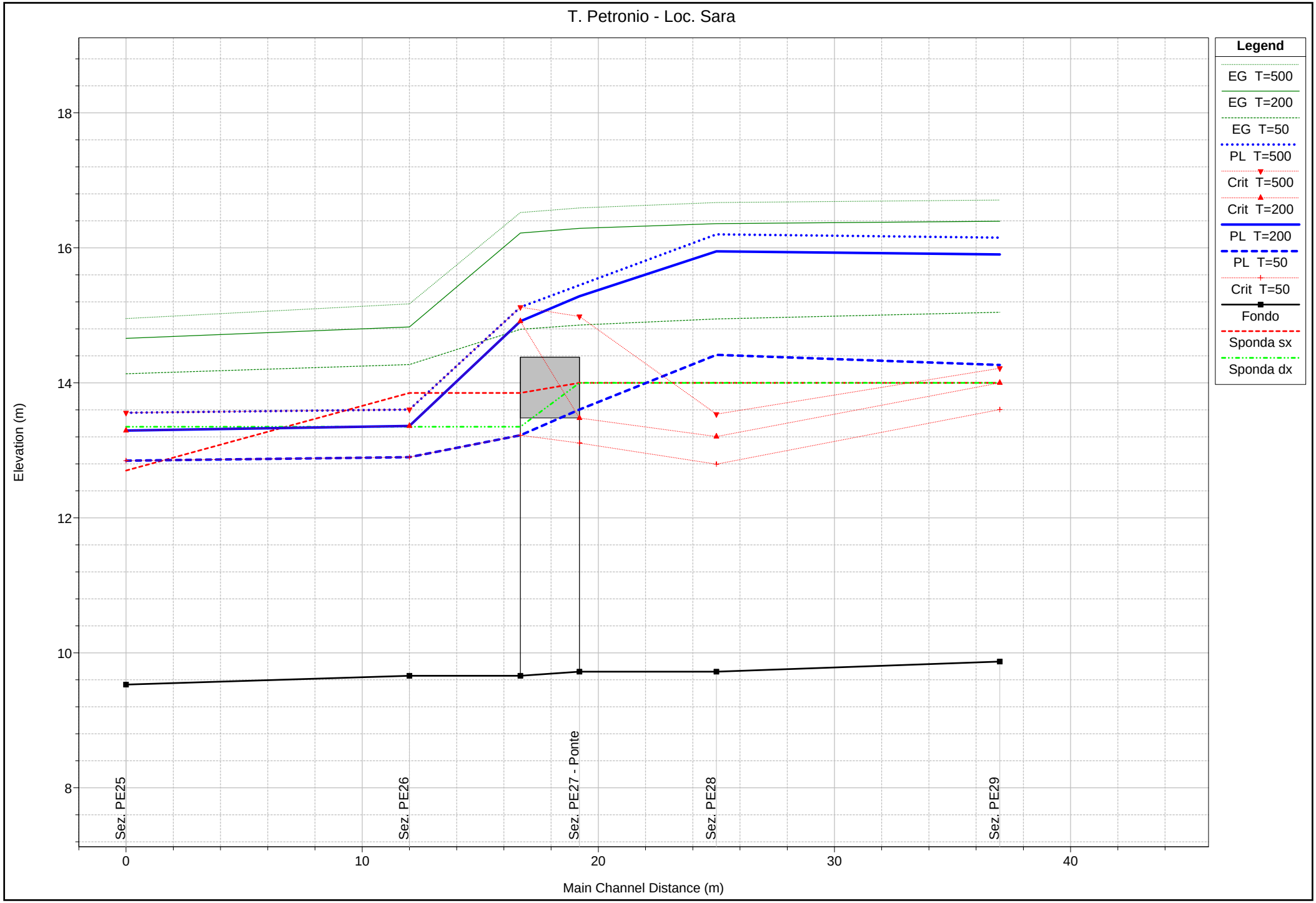
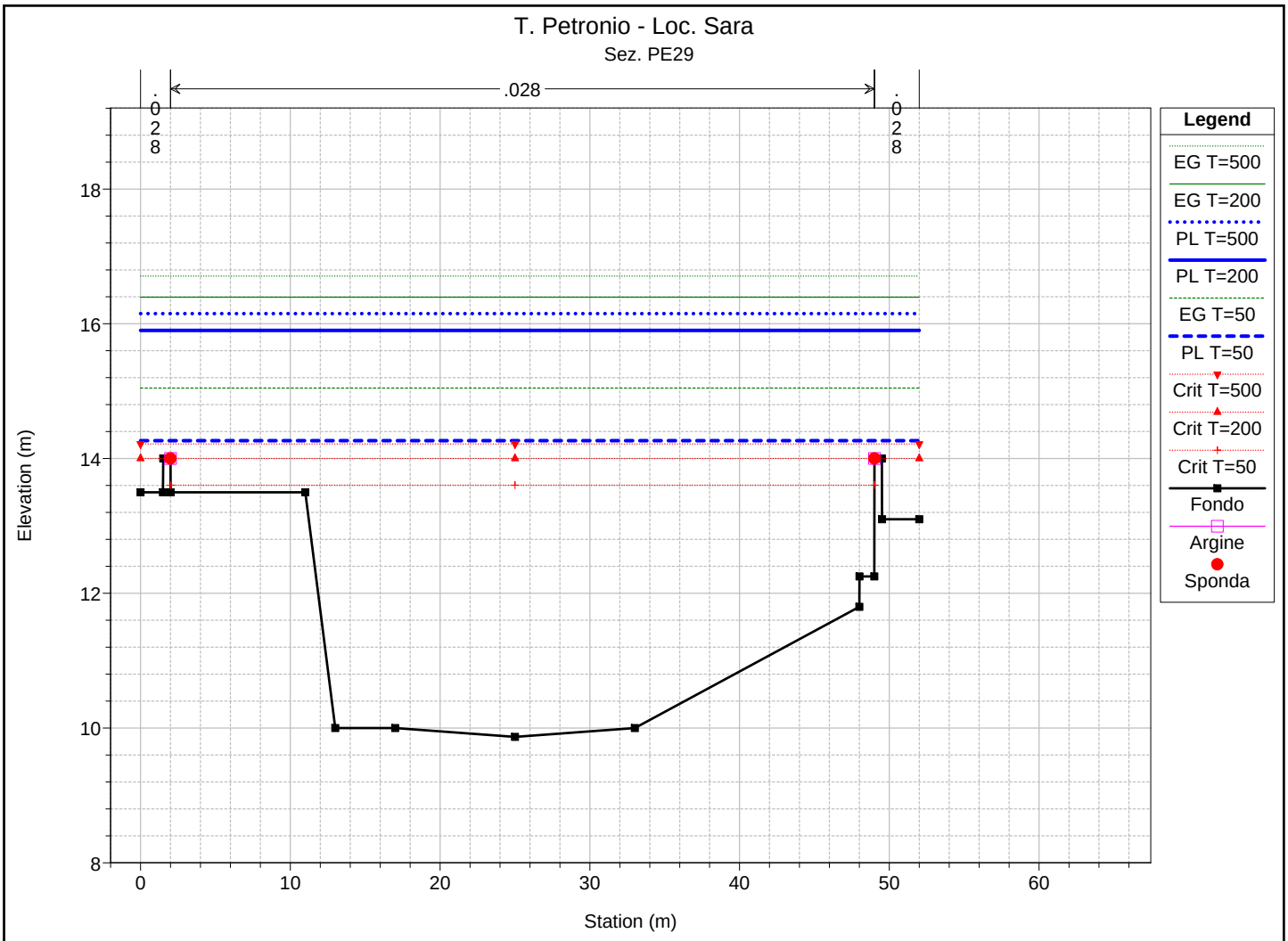
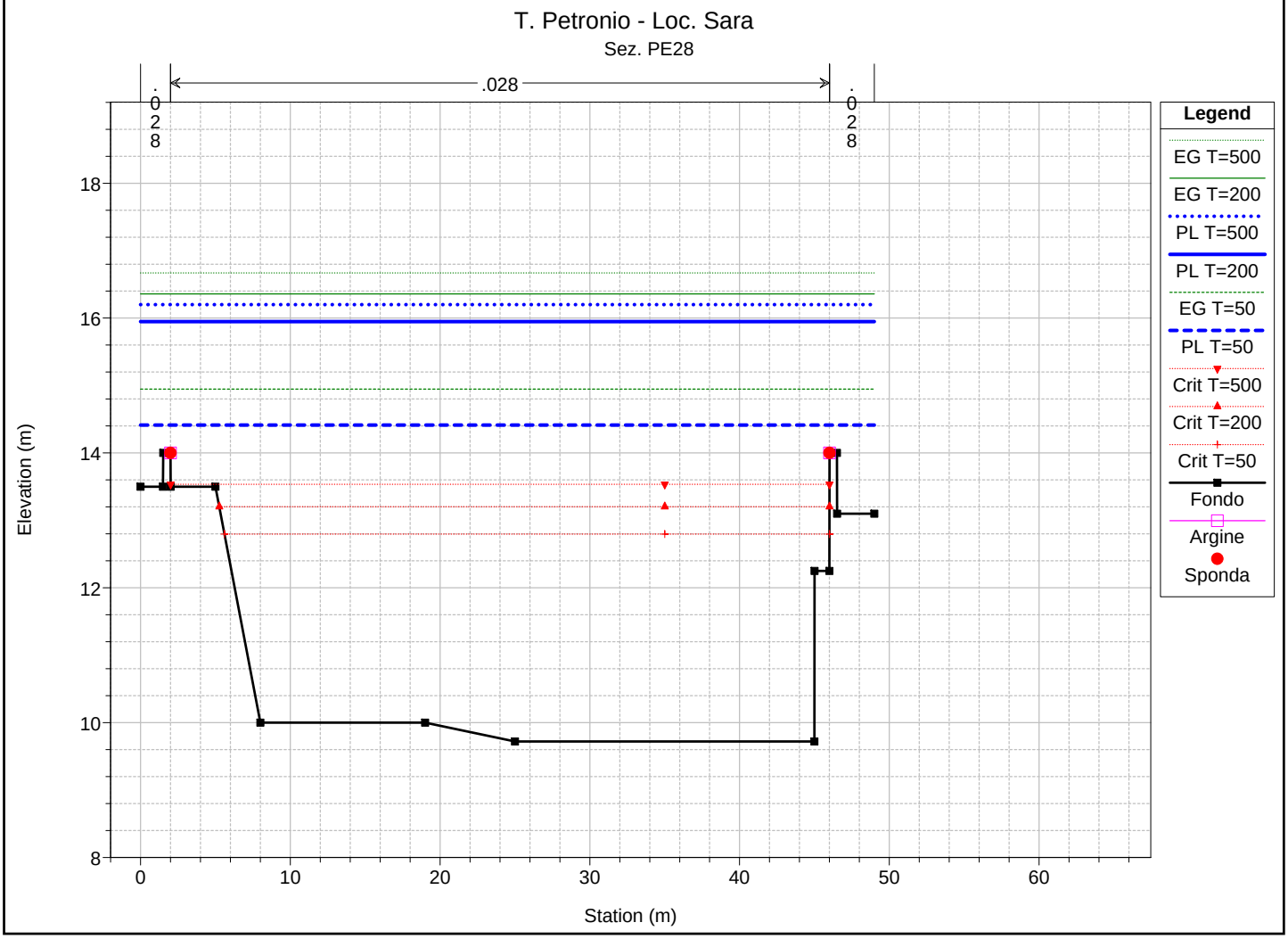
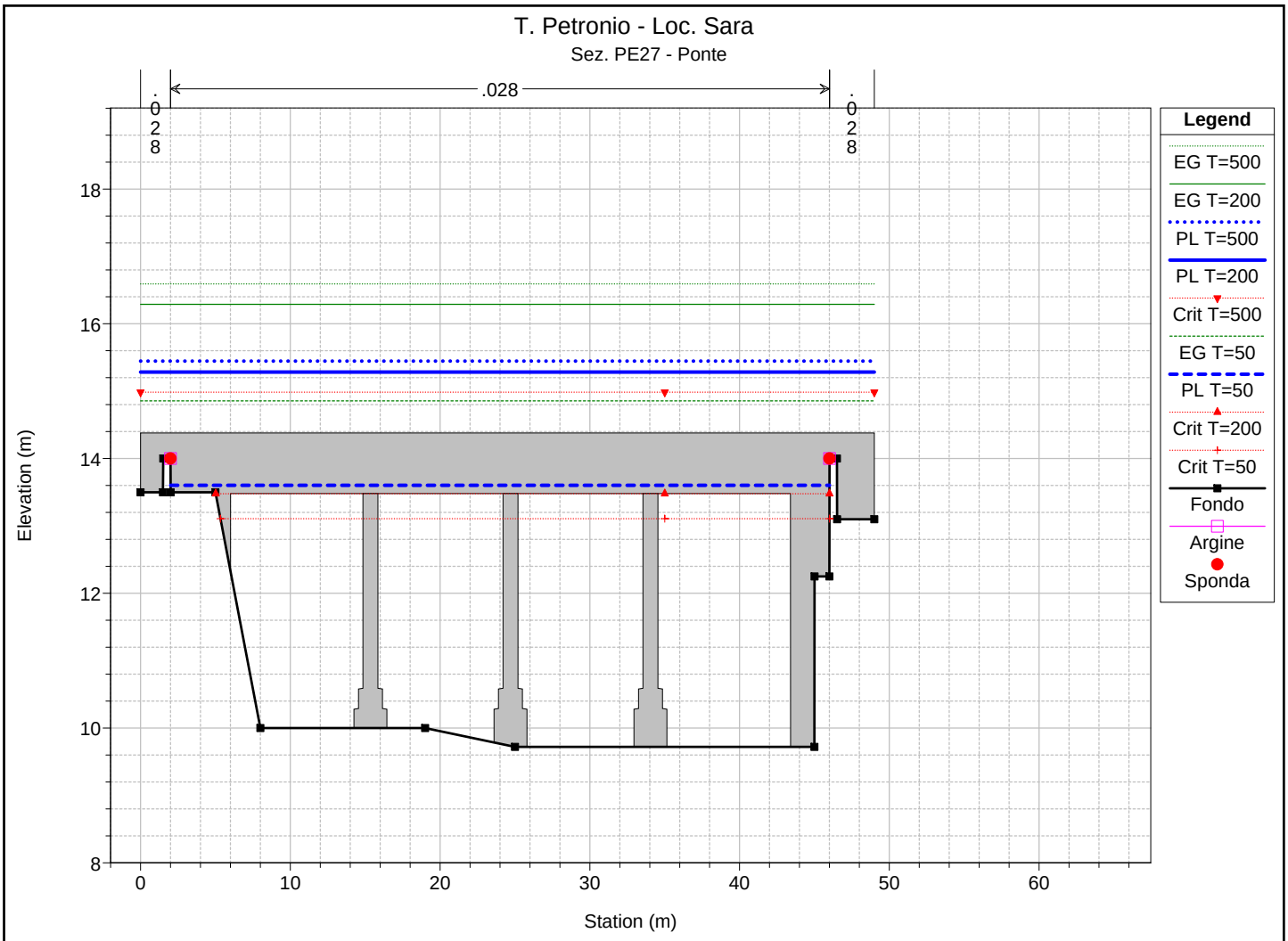


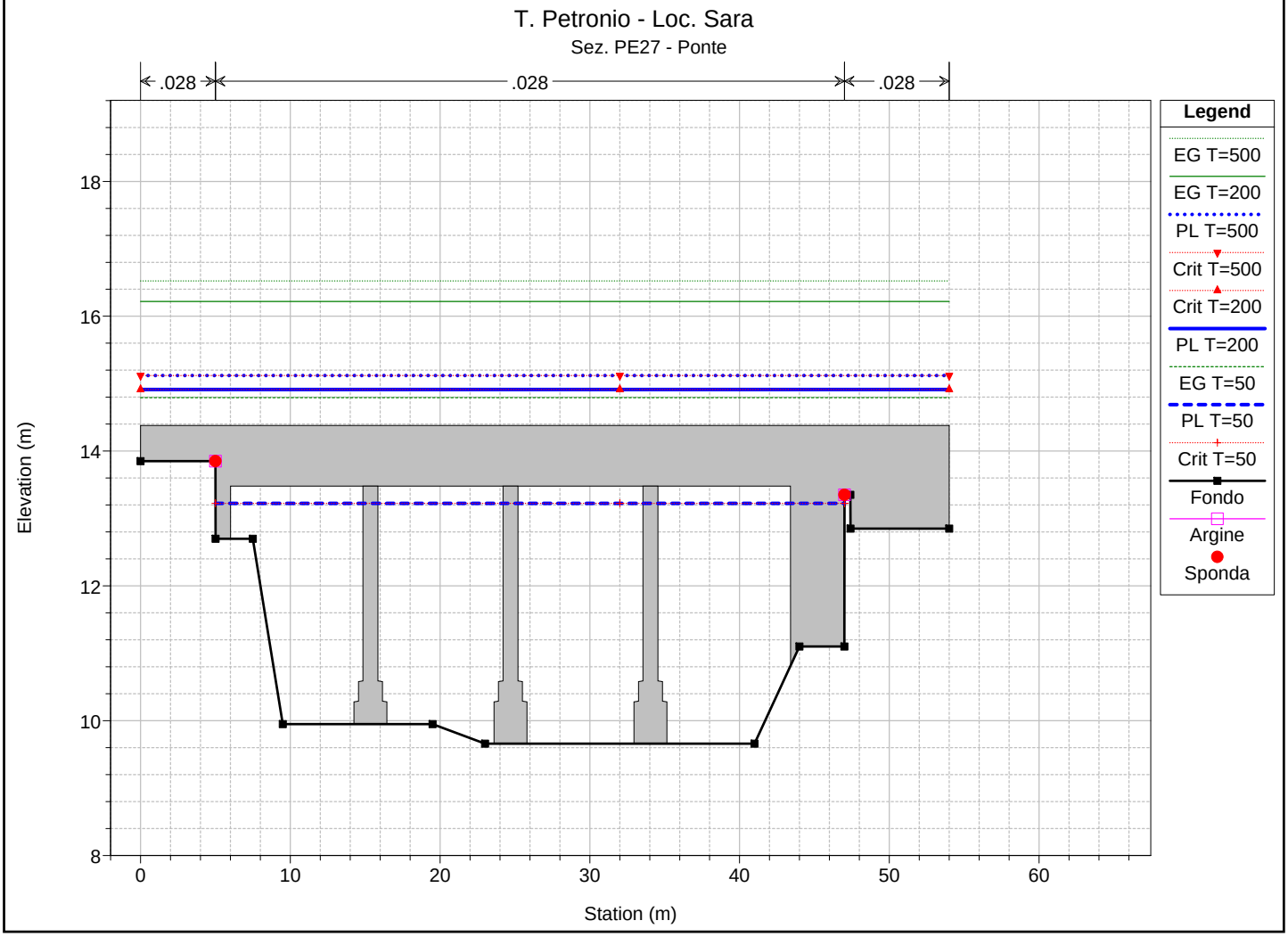
1 cm Horiz. = 2 m 1 cm Vert. = 0.7 m



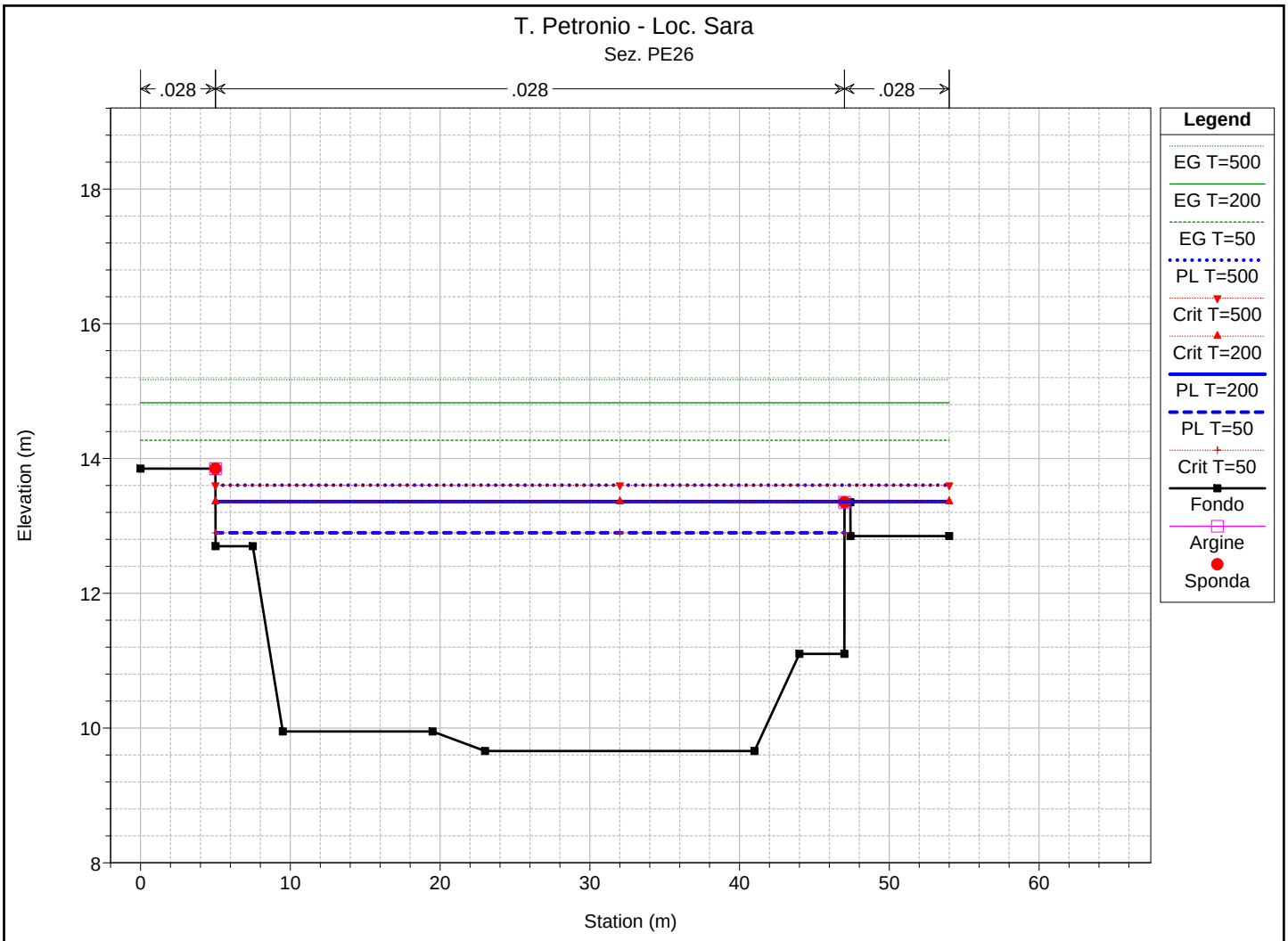


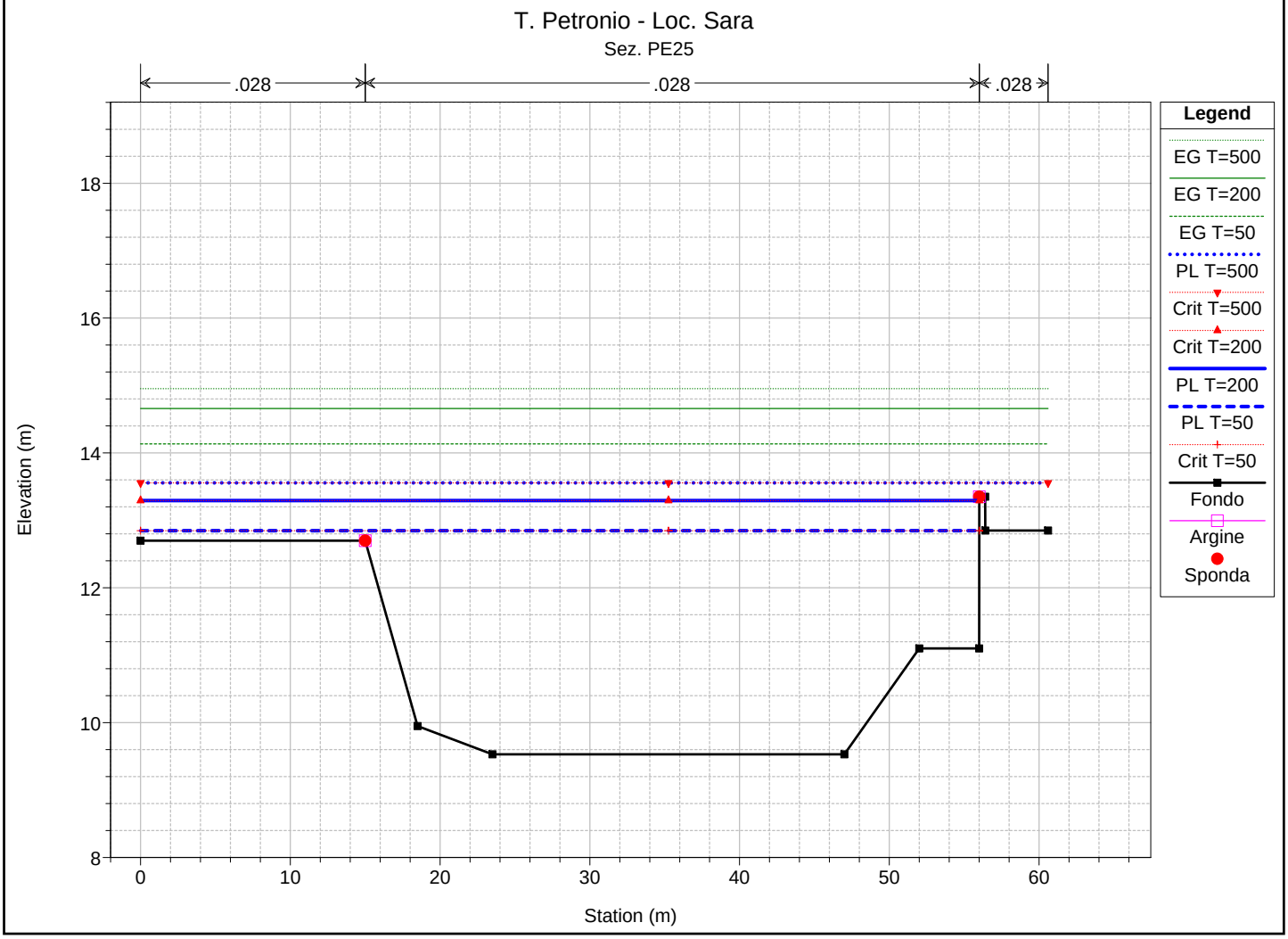
1 cm Horiz. = 4.5 m 1 cm Vert. = 1 m





1 cm Horiz. = 4.5 m 1 cm Vert. = 1 m





1 cm Horiz. = 4.5 m 1 cm Vert. = 1 m

HEC-RAS Plan: Pp4 River: T. Petronio Reach: Tratto 4

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	LOB Elev	L. Freeboard	ROB Elev	R. Freeboard	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Tratto 4	29	T=50	598.00	9.87	14.27	14.00	-0.27	14.00	-0.27	13.60	15.05	0.002914	3.93	155.10	52.00	0.70
Tratto 4	29	T=200	730.00	9.87	15.90	14.00	-1.90	14.00	-1.90	14.00	16.39	0.001073	3.14	240.19	52.00	0.46
Tratto 4	29	T=500	817.00	9.87	16.15	14.00	-2.15	14.00	-2.15	14.22	16.71	0.001134	3.34	253.17	52.00	0.47
Tratto 4	28	T=50	598.00	9.72	14.41	14.00	-0.41	14.00	-0.41	12.80	14.95	0.001483	3.25	187.76	49.00	0.51
Tratto 4	28	T=200	730.00	9.72	15.95	14.00	-1.95	14.00	-1.95	13.20	16.36	0.000759	2.86	262.90	49.00	0.38
Tratto 4	28	T=500	817.00	9.72	16.20	14.00	-2.20	14.00	-2.20	13.54	16.67	0.000821	3.07	275.23	49.00	0.40
Tratto 4	27		Bridge													
Tratto 4	26	T=50	598.00	9.66	12.90	13.85	0.95	13.35	0.45	12.90	14.27	0.006163	5.19	115.20	42.00	1.00
Tratto 4	26	T=200	730.00	9.66	13.36	13.85	0.49	13.35	-0.01	13.36	14.83	0.005531	5.38	138.01	49.00	0.96
Tratto 4	26	T=500	817.00	9.66	13.60	13.85	0.25	13.35	-0.25	13.60	15.17	0.005412	5.57	149.93	49.00	0.96
Tratto 4	25	T=50	598.00	9.53	12.85	12.70	-0.15	13.35	0.50	12.85	14.13	0.005298	5.03	120.67	56.01	0.95
Tratto 4	25	T=200	730.00	9.53	13.29	12.70	-0.59	13.35	0.06	13.29	14.66	0.004777	5.23	145.69	56.01	0.91
Tratto 4	25	T=500	817.00	9.53	13.56	12.70	-0.86	13.35	-0.21	13.56	14.95	0.004484	5.32	163.50	60.60	0.90

Plan: Pp4 T. Petronio Tratto 4 RS: 27 Profile: T=50

E.G. US. (m)	14.95	Element	Inside BR US	Inside BR DS
W.S. US. (m)	14.41	E.G. Elev (m)	14.86	14.79
Q Total (m3/s)	598.00	W.S. Elev (m)	13.60	13.22
Q Bridge (m3/s)	598.00	Crit W.S. (m)	13.11	13.22
Q Weir (m3/s)		Max Chl Dpth (m)	3.88	3.56
Weir Sta Lft (m)		Vel Total (m/s)	4.96	5.55
Weir Sta Rgt (m)		Flow Area (m2)	120.63	107.74
Weir Submerg		Froude # Chl	0.80	0.94
Weir Max Depth (m)		Specif Force (m3)	531.27	516.07
Min El Weir Flow (m)	14.38	Hydr Depth (m)		3.13
Min El Prs (m)	13.48	W.P. Total (m)	96.60	59.68
Delta EG (m)	0.68	Conv. Total (m3/s)	4995.8	5704.5
Delta WS (m)	1.52	Top Width (m)		34.39
BR Open Area (m2)	116.58	Frctn Loss (m)	0.03	0.04
BR Open Vel (m/s)	5.55	C & E Loss (m)	0.03	0.06
Coef of Q		Shear Total (N/m2)	175.46	194.54
Br Sel Method	Energy only	Power Total (N/m s)	0.00	0.00

Plan: Pp4 T. Petronio Tratto 4 RS: 27 Profile: T=200

E.G. US. (m)	16.36	Element	Inside BR US	Inside BR DS
W.S. US. (m)	15.95	E.G. Elev (m)	16.29	16.22
Q Total (m3/s)	730.00	W.S. Elev (m)	15.28	14.91
Q Bridge (m3/s)	565.87	Crit W.S. (m)	13.48	14.91
Q Weir (m3/s)		Max Chl Dpth (m)	5.56	5.25
Weir Sta Lft (m)		Vel Total (m/s)	4.43	5.02
Weir Sta Rgt (m)		Flow Area (m2)	164.88	145.34
Weir Submerg		Froude # Chl	0.60	0.71
Weir Max Depth (m)		Specif Force (m3)	781.93	757.31
Min El Weir Flow (m)	14.38	Hydr Depth (m)	3.36	2.69
Min El Prs (m)	13.48	W.P. Total (m)	147.40	151.19
Delta EG (m)	1.53	Conv. Total (m3/s)	6375.4	5123.6
Delta WS (m)	2.59	Top Width (m)	49.00	54.00
BR Open Area (m2)	116.58	Frctn Loss (m)	0.04	0.04
BR Open Vel (m/s)	4.85	C & E Loss (m)	0.03	0.02
Coef of Q		Shear Total (N/m2)	143.82	191.36
Br Sel Method	Energy only	Power Total (N/m s)	0.00	0.00

Plan: Pp4 T. Petronio Tratto 4 RS: 27 Profile: T=500

E.G. US. (m)	16.67	Element	Inside BR US	Inside BR DS
W.S. US. (m)	16.20	E.G. Elev (m)	16.59	16.52
Q Total (m3/s)	817.00	W.S. Elev (m)	15.45	15.12
Q Bridge (m3/s)	591.24	Crit W.S. (m)	14.98	15.12
Q Weir (m3/s)		Max Chl Dpth (m)	5.73	5.46
Weir Sta Lft (m)		Vel Total (m/s)	4.73	5.22
Weir Sta Rgt (m)		Flow Area (m2)	172.90	156.63
Weir Submerg		Froude # Chl	0.63	0.72
Weir Max Depth (m)		Specif Force (m3)	873.64	848.95
Min El Weir Flow (m)	14.38	Hydr Depth (m)	3.53	2.90
Min El Prs (m)	13.48	W.P. Total (m)	147.73	151.61
Delta EG (m)	1.50	Conv. Total (m3/s)	6884.6	5758.7
Delta WS (m)	2.60	Top Width (m)	49.00	54.00
BR Open Area (m2)	116.58	Frctn Loss (m)	0.04	0.04
BR Open Vel (m/s)	5.07	C & E Loss (m)	0.03	0.02
Coef of Q		Shear Total (N/m2)	161.63	203.91
Br Sel Method	Energy only	Power Total (N/m s)	0.00	0.00