



Autorità di Bacino Distrettuale
dell'Appennino Settentrionale

PIANO DI BACINO STRALCIO SUL RISCHIO IDROGEOLOGICO

(ai sensi dell'art.1, comma 1, del D.L. 180/1998 convertito in L. 267/1998)

Caratteristiche idrauliche e geologiche del territorio

Valutazione del rischio idraulico e geomorfologico

VERIFICHE IDRAULICHE – F. CENTA

Ambito di Bacino di rilievo regionale:

CENTA

Bacino:

CENTA

Comuni:

CISANO SUL NEVA

CASANOVA LERRONE

CASTELBIANCO

ALBENGA

ARNASCO

GARLENDÀ

ERLI

ONZO

ORTOVERO

NASINO

TESTICO

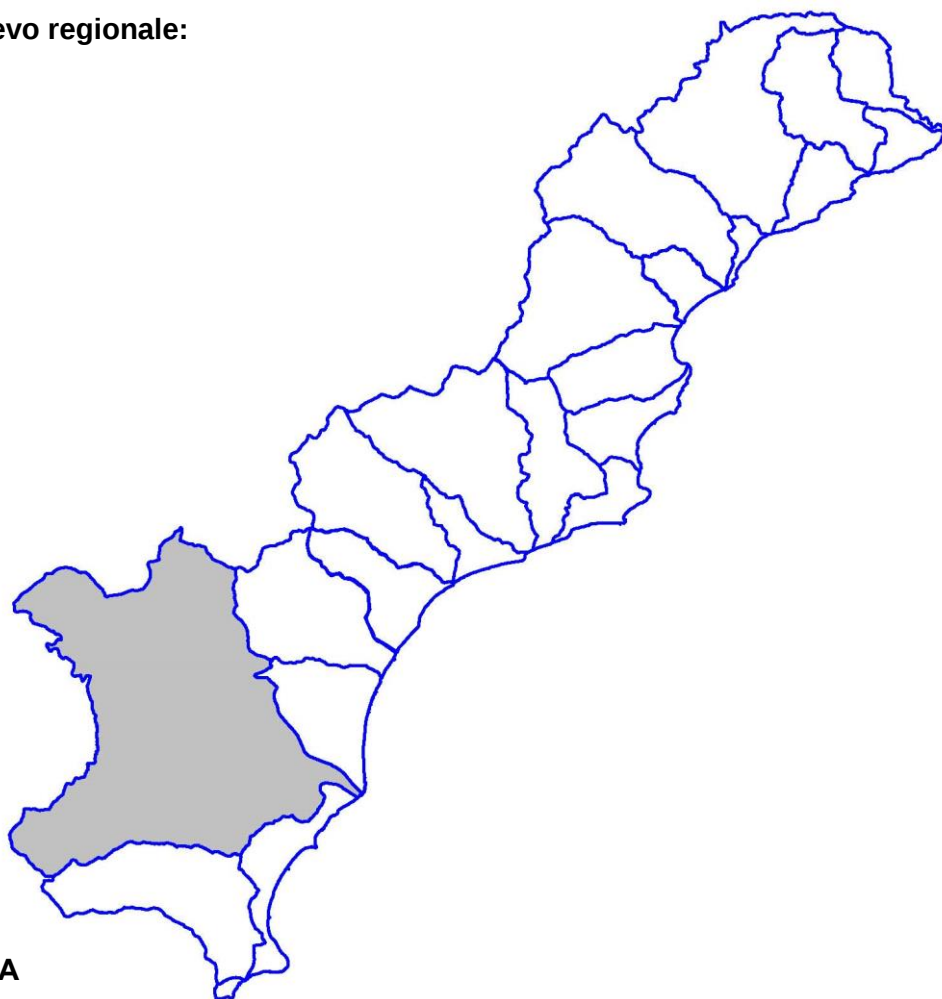
VENDONE

ZUCCARELLO

VILLANOVA D'ALBENGA

CASTELVECCHIO DI R. B.

BARDINETO



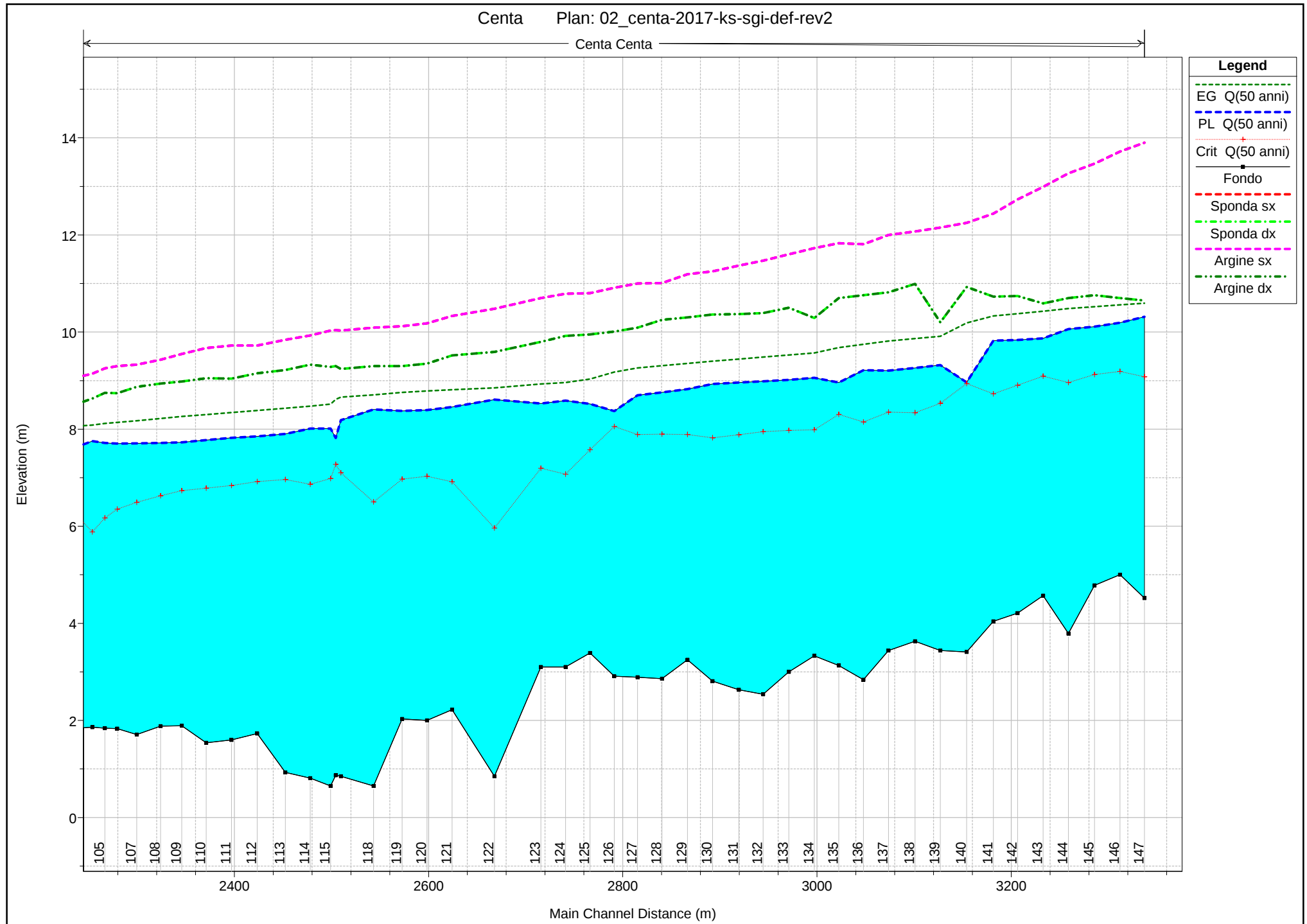
APPROVAZIONE	Delibera del Consiglio Provinciale di Savona n. 47 del 25/11/2003
ULTIMA MODIFICA DELL'ELABORATO	Decreto del Direttore Generale n. 3478 del 24/12/2018
ENTRATA IN VIGORE	Pubblicazione sul BURL n. 2 parte II del 9/1/2019

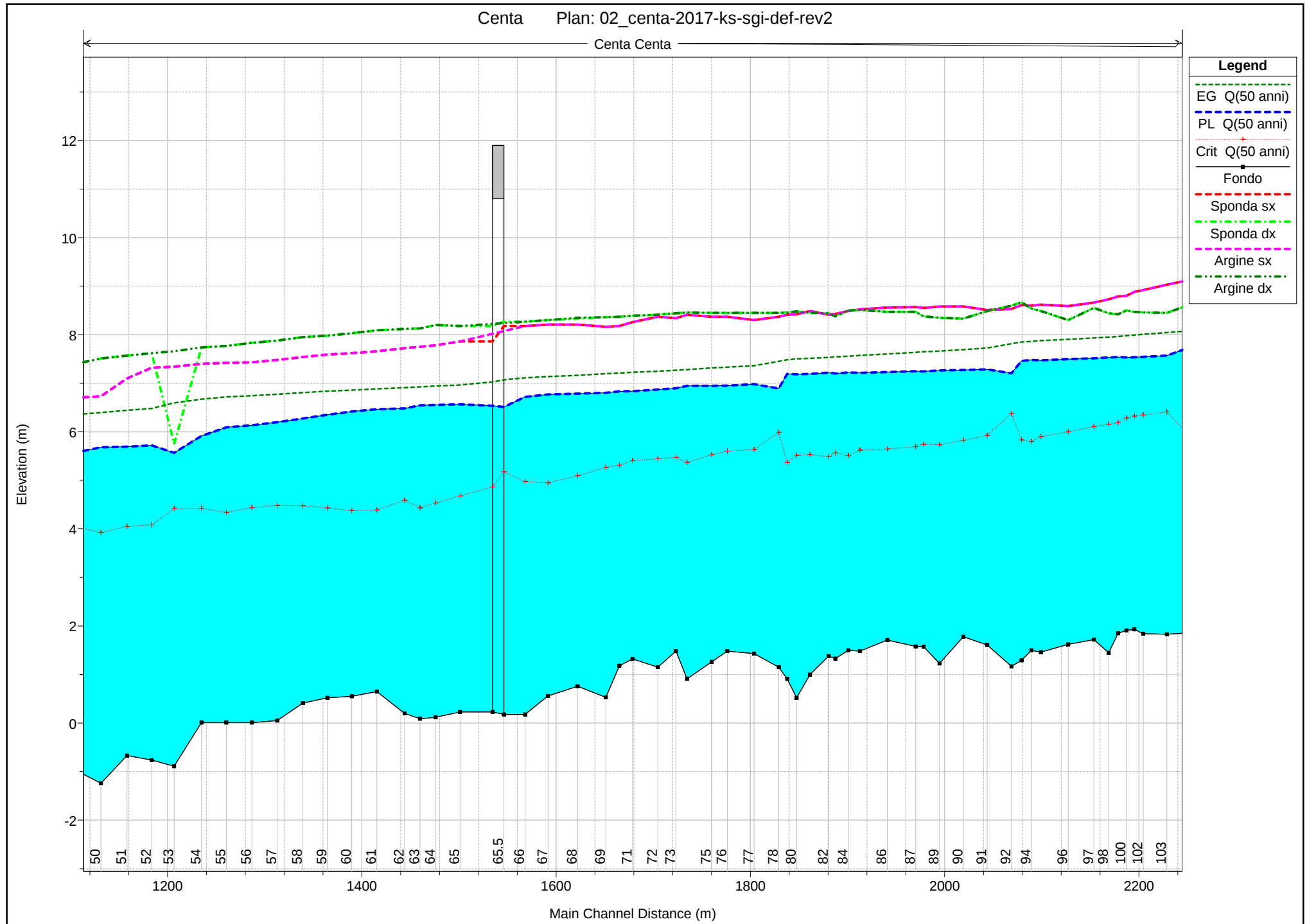
FIUME CENTA

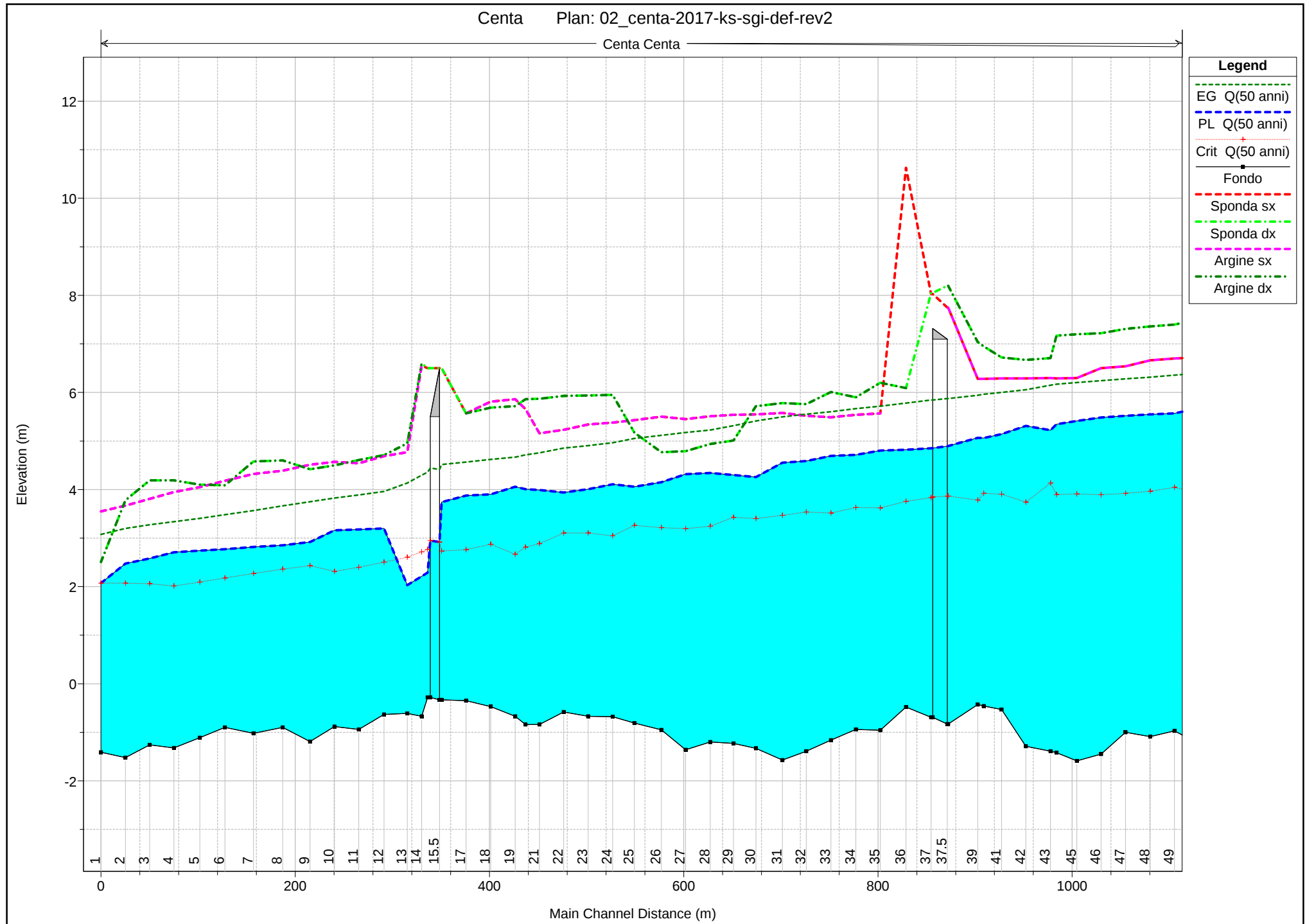
tratto tra confluenza Arroscia-Neva e la foce

sezioni 147 -1

- profili idraulici
- sezioni
- tabelle dei risultati

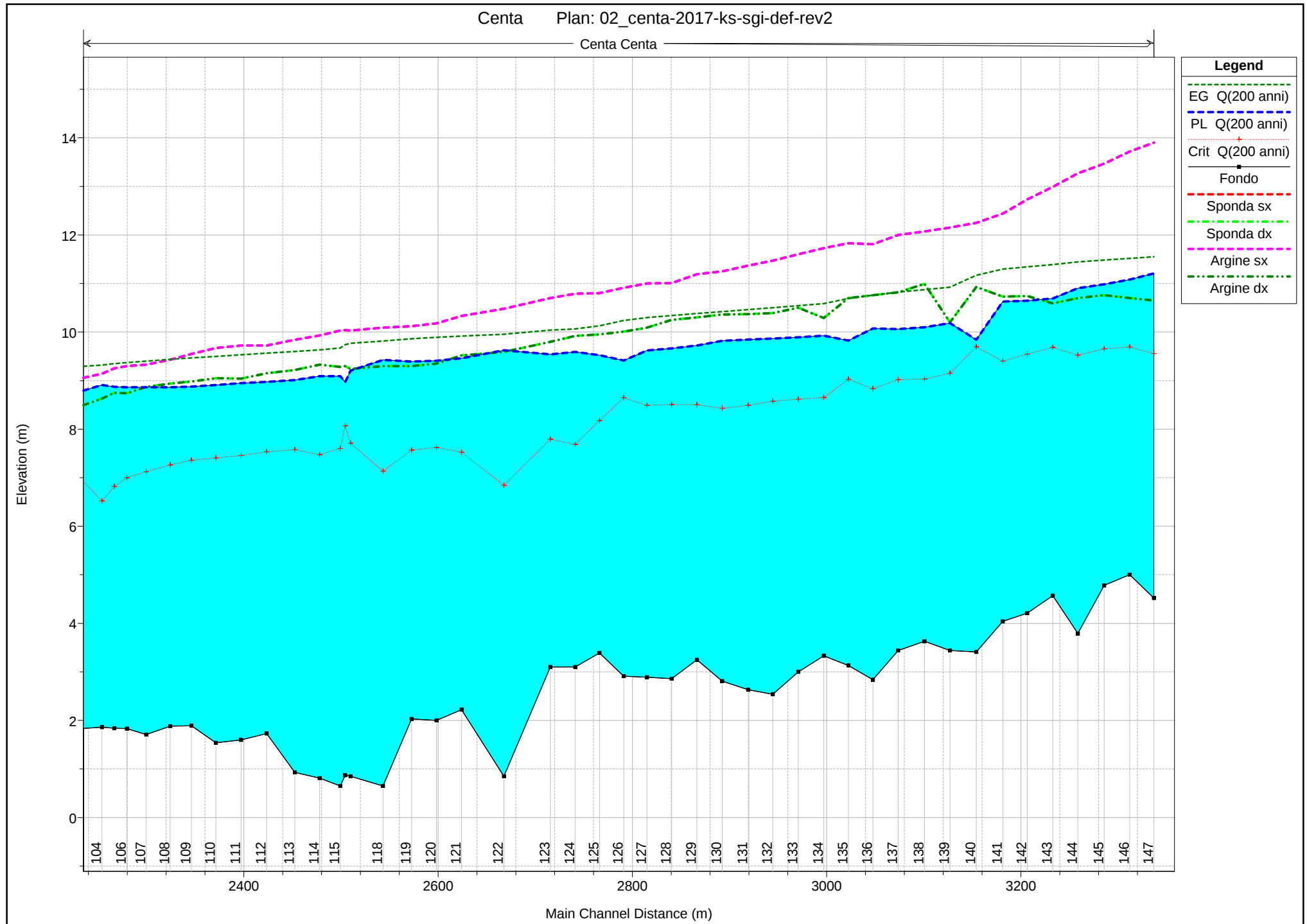


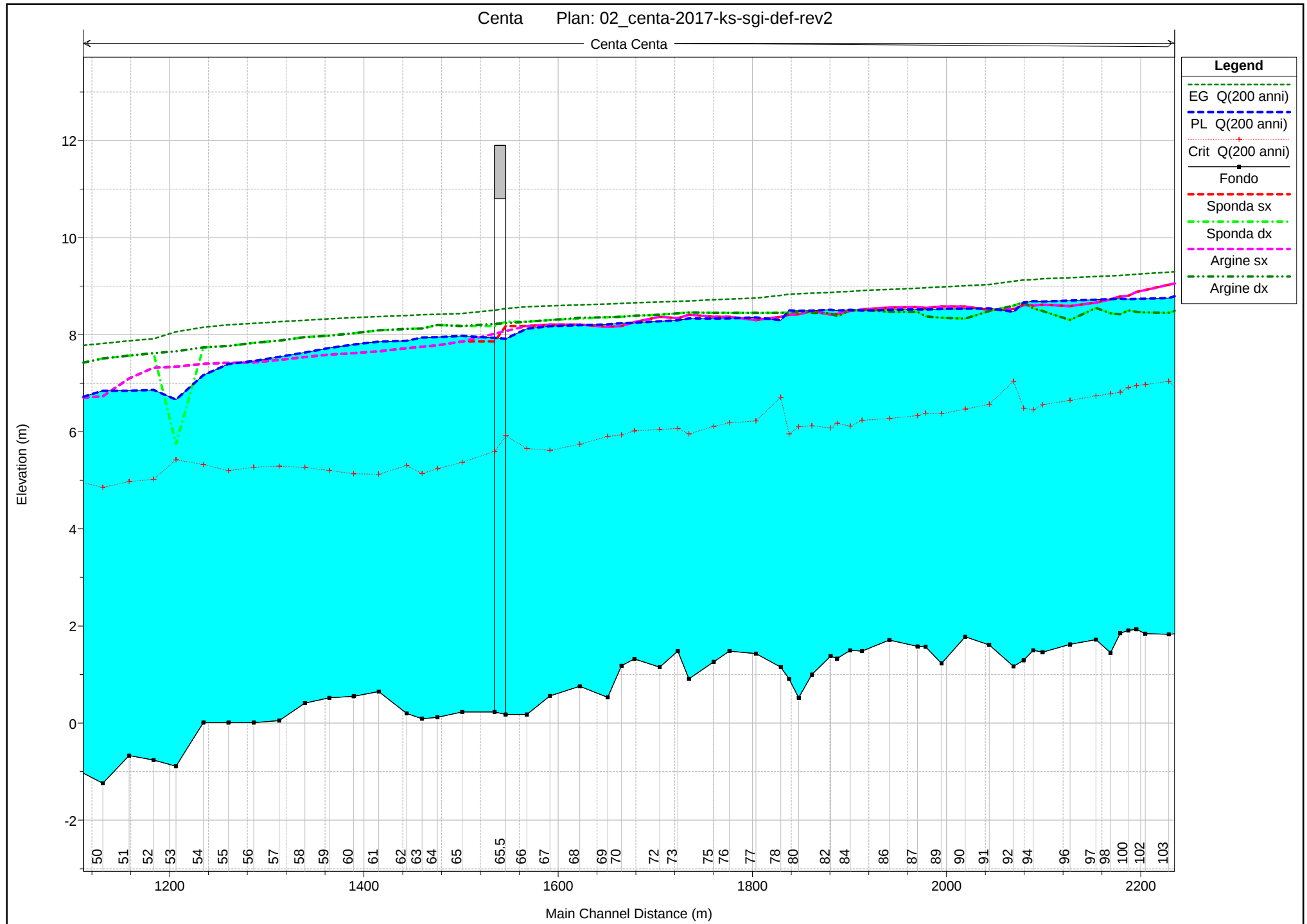


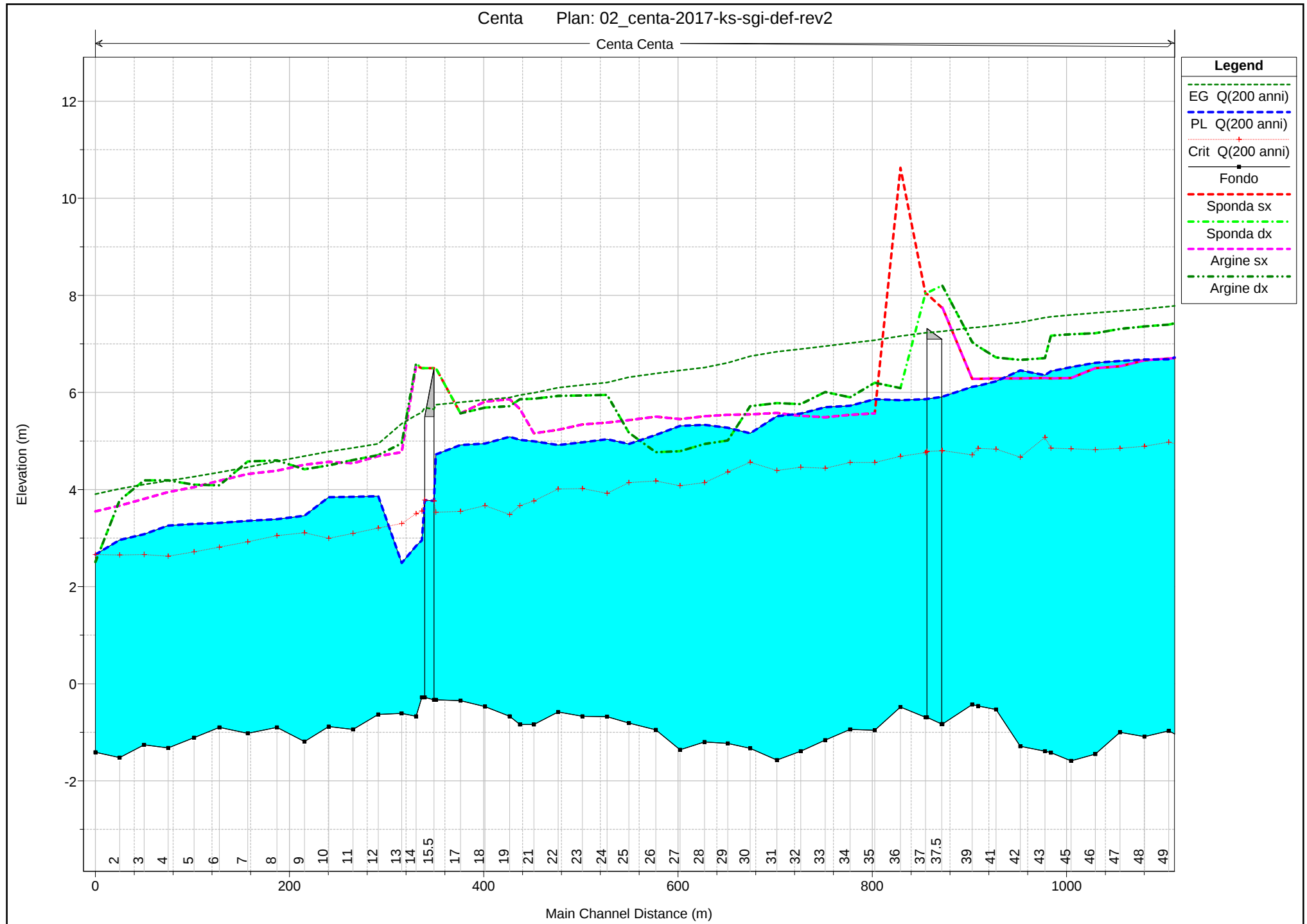


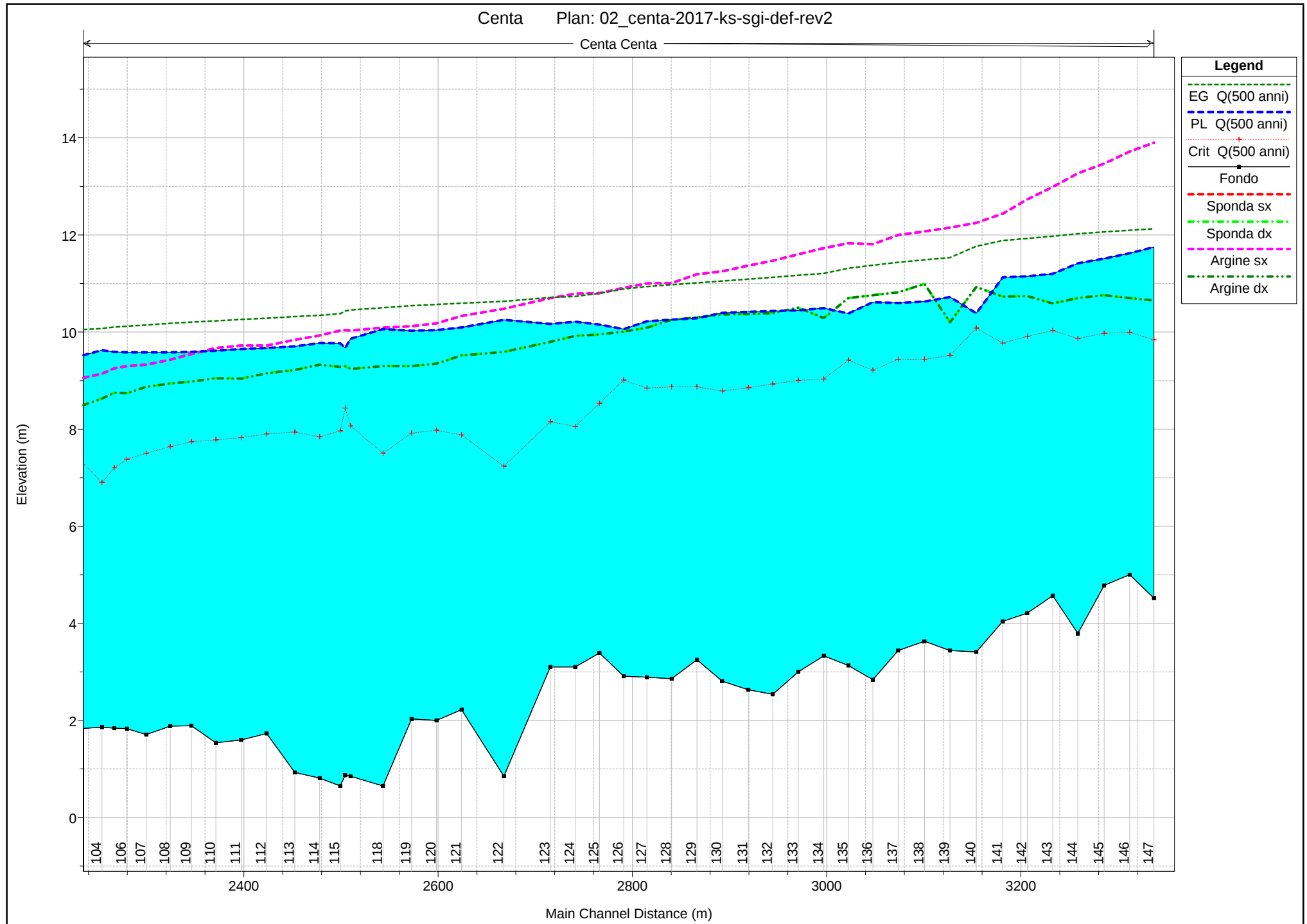
1 cm Horiz. = 50 m 1 cm Vert. = 1 m

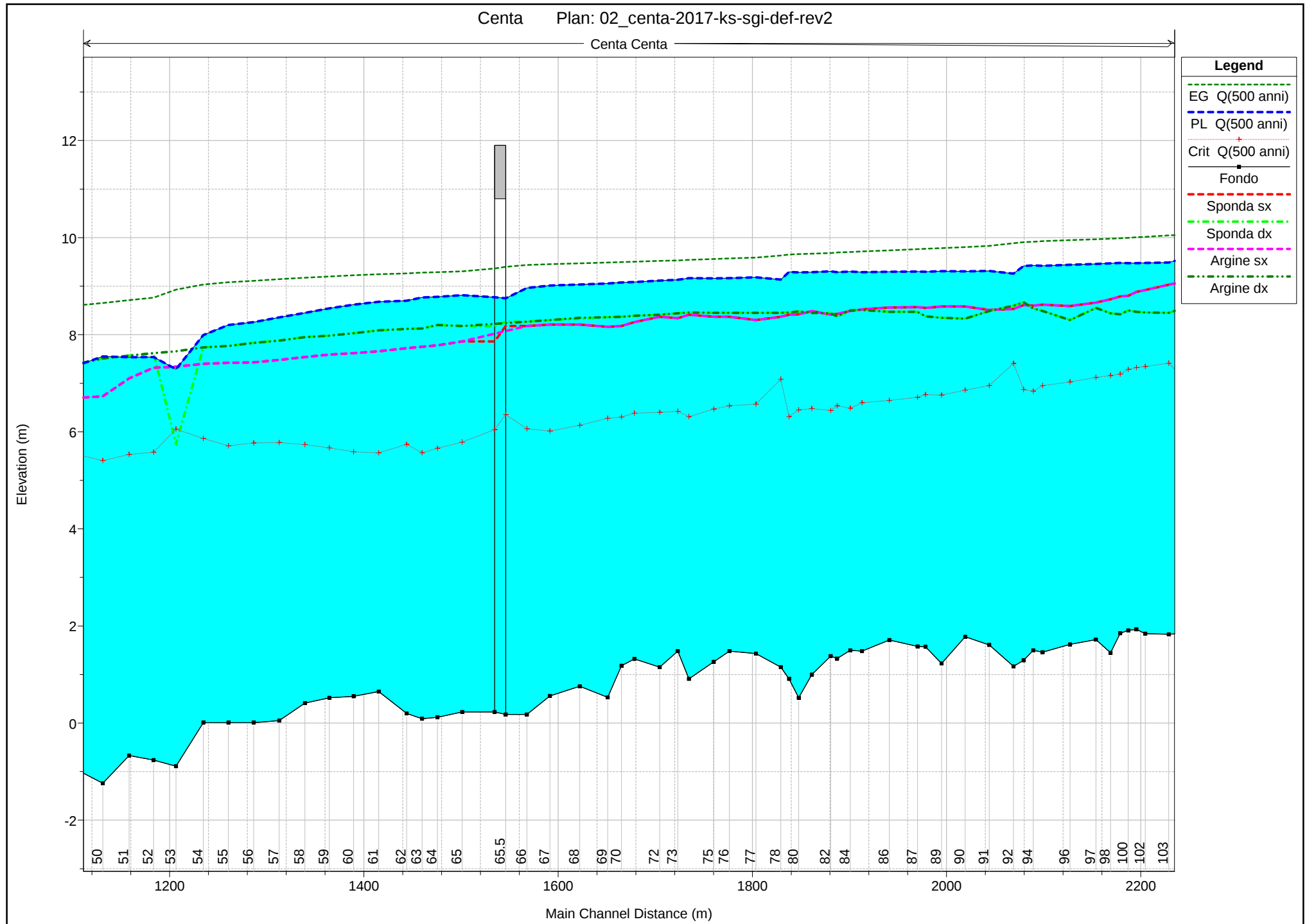
Modificato con DDG n. 3478 del 24/12/2018

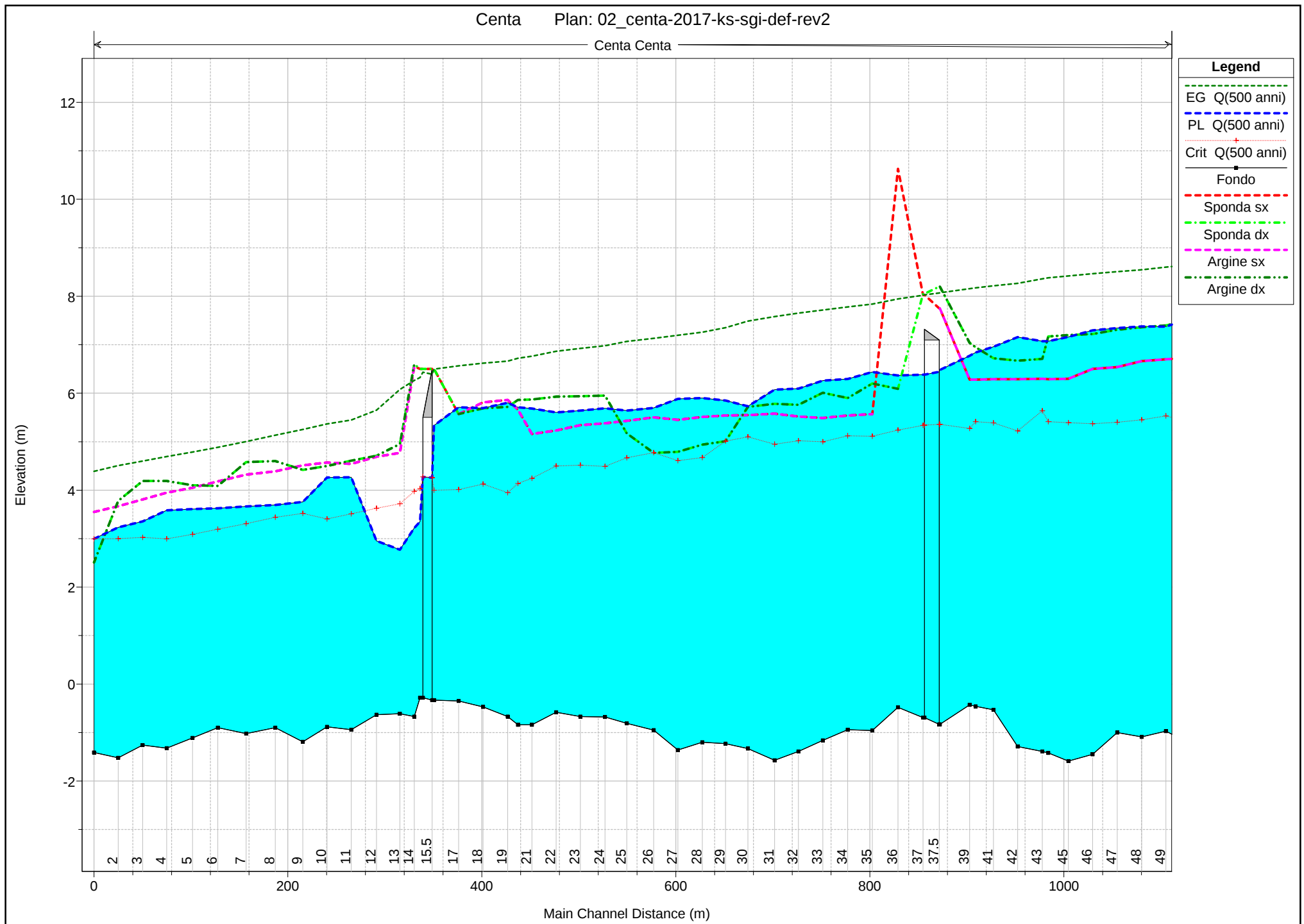


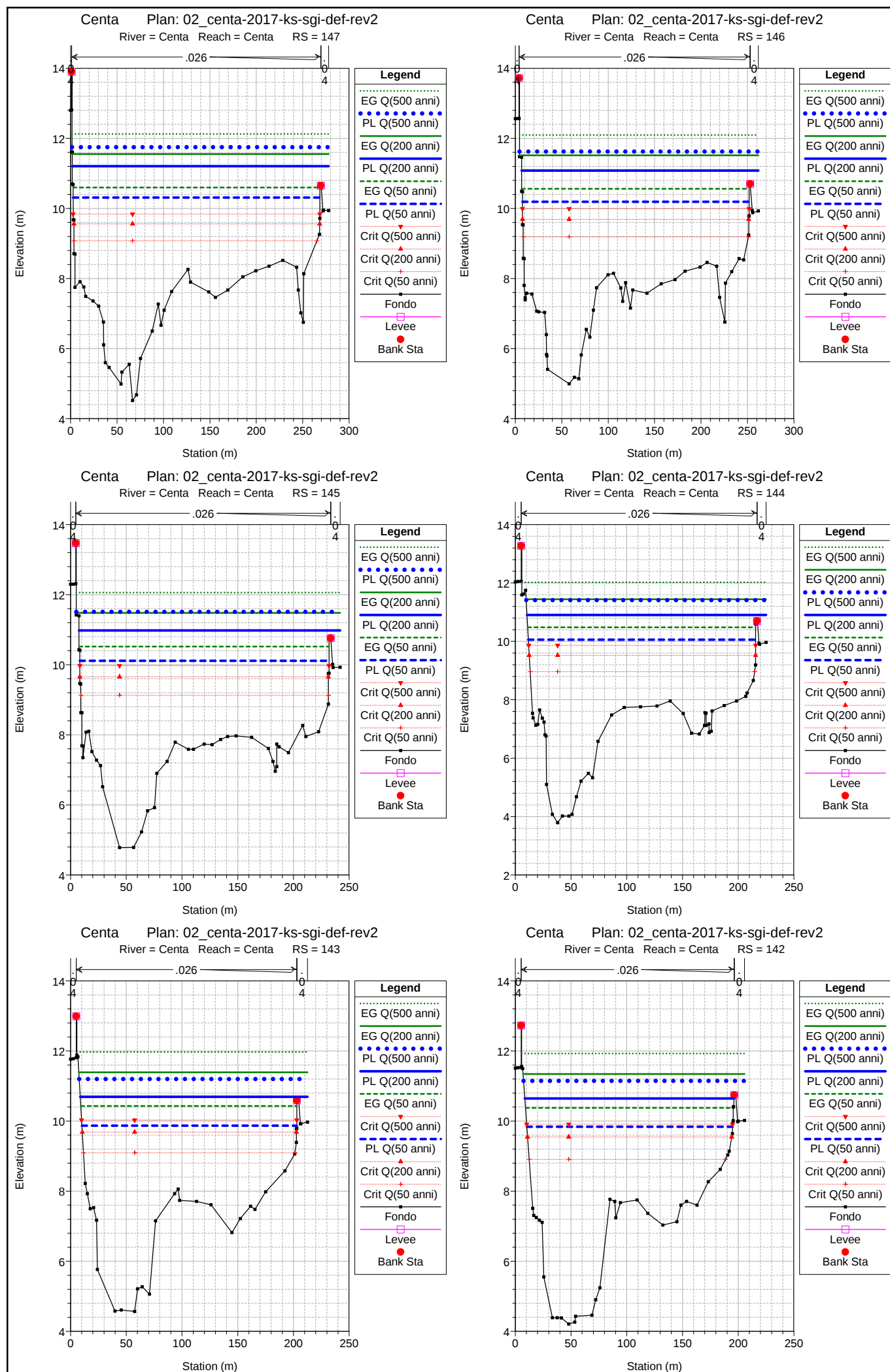


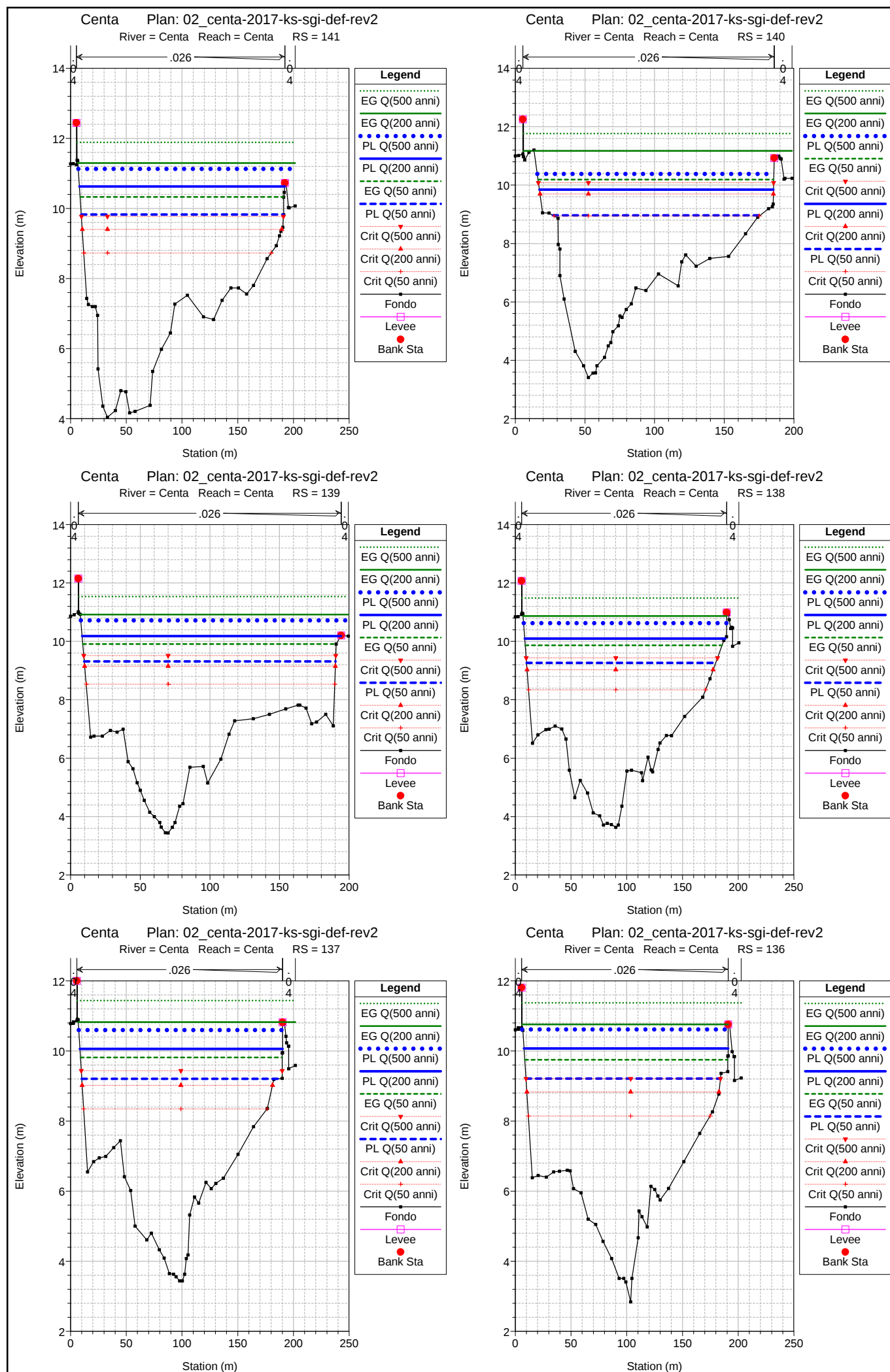


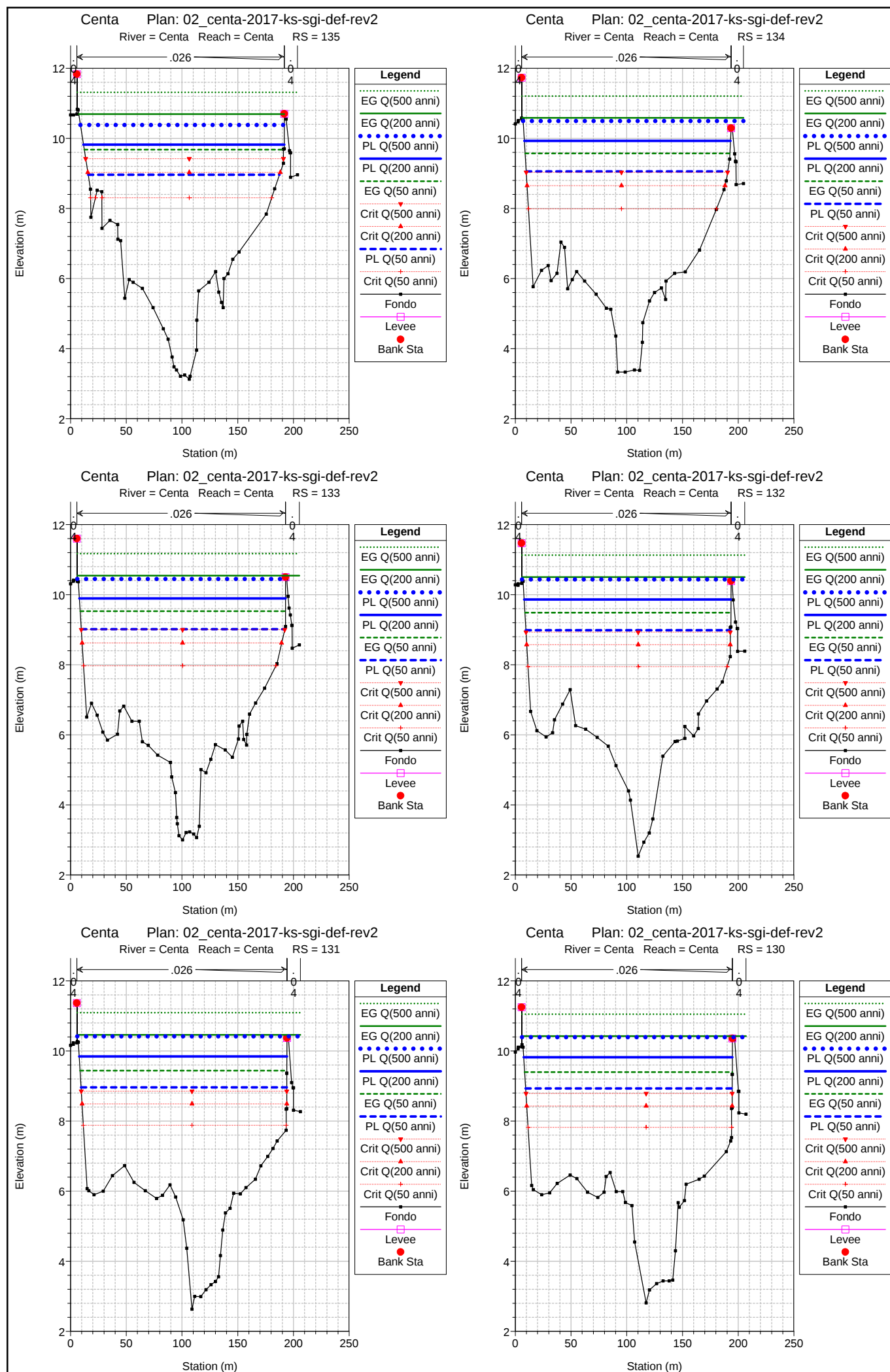


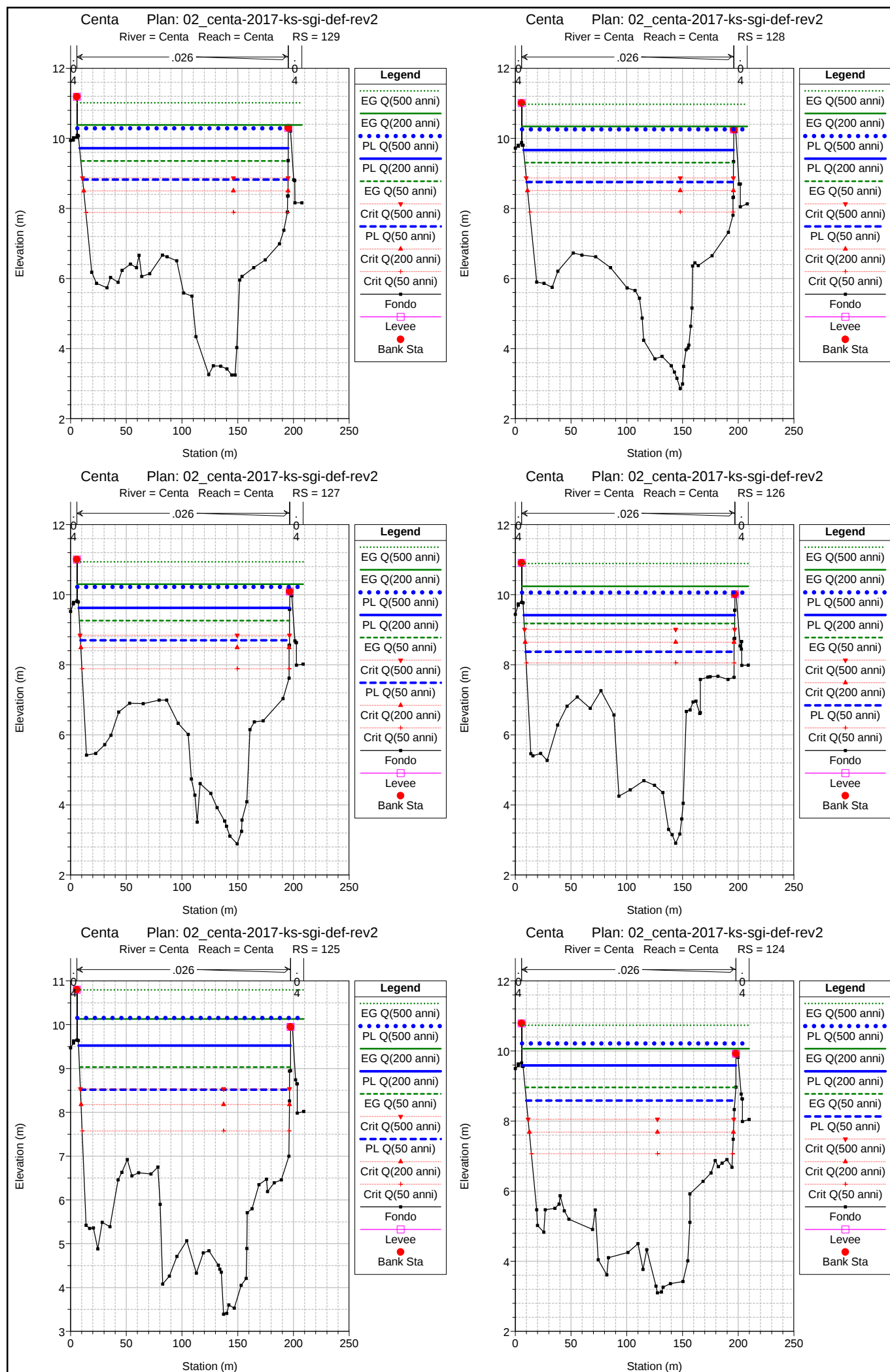


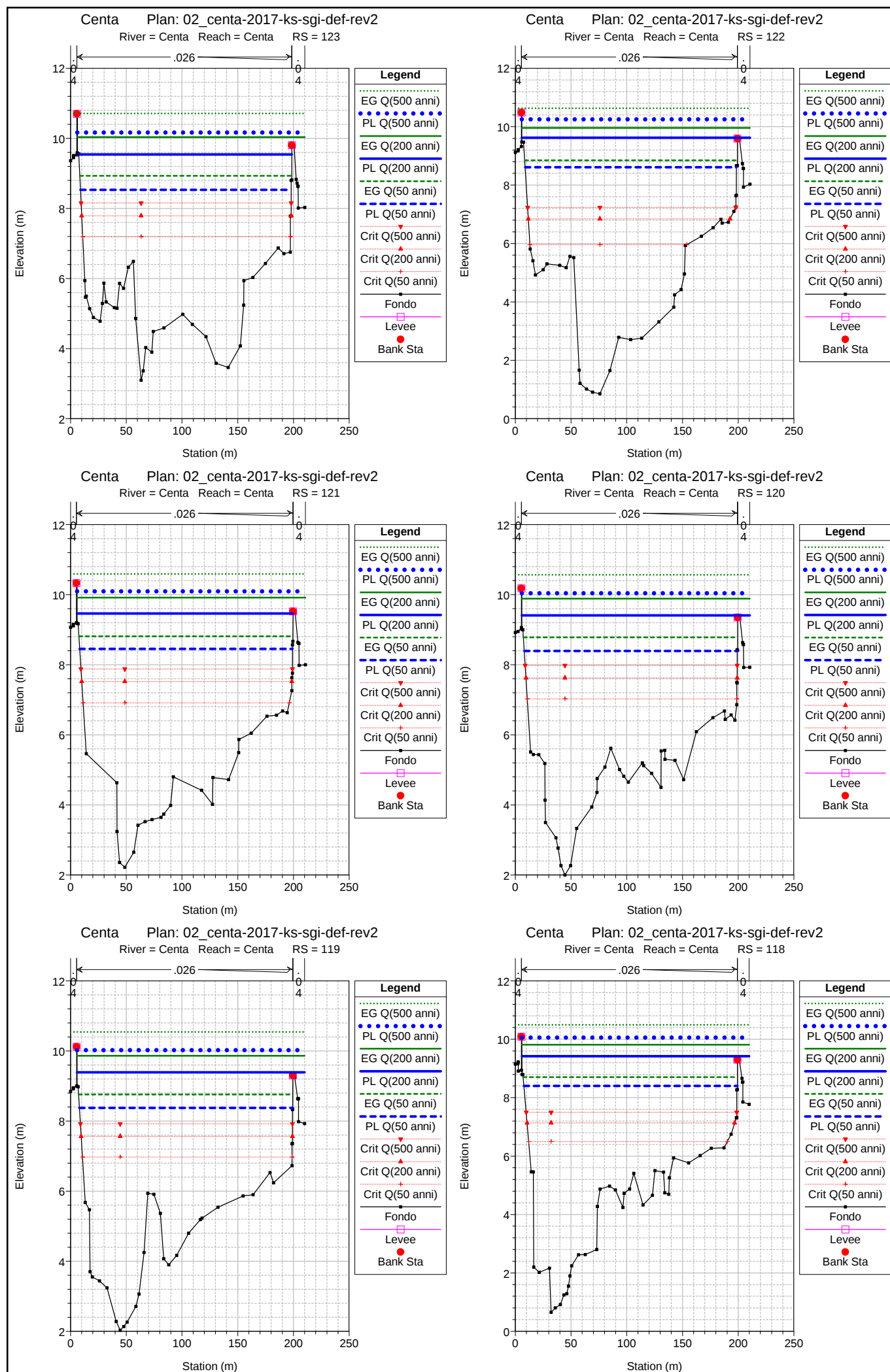


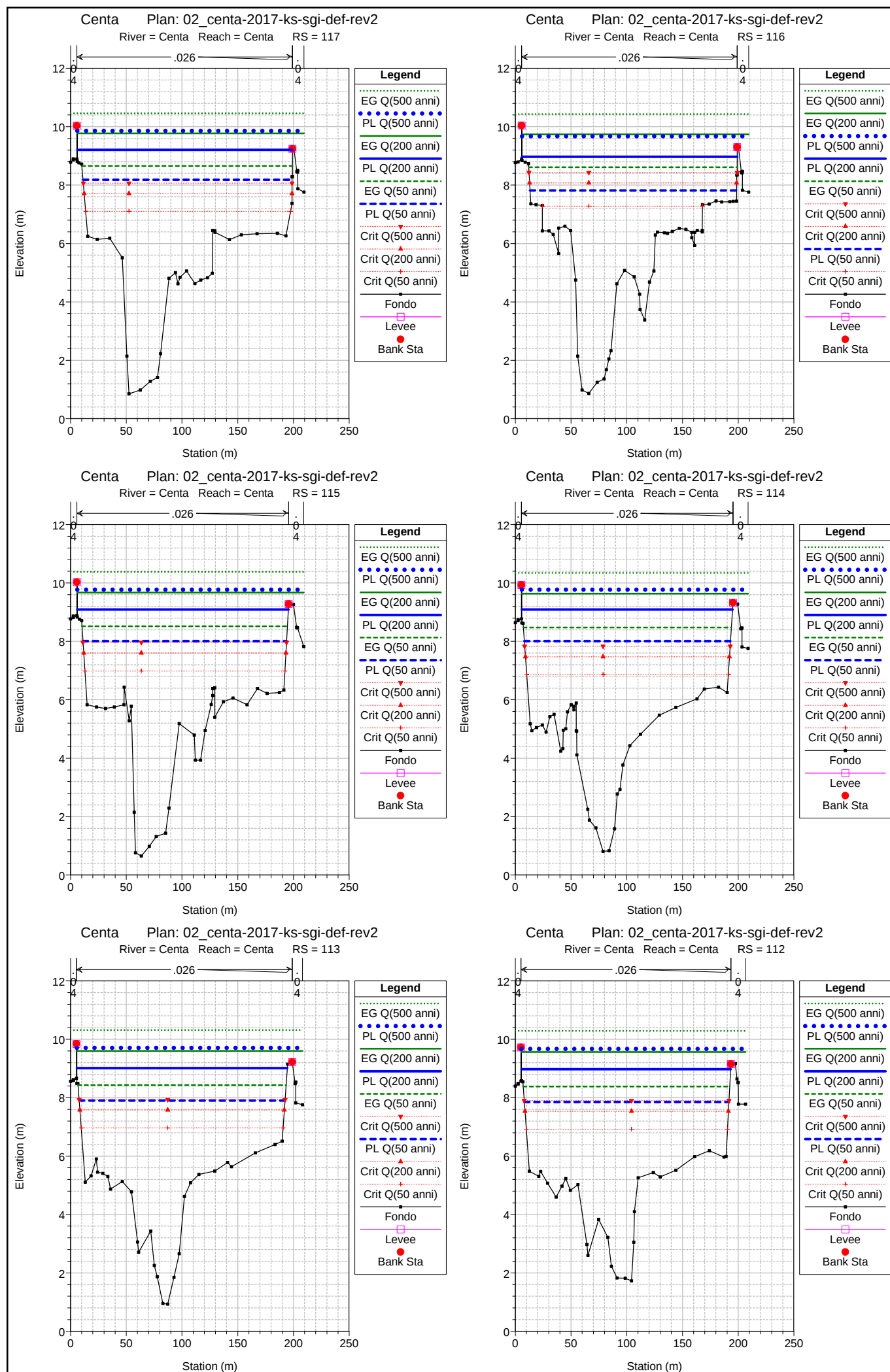


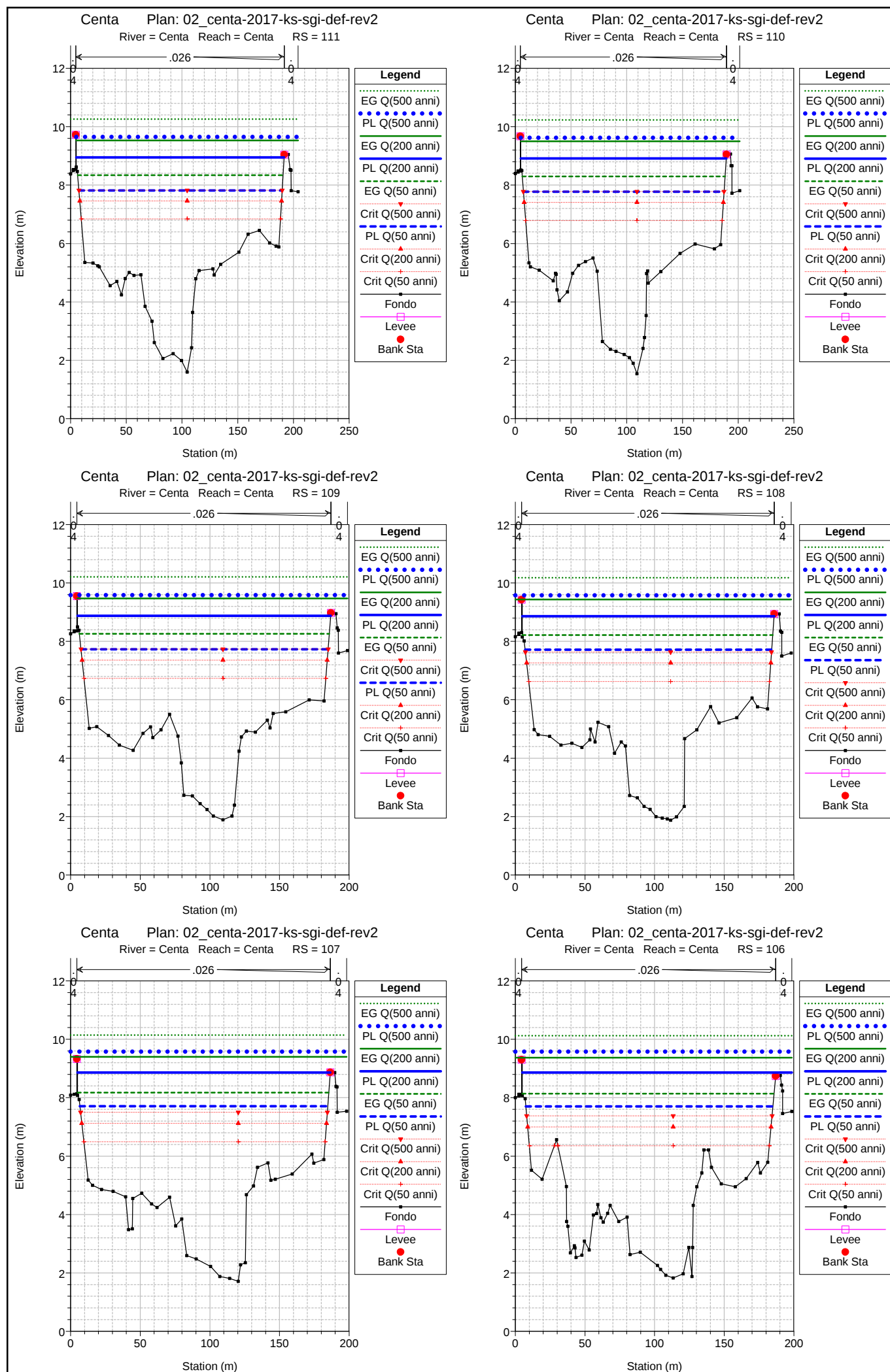


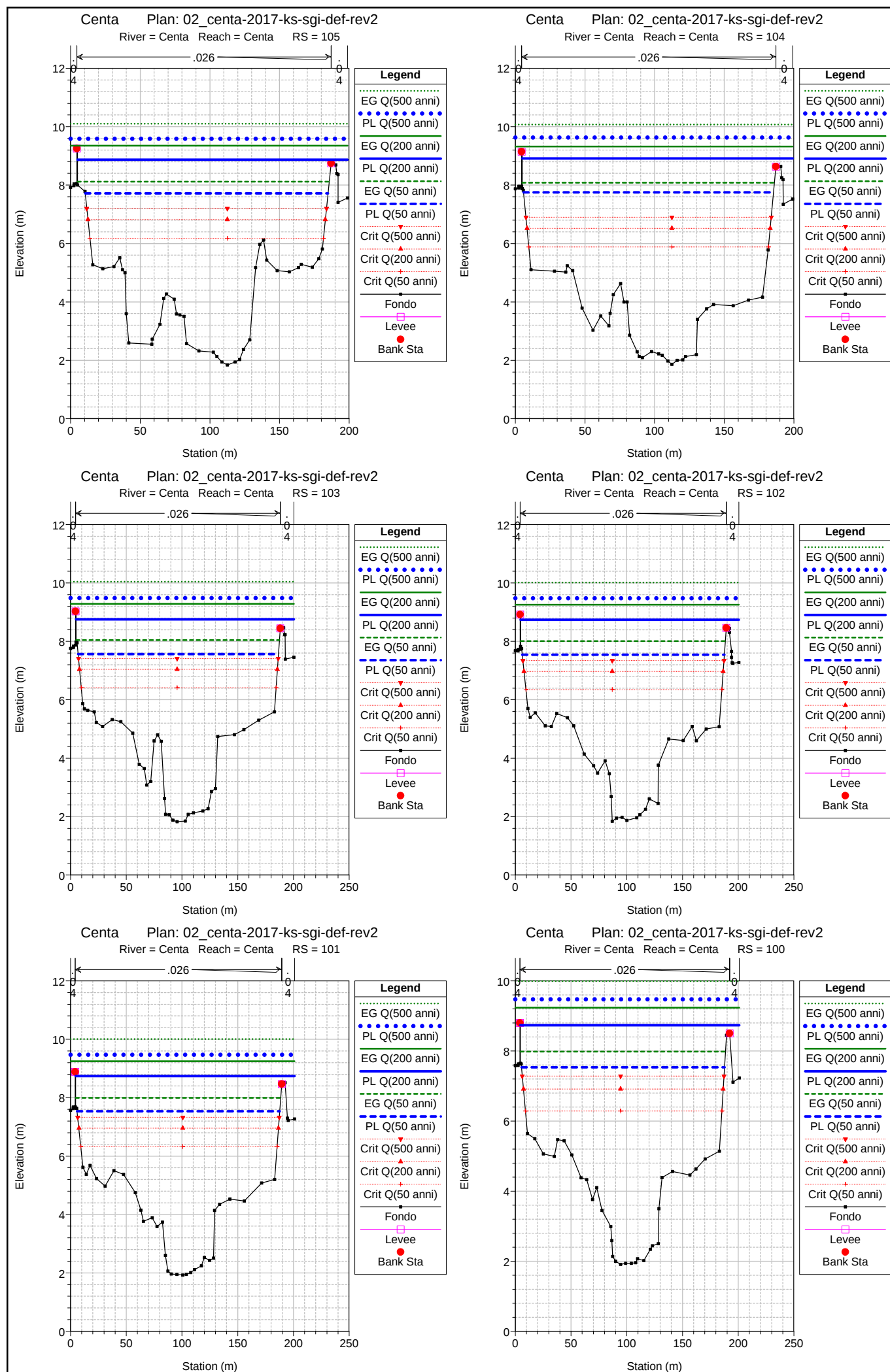


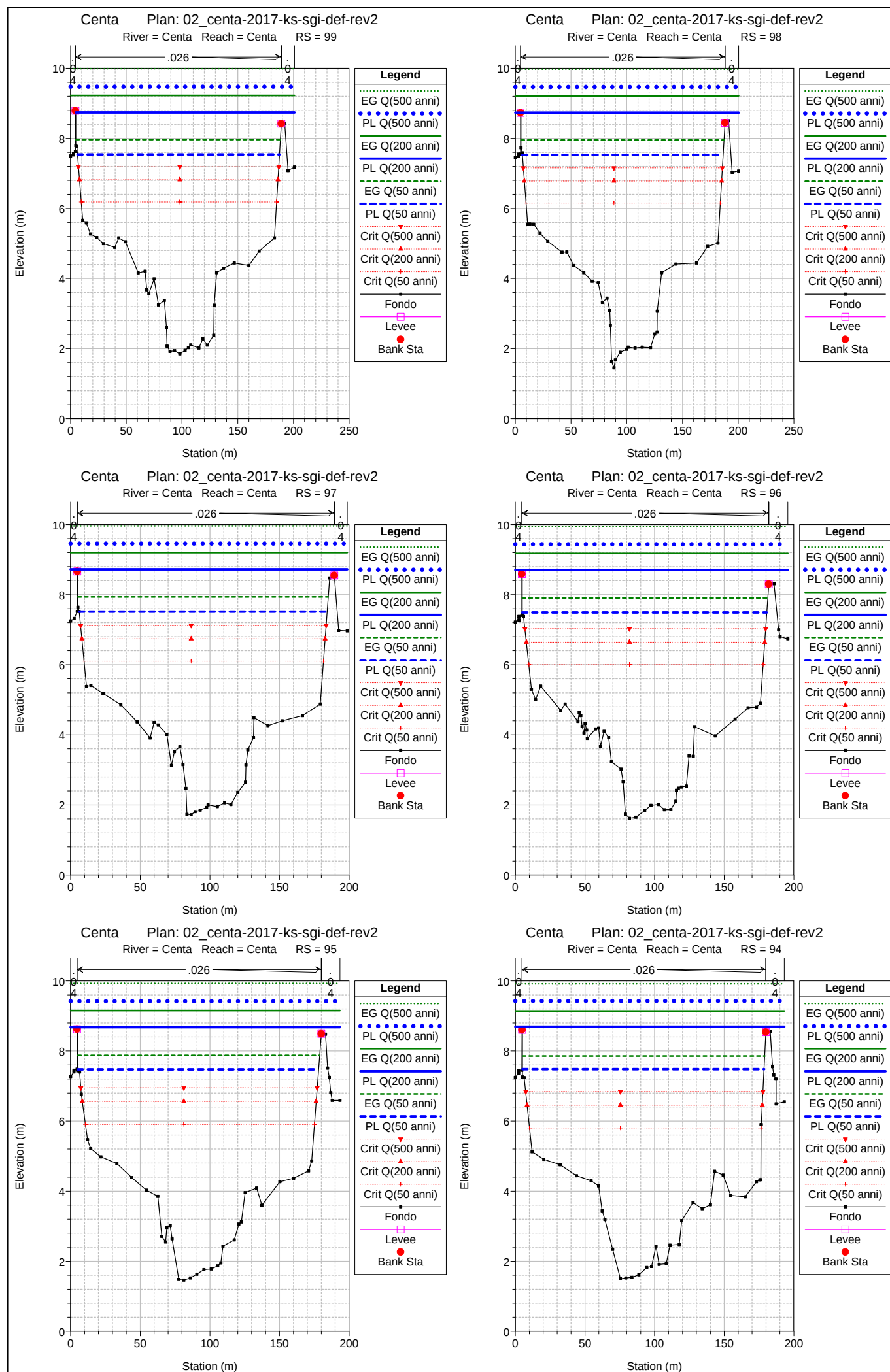


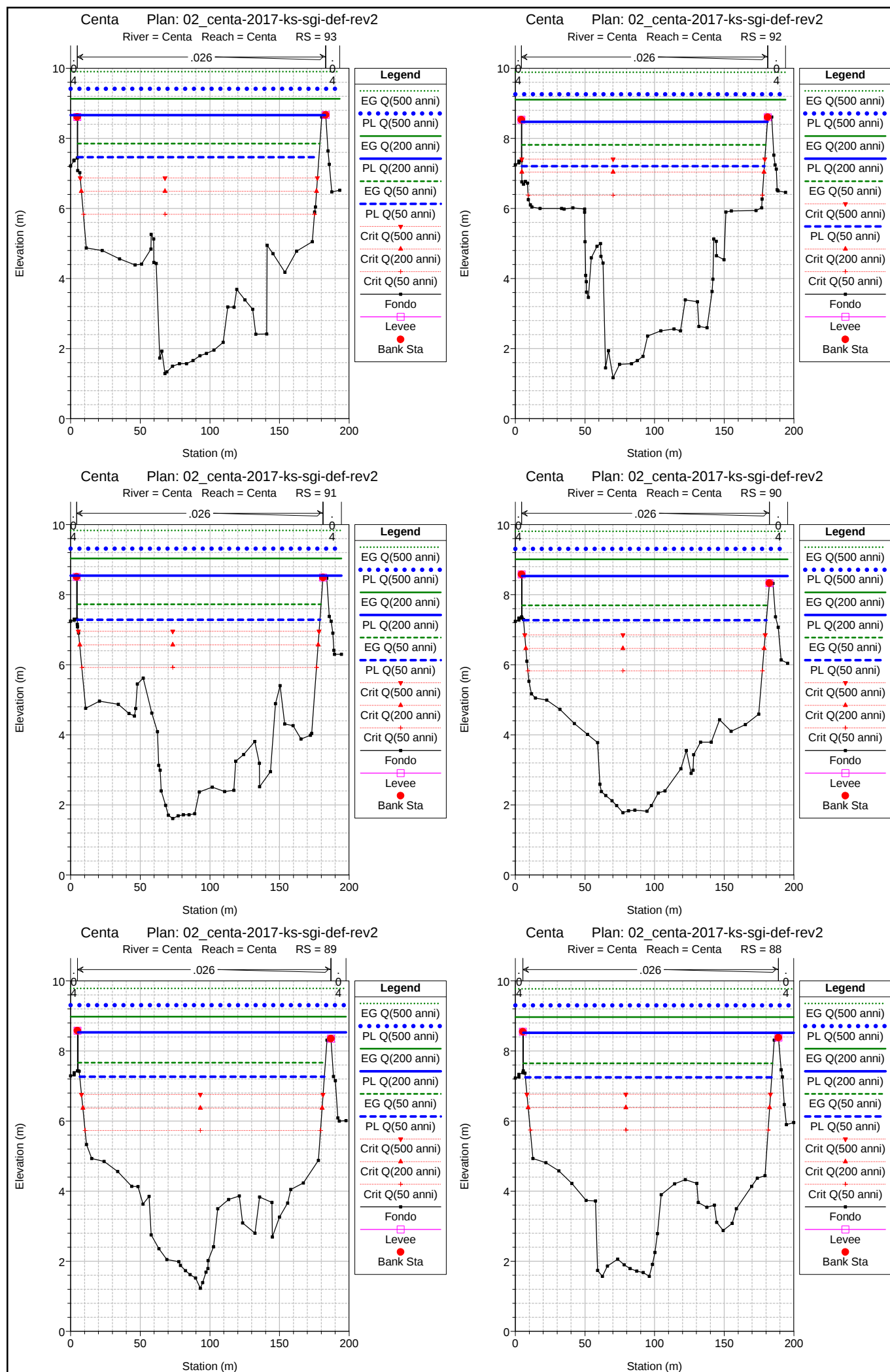


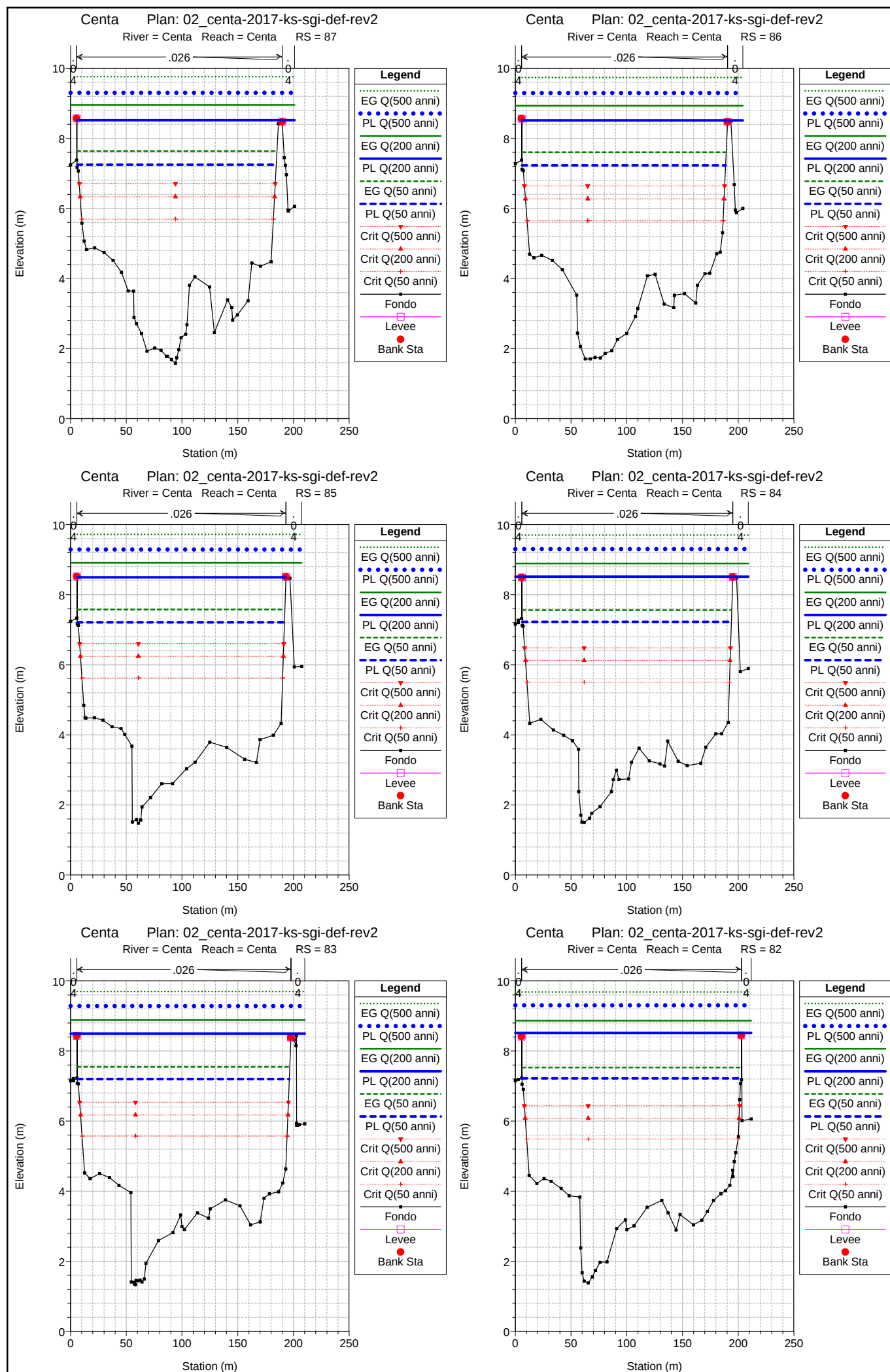


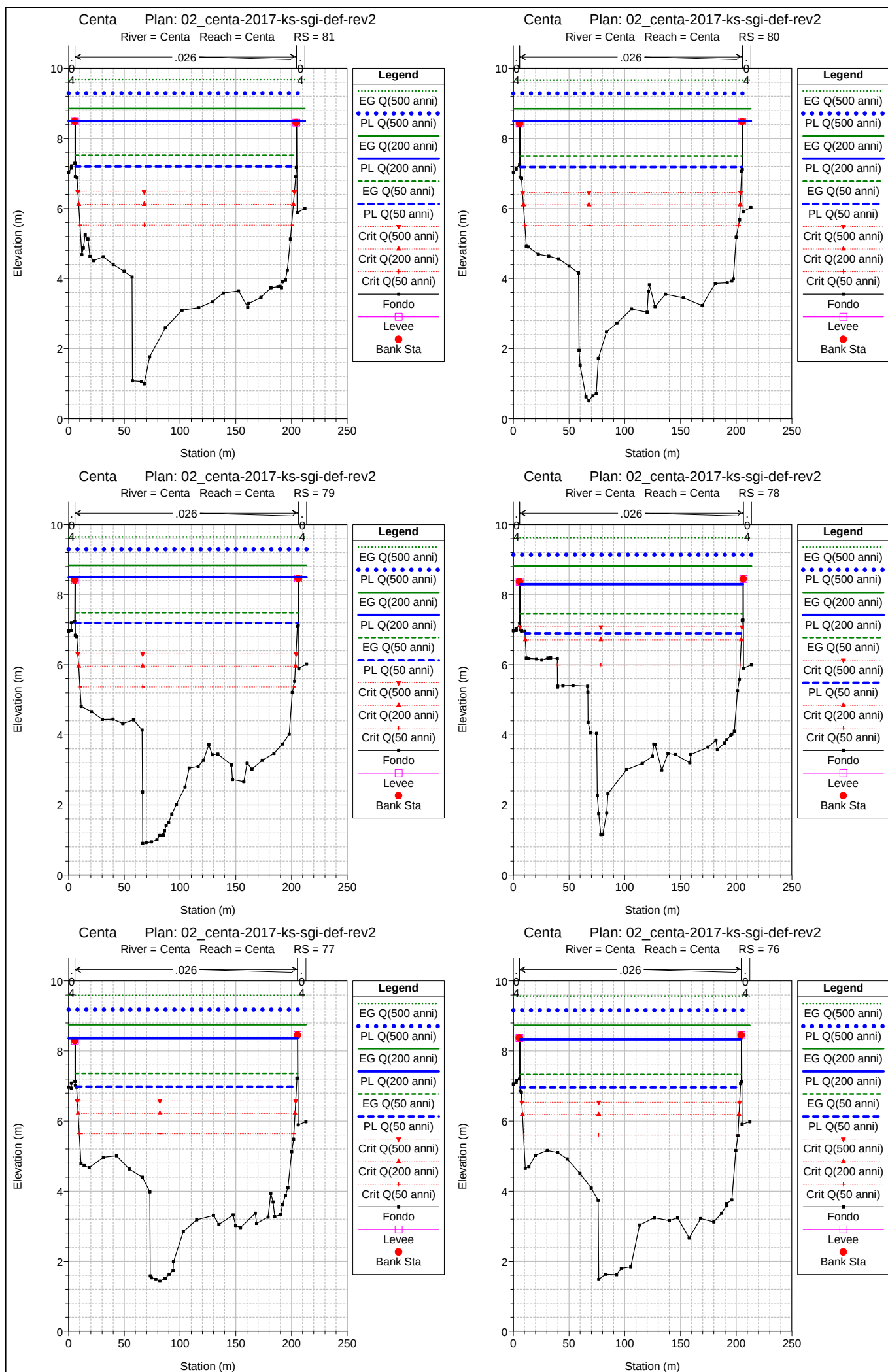


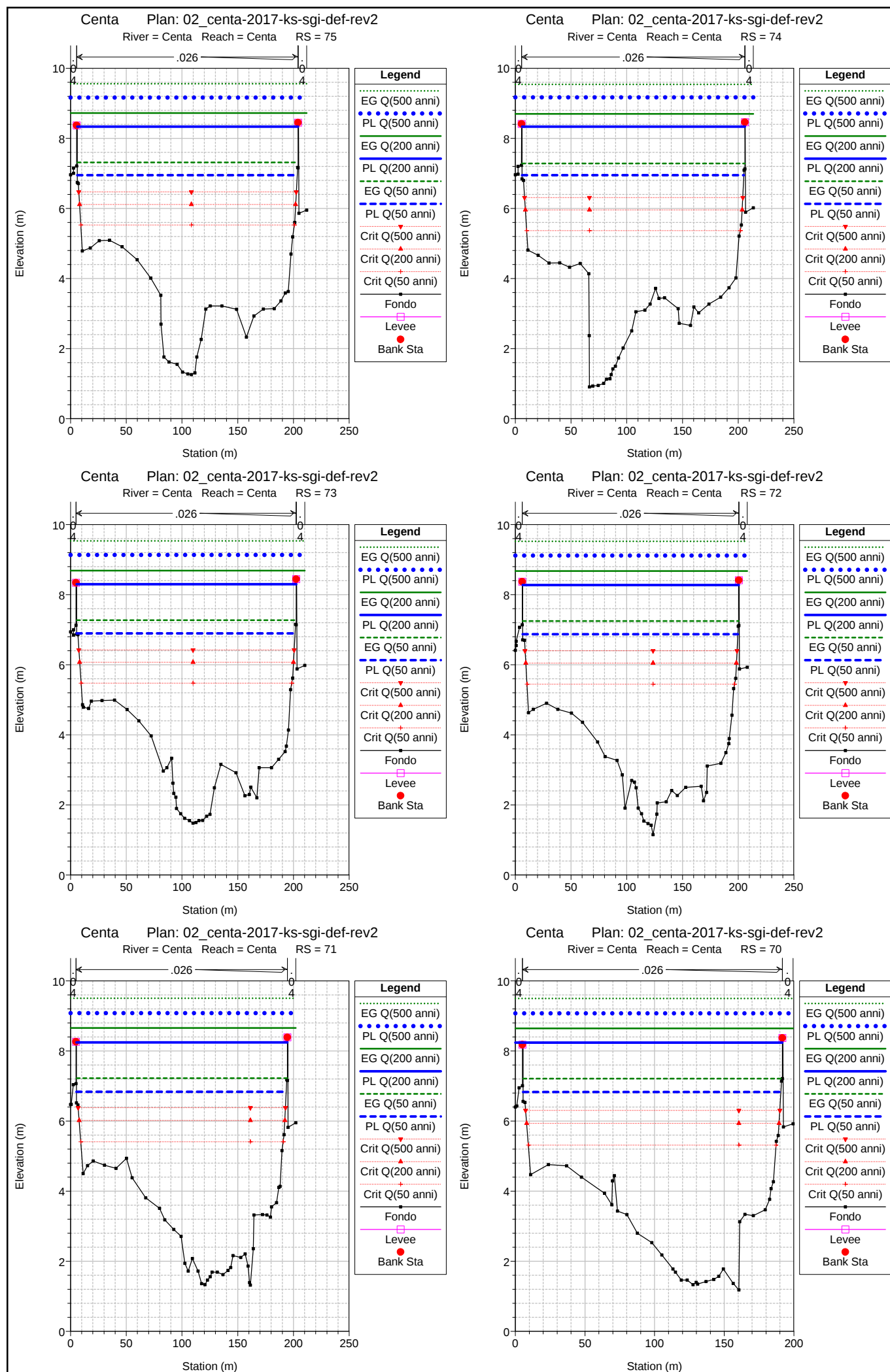


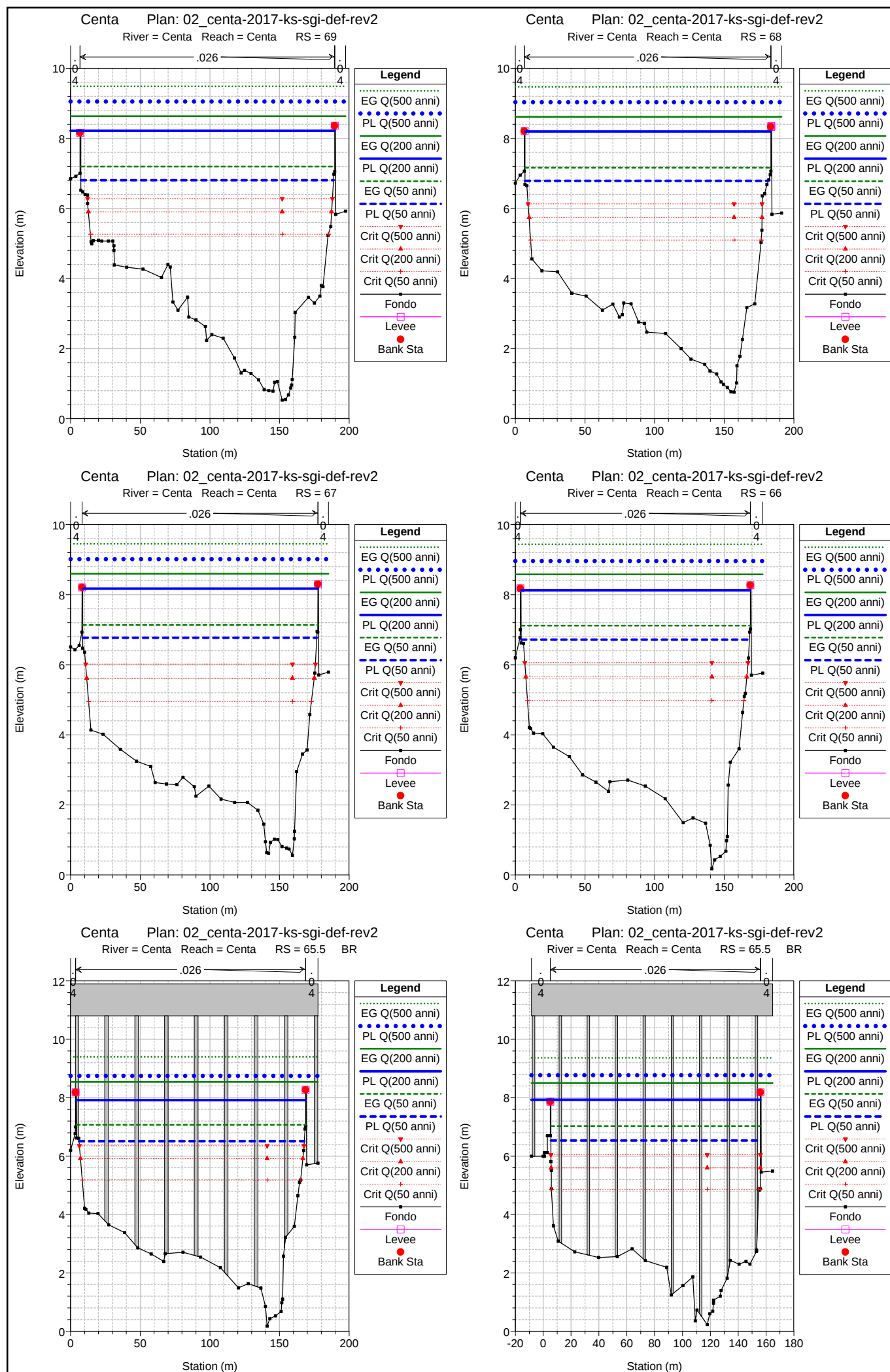


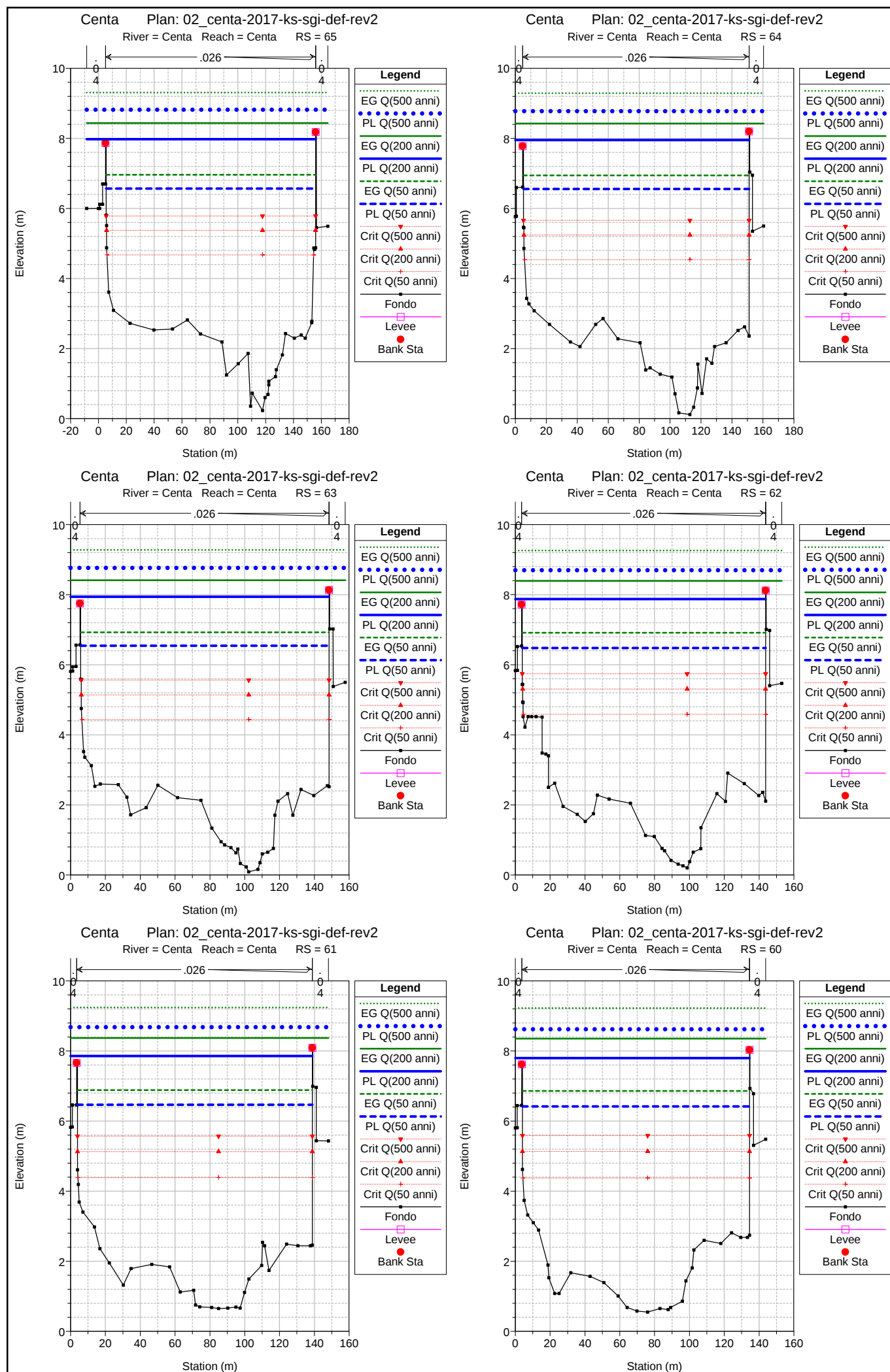


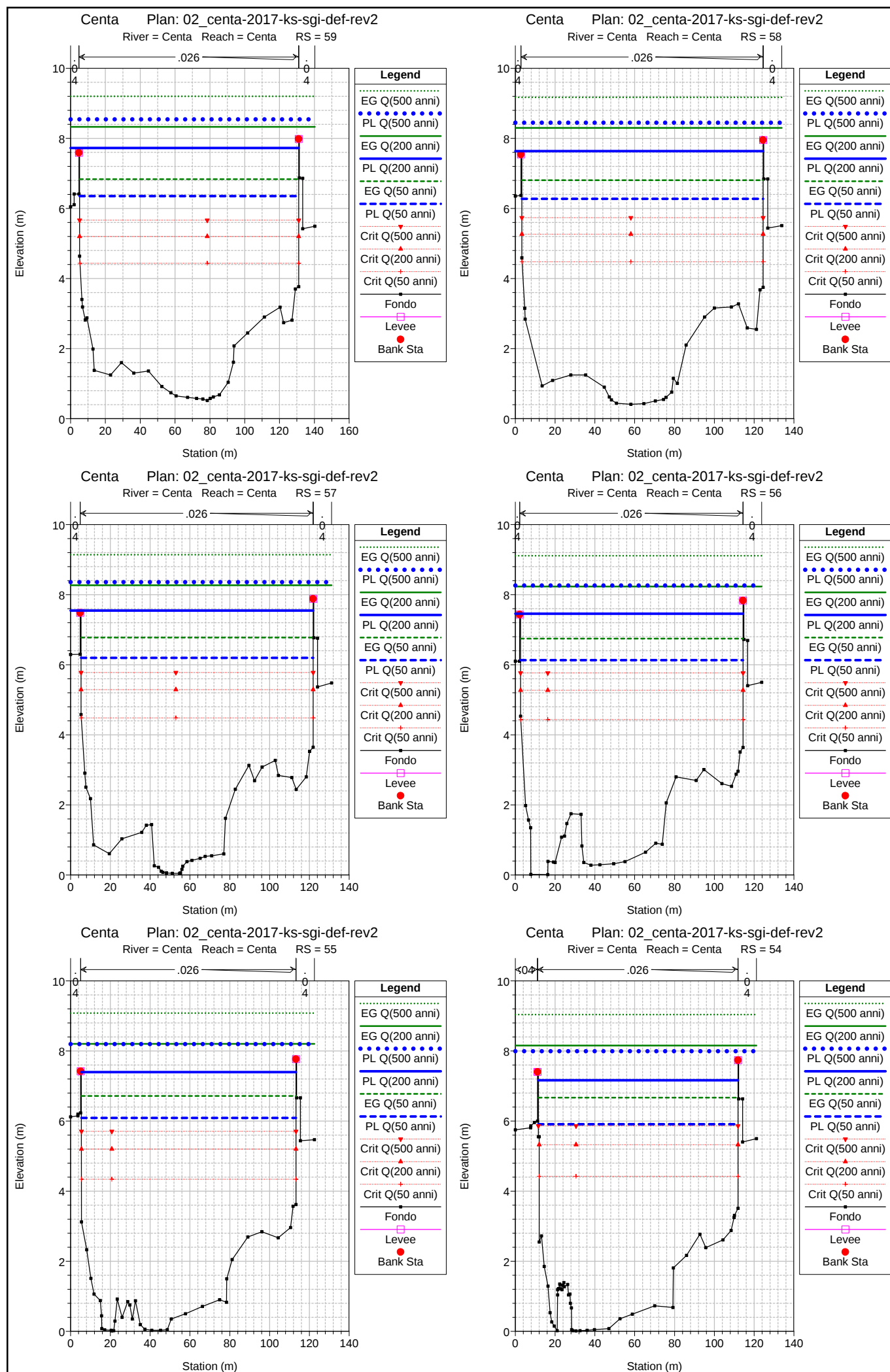


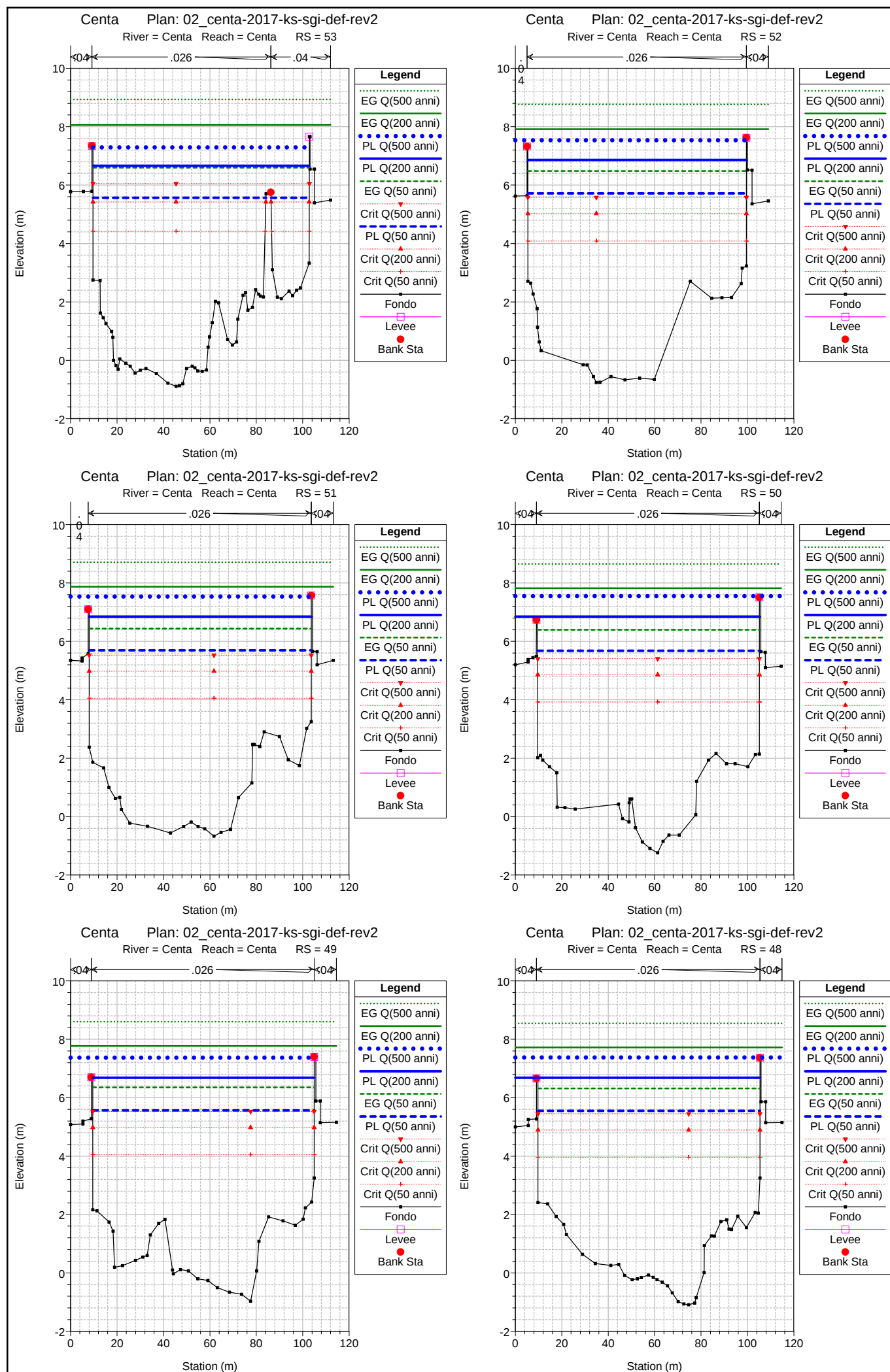


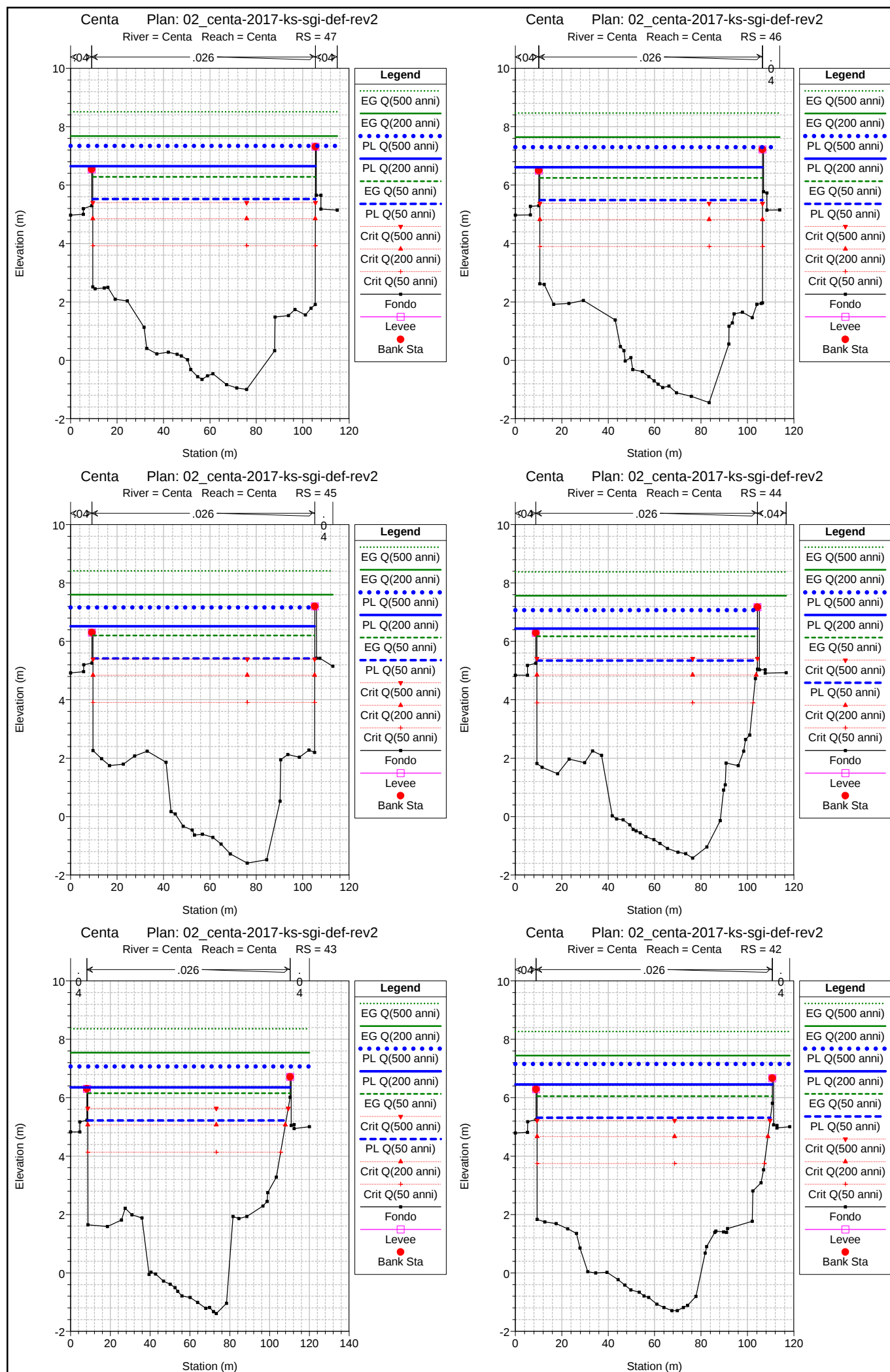


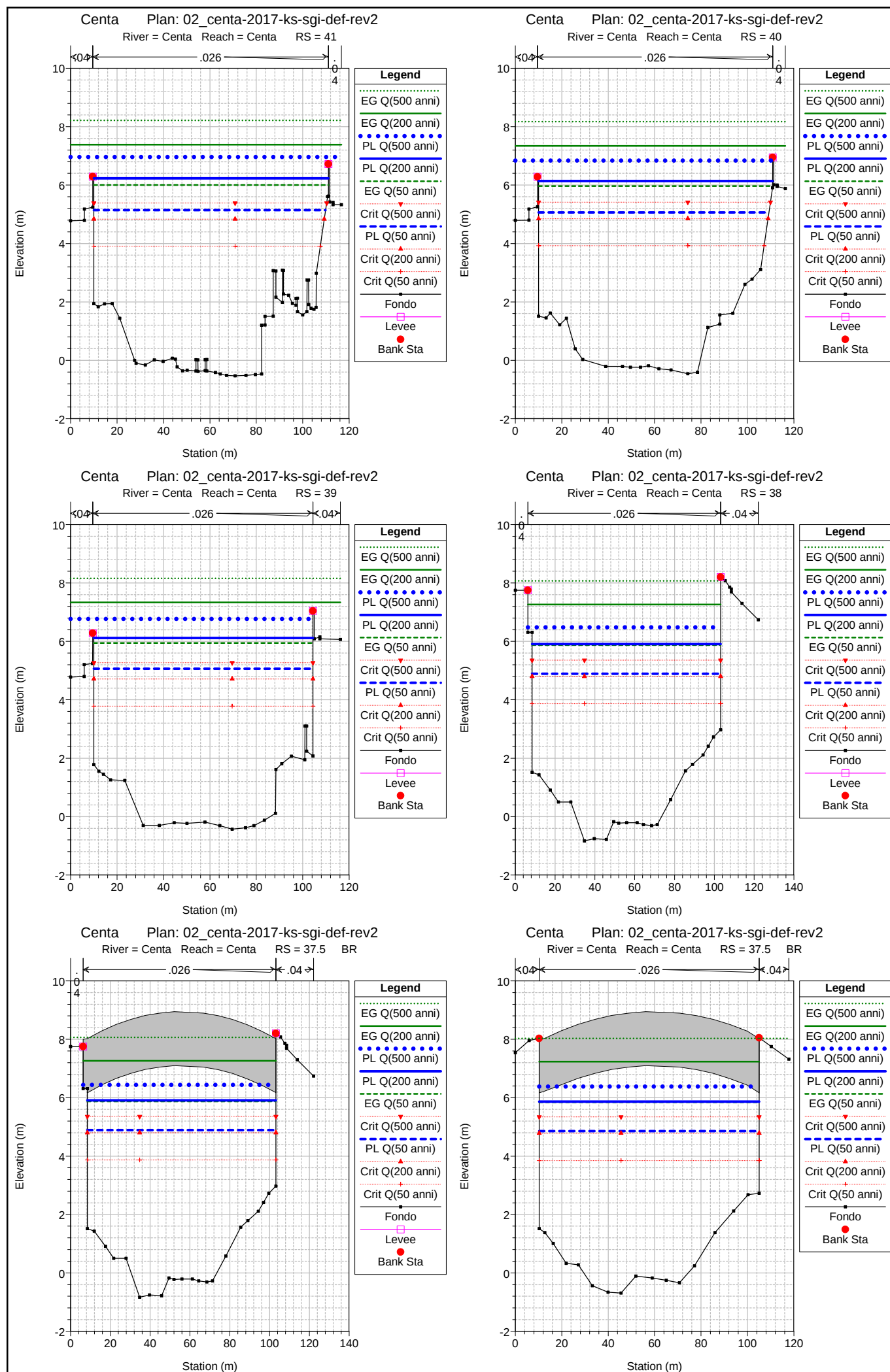


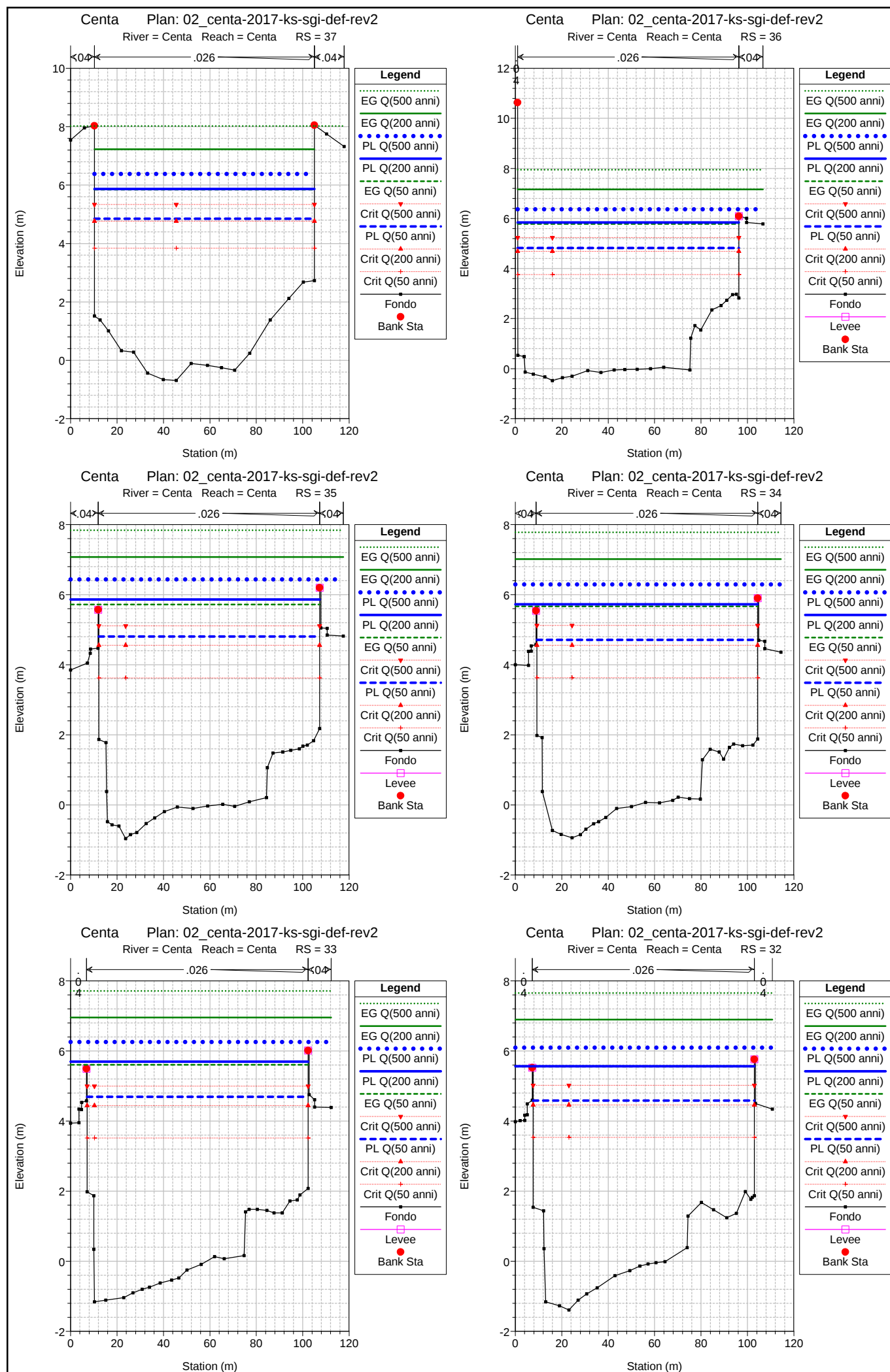


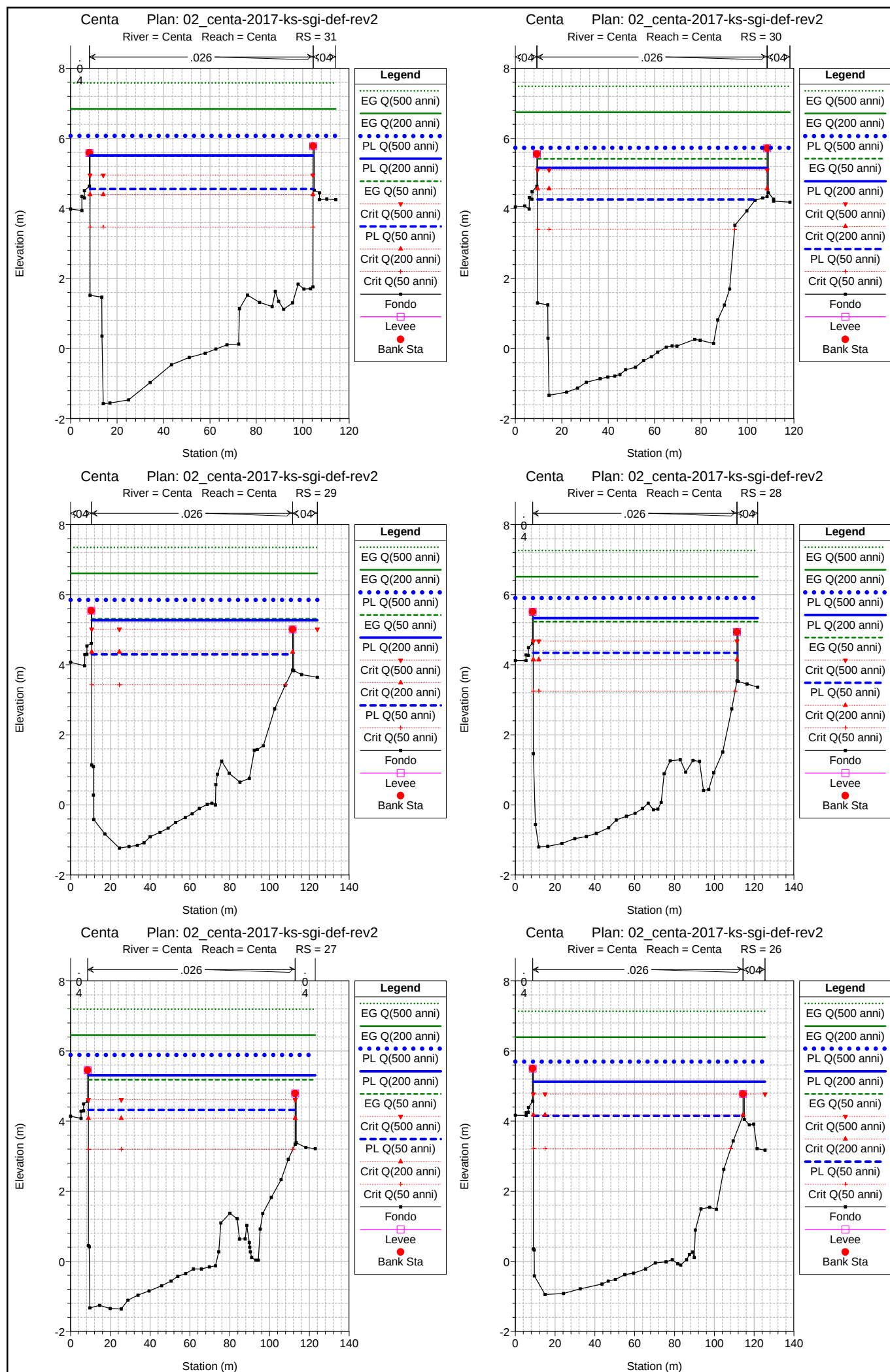


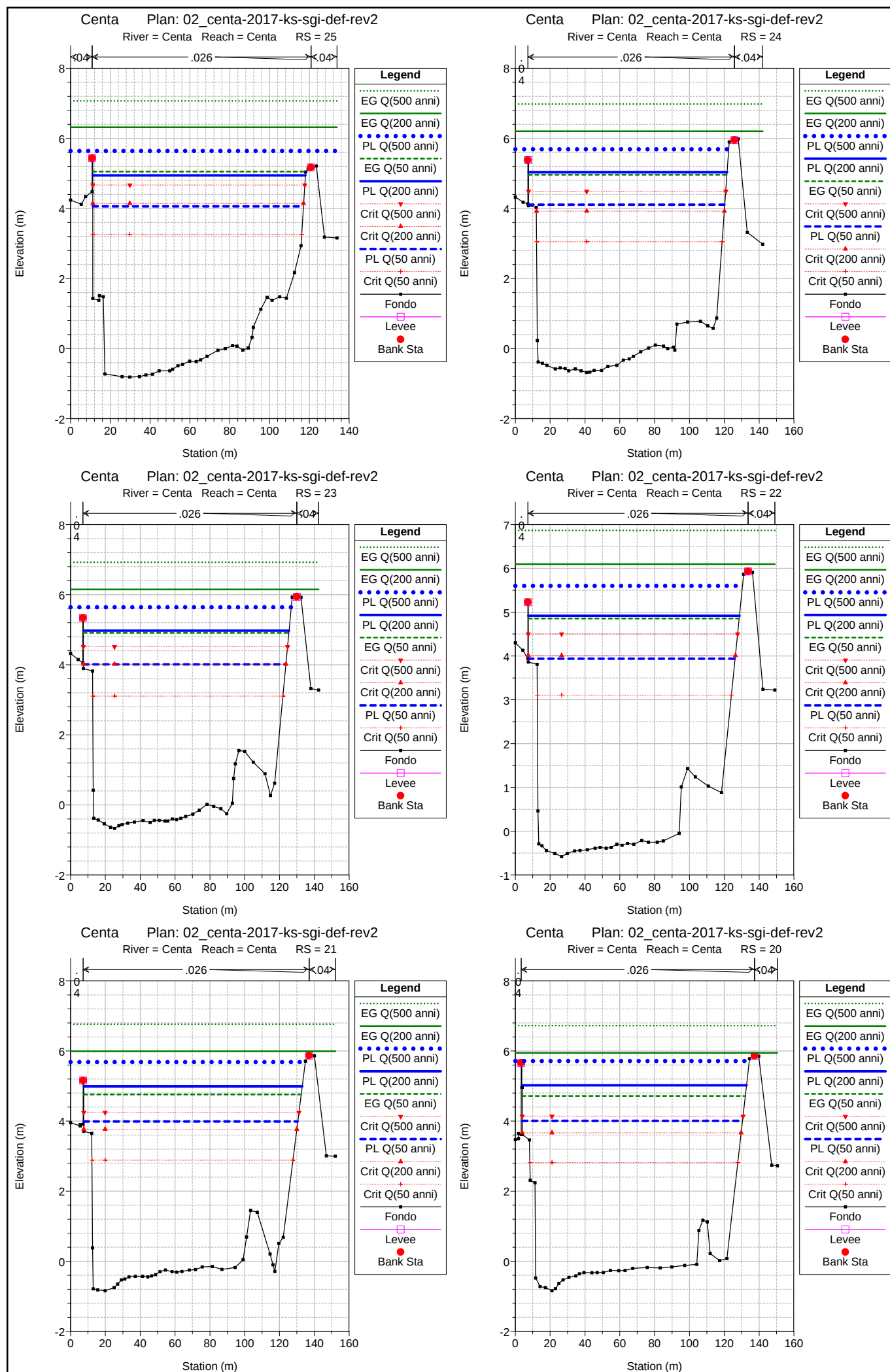


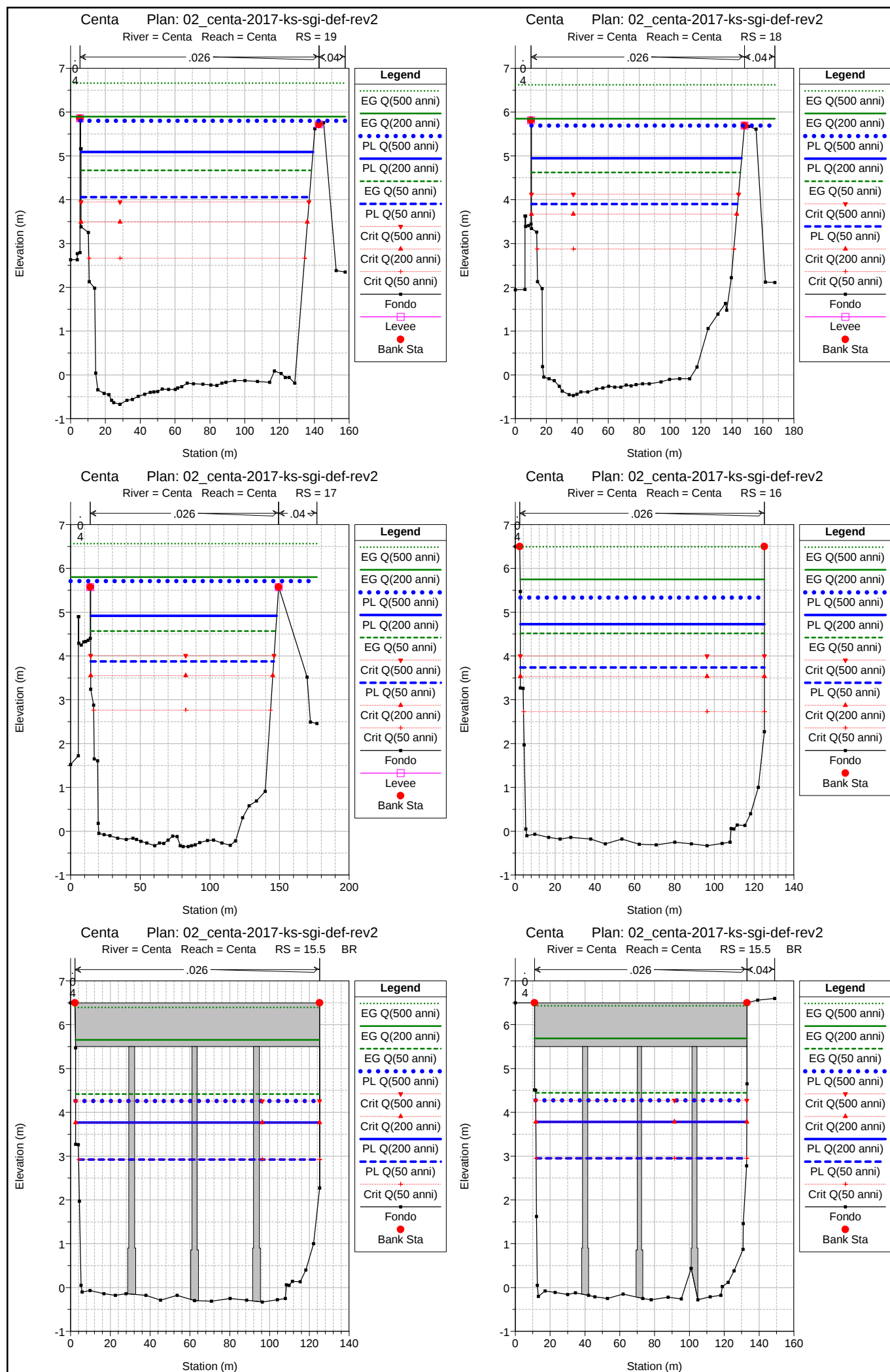


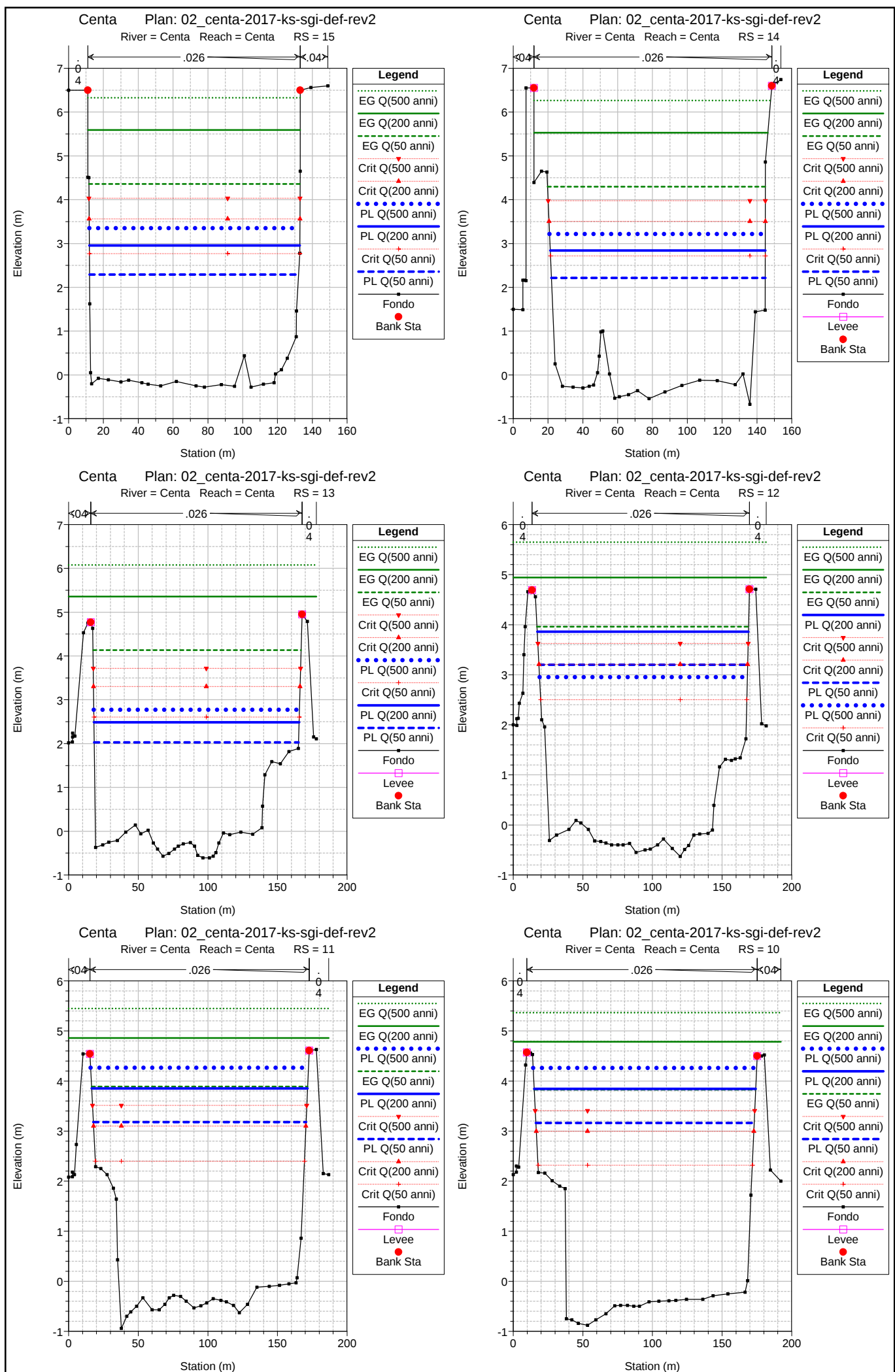


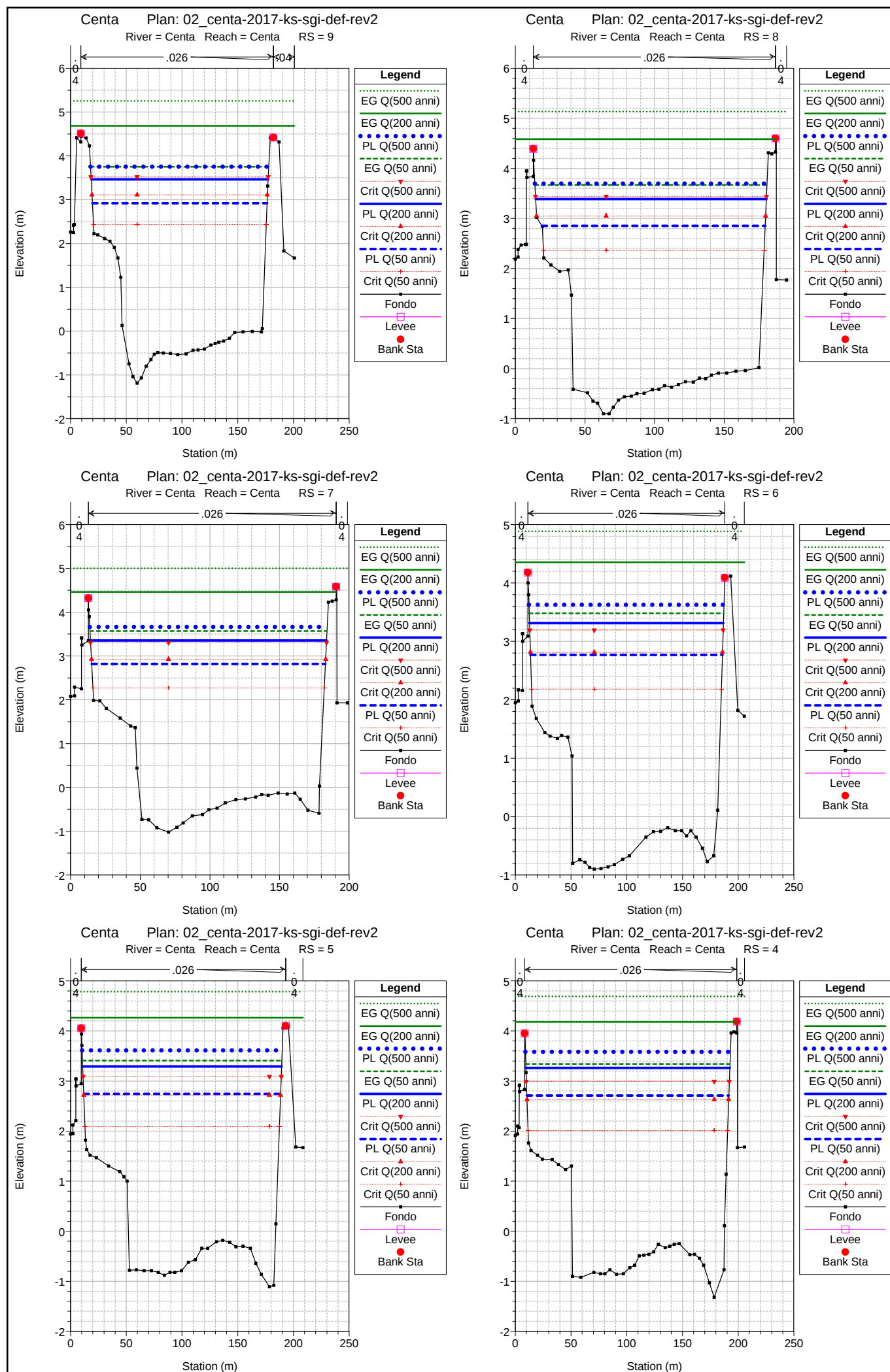


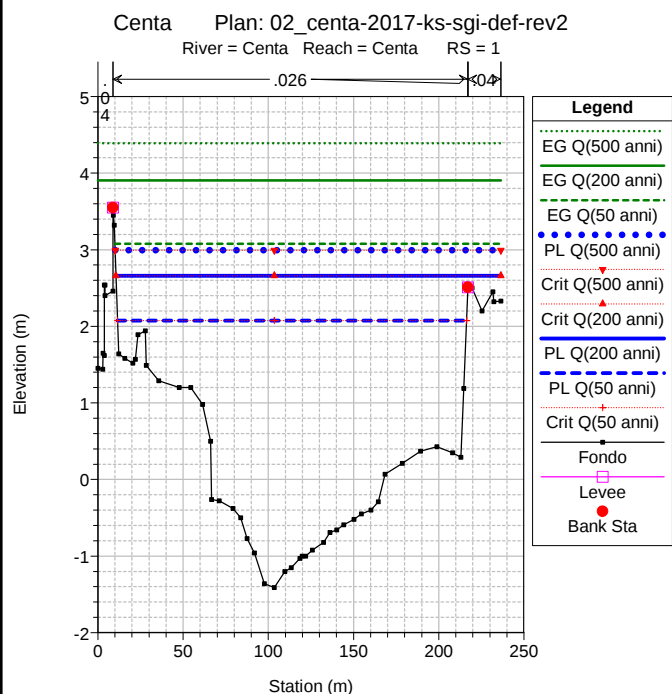
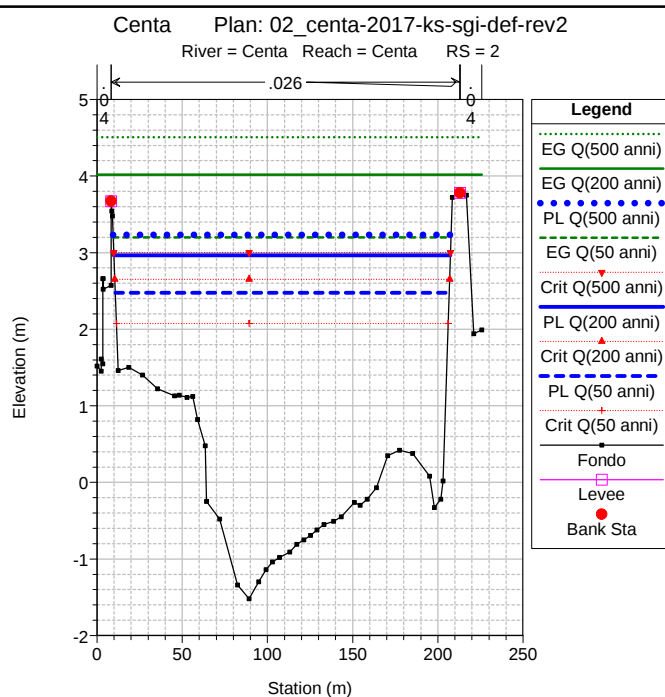
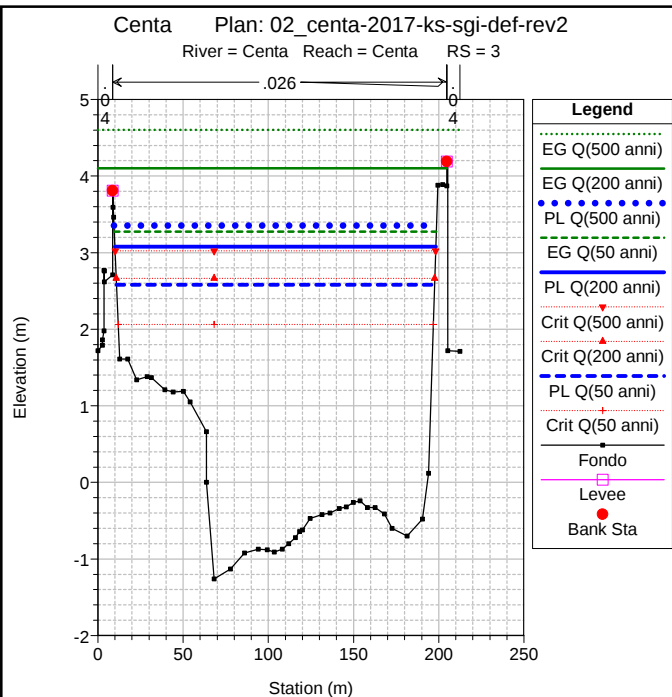












HEC-RAS Plan: 02_PdB_2018 River: Centa Reach: Centa

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
Centa	147	Q(50 anni)	1820.00	4.52	10.31	13.90	3.59	10.65	0.34	9.08	10.60	0.000931	2.36	772.23	265.70	0.44
Centa	147	Q(200 anni)	2630.00	4.52	11.21	13.90	2.69	10.65	-0.56	9.56	11.55	0.000800	2.59	1020.92	276.17	0.43
Centa	147	Q(500 anni)	3160.00	4.52	11.75	13.90	2.15	10.65	-1.10	9.84	12.13	0.000738	2.72	1171.08	276.29	0.42
Centa	146	Q(50 anni)	1820.00	5.00	10.19	13.72	3.53	10.70	0.51	9.19	10.56	0.001279	2.68	678.65	244.20	0.51
Centa	146	Q(200 anni)	2630.00	5.00	11.08	13.72	2.64	10.70	-0.38	9.69	11.52	0.001068	2.93	906.03	254.87	0.49
Centa	146	Q(500 anni)	3160.00	5.00	11.62	13.72	2.10	10.70	-0.92	9.99	12.10	0.000983	3.06	1043.97	257.19	0.48
Centa	145	Q(50 anni)	1820.00	4.78	10.11	13.47	3.36	10.76	0.65	9.13	10.52	0.001376	2.84	641.39	223.64	0.53
Centa	145	Q(200 anni)	2630.00	4.78	10.98	13.47	2.49	10.76	-0.22	9.65	11.48	0.001204	3.13	845.10	234.44	0.52
Centa	145	Q(500 anni)	3160.00	4.78	11.51	13.47	1.96	10.76	-0.75	9.98	12.06	0.001126	3.29	969.68	236.76	0.51
Centa	144	Q(50 anni)	1820.00	3.79	10.06	13.27	3.21	10.70	0.64	8.96	10.48	0.001280	2.88	631.61	203.87	0.52
Centa	144	Q(200 anni)	2630.00	3.79	10.90	13.27	2.37	10.70	-0.20	9.52	11.44	0.001217	3.26	811.05	214.47	0.53
Centa	144	Q(500 anni)	3160.00	3.79	11.42	13.27	1.85	10.70	-0.72	9.86	12.02	0.001164	3.46	921.55	215.22	0.53
Centa	143	Q(50 anni)	1820.00	4.57	9.87	12.99	3.12	10.59	0.72	9.09	10.43	0.001861	3.31	550.05	192.87	0.63
Centa	143	Q(200 anni)	2630.00	4.57	10.69	12.99	2.30	10.59	-0.10	9.68	11.39	0.001690	3.70	714.61	204.00	0.62
Centa	143	Q(500 anni)	3160.00	4.57	11.20	12.99	1.79	10.59	-0.61	10.03	11.97	0.001585	3.90	818.26	204.91	0.61
Centa	142	Q(50 anni)	1820.00	4.21	9.84	12.73	2.89	10.74	0.90	8.91	10.38	0.001654	3.25	559.56	184.55	0.60
Centa	142	Q(200 anni)	2630.00	4.21	10.64	12.73	2.09	10.74	0.10	9.55	11.34	0.001608	3.71	709.75	187.81	0.61
Centa	142	Q(500 anni)	3160.00	4.21	11.15	12.73	1.58	10.74	-0.41	9.91	11.93	0.001536	3.92	813.35	198.20	0.61
Centa	141	Q(50 anni)	1820.00	4.04	9.82	12.44	2.62	10.73	0.91	8.73	10.33	0.001457	3.15	578.02	181.53	0.56
Centa	141	Q(200 anni)	2630.00	4.04	10.63	12.44	1.81	10.73	0.10	9.40	11.30	0.001469	3.63	724.35	184.15	0.58
Centa	141	Q(500 anni)	3160.00	4.04	11.13	12.44	1.31	10.73	-0.40	9.77	11.89	0.001425	3.86	826.06	194.63	0.59
Centa	140	Q(50 anni)	1820.00	3.41	8.96	12.25	3.29	10.93	1.97	8.94	10.19	0.004910	4.90	371.14	148.76	0.99
Centa	140	Q(200 anni)	2630.00	3.41	9.84	12.25	2.41	10.93	1.09	9.70	11.17	0.004044	5.10	515.31	168.04	0.93
Centa	140	Q(500 anni)	3160.00	3.41	10.38	12.25	1.87	10.93	0.55	10.08	11.76	0.003441	5.21	607.05	169.85	0.88
Centa	139	Q(50 anni)	1820.00	3.44	9.32	12.15	2.83	10.20	0.88	8.53	9.91	0.001897	3.42	532.72	180.40	0.63
Centa	139	Q(200 anni)	2630.00	3.44	10.18	12.15	1.97	10.20	0.02	9.15	10.92	0.001744	3.81	690.17	185.81	0.63
Centa	139	Q(500 anni)	3160.00	3.44	10.72	12.15	1.43	10.20	-0.52	9.52	11.53	0.001616	4.00	793.00	192.12	0.62
Centa	138	Q(50 anni)	1820.00	3.63	9.26	12.07	2.81	10.99	1.73	8.34	9.87	0.001784	3.44	528.64	169.71	0.62
Centa	138	Q(200 anni)	2630.00	3.63	10.10	12.07	1.97	10.99	0.89	9.03	10.87	0.001789	3.90	674.52	179.92	0.64
Centa	138	Q(500 anni)	3160.00	3.63	10.63	12.07	1.44	10.99	0.36	9.44	11.49	0.001688	4.10	770.93	182.17	0.64
Centa	137	Q(50 anni)	1820.00	3.44	9.20	12.00	2.80	10.82	1.62	8.35	9.81	0.001906	3.46	525.61	175.90	0.64
Centa	137	Q(200 anni)	2630.00	3.44	10.06	12.00	1.94	10.82	0.76	9.02	10.82	0.001775	3.87	680.37	182.00	0.64
Centa	137	Q(500 anni)	3160.00	3.44	10.60	12.00	1.40	10.82	0.22	9.44	11.44	0.001657	4.06	778.27	183.05	0.63
Centa	136	Q(50 anni)	1820.00	2.84	9.21	11.81	2.60	10.76	1.55	8.15	9.75	0.001511	3.24	562.21	174.60	0.58
Centa	136	Q(200 anni)	2630.00	2.84	10.07	11.81	1.74	10.76	0.69	8.83	10.76	0.001500	3.67	717.54	183.24	0.59
Centa	136	Q(500 anni)	3160.00	2.84	10.61	11.81	1.20	10.76	0.15	9.21	11.38	0.001431	3.87	816.77	184.99	0.59
Centa	135	Q(50 anni)	1820.00	3.13	8.96	11.83	2.87	10.70	1.74	8.30	9.68	0.002472	3.76	484.06	171.70	0.71
Centa	135	Q(200 anni)	2630.00	3.13	9.82	11.83	2.01	10.70	0.88	9.03	10.69	0.002216	4.13	636.69	180.26	0.70
Centa	135	Q(500 anni)	3160.00	3.13	10.38	11.83	1.45	10.70	0.32	9.42	11.32	0.002002	4.28	738.15	183.01	0.68

HEC-RAS Plan: 02_PdB_2018 River: Centa Reach: Centa (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
Centa	134	Q(50 anni)	1820.00	3.33	9.06	11.73	2.67	10.29	1.23	7.99	9.57	0.001496	3.18	572.73	180.94	0.57
Centa	134	Q(200 anni)	2630.00	3.33	9.93	11.73	1.80	10.29	0.36	8.65	10.58	0.001421	3.59	732.52	185.01	0.58
Centa	134	Q(500 anni)	3160.00	3.33	10.49	11.73	1.24	10.29	-0.20	9.03	11.21	0.001316	3.76	852.49	197.69	0.57
Centa	133	Q(50 anni)	1820.00	3.00	9.02	11.60	2.58	10.50	1.48	7.97	9.53	0.001512	3.17	573.28	182.69	0.57
Centa	133	Q(200 anni)	2630.00	3.00	9.89	11.60	1.71	10.50	0.61	8.62	10.54	0.001414	3.58	734.54	184.94	0.57
Centa	133	Q(500 anni)	3160.00	3.00	10.45	11.60	1.15	10.50	0.05	9.00	11.17	0.001342	3.77	837.47	186.78	0.57
Centa	132	Q(50 anni)	1820.00	2.54	8.98	11.47	2.49	10.39	1.41	7.95	9.48	0.001455	3.13	580.84	183.53	0.56
Centa	132	Q(200 anni)	2630.00	2.54	9.87	11.47	1.60	10.39	0.52	8.57	10.50	0.001364	3.54	743.66	185.68	0.56
Centa	132	Q(500 anni)	3160.00	2.54	10.44	11.47	1.03	10.39	-0.05	8.93	11.13	0.001270	3.70	867.82	199.89	0.55
Centa	131	Q(50 anni)	1820.00	2.63	8.96	11.37	2.41	10.37	1.41	7.88	9.44	0.001381	3.08	591.67	184.58	0.55
Centa	131	Q(200 anni)	2630.00	2.63	9.85	11.37	1.52	10.37	0.52	8.49	10.46	0.001300	3.48	755.98	186.42	0.55
Centa	131	Q(500 anni)	3160.00	2.63	10.42	11.37	0.95	10.37	-0.05	8.86	11.09	0.001215	3.64	880.78	200.30	0.54
Centa	130	Q(50 anni)	1820.00	2.81	8.93	11.25	2.32	10.36	1.43	7.82	9.40	0.001333	3.04	599.29	185.28	0.54
Centa	130	Q(200 anni)	2630.00	2.81	9.82	11.25	1.43	10.36	0.54	8.43	10.42	0.001259	3.44	765.16	187.22	0.54
Centa	130	Q(500 anni)	3160.00	2.81	10.39	11.25	0.86	10.36	-0.03	8.79	11.05	0.001177	3.60	890.36	200.86	0.53
Centa	129	Q(50 anni)	1820.00	3.25	8.82	11.19	2.37	10.30	1.48	7.89	9.36	0.001616	3.23	563.95	184.29	0.59
Centa	129	Q(200 anni)	2630.00	3.25	9.72	11.19	1.47	10.30	0.58	8.50	10.38	0.001466	3.60	730.27	187.27	0.58
Centa	129	Q(500 anni)	3160.00	3.25	10.29	11.19	0.90	10.30	0.01	8.87	11.01	0.001371	3.78	836.93	189.36	0.57
Centa	128	Q(50 anni)	1820.00	2.86	8.75	11.01	2.26	10.25	1.50	7.90	9.31	0.001744	3.29	552.92	185.57	0.61
Centa	128	Q(200 anni)	2630.00	2.86	9.66	11.01	1.35	10.25	0.59	8.51	10.34	0.001533	3.64	722.97	188.61	0.59
Centa	128	Q(500 anni)	3160.00	2.86	10.26	11.01	0.75	10.25	-0.01	8.87	10.97	0.001374	3.76	852.96	202.06	0.57
Centa	127	Q(50 anni)	1820.00	2.89	8.70	11.00	2.30	10.09	1.39	7.89	9.26	0.001831	3.32	548.26	187.68	0.62
Centa	127	Q(200 anni)	2630.00	2.89	9.62	11.00	1.38	10.09	0.47	8.49	10.30	0.001554	3.64	722.49	189.38	0.59
Centa	127	Q(500 anni)	3160.00	2.89	10.22	11.00	0.78	10.09	-0.13	8.84	10.94	0.001378	3.75	855.22	202.65	0.57
Centa	126	Q(50 anni)	1820.00	2.91	8.37	10.91	2.54	10.01	1.64	8.05	9.18	0.003351	3.98	457.61	187.15	0.81
Centa	126	Q(200 anni)	2630.00	2.91	9.41	10.91	1.50	10.01	0.60	8.65	10.24	0.002182	4.02	653.71	189.23	0.69
Centa	126	Q(500 anni)	3160.00	2.91	10.06	10.91	0.85	10.01	-0.05	9.01	10.89	0.001783	4.04	793.94	202.95	0.64
Centa	125	Q(50 anni)	1820.00	3.39	8.52	10.80	2.28	9.95	1.43	7.58	9.03	0.001587	3.18	572.95	187.67	0.58
Centa	125	Q(200 anni)	2630.00	3.39	9.52	10.80	1.28	9.95	0.43	8.18	10.13	0.001309	3.45	763.28	190.31	0.55
Centa	125	Q(500 anni)	3160.00	3.39	10.15	10.80	0.65	9.95	-0.20	8.53	10.80	0.001164	3.56	901.14	203.24	0.53
Centa	124	Q(50 anni)	1820.00	3.10	8.59	10.79	2.20	9.92	1.33	7.07	8.96	0.000922	2.71	672.20	187.23	0.46
Centa	124	Q(200 anni)	2630.00	3.10	9.59	10.79	1.20	9.92	0.33	7.69	10.06	0.000872	3.05	862.31	191.86	0.46
Centa	124	Q(500 anni)	3160.00	3.10	10.21	10.79	0.58	9.92	-0.29	8.05	10.73	0.000813	3.20	1000.30	203.66	0.45
Centa	123	Q(50 anni)	1820.00	3.10	8.53	10.70	2.17	9.80	1.27	7.19	8.93	0.001065	2.81	648.71	189.04	0.48
Centa	123	Q(200 anni)	2630.00	3.10	9.54	10.70	1.16	9.80	0.26	7.79	10.04	0.000960	3.13	840.55	191.15	0.48
Centa	123	Q(500 anni)	3160.00	3.10	10.17	10.70	0.53	9.80	-0.37	8.15	10.71	0.000889	3.27	979.36	204.05	0.47
Centa	122	Q(50 anni)	1820.00	0.85	8.61	10.48	1.87	9.59	0.98	5.96	8.85	0.000461	2.18	834.16	189.66	0.33
Centa	122	Q(200 anni)	2630.00	0.85	9.62	10.48	0.86	9.59	-0.03	6.84	9.95	0.000493	2.55	1040.31	204.76	0.35
Centa	122	Q(500 anni)	3160.00	0.85	10.25	10.48	0.23	9.59	-0.66	7.24	10.63	0.000491	2.74	1168.65	204.77	0.36

HEC-RAS Plan: 02_PdB_2018 River: Centa Reach: Centa (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
Centa	121	Q(50 anni)	1820.00	2.22	8.46	10.33	1.87	9.52	1.06	6.92	8.81	0.000883	2.65	687.57	190.90	0.45
Centa	121	Q(200 anni)	2630.00	2.22	9.46	10.33	0.87	9.52	0.06	7.52	9.91	0.000830	2.98	881.13	193.84	0.45
Centa	121	Q(500 anni)	3160.00	2.22	10.09	10.33	0.24	9.52	-0.57	7.88	10.59	0.000773	3.13	1021.07	205.00	0.44
Centa	120	Q(50 anni)	1820.00	2.00	8.39	10.18	1.79	9.35	0.96	7.03	8.78	0.001034	2.77	657.30	191.07	0.48
Centa	120	Q(200 anni)	2630.00	2.00	9.41	10.18	0.77	9.35	-0.06	7.62	9.89	0.000927	3.08	863.05	204.56	0.47
Centa	120	Q(500 anni)	3160.00	2.00	10.04	10.18	0.14	9.35	-0.69	7.98	10.57	0.000856	3.23	992.41	204.57	0.46
Centa	119	Q(50 anni)	1820.00	2.03	8.37	10.12	1.75	9.30	0.93	6.97	8.76	0.000993	2.74	665.21	191.49	0.47
Centa	119	Q(200 anni)	2630.00	2.03	9.39	10.12	0.73	9.30	-0.09	7.57	9.86	0.000893	3.05	870.99	204.16	0.46
Centa	119	Q(500 anni)	3160.00	2.03	10.03	10.12	0.09	9.30	-0.73	7.92	10.54	0.000827	3.20	1000.40	204.17	0.45
Centa	118	Q(50 anni)	1820.00	0.65	8.41	10.09	1.68	9.30	0.89	6.50	8.71	0.000681	2.43	749.11	191.50	0.39
Centa	118	Q(200 anni)	2630.00	0.65	9.42	10.09	0.67	9.30	-0.12	7.13	9.82	0.000666	2.77	956.44	203.82	0.40
Centa	118	Q(500 anni)	3160.00	0.65	10.06	10.09	0.03	9.30	-0.76	7.50	10.50	0.000641	2.95	1085.67	203.83	0.40
Centa	117	Q(50 anni)	1820.00	0.85	8.18	10.03	1.85	9.24	1.06	7.10	8.66	0.001389	3.05	596.75	187.49	0.55
Centa	117	Q(200 anni)	2630.00	0.85	9.21	10.03	0.82	9.24	0.03	7.71	9.77	0.001186	3.32	791.87	193.16	0.52
Centa	117	Q(500 anni)	3160.00	0.85	9.86	10.03	0.17	9.24	-0.62	8.07	10.46	0.001041	3.43	934.33	203.58	0.50
Centa	116	Q(50 anni)	1820.00	0.87	7.82	10.04	2.22	9.30	1.48	7.28	8.61	0.003299	3.95	460.60	185.48	0.80
Centa	116	Q(200 anni)	2630.00	0.87	8.97	10.04	1.07	9.30	0.33	8.07	9.74	0.002040	3.89	676.04	193.10	0.66
Centa	116	Q(500 anni)	3160.00	0.87	9.67	10.04	0.37	9.30	-0.37	8.43	10.43	0.001595	3.87	826.21	203.51	0.60
Centa	115	Q(50 anni)	1820.00	0.65	8.01	10.03	2.02	9.28	1.27	6.98	8.52	0.001509	3.14	578.79	182.80	0.56
Centa	115	Q(200 anni)	2630.00	0.65	9.09	10.03	0.94	9.28	0.19	7.60	9.67	0.001231	3.37	779.32	189.53	0.53
Centa	115	Q(500 anni)	3160.00	0.65	9.77	10.03	0.26	9.28	-0.49	7.97	10.38	0.001068	3.47	922.63	203.31	0.51
Centa	114	Q(50 anni)	1820.00	0.81	8.01	9.93	1.92	9.33	1.32	6.86	8.47	0.001310	3.01	603.84	185.13	0.53
Centa	114	Q(200 anni)	2630.00	0.81	9.09	9.93	0.84	9.33	0.24	7.48	9.63	0.001079	3.26	806.55	189.09	0.50
Centa	114	Q(500 anni)	3160.00	0.81	9.77	9.93	0.16	9.33	-0.44	7.84	10.35	0.000951	3.37	951.93	203.00	0.48
Centa	113	Q(50 anni)	1820.00	0.93	7.90	9.84	1.94	9.22	1.32	6.96	8.43	0.001598	3.22	566.09	184.75	0.59
Centa	113	Q(200 anni)	2630.00	0.93	9.01	9.84	0.83	9.22	0.21	7.58	9.60	0.001222	3.40	773.28	188.81	0.54
Centa	113	Q(500 anni)	3160.00	0.93	9.71	9.84	0.13	9.22	-0.49	7.94	10.32	0.001066	3.47	921.11	202.41	0.51
Centa	112	Q(50 anni)	1820.00	1.73	7.85	9.72	1.87	9.15	1.30	6.92	8.38	0.001623	3.23	562.96	183.67	0.59
Centa	112	Q(200 anni)	2630.00	1.73	8.97	9.72	0.75	9.15	0.18	7.53	9.57	0.001230	3.41	771.29	187.84	0.54
Centa	112	Q(500 anni)	3160.00	1.73	9.67	9.72	0.05	9.15	-0.52	7.90	10.29	0.001050	3.49	919.18	201.21	0.51
Centa	111	Q(50 anni)	1820.00	1.60	7.82	9.72	1.90	9.04	1.22	6.84	8.34	0.001544	3.20	569.15	182.36	0.58
Centa	111	Q(200 anni)	2630.00	1.60	8.95	9.72	0.77	9.04	0.09	7.45	9.53	0.001180	3.38	777.63	186.49	0.53
Centa	111	Q(500 anni)	3160.00	1.60	9.65	9.72	0.07	9.04	-0.61	7.83	10.26	0.001012	3.46	924.45	199.00	0.50
Centa	110	Q(50 anni)	1820.00	1.54	7.77	9.67	1.90	9.05	1.28	6.78	8.30	0.001552	3.21	566.81	180.10	0.58
Centa	110	Q(200 anni)	2630.00	1.54	8.91	9.67	0.76	9.05	0.14	7.40	9.50	0.001189	3.40	774.29	184.44	0.53
Centa	110	Q(500 anni)	3160.00	1.54	9.62	9.67	0.05	9.05	-0.57	7.78	10.23	0.001019	3.48	921.06	196.51	0.50
Centa	109	Q(50 anni)	1820.00	1.89	7.73	9.55	1.82	8.98	1.25	6.73	8.26	0.001536	3.23	563.67	177.41	0.58
Centa	109	Q(200 anni)	2630.00	1.89	8.87	9.55	0.68	8.98	0.11	7.36	9.47	0.001182	3.42	769.55	181.92	0.53
Centa	109	Q(500 anni)	3160.00	1.89	9.59	9.55	-0.04	8.98	-0.61	7.74	10.21	0.001011	3.49	922.11	198.84	0.50

HEC-RAS Plan: 02_PdB_2018 River: Centa Reach: Centa (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
Centa	108	Q(50 anni)	1820.00	1.88	7.71	9.43	1.72	8.94	1.23	6.63	8.22	0.001430	3.15	577.76	177.08	0.56
Centa	108	Q(200 anni)	2630.00	1.88	8.86	9.43	0.57	8.94	0.08	7.26	9.44	0.001118	3.35	784.16	180.91	0.51
Centa	108	Q(500 anni)	3160.00	1.88	9.58	9.43	-0.15	8.94	-0.64	7.64	10.18	0.000964	3.44	938.01	198.02	0.49
Centa	107	Q(50 anni)	1820.00	1.71	7.71	9.33	1.62	8.87	1.16	6.49	8.17	0.001261	3.02	601.70	177.97	0.53
Centa	107	Q(200 anni)	2630.00	1.71	8.86	9.33	0.47	8.87	0.01	7.12	9.40	0.001012	3.25	809.69	181.50	0.49
Centa	107	Q(500 anni)	3160.00	1.71	9.58	9.33	-0.25	8.87	-0.71	7.50	10.15	0.000882	3.34	964.99	198.14	0.47
Centa	106	Q(50 anni)	1820.00	1.83	7.70	9.30	1.60	8.74	1.04	6.35	8.14	0.001138	2.93	621.62	177.39	0.50
Centa	106	Q(200 anni)	2630.00	1.83	8.86	9.30	0.44	8.74	-0.12	7.00	9.37	0.000937	3.16	840.88	193.53	0.47
Centa	106	Q(500 anni)	3160.00	1.83	9.58	9.30	-0.28	8.74	-0.84	7.38	10.12	0.000829	3.27	986.60	198.44	0.45
Centa	105	Q(50 anni)	1820.00	1.84	7.71	9.25	1.54	8.75	1.04	6.17	8.12	0.000952	2.81	647.99	174.38	0.47
Centa	105	Q(200 anni)	2630.00	1.84	8.87	9.25	0.38	8.75	-0.12	6.82	9.35	0.000831	3.06	867.44	193.86	0.45
Centa	105	Q(500 anni)	3160.00	1.84	9.59	9.25	-0.34	8.75	-0.84	7.20	10.10	0.000746	3.18	1013.76	198.77	0.44
Centa	104	Q(50 anni)	1820.00	1.86	7.75	9.14	1.39	8.63	0.88	5.88	8.08	0.000708	2.54	715.22	179.55	0.41
Centa	104	Q(200 anni)	2630.00	1.86	8.91	9.14	0.23	8.63	-0.28	6.52	9.32	0.000642	2.84	937.17	194.11	0.40
Centa	104	Q(500 anni)	3160.00	1.86	9.63	9.14	-0.49	8.63	-1.00	6.90	10.07	0.000595	2.97	1083.87	199.03	0.39
Centa	103	Q(50 anni)	1820.00	1.83	7.57	9.03	1.46	8.45	0.88	6.41	8.05	0.001313	3.06	594.62	179.85	0.54
Centa	103	Q(200 anni)	2630.00	1.83	8.76	9.03	0.27	8.45	-0.31	7.04	9.29	0.000999	3.23	822.94	195.43	0.49
Centa	103	Q(500 anni)	3160.00	1.83	9.49	9.03	-0.46	8.45	-1.04	7.41	10.04	0.000862	3.32	973.80	200.34	0.47
Centa	102	Q(50 anni)	1820.00	1.84	7.55	8.92	1.37	8.46	0.91	6.35	8.01	0.001258	3.01	604.18	181.35	0.53
Centa	102	Q(200 anni)	2630.00	1.84	8.74	8.92	0.18	8.46	-0.28	6.97	9.26	0.000957	3.18	835.93	195.89	0.48
Centa	102	Q(500 anni)	3160.00	1.84	9.48	8.92	-0.56	8.46	-1.02	7.34	10.02	0.000826	3.27	988.01	200.65	0.46
Centa	101	Q(50 anni)	1820.00	1.93	7.54	8.88	1.34	8.47	0.93	6.32	7.99	0.001237	3.00	607.27	181.87	0.52
Centa	101	Q(200 anni)	2630.00	1.93	8.74	8.88	0.14	8.47	-0.27	6.95	9.25	0.000942	3.17	840.21	196.39	0.48
Centa	101	Q(500 anni)	3160.00	1.93	9.47	8.88	-0.59	8.47	-1.00	7.33	10.01	0.000813	3.25	992.77	200.94	0.45
Centa	100	Q(50 anni)	1820.00	1.91	7.53	8.80	1.27	8.50	0.97	6.28	7.98	0.001191	2.96	614.20	182.15	0.52
Centa	100	Q(200 anni)	2630.00	1.91	8.74	8.80	0.06	8.50	-0.24	6.91	9.23	0.000928	3.13	848.13	196.54	0.47
Centa	100	Q(500 anni)	3160.00	1.91	9.47	8.80	-0.67	8.50	-0.97	7.29	10.00	0.000799	3.22	1001.04	200.97	0.45
Centa	99	Q(50 anni)	1820.00	1.85	7.54	8.79	1.25	8.42	0.88	6.19	7.96	0.001086	2.89	630.76	181.32	0.49
Centa	99	Q(200 anni)	2630.00	1.85	8.74	8.79	0.05	8.42	-0.32	6.82	9.22	0.000856	3.08	864.29	196.24	0.46
Centa	99	Q(500 anni)	3160.00	1.85	9.48	8.79	-0.69	8.42	-1.06	7.19	9.99	0.000748	3.17	1017.42	200.89	0.44
Centa	98	Q(50 anni)	1820.00	1.45	7.53	8.73	1.20	8.44	0.91	6.16	7.95	0.001062	2.87	633.43	180.22	0.49
Centa	98	Q(200 anni)	2630.00	1.45	8.73	8.73	0.00	8.44	-0.29	6.78	9.21	0.000841	3.07	872.37	200.43	0.45
Centa	98	Q(500 anni)	3160.00	1.45	9.47	8.73	-0.74	8.44	-1.03	7.16	9.98	0.000739	3.17	1019.91	200.43	0.44
Centa	97	Q(50 anni)	1820.00	1.72	7.52	8.66	1.14	8.55	1.03	6.10	7.94	0.001041	2.87	634.33	177.98	0.49
Centa	97	Q(200 anni)	2630.00	1.72	8.72	8.66	-0.06	8.55	-0.17	6.74	9.20	0.000850	3.07	872.44	198.66	0.46
Centa	97	Q(500 anni)	3160.00	1.72	9.46	8.66	-0.80	8.55	-0.91	7.12	9.97	0.000744	3.17	1019.01	198.66	0.44
Centa	96	Q(50 anni)	1820.00	1.62	7.50	8.59	1.09	8.30	0.80	6.00	7.91	0.000987	2.84	641.29	175.52	0.47
Centa	96	Q(200 anni)	2630.00	1.62	8.70	8.59	-0.11	8.30	-0.40	6.64	9.18	0.000800	3.06	878.15	195.61	0.44
Centa	96	Q(500 anni)	3160.00	1.62	9.44	8.59	-0.85	8.30	-1.14	7.03	9.95	0.000713	3.17	1022.28	195.61	0.43

HEC-RAS Plan: 02_PdB_2018 River: Centa Reach: Centa (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
Centa	95	Q(50 anni)	1820.00	1.46	7.47	8.62	1.15	8.49	1.02	5.90	7.88	0.000938	2.82	646.29	173.02	0.47
Centa	95	Q(200 anni)	2630.00	1.46	8.68	8.62	-0.06	8.49	-0.19	6.56	9.15	0.000776	3.05	881.66	193.42	0.44
Centa	95	Q(500 anni)	3160.00	1.46	9.42	8.62	-0.80	8.49	-0.93	6.95	9.93	0.000695	3.17	1024.40	193.42	0.43
Centa	94	Q(50 anni)	1820.00	1.50	7.48	8.60	1.12	8.54	1.06	5.80	7.86	0.000853	2.72	668.14	173.47	0.44
Centa	94	Q(200 anni)	2630.00	1.50	8.69	8.60	-0.09	8.54	-0.15	6.45	9.14	0.000723	2.97	902.60	193.04	0.42
Centa	94	Q(500 anni)	3160.00	1.50	9.43	8.60	-0.83	8.54	-0.89	6.84	9.91	0.000656	3.10	1044.97	193.04	0.41
Centa	93	Q(50 anni)	1820.00	1.29	7.46	8.61	1.15	8.67	1.21	5.83	7.85	0.000911	2.76	658.54	173.10	0.45
Centa	93	Q(200 anni)	2630.00	1.29	8.66	8.61	-0.05	8.67	0.01	6.49	9.13	0.000791	3.03	874.32	182.78	0.44
Centa	93	Q(500 anni)	3160.00	1.29	9.41	8.61	-0.80	8.67	-0.74	6.87	9.91	0.000697	3.12	1037.07	193.18	0.42
Centa	92	Q(50 anni)	1820.00	1.17	7.20	8.53	1.33	8.60	1.40	6.37	7.81	0.001951	3.46	526.18	174.12	0.64
Centa	92	Q(200 anni)	2630.00	1.17	8.47	8.53	0.06	8.60	0.13	7.04	9.10	0.001295	3.51	748.39	176.35	0.54
Centa	92	Q(500 anni)	3160.00	1.17	9.26	8.53	-0.73	8.60	-0.66	7.41	9.88	0.001040	3.52	921.46	194.04	0.50
Centa	91	Q(50 anni)	1820.00	1.61	7.29	8.51	1.22	8.49	1.20	5.92	7.73	0.001117	2.94	618.11	174.28	0.50
Centa	91	Q(200 anni)	2630.00	1.61	8.54	8.51	-0.03	8.49	-0.05	6.57	9.03	0.000857	3.11	862.66	194.47	0.46
Centa	91	Q(500 anni)	3160.00	1.61	9.31	8.51	-0.80	8.49	-0.82	6.95	9.83	0.000744	3.21	1012.10	194.47	0.44
Centa	90	Q(50 anni)	1820.00	1.78	7.27	8.58	1.31	8.33	1.06	5.83	7.69	0.001019	2.88	632.56	174.44	0.48
Centa	90	Q(200 anni)	2630.00	1.78	8.53	8.58	0.05	8.33	-0.20	6.47	9.01	0.000795	3.06	875.30	190.68	0.44
Centa	90	Q(500 anni)	3160.00	1.78	9.31	8.58	-0.73	8.33	-0.98	6.86	9.81	0.000693	3.15	1031.93	195.51	0.43
Centa	89	Q(50 anni)	1820.00	1.23	7.26	8.58	1.32	8.35	1.09	5.73	7.66	0.000949	2.80	649.41	175.58	0.47
Centa	89	Q(200 anni)	2630.00	1.23	8.53	8.58	0.05	8.35	-0.18	6.37	8.98	0.000762	2.98	896.67	192.42	0.43
Centa	89	Q(500 anni)	3160.00	1.23	9.31	8.58	-0.73	8.35	-0.96	6.76	9.78	0.000664	3.07	1056.01	197.76	0.41
Centa	88	Q(50 anni)	1820.00	1.57	7.25	8.55	1.30	8.38	1.13	5.74	7.65	0.000968	2.81	647.33	176.84	0.47
Centa	88	Q(200 anni)	2630.00	1.57	8.52	8.55	0.03	8.38	-0.14	6.38	8.97	0.000767	2.98	897.73	194.13	0.43
Centa	88	Q(500 anni)	3160.00	1.57	9.30	8.55	-0.75	8.38	-0.92	6.76	9.77	0.000665	3.06	1060.00	199.87	0.41
Centa	87	Q(50 anni)	1820.00	1.58	7.25	8.57	1.32	8.47	1.22	5.70	7.64	0.000927	2.77	658.10	178.76	0.46
Centa	87	Q(200 anni)	2630.00	1.58	8.52	8.57	0.05	8.47	-0.05	6.33	8.96	0.000740	2.94	909.04	195.18	0.43
Centa	87	Q(500 anni)	3160.00	1.58	9.30	8.57	-0.73	8.47	-0.83	6.71	9.76	0.000643	3.03	1072.36	201.01	0.41
Centa	86	Q(50 anni)	1820.00	1.71	7.23	8.56	1.33	8.47	1.24	5.65	7.60	0.000880	2.70	673.86	182.69	0.45
Centa	86	Q(200 anni)	2630.00	1.71	8.51	8.56	0.05	8.47	-0.04	6.28	8.93	0.000684	2.87	931.48	198.14	0.41
Centa	86	Q(500 anni)	3160.00	1.71	9.30	8.56	-0.74	8.47	-0.83	6.65	9.74	0.000599	2.96	1097.84	204.15	0.40
Centa	85	Q(50 anni)	1820.00	1.48	7.21	8.52	1.31	8.51	1.30	5.62	7.58	0.000866	2.66	683.83	185.87	0.44
Centa	85	Q(200 anni)	2630.00	1.48	8.50	8.52	0.02	8.51	0.01	6.24	8.91	0.000680	2.85	922.94	187.17	0.41
Centa	85	Q(500 anni)	3160.00	1.48	9.29	8.52	-0.77	8.51	-0.78	6.60	9.72	0.000585	2.91	1115.69	207.29	0.39
Centa	84	Q(50 anni)	1820.00	1.50	7.22	8.49	1.27	8.50	1.28	5.51	7.56	0.000768	2.56	711.17	187.79	0.42
Centa	84	Q(200 anni)	2630.00	1.50	8.51	8.49	-0.02	8.50	-0.01	6.12	8.89	0.000606	2.73	985.47	209.10	0.39
Centa	84	Q(500 anni)	3160.00	1.50	9.30	8.49	-0.81	8.50	-0.80	6.48	9.70	0.000535	2.83	1149.72	209.10	0.37
Centa	83	Q(50 anni)	1820.00	1.33	7.20	8.43	1.23	8.38	1.18	5.57	7.54	0.000826	2.60	700.57	190.34	0.43
Centa	83	Q(200 anni)	2630.00	1.33	8.50	8.43	-0.07	8.38	-0.12	6.18	8.88	0.000635	2.75	976.09	210.24	0.40
Centa	83	Q(500 anni)	3160.00	1.33	9.29	8.43	-0.86	8.38	-0.91	6.54	9.69	0.000555	2.84	1141.86	210.24	0.38

HEC-RAS Plan: 02_PdB_2018 River: Centa Reach: Centa (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
Centa	82	Q(50 anni)	1820.00	1.38	7.22	8.41	1.19	8.44	1.22	5.49	7.53	0.000734	2.48	733.44	196.80	0.41
Centa	82	Q(200 anni)	2630.00	1.38	8.52	8.41	-0.11	8.44	-0.08	6.08	8.87	0.000567	2.64	1017.17	211.59	0.38
Centa	82	Q(500 anni)	3160.00	1.38	9.30	8.41	-0.89	8.44	-0.86	6.44	9.68	0.000501	2.73	1183.98	211.59	0.36
Centa	81	Q(50 anni)	1820.00	1.00	7.19	8.49	1.30	8.45	1.26	5.53	7.51	0.000783	2.52	723.56	198.35	0.42
Centa	81	Q(200 anni)	2630.00	1.00	8.50	8.49	-0.01	8.45	-0.05	6.12	8.86	0.000592	2.66	1008.63	212.12	0.38
Centa	81	Q(500 anni)	3160.00	1.00	9.29	8.49	-0.80	8.45	-0.84	6.48	9.67	0.000519	2.75	1176.46	212.12	0.37
Centa	80	Q(50 anni)	1820.00	0.52	7.18	8.42	1.24	8.48	1.30	5.52	7.50	0.000772	2.50	728.24	199.52	0.42
Centa	80	Q(200 anni)	2630.00	0.52	8.49	8.42	-0.07	8.48	-0.01	6.11	8.85	0.000583	2.64	1015.28	213.22	0.38
Centa	80	Q(500 anni)	3160.00	0.52	9.29	8.42	-0.87	8.48	-0.81	6.45	9.66	0.000511	2.73	1184.27	213.22	0.36
Centa	79	Q(50 anni)	1820.00	0.91	7.19	8.41	1.22	8.46	1.27	5.37	7.49	0.000678	2.40	758.39	199.97	0.39
Centa	79	Q(200 anni)	2630.00	0.91	8.50	8.41	-0.09	8.46	-0.04	5.96	8.83	0.000530	2.56	1046.12	213.59	0.36
Centa	79	Q(500 anni)	3160.00	0.91	9.29	8.41	-0.88	8.46	-0.83	6.31	9.65	0.000471	2.66	1215.33	213.59	0.35
Centa	78	Q(50 anni)	1820.00	1.15	6.89	8.37	1.48	8.45	1.56	5.99	7.45	0.001902	3.31	550.19	194.40	0.63
Centa	78	Q(200 anni)	2630.00	1.15	8.30	8.37	0.07	8.45	0.15	6.71	8.81	0.001060	3.17	830.70	199.96	0.50
Centa	78	Q(500 anni)	3160.00	1.15	9.14	8.37	-0.77	8.45	-0.69	7.08	9.63	0.000815	3.13	1033.59	213.66	0.45
Centa	77	Q(50 anni)	1820.00	1.43	6.98	8.30	1.32	8.45	1.47	5.63	7.36	0.001032	2.74	664.28	197.53	0.48
Centa	77	Q(200 anni)	2630.00	1.43	8.36	8.30	-0.06	8.45	0.09	6.22	8.75	0.000701	2.80	945.67	205.44	0.41
Centa	77	Q(500 anni)	3160.00	1.43	9.18	8.30	-0.88	8.45	-0.73	6.57	9.59	0.000581	2.84	1138.88	213.07	0.39
Centa	76	Q(50 anni)	1820.00	1.48	6.95	8.37	1.42	8.45	1.50	5.60	7.33	0.001027	2.74	665.04	197.64	0.48
Centa	76	Q(200 anni)	2630.00	1.48	8.34	8.37	0.03	8.45	0.11	6.19	8.73	0.000694	2.80	939.52	198.54	0.41
Centa	76	Q(500 anni)	3160.00	1.48	9.17	8.37	-0.80	8.45	-0.72	6.54	9.57	0.000576	2.83	1139.47	212.28	0.38
Centa	75	Q(50 anni)	1820.00	1.26	6.95	8.37	1.42	8.45	1.50	5.53	7.31	0.000961	2.69	677.00	197.43	0.46
Centa	75	Q(200 anni)	2630.00	1.26	8.33	8.37	0.04	8.45	0.12	6.12	8.72	0.000660	2.76	951.62	198.30	0.40
Centa	75	Q(500 anni)	3160.00	1.26	9.16	8.37	-0.79	8.45	-0.71	6.47	9.56	0.000551	2.80	1151.58	211.84	0.38
Centa	74	Q(50 anni)	1820.00	0.91	6.95	8.41	1.46	8.46	1.51	5.37	7.28	0.000840	2.57	709.53	199.07	0.43
Centa	74	Q(200 anni)	2630.00	0.91	8.34	8.41	0.07	8.46	0.12	5.96	8.70	0.000597	2.66	987.03	199.99	0.38
Centa	74	Q(500 anni)	3160.00	0.91	9.17	8.41	-0.76	8.46	-0.71	6.31	9.54	0.000506	2.72	1188.30	213.59	0.36
Centa	73	Q(50 anni)	1820.00	1.48	6.90	8.34	1.44	8.44	1.54	5.48	7.27	0.000965	2.70	673.58	196.04	0.47
Centa	73	Q(200 anni)	2630.00	1.48	8.30	8.34	0.04	8.44	0.14	6.07	8.69	0.000658	2.77	949.13	197.05	0.40
Centa	73	Q(500 anni)	3160.00	1.48	9.13	8.34	-0.79	8.44	-0.69	6.42	9.53	0.000550	2.81	1147.97	210.12	0.38
Centa	72	Q(50 anni)	1820.00	1.15	6.87	8.37	1.50	8.41	1.54	5.44	7.25	0.000974	2.72	668.06	193.02	0.47
Centa	72	Q(200 anni)	2630.00	1.15	8.28	8.37	0.09	8.41	0.13	6.05	8.67	0.000667	2.80	940.19	193.95	0.41
Centa	72	Q(500 anni)	3160.00	1.15	9.11	8.37	-0.74	8.41	-0.70	6.40	9.52	0.000557	2.84	1139.80	208.17	0.38
Centa	71	Q(50 anni)	1820.00	1.32	6.84	8.26	1.42	8.39	1.55	5.41	7.23	0.000985	2.76	659.41	188.21	0.47
Centa	71	Q(200 anni)	2630.00	1.32	8.24	8.26	0.02	8.39	0.15	6.02	8.66	0.000681	2.84	925.58	189.26	0.41
Centa	71	Q(500 anni)	3160.00	1.32	9.08	8.26	-0.82	8.39	-0.69	6.38	9.50	0.000572	2.89	1118.51	202.19	0.39
Centa	70	Q(50 anni)	1820.00	1.18	6.83	8.18	1.35	8.37	1.54	5.31	7.21	0.000932	2.73	667.56	185.13	0.46
Centa	70	Q(200 anni)	2630.00	1.18	8.24	8.18	-0.06	8.37	0.13	5.94	8.65	0.000661	2.82	937.18	191.77	0.40
Centa	70	Q(500 anni)	3160.00	1.18	9.08	8.18	-0.90	8.37	-0.71	6.30	9.50	0.000561	2.88	1120.85	199.40	0.38

HEC-RAS Plan: 02_PdB_2018 River: Centa Reach: Centa (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
Centa	69	Q(50 anni)	1820.00	0.53	6.80	8.16	1.36	8.36	1.56	5.27	7.20	0.000956	2.77	657.19	181.49	0.46
Centa	69	Q(200 anni)	2630.00	0.53	8.21	8.16	-0.05	8.36	0.15	5.90	8.63	0.000680	2.87	923.08	189.70	0.41
Centa	69	Q(500 anni)	3160.00	0.53	9.05	8.16	-0.89	8.36	-0.69	6.28	9.49	0.000577	2.93	1105.40	197.40	0.39
Centa	68	Q(50 anni)	1820.00	0.76	6.79	8.21	1.42	8.33	1.54	5.10	7.17	0.000861	2.73	666.76	174.74	0.45
Centa	68	Q(200 anni)	2630.00	0.76	8.19	8.21	0.02	8.33	0.14	5.74	8.61	0.000646	2.87	915.34	176.64	0.40
Centa	68	Q(500 anni)	3160.00	0.76	9.03	8.21	-0.82	8.33	-0.70	6.13	9.47	0.000556	2.94	1100.75	191.17	0.38
Centa	67	Q(50 anni)	1820.00	0.56	6.77	8.21	1.44	8.30	1.53	4.95	7.14	0.000777	2.68	677.85	168.11	0.43
Centa	67	Q(200 anni)	2630.00	0.56	8.17	8.21	0.04	8.30	0.13	5.62	8.60	0.000613	2.87	914.99	168.89	0.39
Centa	67	Q(500 anni)	3160.00	0.56	9.01	8.21	-0.80	8.30	-0.71	6.02	9.45	0.000537	2.95	1100.93	185.17	0.38
Centa	66	Q(50 anni)	1820.00	0.18	6.72	8.18	1.46	8.27	1.55	4.98	7.11	0.000856	2.79	652.08	163.89	0.45
Centa	66	Q(200 anni)	2630.00	0.18	8.13	8.18	0.05	8.27	0.14	5.66	8.58	0.000666	2.98	883.88	164.69	0.41
Centa	66	Q(500 anni)	3160.00	0.18	8.96	8.18	-0.78	8.27	-0.69	6.06	9.44	0.000583	3.06	1058.18	177.57	0.39
Centa	65.5	Bridge														
Centa	65	Q(50 anni)	1820.00	0.23	6.57	7.86	1.29	8.18	1.61	4.68	6.96	0.000784	2.79	652.25	150.47	0.43
Centa	65	Q(200 anni)	2630.00	0.23	7.98	7.86	-0.12	8.18	0.20	5.37	8.44	0.000646	3.02	889.64	164.42	0.40
Centa	65	Q(500 anni)	3160.00	0.23	8.82	7.86	-0.96	8.18	-0.64	5.79	9.31	0.000580	3.13	1055.10	173.08	0.39
Centa	64	Q(50 anni)	1820.00	0.12	6.55	7.78	1.23	8.20	1.65	4.53	6.94	0.000734	2.76	659.82	145.77	0.41
Centa	64	Q(200 anni)	2630.00	0.12	7.95	7.78	-0.17	8.20	0.25	5.24	8.42	0.000641	3.04	870.42	151.03	0.40
Centa	64	Q(500 anni)	3160.00	0.12	8.78	7.78	-1.00	8.20	-0.58	5.66	9.29	0.000588	3.18	1022.82	160.36	0.39
Centa	63	Q(50 anni)	1820.00	0.09	6.55	7.75	1.20	8.13	1.58	4.43	6.93	0.000696	2.74	664.67	142.70	0.40
Centa	63	Q(200 anni)	2630.00	0.09	7.94	7.75	-0.19	8.13	0.19	5.14	8.41	0.000620	3.04	873.27	148.49	0.39
Centa	63	Q(500 anni)	3160.00	0.09	8.77	7.75	-1.02	8.13	-0.64	5.57	9.28	0.000575	3.18	1022.62	157.75	0.39
Centa	62	Q(50 anni)	1820.00	0.20	6.48	7.72	1.24	8.12	1.64	4.59	6.91	0.000845	2.91	625.50	139.76	0.44
Centa	62	Q(200 anni)	2630.00	0.20	7.87	7.72	-0.15	8.12	0.25	5.31	8.39	0.000733	3.20	825.84	143.78	0.42
Centa	62	Q(500 anni)	3160.00	0.20	8.70	7.72	-0.98	8.12	-0.58	5.74	9.26	0.000671	3.34	970.88	153.00	0.41
Centa	61	Q(50 anni)	1820.00	0.65	6.47	7.66	1.19	8.09	1.62	4.39	6.88	0.000745	2.86	637.06	134.90	0.42
Centa	61	Q(200 anni)	2630.00	0.65	7.86	7.66	-0.20	8.09	0.23	5.13	8.37	0.000676	3.19	830.03	138.84	0.41
Centa	61	Q(500 anni)	3160.00	0.65	8.68	7.66	-1.02	8.09	-0.59	5.57	9.24	0.000630	3.35	970.52	148.08	0.41
Centa	60	Q(50 anni)	1820.00	0.55	6.42	7.62	1.20	8.03	1.61	4.38	6.86	0.000783	2.94	618.42	130.37	0.43
Centa	60	Q(200 anni)	2630.00	0.55	7.80	7.62	-0.18	8.03	0.23	5.14	8.35	0.000716	3.29	804.21	134.49	0.42
Centa	60	Q(500 anni)	3160.00	0.55	8.62	7.62	-1.00	8.03	-0.59	5.59	9.22	0.000669	3.45	940.90	143.76	0.42
Centa	59	Q(50 anni)	1820.00	0.52	6.35	7.59	1.24	7.98	1.63	4.43	6.84	0.000871	3.08	590.13	125.84	0.45
Centa	59	Q(200 anni)	2630.00	0.52	7.72	7.59	-0.13	7.98	0.26	5.20	8.33	0.000793	3.44	770.03	131.06	0.45
Centa	59	Q(500 anni)	3160.00	0.52	8.54	7.59	-0.95	7.98	-0.56	5.67	9.20	0.000738	3.61	902.37	140.33	0.44
Centa	58	Q(50 anni)	1820.00	0.41	6.28	7.54	1.27	7.95	1.68	4.47	6.81	0.000971	3.23	563.18	121.35	0.48
Centa	58	Q(200 anni)	2630.00	0.41	7.63	7.54	-0.09	7.95	0.32	5.27	8.30	0.000887	3.61	731.79	124.59	0.47
Centa	58	Q(500 anni)	3160.00	0.41	8.45	7.54	-0.91	7.95	-0.50	5.74	9.17	0.000826	3.79	857.38	133.85	0.46
Centa	57	Q(50 anni)	1820.00	0.05	6.20	7.48	1.28	7.88	1.68	4.48	6.77	0.001074	3.37	539.83	116.63	0.50
Centa	57	Q(200 anni)	2630.00	0.05	7.55	7.48	-0.07	7.88	0.33	5.29	8.27	0.000985	3.77	703.29	121.91	0.49

HEC-RAS Plan: 02_PdB_2018 River: Centa Reach: Centa (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
Centa	57	Q(500 anni)	3160.00	0.05	8.36	7.48	-0.88	7.88	-0.48	5.78	9.14	0.000914	3.95	826.32	131.19	0.48
Centa	56	Q(50 anni)	1820.00	0.01	6.13	7.43	1.30	7.83	1.70	4.44	6.75	0.001136	3.47	524.81	111.80	0.51
Centa	56	Q(200 anni)	2630.00	0.01	7.46	7.43	-0.03	7.83	0.37	5.27	8.23	0.001070	3.91	675.93	114.41	0.51
Centa	56	Q(500 anni)	3160.00	0.01	8.26	7.43	-0.83	7.83	-0.43	5.77	9.11	0.001003	4.10	790.68	123.77	0.50
Centa	55	Q(50 anni)	1820.00	0.01	6.09	7.42	1.33	7.77	1.68	4.34	6.72	0.001112	3.50	519.96	107.82	0.51
Centa	55	Q(200 anni)	2630.00	0.01	7.40	7.42	0.02	7.77	0.37	5.20	8.20	0.001078	3.98	660.43	107.85	0.51
Centa	55	Q(500 anni)	3160.00	0.01	8.20	7.42	-0.78	7.77	-0.43	5.71	9.08	0.001017	4.18	780.13	122.54	0.51
Centa	54	Q(50 anni)	1820.00	0.01	5.91	7.40	1.49	7.74	1.83	4.43	6.67	0.001437	3.86	471.81	100.31	0.57
Centa	54	Q(200 anni)	2630.00	0.01	7.17	7.40	0.23	7.74	0.57	5.33	8.15	0.001406	4.40	597.61	100.33	0.58
Centa	54	Q(500 anni)	3160.00	0.01	7.99	7.40	-0.59	7.74	-0.25	5.86	9.04	0.001290	4.56	725.34	121.19	0.56
Centa	53	Q(50 anni)	1820.00	-0.89	5.57	7.34	1.77	5.75	0.18	4.42	6.60	0.001929	4.60	424.71	91.06	0.65
Centa	53	Q(200 anni)	2630.00	-0.89	6.66	7.34	0.68	5.75	-0.91	5.42	8.06	0.002128	5.38	526.29	93.21	0.70
Centa	53	Q(500 anni)	3160.00	-0.89	7.29	7.34	0.05	5.75	-1.54	6.05	8.93	0.002205	5.83	584.97	93.21	0.72
Centa	52	Q(50 anni)	1820.00	-0.76	5.72	7.32	1.60	7.62	1.90	4.08	6.48	0.001302	3.87	470.33	94.05	0.55
Centa	52	Q(200 anni)	2630.00	-0.76	6.86	7.32	0.46	7.62	0.76	5.02	7.92	0.001409	4.55	578.02	94.06	0.59
Centa	52	Q(500 anni)	3160.00	-0.76	7.54	7.32	-0.22	7.62	0.08	5.58	8.76	0.001456	4.91	651.24	99.50	0.60
Centa	51	Q(50 anni)	1820.00	-0.67	5.69	7.10	1.41	7.57	1.88	4.05	6.44	0.001295	3.83	475.42	95.65	0.55
Centa	51	Q(200 anni)	2630.00	-0.67	6.84	7.10	0.26	7.57	0.73	4.98	7.87	0.001392	4.49	585.40	95.66	0.58
Centa	51	Q(500 anni)	3160.00	-0.67	7.54	7.10	-0.44	7.57	0.03	5.53	8.71	0.001412	4.82	667.88	103.65	0.59
Centa	50	Q(50 anni)	1820.00	-1.24	5.68	6.73	1.05	7.51	1.83	3.92	6.40	0.001240	3.74	485.98	95.45	0.53
Centa	50	Q(200 anni)	2630.00	-1.24	6.85	6.73	-0.12	7.51	0.66	4.86	7.82	0.001335	4.38	610.90	105.10	0.56
Centa	50	Q(500 anni)	3160.00	-1.24	7.55	6.73	-0.82	7.51	-0.04	5.41	8.65	0.001330	4.68	705.44	114.52	0.57
Centa	49	Q(50 anni)	1820.00	-0.97	5.57	6.70	1.13	7.40	1.83	4.05	6.36	0.001420	3.93	462.96	95.39	0.57
Centa	49	Q(200 anni)	2630.00	-0.97	6.68	6.70	0.02	7.40	0.72	4.98	7.77	0.001532	4.62	569.28	95.40	0.60
Centa	49	Q(500 anni)	3160.00	-0.97	7.37	6.70	-0.67	7.40	0.03	5.53	8.60	0.001533	4.93	655.16	104.93	0.61
Centa	48	Q(50 anni)	1820.00	-1.09	5.55	6.66	1.11	7.36	1.81	3.96	6.32	0.001344	3.87	469.77	95.65	0.56
Centa	48	Q(200 anni)	2630.00	-1.09	6.68	6.66	-0.02	7.36	0.68	4.89	7.72	0.001443	4.53	592.11	105.41	0.59
Centa	48	Q(500 anni)	3160.00	-1.09	7.38	6.66	-0.72	7.36	-0.02	5.45	8.55	0.001430	4.83	684.10	114.86	0.60
Centa	47	Q(50 anni)	1820.00	-1.00	5.52	6.54	1.02	7.31	1.79	3.92	6.28	0.001340	3.86	471.54	95.88	0.56
Centa	47	Q(200 anni)	2630.00	-1.00	6.65	6.54	-0.11	7.31	0.66	4.85	7.68	0.001436	4.51	593.98	105.45	0.59
Centa	47	Q(500 anni)	3160.00	-1.00	7.34	6.54	-0.80	7.31	-0.03	5.40	8.51	0.001423	4.81	686.15	114.88	0.59
Centa	46	Q(50 anni)	1820.00	-1.45	5.48	6.50	1.02	7.22	1.74	3.89	6.24	0.001337	3.86	471.38	95.91	0.56
Centa	46	Q(200 anni)	2630.00	-1.45	6.61	6.50	-0.11	7.22	0.61	4.82	7.64	0.001433	4.51	594.82	106.48	0.59
Centa	46	Q(500 anni)	3160.00	-1.45	7.30	6.50	-0.80	7.22	-0.08	5.37	8.47	0.001431	4.83	682.06	113.88	0.60
Centa	45	Q(50 anni)	1820.00	-1.59	5.41	6.30	0.89	7.20	1.79	3.91	6.20	0.001442	3.94	461.48	95.50	0.57
Centa	45	Q(200 anni)	2630.00	-1.59	6.52	6.30	-0.22	7.20	0.68	4.84	7.60	0.001542	4.61	581.03	105.16	0.60
Centa	45	Q(500 anni)	3160.00	-1.59	7.16	6.30	-0.86	7.20	0.04	5.39	8.42	0.001584	4.98	648.47	105.17	0.62
Centa	44	Q(50 anni)	1820.00	-1.42	5.35	6.29	0.94	7.17	1.82	3.90	6.17	0.001484	4.02	452.45	95.01	0.59
Centa	44	Q(200 anni)	2630.00	-1.42	6.44	6.29	-0.15	7.17	0.73	4.85	7.56	0.001591	4.70	569.13	104.30	0.62

HEC-RAS Plan: 02_PdB_2018 River: Centa Reach: Centa (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
Centa	44	Q(500 anni)	3160.00	-1.42	7.07	6.29	-0.78	7.17	0.10	5.41	8.38	0.001635	5.09	634.96	104.30	0.64
Centa	43	Q(50 anni)	1820.00	-1.39	5.22	6.30	1.08	6.71	1.49	4.13	6.15	0.001911	4.27	426.58	99.69	0.66
Centa	43	Q(200 anni)	2630.00	-1.39	6.36	6.30	-0.06	6.71	0.35	5.07	7.54	0.001880	4.84	552.34	110.37	0.67
Centa	43	Q(500 anni)	3160.00	-1.39	7.07	6.30	-0.77	6.71	-0.36	5.64	8.36	0.001750	5.07	650.39	120.02	0.66
Centa	42	Q(50 anni)	1820.00	-1.29	5.31	6.29	0.98	6.67	1.36	3.74	6.05	0.001329	3.82	476.60	100.55	0.56
Centa	42	Q(200 anni)	2630.00	-1.29	6.45	6.29	-0.16	6.67	0.22	4.67	7.44	0.001382	4.42	605.47	110.73	0.58
Centa	42	Q(500 anni)	3160.00	-1.29	7.16	6.29	-0.87	6.67	-0.49	5.22	8.27	0.001346	4.70	698.49	118.17	0.59
Centa	41	Q(50 anni)	1820.00	-0.53	5.14	6.29	1.15	6.72	1.58	3.90	6.00	0.001896	4.11	443.02	99.82	0.62
Centa	41	Q(200 anni)	2630.00	-0.53	6.23	6.29	0.06	6.72	0.49	4.84	7.39	0.001961	4.76	552.64	101.05	0.65
Centa	41	Q(500 anni)	3160.00	-0.53	6.96	6.29	-0.67	6.72	-0.24	5.39	8.21	0.001842	4.99	654.19	116.70	0.64
Centa	40	Q(50 anni)	1820.00	-0.46	5.06	6.28	1.22	6.95	1.89	3.92	5.96	0.001801	4.21	431.96	99.28	0.64
Centa	40	Q(200 anni)	2630.00	-0.46	6.14	6.28	0.15	6.95	0.82	4.85	7.34	0.001861	4.87	539.68	100.86	0.67
Centa	40	Q(500 anni)	3160.00	-0.46	6.84	6.28	-0.56	6.95	0.11	5.41	8.17	0.001779	5.13	628.92	110.86	0.67
Centa	39	Q(50 anni)	1820.00	-0.43	5.07	6.28	1.21	7.04	1.97	3.78	5.94	0.001715	4.15	438.50	94.44	0.61
Centa	39	Q(200 anni)	2630.00	-0.43	6.12	6.28	0.16	7.04	0.92	4.72	7.34	0.001864	4.89	537.73	94.45	0.65
Centa	39	Q(500 anni)	3160.00	-0.43	6.77	6.28	-0.49	7.04	0.27	5.27	8.16	0.001872	5.23	617.06	104.42	0.66
Centa	38	Q(50 anni)	1820.00	-0.83	4.89	7.75	2.86	8.20	3.31	3.87	5.88	0.001967	4.39	414.69	94.79	0.67
Centa	38	Q(200 anni)	2630.00	-0.83	5.91	7.75	1.84	8.20	2.29	4.80	7.26	0.002101	5.15	511.15	94.79	0.71
Centa	38	Q(500 anni)	3160.00	-0.83	6.48	7.75	1.27	8.20	1.72	5.36	8.07	0.002258	5.59	565.41	96.86	0.74
Centa	37.5	Bridge														
Centa	37	Q(50 anni)	1820.00	-0.69	4.85	8.03	3.18	8.05	3.20	3.84	5.84	0.002008	4.42	412.07	94.72	0.68
Centa	37	Q(200 anni)	2630.00	-0.69	5.86	8.03	2.17	8.05	2.19	4.76	7.23	0.002144	5.18	507.97	94.72	0.71
Centa	37	Q(500 anni)	3160.00	-0.69	6.38	8.03	1.65	8.05	1.67	5.34	8.02	0.002304	5.67	557.24	94.72	0.75
Centa	36	Q(50 anni)	1820.00	-0.48	4.82	10.63	5.81	6.09	1.27	3.76	5.78	0.001955	4.34	419.71	95.28	0.66
Centa	36	Q(200 anni)	2630.00	-0.48	5.84	10.63	4.79	6.09	0.25	4.69	7.16	0.002095	5.09	516.76	95.28	0.70
Centa	36	Q(500 anni)	3160.00	-0.48	6.37	10.63	4.26	6.09	-0.28	5.24	7.94	0.002238	5.57	571.85	105.61	0.73
Centa	35	Q(50 anni)	1820.00	-0.96	4.80	5.57	0.77	6.20	1.40	3.62	5.72	0.001807	4.23	429.85	95.16	0.64
Centa	35	Q(200 anni)	2630.00	-0.96	5.86	5.57	-0.29	6.20	0.34	4.56	7.08	0.001881	4.90	551.24	107.31	0.66
Centa	35	Q(500 anni)	3160.00	-0.96	6.44	5.57	-0.87	6.20	-0.24	5.11	7.84	0.001929	5.29	627.93	117.51	0.68
Centa	34	Q(50 anni)	1820.00	-0.94	4.71	5.54	0.83	5.90	1.19	3.63	5.67	0.001936	4.33	420.66	95.14	0.66
Centa	34	Q(200 anni)	2630.00	-0.94	5.72	5.54	-0.18	5.90	0.18	4.56	7.02	0.002062	5.05	530.89	104.40	0.69
Centa	34	Q(500 anni)	3160.00	-0.94	6.29	5.54	-0.75	5.90	-0.39	5.12	7.78	0.002096	5.44	607.70	114.42	0.71
Centa	33	Q(50 anni)	1820.00	-1.16	4.69	5.49	0.80	6.01	1.32	3.52	5.61	0.001824	4.23	430.20	95.18	0.64
Centa	33	Q(200 anni)	2630.00	-1.16	5.70	5.49	-0.21	6.01	0.31	4.44	6.96	0.001987	4.98	535.97	102.32	0.68
Centa	33	Q(500 anni)	3160.00	-1.16	6.26	5.49	-0.77	6.01	-0.25	5.00	7.72	0.002046	5.38	610.48	112.21	0.70
Centa	32	Q(50 anni)	1820.00	-1.39	4.59	5.52	0.93	5.76	1.17	3.54	5.55	0.001996	4.35	418.18	95.31	0.66
Centa	32	Q(200 anni)	2630.00	-1.39	5.57	5.52	-0.05	5.76	0.19	4.46	6.90	0.002169	5.12	521.64	102.94	0.71
Centa	32	Q(500 anni)	3160.00	-1.39	6.09	5.52	-0.57	5.76	-0.33	5.02	7.65	0.002263	5.56	588.34	110.74	0.73

HEC-RAS Plan: 02_PdB_2018 River: Centa Reach: Centa (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
Centa	31	Q(50 anni)	1820.00	-1.57	4.56	5.58	1.02	5.78	1.22	3.47	5.50	0.001962	4.30	422.87	96.06	0.65
Centa	31	Q(200 anni)	2630.00	-1.57	5.51	5.58	0.07	5.78	0.27	4.40	6.84	0.002180	5.11	514.63	96.07	0.70
Centa	31	Q(500 anni)	3160.00	-1.57	6.07	5.58	-0.49	5.78	-0.29	4.95	7.58	0.002208	5.48	600.80	114.26	0.72
Centa	30	Q(50 anni)	1820.00	-1.33	4.26	5.55	1.29	5.72	1.46	3.40	5.41	0.002599	4.76	382.03	94.92	0.76
Centa	30	Q(200 anni)	2630.00	-1.33	5.16	5.55	0.39	5.72	0.56	4.56	6.75	0.002905	5.58	471.08	98.90	0.82
Centa	30	Q(500 anni)	3160.00	-1.33	5.73	5.55	-0.18	5.72	-0.01	5.10	7.49	0.002846	5.91	555.76	118.33	0.82
Centa	29	Q(50 anni)	1820.00	-1.23	4.30	5.54	1.24	5.01	0.71	3.43	5.32	0.002258	4.47	407.47	100.92	0.71
Centa	29	Q(200 anni)	2630.00	-1.23	5.27	5.54	0.27	5.01	-0.26	4.36	6.61	0.002296	5.15	524.59	113.38	0.73
Centa	29	Q(500 anni)	3160.00	-1.23	5.85	5.54	-0.31	5.01	-0.84	5.01	7.35	0.002265	5.48	607.56	124.04	0.74
Centa	28	Q(50 anni)	1820.00	-1.20	4.34	5.51	1.17	4.94	0.60	3.25	5.23	0.001826	4.17	436.81	102.40	0.64
Centa	28	Q(200 anni)	2630.00	-1.20	5.33	5.51	0.18	4.94	-0.39	4.14	6.52	0.001903	4.84	556.88	112.78	0.67
Centa	28	Q(500 anni)	3160.00	-1.20	5.90	5.51	-0.39	4.94	-0.96	4.67	7.26	0.001925	5.20	635.72	121.77	0.69
Centa	27	Q(50 anni)	1820.00	-1.36	4.32	5.45	1.14	4.79	0.47	3.20	5.18	0.001820	4.11	442.64	103.92	0.64
Centa	27	Q(200 anni)	2630.00	-1.36	5.31	5.45	0.14	4.79	-0.52	4.08	6.46	0.001881	4.77	565.89	114.09	0.66
Centa	27	Q(500 anni)	3160.00	-1.36	5.88	5.45	-0.43	4.79	-1.09	4.61	7.20	0.001897	5.12	645.74	123.01	0.68
Centa	26	Q(50 anni)	1820.00	-0.95	4.15	5.50	1.35	4.77	0.62	3.22	5.12	0.002170	4.35	418.39	105.35	0.70
Centa	26	Q(200 anni)	2630.00	-0.95	5.12	5.50	0.38	4.77	-0.35	4.18	6.39	0.002192	5.01	537.00	116.43	0.72
Centa	26	Q(500 anni)	3160.00	-0.95	5.70	5.50	-0.20	4.77	-0.93	4.77	7.13	0.002175	5.35	616.42	125.48	0.73
Centa	25	Q(50 anni)	1820.00	-0.81	4.06	5.43	1.37	5.17	1.11	3.26	5.05	0.002283	4.41	412.40	105.89	0.71
Centa	25	Q(200 anni)	2630.00	-0.81	4.94	5.43	0.49	5.17	0.23	4.14	6.32	0.002472	5.20	506.17	106.87	0.76
Centa	25	Q(500 anni)	3160.00	-0.81	5.64	5.43	-0.21	5.17	-0.47	4.67	7.07	0.002252	5.33	620.24	133.88	0.74
Centa	24	Q(50 anni)	1820.00	-0.68	4.11	5.38	1.27	5.95	1.84	3.05	4.96	0.001933	4.10	444.08	112.79	0.66
Centa	24	Q(200 anni)	2630.00	-0.68	5.04	5.38	0.34	5.95	0.91	3.92	6.20	0.002044	4.79	549.35	114.13	0.70
Centa	24	Q(500 anni)	3160.00	-0.68	5.69	5.38	-0.31	5.95	0.26	4.49	6.98	0.001948	5.04	635.05	122.60	0.69
Centa	23	Q(50 anni)	1820.00	-0.67	4.01	5.34	1.33	5.94	1.93	3.11	4.91	0.002181	4.20	433.59	116.30	0.69
Centa	23	Q(200 anni)	2630.00	-0.67	4.97	5.34	0.37	5.94	0.97	4.02	6.15	0.002176	4.81	546.50	118.15	0.71
Centa	23	Q(500 anni)	3160.00	-0.67	5.64	5.34	-0.30	5.94	0.30	4.52	6.93	0.002025	5.03	636.52	126.81	0.70
Centa	22	Q(50 anni)	1820.00	-0.58	3.94	5.23	1.29	5.93	1.99	3.11	4.85	0.002300	4.24	429.27	118.72	0.71
Centa	22	Q(200 anni)	2630.00	-0.58	4.92	5.23	0.31	5.93	1.01	4.01	6.10	0.002226	4.81	547.08	121.25	0.72
Centa	22	Q(500 anni)	3160.00	-0.58	5.60	5.23	-0.37	5.93	0.33	4.50	6.87	0.002038	4.99	640.99	130.47	0.70
Centa	21	Q(50 anni)	1820.00	-0.84	3.99	5.16	1.17	5.87	1.88	2.89	4.76	0.001801	3.88	469.12	122.92	0.63
Centa	21	Q(200 anni)	2630.00	-0.84	4.99	5.16	0.17	5.87	0.88	3.77	5.99	0.001783	4.43	593.66	125.46	0.65
Centa	21	Q(500 anni)	3160.00	-0.84	5.68	5.16	-0.52	5.87	0.19	4.25	6.76	0.001651	4.62	694.02	134.76	0.64
Centa	20	Q(50 anni)	1820.00	-0.84	4.01	5.66	1.65	5.86	1.85	2.81	4.71	0.001629	3.73	488.52	126.48	0.61
Centa	20	Q(200 anni)	2630.00	-0.84	5.02	5.66	0.64	5.86	0.84	3.67	5.94	0.001613	4.25	618.18	129.10	0.62
Centa	20	Q(500 anni)	3160.00	-0.84	5.71	5.66	-0.05	5.86	0.15	4.14	6.72	0.001517	4.46	714.94	134.36	0.61
Centa	19	Q(50 anni)	1820.00	-0.67	4.06	5.86	1.80	5.72	1.66	2.66	4.67	0.001331	3.47	524.84	131.13	0.55
Centa	19	Q(200 anni)	2630.00	-0.67	5.09	5.86	0.77	5.72	0.63	3.49	5.89	0.001331	3.98	661.03	133.18	0.57
Centa	19	Q(500 anni)	3160.00	-0.67	5.80	5.86	0.06	5.72	-0.08	3.95	6.66	0.001247	4.12	787.73	152.02	0.56

HEC-RAS Plan: 02_PdB_2018 River: Centa Reach: Centa (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
Centa	18	Q(50 anni)	1820.00	-0.47	3.90	5.81	1.91	5.69	1.79	2.87	4.62	0.001761	3.75	484.74	133.25	0.63
Centa	18	Q(200 anni)	2630.00	-0.47	4.95	5.81	0.86	5.69	0.74	3.67	5.85	0.001634	4.21	625.05	135.80	0.63
Centa	18	Q(500 anni)	3160.00	-0.47	5.69	5.81	0.12	5.69	0.00	4.13	6.62	0.001425	4.29	760.70	157.32	0.60
Centa	17	Q(50 anni)	1820.00	-0.35	3.88	5.57	1.69	5.57	1.69	2.76	4.57	0.001620	3.68	494.44	131.46	0.61
Centa	17	Q(200 anni)	2630.00	-0.35	4.92	5.57	0.65	5.57	0.65	3.55	5.80	0.001540	4.16	632.41	133.61	0.61
Centa	17	Q(500 anni)	3160.00	-0.35	5.71	5.57	-0.14	5.57	-0.14	4.01	6.56	0.001278	4.15	818.09	176.79	0.57
Centa	16	Q(50 anni)	1820.00	-0.33	3.74	6.50	2.76	6.50	2.76	2.73	4.52	0.001822	3.90	466.26	122.66	0.64
Centa	16	Q(200 anni)	2630.00	-0.33	4.72	6.50	1.77	6.50	1.77	3.53	5.75	0.001801	4.48	587.14	122.67	0.65
Centa	16	Q(500 anni)	3160.00	-0.33	5.33	6.50	1.17	6.50	1.17	4.00	6.50	0.001765	4.77	661.96	122.68	0.66
Centa	15.5	Bridge														
Centa	15	Q(50 anni)	1820.00	-0.28	2.29	6.50	4.21	6.50	4.21	2.77	4.36	0.008915	6.38	285.48	120.09	1.32
Centa	15	Q(200 anni)	2630.00	-0.28	2.95	6.50	3.55	6.50	3.55	3.56	5.59	0.008310	7.19	365.68	120.97	1.32
Centa	15	Q(500 anni)	3160.00	-0.28	3.35	6.50	3.15	6.50	3.15	4.03	6.32	0.008029	7.64	413.56	121.08	1.32
Centa	14	Q(50 anni)	1820.00	-0.67	2.21	6.55	4.34	6.60	4.39	2.72	4.30	0.009283	6.40	284.58	122.89	1.34
Centa	14	Q(200 anni)	2630.00	-0.67	2.84	6.55	3.71	6.60	3.76	3.50	5.53	0.008843	7.27	361.91	123.57	1.36
Centa	14	Q(500 anni)	3160.00	-0.67	3.22	6.55	3.33	6.60	3.38	3.98	6.26	0.008587	7.73	408.82	123.98	1.36
Centa	13	Q(50 anni)	1820.00	-0.61	2.03	4.77	2.74	4.95	2.92	2.60	4.14	0.011863	6.43	283.09	146.75	1.48
Centa	13	Q(200 anni)	2630.00	-0.61	2.49	4.77	2.28	4.95	2.46	3.30	5.36	0.012292	7.51	350.35	147.32	1.55
Centa	13	Q(500 anni)	3160.00	-0.61	2.77	4.77	2.00	4.95	2.18	3.72	6.08	0.012233	8.05	392.42	147.68	1.58
Centa	12	Q(50 anni)	1820.00	-0.63	3.20	4.69	1.49	4.71	1.51	2.50	3.96	0.002227	3.86	471.20	149.90	0.70
Centa	12	Q(200 anni)	2630.00	-0.63	3.86	4.69	0.83	4.71	0.85	3.21	4.94	0.002497	4.60	571.21	151.73	0.76
Centa	12	Q(500 anni)	3160.00	-0.63	2.95	4.69	1.74	4.71	1.76	3.63	5.65	0.008732	7.27	434.46	149.22	1.36
Centa	11	Q(50 anni)	1820.00	-0.94	3.18	4.54	1.36	4.61	1.43	2.40	3.89	0.002031	3.73	488.20	152.74	0.67
Centa	11	Q(200 anni)	2630.00	-0.94	3.85	4.54	0.69	4.61	0.76	3.10	4.86	0.002289	4.45	591.34	155.00	0.73
Centa	11	Q(500 anni)	3160.00	-0.94	4.26	4.54	0.28	4.61	0.35	3.51	5.45	0.002373	4.82	655.81	156.39	0.75
Centa	10	Q(50 anni)	1820.00	-0.88	3.16	4.57	1.41	4.50	1.34	2.32	3.83	0.001899	3.61	504.67	156.77	0.64
Centa	10	Q(200 anni)	2630.00	-0.88	3.84	4.57	0.73	4.50	0.66	3.00	4.78	0.002133	4.30	611.88	159.10	0.70
Centa	10	Q(500 anni)	3160.00	-0.88	4.26	4.57	0.31	4.50	0.24	3.41	5.37	0.002204	4.65	679.31	160.55	0.72
Centa	9	Q(50 anni)	1820.00	-1.19	2.92	4.51	1.59	4.42	1.50	2.43	3.75	0.002736	4.04	450.59	156.78	0.76
Centa	9	Q(200 anni)	2630.00	-1.19	3.46	4.51	1.05	4.42	0.96	3.11	4.69	0.003264	4.91	536.11	158.80	0.85
Centa	9	Q(500 anni)	3160.00	-1.19	3.76	4.51	0.75	4.42	0.66	3.52	5.25	0.003599	5.42	583.15	160.01	0.91
Centa	8	Q(50 anni)	1820.00	-0.90	2.85	4.39	1.54	4.60	1.75	2.36	3.67	0.002727	4.00	455.56	160.26	0.76
Centa	8	Q(200 anni)	2630.00	-0.90	3.39	4.39	1.00	4.60	1.21	3.05	4.58	0.003307	4.84	543.65	165.67	0.85
Centa	8	Q(500 anni)	3160.00	-0.90	3.70	4.39	0.69	4.60	0.90	3.44	5.14	0.003578	5.32	594.50	166.74	0.90
Centa	7	Q(50 anni)	1820.00	-1.02	2.82	4.32	1.50	4.58	1.76	2.27	3.57	0.002540	3.84	473.79	167.81	0.73
Centa	7	Q(200 anni)	2630.00	-1.02	3.36	4.32	0.96	4.58	1.22	2.92	4.46	0.003002	4.66	564.66	169.52	0.81
Centa	7	Q(500 anni)	3160.00	-1.02	3.67	4.32	0.65	4.58	0.91	3.31	5.00	0.003246	5.12	617.49	170.51	0.86
Centa	6	Q(50 anni)	1820.00	-0.90	2.77	4.18	1.41	4.09	1.32	2.18	3.48	0.002408	3.74	486.99	172.31	0.71
Centa	6	Q(200 anni)	2630.00	-0.90	3.31	4.18	0.87	4.09	0.78	2.82	4.36	0.002833	4.53	581.16	174.07	0.79

HEC-RAS Plan: 02_PdB_2018 River: Centa Reach: Centa (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
Centa	6	Q(500 anni)	3160.00	-0.90	3.63	4.18	0.55	4.09	0.46	3.20	4.88	0.003056	4.97	635.98	175.08	0.83
Centa	5	Q(50 anni)	1820.00	-1.11	2.74	4.05	1.31	4.10	1.36	2.09	3.41	0.002221	3.61	503.54	176.73	0.68
Centa	5	Q(200 anni)	2630.00	-1.11	3.29	4.05	0.76	4.10	0.81	2.72	4.27	0.002611	4.38	601.00	178.53	0.76
Centa	5	Q(500 anni)	3160.00	-1.11	3.61	4.05	0.44	4.10	0.49	3.09	4.78	0.002807	4.80	658.39	179.57	0.80
Centa	4	Q(50 anni)	1820.00	-1.32	2.71	3.95	1.24	4.19	1.48	2.01	3.34	0.002109	3.52	517.77	181.27	0.66
Centa	4	Q(200 anni)	2630.00	-1.32	3.26	3.95	0.69	4.19	0.93	2.63	4.18	0.002478	4.26	618.05	183.03	0.74
Centa	4	Q(500 anni)	3160.00	-1.32	3.58	3.95	0.37	4.19	0.61	3.00	4.69	0.002654	4.66	677.58	183.94	0.78
Centa	3	Q(50 anni)	1820.00	-1.26	2.58	3.81	1.23	4.19	1.61	2.06	3.27	0.002551	3.69	493.34	186.60	0.72
Centa	3	Q(200 anni)	2630.00	-1.26	3.08	3.81	0.73	4.19	1.11	2.66	4.10	0.003031	4.48	586.66	188.27	0.81
Centa	3	Q(500 anni)	3160.00	-1.26	3.35	3.81	0.46	4.19	0.84	3.02	4.60	0.003325	4.95	638.48	189.20	0.86
Centa	2	Q(50 anni)	1820.00	-1.52	2.48	3.67	1.19	3.78	1.30	2.07	3.20	0.002927	3.77	482.24	195.99	0.77
Centa	2	Q(200 anni)	2630.00	-1.52	2.96	3.67	0.71	3.78	0.82	2.65	4.02	0.003381	4.55	578.16	197.55	0.85
Centa	2	Q(500 anni)	3160.00	-1.52	3.23	3.67	0.44	3.78	0.55	3.00	4.51	0.003655	5.00	631.86	198.42	0.89
Centa	1	Q(50 anni)	1820.00	-1.41	2.08	3.55	1.47	2.51	0.43	2.08	3.08	0.005308	4.44	410.37	204.85	1.00
Centa	1	Q(200 anni)	2630.00	-1.41	2.66	3.55	0.89	2.51	-0.15	2.66	3.90	0.004742	4.95	536.80	225.83	0.98
Centa	1	Q(500 anni)	3160.00	-1.41	3.00	3.55	0.55	2.51	-0.49	3.00	4.39	0.004540	5.24	612.47	226.36	0.98