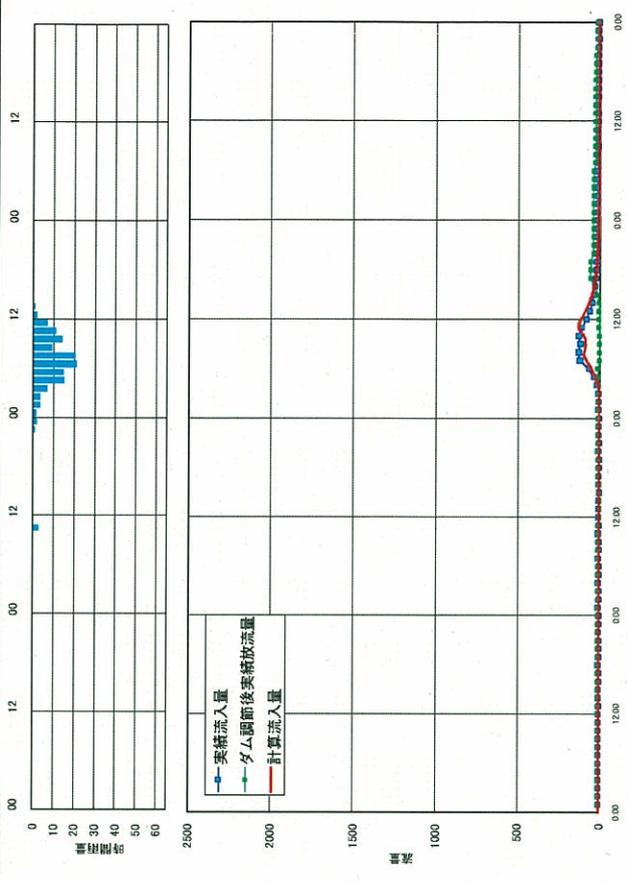
河道定数

河道 No.	K	P	遅滞時間	
			TI (時間)	TI (時間)
a	—	—	—	0.217
b	—	—	—	0.234
A	4.476	0.699	—	0.165
B	12.030	0.665	—	0.350
C	13.878	0.665	—	0.273
D	7.381	0.663	—	0.160
E	4.966	0.729	—	0.180
F	4.831	0.797	—	0.250
G	6.405	0.724	—	0.170
H	6.223	0.681	—	0.143
K	8.039	0.712	—	0.281
O	12.928	0.627	—	0.208
Q	9.401	0.727	—	0.509
R	7.492	0.632	—	0.127
N	7.515	0.644	—	0.306
I	6.235	0.742	—	0.318
J	8.598	0.654	—	0.269
M	1.660	0.752	—	0.095
L	16.279	0.614	—	0.333
P	6.775	0.684	—	0.268

流出計算結果

平成10年9月洪水

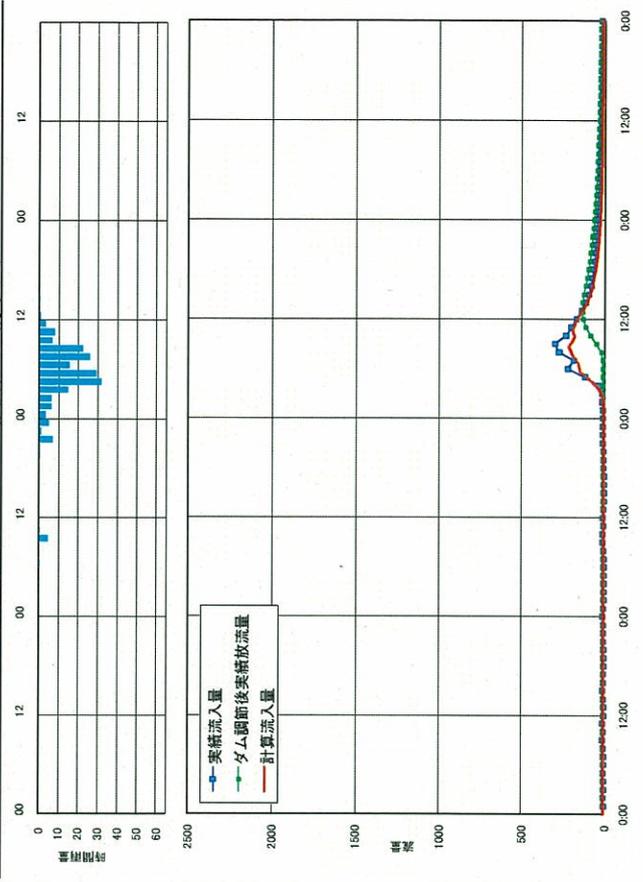
奈良俣ダム (樽俣川)



流出計算結果

平成10年9月洪水

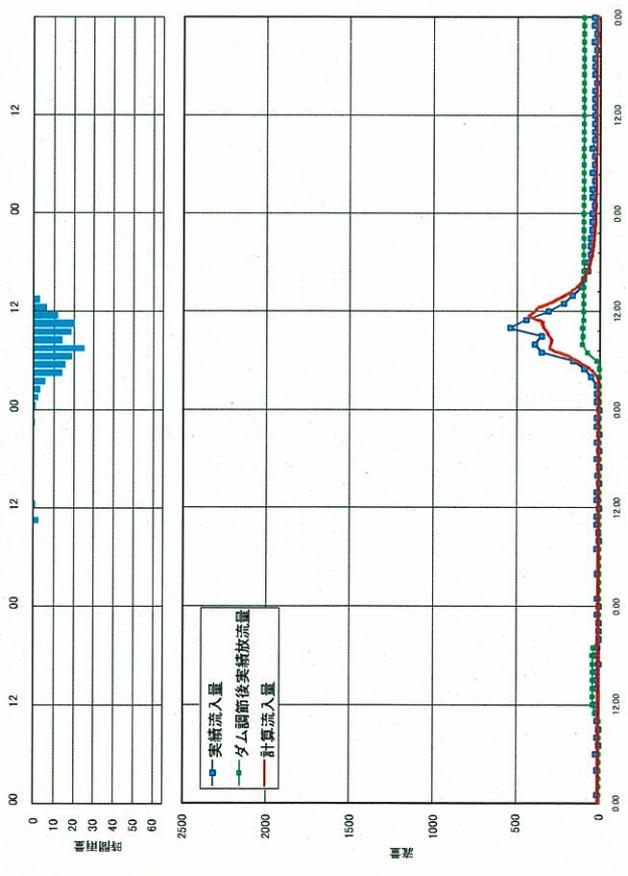
相俣ダム (赤谷川)



矢本沢ダム (利根川)

平成10年9月洪水

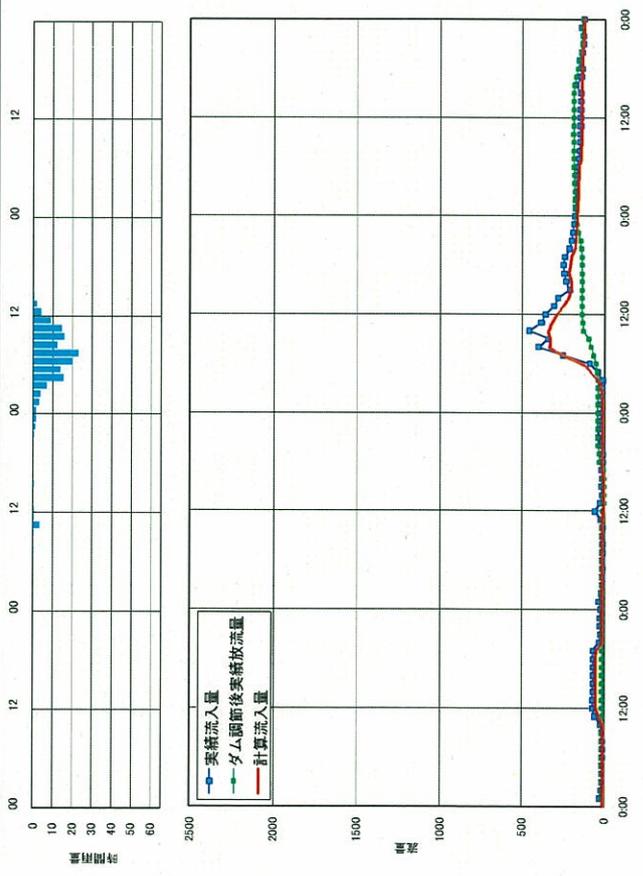
流出計算結果



藤原ダム (利根川)

平成10年9月洪水

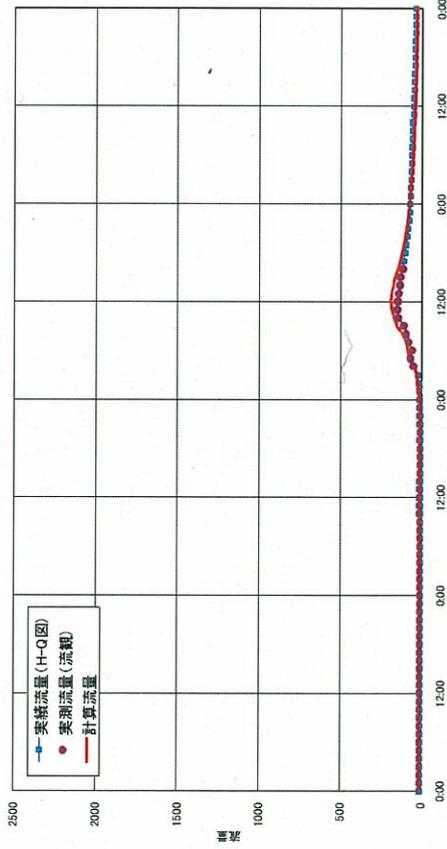
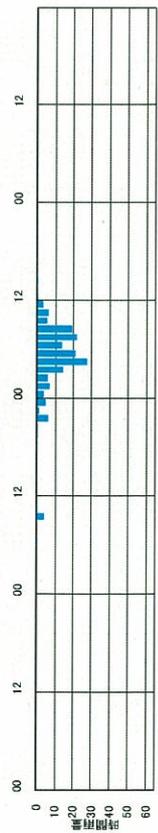
流出計算結果



流出計算結果

平成10年9月洪水

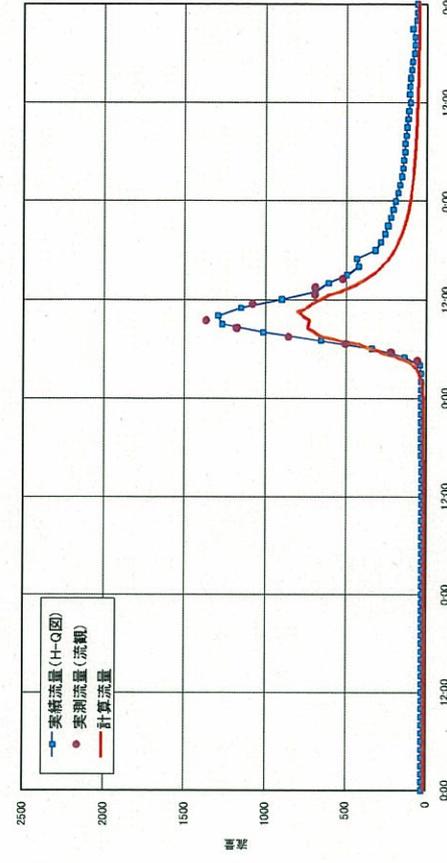
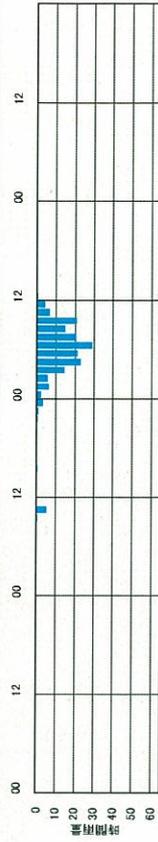
小袖橋 (赤谷川)



流出計算結果

平成10年9月洪水

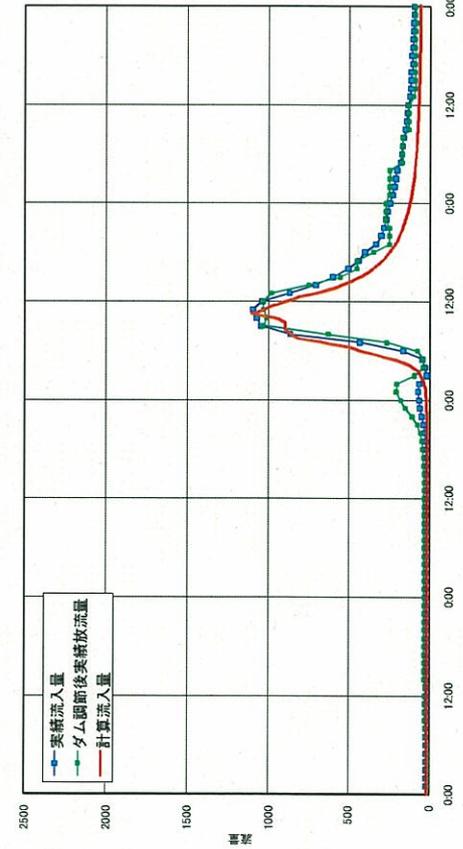
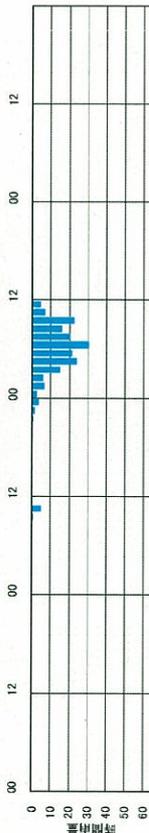
千鳥 (片品川)



流出計算結果

平成10年9月洪水

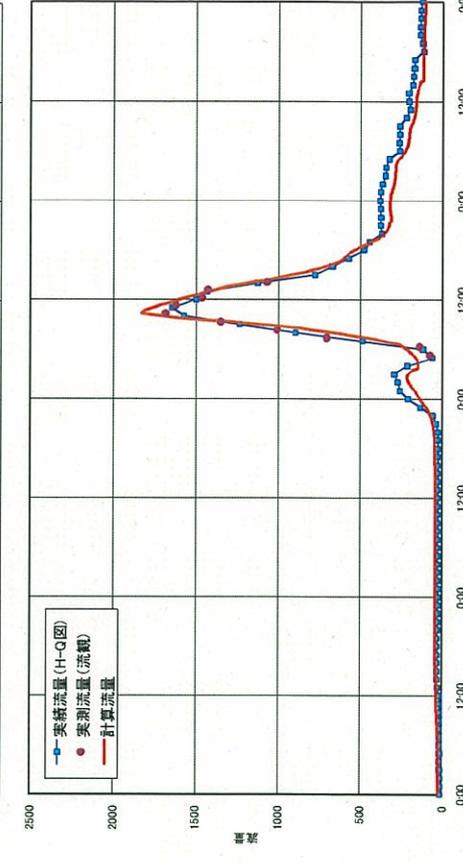
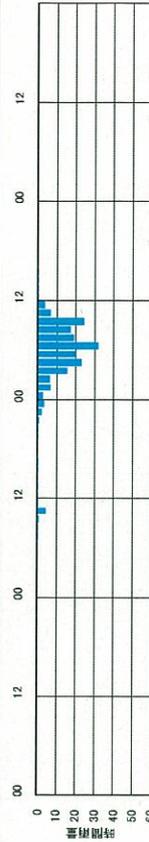
藪原ダム (片品川)



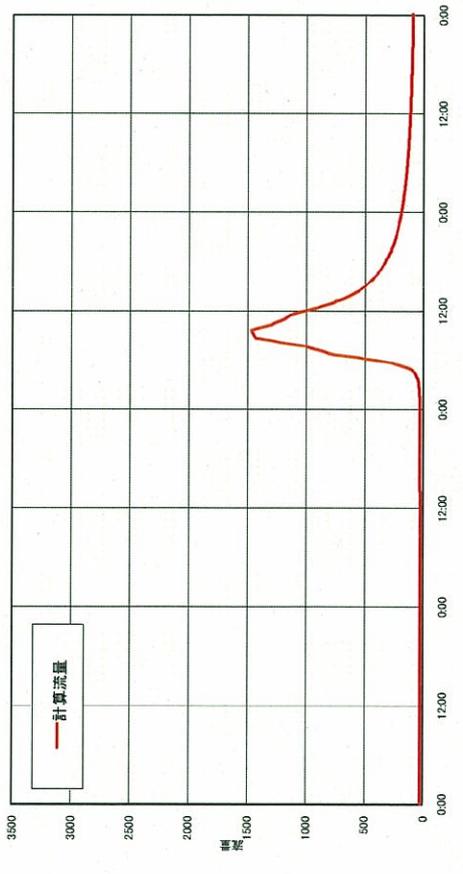
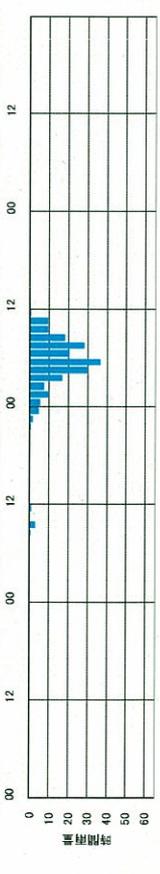
流出計算結果

平成10年9月洪水

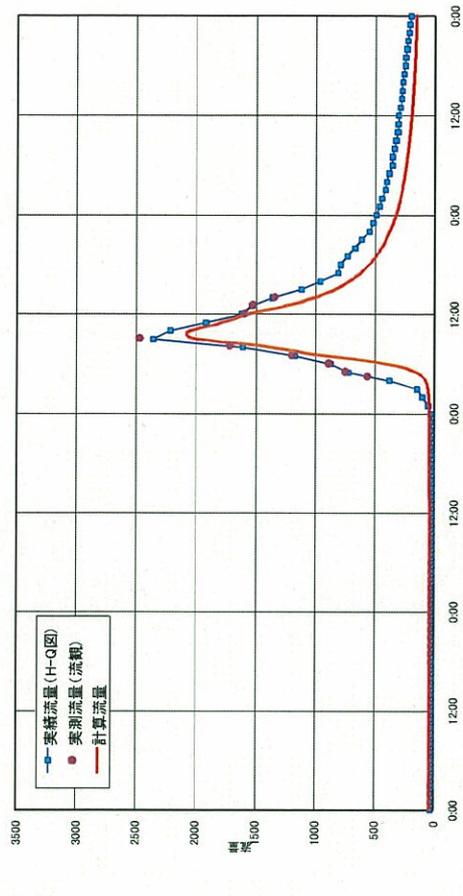
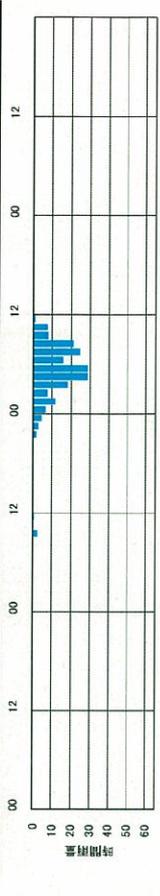
上久屋 (片品川)



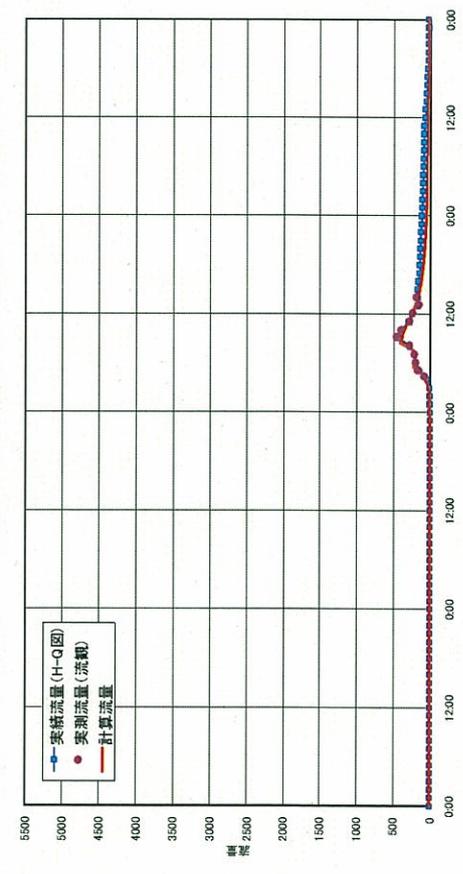
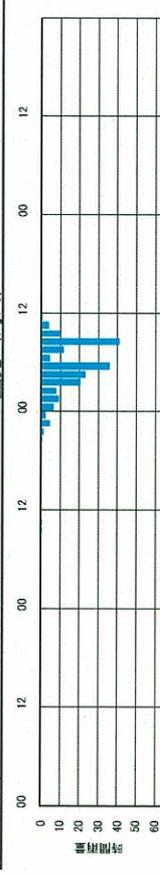
流出計算結果 平成10年9月洪水 岩島 (香妻川)



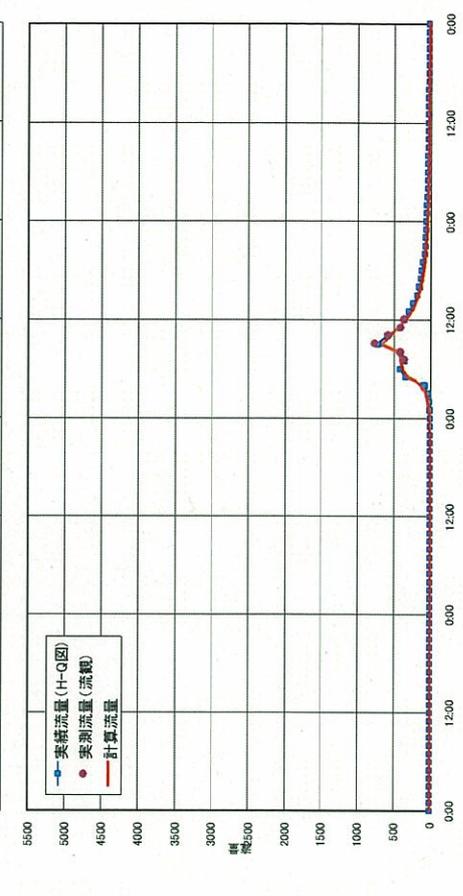
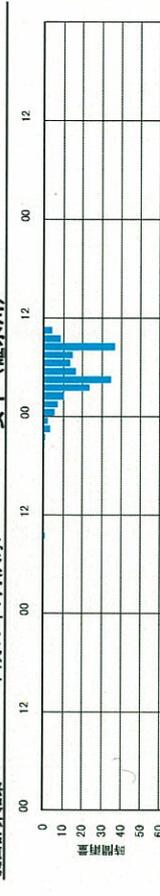
流出計算結果 平成10年9月洪水 村上 (香妻川)



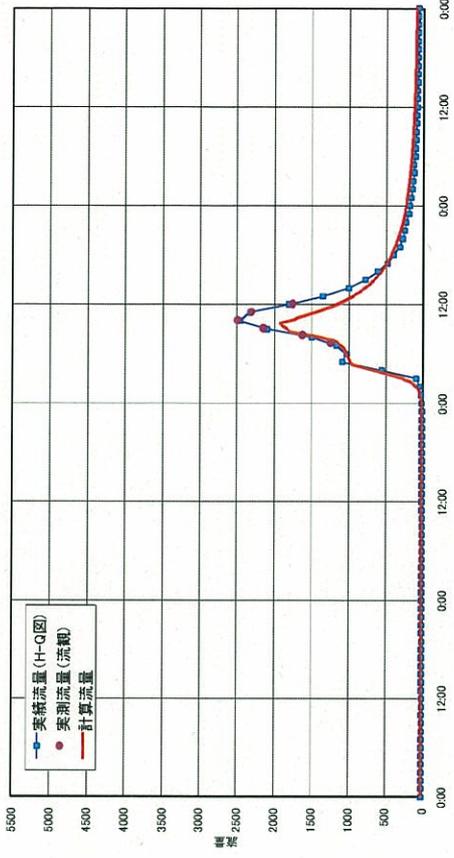
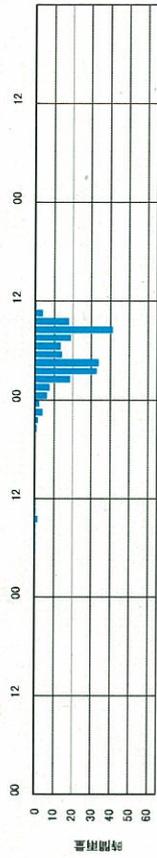
流出計算結果 平成10年9月洪水 上里見 (高川)



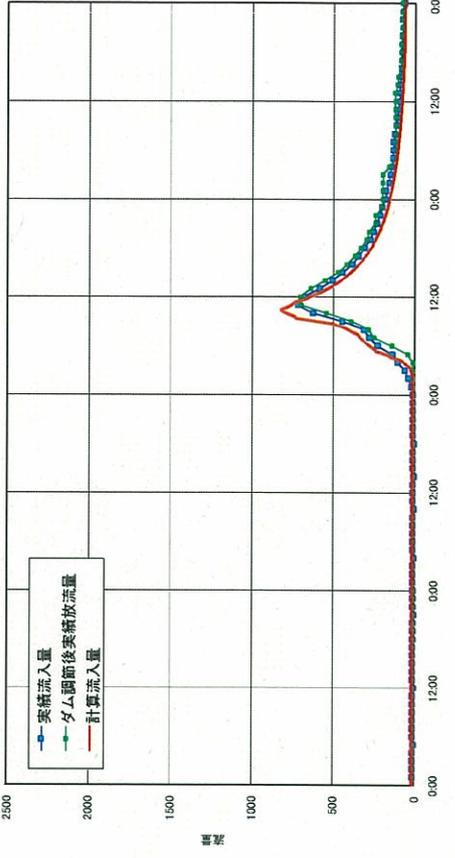
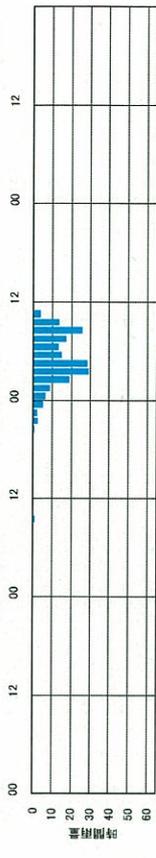
流出計算結果 平成10年9月洪水 安中 (碓氷川)



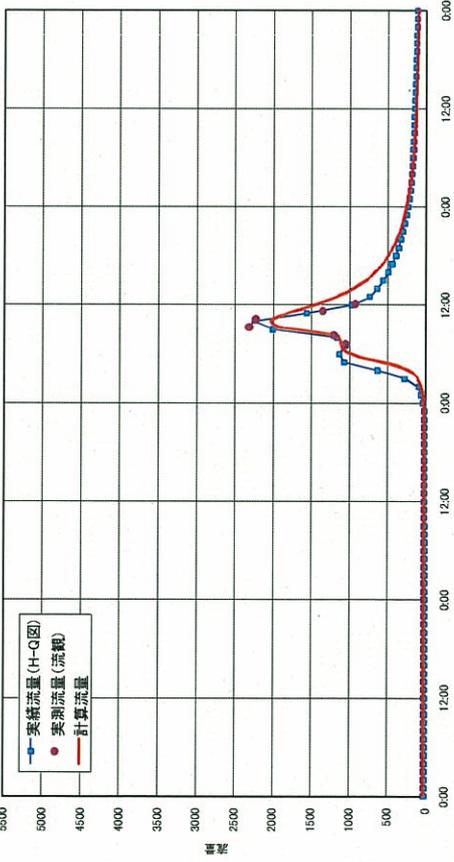
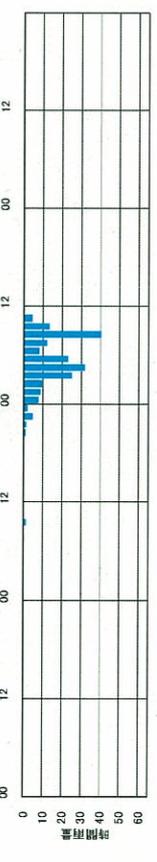
流出計算結果 平成10年9月洪水 岩井 (鱈川)



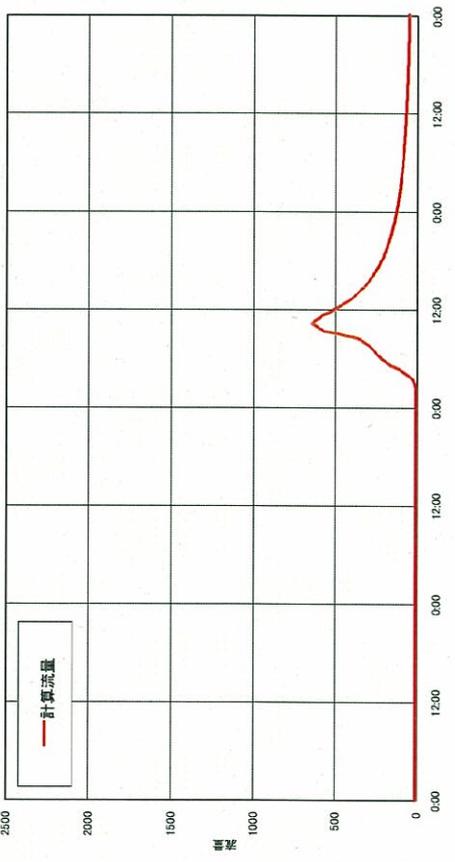
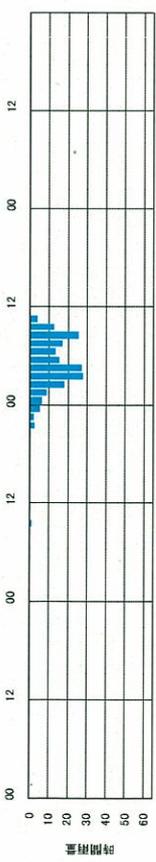
流出計算結果 平成10年9月洪水 下久保ダム (神流川)



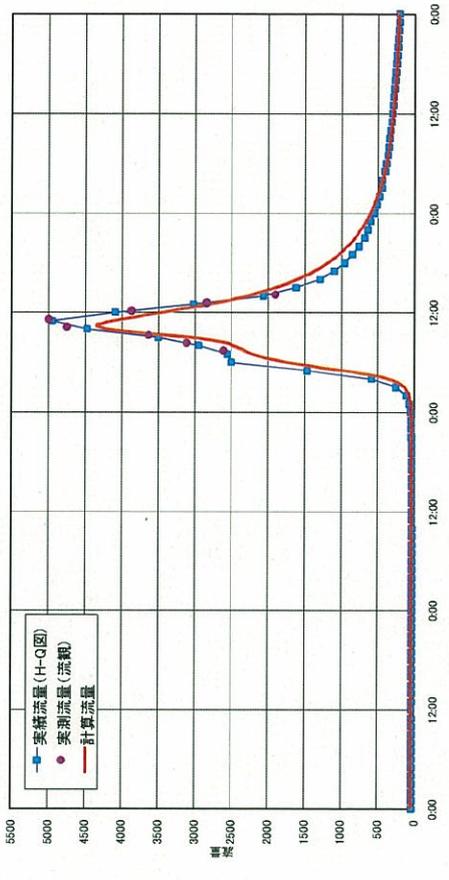
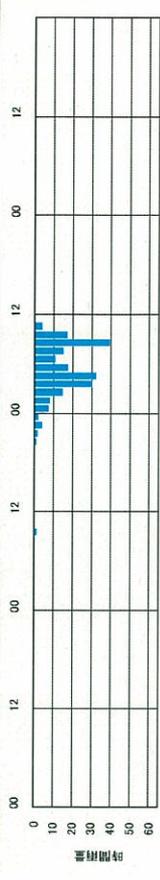
流出計算結果 平成10年9月洪水 高松 (島川)



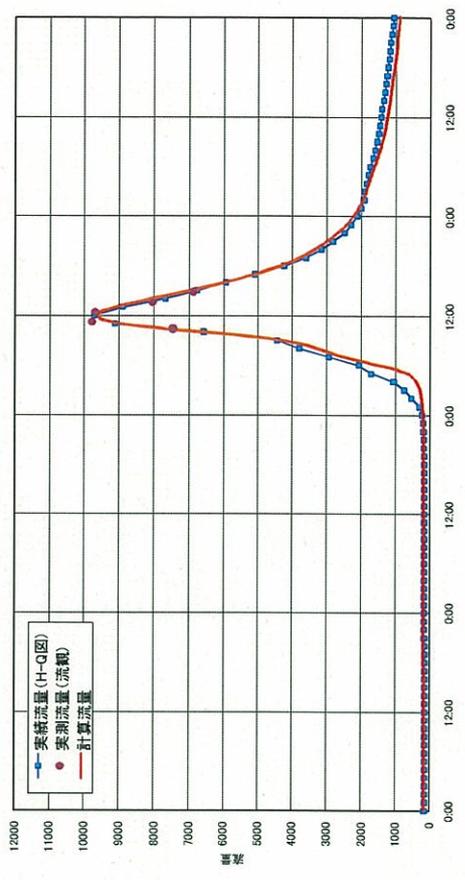
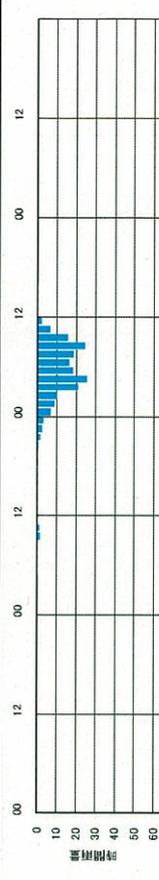
流出計算結果 平成10年9月洪水 万場 (神流川)



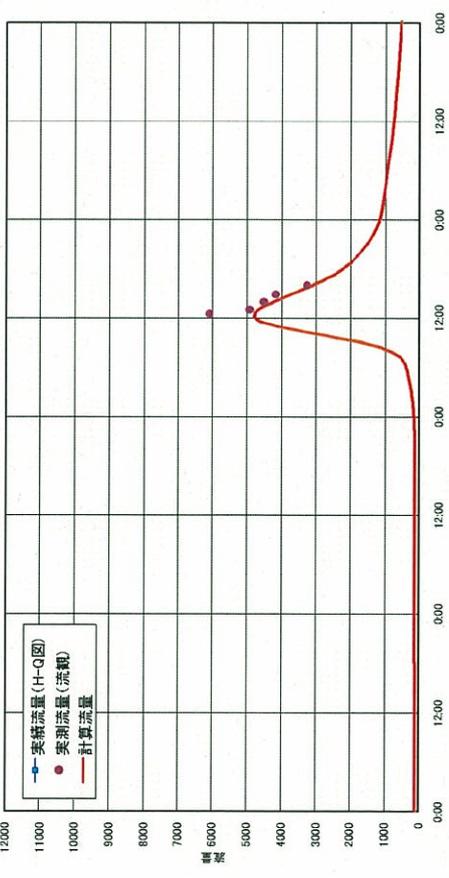
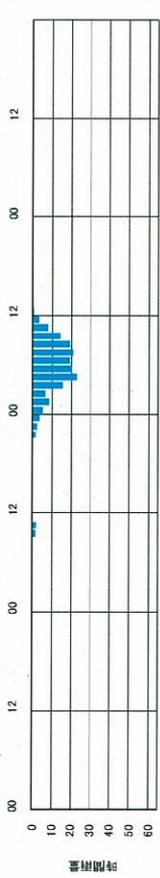
流出計算結果 平成10年9月洪水 岩鼻 (扁川)



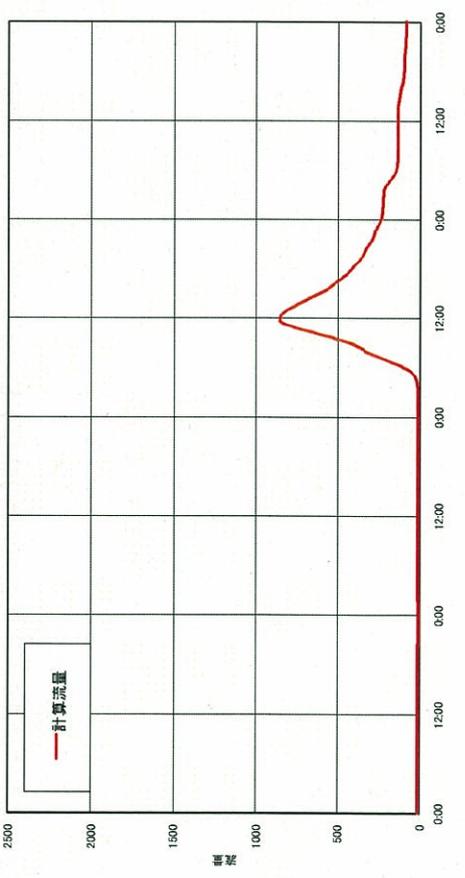
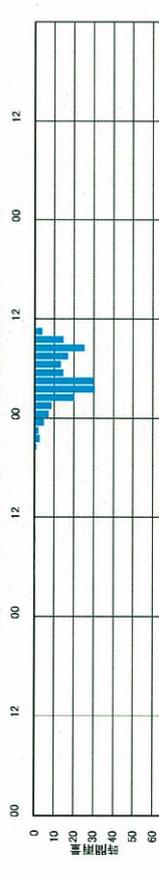
流出計算結果 平成10年9月洪水 八斗島 (利根川)



流出計算結果 平成10年9月洪水 上福島 (利根川)



流出計算結果 平成10年9月洪水 若泉 (神流川)



流出計算に用いた定数

洪水名 平成11年8月洪水

流域定数

流域 No	流域 面積 A (km <sup>2</sup> )	一次 流出率 f1	飽和 雨量 Rsa (mm)	流入係数 fsa	初期 損失 雨量 R0 (mm)	遅滞 時間 Tl (分)	係数		開始 基底 流量 Qb1 (m <sup>3</sup> /s)
							k	p	
1	165.48	0.4	120	1.0	230	30	7.587	0.528	3.7
2	60.59	0.4	120	1.0	230	50	6.252	0.656	1.4
3	165.77	0.4	120	1.0	230	50	9.480	0.592	3.7
4	103.07	0.4	120	1.0	230	50	9.480	0.592	2.3
5	81.80	0.4	120	1.0	230	50	9.480	0.592	1.8
6	110.19	0.4	130	1.0	190	40	10.591	0.655	2.5
7	79.19	0.4	120	1.0	230	50	9.480	0.592	1.8
8	226.00	0.4	120	1.0	230	50	9.480	0.592	5.0
9	252.05	0.4	100	1.0	280	90	13.487	0.530	5.6
10	161.64	0.4	100	1.0	280	90	13.487	0.530	3.6
11	78.78	0.4	100	1.0	280	90	13.487	0.530	1.8
12	182.31	0.4	120	1.0	230	50	9.480	0.592	4.1
13	144.49	0.4	—	—	120	50	35.239	0.300	3.2
14	269.24	0.4	—	—	120	100	29.321	0.305	6.0
15	289.00	0.4	—	—	120	100	29.321	0.305	6.5
16	153.20	0.4	—	—	120	100	29.321	0.305	3.4
17	38.30	0.4	—	—	120	100	29.321	0.305	0.9
18	164.22	0.4	—	—	120	50	35.239	0.300	3.7
19	157.01	0.4	—	—	120	50	35.239	0.300	3.5
20	188.37	0.4	—	—	120	50	35.239	0.300	4.2
21	97.12	0.4	—	—	120	50	35.239	0.300	2.2
22	93.33	0.4	—	—	120	50	35.239	0.300	2.1
23	24.68	0.4	—	—	120	50	35.239	0.300	0.6
24	23.88	0.4	—	—	120	50	35.239	0.300	0.5
25	155.13	0.6	120	1.0	90	30	29.519	0.428	3.5
26	110.02	0.6	120	1.0	90	40	18.623	0.572	2.5
27	121.39	0.6	120	1.0	1.0	60	10.765	0.680	2.7
28	165.39	0.6	120	1.0	90	40	18.623	0.572	3.7
29	43.27	0.6	120	1.0	90	40	18.623	0.572	1.0
30	190.64	0.6	120	1.0	90	40	18.623	0.572	4.3
31	158.74	0.6	120	1.0	90	40	18.623	0.572	3.5
32	201.63	0.6	120	1.0	90	40	18.623	0.572	4.5
33	75.00	0.6	120	1.0	90	40	18.623	0.572	1.7
34	94.85	0.4	—	—	120	50	35.239	0.300	2.1
35	70.05	0.6	120	1.0	90	40	18.623	0.572	1.6
36	269.56	0.6	40	1.0	30	80	29.976	0.476	6.0
37	53.25	0.6	40	1.0	20	80	29.976	0.476	1.2
38	51.68	0.6	40	1.0	20	80	29.976	0.476	1.2
39	37.50	0.6	40	1.0	20	80	29.976	0.476	0.8
	5,107.81								114.0

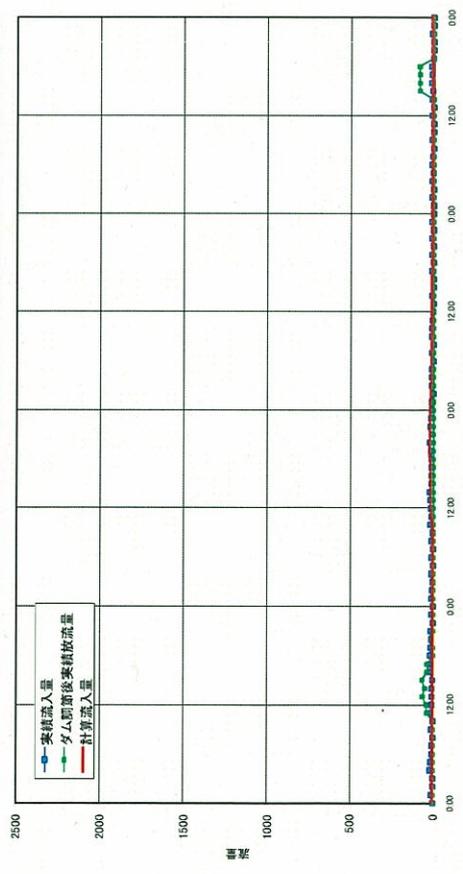
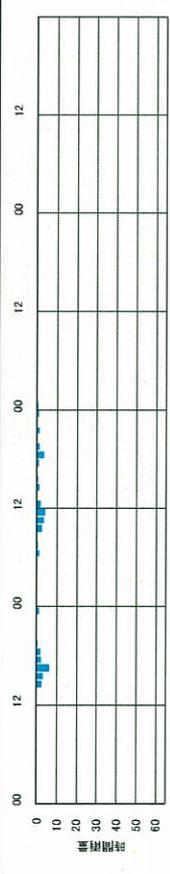
河道定数

河道 No.	K	P	遅滞 時間 Tl (時間)
b	—	—	0.234
A	4.476	0.699	0.165
B	12.030	0.665	0.350
C	13.878	0.665	0.273
D	7.381	0.663	0.160
E	4.966	0.729	0.180
F	4.831	0.797	0.250
G	6.405	0.724	0.170
H	6.223	0.681	0.143
K	8.039	0.712	0.281
O	12.928	0.627	0.208
Q	9.401	0.727	0.509
R	7.492	0.632	0.127
N	7.515	0.644	0.306
I	6.235	0.742	0.318
J	8.598	0.654	0.269
M	1.660	0.752	0.095
L	16.279	0.614	0.333
P	6.775	0.684	0.268

流出計算結果

平成11年8月洪水

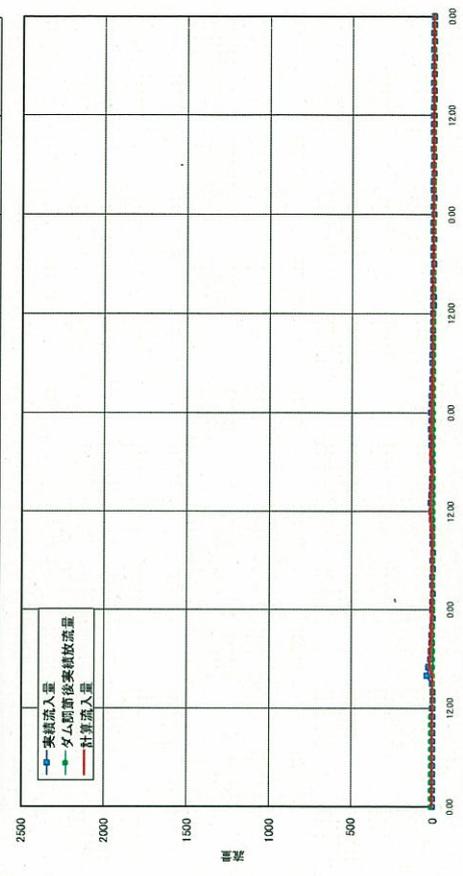
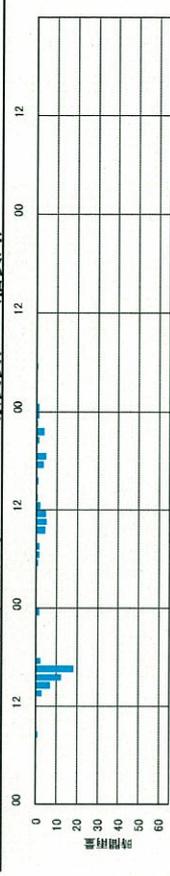
矢本沢ダム (利根川)



流出計算結果

平成11年8月洪水

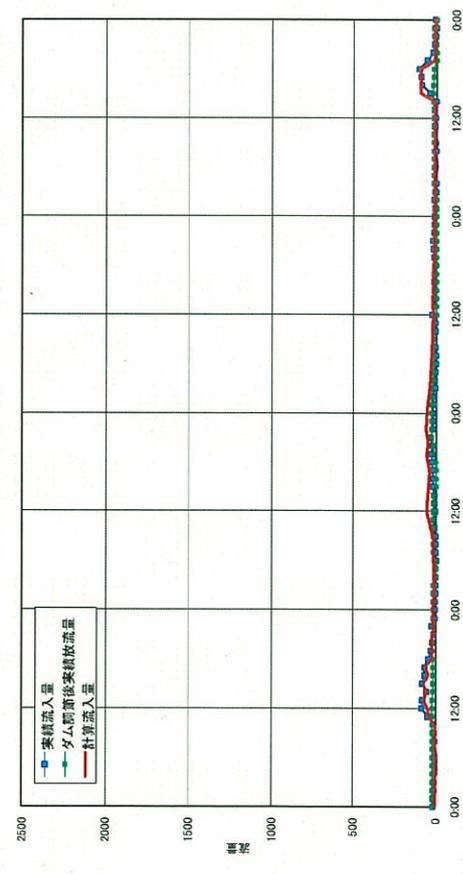
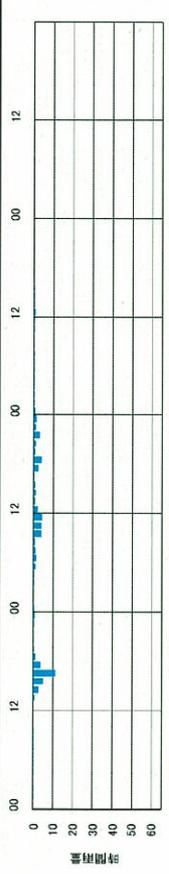
奈良俣ダム (槽谷川)



流出計算結果

平成11年8月洪水

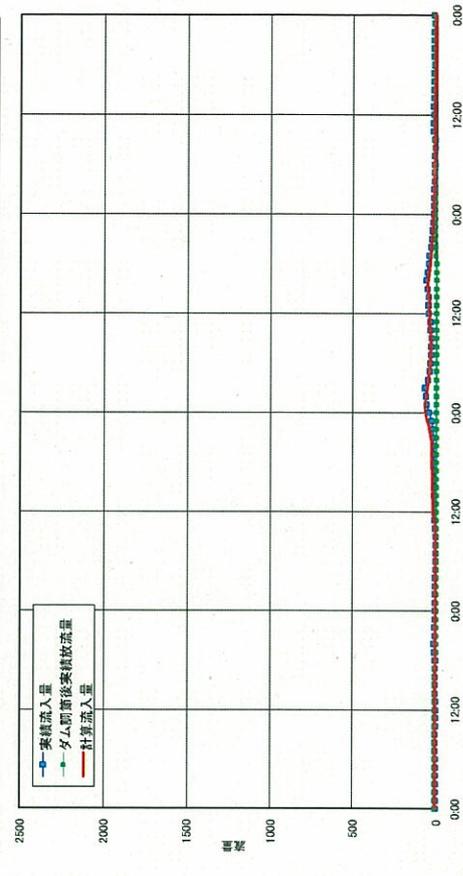
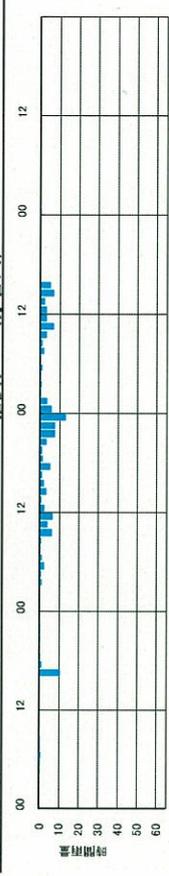
藤原ダム (利根川)



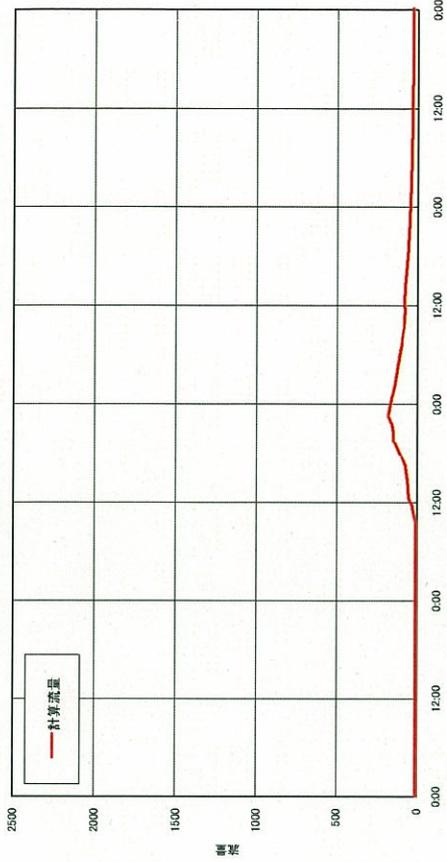
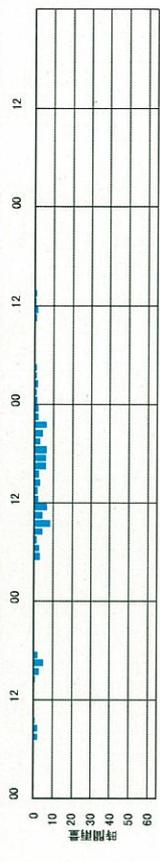
流出計算結果

平成11年8月洪水

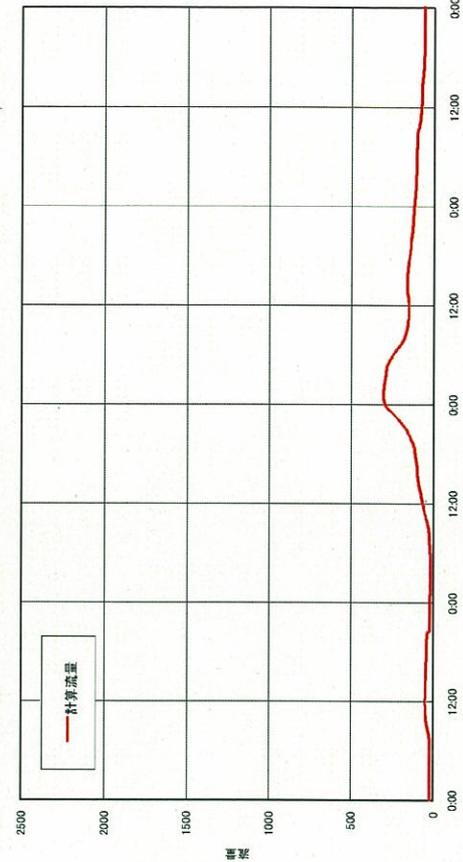
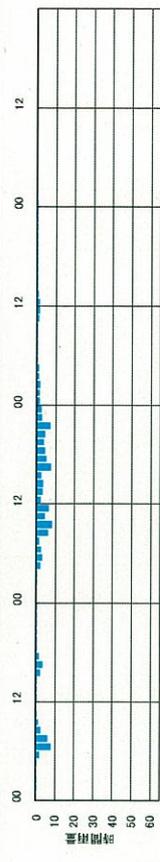
相模ダム (赤谷川)



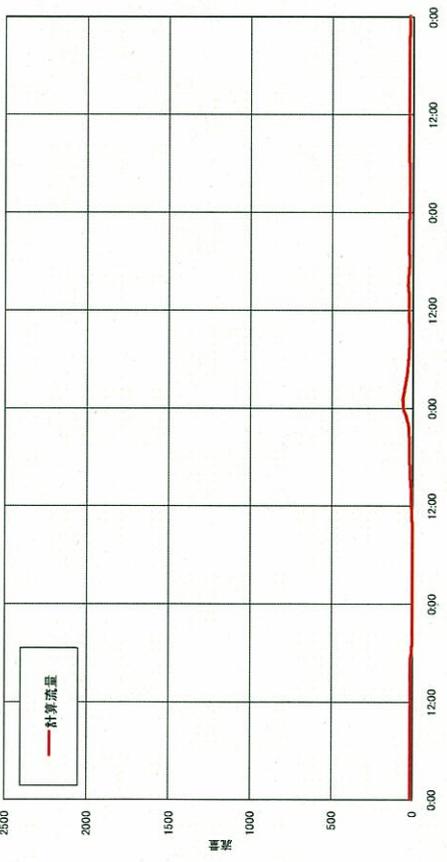
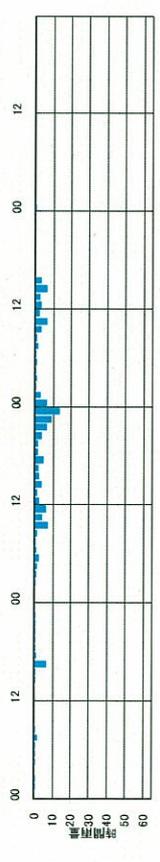
流出計算結果 平成11年8月洪水 千鳥 (片品川)



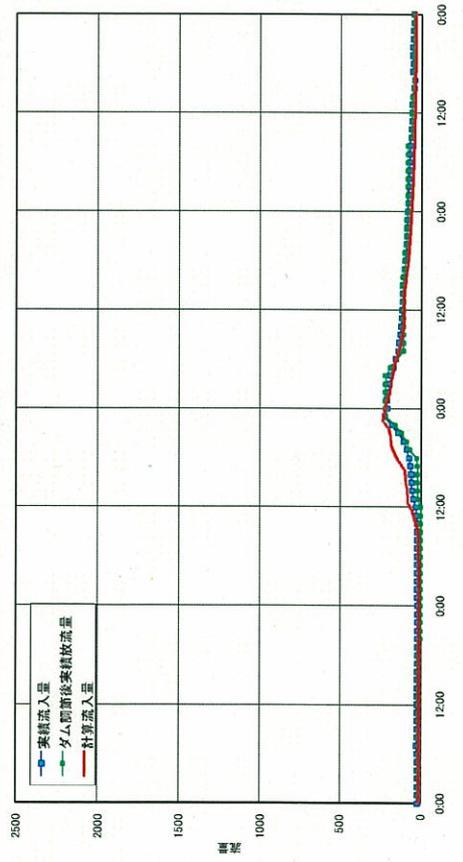
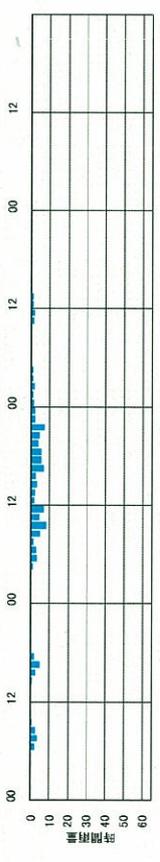
流出計算結果 平成11年8月洪水 上久屋 (片品川)



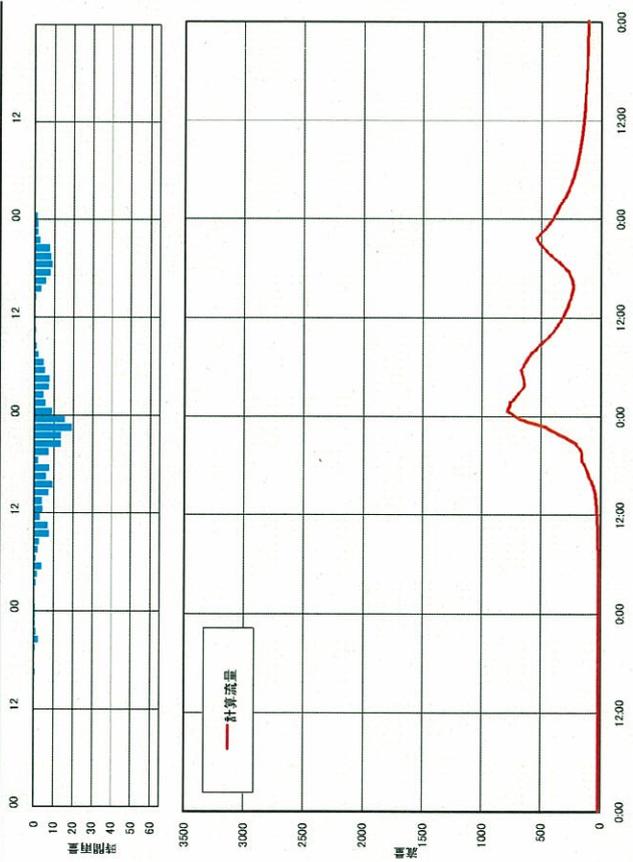
流出計算結果 平成11年8月洪水 小袖橋 (赤谷川)



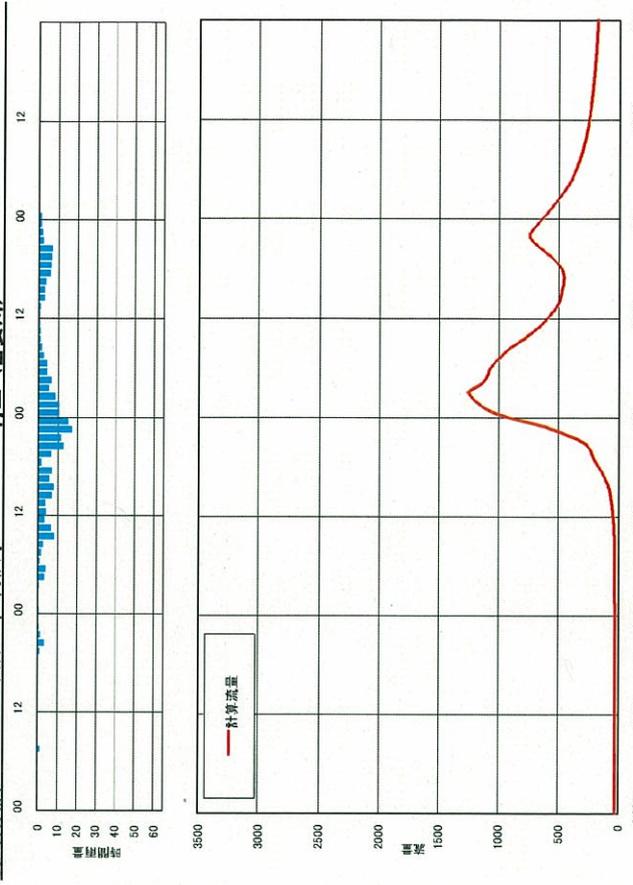
流出計算結果 平成11年8月洪水 蘭原ダム (片品川)



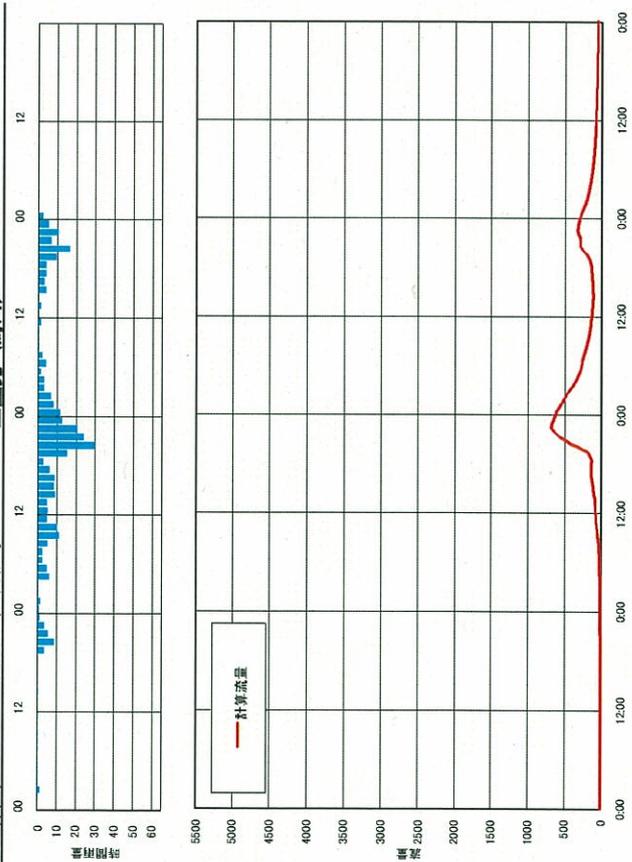
流出計算結果 平成11年8月洪水 岩島 (吾妻川)



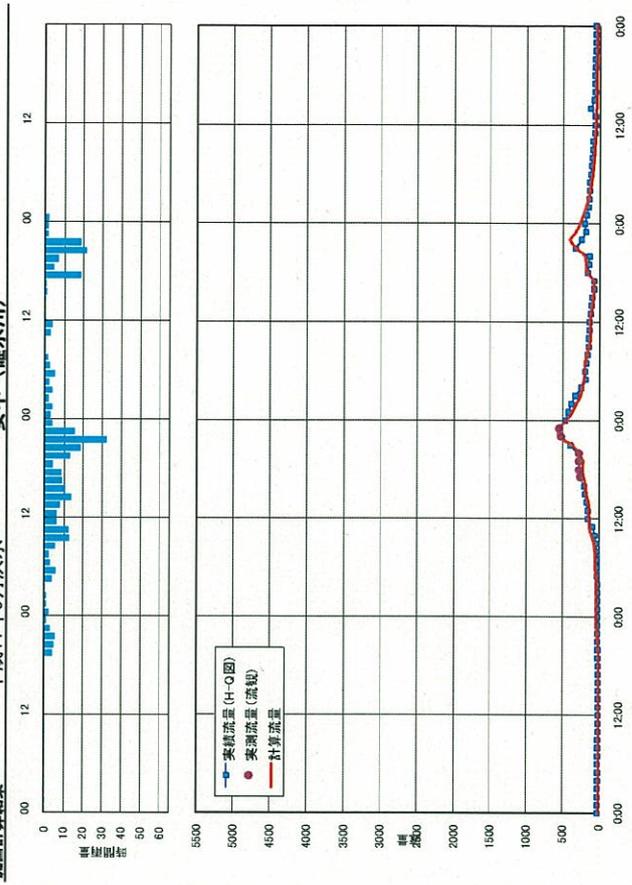
流出計算結果 平成11年8月洪水 村上 (吾妻川)



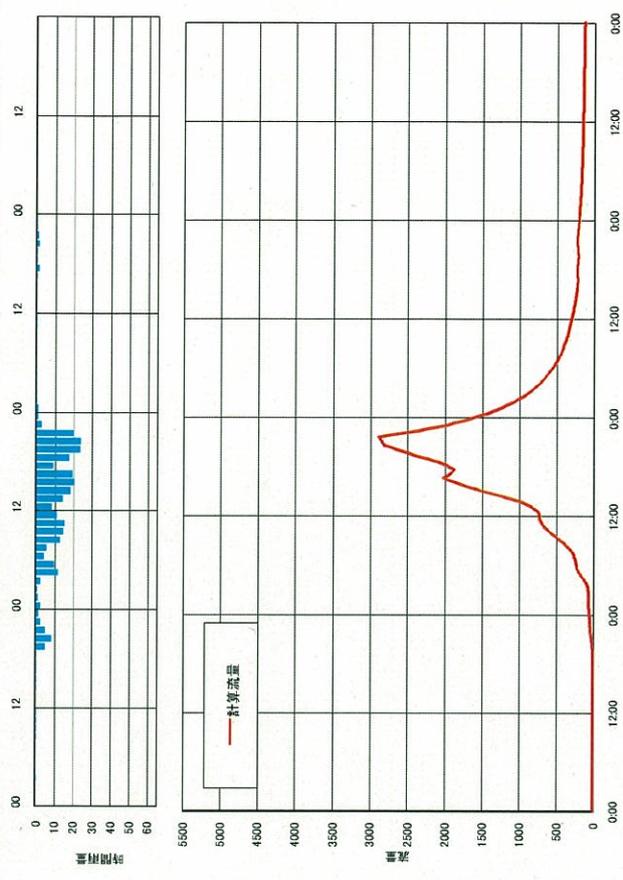
流出計算結果 平成11年8月洪水 上里見 (烏川)



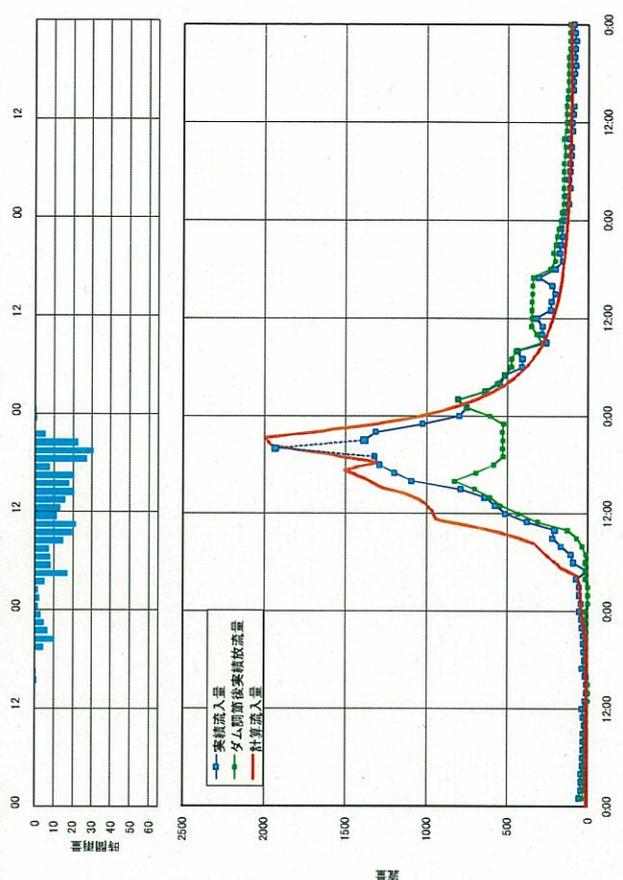
流出計算結果 平成11年8月洪水 安中 (碓氷川)



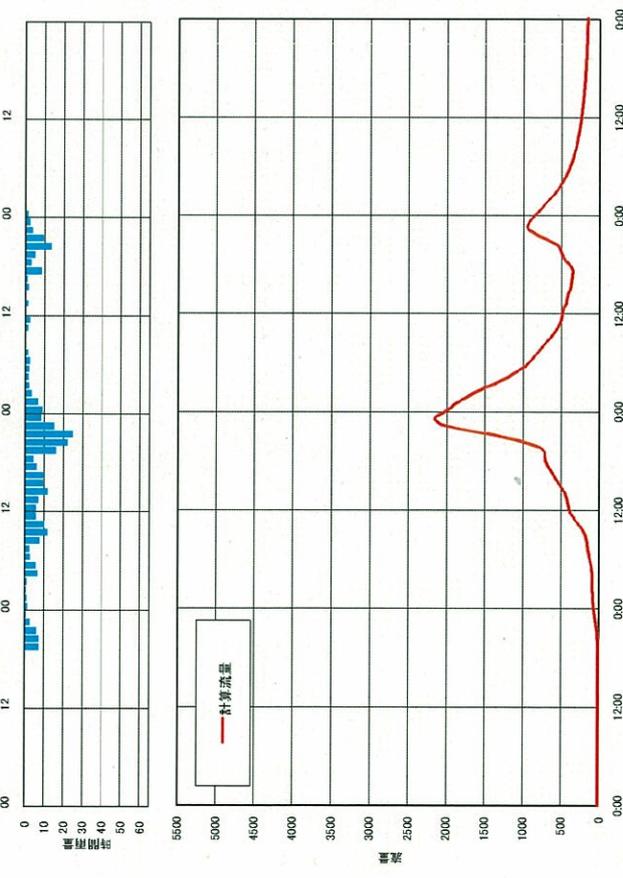
流出計算結果 平成11年8月洪水 岩井 (鱈川)



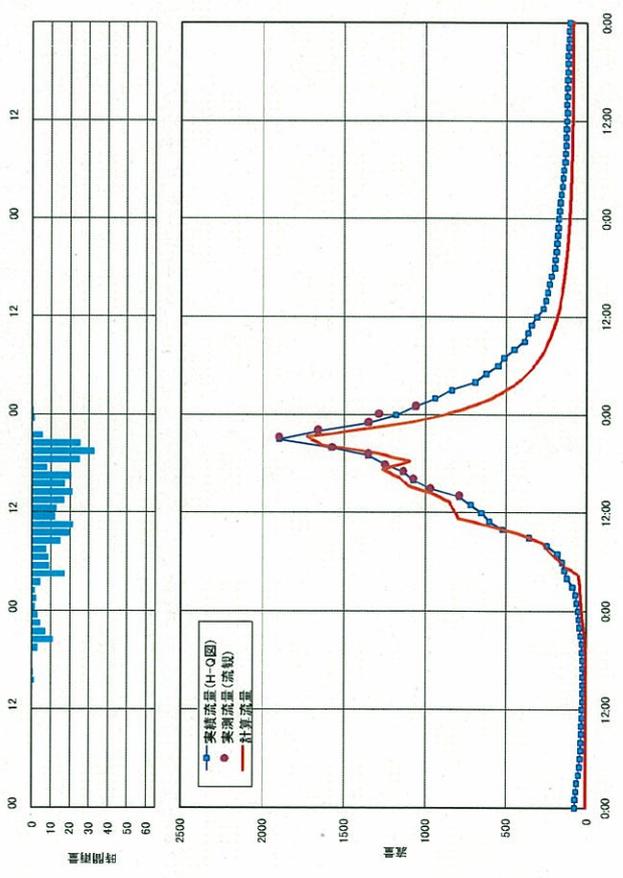
流出計算結果 平成11年8月洪水 下久保ダム (神流川)



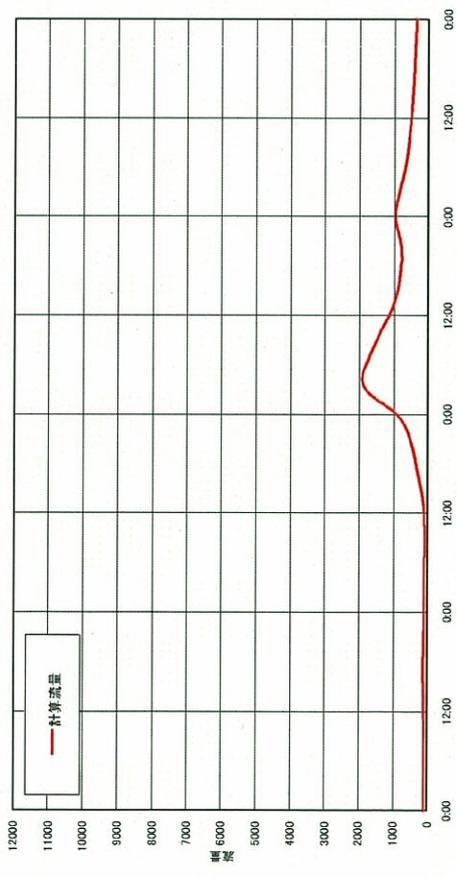
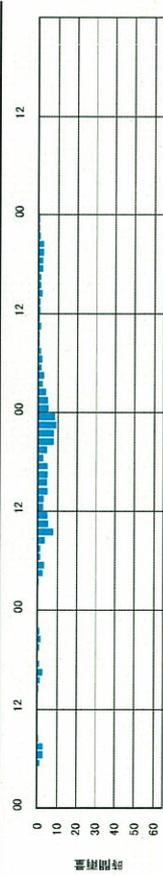
流出計算結果 平成11年8月洪水 高松 (高川)



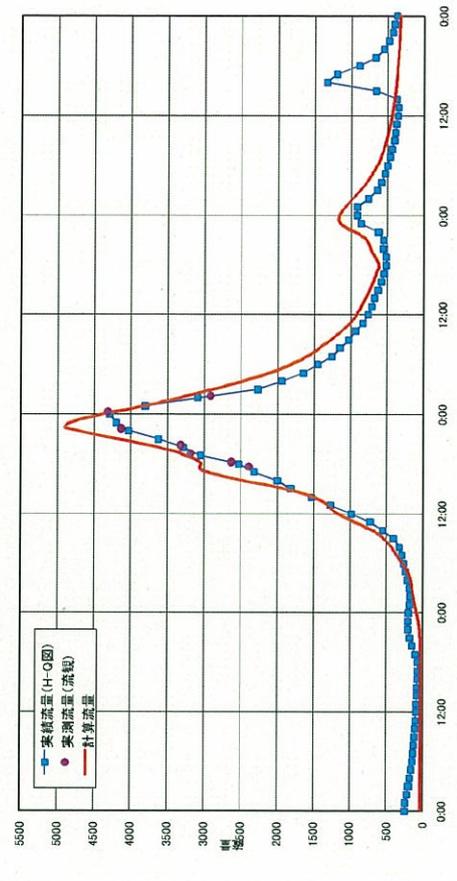
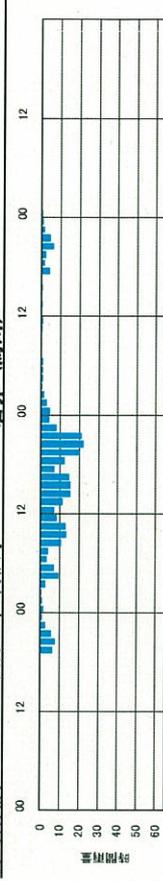
流出計算結果 平成11年8月洪水 万場 (神流川)



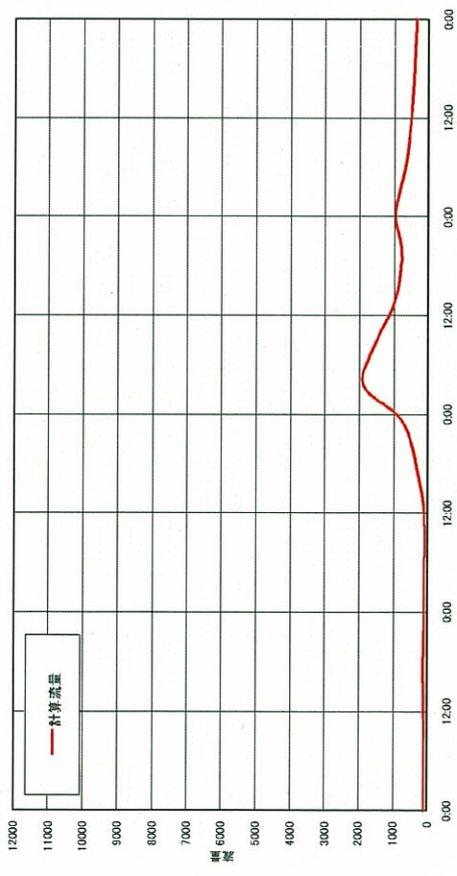
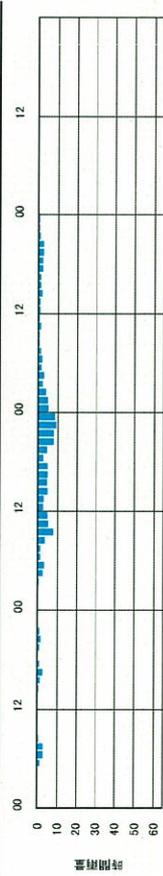
流出計算結果 平成11年8月洪水 上福島(利根川)



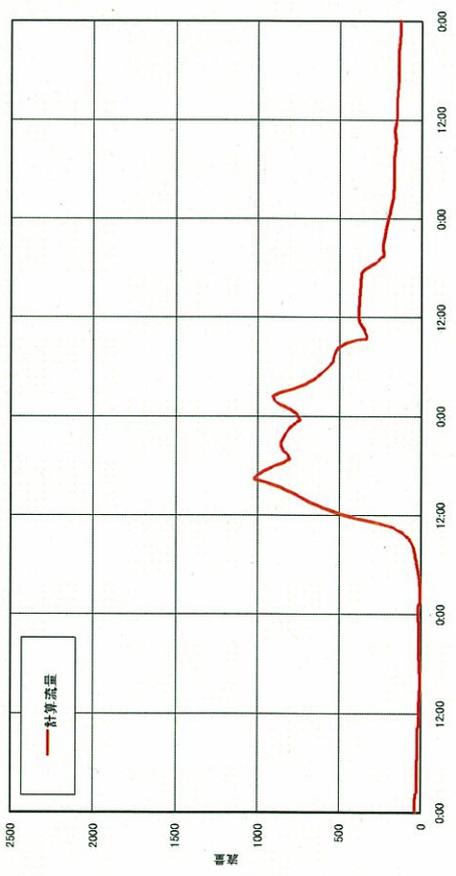
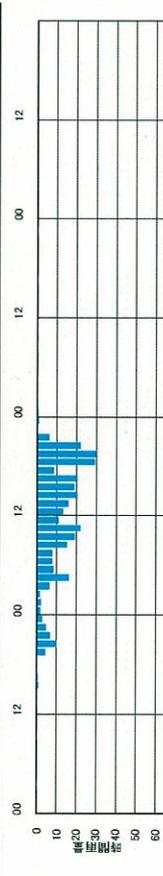
流出計算結果 平成11年8月洪水 岩鼻(烏川)



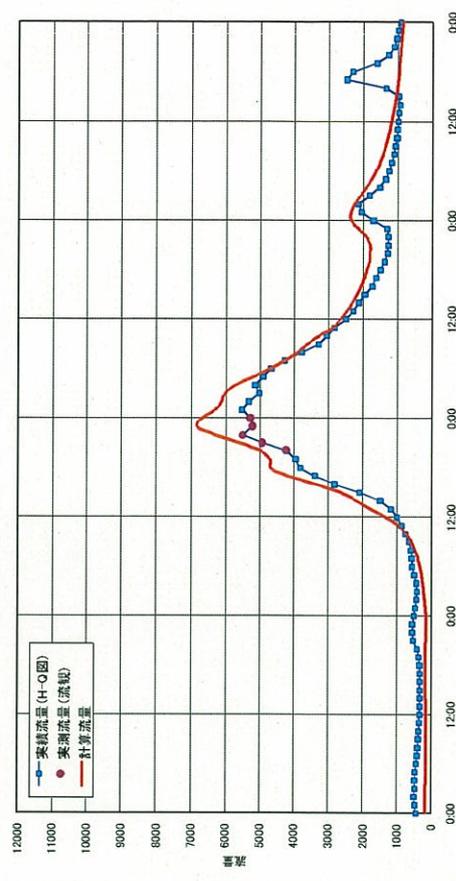
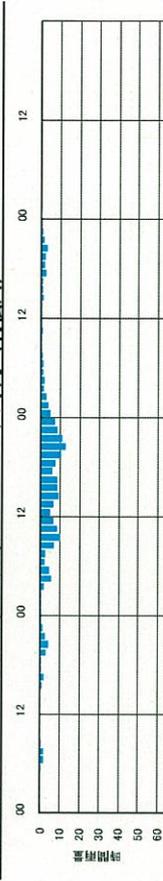
流出計算結果 平成11年8月洪水 若泉(神流川)



流出計算結果 平成11年8月洪水 八斗島(利根川)



流出計算結果 平成11年8月洪水 八斗島(利根川)



流出計算に用いた定数

洪水名 平成13年9月洪水

流域定数

流域 No	流域面積 (km <sup>2</sup> )	一次流出率 f1	飽和雨量 Rsa (mm)	流入係数 fsa	初期損失雨量 R0 (mm)	遅滞時間 Tl (分)	係数		開始基底流量 Qb1 (m <sup>3</sup> /s)
							k	P	
1	165.48	0.4	130	1.0	7.0	30	7.587	0.528	8.2
2	60.59	0.4	90	1.0	10.0	50	6.252	0.656	3.0
3	165.77	0.4	130	1.0	7.0	50	9.480	0.592	8.2
4	103.07	0.4	130	1.0	7.0	50	9.480	0.592	5.1
5	81.80	0.4	130	1.0	7.0	50	9.480	0.592	4.0
6	110.19	0.4	120	1.0	10.0	40	10.591	0.655	5.4
7	79.19	0.4	130	1.0	7.0	50	9.480	0.592	3.9
8	226.00	0.4	130	1.0	7.0	50	9.480	0.592	11.2
9	252.05	0.4	190	1.0	1.0	90	13.487	0.530	12.4
10	161.64	0.4	190	1.0	1.0	90	13.487	0.530	8.0
11	78.78	0.4	190	1.0	1.0	90	13.487	0.530	3.9
12	182.31	0.4	130	1.0	7.0	50	9.480	0.592	9.0
13	144.49	0.4			14.0	50	35.239	0.300	7.1
14	269.24	0.4			14.0	100	29.321	0.305	13.3
15	289.00	0.4			14.0	100	29.321	0.305	14.3
16	153.20	0.4			14.0	100	29.321	0.305	7.6
17	38.30	0.4			14.0	100	29.321	0.305	1.9
18	164.22	0.4			15.0	50	35.239	0.300	8.1
19	157.01	0.4			15.0	50	35.239	0.300	7.7
20	188.37	0.4			15.0	50	35.239	0.300	9.3
21	97.12	0.4			15.0	50	35.239	0.300	4.8
22	93.33	0.4			15.0	50	35.239	0.300	4.6
23	24.68	0.4			15.0	50	35.239	0.300	1.2
24	23.88	0.4			15.0	50	35.239	0.300	1.2
25	155.13	0.6	230	1.0	6.0	30	29.519	0.428	7.7
26	110.02	0.6	230	1.0	6.0	40	18.623	0.572	5.4
27	121.39	0.6	230	1.0	6.0	60	10.765	0.680	6.0
28	165.39	0.6	230	1.0	6.0	40	18.623	0.572	8.2
29	43.27	0.6	230	1.0	6.0	40	18.623	0.572	2.1
30	190.64	0.6	230	1.0	17.0	40	18.623	0.572	9.4
31	158.74	0.6	230	1.0	17.0	40	18.623	0.572	7.8
32	201.63	0.6	230	1.0	17.0	40	18.623	0.572	9.9
33	75.00	0.6	230	1.0	6.0	40	18.623	0.572	3.7
34	94.85	0.4			14.0	50	35.239	0.300	4.7
35	70.05	0.6	230	1.0	6.0	40	18.623	0.572	3.5
36	269.56	0.6	130	1.0	22.0	80	29.976	0.476	13.3
37	53.25	0.6	130	1.0	22.0	80	29.976	0.476	2.6
38	51.68	0.6	130	1.0	22.0	80	29.976	0.476	2.6
39	37.50	0.6	130	1.0	22.0	80	29.976	0.476	1.9
	5,107.81								252.0

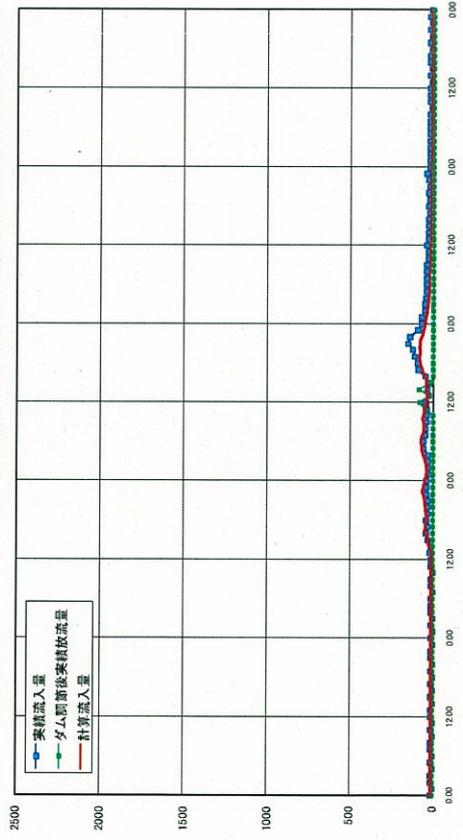
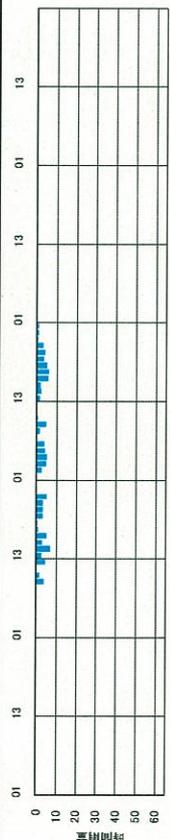
河道定数

河道 No.	K	P	遅滞時間	
			Tl (時間)	Tl (時間)
a	--	--	0.217	0.217
b	--	--	0.234	0.234
A	4.476	0.699	0.165	0.165
B	12.030	0.665	0.350	0.350
C	13.878	0.665	0.273	0.273
D	7.381	0.663	0.160	0.160
E	4.966	0.729	0.180	0.180
F	4.831	0.797	0.250	0.250
G	6.405	0.724	0.170	0.170
H	6.223	0.681	0.143	0.143
K	8.039	0.712	0.281	0.281
O	12.928	0.627	0.208	0.208
Q	9.401	0.727	0.509	0.509
R	7.492	0.632	0.127	0.127
N	7.515	0.644	0.306	0.306
I	6.235	0.742	0.318	0.318
J	8.598	0.654	0.269	0.269
M	1.660	0.752	0.095	0.095
L	16.279	0.614	0.333	0.333
P	6.775	0.684	0.268	0.268

流出計算結果

平成13年9月洪水

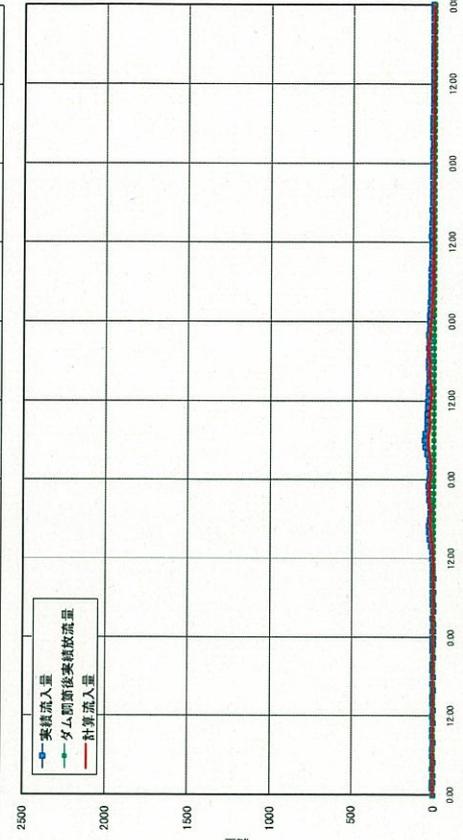
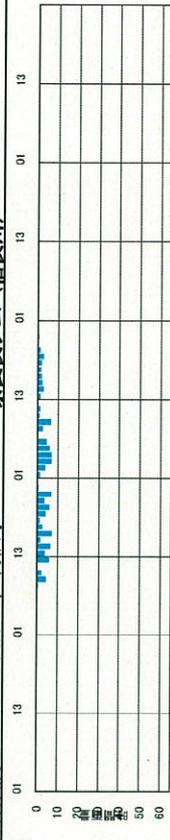
矢木沢ダム(利根川)



流出計算結果

平成13年9月洪水

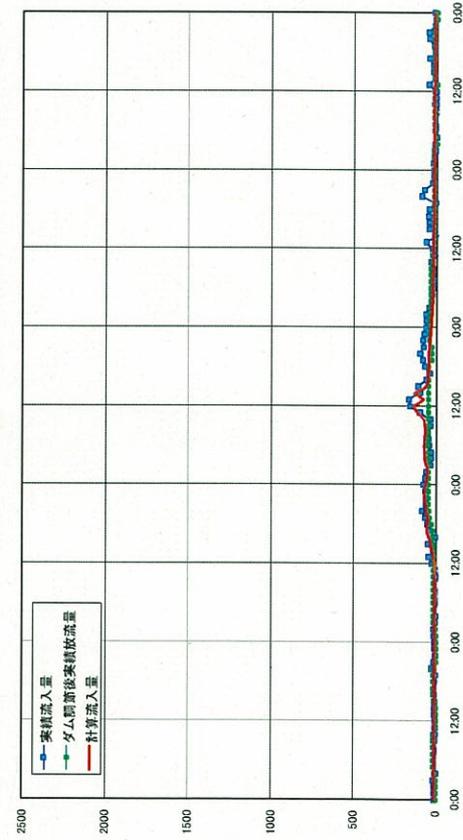
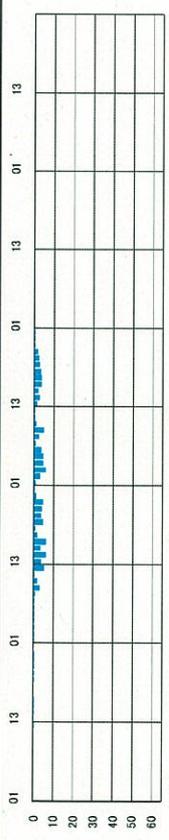
奈良長ダム(槽俣川)



流出計算結果

平成13年9月洪水

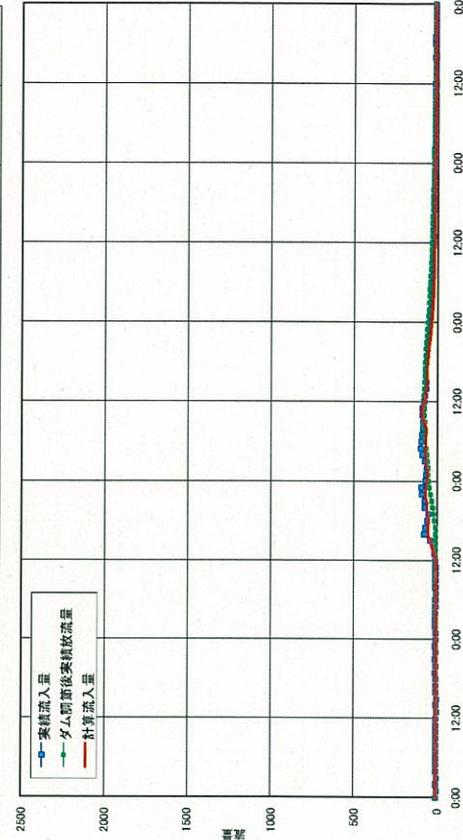
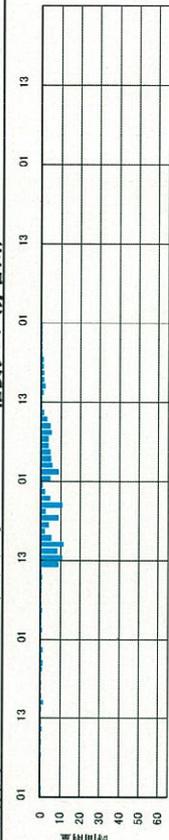
藤原ダム(利根川)



流出計算結果

平成13年9月洪水

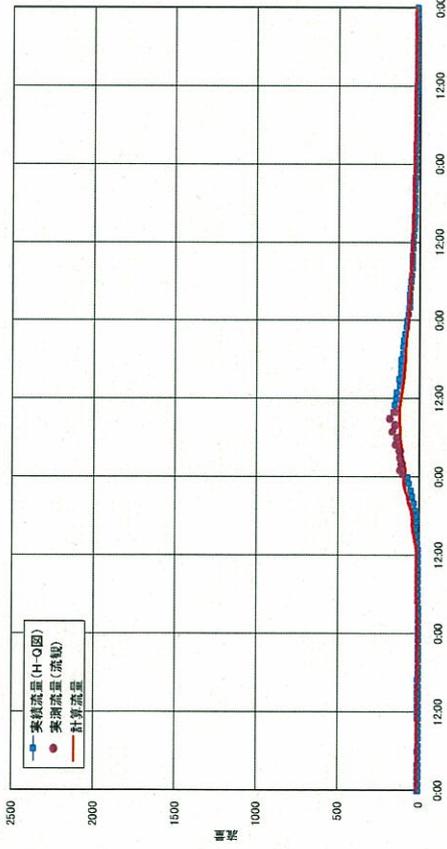
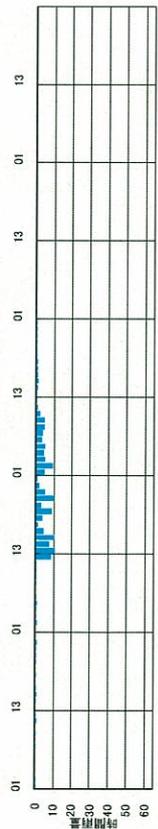
相俣ダム(赤谷川)



流出計算結果

平成13年9月洪水

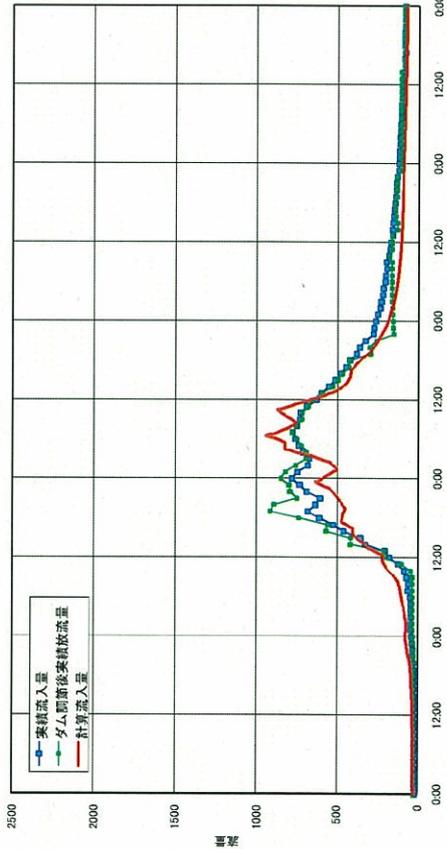
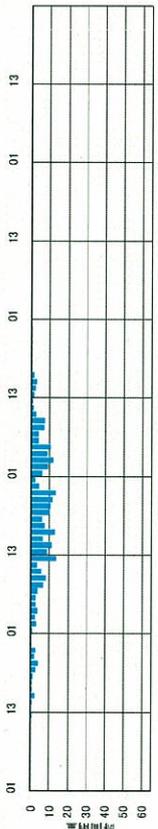
小瀬橋(赤谷川)



流出計算結果

平成13年9月洪水

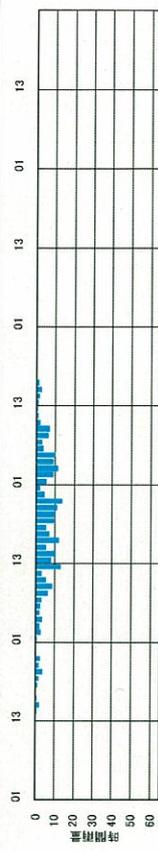
蘭原ダム(片品川)



流出計算結果

平成13年9月洪水

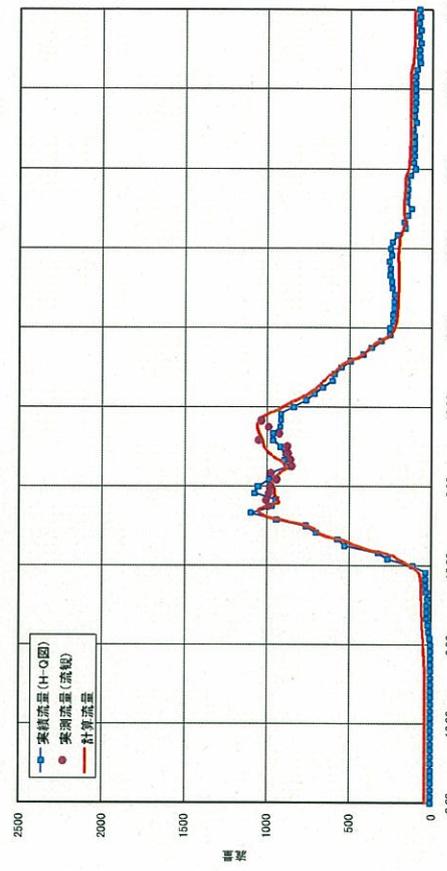
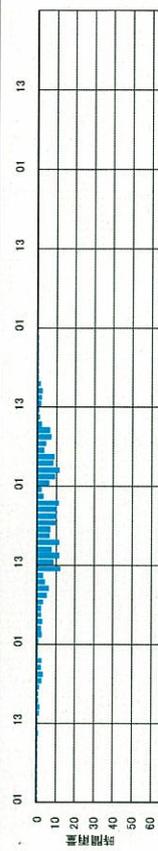
千鳥(片品川)



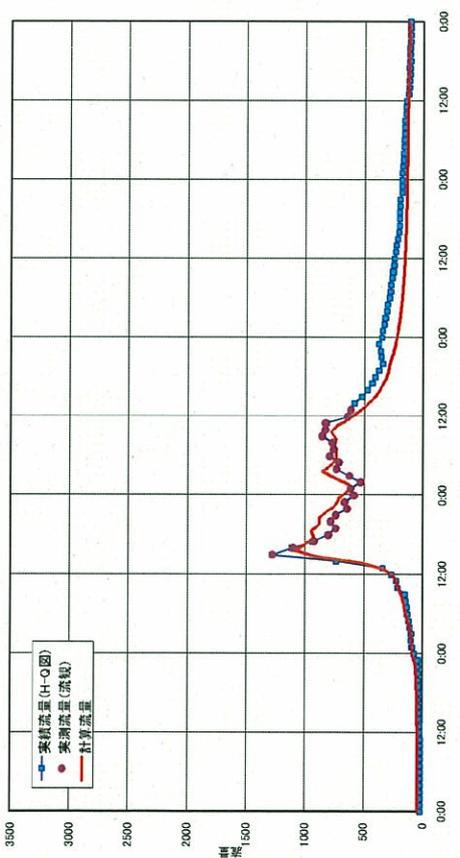
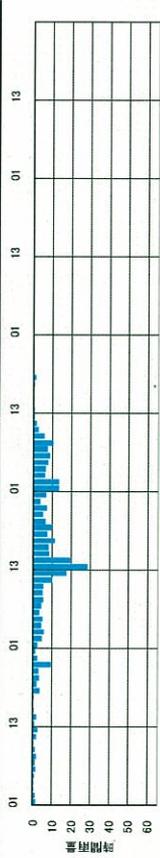
流出計算結果

平成13年9月洪水

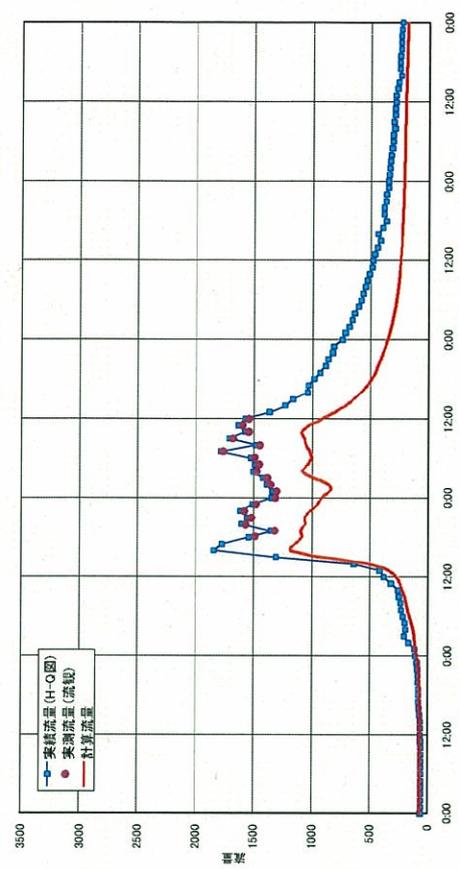
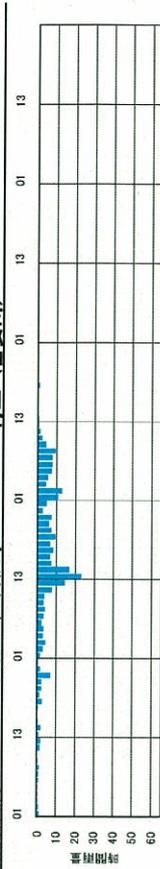
上久屋(片品川)



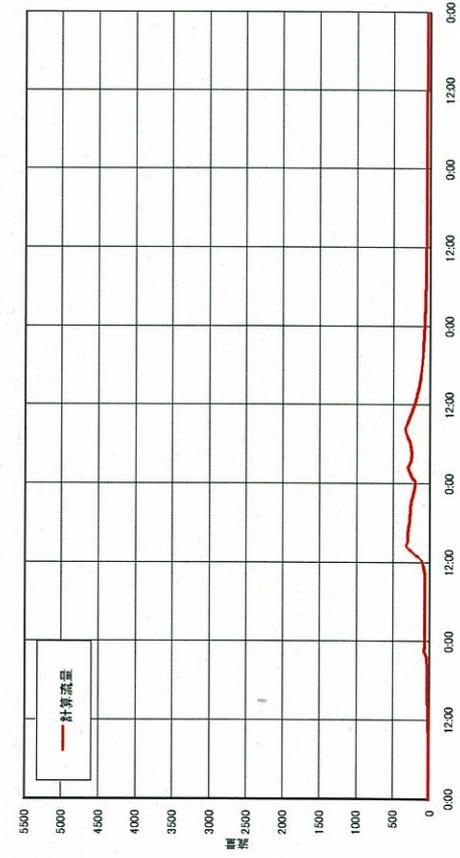
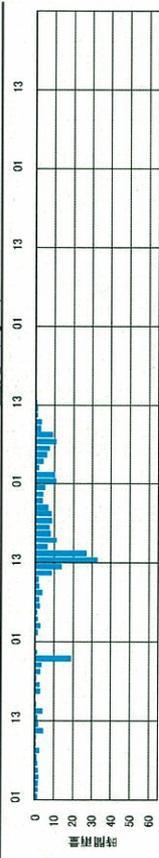
流出計算結果 平成13年9月洪水 岩島(香妻川)



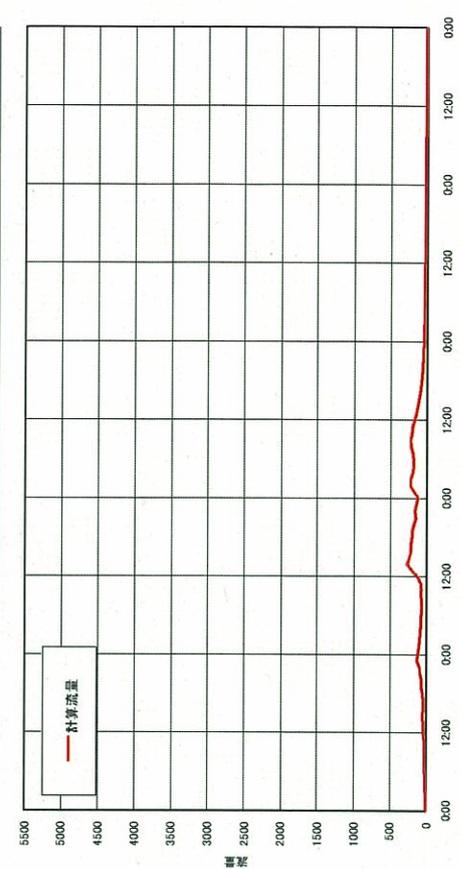
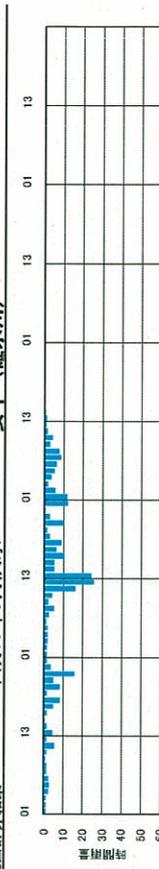
流出計算結果 平成13年9月洪水 村上(香妻川)



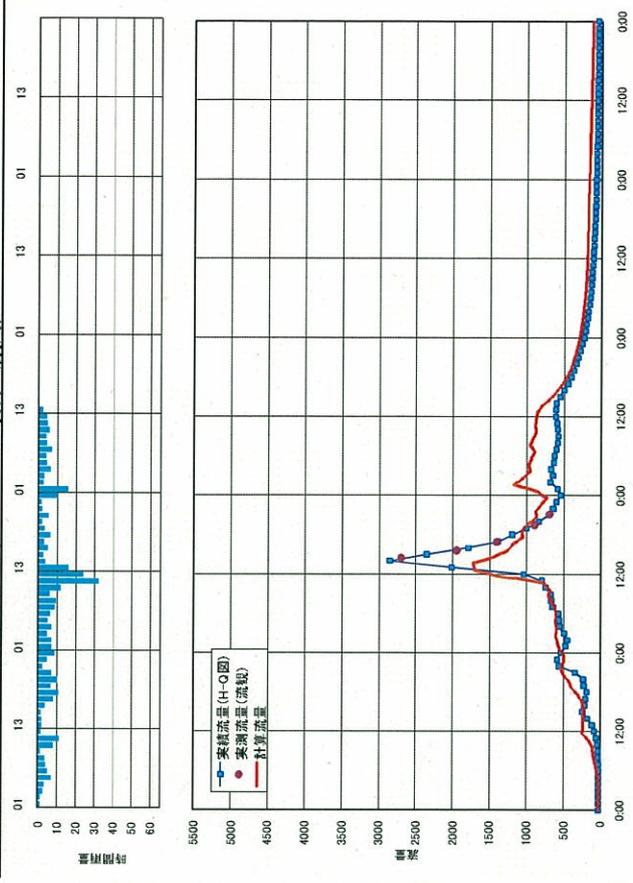
流出計算結果 平成13年9月洪水 上里見(島川)



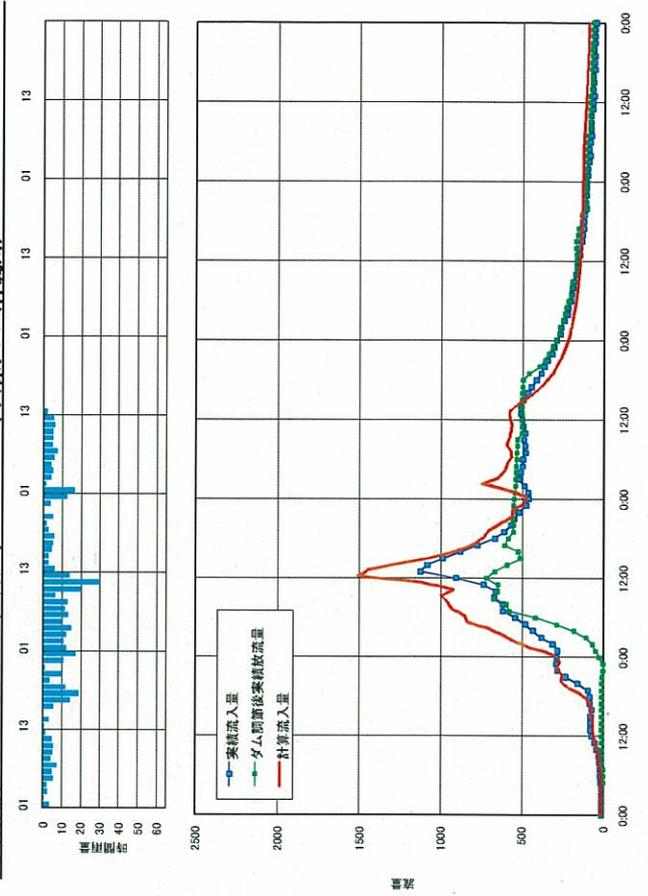
流出計算結果 平成13年9月洪水 安中(碓氷川)



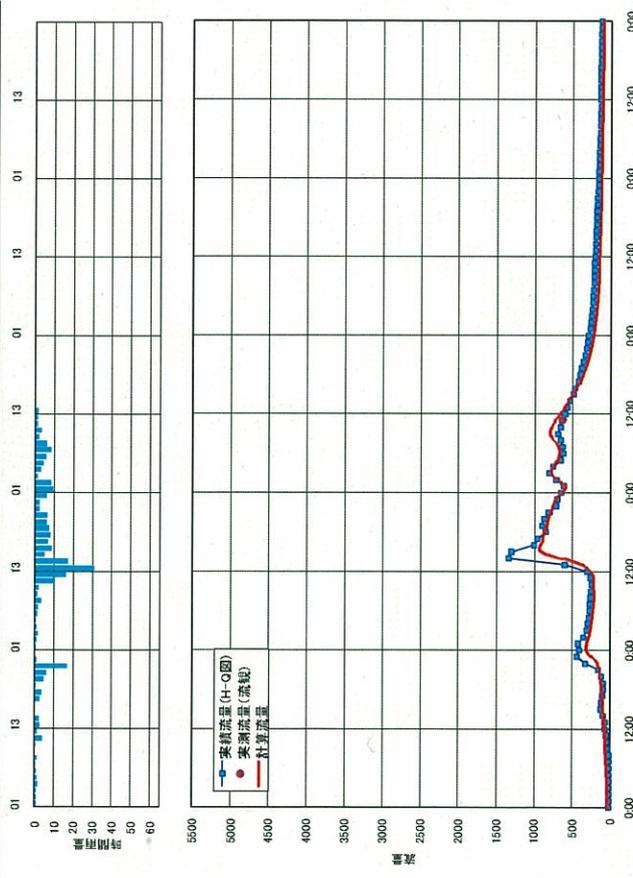
流出計算結果 平成13年9月洪水 岩井 (錦川)



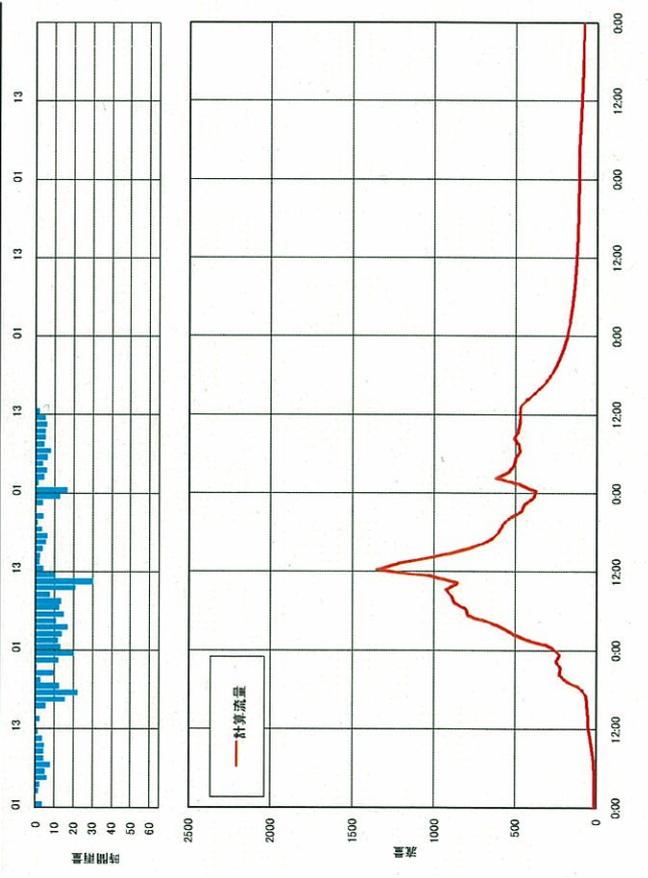
流出計算結果 平成13年9月洪水 下久保ダム (神流川)



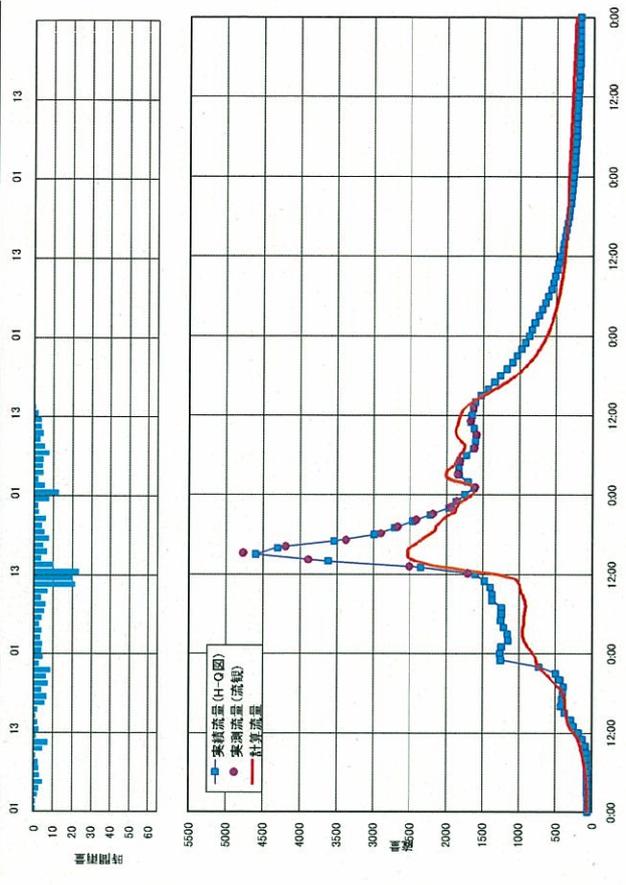
流出計算結果 平成13年9月洪水 高松 (高川)



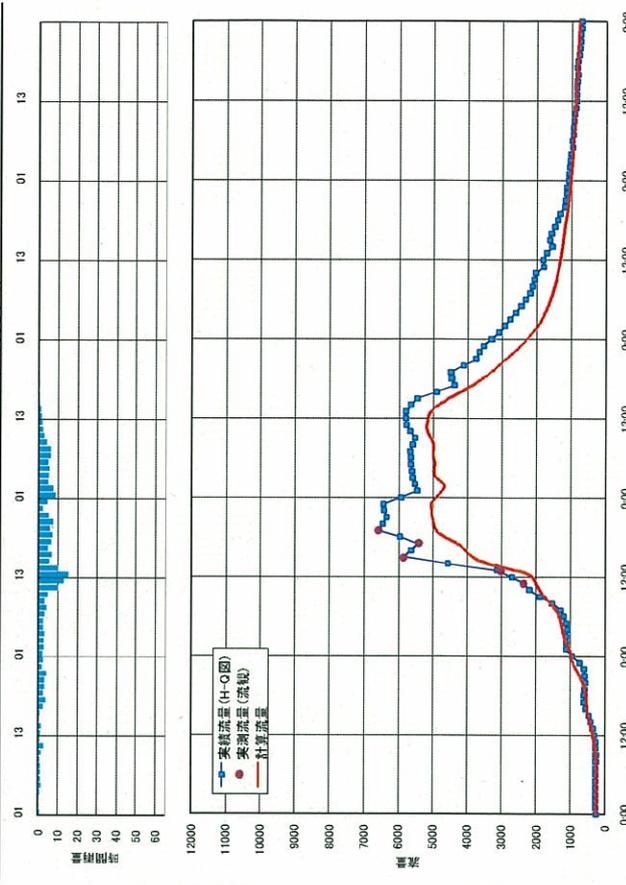
流出計算結果 平成13年9月洪水 万場 (神流川)



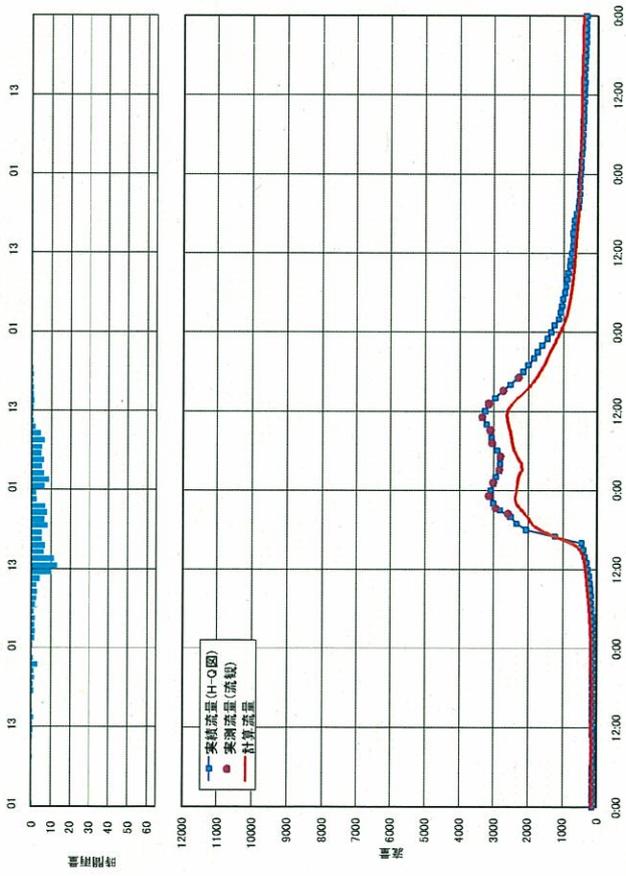
流出計算結果 平成13年9月洪水 岩鼻 (扇川)



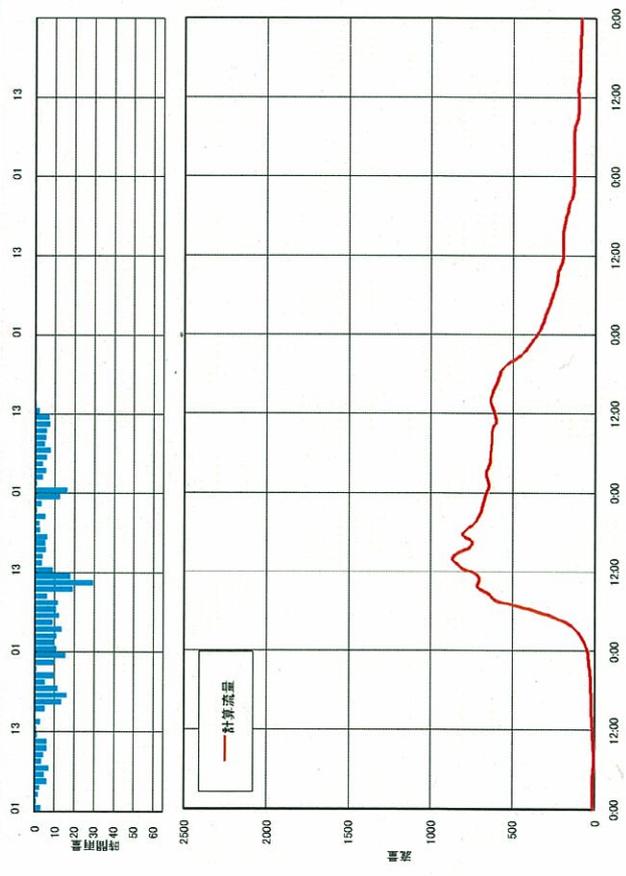
流出計算結果 平成13年9月洪水 八斗島 (利根川)



流出計算結果 平成13年9月洪水 上福島 (利根川)



流出計算結果 平成13年9月洪水 若泉 (神流川)



流出計算に用いた定数

洪水名 平成14年7月洪水

流域定数

流域 No	流域 面積 A (km <sup>2</sup> )	一次 流出率 f1	飽和 雨量 Rsa (mm)	流入係数 fsa	初期 損失 雨量 R0 (mm)	遅滞 時間 Tl (分)	係数		開始 基底 流量 Qb1 (m <sup>3</sup> /s)
							k	P	
1	165.48	0.4	140	1.0	24.0	30	7.587	0.528	5.0
2	60.59	0.4	140	1.0	24.0	50	6.252	0.656	1.8
3	165.77	0.4	140	1.0	24.0	50	9.480	0.592	5.0
4	103.07	0.4	140	1.0	24.0	50	9.480	0.592	3.1
5	81.80	0.4	140	1.0	24.0	50	9.480	0.592	2.5
6	110.19	0.4	130	1.0	24.0	40	10.591	0.655	3.3
7	79.19	0.4	140	1.0	24.0	50	9.480	0.592	2.4
8	226.00	0.4	140	1.0	24.0	50	9.480	0.592	6.8
9	252.05	0.4	150	1.0	27.0	90	13.487	0.530	7.6
10	161.64	0.4	150	1.0	27.0	90	13.487	0.530	4.9
11	78.78	0.4	150	1.0	27.0	90	13.487	0.530	2.4
12	182.31	0.4	140	1.0	24.0	50	9.480	0.592	5.5
13	144.49	0.4	—	—	13.0	50	35.239	0.300	4.4
14	269.24	0.4	—	—	8.0	100	29.321	0.305	8.1
15	289.00	0.4	—	—	8.0	100	29.321	0.305	8.7
16	153.20	0.4	—	—	8.0	100	29.321	0.305	4.6
17	38.30	0.4	—	—	8.0	100	29.321	0.305	1.2
18	164.22	0.4	—	—	13.0	50	35.239	0.300	5.0
19	157.01	0.4	—	—	13.0	50	35.239	0.300	4.7
20	188.37	0.4	—	—	13.0	50	35.239	0.300	5.7
21	97.12	0.4	—	—	13.0	50	35.239	0.300	2.9
22	93.33	0.4	—	—	13.0	50	35.239	0.300	2.8
23	24.68	0.4	—	—	13.0	50	35.239	0.300	0.7
24	23.88	0.4	—	—	13.0	50	35.239	0.300	0.7
25	155.13	0.6	320	1.0	5.0	30	29.519	0.428	4.7
26	110.02	0.6	250	1.0	17.0	40	18.623	0.572	3.3
27	121.39	0.6	190	1.0	3.0	60	10.765	0.680	3.7
28	165.39	0.6	250	1.0	17.0	40	18.623	0.572	5.0
29	43.27	0.6	250	1.0	17.0	40	18.623	0.572	1.3
30	190.64	0.6	240	1.0	42.0	40	18.623	0.572	5.7
31	158.74	0.6	240	1.0	42.0	40	18.623	0.572	4.8
32	201.63	0.6	240	1.0	42.0	40	18.623	0.572	6.1
33	75.00	0.6	250	1.0	17.0	40	18.623	0.572	2.3
34	94.85	0.4	—	—	13.0	50	35.239	0.300	2.9
35	70.05	0.6	250	1.0	17.0	40	18.623	0.572	2.1
36	269.56	0.6	110	1.0	23.0	80	29.976	0.476	8.1
37	53.25	0.6	110	1.0	29.0	80	29.976	0.476	1.6
38	51.68	0.6	110	1.0	29.0	80	29.976	0.476	1.6
39	37.50	0.6	110	1.0	29.0	80	29.976	0.476	1.1
	5,107.81								154.0

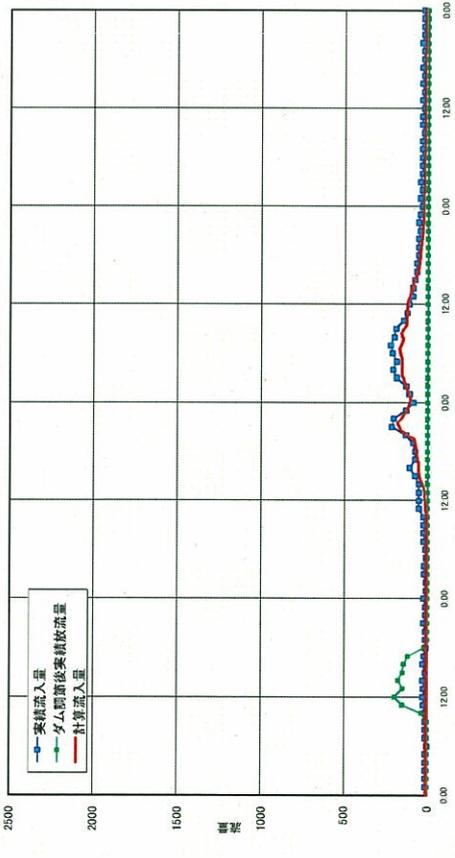
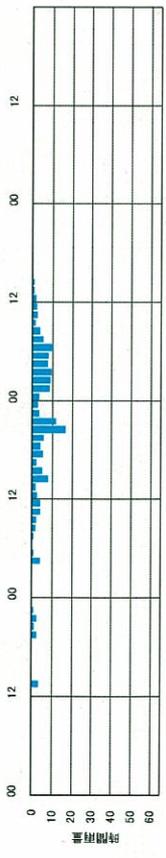
河道定数

河道 No.	K	P	遅滞 時間 Tl (時間)	
			—	—
a	—	—	—	0.217
b	—	—	—	0.234
A	4.476	0.699	—	0.165
B	12.030	0.665	—	0.350
C	13.878	0.665	—	0.273
D	7.381	0.663	—	0.160
E	4.966	0.729	—	0.180
F	4.831	0.797	—	0.250
G	6.405	0.724	—	0.170
H	6.223	0.681	—	0.143
K	8.039	0.712	—	0.281
O	12.928	0.627	—	0.208
Q	9.401	0.727	—	0.509
R	7.492	0.632	—	0.127
N	7.515	0.644	—	0.306
I	6.235	0.742	—	0.318
J	8.598	0.654	—	0.269
M	1.660	0.752	—	0.095
L	16.279	0.614	—	0.333
P	6.775	0.684	—	0.268

流出計算結果

平成14年7月洪水

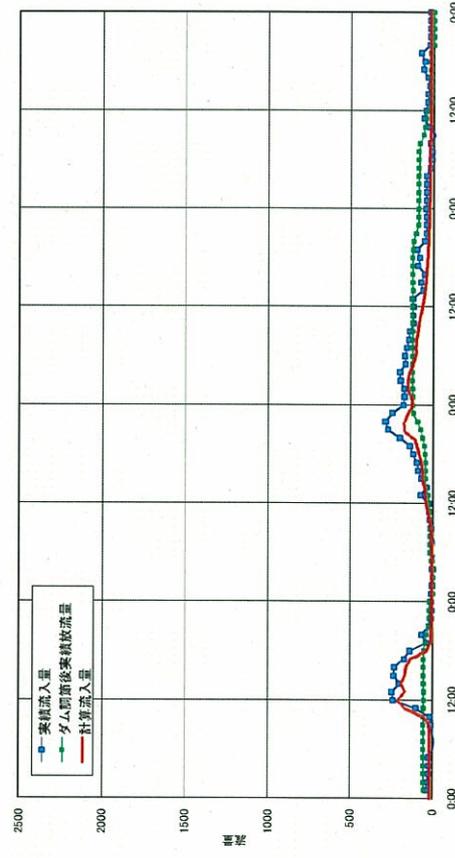
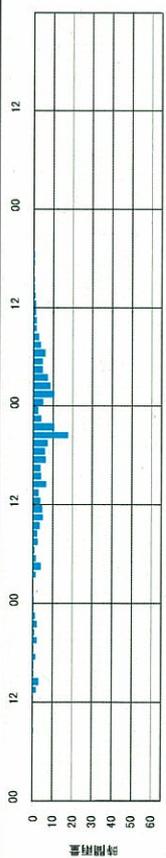
矢木沢ダム (利根川)



流出計算結果

平成14年7月洪水

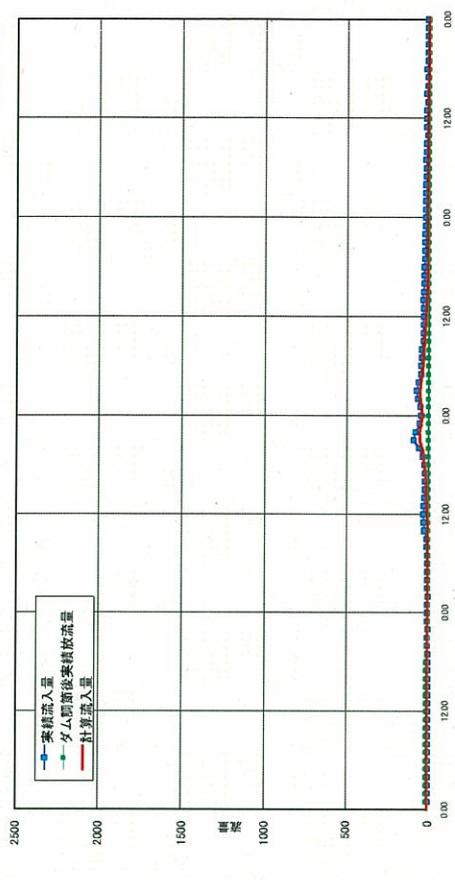
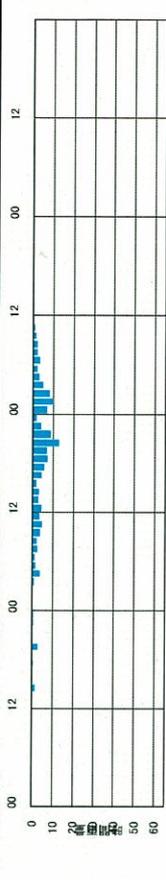
藤原ダム (利根川)



流出計算結果

平成14年7月洪水

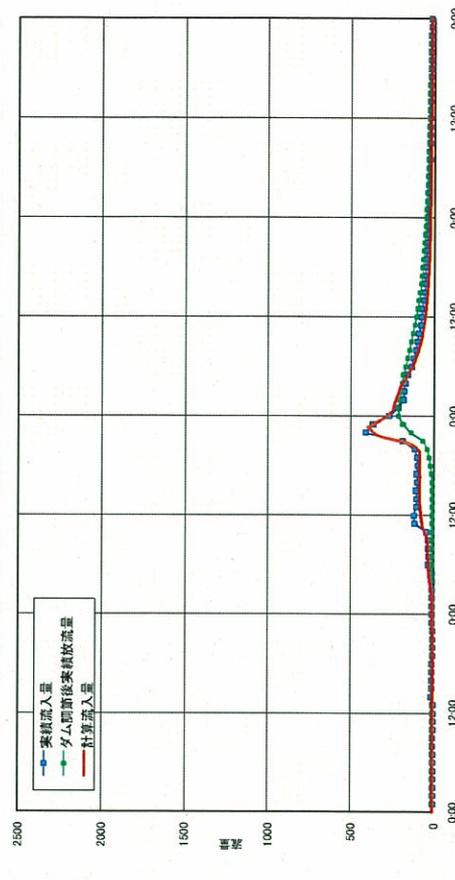
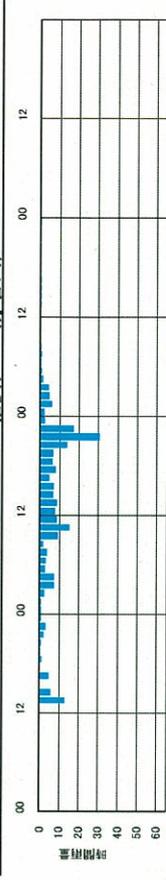
奈良原ダム (槽俣川)



流出計算結果

平成14年7月洪水

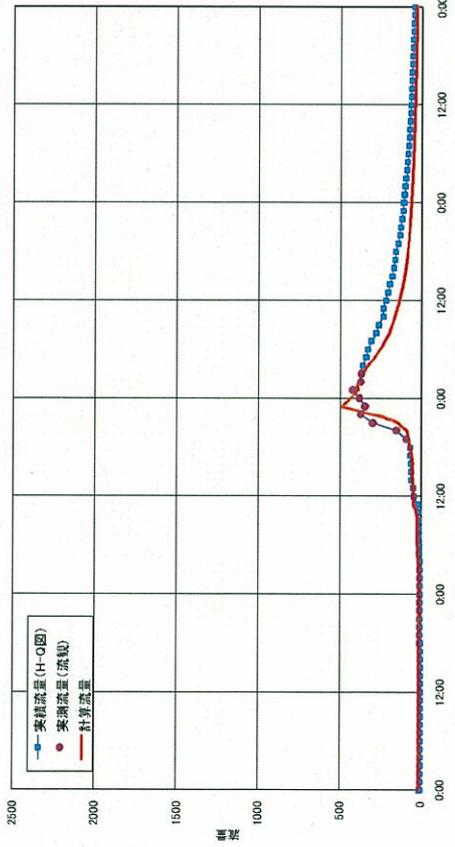
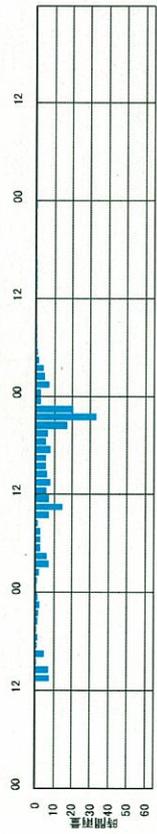
相俣ダム (赤谷川)



流出計算結果

平成14年7月洪水

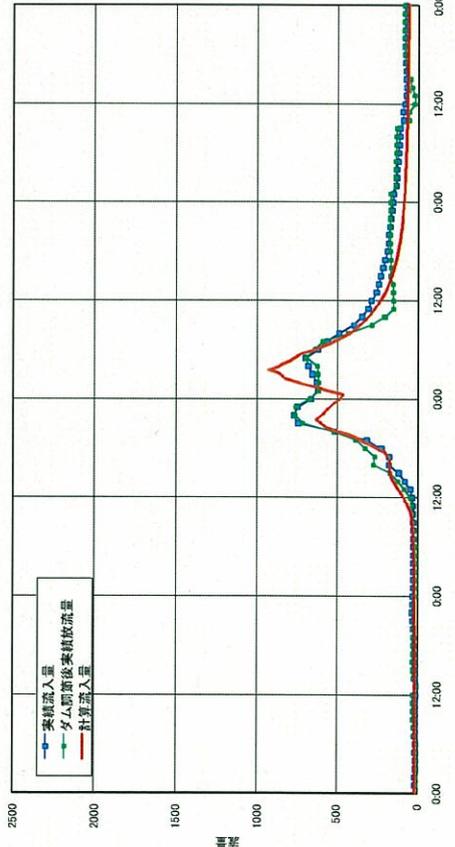
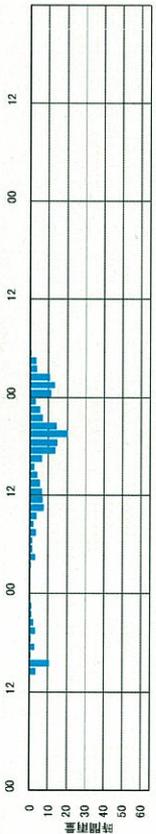
小瀬橋(赤谷川)



流出計算結果

平成14年7月洪水

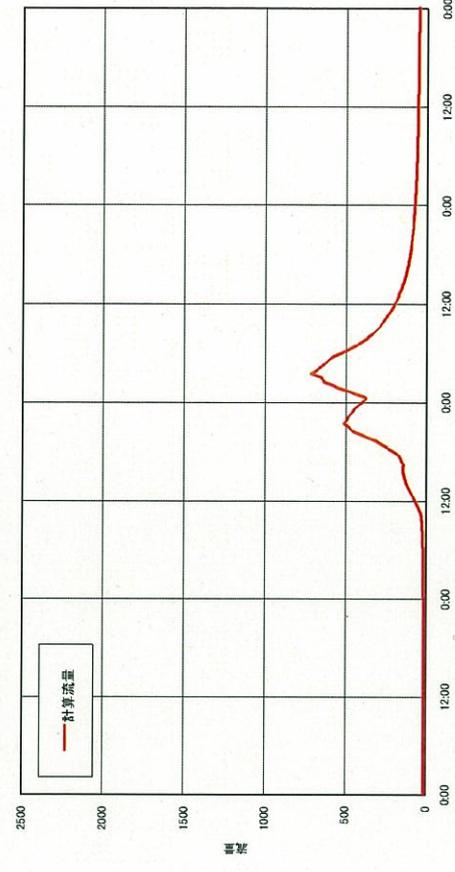
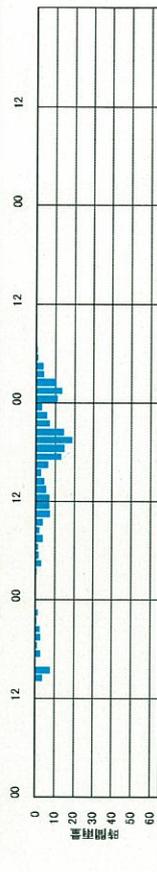
藪原ダム(片品川)



流出計算結果

平成14年7月洪水

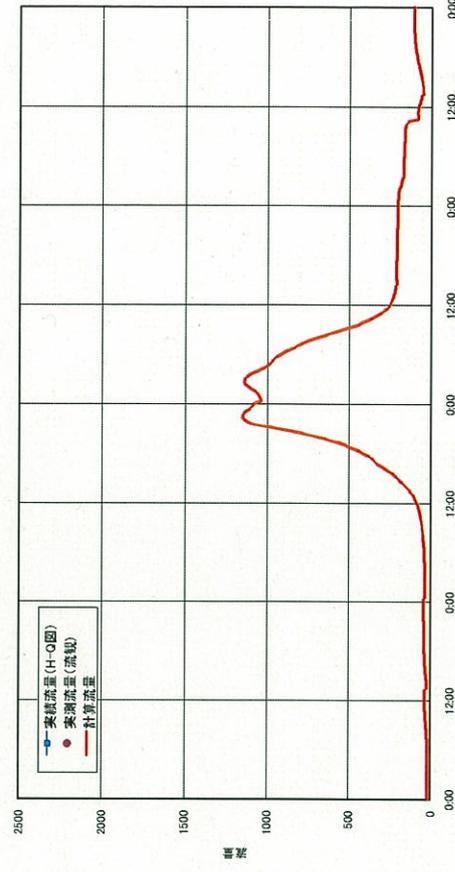
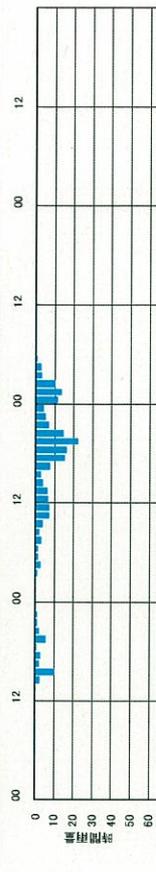
千鳥(片品川)



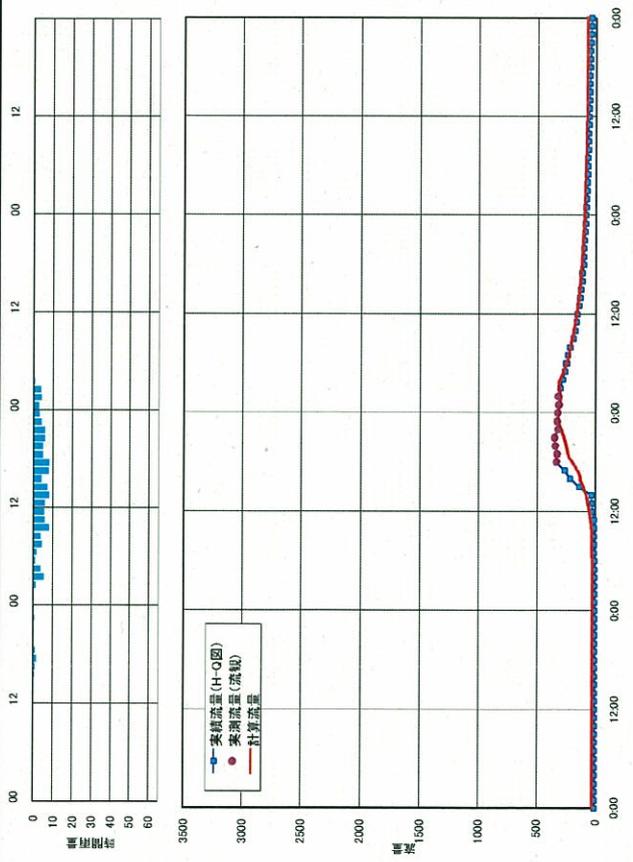
流出計算結果

平成14年7月洪水

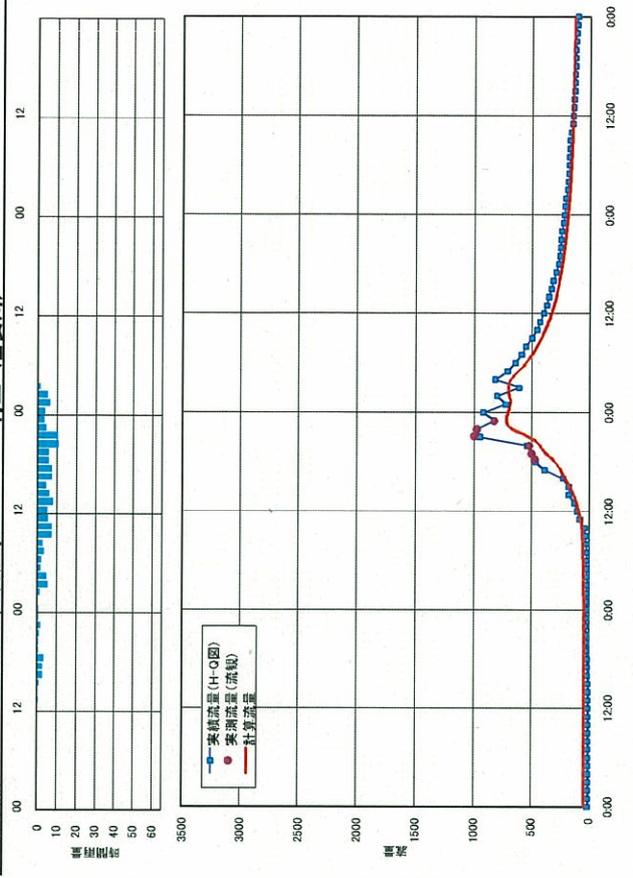
上久屋(片品川)



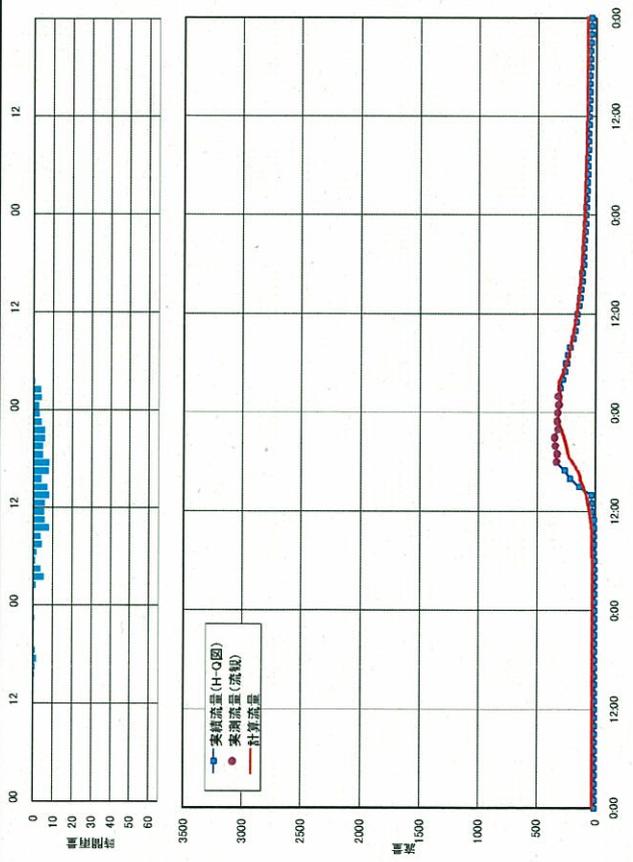
流出計算結果 平成14年7月洪水 岩島 (香妻川)



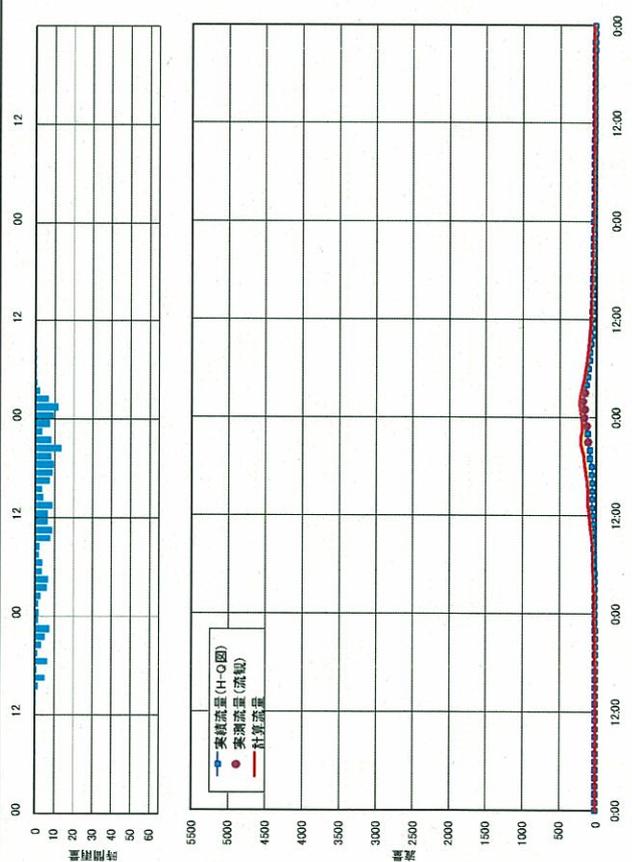
流出計算結果 平成14年7月洪水 村上 (香妻川)



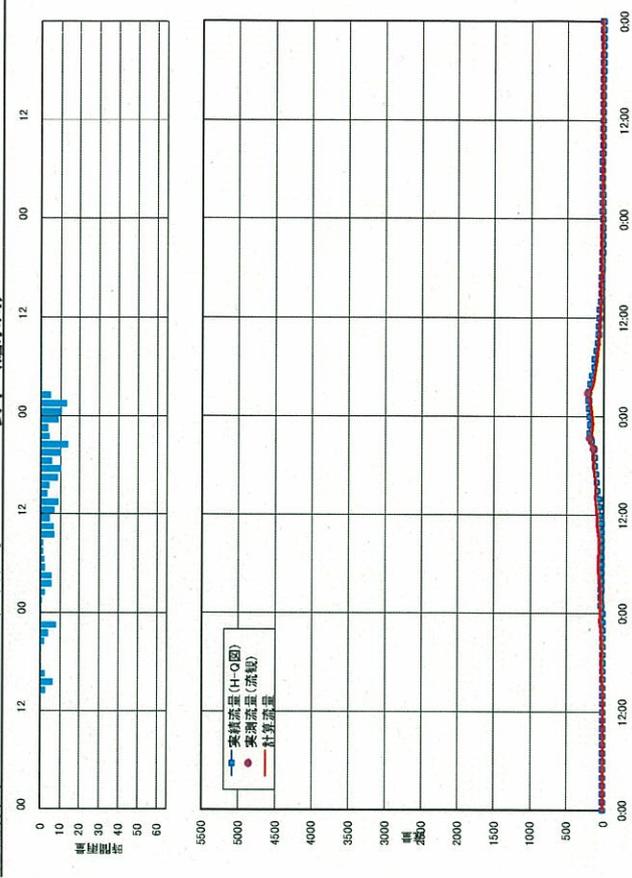
流出計算結果 平成14年7月洪水 上里見 (高川)



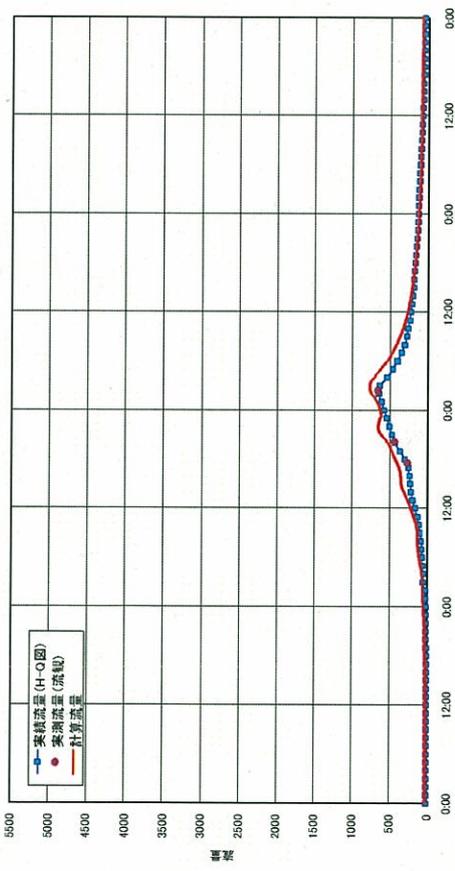
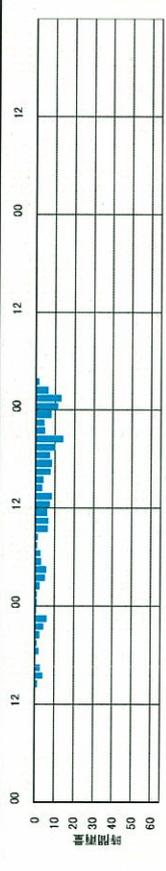
流出計算結果 平成14年7月洪水 上里見 (高川)



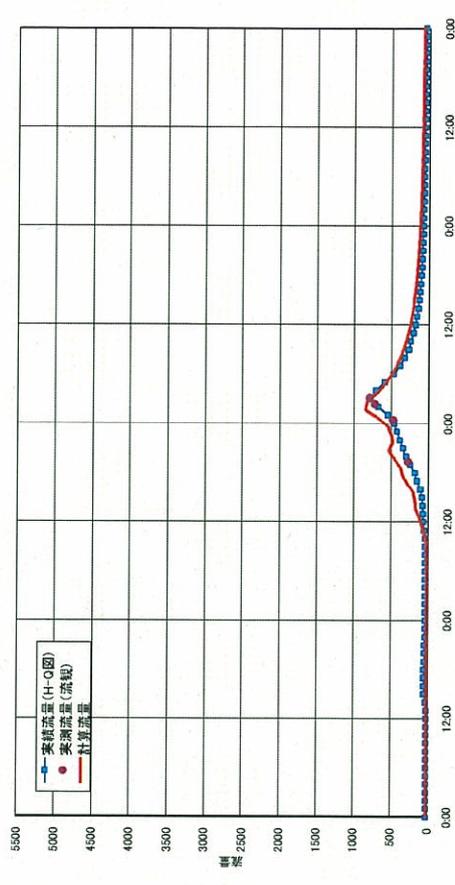
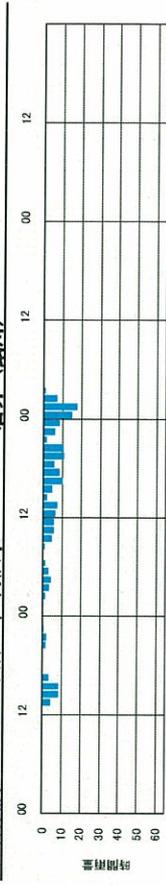
流出計算結果 平成14年7月洪水 安中 (碓氷川)



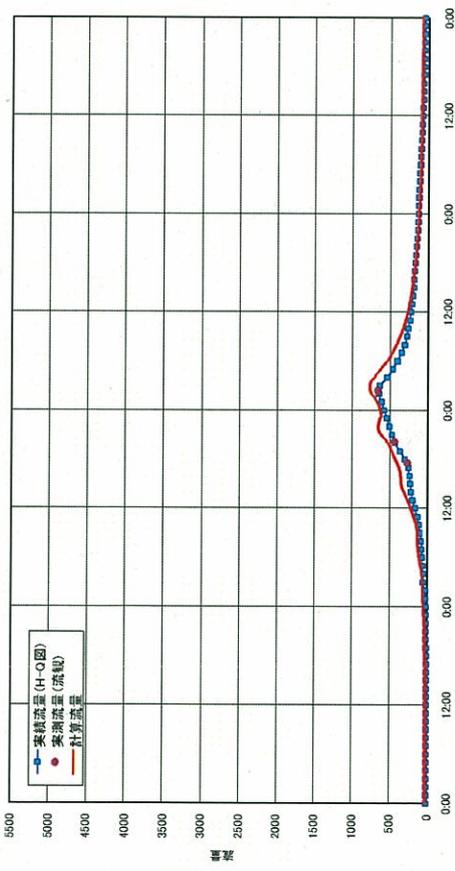
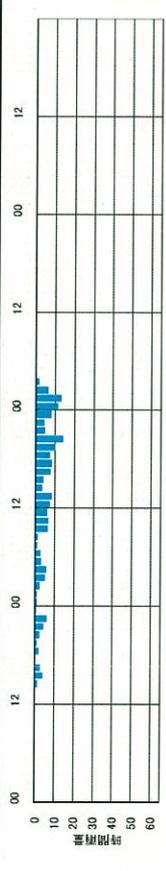
流出計算結果 平成14年7月洪水 高松 (島川)



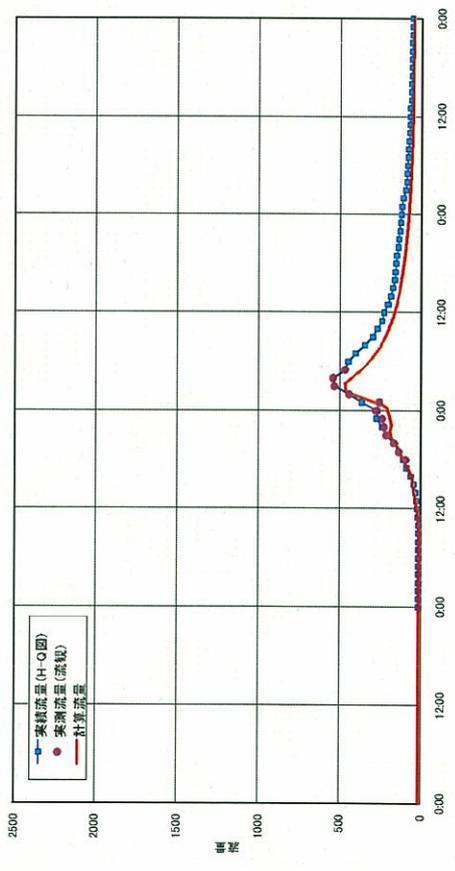
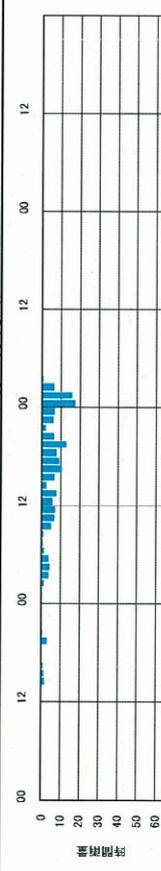
流出計算結果 平成14年7月洪水 岩井 (鏡川)



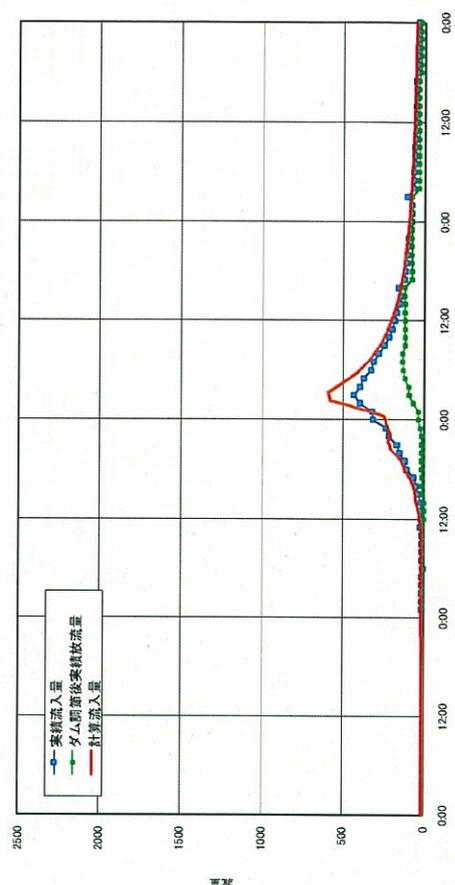
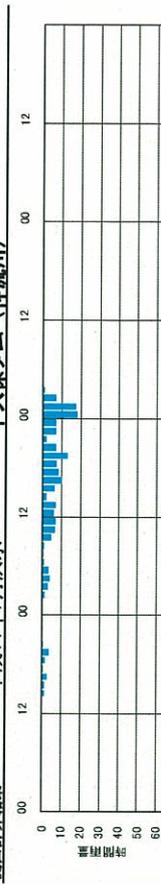
流出計算結果 平成14年7月洪水 高松 (島川)



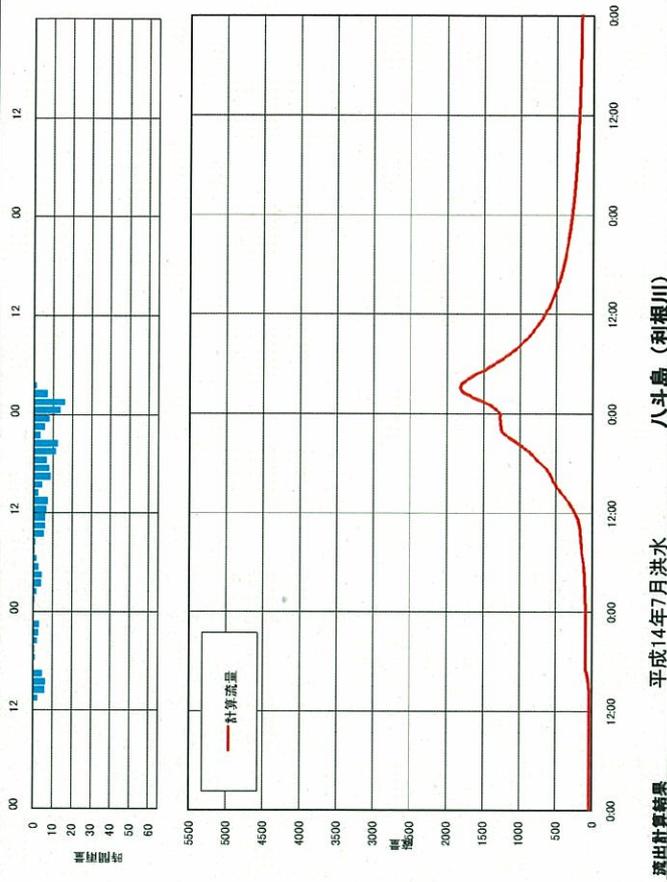
流出計算結果 平成14年7月洪水 万場 (神流川)



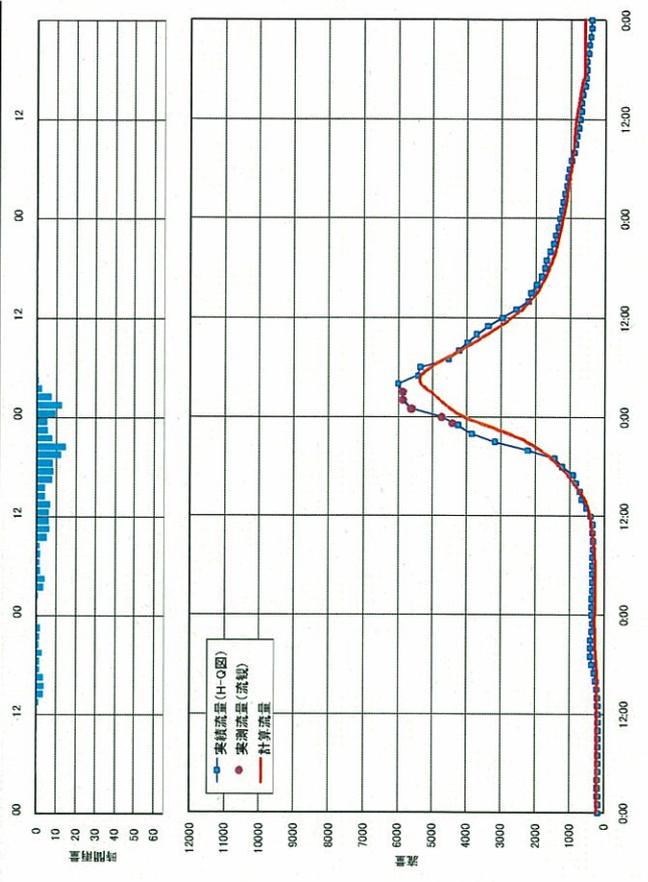
流出計算結果 平成14年7月洪水 下久保ダム (神流川)



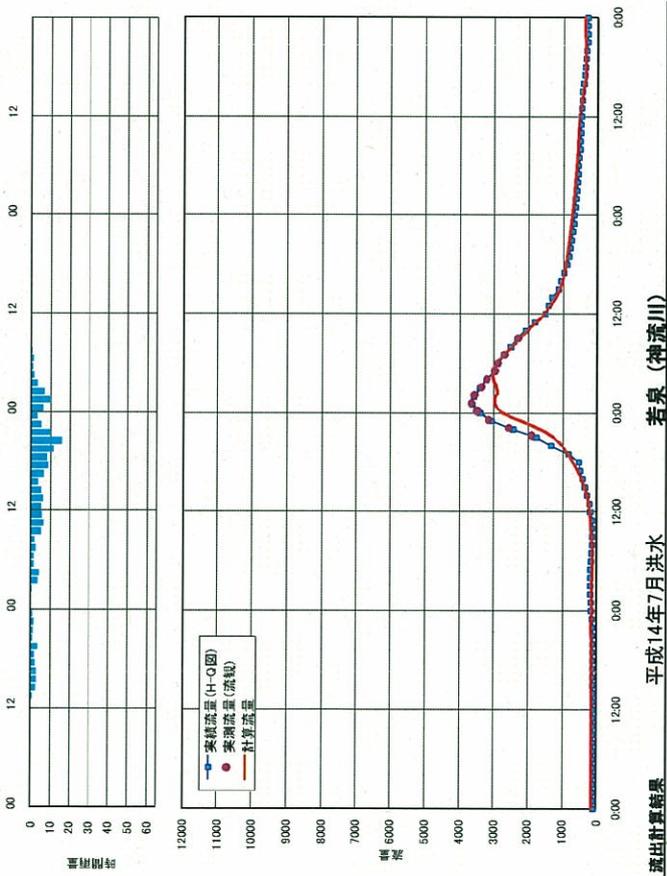
流出計算結果 平成14年7月洪水 岩鼻 (烏川)



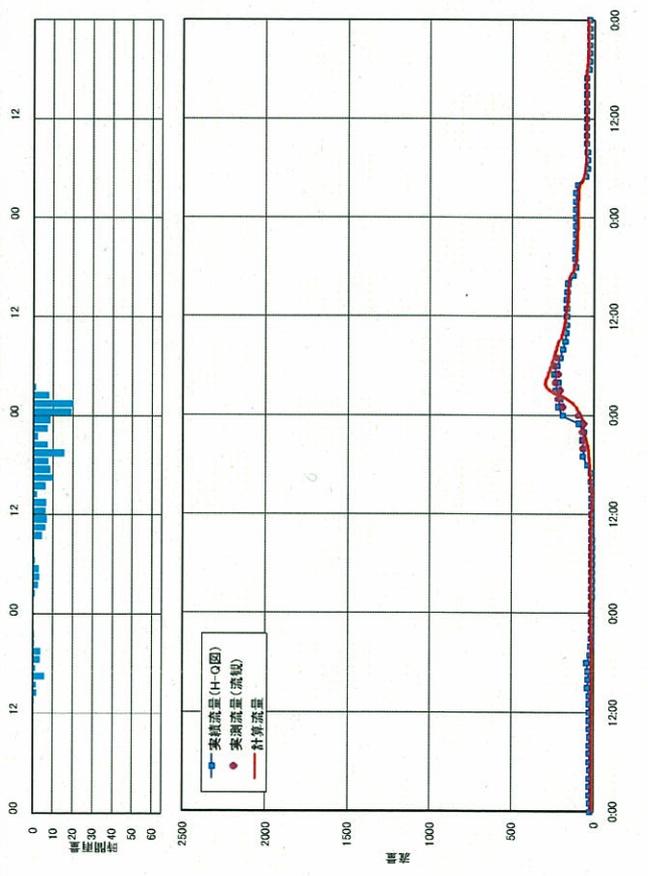
流出計算結果 平成14年7月洪水 八斗島 (利根川)



流出計算結果 平成14年7月洪水 上福島 (利根川)



流出計算結果 平成14年7月洪水 若泉 (神流川)



流出計算に用いた定数

洪水名 平成19年9月洪水

流域定数

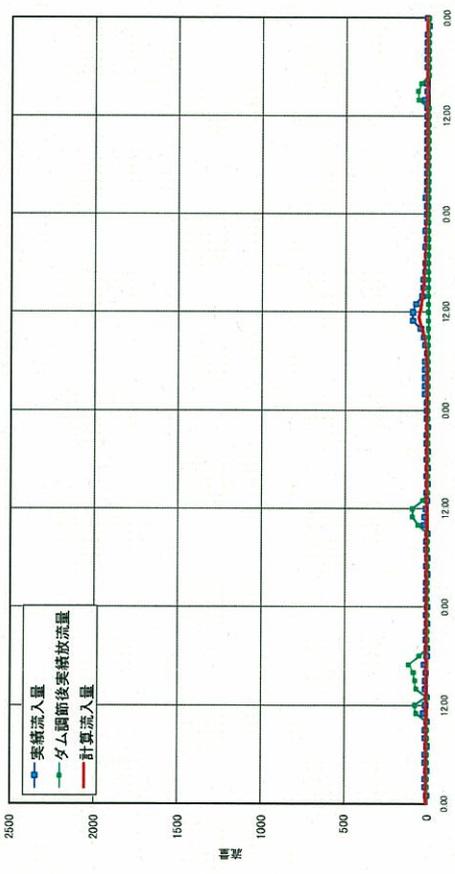
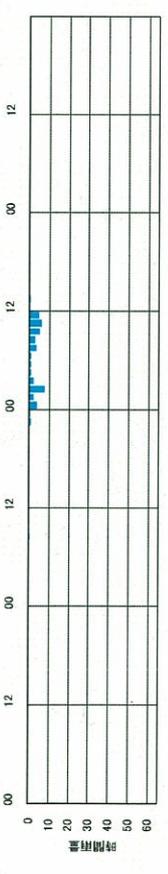
流域 No	流域 面積 (km <sup>2</sup> )	一次 流出率 f1	飽和 雨量 Rsa (mm)	流入係数 fsa	初期 損失 雨量 R0 (mm)	遅滞 時間 Tl (分)	係数		開始 基底 流量 Qb1 (m <sup>3</sup> /s)
							k	P	
1	165.48	0.4	180	1.0	19.0	30	7.587	0.528	6.0
2	60.59	0.4	180	1.0	19.0	50	6.252	0.656	2.2
3	165.77	0.4	180	1.0	19.0	50	9.480	0.592	6.0
4	103.07	0.4	180	1.0	19.0	50	9.480	0.592	3.7
5	81.80	0.4	180	1.0	19.0	50	9.480	0.592	3.0
6	110.19	0.4	180	1.0	19.0	40	10.591	0.655	4.0
7	79.19	0.4	180	1.0	19.0	50	9.480	0.592	2.9
8	226.00	0.4	180	1.0	19.0	50	9.480	0.592	8.2
9	252.05	0.4	180	1.0	21.0	90	13.487	0.530	9.1
10	161.64	0.4	180	1.0	21.0	90	13.487	0.530	5.9
11	78.78	0.4	180	1.0	21.0	90	13.487	0.530	2.9
12	182.31	0.4	180	1.0	19.0	50	9.480	0.592	6.6
13	144.49	0.4	—	—	18.0	50	35.239	0.300	5.2
14	269.24	0.4	—	—	21.0	100	29.321	0.305	9.8
15	289.00	0.4	—	—	21.0	100	29.321	0.305	10.5
16	153.20	0.4	—	—	21.0	100	29.321	0.305	5.5
17	38.30	0.4	—	—	21.0	100	29.321	0.305	1.4
18	164.22	0.4	—	—	18.0	50	35.239	0.300	5.9
19	157.01	0.4	—	—	18.0	50	35.239	0.300	5.7
20	188.37	0.4	—	—	18.0	50	35.239	0.300	6.8
21	97.12	0.4	—	—	18.0	50	35.239	0.300	3.5
22	93.33	0.4	—	—	18.0	50	35.239	0.300	3.4
23	24.68	0.4	—	—	18.0	50	35.239	0.300	0.9
24	23.88	0.4	—	—	18.0	50	35.239	0.300	0.9
25	155.13	0.6	170	1.0	22.0	30	29.519	0.428	5.6
26	110.02	0.6	170	1.0	22.0	40	18.623	0.572	4.0
27	121.39	0.6	170	1.0	22.0	60	10.765	0.680	4.4
28	165.39	0.6	170	1.0	22.0	40	18.623	0.572	6.0
29	43.27	0.6	170	1.0	23.0	40	18.623	0.572	1.6
30	190.64	0.6	170	1.0	23.0	40	18.623	0.572	6.9
31	158.74	0.6	170	1.0	23.0	40	18.623	0.572	5.7
32	201.63	0.6	170	1.0	23.0	40	18.623	0.572	7.3
33	75.00	0.6	170	1.0	22.0	40	18.623	0.572	2.7
34	94.85	0.4	—	—	18.0	50	35.239	0.300	3.4
35	70.05	0.6	170	1.0	22.0	40	18.623	0.572	2.5
36	269.56	0.6	120	1.0	1.0	80	29.976	0.476	9.8
37	53.25	0.6	120	1.0	1.0	80	29.976	0.476	1.9
38	51.68	0.6	120	1.0	1.0	80	29.976	0.476	1.9
39	37.50	0.6	120	1.0	1.0	80	29.976	0.476	1.4
	5,107.81								185.0

河道定数

河道 No.	K	P	遅滞 時間	
			Tl (時間)	Tl (時間)
a	—	—	—	0.217
b	—	—	—	0.234
A	4.476	0.699	—	0.165
B	12.030	0.665	—	0.350
C	13.878	0.665	—	0.273
D	7.381	0.663	—	0.160
E	4.966	0.729	—	0.180
F	4.831	0.797	—	0.250
G	6.405	0.724	—	0.170
H	6.223	0.681	—	0.143
K	8.039	0.712	—	0.281
Q	12.928	0.627	—	0.208
O	9.401	0.727	—	0.509
R	7.492	0.632	—	0.127
N	7.515	0.644	—	0.306
I	6.235	0.742	—	0.318
J	8.598	0.654	—	0.269
M	16.279	0.752	—	0.095
L	—	—	—	0.333
P	6.775	0.684	—	0.268

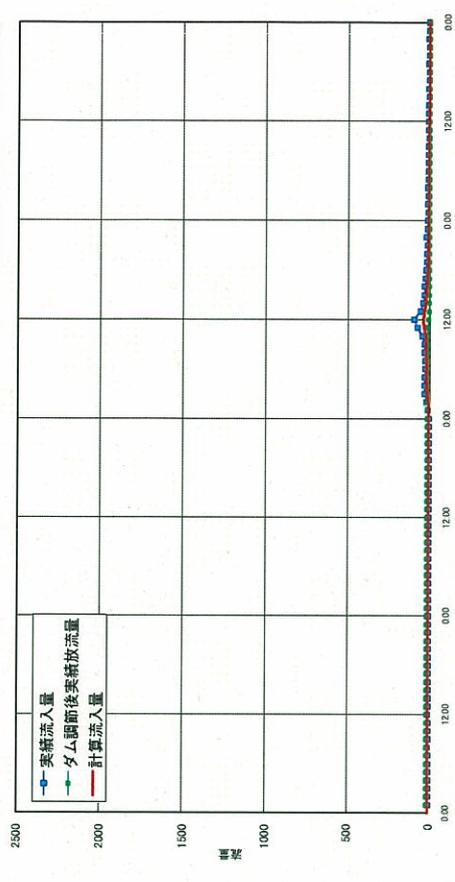
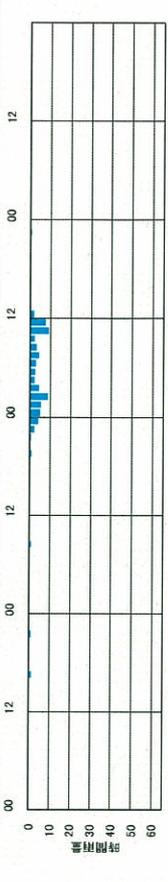
流出計算結果 平成19年9月洪水

矢木沢ダム (利根川)



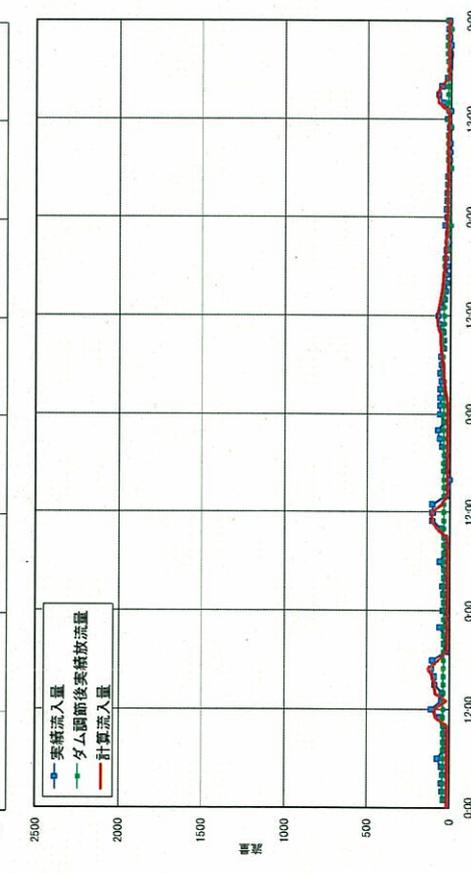
流出計算結果 平成19年9月洪水

奈良原ダム (槽谷川)



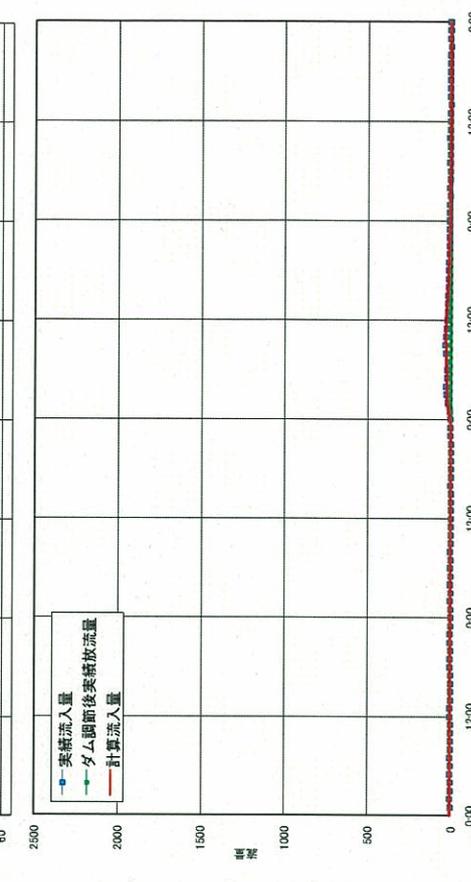
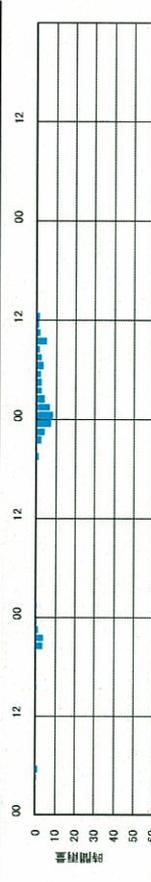
流出計算結果 平成19年9月洪水

藤原ダム (利根川)



流出計算結果 平成19年9月洪水

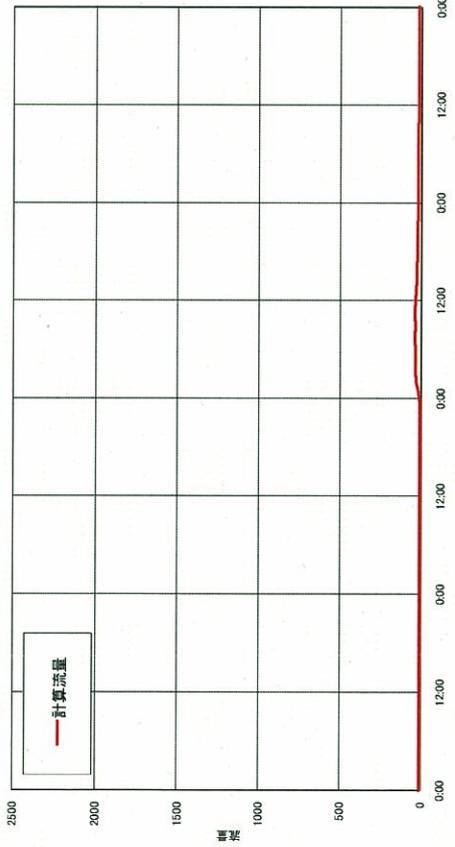
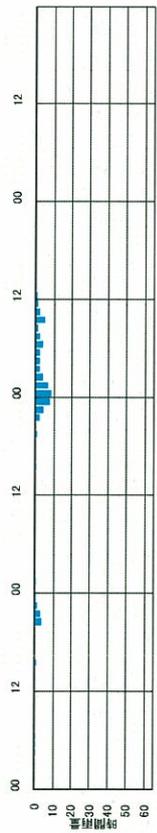
相俣ダム (赤谷川)



流出計算結果

平成19年9月洪水

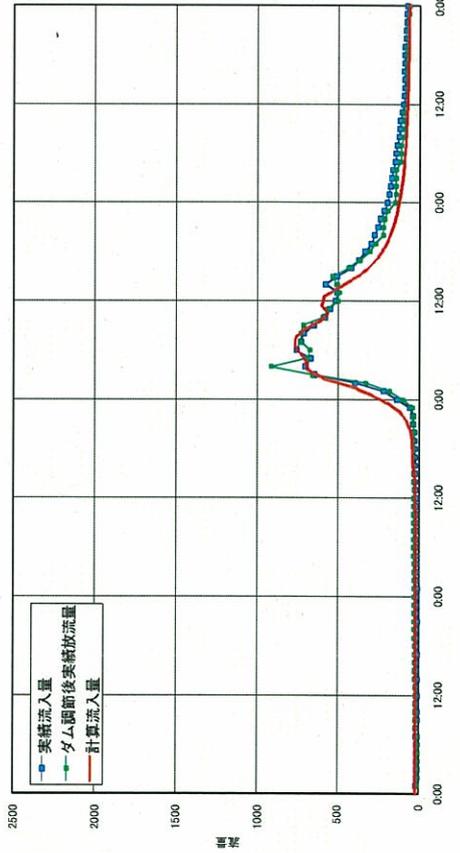
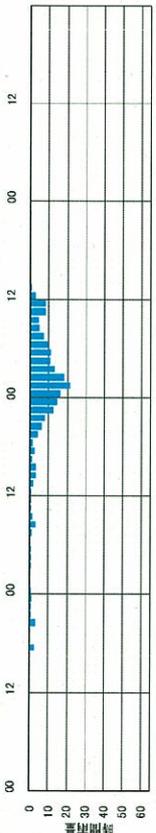
小袖橋 (赤谷川)



流出計算結果

平成19年9月洪水

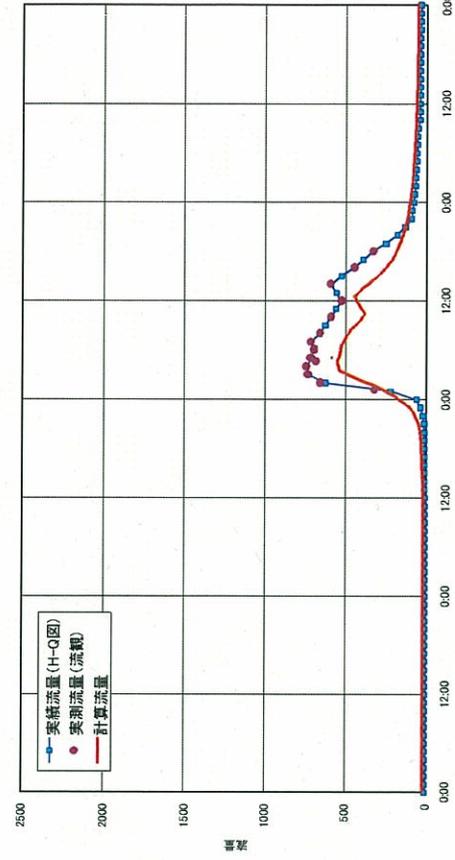
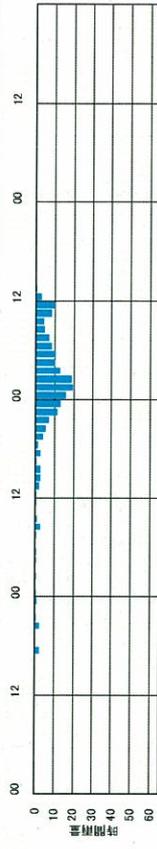
蘭原ダム (片品川)



流出計算結果

平成19年9月洪水

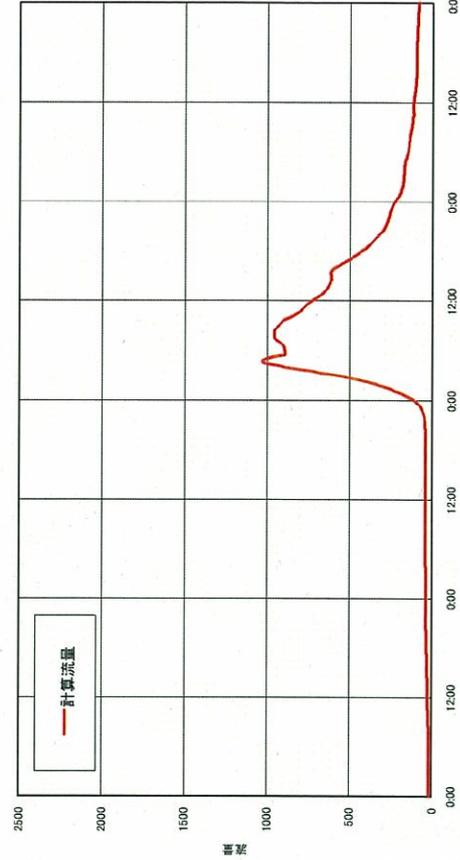
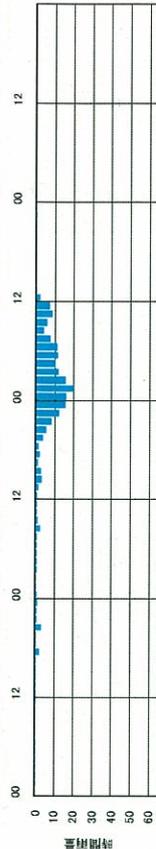
千鳥 (片品川)



流出計算結果

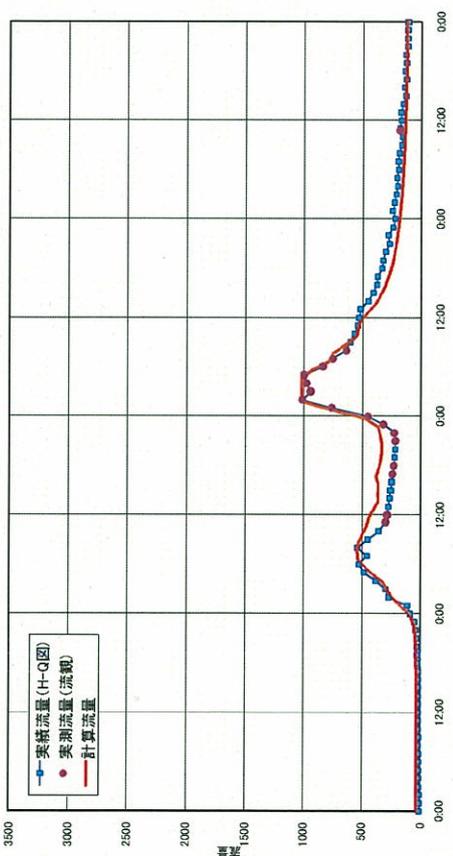
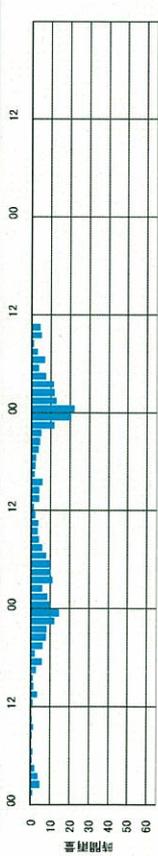
平成19年9月洪水

上久屋 (片品川)



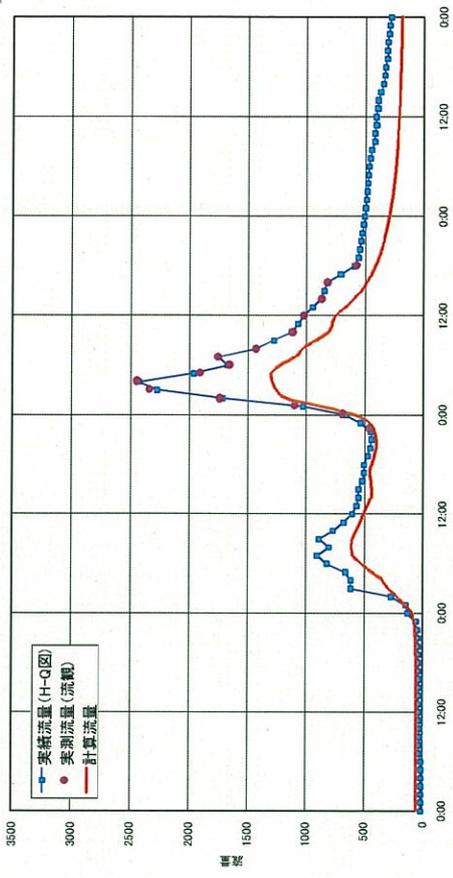
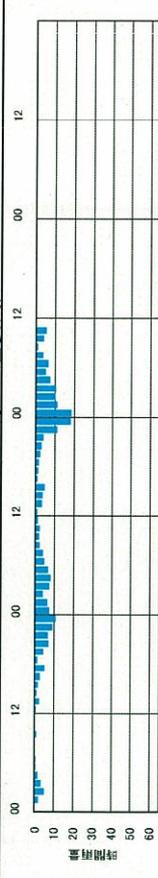
流出計算結果 平成19年9月洪水

岩島 (香菱川)



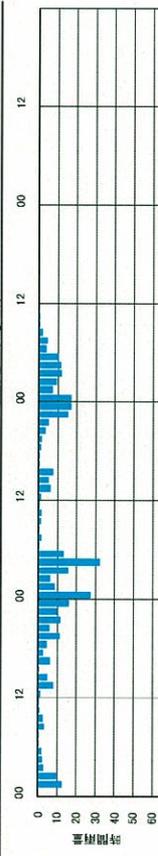
平成19年9月洪水

村上 (香菱川)



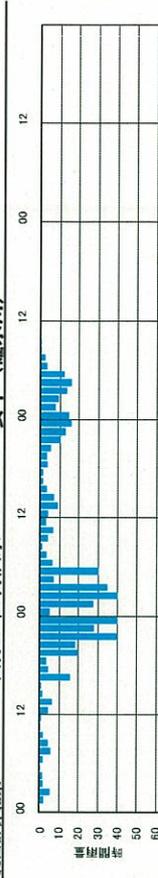
流出計算結果 平成19年9月洪水

上里見 (高川)

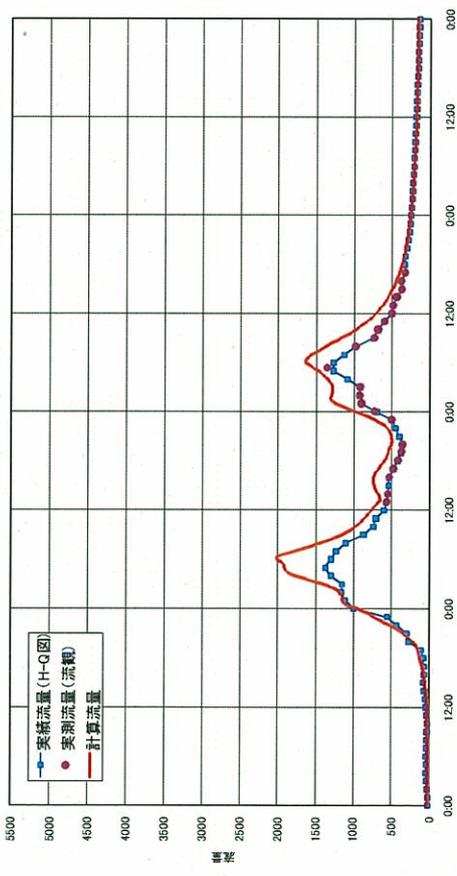
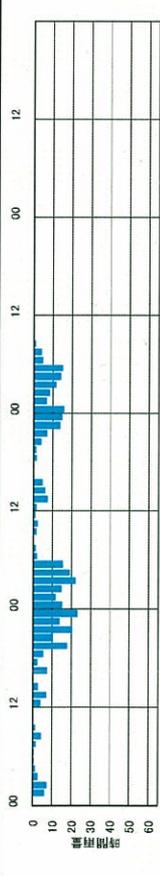


平成19年9月洪水

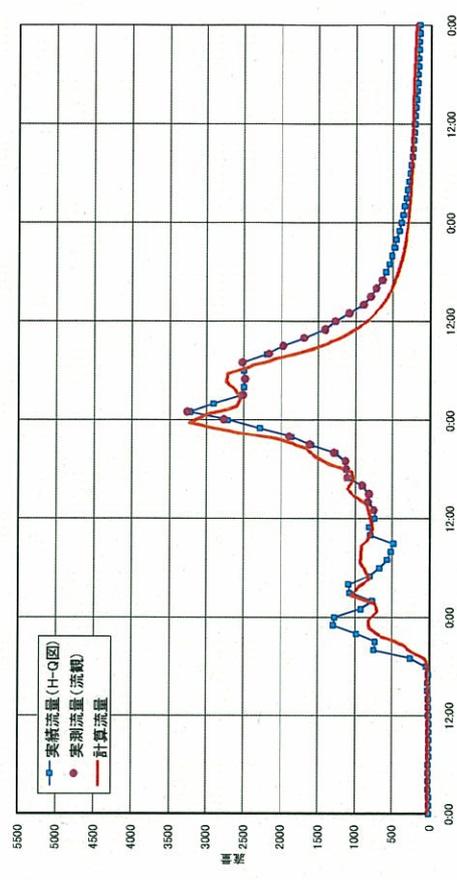
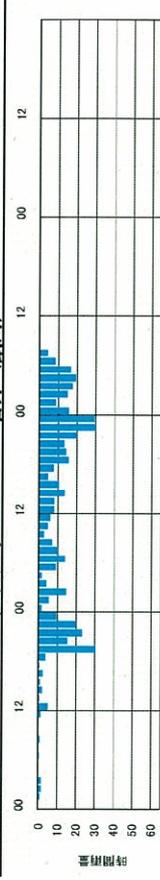
安中 (碓氷川)



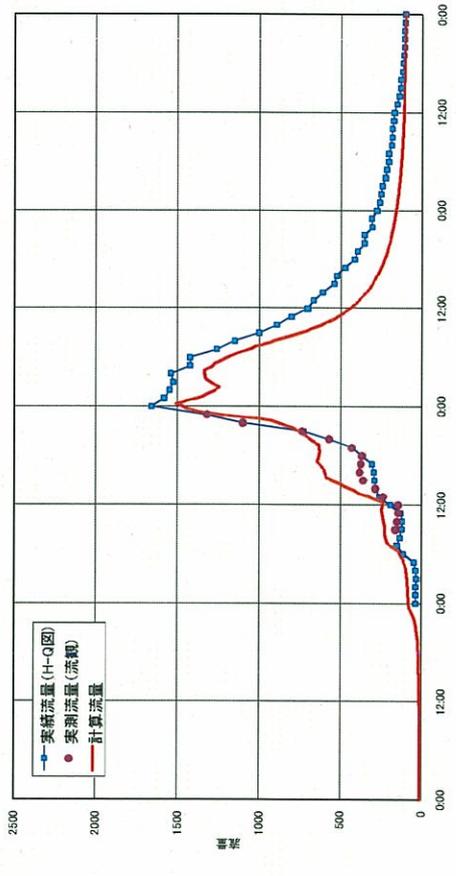
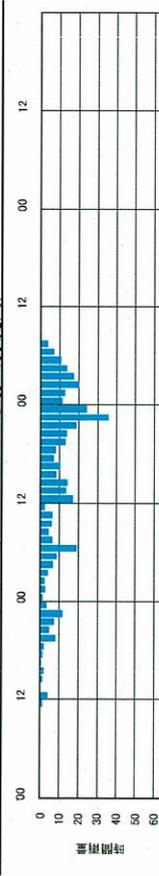
流出計算結果 平成19年9月洪水 高松 (島川)



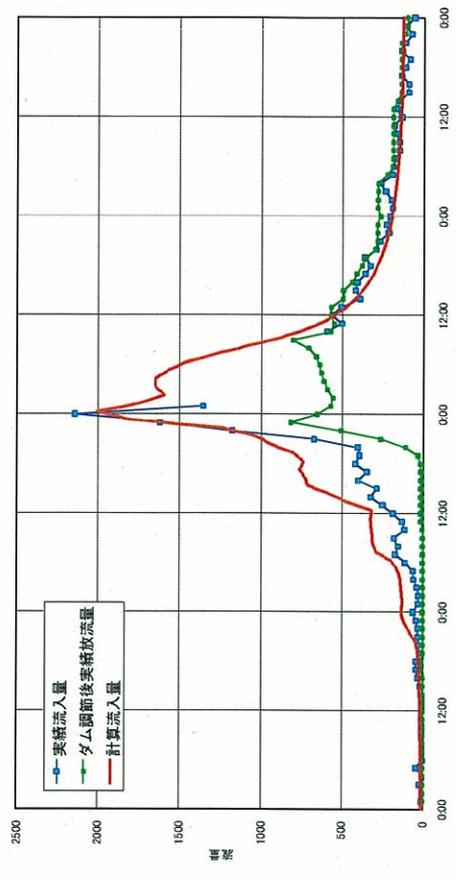
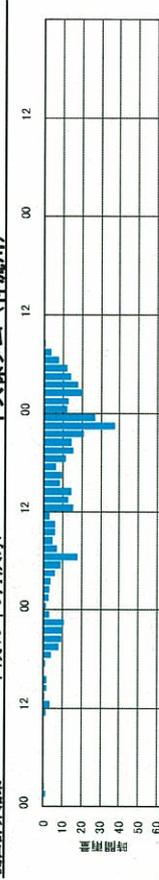
流出計算結果 平成19年9月洪水 岩井 (鏡川)



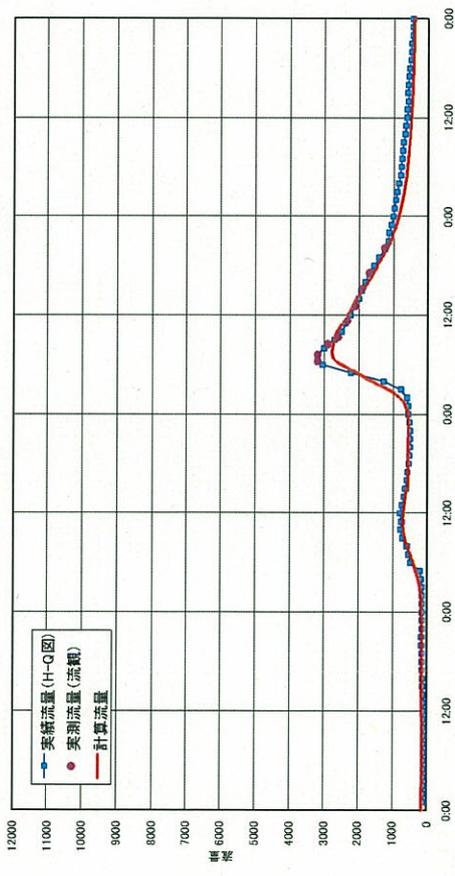
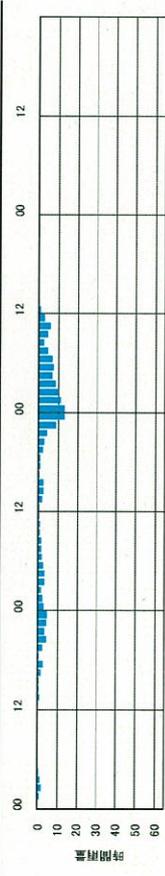
流出計算結果 平成19年9月洪水 万場 (神流川)



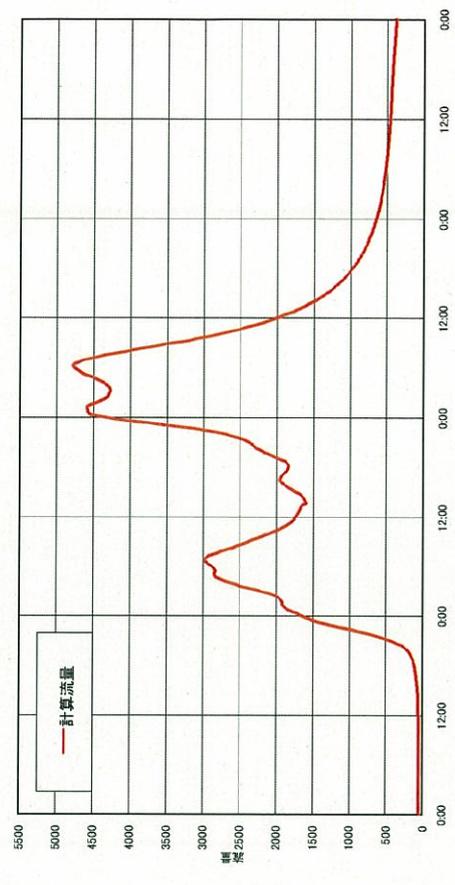
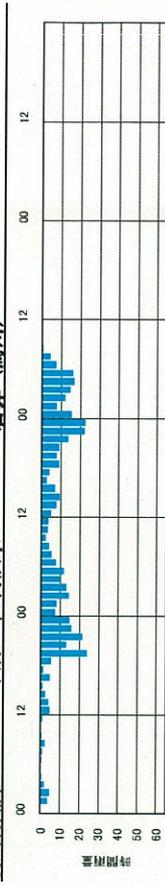
流出計算結果 平成19年9月洪水 下久保ダム (神流川)



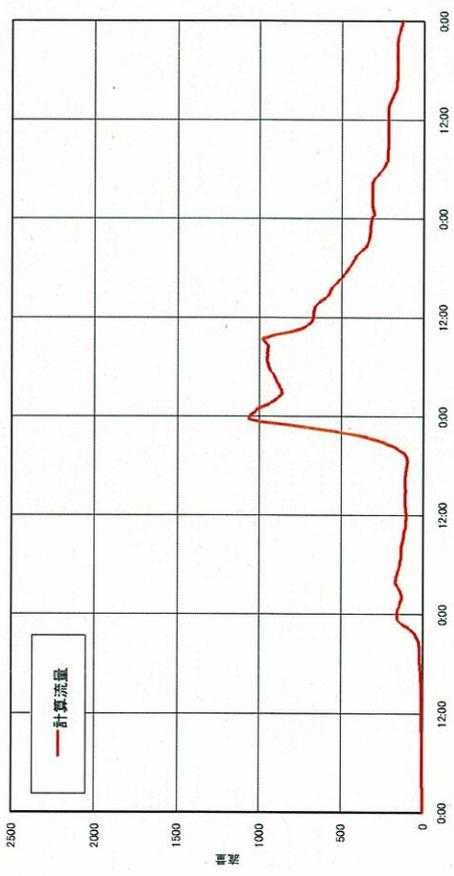
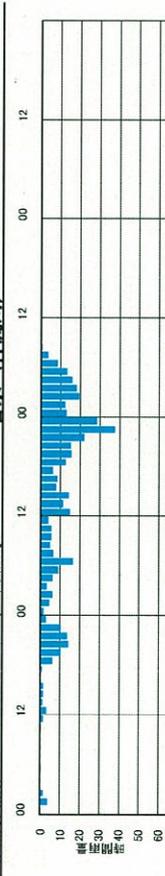
流出計算結果 上福島(利根川) 平成19年9月洪水



流出計算結果 岩鼻(扁川) 平成19年9月洪水



流出計算結果 若泉(神流川) 平成19年9月洪水



流出計算結果 八斗島(利根川) 平成19年9月洪水

