

**Canal and retaining wall sections**

Appendix I1

**Railway Project**

Pre-engineering, phase 2

VR Track Oy

15.12.2017


 MINISTERIO  
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## Notes

canal structures.

Section lengths are estimated mainly for quantity purposes.

Typical cross-section for canal drainage structures are shown in Appendix H.

Typical cross section type: Canal drainage structure where area for railway structures is narrow							
Western track				Eastern track			
Canal section begins	Canal section ends	length of the section	Comments	Canal section begins	Canal section ends	length of the section	Comments
0+956	1+380	424	Port Connection	0+956	1+380	424	Port Connection
1+220	1+380	160	Main Line	1+220	1+380	160	Main Line
1+380	3+000	1620		1+380	3+000	1620	
3+000	4+150	1150	Trench, drainage canal also above the trench	3+000	4+150	1150	Trench, drainage canal also above the trench
4+150	5+150	1000		4+150	5+180	1030	
5+450	5+800	350		5+660	5+740	80	
6+280	7+000	720		7+080	8+380	1300	
7+650	8+150	500		9+520	9+660	140	
8+400	8+550	150		10+500	11+000	500	
8+700	8+750	50		11+480	11+620	140	
9+650	11+650	2000		12+180	12+460	280	
12+250	13+200	950		12+580	13+160	580	
15+300	15+350	50		13+940	15+160	1220	
15+450	17+500	2050		15+320	15+460	140	
17+500	17+660	160	Canal drainage beside the embankment	15+800	15+960	160	
18+400	18+650	250		16+850	17+100	250	Canal drainage beside the embankment, Canal breadth 2,6 m
18+750	20+600	1850	Trench, drainage canal also above the trench	17+500	17+760	260	Canal drainage beside the embankment
20+600	20+700	100		18+350	18+750	400	Canal drainage beside the embankment, Canal breadth 2,6 m
21+150	21+300	150		18+750	20+550	1800	Trench, drainage canal also above the trench

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Typical cross section type: Canal drainage structure where area for railway structures is narrow							
Western track				Eastern track			
Canal section begins	Canal section ends	length of the section	Comments	Canal section begins	Canal section ends	length of the section	Comments
21+450	21+600	150		20+550	20+560	10	
22+800	22+900	100		21+440	21+700	260	
23+250	24+450	1200		22+760	22+900	140	
25+050	25+500	450		23+280	24+320	1040	
28+700	28+900	200		24+940	25+540	600	
29+700	29+850	150		25+800	26+300	500	
30+150	30+400	250		26+280	26+860	580	
30+600	31+000	400		26+960	27+100	140	
31+150	31+300	150					
32+500	32+550	50					
34+150	34+700	550					
35+600	35+900	300					
36+050	36+200	150					
36+550	36+750	200					
37+050	37+100	50					
38+100	39+150	1050					

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## Notes

needed ones are not shown.

Section lengths are estimated mainly for quantity purposes.

Solutions for structures shall be studied and designed location specific in the detailed design phase.

Typical cross section type: Support wall or supported structure where the area for railway structures is narrow							
Western track				Eastern track			
special cross section begins	special cross section ends	length of the section	Comments	special cross section begins	special cross section ends	length of the section	Comments
2+900	3+000	100		2+950	3+025	75	
3+000	4+150	1150	Trench	3+025	4+150	1125	Trench
4+150	4+450	300		4+150	4+450	300	
4+620	4+700	80		4+620	4+700	80	
5+050	5+100	50		5+050	5+100	50	
5+500	5+750	250					
6+280	6+600	320					
				7+150	7+700	550	
10+300	10+400	100					
12+600	12+650	50					
18+700	18+750	50		18+700	18+750	50	
18+750	20+600	1850	Trench	18+750	20+550	1800	Trench
20+600	20+620	20					
23+350	24+200	850	The embankment is > 5 m high and requires support structures	23+350	23+900	550	The embankment is > 5 m high and requires support structures
25+750	25+850	100					
41+350	41+450	100	Bridge area	41+400	41+450	50	Bridge area
197+800	198+100	300	Concrete canal beside the track	197+820	197+960	140	Concrete canal beside the track