

Regione Piemonte

COMUNE DI ORBASSANO

**Adeguamento del PRGC ai
sensi della circolare 7/LAP**

Aspetti idraulici

CODICE:

342

DATA:

aprile 2003

AGGIORNAMENTO:

SEZIONI TRASVERSALI

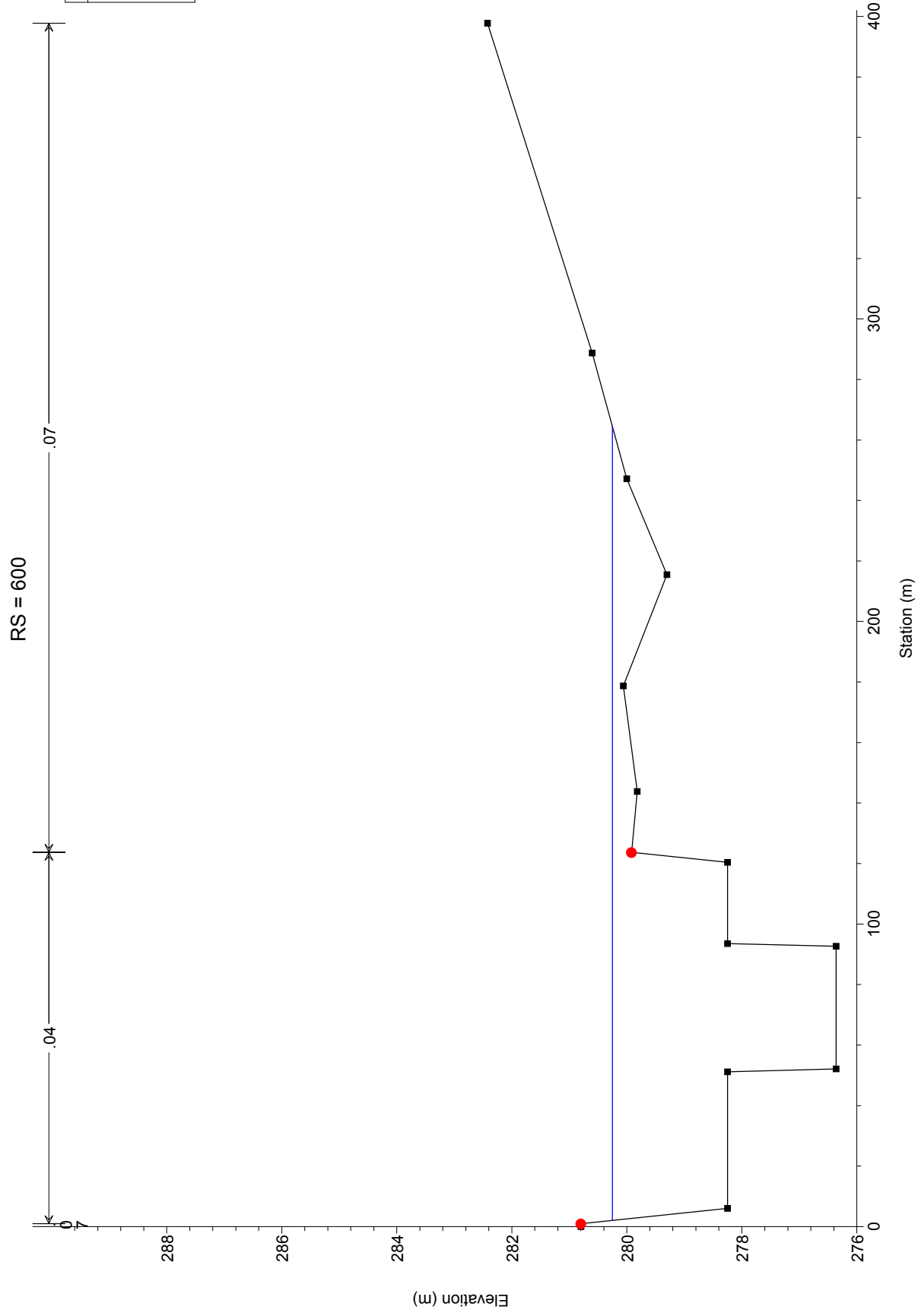
SCALA:

varie

Ing. Virgilio ANSELMO
Via Vittorio Emanuele 33
10023 CHIERI
Tel. 011 9415835

ELABORATO

H5



Legend
 WS PF 1
 Ground
 Bank Sta

1 cm Horiz. = 19 m 1 cm Vert. = 1 m

RS = 600

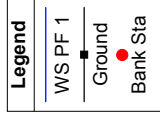
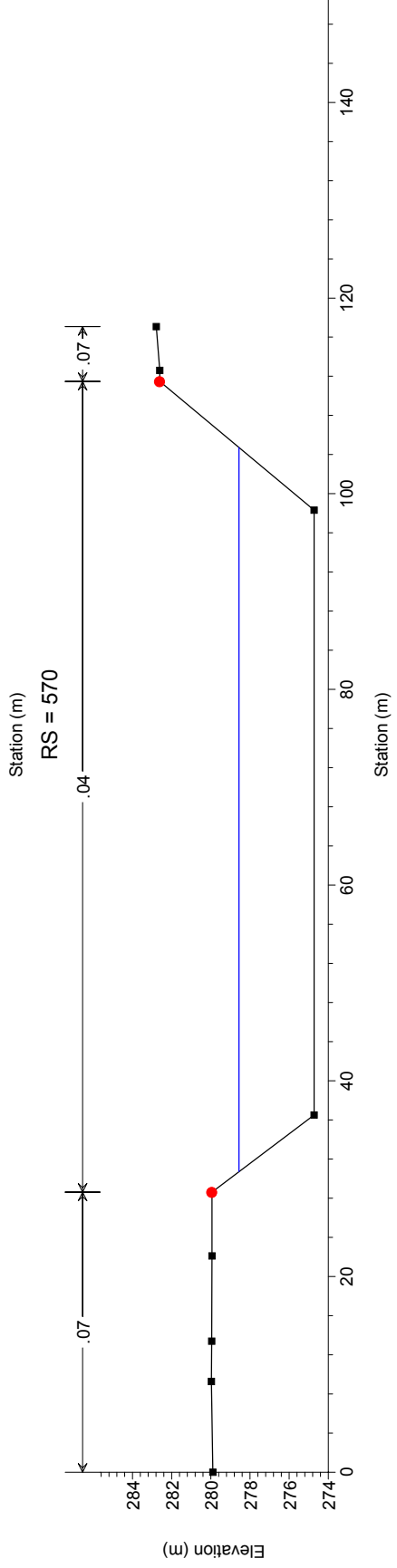
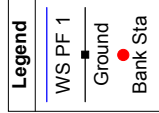
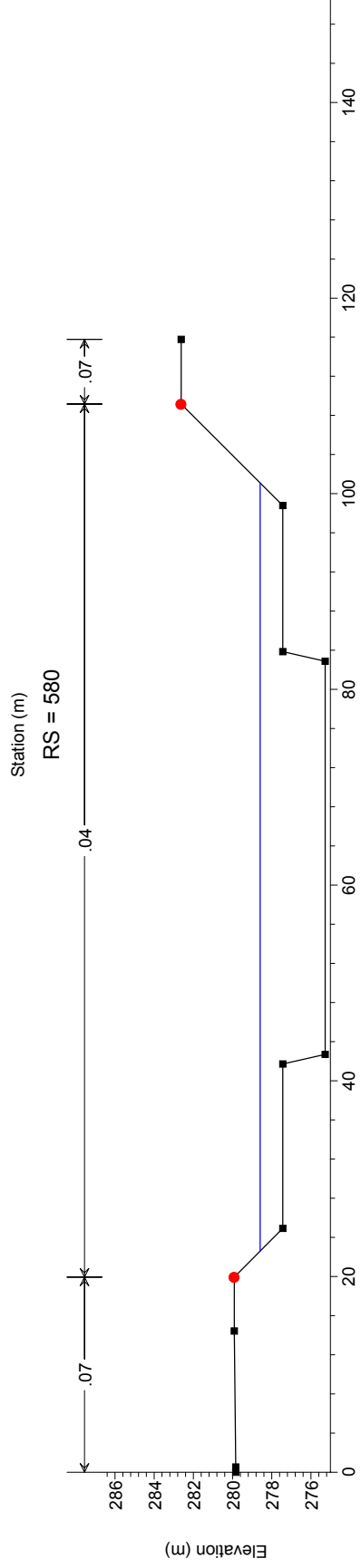
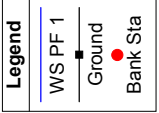
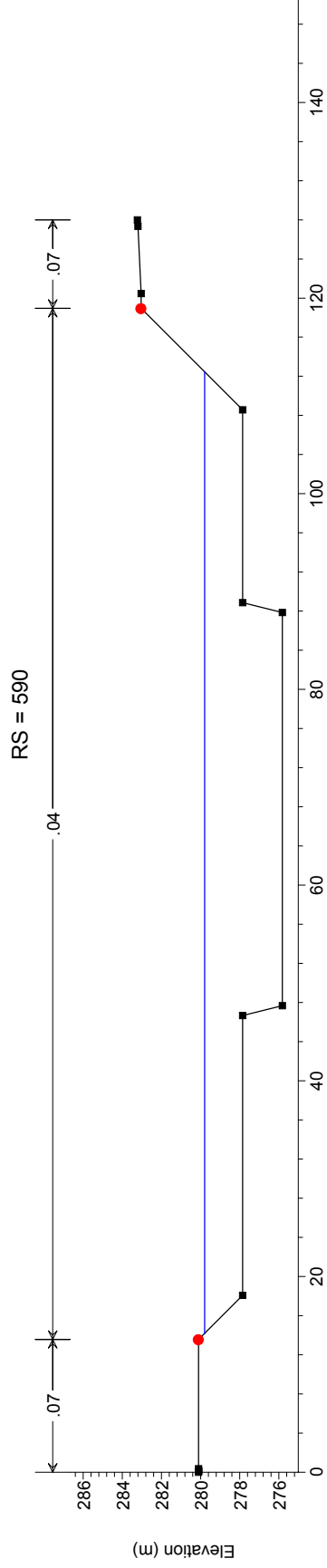
.07

.04

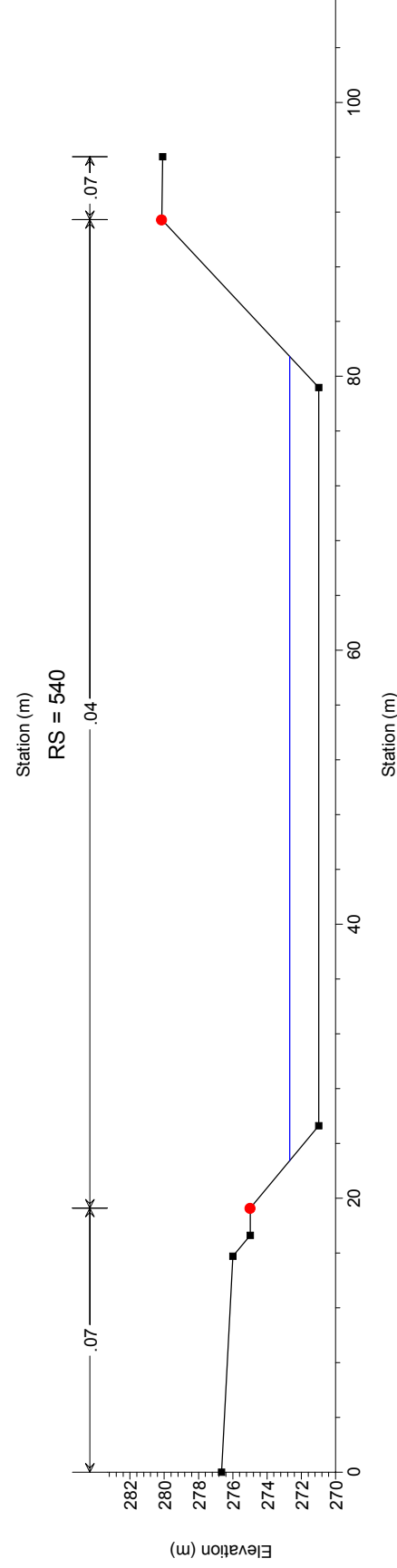
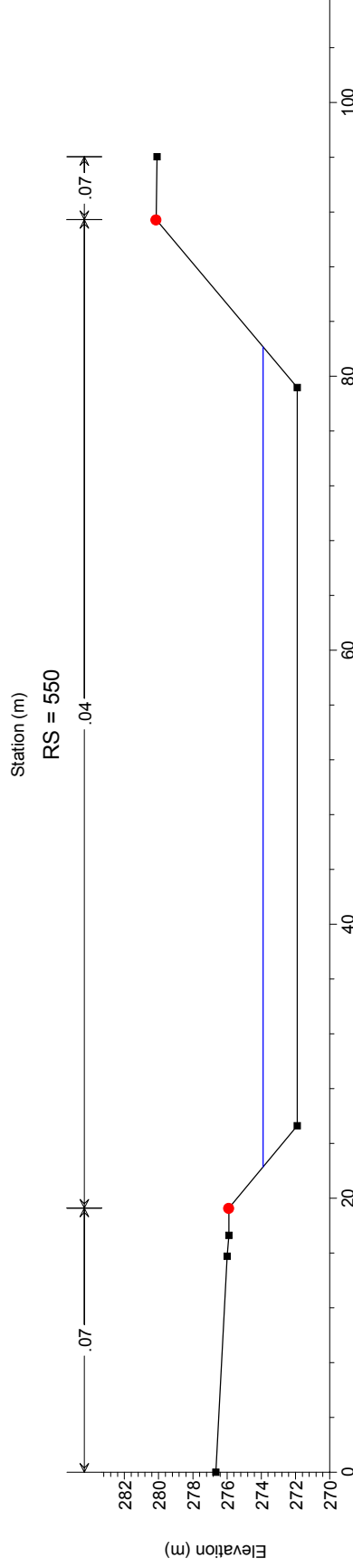
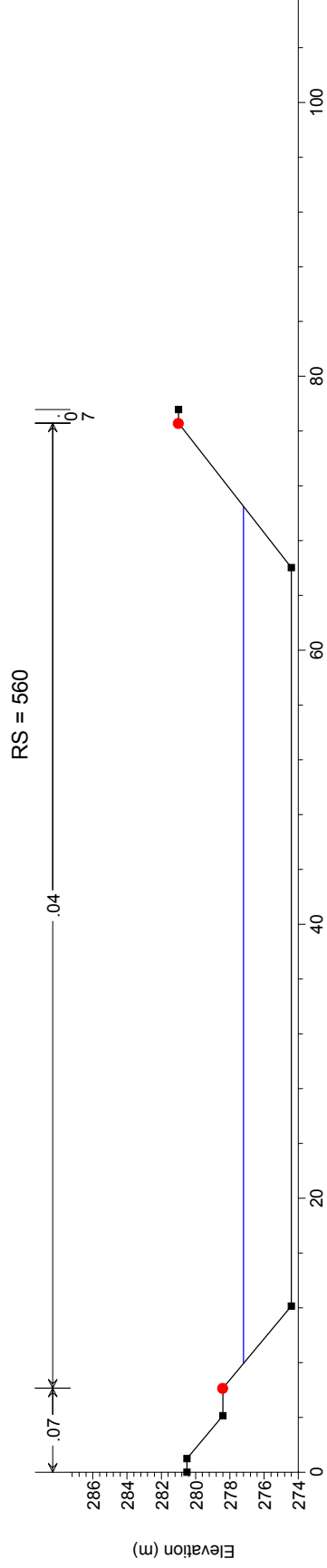
0.7

Elevation (m)

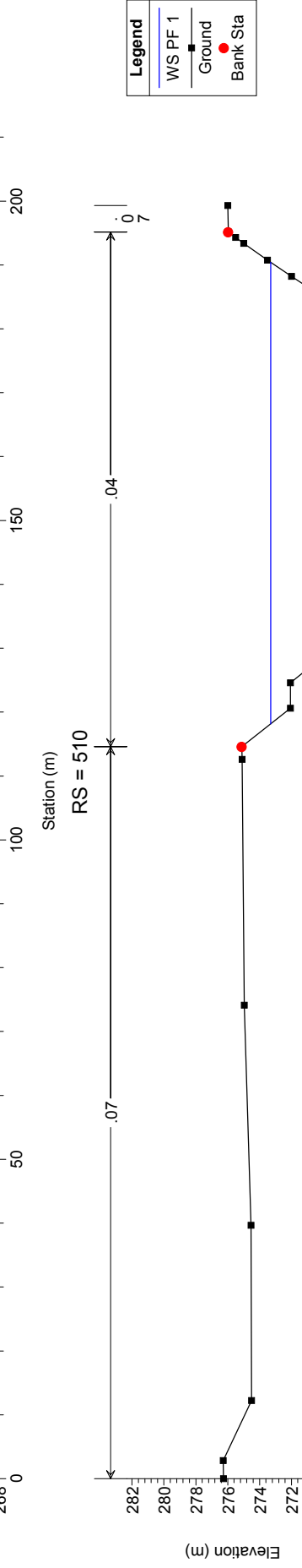
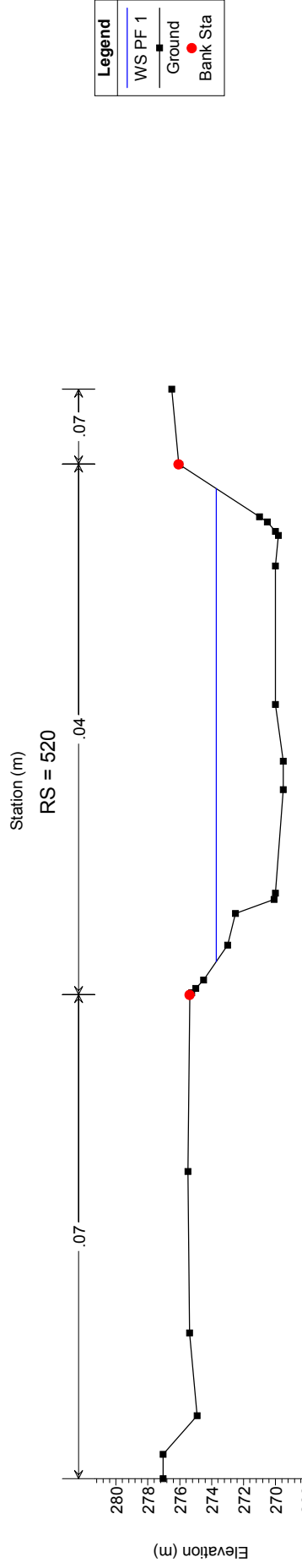
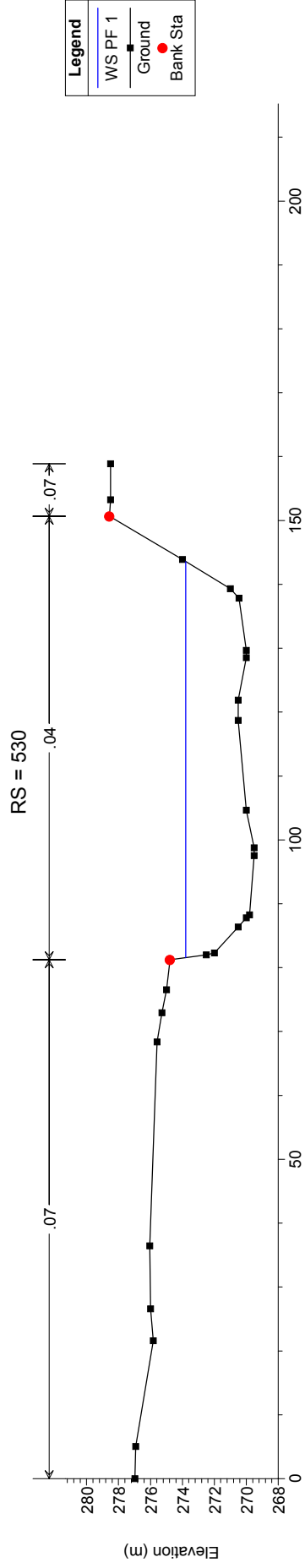
Station (m)



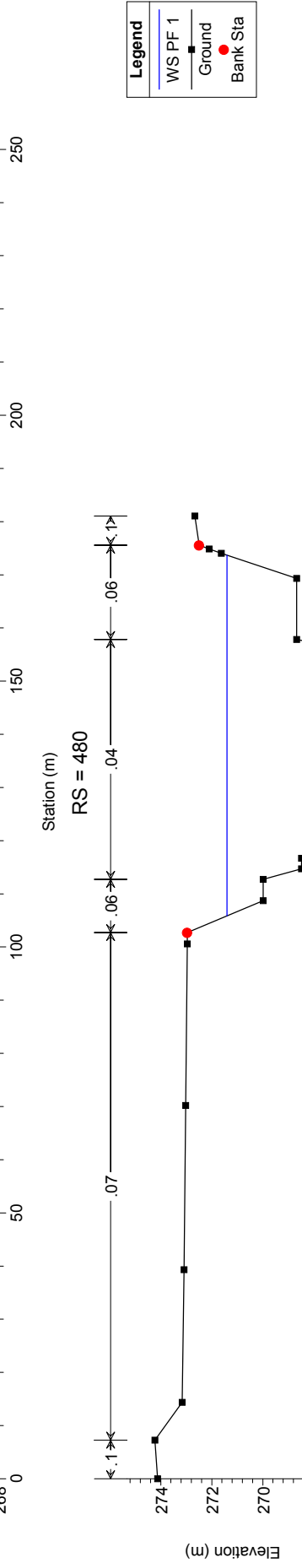
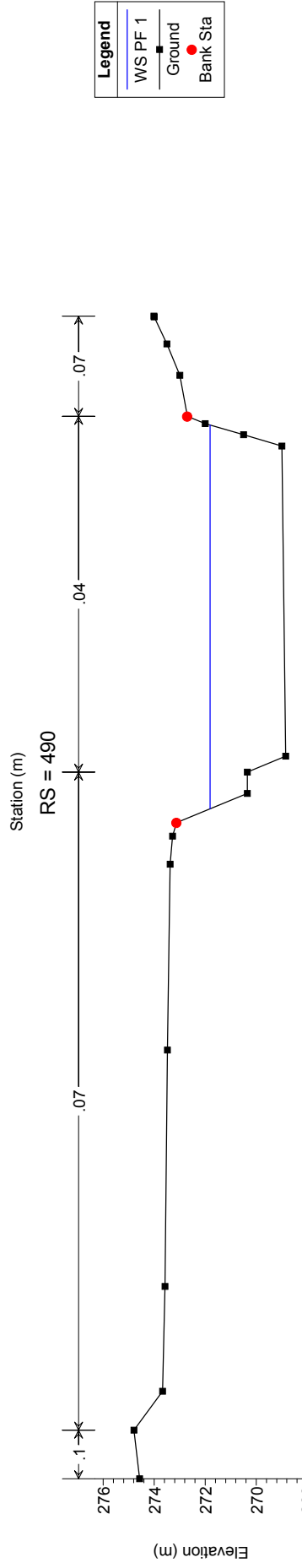
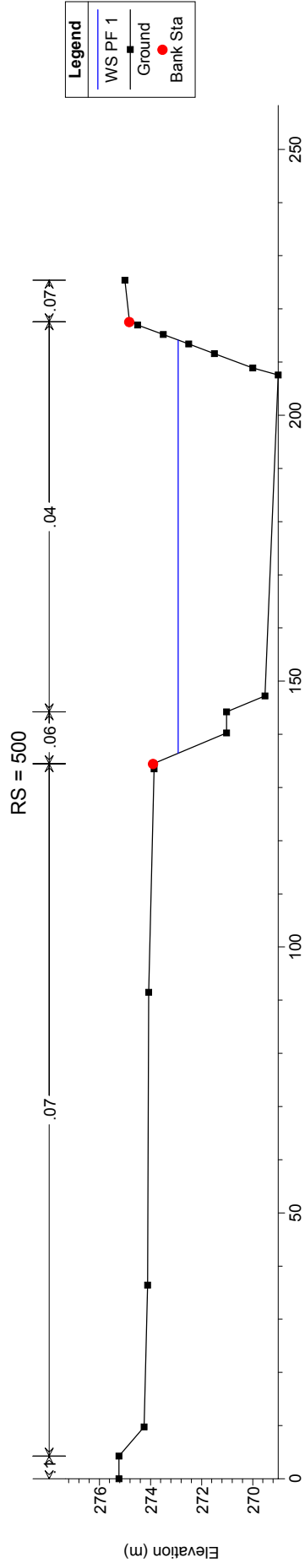
1 cm Horiz. = 7 m 1 cm Vert. = 3.5 m



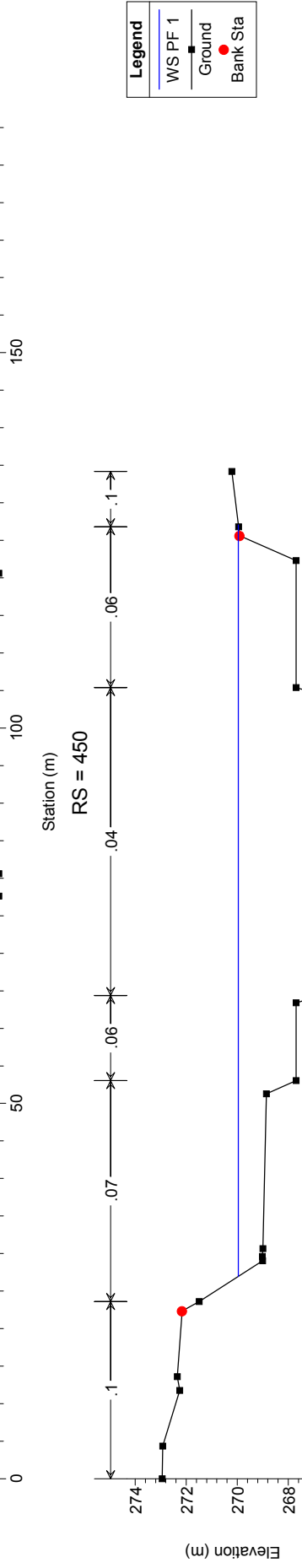
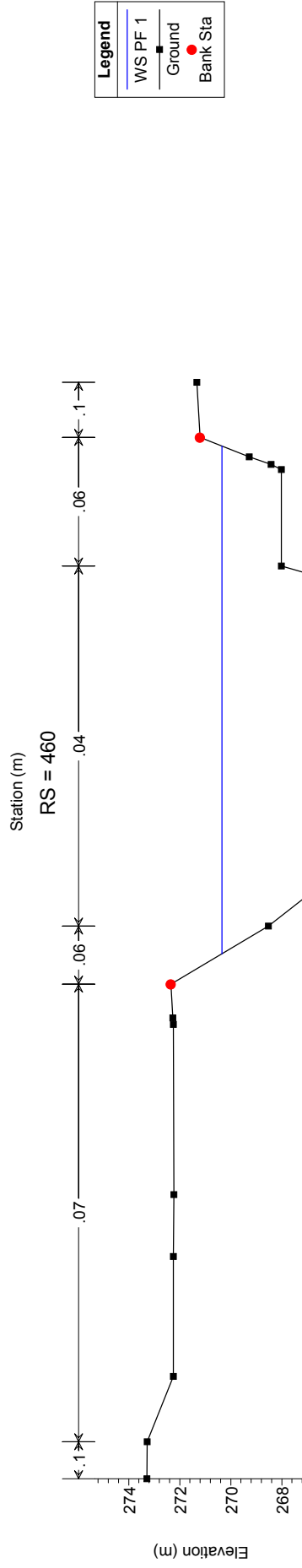
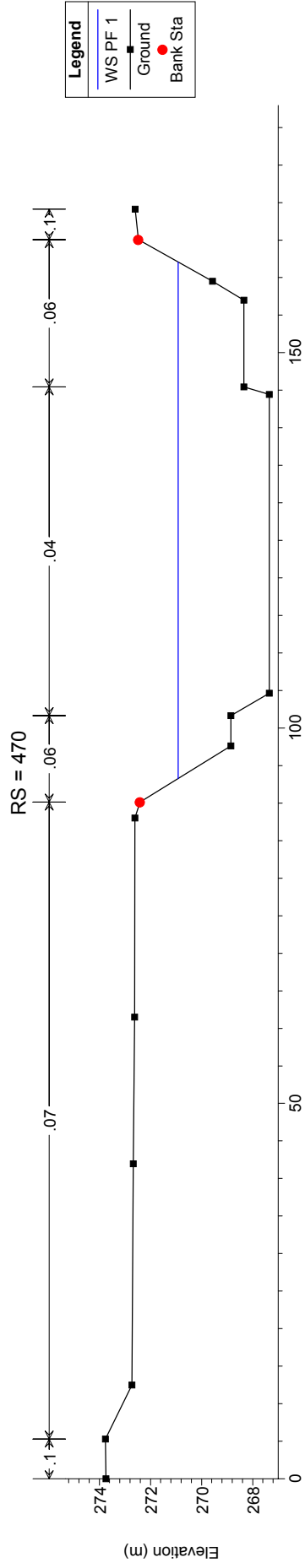
1 cm Horiz. = 5 m 1 cm Vert. = 4 m



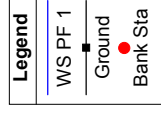
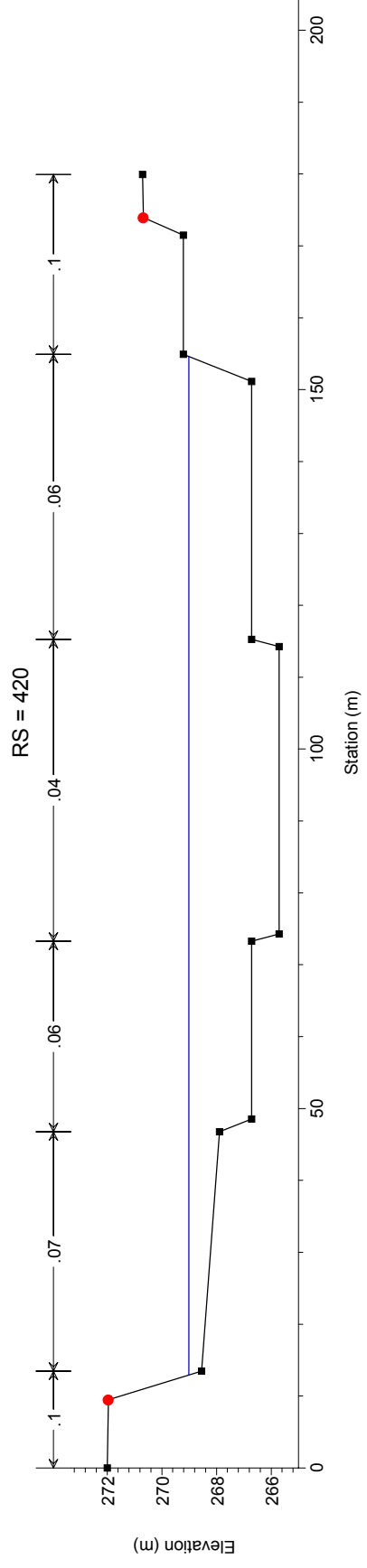
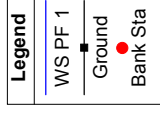
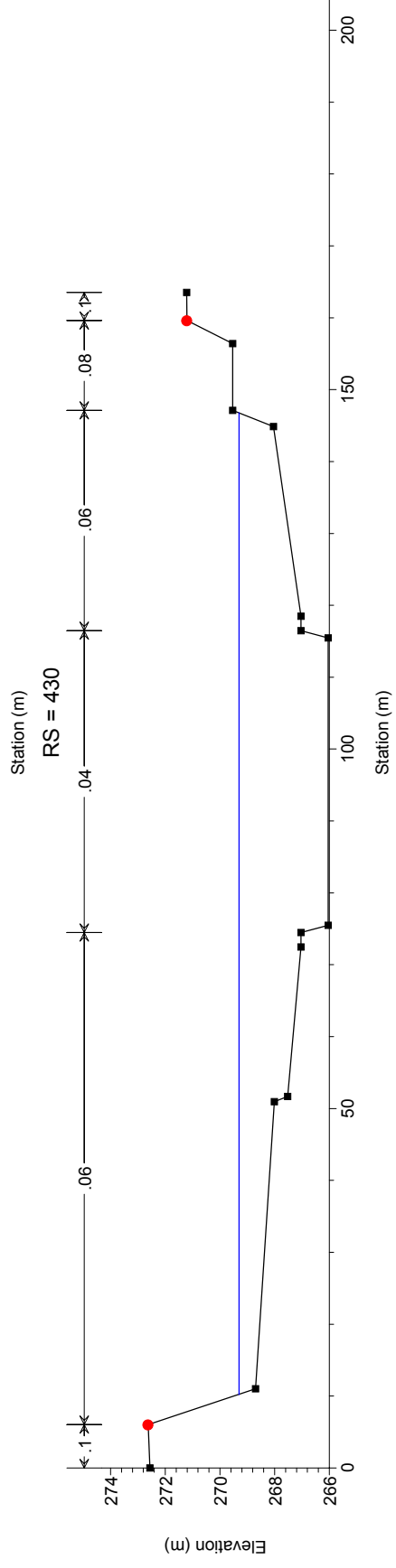
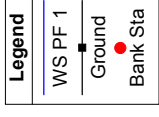
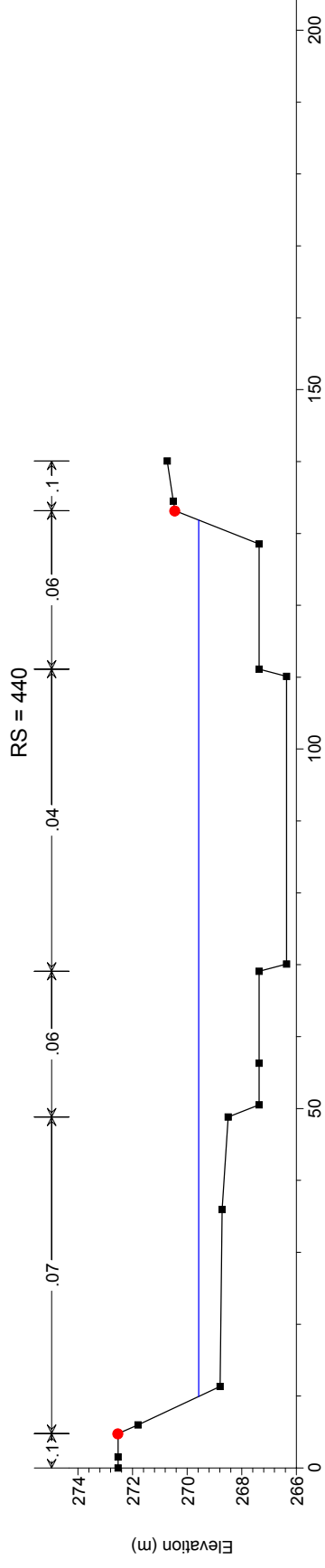
1 cm Horiz. = 10 m 1 cm Vert. = 4 m



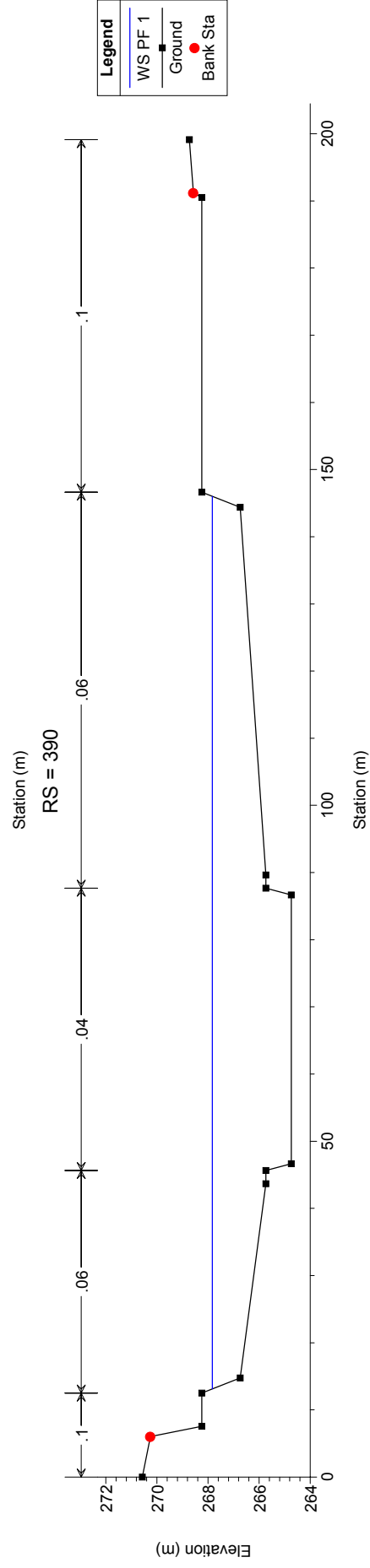
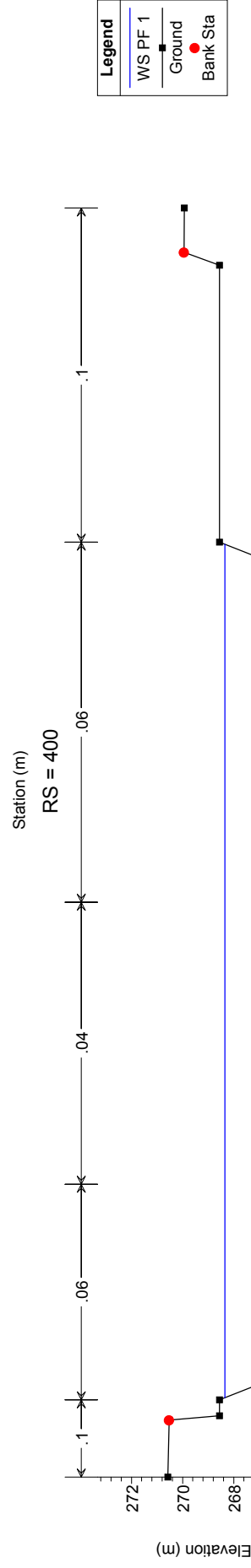
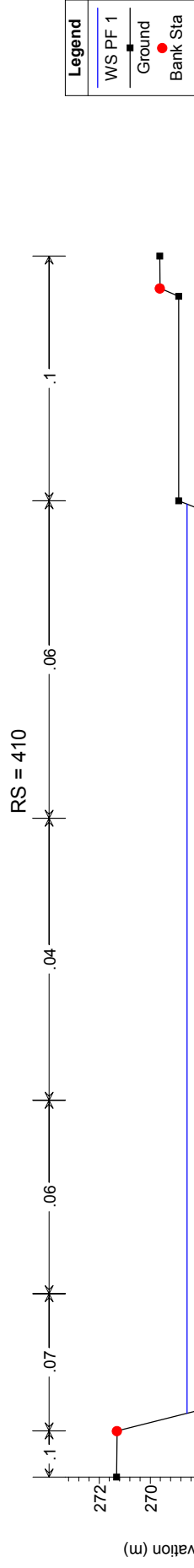
1 cm Horiz. = 12 m 1 cm Vert. = 2.5 m



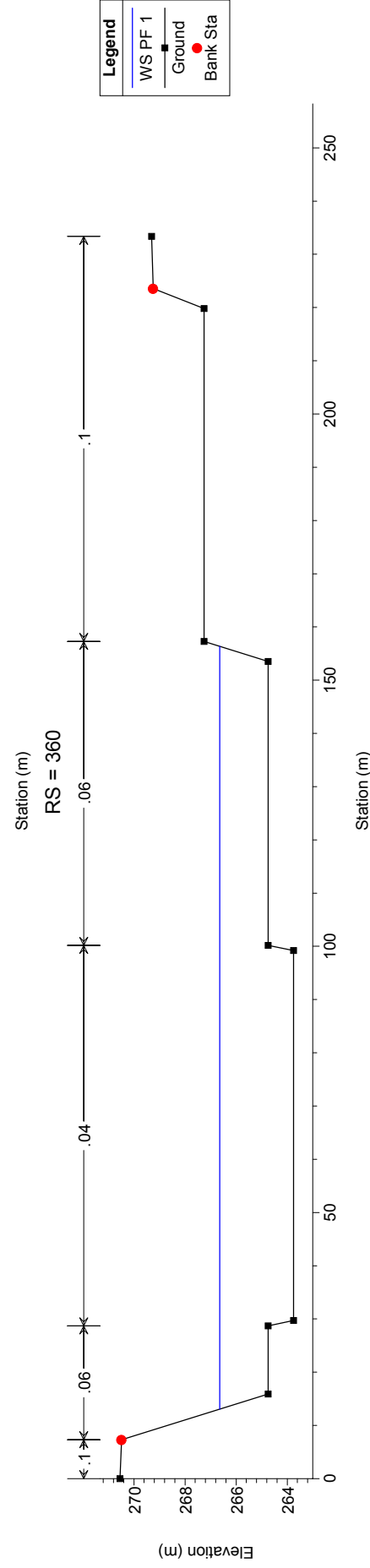
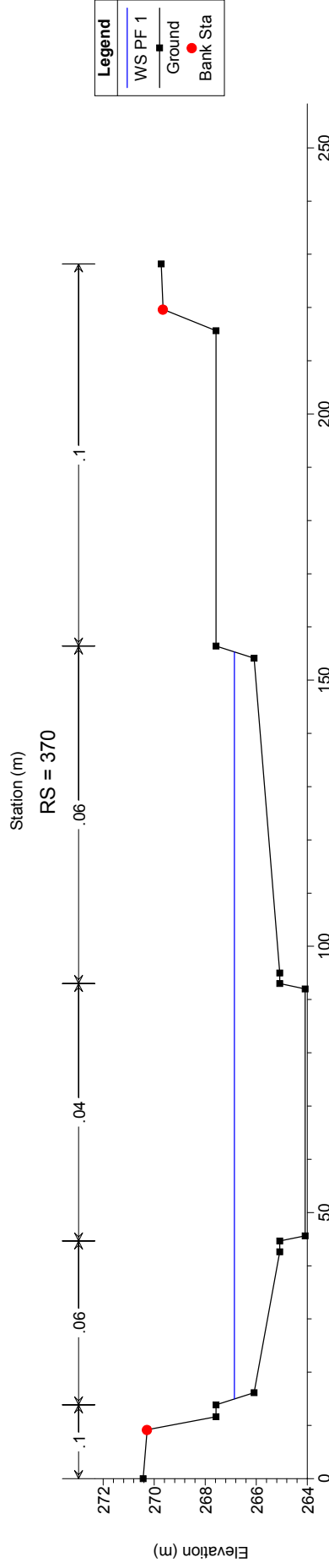
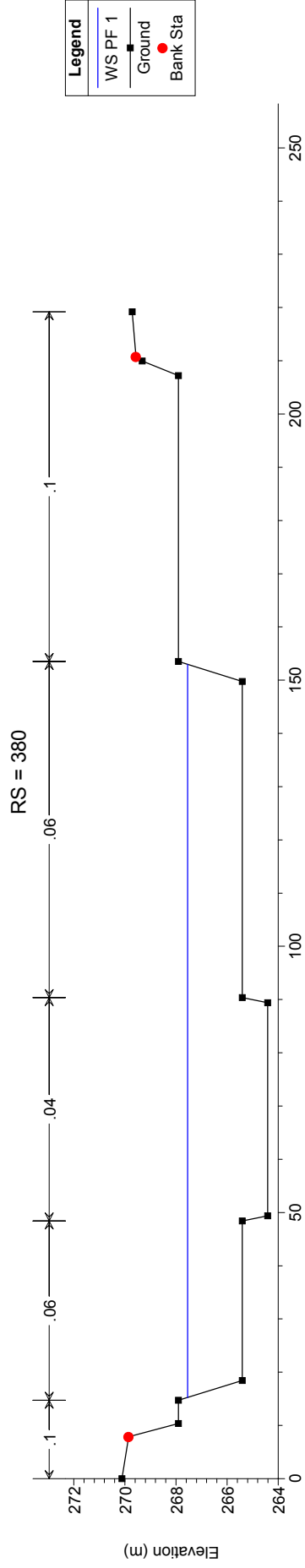
1 cm Horiz. = 8.5 m 1 cm Vert. = 2.5 m



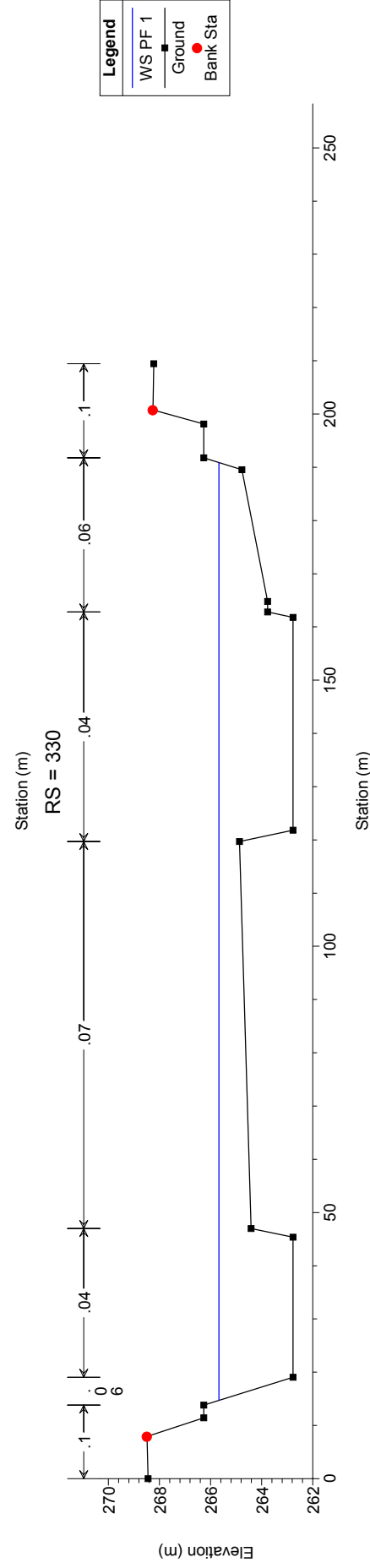
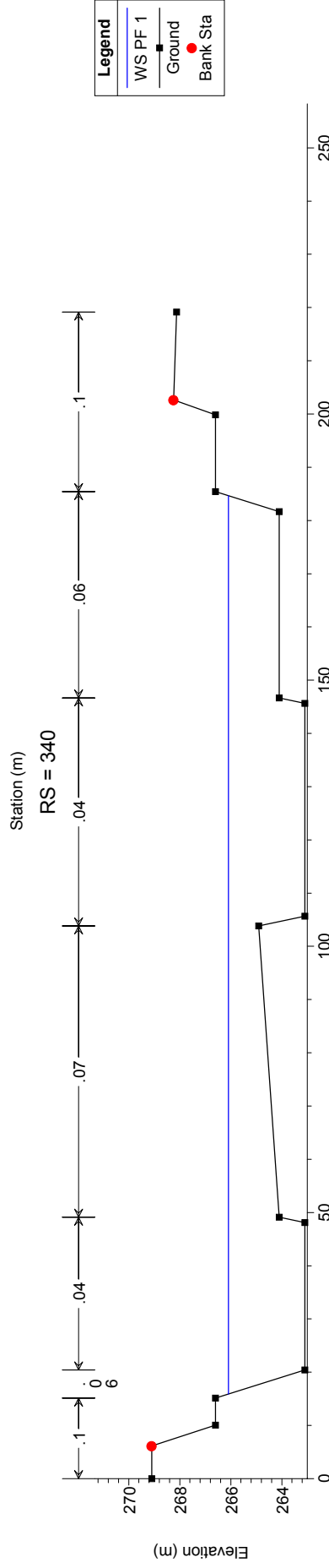
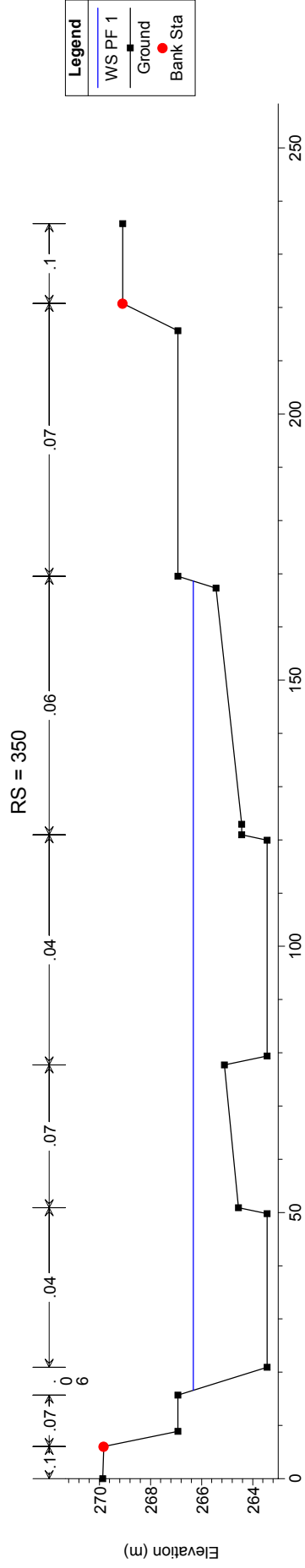
1 cm Horiz. = 9.5 m 1 cm Vert. = 2.5 m



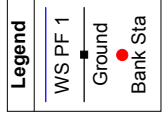
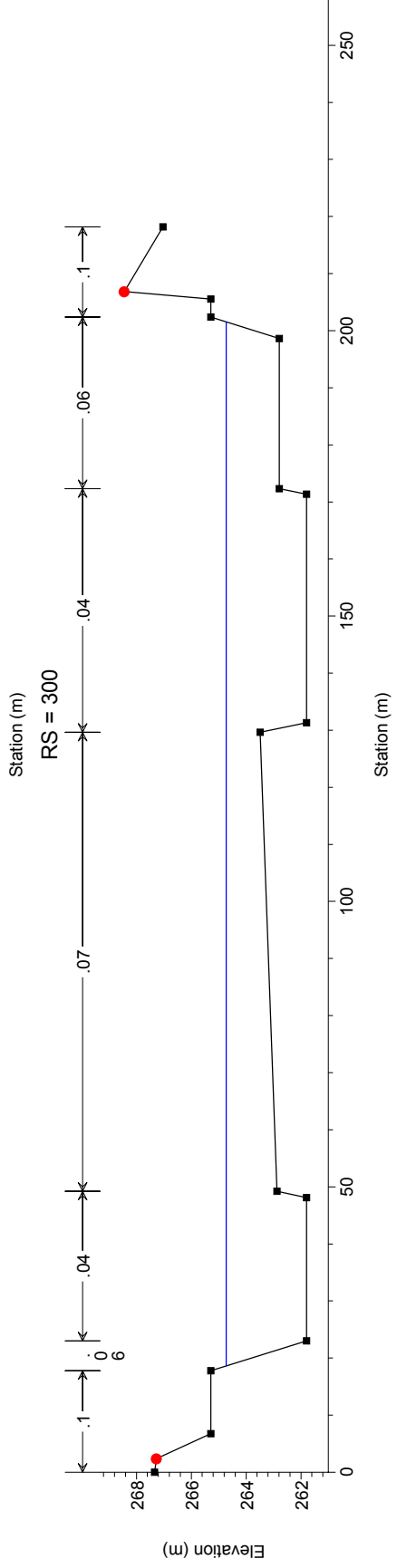
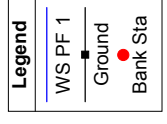
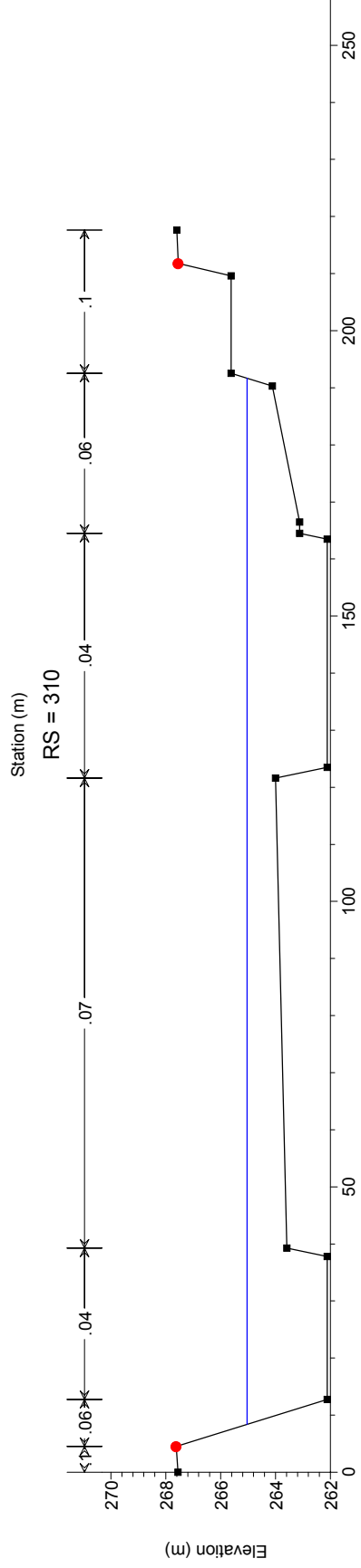
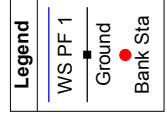
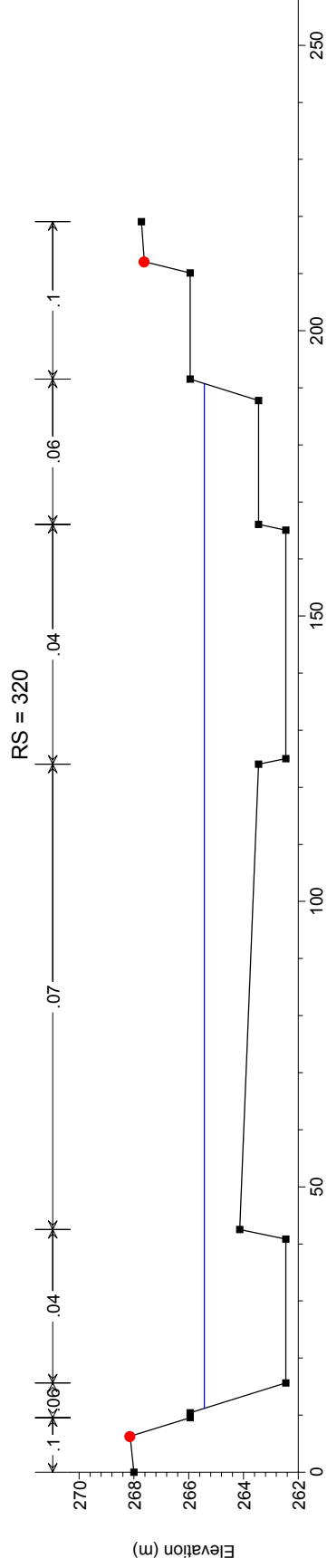
1 cm Horiz. = 9.5 m 1 cm Vert. = 2.5 m



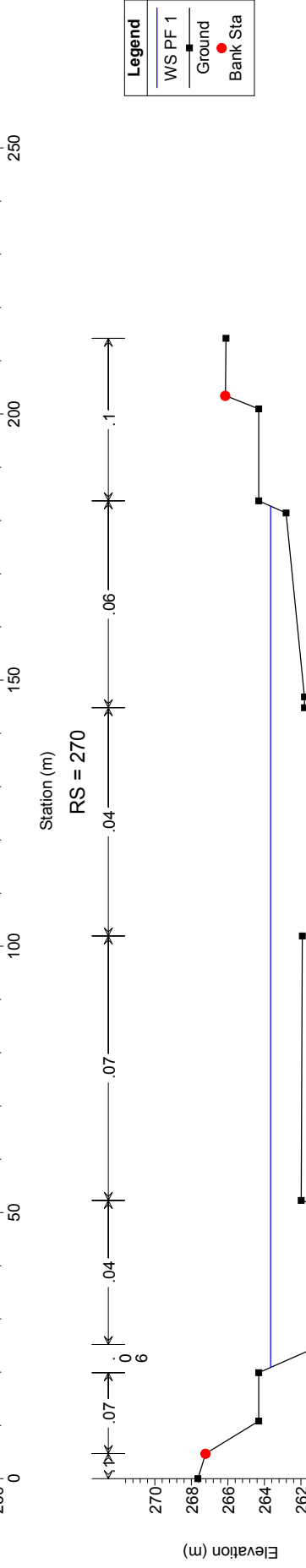
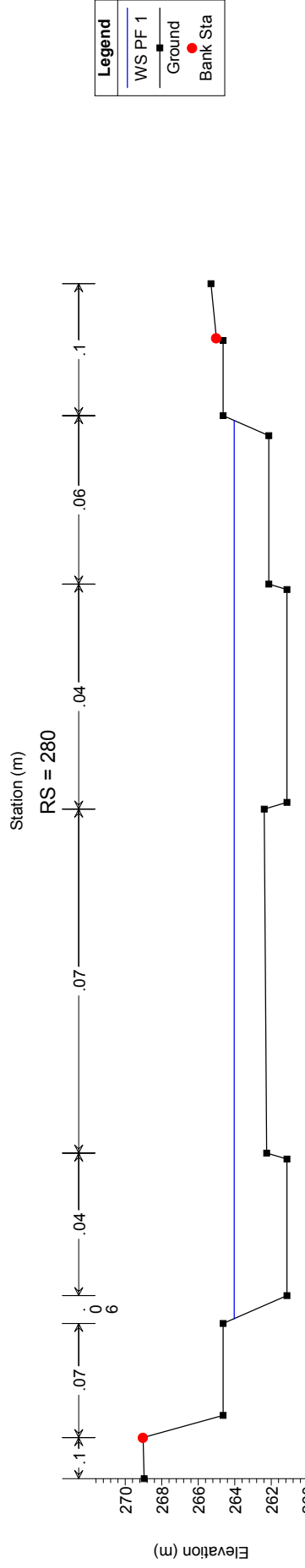
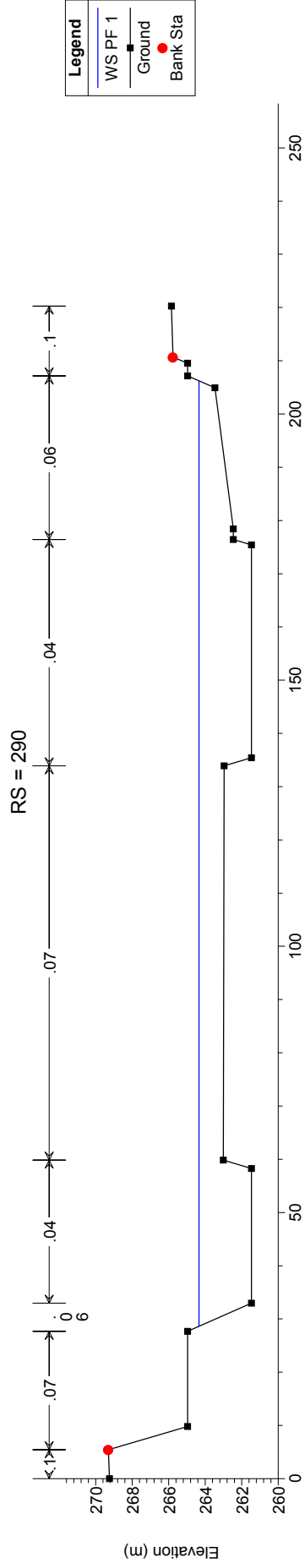
1 cm Horiz. = 12 m 1 cm Vert. = 2.5 m



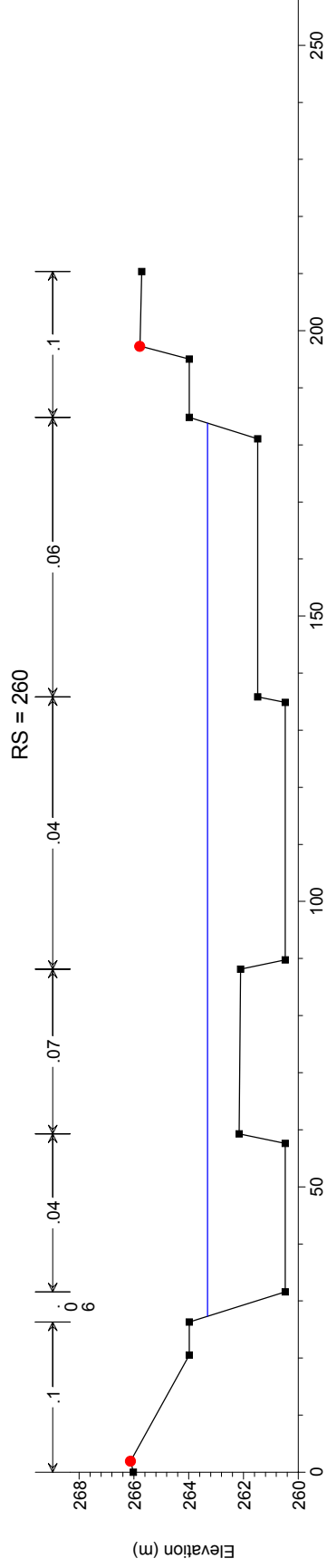
1 cm Horiz. = 12 m 1 cm Vert. = 2.5 m



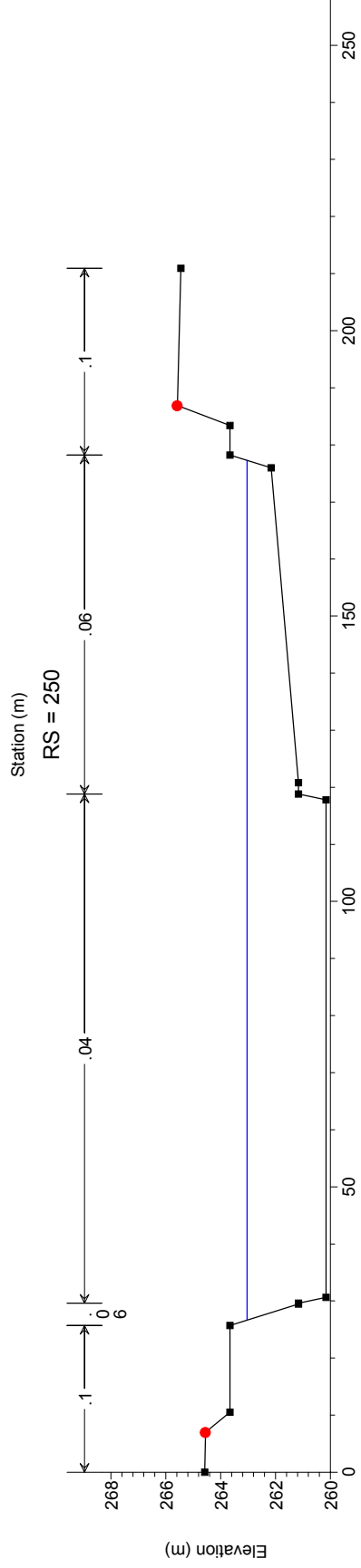
1 cm Horiz. = 12 m 1 cm Vert. = 2.5 m



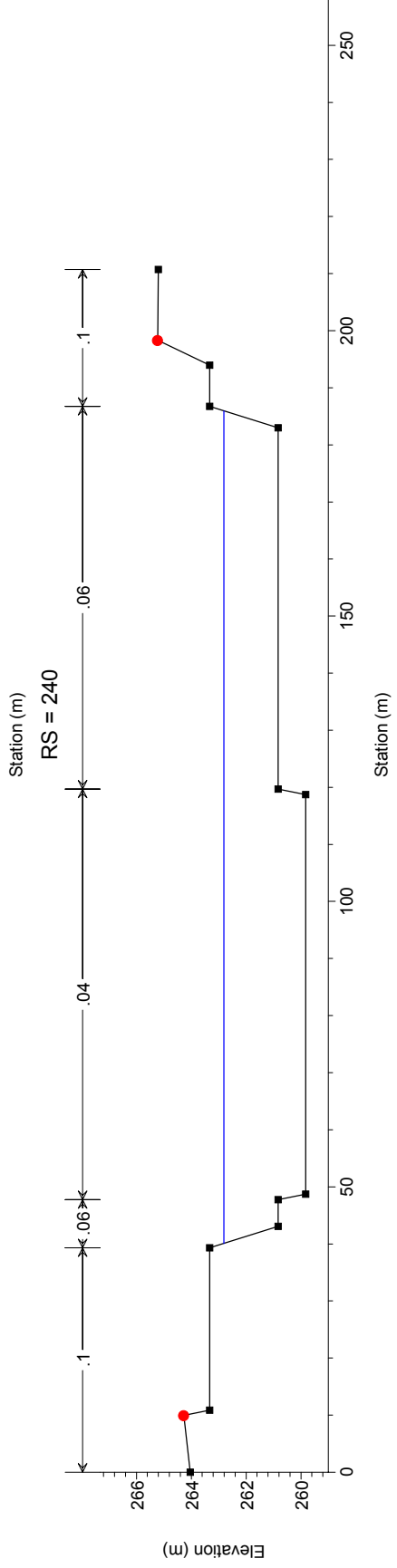
1 cm Horiz. = 12 m 1 cm Vert. = 3.5 m



Legend	
—	WS PF 1
—	Ground
●	Bank Sta

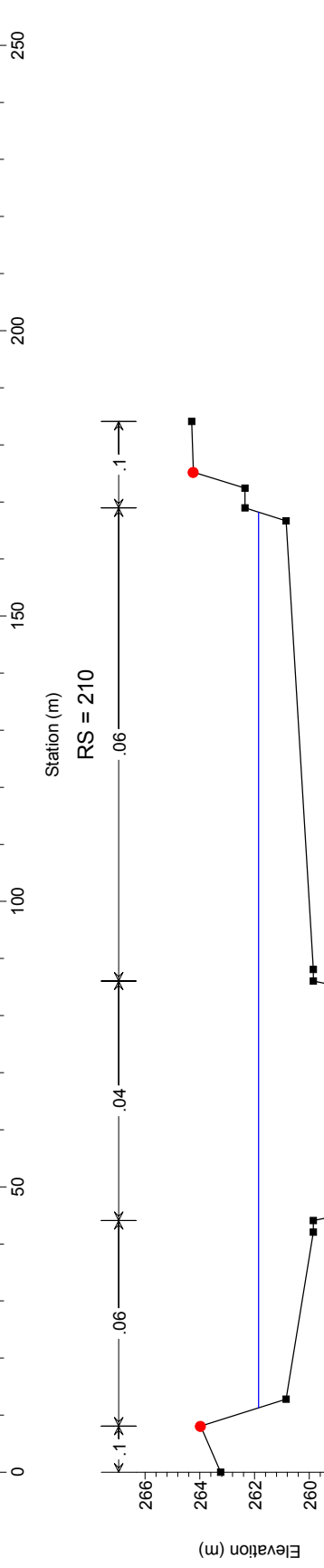
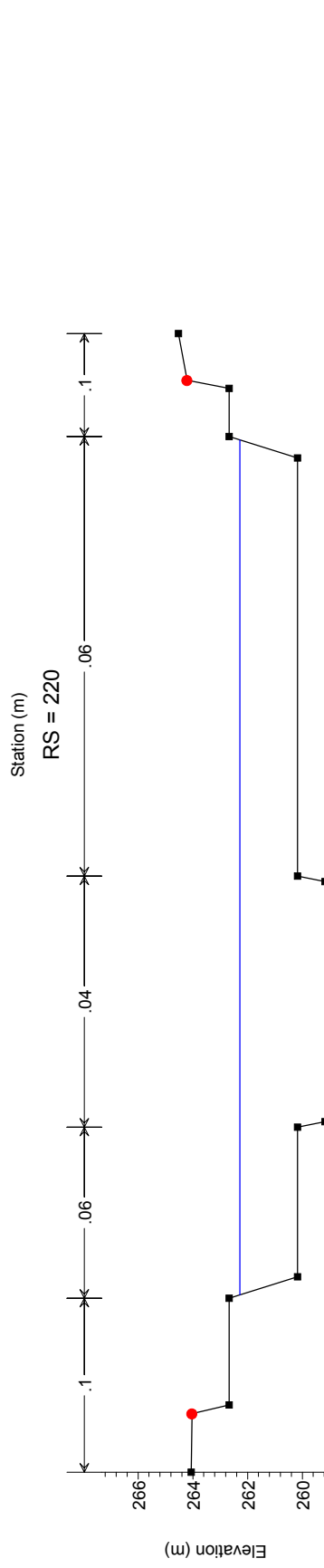
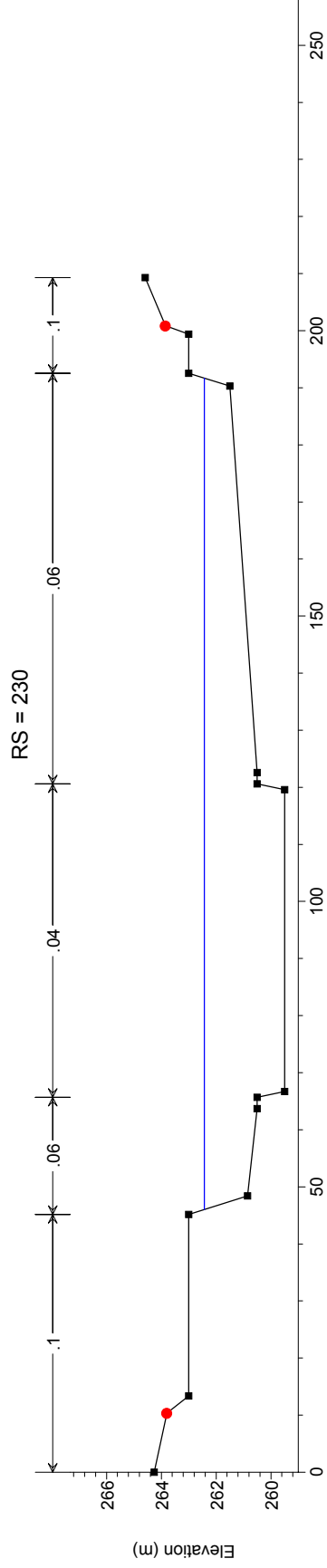


Legend	
—	WS PF 1
—	Ground
●	Bank Sta

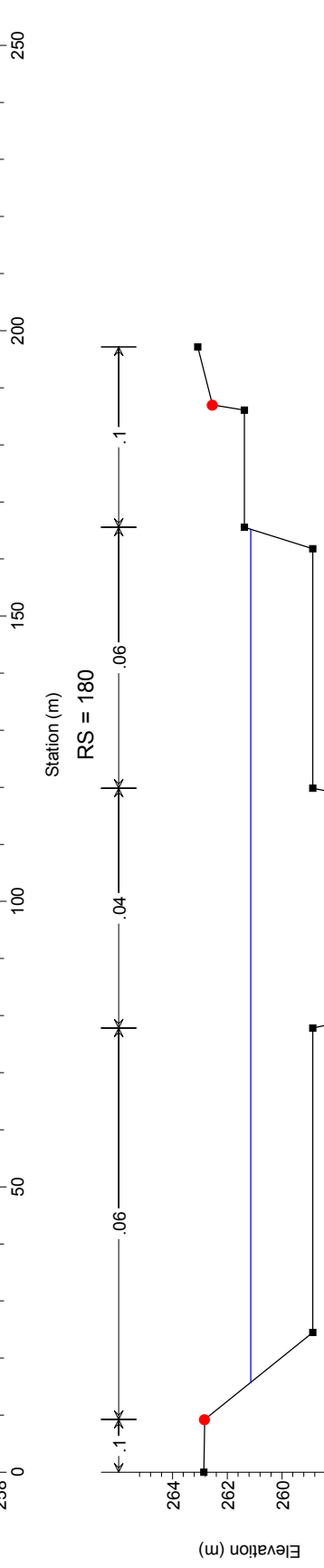
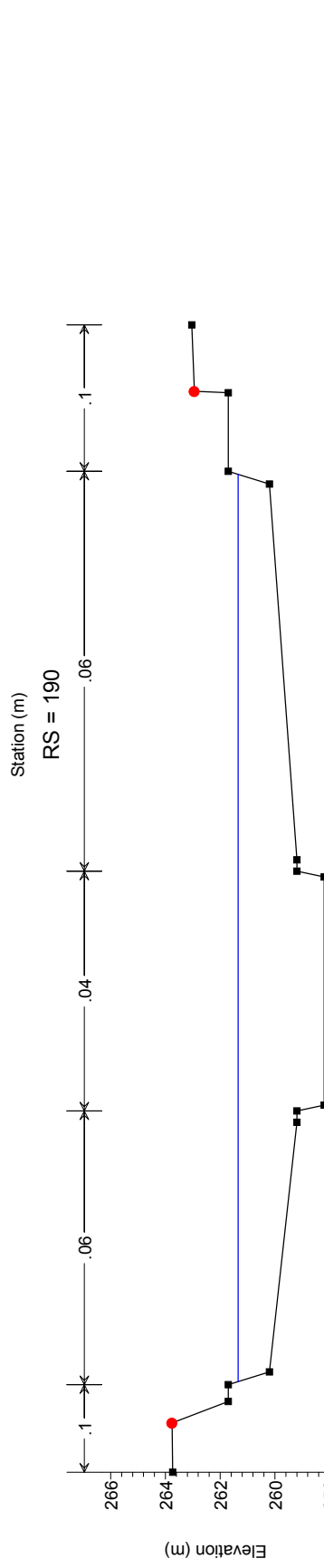
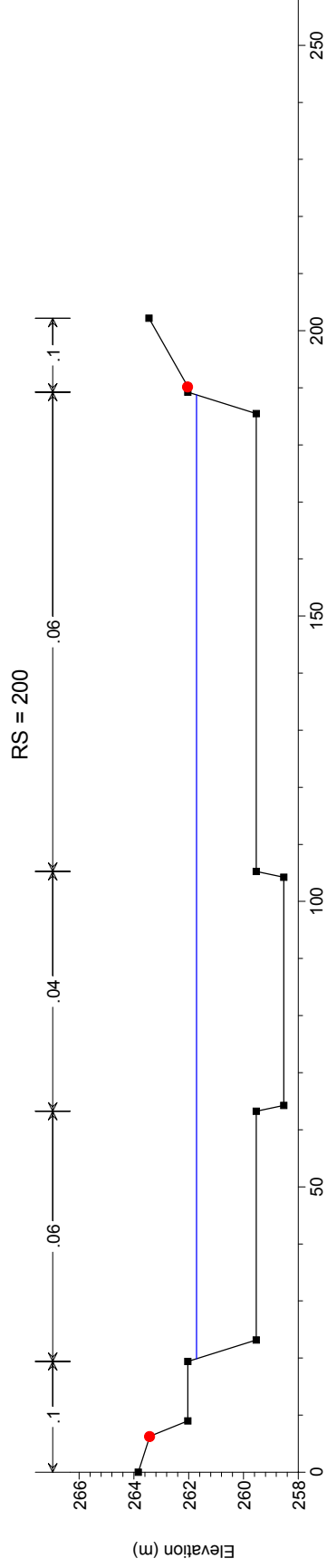


Legend	
—	WS PF 1
—	Ground
●	Bank Sta

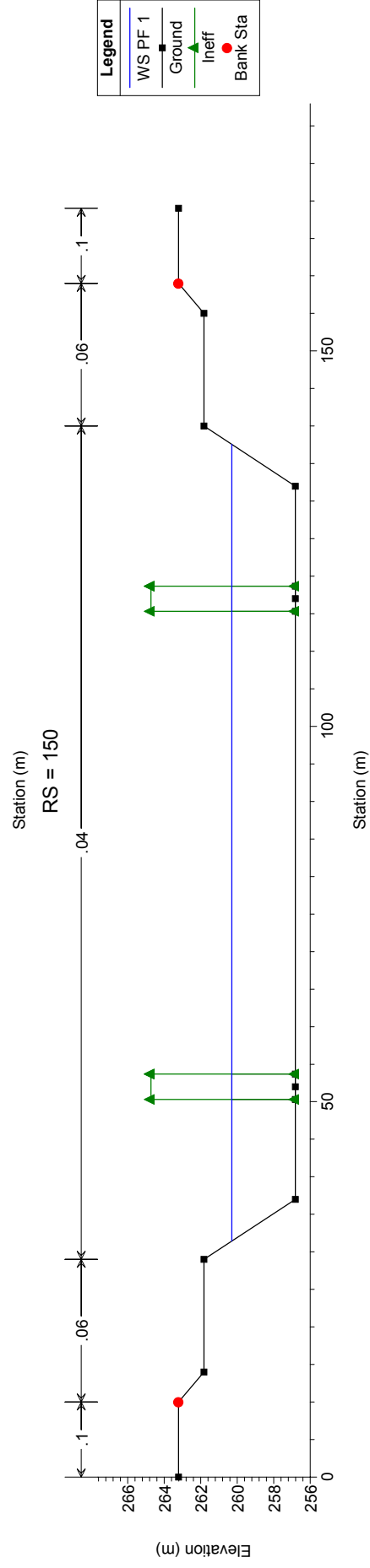
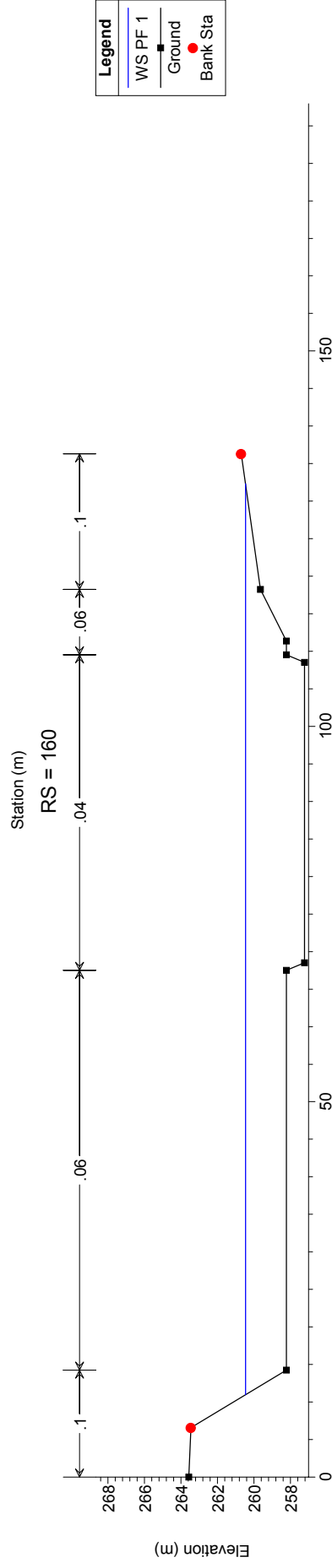
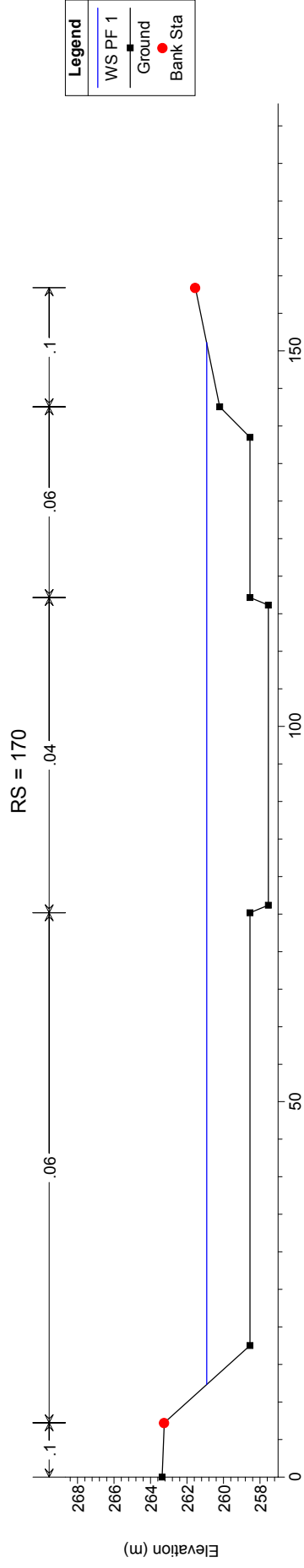
1 cm Horiz. = 12 m 1 cm Vert. = 2.5 m



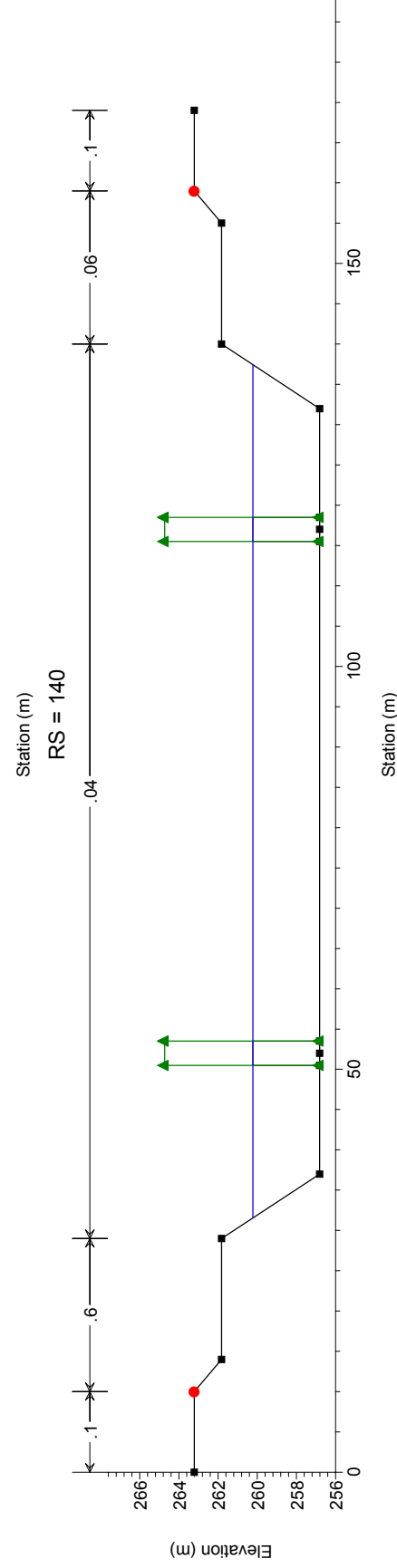
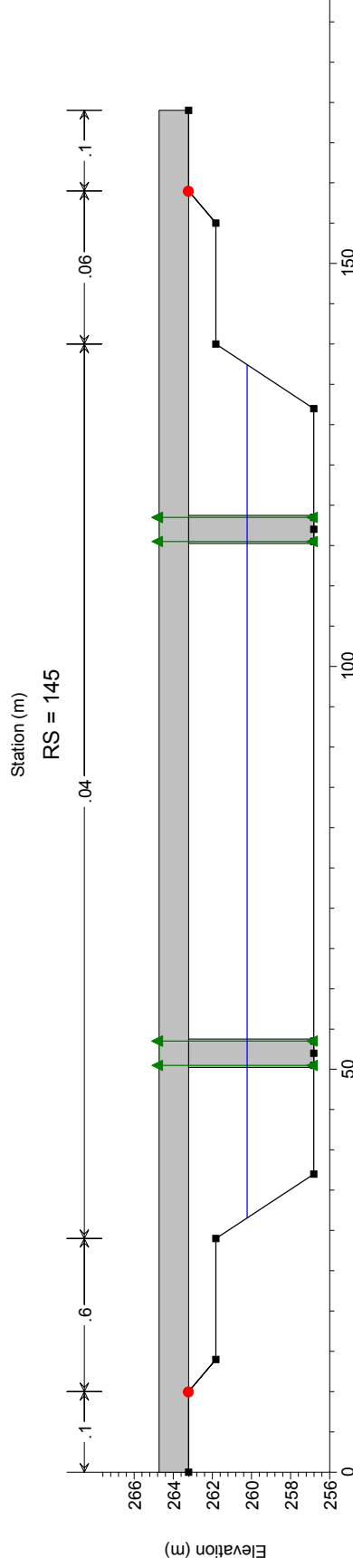
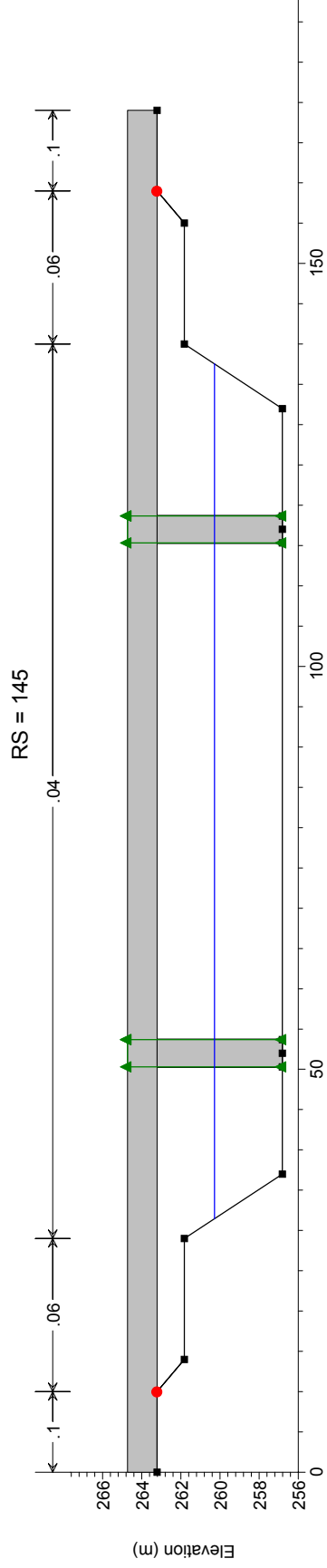
1 cm Horiz. = 12 m 1 cm Vert. = 2.5 m



1 cm Horiz. = 12 m 1 cm Vert. = 2.5 m

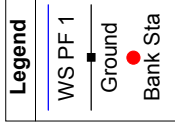
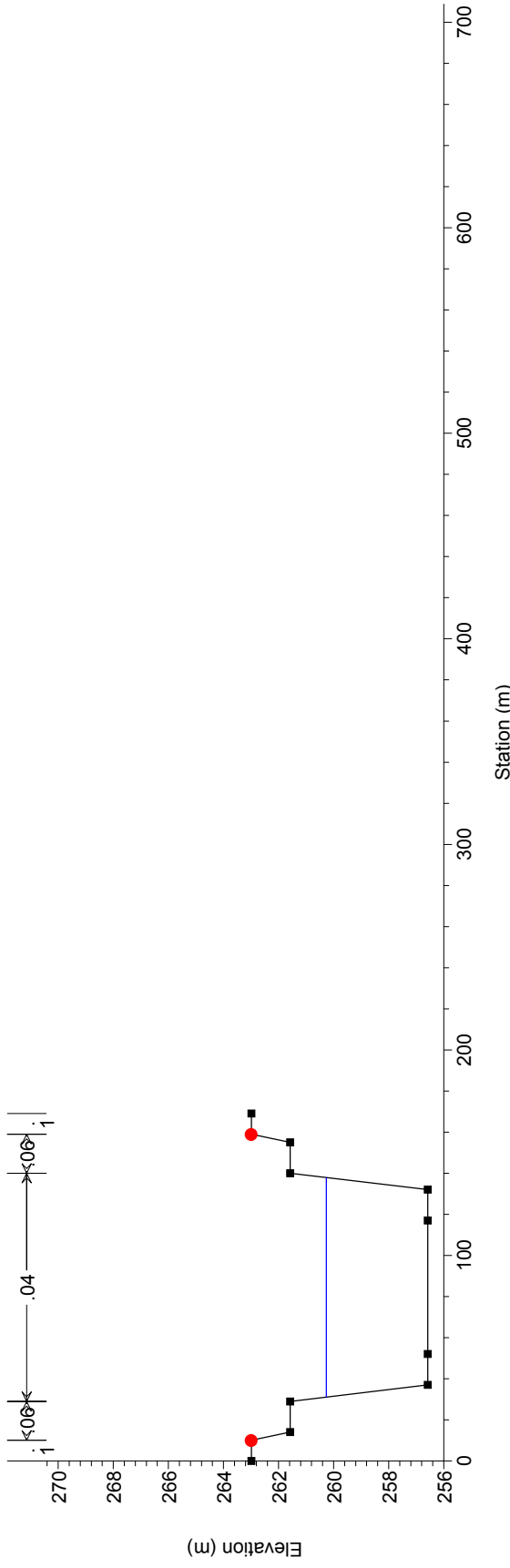


1 cm Horiz. = 8.5 m 1 cm Vert. = 3.5 m

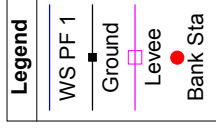
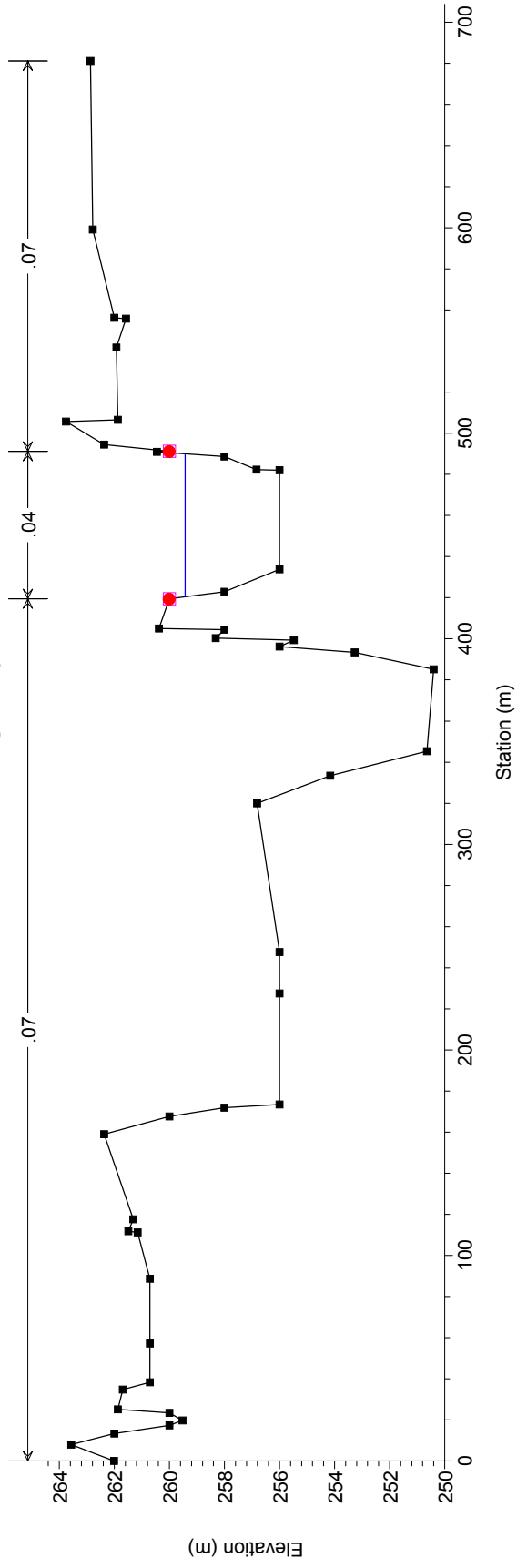


1 cm Horiz. = 8.5 m 1 cm Vert. = 3.5 m

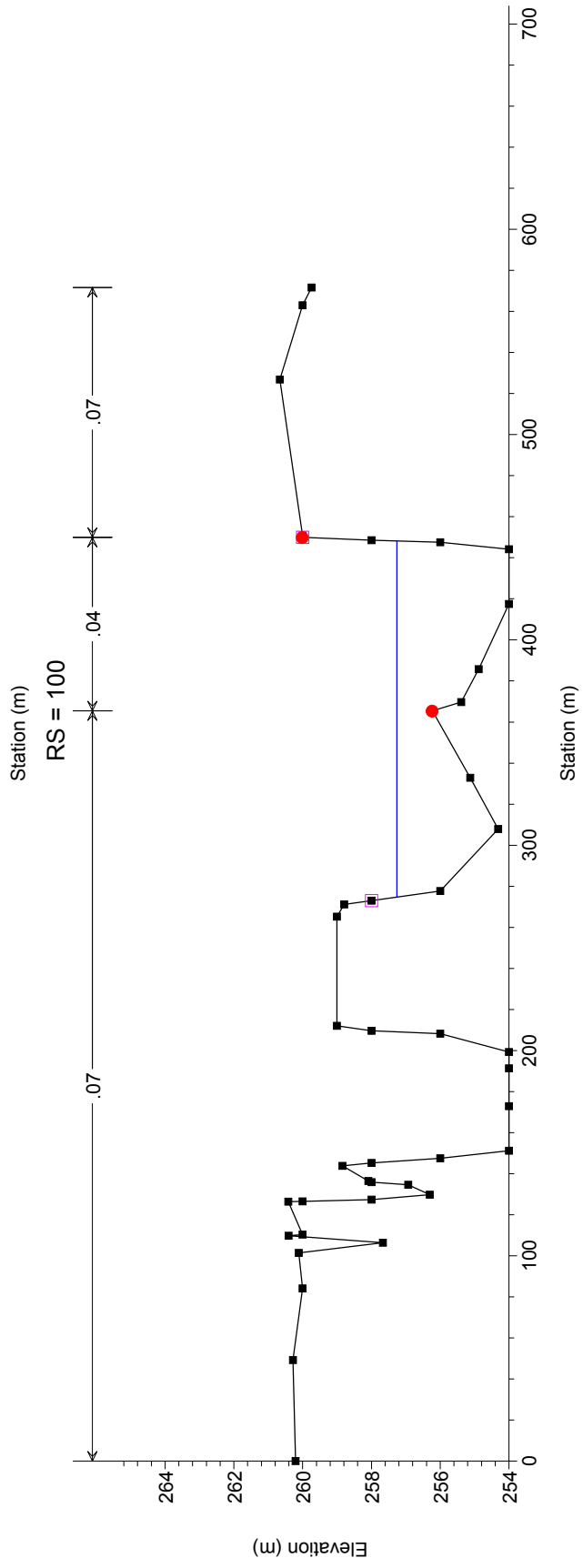
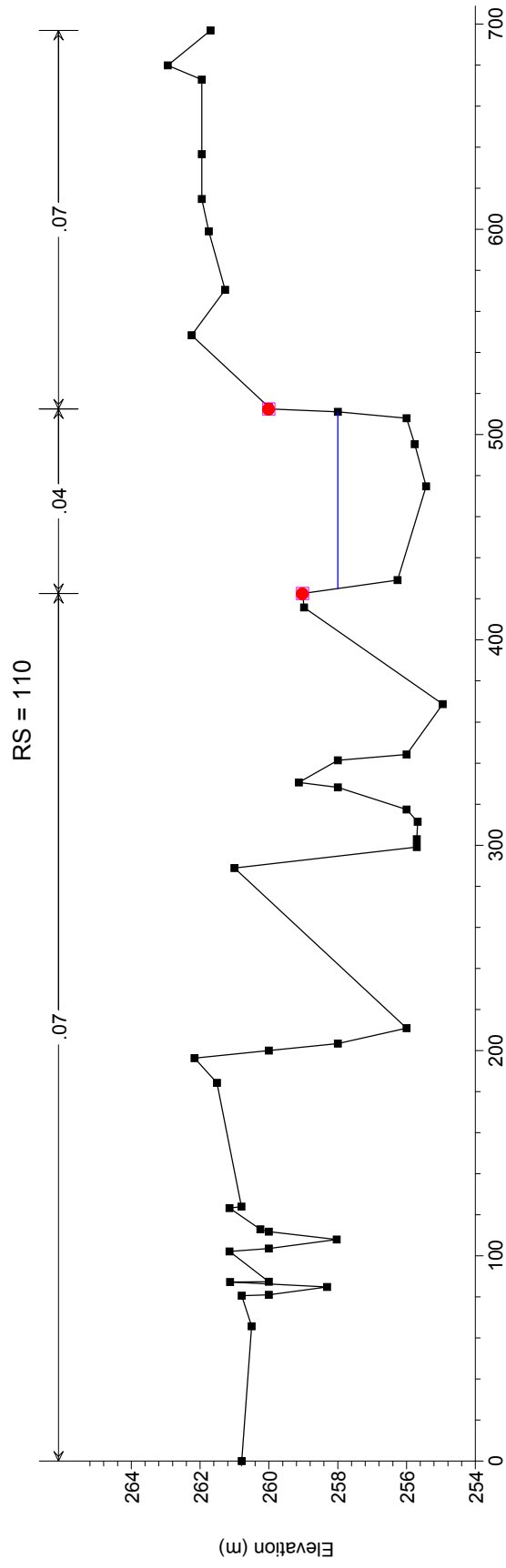
RS = 130



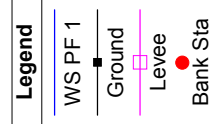
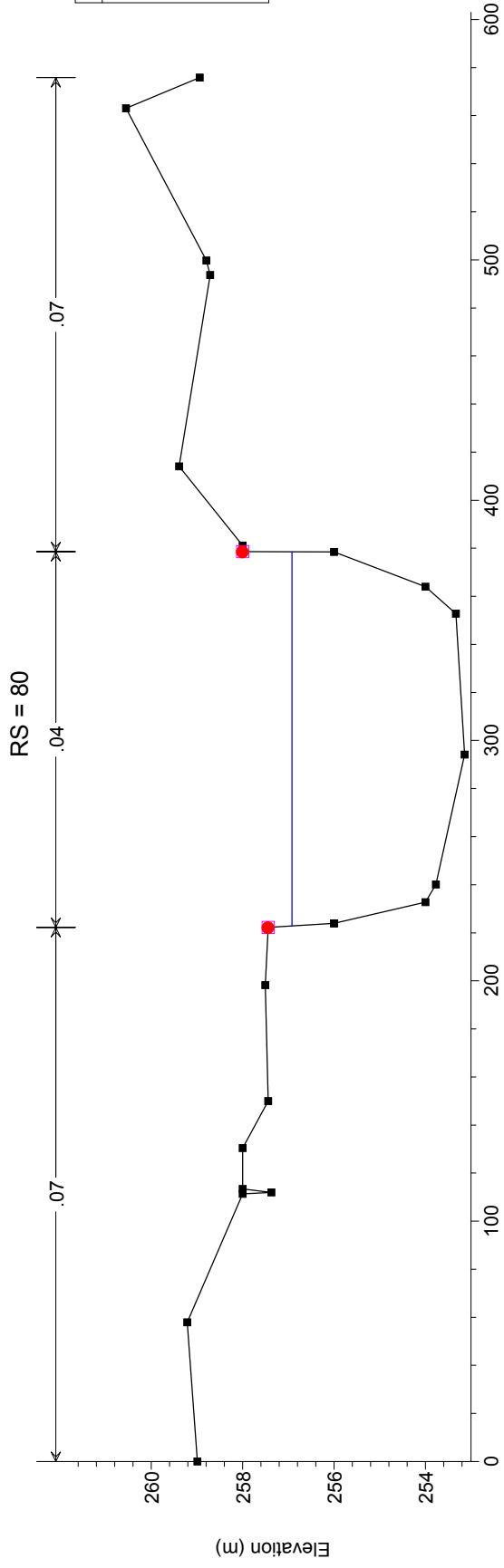
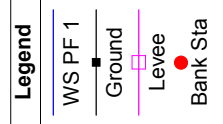
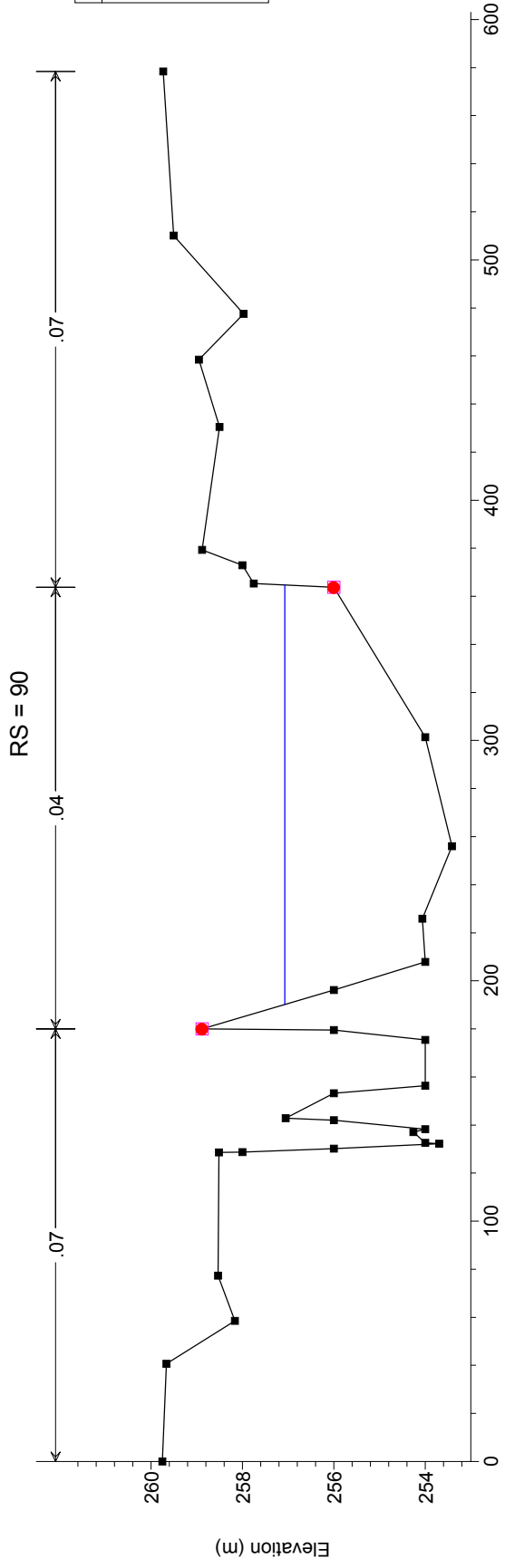
RS = 120



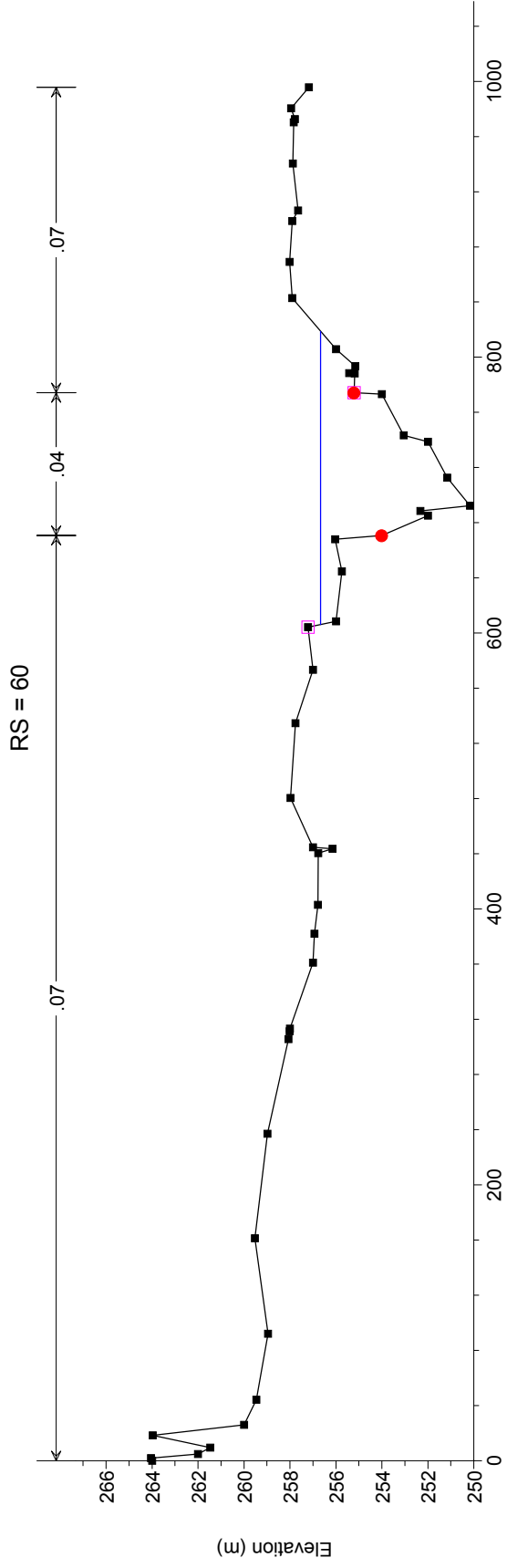
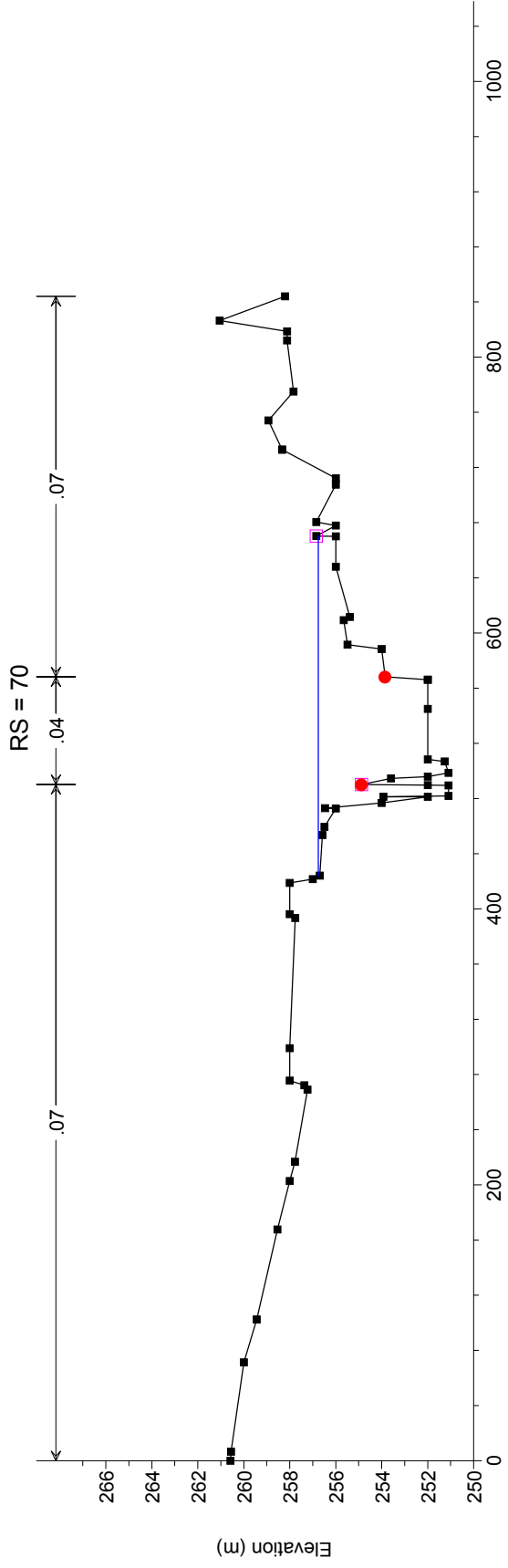
1 cm Horiz. = 33.5 m 1 cm Vert. = 2.5 m



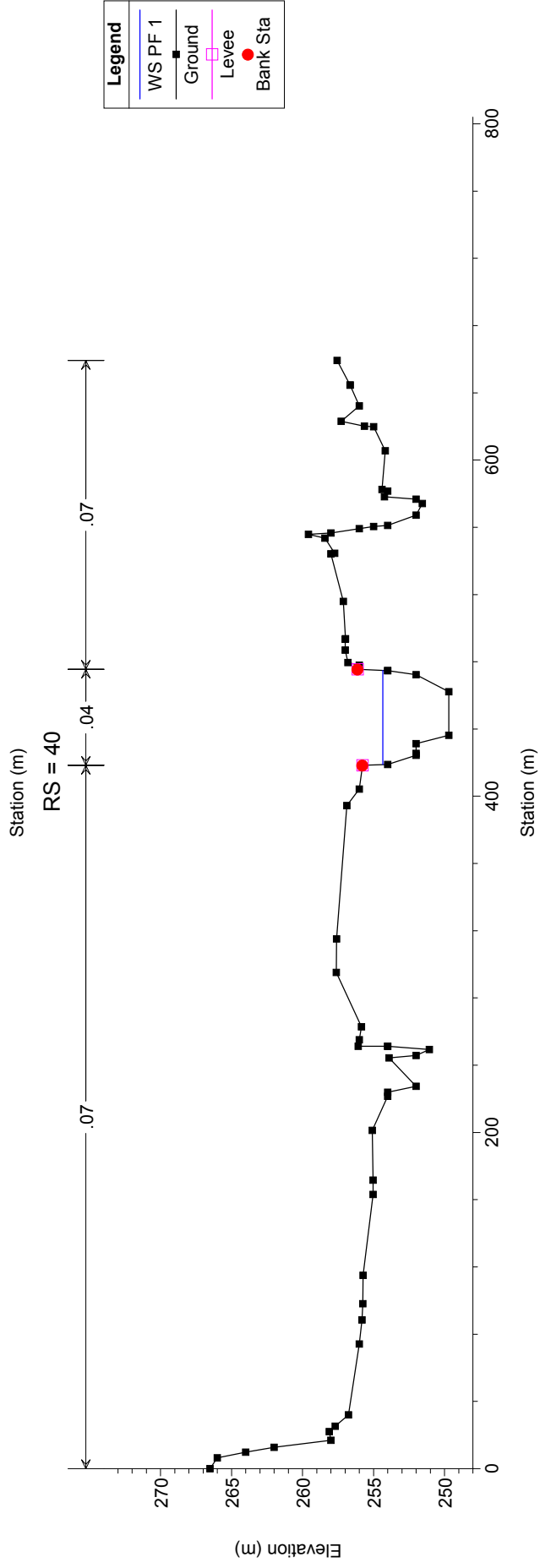
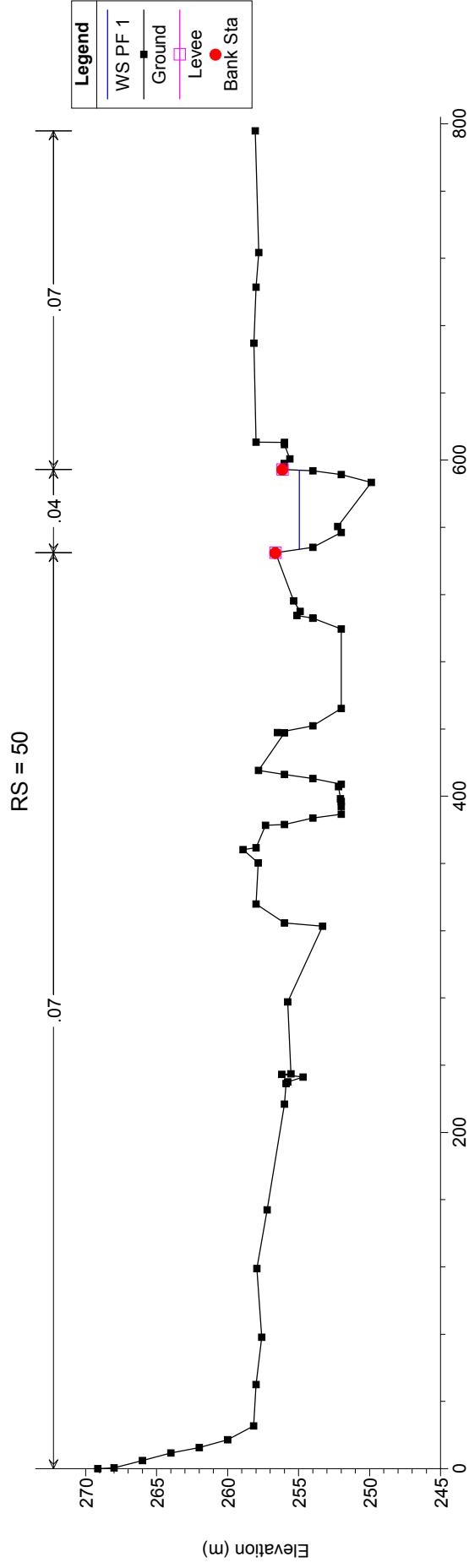
1 cm Horiz. = 33.5 m 1 cm Vert. = 2 m

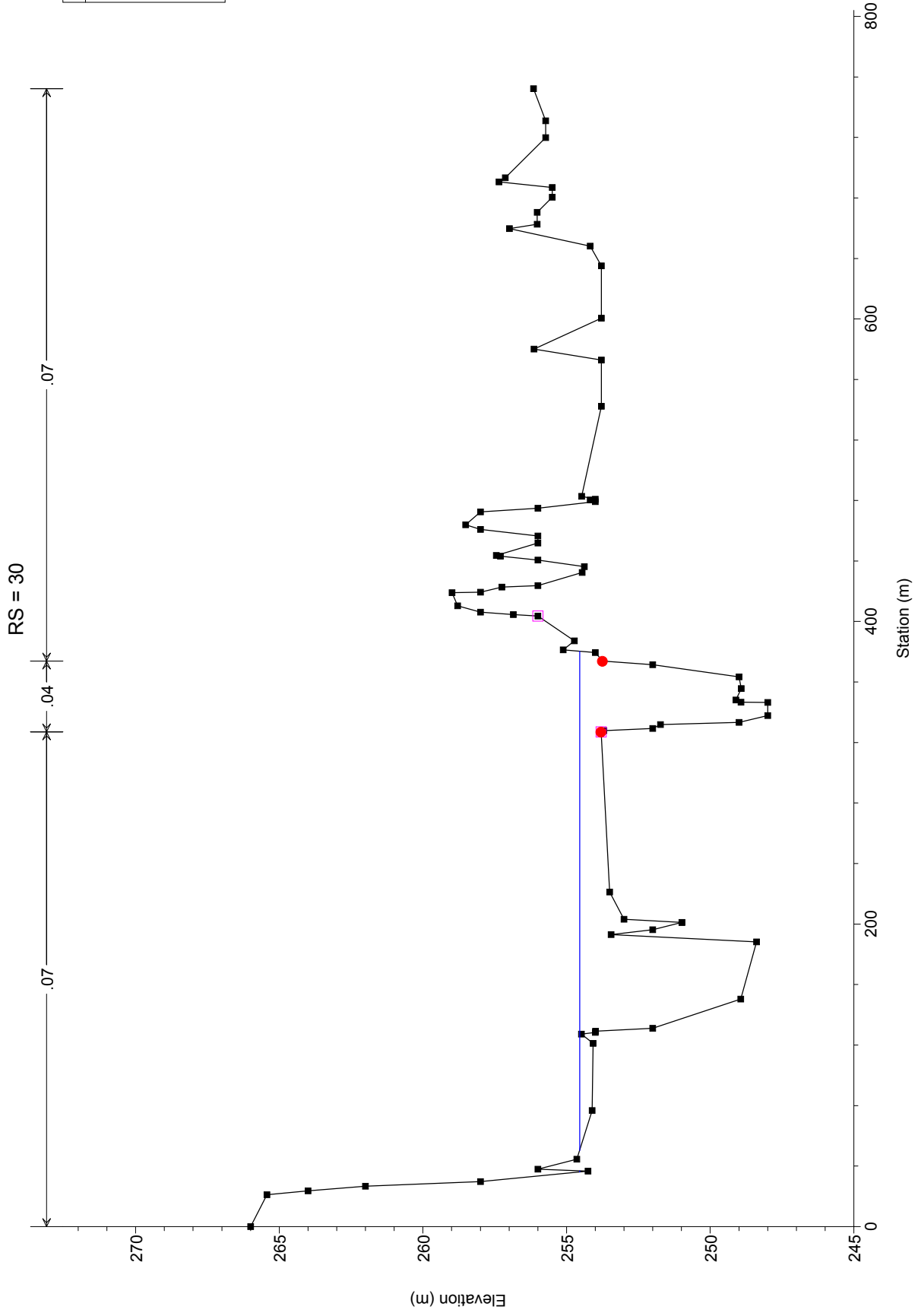


1 cm Horiz. = 28.5 m 1 cm Vert. = 1.5 m

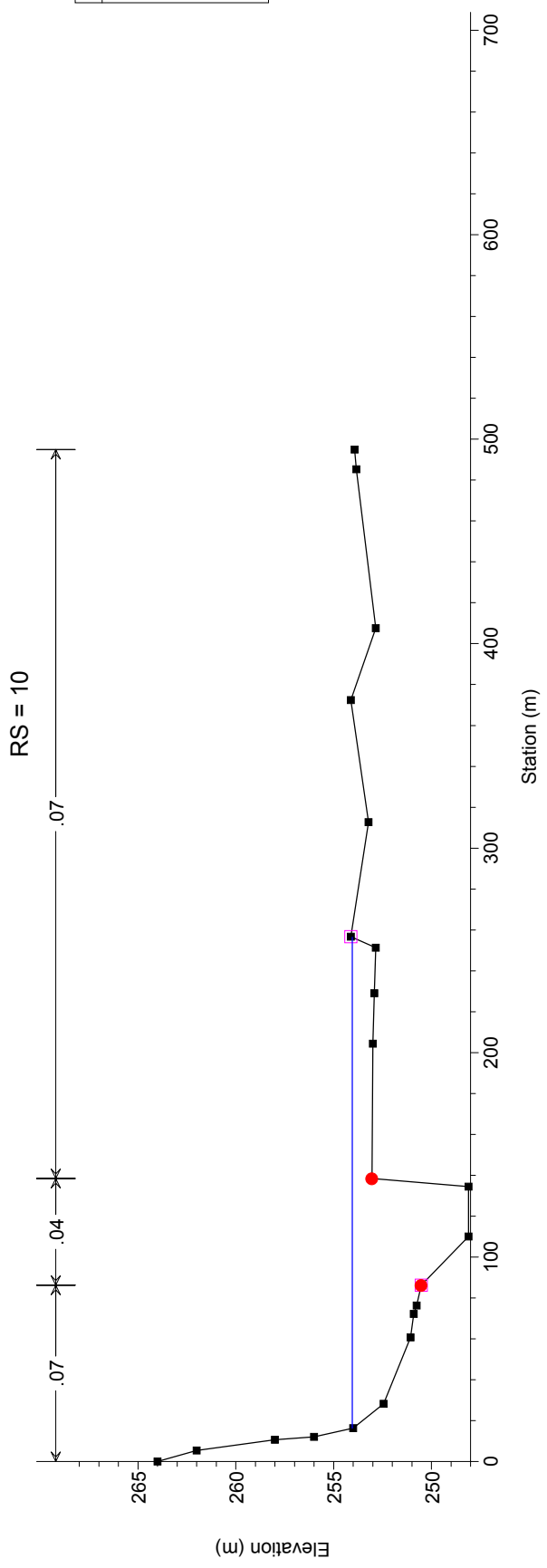
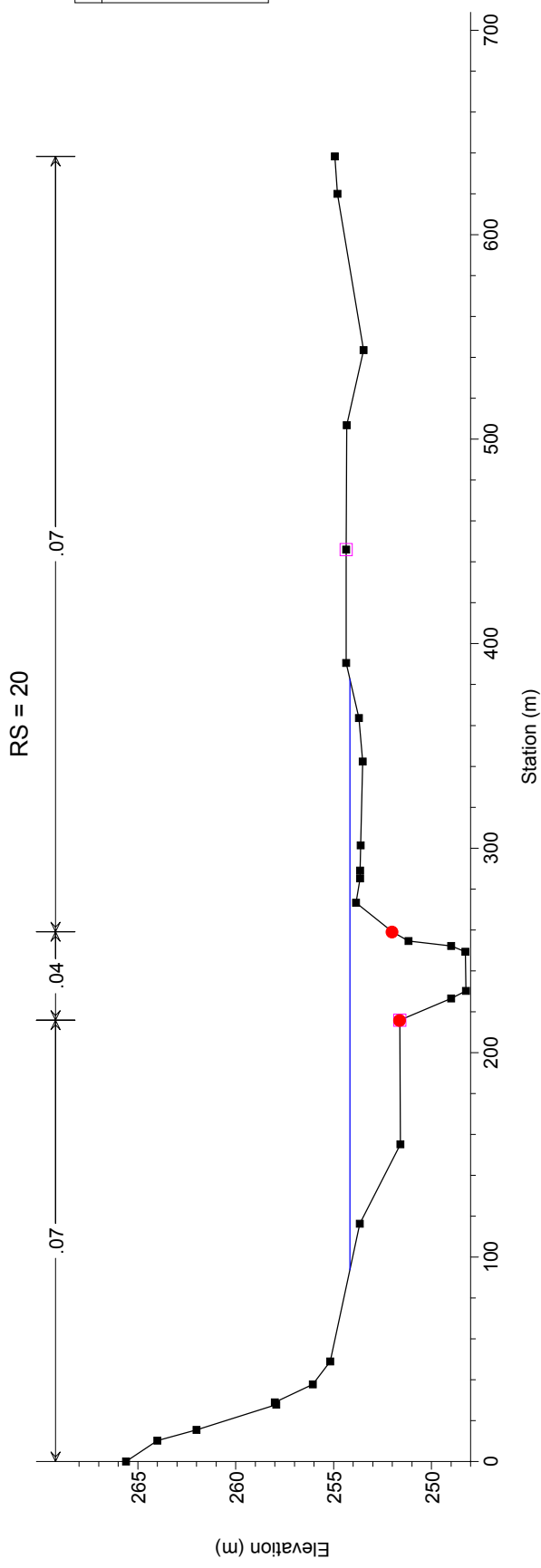


1 cm Horiz. = 50 m 1 cm Vert. = 3 m





Legend	
—	WS PF 1
■	Ground
□	Levee
●	Bank Sta



1 cm Horiz. = 33.5 m 1 cm Vert. = 3.5 m

TABULATO MODELLO IDRAULICO Q = 820 m³/s

RAS Plan: 820	River Sta	Q	Min Ch	W.S.	Crit	E.G.	E.G.	Vel	Flow	Top	Froude #
		Total (m ³ /s)	El (m)	Elev (m)	W.S. (m)	Elev (m)	Slope (m/m)	Chnl (m/s)	Area (m ²)	Width (m)	Chl
Orbassano	600	820.00	276.36	280.25	279.30	280.56	0.002945	2.52	376.08	262.56	0.50
Orbassano	590	820.00	275.82	279.79	278.95	280.27	0.004147	3.07	267.42	98.30	0.59
Orbassano	580	820.00	275.27	278.58	278.55	279.68	0.012301	4.64	176.87	78.51	0.99
Orbassano	570	820.00	274.72	278.56	277.28	279.06	0.003069	3.14	260.77	74.00	0.53
Orbassano	560	820.00	274.41	277.20	277.20	278.50	0.011862	5.05	162.27	62.54	1.00
Orbassano	559.696*	820.00	274.33	276.92	277.12	278.45	0.015344	5.49	149.49	61.89	1.13
Orbassano	559.393*	820.00	274.26	276.75	277.05	278.41	0.017368	5.71	143.72	61.59	1.19
Orbassano	559.090*	820.00	274.18	276.60	276.97	278.36	0.019040	5.87	139.58	61.37	1.24
Orbassano	558.787*	820.00	274.11	276.48	276.89	278.32	0.020447	6.01	136.46	61.21	1.28
Orbassano	558.484*	820.00	274.03	276.36	276.82	278.27	0.021686	6.12	133.93	61.07	1.32
Orbassano	558.181*	820.00	273.95	276.25	276.74	278.22	0.022814	6.22	131.80	60.96	1.35
Orbassano	557.878*	820.00	273.88	276.14	276.67	278.17	0.023837	6.31	129.98	60.86	1.38
Orbassano	557.575*	820.00	273.80	276.04	276.59	278.12	0.024778	6.39	128.39	60.77	1.40
Orbassano	557.272*	820.00	273.73	275.94	276.51	278.07	0.025719	6.46	126.88	60.68	1.43
Orbassano	556.969*	820.00	273.65	275.84	276.44	278.01	0.026530	6.53	125.64	60.61	1.45
Orbassano	556.666*	820.00	273.57	275.75	276.36	277.96	0.027361	6.59	124.42	60.54	1.47
Orbassano	556.363*	820.00	273.50	275.66	276.29	277.90	0.028063	6.64	123.43	60.49	1.48
Orbassano	556.060*	820.00	273.42	275.56	276.21	277.85	0.028773	6.70	122.45	60.43	1.50
Orbassano	555.757*	820.00	273.35	275.47	276.13	277.79	0.029386	6.74	121.64	60.38	1.52
Orbassano	555.454*	820.00	273.27	275.38	276.06	277.73	0.030015	6.79	120.82	60.33	1.53
Orbassano	555.151*	820.00	273.19	275.30	275.98	277.67	0.030647	6.83	120.03	60.29	1.55
Orbassano	554.848*	820.00	273.12	275.21	275.91	277.61	0.031149	6.87	119.41	60.25	1.56
Orbassano	554.545*	820.00	273.04	275.12	275.83	277.55	0.031663	6.90	118.79	60.21	1.57
Orbassano	554.242*	820.00	272.96	275.04	275.75	277.49	0.032172	6.94	118.20	60.17	1.58
Orbassano	553.939*	820.00	272.89	274.95	275.68	277.43	0.032585	6.97	117.72	60.14	1.59
Orbassano	553.636*	820.00	272.81	274.87	275.60	277.36	0.033006	6.99	117.24	60.11	1.60
Orbassano	553.333*	820.00	272.74	274.79	275.53	277.30	0.033418	7.02	116.78	60.08	1.61
Orbassano	553.030*	820.00	272.66	274.70	275.45	277.23	0.033760	7.04	116.40	60.06	1.62
Orbassano	552.727*	820.00	272.59	274.62	275.37	277.17	0.034107	7.07	116.02	60.03	1.62
Orbassano	552.424*	820.00	272.51	274.54	275.30	277.10	0.034390	7.09	115.72	60.01	1.63
Orbassano	552.121*	820.00	272.43	274.46	275.22	277.03	0.034746	7.11	115.34	59.99	1.64
Orbassano	551.818*	820.00	272.36	274.38	275.15	276.97	0.035089	7.13	114.98	59.96	1.64
Orbassano	551.515*	820.00	272.28	274.30	275.07	276.90	0.035340	7.15	114.72	59.94	1.65
Orbassano	551.212*	820.00	272.20	274.22	274.99	276.83	0.035594	7.16	114.46	59.93	1.65
Orbassano	550.909*	820.00	272.13	274.14	274.92	276.76	0.035832	7.18	114.22	59.91	1.66
Orbassano	550.606*	820.00	272.05	274.05	274.84	276.69	0.036092	7.20	113.95	59.89	1.67
Orbassano	550.303*	820.00	271.98	273.97	274.77	276.62	0.036352	7.21	113.70	59.87	1.67
Orbassano	550	820.00	271.90	273.89	274.69	276.56	0.036597	7.23	113.45	59.85	1.68
Orbassano	540	820.00	270.98	272.67	273.77	276.44	0.063490	8.60	95.35	58.70	2.15
Orbassano	538.75*	820.00	270.80	272.63	273.63	275.97	0.051931	8.10	101.23	58.64	1.97
Orbassano	537.5*	820.00	270.61	272.59	273.50	275.58	0.043100	7.66	107.06	58.65	1.81
Orbassano	536.25*	820.00	270.43	272.57	273.38	275.25	0.036051	7.25	113.04	58.76	1.67
Orbassano	535.*	820.00	270.24	272.57	273.27	274.97	0.030197	6.87	119.41	59.00	1.54
Orbassano	533.75*	820.00	270.05	273.83	273.16	274.67	0.005732	4.05	202.22	62.37	0.72
Orbassano	532.5*	820.00	269.87	273.82		274.62	0.005322	3.96	206.83	62.26	0.69
Orbassano	531.25*	820.00	269.68	273.81		274.58	0.005022	3.90	210.51	62.13	0.68
Orbassano	530	820.00	269.50	273.79		274.55	0.004812	3.84	213.27	62.00	0.66
Orbassano	520	820.00	269.50	273.71		274.27	0.003671	3.32	247.19	74.04	0.58
Orbassano	510	820.00	269.50	273.30		273.97	0.004770	3.62	226.56	72.25	0.65
Orbassano	500	820.00	269.00	272.92		273.46	0.004061	3.25	252.22	77.71	0.58
Orbassano	490	820.00	268.85	271.81		272.77	0.010256	4.36	188.15	72.20	0.86
Orbassano	480	820.00	267.67	271.40		272.19	0.008217	3.94	207.96	67.84	0.72

RAS Plan: 820	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
Orbassano	470	820.00	267.35	270.92		271.75	0.009204	4.05	202.64	68.80	0.75
Orbassano	460	820.00	267.02	270.34		271.26	0.010000	4.25	192.89	67.64	0.80
Orbassano	450	820.00	266.69	269.95		270.61	0.013197	3.59	228.27	100.12	0.75
Orbassano	440	820.00	266.36	269.58		270.11	0.006859	3.24	253.29	121.91	0.72
Orbassano	430	820.00	266.04	269.31		269.76	0.006277	2.98	274.72	136.55	0.67
Orbassano	420	820.00	265.71	269.01		269.37	0.008115	2.64	311.06	141.67	0.57
Orbassano	410	820.00	265.38	268.55		269.00	0.006381	2.97	275.98	135.35	0.66
Orbassano	400	820.00	265.06	268.35		268.68	0.005443	2.53	324.07	127.08	0.51
Orbassano	390	820.00	264.74	267.83		268.29	0.010396	3.02	271.76	132.86	0.67
Orbassano	380	820.00	264.41	267.55		267.87	0.005863	2.49	328.78	137.73	0.52
Orbassano	370	820.00	264.08	266.86		267.40	0.014210	3.26	251.18	140.34	0.78
Orbassano	360	820.00	263.75	266.64		266.95	0.004962	2.44	336.26	143.30	0.51
Orbassano	350	820.00	263.43	266.33		266.66	0.006811	2.55	321.88	152.03	0.56
Orbassano	340	820.00	263.10	266.09		266.33	0.005058	2.17	378.08	168.72	0.46
Orbassano	330	820.00	262.77	265.67		266.00	0.009561	2.55	322.09	176.17	0.60
Orbassano	320	820.00	262.45	265.43		265.66	0.005386	2.11	388.80	179.56	0.46
Orbassano	310	820.00	262.12	265.04		265.32	0.008186	2.37	345.71	183.27	0.55
Orbassano	300	820.00	261.79	264.73		264.96	0.005701	2.13	384.95	182.91	0.47
Orbassano	290	820.00	261.46	264.34		264.63	0.007852	2.39	343.63	177.59	0.55
Orbassano	280	820.00	261.14	264.04		264.29	0.005547	2.21	371.18	168.76	0.48
Orbassano	270	820.00	260.81	263.66		263.96	0.006728	2.41	339.66	161.80	0.53
Orbassano	260	820.00	260.48	263.32		263.62	0.006152	2.44	336.26	156.47	0.53
Orbassano	250	820.00	260.16	263.03		263.33	0.004811	2.43	338.13	150.62	0.52
Orbassano	240	820.00	259.83	262.81		263.09	0.004283	2.31	354.39	145.85	0.47
Orbassano	230	820.00	259.50	262.43		262.83	0.005627	2.79	293.41	145.66	0.63
Orbassano	220	820.00	259.17	262.28		262.55	0.004067	2.33	351.86	149.76	0.49
Orbassano	210	820.00	258.85	261.85		262.24	0.010020	2.77	296.43	156.90	0.64
Orbassano	200	820.00	258.53	261.72		261.93	0.003216	2.03	402.96	168.91	0.42
Orbassano	190	820.00	258.20	261.34		261.67	0.007812	2.55	321.39	158.97	0.57
Orbassano	180	820.00	257.87	261.14		261.40	0.003572	2.24	366.68	149.51	0.46
Orbassano	170	820.00	257.54	260.92		261.21	0.003672	2.38	344.18	138.79	0.48
Orbassano	160	820.00	257.22	260.46		260.90	0.010674	2.95	278.34	121.36	0.62
Orbassano	150	820.00	256.82	260.29	258.85	260.62	0.002137	2.52	325.75	106.11	0.44
Orbassano	145	Bridge									
Orbassano	140	820.00	256.82	260.23	258.85	260.56	0.002238	2.55	321.95	105.91	0.45
Orbassano	130	820.00	256.58	260.27		260.51	0.001512	2.20	371.98	106.80	0.38
Orbassano	120	820.00	256.00	259.43	258.83	260.22	0.005973	3.94	208.06	69.58	0.73
Orbassano	110	820.00	255.43	258.00	258.00	259.04	0.012377	4.53	180.96	86.06	1.00
Orbassano	100	820.00	254.00	257.26	256.40	257.54	0.003020	2.65	405.95	173.55	0.51
Orbassano	90	820.00	253.41	257.07	255.61	257.23	0.001349	1.77	464.58	174.54	0.34
Orbassano	80	820.00	253.14	256.92	254.98	257.05	0.000877	1.62	507.35	155.70	0.29
Orbassano	70	820.00	251.09	256.76	254.31	256.92	0.000794	1.94	592.20	246.59	0.29
Orbassano	60	820.00	250.17	256.66	254.07	256.81	0.000663	1.72	555.15	212.48	0.26
Orbassano	50	820.00	249.87	254.94	254.82	256.41	0.010281	5.37	152.72	47.01	0.95
Orbassano	40	820.00	249.70	254.34	253.51	255.19	0.005236	4.11	199.62	56.00	0.69
Orbassano	30	820.00	248.00	254.55	252.64	254.70	0.000991	2.15	729.07	330.74	0.31
Orbassano	20	820.00	248.24	254.16	252.73	254.48	0.001620	2.84	505.44	288.85	0.41
Orbassano	10	820.00	248.10	254.05	251.84	254.27	0.001002	2.31	563.12	240.17	0.32

Si ricorda che:

River Sta : numero sezione (crescente da valle verso monte)
Q total : portata di riferimento
Min Ch El : quota minima del fondo
W.S. Elev. : quota del pelo libero

Crit- W.S.	: quota del pelo libero allo stato critico
E.G. Elev.	: quota della linea dell'energia
E.G. Slope	: pendenza "motrice"
Vel Chnl	: velocità media nell'alveo principale
Flow Area	: area bagnata
Top Width	: larghezza del pelo libero
Froude # Chl	: numero di Froude per l'alveo principale (la corrente è "veloce" per numero di Froude > 1)
*	: sezione interpolata