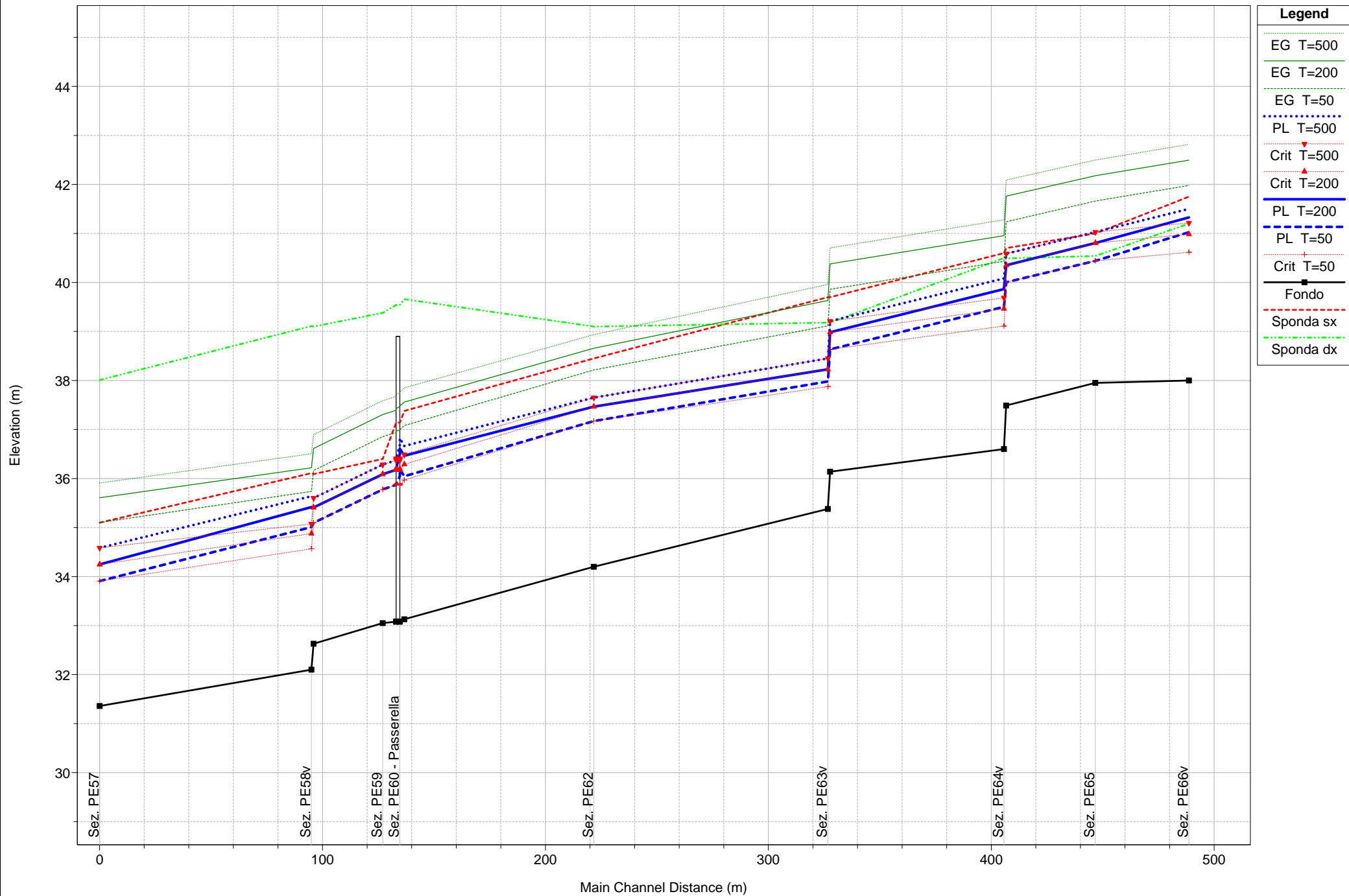


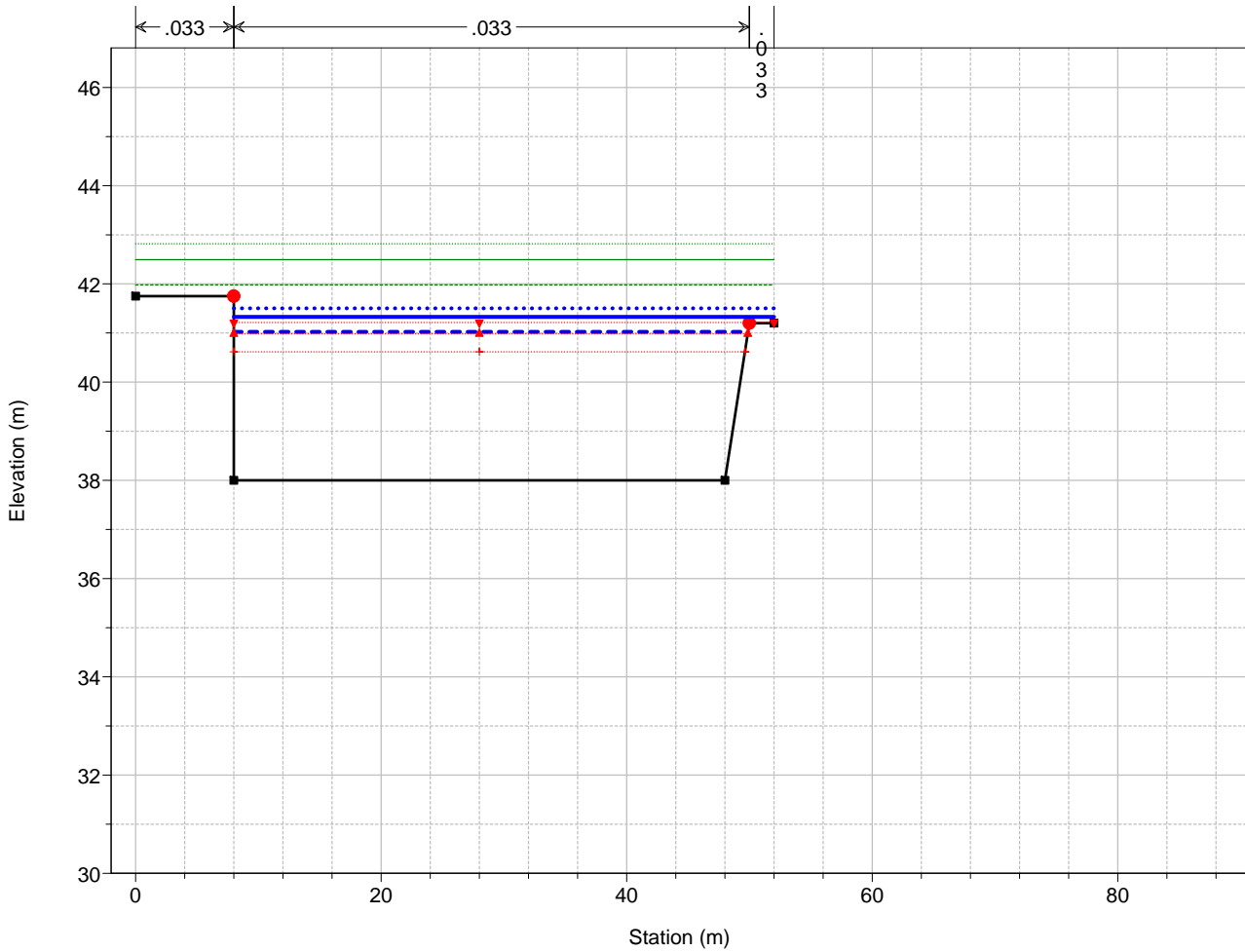
T. Petronio - Loc. Pian Tangoni



1 cm Horiz. = 22 m 1 cm Vert. = 1 m

T. Petronio - Loc. Pian Tangoni

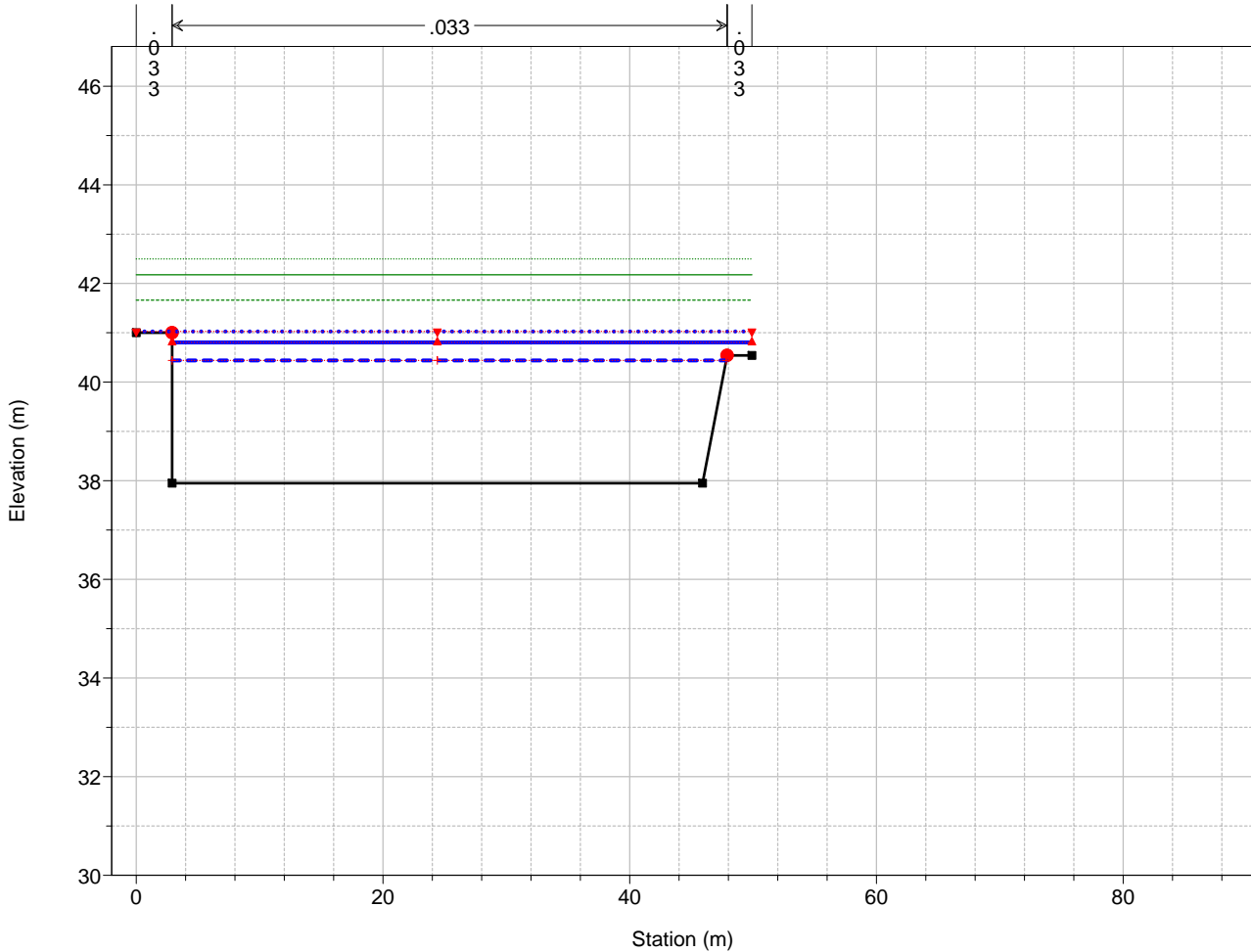
Sez. PE66v



Legend	
EG T=500	Green solid line
EG T=200	Green dashed line
EG T=50	Green dotted line
PL T=500	Blue dotted line
PL T=200	Blue dashed line
PL T=50	Blue solid line
Crit T=500	Red inverted triangle
Crit T=200	Red triangle
Crit T=50	Red plus sign
Fondo	Black solid line with square marker
Sponda	Red dot

T. Petronio - Loc. Pian Tangoni

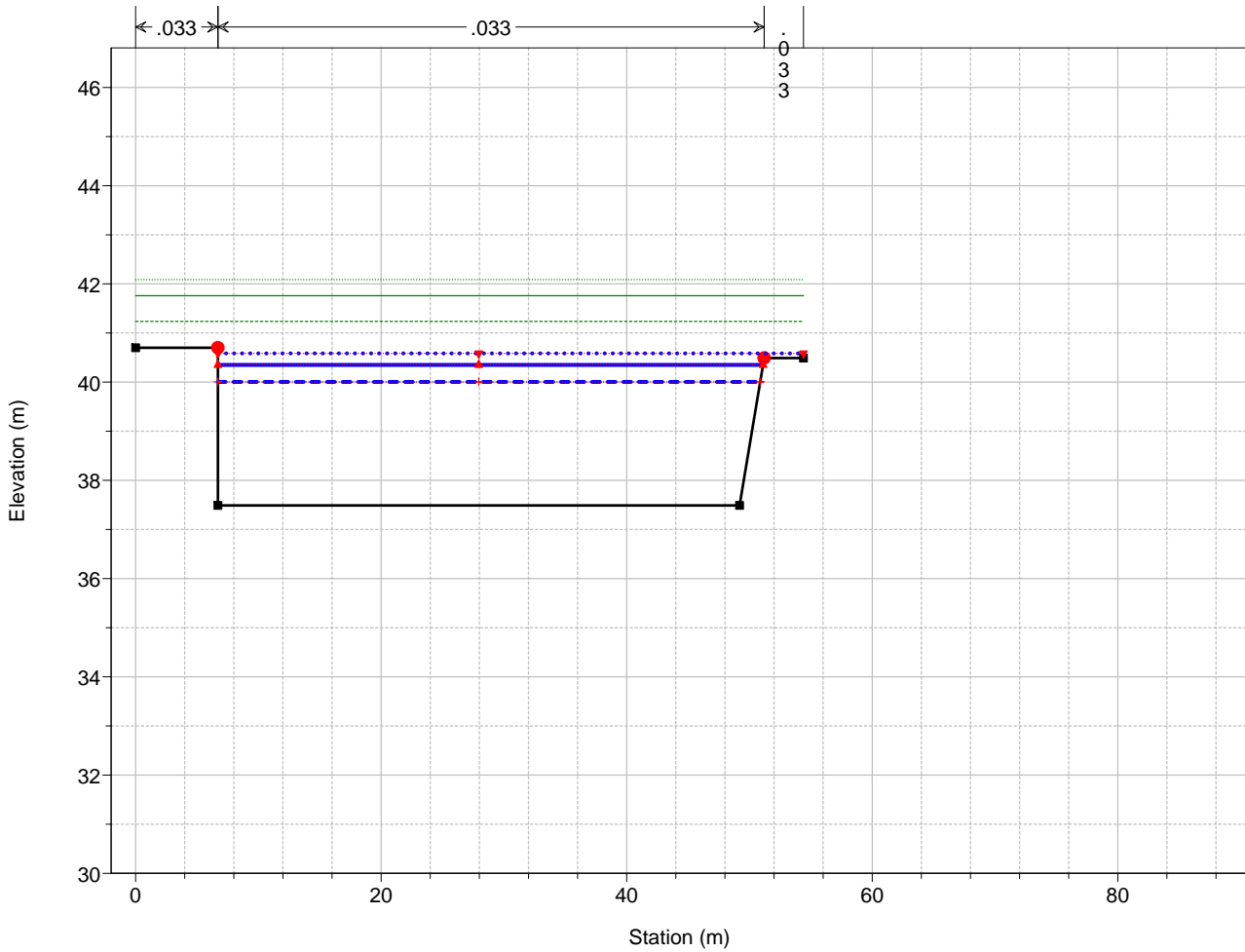
Sez. PE65



Legend	
EG T=500	Green solid line
EG T=200	Green dashed line
EG T=50	Green dotted line
PL T=500	Blue dotted line
PL T=200	Blue dashed line
PL T=50	Blue solid line
Crit T=500	Red inverted triangle
Crit T=200	Red triangle
Crit T=50	Red plus sign
Fondo	Black solid line with square marker
Sponda	Red dot

T. Petronio - Loc. Pian Tangoni

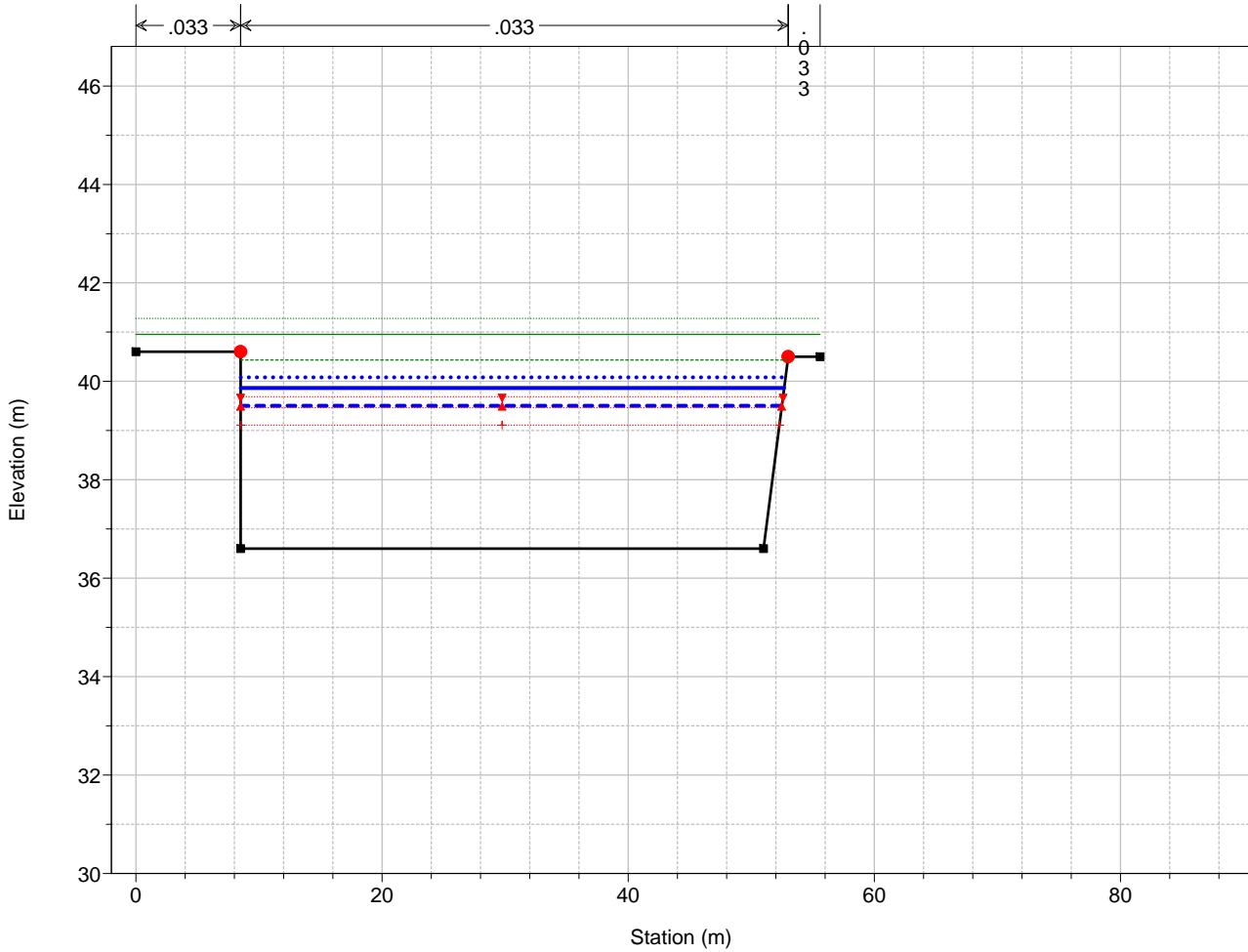
Sez. PE64m



Legend	
EG T=500	(Green dotted line)
EG T=200	(Green solid line)
EG T=50	(Green dashed line)
PL T=500	(Blue dotted line)
Crit T=500	(Red downward triangle)
Crit T=200	(Red upward triangle)
PL T=200	(Blue solid line)
PL T=50	(Blue dashed line)
Crit T=50	(Red upward triangle)
Fondo	(Black solid line with square markers)
Sponda	(Red solid line with circle markers)

T. Petronio - Loc. Pian Tangoni

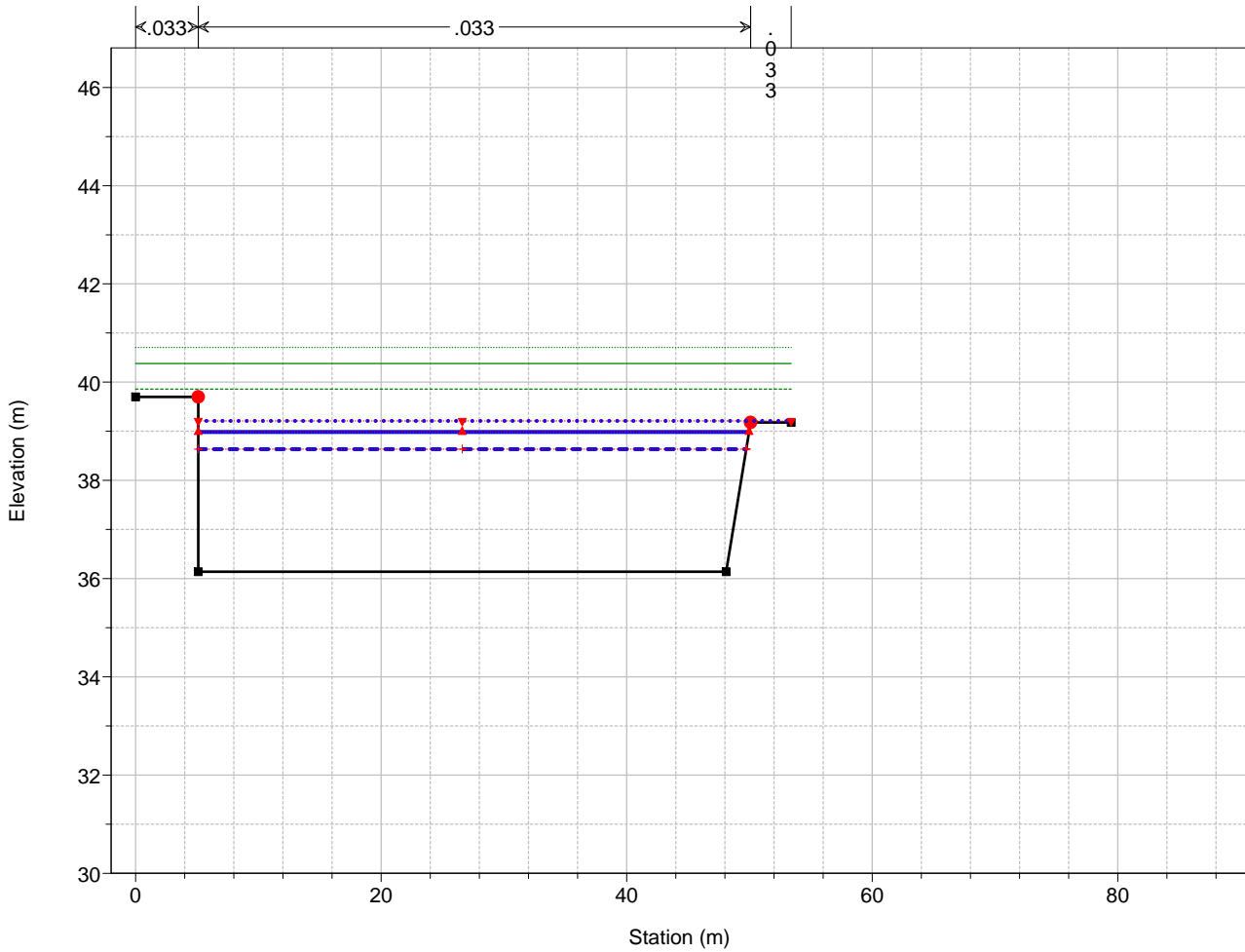
Sez. PE64v



Legend	
EG T=500	(Green dotted line)
EG T=200	(Green solid line)
EG T=50	(Green dashed line)
PL T=500	(Blue dotted line)
PL T=200	(Blue solid line)
Crit T=500	(Red downward triangle)
PL T=50	(Blue dashed line)
Crit T=200	(Red upward triangle)
Crit T=50	(Red upward triangle)
Fondo	(Black solid line with square markers)
Sponda	(Red solid line with circle markers)

T. Petronio - Loc. Pian Tangoni

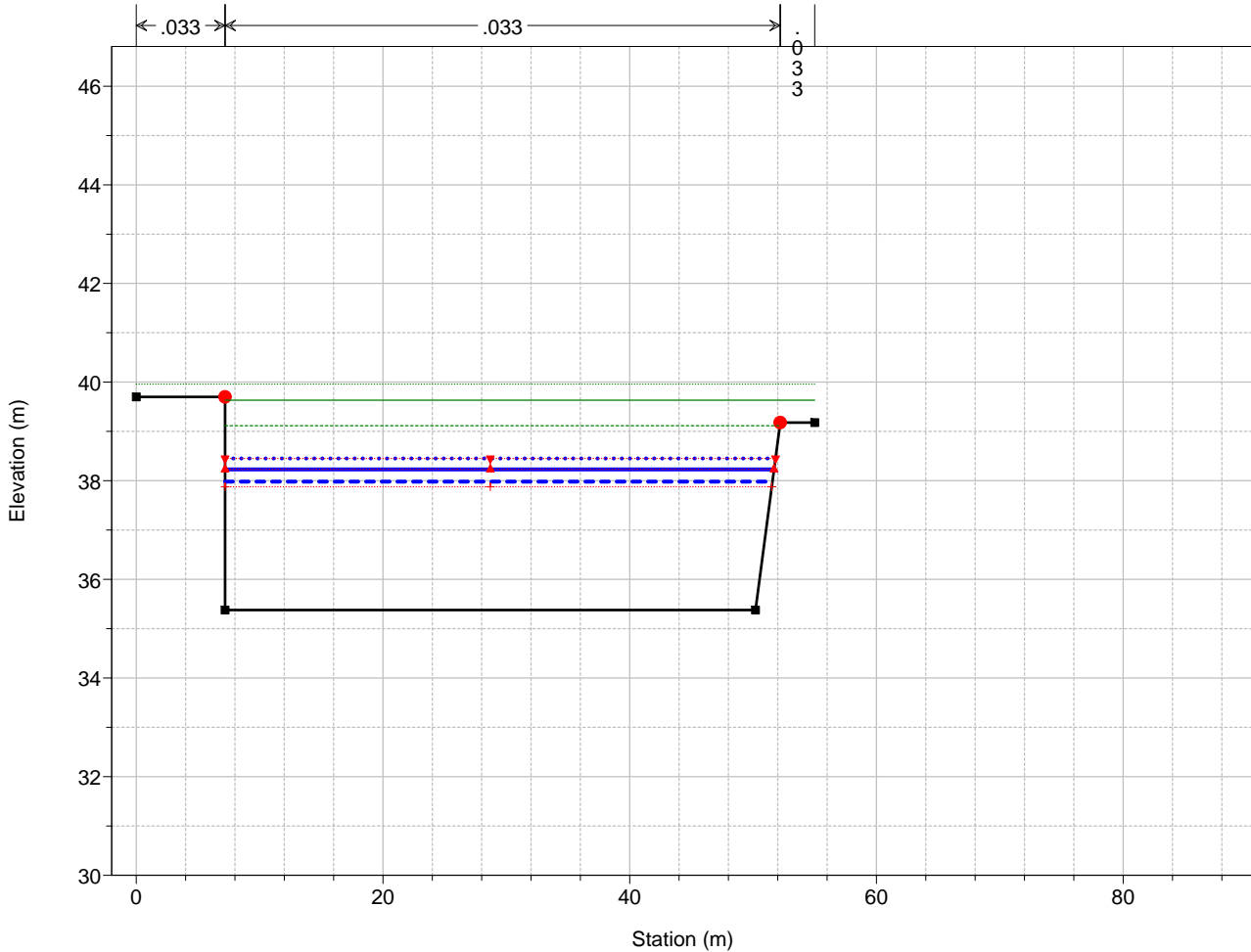
Sez. PE63m



Legend	
EG T=500	Green solid line
EG T=200	Green dashed line
EG T=50	Green dotted line
PL T=500	Blue solid line
Crit T=500	Red solid line with downward triangle
Crit T=200	Red dashed line with upward triangle
PL T=200	Blue dashed line
PL T=50	Blue dotted line
Crit T=50	Red dotted line with cross
Fondo	Black solid line with square
Sponda	Red solid circle

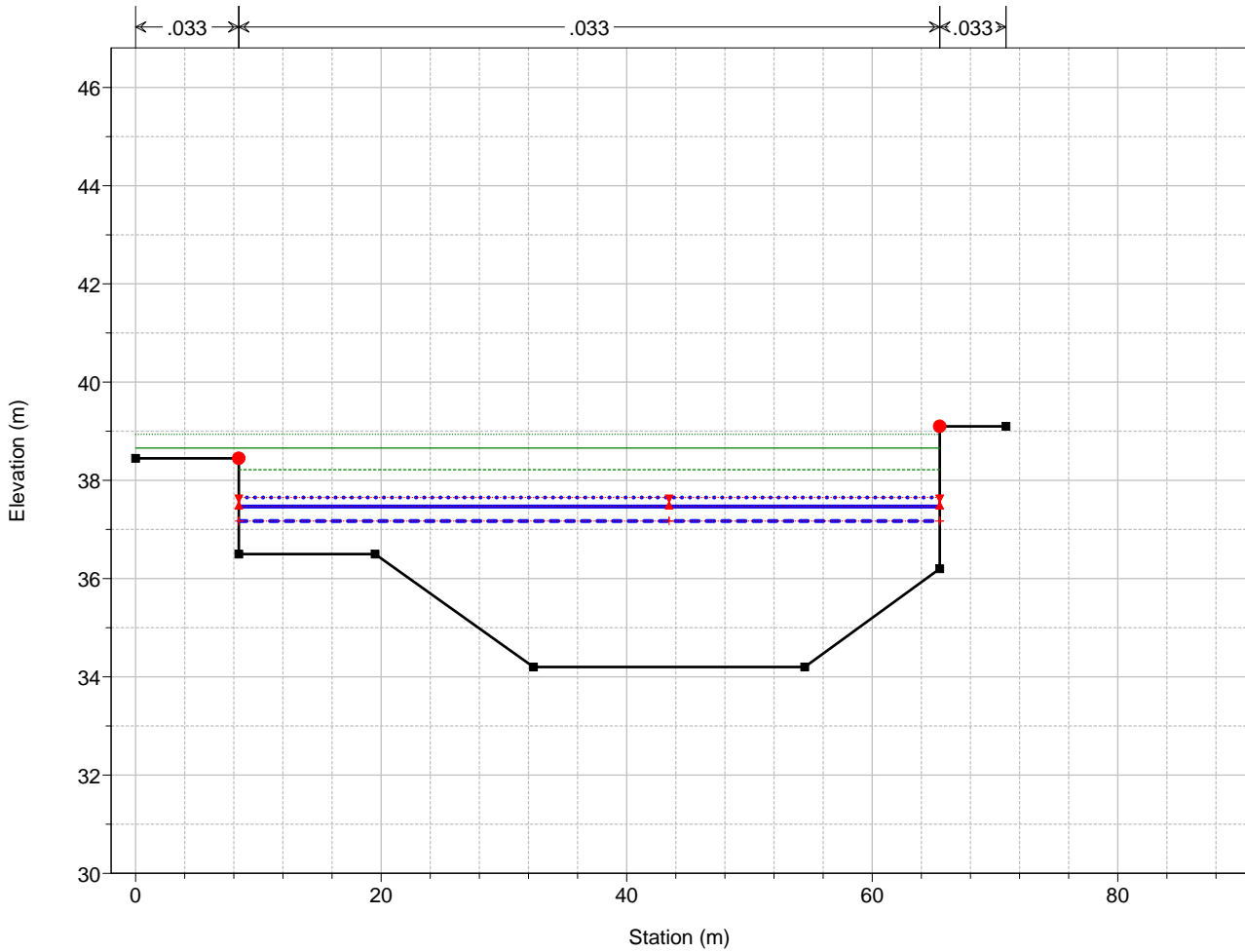
T. Petronio - Loc. Pian Tangoni

Sez. PE63v

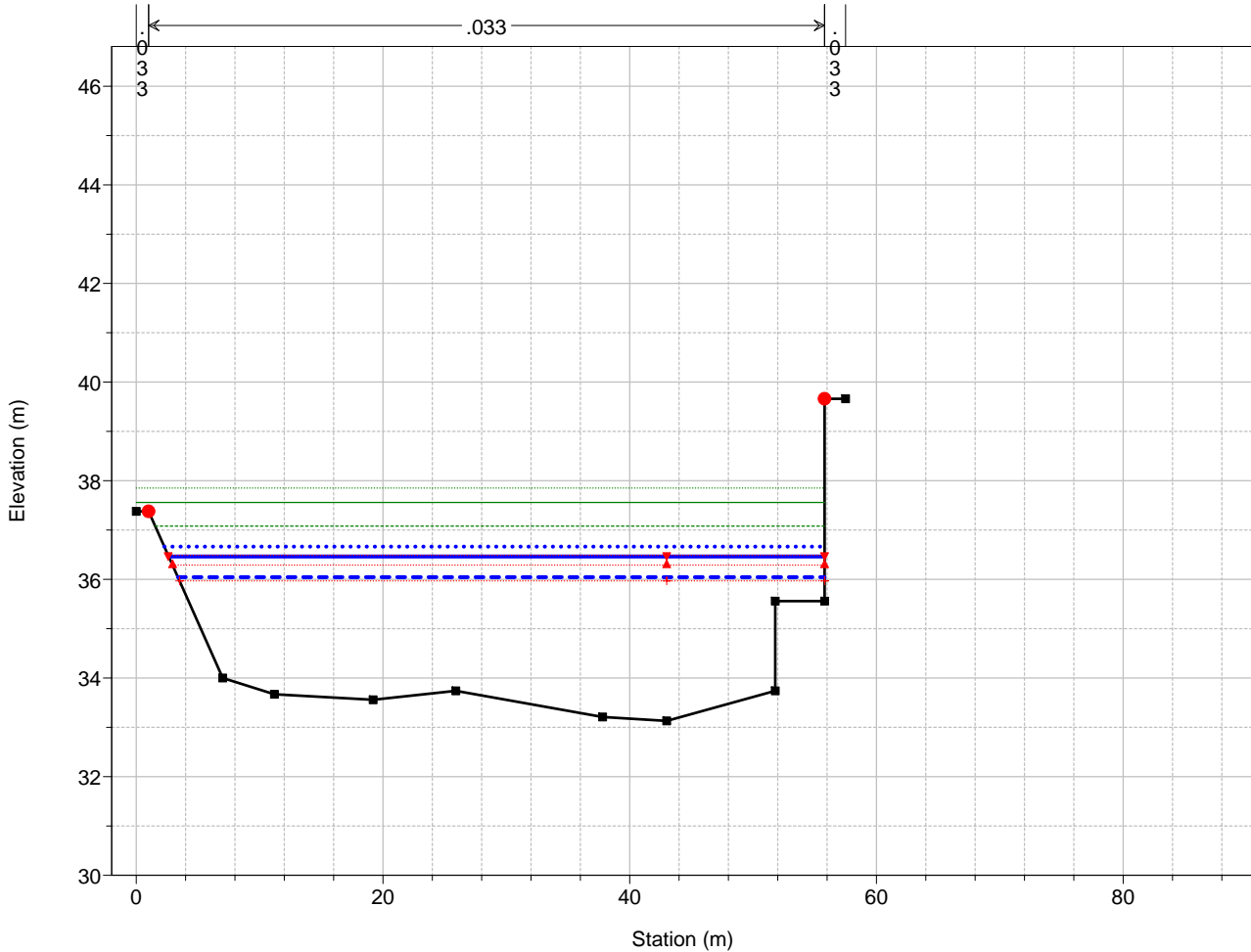


Legend	
EG T=500	Green solid line
EG T=200	Green dashed line
EG T=50	Green dotted line
PL T=500	Blue solid line
Crit T=500	Red solid line with downward triangle
Crit T=200	Red dashed line with upward triangle
PL T=200	Blue dashed line
PL T=50	Blue dotted line
Crit T=50	Red dotted line with cross
Fondo	Black solid line with square
Sponda	Red solid circle

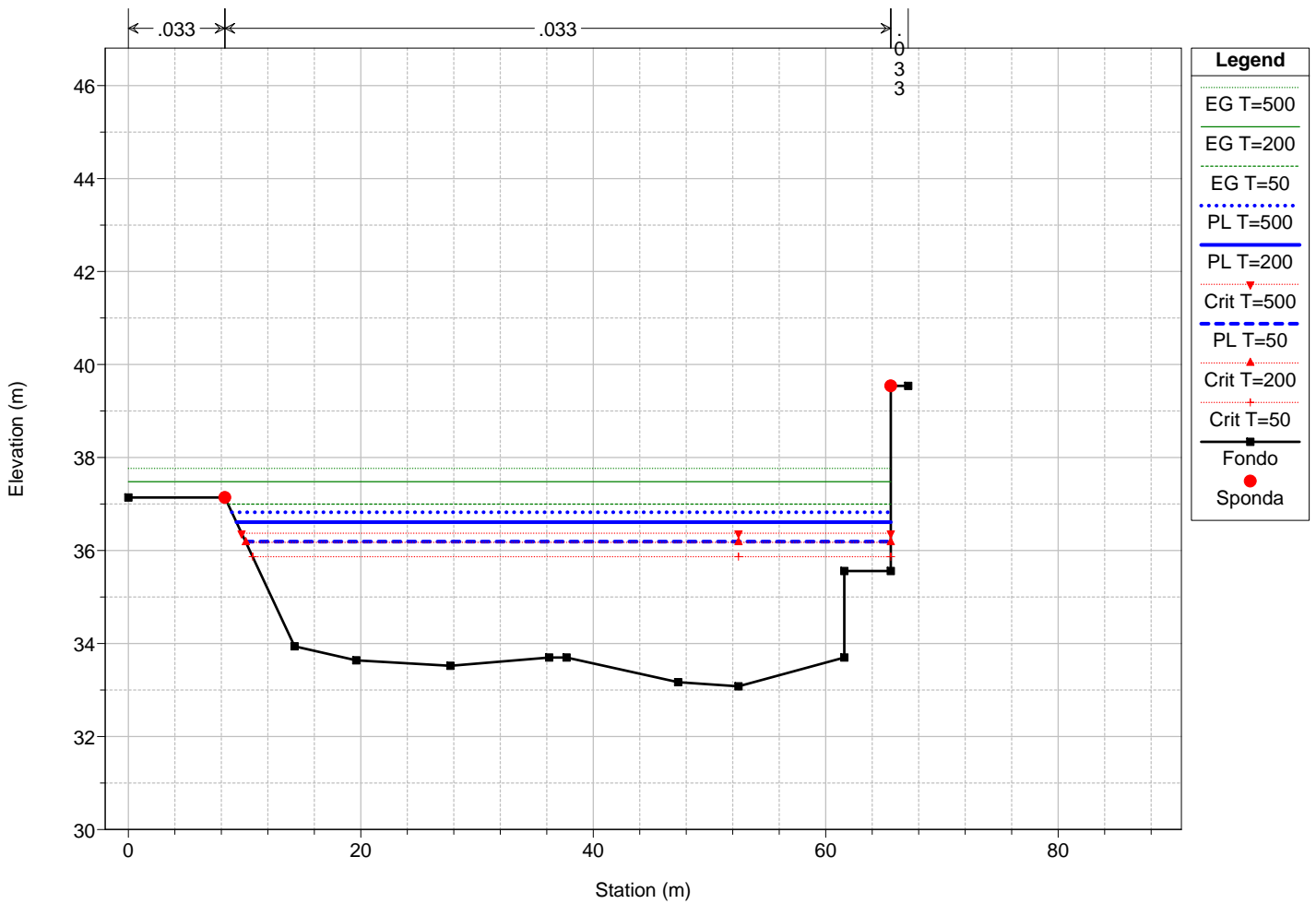
T. Petronio - Loc. Pian Tangoni
Sez. PE62



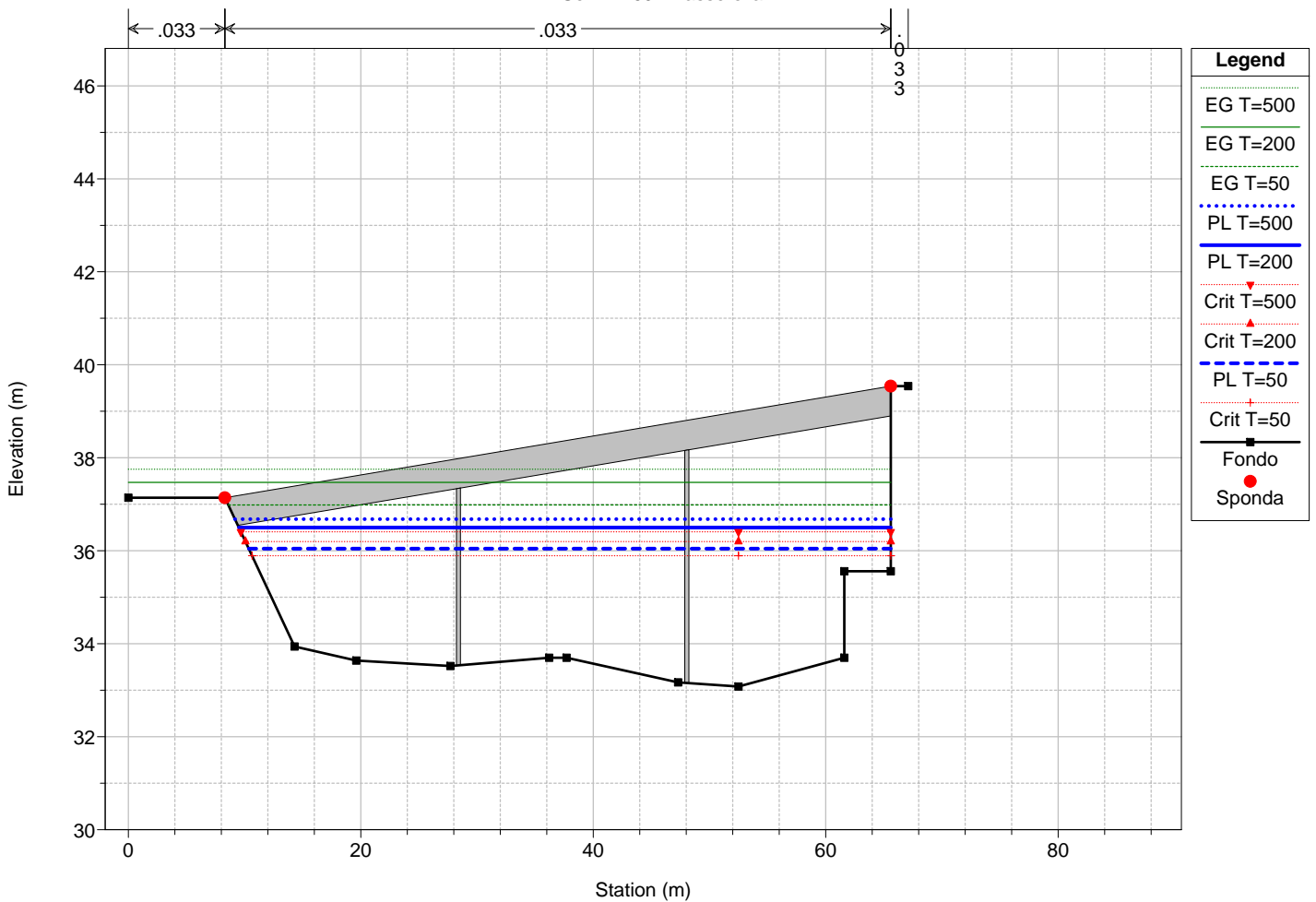
T. Petronio - Loc. Pian Tangoni
Sez. PE61



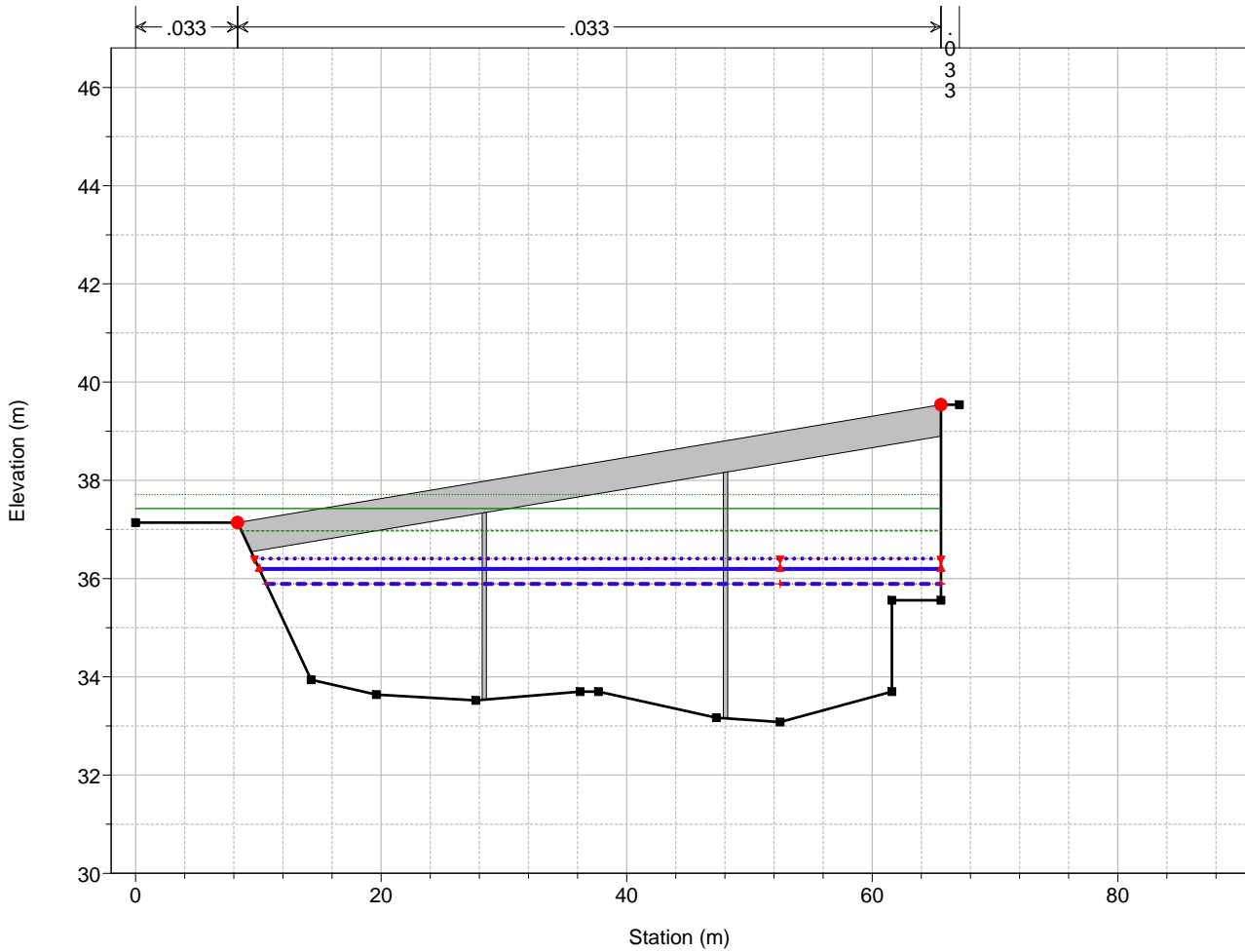
T. Petronio - Loc. Pian Tangoni



T. Petronio - Loc. Pian Tangoni Sez. PE60 - Passerella

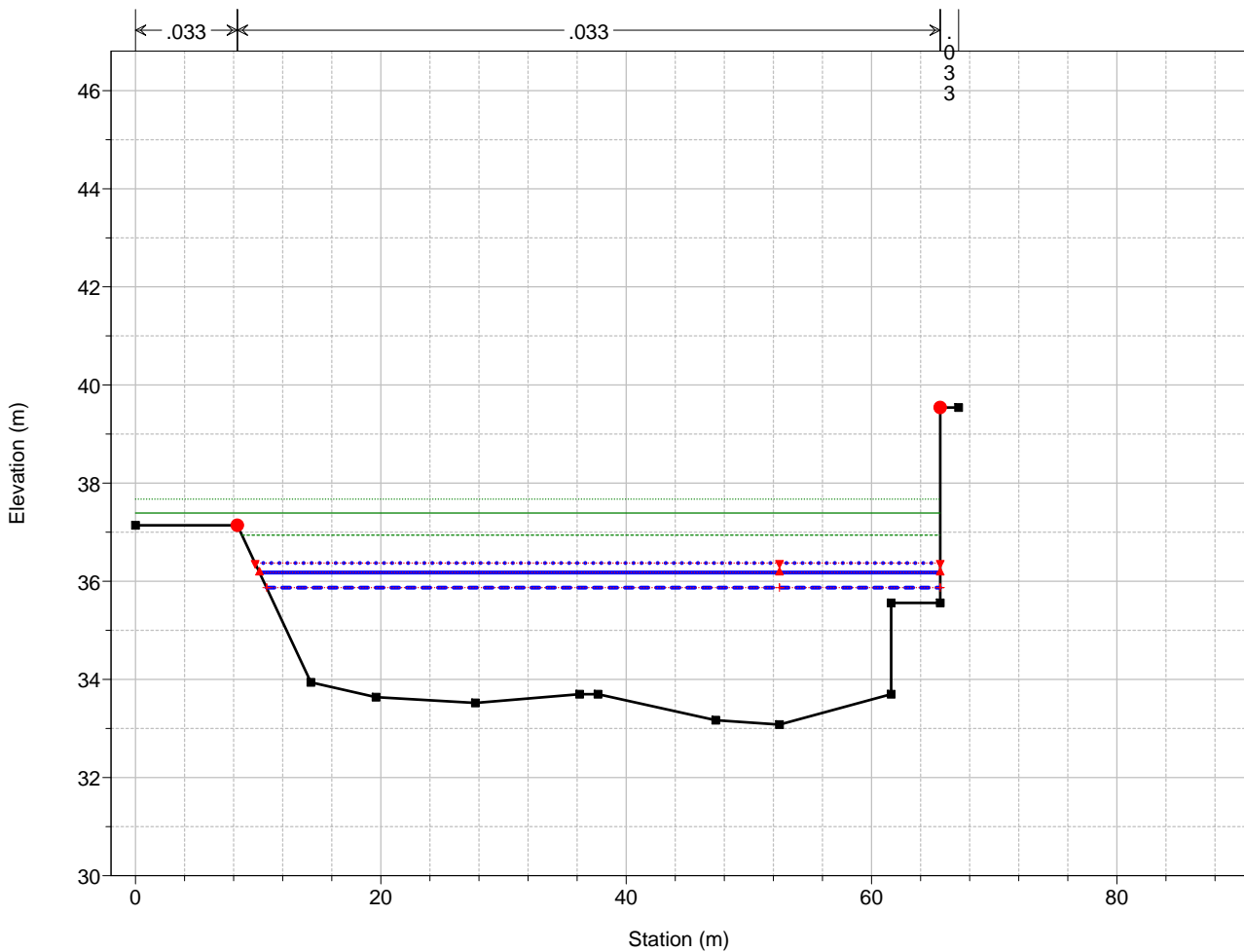


T. Petronio - Loc. Pian Tangoni
Sez. PE60 - Passerella



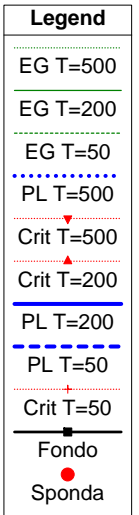
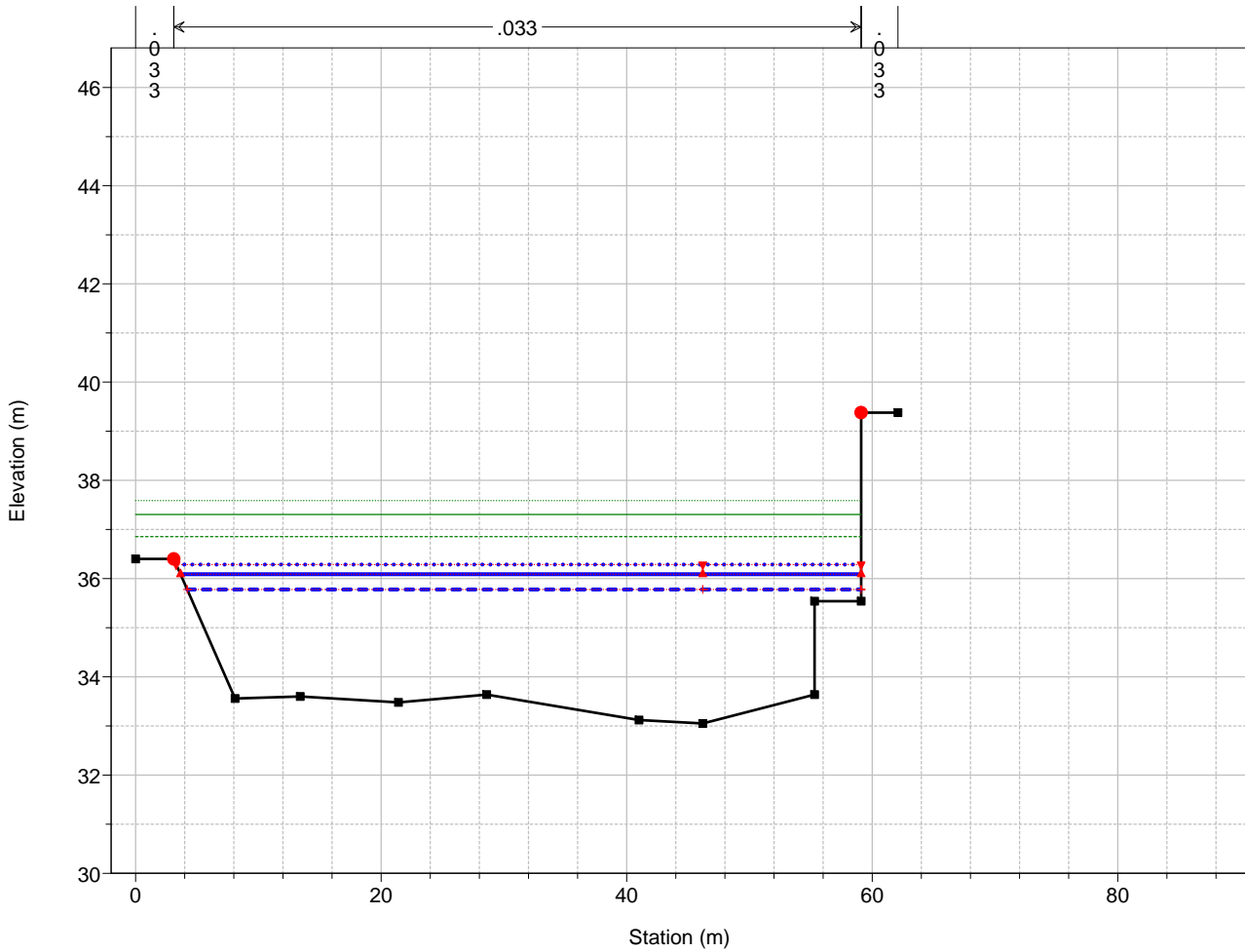
Legend	
EG T=500	Green dotted line
EG T=200	Green solid line
EG T=50	Green dashed line
PL T=500	Blue dotted line
Crit T=500	Red inverted triangle
Crit T=200	Red upright triangle
PL T=200	Blue solid line
PL T=50	Blue dashed line
Crit T=50	Red plus sign
Fondo	Black square
Sponda	Red circle

T. Petronio - Loc. Pian Tangoni

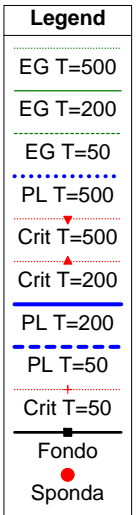
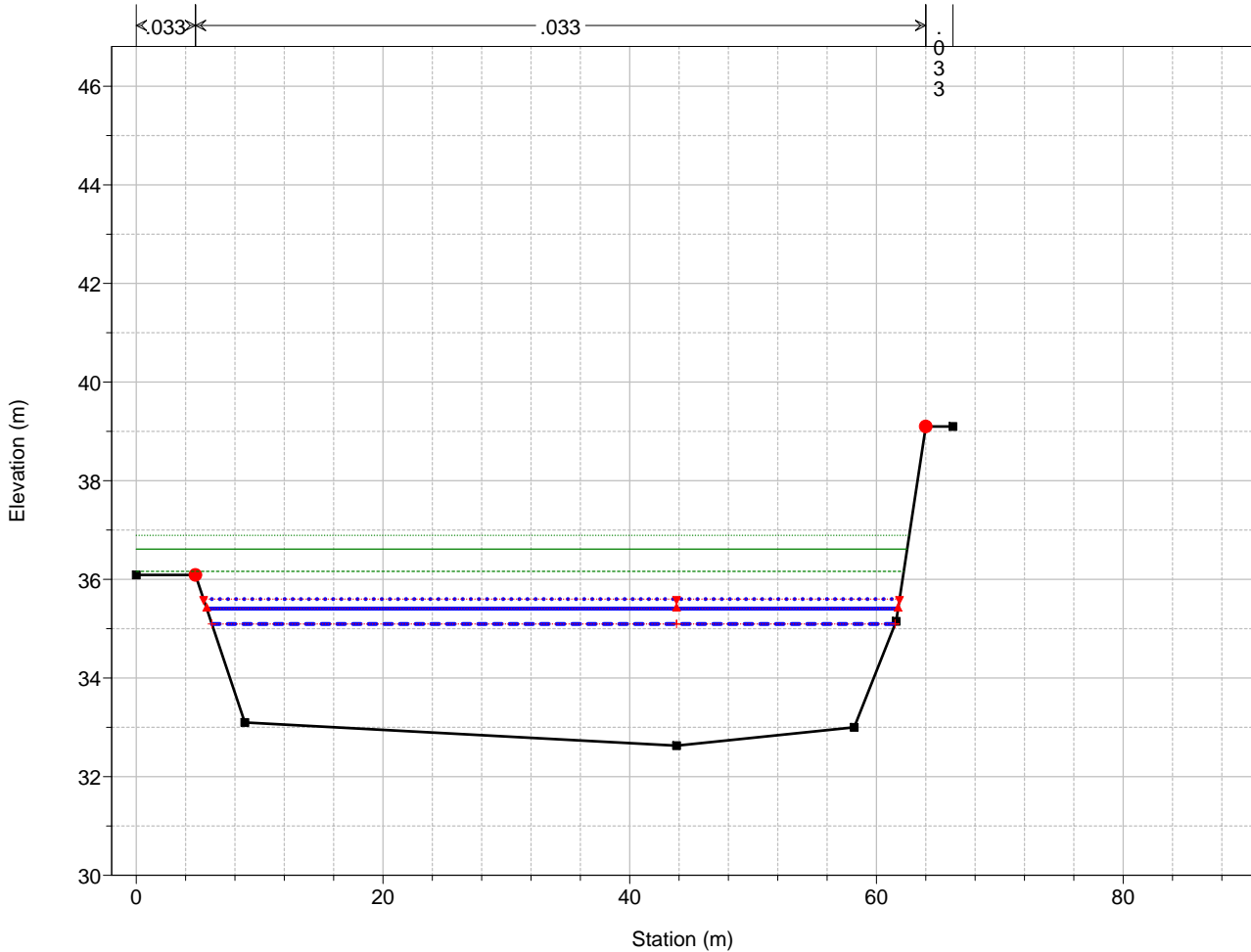


Legend	
EG T=500	Green dotted line
EG T=200	Green solid line
EG T=50	Green dashed line
PL T=500	Blue dotted line
Crit T=500	Red inverted triangle
Crit T=200	Red upright triangle
PL T=200	Blue solid line
PL T=50	Blue dashed line
Crit T=50	Red plus sign
Fondo	Black square
Sponda	Red circle

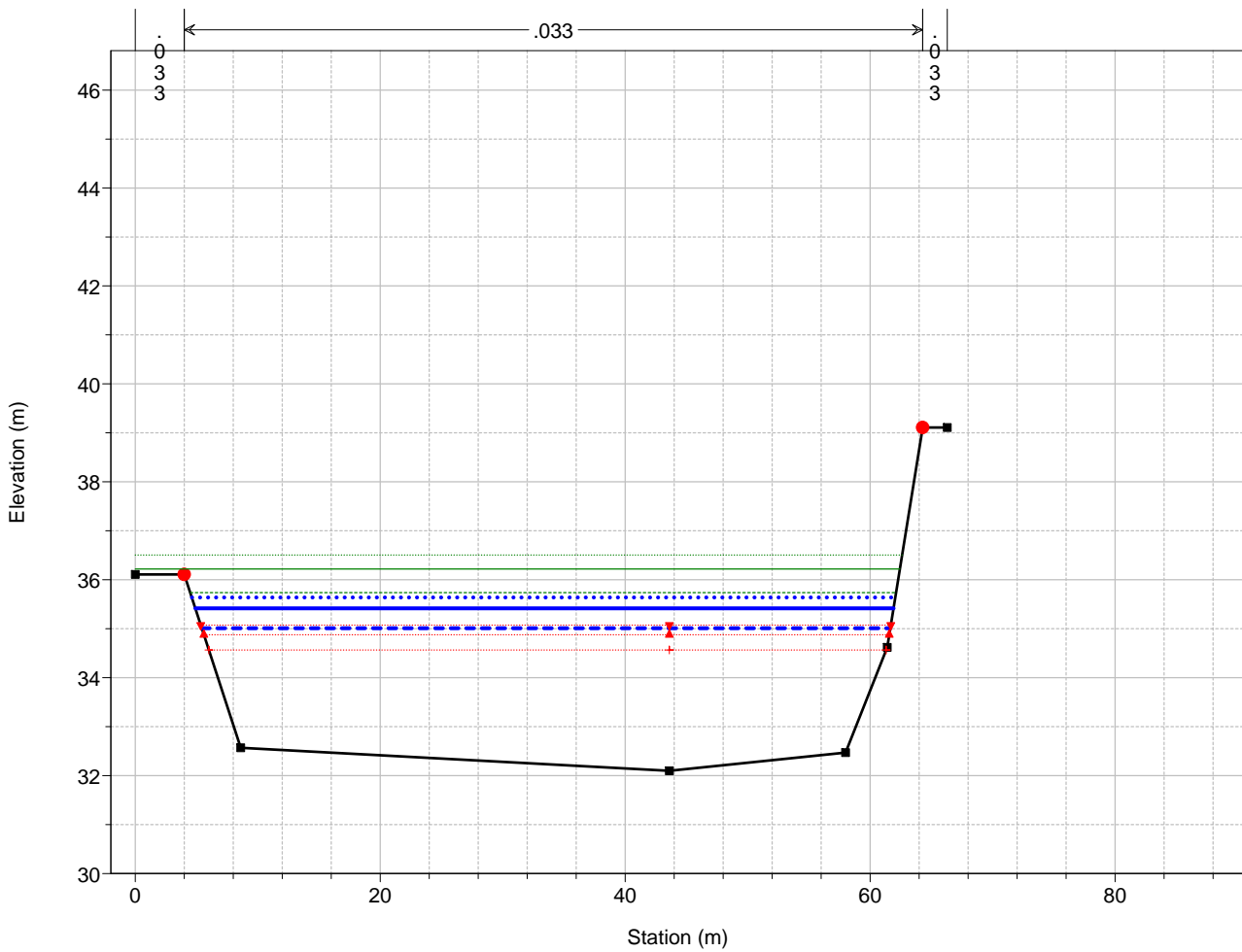
T. Petronio - Loc. Pian Tangoni
Sez. PE59



T. Petronio - Loc. Pian Tangoni
Sez. PE58m

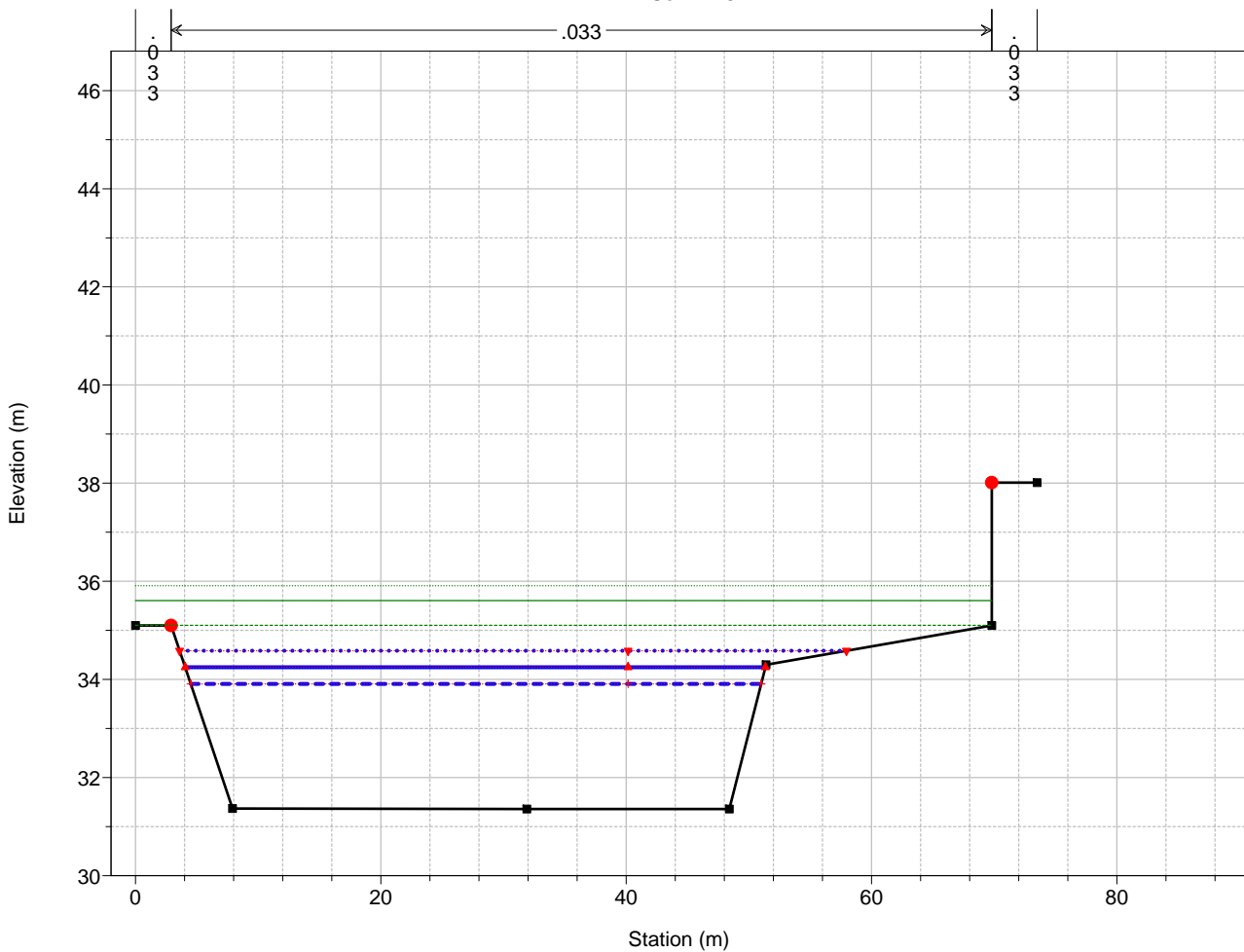


T. Petronio - Loc. Pian Tangoni
Sez. PE58v



Legend	
EG T=500	(Green dotted line)
EG T=200	(Green solid line)
EG T=50	(Green dashed line)
PL T=500	(Blue dotted line)
PL T=200	(Blue solid line)
PL T=50	(Blue dashed line)
Crit T=500	(Red dotted line with inverted triangles)
Crit T=200	(Red solid line with triangles)
Crit T=50	(Red dashed line with pluses)
Fondo	(Black solid line with squares)
Sponda	(Red solid line with circles)

T. Petronio - Loc. Pian Tangoni
Sez. PE57



Legend	
EG T=500	(Green dotted line)
EG T=200	(Green solid line)
EG T=50	(Green dashed line)
PL T=500	(Blue dotted line)
PL T=200	(Blue solid line)
PL T=50	(Blue dashed line)
Crit T=500	(Red dotted line with inverted triangles)
Crit T=200	(Red solid line with triangles)
Crit T=50	(Red dashed line with pluses)
Fondo	(Black solid line with squares)
Sponda	(Red solid line with circles)

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
Pian Tangoni	66.1	T=50	536.00	38.00	41.02	41.75	0.73	41.20	0.18	40.62	41.98	0.005560	4.33	123.71	41.89	0.80
Pian Tangoni	66.1	T=200	654.00	38.00	41.32	41.75	0.43	41.20	-0.12	40.98	42.49	0.006072	4.80	136.57	44.00	0.85
Pian Tangoni	66.1	T=500	732.00	38.00	41.49	41.75	0.26	41.20	-0.29	41.21	42.81	0.006482	5.11	143.75	44.00	0.88
Pian Tangoni	65	T=50	536.00	37.95	40.44	41.00	0.56	40.54	0.10	40.44	41.66	0.008853	4.90	109.46	44.92	1.00
Pian Tangoni	65	T=200	654.00	37.95	40.80	41.00	0.20	40.54	-0.26	40.80	42.18	0.008391	5.20	126.31	47.00	0.99
Pian Tangoni	65	T=500	732.00	37.95	41.03	41.00	-0.03	40.54	-0.49	41.03	42.50	0.008108	5.37	137.17	49.90	0.99
Pian Tangoni	64.2	T=50	536.00	37.49	40.00	40.70	0.70	40.49	0.49	40.00	41.24	0.008879	4.93	108.82	44.17	1.00
Pian Tangoni	64.2	T=200	654.00	37.49	40.35	40.70	0.35	40.49	0.14	40.35	41.76	0.008663	5.26	124.31	44.41	1.00
Pian Tangoni	64.2	T=500	732.00	37.49	40.59	40.70	0.11	40.49	-0.10	40.59	42.09	0.008385	5.43	135.04	47.70	1.00
Pian Tangoni	64.1	T=50	536.00	36.60	39.50	40.60	1.10	40.50	1.00	39.11	40.43	0.005613	4.27	125.53	43.99	0.81
Pian Tangoni	64.1	T=200	654.00	36.60	39.86	40.60	0.74	40.50	0.64	39.46	40.95	0.005737	4.63	141.40	44.17	0.83
Pian Tangoni	64.1	T=500	732.00	36.60	40.08	40.60	0.52	40.50	0.42	39.69	41.28	0.005846	4.85	151.00	44.28	0.84
Pian Tangoni	63.2	T=50	536.00	36.14	38.63	39.70	1.07	39.18	0.55	38.63	39.86	0.008855	4.90	109.31	44.64	1.00
Pian Tangoni	63.2	T=200	654.00	36.14	38.98	39.70	0.72	39.18	0.20	38.98	40.38	0.008615	5.23	124.98	44.87	1.00
Pian Tangoni	63.2	T=500	732.00	36.14	39.21	39.70	0.49	39.18	-0.03	39.21	40.71	0.008416	5.42	135.26	48.30	1.00
Pian Tangoni	63.1	T=50	536.00	35.38	37.98	39.70	1.72	39.18	1.20	37.88	39.11	0.007792	4.72	113.65	44.37	0.94
Pian Tangoni	63.1	T=200	654.00	35.38	38.22	39.70	1.48	39.18	0.96	38.22	39.63	0.008709	5.26	124.38	44.50	1.00
Pian Tangoni	63.1	T=500	732.00	35.38	38.45	39.70	1.25	39.18	0.73	38.45	39.96	0.008517	5.44	134.49	44.62	1.00
Pian Tangoni	62	T=50	536.00	34.20	37.17	38.45	1.28	39.10	1.93	37.17	38.22	0.008840	4.53	118.41	57.10	1.00
Pian Tangoni	62	T=200	654.00	34.20	37.47	38.45	0.98	39.10	1.63	37.47	38.66	0.008572	4.84	135.20	57.10	1.00
Pian Tangoni	62	T=500	732.00	34.20	37.65	38.45	0.80	39.10	1.45	37.65	38.94	0.008435	5.02	145.71	57.10	1.00
Pian Tangoni	61	T=50	536.00	33.13	36.07	37.38	1.31	39.66	3.59	35.97	37.08	0.007710	4.46	120.19	52.47	0.94
Pian Tangoni	61	T=200	654.00	33.13	36.45	37.38	0.93	39.66	3.21	36.29	37.56	0.007007	4.65	140.55	53.16	0.91
Pian Tangoni	61	T=500	732.00	33.13	36.67	37.38	0.71	39.66	2.99	36.49	37.85	0.006871	4.82	151.95	53.54	0.91
Pian Tangoni	60.2	T=50	536.00	33.08	36.21	37.14	0.93	39.54	3.33	35.87	37.00	0.005555	3.95	135.70	55.55	0.81
Pian Tangoni	60.2	T=200	654.00	33.08	36.60	37.14	0.54	39.54	2.94	36.18	37.48	0.005161	4.15	157.62	56.29	0.79
Pian Tangoni	60.2	T=500	732.00	33.08	36.83	37.14	0.31	39.54	2.71	36.37	37.77	0.005073	4.30	170.30	56.71	0.79
Pian Tangoni	60.11		Bridge													
Pian Tangoni	60.1	T=50	536.00	33.08	35.87	37.14	1.27	39.54	3.67	35.87	36.94	0.008894	4.58	116.98	54.92	1.00
Pian Tangoni	60.1	T=200	654.00	33.08	36.18	37.14	0.96	39.54	3.36	36.18	37.39	0.008602	4.88	134.02	55.50	1.00
Pian Tangoni	60.1	T=500	732.00	33.08	36.37	37.14	0.77	39.54	3.17	36.37	37.67	0.008449	5.06	144.77	55.86	1.00
Pian Tangoni	59	T=50	536.00	33.05	35.78	36.40	0.62	39.38	3.60	35.78	36.85	0.008991	4.60	116.63	54.90	1.01
Pian Tangoni	59	T=200	654.00	33.05	36.09	36.40	0.31	39.38	3.29	36.09	37.31	0.008692	4.89	133.61	55.45	1.01
Pian Tangoni	59	T=500	732.00	33.05	36.28	36.40	0.12	39.38	3.10	36.28	37.59	0.008493	5.06	144.54	55.79	1.00
Pian Tangoni	58.2	T=50	536.00	32.63	35.10	36.09	0.99	39.10	4.00	35.10	36.16	0.008677	4.58	117.06	55.38	1.01
Pian Tangoni	58.2	T=200	654.00	32.63	35.41	36.09	0.68	39.10	3.69	35.41	36.61	0.008310	4.86	134.50	56.05	1.00
Pian Tangoni	58.2	T=500	732.00	32.63	35.60	36.09	0.49	39.10	3.50	35.60	36.89	0.008122	5.03	145.45	56.42	1.00
Pian Tangoni	58.1	T=50	536.00	32.10	35.01	36.11	1.10	39.11	4.10	34.57	35.74	0.004714	3.78	141.79	56.22	0.76
Pian Tangoni	58.1	T=200	654.00	32.10	35.42	36.11	0.69	39.11	3.69	34.88	36.22	0.004368	3.97	164.76	57.01	0.75

HEC-RAS Plan: Pp8 River: T. Petronio Reach: Pian Tangoni (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
Pian Tangoni	58.1	T=500	732.00	32.10	35.64	36.11	0.47	39.11	3.47	35.08	36.51	0.004328	4.12	177.52	57.45	0.75
Pian Tangoni	57	T=50	536.00	31.36	33.90	35.10	1.20	38.01	4.11	33.90	35.10	0.008525	4.85	110.47	46.49	1.00
Pian Tangoni	57	T=200	654.00	31.36	34.25	35.10	0.85	38.01	3.76	34.25	35.61	0.008291	5.17	126.62	47.30	1.01
Pian Tangoni	57	T=500	732.00	31.36	34.58	35.10	0.52	38.01	3.43	34.58	35.91	0.008185	5.10	143.58	54.35	1.00

Plan: Pp8 T. Petronio Pian Tangoni RS: 60.11 Profile: T=50

E.G. US. (m)	37.00	Element	Inside BR US	Inside BR DS
W.S. US. (m)	36.21	E.G. Elev (m)	36.99	36.97
Q Total (m3/s)	536.00	W.S. Elev (m)	36.06	35.90
Q Bridge (m3/s)	536.00	Crit W.S. (m)	35.90	35.90
Q Weir (m3/s)		Max Chl Dpth (m)	2.98	2.82
Weir Sta Lft (m)		Vel Total (m/s)	4.27	4.59
Weir Sta Rgt (m)		Flow Area (m2)	125.55	116.68
Weir Submerg		Froude # Chl	0.90	1.00
Weir Max Depth (m)		Specif Force (m3)	390.48	388.47
Min El Weir Flow (m)	37.14	Hydr Depth (m)	2.30	2.15
Min El Prs (m)	38.90	W.P. Total (m)	68.37	67.21
Delta EG (m)	0.06	Conv. Total (m3/s)	5705.0	5107.5
Delta WS (m)	0.34	Top Width (m)	54.57	54.27
BR Open Area (m2)	217.61	Frctn Loss (m)		
BR Open Vel (m/s)	4.59	C & E Loss (m)		
Coef of Q		Shear Total (N/m2)	158.96	187.51
Br Sel Method	Momentum	Power Total (N/m s)	0.00	0.00

Plan: Pp8 T. Petronio Pian Tangoni RS: 60.11 Profile: T=200

E.G. US. (m)	37.48	Element	Inside BR US	Inside BR DS
W.S. US. (m)	36.60	E.G. Elev (m)	37.47	37.43
Q Total (m3/s)	654.00	W.S. Elev (m)	36.48	36.21
Q Bridge (m3/s)	654.00	Crit W.S. (m)	36.21	36.21
Q Weir (m3/s)		Max Chl Dpth (m)	3.40	3.13
Weir Sta Lft (m)		Vel Total (m/s)	4.39	4.89
Weir Sta Rgt (m)		Flow Area (m2)	148.90	133.66
Weir Submerg		Froude # Chl	0.85	1.00
Weir Max Depth (m)		Specif Force (m3)	508.28	502.59
Min El Weir Flow (m)	37.14	Hydr Depth (m)	2.69	2.44
Min El Prs (m)	38.90	W.P. Total (m)	71.39	69.42
Delta EG (m)	0.09	Conv. Total (m3/s)	7365.2	6268.6
Delta WS (m)	0.42	Top Width (m)	55.37	54.85
BR Open Area (m2)	217.61	Frctn Loss (m)	0.02	0.00
BR Open Vel (m/s)	4.89	C & E Loss (m)	0.02	0.00
Coef of Q		Shear Total (N/m2)	161.26	205.51
Br Sel Method	Energy only	Power Total (N/m s)	0.00	0.00

Plan: Pp8 T. Petronio Pian Tangoni RS: 60.11 Profile: T=500

E.G. US. (m)	37.77	Element	Inside BR US	Inside BR DS
W.S. US. (m)	36.83	E.G. Elev (m)	37.75	37.71
Q Total (m3/s)	732.00	W.S. Elev (m)	36.68	36.40
Q Bridge (m3/s)	732.00	Crit W.S. (m)	36.40	36.40
Q Weir (m3/s)		Max Chl Dpth (m)	3.61	3.32
Weir Sta Lft (m)		Vel Total (m/s)	4.58	5.07
Weir Sta Rgt (m)		Flow Area (m2)	159.79	144.38
Weir Submerg		Froude # Chl	0.77	1.00
Weir Max Depth (m)		Specif Force (m3)	588.22	581.75
Min El Weir Flow (m)	37.14	Hydr Depth (m)	3.06	2.61
Min El Prs (m)	38.90	W.P. Total (m)	75.83	70.81
Delta EG (m)	0.09	Conv. Total (m3/s)	7958.3	7034.6
Delta WS (m)	0.45	Top Width (m)	52.19	55.22
BR Open Area (m2)	217.61	Frctn Loss (m)	0.02	0.00
BR Open Vel (m/s)	5.07	C & E Loss (m)	0.02	0.00
Coef of Q		Shear Total (N/m2)	174.81	216.49
Br Sel Method	Energy only	Power Total (N/m s)	0.00	0.00