

VERIFICHE IDRAULICHE IN MOTO PERMANENTE LUNGO IL TORRENTE ARBIOLA E FAGGIANO

PORTATE

Tempo di ritorno 20 anni

ARBIOLA	Q = 19.40 mc/s
FAGGIANO ALTO	Q = 42.30 mc/s
FAGGIANO IMMISSIONE ARBIOLA	Q = 55.68 mc/s

Tempo di ritorno 100 anni

ARBIOLA	Q = 32.50 mc/s
FAGGIANO ALTO	Q = 70.70 mc/s
FAGGIANO IMMISSIONE ARBIOLA	Q = 92.90 mc/s

Tempo di ritorno 200 anni

ARBIOLA	Q = 35.60 mc/s
FAGGIANO ALTO	Q = 77.40 mc/s
FAGGIANO IMMISSIONE ARBIOLA	Q = 101.70 mc/s

Con restituzione di:

- Planimetria con traccia delle sezioni
- Profili longitudinali
- Sezioni trasversali con i livelli idrometrici
- Tabulati dei risultati delle verifiche idrauliche

Con restituzione al contorno:

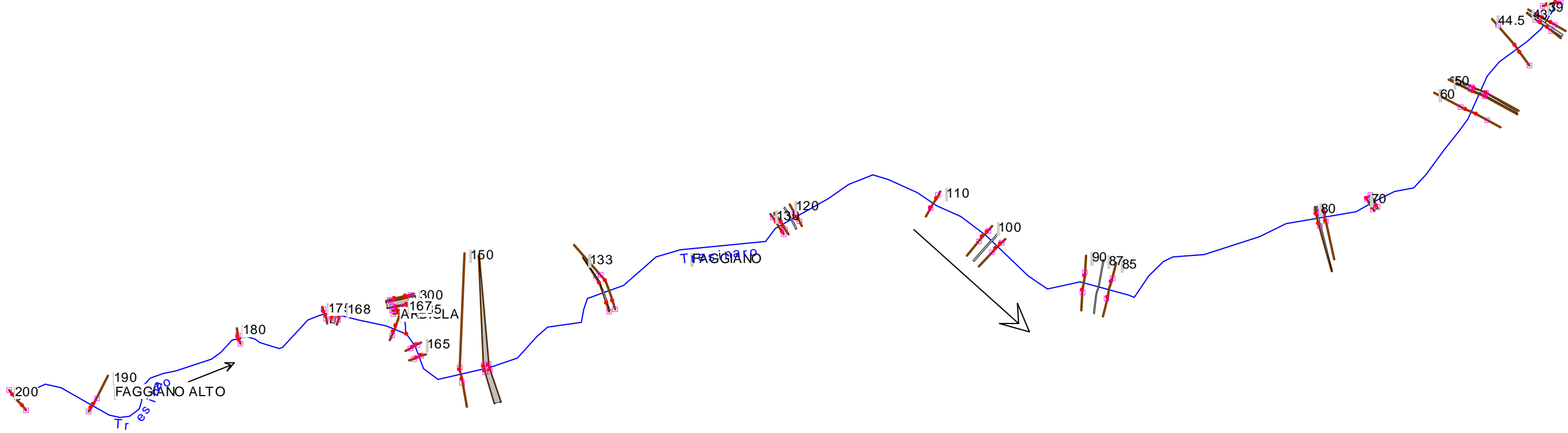
- Stato critico sull'ultima sezione 17bis inserita nel modello

Scabrezza:

secondo Strickler $16 \text{ m}^{1/3}\text{s}^{-1}$ presenza di vegetazione

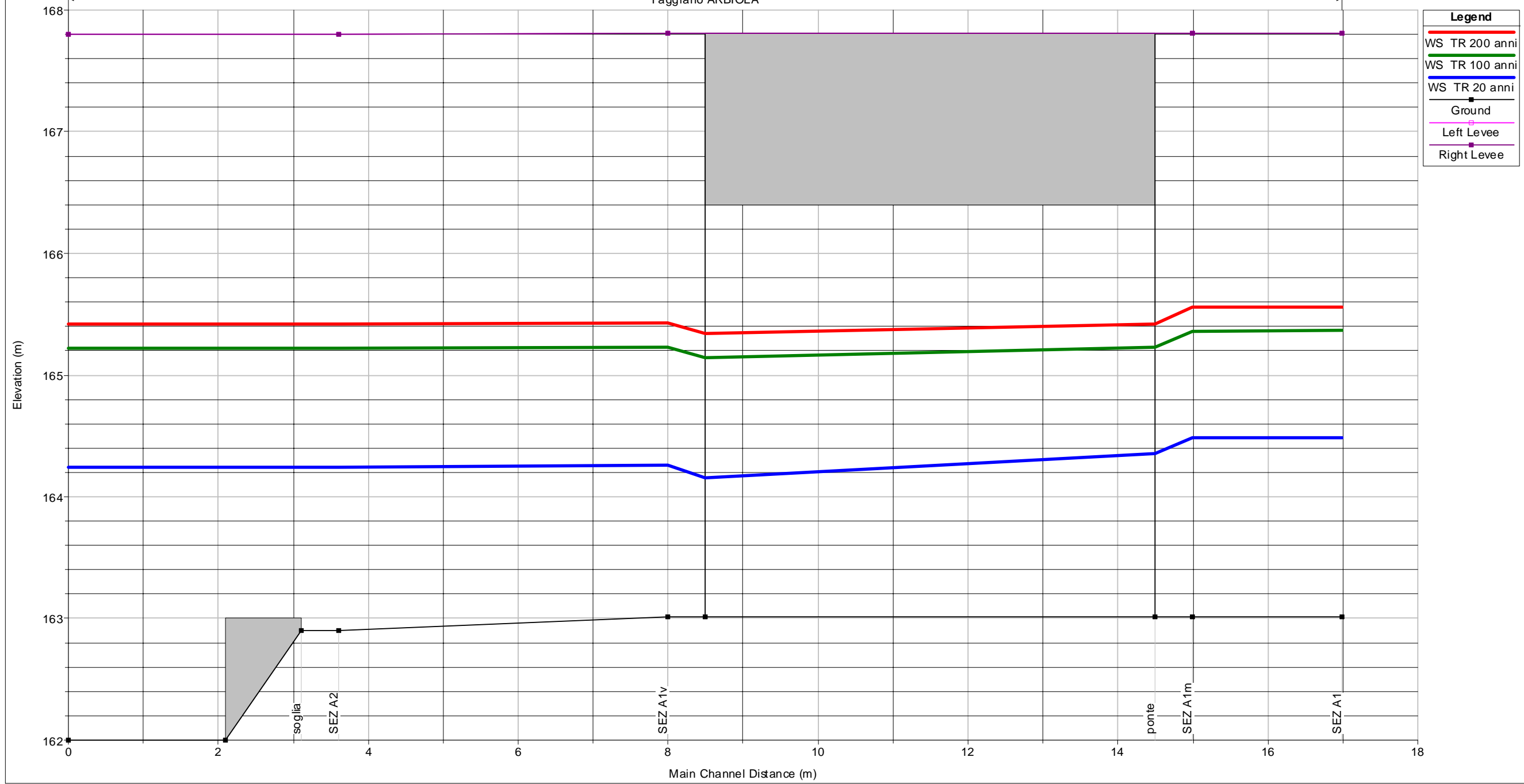
secondo Strickler $13 \text{ m}^{1/3}\text{s}^{-1}$ presenza di folta vegetazione

SCHEMA PLANIMETRICO CON TRACCIA DELLE SEZIONI



PROFILO LONGITUDINALE - ARBIOLA

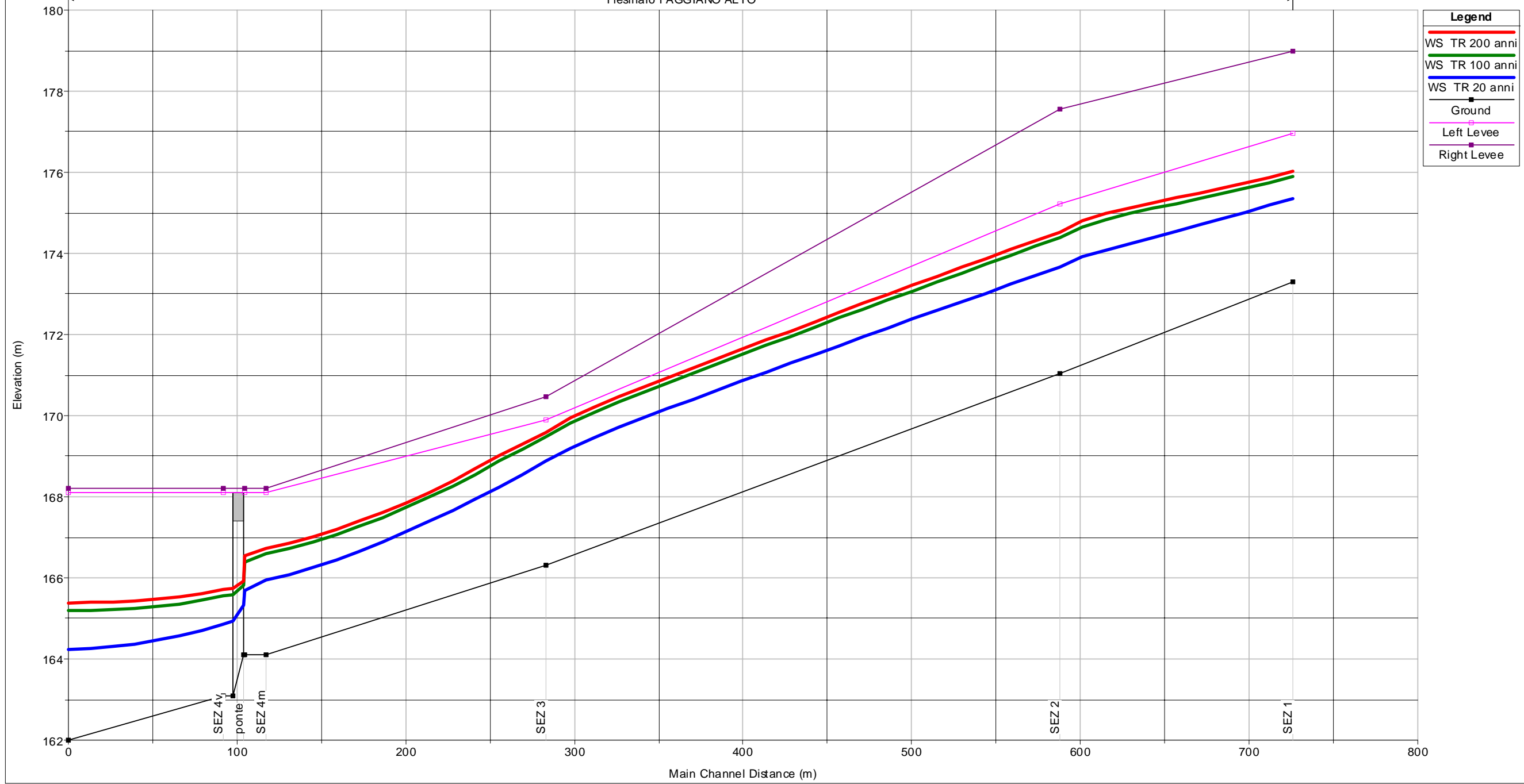
Arbiola-Faggiano-Tresinaro Plan: 13-scab 01/12/2016
Faggiano ARBIOLA



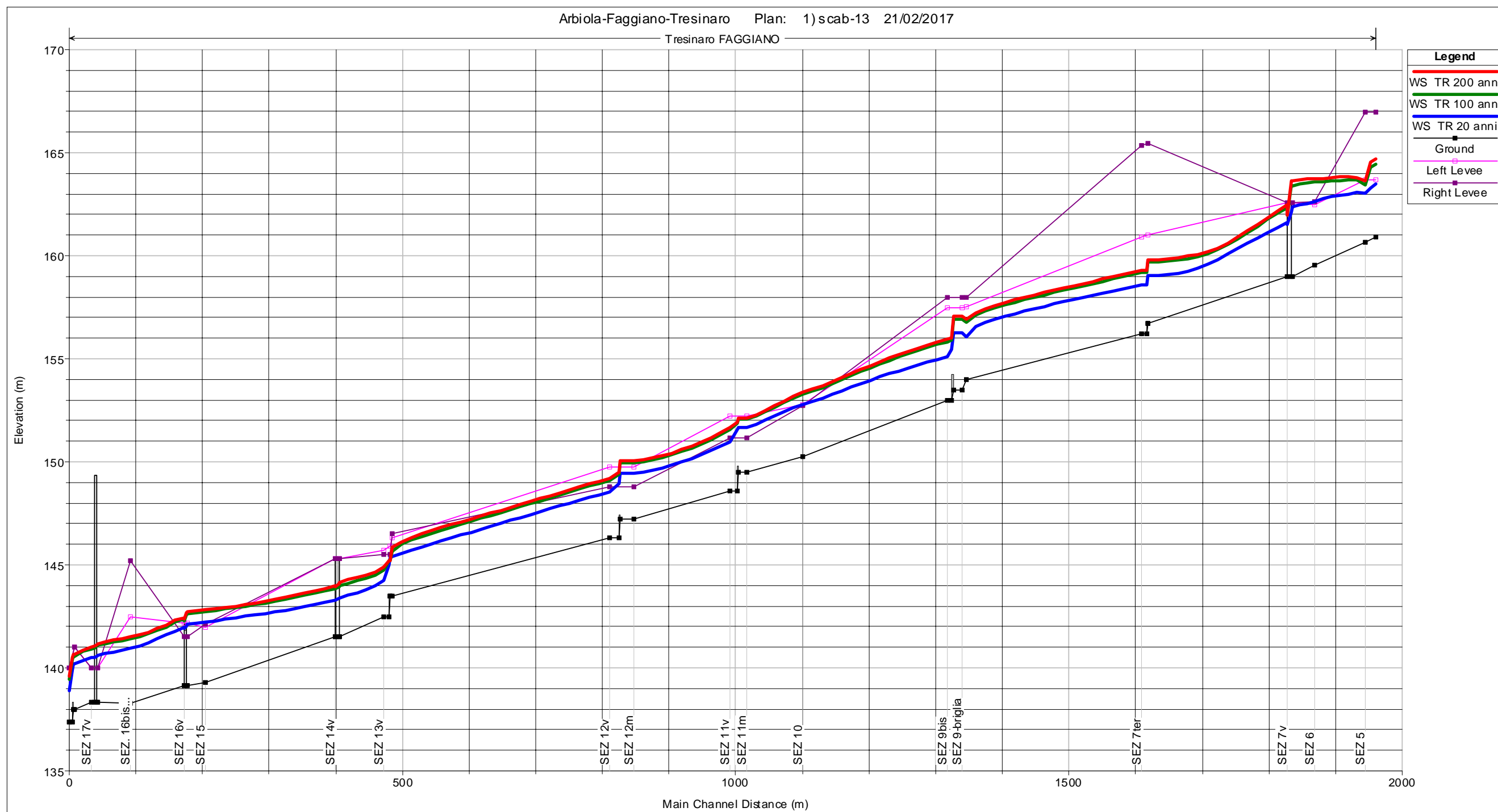
PROFILO LONGITUDINALE – FAGGIANO ALTO

Arbiola-Faggiano-Tresinaro Plan: 13-scab 01/12/2016

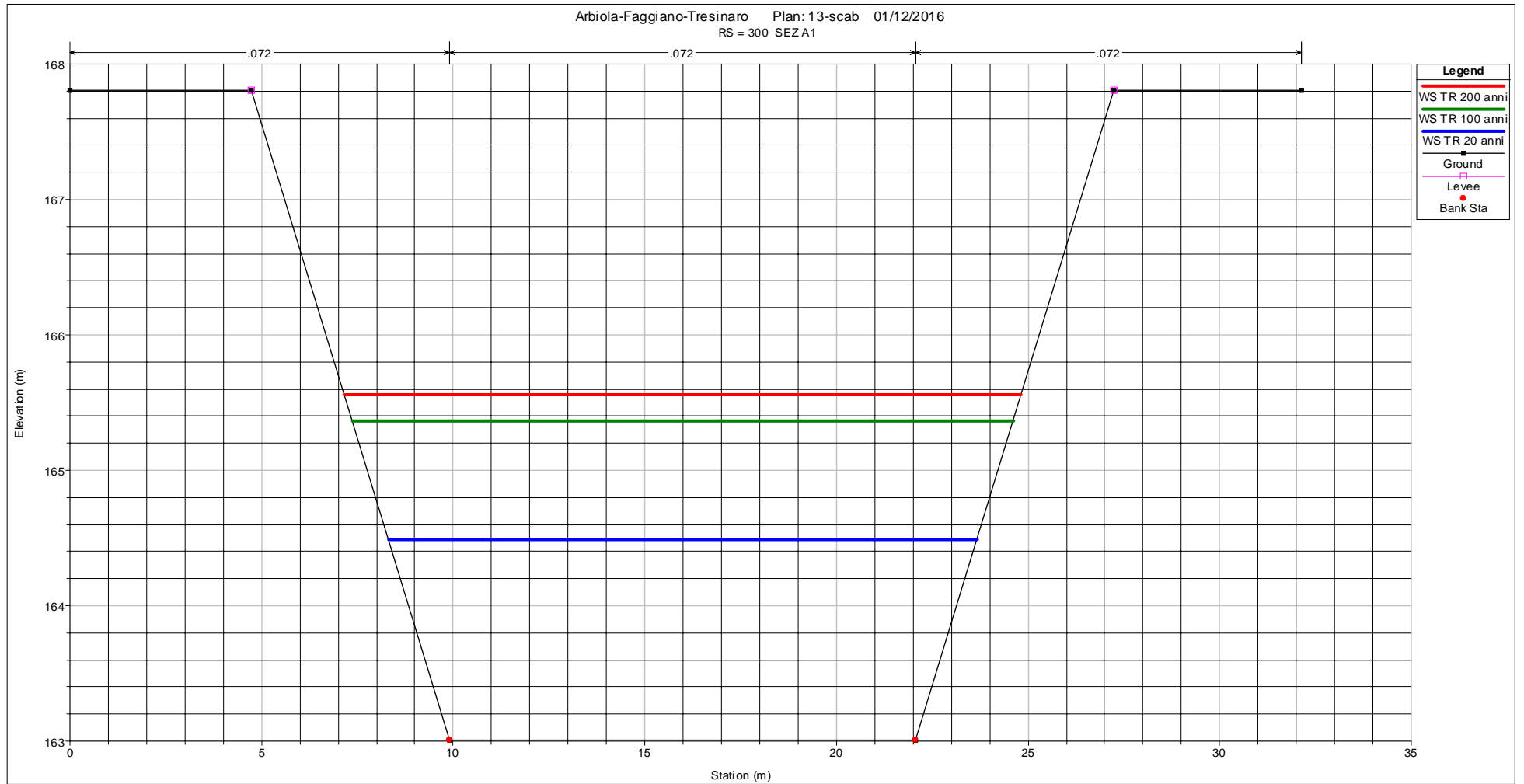
Tresinaro FAGGIANO ALTO



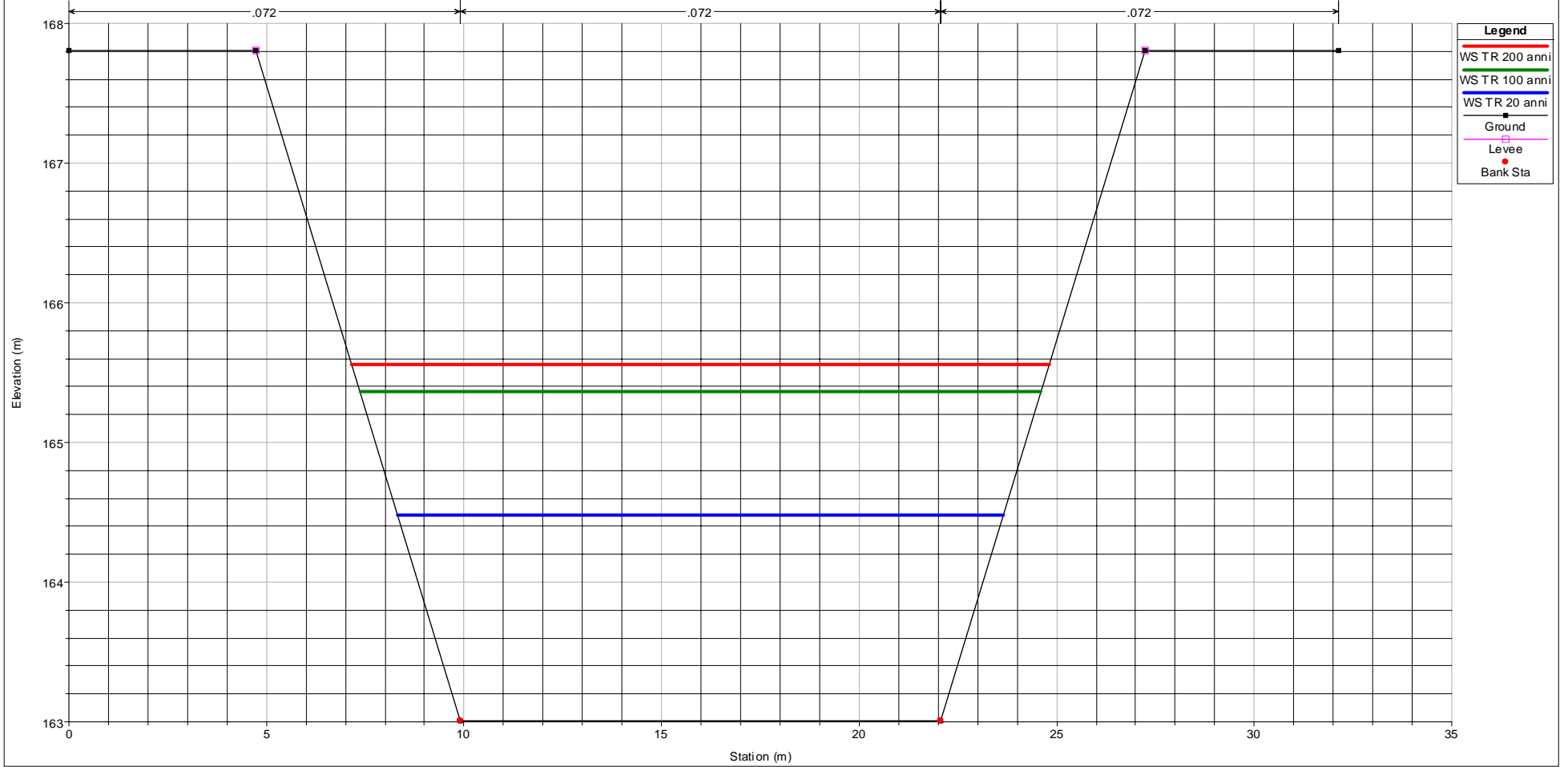
PROFILO LONGITUDINALE – FAGGIANO A VALLE DELLA CONFLUENZA CON ARBIOLA



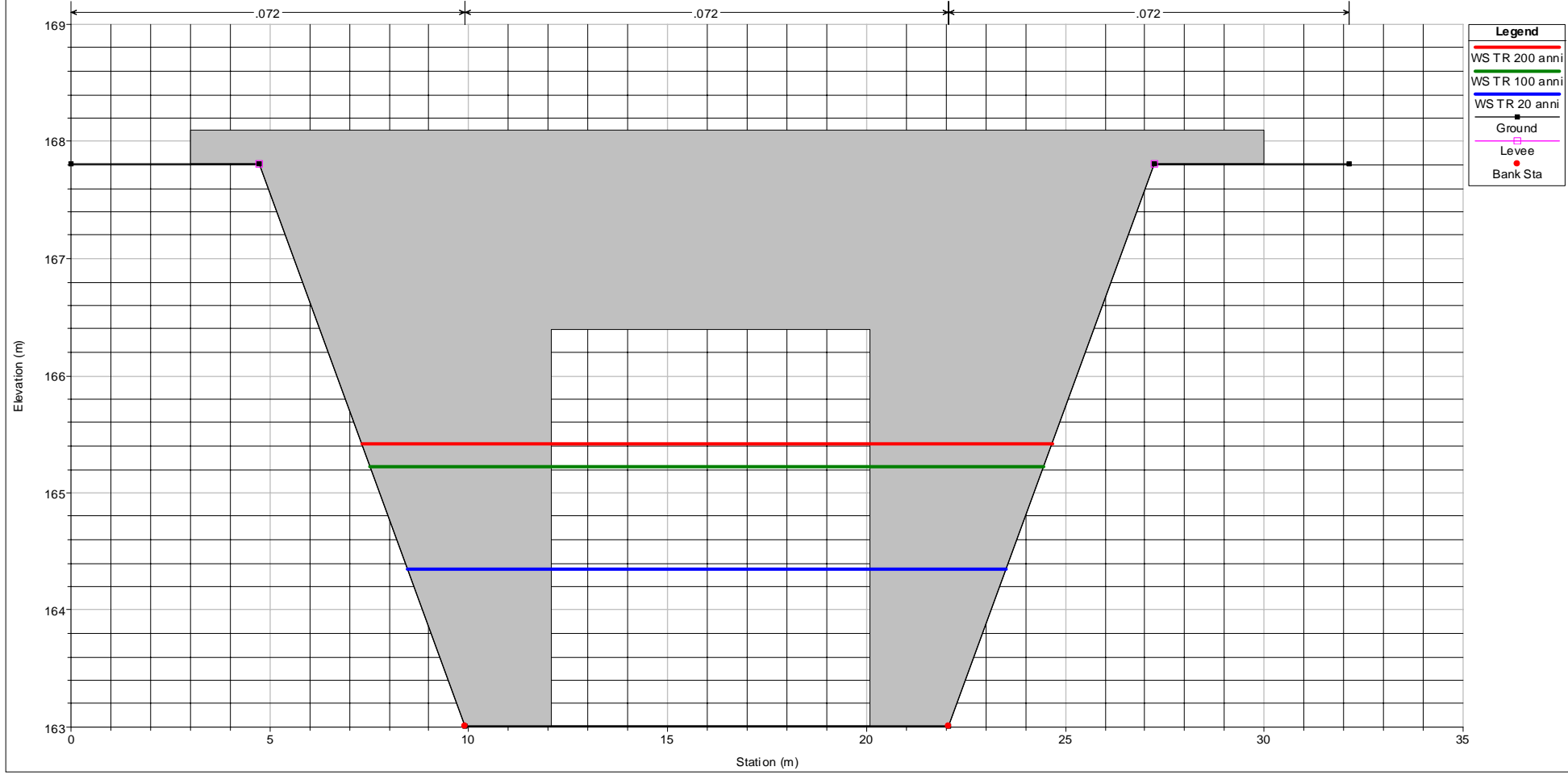
SEZIONI TRASVERSALI CON I LIVELLI IDROMETRICI – ARBIOLA



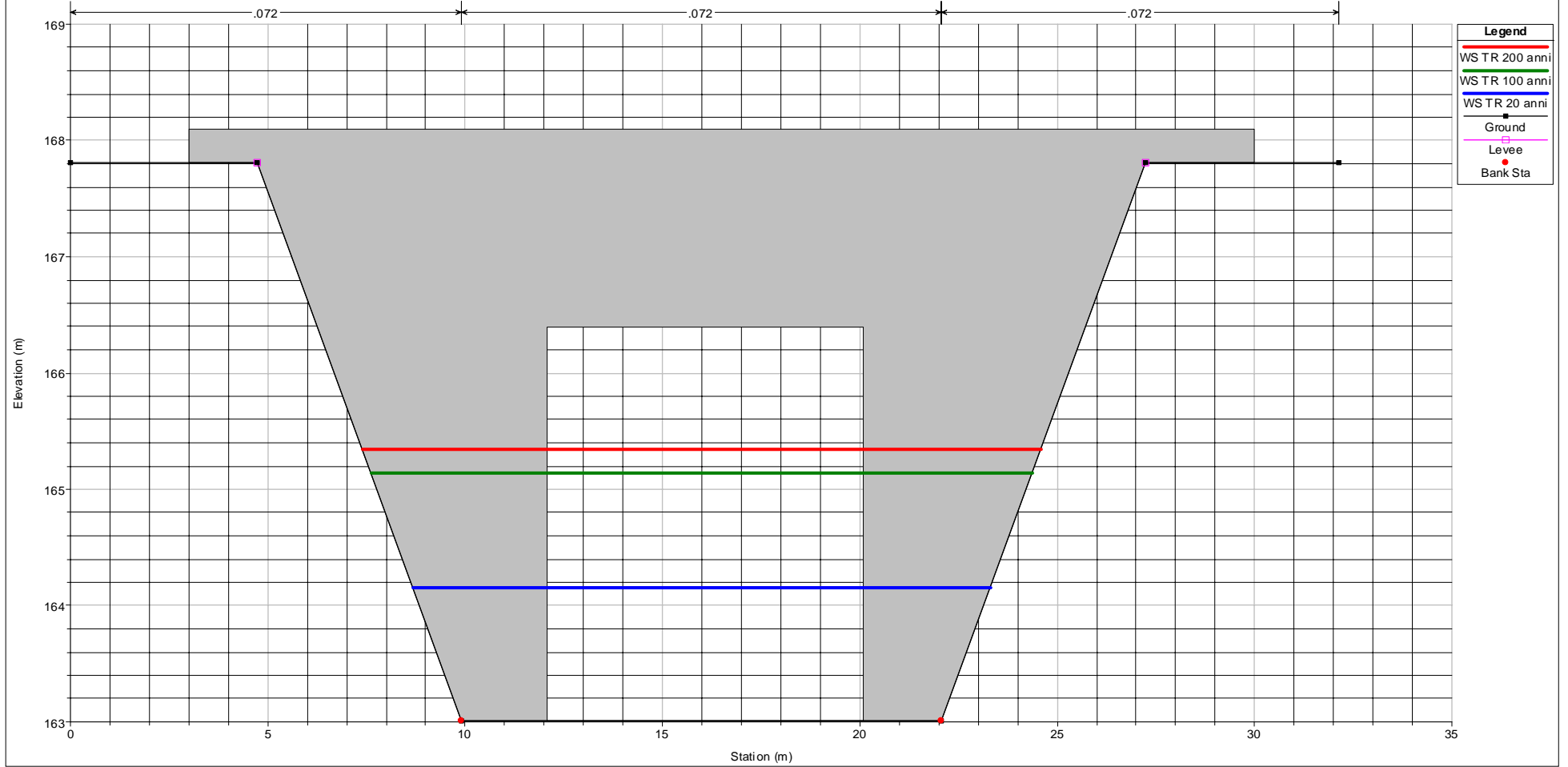
Arbiola-Faggiano-Tresinaro Plan: 13-scab 01/12/2016
RS = 299 SEZA1m



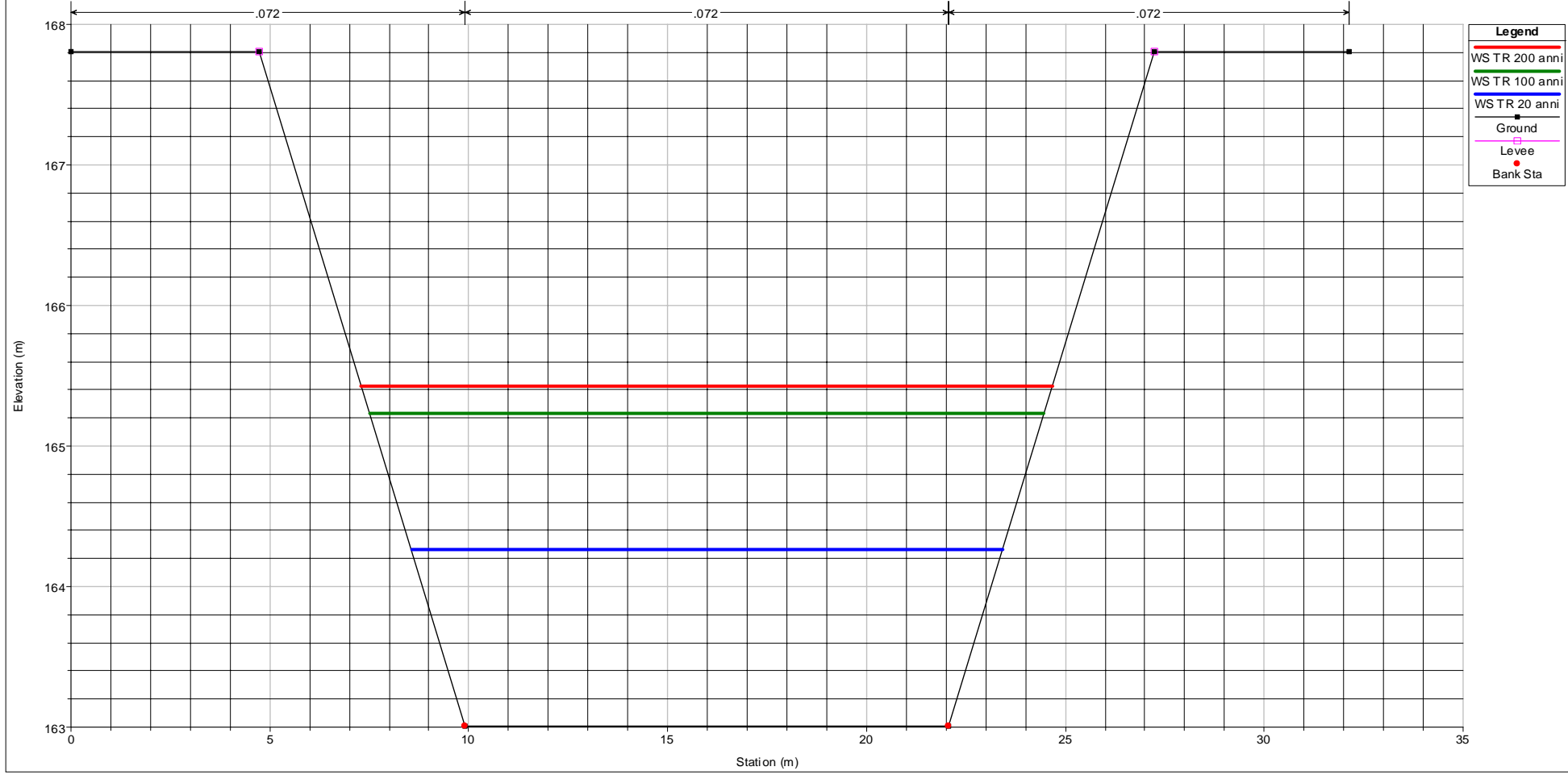
Arbiola-Faggiano-Tresinaro Plan: 13-scab 01/12/2016
RS = 297 BR ponte



Arbiola-Faggiano-Tresinaro Plan: 13-scab 01/12/2016
RS = 297 BR ponte

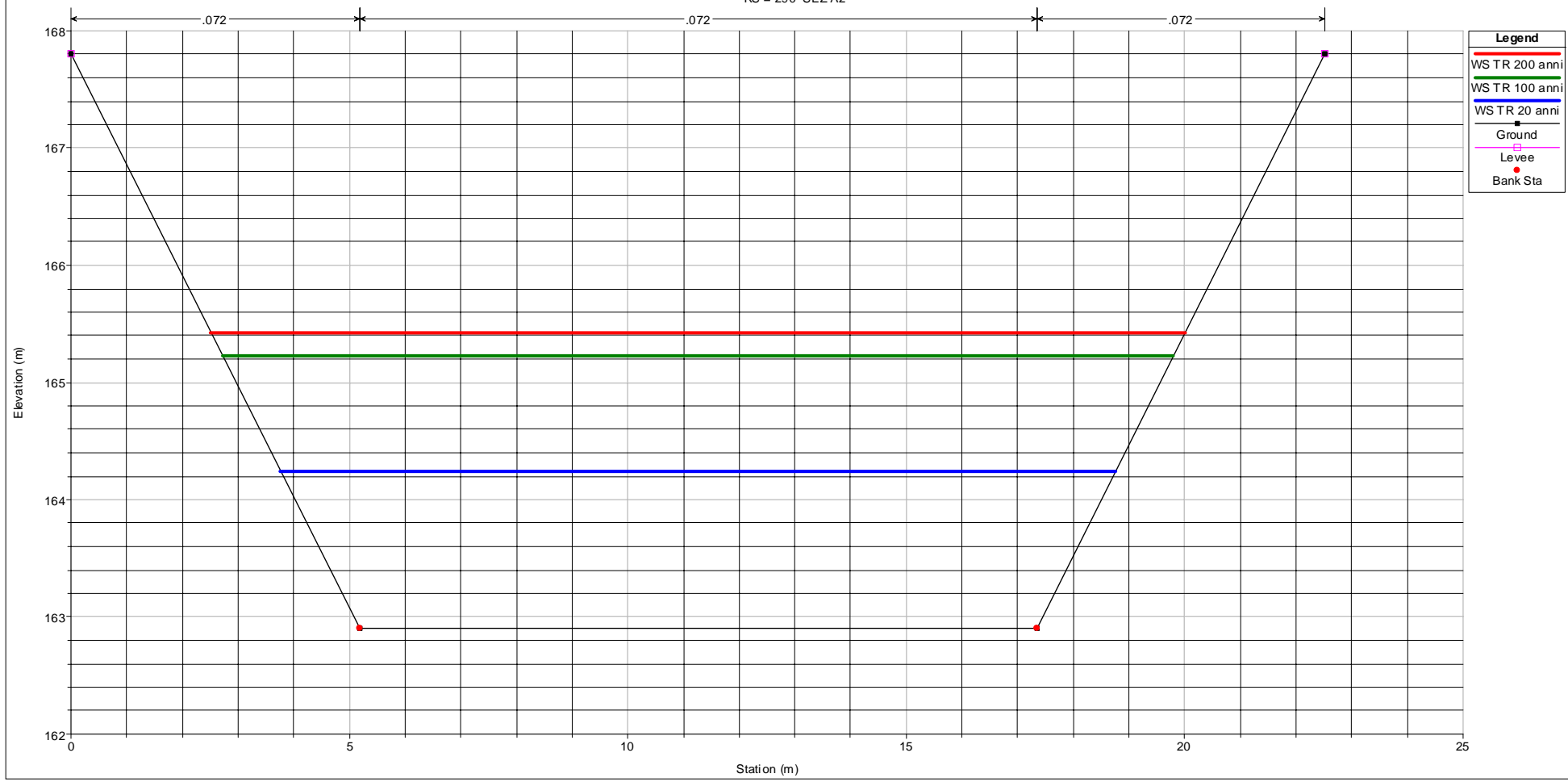


Arbiola-Faggiano-Tresinaro Plan: 13-scab 01/12/2016
RS = 295 SEZ A1v



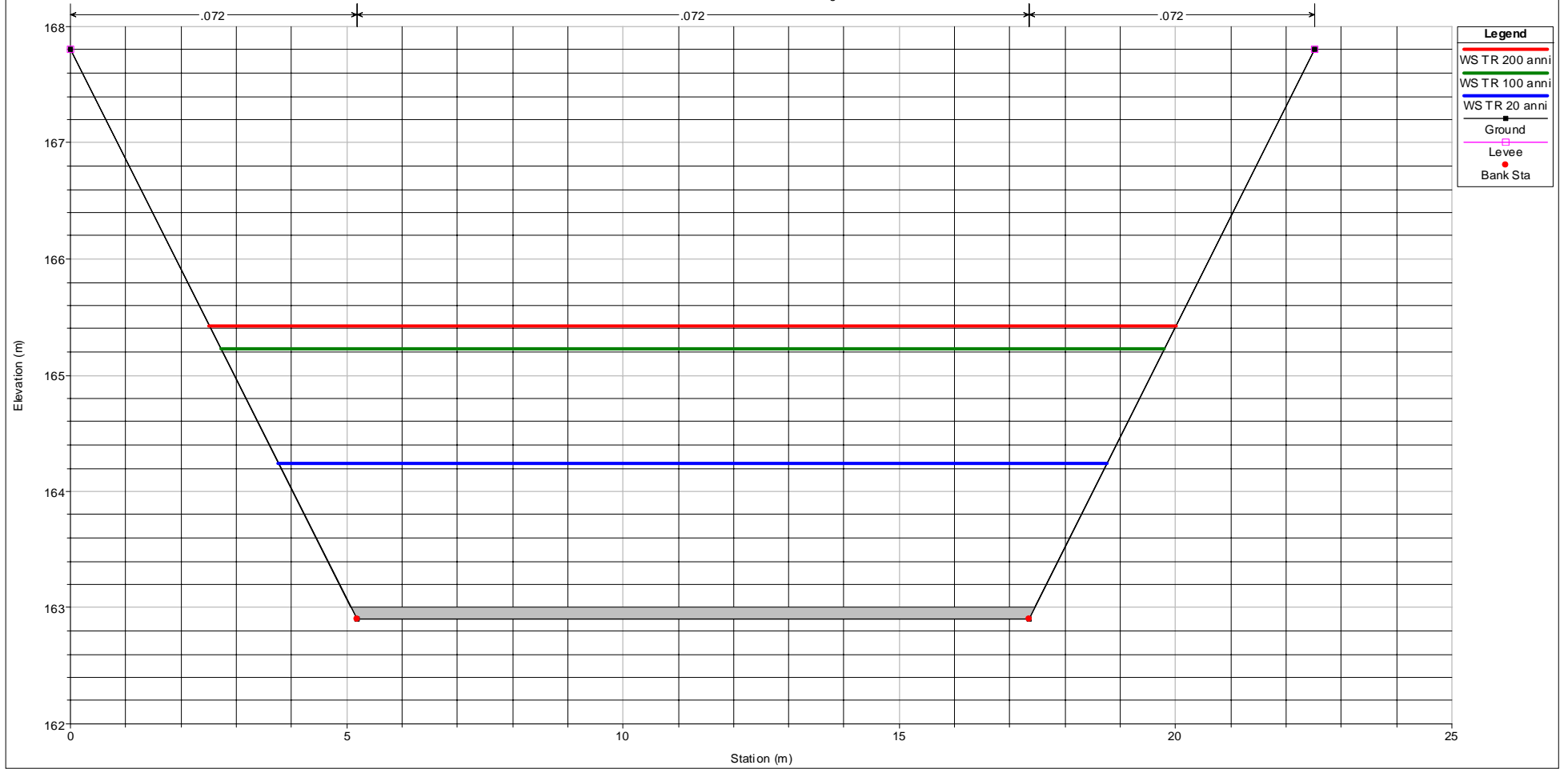
- Legend**
- WS TR 200 anni
 - WS TR 100 anni
 - WS TR 20 anni
 - Ground
 - Levee
 - Bank Sta

Arbiola-Faggiano-Tresinaro Plan: 13-scab 01/12/2016
RS = 290 SEZ A2

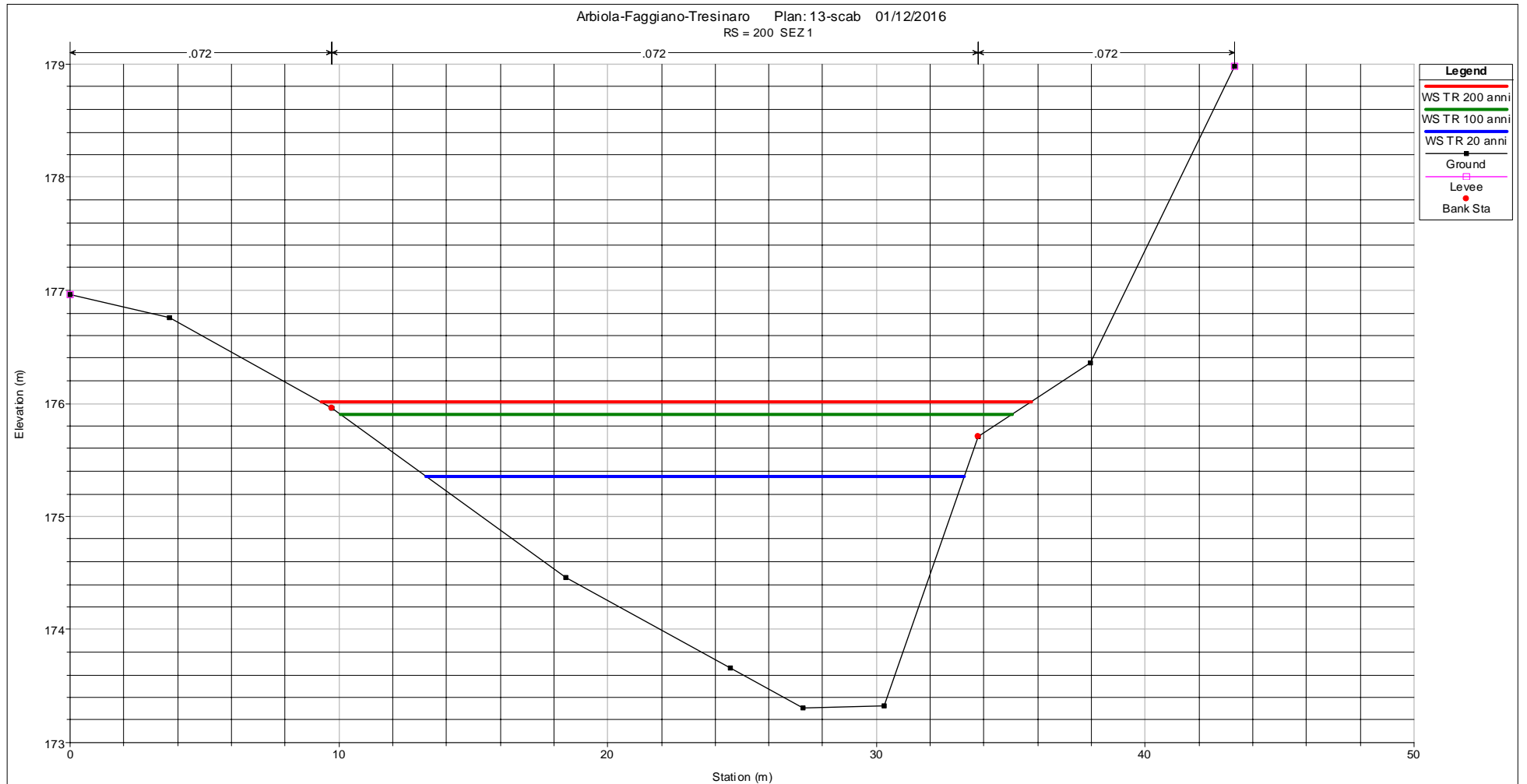


- Legend**
- WS TR 200 anni
 - WS TR 100 anni
 - WS TR 20 anni
 - Ground
 - Levee
 - Bank Sta

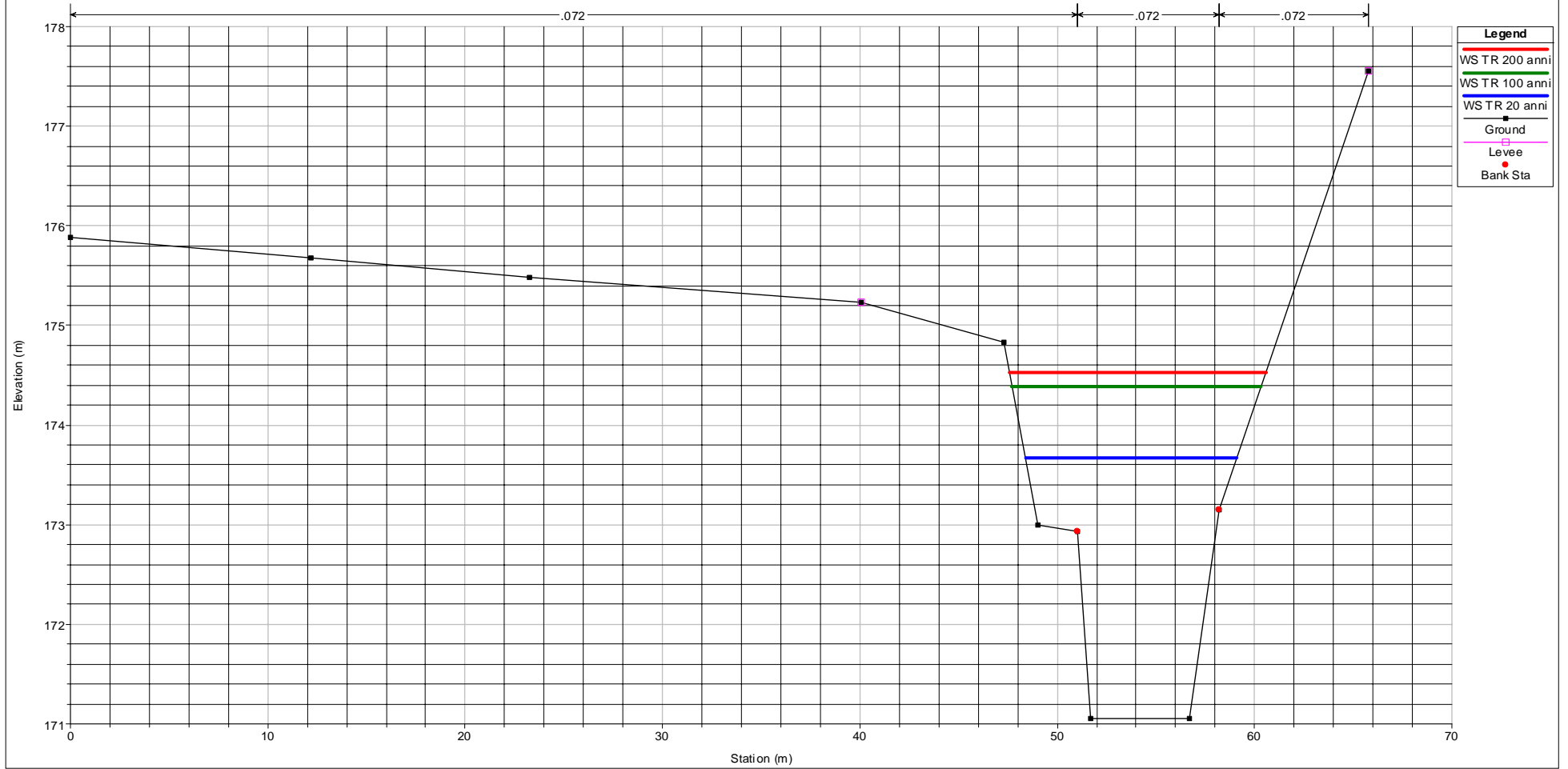
Arbiola-Faggiano-Tresinaro Plan: 13-scab 01/12/2016
RS = 285 IS soglia



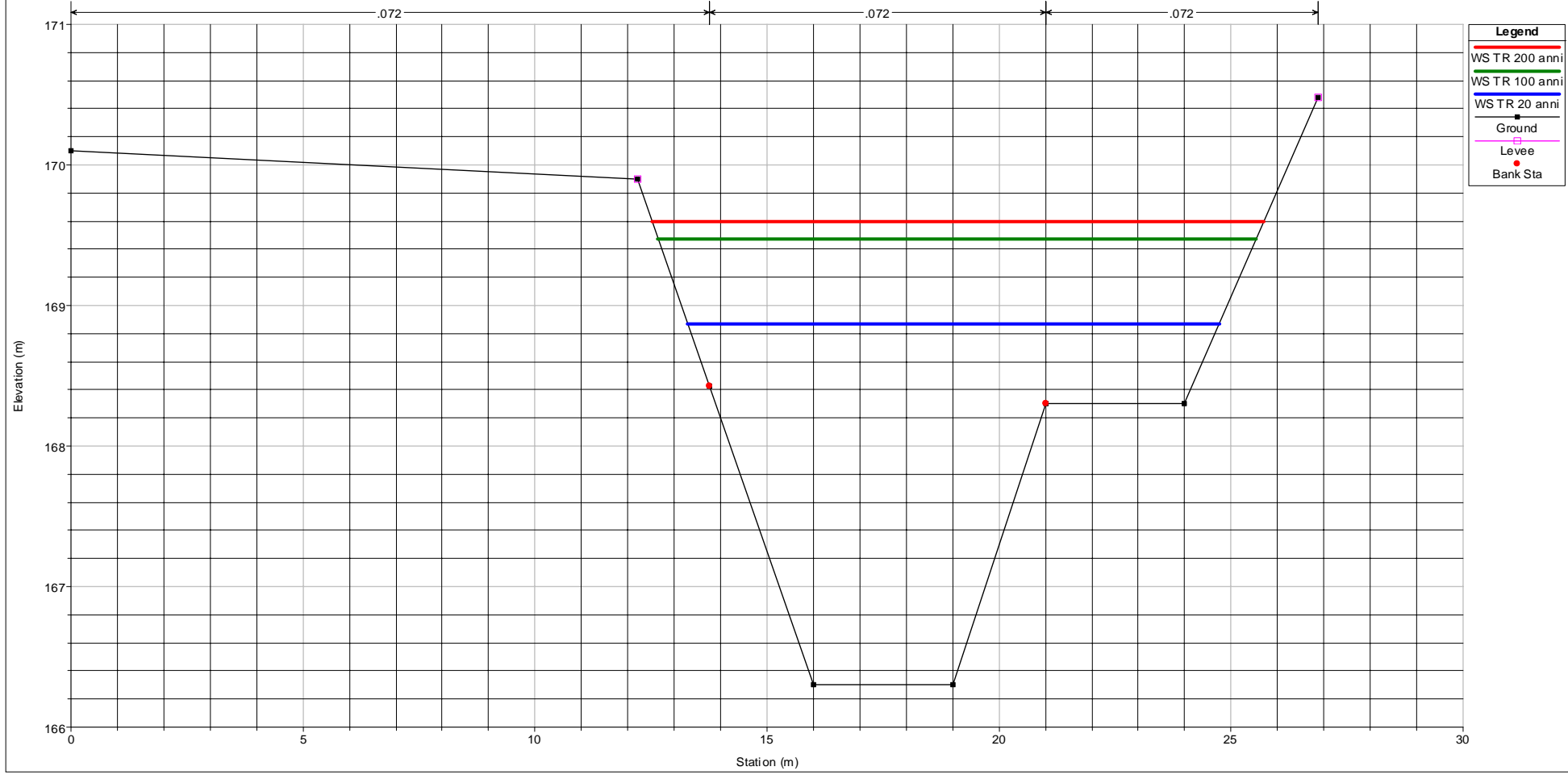
SEZIONI TRASVERSALI CON I LIVELLI IDROMETRICI – FAGGIANO ALTO



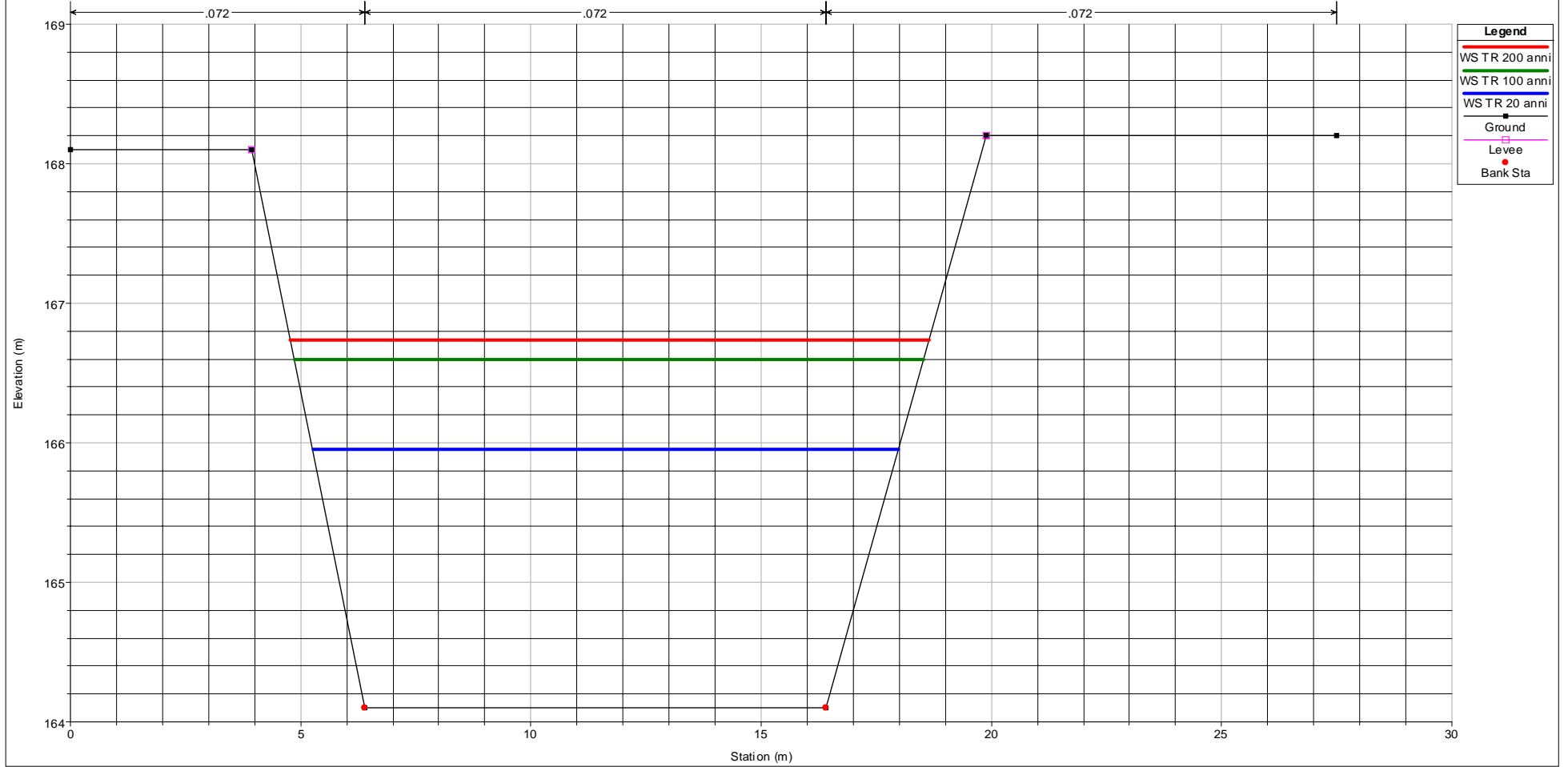
Arbiola-Faggiano-Tresinaro Plan: 13-scab 01/12/2016
RS = 190 SEZ 2



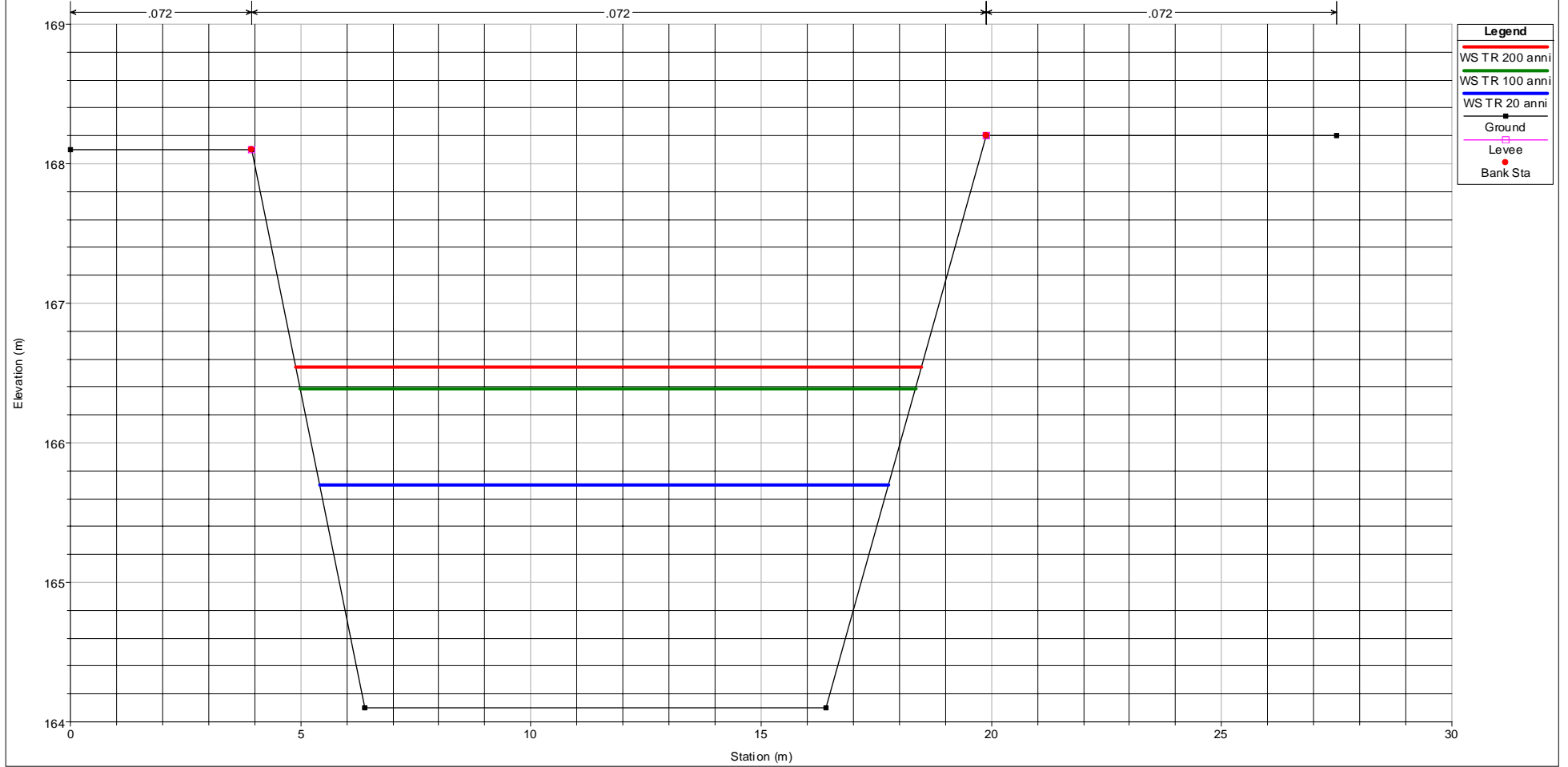
Arbiola-Faggiano-Tresinaro Plan: 13-scab 01/12/2016
RS = 180 SEZ 3



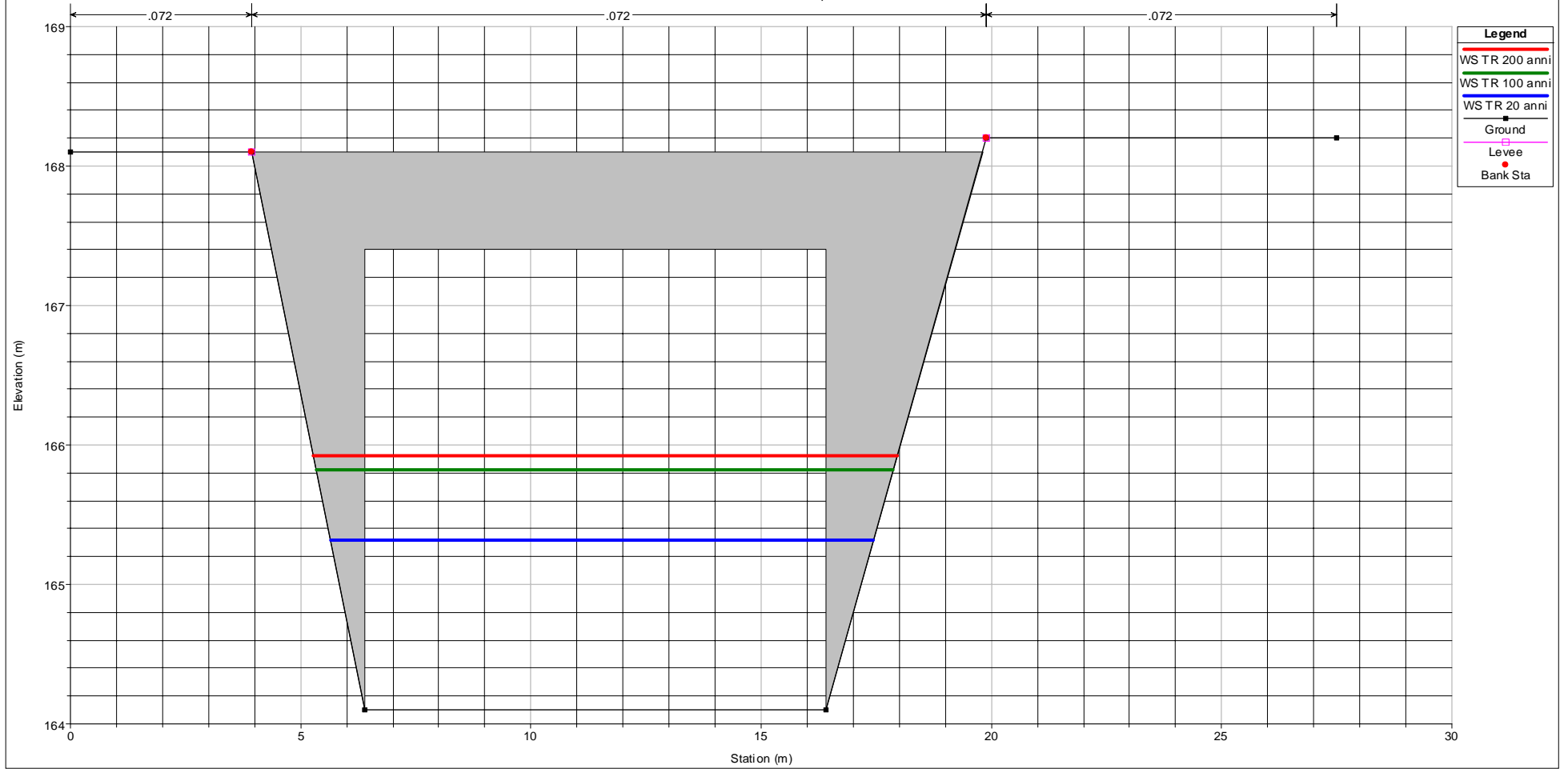
Arbiola-Faggiano-Tresinaro Plan: 13-scab 01/12/2016
RS = 175 SEZ 4m



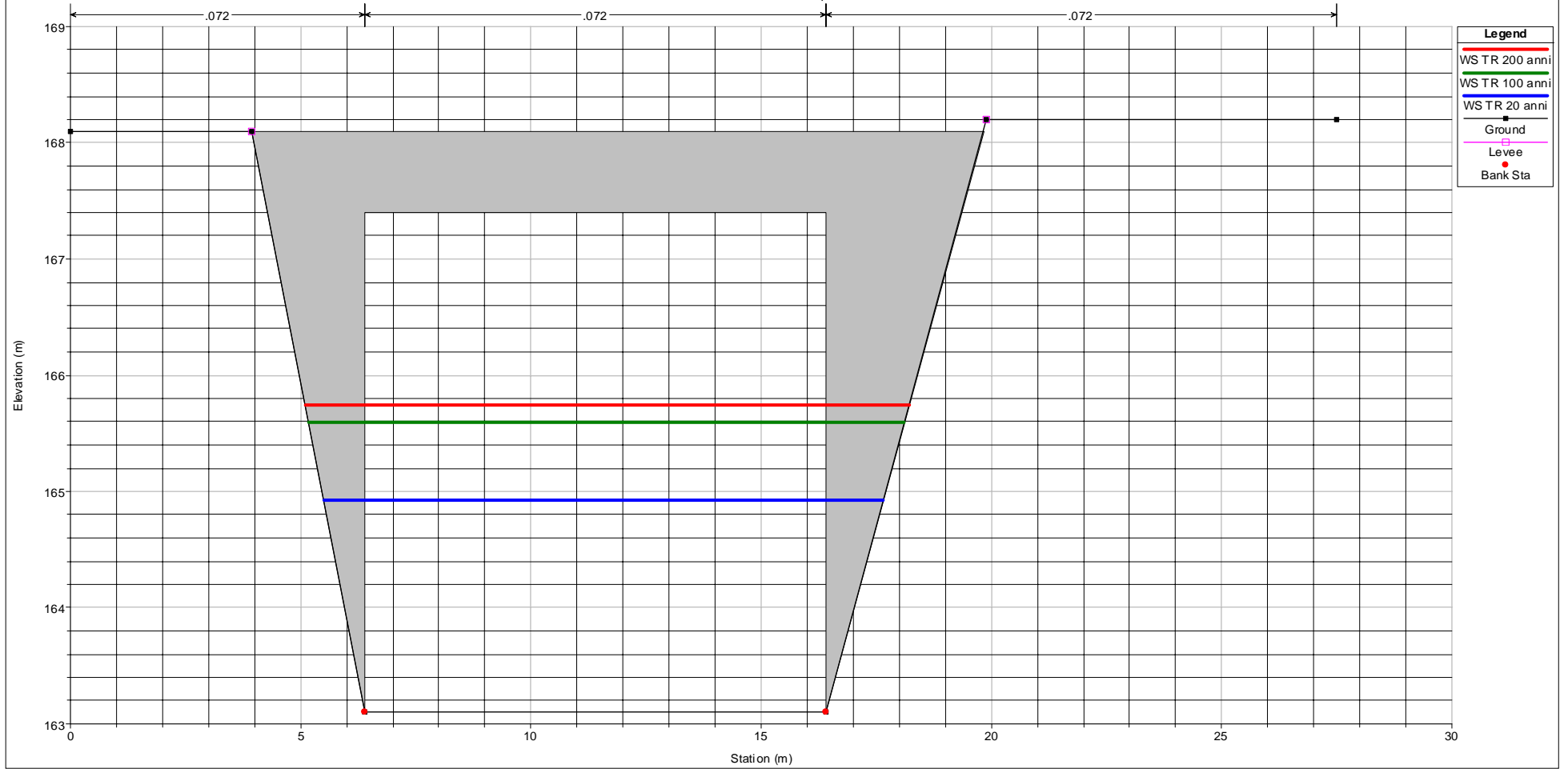
Arbiola-Faggiano-Tresinaro Plan: 13-scab 01/12/2016
RS = 170 SEZ 4



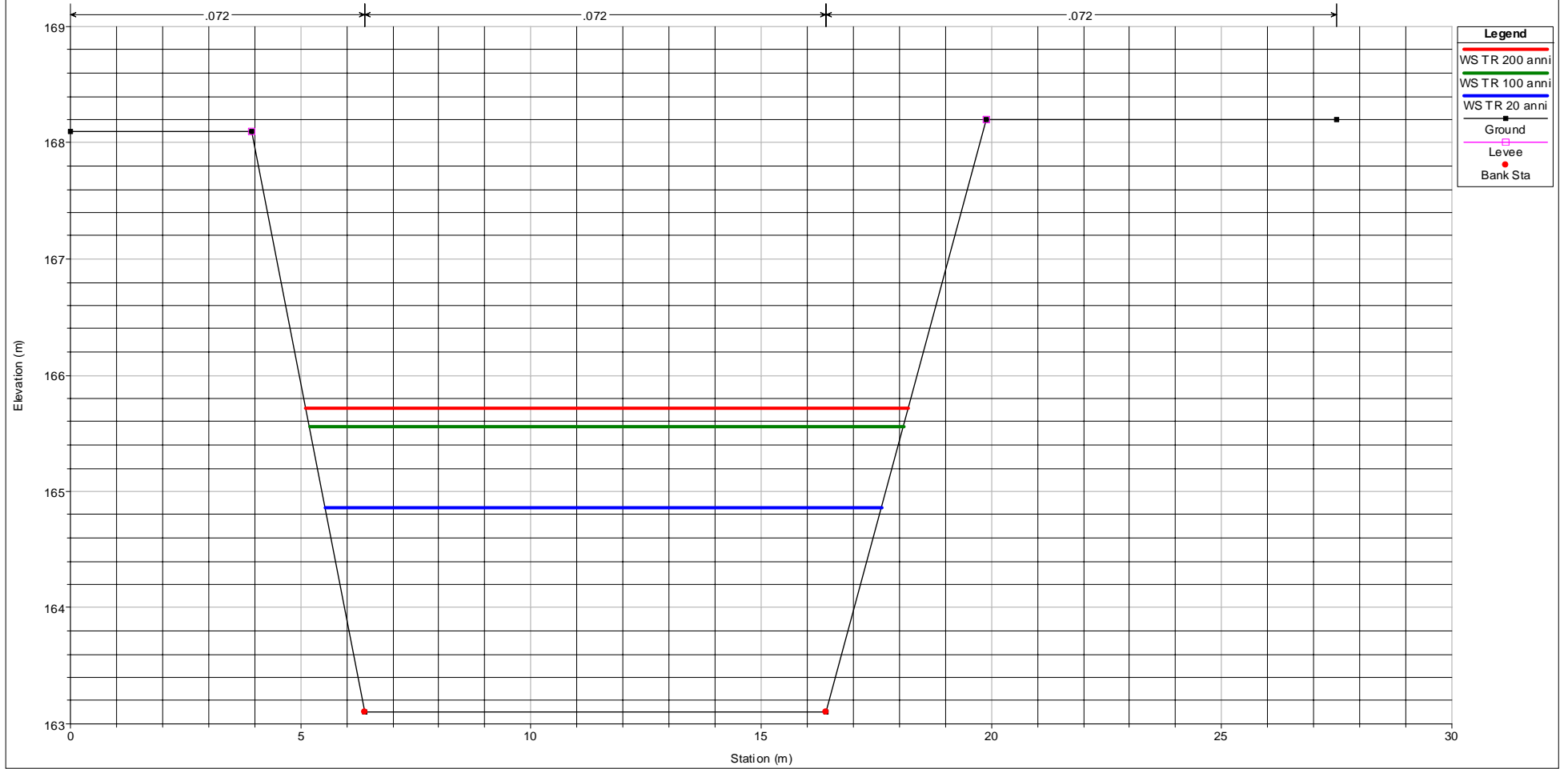
Abiola-Faggiano-Tresinaro Plan: 13-scab 01/12/2016
RS = 169 BR ponte



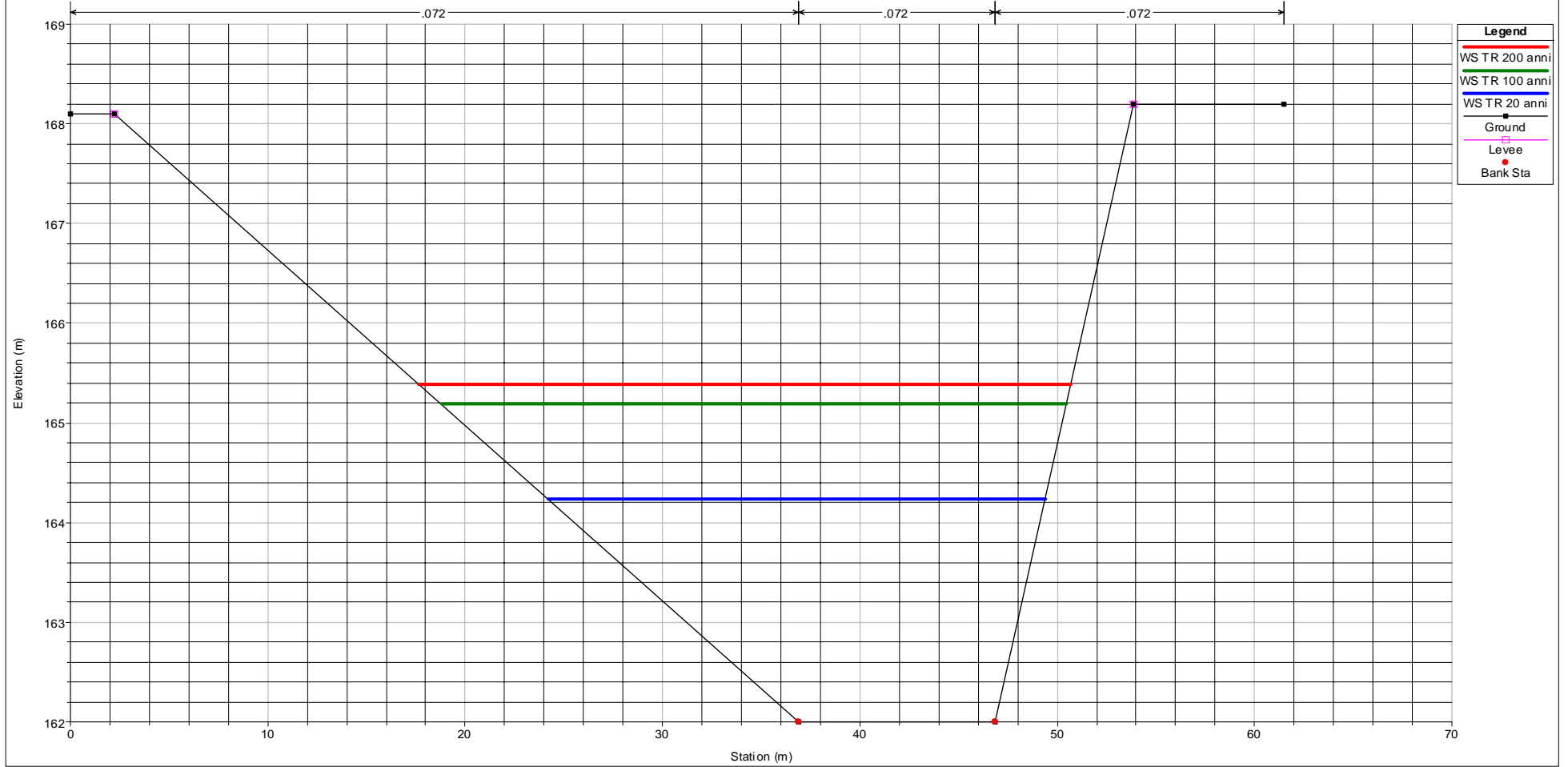
Arbiola-Faggiano-Tresinaro Plan: 13-scab 01/12/2016
RS = 169 BR ponte



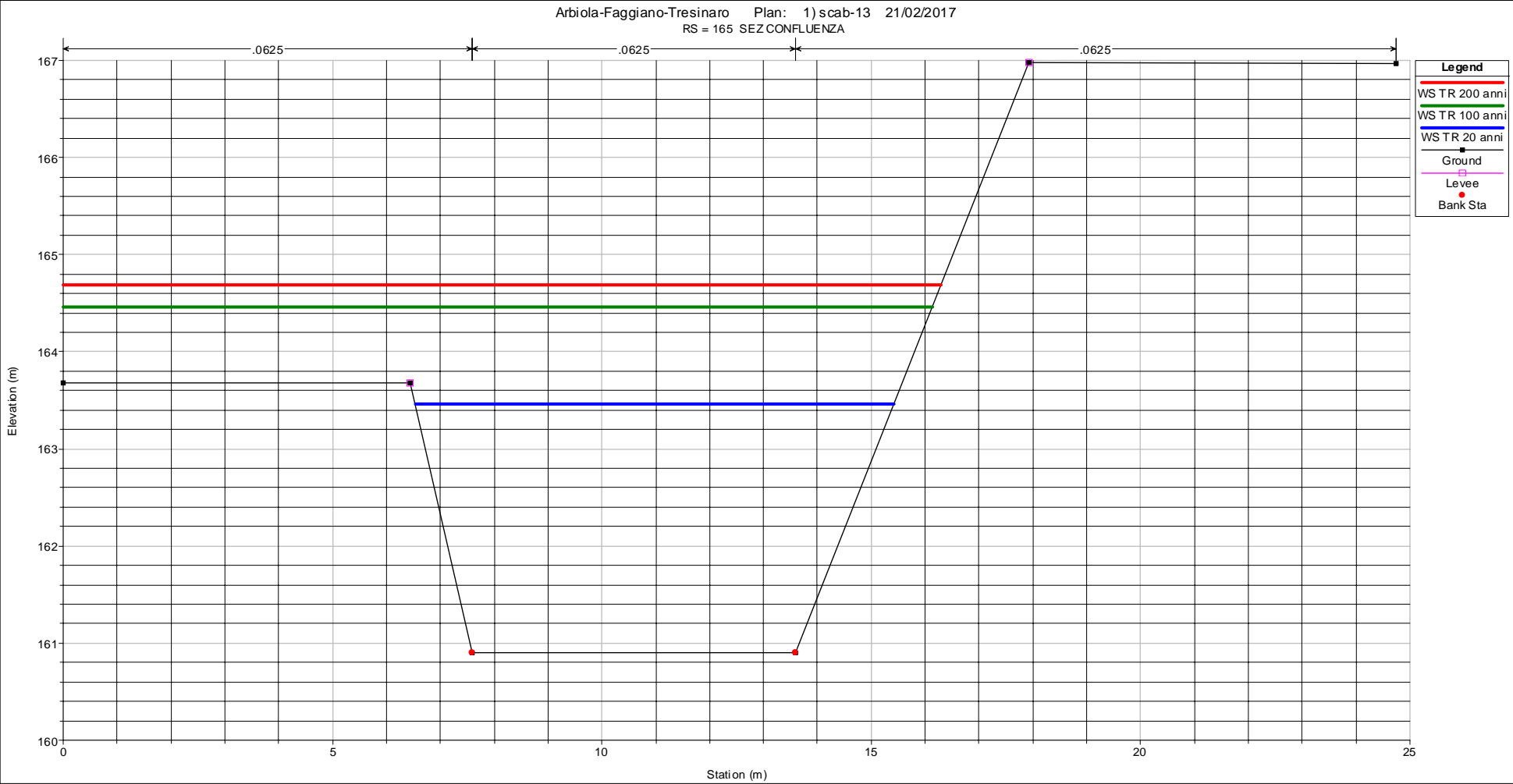
Arbiola-Faggiano-Tresinaro Plan: 13-scab 01/12/2016
RS = 168 SEZ 4v



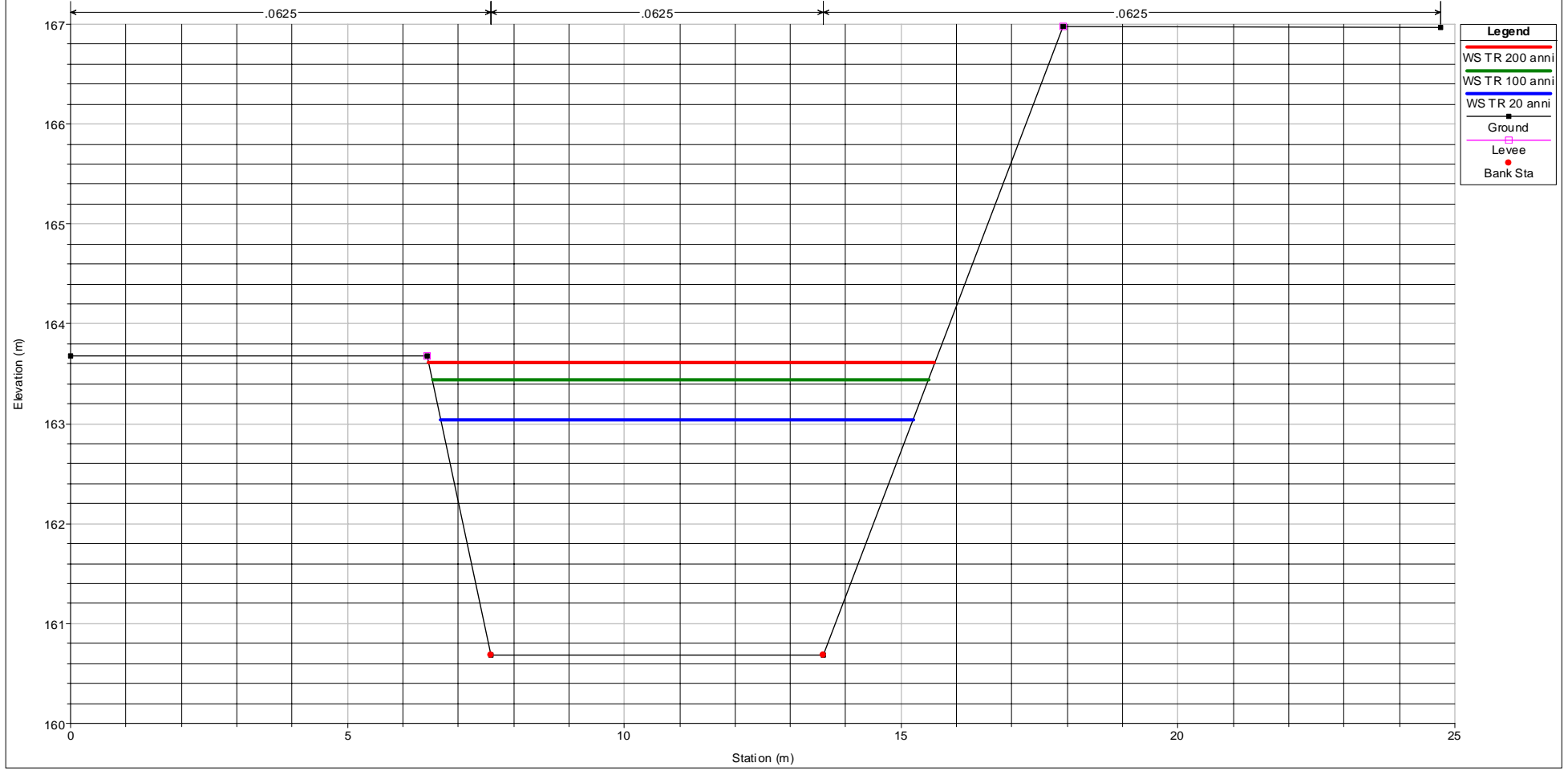
Arbiola-Faggiano-Tresinaro Plan: 13-scab 01/12/2016
RS = 167 SEZ 4bis



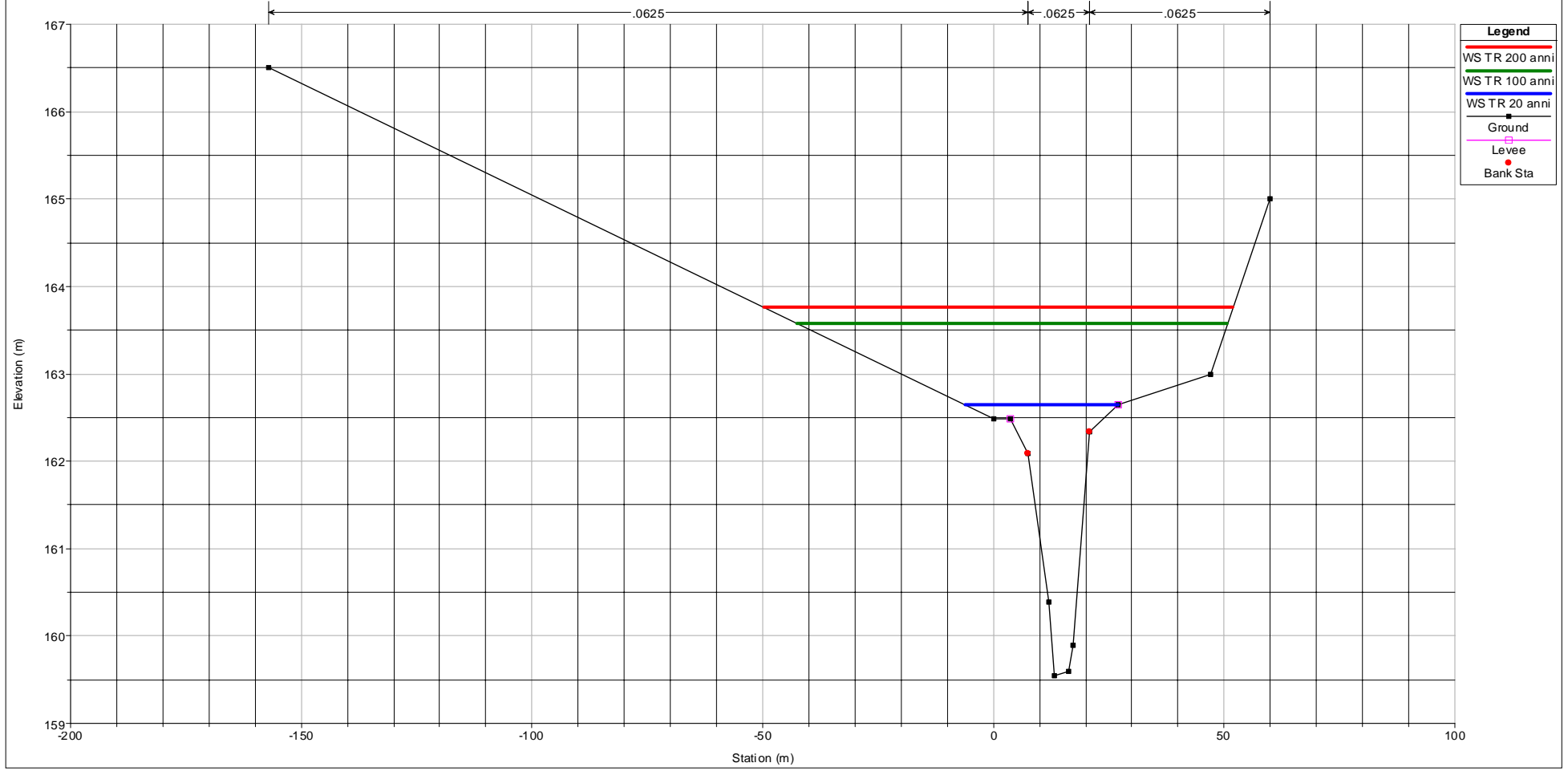
SEZIONI TRASVERSALI CON I LIVELLI IDROMETRICI – FAGGIANO A VALLE CONFLUENZA CON ARBIOLA



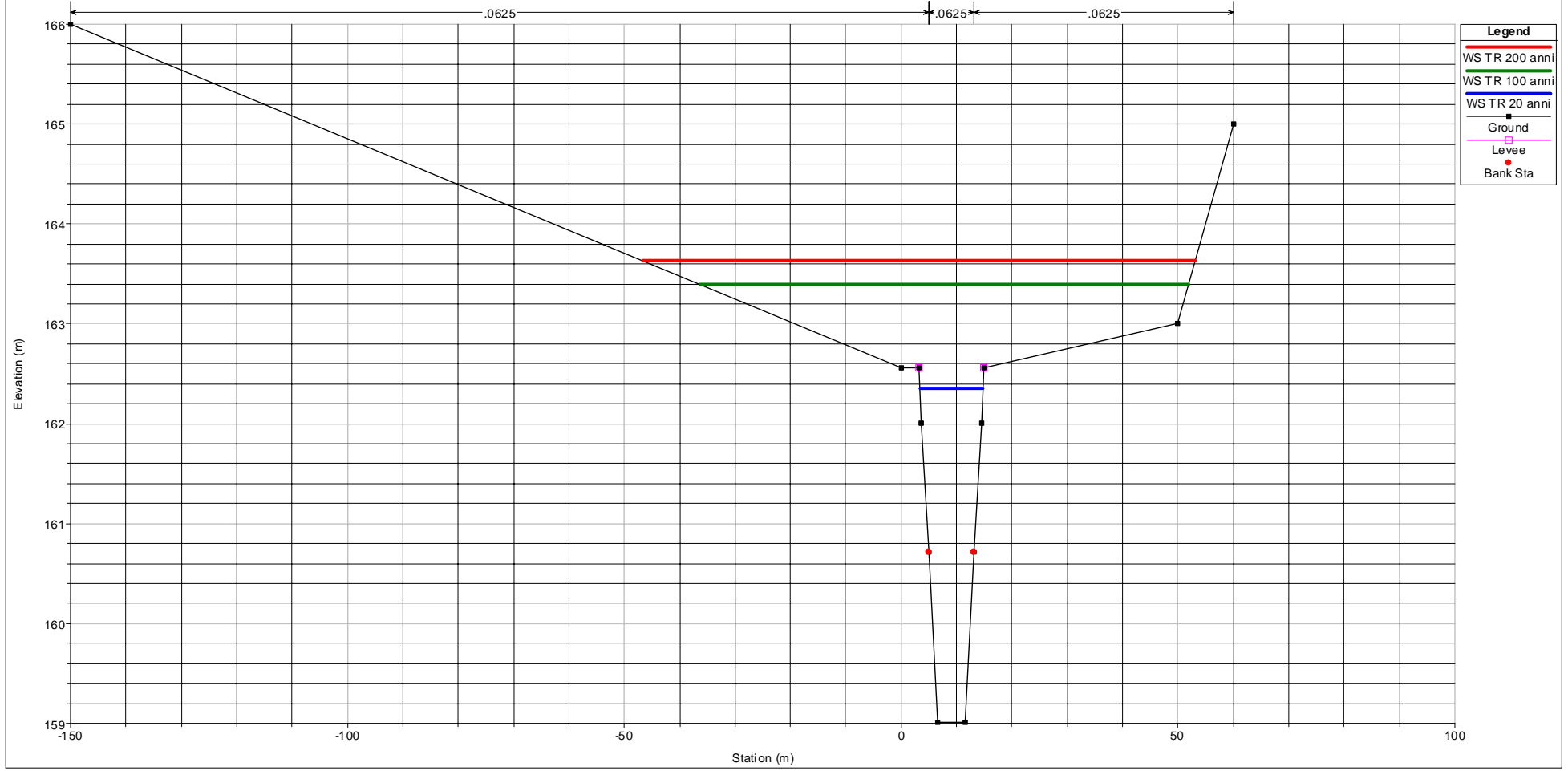
Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 160 SEZ 5



Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 150 SEZ 6

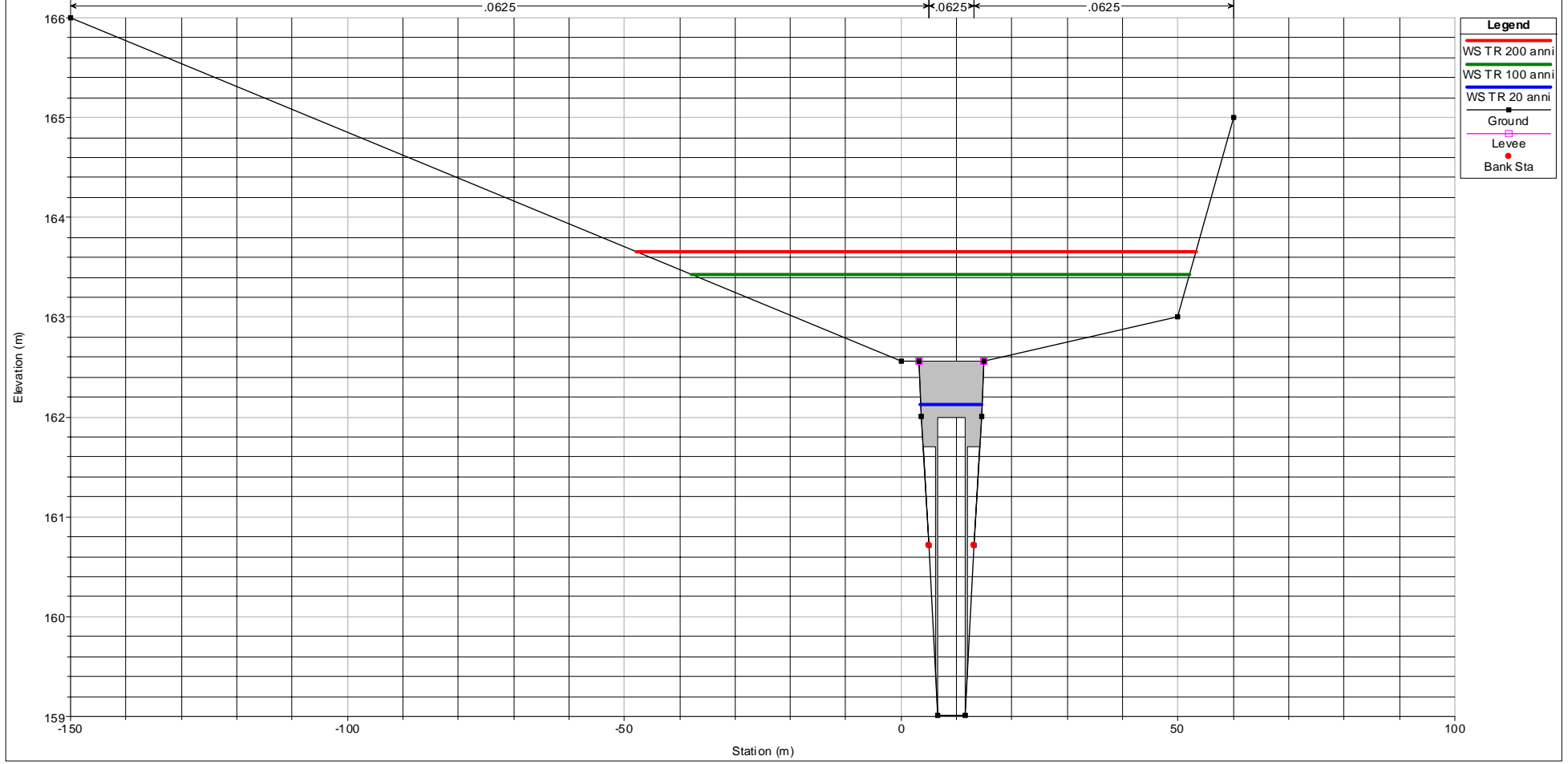


Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 140 SEZ 7m



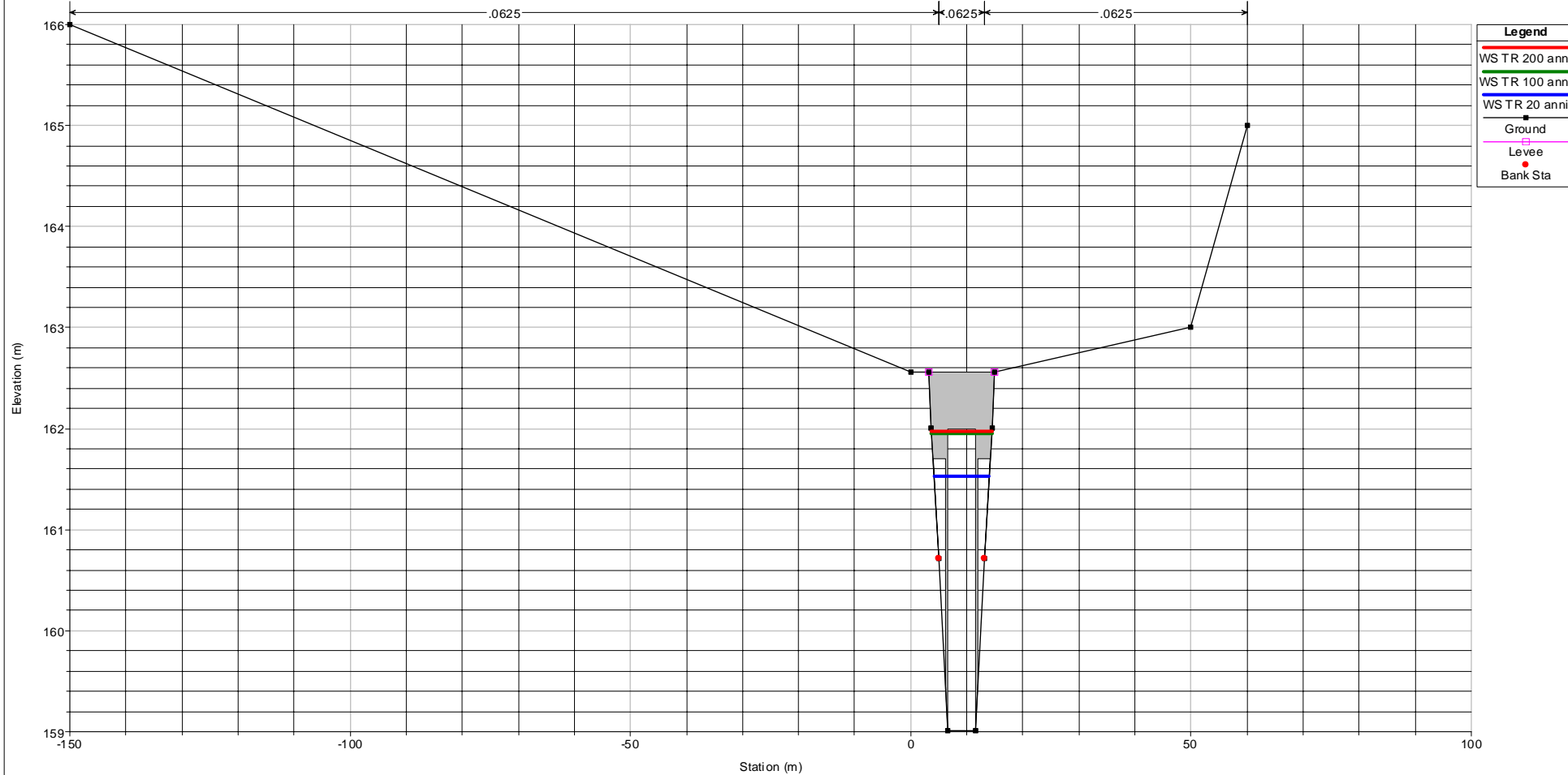
- Legend**
- WS TR 200 anni
 - WS TR 100 anni
 - WS TR 20 anni
 - Ground
 - Levee
 - Bank Sta

Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 137 BR ponte

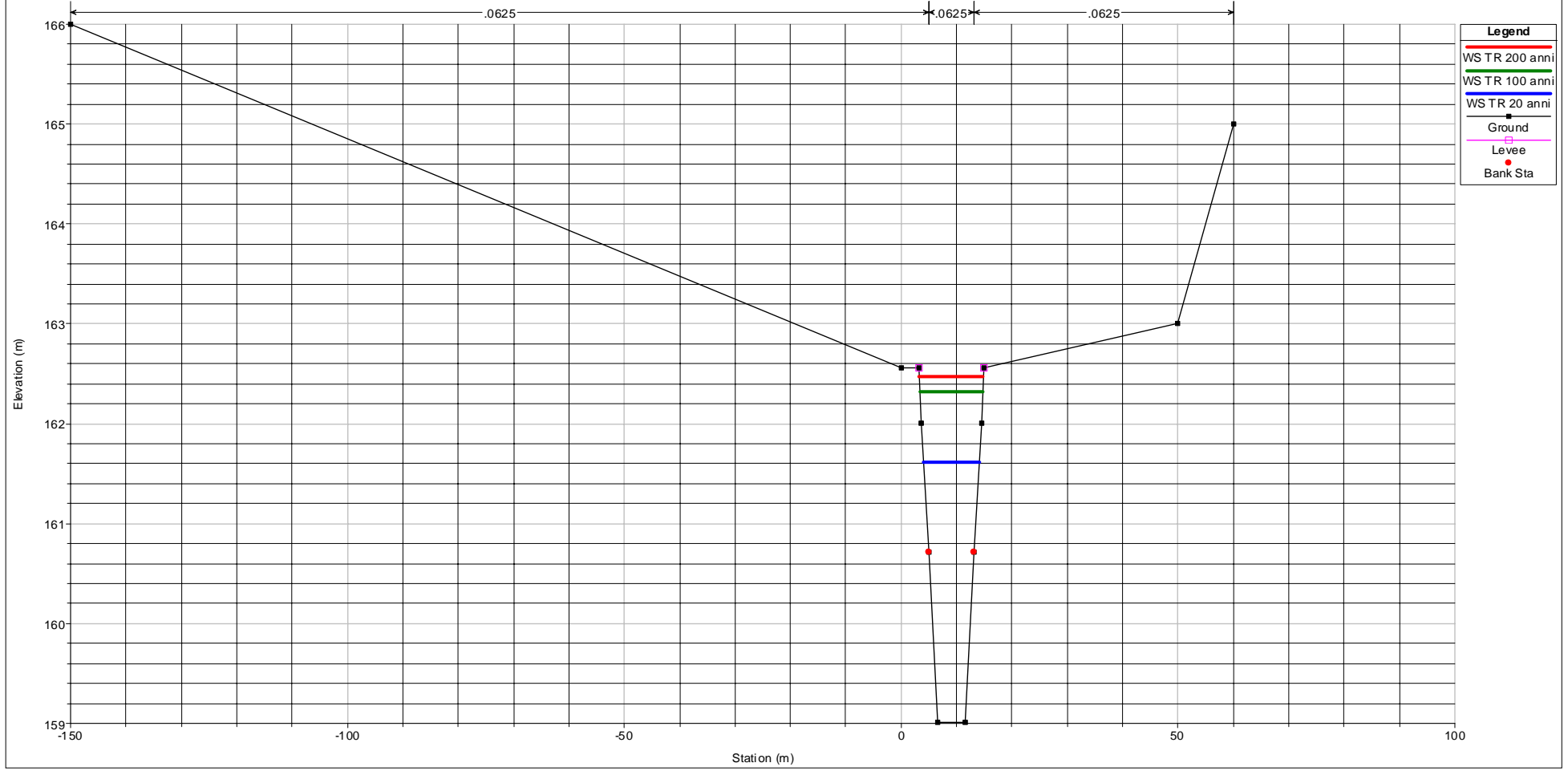


- Legend**
- WS TR 200 anni
 - WS TR 100 anni
 - WS TR 20 anni
 - Ground
 - Levee
 - Bank Sta

Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 137 BR ponte

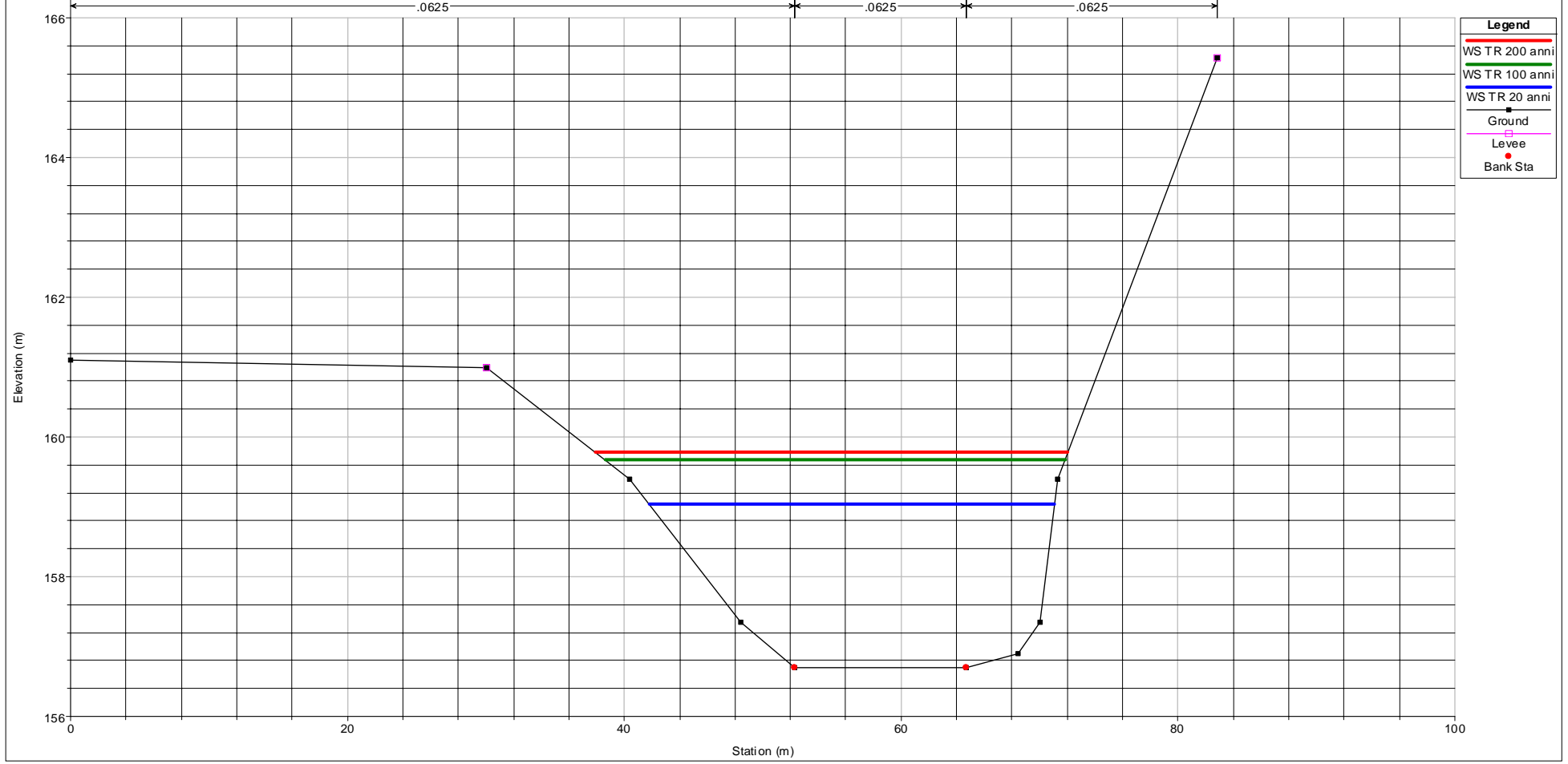


Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 135 SEZ 7v



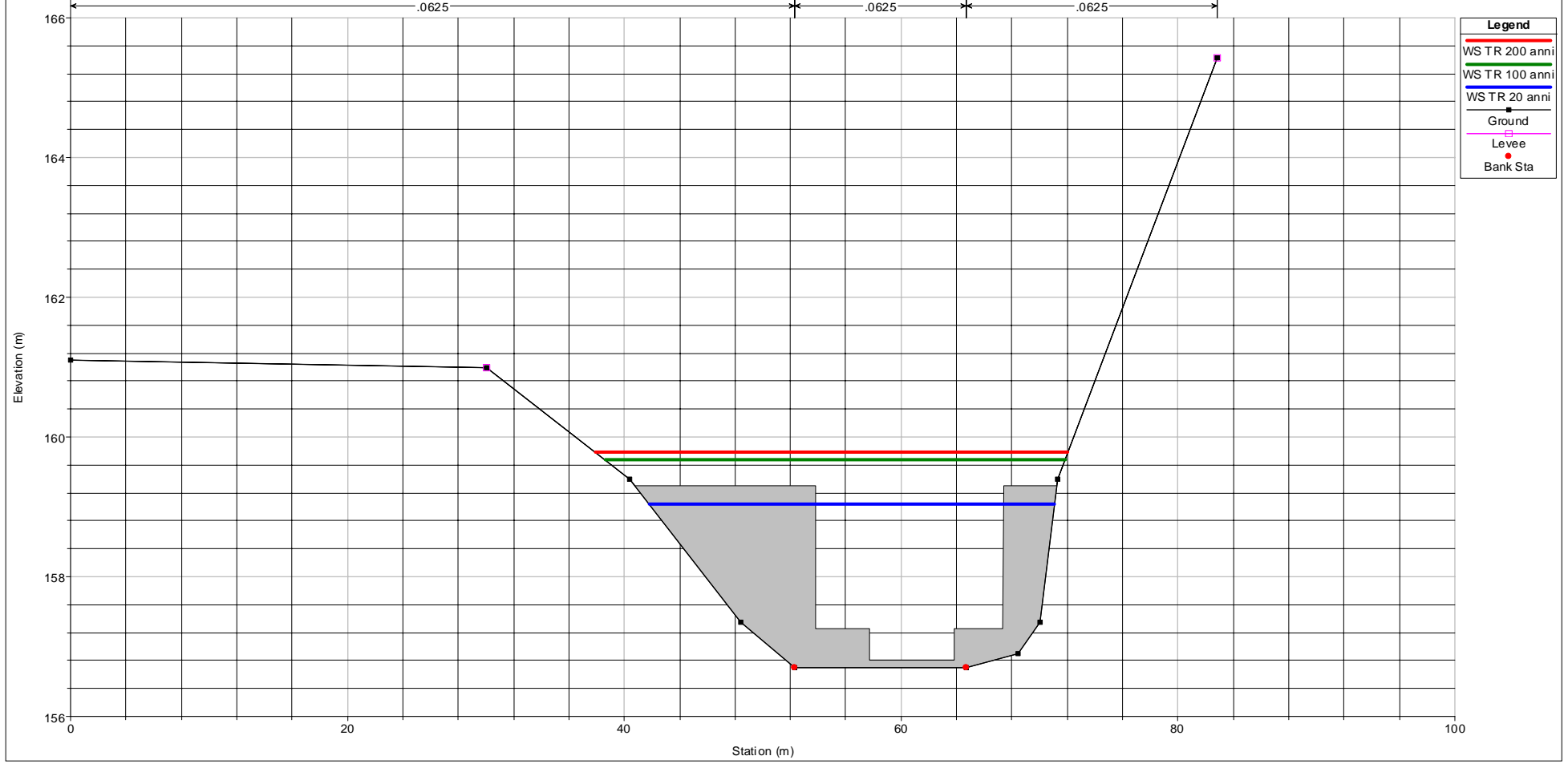
- Legend**
- WS TR 200 anni
 - WS TR 100 anni
 - WS TR 20 anni
 - Ground
 - Levee
 - Bank Sta

Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 133 SEZ 7bis

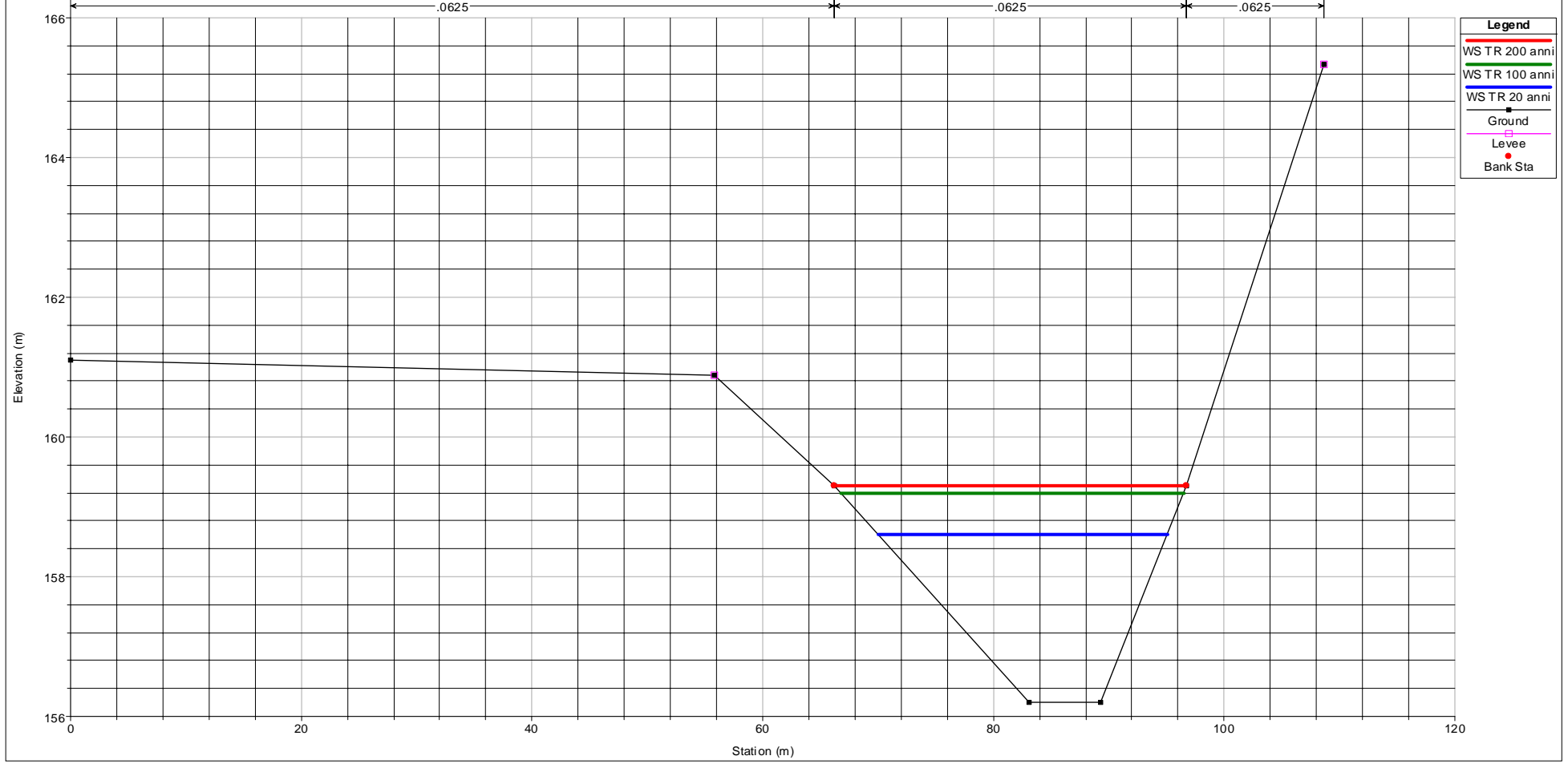


- Legend**
- WS TR 200 anni
 - WS TR 100 anni
 - WS TR 20 anni
 - Ground
 - Levee
 - Bank Sta

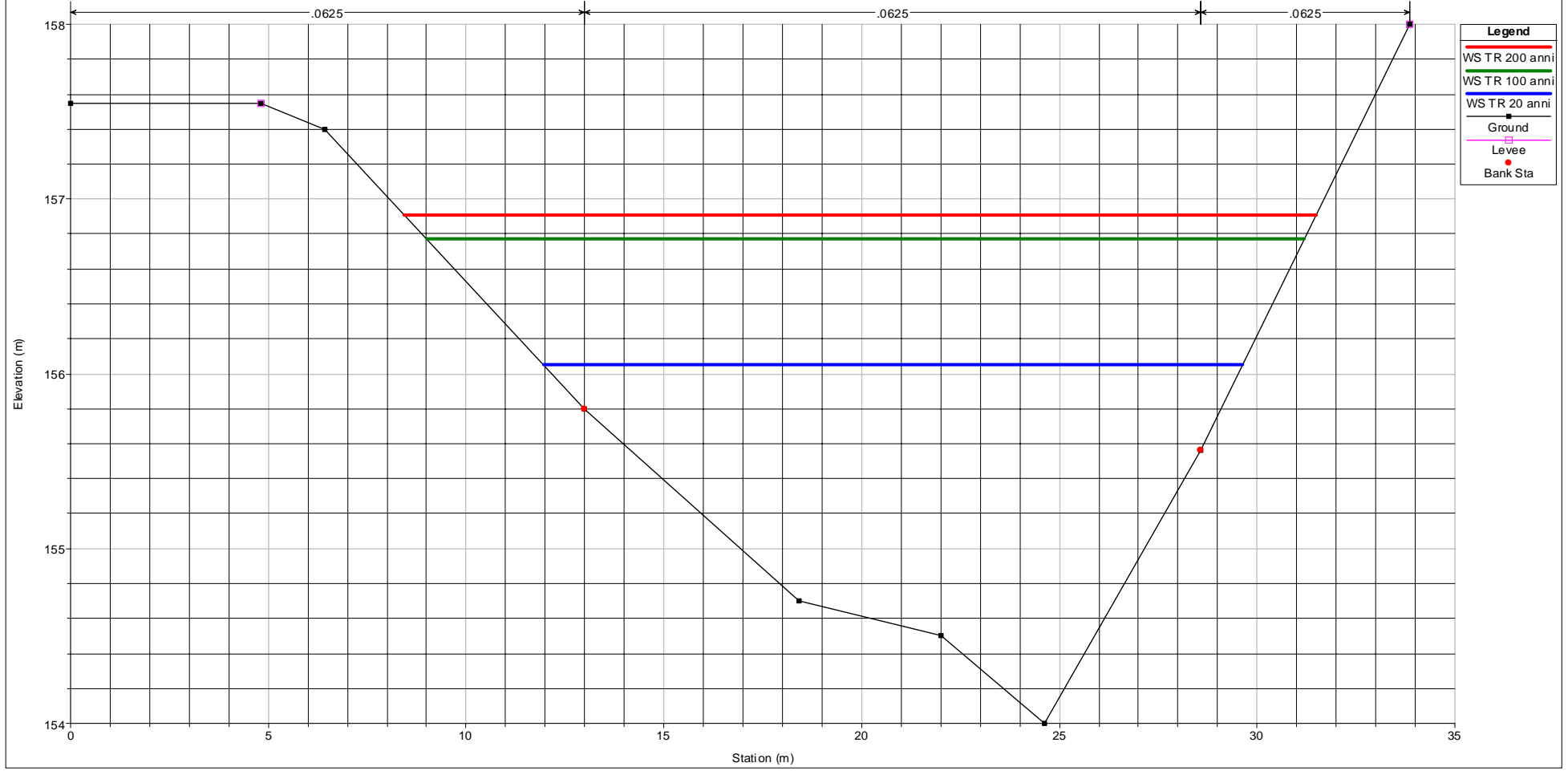
Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 132.5 IS briglia



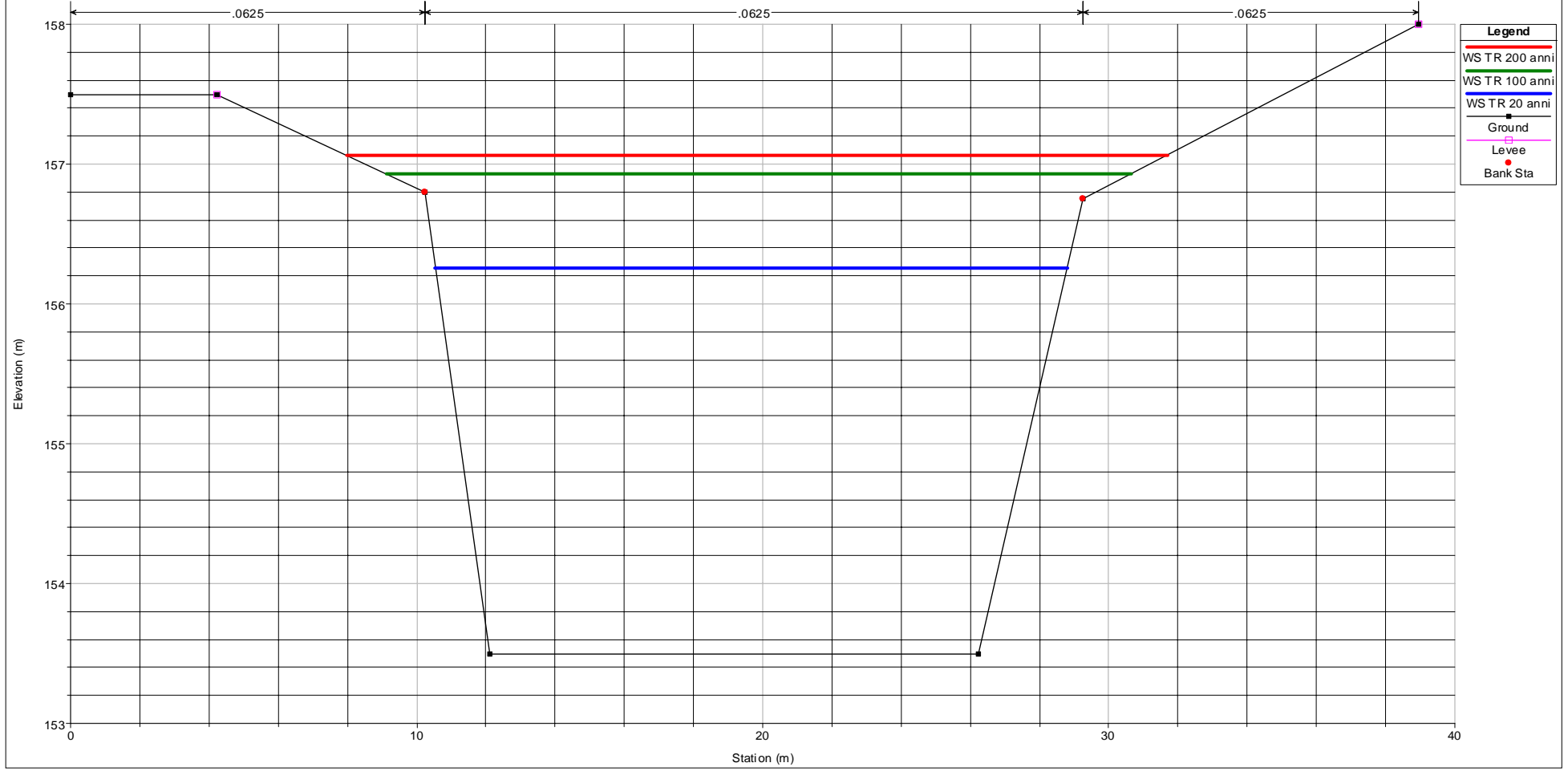
Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 132 SEZ 7ter



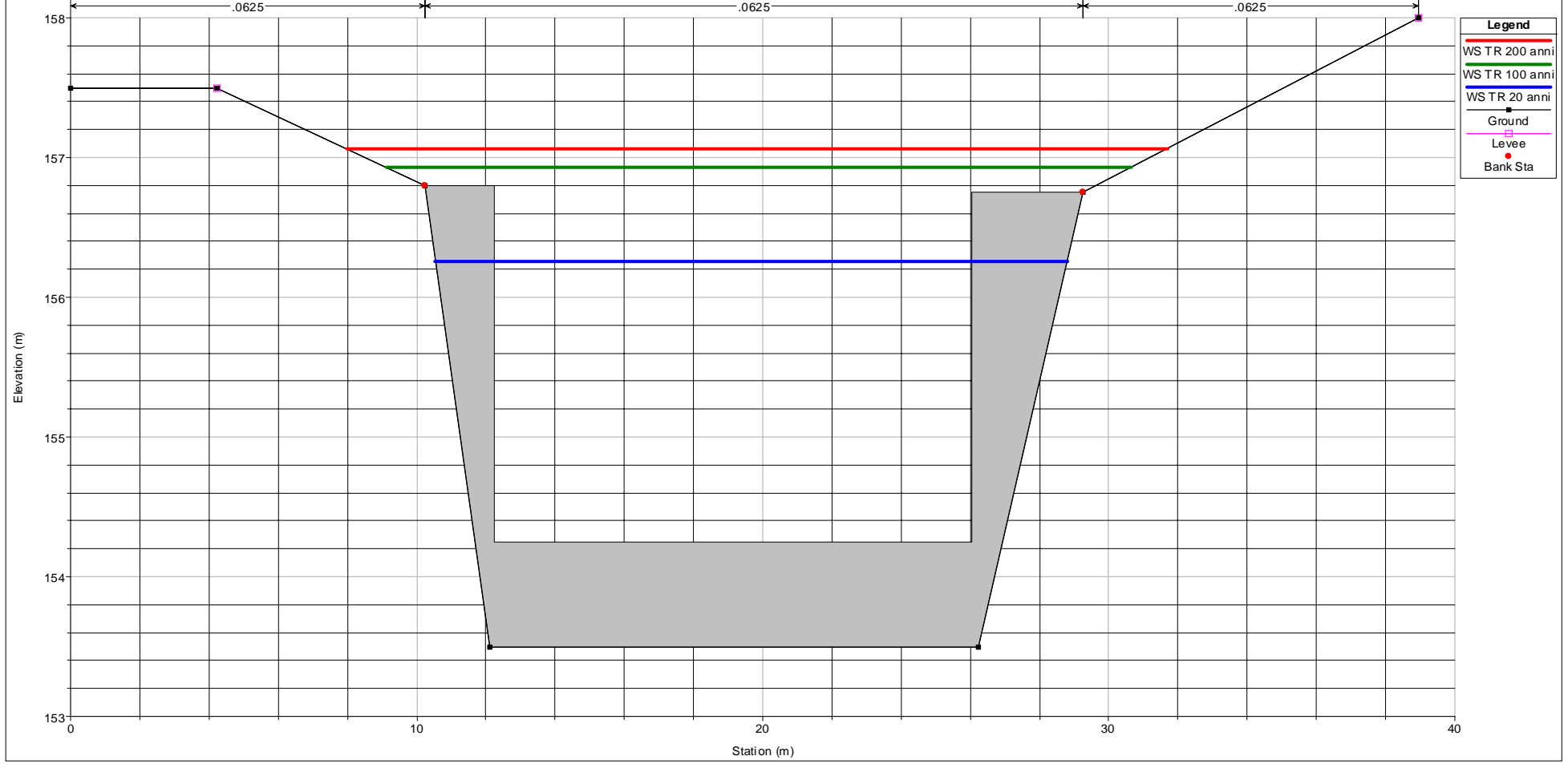
Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 130 SEZ 8



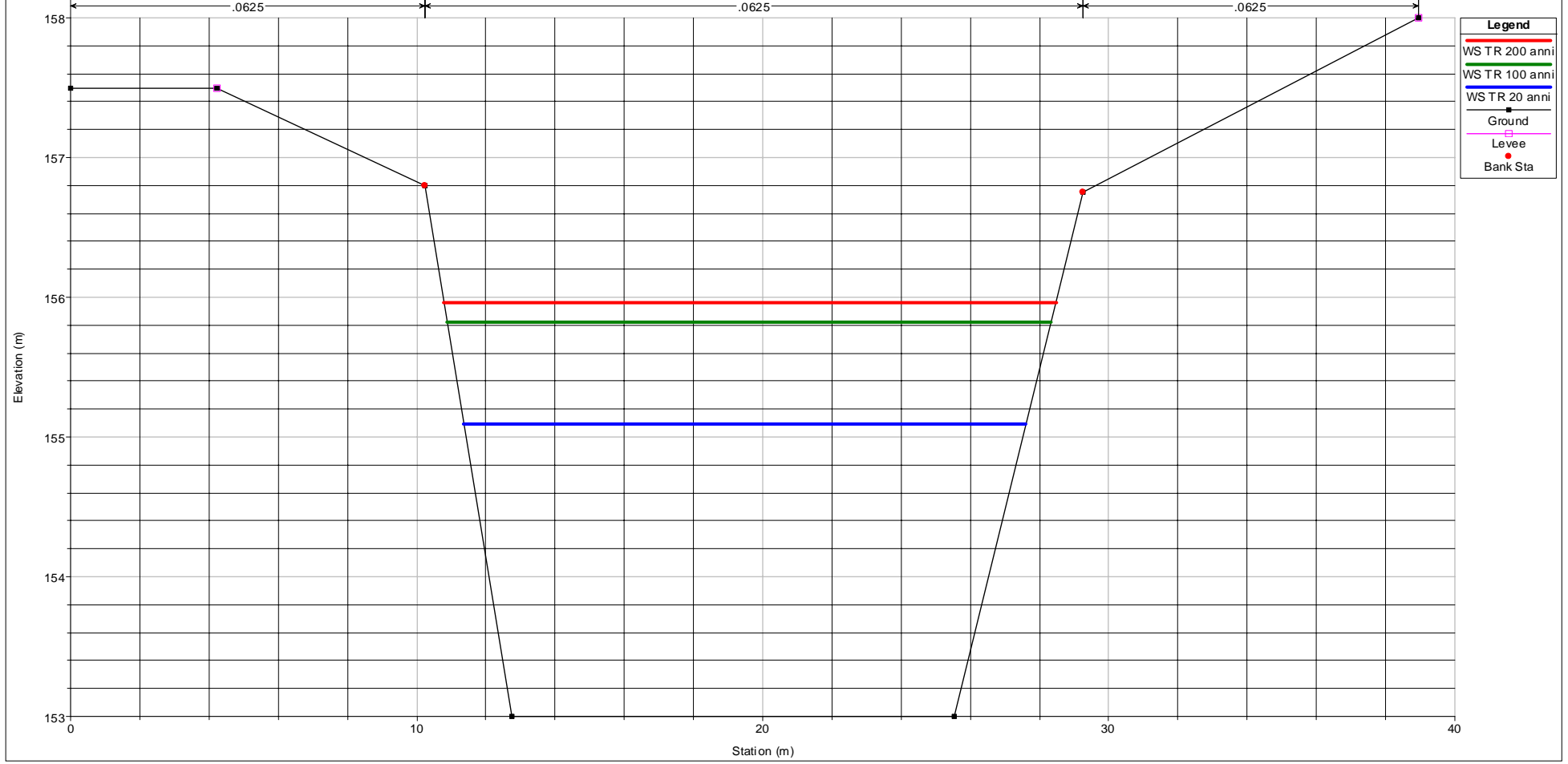
Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 129 SEZ 9-briglia



Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 125 IS briglia

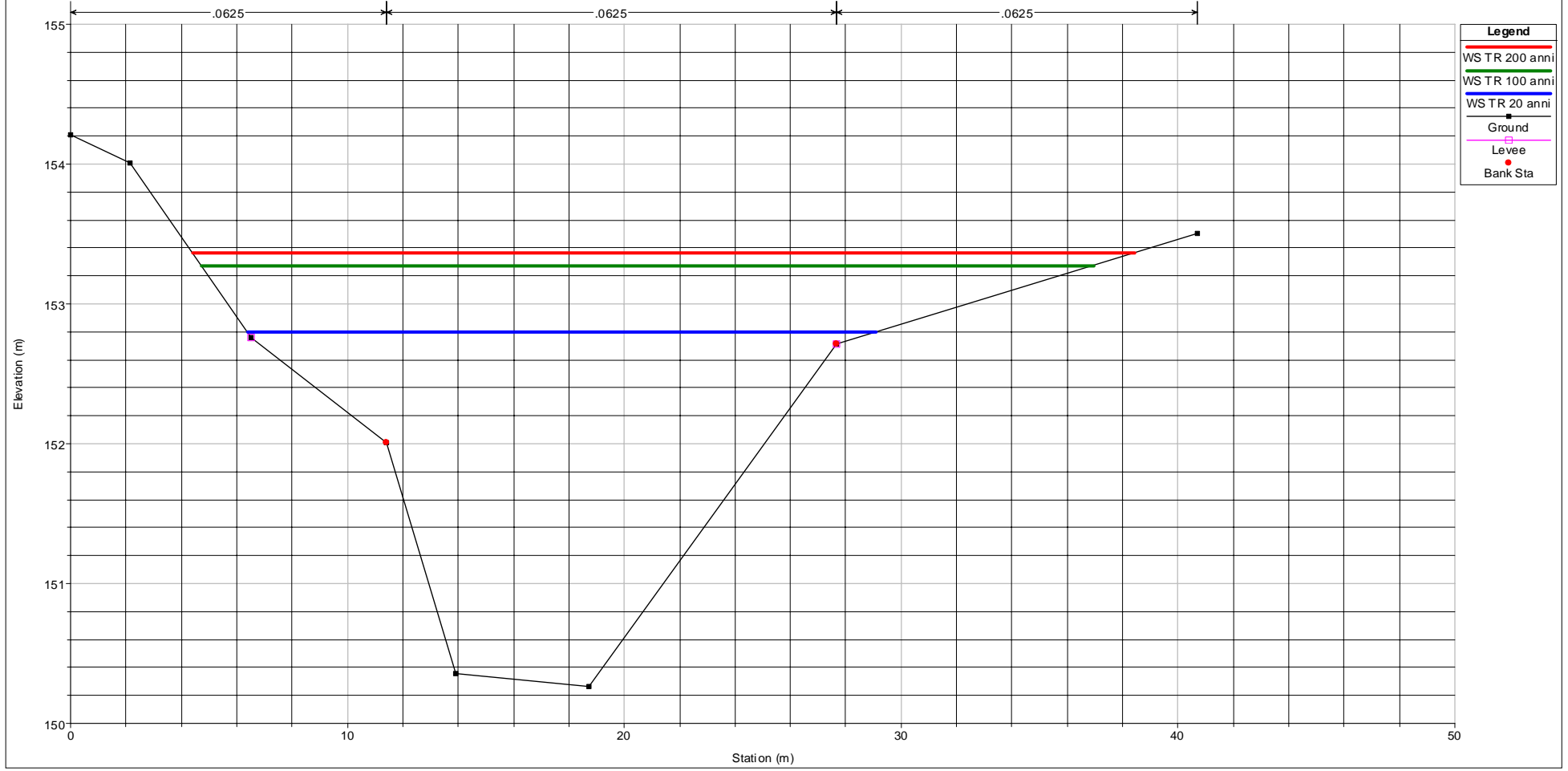


Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 120 SEZ 9bis

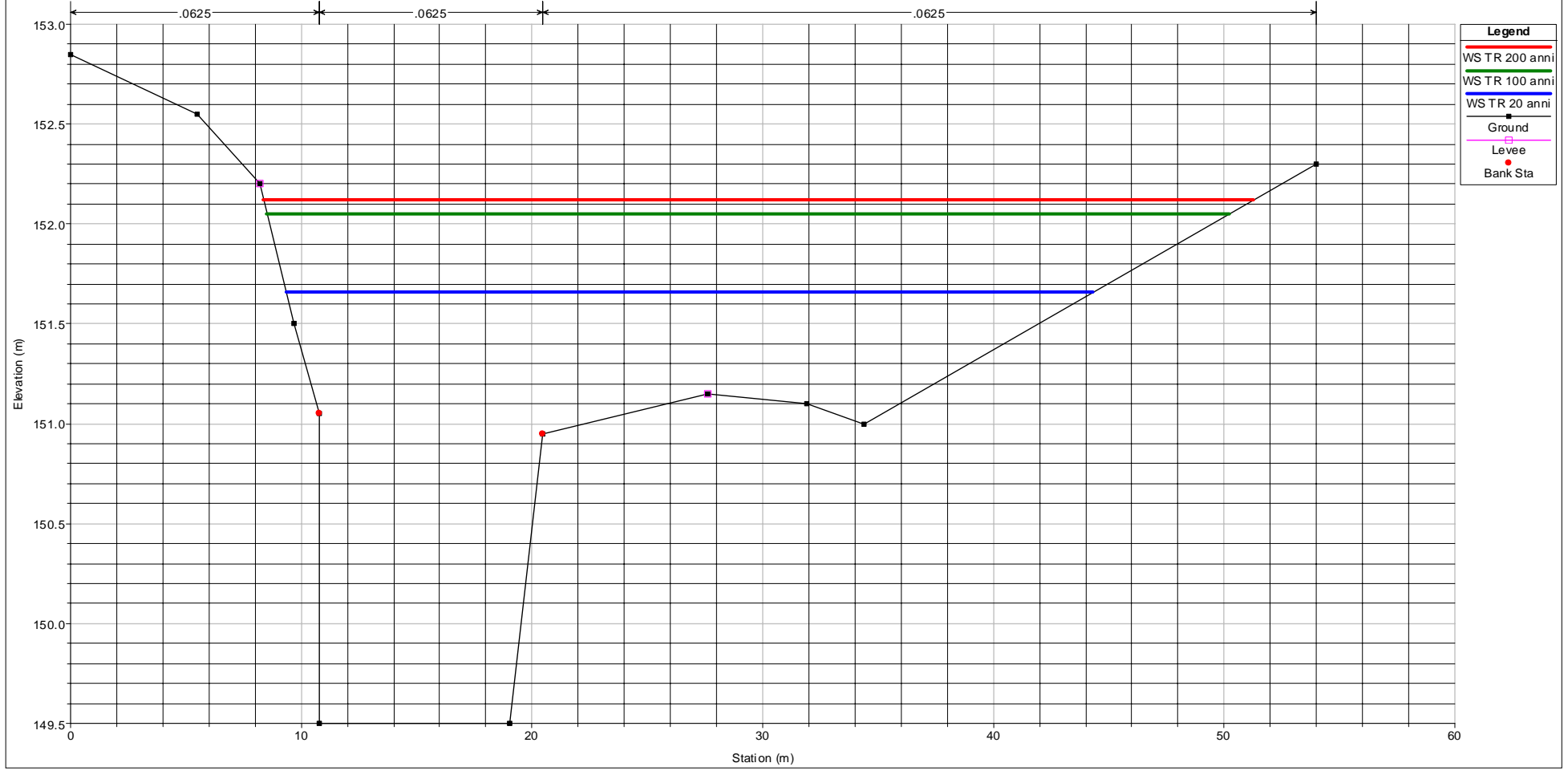


- Legend**
- WS TR 200 anni
 - WS TR 100 anni
 - WS TR 20 anni
 - Ground
 - Levee
 - Bank Sta

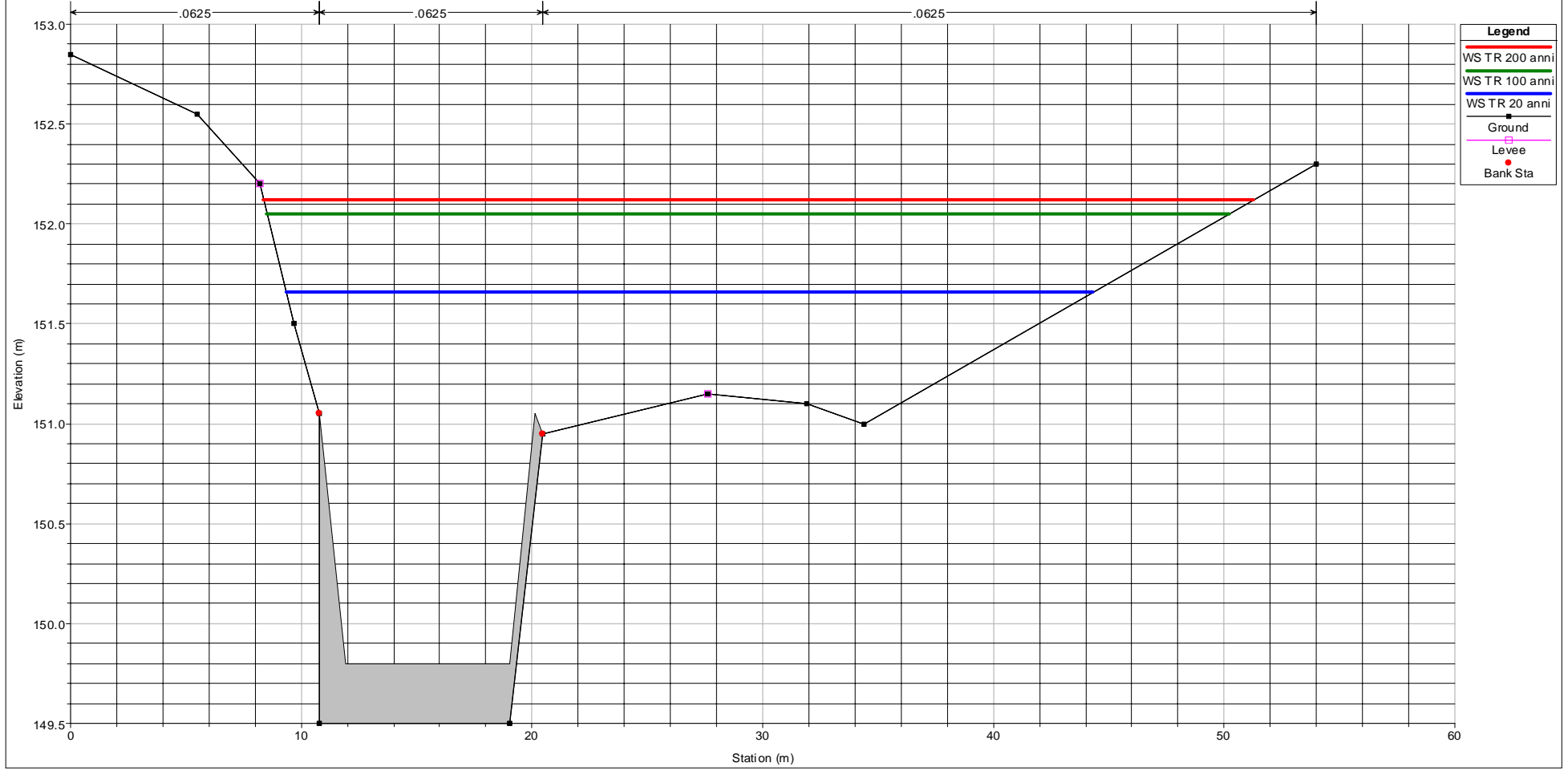
Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 110 SEZ 10



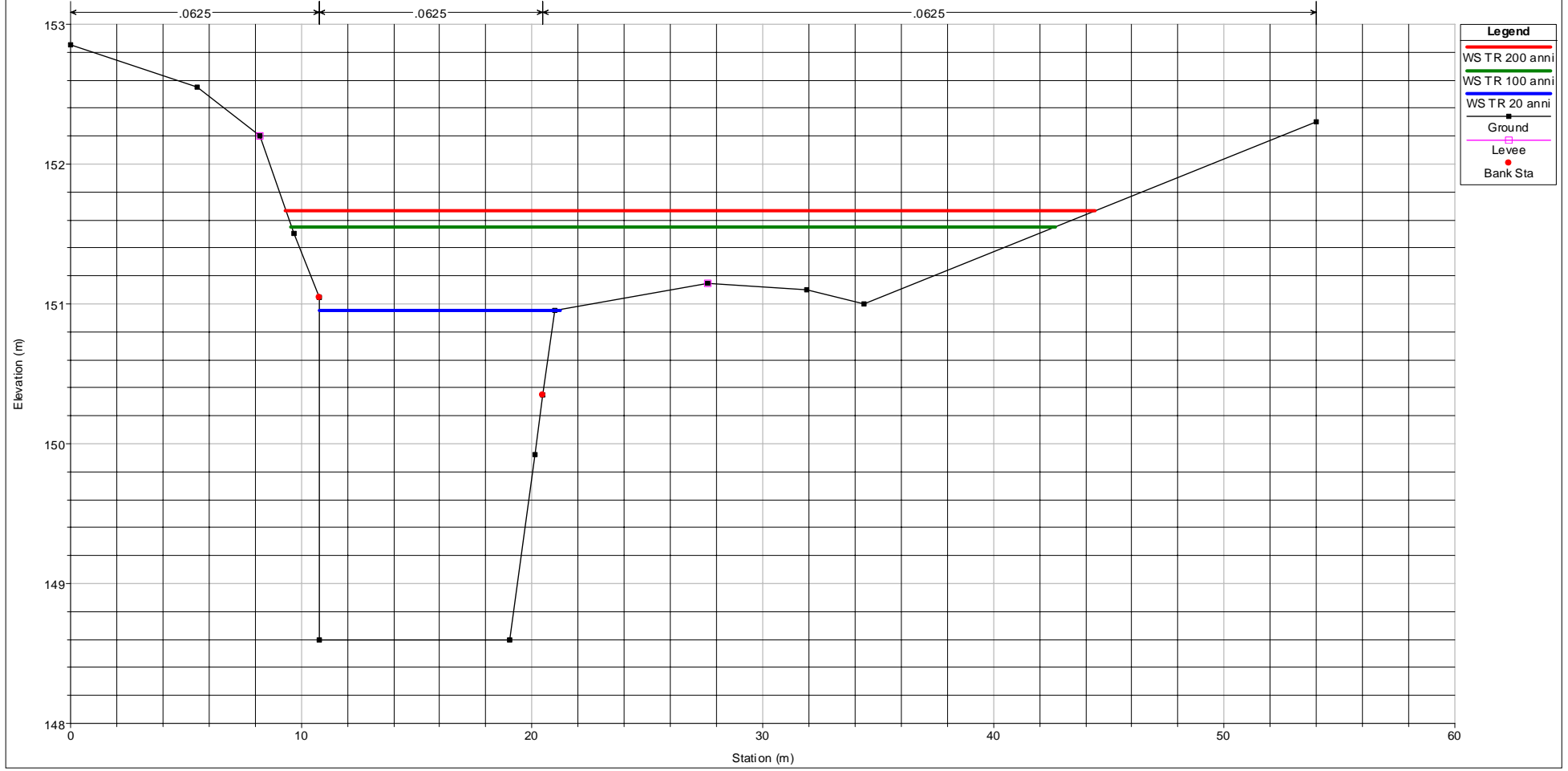
Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 100 SEZ 11m



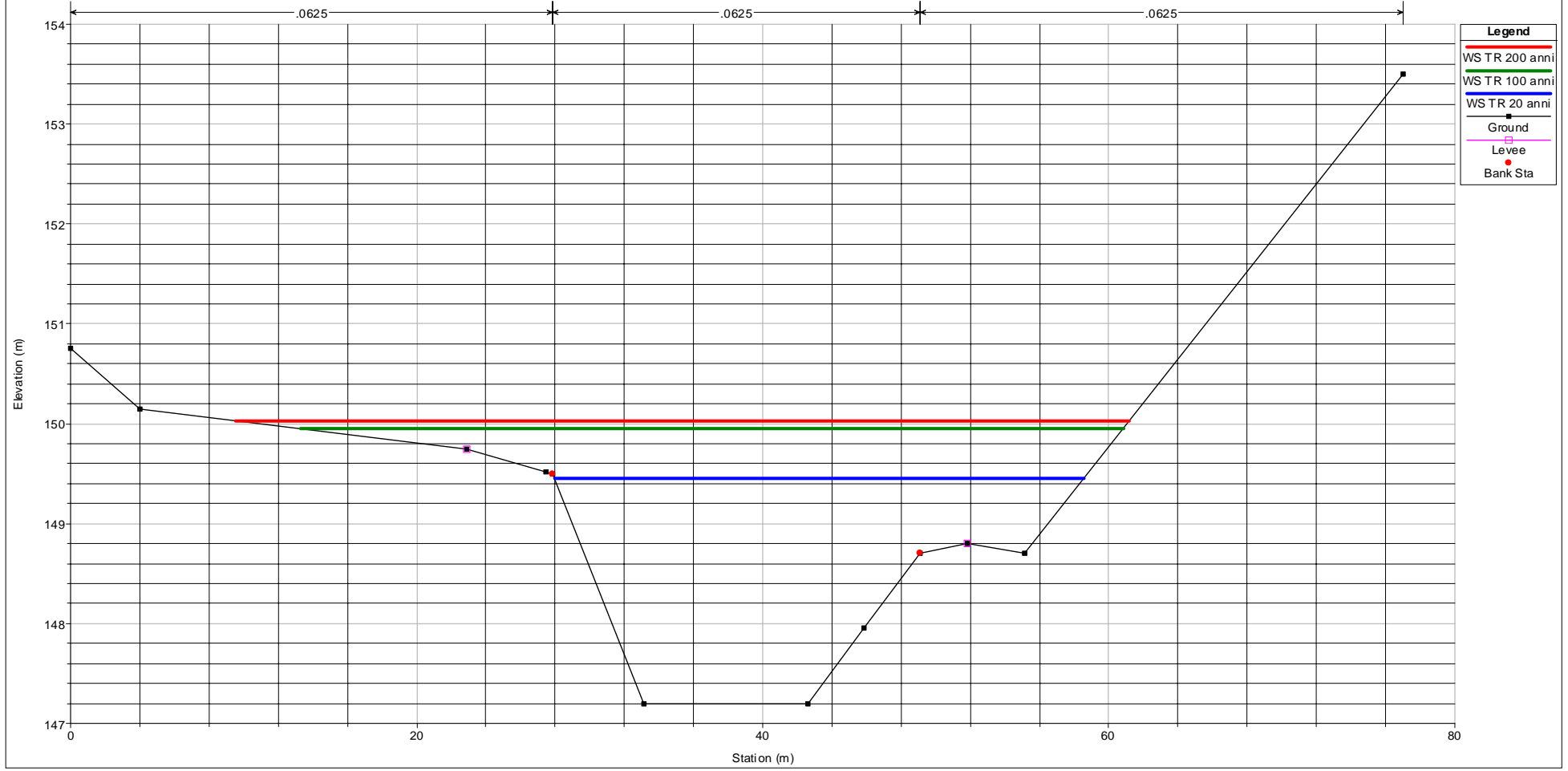
Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 97 IS briglia



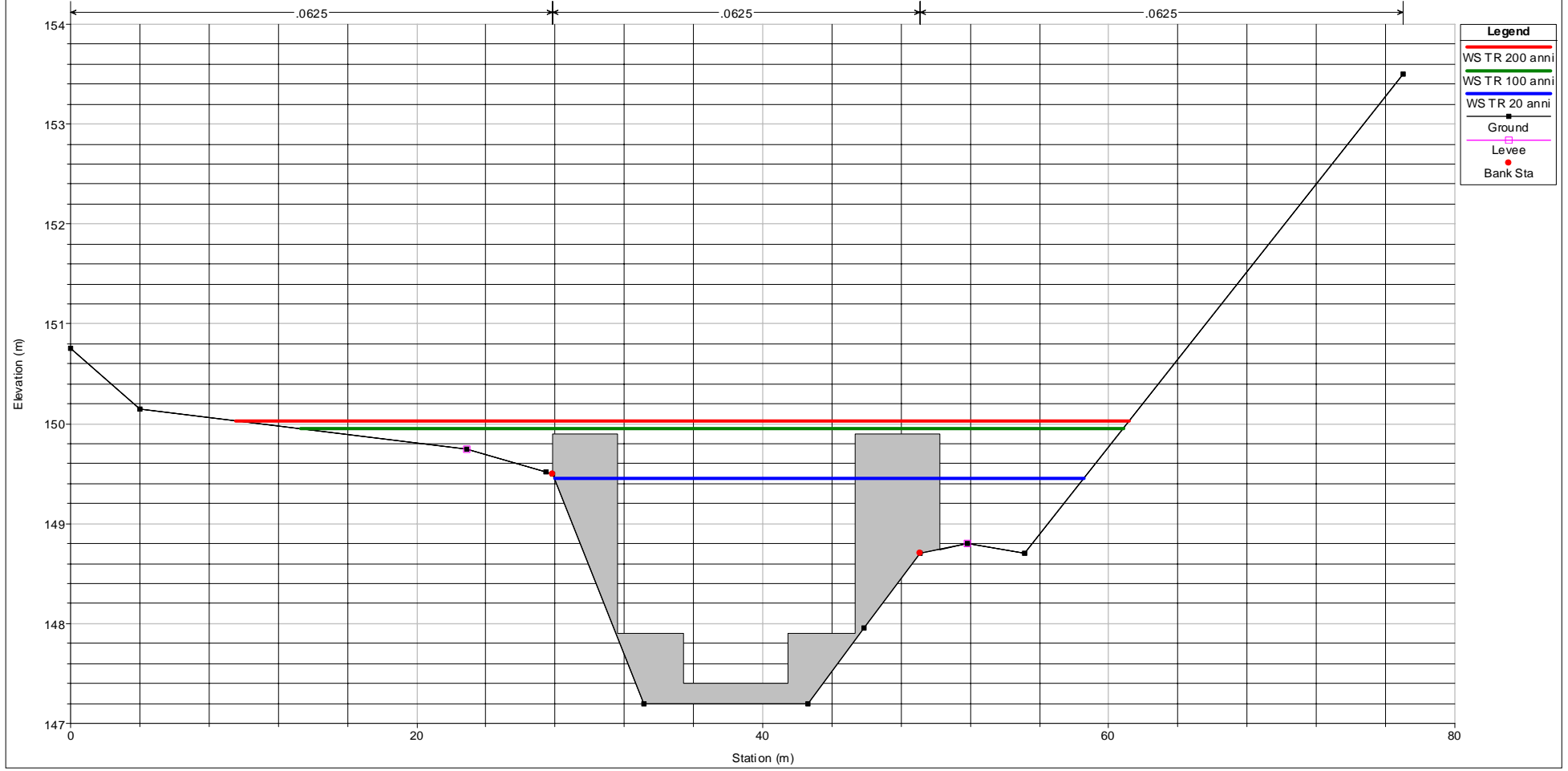
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RS = 95 SEZ 11v



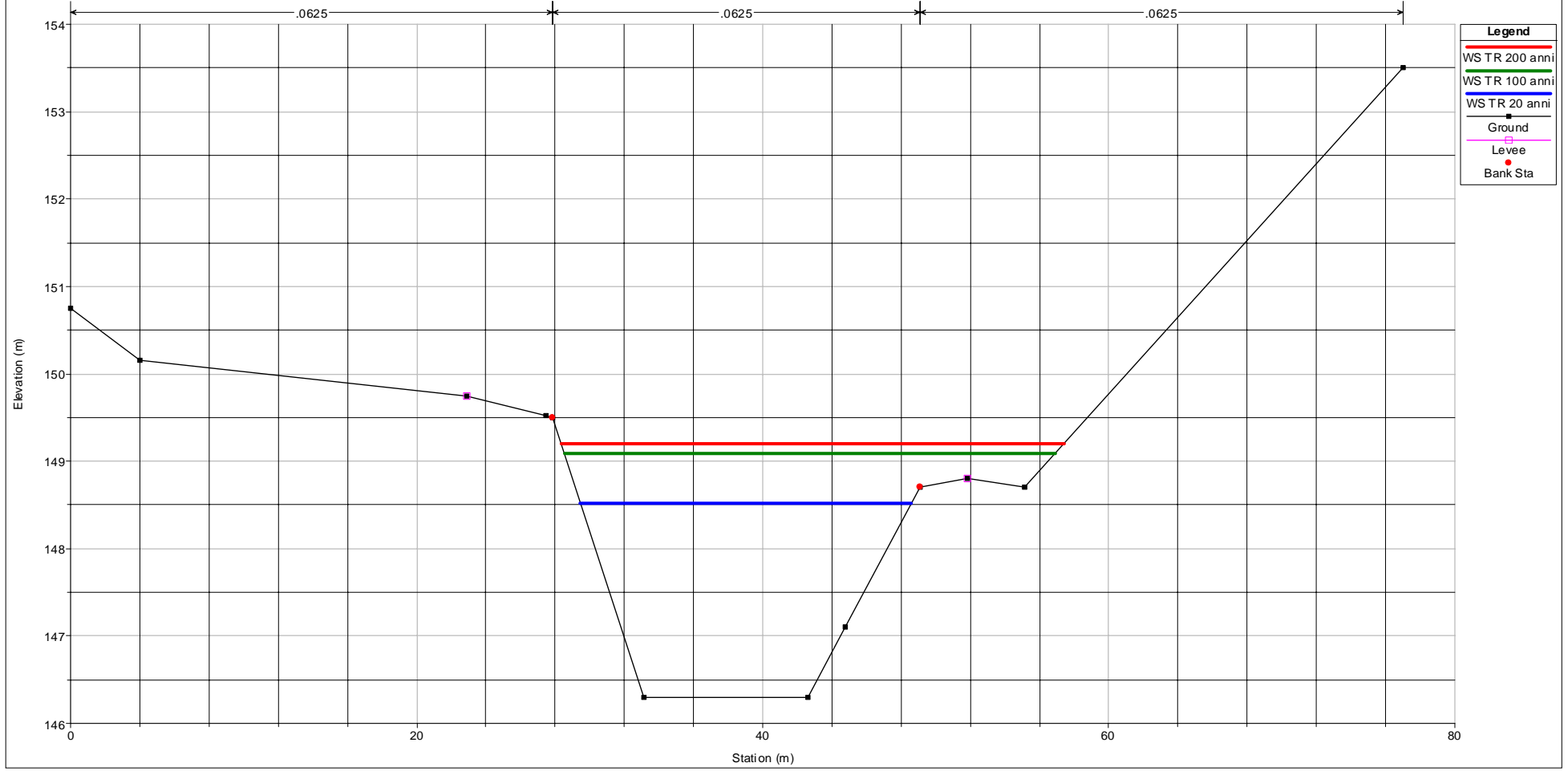
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RS = 90 SEZ 12m



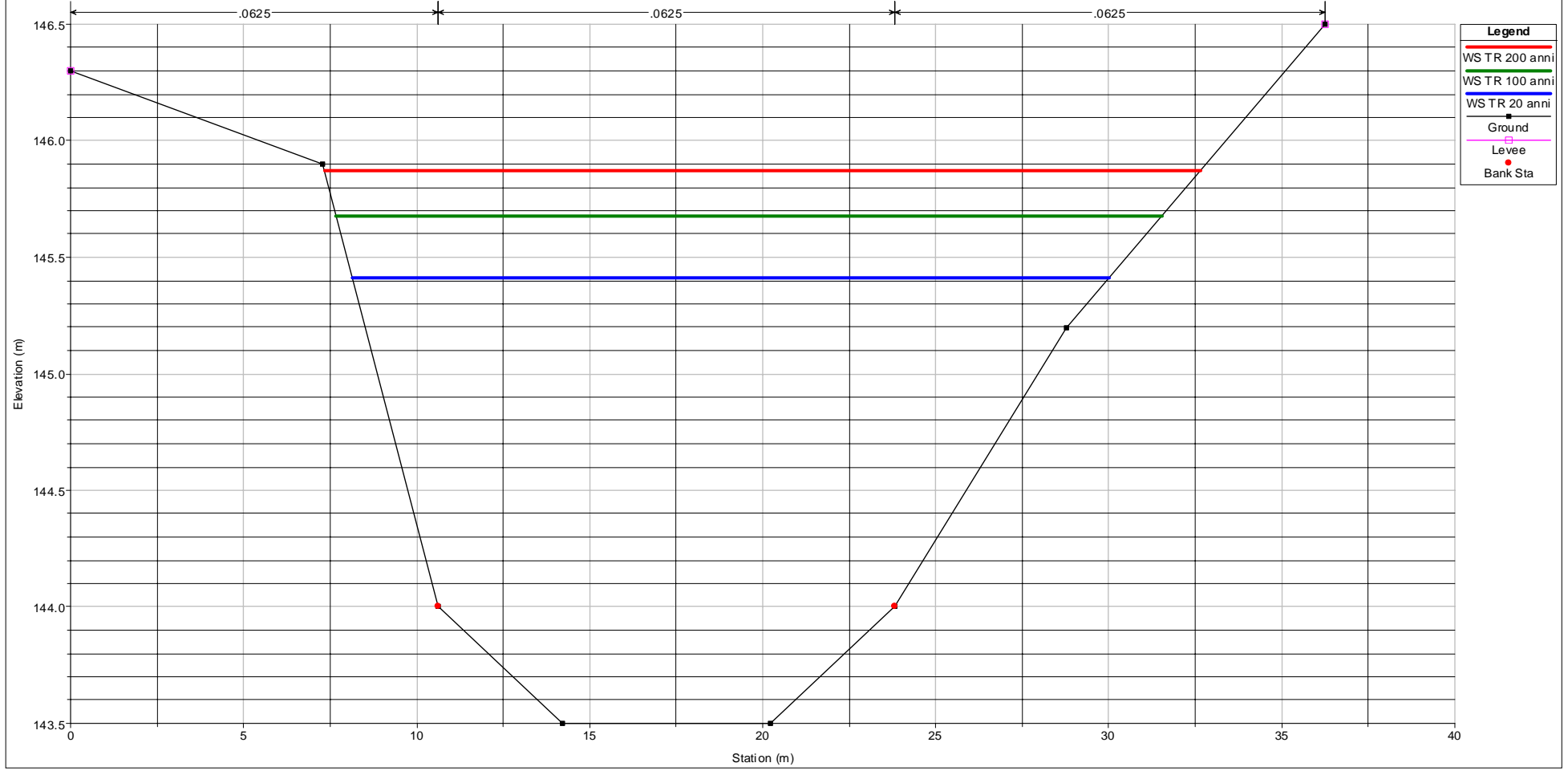
Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 87 IS briglia



Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 85 SEZ 12v

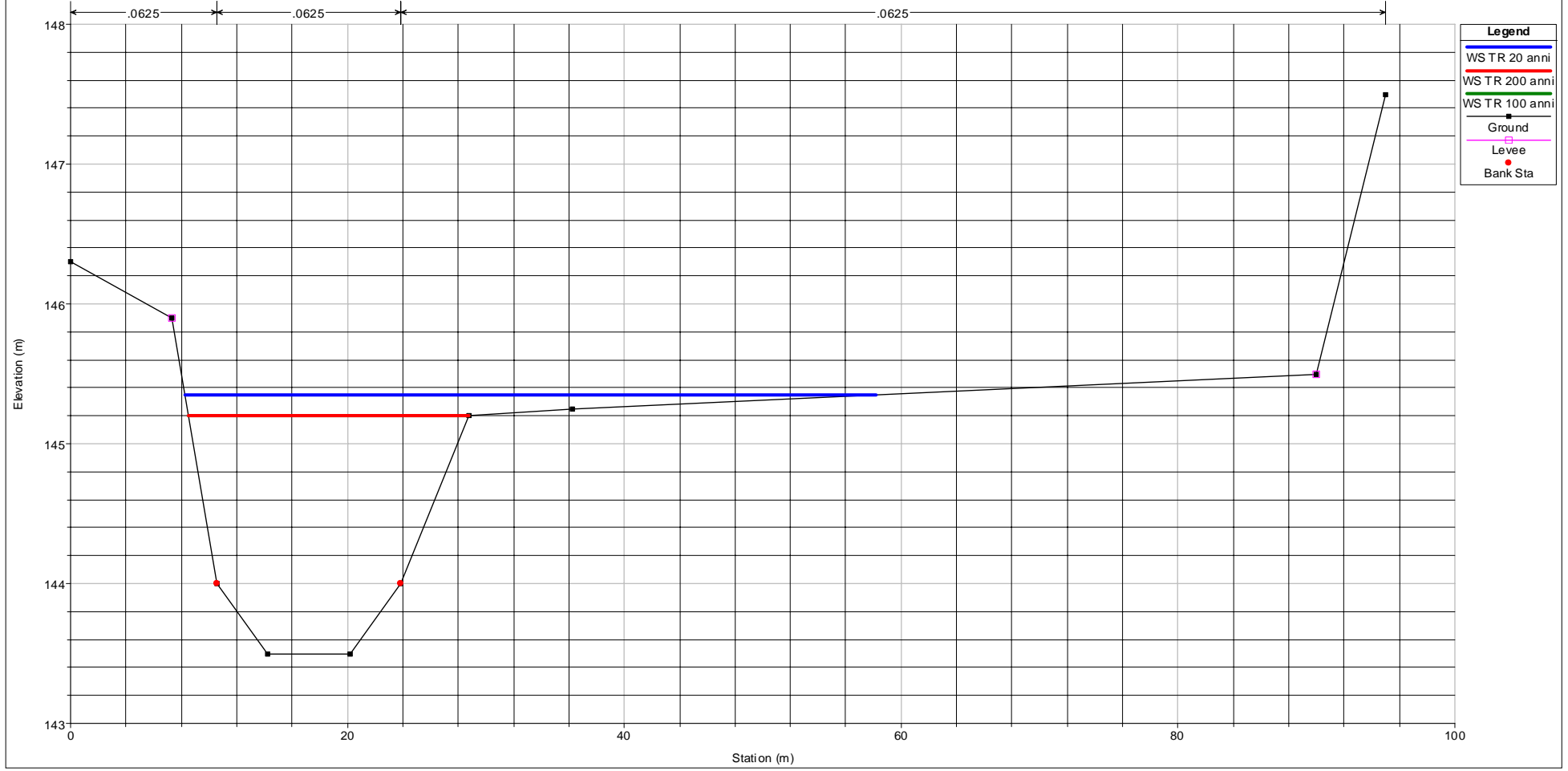


Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 81 SEZ 13bis

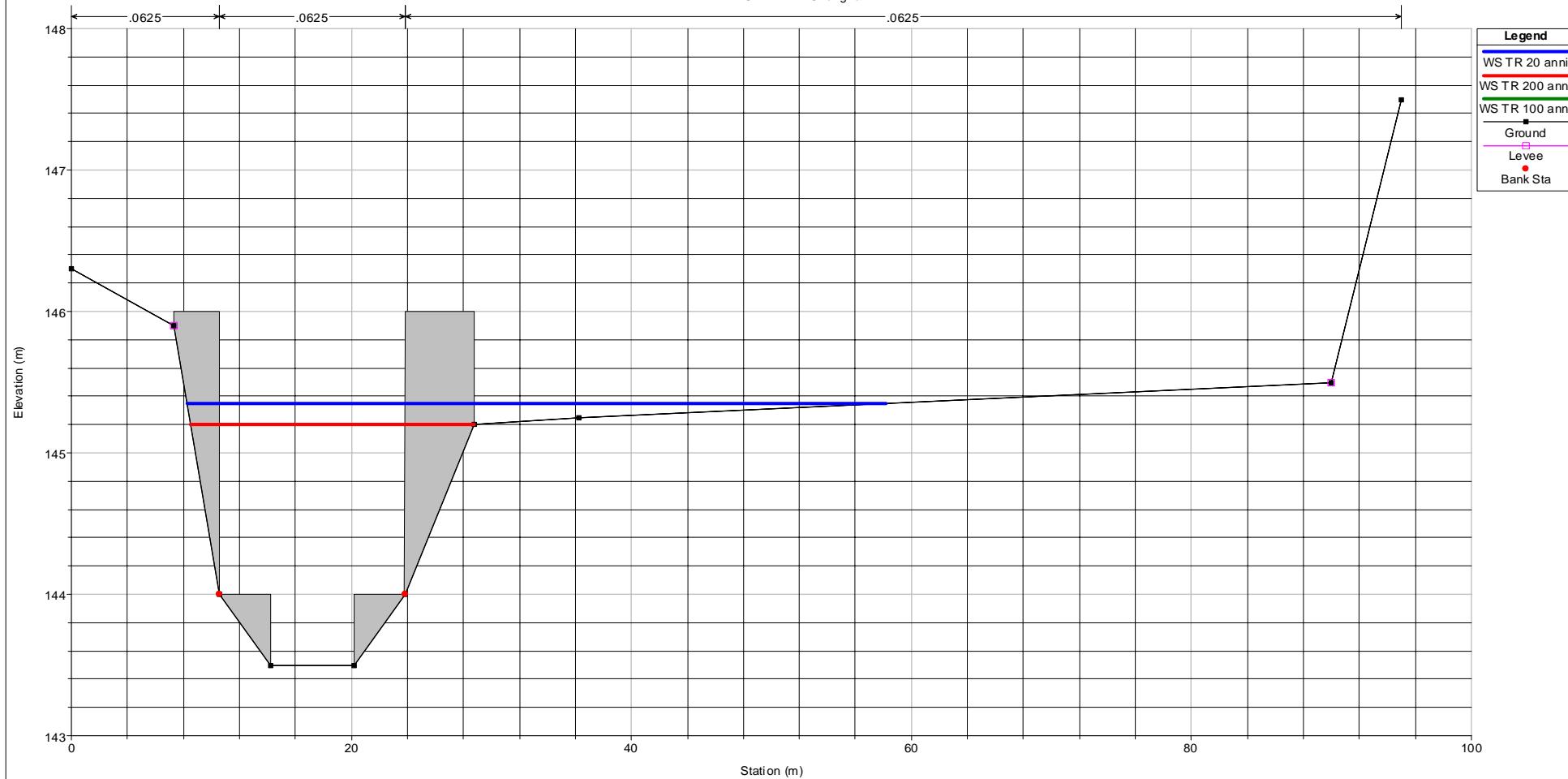


- Legend**
- WS TR 200 anni
 - WS TR 100 anni
 - WS TR 20 anni
 - Ground
 - Levee
 - Bank Sta

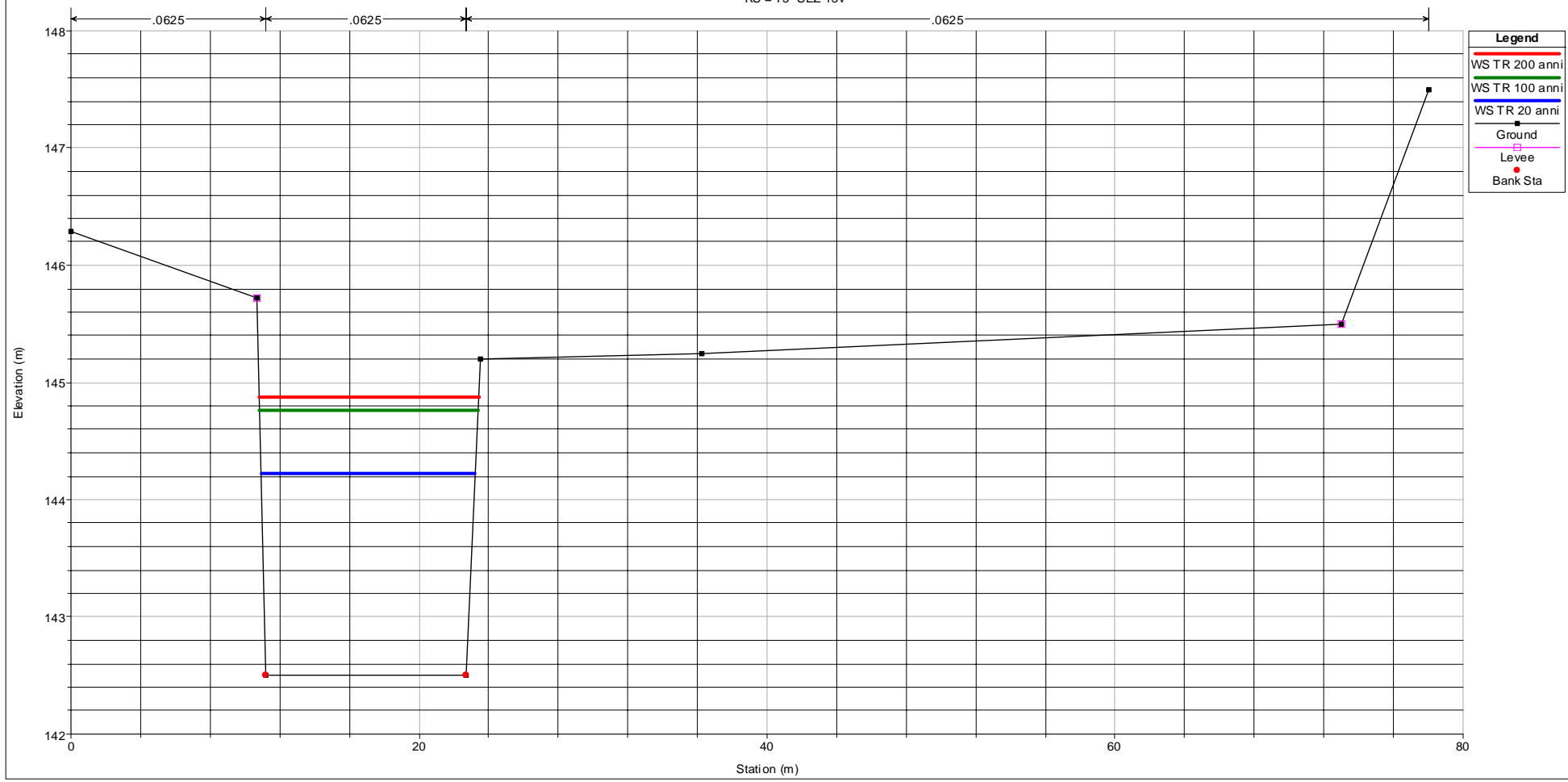
Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 80 SEZ 13



Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 77 IS briglia

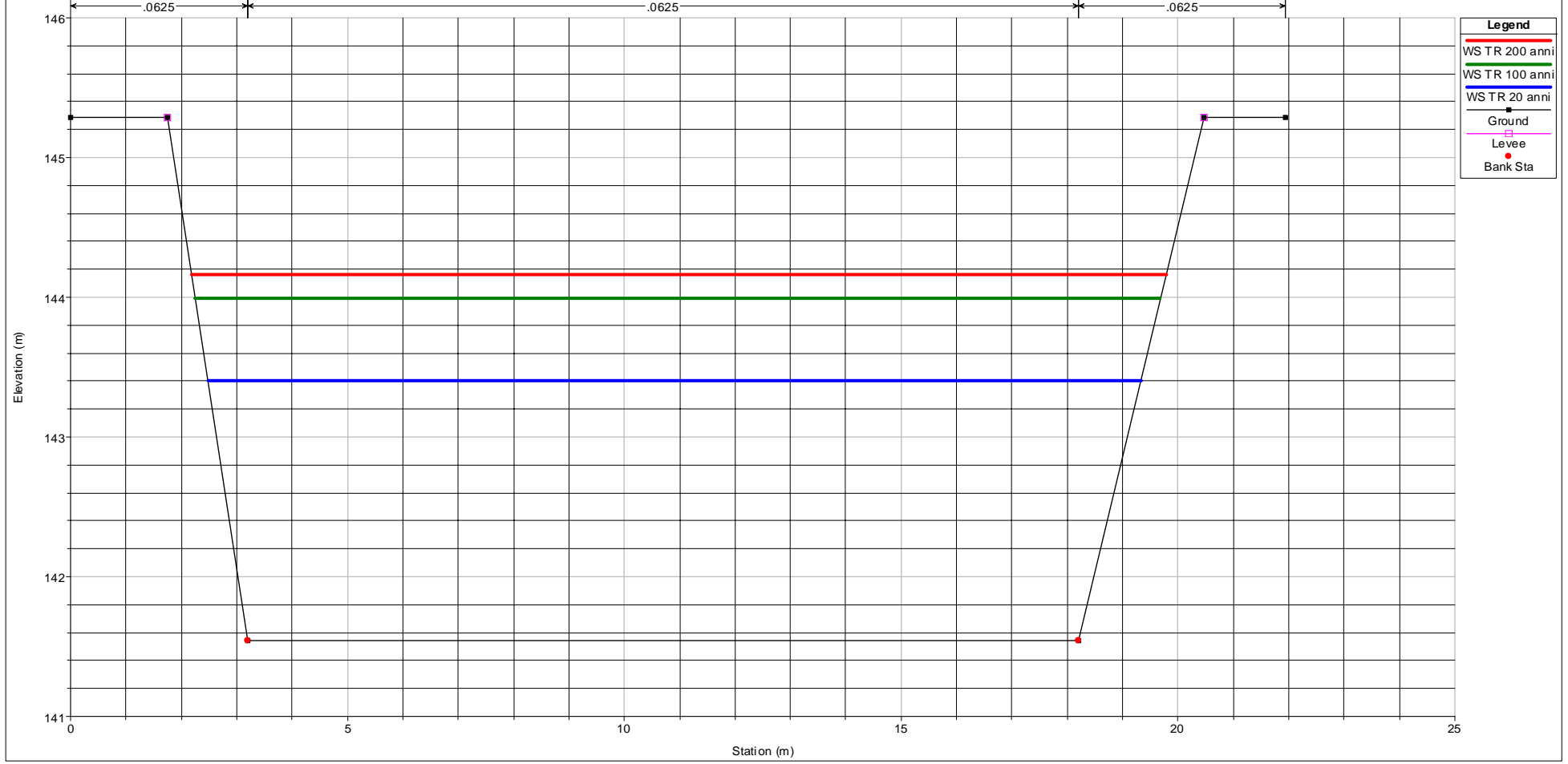


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RS = 75 SEZ 13v

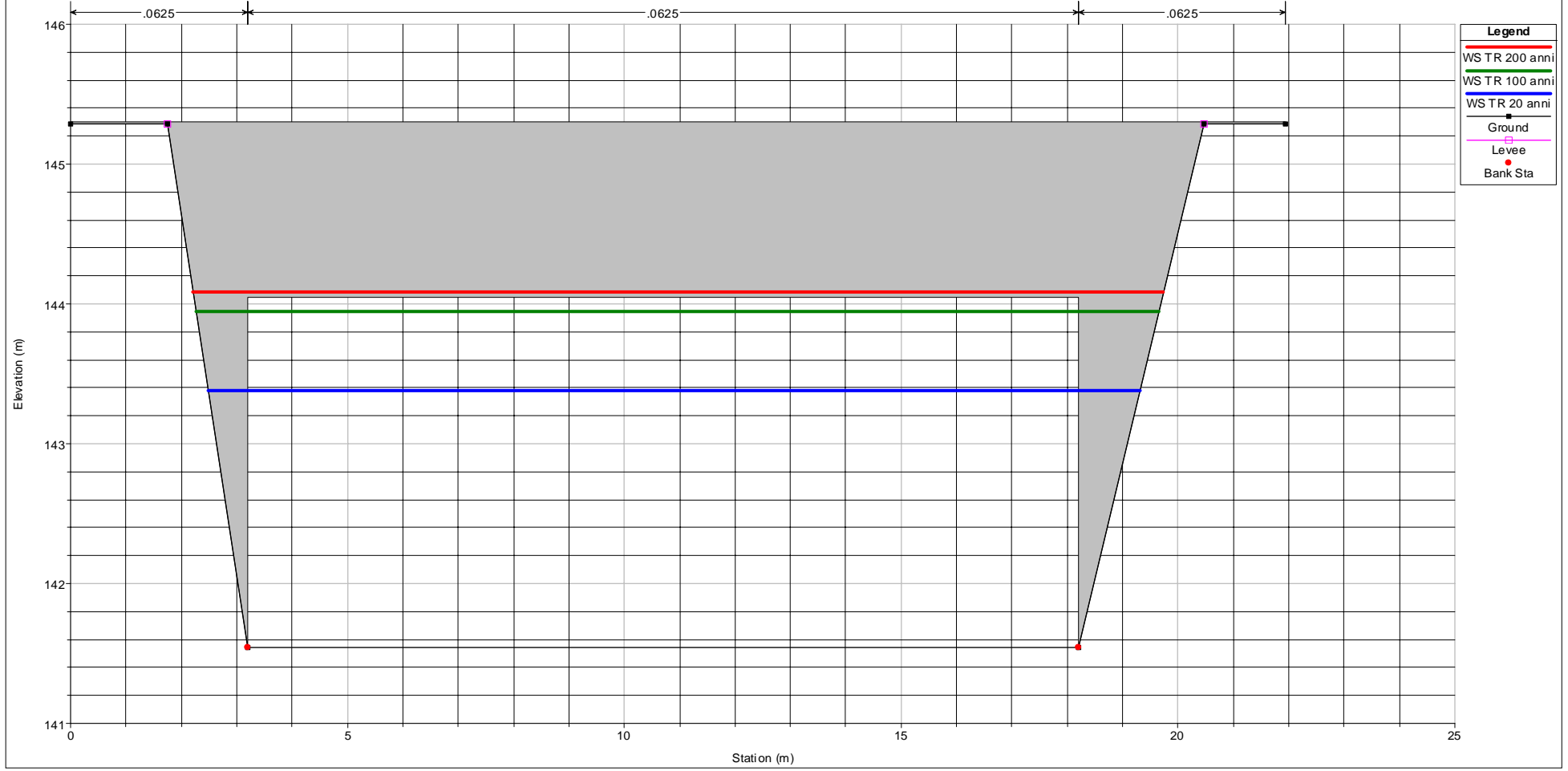


- Legend**
- WS TR 200 anni
- WS TR 100 anni
- WS TR 20 anni
- Ground
- Levee
- Bank Sta

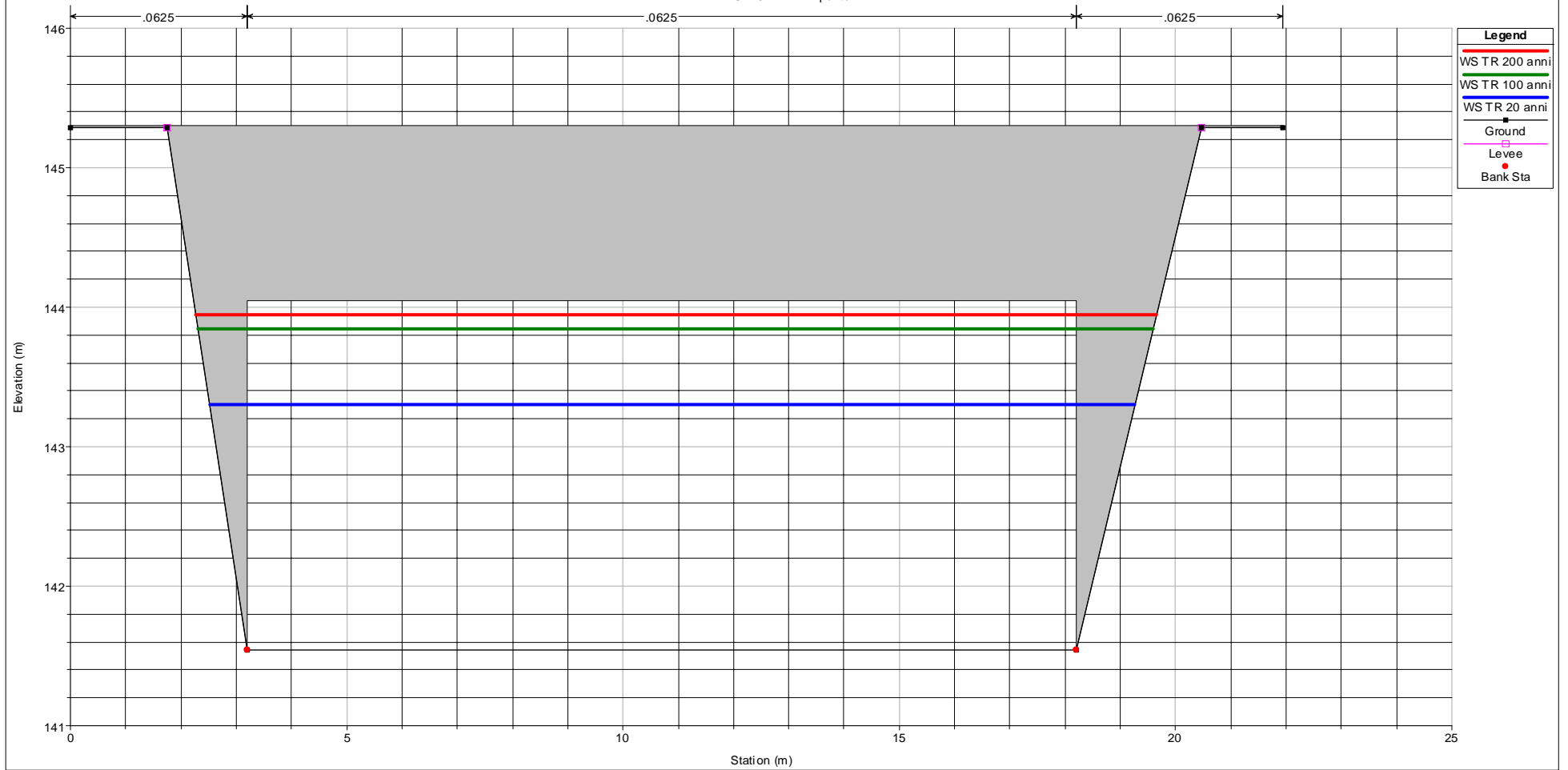
Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 70 SEZ 14m



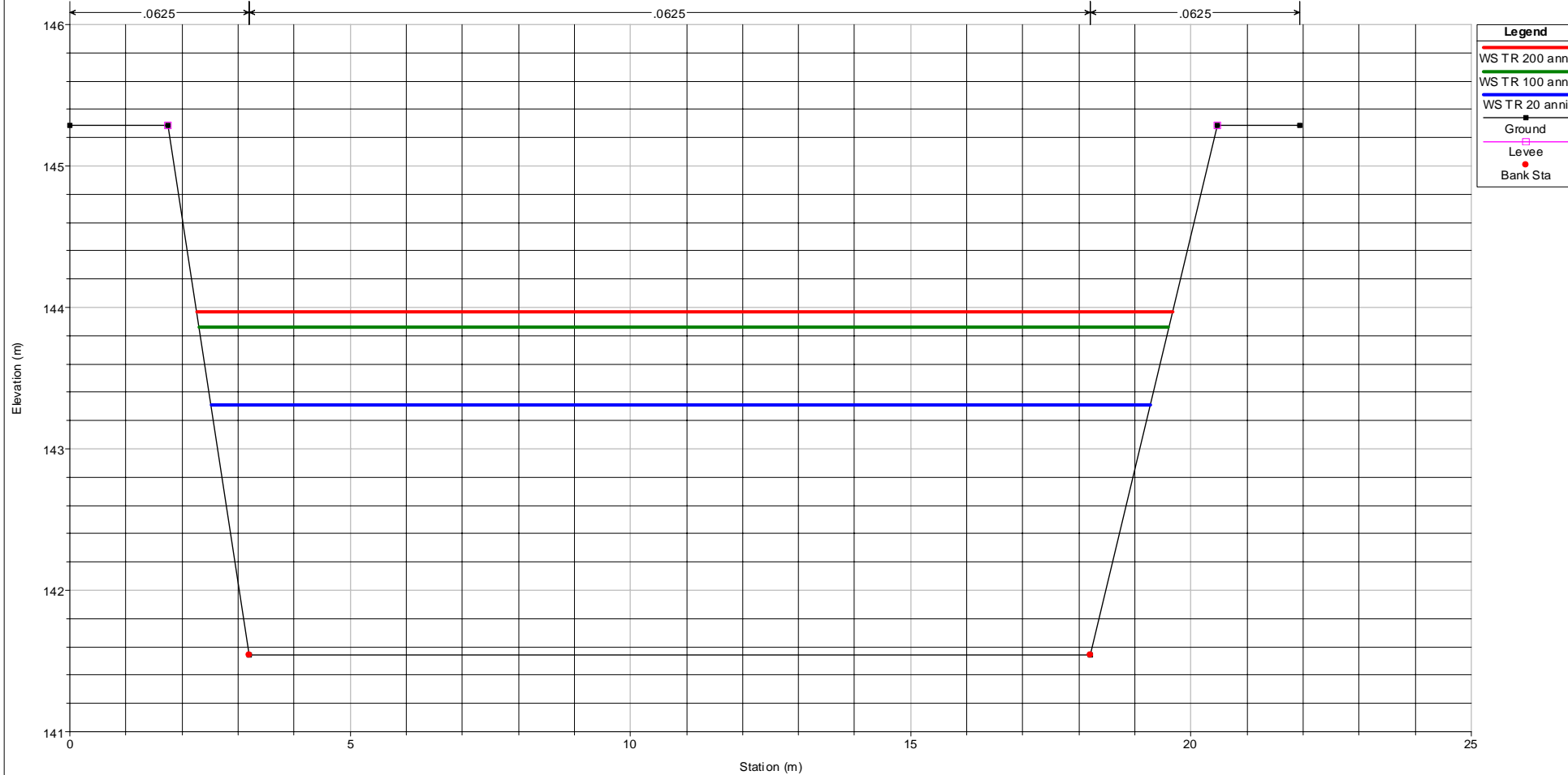
Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 67 BR ponte



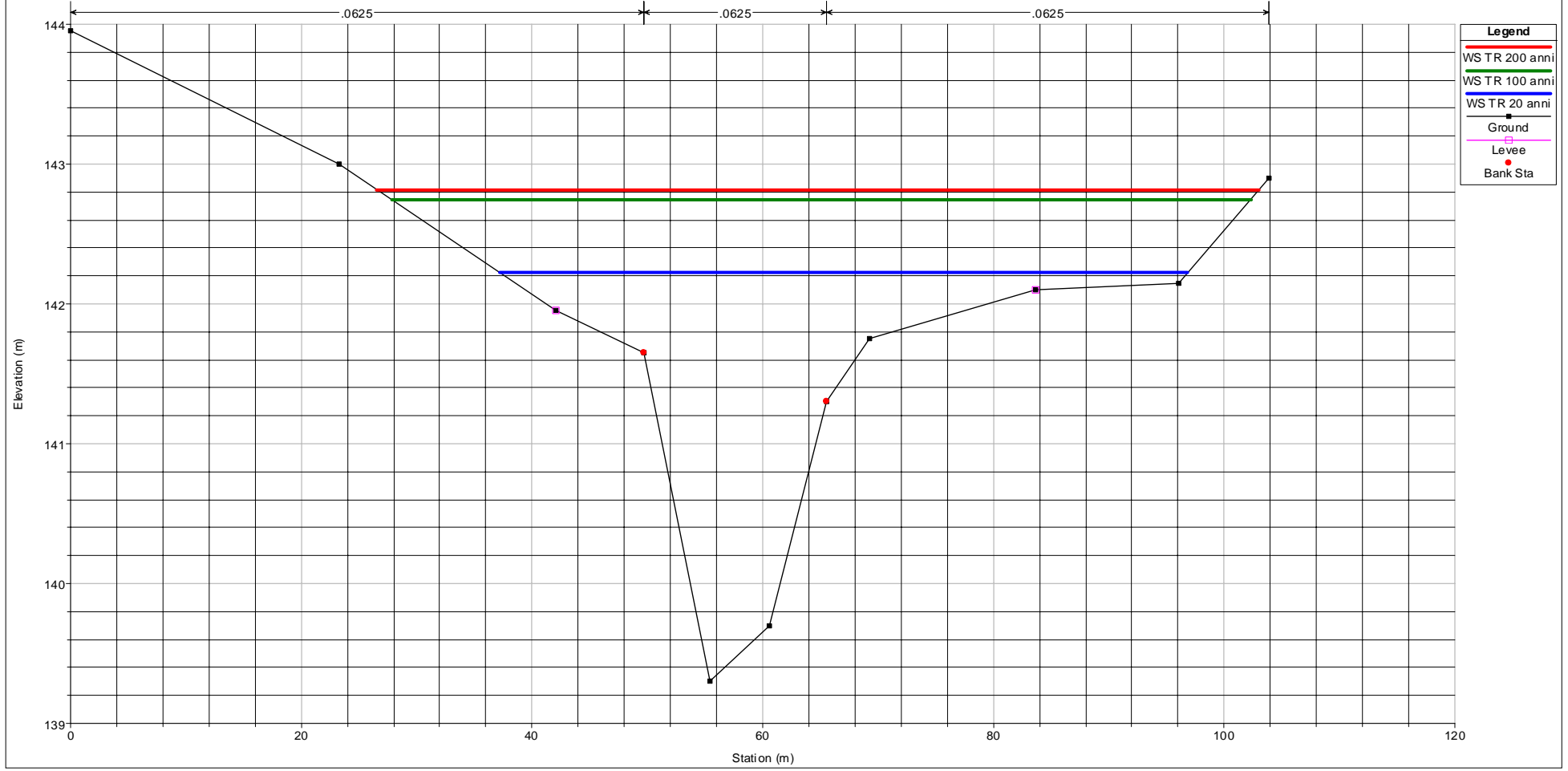
Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 67 BR ponte



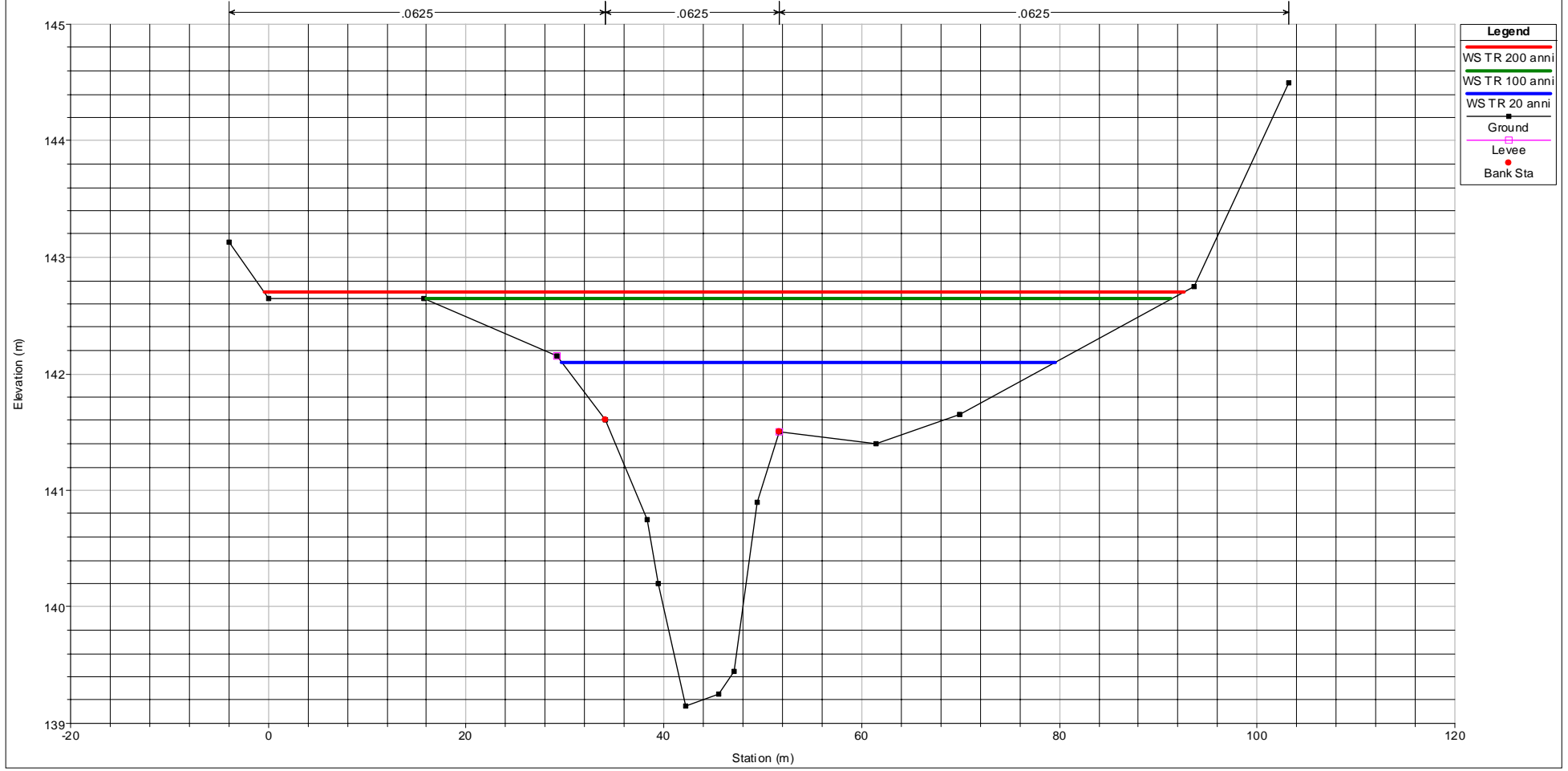
Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 65 SEZ 14v



Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 60 SEZ 15



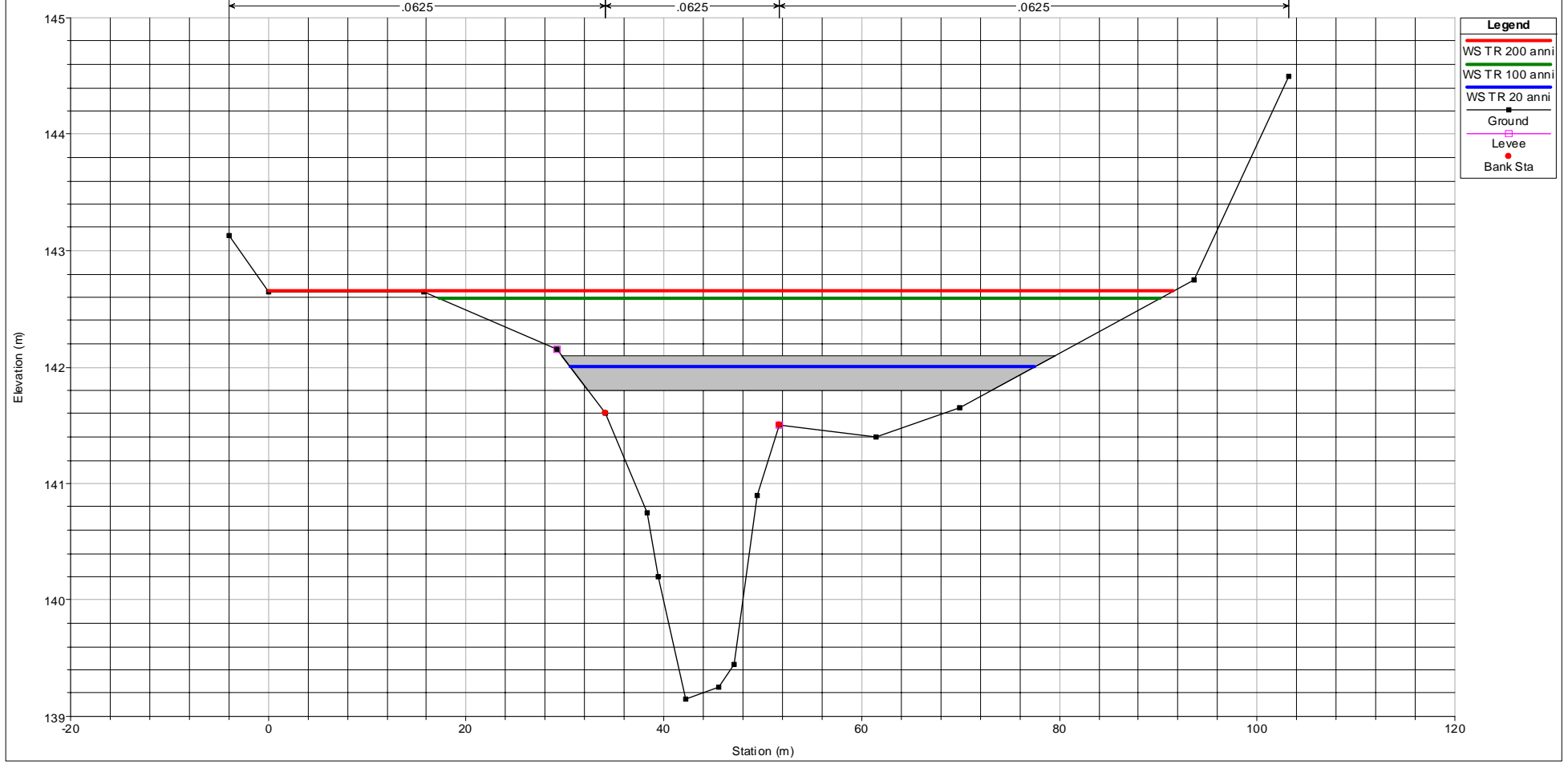
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RS = 50 SEZ 16m



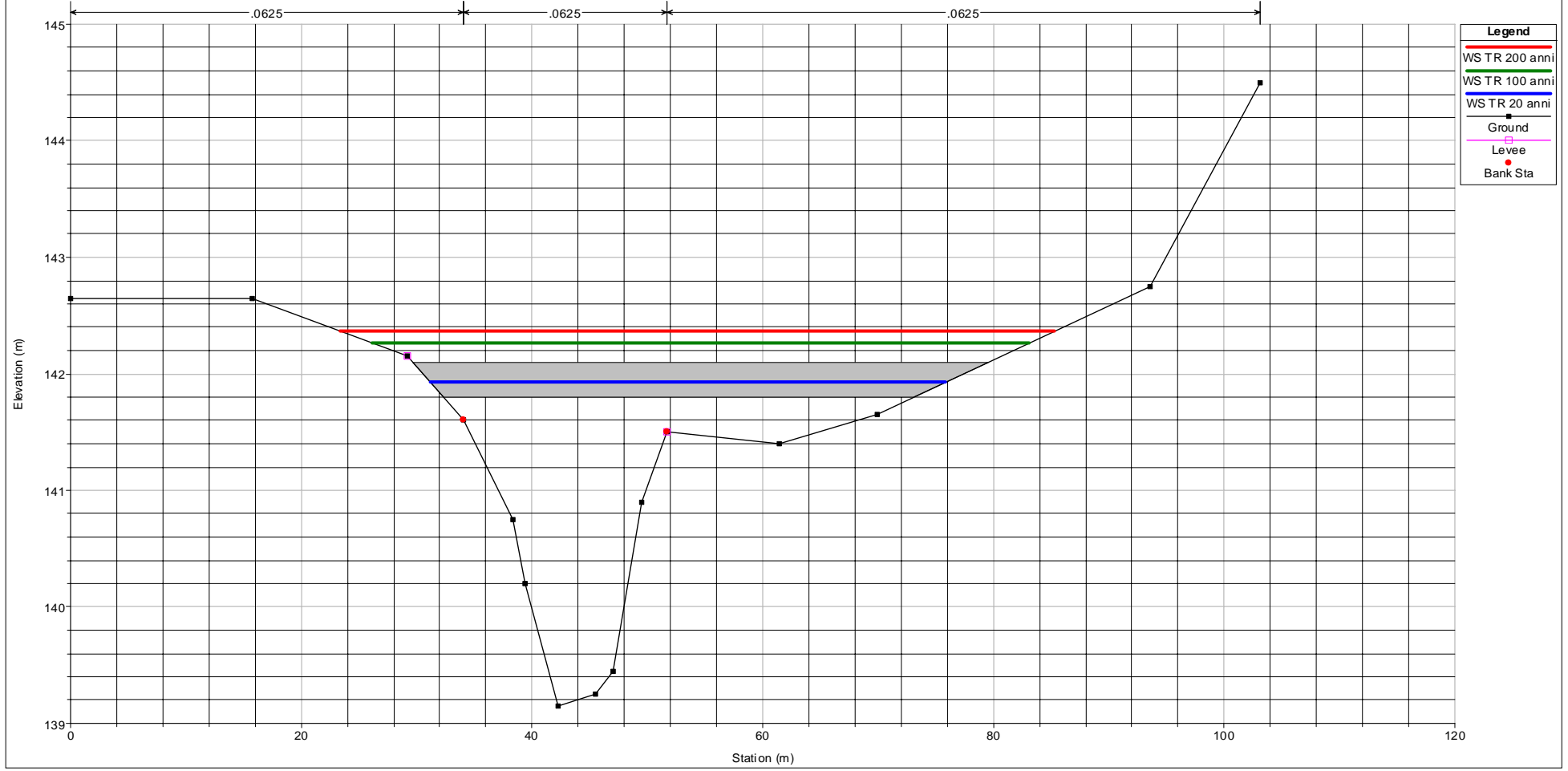
Legend

- WS TR 200 anni
- WS TR 100 anni
- WS TR 20 anni
- Ground
- Levee
- Bank Sta

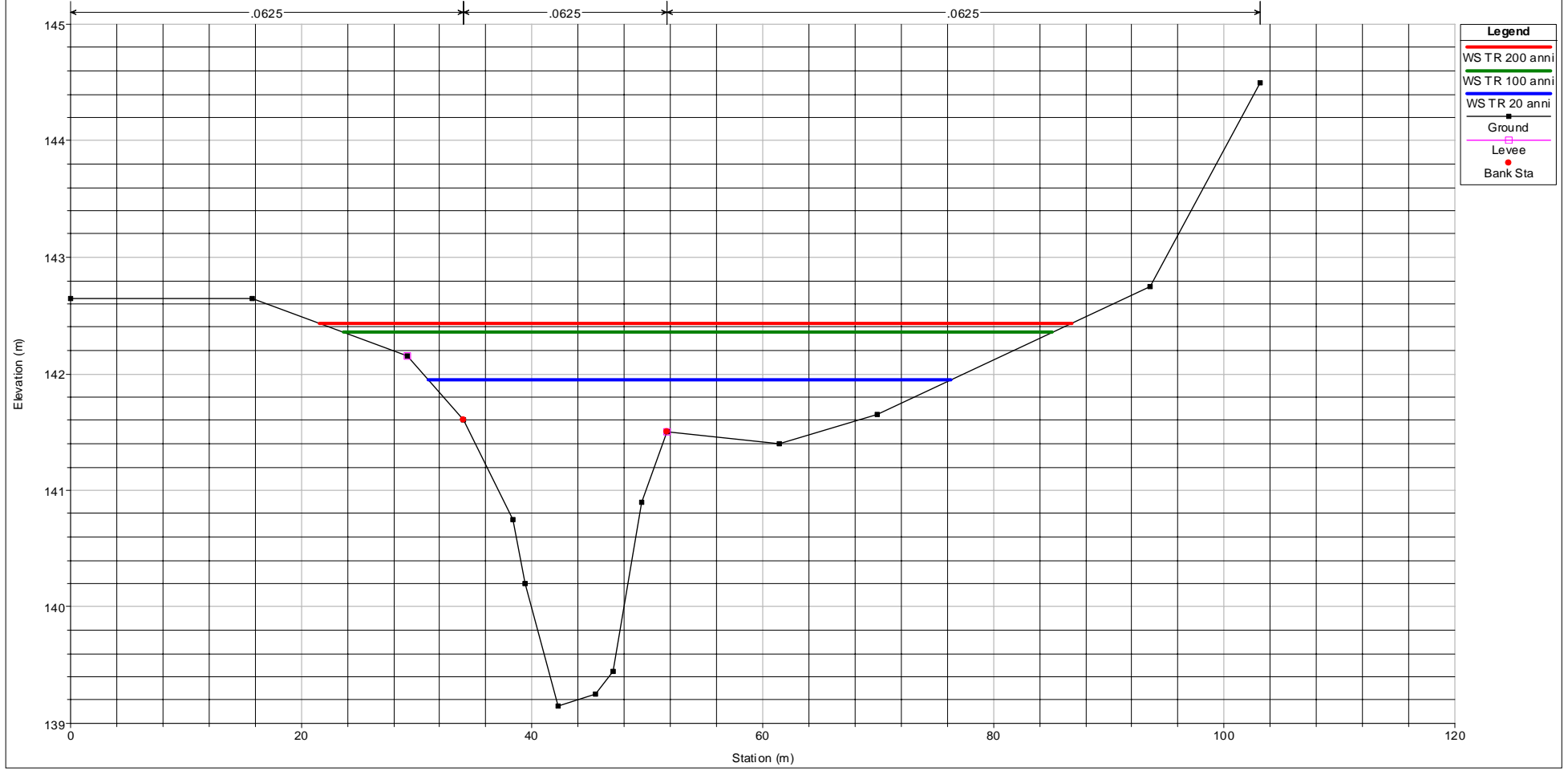
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RS = 47 BR passerella



Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 47 BR passerella



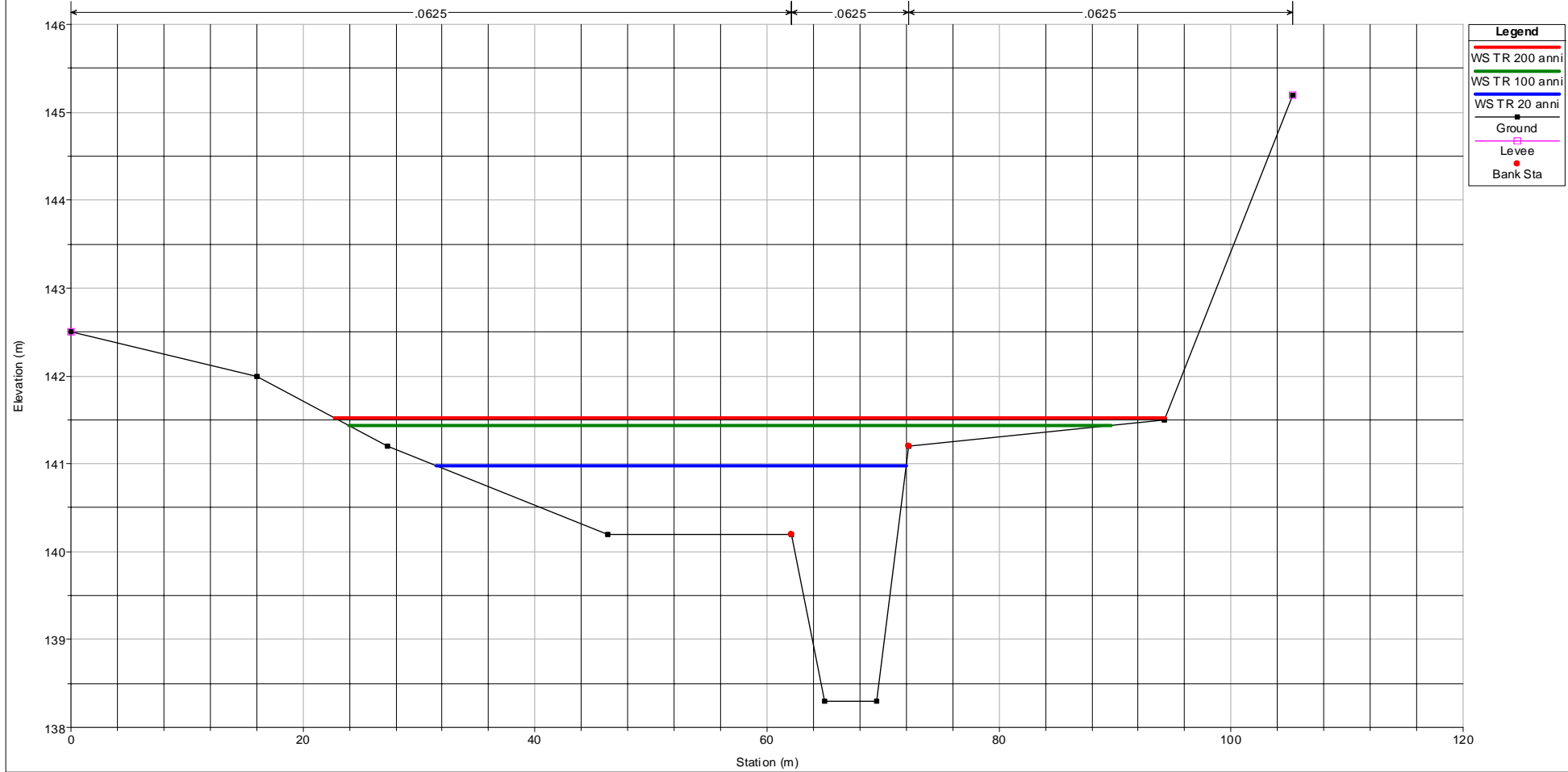
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RS = 45 SEZ 16v



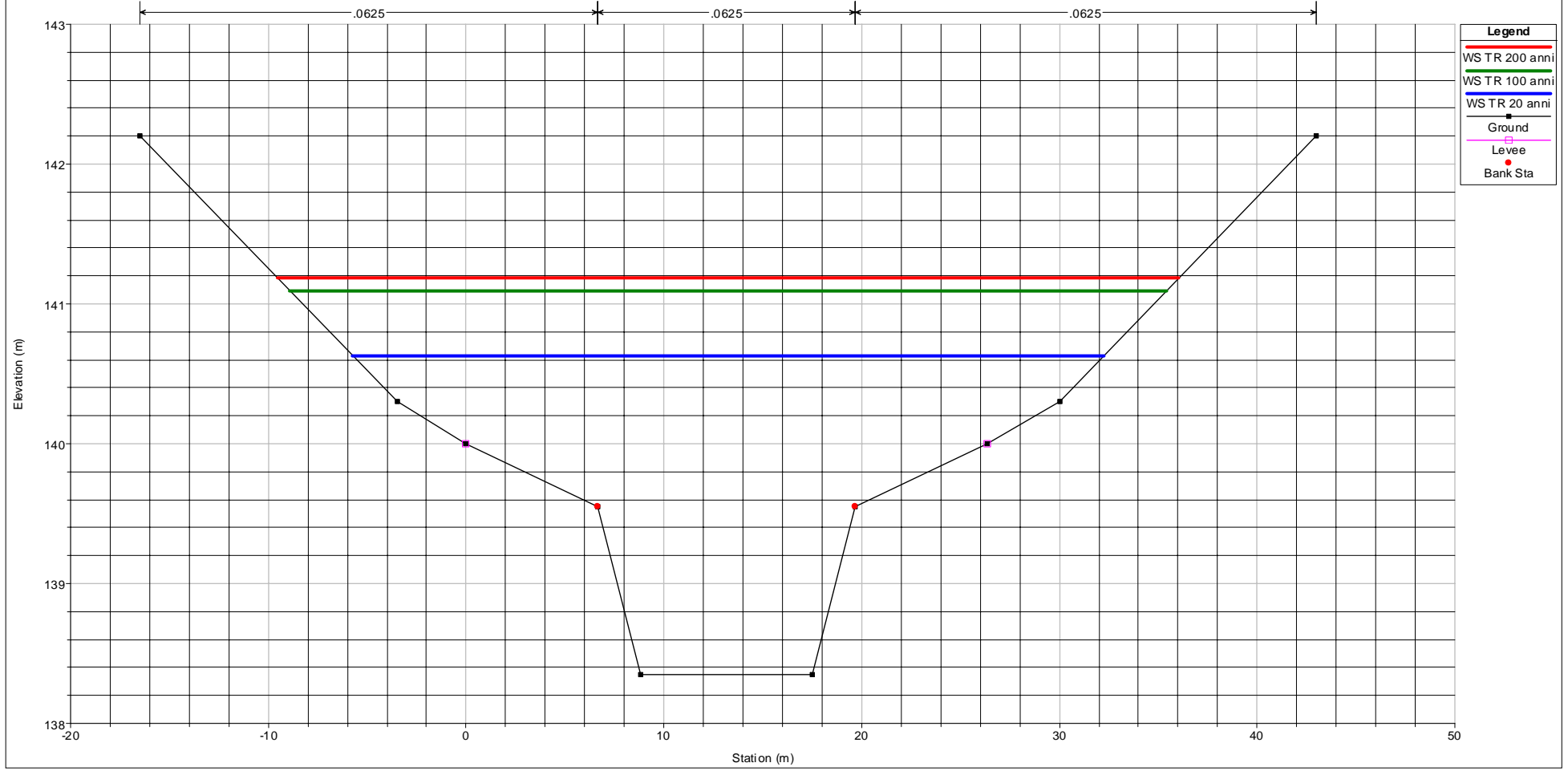
Legend

- WS TR 200 anni
- WS TR 100 anni
- WS TR 20 anni
- Ground
- Levee
- Bank Sta

Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 44.5 SEZ. 16bis

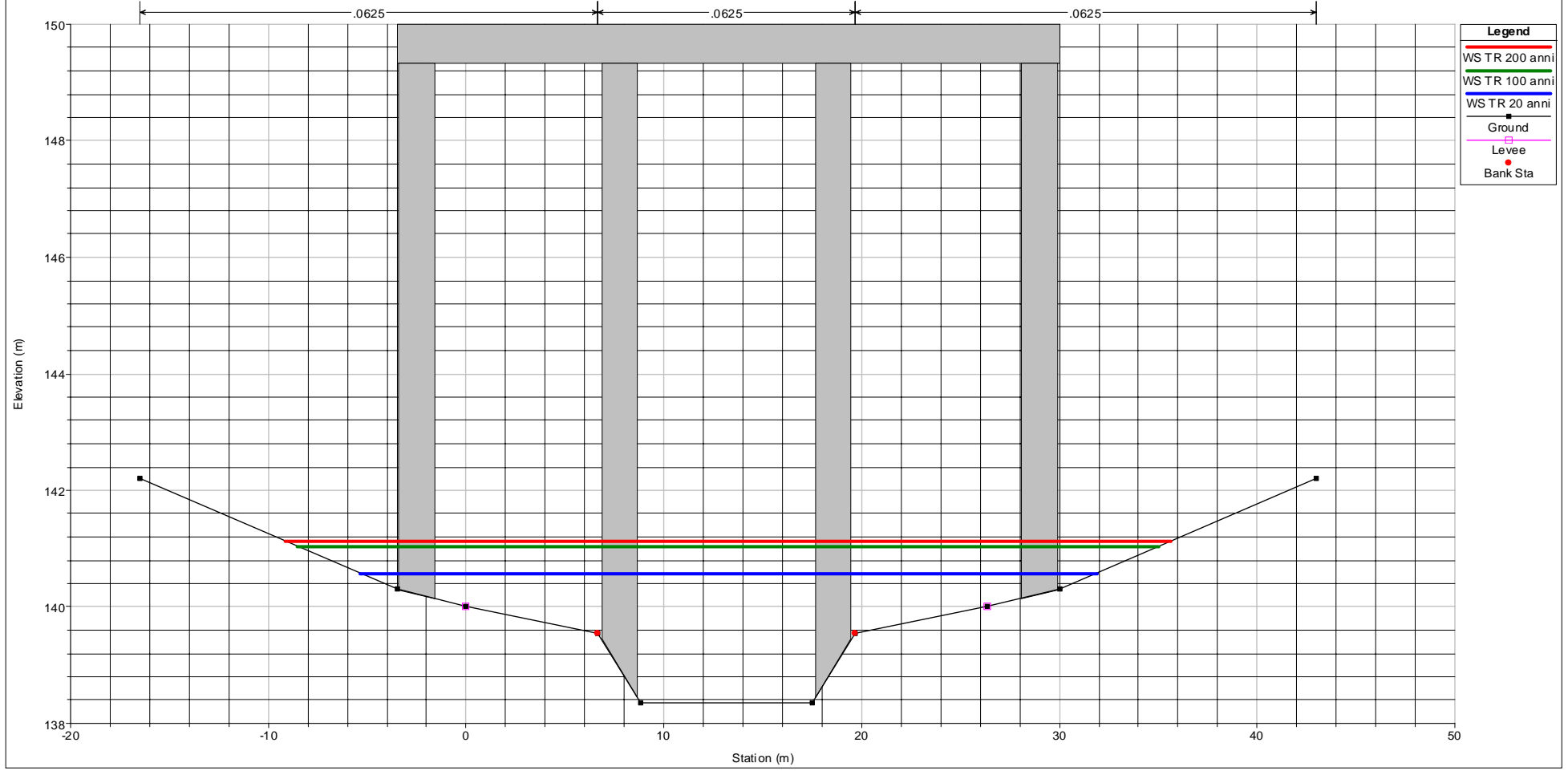


Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 43 SEZ 17m

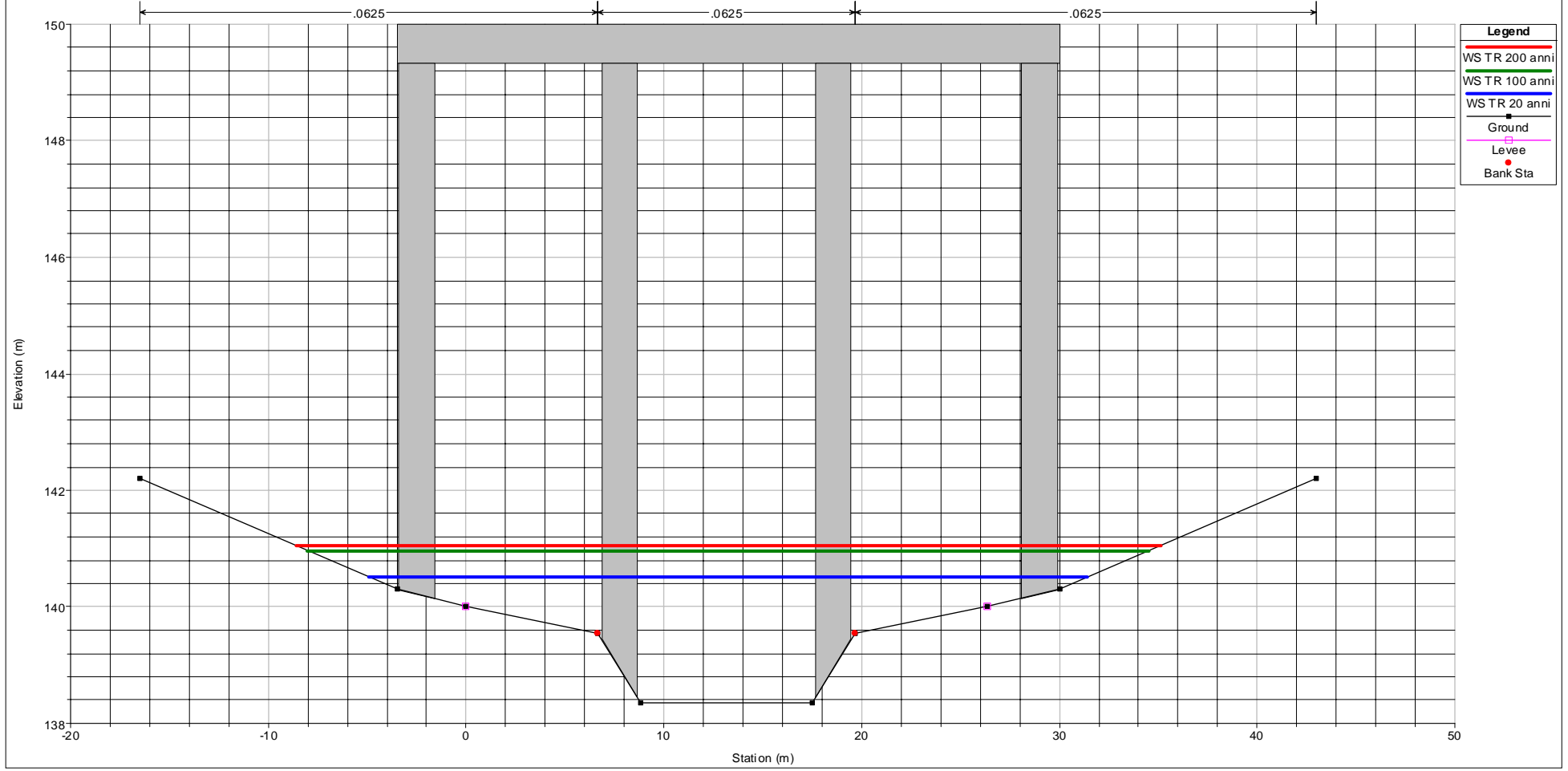


- Legend**
- WS TR 200 anni
 - WS TR 100 anni
 - WS TR 20 anni
 - Ground
 - Levee
 - Bank Sta

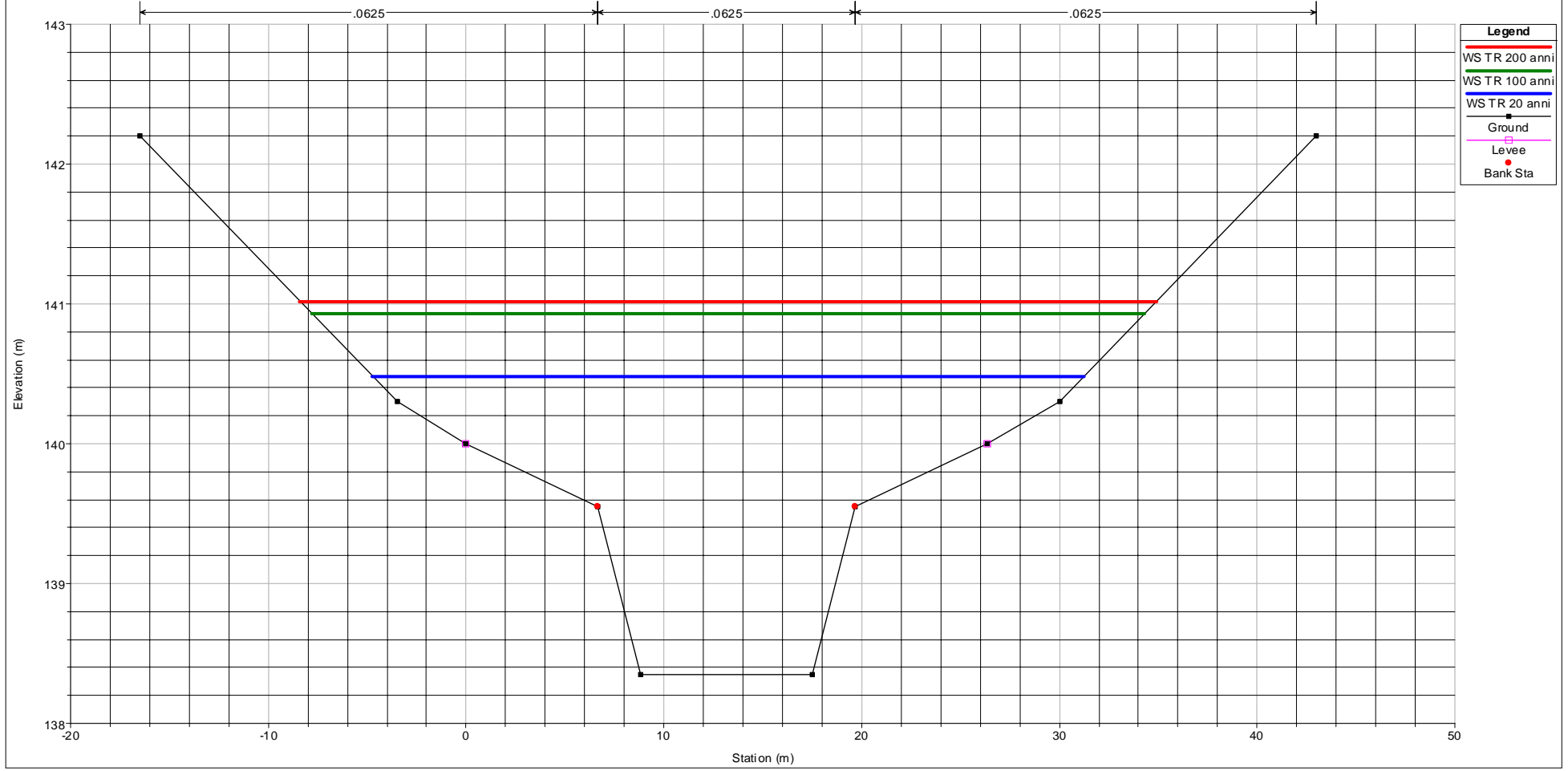
Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 41 BR ponte



Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 41 BR ponte

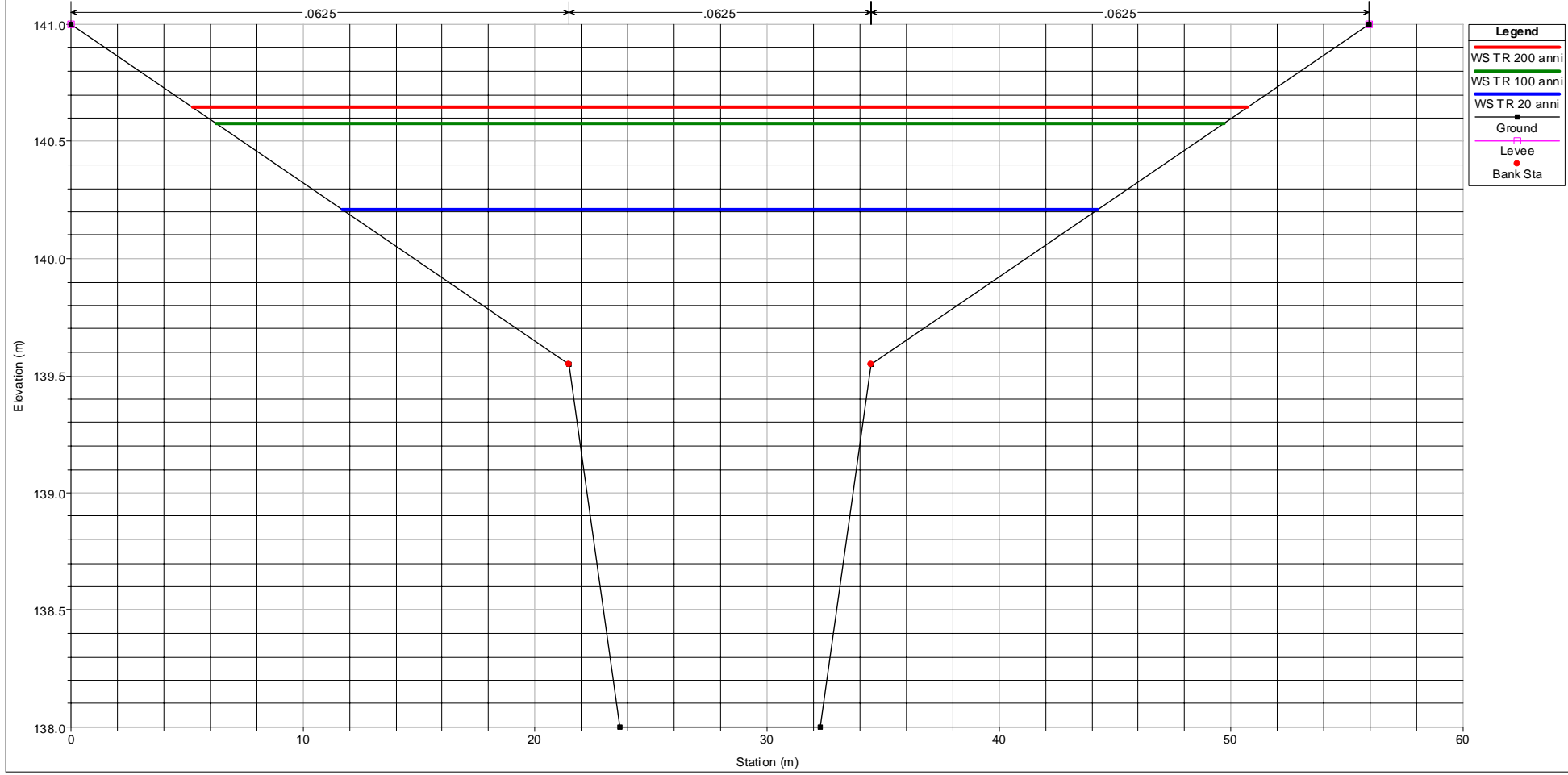


Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 40 SEZ 17v

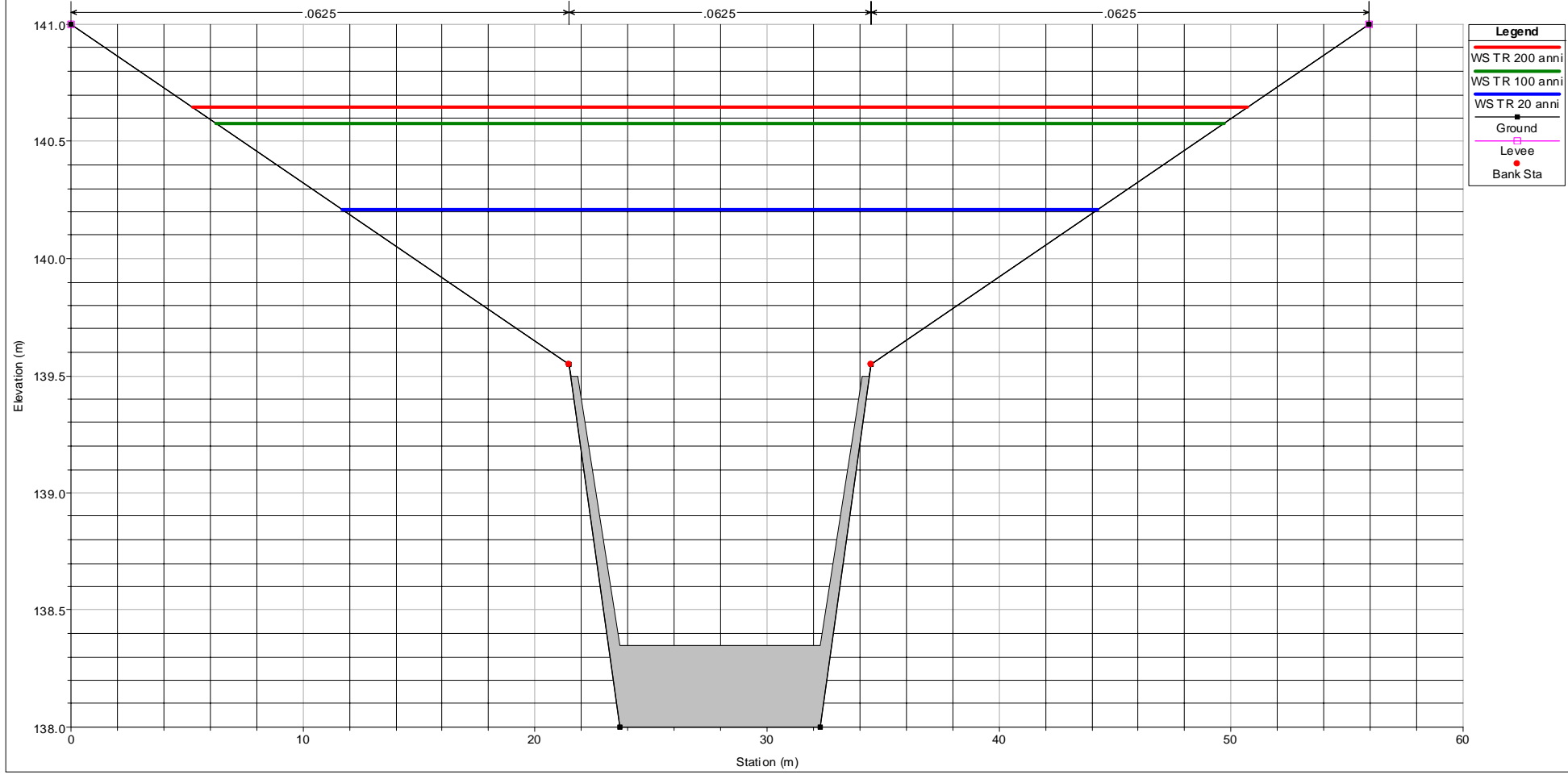


- Legend**
- WS TR 200 anni
 - WS TR 100 anni
 - WS TR 20 anni
 - Ground
 - Levee
 - Bank Sta

Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 39.8 SEZ 17-briglia

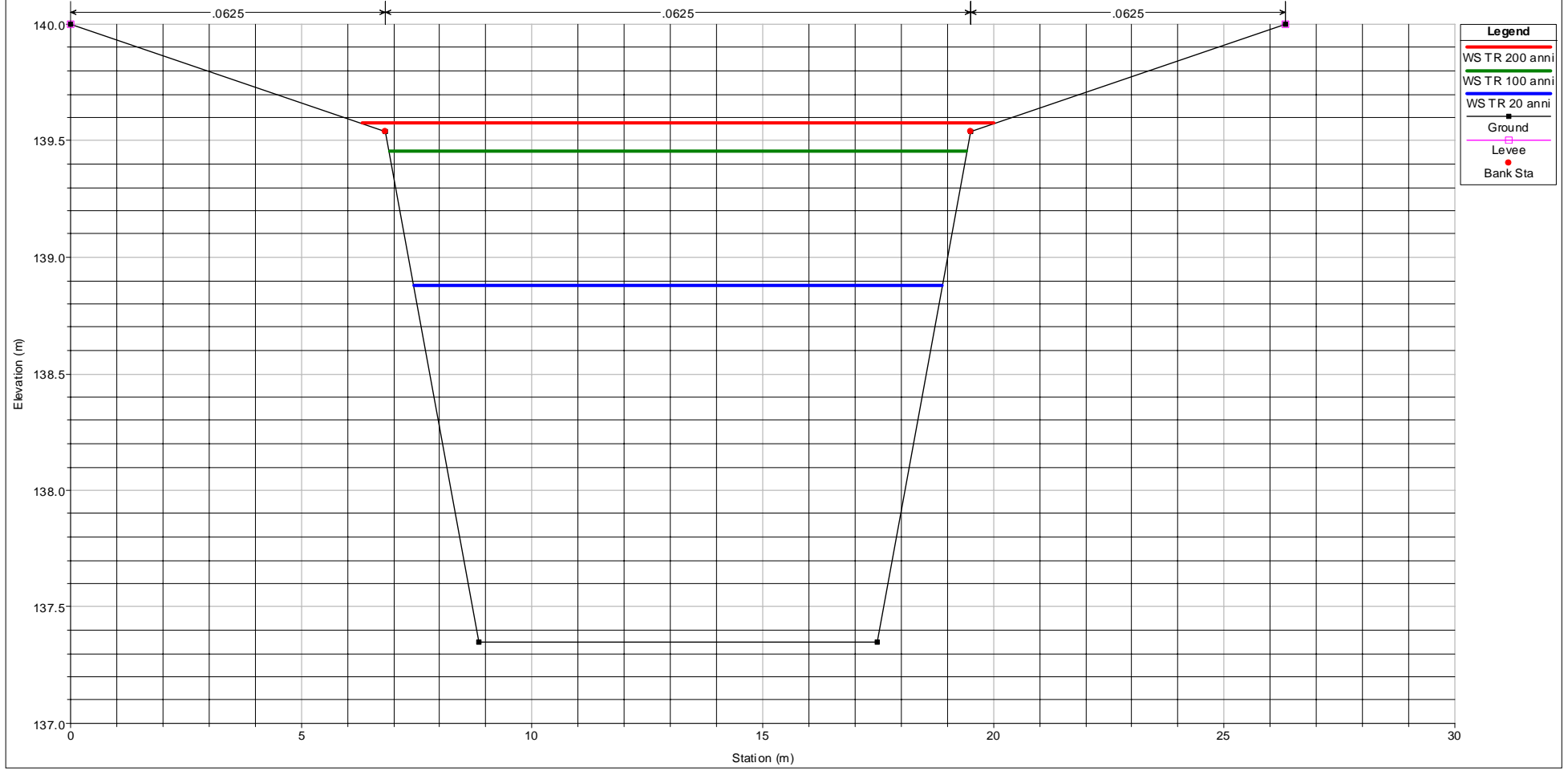


Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 39.5 IS Briglia



- Legend**
- WS TR 200 anni
 - WS TR 100 anni
 - WS TR 20 anni
 - Ground
 - Levee
 - Bank Sta

Arbiola-Faggiano-Tresinaro Plan: 1) scab-13 21/02/2017
RS = 39 SEZ 18



- Legend**
- WS TR 200 anni
 - WS TR 100 anni
 - WS TR 20 anni
 - Ground
 - Levee
 - Bank Sta

TABULATO DI CALCOLO – ARBIOLA

River Station	Sezioni	Profile	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
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
300	SEZ A1	TR 20	19.4	163.01	164.49	163.64	164.54	0.003143	1.01	20.34	15.35	0.27
300	SEZ A1	TR 100	32.5	163.01	165.36	163.89	165.41	0.00174	1.03	34.61	17.24	0.21
300	SEZ A1	TR 200	35.6	163.01	165.56	163.95	165.61	0.001578	1.03	38	17.66	0.21
299	SEZ A1m	TR 20	19.4	163.01	164.48	163.64	164.53	0.003195	1.02	20.24	15.34	0.27
299	SEZ A1m	TR 100	32.5	163.01	165.36	163.89	165.41	0.00175	1.03	34.55	17.23	0.21
299	SEZ A1m	TR 200	35.6	163.01	165.56	163.95	165.61	0.001585	1.03	37.94	17.65	0.21
297	ponte		Bridge									
295	SEZ A1v	TR 20	19.4	163.01	164.26	163.64	164.33	0.005602	1.21	16.9	14.86	0.34
295	SEZ A1v	TR 100	32.5	163.01	165.23	163.89	165.29	0.002144	1.09	32.3	16.95	0.23
295	SEZ A1v	TR 200	35.6	163.01	165.43	163.95	165.48	0.001899	1.09	35.72	17.38	0.22
290	SEZ A2	TR 20	19.4	162.9	164.25	163.53	164.31	0.00436	1.12	18.29	15.01	0.31
290	SEZ A2	TR 100	32.5	162.9	165.22	163.78	165.28	0.001831	1.04	33.97	17.07	0.22
290	SEZ A2	TR 200	35.6	162.9	165.42	163.84	165.48	0.001642	1.04	37.43	17.5	0.21
285	soglia		Inl Struct									
280	SEZ A3	TR 20	19.4	162	164.24	162.71	164.27	0.001042	0.77	27.89	14.85	0.16
280	SEZ A3	TR 100	32.5	162	165.22	163	165.25	0.000803	0.86	43.33	16.94	0.15
280	SEZ A3	TR 200	35.6	162	165.42	163.06	165.45	0.000773	0.88	46.78	17.38	0.15

TABULATO DI CALCOLO – FAGGIANO ALTO

River Station	Sezioni	Profile	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
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
200	SEZ 1	TR 20	42.3	173.31	175.35	174.78	175.51	0.012501	1.73	24.45	20.01	0.5
200	SEZ 1	TR 100	70.7	173.31	175.9	175.19	176.09	0.011479	1.93	36.66	24.98	0.5
200	SEZ 1	TR 200	77.4	173.31	176.02	175.27	176.21	0.011059	1.97	39.5	26.43	0.49
190	SEZ 2	TR 20	42.3	171.05	173.67	172.86	173.96	0.014684	2.43	18.46	10.71	0.51
190	SEZ 2	TR 100	70.7	171.05	174.39	173.59	174.78	0.014663	2.9	26.8	12.63	0.53
190	SEZ 2	TR 200	77.4	171.05	174.53	173.72	174.95	0.014668	3	28.64	13.01	0.54
180	SEZ 3	TR 20	42.3	166.3	168.87	168.52	169.25	0.021735	2.8	16.26	11.46	0.64
180	SEZ 3	TR 100	70.7	166.3	169.47	169.08	169.98	0.021403	3.32	23.61	12.9	0.66
180	SEZ 3	TR 200	77.4	166.3	169.59	169.19	170.13	0.021451	3.42	25.17	13.18	0.67
175	SEZ 4m	TR 20	42.3	164.1	165.95	165.3	166.18	0.010582	2.15	21.03	12.72	0.51
175	SEZ 4m	TR 100	70.7	164.1	166.6	165.78	166.92	0.010503	2.62	29.53	13.67	0.53
175	SEZ 4m	TR 200	77.4	164.1	166.74	165.88	167.08	0.010404	2.7	31.46	13.87	0.53
170	SEZ 4	TR 20	42.3	164.1	165.7	165.29	165.98	0.021124	2.37	17.82	12.34	0.63
170	SEZ 4	TR 100	70.7	164.1	166.39	165.75	166.75	0.01777	2.64	26.76	13.36	0.6
170	SEZ 4	TR 200	77.4	164.1	166.54	165.85	166.91	0.017172	2.69	28.82	13.59	0.59
169	ponte		Bridge									
168	SEZ 4v	TR 20	42.3	163.1	164.87	164.31	165.13	0.012856	2.3	19.49	12.08	0.55
168	SEZ 4v	TR 100	70.7	163.1	165.56	164.78	165.92	0.011493	2.71	28.18	12.9	0.55
168	SEZ 4v	TR 200	77.4	163.1	165.72	164.89	166.09	0.011145	2.78	30.2	13.08	0.55
167	SEZ 4bis	TR 20	42.3	162	164.23	163.1	164.3	0.002985	1.3	39.31	25.2	0.28
167	SEZ 4bis	TR 100	70.7	162	165.19	163.49	165.25	0.001983	1.34	66.4	31.69	0.24
167	SEZ 4bis	TR 200	77.4	162	165.38	163.57	165.45	0.00185	1.35	72.83	33.04	0.23

River Station	Sezioni	Profile	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
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
95	SEZ 11v	TR 20	55.8	148.6	150.96	150.23	151.3	0.016971	2.59	21.68	10.41	0.55
95	SEZ 11v	TR 100	92.9	148.6	151.55	150.85	151.98	0.017458	3.06	36.7	33.14	0.58
95	SEZ 11v	TR 200	101.7	148.6	151.66	150.95	152.1	0.017053	3.1	40.56	35.08	0.58
90	SEZ 12m	TR 20	55.8	147.2	149.45	148.5	149.55	0.004963	1.41	42.4	30.6	0.34
90	SEZ 12m	TR 100	92.9	147.2	149.95	148.98	150.09	0.00528	1.72	60.99	47.54	0.37
90	SEZ 12m	TR 200	101.7	147.2	150.03	149.07	150.18	0.005495	1.79	64.94	51.66	0.38
87	briglia		Inl Struct									
85	SEZ 12v	TR 20	55.8	146.3	148.52	147.66	148.68	0.008461	1.76	31.79	19.13	0.43
85	SEZ 12v	TR 100	92.9	146.3	149.09	148.14	149.31	0.009102	2.12	45.52	28.37	0.47
85	SEZ 12v	TR 200	101.7	146.3	149.2	148.25	149.44	0.009167	2.19	48.69	29.06	0.47
81	SEZ 13bis	TR 20	55.8	143.5	145.41		145.62	0.010481	2.11	29.38	21.87	0.5
81	SEZ 13bis	TR 100	92.9	143.5	145.68	145.3	146.08	0.017257	2.97	35.42	23.85	0.66
81	SEZ 13bis	TR 200	101.7	143.5	145.87	145.4	146.25	0.014598	2.9	40.2	25.3	0.62
80	SEZ 13	TR 20	55.8	143.5	145.35	144.85	145.59	0.012645	2.26	30.05	49.94	0.55
80	SEZ 13	TR 100	92.9	143.5	145.2	145.2	145.99	0.046588	4.08	24.86	20.27	1.04
80	SEZ 13	TR 200	101.7	143.5	145.2	145.2	146.14	0.055724	4.46	24.87	20.27	1.14
77	briglia		Inl Struct									
75	SEZ 13v	TR 20	55.8	142.5	144.22	143.84	144.62	0.019033	2.79	20.52	12.33	0.68
75	SEZ 13v	TR 100	92.9	142.5	144.77	144.37	145.39	0.021055	3.53	27.28	12.59	0.75
75	SEZ 13v	TR 200	101.7	142.5	144.88	144.49	145.56	0.021473	3.68	28.69	12.65	0.76

River Station	Sezioni	Profile	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
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
70	SEZ 14m	TR 20	55.8	141.54	143.41	142.66	143.6	0.008332	1.95	29.72	16.85	0.46
70	SEZ 14m	TR 100	92.9	141.54	143.99	143.1	144.29	0.009176	2.45	39.75	17.43	0.5
70	SEZ 14m	TR 200	101.7	141.54	144.16	143.2	144.47	0.008763	2.51	42.72	17.6	0.49
67	ponte		Bridge									
65	SEZ 14v	TR 20	55.8	141.54	143.31	142.66	143.52	0.010017	2.06	28.06	16.75	0.49
65	SEZ 14v	TR 100	92.9	141.54	143.86	143.1	144.2	0.011052	2.6	37.47	17.3	0.54
65	SEZ 14v	TR 200	101.7	141.54	143.97	143.2	144.33	0.011394	2.71	39.3	17.41	0.56
60	SEZ 15	TR 20	55.8	139.3	142.22	141.19	142.34	0.00494	1.56	44.68	59.7	0.35
60	SEZ 15	TR 100	92.9	139.3	142.75	141.73	142.85	0.003985	1.62	79.86	74.51	0.32
60	SEZ 15	TR 200	101.7	139.3	142.82	141.91	142.93	0.004106	1.68	85.17	76.49	0.33
50	SEZ 16m	TR 20	55.8	139.15	142.1	141.1	142.19	0.004831	1.44	47.42	49.94	0.34
50	SEZ 16m	TR 100	92.9	139.15	142.64	141.79	142.74	0.00395	1.54	81.18	75.34	0.32
50	SEZ 16m	TR 200	101.7	139.15	142.71	141.87	142.81	0.004212	1.62	86.88	93.09	0.33
47	passerella		Bridge									
45	SEZ 16v	TR 20	55.8	139.15	141.95	141.1	142.07	0.007085	1.64	40.16	45.29	0.4
45	SEZ 16v	TR 100	92.9	139.15	142.36	141.79	142.51	0.007366	1.93	61.61	61.46	0.42
45	SEZ 16v	TR 200	101.7	139.15	142.43	141.87	142.6	0.007414	1.99	66.56	65.25	0.43
44.5	SEZ. 16bis	TR 20	55.8	138.3	140.98	140.57	141.12	0.008664	1.91	38.58	40.53	0.42
44.5	SEZ. 16bis	TR 100	92.9	138.3	141.44	140.93	141.59	0.008146	2.08	61.14	65.68	0.42
44.5	SEZ. 16bis	TR 200	101.7	138.3	141.53	141	141.68	0.007945	2.11	67.31	71.63	0.42

River Station	Sezioni	Profile	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
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
43	SEZ 17m	TR 20	55.8	138.35	140.63	139.87	140.74	0.005384	1.63	42.6	38.01	0.36
43	SEZ 17m	TR 100	92.9	138.35	141.09	140.39	141.24	0.005806	1.94	61.7	44.36	0.39
43	SEZ 17m	TR 200	101.7	138.35	141.18	140.46	141.34	0.005916	2	65.7	45.58	0.39
41	ponte		Bridge									
40	SEZ 17v	TR 20	55.8	138.35	140.48	139.87	140.63	0.007579	1.84	37.12	35.99	0.42
40	SEZ 17v	TR 100	92.9	138.35	140.93	140.39	141.12	0.007887	2.16	54.77	42.17	0.45
40	SEZ 17v	TR 200	101.7	138.35	141.02	140.46	141.22	0.00802	2.23	58.39	43.33	0.45
39.8	SEZ 17-briglia	TR 20	55.8	138	140.21	139.49	140.41	0.009418	2.03	31.84	32.58	0.46
39.8	SEZ 17-briglia	TR 100	92.9	138	140.58	140.17	140.87	0.011958	2.57	45.8	43.46	0.54
39.8	SEZ 17-briglia	TR 200	101.7	138	140.65	140.28	140.95	0.012473	2.67	48.81	45.46	0.55
39.5	briglia		Inl Struct									
39	SEZ 17bis	TR 20	55.8	137.35	138.88	138.88	139.55	0.051992	3.63	15.38	11.46	1
39	SEZ 17bis	TR 100	92.9	137.35	139.45	139.45	140.34	0.048878	4.17	22.27	12.51	1
39	SEZ 17bis	TR 200	101.7	137.35	139.57	139.57	140.51	0.048046	4.28	23.8	13.7	1

TABULATO DI CALCOLO – ARBIOLA – scabrezza secondo Strickler $16 \text{ m}^{1/3} \text{ s}^{-1}$

River Station	Sezioni	Profile	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
			(m ³ /s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m ²)	(m)	
300	SEZ A1	TR 20	19.4	163.01	164.42	163.64	164.47	0.002808	1.07	19.26	15.2	0.29
300	SEZ A1	TR 100	32.5	163.01	165.28	163.89	165.33	0.00149	1.07	33.18	17.06	0.23
300	SEZ A1	TR 200	35.6	163.01	165.47	163.95	165.53	0.001342	1.07	36.5	17.48	0.22
299	SEZ A1m	TR 20	19.4	163.01	164.41	163.64	164.47	0.002853	1.07	19.16	15.18	0.29
299	SEZ A1m	TR 100	32.5	163.01	165.28	163.89	165.33	0.001497	1.07	33.12	17.05	0.23
299	SEZ A1m	TR 200	35.6	163.01	165.47	163.95	165.52	0.001347	1.07	36.45	17.47	0.22
297	ponte		Bridge									
295	SEZ A1v	TR 20	19.4	163.01	164.16	163.64	164.25	0.005625	1.32	15.42	14.64	0.39
295	SEZ A1v	TR 100	32.5	163.01	165.15	163.89	165.21	0.00183	1.14	30.99	16.78	0.25
295	SEZ A1v	TR 200	35.6	163.01	165.35	163.95	165.41	0.001609	1.13	34.35	17.21	0.24
290	SEZ A2	TR 20	19.4	162.9	164.15	163.53	164.22	0.00426	1.21	16.83	14.8	0.35
290	SEZ A2	TR 100	32.5	162.9	165.15	163.78	165.2	0.00155	1.08	32.69	16.91	0.23
290	SEZ A2	TR 200	35.6	162.9	165.35	163.84	165.4	0.001381	1.08	36.08	17.33	0.22
285	soglia		Inl Struct									
280	SEZ A3	TR 20	19.4	162	164.15	162.71	164.18	0.00092	0.81	26.44	14.63	0.18
280	SEZ A3	TR 100	32.5	162	165.14	163	165.18	0.00066	0.88	42.05	16.78	0.16
280	SEZ A3	TR 200	35.6	162	165.34	163.06	165.38	0.000634	0.9	45.43	17.21	0.16

TABULATO DI CALCOLO – FAGGIANO ALTO - scabrezza secondo Strickler 16 m^{1/3}s

River Station	Sezioni	Profile	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
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
200	SEZ 1	TR 20	42.3	173.31	175.22	174.78	175.41	0.012753	1.93	21.89	19.06	0.58
200	SEZ 1	TR 100	70.7	173.31	175.75	175.19	175.98	0.011622	2.15	32.96	23.09	0.57
200	SEZ 1	TR 200	77.4	173.31	175.85	175.27	176.1	0.011384	2.19	35.43	24.37	0.57
190	SEZ 2	TR 20	42.3	171.05	173.5	172.86	173.85	0.014666	2.66	16.69	10.26	0.58
190	SEZ 2	TR 100	70.7	171.05	174.18	173.59	174.66	0.014561	3.18	24.23	12.07	0.6
190	SEZ 2	TR 200	77.4	171.05	174.32	173.72	174.82	0.014531	3.28	25.91	12.44	0.61
180	SEZ 3	TR 20	42.3	166.3	168.74	168.52	169.19	0.021422	3.05	14.76	11.15	0.72
180	SEZ 3	TR 100	70.7	166.3	169.3	169.08	169.92	0.021206	3.63	21.42	12.48	0.75
180	SEZ 3	TR 200	77.4	166.3	169.41	169.19	170.07	0.021254	3.75	22.83	12.75	0.76
175	SEZ 4m	TR 20	42.3	164.1	165.89	165.3	166.14	0.008895	2.23	20.3	12.63	0.53
175	SEZ 4m	TR 100	70.7	164.1	166.54	165.78	166.88	0.008609	2.69	28.72	13.58	0.55
175	SEZ 4m	TR 200	77.4	164.1	166.68	165.88	167.04	0.008488	2.77	30.64	13.78	0.55
170	SEZ 4	TR 20	42.3	164.1	165.69	165.29	165.98	0.016158	2.39	17.73	12.33	0.64
170	SEZ 4	TR 100	70.7	164.1	166.38	165.75	166.74	0.013508	2.65	26.68	13.36	0.6
170	SEZ 4	TR 200	77.4	164.1	166.54	165.85	166.91	0.013043	2.69	28.74	13.58	0.59
169	ponte		Bridge									
168	SEZ 4v	TR 20	42.3	163.1	164.72	164.31	165.03	0.012943	2.51	17.76	11.91	0.63
168	SEZ 4v	TR 100	70.7	163.1	165.39	164.78	165.81	0.011085	2.93	26	12.7	0.62
168	SEZ 4v	TR 200	77.4	163.1	165.54	164.89	165.98	0.010643	2.99	27.95	12.88	0.61
167	SEZ 4bis	TR 20	42.3	162	164.13	163.1	164.21	0.002719	1.38	36.71	24.49	0.3
167	SEZ 4bis	TR 100	70.7	162	165.11	163.49	165.18	0.001659	1.39	63.89	31.14	0.25
167	SEZ 4bis	TR 200	77.4	162	165.3	163.57	165.38	0.001541	1.39	70.18	32.49	0.24

River Station	Sezioni	Profile	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
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
95	SEZ 11v	TR 20	55.8	148.6	150.8	150.23	151.2	0.016434	2.78	20.13	10.06	0.62
95	SEZ 11v	TR 100	92.9	148.6	151.39	150.85	151.95	0.017972	3.39	31.71	30.39	0.66
95	SEZ 11v	TR 200	101.7	148.6	151.5	150.95	152.06	0.017716	3.46	35.1	32.29	0.66
90	SEZ 12m	TR 20	55.8	147.2	149.45	148.5	149.55	0.003825	1.41	42.48	30.62	0.34
90	SEZ 12m	TR 100	92.9	147.2	149.95	148.98	150.09	0.004092	1.72	60.99	47.54	0.37
90	SEZ 12m	TR 200	101.7	147.2	150.03	149.07	150.18	0.004268	1.79	64.87	51.59	0.38
87	briglia		Inl Struct									
85	SEZ 12v	TR 20	55.8	146.3	148.39	147.66	148.57	0.008274	1.91	29.26	18.55	0.48
85	SEZ 12v	TR 100	92.9	146.3	148.94	148.14	149.21	0.008963	2.3	41.44	27.47	0.52
85	SEZ 12v	TR 200	101.7	146.3	149.05	148.25	149.33	0.009023	2.37	44.38	28.12	0.53
81	SEZ 13bis	TR 20	55.8	143.5	145.41	144.85	145.62	0.008249	2.12	29.21	21.81	0.51
81	SEZ 13bis	TR 100	92.9	143.5	145.65	145.3	146.07	0.014072	3.02	34.77	23.64	0.68
81	SEZ 13bis	TR 200	101.7	143.5	145.85	145.4	146.24	0.011729	2.93	39.67	25.15	0.63
80	SEZ 13	TR 20	55.8	143.5	145.35	144.85	145.59	0.009799	2.26	30.05	49.94	0.55
80	SEZ 13	TR 100	92.9	143.5	145.2	145.2	145.99	0.036101	4.08	24.86	20.27	1.04
80	SEZ 13	TR 200	101.7	143.5	145.2	145.2	146.14	0.04318	4.46	24.87	20.27	1.14
77	briglia		Inl Struct									
75	SEZ 13v	TR 20	55.8	142.5	144.09	143.84	144.55	0.019227	3.02	18.91	12.26	0.77
75	SEZ 13v	TR 100	92.9	142.5	144.59	144.37	145.33	0.021236	3.82	25.14	12.51	0.84
75	SEZ 13v	TR 200	101.7	142.5	144.69	144.49	145.5	0.021814	3.99	26.37	12.56	0.86

River Station	Sezioni	Profile	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
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
70	SEZ 14m	TR 20	55.8	141.54	143.28	142.66	143.5	0.008144	2.09	27.64	16.73	0.51
70	SEZ 14m	TR 100	92.9	141.54	143.84	143.1	144.18	0.008774	2.61	37.19	17.29	0.55
70	SEZ 14m	TR 200	101.7	141.54	143.96	143.2	144.32	0.008959	2.73	39.12	17.4	0.56
67	ponte		Bridge									
65	SEZ 14v	TR 20	55.8	141.54	143.17	142.66	143.42	0.010127	2.23	25.82	16.62	0.56
65	SEZ 14v	TR 100	92.9	141.54	143.7	143.1	144.09	0.01096	2.8	34.67	17.14	0.61
65	SEZ 14v	TR 200	101.7	141.54	143.8	143.2	144.22	0.011283	2.92	36.37	17.24	0.62
60	SEZ 15	TR 20	55.8	139.3	142.11	141.19	142.25	0.004989	1.71	38.13	46.02	0.39
60	SEZ 15	TR 100	92.9	139.3	142.7	141.73	142.81	0.003441	1.69	76.21	73.11	0.34
60	SEZ 15	TR 200	101.7	139.3	142.77	141.91	142.89	0.003533	1.75	81.45	75.11	0.35
50	SEZ 16m	TR 20	55.8	139.15	141.98	141.1	142.1	0.005012	1.59	41.79	46.38	0.38
50	SEZ 16m	TR 100	92.9	139.15	142.61	141.79	142.71	0.003247	1.57	79.09	73.98	0.33
50	SEZ 16m	TR 200	101.7	139.15	142.68	141.87	142.79	0.00347	1.66	84.36	92.28	0.34
47	passerella		Bridge									
45	SEZ 16v	TR 20	55.8	139.15	141.86	141.1	142.01	0.006928	1.78	36.25	42.59	0.45
45	SEZ 16v	TR 100	92.9	139.15	142.35	141.79	142.51	0.005757	1.94	61.38	61.28	0.42
45	SEZ 16v	TR 200	101.7	139.15	142.36	141.87	142.54	0.006821	2.11	61.68	61.52	0.46
44.5	SEZ. 16bis	TR 20	55.8	138.3	140.88	140.57	141.06	0.008524	2.1	34.8	38.64	0.48
44.5	SEZ. 16bis	TR 100	92.9	138.3	141.34	140.93	141.53	0.007926	2.27	55.12	57.1	0.47
44.5	SEZ. 16bis	TR 200	101.7	138.3	141.42	141	141.61	0.007792	2.31	60.31	64.56	0.47

River Station	Sezioni	Profile	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
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
43	SEZ 17m	TR 20	55.8	138.35	140.58	139.87	140.7	0.004722	1.71	40.54	37.26	0.38
43	SEZ 17m	TR 100	92.9	138.35	141.03	140.39	141.19	0.005083	2.03	58.85	43.47	0.41
43	SEZ 17m	TR 200	101.7	138.35	141.12	140.46	141.29	0.005178	2.09	62.67	44.66	0.42
41	ponte		Bridge									
40	SEZ 17v	TR 20	55.8	138.35	140.43	139.87	140.59	0.006699	1.93	35.18	35.24	0.45
40	SEZ 17v	TR 100	92.9	138.35	140.87	140.39	141.08	0.00692	2.26	52.18	41.32	0.47
40	SEZ 17v	TR 200	101.7	138.35	140.95	140.46	141.17	0.007037	2.33	55.63	42.45	0.48
39.8	SEZ 17-briglia	TR 20	55.8	138	140.21	139.49	140.41	0.007298	2.03	31.84	32.58	0.46
39.8	SEZ 17-briglia	TR 100	92.9	138	140.58	140.17	140.87	0.009266	2.57	45.8	43.46	0.54
39.8	SEZ 17-briglia	TR 200	101.7	138	140.65	140.28	140.95	0.009665	2.67	48.81	45.46	0.55
39.5	briglia		Inl Struct									
39	SEZ 17bis	TR 20	55.8	137.35	138.88	138.88	139.55	0.040288	3.63	15.38	11.46	1
39	SEZ 17bis	TR 100	92.9	137.35	139.45	139.45	140.34	0.037875	4.17	22.27	12.51	1
39	SEZ 17bis	TR 200	101.7	137.35	139.57	139.57	140.51	0.037231	4.28	23.8	13.7	1