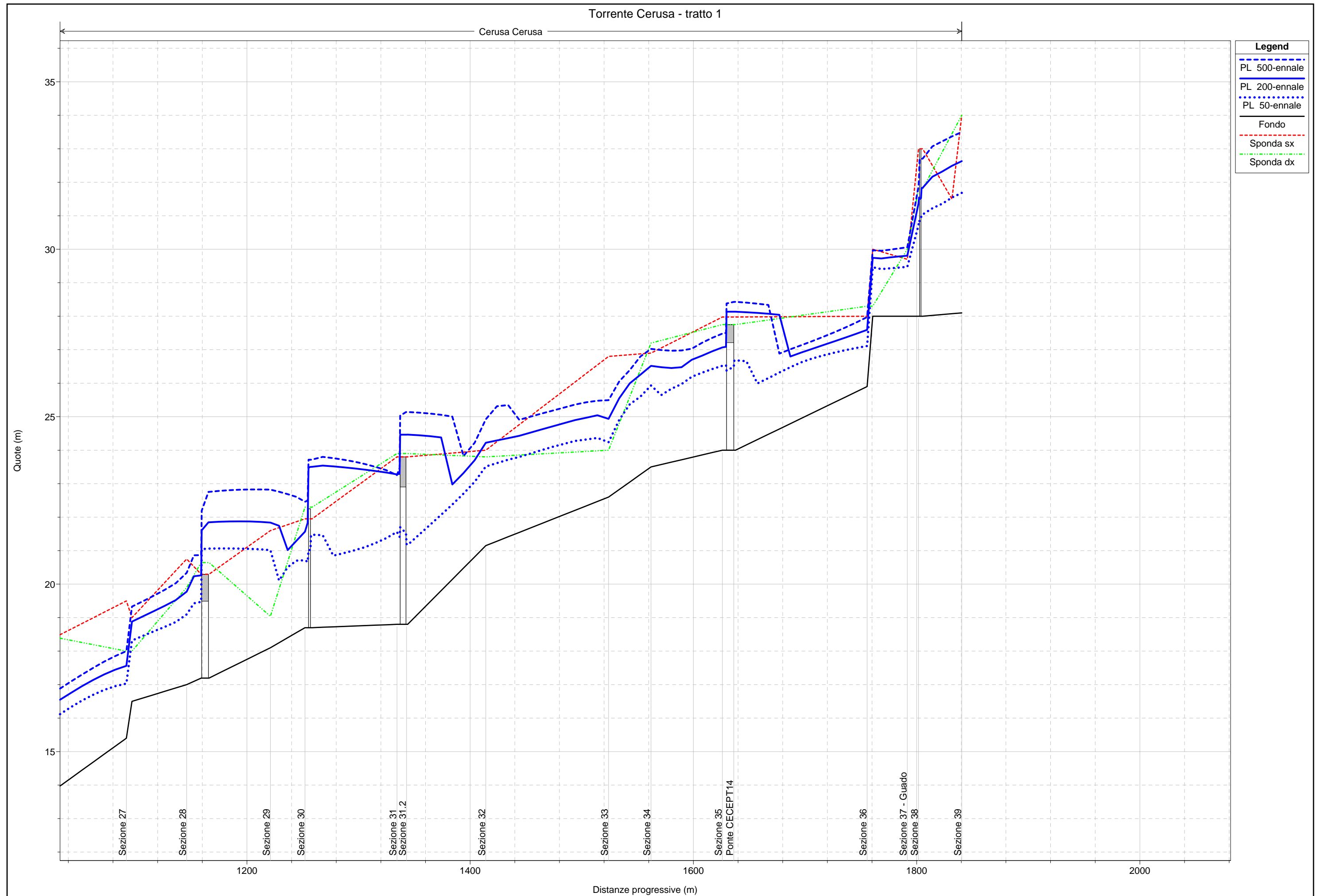
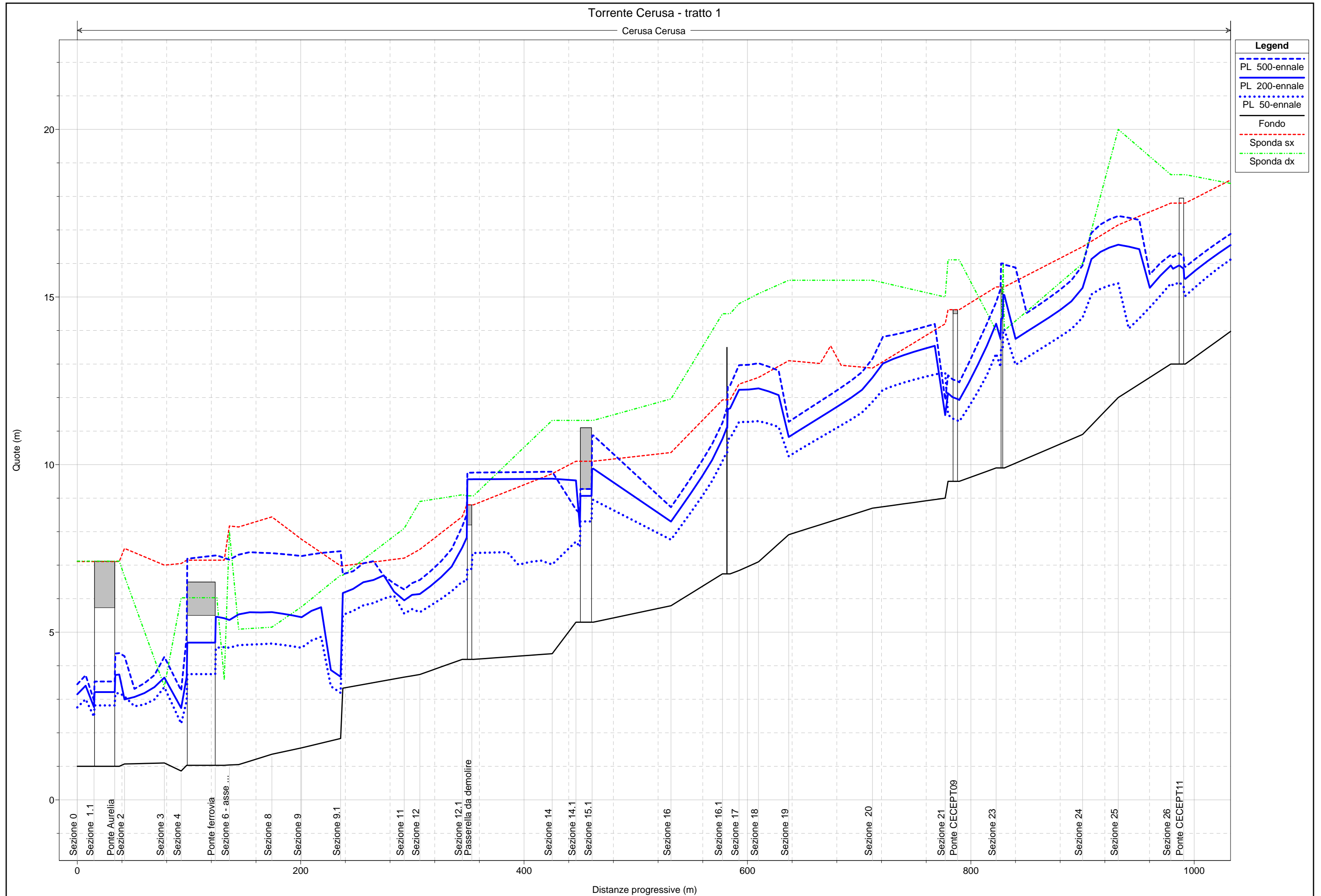


Torrente Cerusa

Tratto 1: dalla sezione 39 alla 0

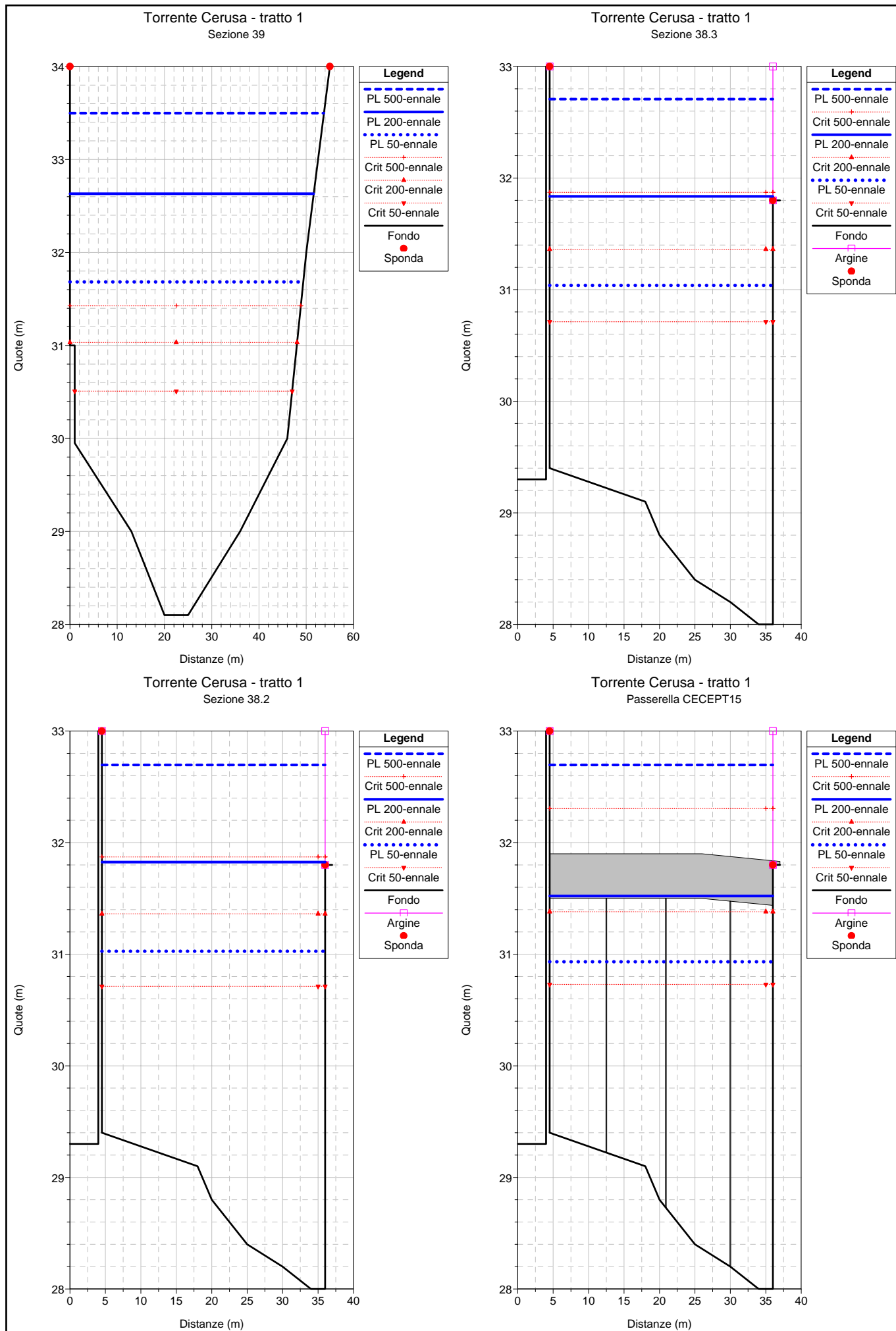
- Profili di corrente
- Sezioni idrauliche
- Tabelle dei risultati

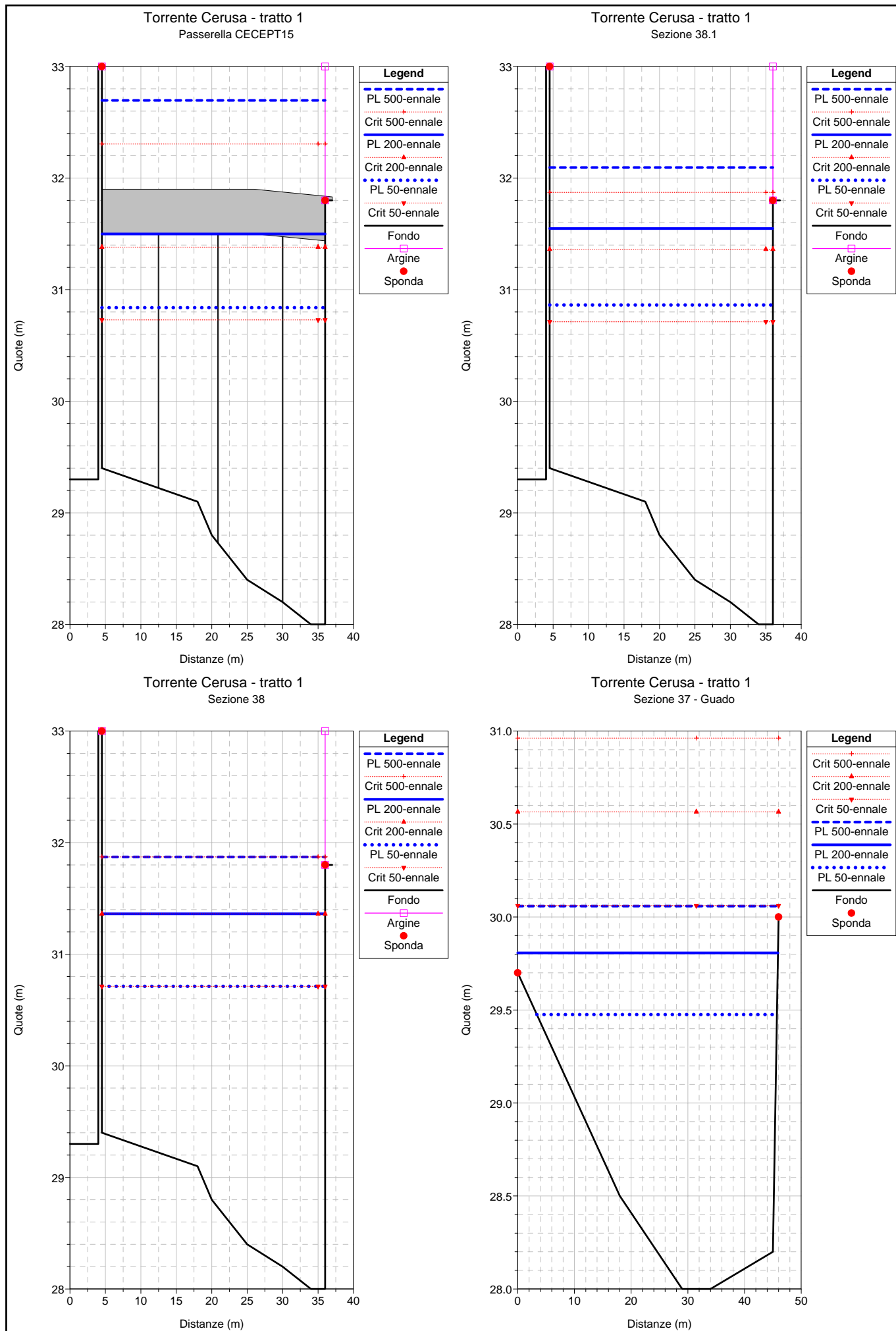


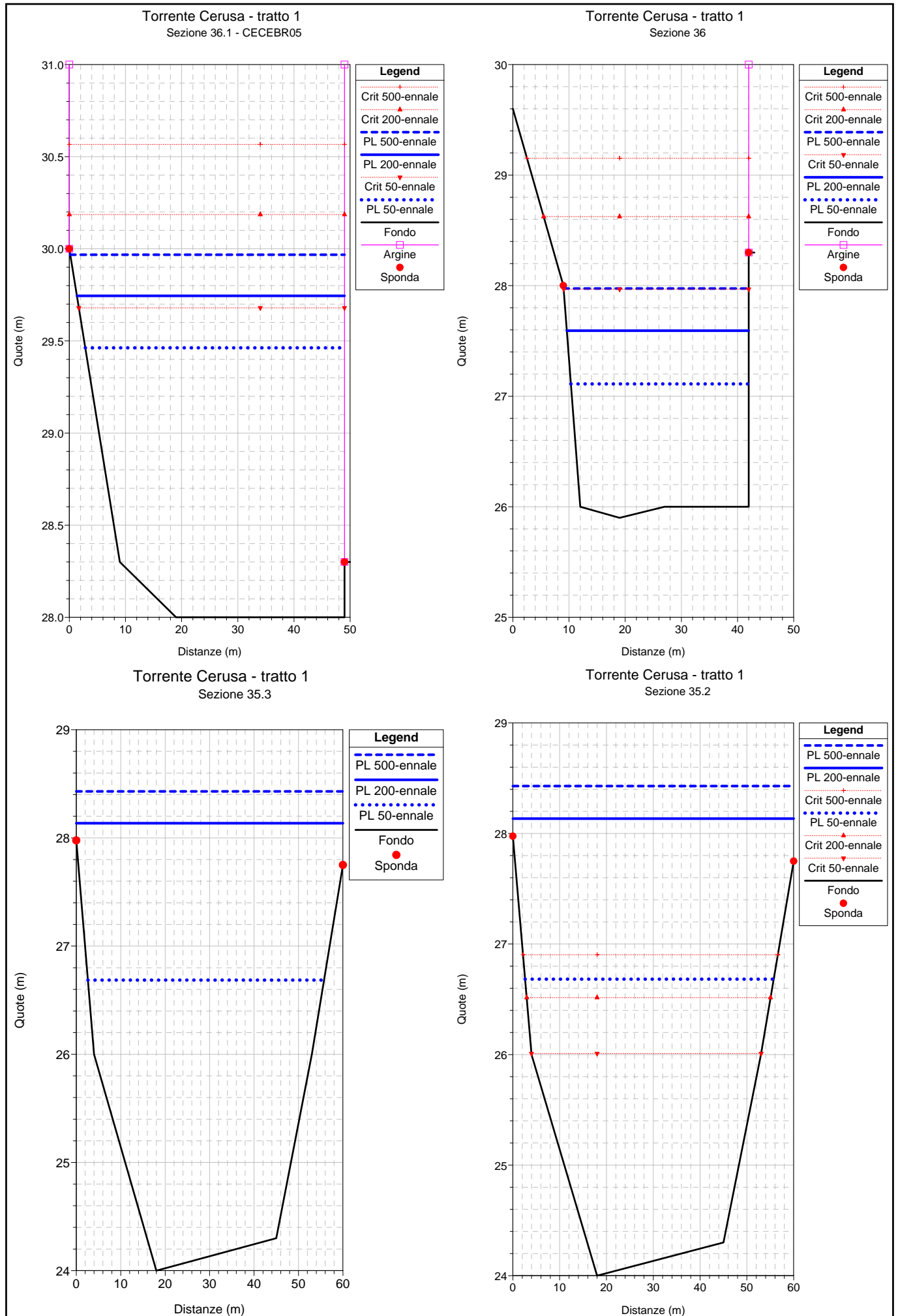


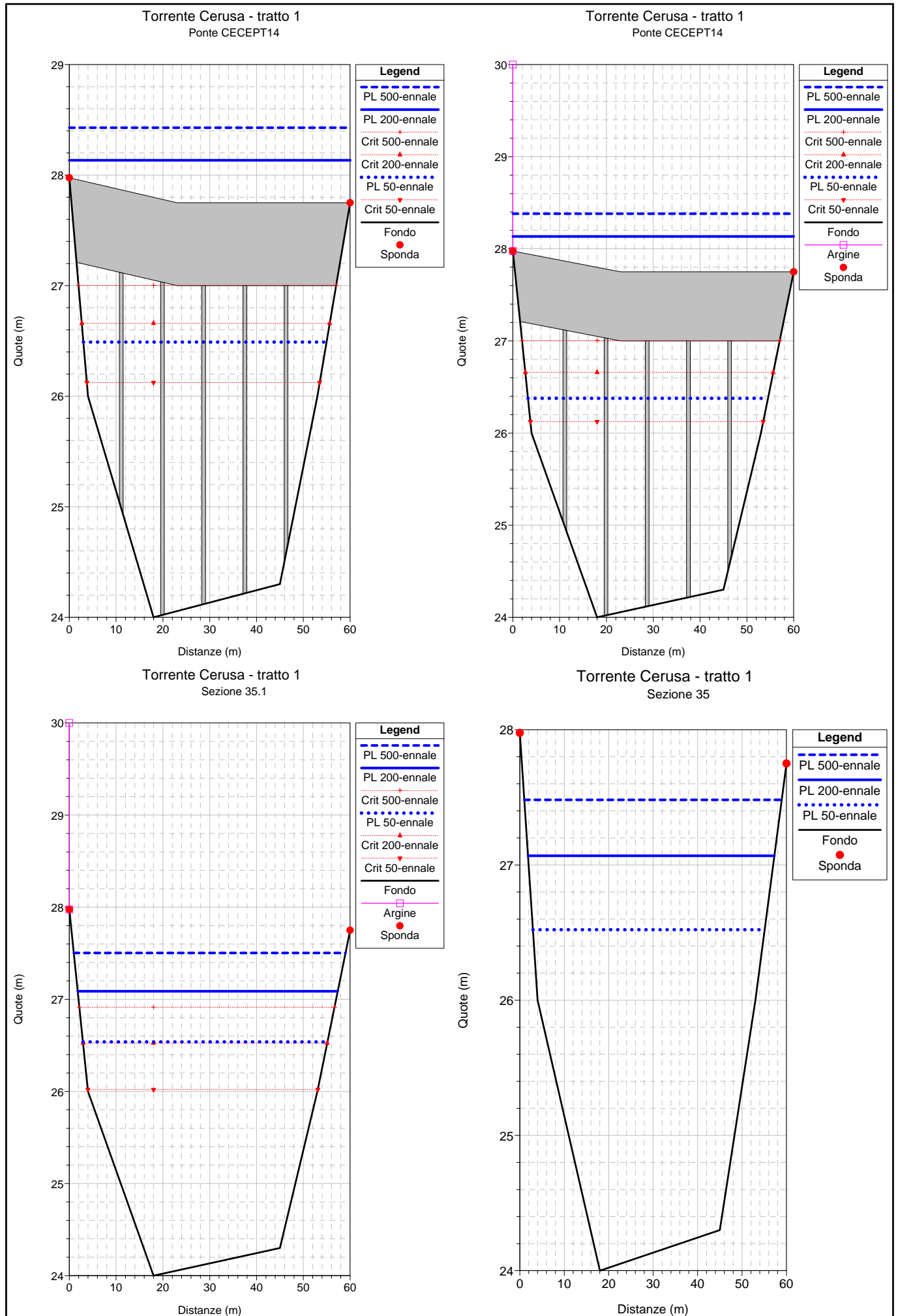
1 cm Horiz. = 30 m 1 cm Vert. = 1 m

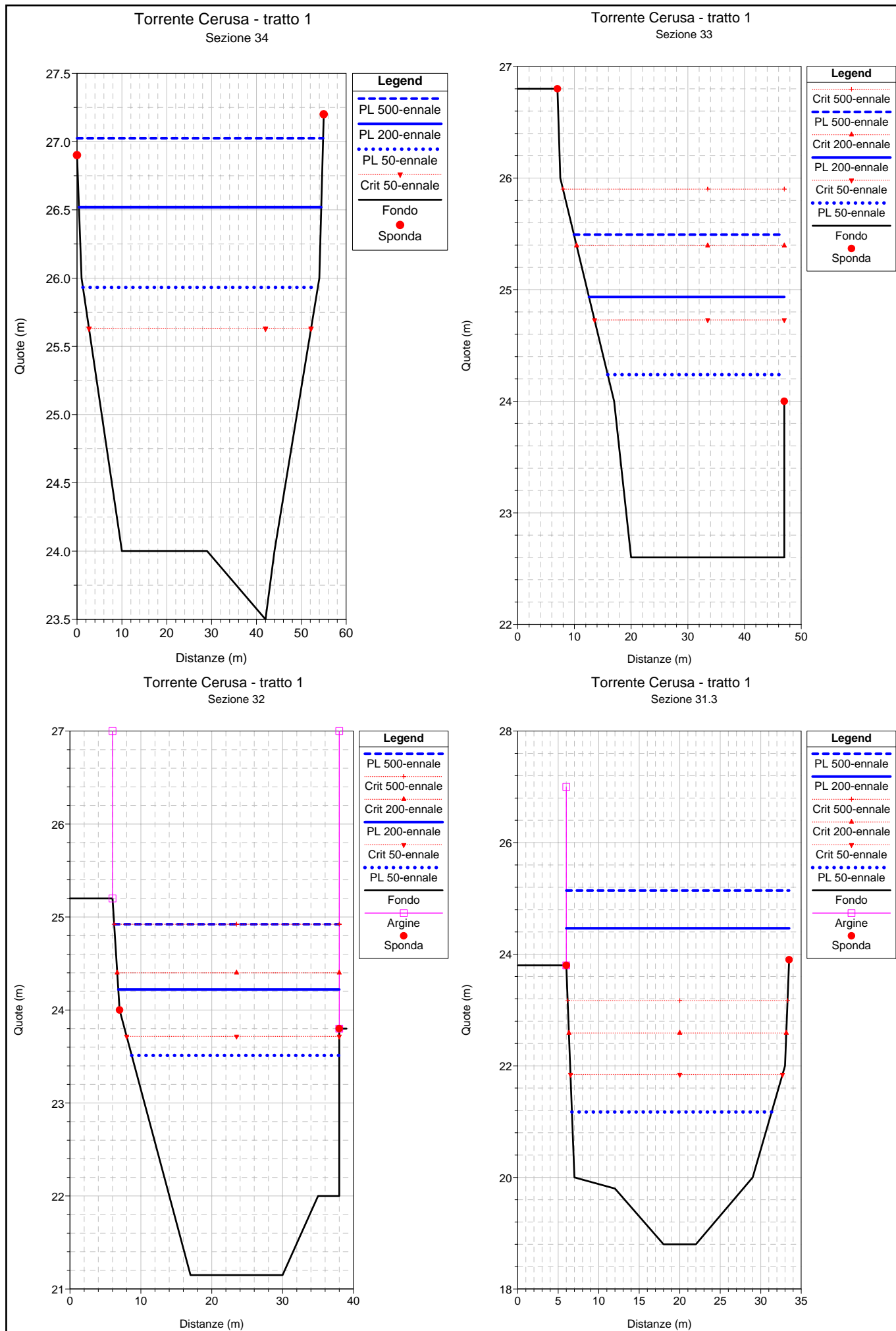
Approvato con D.C.P. n. 28 del 28-03-2007

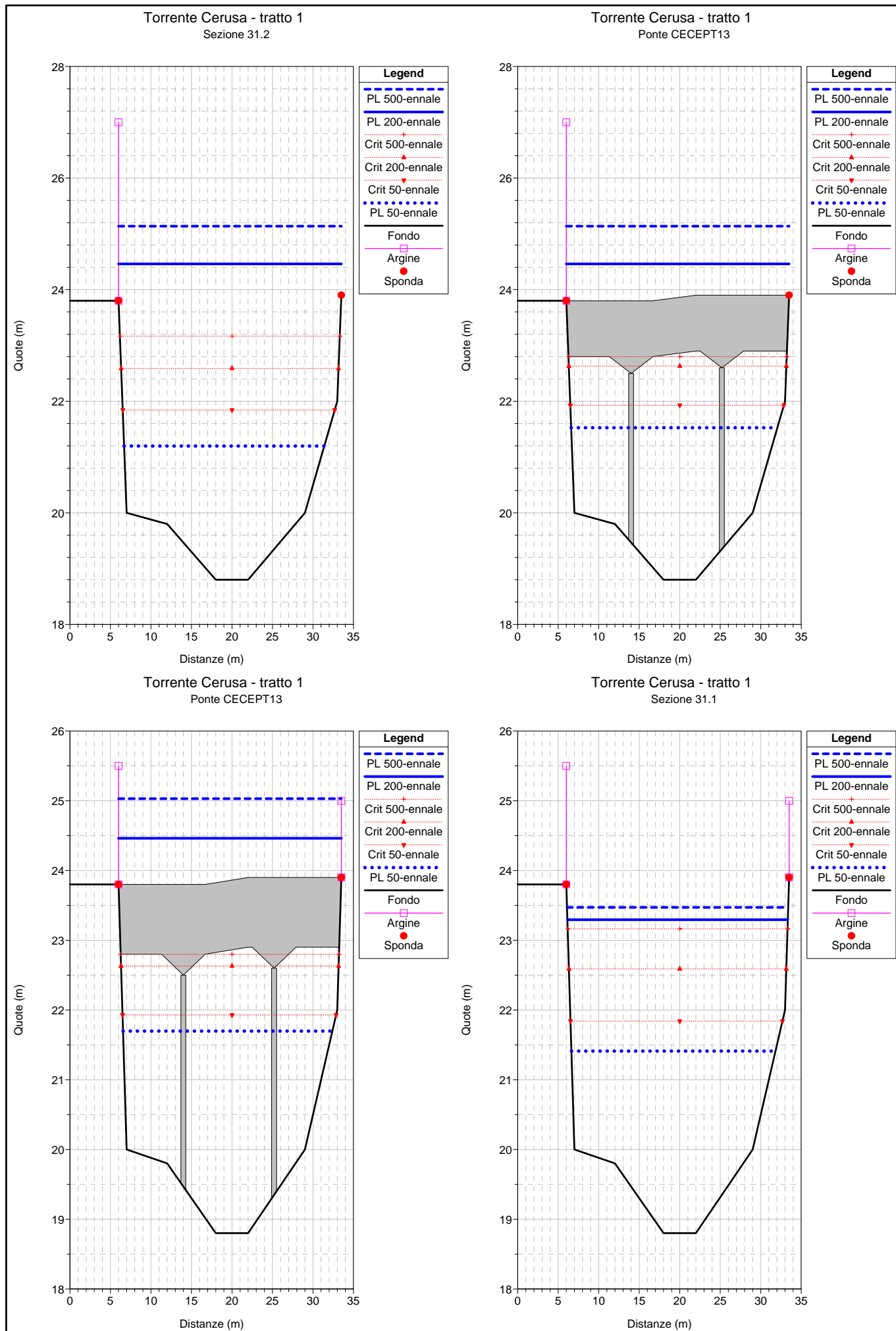


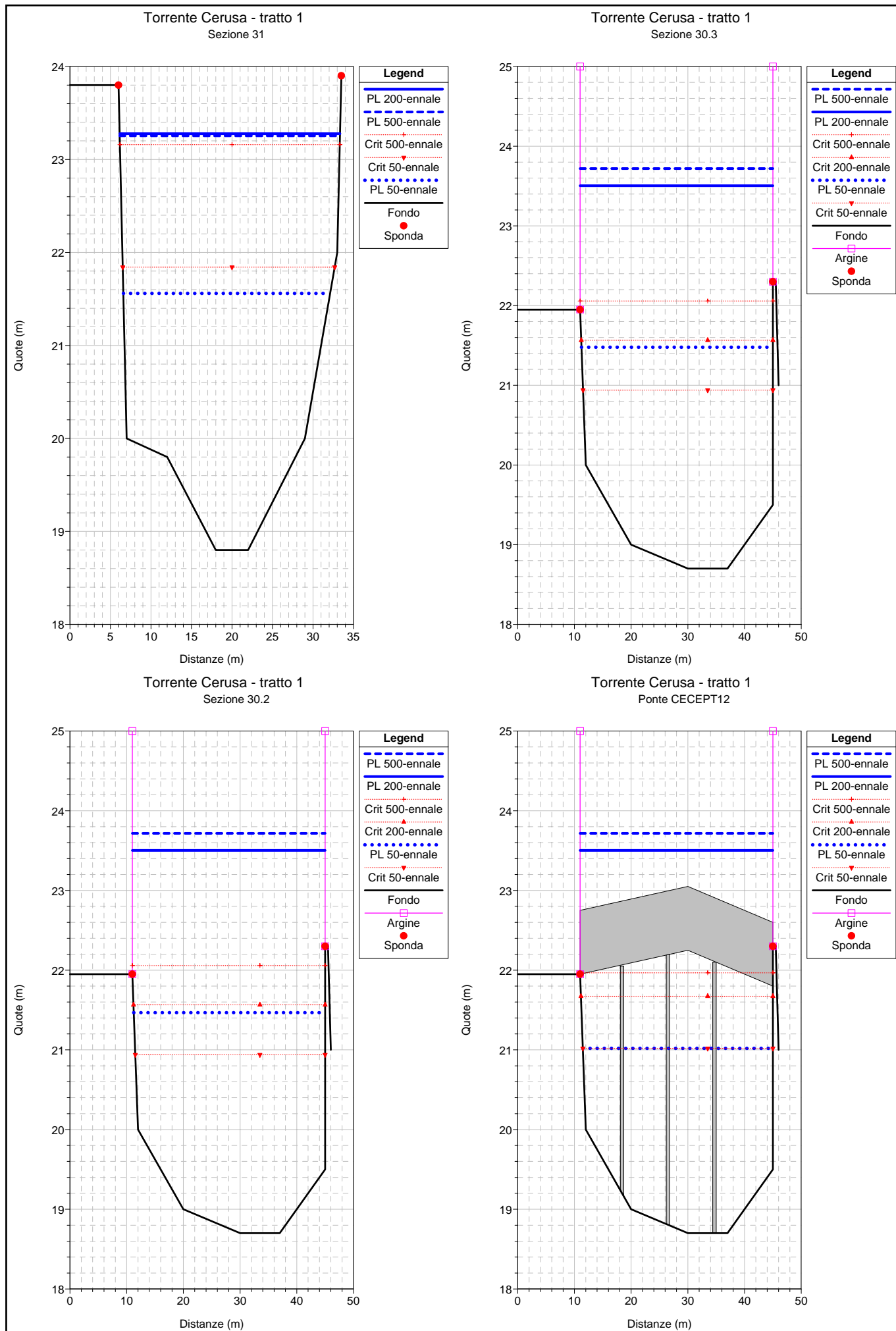


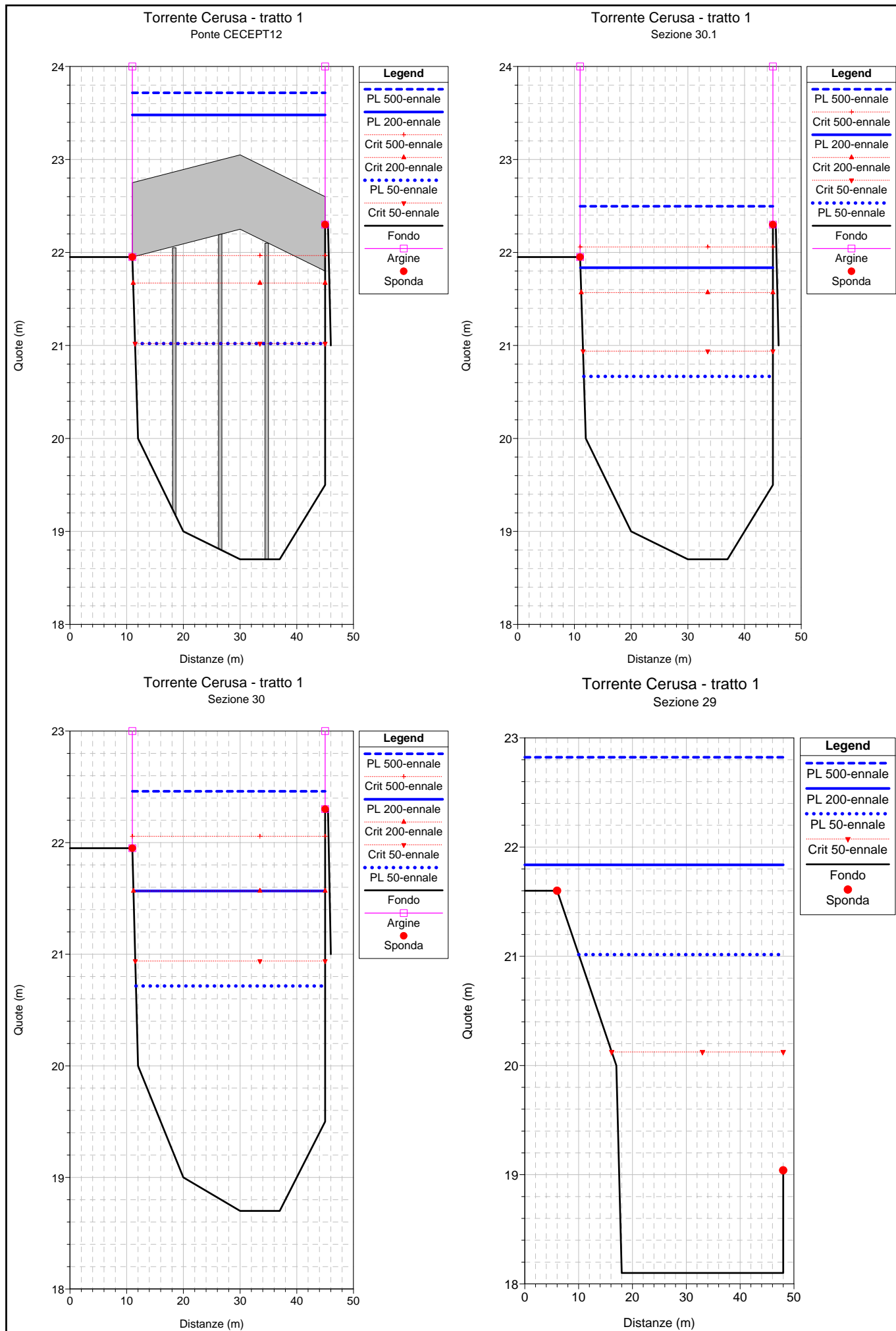


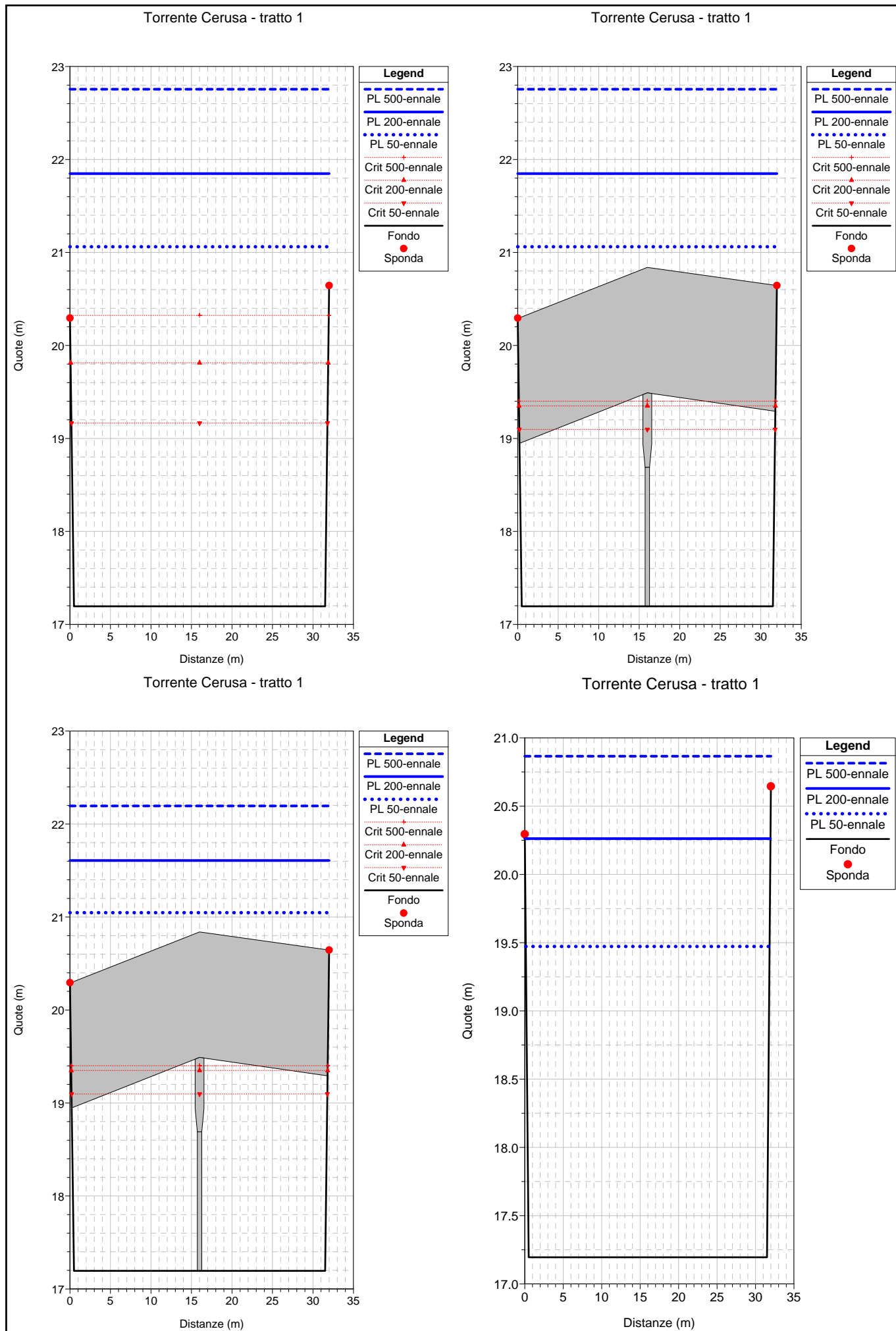


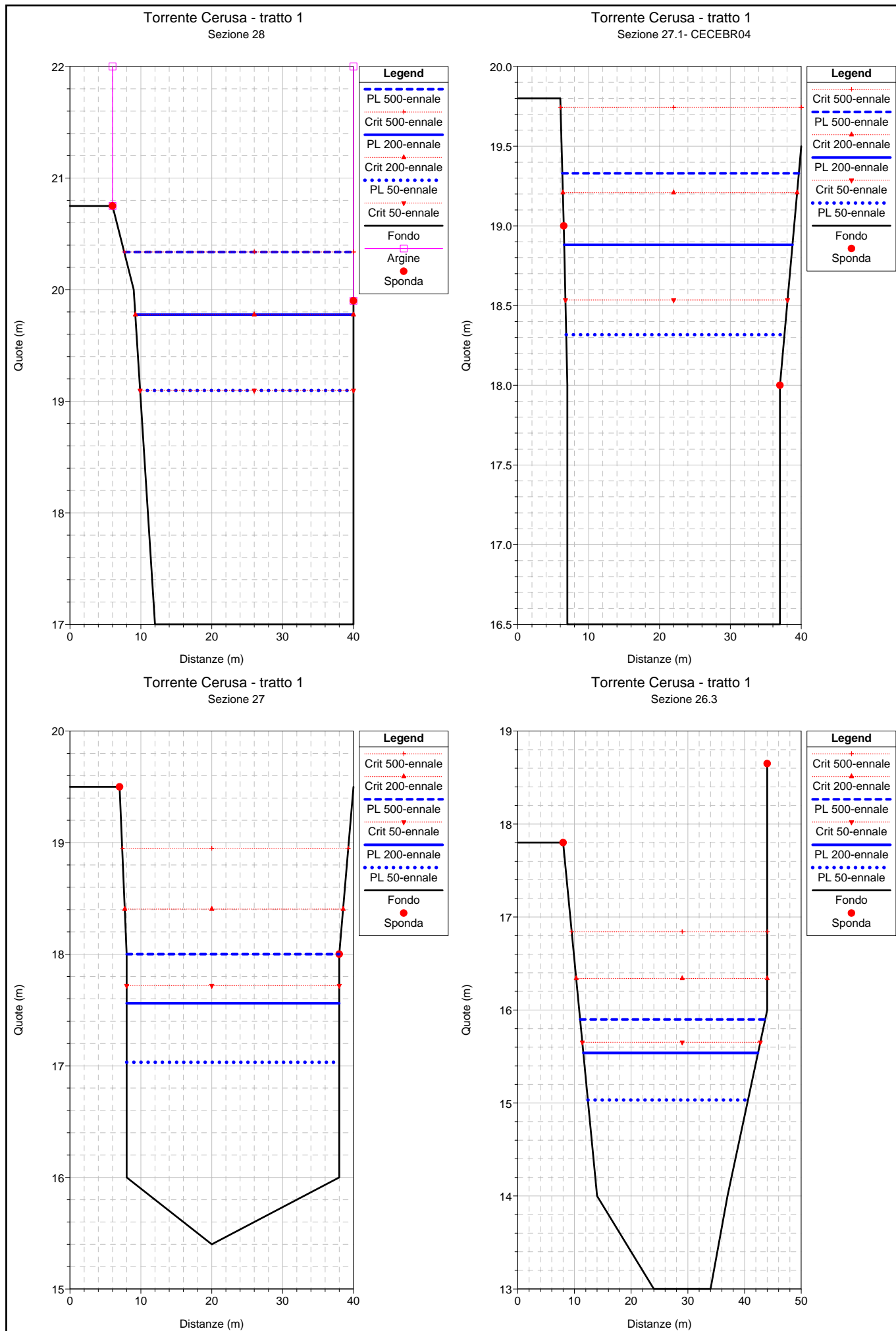


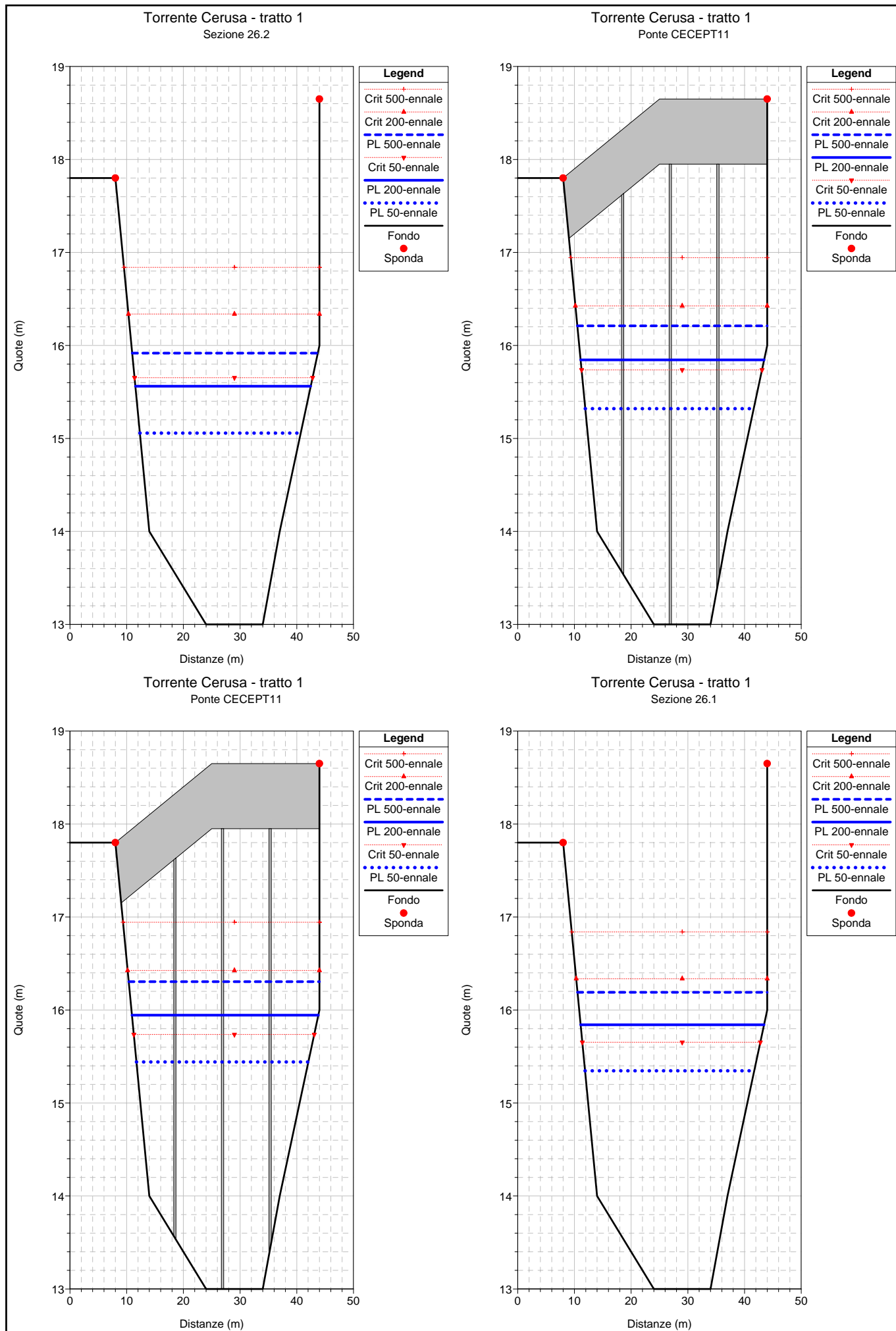


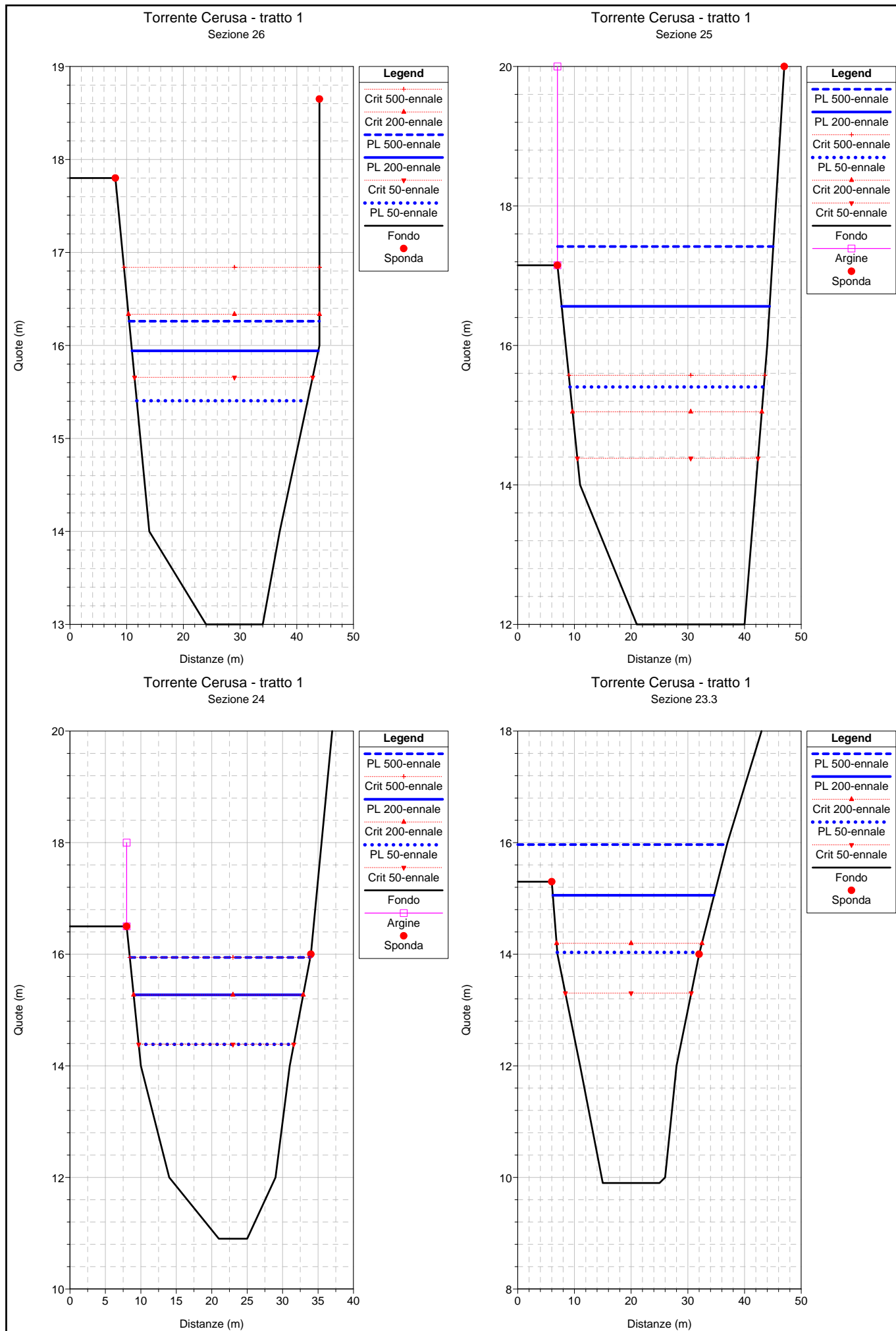


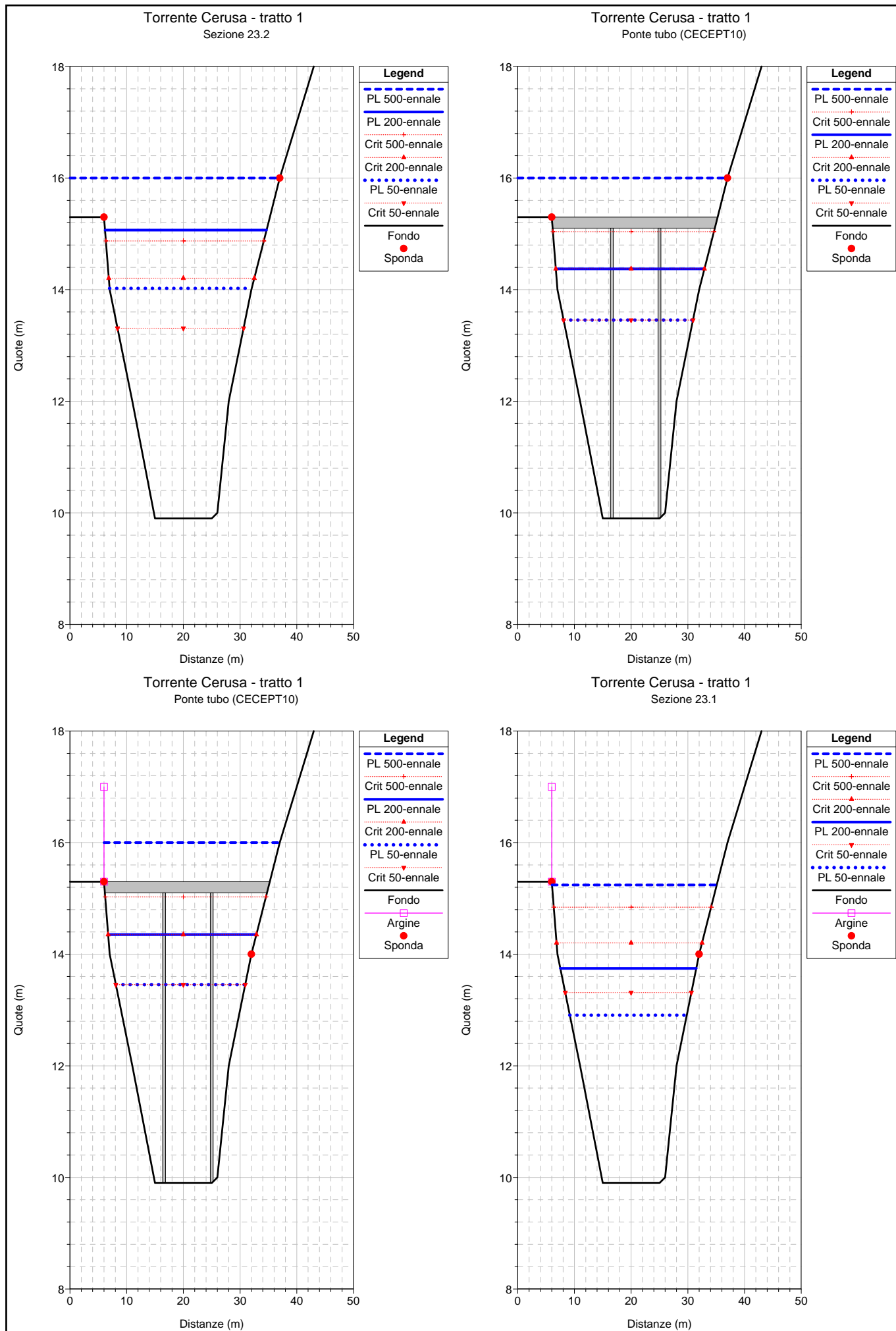


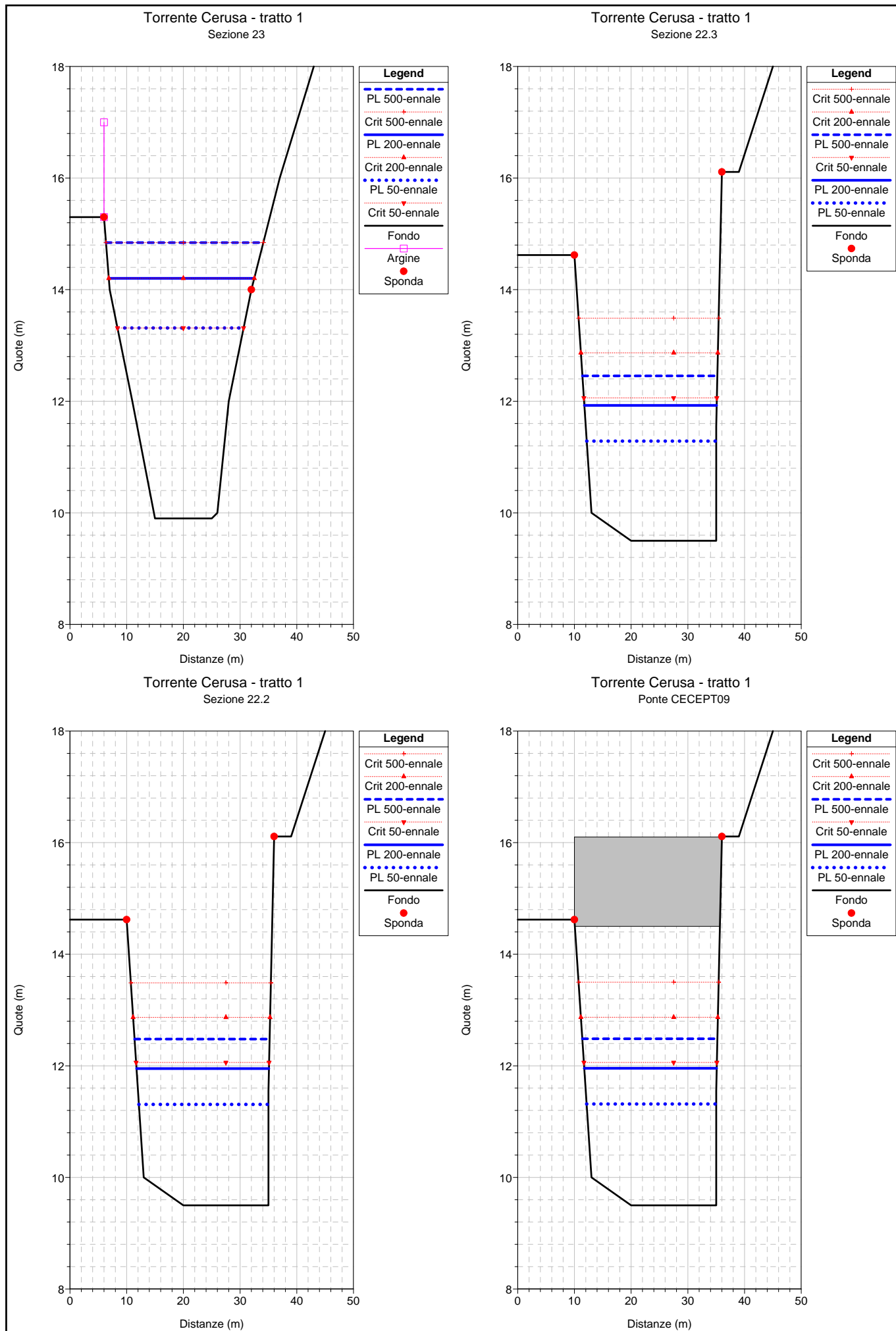


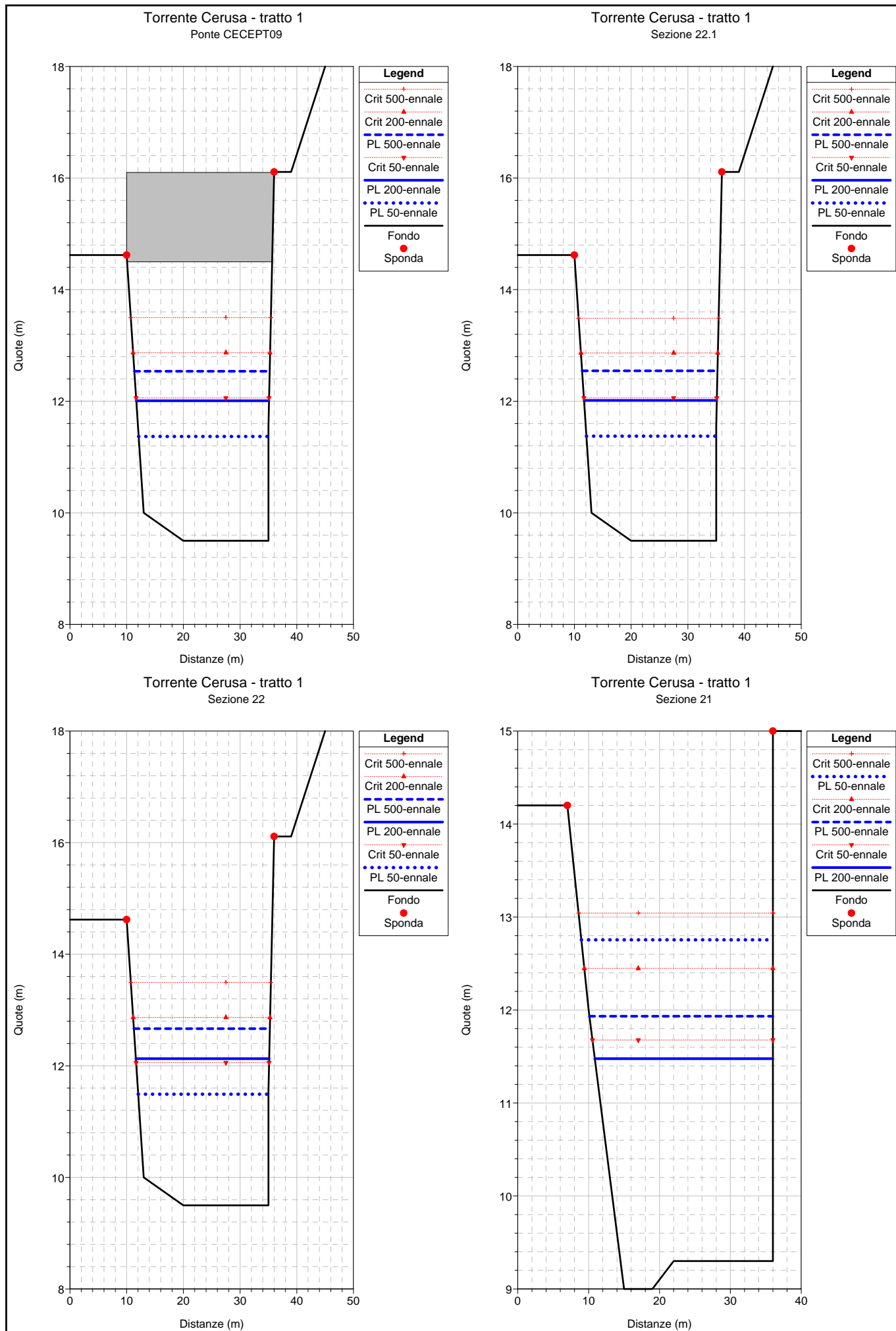


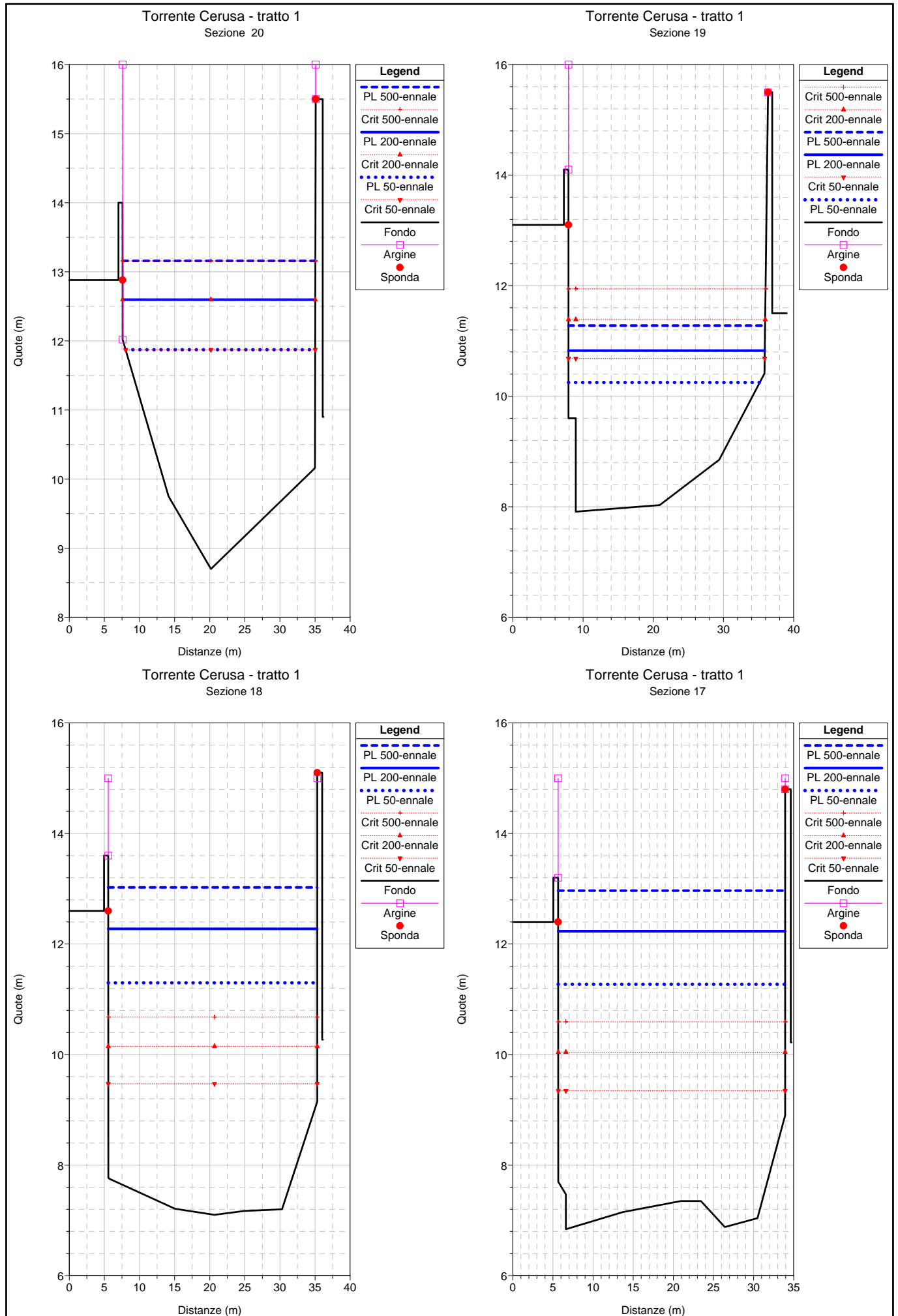


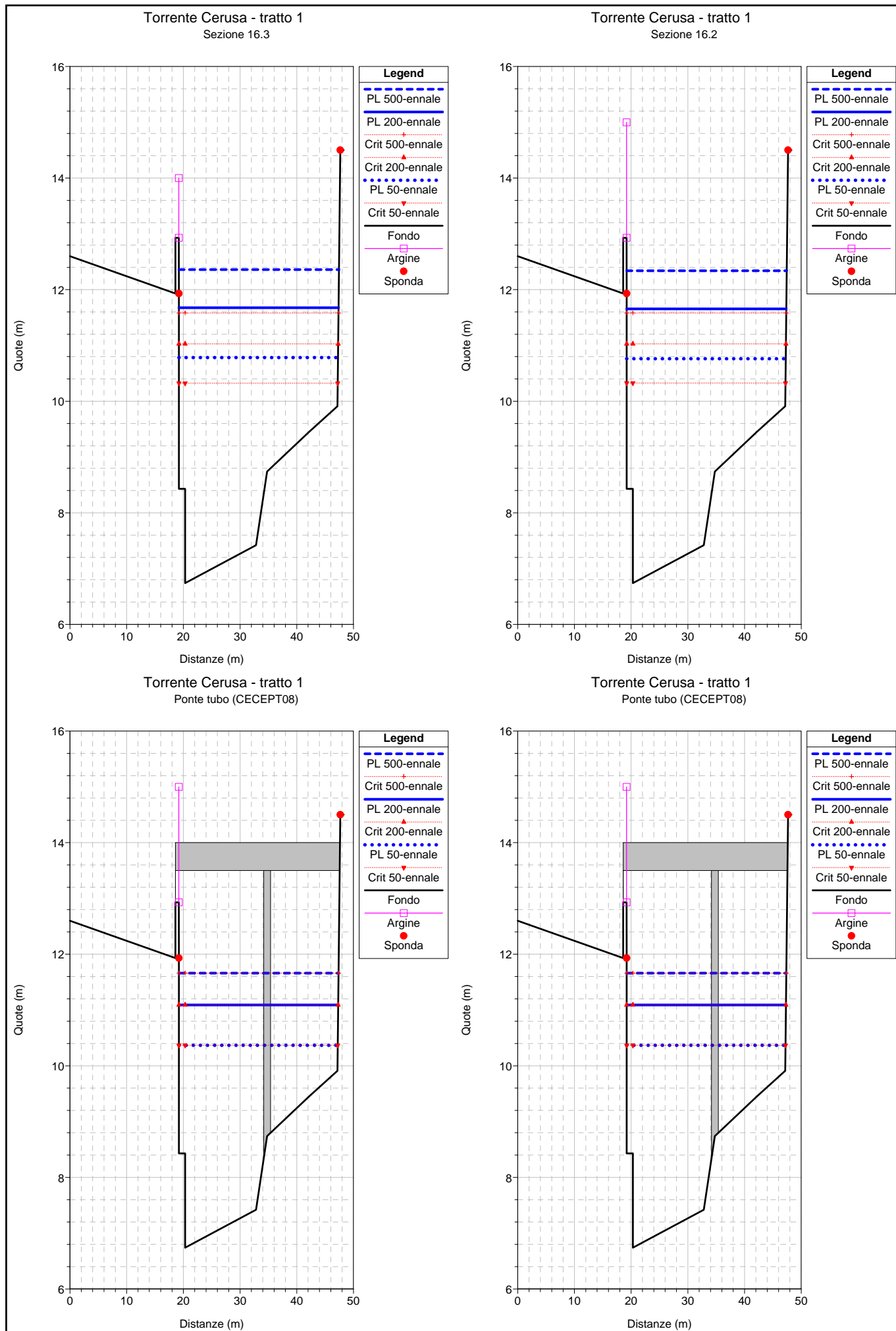


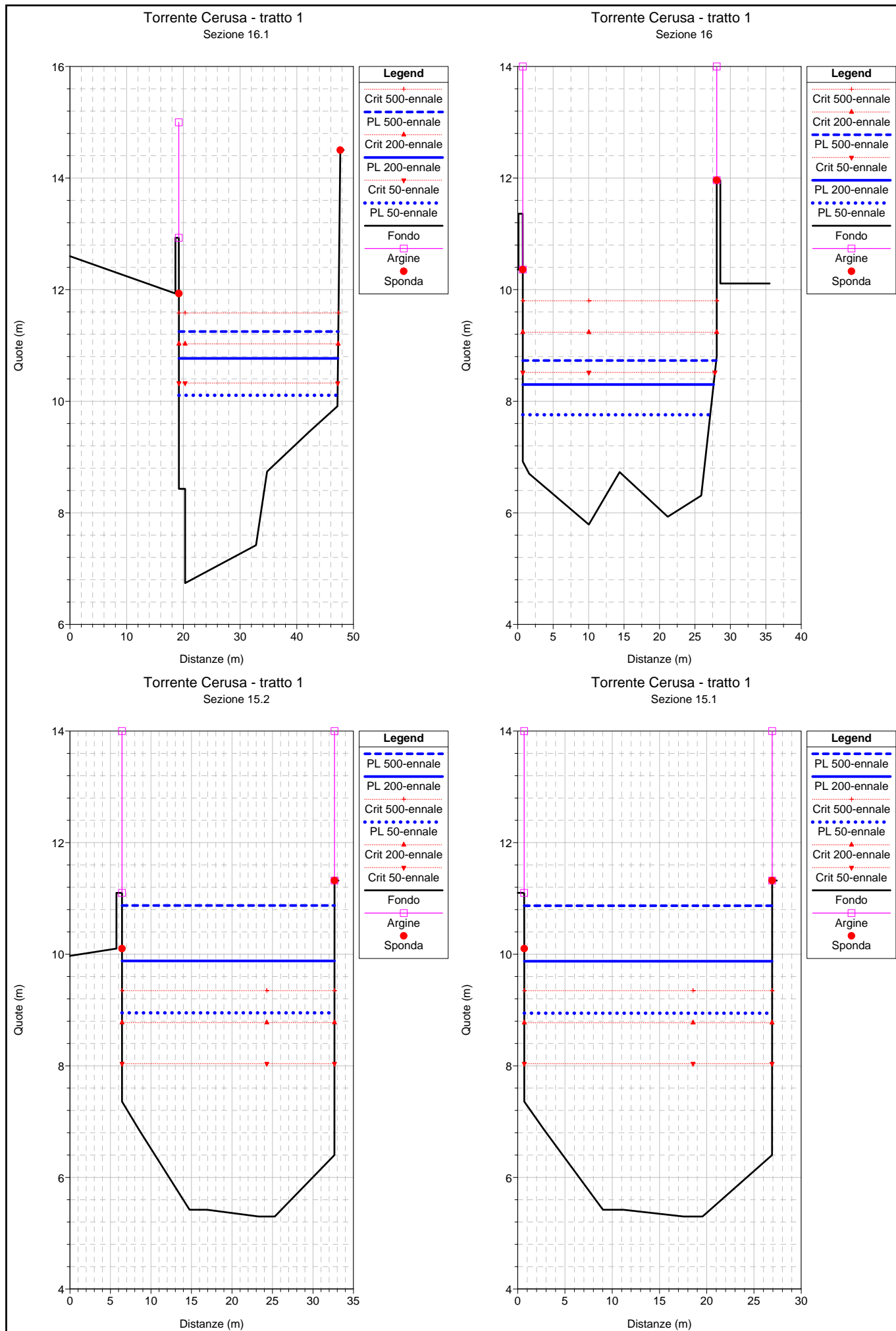


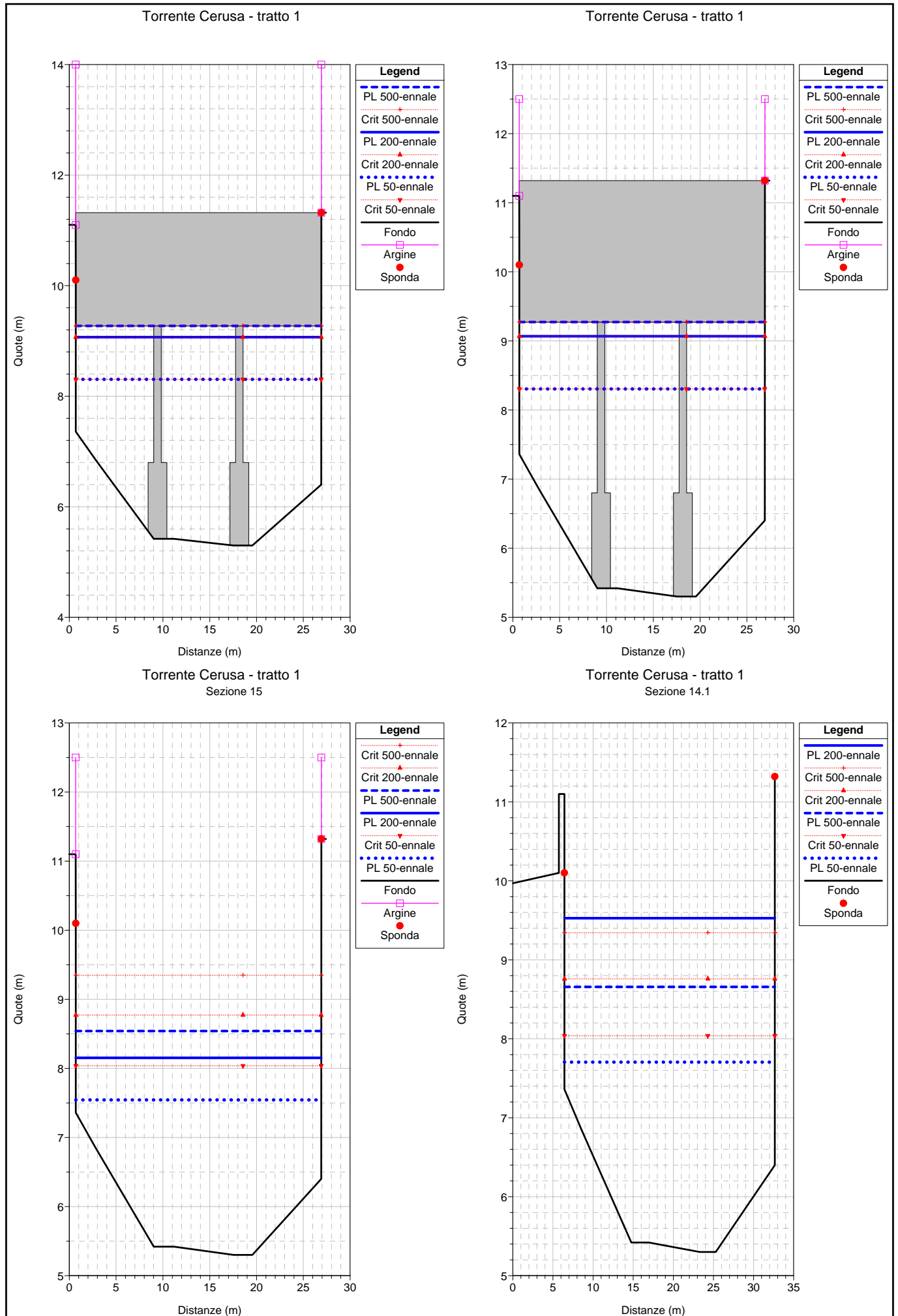


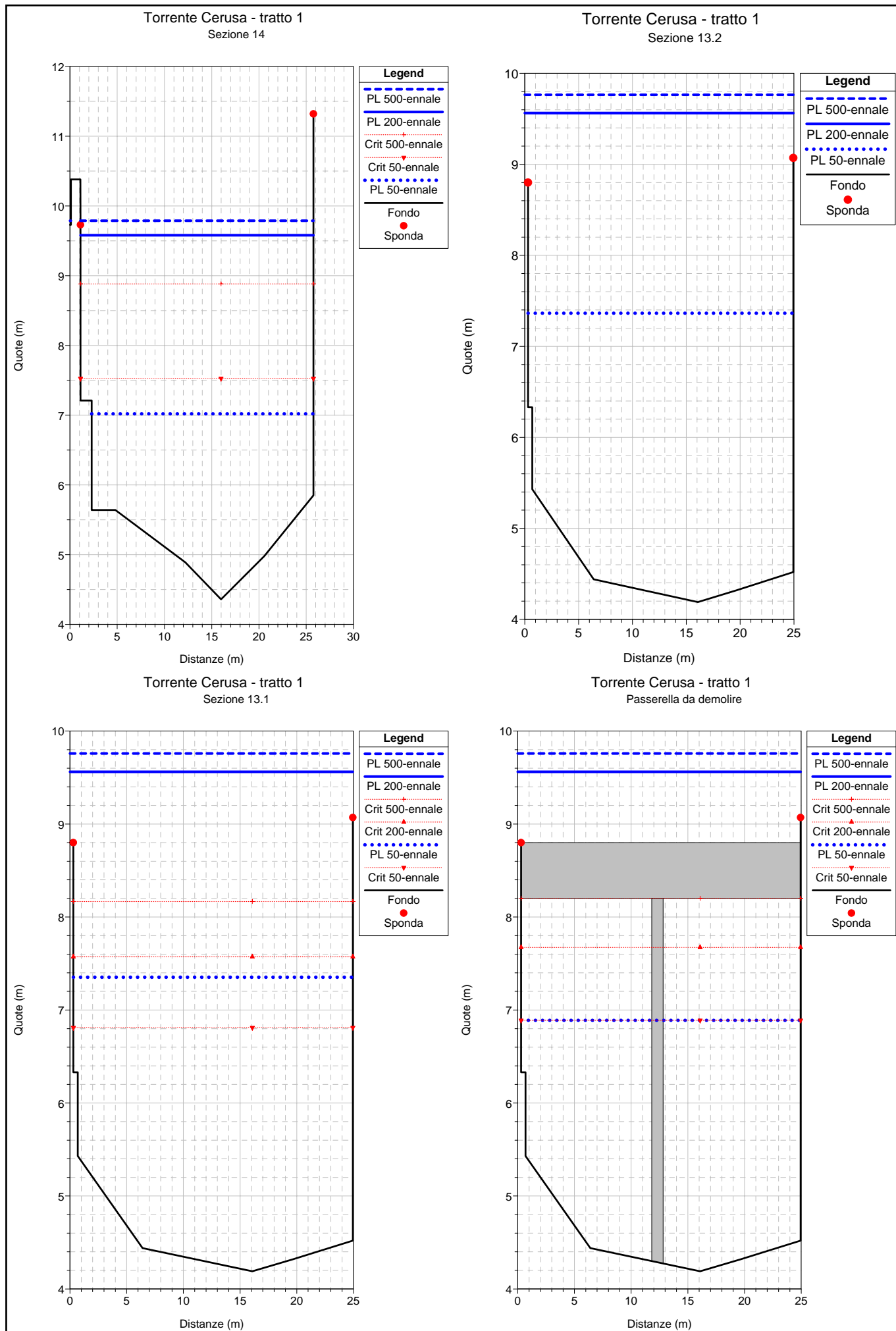


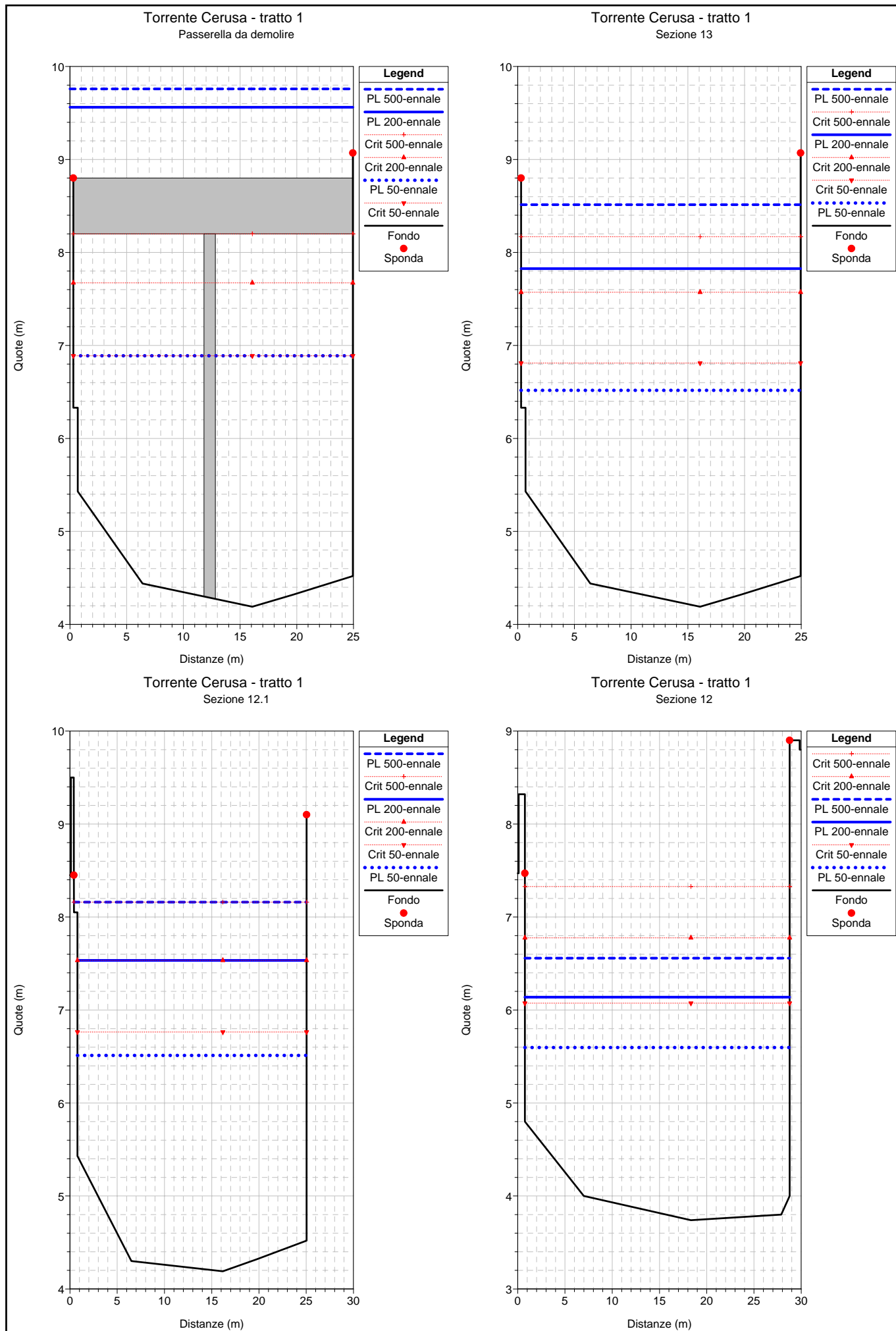


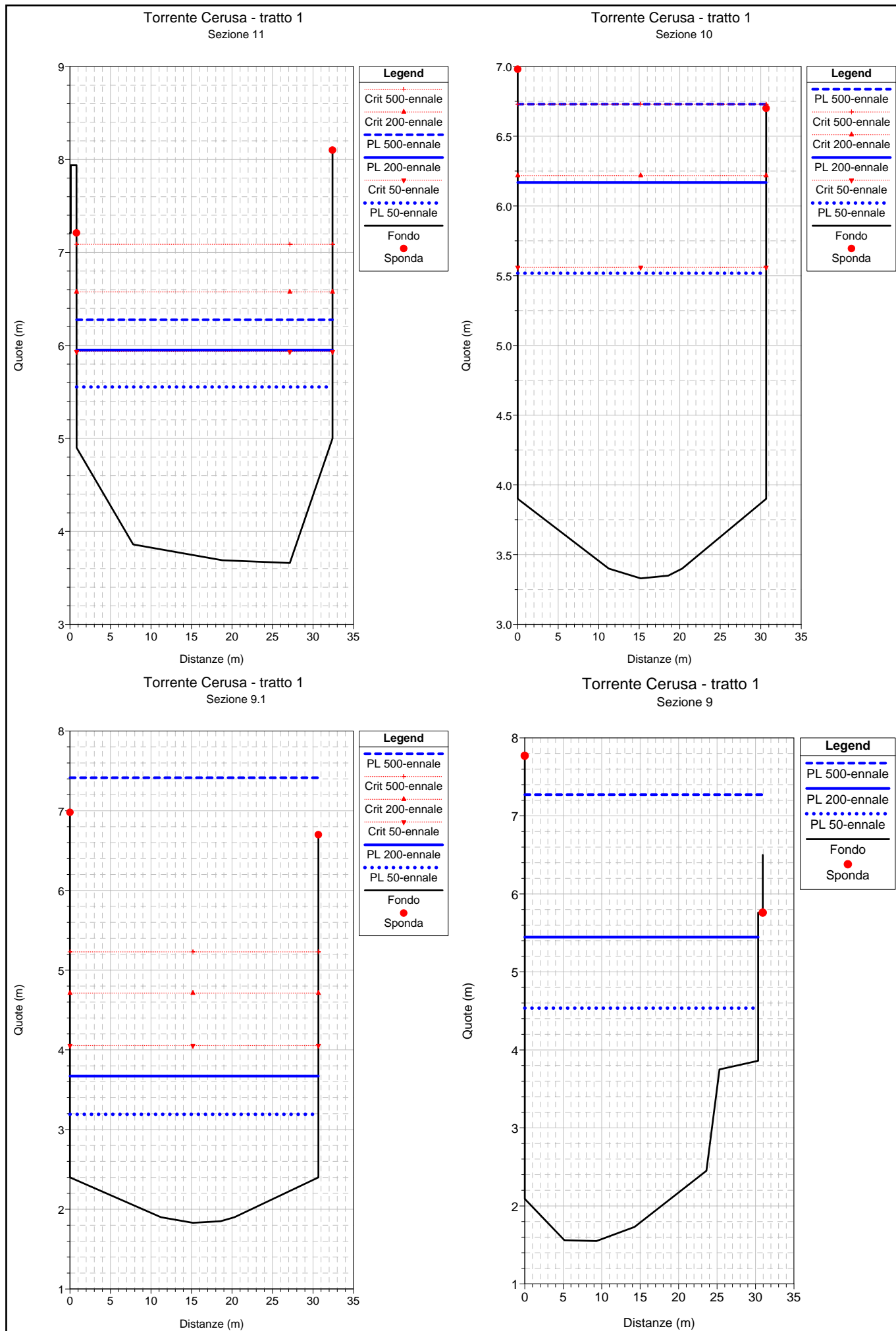


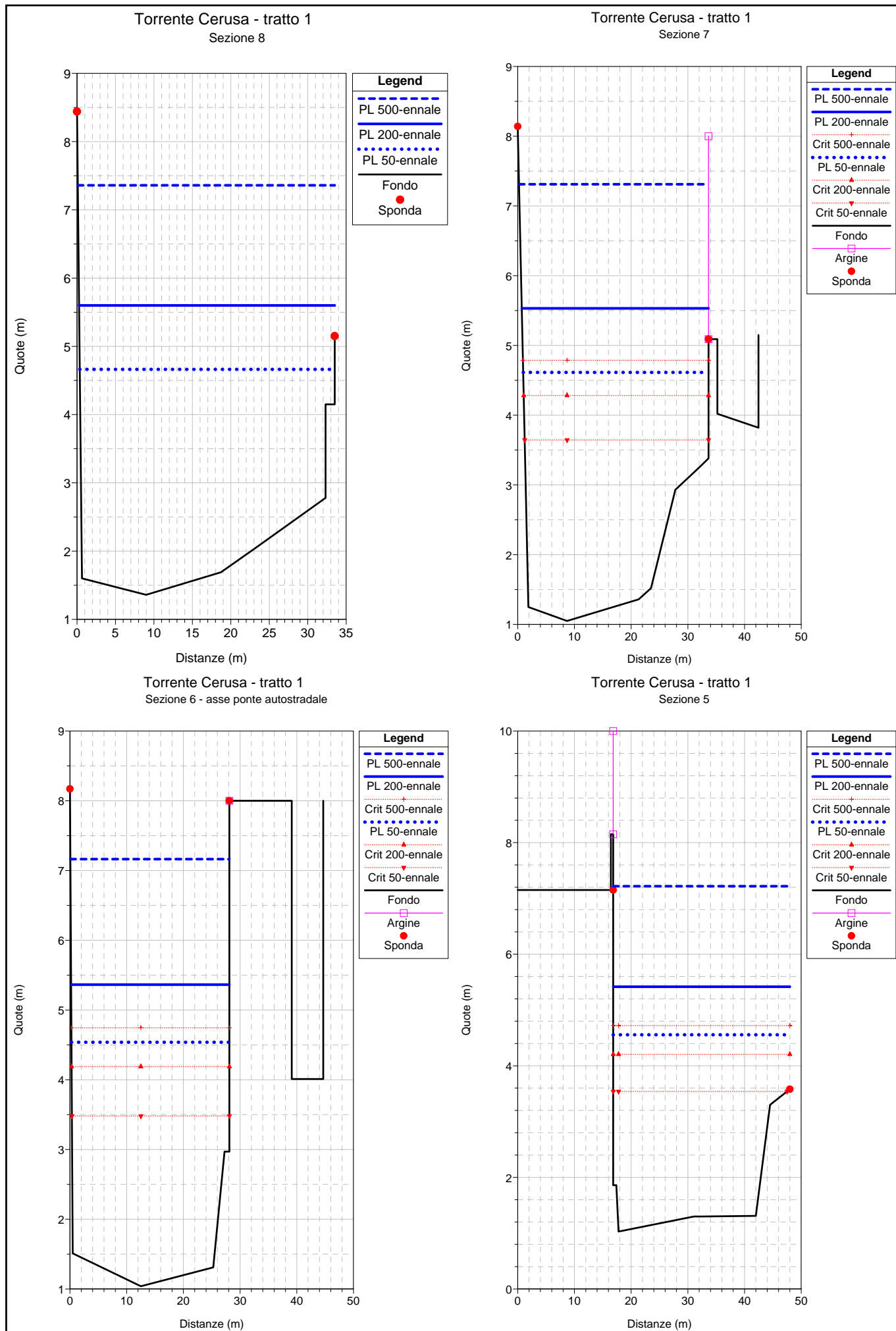


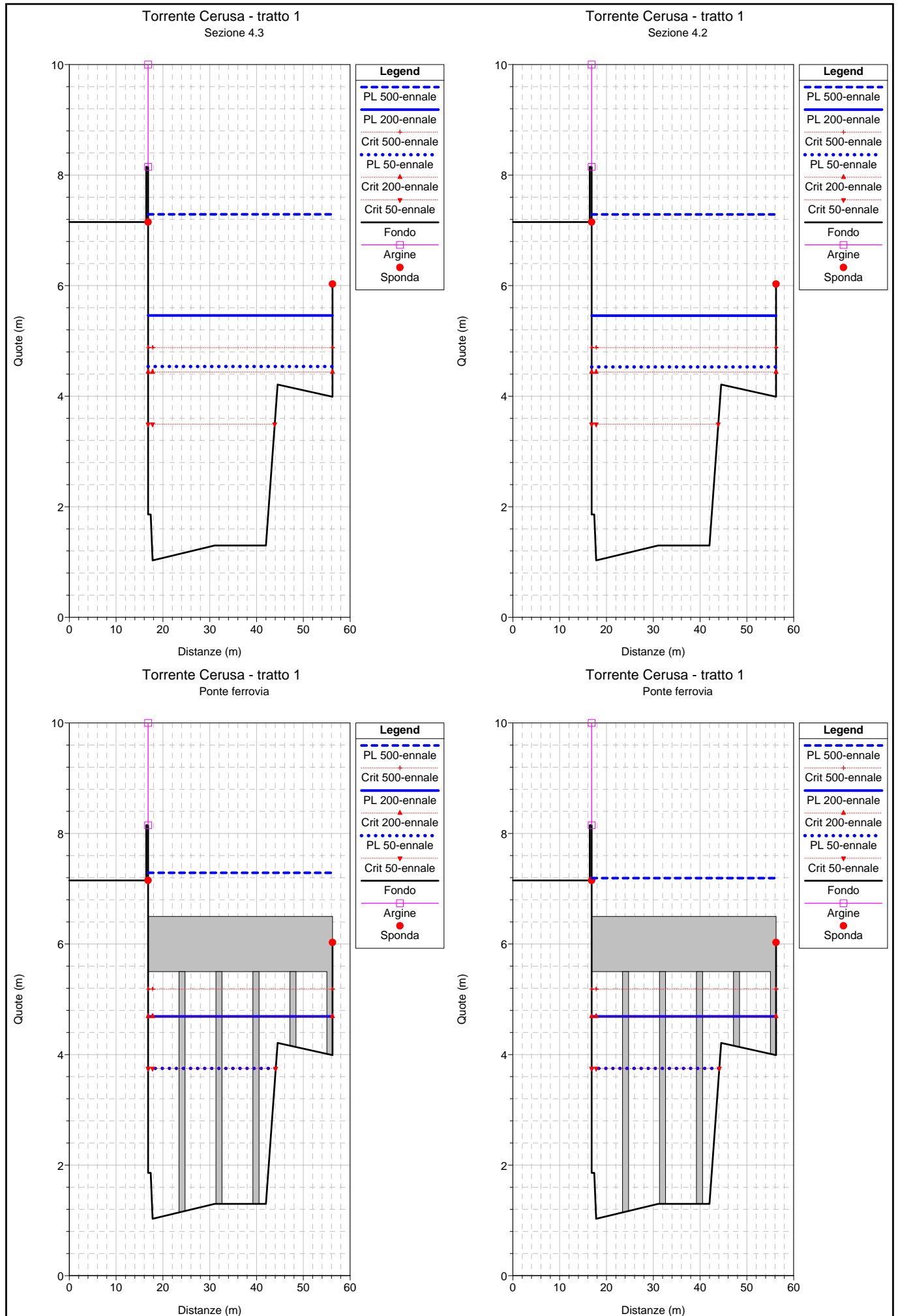


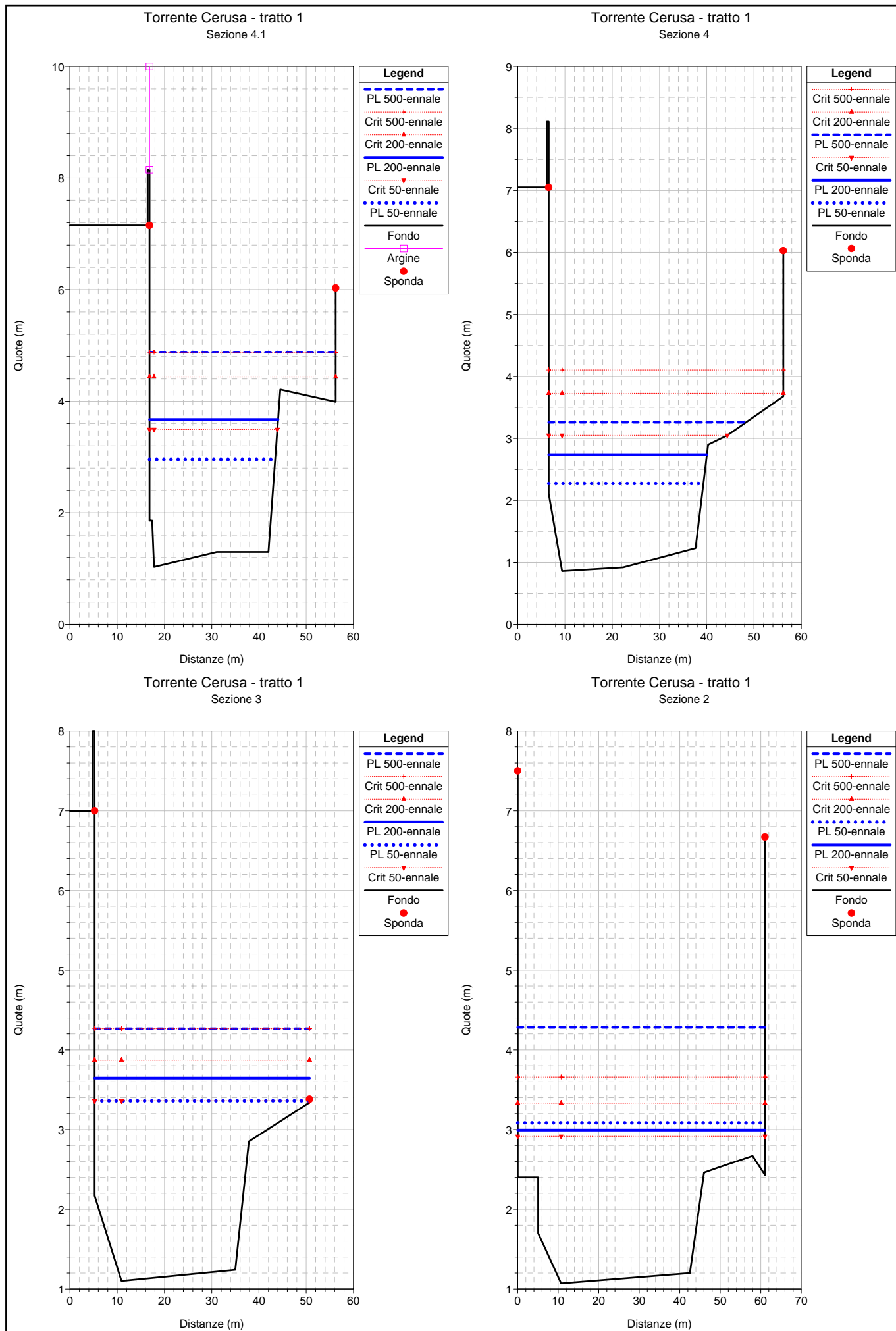


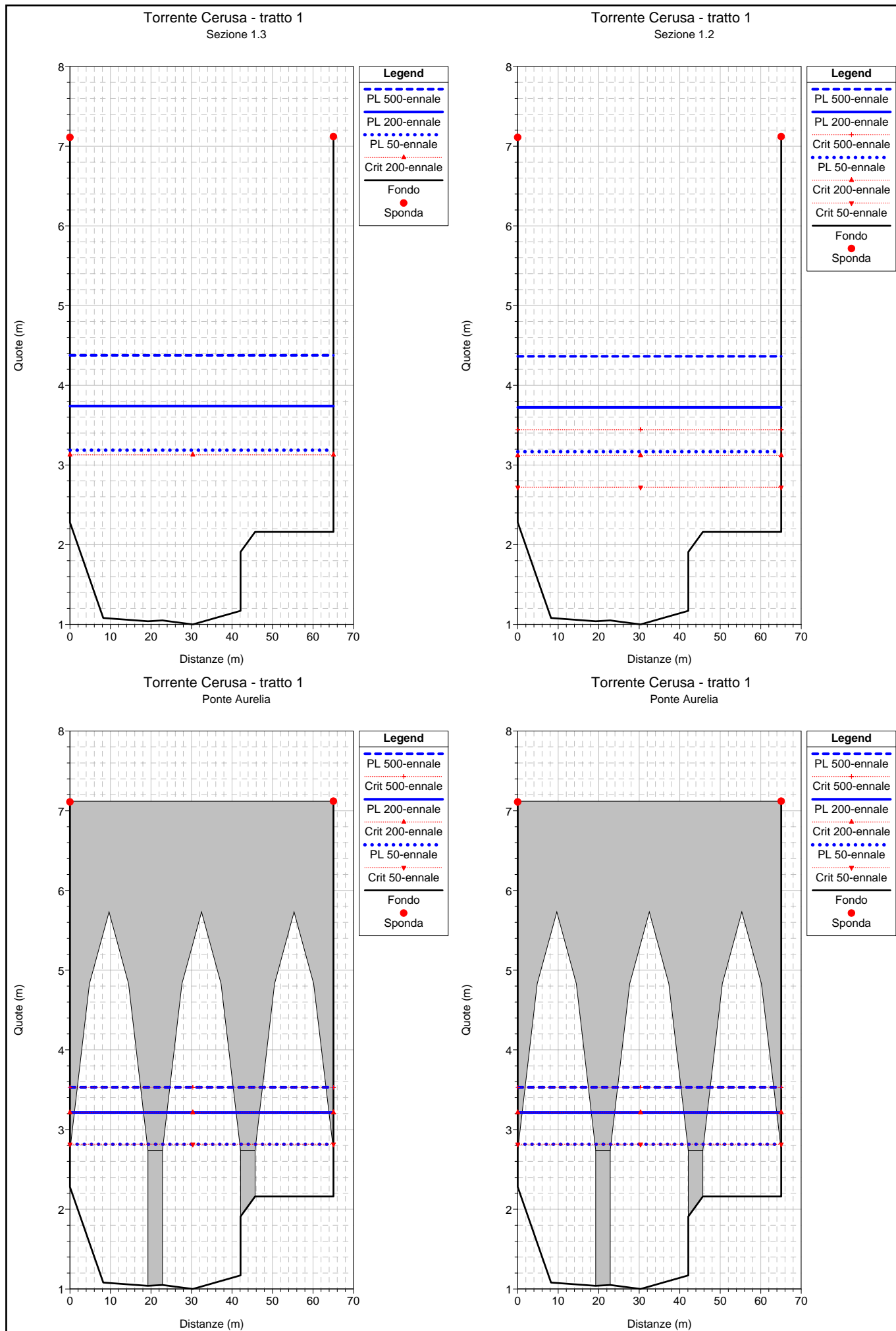


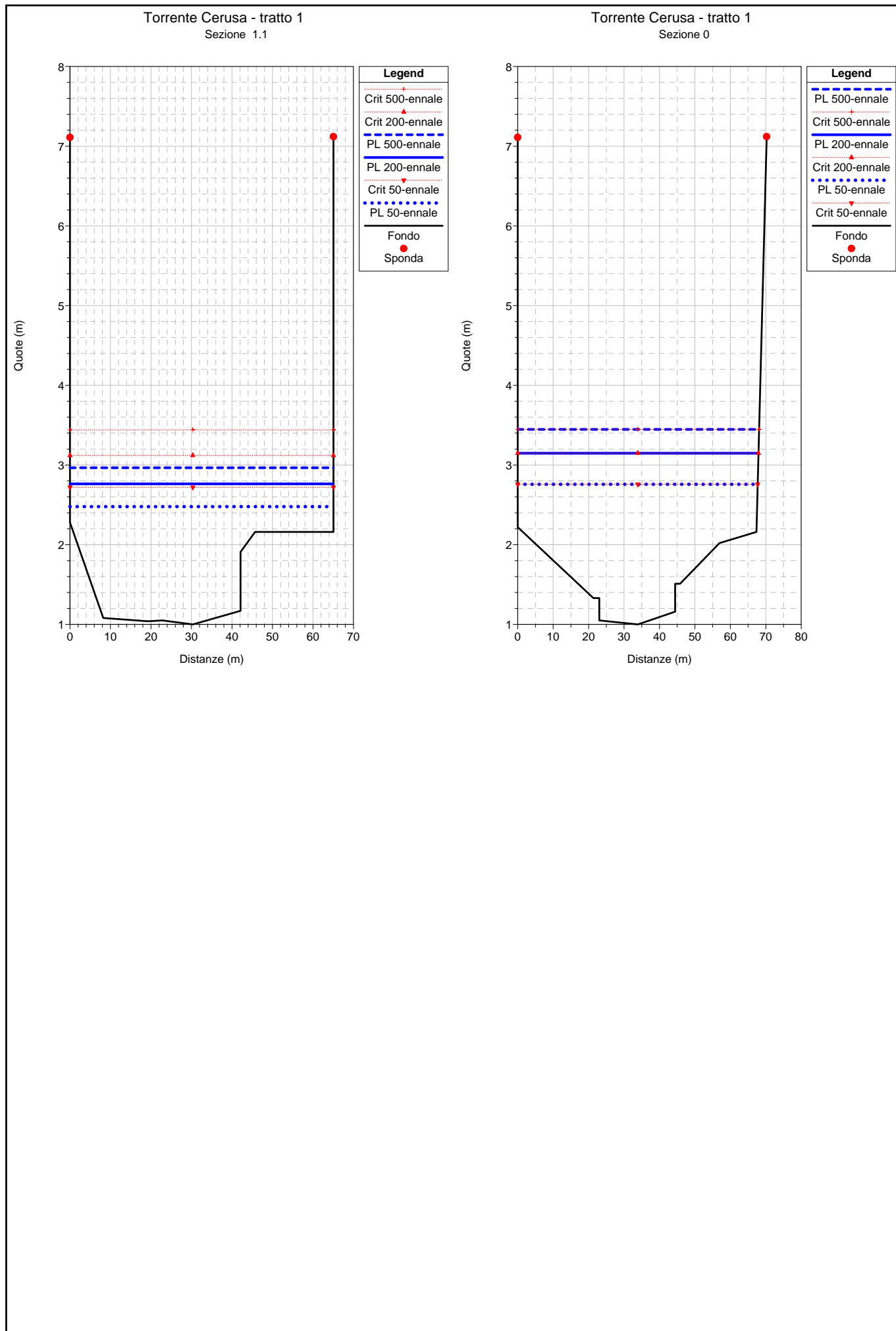












HEC-RAS Plan: Cerusa -1 River: Cerusa Reach: Cerusa

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	LOB Elev (m)	L. Freeboard (m)	ROB Elev (m)	R. Freeboard (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Cerusa	39	500-ennale	544.00	28.10	33.50	34.00	0.50	34.00	0.50	31.43	33.81	0.000941	2.48	219.62	53.75	0.39
Cerusa	39	200-ennale	416.00	28.10	32.63	34.00	1.37	34.00	1.37	31.03	32.92	0.001109	2.39	173.97	51.58	0.42
Cerusa	39	50-ennale	271.00	28.10	31.68	34.00	2.32	34.00	2.32	30.51	31.92	0.001263	2.15	126.16	49.37	0.43
Cerusa	38.3	500-ennale	544.00	28.00	32.71	33.00	0.29	31.80	-0.91	31.87	33.68	0.003717	4.37	124.59	31.50	0.70
Cerusa	38.3	200-ennale	416.00	28.00	31.84	33.00	1.16	31.80	-0.04	31.36	32.77	0.004689	4.28	97.16	31.50	0.78
Cerusa	38.3	50-ennale	271.00	28.00	31.04	33.00	1.96	31.80	0.76	30.71	31.76	0.005094	3.76	72.04	31.50	0.79
Cerusa	38.2	500-ennale	544.00	28.00	32.70	33.00	0.30	31.80	-0.90	31.87	33.67	0.003750	4.38	124.24	31.50	0.70
Cerusa	38.2	200-ennale	416.00	28.00	31.83	33.00	1.17	31.80	-0.03	31.36	32.77	0.004740	4.30	96.83	31.50	0.78
Cerusa	38.2	50-ennale	271.00	28.00	31.03	33.00	1.97	31.80	0.77	30.71	31.76	0.005175	3.78	71.68	31.50	0.80
Cerusa	38.11		Bridge													
Cerusa	38.1	500-ennale	544.00	28.00	32.09	33.00	0.91	31.80	-0.29	31.87	33.45	0.006245	5.17	105.30	31.50	0.90
Cerusa	38.1	200-ennale	416.00	28.00	31.55	33.00	1.45	31.80	0.25	31.36	32.68	0.006371	4.72	88.08	31.50	0.90
Cerusa	38.1	50-ennale	271.00	28.00	30.86	33.00	2.14	31.80	0.94	30.71	31.71	0.006564	4.08	66.50	31.50	0.90
Cerusa	38	500-ennale	544.00	28.00	31.87	33.00	1.13	31.80	-0.07	31.87	33.43	0.007735	5.53	98.29	31.50	1.00
Cerusa	38	200-ennale	416.00	28.00	31.36	33.00	1.64	31.80	0.44	31.36	32.67	0.007905	5.06	82.23	31.50	1.00
Cerusa	38	50-ennale	271.00	28.00	30.71	33.00	2.29	31.80	1.09	30.71	31.69	0.008300	4.39	61.77	31.50	1.00
Cerusa	37	500-ennale	544.00	28.00	30.06	29.70	-0.36	30.00	-0.06	30.96	33.14	0.032533	7.78	69.94	46.00	2.01
Cerusa	37	200-ennale	416.00	28.00	29.81	29.70	-0.11	30.00	0.19	30.57	32.39	0.034240	7.13	58.37	45.89	2.02
Cerusa	37	50-ennale	271.00	28.00	29.48	29.70	0.22	30.00	0.52	30.06	31.44	0.034309	6.22	43.59	42.35	1.96
Cerusa	36.1	500-ennale	544.00	28.00	29.97	30.00	0.03	28.30	-1.67	30.57	32.08	0.018943	6.43	84.58	48.83	1.56
Cerusa	36.1	200-ennale	416.00	28.00	29.74	30.00	0.26	28.30	-1.44	30.19	31.36	0.016806	5.64	73.80	47.65	1.45
Cerusa	36.1	50-ennale	271.00	28.00	29.46	30.00	0.54	28.30	-1.16	29.68	30.48	0.013104	4.47	60.58	46.16	1.25
Cerusa	36	500-ennale	544.00	25.90	27.97	28.00	0.03	28.30	0.33	29.15	31.78	0.031436	8.65	62.90	32.96	2.00
Cerusa	36	200-ennale	416.00	25.90	27.59	28.00	0.41	28.30	0.71	28.62	31.06	0.036858	8.25	50.43	32.39	2.11
Cerusa	36	50-ennale	271.00	25.90	27.11	28.00	0.89	28.30	1.19	27.97	30.17	0.050146	7.74	34.99	31.67	2.35
Cerusa	35.3	500-ennale	544.00	24.00	28.43	27.98	-0.45	27.75	-0.68		28.78	0.001259	2.63	206.50	60.00	0.45
Cerusa	35.3	200-ennale	416.00	24.00	28.14	27.98	-0.16	27.75	-0.39		28.38	0.000980	2.20	188.83	60.00	0.40
Cerusa	35.3	50-ennale	271.00	24.00	26.69	27.98	1.29	27.75	1.06		27.02	0.002393	2.56	105.77	53.13	0.58
Cerusa	35.2	500-ennale	544.00	24.00	28.43	27.98	-0.45	27.75	-0.68	26.90	28.78	0.001262	2.64	206.38	60.00	0.45
Cerusa	35.2	200-ennale	416.00	24.00	28.13	27.98	-0.16	27.75	-0.38	26.52	28.38	0.000981	2.20	188.75	60.00	0.40
Cerusa	35.2	50-ennale	271.00	24.00	26.68	27.98	1.29	27.75	1.07	26.01	27.02	0.002406	2.57	105.57	53.11	0.58
Cerusa	35.11		Bridge													
Cerusa	35.1	500-ennale	544.00	24.00	27.50	27.98	0.47	27.75	0.25	26.91	28.16	0.003316	3.60	151.20	58.05	0.71
Cerusa	35.1	200-ennale	416.00	24.00	27.09	27.98	0.89	27.75	0.66	26.53	27.63	0.003210	3.26	127.60	55.55	0.69
Cerusa	35.1	50-ennale	271.00	24.00	26.54	27.98	1.44	27.75	1.21	26.02	26.93	0.003019	2.77	97.95	52.24	0.64
Cerusa	35	500-ennale	544.00	24.00	27.48	27.98	0.49	27.75	0.27		28.15	0.003397	3.63	149.96	57.93	0.72
Cerusa	35	200-ennale	416.00	24.00	27.07	27.98	0.91	27.75	0.68		27.62	0.003293	3.29	126.51	55.43	0.69
Cerusa	35	50-ennale	271.00	24.00	26.52	27.98	1.46	27.75	1.23		26.92	0.003099	2.79	97.10	52.14	0.65

HEC-RAS Plan: Cerusa -1 River: Cerusa Reach: Cerusa (Continued)

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	LOB Elev (m)	L. Freeboard (m)	ROB Elev (m)	R. Freeboard (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Cerusa	34	500-ennale	544.00	23.50	27.02	26.90	-0.12	27.20	0.18		27.73	0.003502	3.72	146.06	54.85	0.73
Cerusa	34	200-ennale	416.00	23.50	26.52	26.90	0.38	27.20	0.68		27.15	0.003979	3.51	118.51	54.01	0.76
Cerusa	34	50-ennale	271.00	23.50	25.93	26.90	0.97	27.20	1.27	25.63	26.42	0.004462	3.11	87.16	52.35	0.77
Cerusa	33	500-ennale	544.00	22.60	25.49	26.80	1.31	24.00	-1.49	25.90	27.36	0.011329	6.05	89.98	37.09	1.24
Cerusa	33	200-ennale	416.00	22.60	24.93	26.80	1.87	24.00	-0.93	25.39	26.73	0.013670	5.94	70.00	34.44	1.33
Cerusa	33	50-ennale	271.00	22.60	24.24	26.80	2.56	24.00	-0.24	24.73	25.92	0.018507	5.74	47.19	31.13	1.49
Cerusa	32	500-ennale	544.00	21.15	24.92	24.00	-0.92	23.80	-1.12	24.92	26.49	0.006850	5.55	98.37	31.77	1.00
Cerusa	32	200-ennale	416.00	21.15	24.22	24.00	-0.22	23.80	-0.42	24.40	25.74	0.009002	5.45	76.30	31.18	1.11
Cerusa	32	50-ennale	271.00	21.15	23.51	24.00	0.49	23.80	0.29	23.72	24.76	0.010440	4.95	54.72	29.29	1.16
Cerusa	31.3	500-ennale	544.00	18.80	25.14	23.80	-1.34	23.90	-1.24	23.17	25.83	0.001800	3.68	147.69	27.50	0.51
Cerusa	31.3	200-ennale	416.00	18.80	24.46	23.80	-0.66	23.90	-0.56	22.59	24.99	0.001564	3.22	129.10	27.50	0.47
Cerusa	31.3	50-ennale	271.00	18.80	21.17	23.80	2.63	23.90	2.73	21.84	23.39	0.021397	6.61	41.03	24.65	1.63
Cerusa	31.2	500-ennale	544.00	18.80	25.14	23.80	-1.34	23.90	-1.24	23.17	25.83	0.001803	3.69	147.62	27.50	0.51
Cerusa	31.2	200-ennale	416.00	18.80	24.46	23.80	-0.66	23.90	-0.56	22.59	24.99	0.001567	3.22	129.03	27.50	0.48
Cerusa	31.2	50-ennale	271.00	18.80	21.20	23.80	2.60	23.90	2.70	21.84	23.35	0.020444	6.51	41.64	24.71	1.60
Cerusa	31.11		Bridge													
Cerusa	31.1	500-ennale	544.00	18.80	23.47	23.80	0.33	23.90	0.43	23.16	24.93	0.005438	5.34	101.82	27.30	0.88
Cerusa	31.1	200-ennale	416.00	18.80	23.29	23.80	0.51	23.90	0.61	22.59	24.23	0.003681	4.29	97.00	27.21	0.73
Cerusa	31.1	50-ennale	271.00	18.80	21.41	23.80	2.39	23.90	2.49	21.84	23.11	0.014169	5.77	46.98	25.19	1.35
Cerusa	31	500-ennale	544.00	18.80	23.25	23.80	0.55	23.90	0.65	23.16	24.89	0.006511	5.67	95.91	27.19	0.96
Cerusa	31	200-ennale	416.00	18.80	23.28	23.80	0.52	23.90	0.62		24.22	0.003736	4.31	96.52	27.20	0.73
Cerusa	31	50-ennale	271.00	18.80	21.56	23.80	2.24	23.90	2.34	21.84	23.01	0.011219	5.34	50.75	25.53	1.21
Cerusa	30.3	500-ennale	544.00	18.70	23.72	21.95	-1.77	22.30	-1.42	22.06	24.33	0.001809	3.46	157.29	34.00	0.51
Cerusa	30.3	200-ennale	416.00	18.70	23.50	21.95	-1.55	22.30	-1.20	21.56	23.90	0.001223	2.77	149.96	34.00	0.42
Cerusa	30.3	50-ennale	271.00	18.70	21.48	21.95	0.47	22.30	0.82	20.94	22.05	0.003497	3.34	81.10	33.76	0.69
Cerusa	30.2	500-ennale	544.00	18.70	23.72	21.95	-1.77	22.30	-1.42	22.06	24.33	0.001813	3.46	157.19	34.00	0.51
Cerusa	30.2	200-ennale	416.00	18.70	23.50	21.95	-1.55	22.30	-1.20	21.56	23.89	0.001225	2.78	149.91	34.00	0.42
Cerusa	30.2	50-ennale	271.00	18.70	21.47	21.95	0.48	22.30	0.83	20.94	22.04	0.003543	3.36	80.76	33.75	0.69
Cerusa	30.11		Bridge													
Cerusa	30.1	500-ennale	544.00	18.70	22.50	21.95	-0.55	22.30	-0.20	22.06	23.62	0.004642	4.70	115.70	34.00	0.81
Cerusa	30.1	200-ennale	416.00	18.70	21.84	21.95	0.11	22.30	0.46	21.57	22.85	0.005320	4.46	93.24	33.94	0.86
Cerusa	30.1	50-ennale	271.00	18.70	20.67	21.95	1.28	22.30	1.63	20.94	21.95	0.012797	5.03	53.91	33.34	1.26
Cerusa	30	500-ennale	544.00	18.70	22.46	21.95	-0.51	22.30	-0.16	22.06	23.61	0.004799	4.75	114.47	34.00	0.83
Cerusa	30	200-ennale	416.00	18.70	21.57	21.95	0.38	22.30	0.73	21.57	22.81	0.007337	4.94	84.15	33.80	1.00
Cerusa	30	50-ennale	271.00	18.70	20.72	21.95	1.23	22.30	1.58	20.94	21.93	0.011635	4.88	55.54	33.37	1.21
Cerusa	29	500-ennale	544.00	18.10	22.82	21.60	-1.22	19.04	-3.78		23.33	0.001719	3.18	175.03	48.00	0.51
Cerusa	29	200-ennale	416.00	18.10	21.84	21.60	-0.24	19.04	-2.80		22.39	0.002600	3.29	127.76	48.00	0.60

HEC-RAS Plan: Cerusa -1 River: Cerusa Reach: Cerusa (Continued)

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	LOB Elev (m)	L. Freeboard (m)	ROB Elev (m)	R. Freeboard (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Cerusa	29	50-ennale	271.00	18.10	21.02	21.60	0.58	19.04	-1.98	20.12	21.45	0.002659	2.91	92.99	37.98	0.59
Cerusa	28.6	500-ennale	544.00	17.19	22.76	20.30	-2.46	20.65	-2.11	20.32	23.24	0.001274	3.09	176.28	32.00	0.42
Cerusa	28.6	200-ennale	416.00	17.19	21.85	20.30	-1.55	20.65	-1.20	19.81	22.25	0.001280	2.83	147.24	32.00	0.42
Cerusa	28.6	50-ennale	271.00	17.19	21.06	20.30	-0.77	20.65	-0.42	19.16	21.31	0.000962	2.22	122.08	32.00	0.36
Cerusa	28.5	Bridge														
Cerusa	28.4	500-ennale	544.00	17.19	20.87	20.30	-0.57	20.65	-0.22		21.99	0.004557	4.70	115.84	32.00	0.79
Cerusa	28.4	200-ennale	416.00	17.19	20.26	20.30	0.03	20.65	0.38		21.21	0.004689	4.31	96.53	31.94	0.79
Cerusa	28.4	50-ennale	271.00	17.19	19.47	20.30	0.82	20.65	1.17		20.21	0.005131	3.80	71.39	31.70	0.81
Cerusa	28	500-ennale	544.00	17.00	20.34	20.75	0.41	19.90	-0.44	20.34	21.87	0.007261	5.48	99.19	32.35	1.00
Cerusa	28	200-ennale	416.00	17.00	19.78	20.75	0.97	19.90	0.12	19.78	21.10	0.007485	5.10	81.59	30.78	1.00
Cerusa	28	50-ennale	271.00	17.00	19.10	20.75	1.65	19.90	0.80	19.10	20.11	0.007884	4.45	60.92	30.10	1.00
Cerusa	27.1	500-ennale	544.00	16.50	19.33	19.00	-0.33	18.00	-1.33	19.74	21.35	0.010609	6.33	87.12	33.37	1.21
Cerusa	27.1	200-ennale	416.00	16.50	18.88	19.00	0.12	18.00	-0.88	19.21	20.58	0.011157	5.79	72.40	32.20	1.20
Cerusa	27.1	50-ennale	271.00	16.50	18.32	19.00	0.68	18.00	-0.32	18.54	19.57	0.011528	4.97	54.64	30.79	1.18
Cerusa	27	500-ennale	544.00	15.40	18.00	19.50	1.50	18.00	0.00	18.95	21.17	0.021780	7.88	69.01	30.00	1.66
Cerusa	27	200-ennale	416.00	15.40	17.56	19.50	1.94	18.00	0.44	18.40	20.39	0.024971	7.45	55.80	30.00	1.74
Cerusa	27	50-ennale	271.00	15.40	17.03	19.50	2.47	18.00	0.97	17.72	19.38	0.030938	6.78	39.94	30.00	1.88
Cerusa	26.3	500-ennale	544.00	13.00	15.90	17.80	1.90	18.65	2.75	16.84	19.04	0.021188	7.85	69.29	32.64	1.72
Cerusa	26.3	200-ennale	416.00	13.00	15.54	17.80	2.26	18.65	3.11	16.34	18.17	0.020778	7.18	57.92	30.82	1.67
Cerusa	26.3	50-ennale	271.00	13.00	15.03	17.80	2.77	18.65	3.62	15.65	17.06	0.021117	6.31	42.96	28.24	1.63
Cerusa	26.2	500-ennale	544.00	13.00	15.92	17.80	1.88	18.65	2.73	16.84	19.00	0.020626	7.78	69.94	32.74	1.70
Cerusa	26.2	200-ennale	416.00	13.00	15.56	17.80	2.24	18.65	3.09	16.34	18.13	0.020090	7.10	58.60	30.93	1.65
Cerusa	26.2	50-ennale	271.00	13.00	15.06	17.80	2.74	18.65	3.59	15.65	17.02	0.020132	6.21	43.66	28.37	1.60
Cerusa	26.11	Bridge														
Cerusa	26.1	500-ennale	544.00	13.00	16.19	17.80	1.61	18.65	2.46	16.84	18.61	0.014297	6.89	78.99	33.46	1.43
Cerusa	26.1	200-ennale	416.00	13.00	15.84	17.80	1.96	18.65	2.81	16.34	17.78	0.013379	6.17	67.46	32.35	1.36
Cerusa	26.1	50-ennale	271.00	13.00	15.35	17.80	2.45	18.65	3.30	15.65	16.73	0.012025	5.21	52.06	29.84	1.26
Cerusa	26	500-ennale	544.00	13.00	16.26	17.80	1.54	18.65	2.39	16.84	18.54	0.013061	6.69	81.35	33.57	1.37
Cerusa	26	200-ennale	416.00	13.00	15.94	17.80	1.86	18.65	2.71	16.34	17.70	0.011669	5.88	70.76	32.87	1.28
Cerusa	26	50-ennale	271.00	13.00	15.41	17.80	2.40	18.65	3.25	15.66	16.70	0.010909	5.03	53.83	30.14	1.20
Cerusa	25	500-ennale	544.00	12.00	17.42	17.15	-0.27	20.00	2.58	15.57	17.95	0.001459	3.22	168.92	38.06	0.49
Cerusa	25	200-ennale	416.00	12.00	16.56	17.15	0.59	20.00	3.44	15.05	17.03	0.001600	3.04	136.76	36.67	0.50
Cerusa	25	50-ennale	271.00	12.00	15.41	17.15	1.74	20.00	4.59	14.38	15.81	0.001973	2.83	95.81	34.19	0.54
Cerusa	24	500-ennale	544.00	10.90	15.94	16.50	0.56	16.00	0.06	15.94	17.74	0.006706	5.94	91.58	25.47	1.00
Cerusa	24	200-ennale	416.00	10.90	15.27	16.50	1.23	16.00	0.73	15.27	16.84	0.006901	5.55	75.00	23.92	1.00
Cerusa	24	50-ennale	271.00	10.90	14.39	16.50	2.11	16.00	1.61	14.39	15.64	0.007247	4.95	54.71	21.89	1.00
Cerusa	23.3	500-ennale	544.00	9.90	15.97	15.30	-0.67	14.00	-1.97		16.92	0.002530	4.37	130.52	36.91	0.64

HEC-RAS Plan: Cerusa -1 River: Cerusa Reach: Cerusa (Continued)

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	LOB Elev (m)	L. Freeboard (m)	ROB Elev (m)	R. Freeboard (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Cerusa	23.3	200-ennale	416.00	9.90	15.06	15.30	0.24	14.00	-1.06	14.20	15.96	0.003110	4.22	99.48	28.45	0.69
Cerusa	23.3	50-ennale	271.00	9.90	14.03	15.30	1.27	14.00	-0.03	13.30	14.75	0.003492	3.76	72.09	25.11	0.71
Cerusa	23.2	500-ennale	544.00	9.90	16.00	15.30	-0.70	16.00	0.00	14.87	16.90	0.002785	4.22	131.78	37.00	0.66
Cerusa	23.2	200-ennale	416.00	9.90	15.07	15.30	0.23	16.00	0.93	14.21	15.95	0.003363	4.17	99.80	28.49	0.71
Cerusa	23.2	50-ennale	271.00	9.90	14.02	15.30	1.28	16.00	1.98	13.31	14.75	0.003543	3.77	71.82	25.07	0.71
Cerusa	23.11		Bridge													
Cerusa	23.1	500-ennale	544.00	9.90	15.24	15.30	0.06	14.00	-1.24	14.84	16.64	0.004571	5.26	104.80	29.06	0.84
Cerusa	23.1	200-ennale	416.00	9.90	13.75	15.30	1.55	14.00	0.25	14.20	15.83	0.010929	6.40	65.05	23.99	1.24
Cerusa	23.1	50-ennale	271.00	9.90	12.91	15.30	2.39	14.00	1.09	13.31	14.65	0.011690	5.85	46.33	20.63	1.25
Cerusa	23	500-ennale	544.00	9.90	14.84	15.30	0.46	14.00	-0.84	14.84	16.59	0.006380	5.86	93.50	27.76	0.98
Cerusa	23	200-ennale	416.00	9.90	14.20	15.30	1.10	14.00	-0.20	14.20	15.72	0.006862	5.45	76.41	25.67	1.00
Cerusa	23	50-ennale	271.00	9.90	13.31	15.30	1.99	14.00	0.69	13.31	14.55	0.007312	4.93	55.02	22.25	1.00
Cerusa	22.3	500-ennale	544.00	9.50	12.45	14.62	2.17	16.11	3.66	13.49	15.99	0.020145	8.33	65.27	23.79	1.61
Cerusa	22.3	200-ennale	416.00	9.50	11.93	14.62	2.69	16.11	4.18	12.87	15.08	0.022500	7.87	52.84	23.33	1.67
Cerusa	22.3	50-ennale	271.00	9.50	11.29	14.62	3.33	16.11	4.82	12.06	13.87	0.026477	7.12	38.08	22.84	1.76
Cerusa	22.2	500-ennale	544.00	9.50	12.48	14.62	2.14	16.11	3.63	13.49	15.95	0.019590	8.26	65.88	23.81	1.58
Cerusa	22.2	200-ennale	416.00	9.50	11.95	14.62	2.67	16.11	4.16	12.87	15.04	0.021783	7.79	53.40	23.35	1.64
Cerusa	22.2	50-ennale	271.00	9.50	11.31	14.62	3.31	16.11	4.80	12.06	13.82	0.025363	7.02	38.60	22.85	1.72
Cerusa	22.11		Bridge													
Cerusa	22.1	500-ennale	544.00	9.50	12.54	14.62	2.08	16.11	3.56	13.49	15.86	0.018233	8.07	67.45	23.87	1.53
Cerusa	22.1	200-ennale	416.00	9.50	12.01	14.62	2.61	16.11	4.10	12.87	14.94	0.020003	7.58	54.90	23.41	1.58
Cerusa	22.1	50-ennale	271.00	9.50	11.37	14.62	3.25	16.11	4.74	12.06	13.70	0.022517	6.76	40.10	22.89	1.63
Cerusa	22	500-ennale	544.00	9.50	12.67	14.62	1.95	16.11	3.44	13.49	15.71	0.016053	7.73	70.34	23.98	1.44
Cerusa	22	200-ennale	416.00	9.50	12.13	14.62	2.49	16.11	3.98	12.87	14.79	0.017288	7.23	57.57	23.51	1.47
Cerusa	22	50-ennale	271.00	9.50	11.49	14.62	3.13	16.11	4.62	12.06	13.54	0.018389	6.33	42.78	22.97	1.48
Cerusa	21	500-ennale	544.00	9.00	11.93	14.20	2.27	15.00	3.07	13.04	15.60	0.022857	8.48	64.12	25.89	1.72
Cerusa	21	200-ennale	416.00	9.00	11.48	14.20	2.72	15.00	3.52	12.45	14.68	0.024511	7.93	52.46	25.13	1.75
Cerusa	21	50-ennale	271.00	9.00	12.75	14.20	1.45	15.00	2.25	11.68	13.26	0.002363	3.16	85.85	27.03	0.57
Cerusa	20	500-ennale	544.00	8.70	13.16	12.88	-0.28	15.50	2.34	13.16	14.87	0.007200	5.79	93.95	27.45	1.00
Cerusa	20	200-ennale	416.00	8.70	12.60	12.88	0.28	15.50	2.90	12.60	14.03	0.007297	5.30	78.53	27.44	1.00
Cerusa	20	50-ennale	271.00	8.70	11.87	12.88	1.01	15.50	3.63	11.87	12.96	0.007554	4.62	58.72	27.00	1.00
Cerusa	19	500-ennale	544.00	7.91	11.28	13.10	1.82	15.50	4.22	11.94	13.89	0.014798	7.16	75.98	28.00	1.39
Cerusa	19	200-ennale	416.00	7.91	10.82	13.10	2.28	15.50	4.68	11.39	13.03	0.015324	6.57	63.28	27.96	1.39
Cerusa	19	50-ennale	271.00	7.91	10.25	13.10	2.85	15.50	5.25	10.68	11.92	0.016009	5.74	47.25	27.25	1.39
Cerusa	18	500-ennale	544.00	7.10	13.02	12.60	-0.42	15.10	2.08	10.68	13.57	0.001384	3.27	166.36	29.77	0.44
Cerusa	18	200-ennale	416.00	7.10	12.27	12.60	0.33	15.10	2.83	10.15	12.70	0.001260	2.89	144.06	29.77	0.42
Cerusa	18	50-ennale	271.00	7.10	11.30	12.60	1.30	15.10	3.80	9.47	11.58	0.001056	2.36	114.99	29.77	0.38

HEC-RAS Plan: Cerusa -1 River: Cerusa Reach: Cerusa (Continued)

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	LOB Elev (m)	L. Freeboard (m)	ROB Elev (m)	R. Freeboard (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Cerusa	17	500-ennale	544.00	6.84	12.96	12.40	-0.57	14.80	1.83	10.59	13.54	0.001481	3.36	161.95	28.28	0.45
Cerusa	17	200-ennale	416.00	6.84	12.23	12.40	0.17	14.80	2.57	10.04	12.67	0.001325	2.95	141.19	28.28	0.42
Cerusa	17	50-ennale	271.00	6.84	11.27	12.40	1.13	14.80	3.53	9.35	11.56	0.001068	2.38	114.05	28.28	0.38
Cerusa	16.3	500-ennale	544.00	6.74	12.36	11.93	-0.43	14.50	2.14	11.58	13.47	0.004103	4.67	116.59	28.24	0.73
Cerusa	16.3	200-ennale	416.00	6.74	11.68	11.93	0.25	14.50	2.82	11.03	12.61	0.004226	4.27	97.35	28.16	0.73
Cerusa	16.3	50-ennale	271.00	6.74	10.78	11.93	1.15	14.50	3.72	10.32	11.50	0.004519	3.75	72.25	28.06	0.75
Cerusa	16.2	500-ennale	544.00	6.74	12.34	11.93	-0.41	14.50	2.16	11.58	13.46	0.004169	4.69	116.01	28.24	0.74
Cerusa	16.2	200-ennale	416.00	6.74	11.66	11.93	0.27	14.50	2.84	11.03	12.60	0.004305	4.30	96.76	28.16	0.74
Cerusa	16.2	50-ennale	271.00	6.74	10.76	11.93	1.17	14.50	3.74	10.33	11.49	0.004641	3.78	71.64	28.06	0.76
Cerusa	16.11		Bridge													
Cerusa	16.1	500-ennale	544.00	6.74	11.25	11.93	0.68	14.50	3.25	11.58	13.32	0.010847	6.37	85.34	28.11	1.17
Cerusa	16.1	200-ennale	416.00	6.74	10.77	11.93	1.16	14.50	3.73	11.03	12.48	0.010855	5.79	71.81	28.06	1.16
Cerusa	16.1	50-ennale	271.00	6.74	10.11	11.93	1.82	14.50	4.39	10.33	11.42	0.011791	5.09	53.29	27.99	1.18
Cerusa	16	500-ennale	544.00	5.79	8.73	10.36	1.63	11.96	3.23	9.80	12.34	0.023414	8.42	64.59	27.30	1.75
Cerusa	16	200-ennale	416.00	5.79	8.30	10.36	2.06	11.96	3.66	9.24	11.45	0.025454	7.86	52.91	26.92	1.79
Cerusa	16	50-ennale	271.00	5.79	7.76	10.36	2.60	11.96	4.20	8.52	10.29	0.029511	7.05	38.46	26.45	1.86
Cerusa	15.2	500-ennale	544.00	5.30	10.87	10.10	-0.77	11.32	0.45	9.35	11.73	0.002452	4.11	132.44	26.24	0.58
Cerusa	15.2	200-ennale	416.00	5.30	9.88	10.10	0.22	11.32	1.44	8.77	10.66	0.002833	3.91	106.40	26.23	0.62
Cerusa	15.2	50-ennale	271.00	5.30	8.95	10.10	1.15	11.32	2.37	8.04	9.51	0.002650	3.31	81.98	26.23	0.60
Cerusa	15.1	500-ennale	544.00	5.30	10.87	10.10	-0.77	11.32	0.45	9.35	11.73	0.002458	4.11	132.34	26.24	0.58
Cerusa	15.1	200-ennale	416.00	5.30	9.87	10.10	0.23	11.32	1.45	8.77	10.65	0.002847	3.92	106.23	26.23	0.62
Cerusa	15.1	50-ennale	271.00	5.30	8.94	10.10	1.16	11.32	2.38	8.04	9.50	0.002665	3.31	81.83	26.23	0.60
Cerusa	15.01		Bridge													
Cerusa	15	500-ennale	544.00	5.30	8.54	10.10	1.56	11.32	2.78	9.35	11.51	0.016422	7.63	71.28	26.22	1.48
Cerusa	15	200-ennale	416.00	5.30	8.15	10.10	1.95	11.32	3.17	8.77	10.51	0.015496	6.81	61.10	26.22	1.42
Cerusa	15	50-ennale	271.00	5.30	7.54	10.10	2.56	11.32	3.78	8.04	9.38	0.017066	6.01	45.12	26.22	1.46
Cerusa	14.1	500-ennale	544.00	5.30	8.66	10.10	1.44	11.32	2.66	9.34	11.38	0.014419	7.32	74.36	26.23	1.39
Cerusa	14.1	200-ennale	416.00	5.30	9.53	10.10	0.57	11.32	1.79	8.76	10.46	0.003725	4.28	97.17	26.23	0.71
Cerusa	14.1	50-ennale	271.00	5.30	7.70	10.10	2.40	11.32	3.62	8.04	9.24	0.012872	5.49	49.33	26.23	1.28
Cerusa	14	500-ennale	544.00	4.36	9.79	9.73	-0.06	11.32	1.53	8.88	10.98	0.004064	4.83	112.63	24.75	0.72
Cerusa	14	200-ennale	416.00	4.36	9.58	9.73	0.15	11.32	1.74	10.34	10.34	0.002739	3.87	107.45	24.65	0.59
Cerusa	14	50-ennale	271.00	4.36	7.02	9.73	2.71	11.32	4.30	7.53	8.90	0.016342	6.08	44.60	23.46	1.41
Cerusa	13.2	500-ennale	544.00	4.19	9.76	8.80	-0.96	9.07	-0.69		10.66	0.002594	4.20	129.89	24.94	0.58
Cerusa	13.2	200-ennale	416.00	4.19	9.56	8.80	-0.76	9.07	-0.49		10.13	0.001713	3.34	124.89	24.94	0.47
Cerusa	13.2	50-ennale	271.00	4.19	7.36	8.80	1.44	9.07	1.71		8.12	0.004174	3.85	70.45	24.64	0.73
Cerusa	13.1	500-ennale	544.00	4.19	9.76	8.80	-0.96	9.07	-0.69	8.17	10.66	0.002602	4.20	129.75	24.94	0.58
Cerusa	13.1	200-ennale	416.00	4.19	9.56	8.80	-0.76	9.07	-0.49	7.57	10.13	0.001715	3.34	124.84	24.94	0.47
Cerusa	13.1	50-ennale	271.00	4.19	7.35	8.80	1.45	9.07	1.72	6.81	8.11	0.004222	3.86	70.19	24.64	0.73

HEC-RAS Plan: Cerusa -1 River: Cerusa Reach: Cerusa (Continued)

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	LOB Elev (m)	L. Freeboard (m)	ROB Elev (m)	R. Freeboard (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Cerusa	13.01		Bridge													
Cerusa	13	500-ennale	544.00	4.19	8.51	8.80	0.29	9.07	0.56	8.17	10.06	0.006025	5.51	98.78	24.64	0.88
Cerusa	13	200-ennale	416.00	4.19	7.83	8.80	0.97	9.07	1.24	7.57	9.14	0.006217	5.08	81.85	24.64	0.89
Cerusa	13	50-ennale	271.00	4.19	6.52	8.80	2.28	9.07	2.55	6.81	8.04	0.012424	5.46	49.60	24.64	1.23
Cerusa	12.1	500-ennale	544.00	4.19	8.16	8.45	0.29	9.10	0.94	8.16	10.00	0.007833	6.01	90.49	24.62	1.00
Cerusa	12.1	200-ennale	416.00	4.19	7.53	8.45	0.92	9.10	1.57	7.53	9.09	0.007889	5.53	75.24	24.25	1.00
Cerusa	12.1	50-ennale	271.00	4.19	6.51	8.45	1.94	9.10	2.59	6.76	7.98	0.011518	5.37	50.47	24.25	1.19
Cerusa	12	500-ennale	544.00	3.74	6.56	7.47	0.91	8.90	2.34	7.33	9.39	0.016991	7.46	72.91	28.01	1.48
Cerusa	12	200-ennale	416.00	3.74	6.14	7.47	1.33	8.90	2.76	6.78	8.49	0.017227	6.80	61.17	28.01	1.47
Cerusa	12	50-ennale	271.00	3.74	5.60	7.47	1.87	8.90	3.30	6.07	7.37	0.018057	5.89	45.99	28.01	1.47
Cerusa	11	500-ennale	544.00	3.66	6.28	7.21	0.93	8.10	1.82	7.09	9.13	0.018655	7.48	72.69	31.60	1.58
Cerusa	11	200-ennale	416.00	3.66	5.95	7.21	1.26	8.10	2.15	6.58	8.21	0.017677	6.67	62.41	31.59	1.51
Cerusa	11	50-ennale	271.00	3.66	5.55	7.21	1.66	8.10	2.55	5.93	7.06	0.015361	5.44	49.86	31.59	1.38
Cerusa	10	500-ennale	544.00	3.33	6.73	6.98	0.25	6.70	-0.03	6.73	8.33	0.007623	5.60	97.10	30.67	1.01
Cerusa	10	200-ennale	416.00	3.33	6.17	6.98	0.81	6.70	0.53	6.22	7.55	0.008189	5.21	79.90	30.67	1.03
Cerusa	10	50-ennale	271.00	3.33	5.52	6.98	1.46	6.70	1.18	5.56	6.56	0.008617	4.52	59.94	30.67	1.03
Cerusa	9.1	500-ennale	544.00	1.83	7.42	6.98	-0.44	6.70	-0.71	5.23	7.97	0.001542	3.31	164.13	30.67	0.46
Cerusa	9.1	200-ennale	416.00	1.83	3.67	6.98	3.31	6.70	3.03	4.71	7.30	0.037842	8.44	49.32	30.67	2.12
Cerusa	9.1	50-ennale	271.00	1.83	3.19	6.98	3.79	6.70	3.51	4.05	6.32	0.050314	7.83	34.60	30.67	2.35
Cerusa	9	500-ennale	544.00	1.55	7.27	7.77	0.50	5.76	-1.51		7.91	0.001784	3.54	153.65	30.95	0.51
Cerusa	9	200-ennale	416.00	1.55	5.45	7.77	2.32	5.76	0.31		6.38	0.004329	4.27	97.34	30.34	0.76
Cerusa	9	50-ennale	271.00	1.55	4.54	7.77	3.23	5.76	1.22		5.31	0.005220	3.89	69.69	30.34	0.82
Cerusa	8	500-ennale	544.00	1.36	7.36	8.44	1.08	5.15	-2.21		7.82	0.001209	3.01	180.91	33.41	0.41
Cerusa	8	200-ennale	416.00	1.36	5.60	8.44	2.84	5.15	-0.45		6.19	0.002330	3.40	122.27	33.24	0.57
Cerusa	8	50-ennale	271.00	1.36	4.66	8.44	3.78	5.15	0.49		5.11	0.002465	2.97	91.17	33.16	0.57
Cerusa	7	500-ennale	544.00	1.05	7.31	8.14	0.83	5.09	-2.22	4.79	7.76	0.001124	2.97	183.09	33.42	0.41
Cerusa	7	200-ennale	416.00	1.05	5.53	8.14	2.61	5.09	-0.44	4.28	6.10	0.002135	3.35	124.05	32.94	0.55
Cerusa	7	50-ennale	271.00	1.05	4.61	8.14	3.53	5.09	0.48	3.64	5.04	0.002146	2.89	93.90	32.69	0.54
Cerusa	6	500-ennale	544.00	1.04	7.16	8.17	1.01	8.00	0.84	4.74	7.74	0.001474	3.36	162.01	28.05	0.45
Cerusa	6	200-ennale	416.00	1.04	5.36	8.17	2.81	8.00	2.64	4.19	6.07	0.002610	3.73	111.67	27.92	0.59
Cerusa	6	50-ennale	271.00	1.04	4.54	8.17	3.63	8.00	3.46	3.48	5.01	0.002243	3.06	88.60	27.86	0.55
Cerusa	5	500-ennale	544.00	1.03	7.22	7.15	-0.07	3.58	-3.64	4.72	7.71	0.001251	3.09	175.77	31.16	0.42
Cerusa	5	200-ennale	416.00	1.03	5.42	7.15	1.73	3.58	-1.84	4.20	6.03	0.002340	3.48	119.66	31.16	0.57
Cerusa	5	50-ennale	271.00	1.03	4.56	7.15	2.59	3.58	-0.98	3.54	4.99	0.002172	2.92	92.86	31.16	0.54
Cerusa	4.3	500-ennale	544.00	1.03	7.29	7.15	-0.14	6.03	-1.26	4.88	7.66	0.001029	2.71	200.94	39.40	0.38
Cerusa	4.3	200-ennale	416.00	1.03	5.46	7.15	1.69	6.03	0.57	4.44	5.99	0.002400	3.23	128.84	39.40	0.57
Cerusa	4.3	50-ennale	271.00	1.03	4.54	7.15	2.61	6.03	1.49	3.50	4.97	0.002918	2.93	92.44	39.40	0.61

HEC-RAS Plan: Cerusa -1 River: Cerusa Reach: Cerusa (Continued)

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	LOB Elev (m)	L. Freeboard (m)	ROB Elev (m)	R. Freeboard (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
Cerusa	4.2	500-ennale	544.00	1.03	7.29	7.15	-0.14	6.03	-1.26	4.88	7.66	0.001029	2.71	200.89	39.40	0.38
Cerusa	4.2	200-ennale	416.00	1.03	5.46	7.15	1.69	6.03	0.57	4.44	5.99	0.002409	3.23	128.69	39.40	0.57
Cerusa	4.2	50-ennale	271.00	1.03	4.53	7.15	2.62	6.03	1.50	3.50	4.97	0.002944	2.94	92.17	39.40	0.61
Cerusa	4.11		Bridge													
Cerusa	4.1	500-ennale	544.00	1.03	4.88	7.15	2.27	6.03	1.15	4.88	6.22	0.007617	5.14	105.94	39.40	1.00
Cerusa	4.1	200-ennale	416.00	1.03	3.67	7.15	3.48	6.03	2.36	4.44	5.86	0.014583	6.55	63.54	27.20	1.37
Cerusa	4.1	50-ennale	271.00	1.03	2.96	7.15	4.19	6.03	3.07	3.50	4.87	0.019195	6.13	44.24	26.58	1.52
Cerusa	4	500-ennale	544.00	0.86	3.26	7.05	3.79	6.03	2.77	4.10	6.02	0.024141	7.36	73.95	41.78	1.76
Cerusa	4	200-ennale	416.00	0.86	2.74	7.05	4.31	6.03	3.29	3.73	5.68	0.028426	7.60	54.74	33.48	1.90
Cerusa	4	50-ennale	271.00	0.86	2.27	7.05	4.78	6.03	3.76	3.05	4.69	0.034389	6.89	39.35	32.74	2.00
Cerusa	3	500-ennale	544.00	1.10	4.27	7.00	2.73	3.38	-0.89	4.27	5.49	0.007288	4.90	110.94	45.49	1.00
Cerusa	3	200-ennale	416.00	1.10	3.65	7.00	3.35	3.38	-0.27	3.87	4.93	0.010951	5.03	82.73	45.49	1.19
Cerusa	3	50-ennale	271.00	1.10	3.36	7.00	3.64	3.38	0.02	3.36	4.13	0.008087	3.89	69.73	45.49	1.00
Cerusa	2	500-ennale	544.00	1.07	4.28	7.50	3.22	6.67	2.39	3.66	4.87	0.003143	3.39	160.54	61.04	0.67
Cerusa	2	200-ennale	416.00	1.07	2.99	7.50	4.51	6.67	3.68	3.33	4.31	0.016520	5.09	81.75	61.04	1.40
Cerusa	2	50-ennale	271.00	1.07	3.08	7.50	4.42	6.67	3.59	2.91	3.58	0.005659	3.10	87.28	61.04	0.83
Cerusa	1.3	500-ennale	544.00	1.00	4.38	7.11	2.73	7.12	2.74		4.81	0.002105	2.93	185.85	65.05	0.55
Cerusa	1.3	200-ennale	416.00	1.00	3.74	7.11	3.37	7.12	3.38	3.13	4.16	0.002781	2.88	144.49	65.05	0.62
Cerusa	1.3	50-ennale	271.00	1.00	3.19	7.11	3.92	7.12	3.93		3.50	0.003003	2.50	108.48	65.05	0.62
Cerusa	1.2	500-ennale	544.00	1.00	4.36	7.11	2.75	7.12	2.76	3.44	4.80	0.002133	2.94	185.09	65.05	0.56
Cerusa	1.2	200-ennale	416.00	1.00	3.72	7.11	3.39	7.12	3.40	3.12	4.15	0.002854	2.90	143.34	65.05	0.62
Cerusa	1.2	50-ennale	271.00	1.00	3.17	7.11	3.94	7.12	3.95	2.72	3.49	0.003119	2.53	107.22	65.05	0.63
Cerusa	1.11		Bridge													
Cerusa	1.1	500-ennale	544.00	1.00	2.97	7.11	4.14	7.12	4.15	3.44	4.67	0.019265	5.78	94.10	65.05	1.53
Cerusa	1.1	200-ennale	416.00	1.00	2.76	7.11	4.35	7.12	4.36	3.12	4.11	0.018463	5.14	80.95	65.05	1.47
Cerusa	1.1	50-ennale	271.00	1.00	2.48	7.11	4.63	7.12	4.64	2.72	3.44	0.018467	4.34	62.38	65.05	1.42
Cerusa	0	500-ennale	544.00	1.00	3.45	7.11	3.66	7.12	3.67	3.45	4.39	0.007671	4.30	126.49	68.11	1.01
Cerusa	0	200-ennale	416.00	1.00	3.15	7.11	3.96	7.12	3.97	3.15	3.93	0.007945	3.92	106.17	67.94	1.00
Cerusa	0	50-ennale	271.00	1.00	2.76	7.11	4.35	7.12	4.36	2.76	3.35	0.008629	3.40	79.70	67.72	1.00