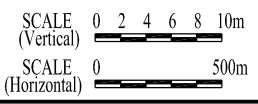
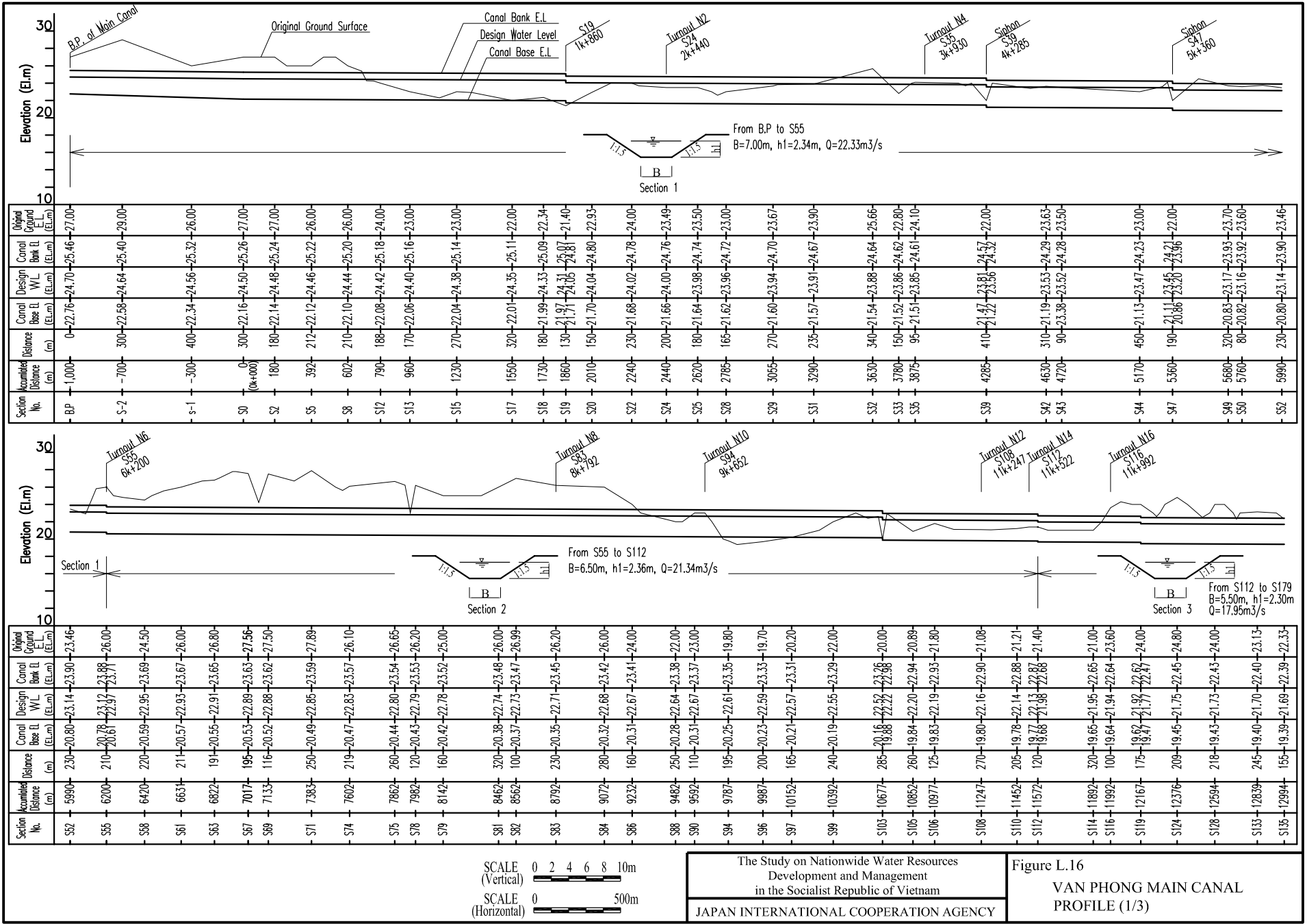


**< Legend >**

- Weir
- Pumping Station
- Existing Irrigation Main Canal
- Existing Irrigation Secondary Canal
- Planned Irrigation Main Canal
- Planned Irrigation Secondary Canal
- BP of Branching Canal
- Siphon (n=1)
- Aqueduct (n=2)
- Road Bridge

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**Figure L.15**  
**General Layout of Irrigation System**  
**Ha Thanh**



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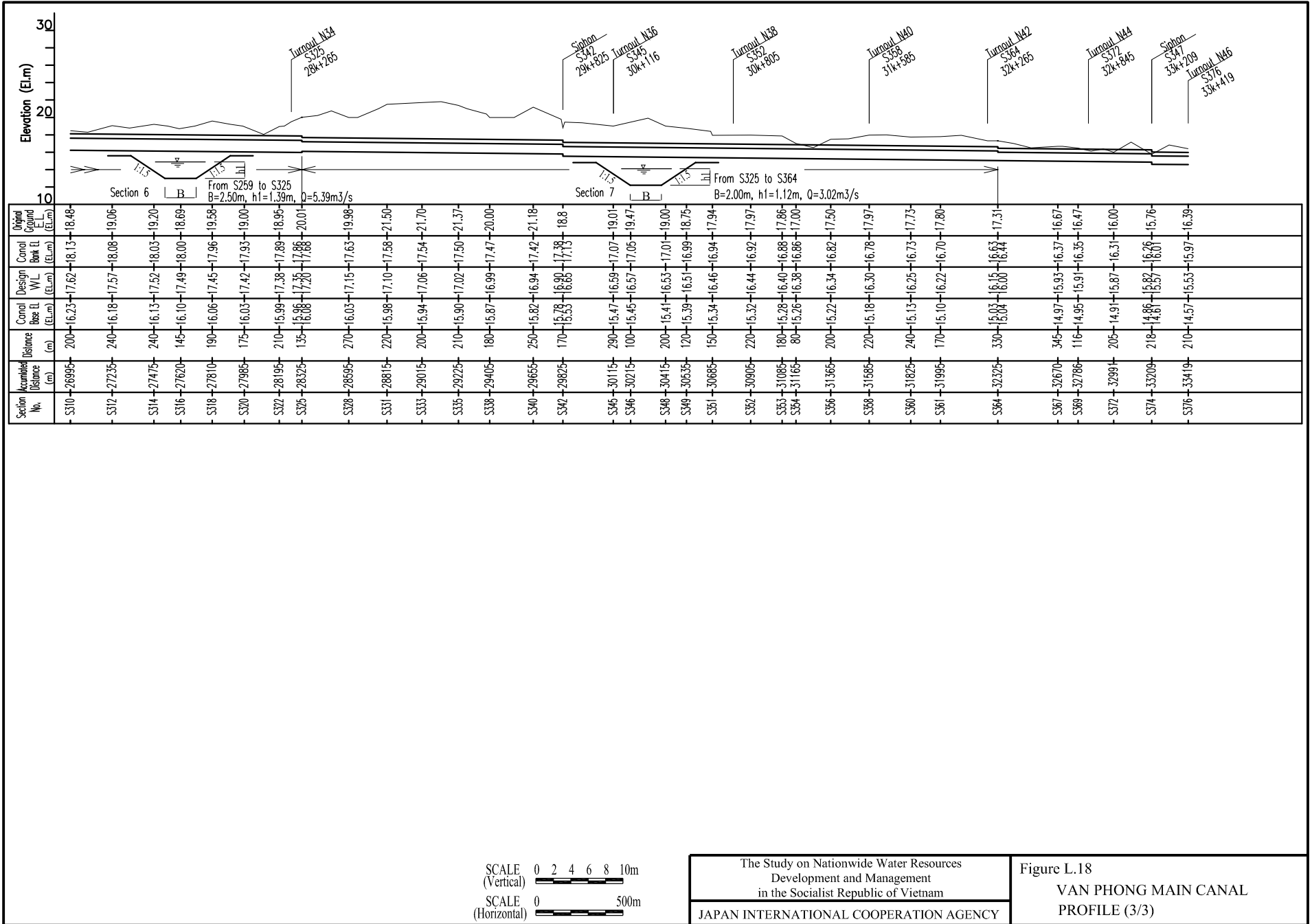
Figure L.16  
VAN PHONG MAIN CANAL  
PROFILE (1/3)

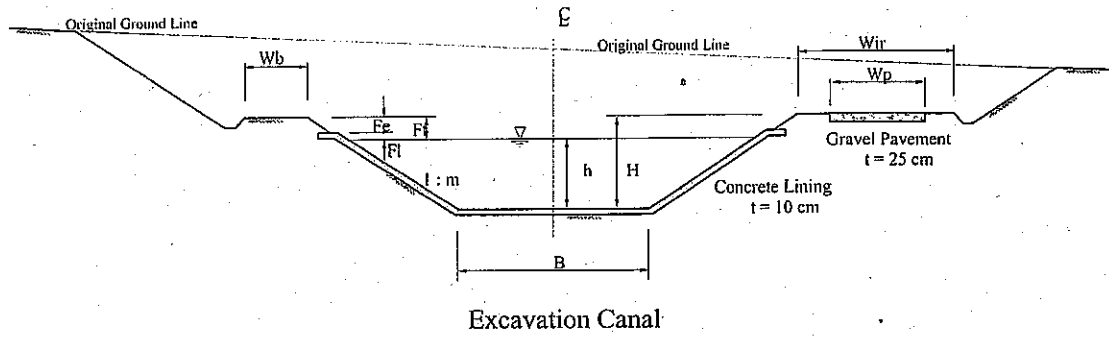


SCALE (Vertical) 0 2 4 6 8 10m  
SCALE (Horizontal) 0 500m

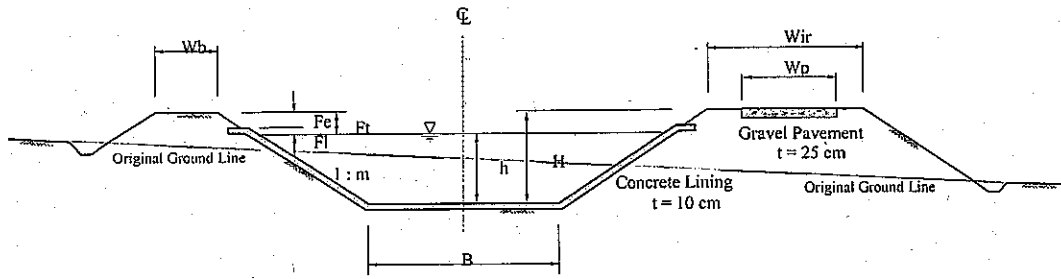
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Figure L.17  
VAN PHONG MAIN CANAL  
PROFILE (2/3)

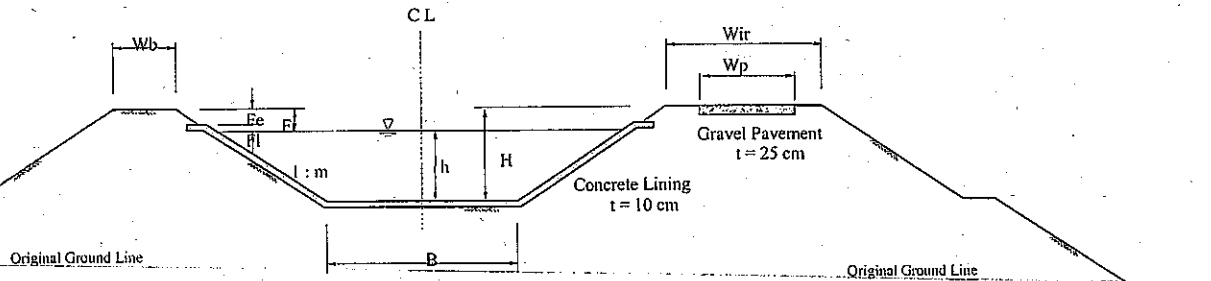




Excavation Canal



Excavation / Earthfilling Canal

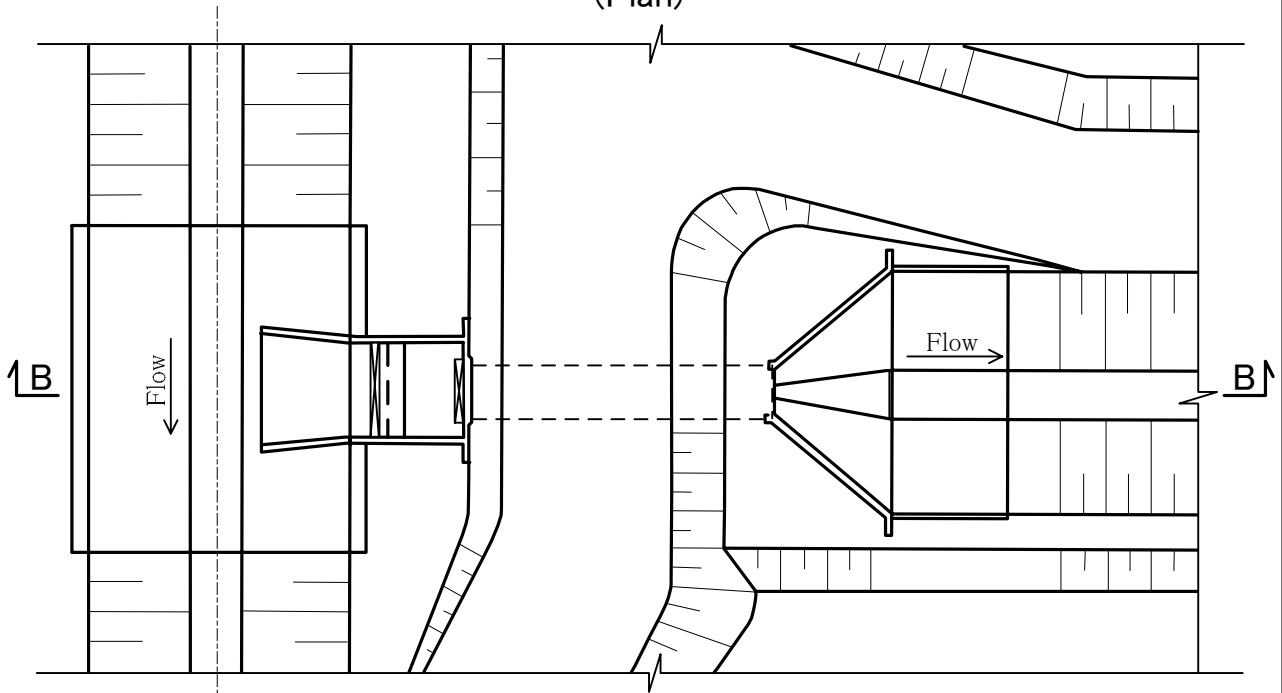


Earthfilling Canal

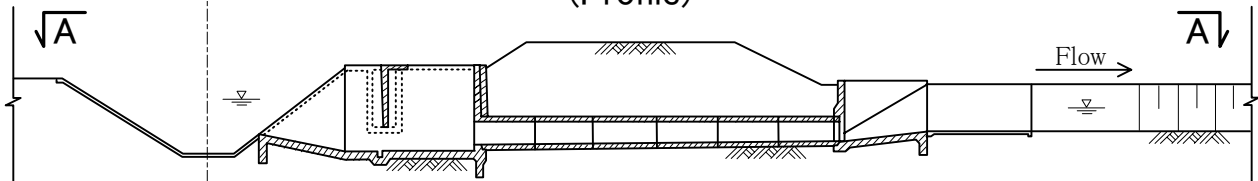
Typical Dimensions of Irrigation Canal

No.	Canal Bottom Width B	Side Slope tan, m	Water Depth h	B/h Ratio	Lining Freeboard Fl	Extra Freeboard Fe	Total Freeboard Ft	Canal Height H	Canal Bank Wb	Inspection Road Wir	Pavement Wp
	(m)		(m)		(m)	(m)	(m)	(m)	(m)	(m)	(m)
1	7.00	1.50	2.35	2.98	0.35	0.40	0.75	3.10	2.00	5.00	3.00
2	6.50	1.50	2.35	2.77	0.35	0.40	0.75	3.10	2.00	5.00	3.00
3	6.00	1.50	2.30	2.61	0.35	0.40	0.75	3.05	2.00	5.00	3.00
4	5.50	1.50	2.30	2.39	0.30	0.40	0.70	3.00	2.00	5.00	3.00
5	5.00	1.50	2.25	2.22	0.30	0.40	0.70	2.95	2.00	5.00	3.00
6	4.50	1.50	2.20	2.05	0.30	0.35	0.65	2.85	2.00	5.00	3.00
7	4.00	1.50	2.10	1.90	0.30	0.35	0.65	2.75	2.00	5.00	3.00
8	3.50	1.50	2.00	1.75	0.30	0.30	0.60	2.60	2.00	5.00	3.00
9	3.00	1.50	1.90	1.58	0.25	0.30	0.55	2.45	2.00	5.00	3.00
10	2.50	1.50	1.70	1.47	0.25	0.25	0.50	2.20	2.00	5.00	3.00
11	2.00	1.50	1.50	1.33	0.20	0.25	0.45	1.95	2.00	4.00	2.40
12	1.50	1.50	1.25	1.20	0.20	0.20	0.40	1.65	2.00	4.00	2.40
13	1.25	1.50	1.10	1.14	0.20	0.20	0.40	1.50	2.00	4.00	2.40
14	1.00	1.50	0.95	1.05	0.20	0.20	0.40	1.35	2.00	4.00	2.40
15	0.80	1.50	0.80	1.00	0.20	0.20	0.40	1.20	2.00	4.00	2.40
16	0.60	1.25	0.60	1.00	0.20	0.20	0.40	1.00	2.00	4.00	2.40

**Section A-A  
(Plan)**



**Section B-B  
(Profile)**



No.	Turnout Name	Location	Discharge (m <sup>3</sup> /s)
<b>Vinh Thanh Irrigation Area</b>			
1	VT-N1	7k+140	0.052
2	VT-N3	9k+055	0.188
3	VT-N5	11k+560	0.040
4	VT-N7	14k+425	0.219
5	VT-N9	16k+315	0.086
6	VT-N11	17k+255	0.140
7	VT-N13	18k+055	0.057
8	VT-N15	18k+845	0.018
<b>Van Phong Irrigation Area</b>			
1	VP-N2	2k+440	0.098
2	VP-N4	3k+930	0.170
3	VP-N6	6k+140	0.396
4	VP-N8	8k+792	0.382
5	VP-N10	9k+652	0.260
6	VP-N12	11k+247	0.774
7	VP-N14	11k+522	1.626
8	VP-N16	11k+992	0.802
9	VP-N18	14k+430	0.304
10	VP-N20	16k+560	2.407
11	VP-N22	17k+620	0.290
12	VP-N24	18k+570	0.943

No.	Turnout Name	Location	Discharge (m <sup>3</sup> /s)
13	VP-N26	21k+335	0.195
14	VP-N28	22k+200	0.190
15	VP-N1	22k+820	6.621
16	VP-N30	24k+315	0.469
17	VP-N32	25k+070	0.191
18	VP-N34	28k+265	0.724
19	VP-N36	30k+116	0.220
20	VP-N38	30k+805	0.129
21	VP-N40	31k+585	0.131
22	VP-N42	32k+265	0.260
23	VP-N44	32k+850	0.333
24	VP-N46	33k+419	1.367
<b>La Tinh Irrigation Area</b>			
1	CG-N1	0k+000	2.529
2	CG-N1.1	2k+750	0.648
3	CG-N2	0k+250	0.130
4	CG-N4	1k+250	0.113
5	CG-N3	2k+500	0.243
6	CG-N8	3k+250	0.162
7	CG-N5	6k+250	0.324
8	CG-N7	10k+000	0.162
9	VP-N1.1	8k+700	1.280

No.	Turnout Name	Location	Discharge (m <sup>3</sup> /s)
10	CK-N1	0k+000	0.536
11	CK-N3	0k+190	0.608
<b>Tan An - Dap Da Irrigation Area</b>			
1	TH-N2	1k+500	5.642
2	TH-N1	2k+500	1.401
3	TH-N3	3k+625	1.199
4	TH-N4	3k+625	0.804
5	BT-N1	0k+341	0.128
6	BY-N1		0.049
7	BY-N2	0k+270	0.296
8	TM-N2	0k+000	1.649
9	TM-N3	6k+500	0.243
10	TL-N2	0k+000	0.054
11	TD-N2	1k+145	2.238
12	TD-N1	2k+250	2.576
13	LT-N1	0k+240	0.387
14	HB-N1	0k+000	0.076
15	HB-N2	0k+000	0.136
<b>Ha Thanh Irrigation Area</b>			
1	TH-N2.2	5k+500	1.474
2	TH2-N1.1		0.627

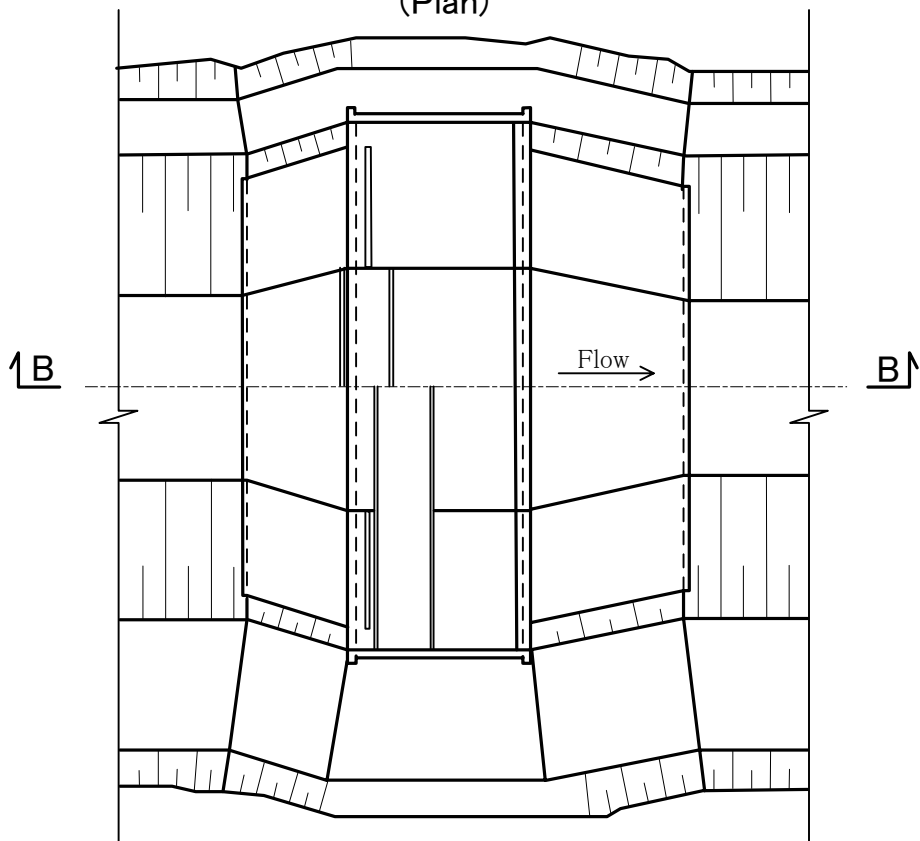
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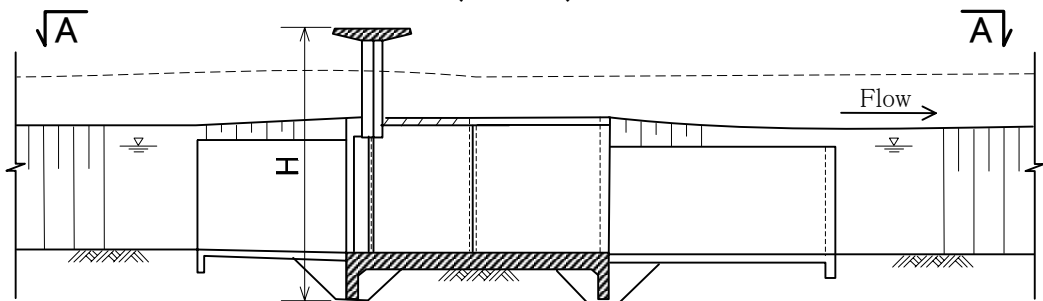
**Figure L.20**

**Related Structure Typical Turnout**

**Section A-A  
(Plan)**



**Section B-B  
(Profile)**



No.	Check Gate Name	Location	Discharge (m <sup>3</sup> /s)	Dimension H (m)
Vinh Thanh Irrigation Area				
1	VT-N3	9k+095	1.04	1.25
2	VT-N7	14k+475	0.55	1.11
3	VT-N11	17k+285	0.25	1.02
Van Phong Irrigation Area				
1	VP-N6	6K+200	17.90	3.10
2	VP-N14	11K+572	15.35	3.06
3	VP-N16	12K+167	13.71	2.87
4	VP-N20	16K+615	12.08	2.87
5	VP-N14	18K+630	8.42	2.35
6	VP-N1	22K+945	6.62	2.24
7	VP-N34	28K+325	3.67	1.97
8	VP-N42	32K+325	2.93	1.62

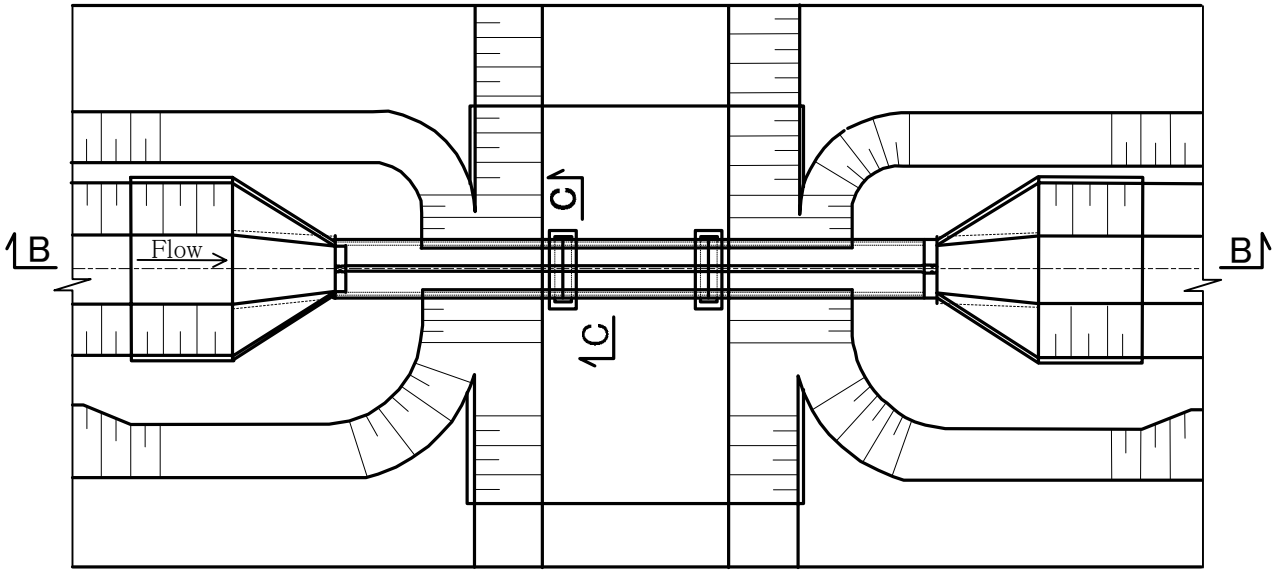
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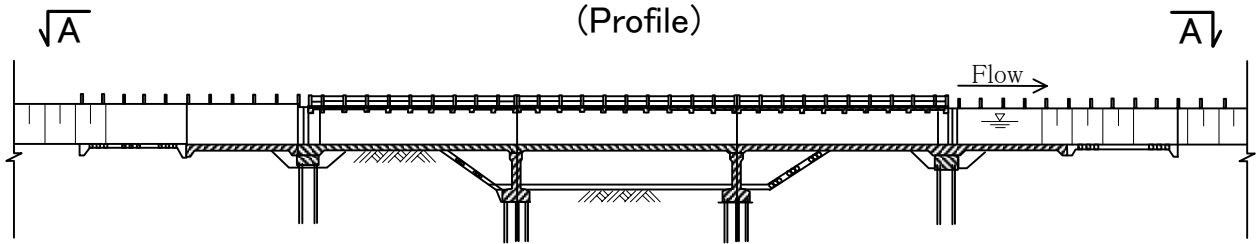
**Figure L.21**

**Related Structure Typical Check Gate**

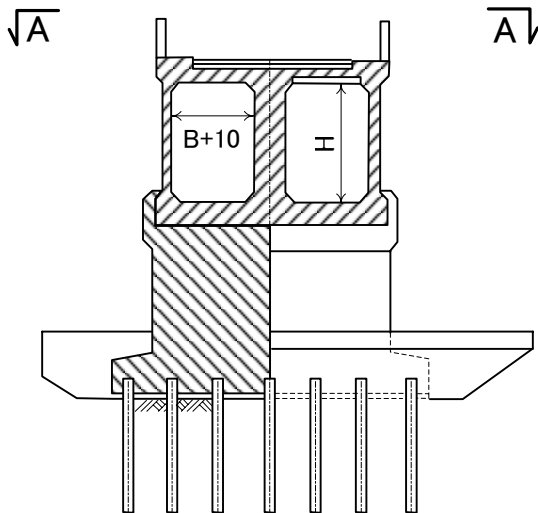
Section A-A  
(Plan)



Section B-B  
(Profile)



Section C-C  
(Cross section)



No.	Location	Discharge (m <sup>3</sup> /s)	Dimension	
			B (m)	H (m)
Van Phong Irrigation Area				
1	K1+860	18.41	2.0	3.0
2	K10+677	15.48	2.0	3.0
3	K15+400	11.46	2.0	3.0
4	18k+115	8.39	1.5	2.5
5	21k+165	6.99	1.5	2.5
6	22k+080	4.83	1.5	2.5
7	23k+645	6.48	1.2	2.0

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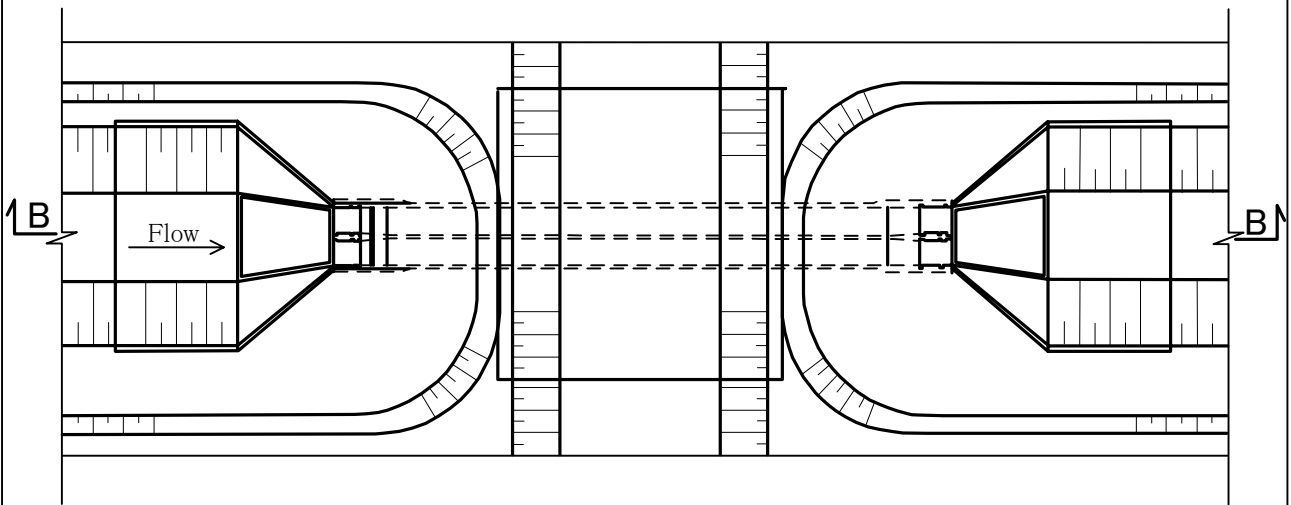
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**Figure L.22**

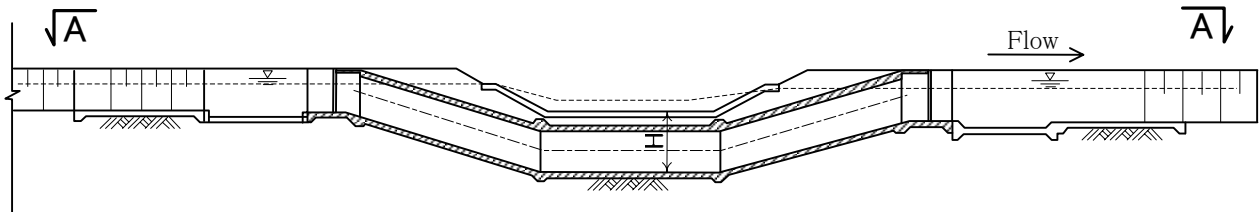
**Related Structure Typical Aqueduct  
(River Crossing)**



**Section A-A  
(Plan)**



**Section B-B  
(Profile)**



No.	Location	Discharge (m <sup>3</sup> /s)	Dimension
			H (m)
Vinh Thanh Irrigation Area			
1	9k+980	1.04	1.2
Van Phong Irrigation Area			
1	4k+285	17.98	3.0
2	5k+360	17.65	3.0
3	29k+825	2.87	1.8
4	33k+209	1.63	1.2

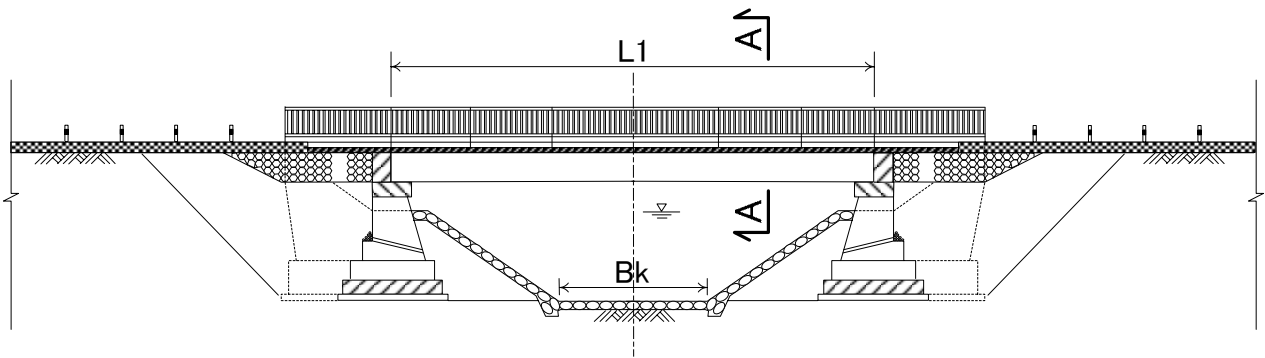
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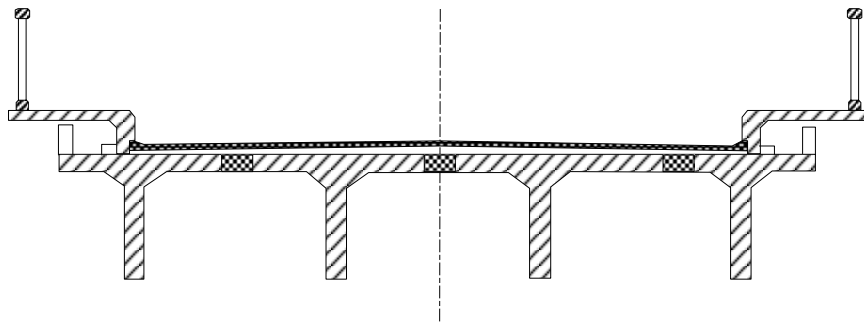
**Figure L.23**

**Related Structure Typical Siphon  
(River Crossing)**

**Typical Section  
(Profile)**



**Section A-A  
(Cross section)**



No.	Location	Dimension	
		Bk (m)	L1 (m)
Van Phong Irrigation Area			
1	5k+530	7.0	18.1
2	8k+912	6.5	17.6
3	13k+219	5.5	16.3
4	20k+665	4.0	13.8
5	21k+475	4.0	13.8
6	25k+905	2.5	10.4
7	30k+315	2.0	9.0
8	32k+645	2.0	9.0

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**Figure L.24**

**Related Structure Typical Road Bridge**