

COMUNE DI SASSARI

VERIFICHE DI SICUREZZA IDRAULICA OPERE INTERFERENTI CON IL RETICOLO IDROGRAFICO – ATTRAVERSAMENTI STRADE COMUNALI

Area di indagine: **TERRITORIO COMUNALE**

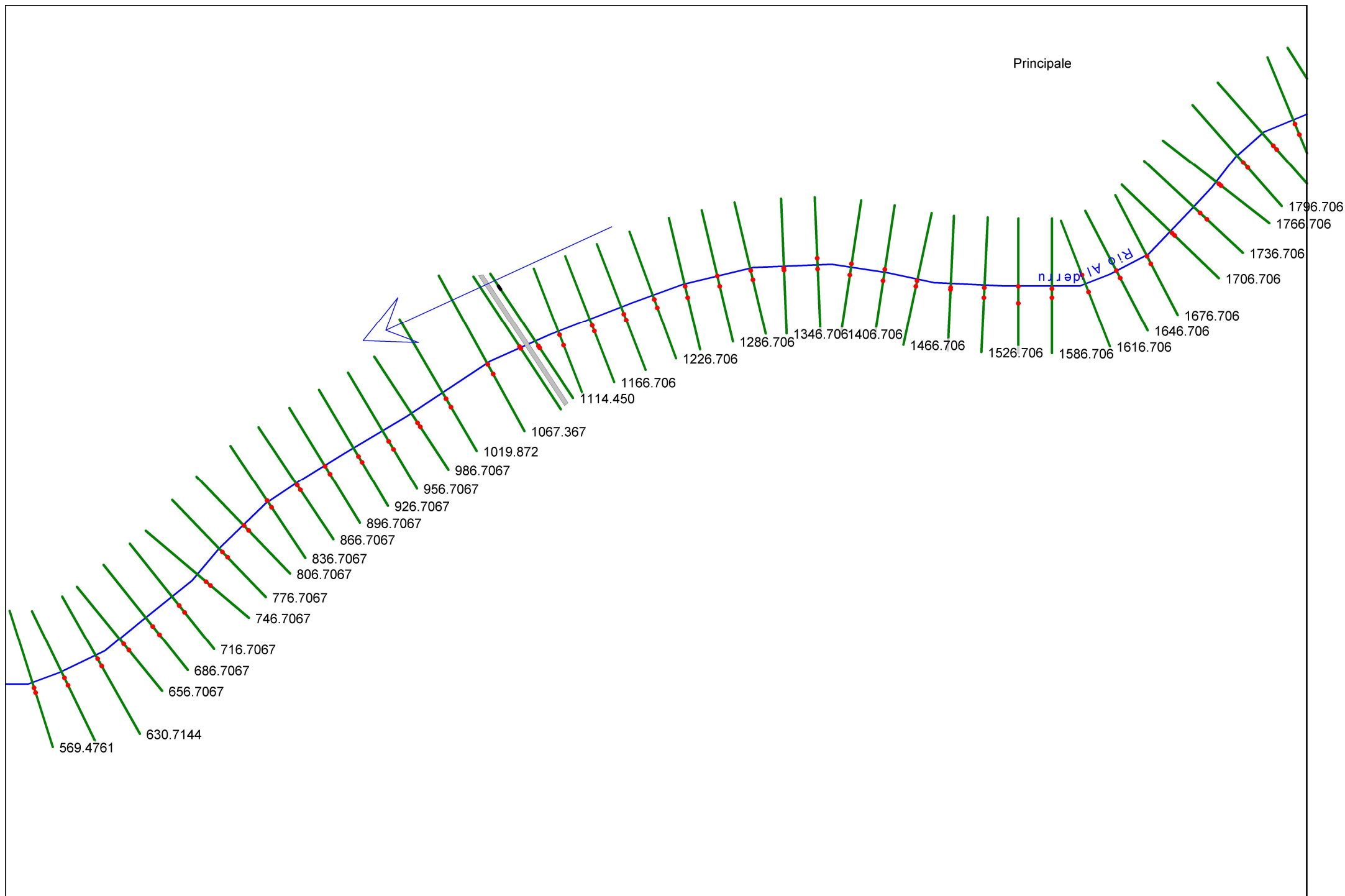
SIMULAZIONI IN MOTO PERMANENTE

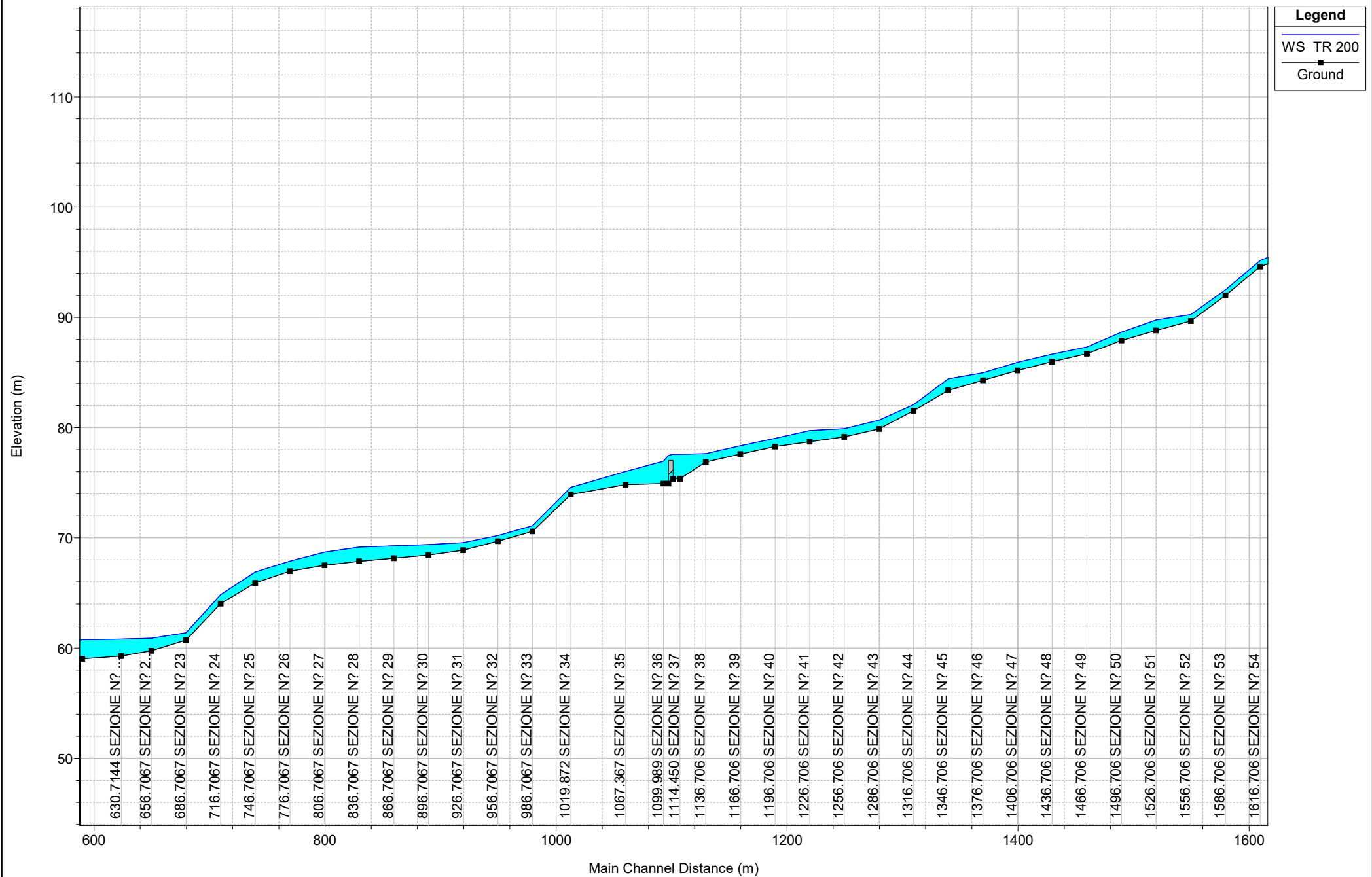
ATTRAVERSAMENTO C01 sul Rio Aliderru

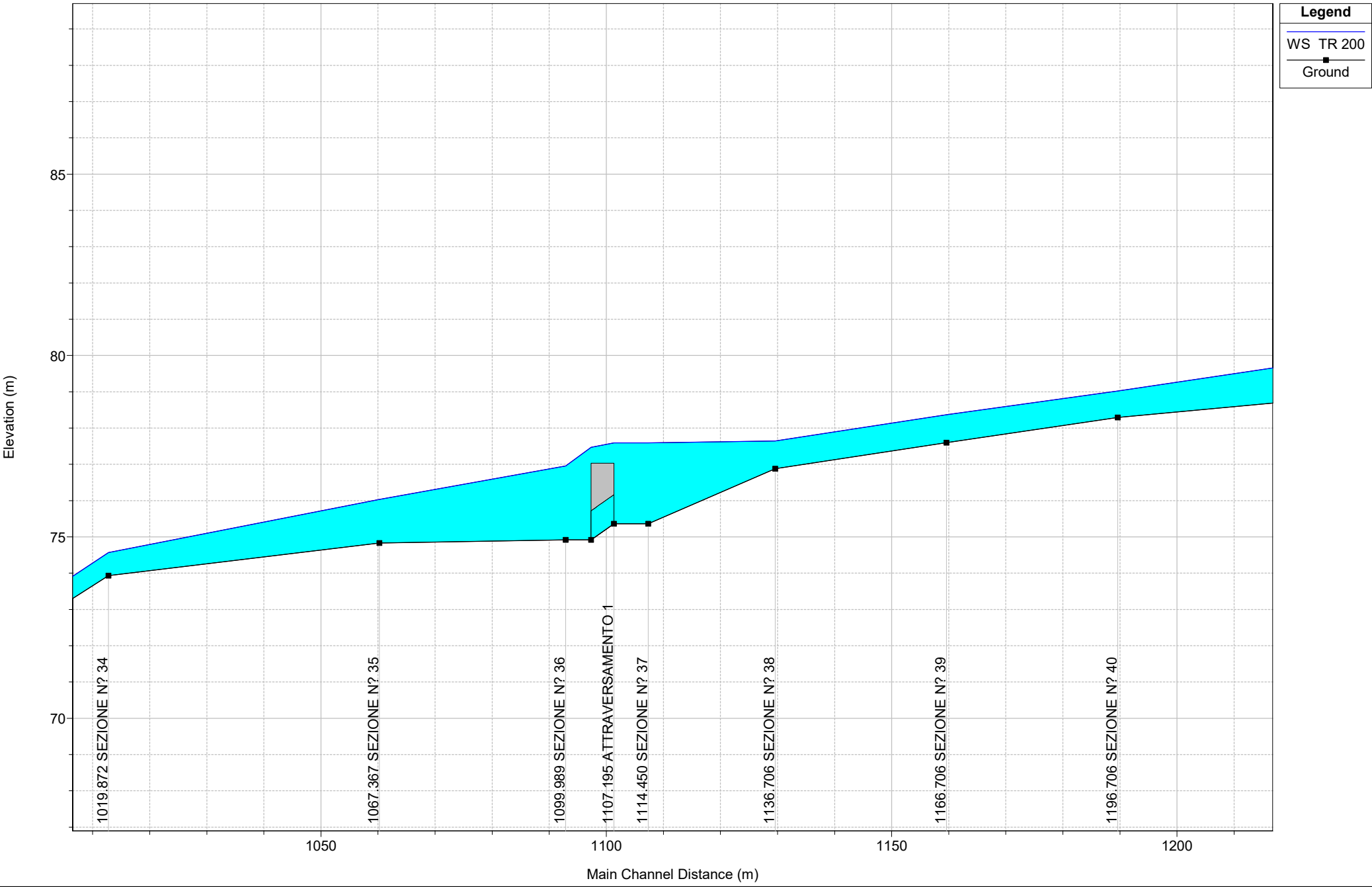
- Schema planimetrico del modello matematico;
- Profili longitudinali con livelli idrici per il tempo di ritorno di 200 anni;
- Sezioni trasversali con livelli idrici per il tempo di ritorno di 200 anni;
- Tabulati numerici di output per il tempo di ritorno di 200 anni;
- Calcolo della portata critica;
- Profilo longitudinale del livello idrico per il tempo di ritorno critico TC;
- Verifica dei franchi idraulici e della portata critica;

River	Reach	RS	PORTATE mc/s			
			TR 50	TR 100	TR 200	TR 500
Rio Aliderru	Principale	2211.069	16.694	19.556	22.463	26.448
Rio Aliderru	Principale	1067.367	21.115	25.062	29.071	34.509

River	Reach	PROFILI	condizioni al contorno	
			upstream	downstream
Rio Aliderru	Principale	all	Known WS	Known WS



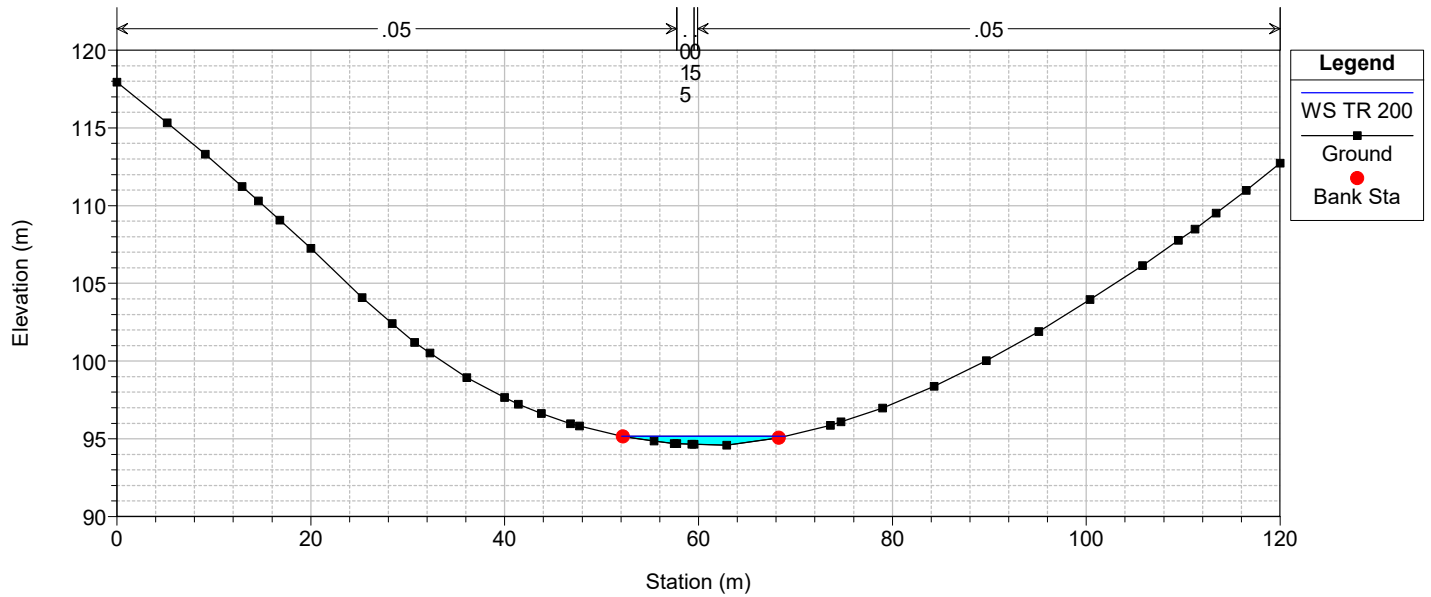




RIO ALIDERRU Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

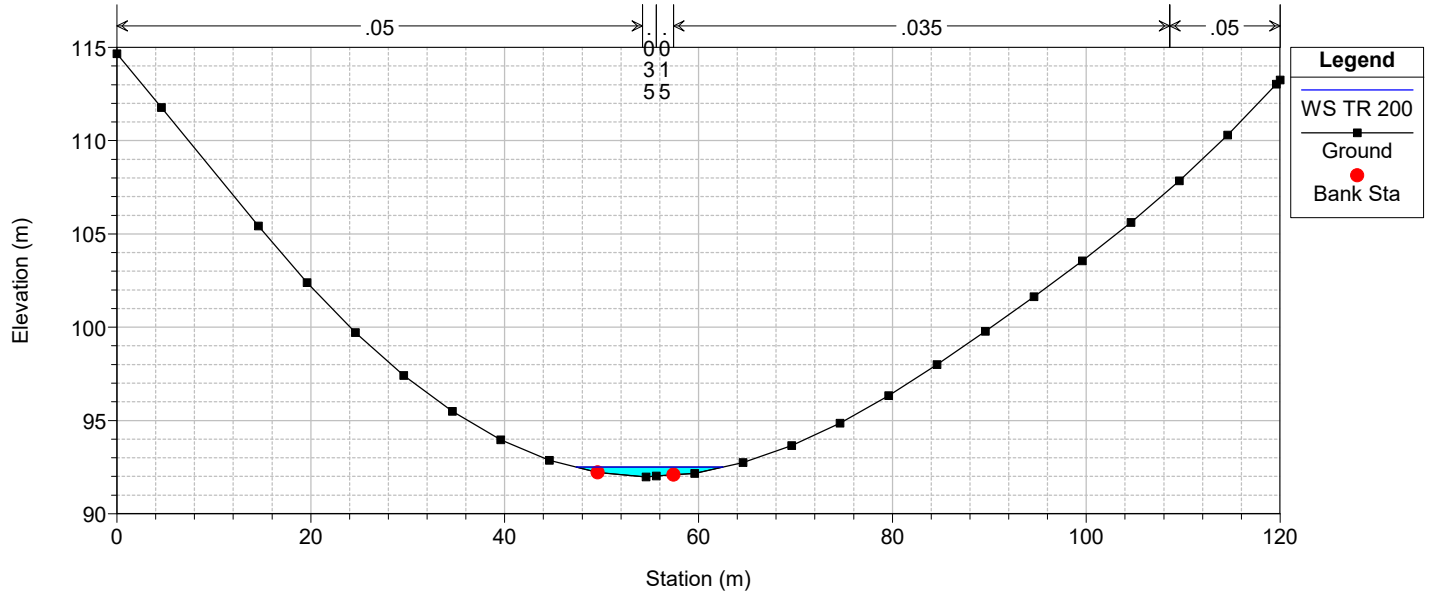
River = Rio Aliderru Reach = Principale RS = 1616.706 SEZIONE N? 54 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO ALIDERRU Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

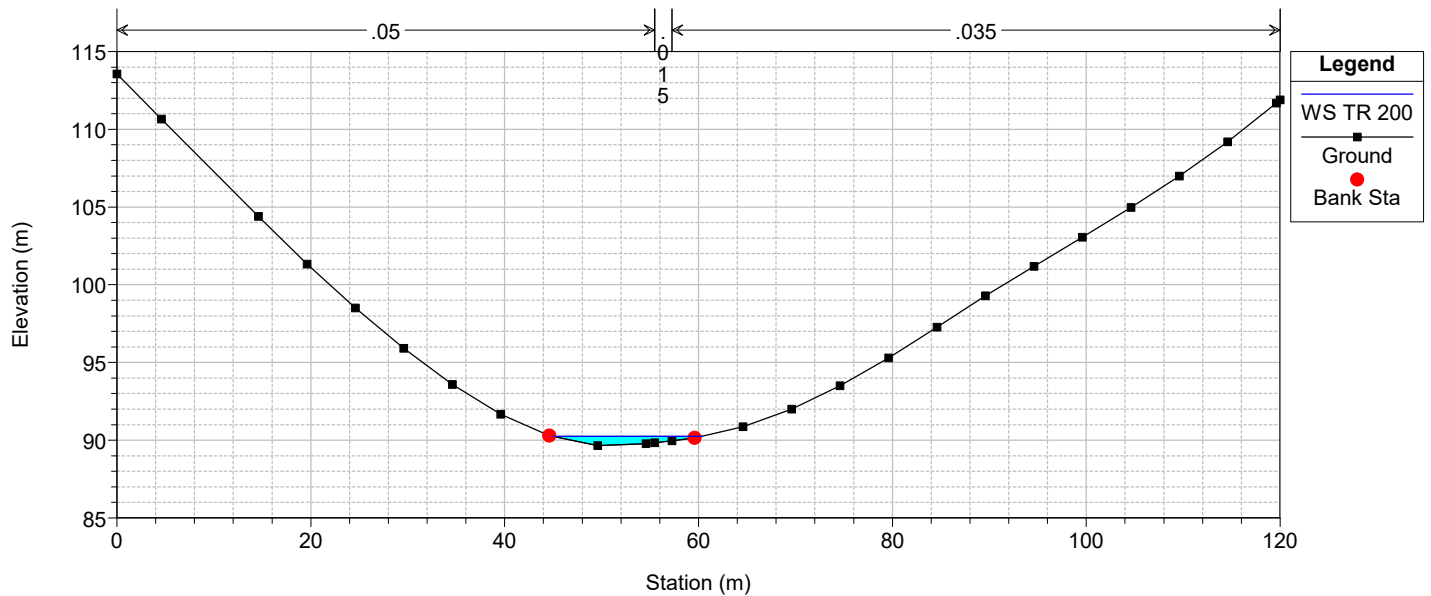
River = Rio Aliderru Reach = Principale RS = 1586.706 SEZIONE N? 53 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO ALIDERRU Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

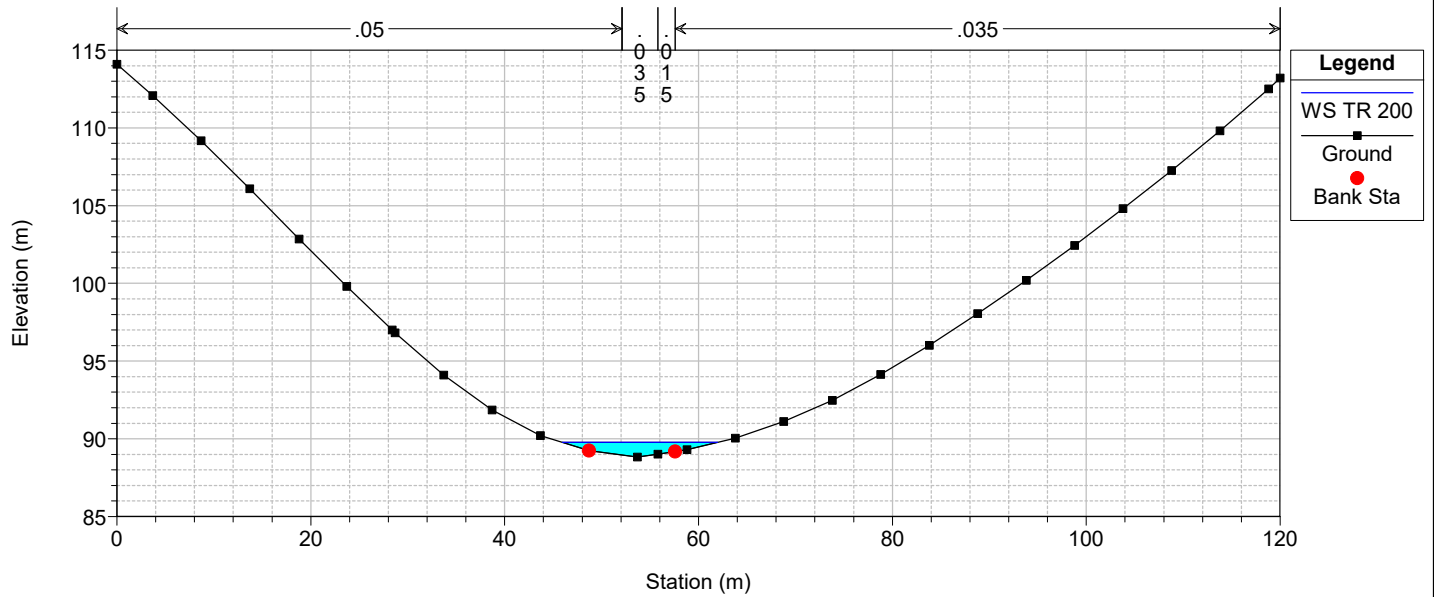
River = Rio Aliderru Reach = Principale RS = 1556.706 SEZIONE N? 52 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO ALIDERRU Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

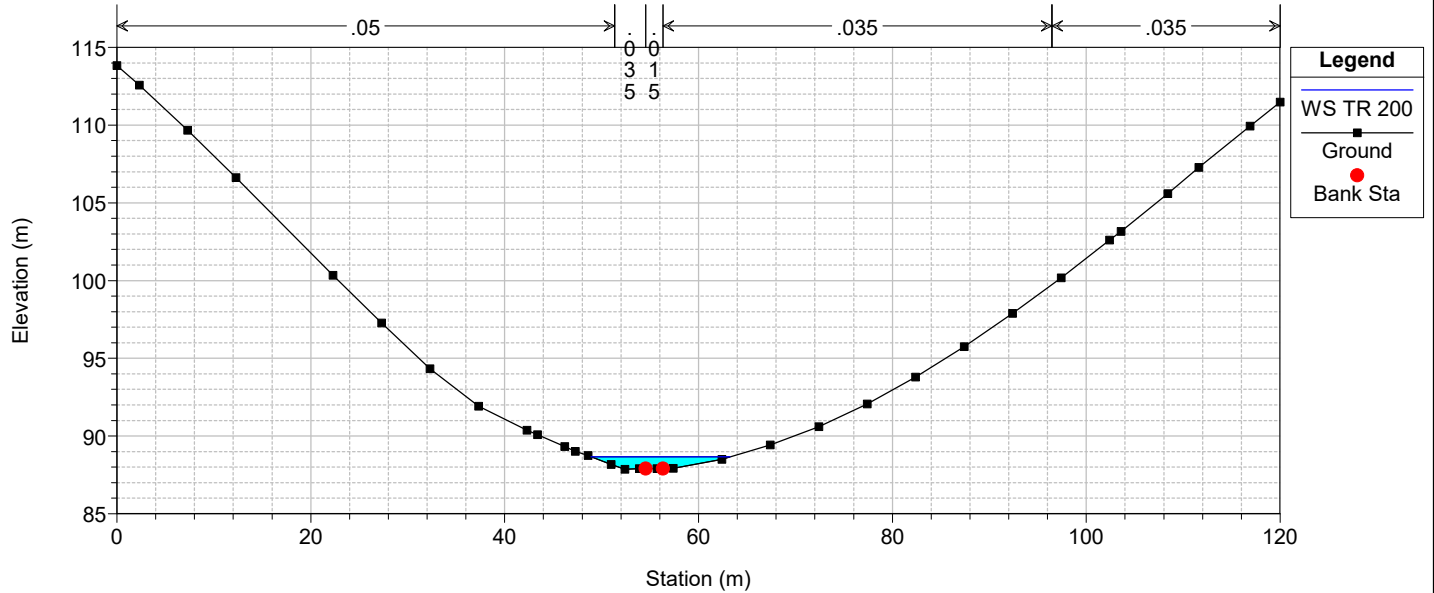
River = Rio Aliderru Reach = Principale RS = 1526.706 SEZIONE N? 51 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO ALIDERRU Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

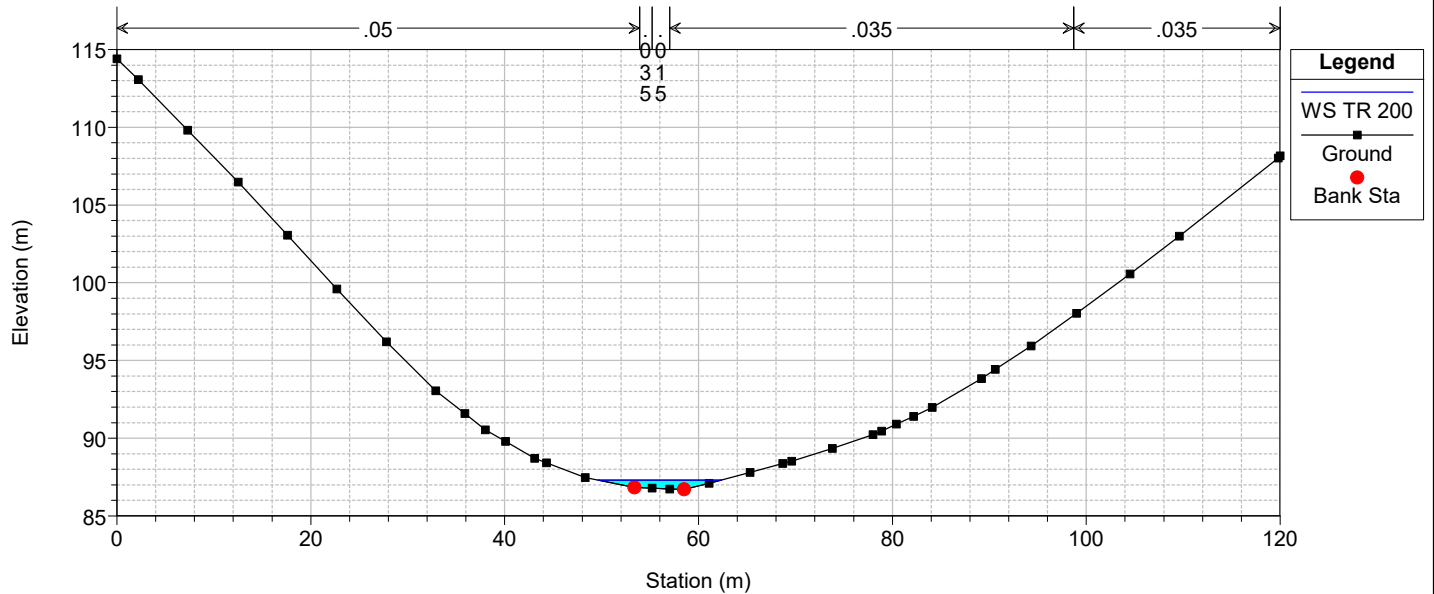
River = Rio Aliderru Reach = Principale RS = 1496.706 SEZIONE N? 50 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO ALIDERRU Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

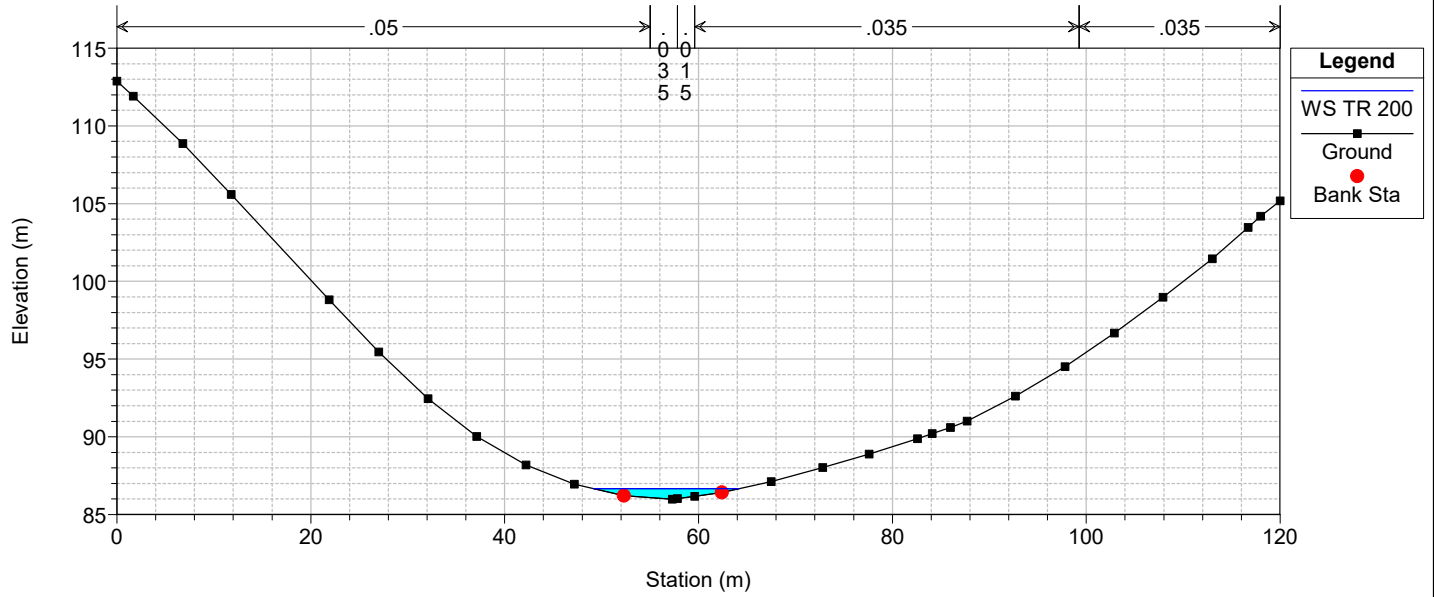
River = Rio Aliderru Reach = Principale RS = 1466.706 SEZIONE N? 49 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO ALIDERRU Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

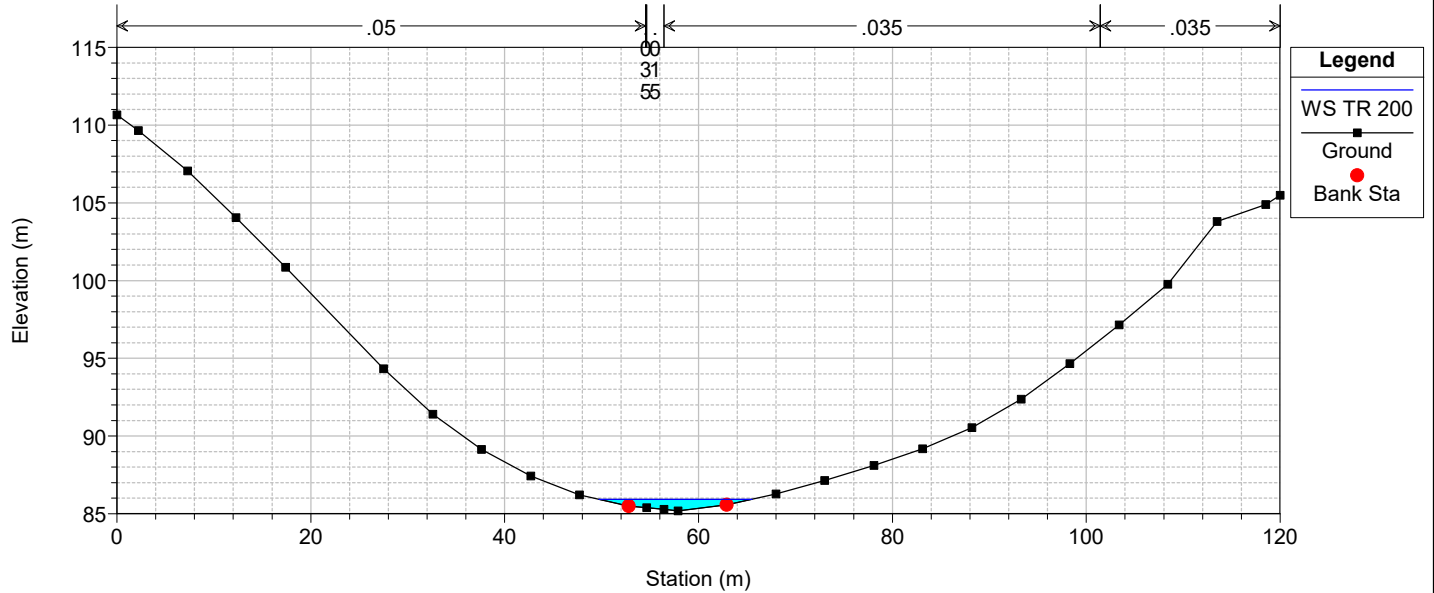
River = Rio Aliderru Reach = Principale RS = 1436.706 SEZIONE N? 48 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO ALIDERRU Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

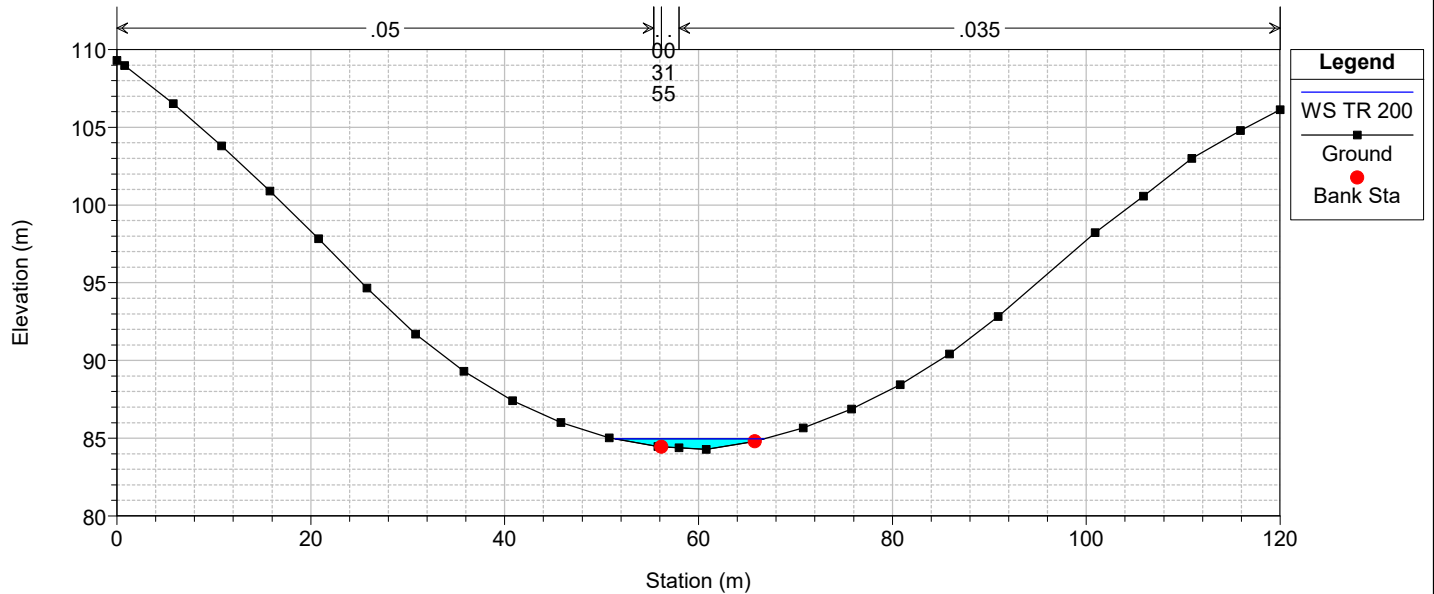
River = Rio Aliderru Reach = Principale RS = 1406.706 SEZIONE N? 47 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO ALIDERRU Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

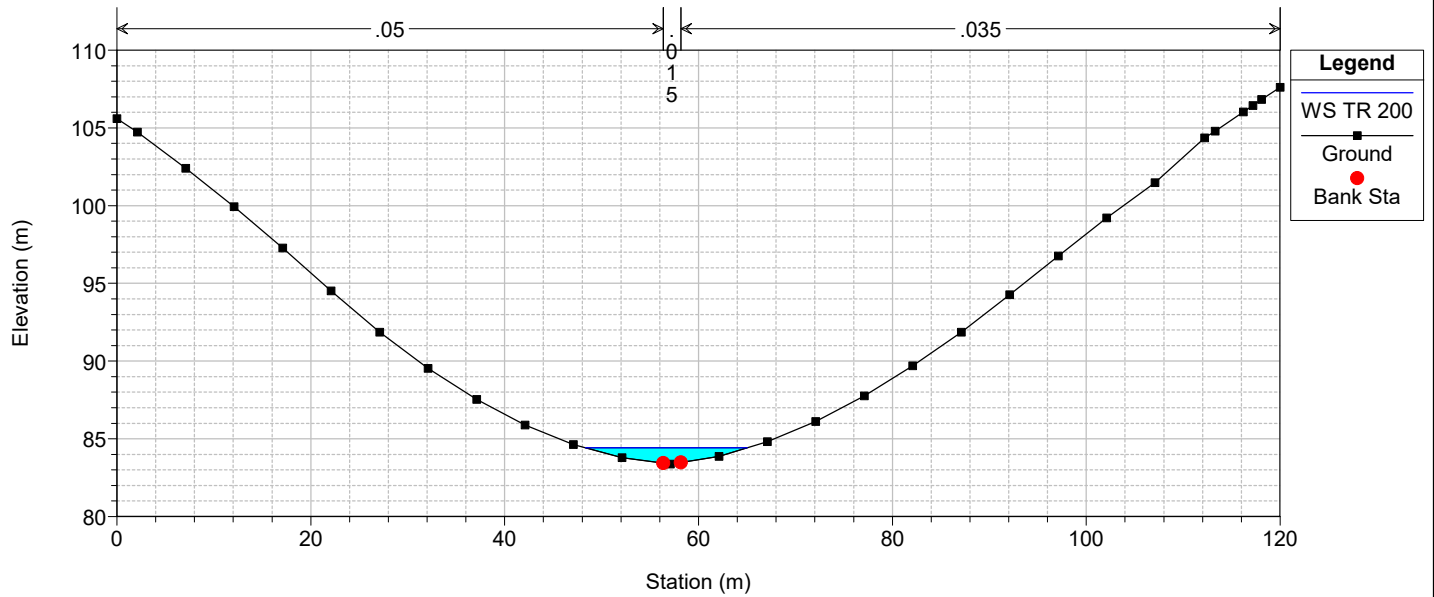
River = Rio Aliderru Reach = Principale RS = 1376.706 SEZIONE N? 46 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO ALIDERRU Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

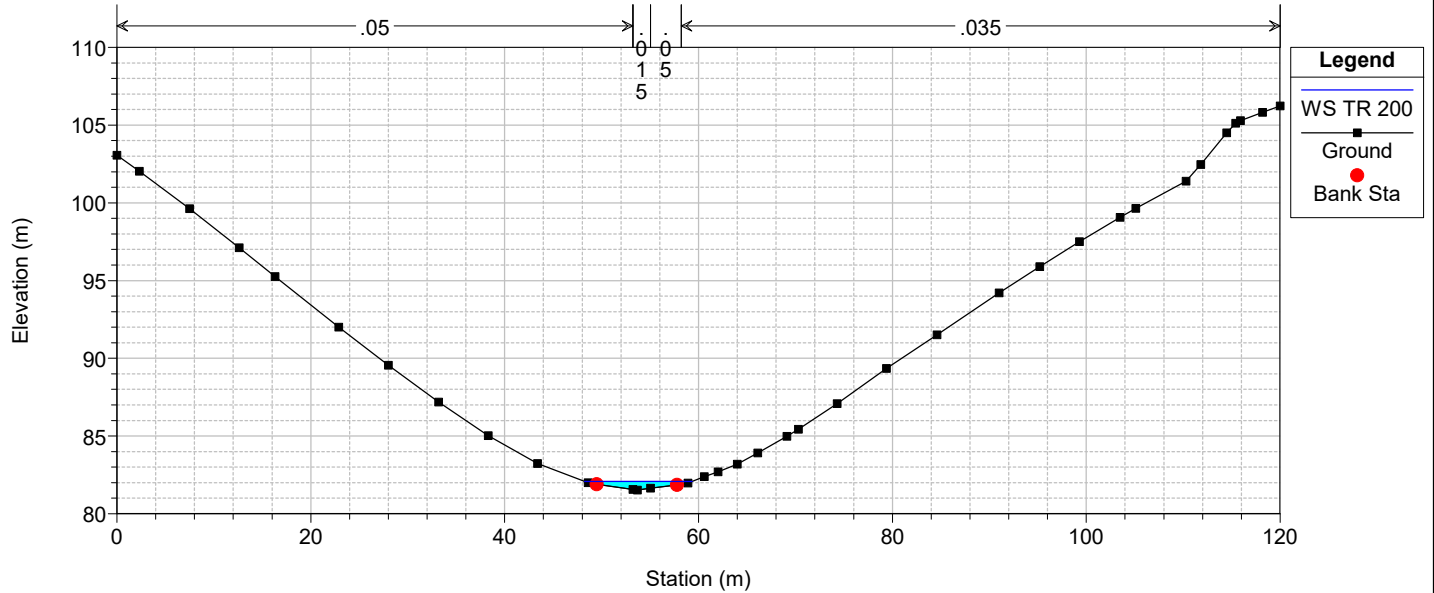
River = Rio Aliderru Reach = Principale RS = 1346.706 SEZIONE N? 45 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO ALIDERRU Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

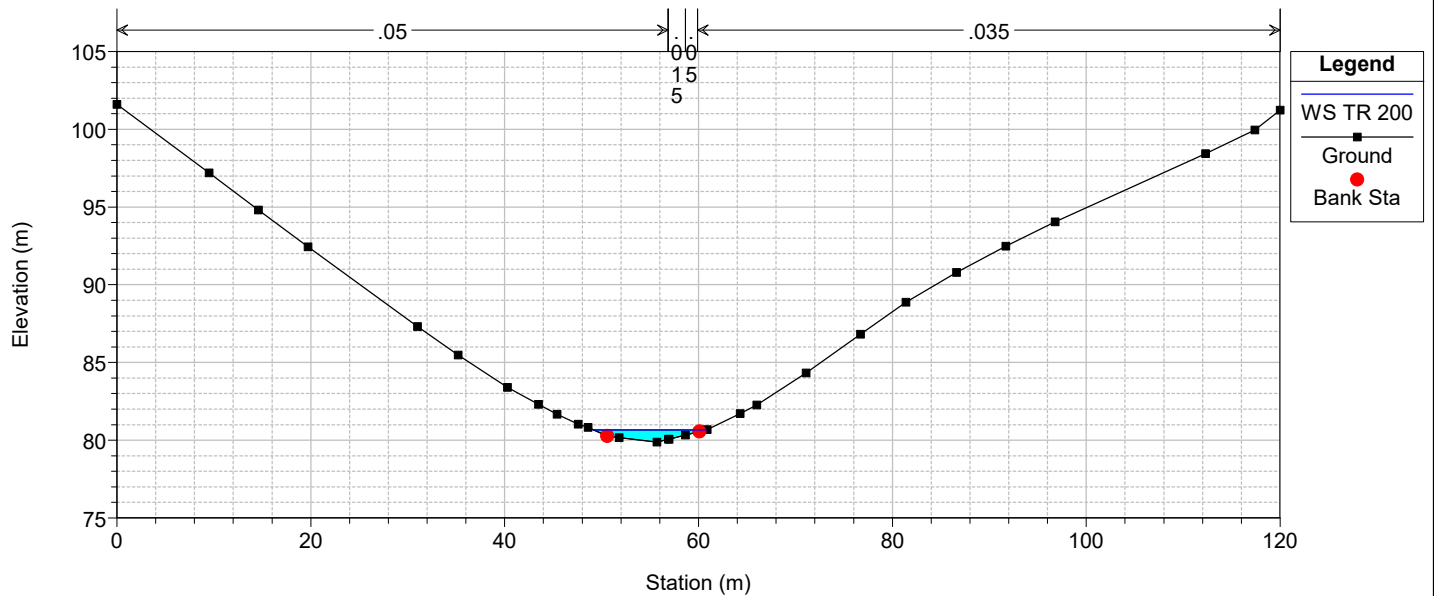
River = Rio Aliderru Reach = Principale RS = 1316.706 SEZIONE N? 44 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO ALIDERRU Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

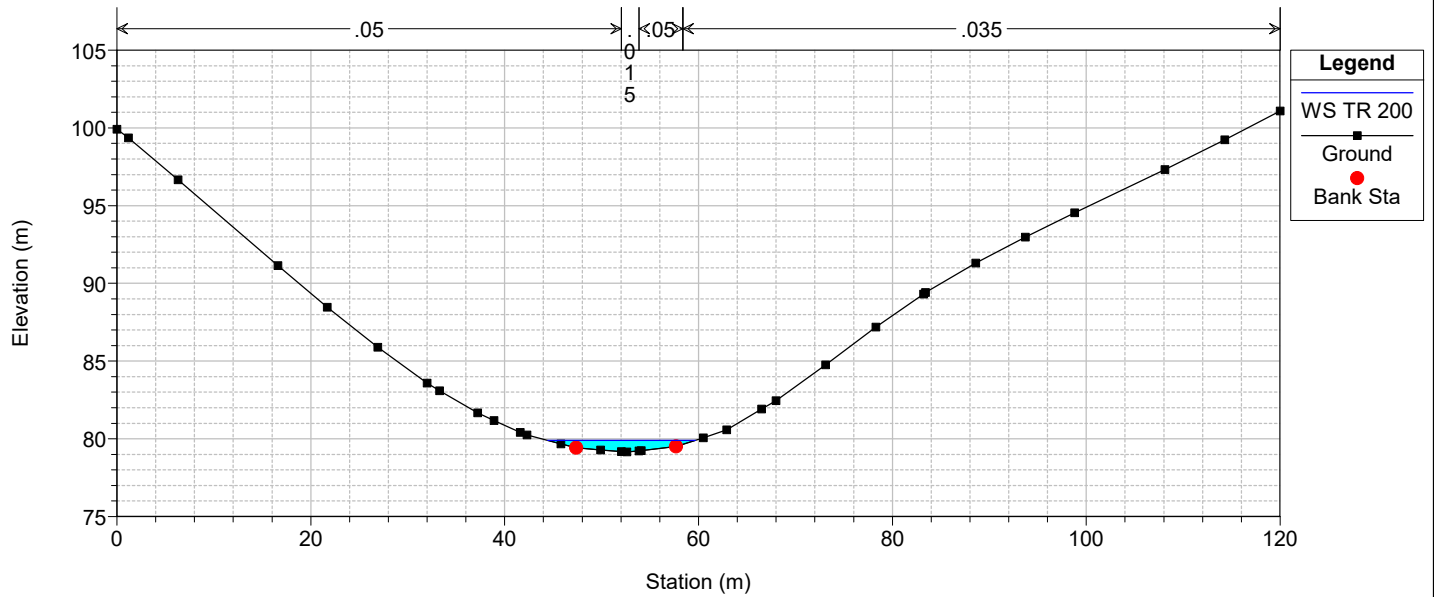
River = Rio Aliderru Reach = Principale RS = 1286.706 SEZIONE N? 43 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO ALIDERRU Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

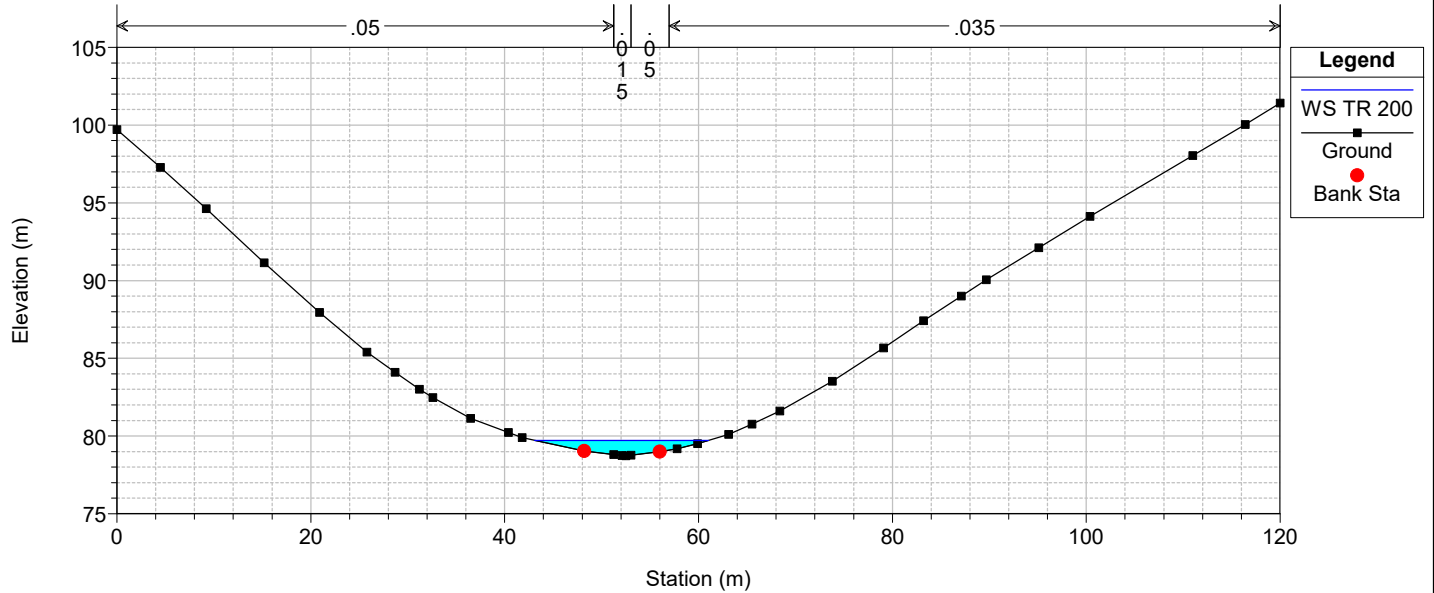
River = Rio Aliderru Reach = Principale RS = 1256.706 SEZIONE N° 42 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO ALIDERRU Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

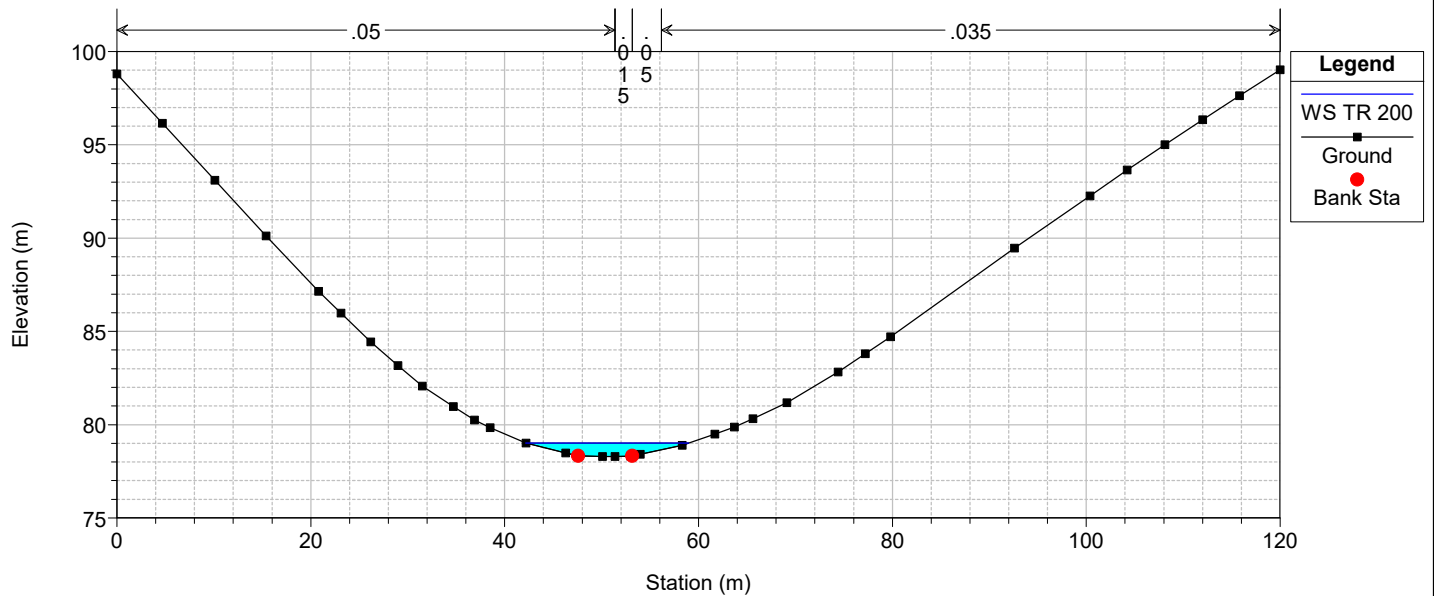
River = Rio Aliderru Reach = Principale RS = 1226.706 SEZIONE N° 41 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO ALIDERRU Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

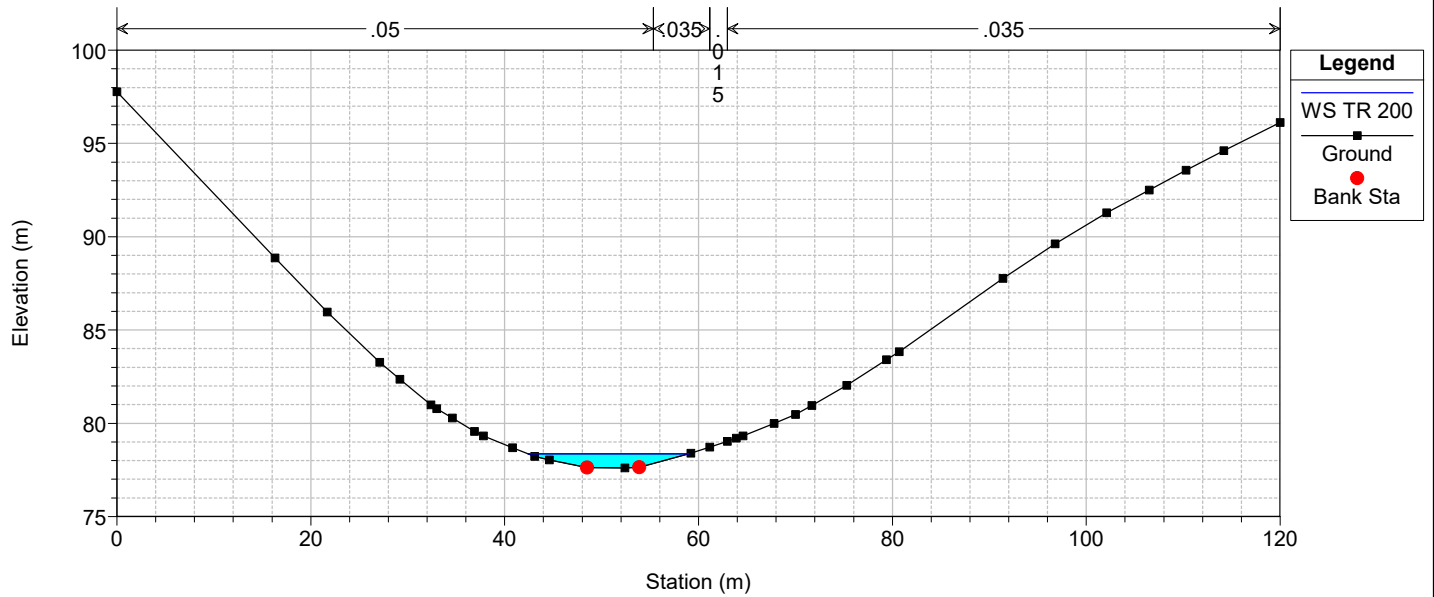
River = Rio Aliderru Reach = Principale RS = 1196.706 SEZIONE N° 40 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO ALIDERRU Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

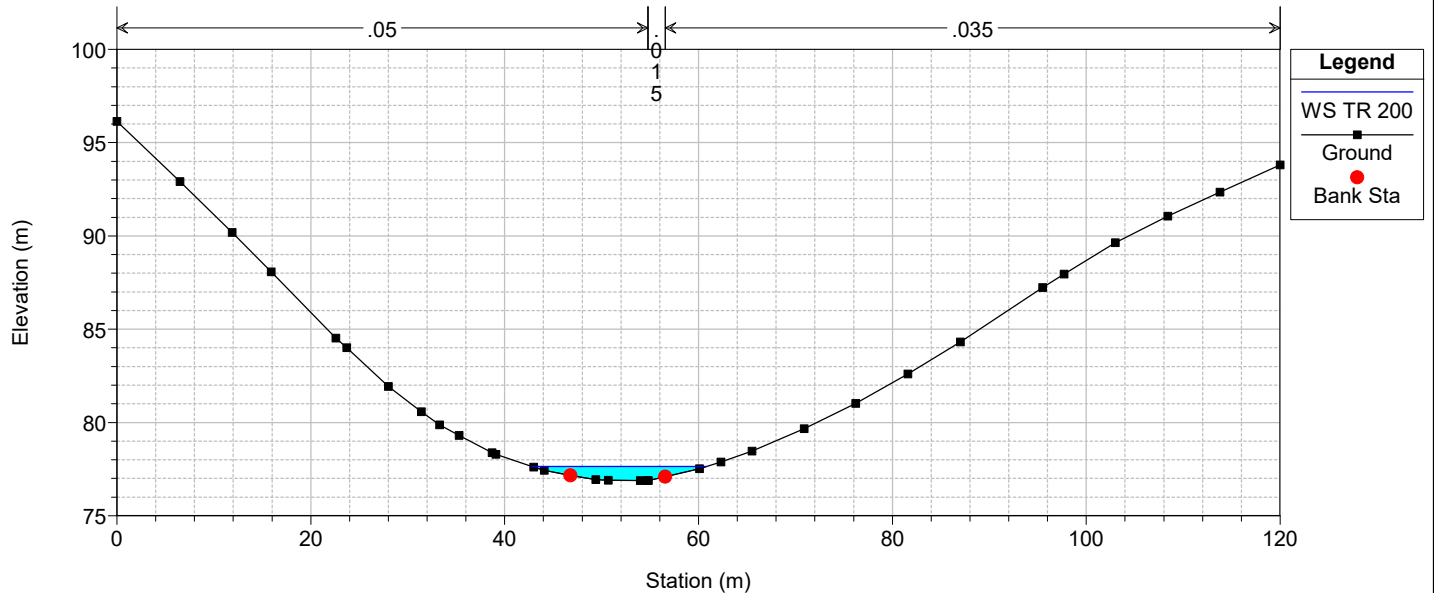
River = Rio Aliderru Reach = Principale RS = 1166.706 SEZIONE N? 39 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO ALIDERRU Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

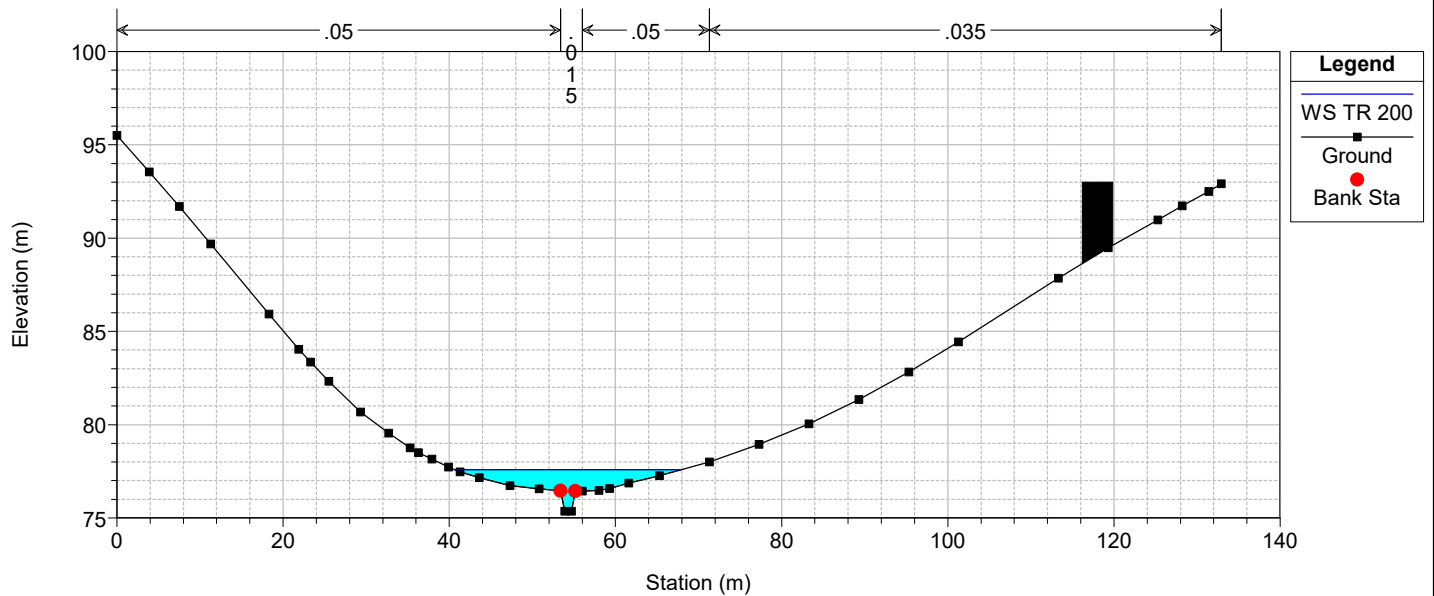
River = Rio Aliderru Reach = Principale RS = 1136.706 SEZIONE N? 38 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO ALIDERRU Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

River = Rio Aliderru Reach = Principale RS = 1114.450 SEZIONE N? 37 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI

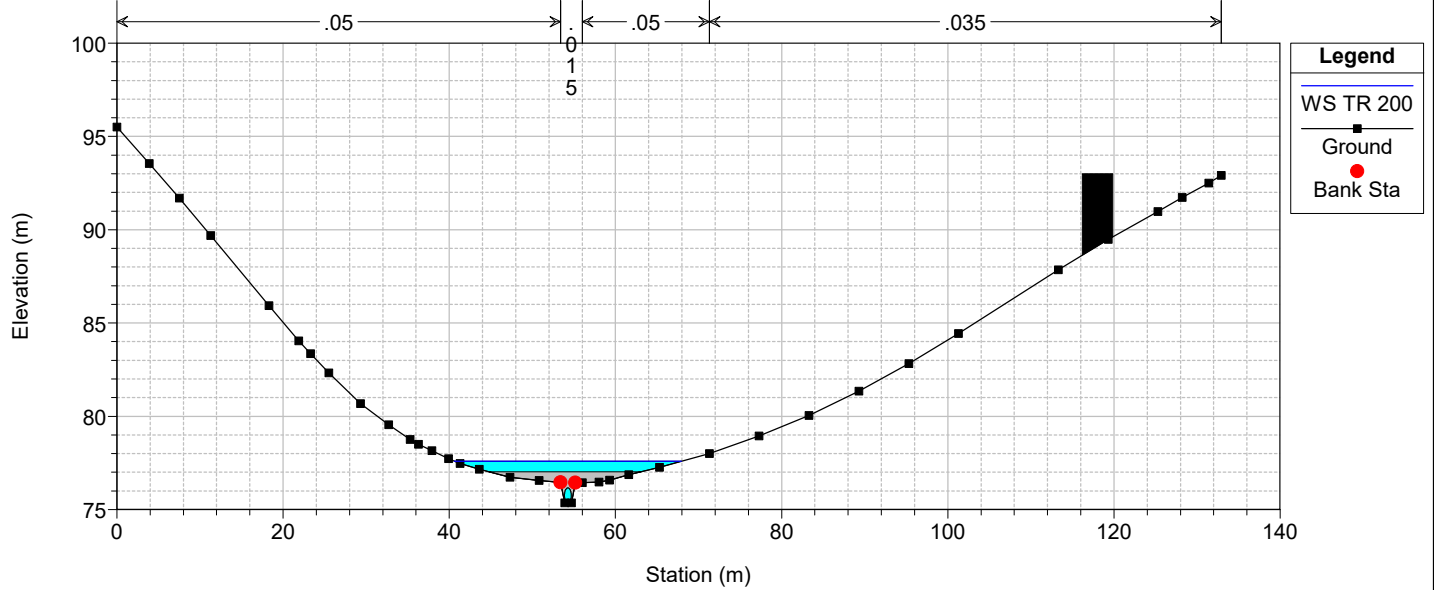


RIO ALIDERRU

Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

River = Rio Aliderru Reach = Principale RS = 1107.195 Culv ATTRAVERSAMENTO 1 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI

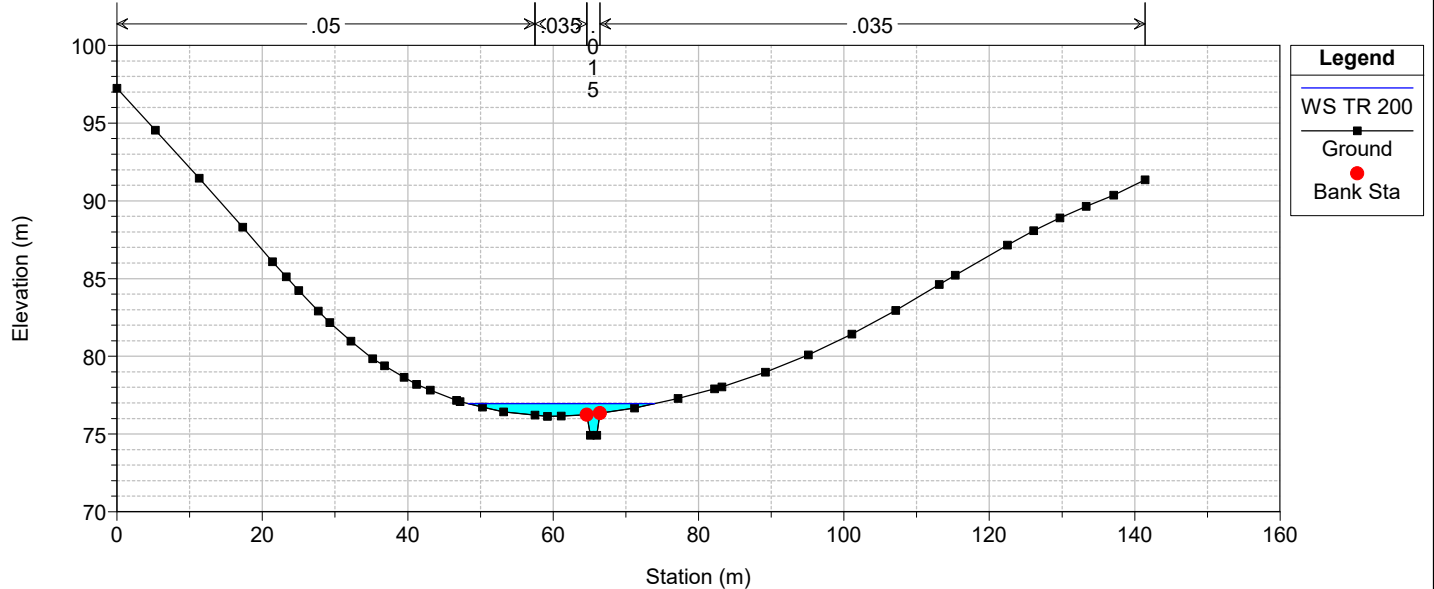


RIO ALIDERRU

Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

River = Rio Aliderru Reach = Principale RS = 1099.989 SEZIONE N° 36 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI

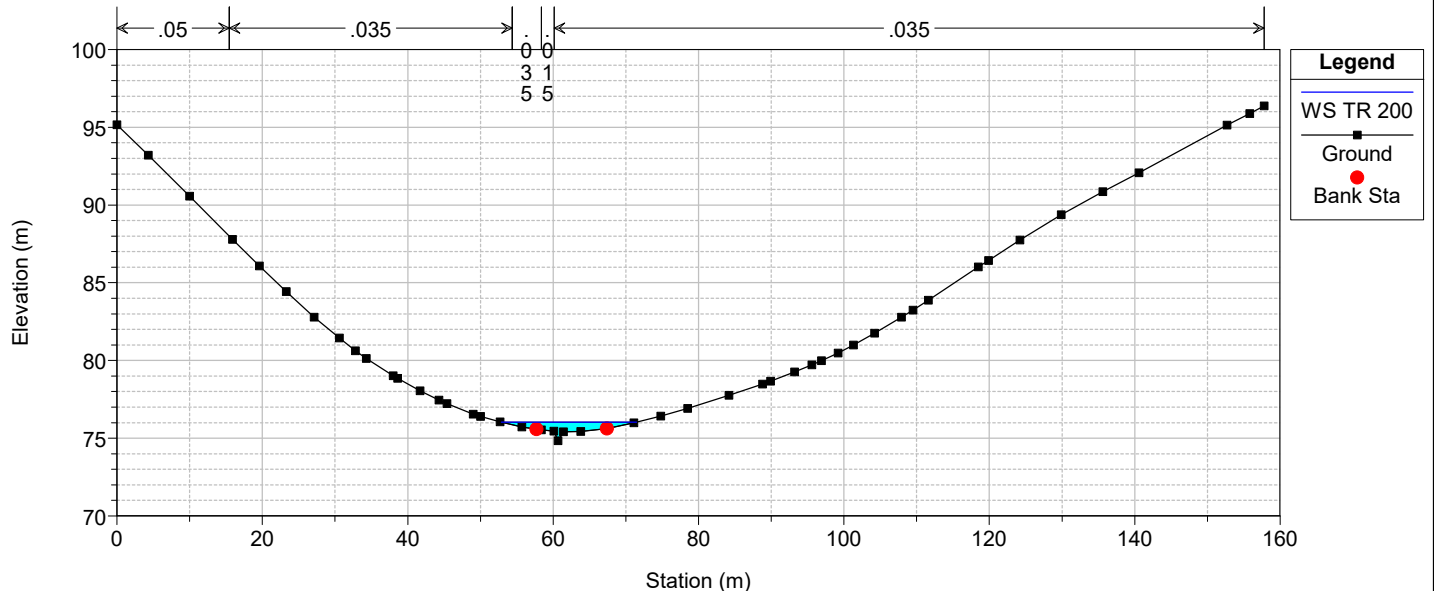


RIO ALIDERRU

Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

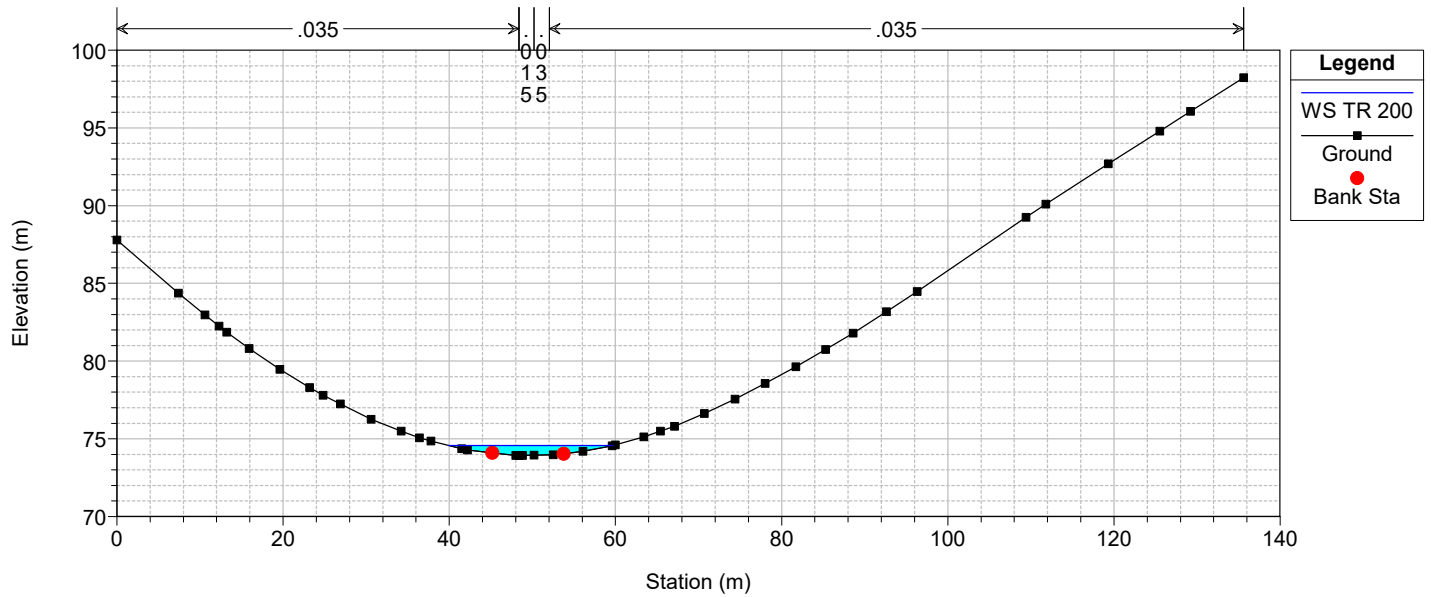
River = Rio Aliderru Reach = Principale RS = 1067.367 SEZIONE N° 35 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO ALIDERRU Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

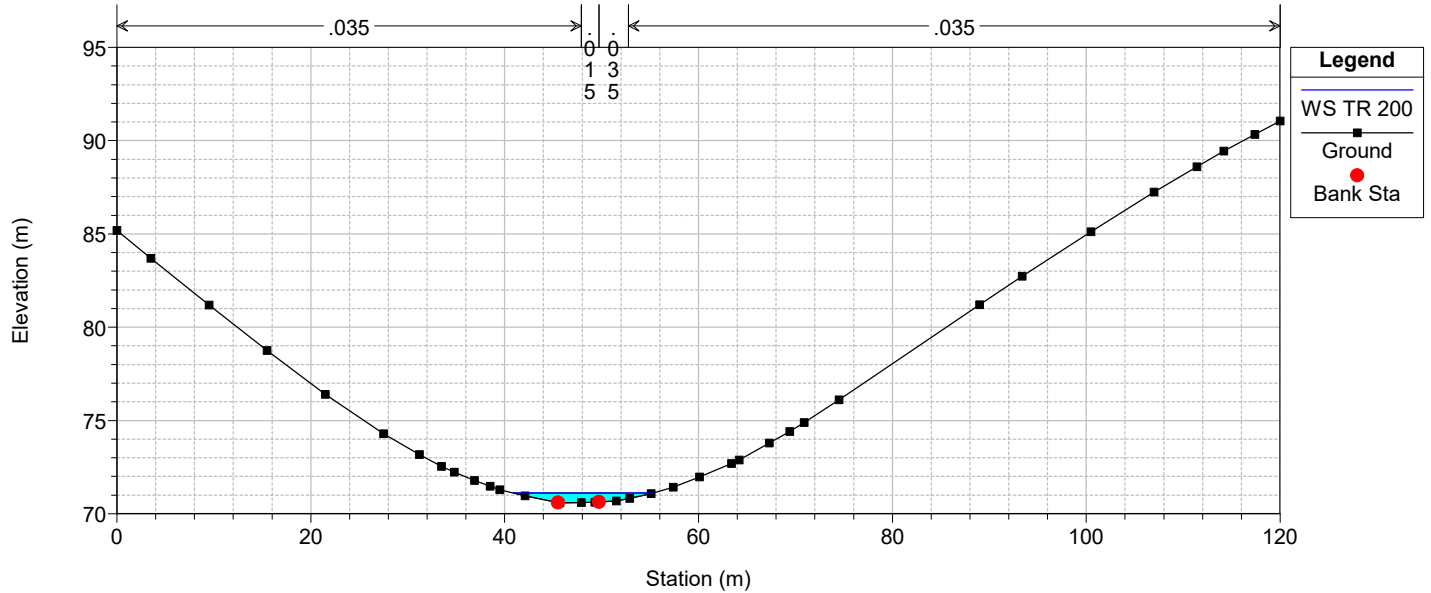
River = Rio Aliderru Reach = Principale RS = 1019.872 SEZIONE N° 34 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO ALIDERRU Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

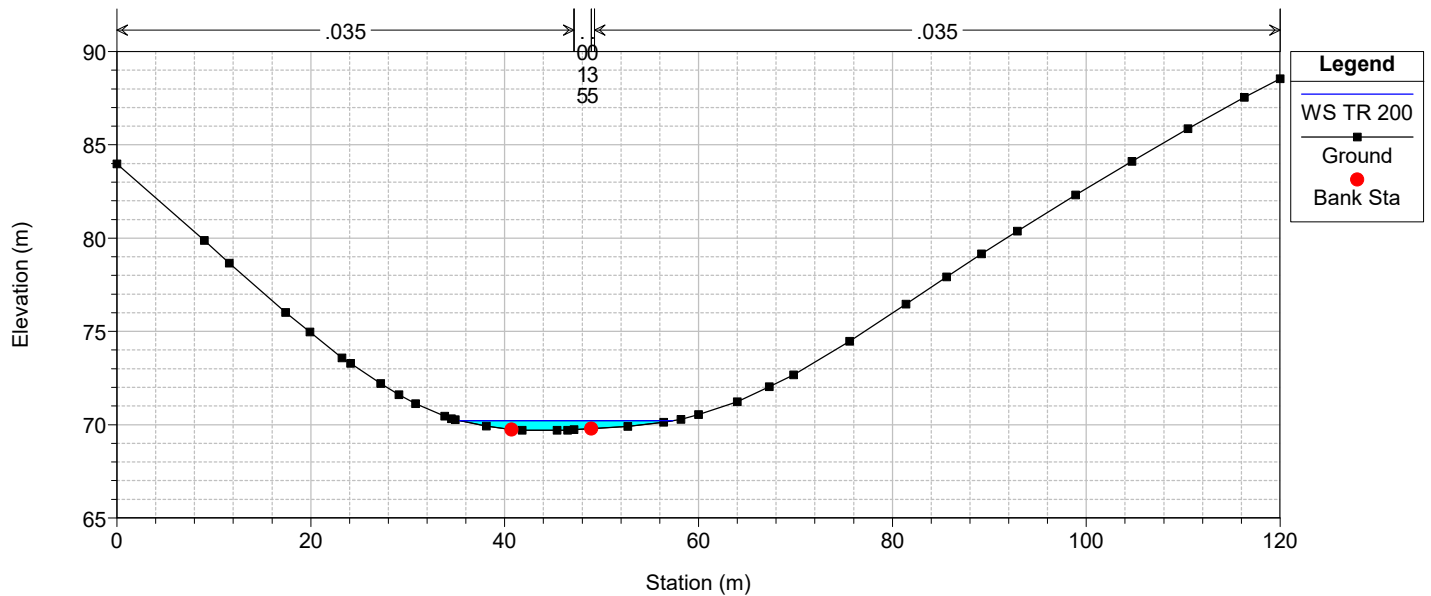
River = Rio Aliderru Reach = Principale RS = 986.7067 SEZIONE N° 33 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO ALIDERRU Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

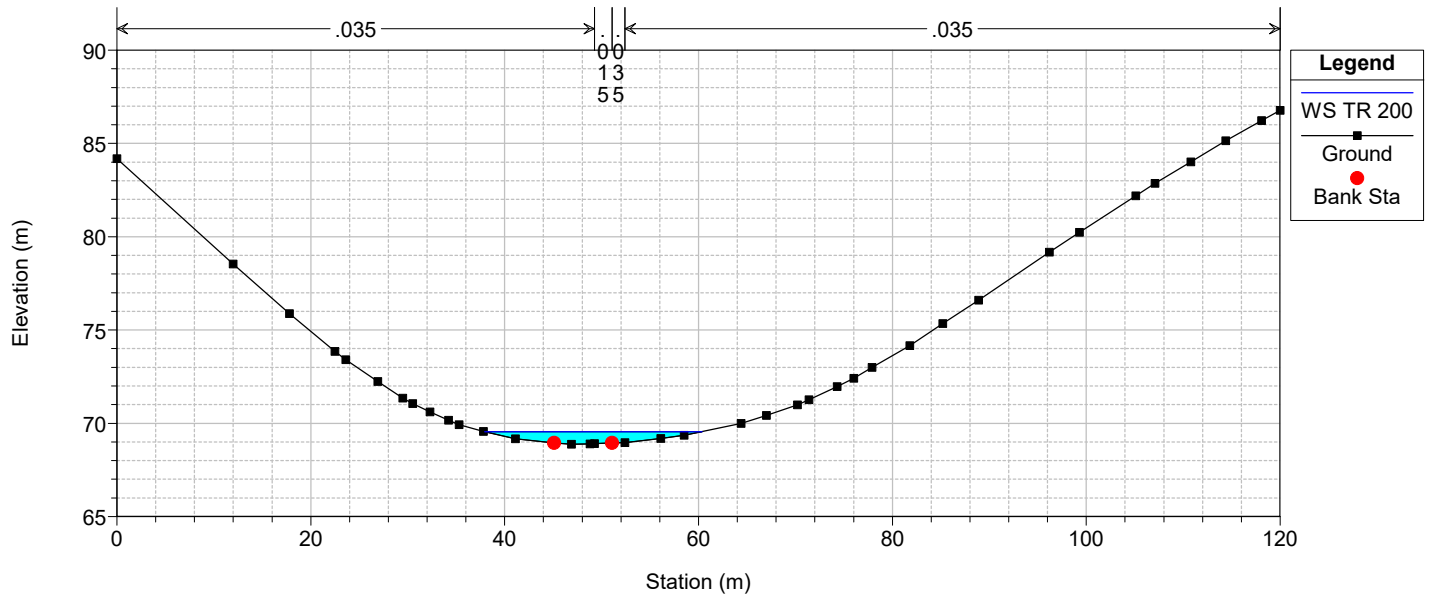
River = Rio Aliderru Reach = Principale RS = 956.7067 SEZIONE N° 32 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO ALIDERRU Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

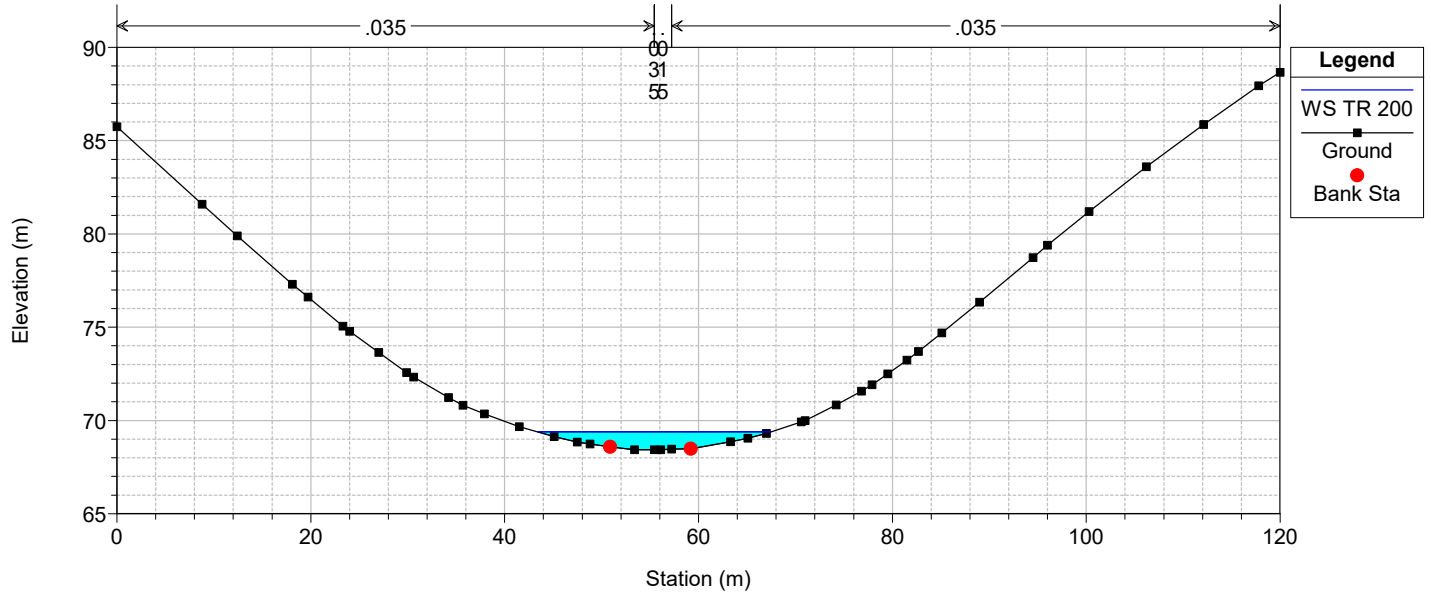
River = Rio Aliderru Reach = Principale RS = 926.7067 SEZIONE N? 31 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO ALIDERRU Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

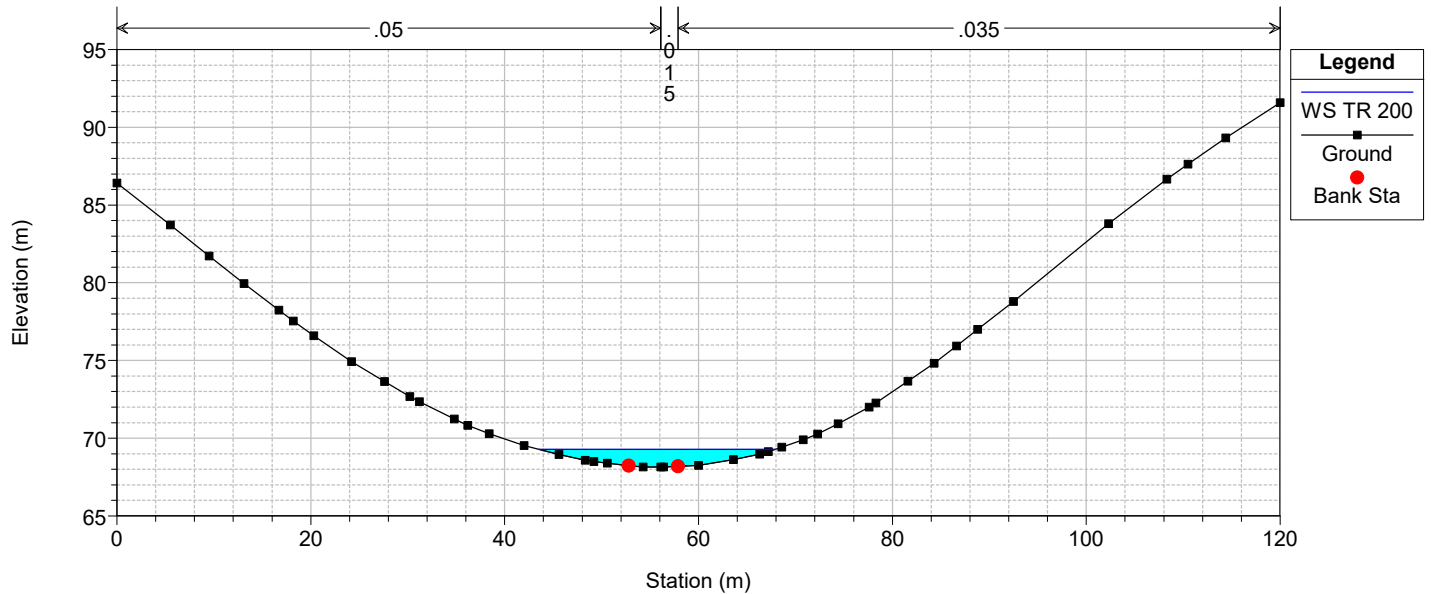
River = Rio Aliderru Reach = Principale RS = 896.7067 SEZIONE N? 30 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO ALIDERRU Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

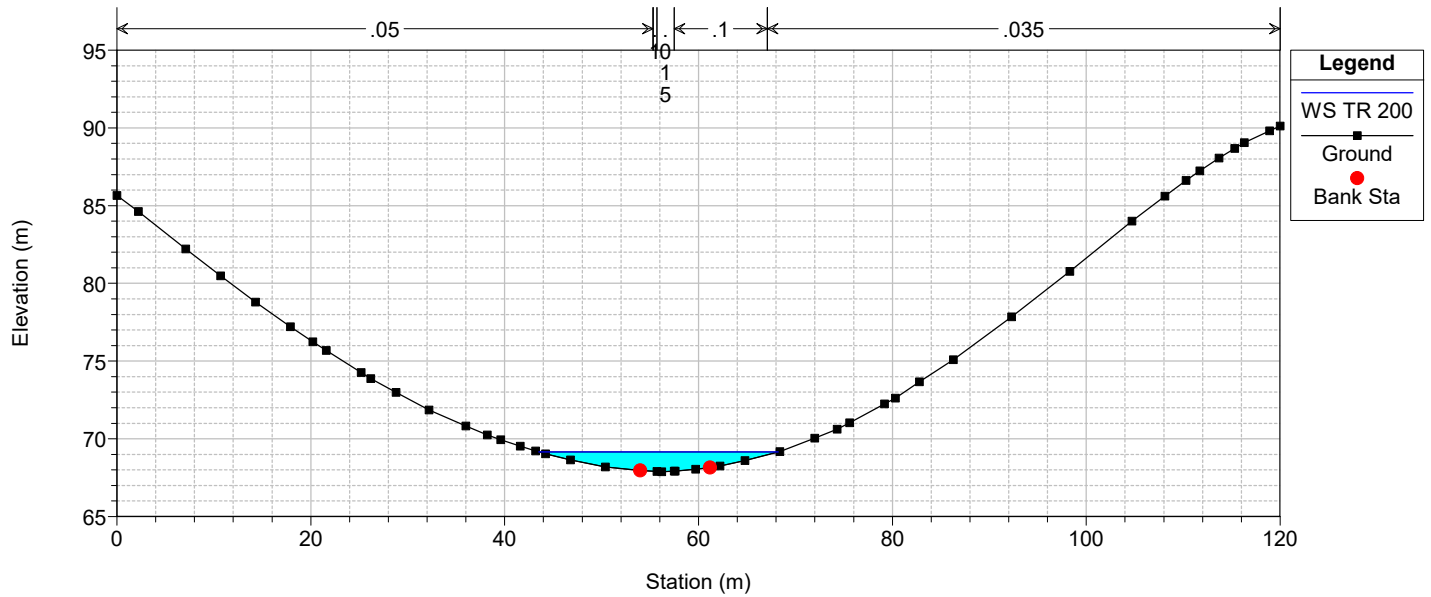
River = Rio Aliderru Reach = Principale RS = 866.7067 SEZIONE N? 29 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO ALIDERRU Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

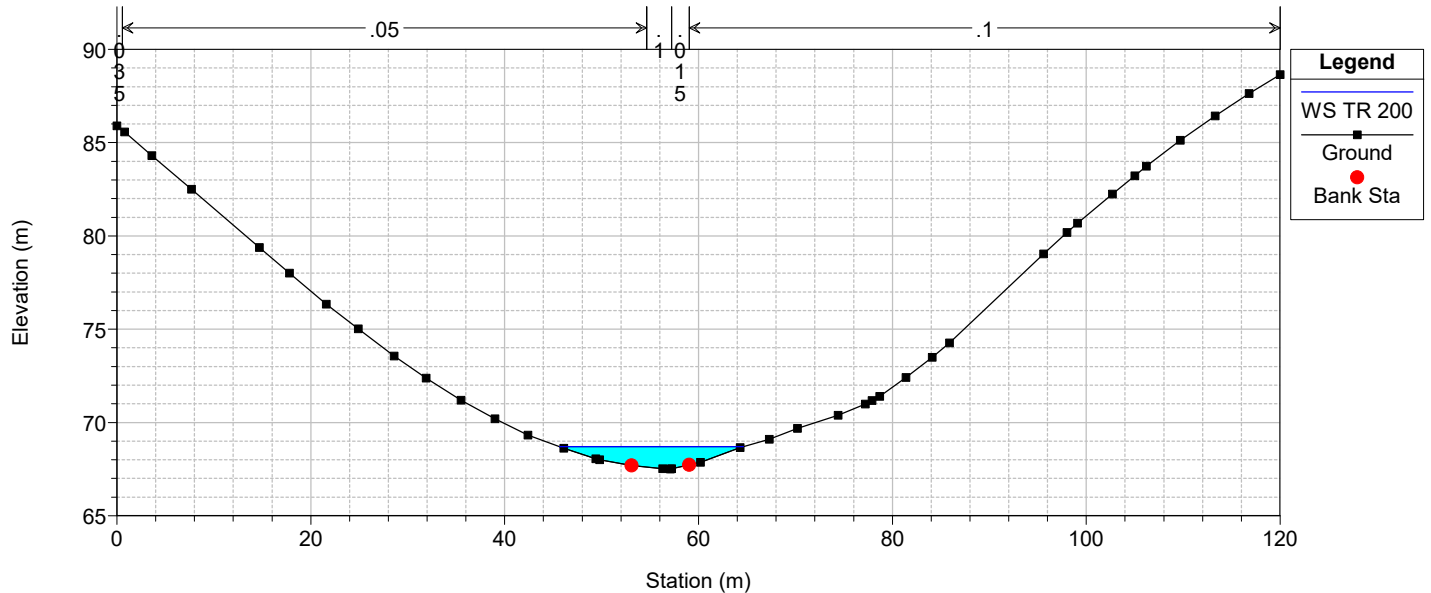
River = Rio Aliderru Reach = Principale RS = 836.7067 SEZIONE N° 28 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO ALIDERRU Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

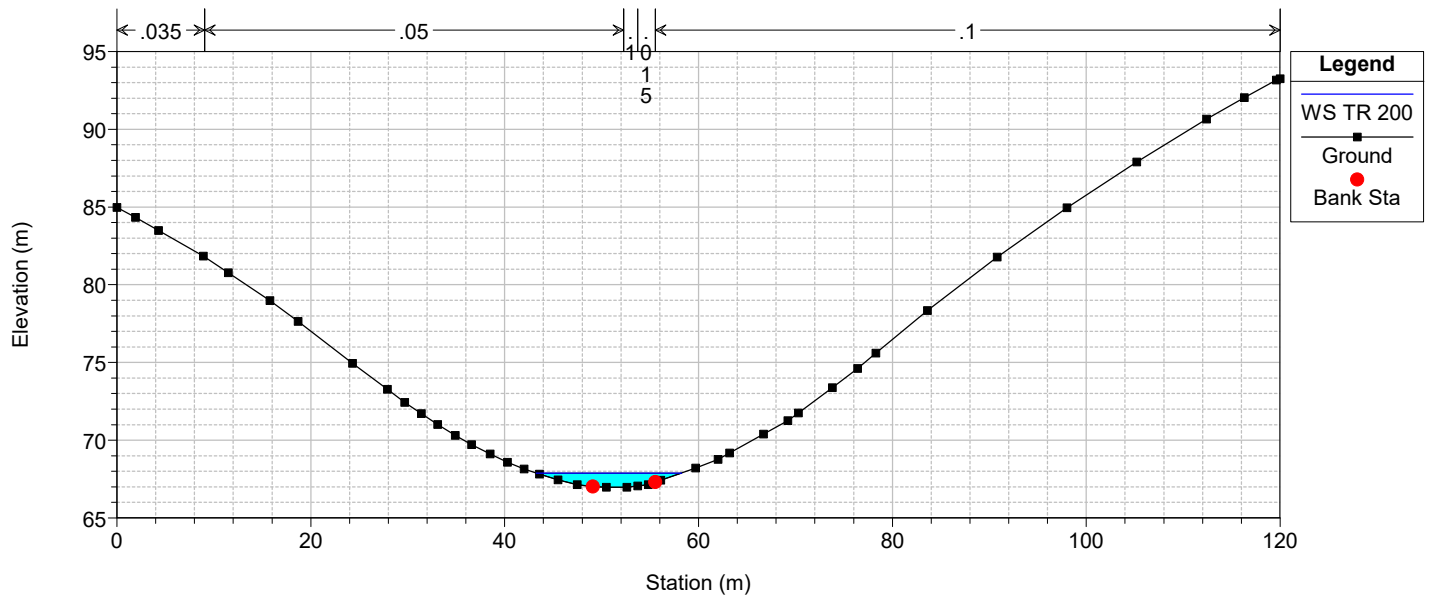
River = Rio Aliderru Reach = Principale RS = 806.7067 SEZIONE N° 27 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO ALIDERRU Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

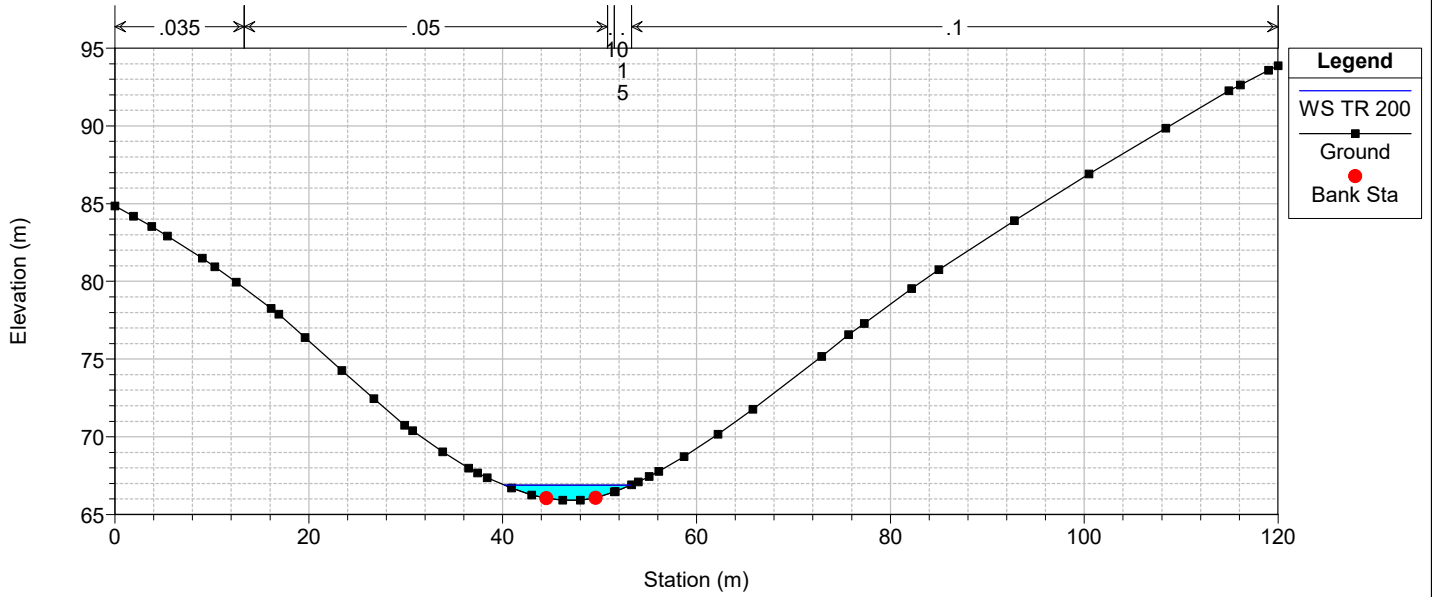
River = Rio Aliderru Reach = Principale RS = 776.7067 SEZIONE N° 26 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO ALIDERRU Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

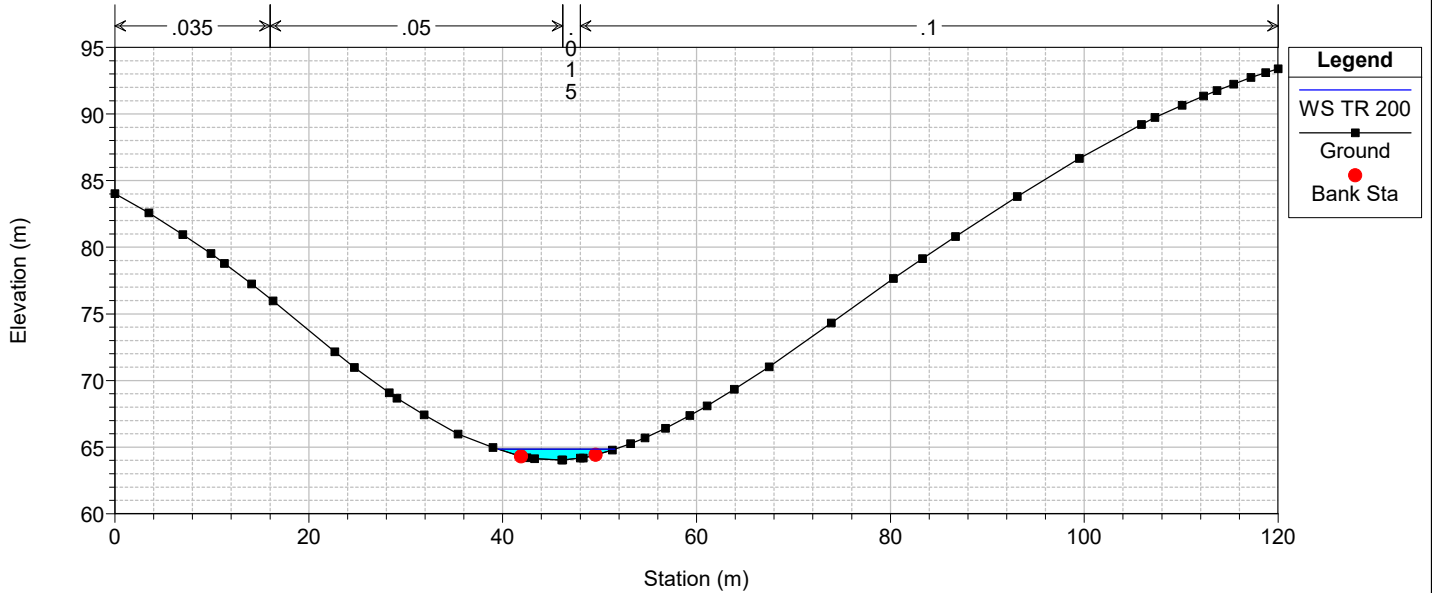
River = Rio Aliderru Reach = Principale RS = 746.7067 SEZIONE N° 25 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO ALIDERRU Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

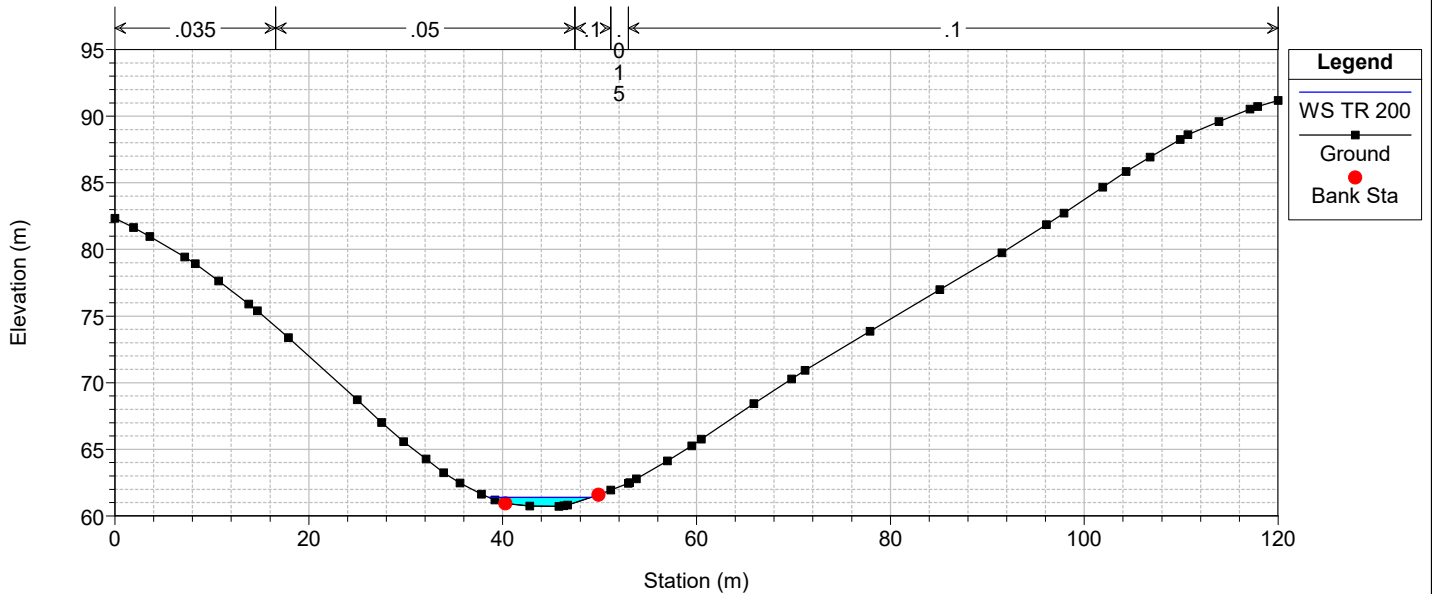
River = Rio Aliderru Reach = Principale RS = 716.7067 SEZIONE N° 24 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO ALIDERRU Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

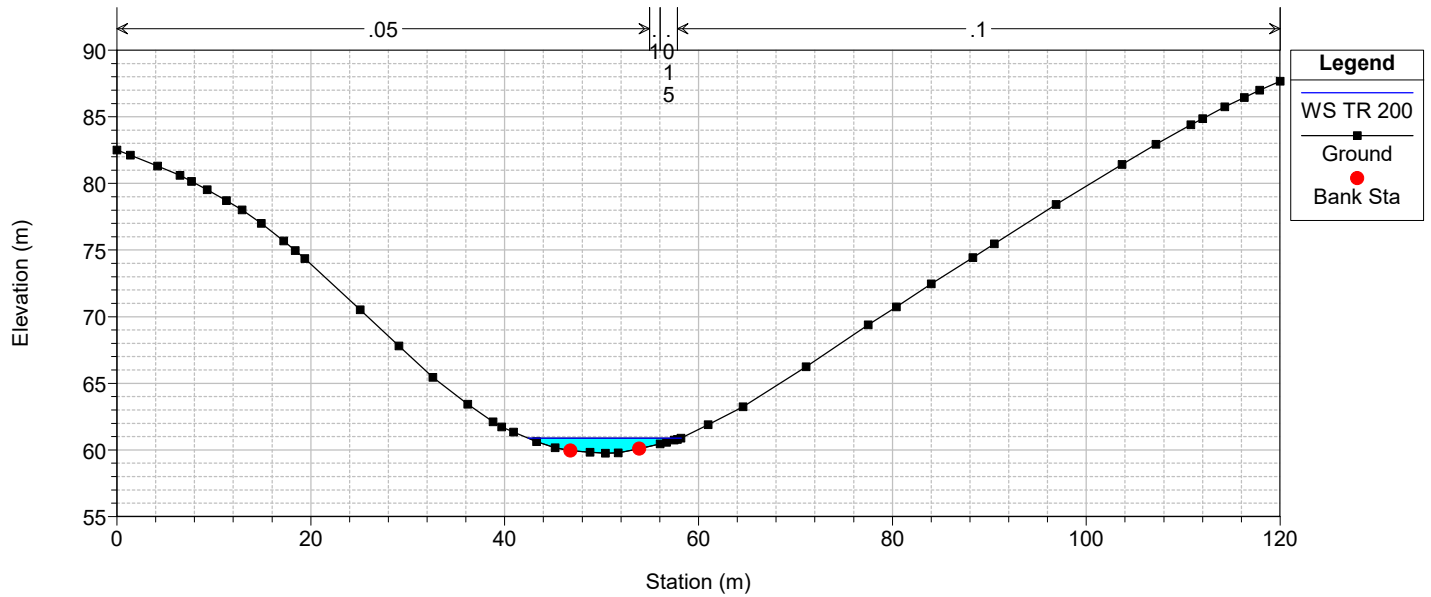
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RIO ALIDERRU Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

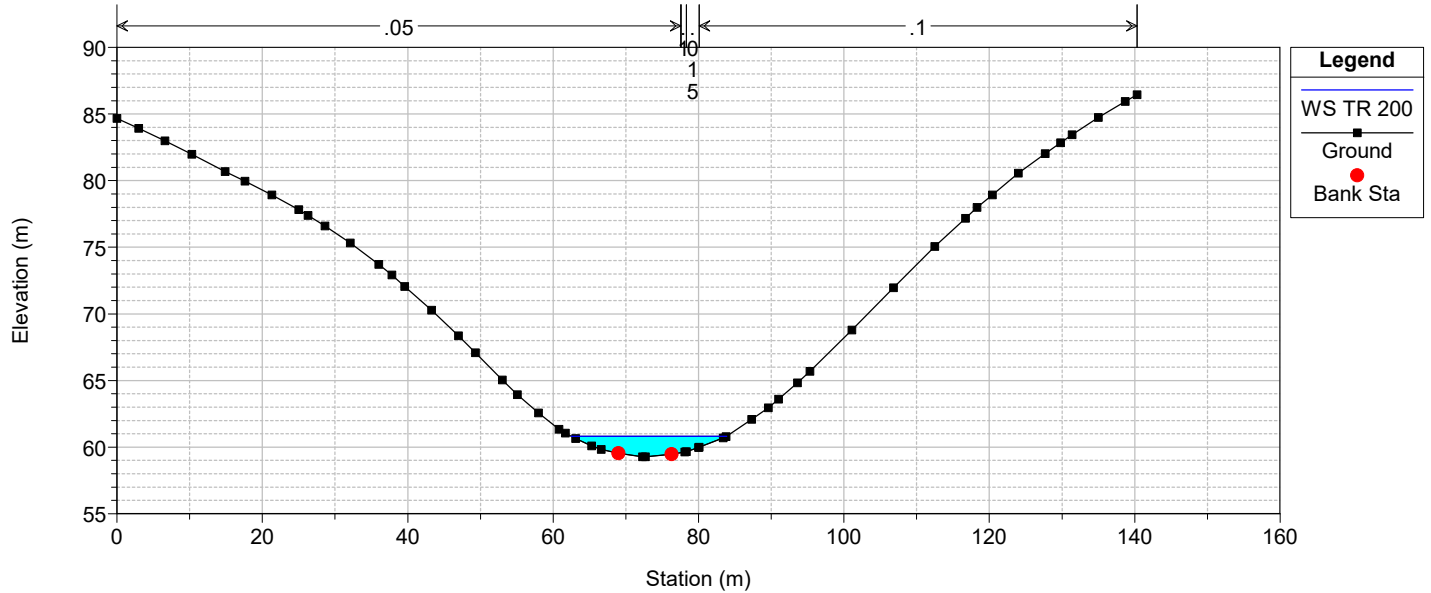
River = Rio Aliderru Reach = Principale RS = 656.7067 SEZIONE N° 22 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO ALIDERRU Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

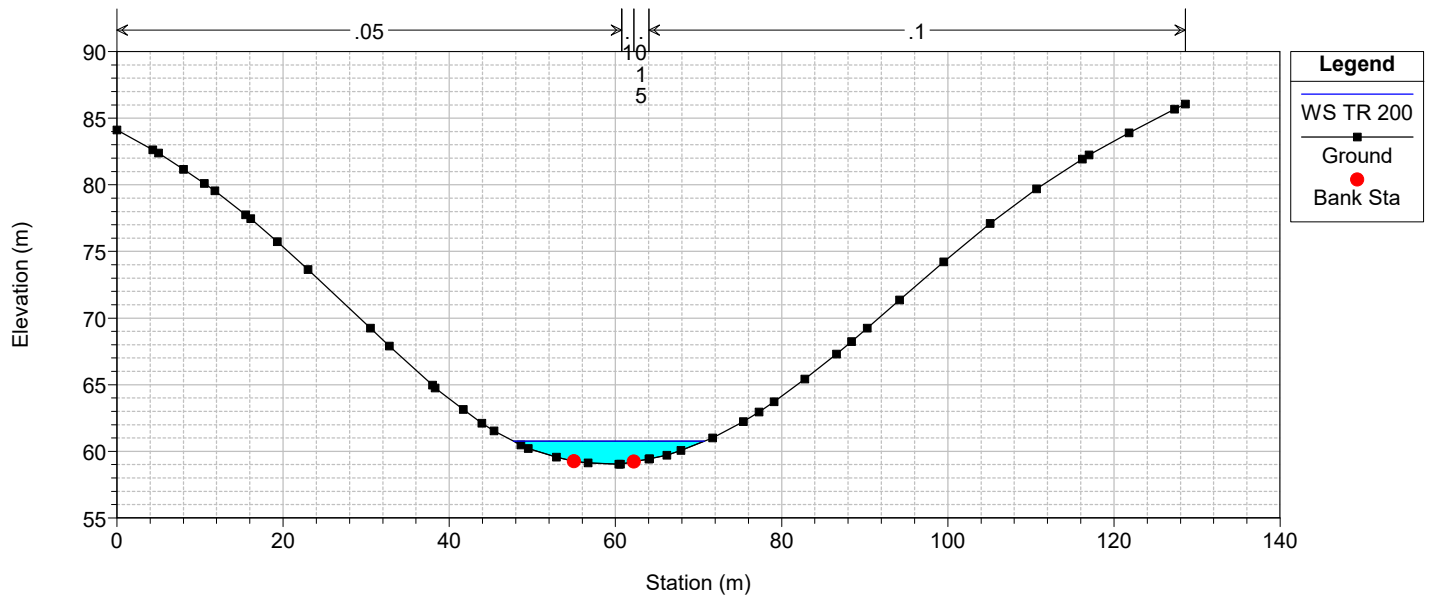
River = Rio Aliderru Reach = Principale RS = 630.7144 SEZIONE N° 21 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO ALIDERRU Plan: aliderru_16092021 9/16/2021

Geom: aliderru_03022021

River = Rio Aliderru Reach = Principale RS = 597.0024 SEZIONE N° 20 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (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
Principale	1616.706	TR 200	22.46	94.60	95.17	95.38	95.89	0.062571	3.76	6.00	16.86	1.97
Principale	1586.706	TR 200	22.46	91.98	92.50	92.83	93.76	0.078401	5.34	4.95	15.12	2.61
Principale	1556.706	TR 200	22.46	89.66	90.25	90.50	91.10	0.091433	4.08	5.53	15.39	2.13
Principale	1526.706	TR 200	22.46	88.82	89.77	89.84	90.18	0.012408	2.97	8.75	15.98	1.10
Principale	1496.706	TR 200	22.46	87.90	88.66	88.99	89.71	0.014149	6.62	7.52	14.32	2.42
Principale	1466.706	TR 200	22.46	86.70	87.31	87.73	88.93	0.050900	6.25	4.89	12.75	2.70
Principale	1436.706	TR 200	22.46	85.98	86.66	86.92	87.47	0.033110	4.07	6.15	14.99	1.81
Principale	1406.706	TR 200	22.46	85.19	85.93	86.13	86.59	0.023641	3.68	6.86	15.77	1.56
Principale	1376.706	TR 200	22.46	84.29	84.97	85.21	85.76	0.031707	4.12	6.22	15.39	1.86
Principale	1346.706	TR 200	22.46	83.38	84.42	84.72	85.32	0.007976	5.92	10.09	16.66	1.89
Principale	1316.706	TR 200	22.46	81.53	82.08	82.56	84.55	0.136706	7.06	3.42	11.10	3.70
Principale	1286.706	TR 200	22.46	79.89	80.67	80.96	81.61	0.055208	4.34	5.39	11.64	1.90
Principale	1256.706	TR 200	22.46	79.15	79.90	80.07	80.47	0.023514	3.41	7.30	15.22	1.40
Principale	1226.706	TR 200	22.46	78.73	79.72	79.72	80.04	0.008215	2.71	10.55	17.94	0.94
Principale	1196.706	TR 200	22.46	78.29	79.02	79.21	79.64	0.020445	4.00	8.07	16.83	1.51
Principale	1166.706	TR 200	22.46	77.60	78.36	78.46	78.77	0.036949	3.17	8.34	16.63	1.17
Principale	1136.706	TR 200	22.46	76.88	77.64	77.72	78.02	0.017631	2.88	8.98	18.06	1.11
Principale	1114.450	TR 200	22.46	75.36	77.59	77.38	77.77	0.001507	2.72	21.52	27.28	0.63
Principale	1107.195		Culvert									
Principale	1099.989	TR 200	22.46	74.92	76.96	76.96	77.24	0.003257	3.30	15.23	25.70	0.81
Principale	1067.367	TR 200	29.07	74.83	76.03	76.30	76.89	0.034303	4.37	7.70	18.56	1.83
Principale	1019.872	TR 200	29.07	73.93	74.57	74.83	75.40	0.028471	4.45	8.22	19.77	1.85
Principale	986.7067	TR 200	29.07	70.59	71.11	71.61	73.67	0.092238	8.47	4.95	14.38	3.82
Principale	956.7067	TR 200	29.07	69.70	70.21	70.49	71.20	0.050502	5.00	7.49	21.99	2.28
Principale	926.7067	TR 200	29.07	68.88	69.55	69.74	70.17	0.020630	4.23	9.85	22.43	1.69
Principale	896.7067	TR 200	29.07	68.44	69.39	69.33	69.64	0.005344	2.56	15.13	24.03	0.86
Principale	866.7067	TR 200	29.07	68.15	69.28		69.48	0.004151	2.52	18.09	24.35	0.76
Principale	836.7067	TR 200	29.07	67.88	69.16		69.34	0.004988	2.19	19.83	24.72	0.64
Principale	806.7067	TR 200	29.07	67.51	68.70	68.70	69.10	0.010951	3.22	13.69	18.95	0.98
Principale	776.7067	TR 200	29.07	66.97	67.89	68.09	68.59	0.026476	4.07	9.28	14.99	1.41
Principale	746.7067	TR 200	29.07	65.92	66.89	67.08	67.57	0.044509	4.00	8.31	13.01	1.33
Principale	716.7067	TR 200	29.07	64.04	64.85	65.24	66.15	0.046299	5.17	6.41	12.00	1.98
Principale	686.7067	TR 200	29.07	60.73	61.39	61.85	63.17	0.326975	6.00	4.96	10.48	2.66
Principale	656.7067	TR 200	29.07	59.75	60.89	60.89	61.24	0.019315	2.83	11.52	15.79	0.89
Principale	630.7144	TR 200	29.07	59.28	60.82	60.33	60.93	0.003133	1.42	21.24	21.37	0.38
Principale	597.0024	TR 200	29.07	59.03	60.76		60.84	0.001873	1.09	25.83	22.95	0.27

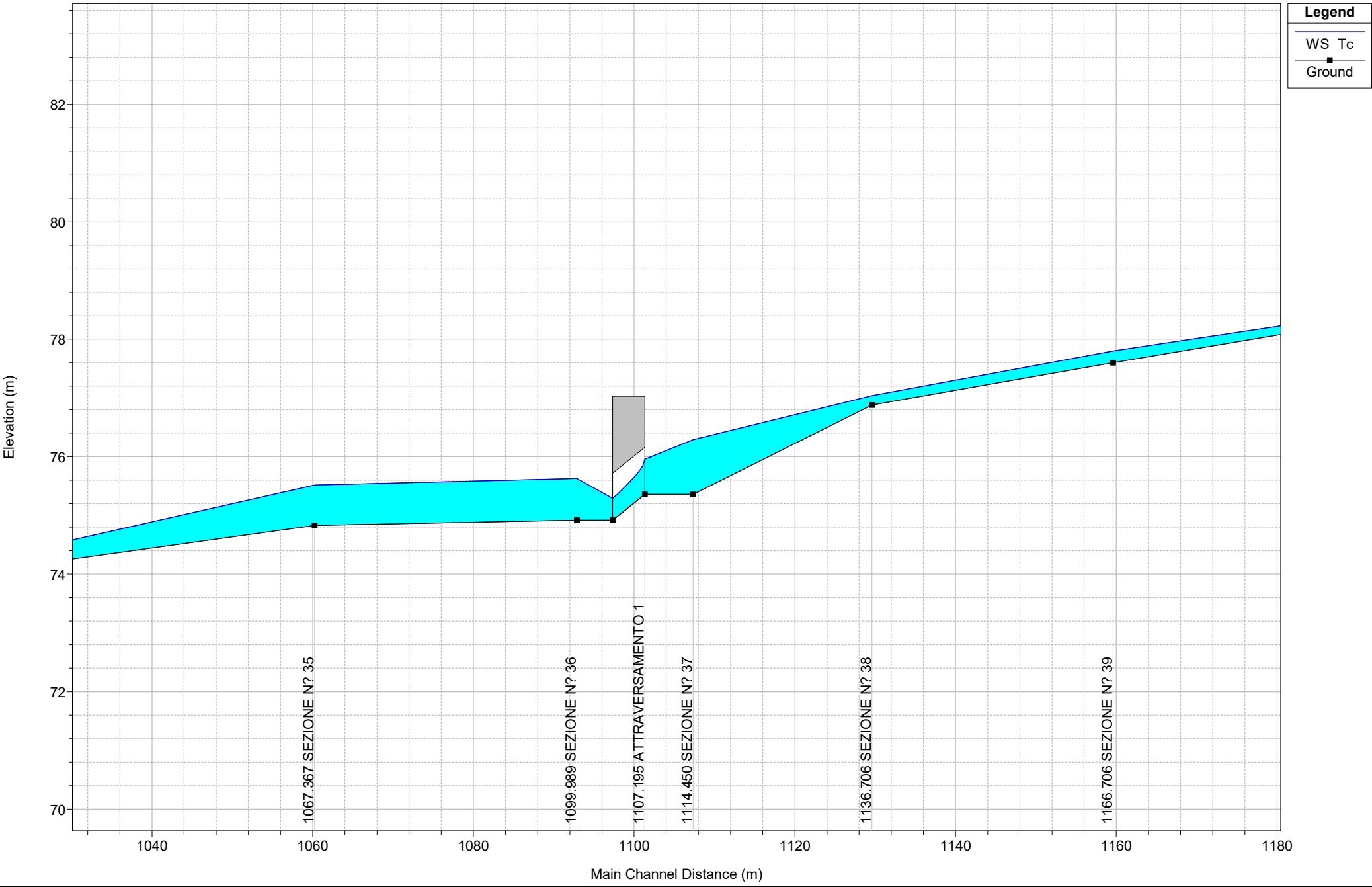
Reach	River Sta	Profile	E.G. US.	W.S. US.	E.G. IC	E.G. OC	Min El Weir Flow	Q Culv Group	Q Weir	Delta WS	Culv Vel US	Culv Vel DS
			(m)	(m)	(m)	(m)	(m)	(m3/s)	(m3/s)	(m)	(m/s)	(m/s)
Principale	1107.195 Culvert #1	TR 200	77.77	77.59	77.77	77.77	77.03	1.78	20.68	0.63	3.54	3.54

CALCOLO IDROLOGICO PORTATE DI PIENA

ALIDERRU 1			
		TR (anni)	1
Lunghezza asta	L	m	2731
Curve Number	CN	-	94.10
Pend.za media bac.	i _{bac}	-	0.1701
Area bacino	A	kmq	1.5
Altitudine massima	Hmax	m slm	213.2
Altitudine media	Hmed	m slm	155.42
Altitudine minima	Hmin	m slm	77.38
Pend.za media asta	iret	m/m	0.0497
	SCS	(ore)	0.434
	GIANDOTTI	(ore)	1.273
	PASINI	(ore)	0.775
	VAPI	(ore)	2.382
	KIRPICH	(ore)	0.284
	VIPARELLI	(ore)	0.759
	tc adott.	SCS (ore)	0.434
Tempi di ritorno	T	(anni)	1
Dati pluviometrici	Pgiorn.	(mm)	50
	Sottozona		2
Altezza di pioggia	n1	-	0.31570972
	a1	-	20.6914142
	n2 (ADOTTATO)	-	-0.18676
	a2 (ADOTTATO)	-	0.44182
	n (ADOTTATO)	-	0.12894972
	a (ADOTTATO)	-	9.14188063
	h (ADOTTATO)	(mm)	8.209
	Coef.f.Ragg (ADOTTATO)	-	0.938
	h r (ADOTTATO)	(mm)	7.701
	S	(mm)	15.926
	Ia	(mm)	3.185
	Pnetta (ADOTTATO)	(mm)	0.997
	Coef.defl. (SCS)		0.532
	Coef.defl. (GIANDOTTI)		0.663
	Coef.defl. (PASINI)		0.611
	Coef.defl. (VAPI)		0.713
	Coef.defl. (KIRPICH)		0.470
	Coef.defl. (VIPARELLI)		0.608
	Coef.defl. (ADOTTATO)	-	0.122
PORTATE DI PIENA	Qpicco (SCS)	(mc/s)	16.694
	Qpicco (GIANDOTTI)	(mc/s)	11.018
	Qpicco (PASINI)	(mc/s)	13.846
	Qpicco (VAPI)	(mc/s)	7.651
	Qpicco (KIRPICH)	(mc/s)	18.680
	Qpicco (VIPARELLI)	(mc/s)	13.950
	Qpicco (ADOTTATO)	(mc/s)	0.958

Comune di Sassari (SS)
 VERIFICHE DI SICUREZZA IDRAULICA OPERE INTERFERENTI CON IL RETICOLO IDROGRAFICO
 Strade comunali - **ATTRAVERSAMENTO C01**

	River Sta	Profile	Culv Inv El DS	Culv Inv El US	W.S.	Q Culv	Culv Vel US	Culv Vel DS	QUOTA INTRADOS SO	FRANCHI DISPONIBILI	FRANCHI RICHIESTI	50% di FRANCHI RICHIESTI	VERIFICA	Deficit
			(m slm)	(m slm)	(m slm)	(m³/s)	(m/s)	(m/s)	(m slm)	(m)	(m)	(m)		(m)
UPSTREAM	1107.195 Culv	TR 200 ANNI		75.36	77.59	22.46	3.54		76.16	-1.43	1.299		NON VERIF.	2.72918705
	1107.195 Culv	Tr critico		75.36	76.29	0.96	2.38		76.16	-0.13	1.000	0.500	NON VERIF.	0.630
DOWNSTREAM	1107.195 Culv	TR 200 ANNI	74.92		76.96	22.46		3.54	75.72	-1.24	1.243		NON VERIF.	2.48260855
	1107.195 Culv	Tr critico	74.92		75.63	0.96		4.24	75.72	0.09	1.000	0.500	NON VERIF.	0.410



COMUNE DI SASSARI

VERIFICHE DI SICUREZZA IDRAULICA OPERE INTERFERENTI CON IL RETICOLO IDROGRAFICO – ATTRAVERSAMENTI STRADE COMUNALI

Area di indagine: **TERRITORIO COMUNALE**

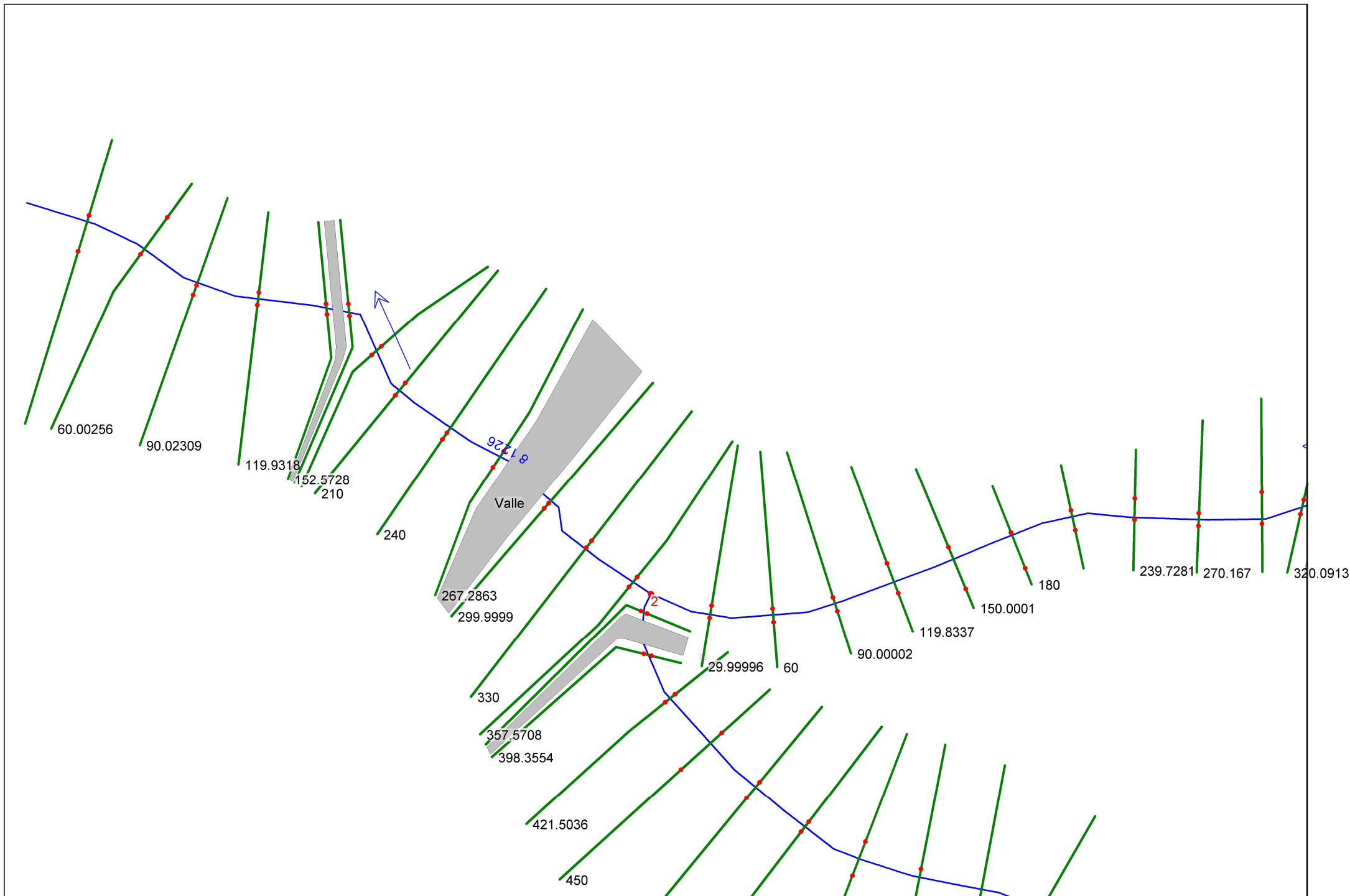
SIMULAZIONI IN MOTO PERMANENTE

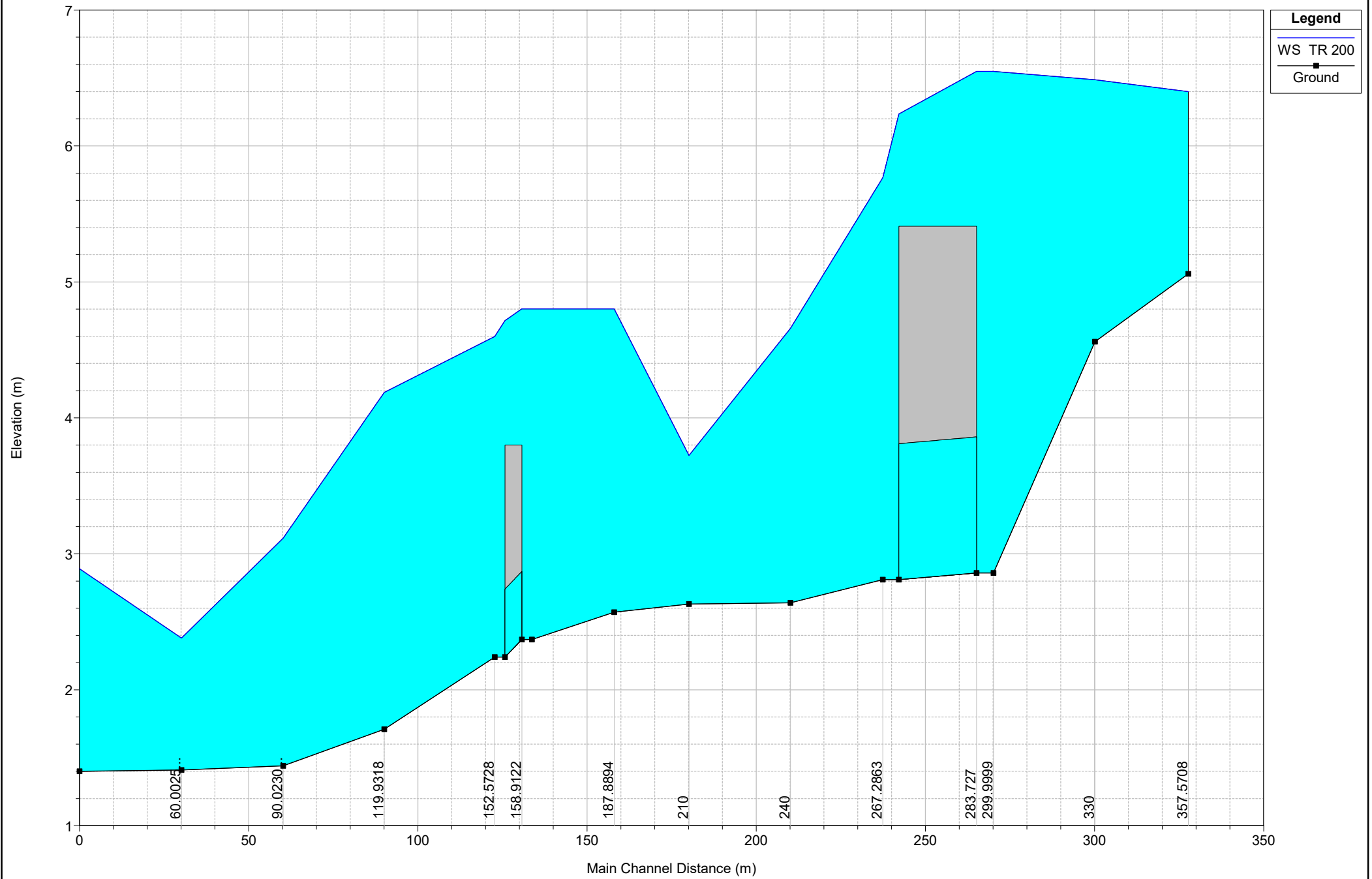
ATTRAVERSAMENTO C02 e C03 sul Fiume 75605

- Schema planimetrico del modello matematico;
- Profili longitudinali con livelli idrici per il tempo di ritorno di 200 anni;
- Sezioni trasversali con livelli idrici per il tempo di ritorno di 200 anni;
- Tabulati numerici di output per il tempo di ritorno di 200 anni;
- Calcolo della portata critica;
- Profilo longitudinale del livello idrico per il tempo di ritorno critico TC;
- Verifica dei franchi idraulici e della portata critica;

River	Reach	RS	PORTATE mc/s			
			TR 50	TR 100	TR 200	TR 500
75626	Monte	719.9999	10.338	12.329	14.358	17.116
75626	Monte	300.1927	18.045	21.596	25.212	30.111
81226	Monte	1548.336	42.953	52.001	61.226	73.644
81226	Valle	357.5708	58.12	70.101	82.279	98.601

River	Reach	PROFILI	condizioni al contorno	
			upstream	downstream
75626	Monte	all	Critical Depth	Junction = 2
81226	Monte	all	Critical Depth	Junction = 2
81226	Valle	all	Junction = 2	Known WS

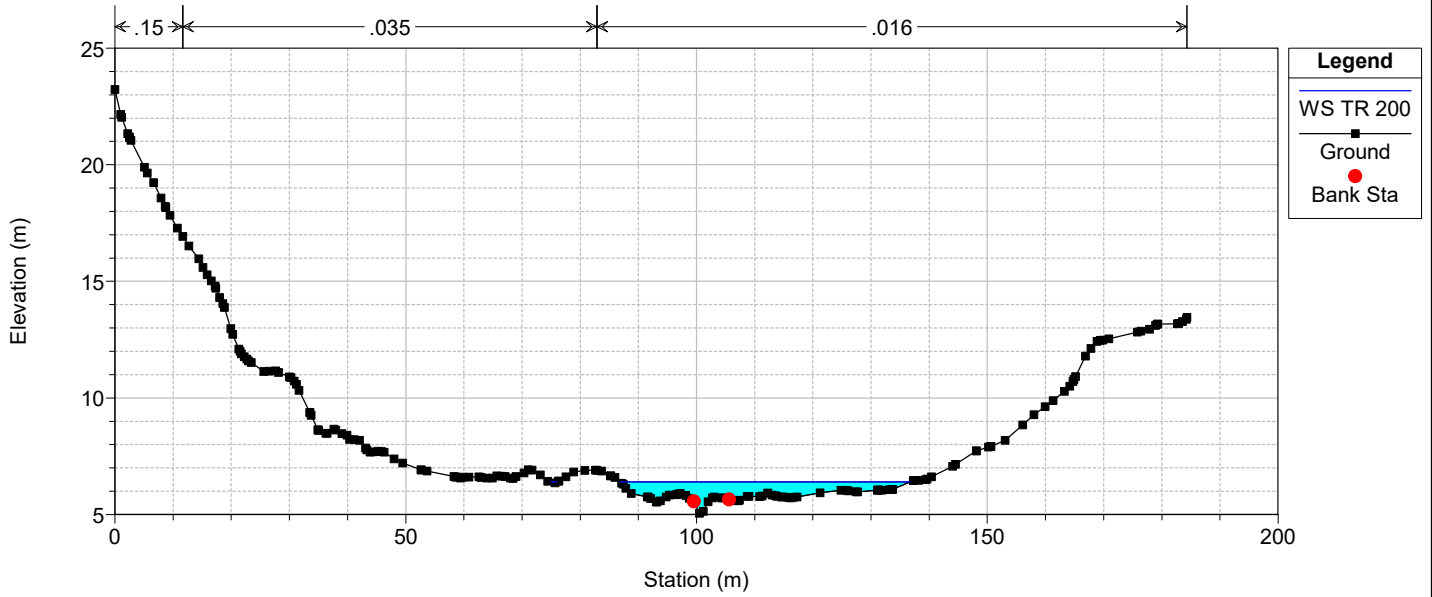




ppalmas06102016 Plan: 09022021 2/10/2021

Geom: ppalmas06102016

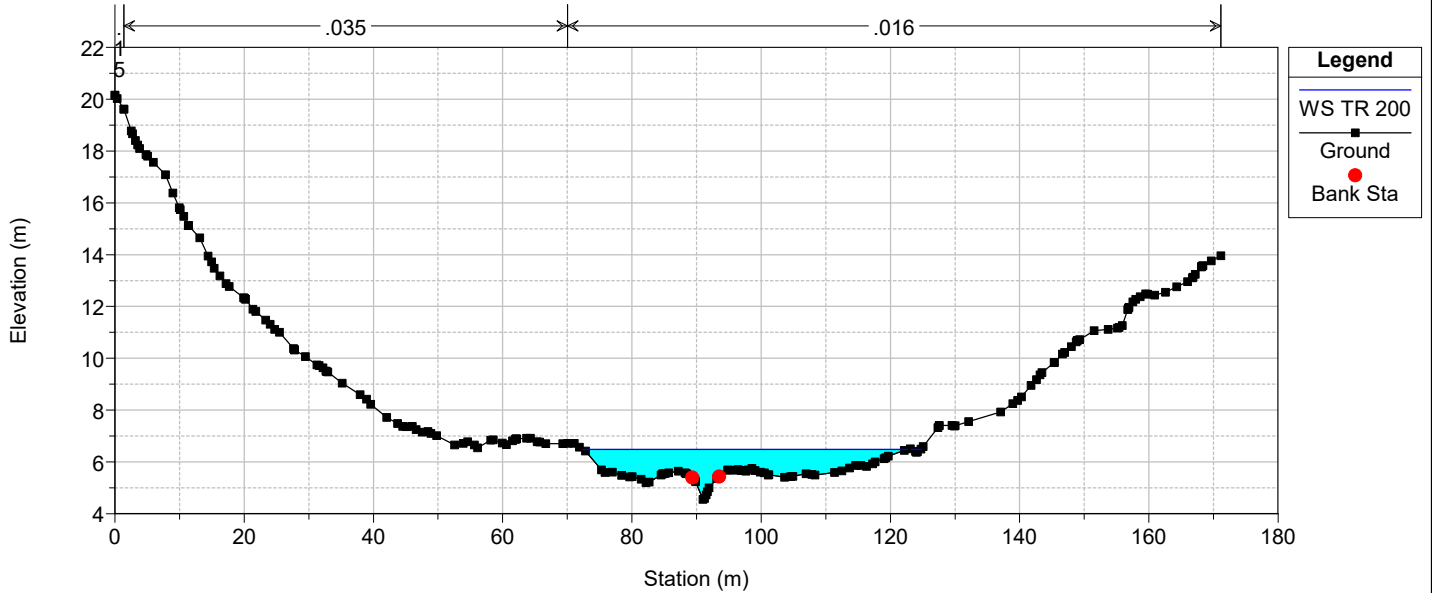
River = 81226 Reach = Valle RS = 357.5708 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



ppalmas06102016 Plan: 09022021 2/10/2021

Geom: ppalmas06102016

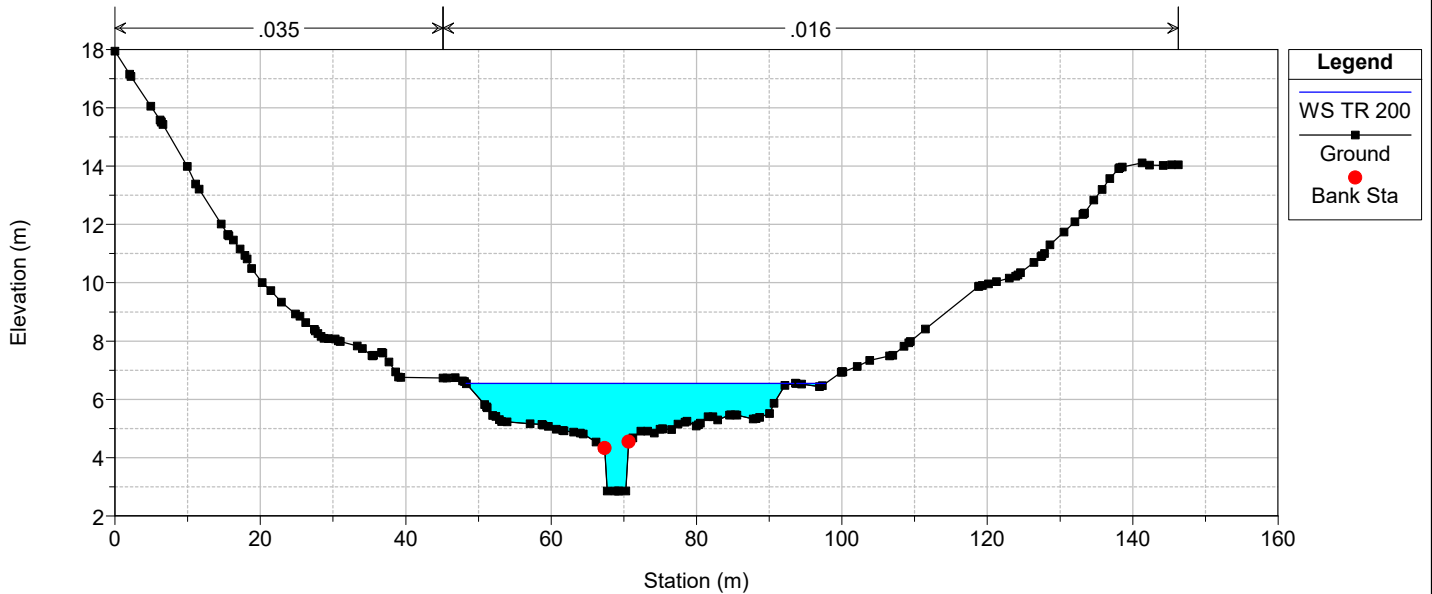
River = 81226 Reach = Valle RS = 330 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



ppalmas06102016 Plan: 09022021 2/10/2021

Geom: ppalmas06102016

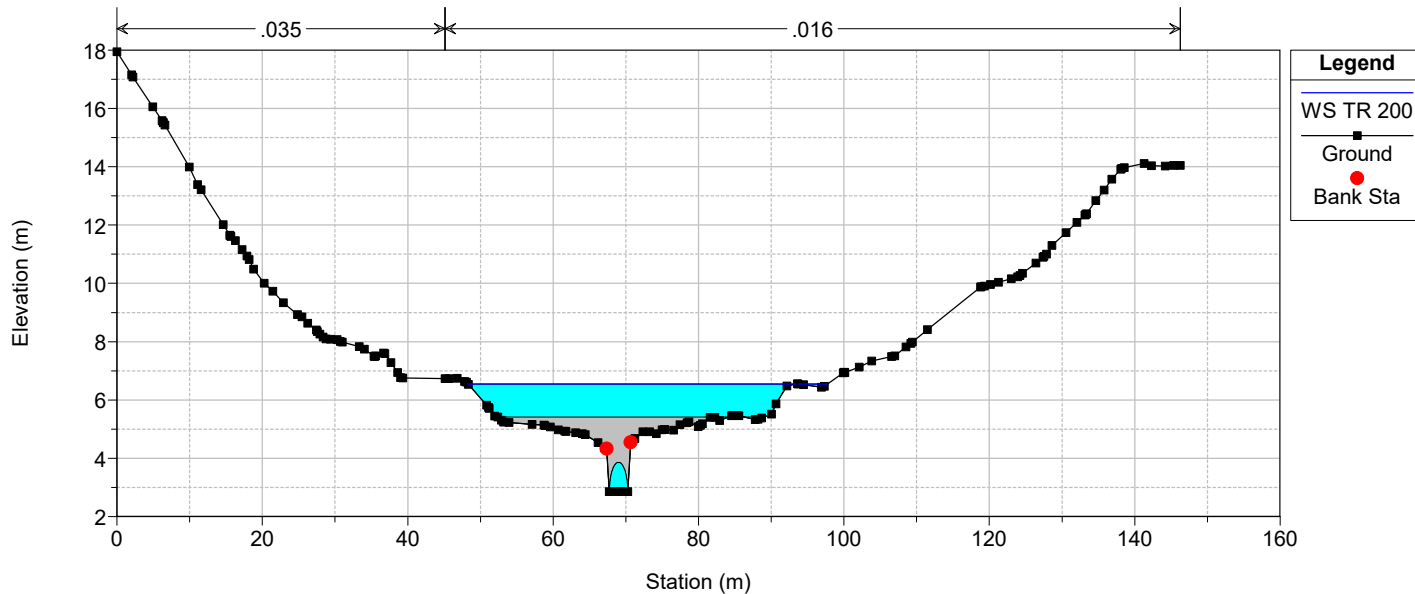
River = 81226 Reach = Valle RS = 299.9999 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



ppalmas06102016 Plan: 09022021 2/10/2021

Geom: ppalmas06102016

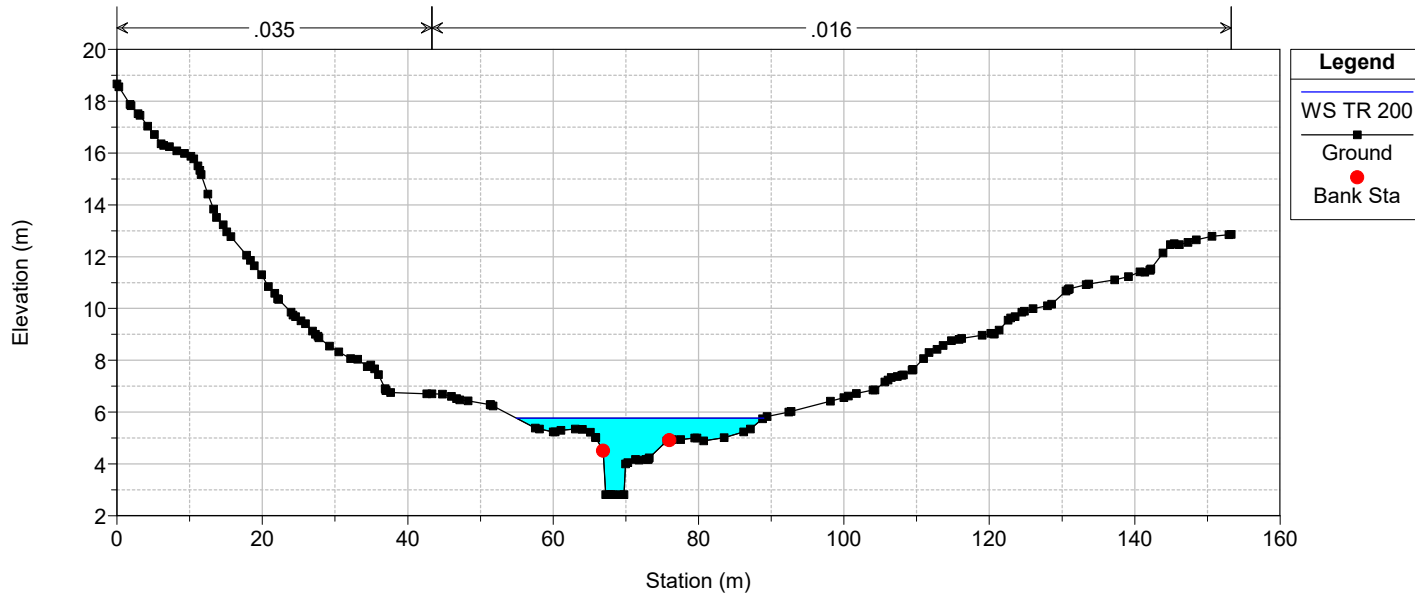
River = 81226 Reach = Valle RS = 283.727 Culv COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



ppalmas06102016 Plan: 09022021 2/10/2021

Geom: ppalmas06102016

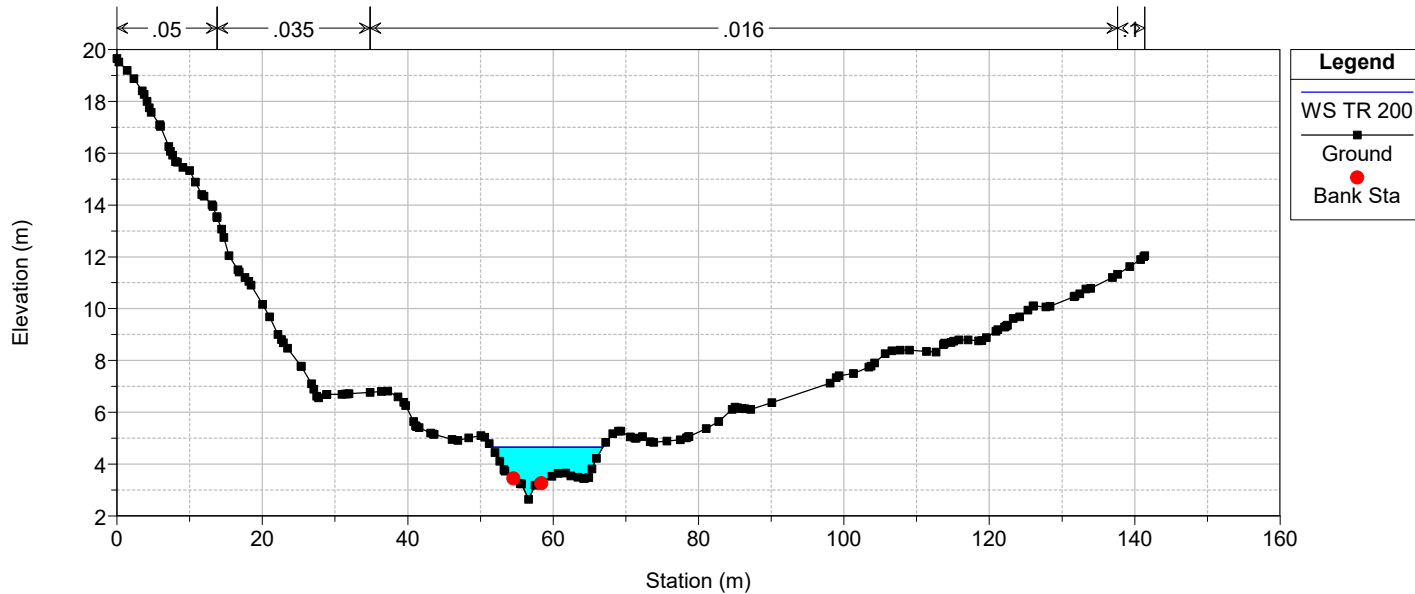
River = 81226 Reach = Valle RS = 267.2863 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



ppalmas06102016 Plan: 09022021 2/10/2021

Geom: ppalmas06102016

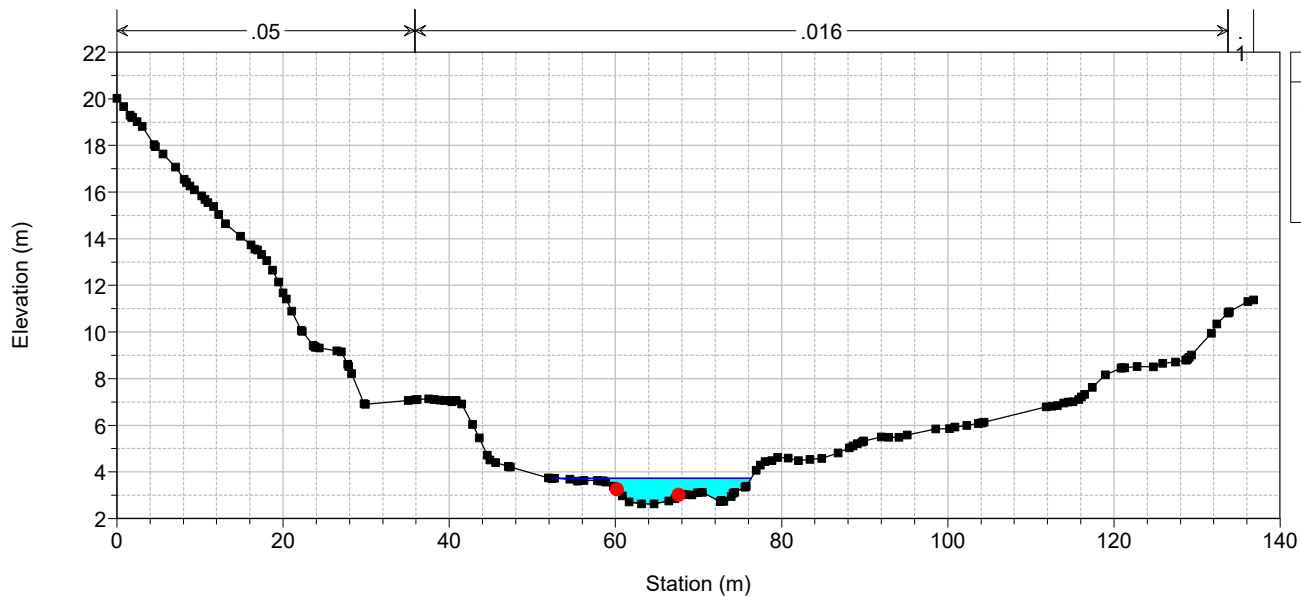
River = 81226 Reach = Valle RS = 240 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



ppalmas06102016 Plan: 09022021 2/10/2021

Geom: ppalmas06102016

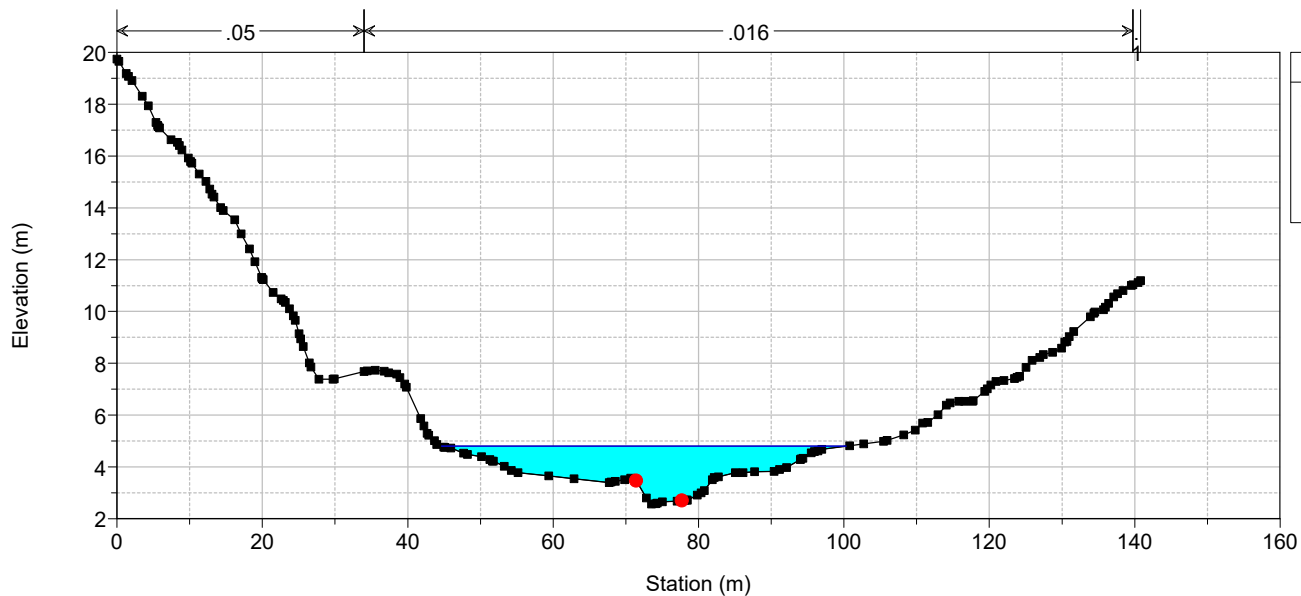
River = 81226 Reach = Valle RS = 210 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



ppalmas06102016 Plan: 09022021 2/10/2021

Geom: ppalmas06102016

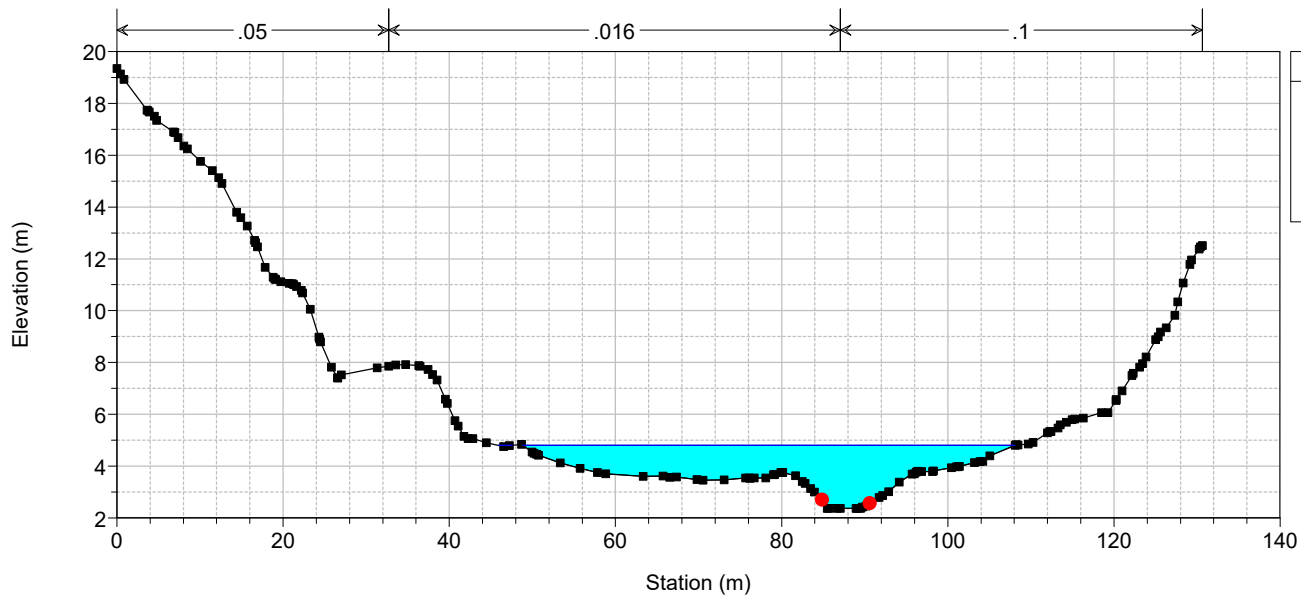
River = 81226 Reach = Valle RS = 187.8894 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



ppalmas06102016 Plan: 09022021 2/10/2021

Geom: ppalmas06102016

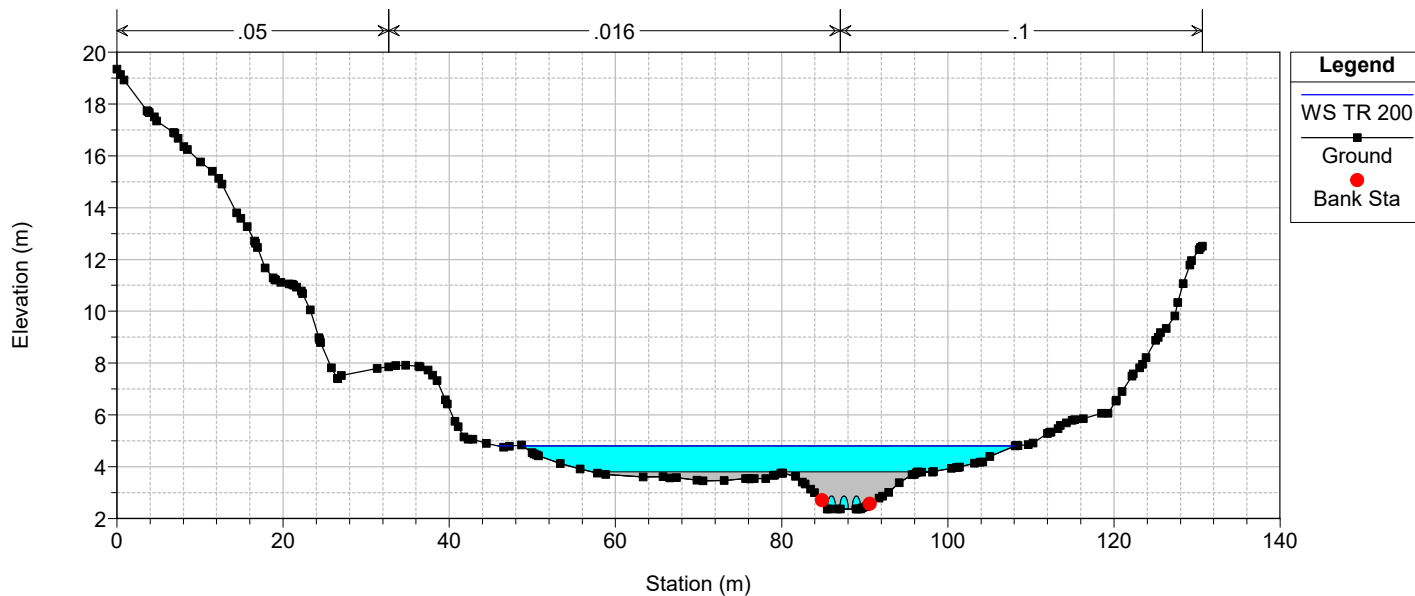
River = 81226 Reach = Valle RS = 163.5657 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



ppalmas06102016 Plan: 09022021 2/10/2021

Geom: ppalmas06102016

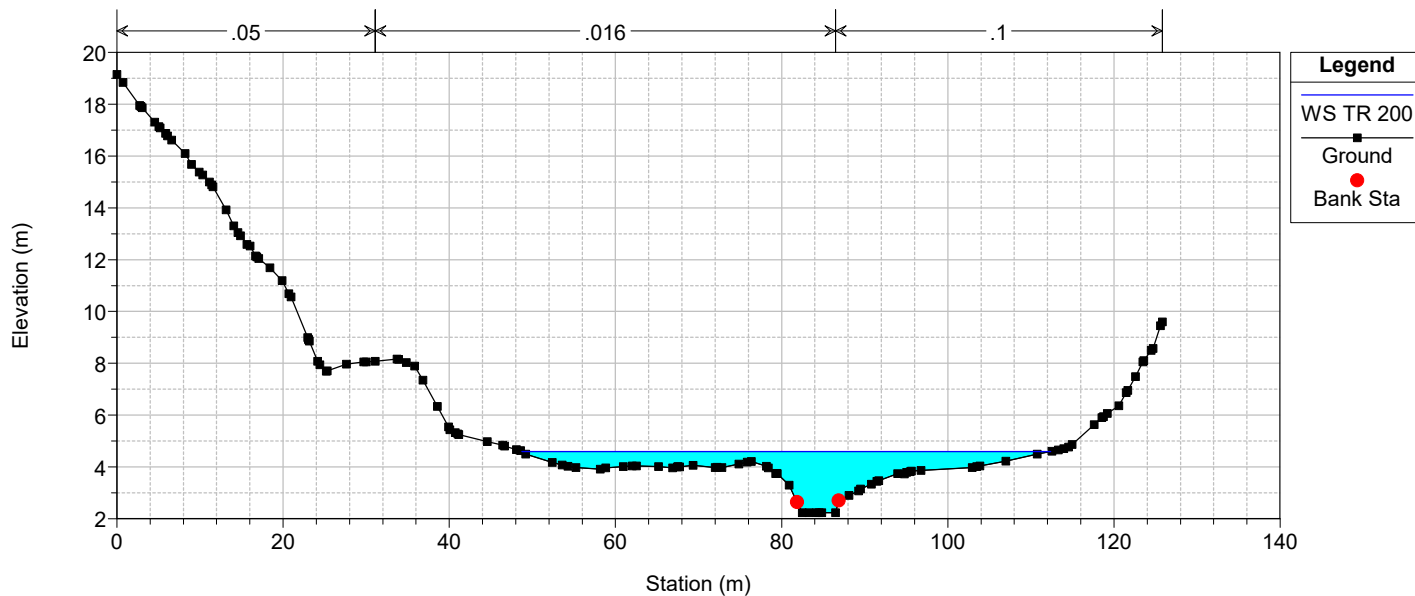
River = 81226 Reach = Valle RS = 158.9122 Culv COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



ppalmas06102016 Plan: 09022021 2/10/2021

Geom: ppalmas06102016

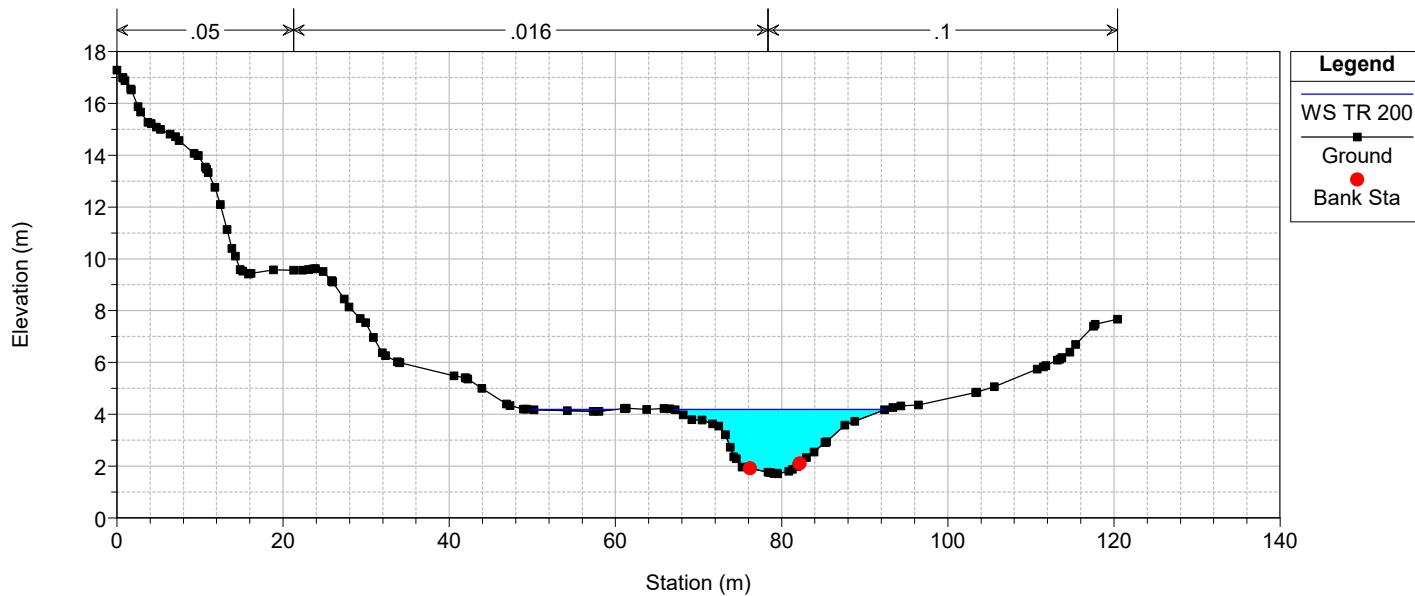
River = 81226 Reach = Valle RS = 152.5728 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



ppalmas06102016 Plan: 09022021 2/10/2021

Geom: ppalmas06102016

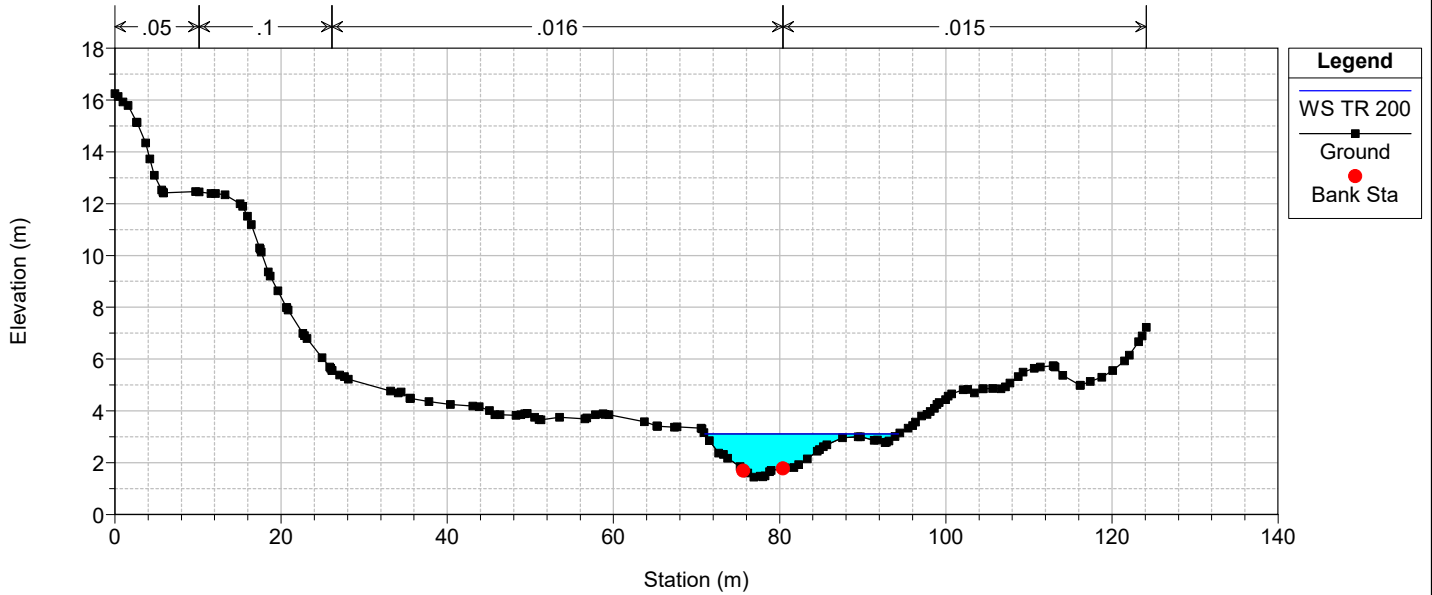
River = 81226 Reach = Valle RS = 119.9318 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



ppalmas06102016 Plan: 09022021 2/10/2021

Geom: ppalmas06102016

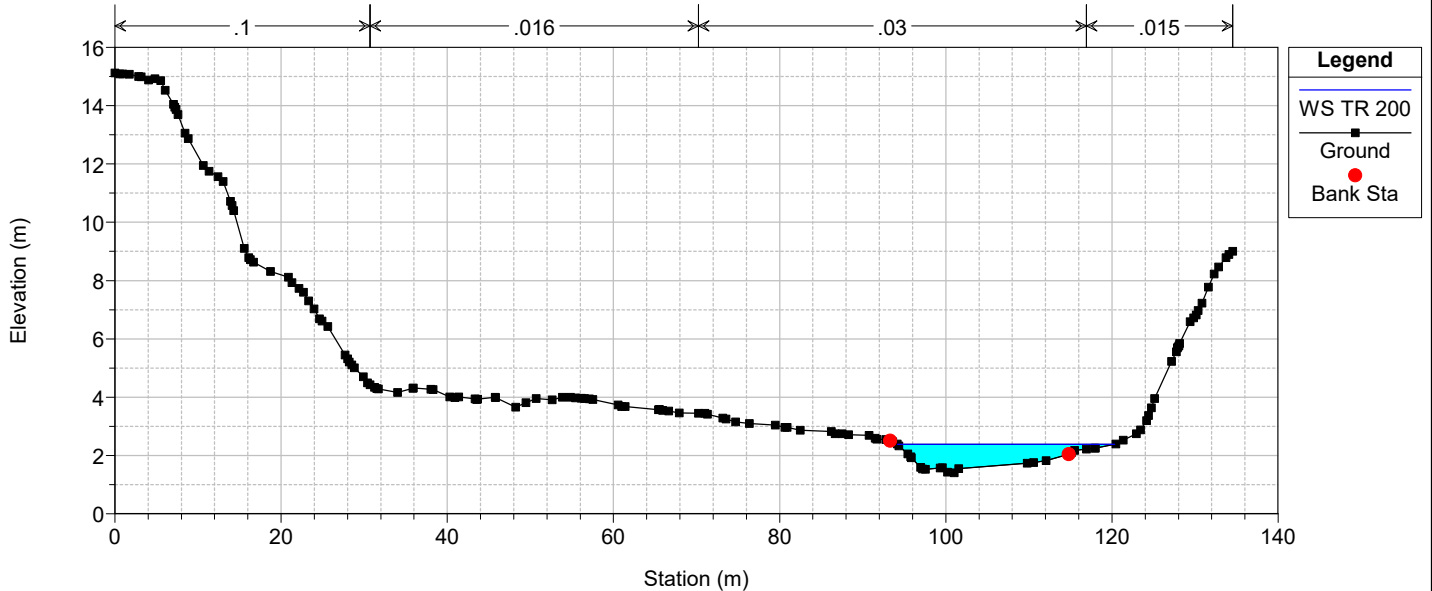
River = 81226 Reach = Valle RS = 90.02309 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



ppalmas06102016 Plan: 09022021 2/10/2021

Geom: ppalmas06102016

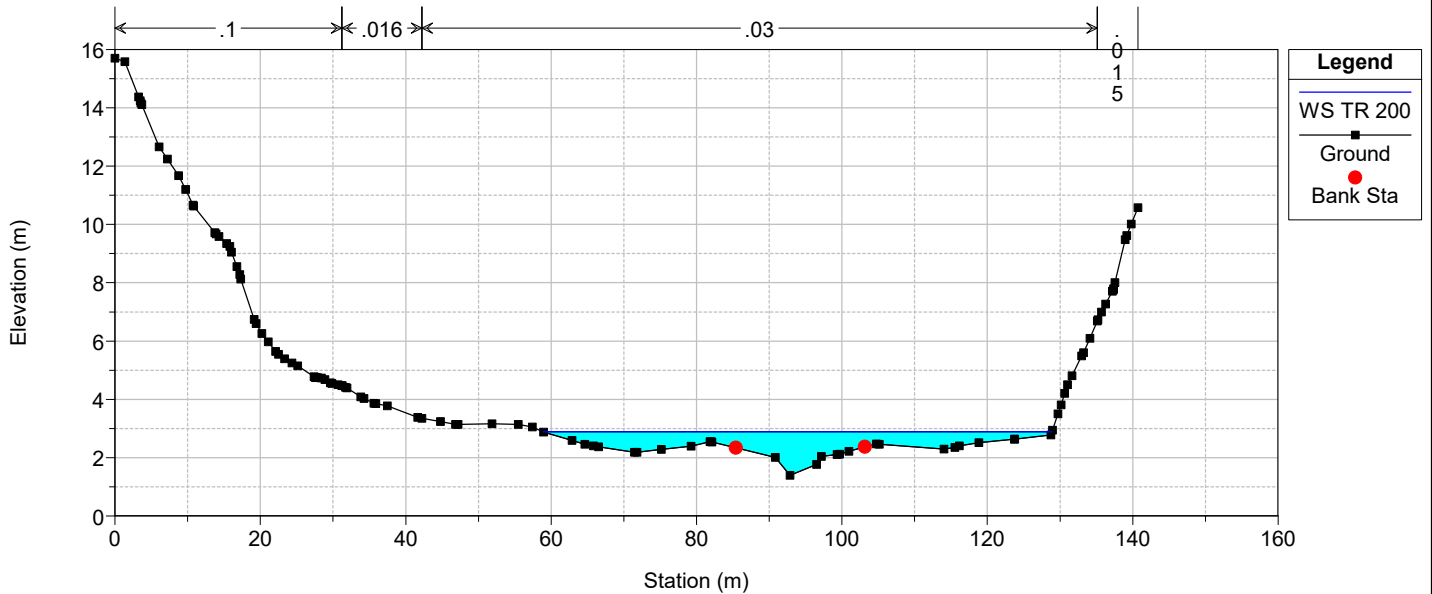
River = 81226 Reach = Valle RS = 60.00256 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



ppalmas06102016 Plan: 09022021 2/10/2021

Geom: ppalmas06102016

River = 81226 Reach = Valle RS = 29.85536 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (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
Valle	357.5708	TR 200	82.28	5.06	6.40	6.54	6.88	0.004820	3.86	27.64	50.90	1.32
Valle	330	TR 200	82.28	4.56	6.49	6.27	6.68	0.001104	2.50	43.41	51.76	0.66
Valle	299.9999	TR 200	82.28	2.86	6.55	5.81	6.63	0.000265	1.61	65.22	49.04	0.27
Valle	283.727		Culvert									
Valle	267.2863	TR 200	82.28	2.81	5.77	5.77	6.21	0.001664	3.32	31.39	34.06	0.77
Valle	240	TR 200	82.28	2.64	4.66	5.10	6.04	0.005799	6.03	16.50	15.35	1.54
Valle	210	TR 200	82.28	2.63	3.72	4.28	5.73	0.012934	6.86	13.91	23.58	2.23
Valle	187.8894	TR 200	82.28	2.57	4.80	4.31	4.92	0.000438	2.06	58.13	55.63	0.46
Valle	163.5657	TR 200	82.28	2.37	4.80	4.18	4.91	0.000542	1.22	70.60	60.86	0.25
Valle	158.9122		Culvert									
Valle	152.5728	TR 200	82.28	2.24	4.60		4.87	0.002478	2.73	50.21	63.64	0.57
Valle	119.9318	TR 200	82.28	1.71	4.19	4.19	4.74	0.004273	3.33	31.59	35.50	0.69
Valle	90.02309	TR 200	82.28	1.44	3.12	3.59	4.50	0.005842	6.26	17.91	23.32	1.62
Valle	60.00256	TR 200	82.28	1.41	2.38	2.86	4.08	0.053288	5.83	14.49	26.14	2.28
Valle	29.85536	TR 200	82.28	1.40	2.89	2.90	3.16	0.007831	2.73	38.72	70.01	0.92

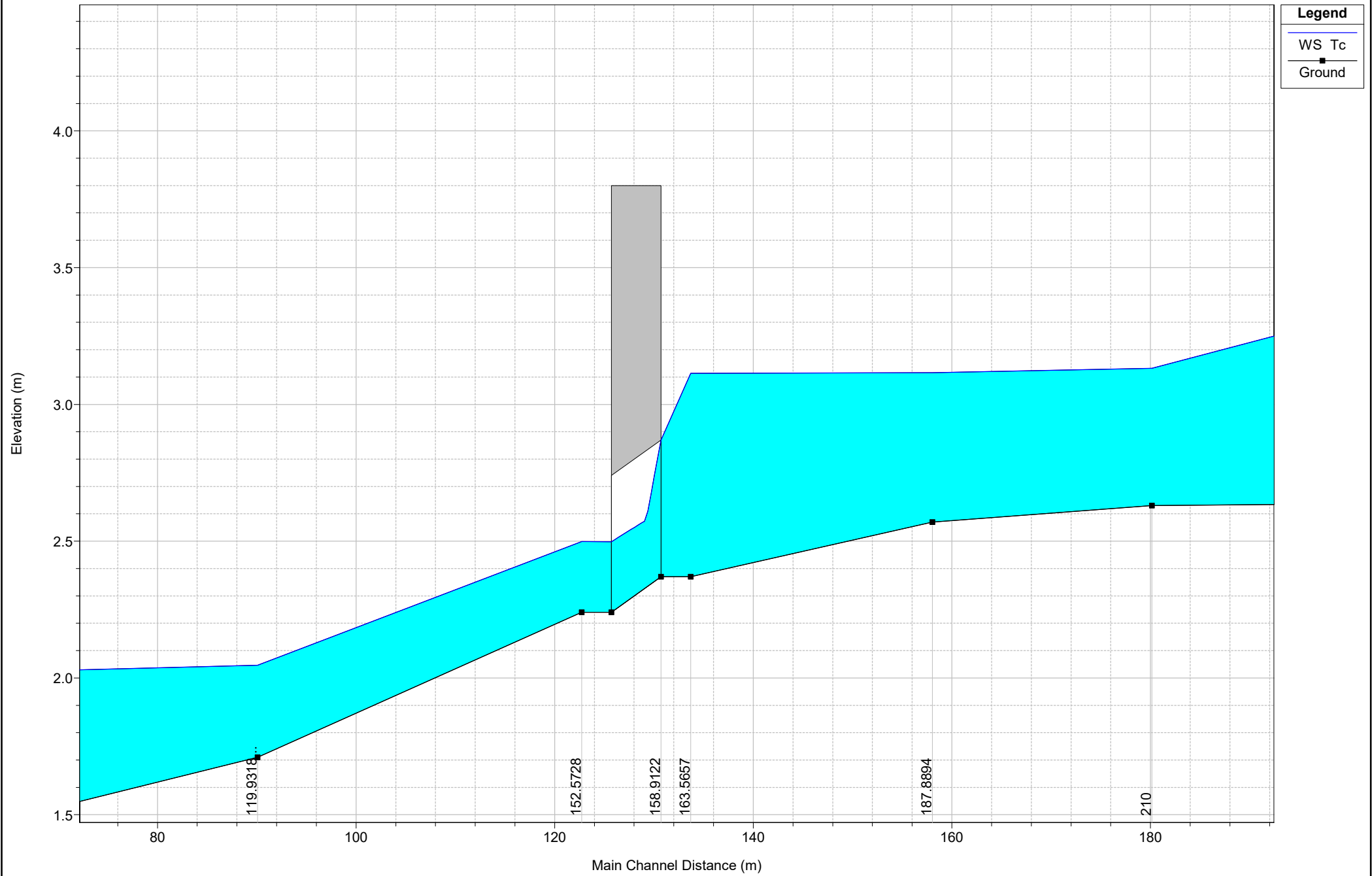
Reach	River Sta	Profile	E.G. US.	W.S. US.	E.G. IC	E.G. OC	Min El Weir Flow	Q Culv Group	Q Weir	Delta WS	Culv Vel US	Culv Vel DS
			(m)	(m)	(m)	(m)	(m)	(m3/s)	(m3/s)	(m)	(m/s)	(m/s)
Valle	283.727 Culvert #1	TR 200	6.63	6.55	6.59	6.63	5.41	5.94	76.41	0.78	3.03	3.03
Valle	158.9122 Culvert #1	TR 200	4.91	4.80	4.90	4.91	3.80	1.31	80.97	0.20	1.11	1.11

CALCOLO IDROLOGICO PORTATE DI PIENA

sub. 4	TR (anni)		1
Lunghezza asta	L	m	6420
Curve Number	CN	-	92.51
Pend.za media bac.	i _{bac}	-	0.295
Area bacino	A	kmq	8.54
Altitudine massima	Hmax	m slm	427
Altitudine media	Hmed	m slm	194
Altitudine minima	Hmin	m slm	0.4
Pend.za media asta	iret	m/m	0.0764
Tempi di corrivazione	SCS	(ore)	1.175
	GIANDOTTI	(ore)	1.915
	PASINI	(ore)	1.484
	VAPI	(ore)	0.561
	KIRPICH	(ore)	0.889
	VIPARELLI	(ore)	1.189
	tc adott.	SCS (ore)	1.175
Tempi di ritorno	T	(anni)	1
Dati pluviometrici	Pgiorn.	(mm)	50
	Sottozona		2
Altezza di pioggia	n1	-	0.31570972
	a1	-	20.6914142
	n2 (ADOTTATO)	-	-0.0056593
	a2 (ADOTTATO)	-	0.44182
	n (ADOTTATO)	-	0.31005042
	a (ADOTTATO)	-	9.14188063
	h (ADOTTATO)	(mm)	9.611
	S	(mm)	20.565
	la	(mm)	4.113
	Pnetta (ADOTTATO)	(mm)	1.160
	Coef.defl. (ADOTTATO)	-	0.121
	Coef.Ragg (ADOTTATO)	-	0.921
PORTATE DI PIENA	Qpicco (SCS)	(mc/s)	58.120
	Qpicco (GIANDOTTI)	(mc/s)	44.533
	Qpicco (PASINI)	(mc/s)	51.238
	Qpicco (VAPI)	(mc/s)	75.226
	Qpicco (KIRPICH)	(mc/s)	65.751
	Qpicco (VIPARELLI)	(mc/s)	57.756
	Qpicco (ADOTTATO)	(mc/s)	2.156

Comune di Sassari (SS)
 VERIFICHE DI SICUREZZA IDRAULICA OPERE INTERFERENTI CON IL RETICOLO IDROGRAFICO
 Strade comunali - **ATTRAVERSAMENTO C02**

	River Sta	Profile	Culv Inv El DS	Culv Inv El US	W.S.	Q Culv	Culv Vel US	Culv Vel DS	QUOTA INTRADOS SO	FRANCHI DISPONIBILI	FRANCHI RICHIESTI	50% di FRANCHI RICHIESTI	VERIFICA	Deficit
			(m slm)	(m slm)	(m slm)	(m³/s)	(m/s)	(m/s)	(m slm)	(m)	(m)	(m)		(m)
UPSTREAM	158.9122 Culv	TR 200 ANNI		2.37	4.8	82.28	1.11		2.87	-1.93	1.356		NON VERIF.	3.28619578
	158.9122 Culv	Tr critico		2.37	3.11	2.16	1.83		2.87	-0.24	1.000	0.500	NON VERIF.	0.740
DOWNSTREAM	158.9122 Culv	TR 200 ANNI	2.24		4.6	82.28		1.11	2.74	-1.86	1.337		NON VERIF.	3.19651936
	158.9122 Culv	Tr critico	2.24		2.54	2.16		2.92	2.74	0.2	1.000	0.500	NON VERIF.	0.300

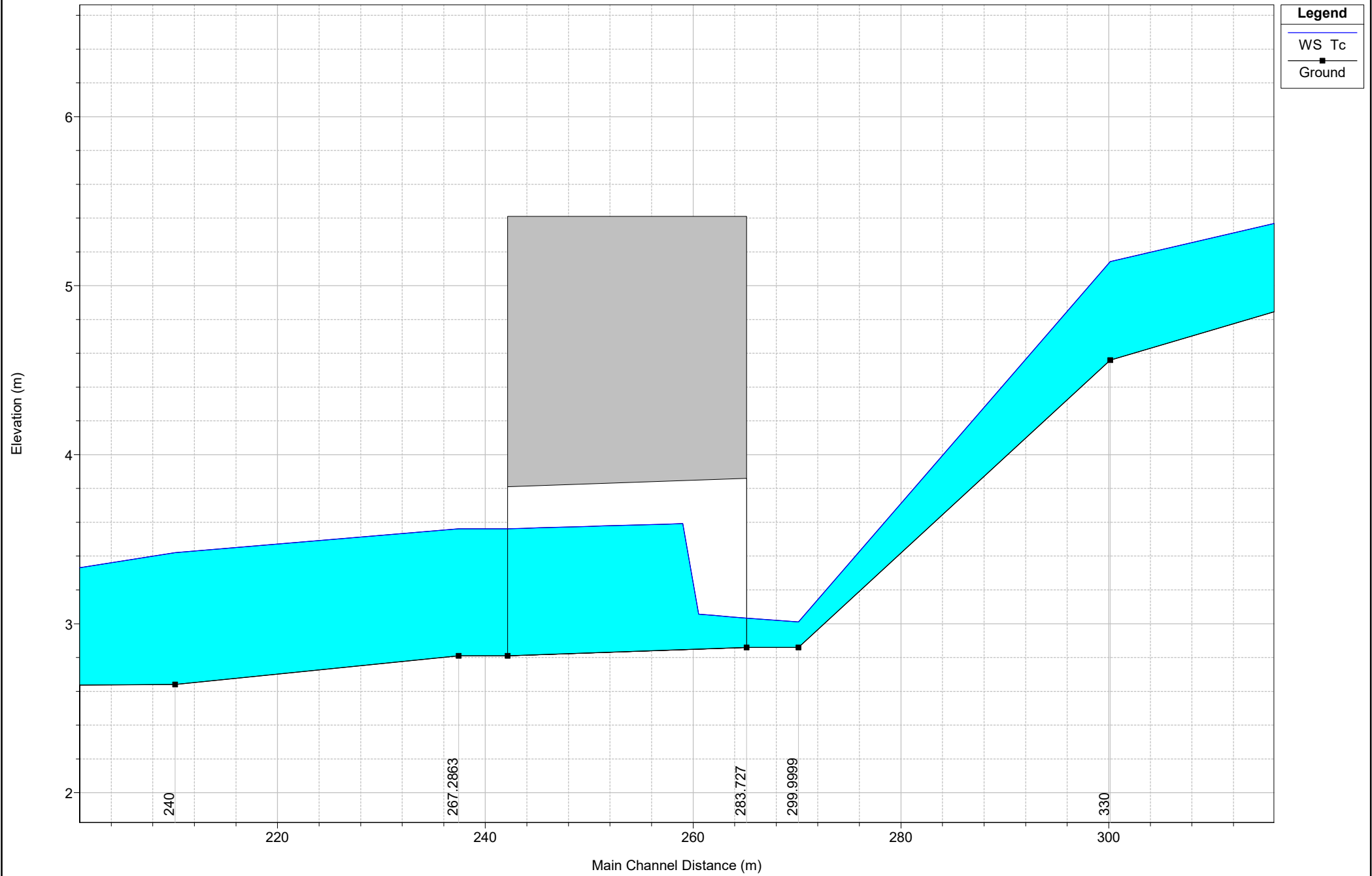


CALCOLO IDROLOGICO PORTATE DI PIENA

C03 - PORTO PALMAS			
sub. 4	TR (anni)		1
Lunghezza asta	L	m	6420
Curve Number	CN	-	92.51
Pend.za media bac.	i _{bac}	-	0.295
Area bacino	A	kmq	8.54
Altitudine massima	Hmax	m slm	427
Altitudine media	Hmed	m slm	194
Altitudine minima	Hmin	m slm	0.4
Pend.za media asta	iret	m/m	0.0764
Tempi di corrivazione	SCS	(ore)	1.175
	GIANDOTTI	(ore)	1.915
	PASINI	(ore)	1.484
	VAPI	(ore)	0.561
	KIRPICH	(ore)	0.889
	VIPARELLI	(ore)	1.189
	tc adott.	SCS	
		(ore)	1.175
Tempi di ritorno	T	(anni)	1
Dati pluviometrici	Pgiorn.	(mm)	50
	Sottozona		2
Altezza di pioggia	n1	-	0.31570972
	a1	-	20.6914142
	n2 (ADOTTATO)	-	-0.0056593
	a2 (ADOTTATO)	-	0.44182
	n (ADOTTATO)	-	0.31005042
	a (ADOTTATO)	-	9.14188063
	h (ADOTTATO)	(mm)	9.611
	S	(mm)	20.565
	la	(mm)	4.113
	Pnetta (ADOTTATO)	(mm)	1.160
	Coef.defl. (ADOTTATO)	-	0.121
	Coeff.Ragg (ADOTTATO)	-	0.921
PORTATE DI PIENA	Qpicco (SCS)	(mc/s)	58.120
	Qpicco (GIANDOTTI)	(mc/s)	44.533
	Qpicco (PASINI)	(mc/s)	51.238
	Qpicco (VAPI)	(mc/s)	75.226
	Qpicco (KIRPICH)	(mc/s)	65.751
	Qpicco (VIPARELLI)	(mc/s)	57.756
	Qpicco (ADOTTATO)	(mc/s)	2.156

Comune di Sassari (SS)
 VERIFICHE DI SICUREZZA IDRAULICA OPERE INTERFERENTI CON IL RETICOLO IDROGRAFICO
 Strade comunali - **ATTRAVERSAMENTO C03**

	River Sta	Profile	Culv Inv El DS	Culv Inv El US	W.S.	Q Culv	Culv Vel US	Culv Vel DS	QUOTA INTRADOS SO	FRANCHI DISPONIBILI	FRANCHI RICHIESTI	50% di FRANCHI RICHIESTI	VERIFICA	Deficit
			(m slm)	(m slm)	(m slm)	(m³/s)	(m/s)	(m/s)	(m slm)	(m)	(m)	(m)		(m)
UPSTREAM	283.727 Culve	TR 200 ANNI		2.86	6.55	82.28	3.03		3.86	-2.69	1.500		NON VERIF.	4.19
	283.727 Culve	Tr critico		2.86	3.01	2.16	5.02		3.86	0.85	1.000	0.500	OK	OK
DOWNSTREAM	283.727 Culve	TR 200 ANNI	2.81		5.77	82.28		3.03	3.81	-1.96	1.497		NON VERIF.	3.4568046
	283.727 Culve	Tr critico	2.81		3.56	2.16		1.28	3.81	0.25	1.000	0.500	NON VERIF.	0.250



COMUNE DI SASSARI

VERIFICHE DI SICUREZZA IDRAULICA OPERE INTERFERENTI CON IL RETICOLO IDROGRAFICO – ATTRAVERSAMENTI STRADE COMUNALI

Area di indagine: **TERRITORIO COMUNALE**

SIMULAZIONI IN MOTO PERMANENTE

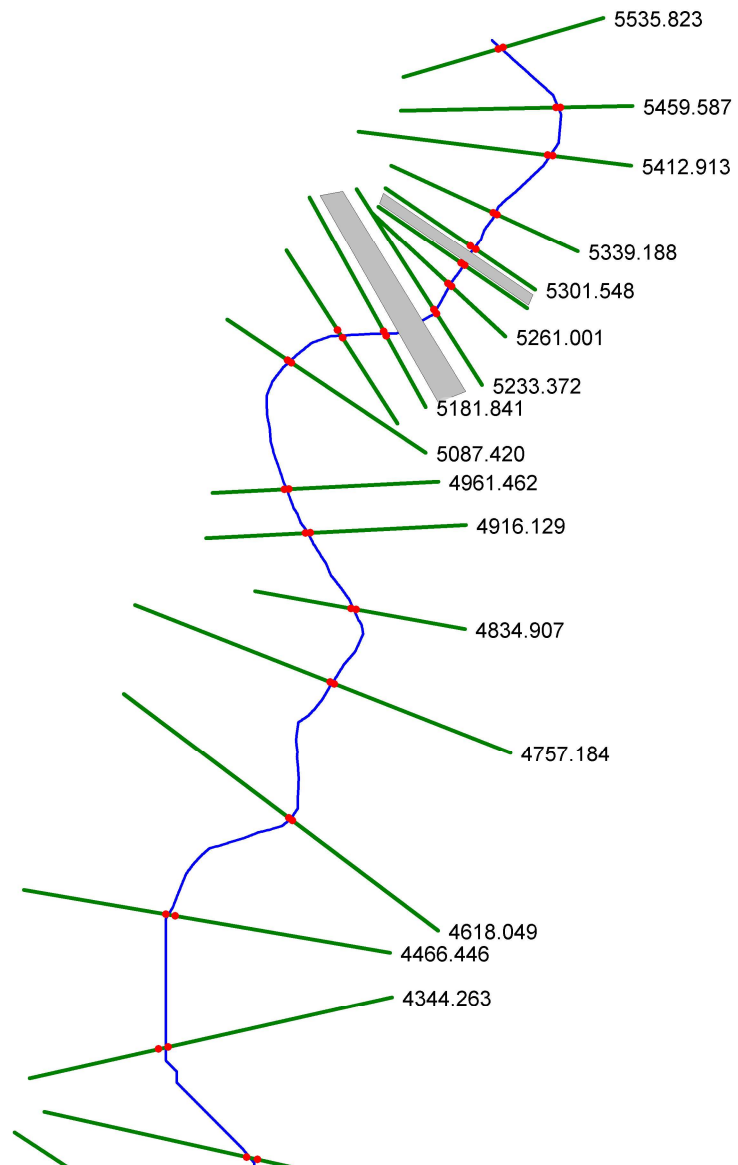
ATTRAVERSAMENTO C05 sul rio Bastianeddu

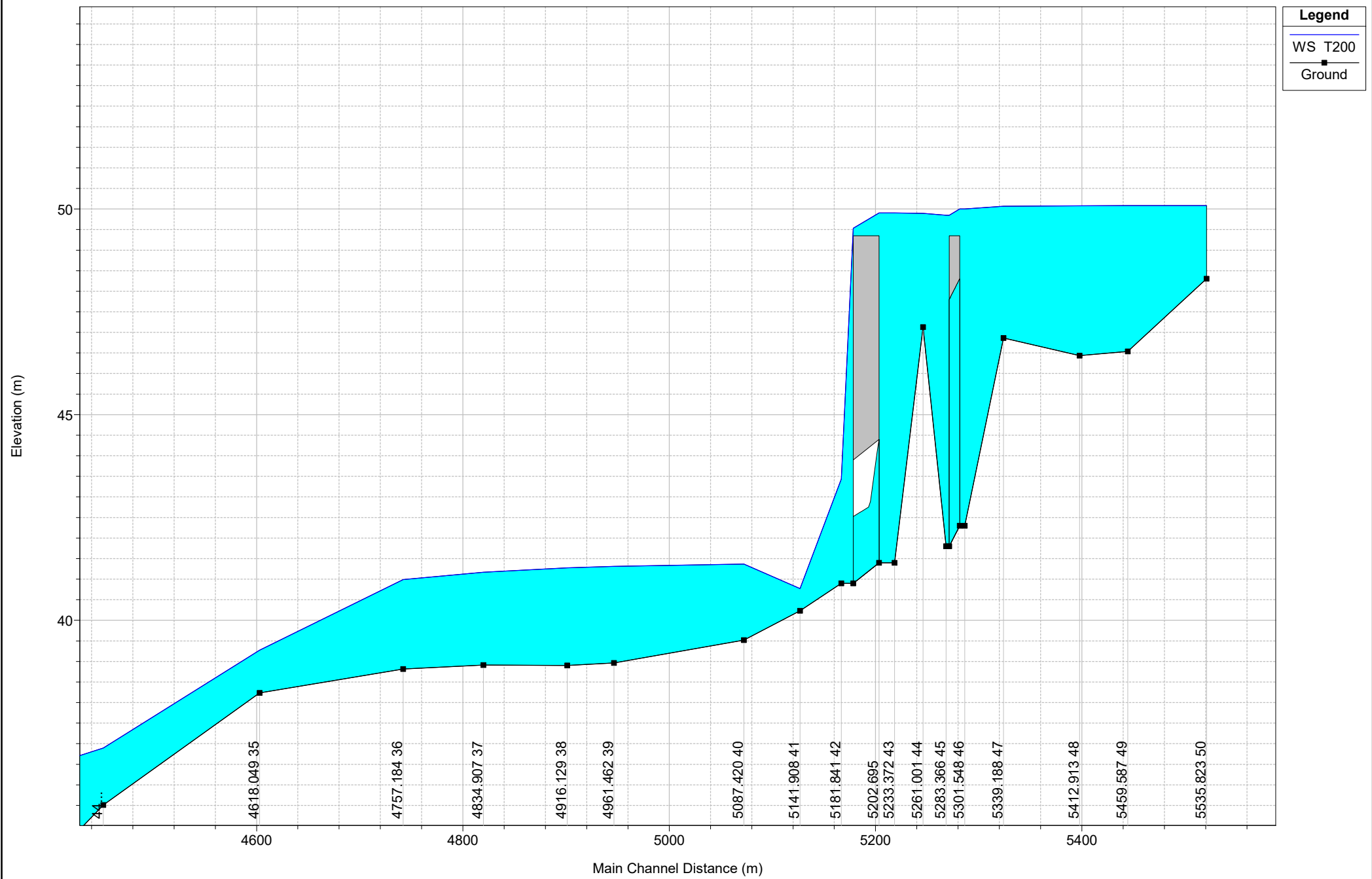
- Schema planimetrico del modello matematico;
- Profili longitudinali con livelli idrici per il tempo di ritorno di 200 anni;
- Sezioni trasversali con livelli idrici per il tempo di ritorno di 200 anni;
- Tabulati numerici di output per il tempo di ritorno di 200 anni;
- Calcolo della portata critica;
- Profilo longitudinale del livello idrico per il tempo di ritorno critico TC;
- Verifica dei franchi idraulici e della portata critica;

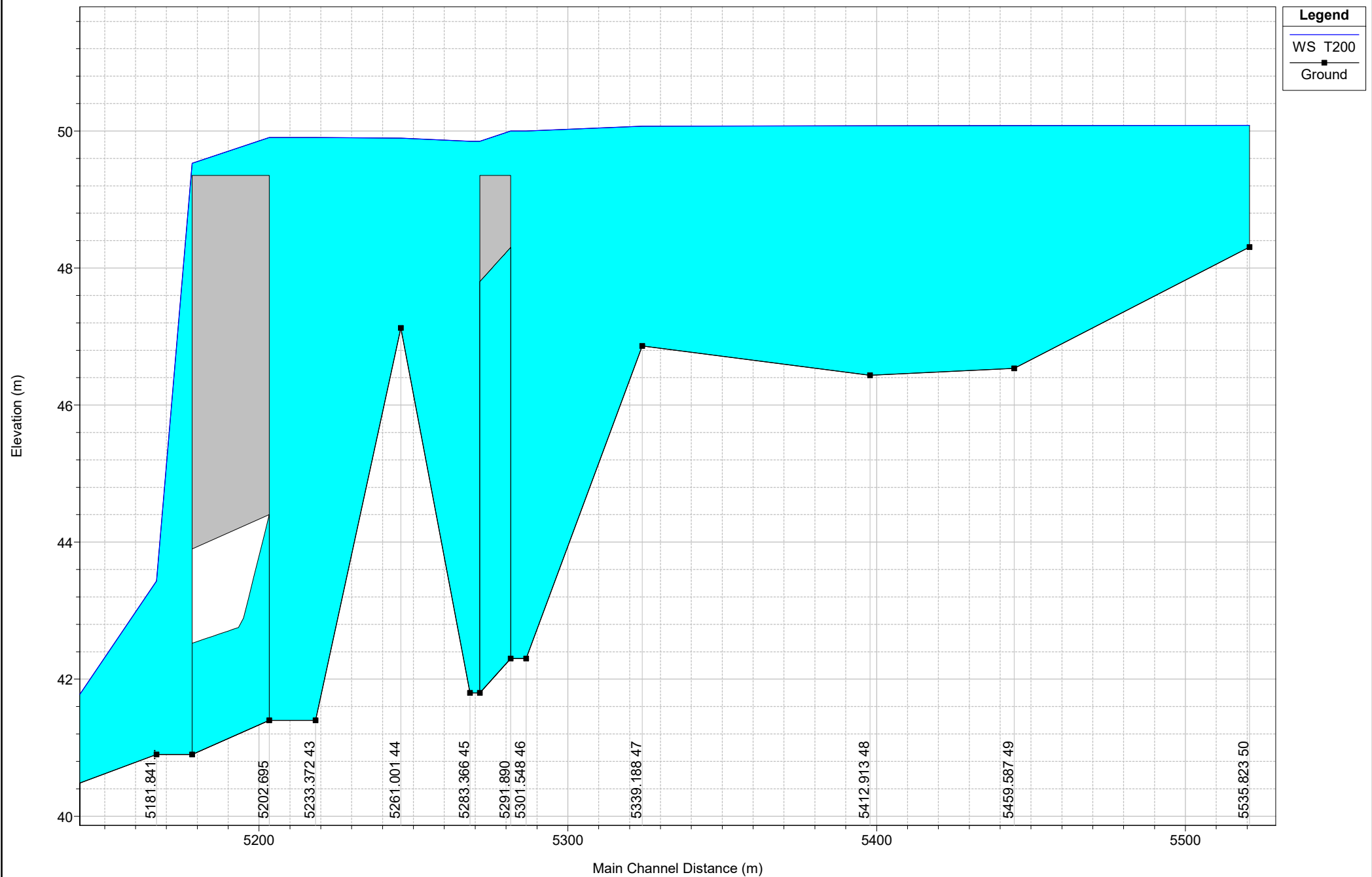
River	Reach	RS	PORTATE mc/s			
			T50	T100	T200	T500
Baratz	RioBastia	5535.823	58.423	70.396	82.625	99.235
Baratz	RioBastia	5087.42	76.239	92.547	109.183	131.546
Baratz	RioBastia	3769.153	76.239	92.547	109.183	131.546
Baratz	RioBastia	2489.094	89.148	107.285	125.699	150.347

River	Reach	PROFILI	condizioni al contorno	
			upstream	downstream
Baratz	RioBastia	all	Normal Depth S = 0.01	Known WS

RioBastia



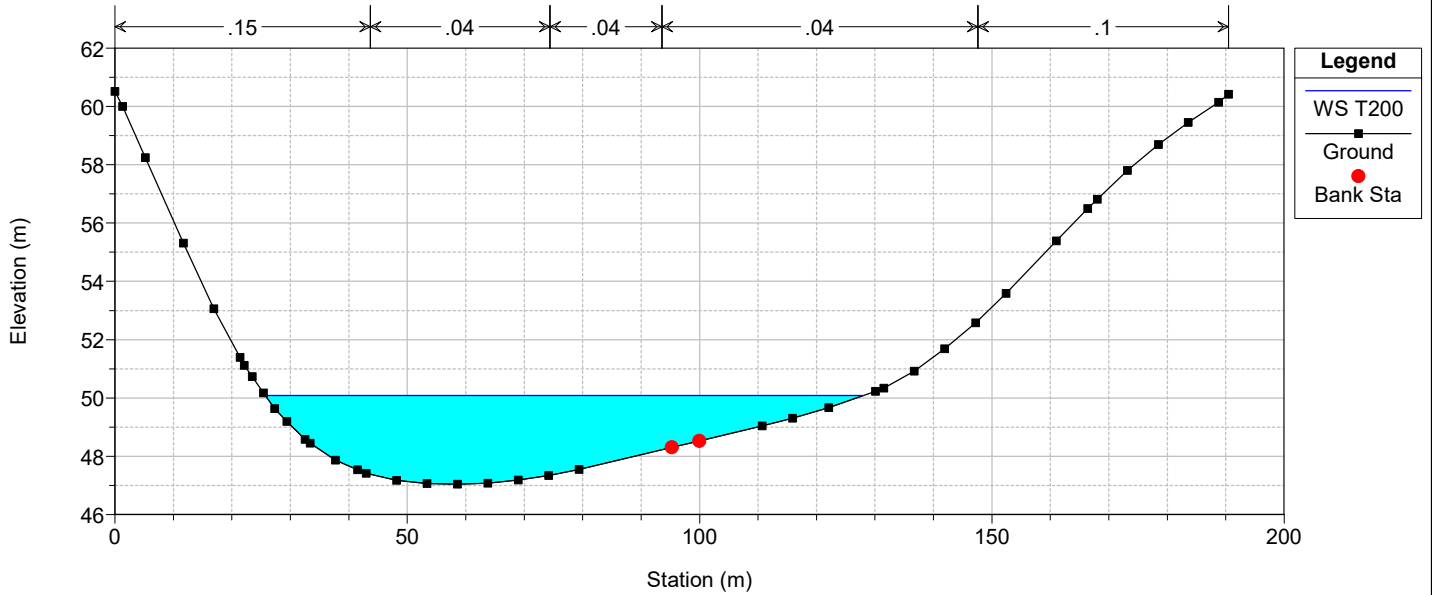




Baratz1 Plan: 150222021 2/15/2021

Geom: 15022021

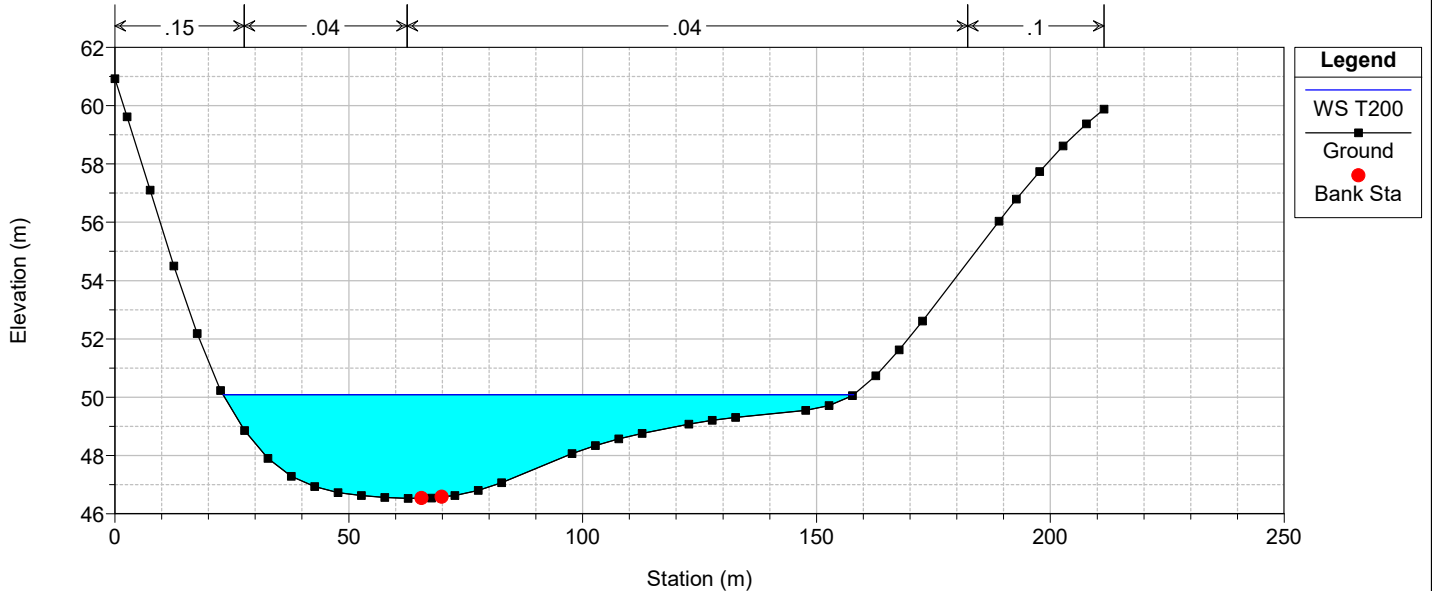
River = Baratz Reach = RioBastia RS = 5535.823 50 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Baratz1 Plan: 150222021 2/15/2021

Geom: 15022021

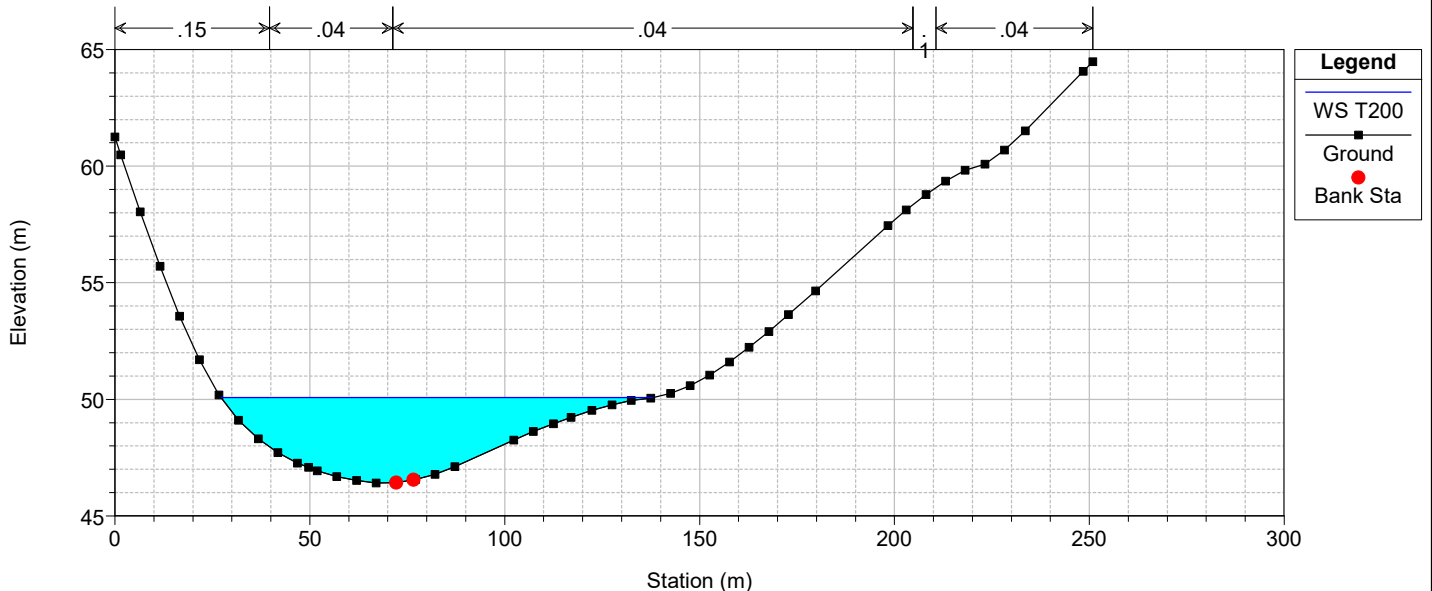
River = Baratz Reach = RioBastia RS = 5459.587 49 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Baratz1 Plan: 150222021 2/15/2021

Geom: 15022021

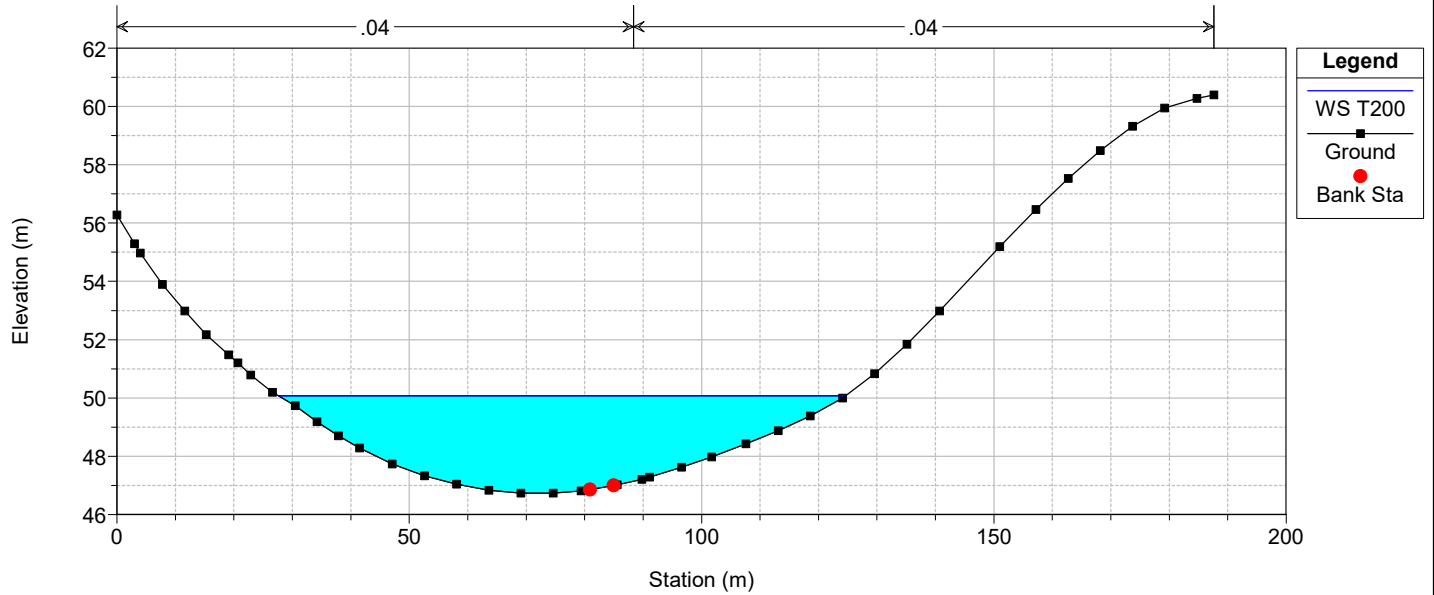
River = Baratz Reach = RioBastia RS = 5412.913 48 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Baratz1 Plan: 150222021 2/15/2021

Geom: 15022021

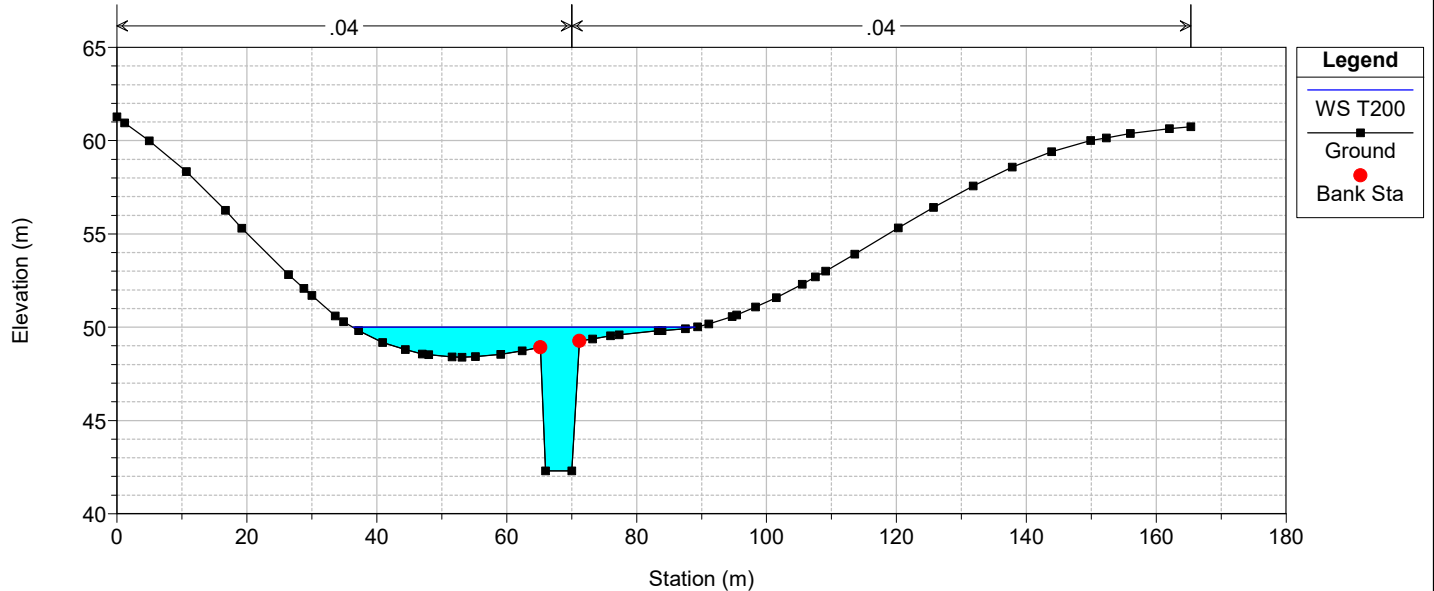
River = Baratz Reach = RioBastia RS = 5339.188 47 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Baratz1 Plan: 150222021 2/15/2021

Geom: 15022021

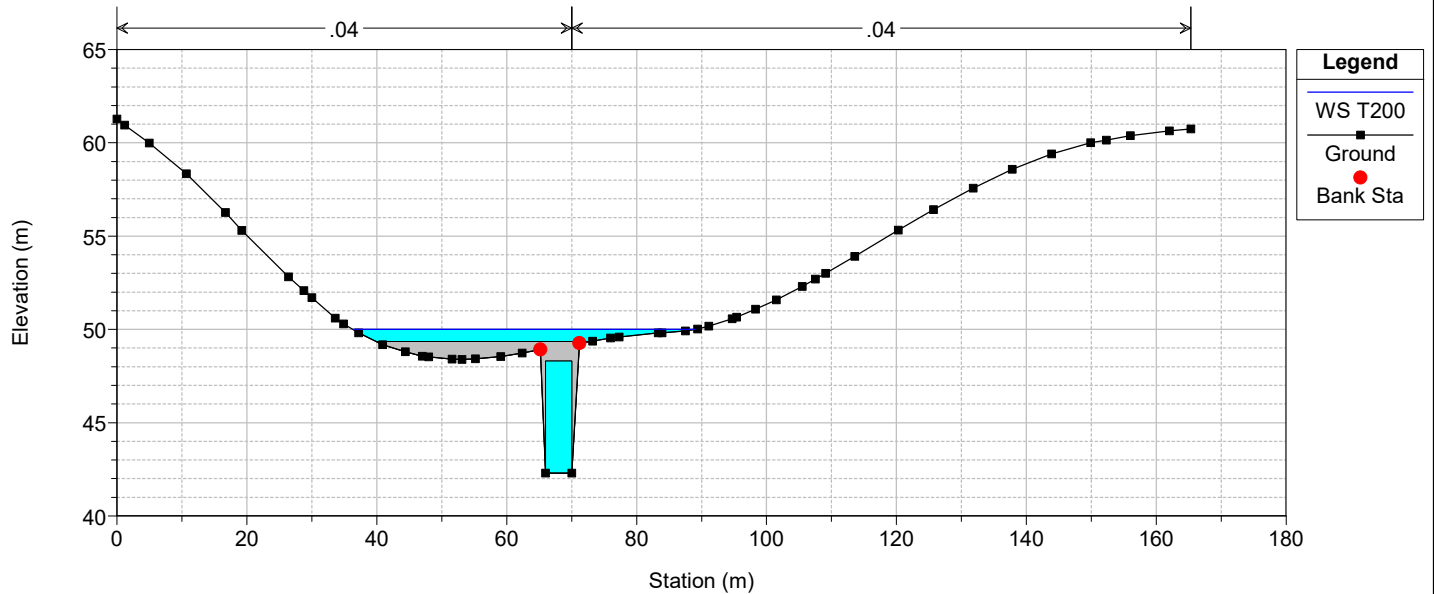
River = Baratz Reach = RioBastia RS = 5301.548 46 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Baratz1 Plan: 150222021 2/15/2021

Geom: 15022021

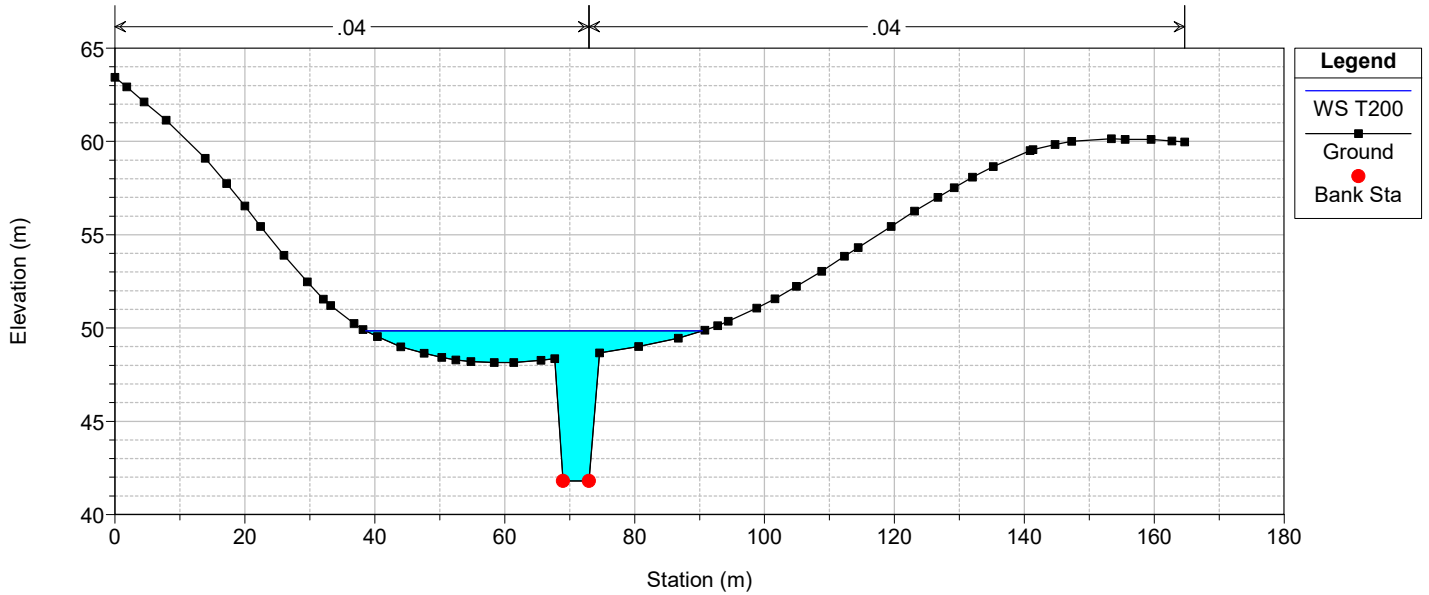
River = Baratz Reach = RioBastia RS = 5291.890 Culv COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Baratz1 Plan: 150222021 2/15/2021

Geom: 15022021

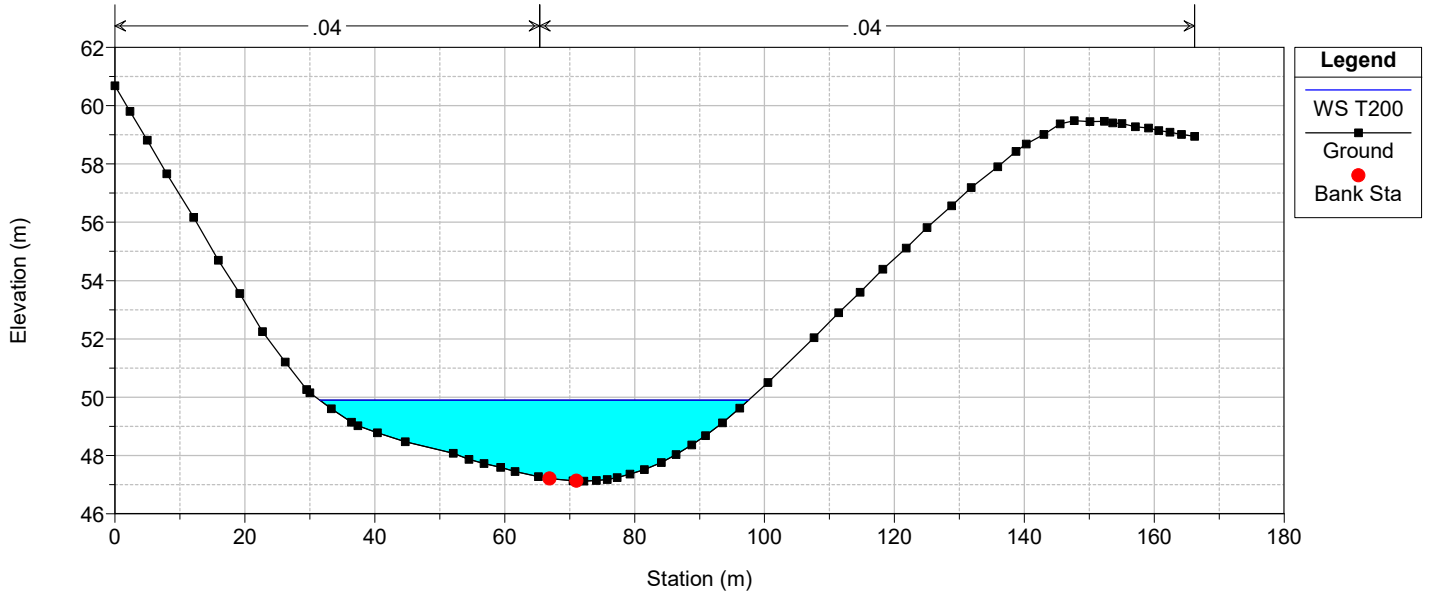
River = Baratz Reach = RioBastia RS = 5283.366 45 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Baratz1 Plan: 150222021 2/15/2021

Geom: 15022021

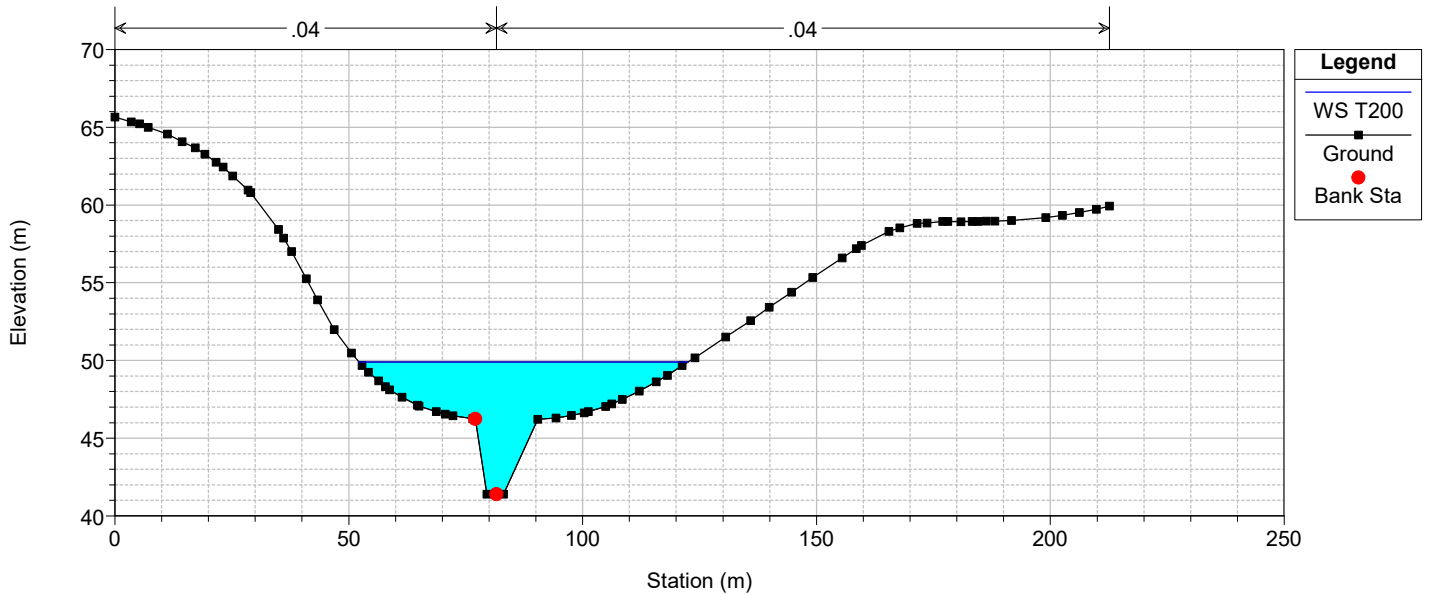
River = Baratz Reach = RioBastia RS = 5261.001 44 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Baratz1 Plan: 150222021 2/15/2021

Geom: 15022021

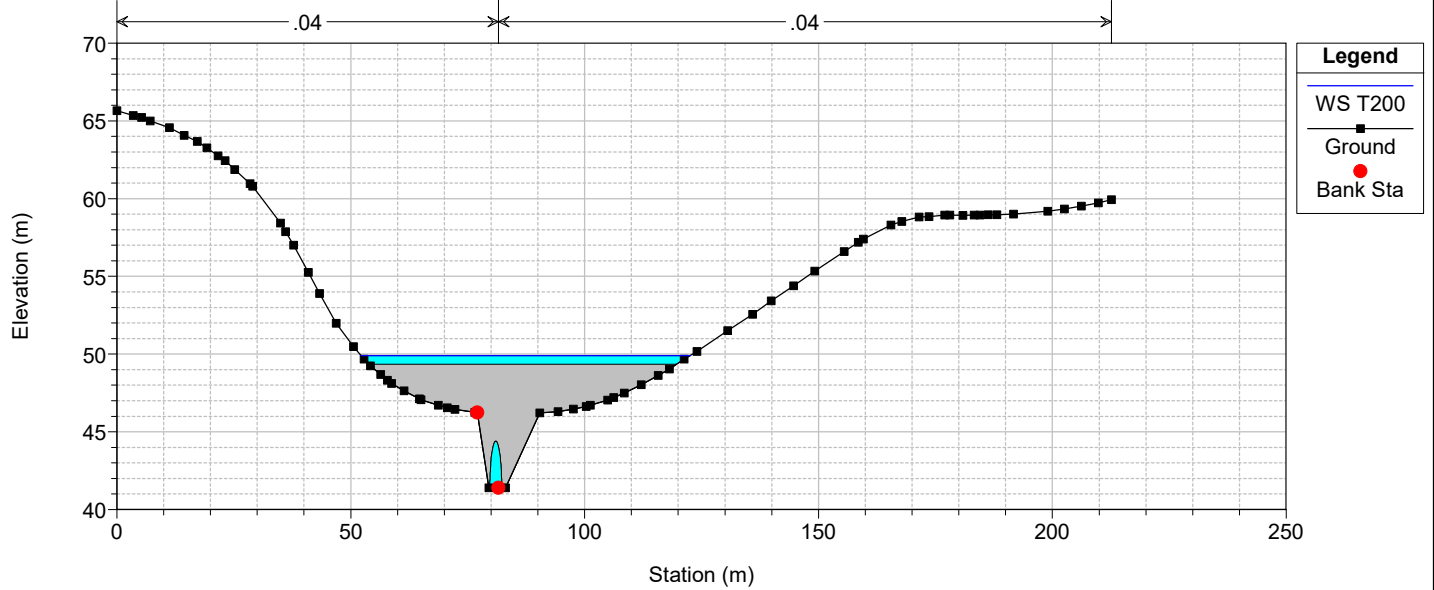
River = Baratz Reach = RioBastia RS = 5233.372 43 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Baratz1 Plan: 150222021 2/15/2021

Geom: 15022021

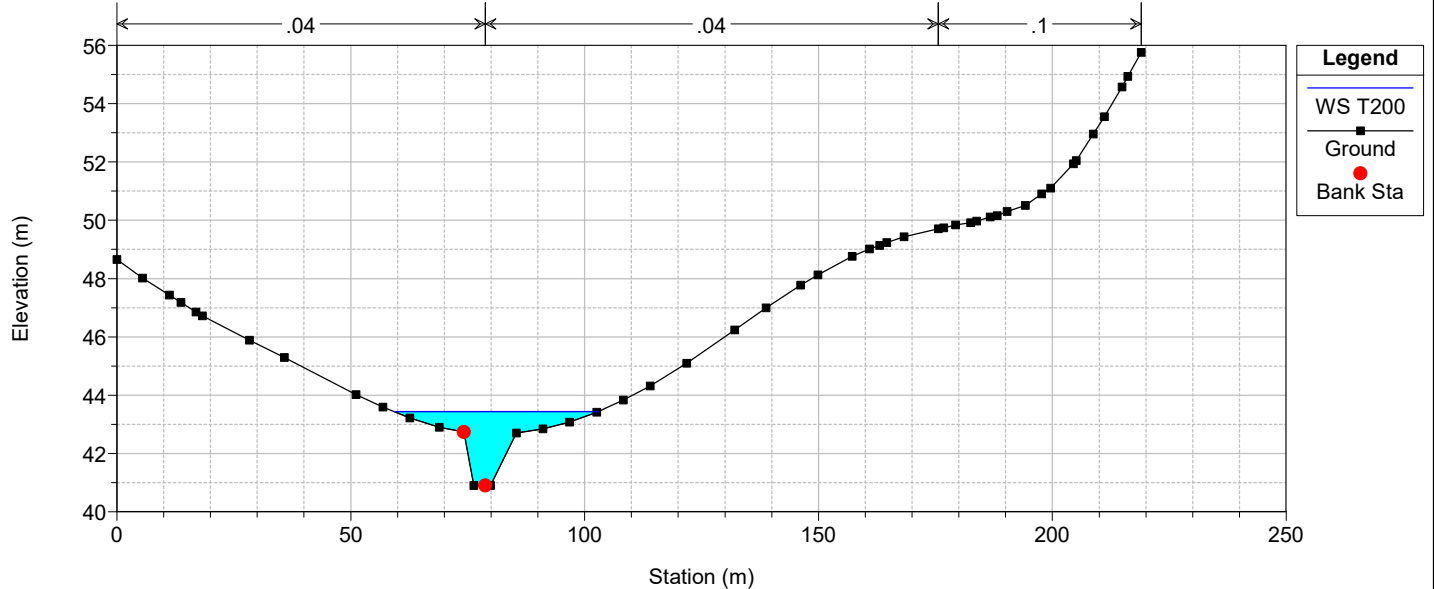
River = Baratz Reach = RioBastia RS = 5202.695 Culv COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Baratz1 Plan: 150222021 2/15/2021

Geom: 15022021

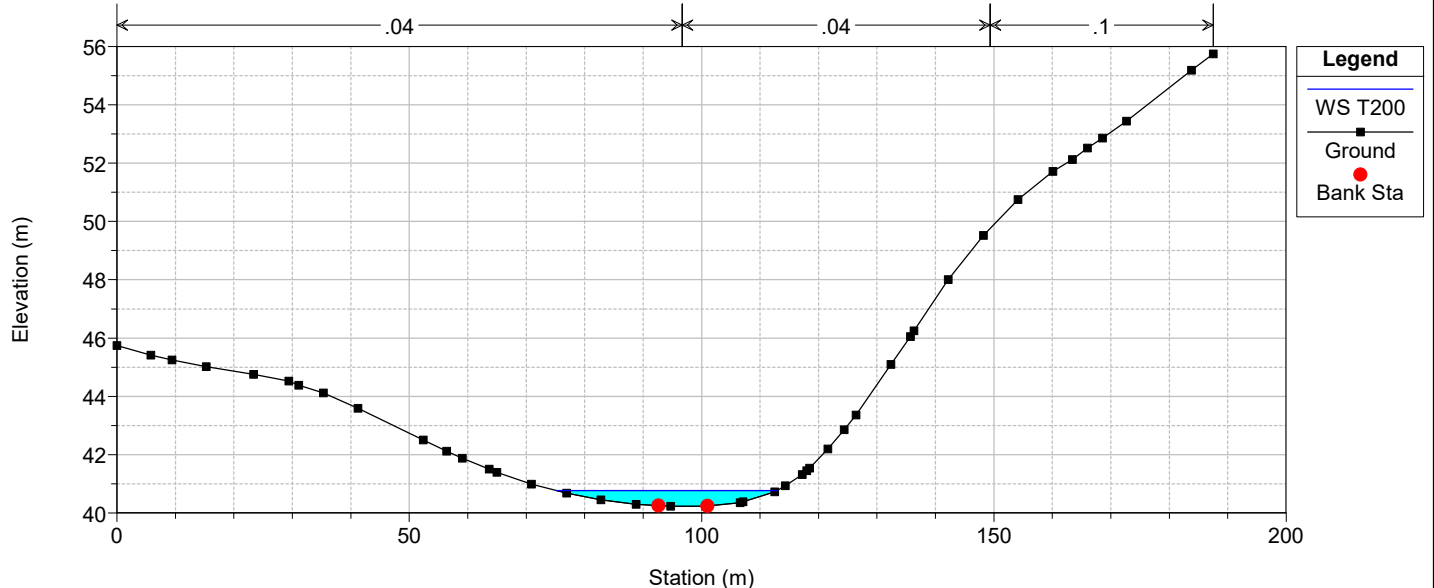
River = Baratz Reach = RioBastia RS = 5181.841 42 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Baratz1 Plan: 150222021 2/15/2021

Geom: 15022021

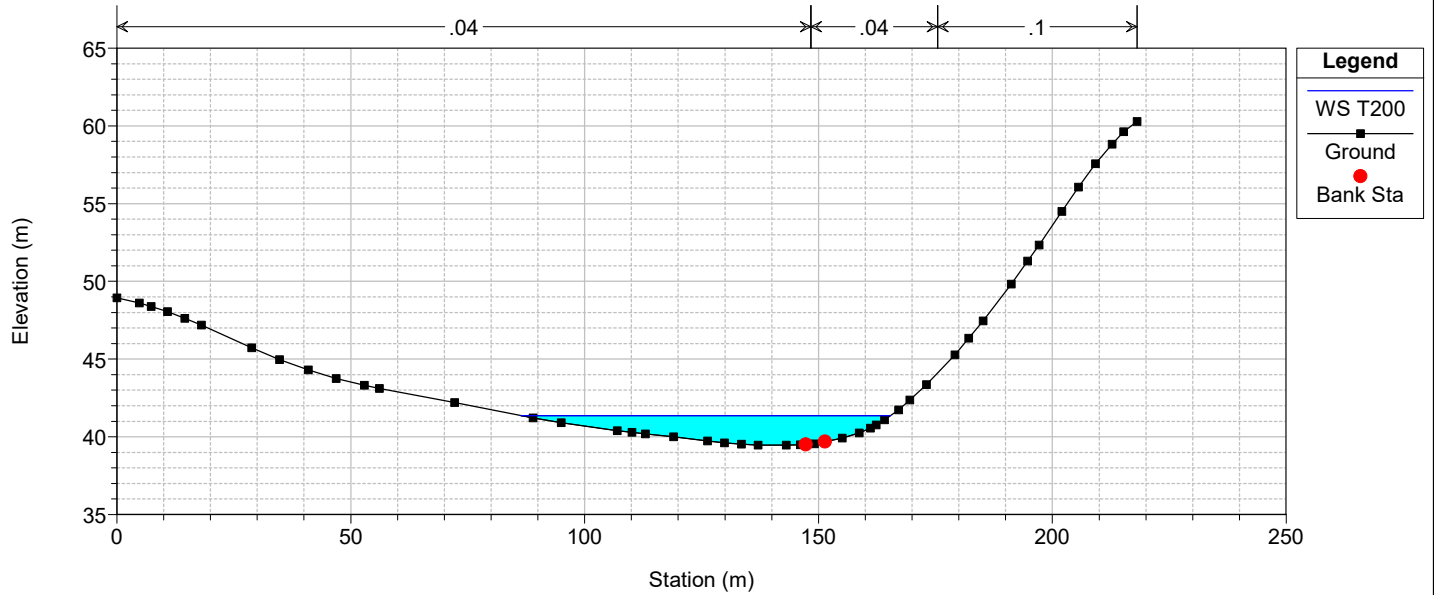
River = Baratz Reach = RioBastia RS = 5141.908 41 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Baratz1 Plan: 150222021 2/15/2021

Geom: 15022021

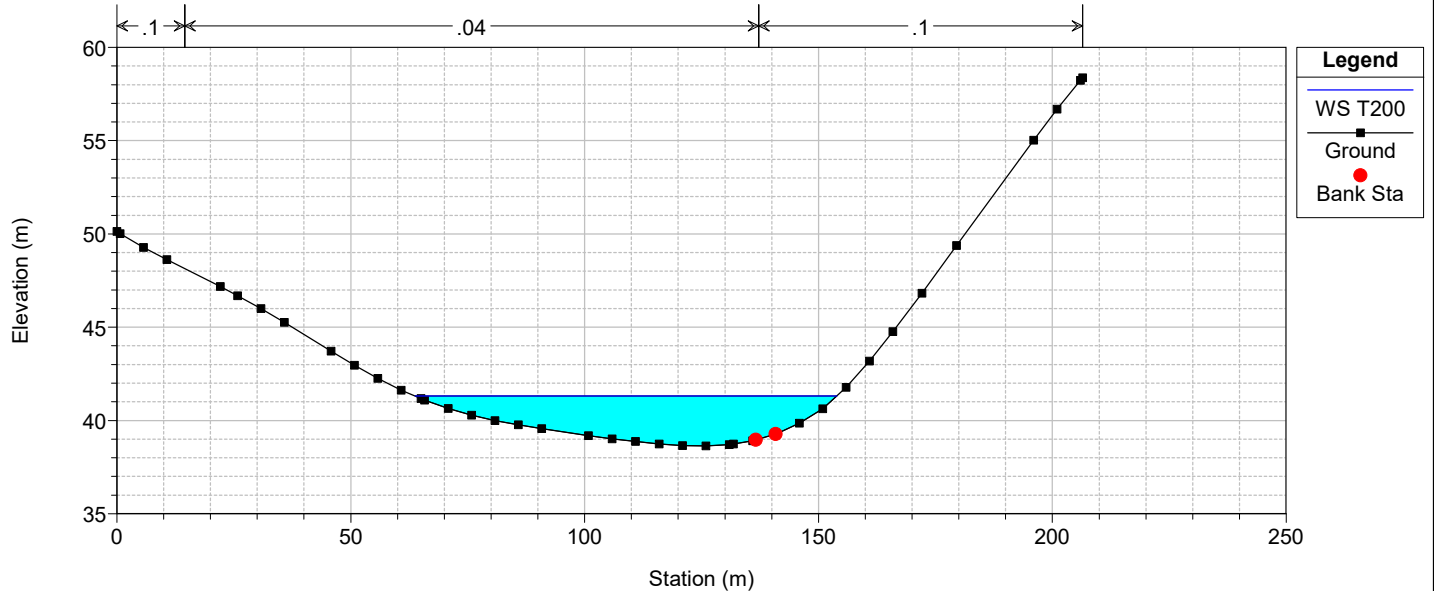
River = Baratz Reach = RioBastia RS = 5087.420 40 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Baratz1 Plan: 150222021 2/15/2021

Geom: 15022021

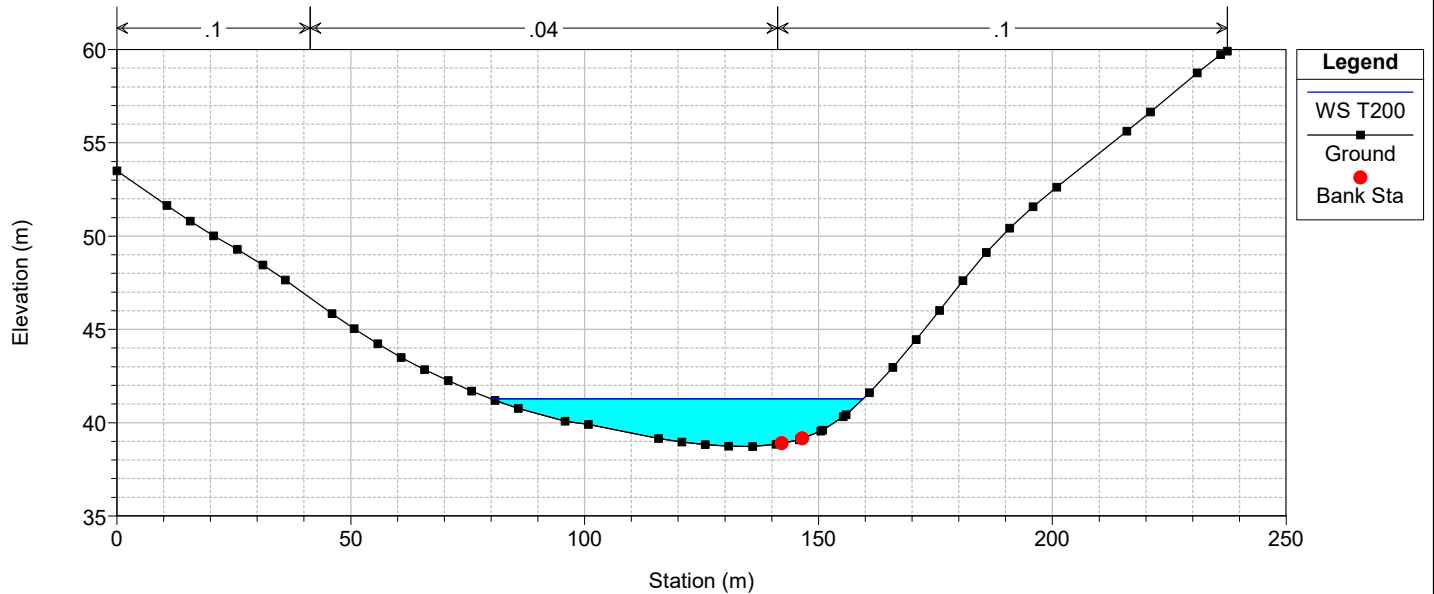
River = Baratz Reach = RioBastia RS = 4961.462 39 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Baratz1 Plan: 150222021 2/15/2021

Geom: 15022021

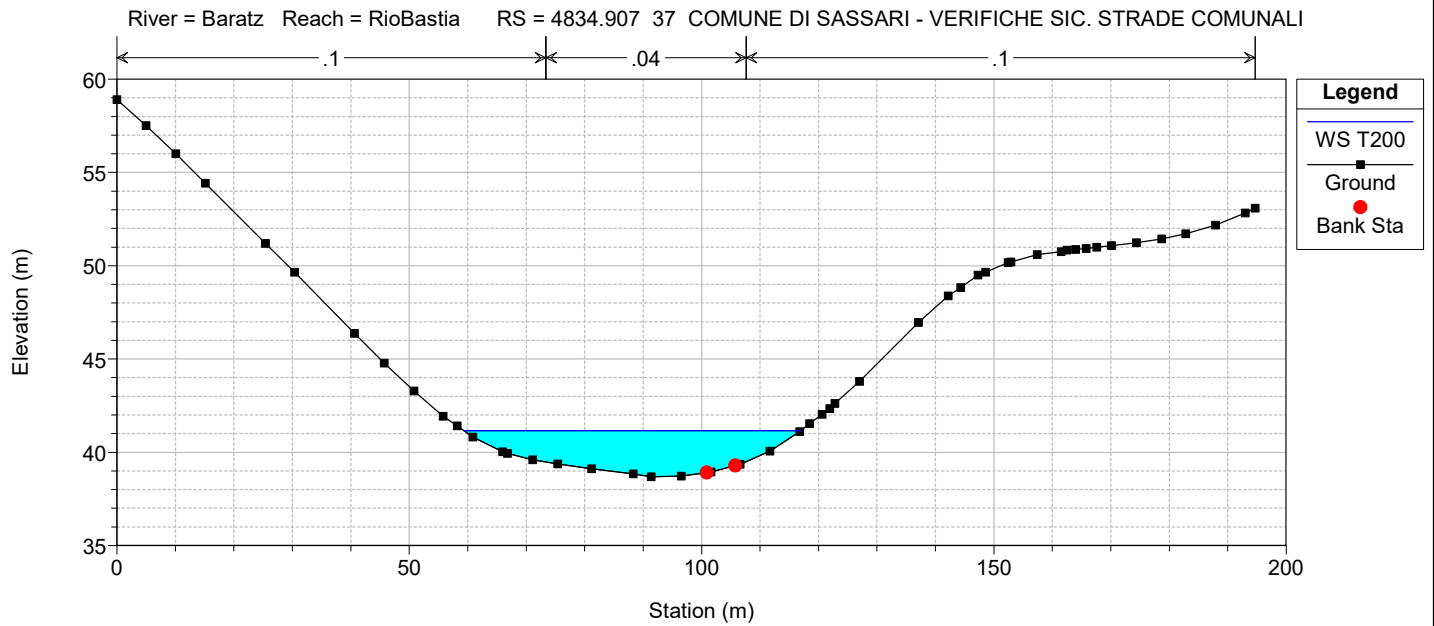
River = Baratz Reach = RioBastia RS = 4916.129 38 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Baratz1 Plan: 150222021 2/15/2021

Geom: 15022021

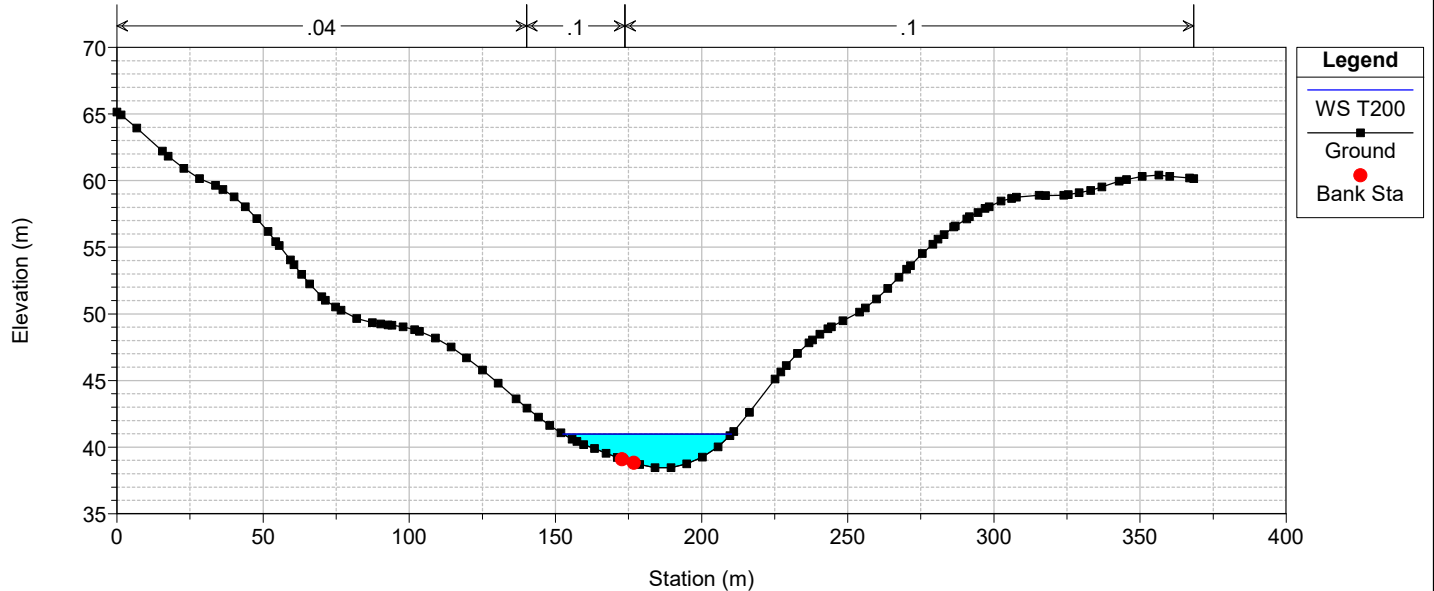
River = Baratz Reach = RioBastia RS = 4834.907 37 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Baratz1 Plan: 150222021 2/15/2021

Geom: 15022021

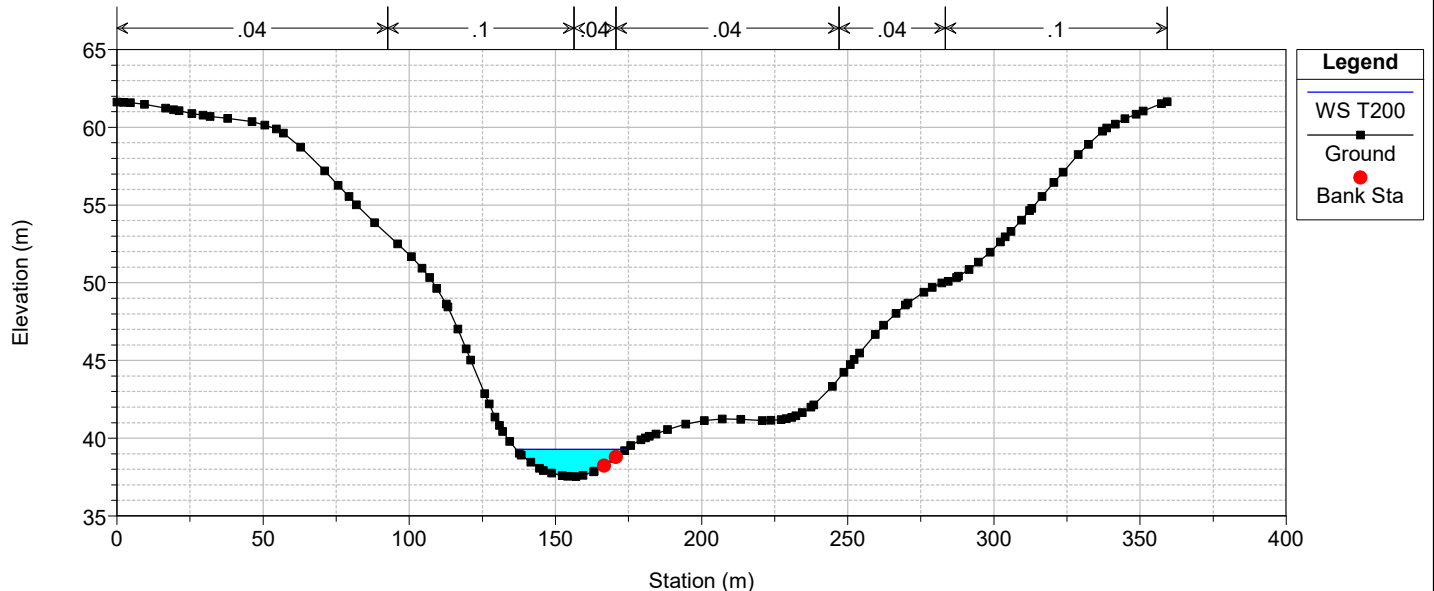
River = Baratz Reach = RioBastia RS = 4757.184 36 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Baratz1 Plan: 150222021 2/15/2021

Geom: 15022021

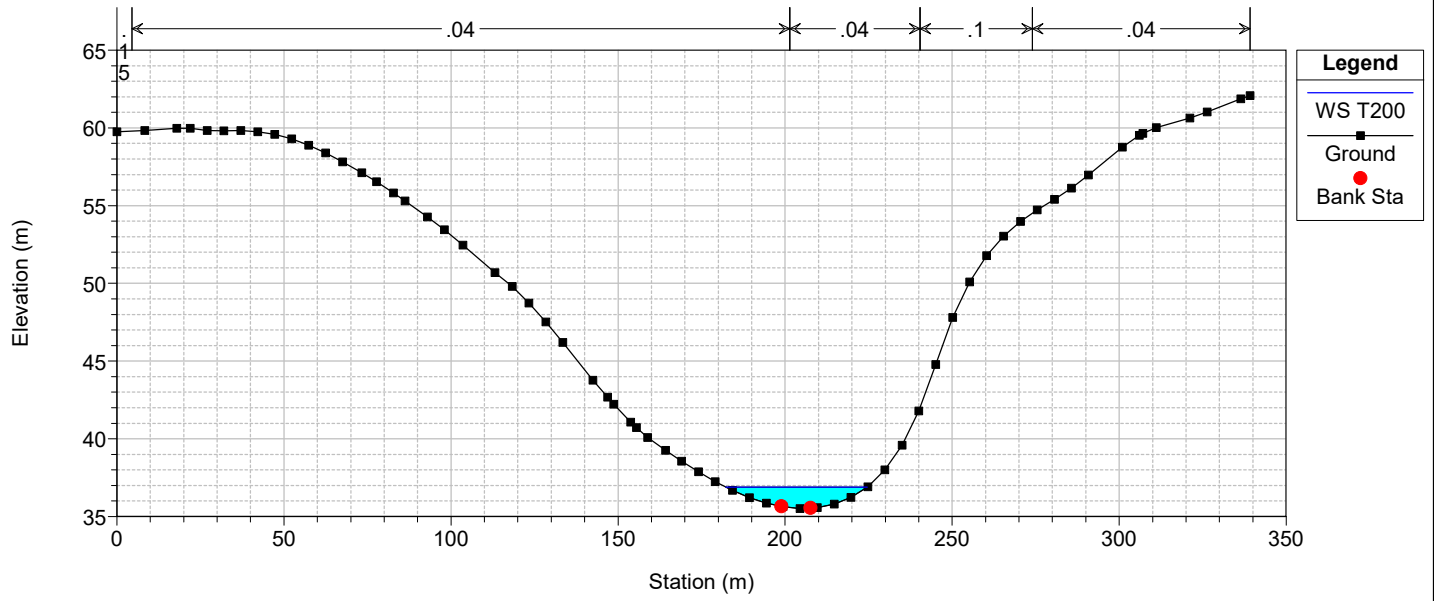
River = Baratz Reach = RioBastia RS = 4618.049 35 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Baratz1 Plan: 150222021 2/15/2021

Geom: 15022021

River = Baratz Reach = RioBastia RS = 4466.446 34 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



HEC-RAS Plan: 15022021 River: Baratz Reach: RioBastia Profile: T200

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (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
RioBastia	5535.823	T200	82.62	48.31	50.08	47.99	50.09	0.000114	0.37	198.76	102.27	0.09
RioBastia	5459.587	T200	82.62	46.54	50.08		50.09	0.000051	0.42	270.47	134.77	0.07
RioBastia	5412.913	T200	82.62	46.43	50.08		50.08	0.000069	0.49	231.66	110.90	0.08
RioBastia	5339.188	T200	82.62	46.86	50.07		50.08	0.000084	0.49	210.92	96.93	0.09
RioBastia	5301.548	T200	82.62	42.30	50.00	45.66	50.06	0.000904	1.28	80.46	52.66	0.16
RioBastia	5291.890		Culvert									
RioBastia	5283.366	T200	82.62	41.80	49.85		49.95	0.000287	1.70	94.21	51.86	0.19
RioBastia	5261.001	T200	82.62	47.13	49.90		49.92	0.000352	0.92	117.99	66.02	0.18
RioBastia	5233.372	T200	82.62	41.40	49.91	44.27	49.91	0.000047	0.45	227.50	70.37	0.05
RioBastia	5202.695		Culvert									
RioBastia	5181.841	T200	82.62	40.90	43.43	43.43	43.82	0.009249	3.60	35.06	43.61	0.79
RioBastia	5141.908	T200	82.62	40.23	40.77	41.20	42.66	0.192434	7.24	14.11	37.77	3.16
RioBastia	5087.420	T200	109.18	39.52	41.36	40.58	41.43	0.001572	1.45	96.02	78.97	0.35
RioBastia	4961.462	T200	109.18	38.96	41.31		41.34	0.000386	0.41	161.24	90.14	0.09
RioBastia	4916.129	T200	109.18	38.90	41.27		41.32	0.000706	0.46	132.45	79.44	0.10
RioBastia	4834.907	T200	109.18	38.91	41.17		41.24	0.001080	1.34	97.31	57.70	0.30
RioBastia	4757.184	T200	109.18	38.82	40.99		41.07	0.006796	1.32	92.90	57.69	0.30
RioBastia	4618.049	T200	109.18	38.24	39.28	39.05	39.61	0.017049	2.72	42.98	37.56	0.99
RioBastia	4466.446	T200	109.18	35.51	36.90	36.90	37.35	0.013756	3.56	38.46	42.36	0.98

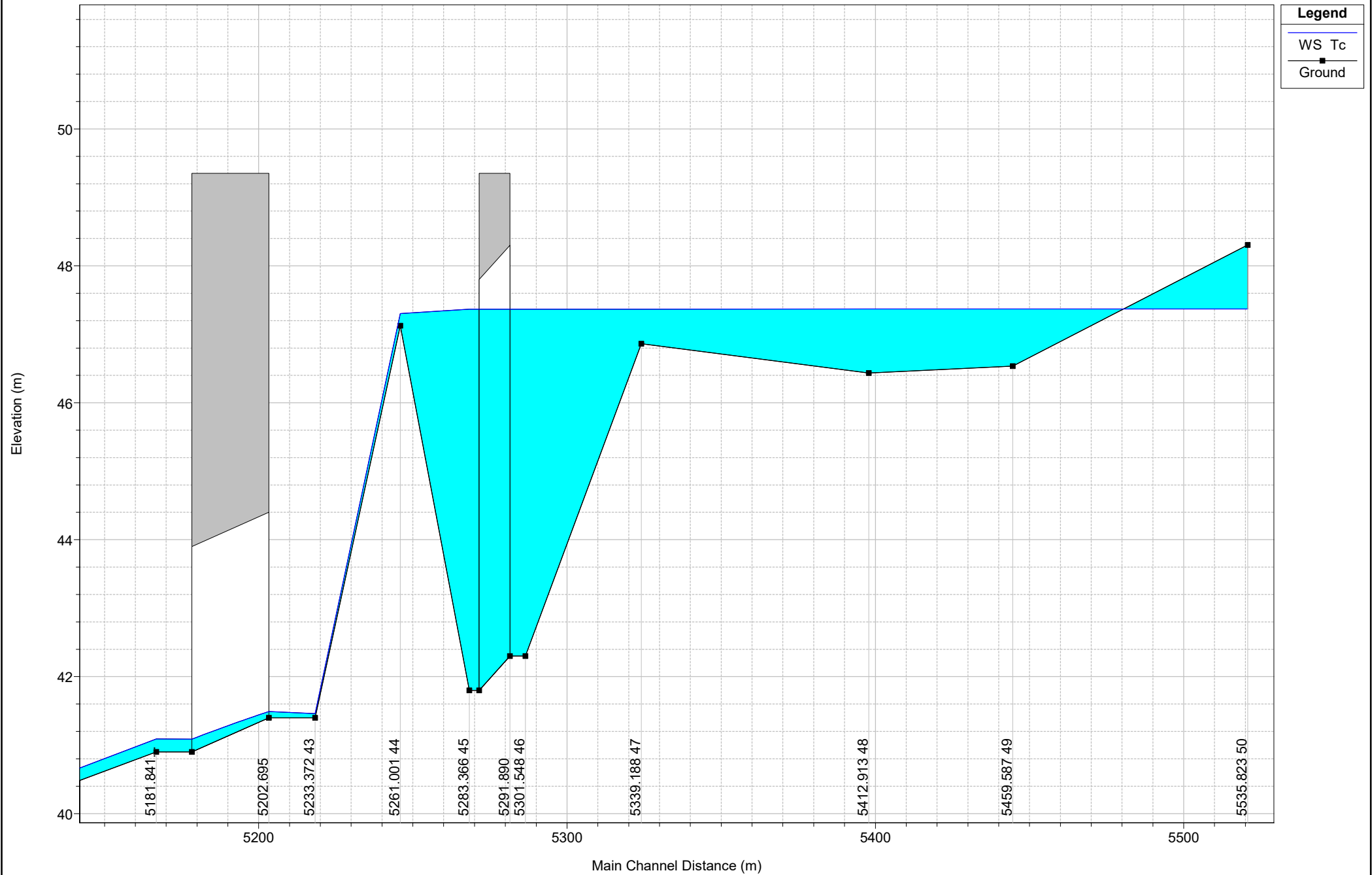
Reach	River Sta	Profile	E.G. US.	W.S. US.	E.G. IC	E.G. OC	Min El Weir Flow	Q Culv Group	Q Weir	Delta WS	Culv Vel US	Culv Vel DS
			(m)	(m)	(m)	(m)	(m)	(m3/s)	(m3/s)	(m)	(m/s)	(m/s)
RioBastia	5291.890 Culvert #1	T200	50.07	50.00	47.82	50.07	49.35	48.10	34.53	0.15	2.00	2.00
RioBastia	5202.695 Culvert #1	T200	49.91	49.91	49.91	47.03	49.35	42.50	40.06	6.47	7.22	11.03

CALCOLO IDROLOGICO PORTATE DI PIENA

LAGO DI BARATZ B2 - C05			
TR (anni)			1
Lunghezza asta	L	m	6200
Curve Number	CN	-	92.50
Pend.za media bac.	i _{bac}	-	0.2820
Area bacino	A	kmq	7.3982
Altitudine massima	Hmax	m slm	0
Altitudine media	Hmed	m slm	155.4
Altitudine minima	Hmin	m slm	41.1
Pend.za media asta	iret	m/m	0.0520
	SCS	(ore)	0.700
	GIANDOTTI	(ore)	2.359
	PASINI	(ore)	1.695
	VAPI	(ore)	3.400
	KIRPICH	(ore)	0.440
	VIPARELLI	(ore)	1.722
	tc adott.	SCS (ore)	0.700
Tempi di ritorno	T	(anni)	1
Dati pluviometrici	Pgiorn.	(mm)	50
	Sottozona		2
Altezza di pioggia	n1	-	0.31570972
	a1	-	20.6914142
	n2 (ADOTTATO)	-	-0.18676
	a2 (ADOTTATO)	-	0.44182
	n (ADOTTATO)	-	0.12894972
	a (ADOTTATO)	-	9.14188063
	h (ADOTTATO)	(mm)	8.731
	Coef.f.Ragg (ADOTTATO)	-	0.908
	h r (ADOTTATO)	(mm)	7.931
	S	(mm)	20.595
	Ia	(mm)	4.119
	Pnetta (ADOTTATO)	(mm)	0.595
	Coef.defl. (SCS)		0.494
	Coef.defl. (GIANDOTTI)		0.632
	Coef.defl. (PASINI)		0.600
	Coef.defl. (VAPI)		0.664
	Coef.defl. (KIRPICH)		0.421
	Coef.defl. (VIPARELLI)		0.602
	Coef.defl. (ADOTTATO)	-	0.068
PORTATE DI PIENA	Qpicco (SCS)	(mc/s)	58.423
	Qpicco (GIANDOTTI)	(mc/s)	33.674
	Qpicco (PASINI)	(mc/s)	40.285
	Qpicco (VAPI)	(mc/s)	27.448
	Qpicco (KIRPICH)	(mc/s)	64.629
	Qpicco (VIPARELLI)	(mc/s)	39.948
	Qpicco (ADOTTATO)	(mc/s)	1.748

Comune di Sassari (SS)
 VERIFICHE DI SICUREZZA IDRAULICA OPERE INTERFERENTI CON IL RETICOLO IDROGRAFICO
 Strade comunali - **ATTRAVERSAMENTO C05**

	River Sta	Profile	Culv Inv El DS	Culv Inv El US	W.S.	Q Culv	Culv Vel US	Culv Vel DS	QUOTA INTRADOS SO	FRANCHI DISPONIBILI	FRANCHI RICHIESTI	50% di FRANCHI RICHIESTI	VERIFICA	Deficit
			(m slm)	(m slm)	(m slm)	(m³/s)	(m/s)	(m/s)	(m slm)	(m)	(m)	(m)		(m)
UPSTREAM	5291.890 Culv	TR 200 ANNI		42.3	50	82.62	2		48.3	-1.7	1.500		NON VERIF.	3.2
	5291.890 Culv	Tr critico		42.3	47.37	1.75	0.09		48.3	0.93	1.500	0.750	OK	OK
DOWNSTREAM	5291.890 Culv	TR 200 ANNI	41.8		49.85	82.62		2	47.8	-2.05	1.500		NON VERIF.	3.55
	5291.890 Culv	Tr critico	41.8		47.37	1.75		0.08	47.8	0.43	1.500	0.750	NON VERIF.	0.320



COMUNE DI SASSARI

VERIFICHE DI SICUREZZA IDRAULICA OPERE INTERFERENTI CON IL RETICOLO IDROGRAFICO – ATTRAVERSAMENTI STRADE COMUNALI

Area di indagine: **TERRITORIO COMUNALE**

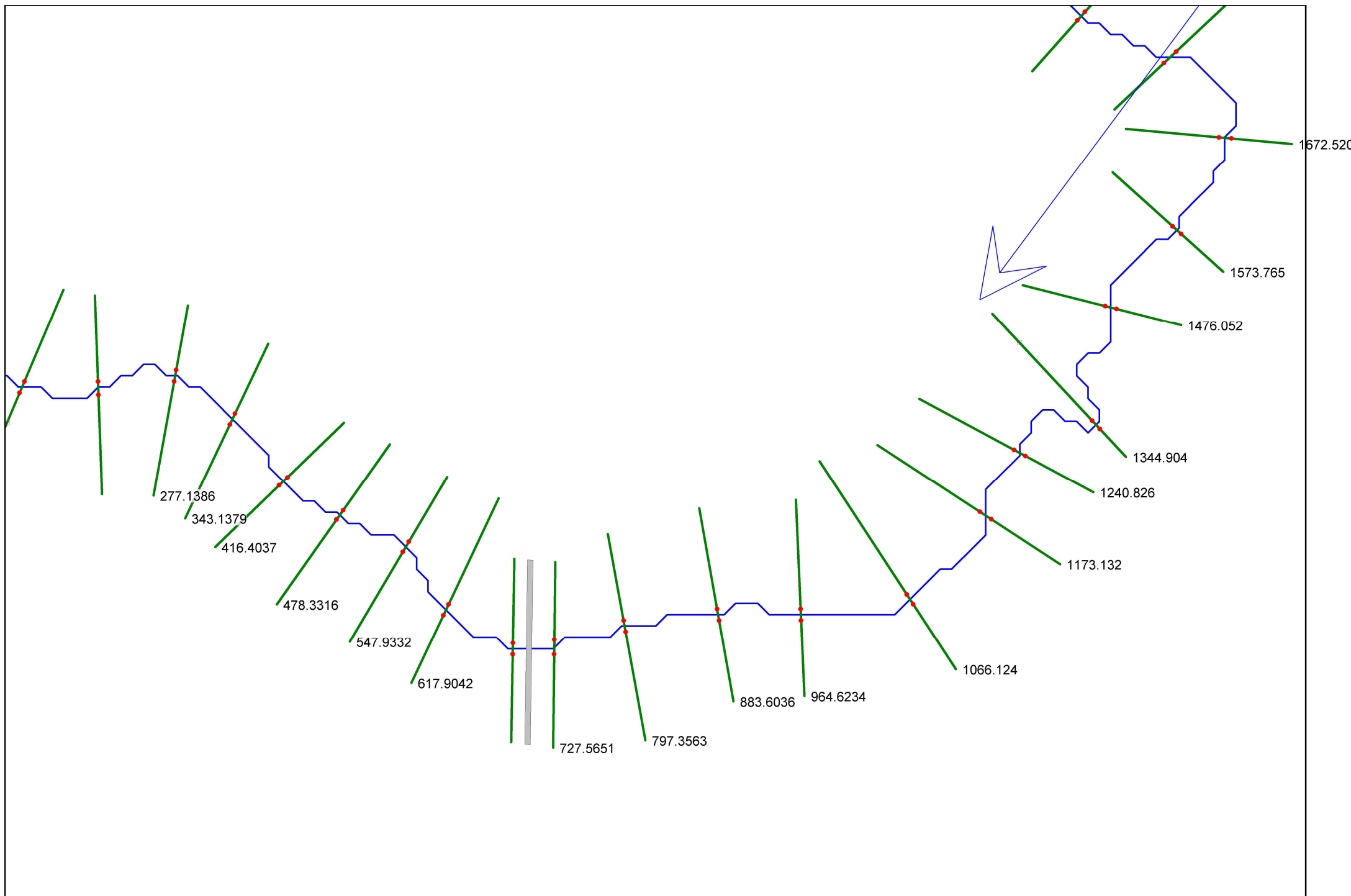
SIMULAZIONI IN MOTO PERMANENTE

ATTRAVERSAMENTO C06 sul Fiume 77204

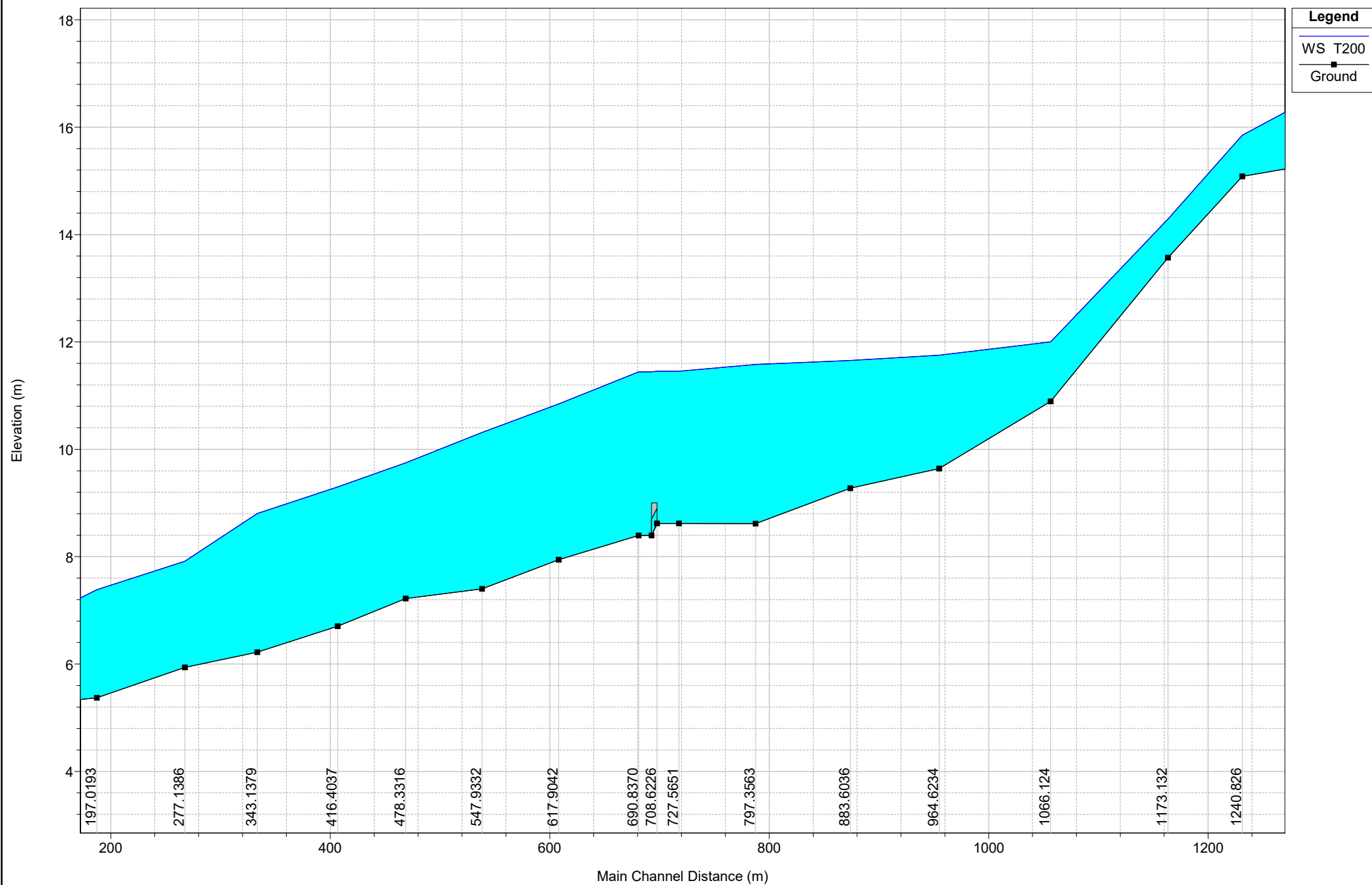
- Schema planimetrico del modello matematico;
- Profili longitudinali con livelli idrici per il tempo di ritorno di 200 anni;
- Sezioni trasversali con livelli idrici per il tempo di ritorno di 200 anni;
- Tabulati numerici di output per il tempo di ritorno di 200 anni;
- Calcolo della portata critica;
- Profilo longitudinale del livello idrico per il tempo di ritorno critico TC;
- Verifica dei franchi idraulici e della portata critica;

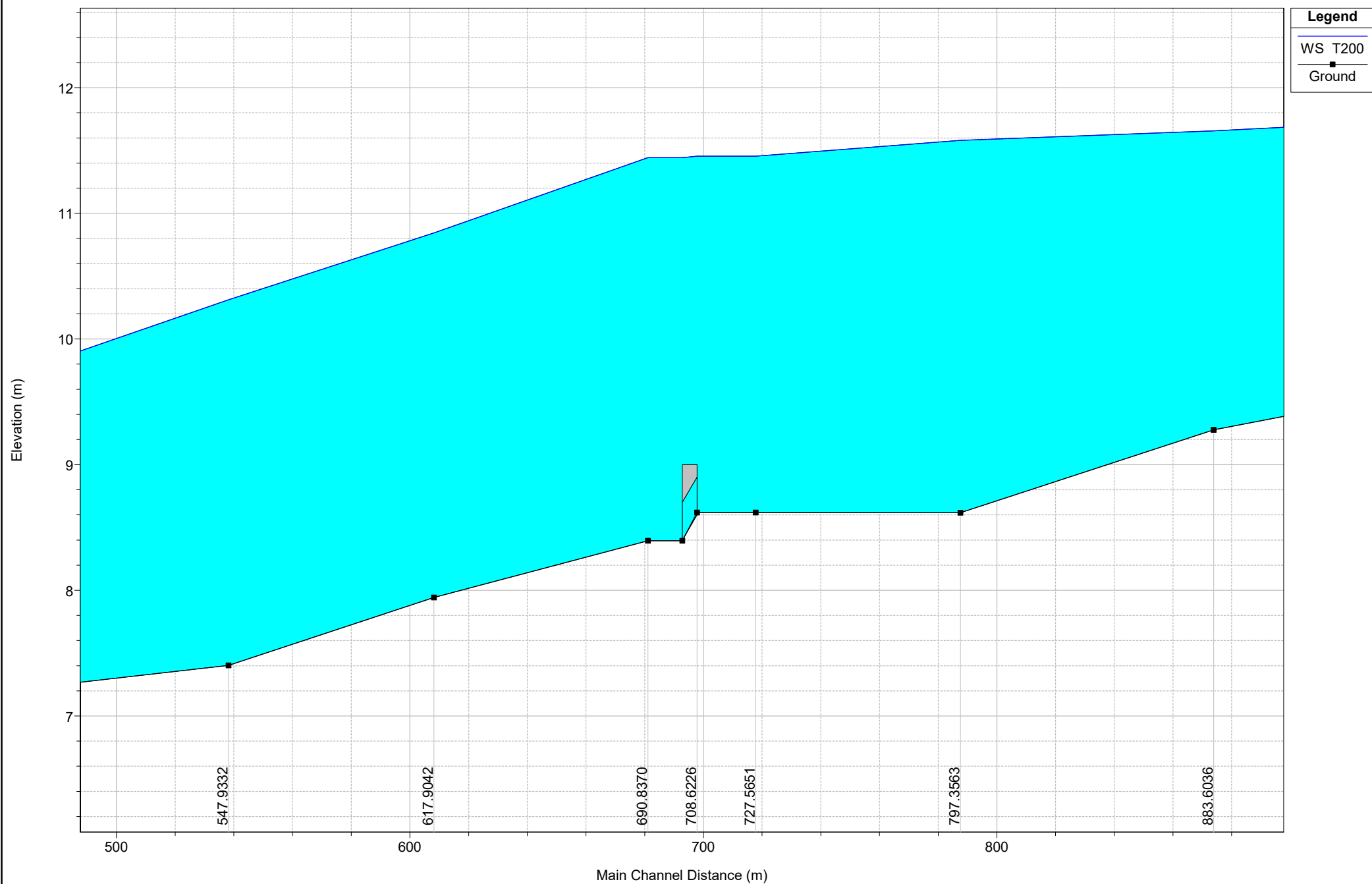
			PORTATE mc/s			
River	Reach	RS	T50	T100	T200	T500
Baratz	B4vallesatta	3180.091	64.958	77.975	91.241	109.217

			condizioni al contorno	
River	Reach	PROFILI	upstream	downstream
Baratz	B4vallesatta	all	Normal Depth S = 0.02	Known WS



B4 Plan: Plan 01 2/12/2021
Geom: B4 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI

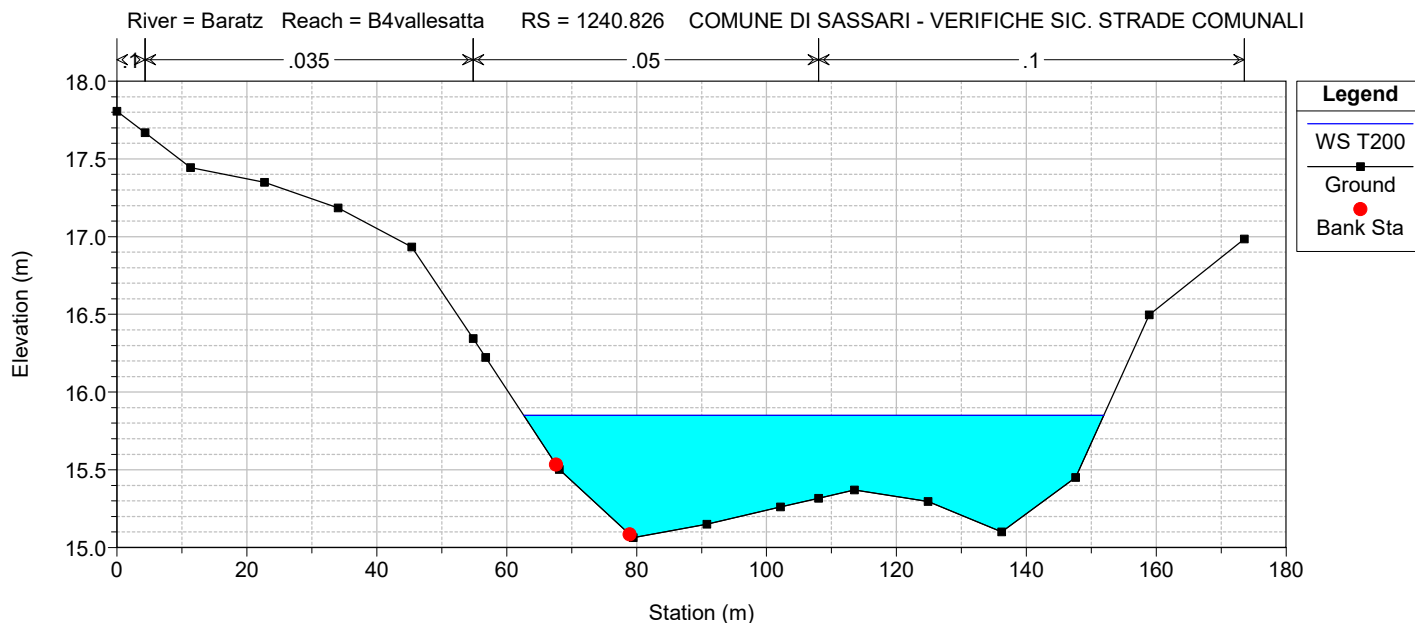




B4 Plan: Plan 01 2/12/2021

Geom: B4

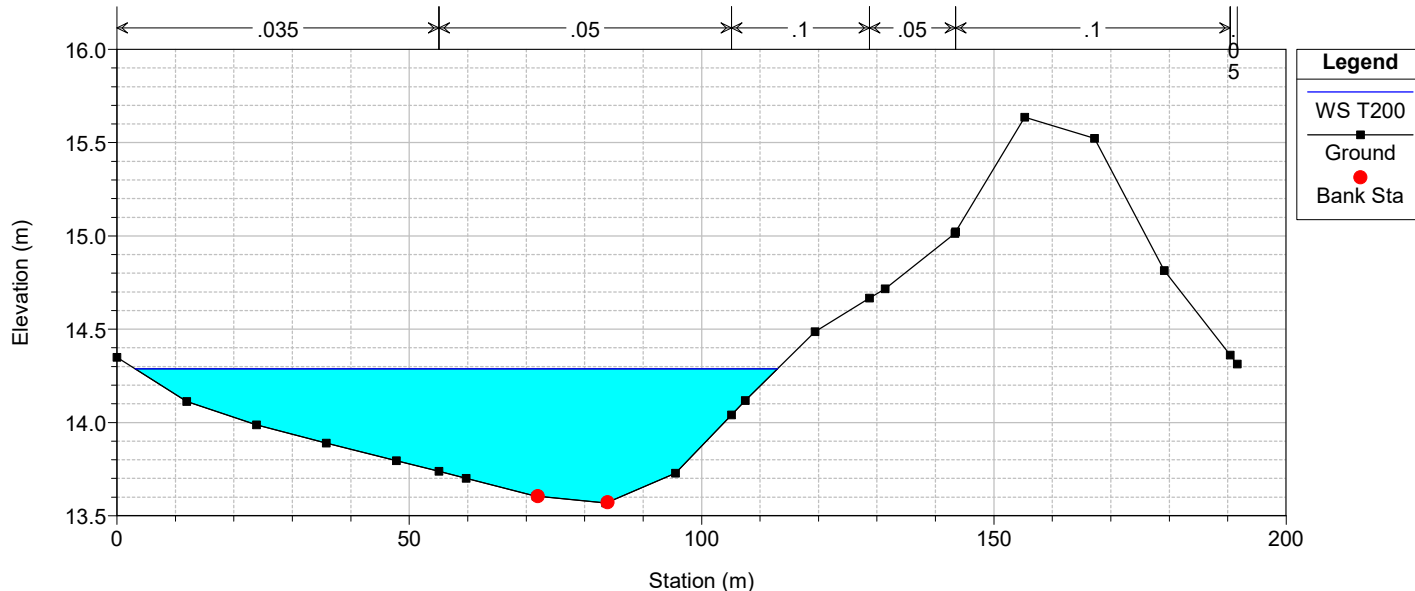
River = Baratz Reach = B4vallesatta RS = 1240.826 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



B4 Plan: Plan 01 2/12/2021

Geom: B4

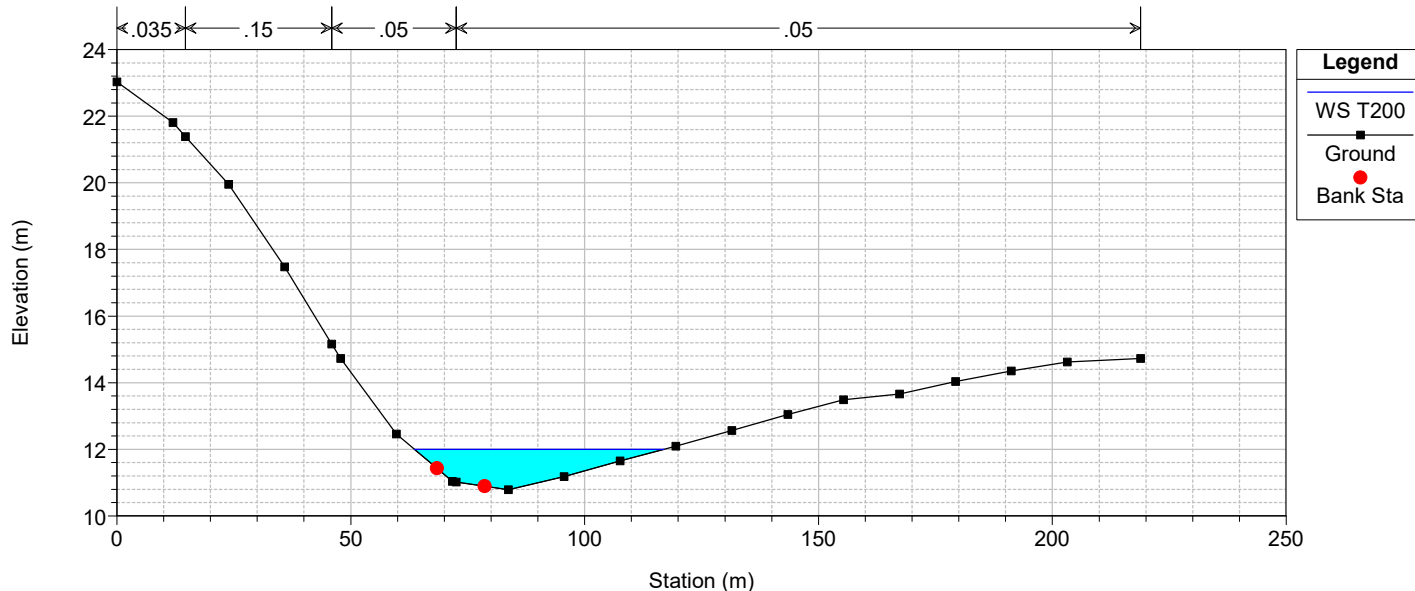
River = Baratz Reach = B4vallesatta RS = 1173.132 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



B4 Plan: Plan 01 2/12/2021

Geom: B4

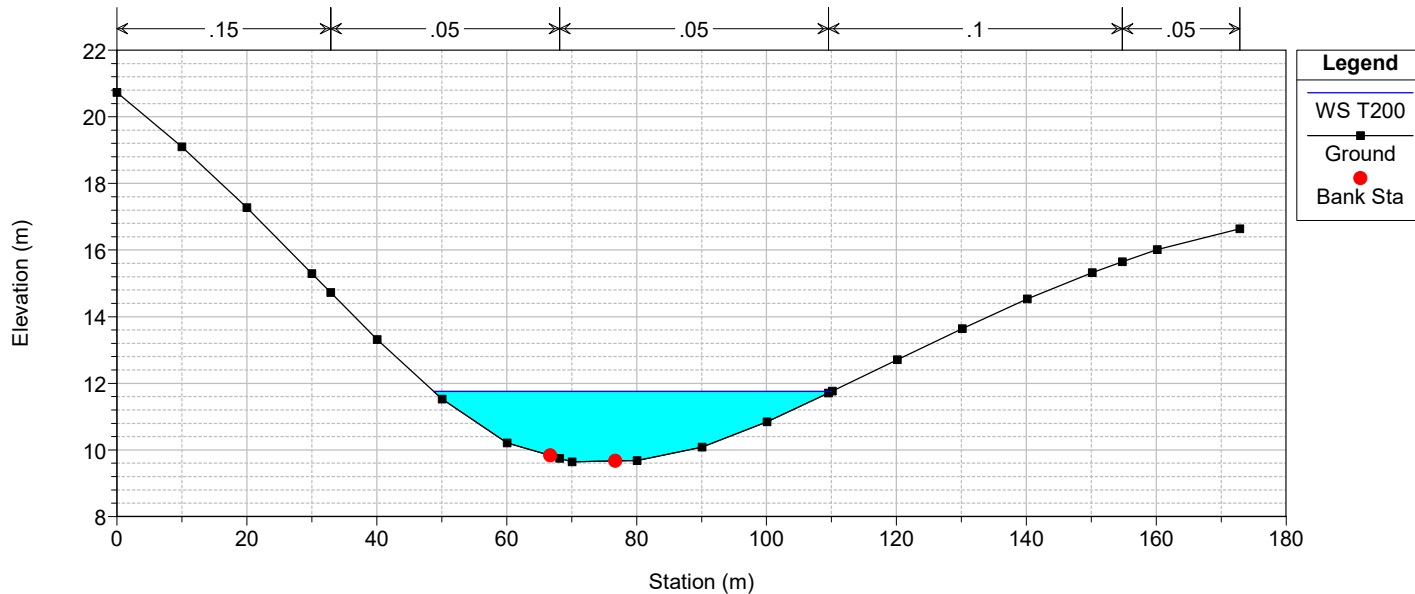
River = Baratz Reach = B4vallesatta RS = 1066.124 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



B4 Plan: Plan 01 2/12/2021

Geom: B4

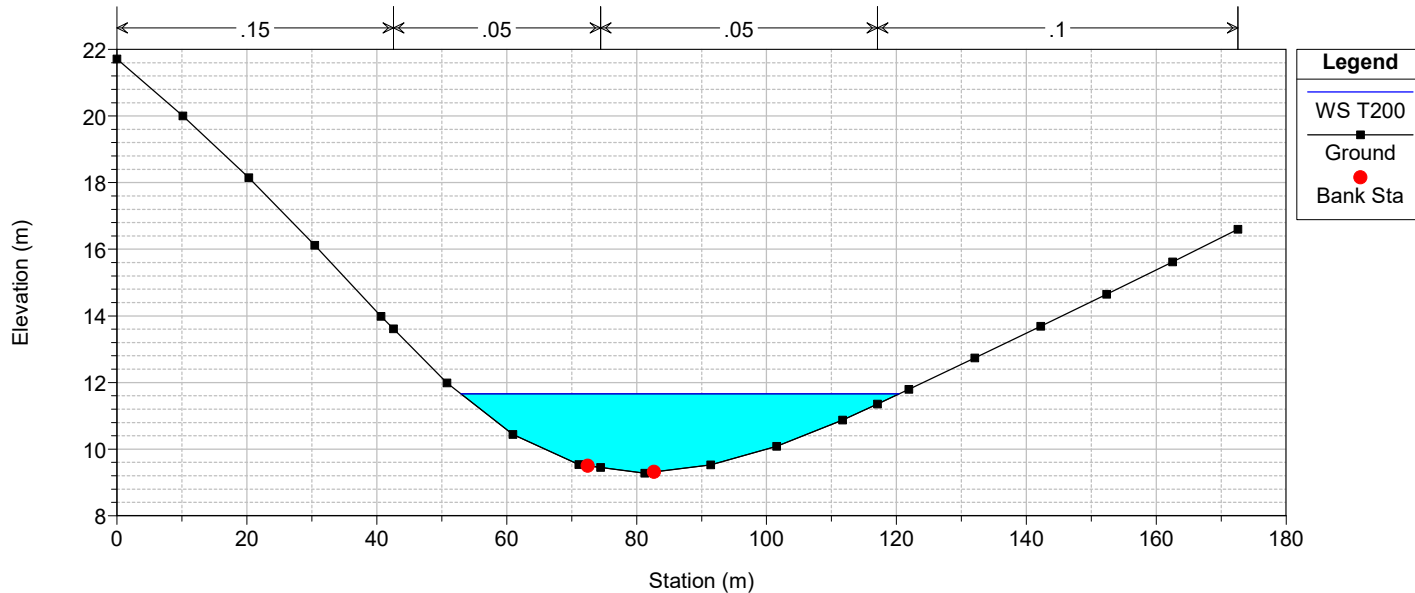
River = Baratz Reach = B4vallesatta RS = 964.6234 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



B4 Plan: Plan 01 2/12/2021

Geom: B4

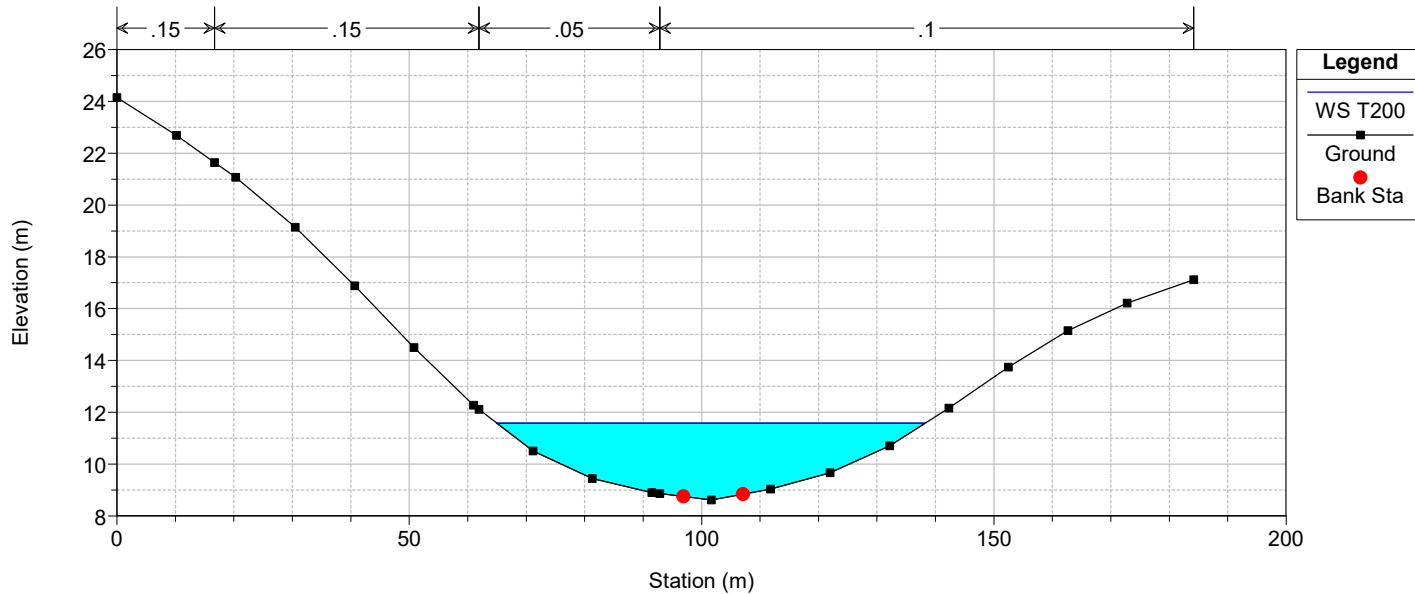
River = Baratz Reach = B4vallesatta RS = 883.6036 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



B4 Plan: Plan 01 2/12/2021

Geom: B4

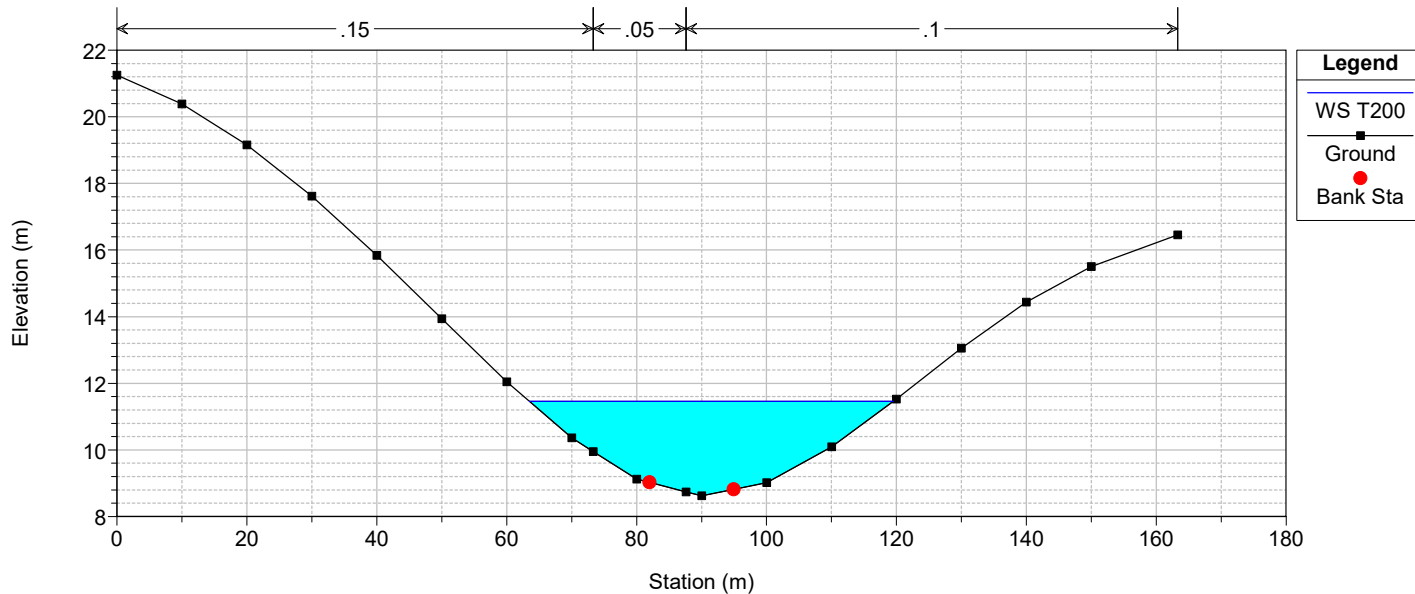
River = Baratz Reach = B4vallesatta RS = 797.3563 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



B4 Plan: Plan 01 2/12/2021

Geom: B4

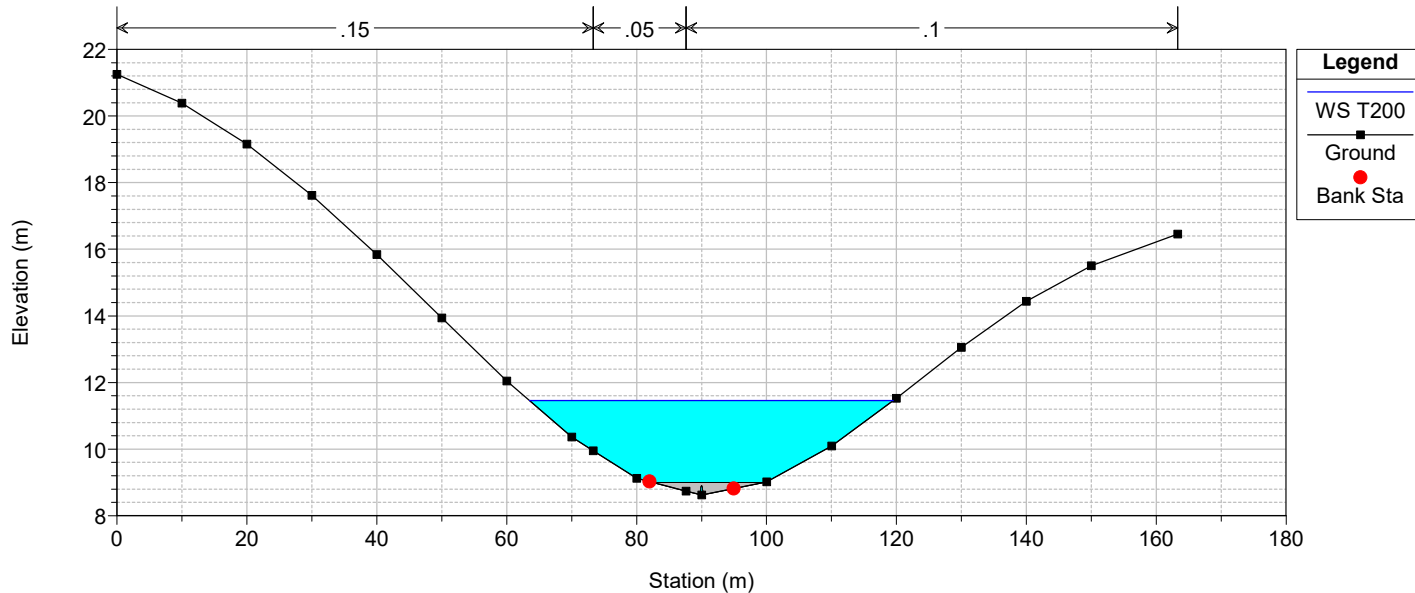
River = Baratz Reach = B4vallesatta RS = 727.5651 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



B4 Plan: Plan 01 2/12/2021

Geom: B4

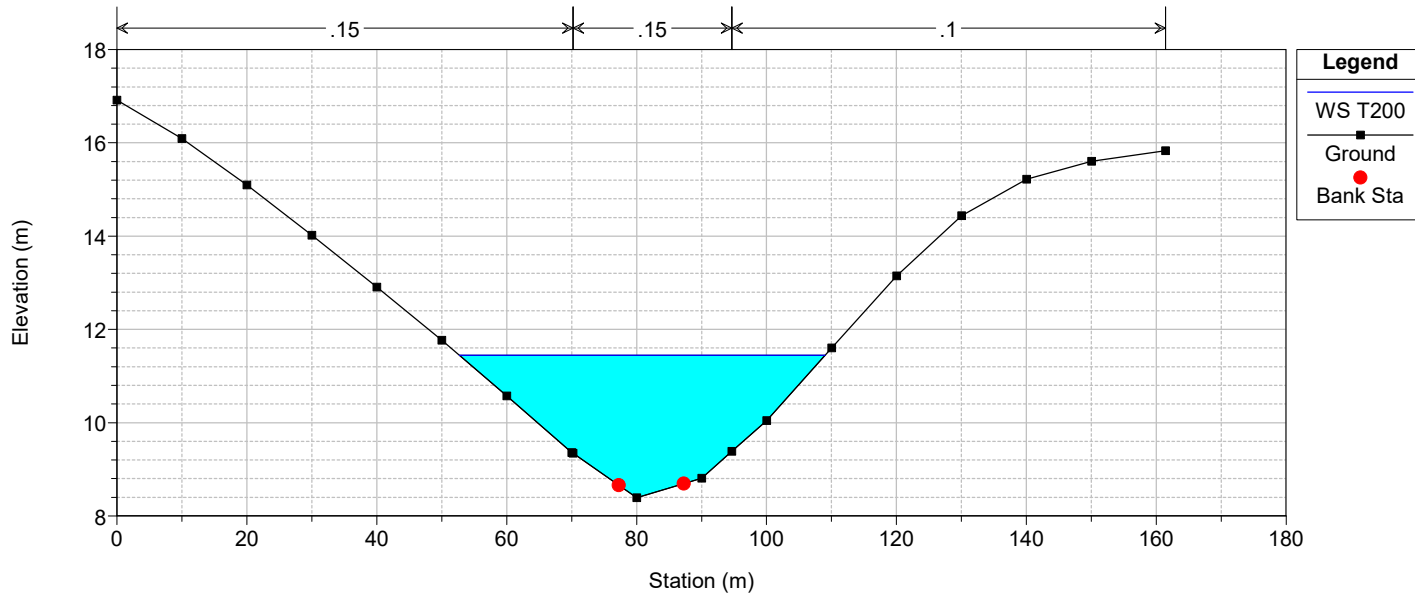
River = Baratz Reach = B4vallesatta RS = 708.6226 Culv COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



B4 Plan: Plan 01 2/12/2021

Geom: B4

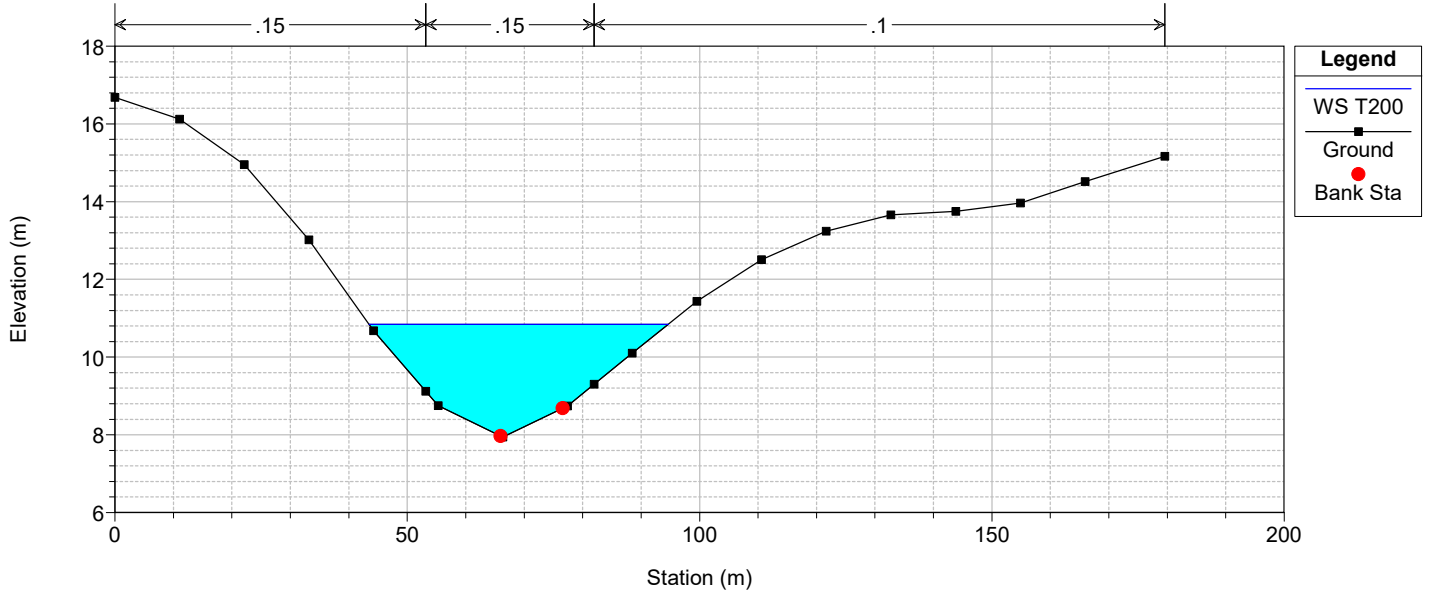
River = Baratz Reach = B4vallesatta RS = 690.8370 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



B4 Plan: Plan 01 2/12/2021

Geom: B4

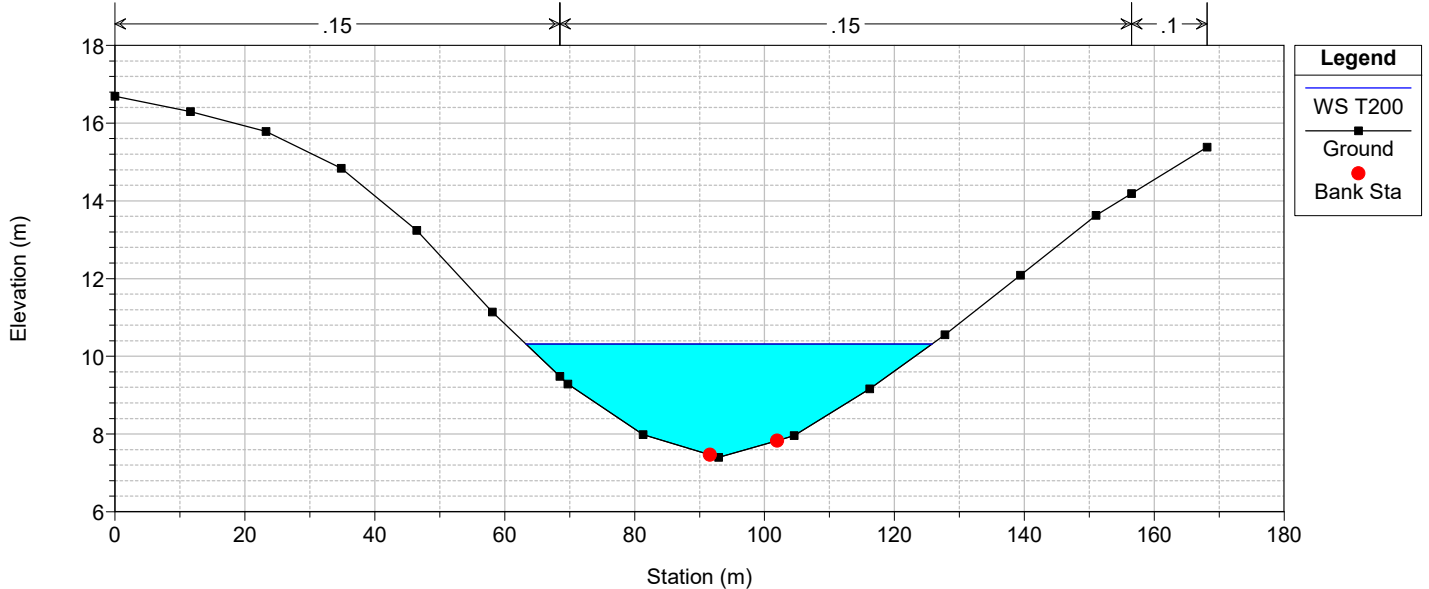
River = Baratz Reach = B4vallesatta RS = 617.9042 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



B4 Plan: Plan 01 2/12/2021

Geom: B4

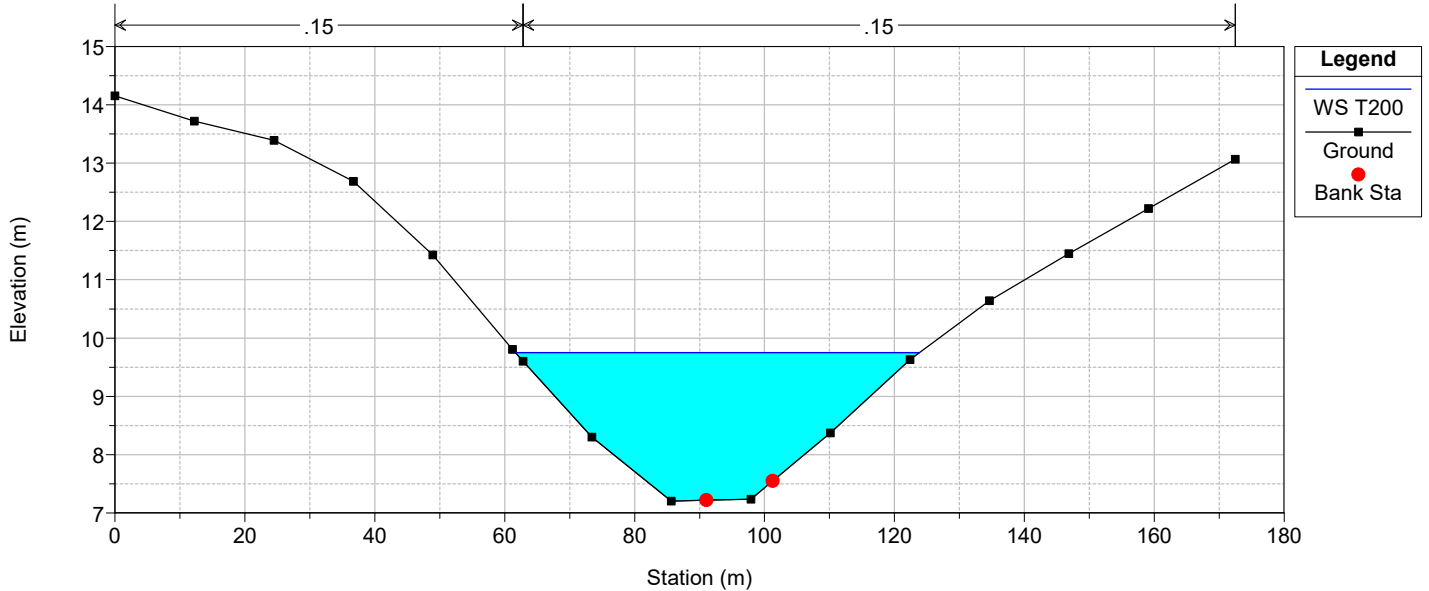
River = Baratz Reach = B4vallesatta RS = 547.9332 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



B4 Plan: Plan 01 2/12/2021

Geom: B4

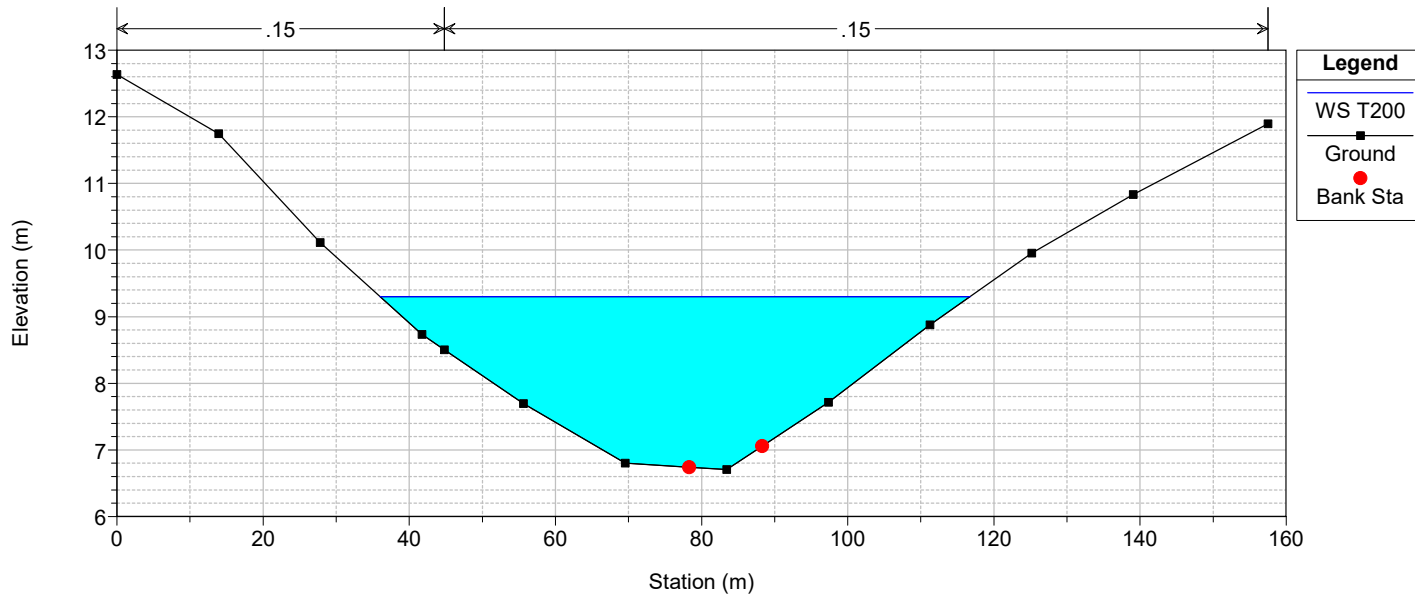
River = Baratz Reach = B4vallesatta RS = 478.3316 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



B4 Plan: Plan 01 2/12/2021

Geom: B4

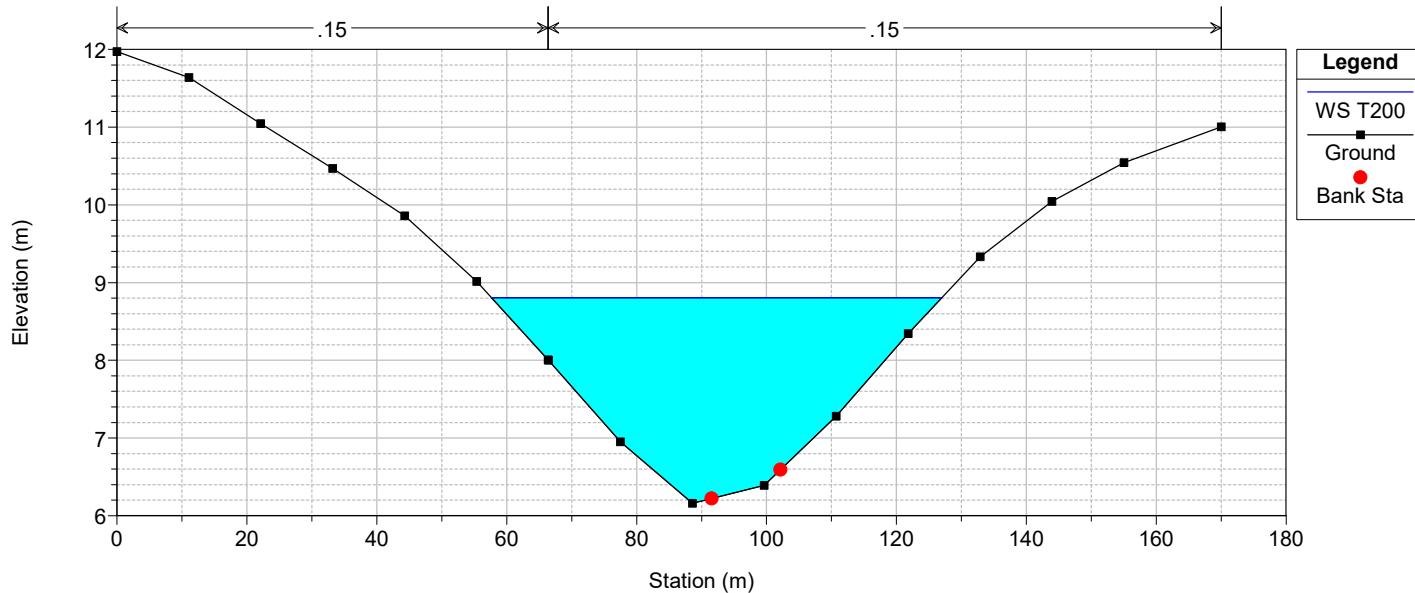
River = Baratz Reach = B4vallesatta RS = 416.4037 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



B4 Plan: Plan 01 2/12/2021

Geom: B4

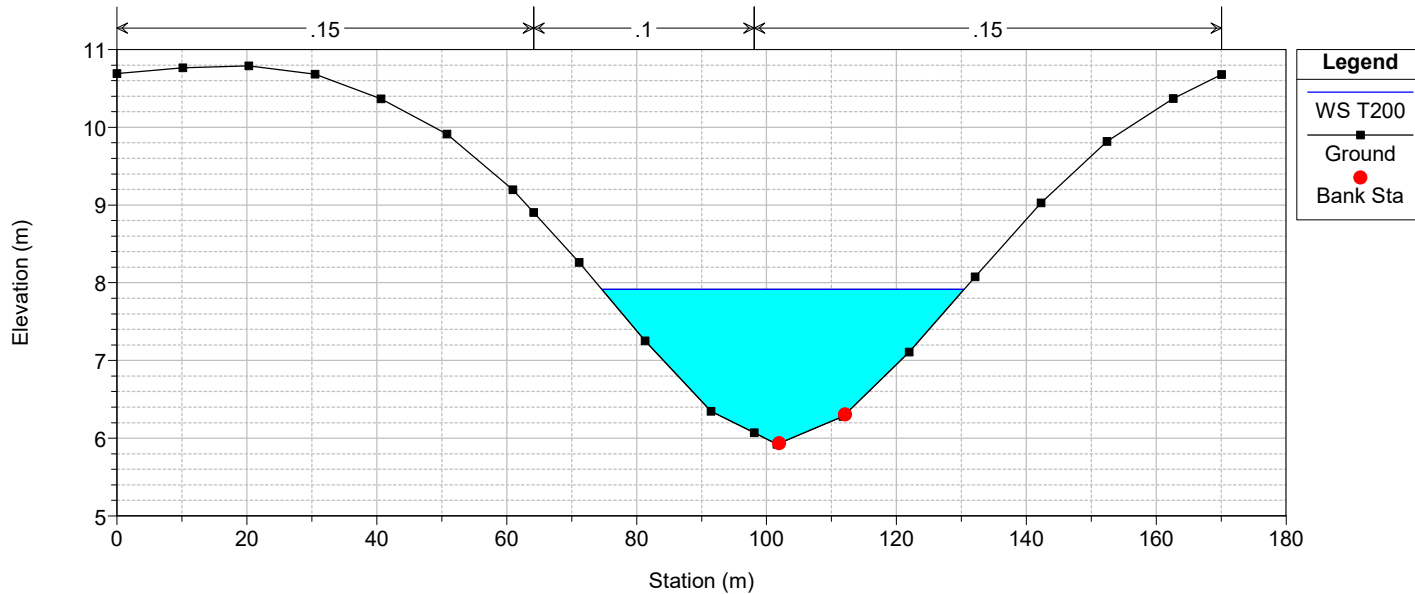
River = Baratz Reach = B4vallesatta RS = 343.1379 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



B4 Plan: Plan 01 2/12/2021

Geom: B4

River = Baratz Reach = B4vallesatta RS = 277.1386 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



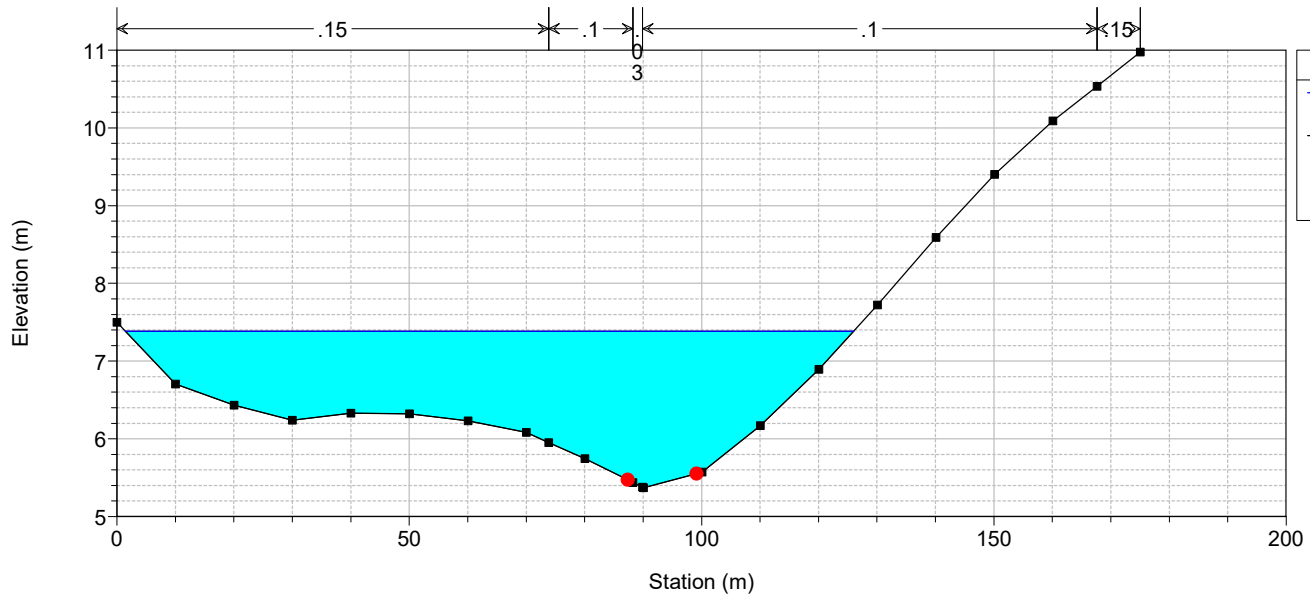
B4 Plan: Plan 01 2/12/2021

Geom: B4

River = Baratz Reach = B4vallesatta

RS = 197.0193

COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Legend

WS T200

Ground

Bank Sta

HEC-RAS Plan: Plan 01 River: Baratz Reach: B4vallesatta Profile: T200

Reach	River Sta	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)	
B4vallesatta	1240.826	T200	91.24	15.08	15.85	15.76	16.03	0.028541	2.26	49.94	89.30	0.98
B4vallesatta	1173.132	T200	91.24	13.57	14.29	14.26	14.48	0.018963	2.18	47.96	109.88	0.83
B4vallesatta	1066.124	T200	91.24	10.89	12.00	11.96	12.32	0.021659	2.87	37.78	53.38	0.94
B4vallesatta	964.6234	T200	91.24	9.64	11.75		11.82	0.001802	1.38	84.29	61.25	0.31
B4vallesatta	883.6036	T200	91.24	9.28	11.66		11.70	0.001057	1.13	101.71	67.39	0.24
B4vallesatta	797.3563	T200	91.24	8.62	11.58		11.61	0.000983	0.63	140.37	73.28	0.12
B4vallesatta	727.5651	T200	91.24	8.62	11.46	10.08	11.51	0.001969	1.20	98.35	55.98	0.23
B4vallesatta	708.6226		Culvert									
B4vallesatta	690.8370	T200	91.24	8.39	11.44		11.49	0.006729	1.11	98.47	56.29	0.21
B4vallesatta	617.9042	T200	91.24	7.94	10.84		10.90	0.009597	1.21	85.86	51.20	0.24
B4vallesatta	547.9332	T200	91.24	7.40	10.31		10.35	0.006418	1.04	109.68	62.53	0.20
B4vallesatta	478.3316	T200	91.24	7.22	9.75		9.80	0.009901	1.21	96.91	62.21	0.25
B4vallesatta	416.4037	T200	91.24	6.71	9.30		9.33	0.005697	0.93	124.95	80.72	0.19
B4vallesatta	343.1379	T200	91.24	6.22	8.81		8.85	0.008090	1.09	105.21	69.34	0.22
B4vallesatta	277.1386	T200	91.24	5.94	7.91		8.02	0.022795	1.49	65.81	55.75	0.35
B4vallesatta	197.0193	T200	91.24	5.37	7.38		7.42	0.003554	1.23	143.86	124.57	0.28

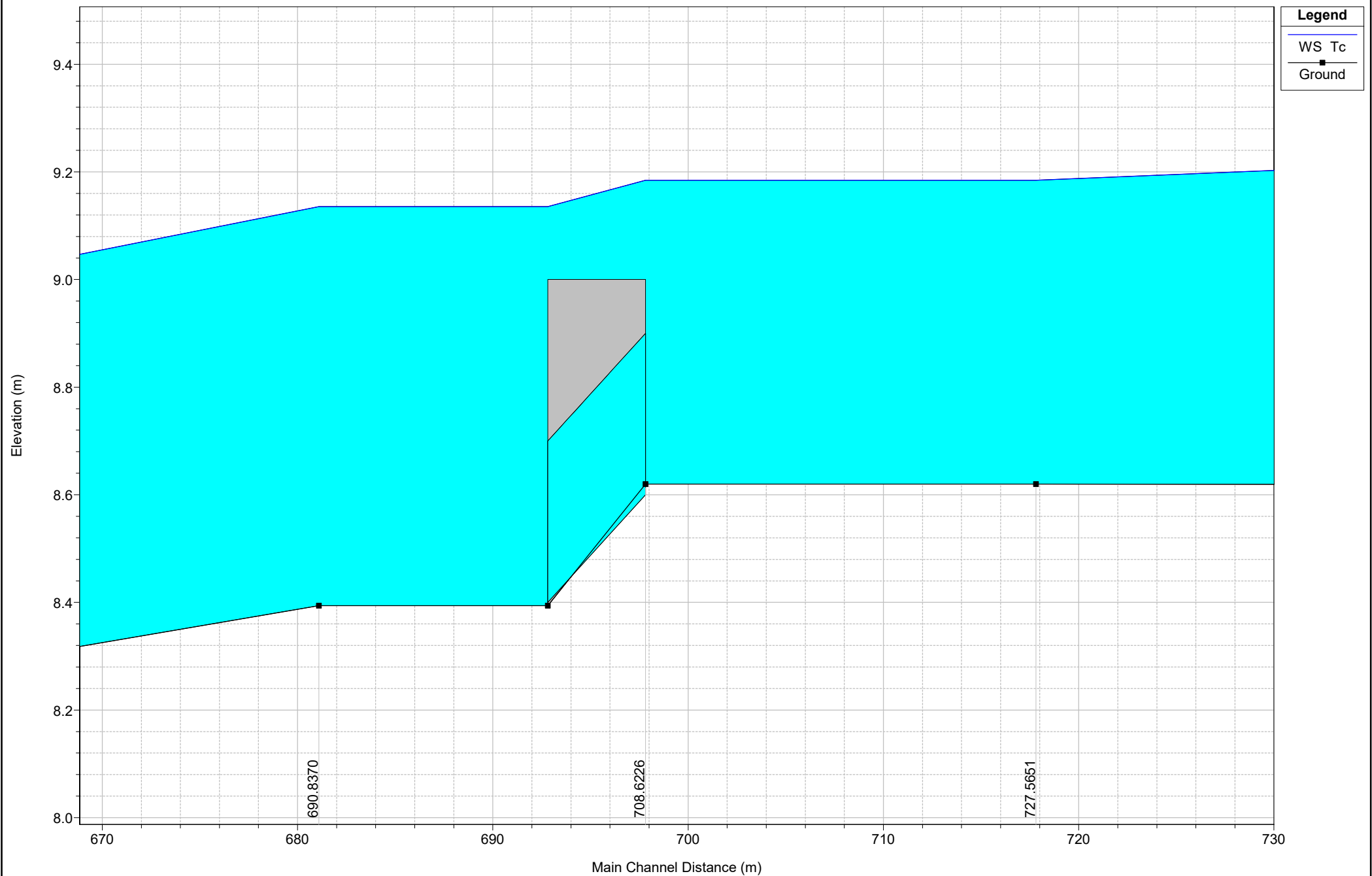
Reach	River Sta	Profile	E.G. US.	W.S. US.	E.G. IC	E.G. OC	Min El Weir Flow	Q Culv Group	Q Weir	Delta WS	Culv Vel US	Culv Vel DS
			(m)	(m)	(m)	(m)	(m)	(m3/s)	(m3/s)	(m)	(m/s)	(m/s)
B4vallesatta	708.6226 Culvert #1	T200	11.51	11.46	8.81	11.51	9.00	0.04	91.37	0.01	0.53	0.53

CALCOLO IDROLOGICO PORTATE DI PIENA

LAGO DI BARATZ B3 -C06			
TR (anni)			1
Lunghezza asta	L	m	6712
Curve Number	CN	-	93.00
Pend.za media bac.	i _{bac}	-	0.3000
Area bacino	A	kmq	7.9512
Altitudine massima	Hmax	m slm	0
Altitudine media	Hmed	m slm	150.5
Altitudine minima	Hmin	m slm	7.7
Pend.za media asta	iret	m/m	0.0520
	SCS	(ore)	0.707
	GIANDOTTI	(ore)	2.233
	PASINI	(ore)	1.783
	VAPI	(ore)	3.425
	KIRPICH	(ore)	0.457
	VIPARELLI	(ore)	1.864
	tc adott.	SCS (ore)	0.707
Tempi di ritorno	T	(anni)	1
Dati pluviometrici	Pgiorn.	(mm)	50
	Sottozona		2
Altezza di pioggia	n1	-	0.31570972
	a1	-	20.6914142
	n2 (ADOTTATO)	-	-0.18676
	a2 (ADOTTATO)	-	0.44182
	n (ADOTTATO)	-	0.12894972
	a (ADOTTATO)	-	9.14188063
	h (ADOTTATO)	(mm)	8.742
	Coef.f.Ragg (ADOTTATO)	-	0.906
	h r (ADOTTATO)	(mm)	7.923
	S	(mm)	19.118
	Ia	(mm)	3.824
	Pnetta (ADOTTATO)	(mm)	0.724
	Coef.defl. (SCS)		0.513
	Coef.defl. (GIANDOTTI)		0.643
	Coef.defl. (PASINI)		0.622
	Coef.defl. (VAPI)		0.680
	Coef.defl. (KIRPICH)		0.446
	Coef.defl. (VIPARELLI)		0.626
	Coef.defl. (ADOTTATO)	-	0.083
PORTATE DI PIENA	Qpicco (SCS)	(mc/s)	64.958
	Qpicco (GIANDOTTI)	(mc/s)	38.260
	Qpicco (PASINI)	(mc/s)	43.295
	Qpicco (VAPI)	(mc/s)	30.045
	Qpicco (KIRPICH)	(mc/s)	72.053
	Qpicco (VIPARELLI)	(mc/s)	42.256
	Qpicco (ADOTTATO)	(mc/s)	2.261

Comune di Sassari (SS)
VERIFICHE DI SICUREZZA IDRAULICA OPERE INTERFERENTI CON IL RETICOLO IDROGRAFICO
Strade comunali - **ATTRAVERSAMENTO C06**

	River Sta	Profile	Culv Inv El DS	Culv Inv El US	W.S.	Q Culv	Culv Vel US	Culv Vel DS	QUOTA INTRADOS SO	FRANCHI DISPONIBILI	FRANCHI RICHIESTI	50% di FRANCHI RICHIESTI	VERIFICA	Deficit
			(m slm)	(m slm)	(m slm)	(m³/s)	(m/s)	(m/s)	(m slm)	(m)	(m)	(m)		(m)
UPSTREAM	708.6226 Culv	TR 200 ANNI		8.6	11.46	91.24	0.53		8.9	-2.56	1.471		NON VERIF.	4.0313035
	708.6226 Culv	Tr critico		8.6	9.18	2.3	0.67		8.9	-0.28	1.000	0.500	NON VERIF.	0.780
DOWNSTREAM	708.6226 Culv	TR 200 ANNI	8.4		11.44	91.24		0.53	8.7	-2.74	1.500		NON VERIF.	4.24
	708.6226 Culv	Tr critico	8.4		9.14	2.3		0.67	8.7	-0.44	1.000	0.500	NON VERIF.	0.940



COMUNE DI SASSARI

VERIFICHE DI SICUREZZA IDRAULICA OPERE INTERFERENTI CON IL RETICOLO IDROGRAFICO – ATTRAVERSAMENTI STRADE COMUNALI

Area di indagine: **TERRITORIO COMUNALE**

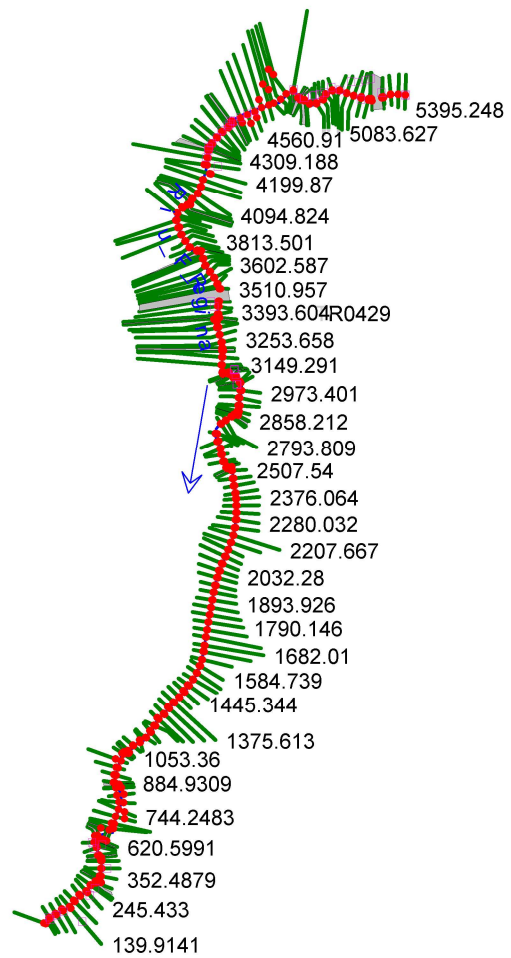
SIMULAZIONI IN MOTO PERMANENTE

ATTRAVERSAMENTI C07, C08, C64 e C69 sul rio Calamasciu

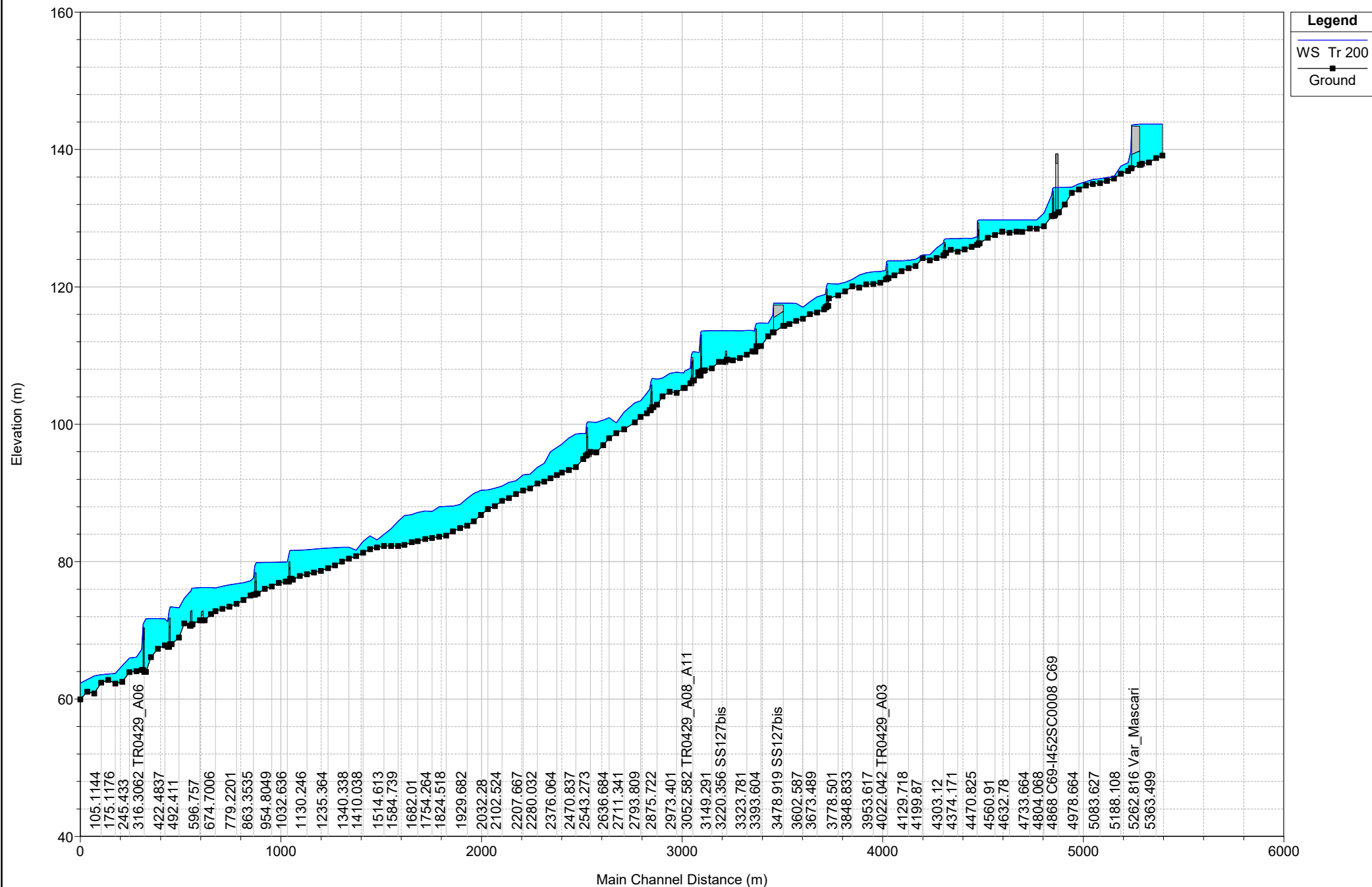
- Schema planimetrico del modello matematico;
- Profili longitudinali con livelli idrici per il tempo di ritorno di 200 anni;
- Sezioni trasversali con livelli idrici per il tempo di ritorno di 200 anni;
- Tabulati numerici di output per il tempo di ritorno di 200 anni;
- Calcolo della portata critica;
- Profilo longitudinale del livello idrico per il tempo di ritorno critico TC;
- Verifica dei franchi idraulici e della portata critica;

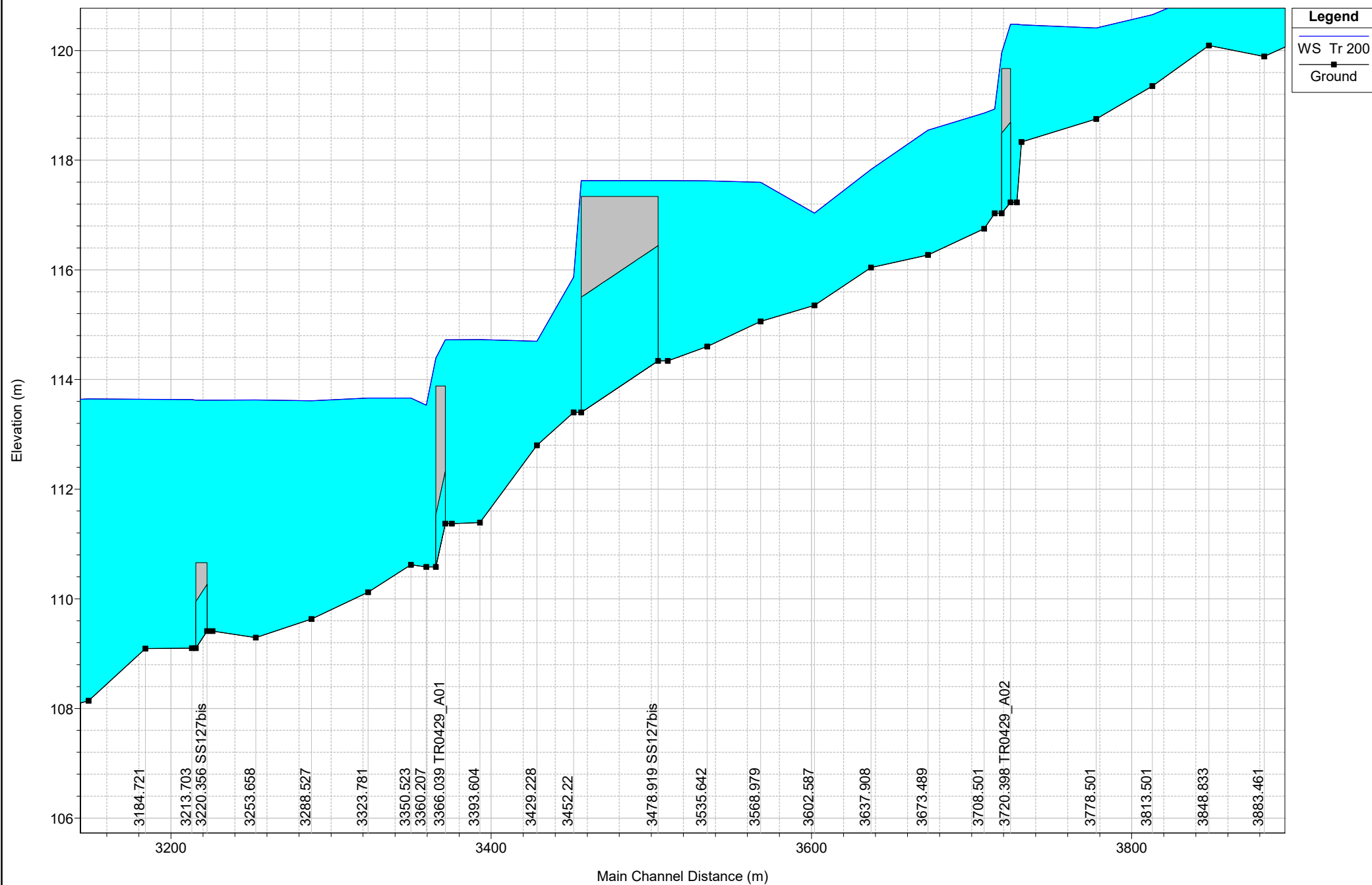
River	Reach	RS	PORTATE mc/s			
			Tr 50	Tr 100	Tr 200	Tr 500
Riu_F_Regina	TR0429	5395.248	42.924	50.551	58.223	68.415
Riu_F_Regina	TR0429	4768.796	57.218	67.097	77.02	90.187
Riu_F_Regina	TR0429	4409.721	57.81	67.808	77.852	91.176
Riu_F_Regina	TR0429	3953.617	57.305	67.206	77.151	90.343
Riu_F_Regina	TR0429	3637.908	65.434	76.87	88.361	103.611
Riu_F_Regina	TR0429	3323.781	71.162	83.778	96.463	113.304
Riu_F_Regina	TR0429	3008.535	70.638	83.142	95.713	112.402
Riu_F_Regina	TR0429	2824.898	83.581	98.507	113.522	133.463
Riu_F_Regina	TR0429	2436.356	136.456	161.371	186.458	219.797
Riu_F_Regina	TR0429	989.6494	143.21	169.463	195.904	231.049
Riu_F_Regina	TR0429	814.2578	145.79	172.504	199.406	235.162
Riu_F_Regina	TR0429	596.757	145.192	171.787	198.57	234.164
Riu_F_Regina	TR0429	422.4837	144.655	171.133	197.795	233.228

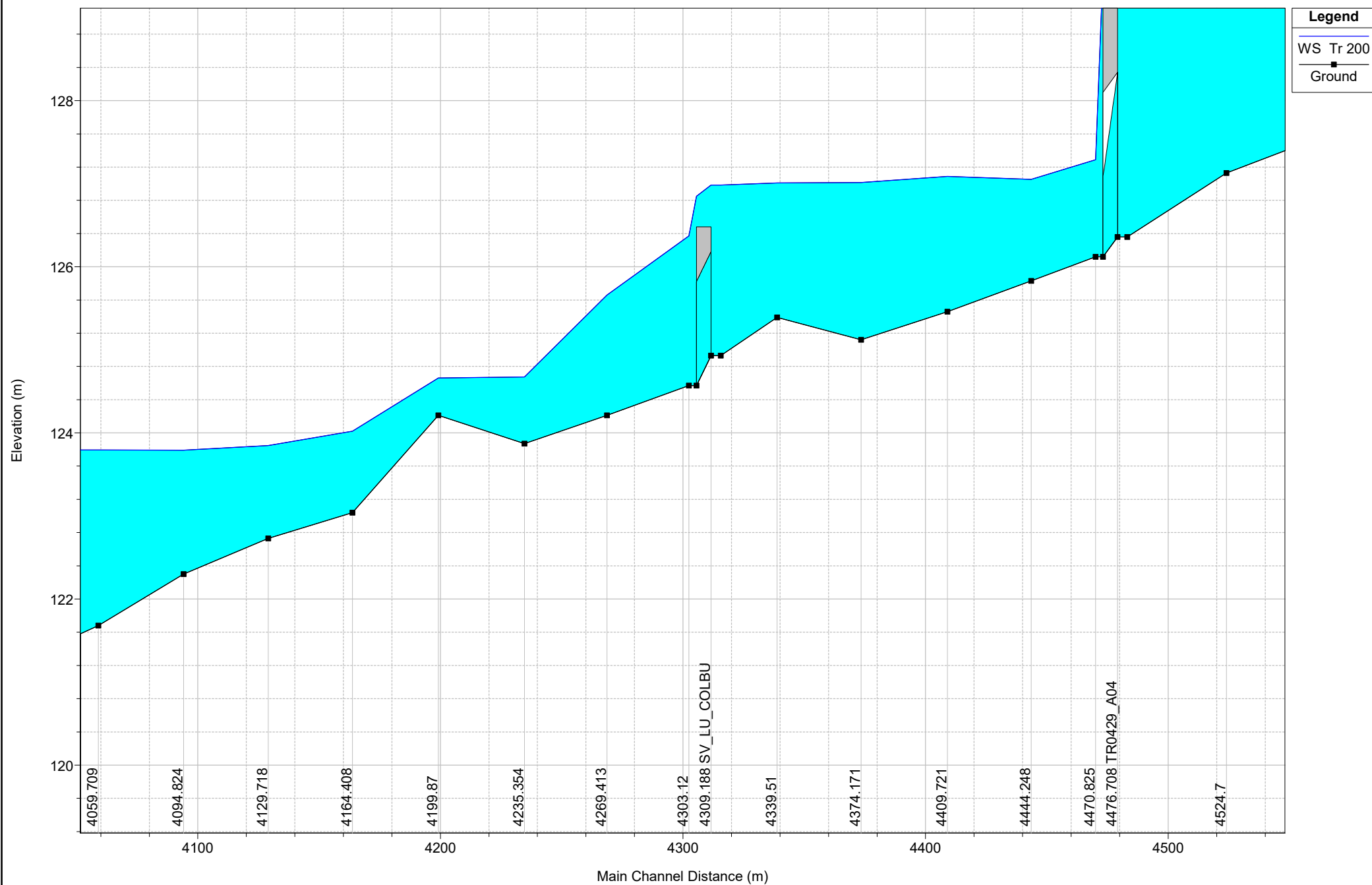
River	Reach	PROFILI	condizioni al contorno	
			upstream	downstream
Riu_F_Regina	TR0429	all	Critical Depth	Critical Depth

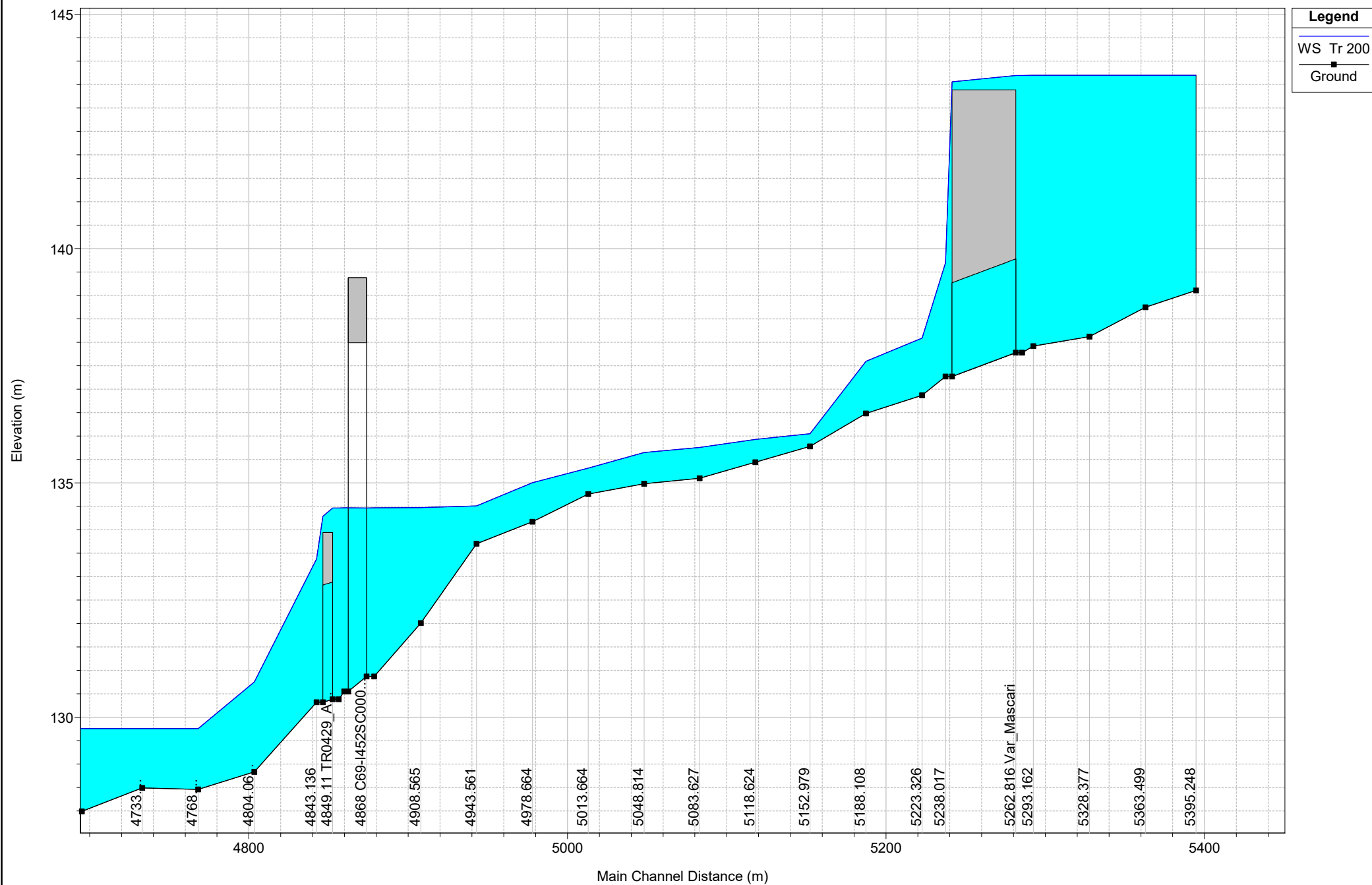


Calamasciu Plan: Calamasciu_ok 11/30/2021
Geom: Calamasciu_ok COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI





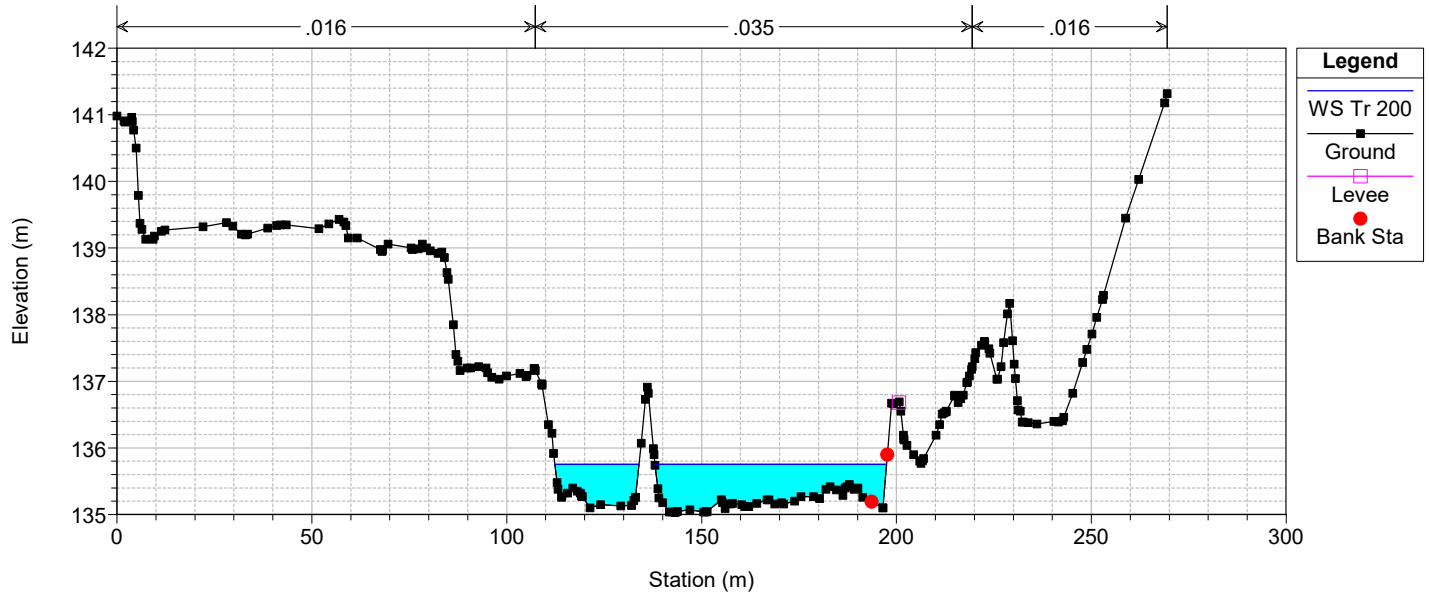




Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

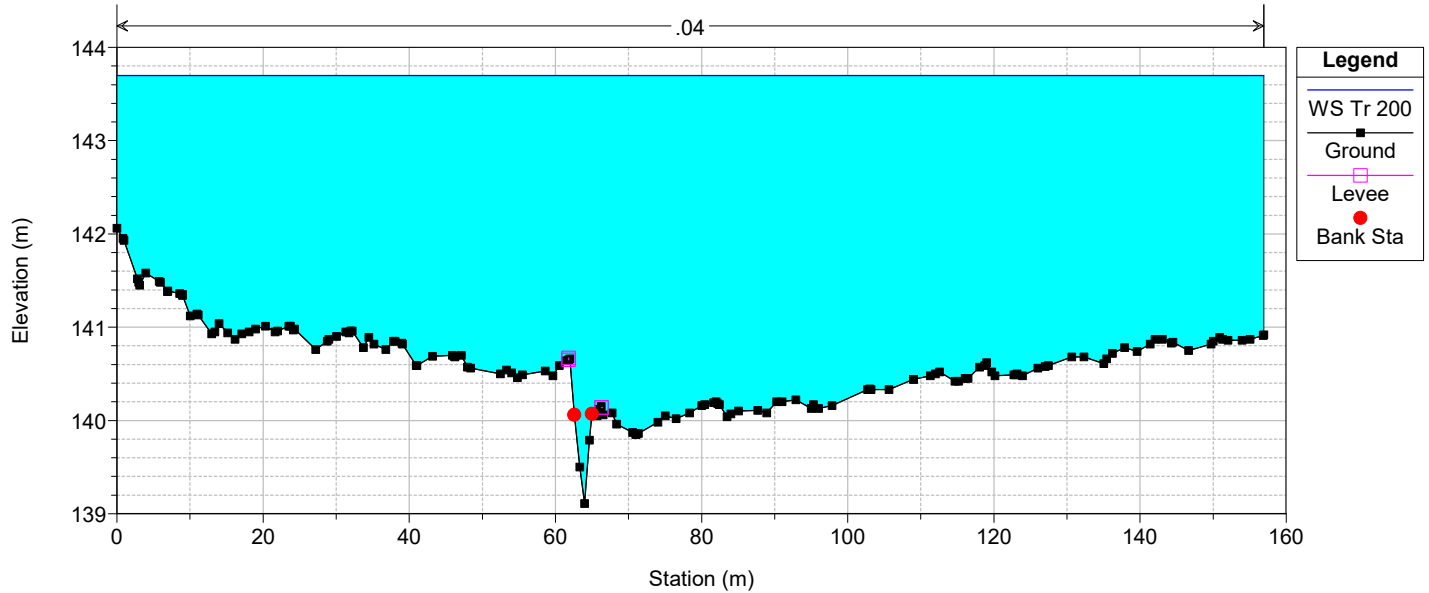
River = Riu_F_Regina Reach = TR0429 RS = 5083.627 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

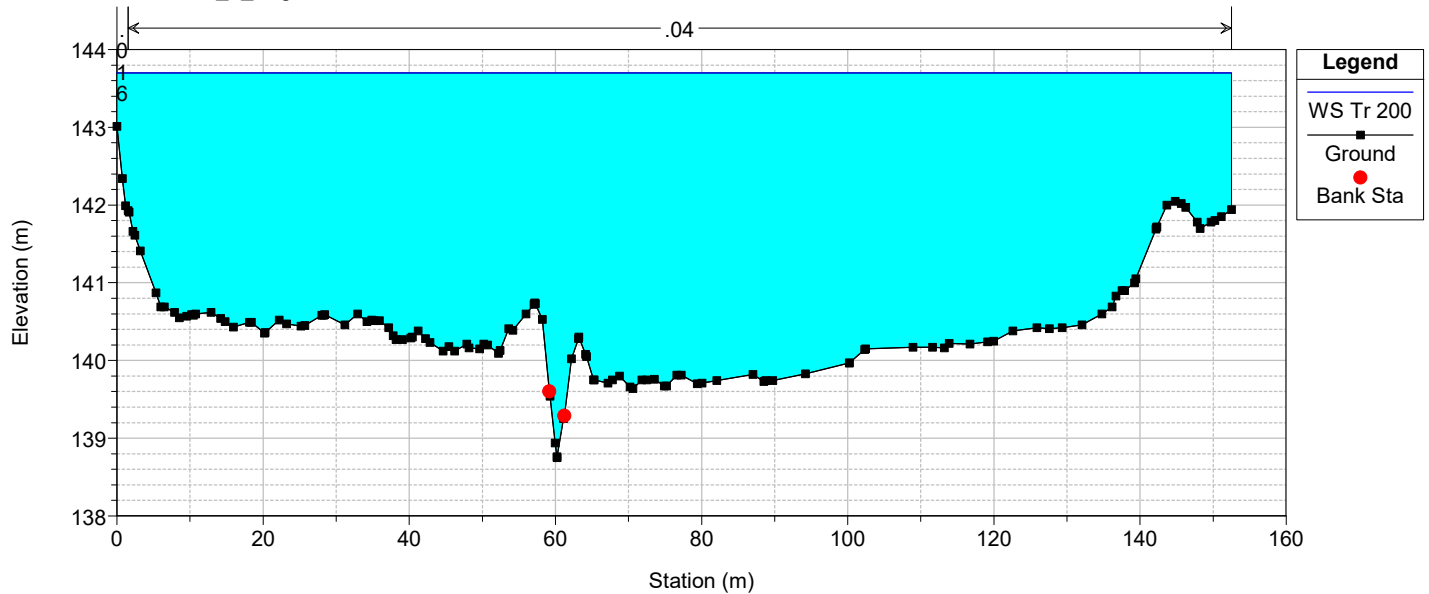
River = Riu_F_Regina Reach = TR0429 RS = 5395.248 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

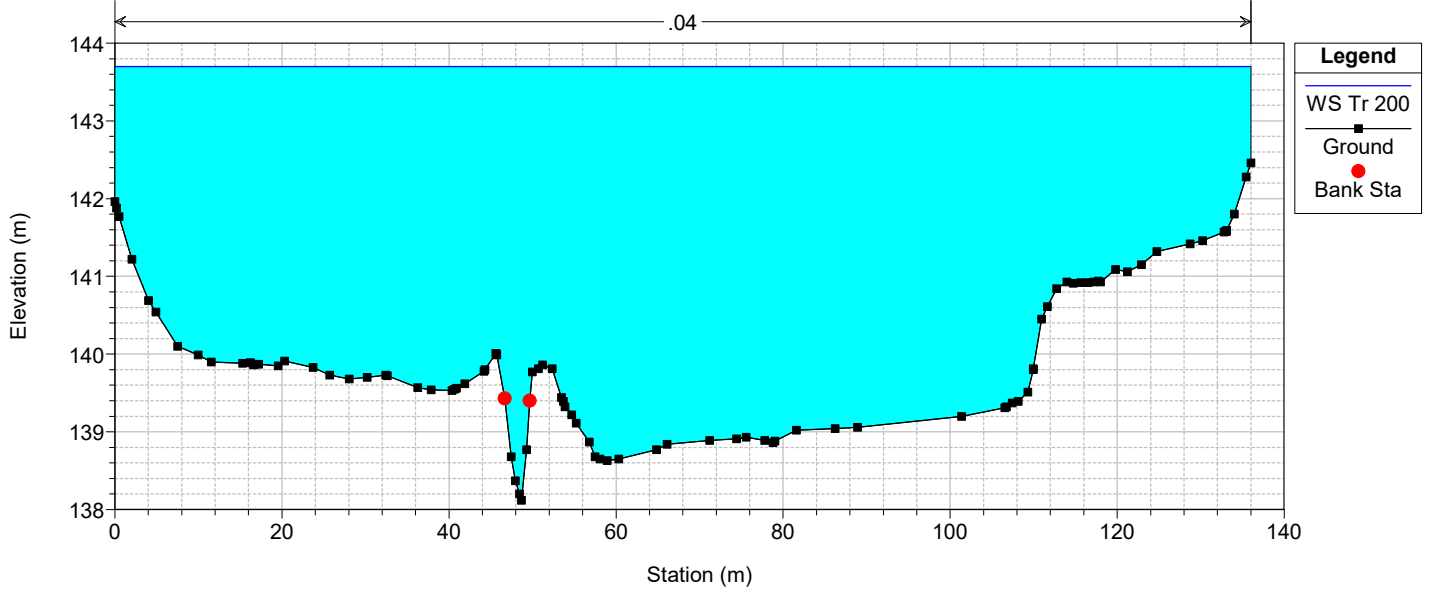
River = Riu_F_Regina Reach = TR0429 RS = 5363.499 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

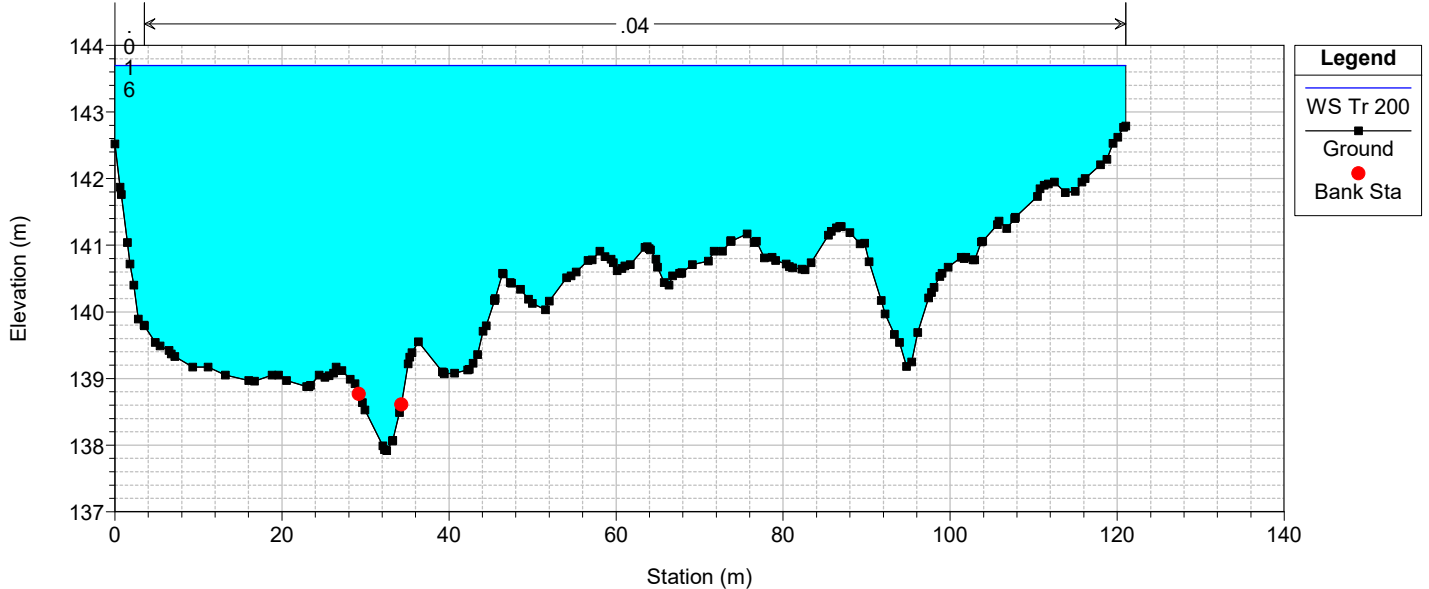
River = Riu_F_Regina Reach = TR0429 RS = 5328.377 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

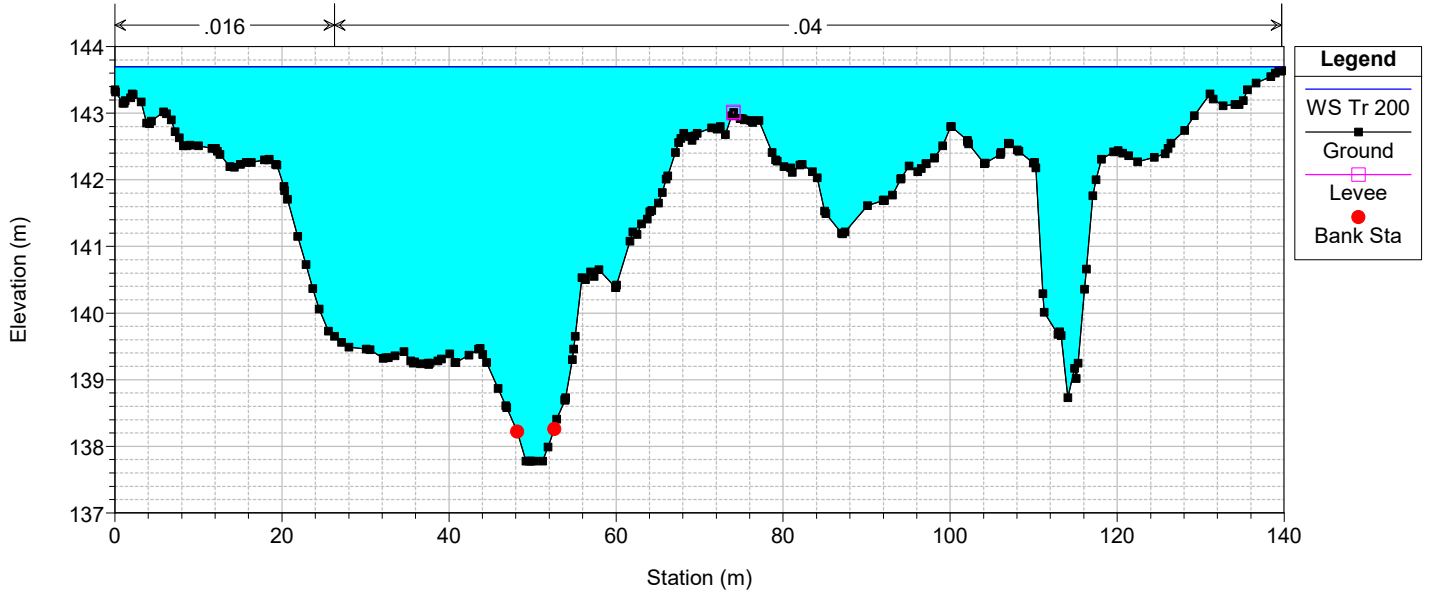
River = Riu_F_Regina Reach = TR0429 RS = 5293.162 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

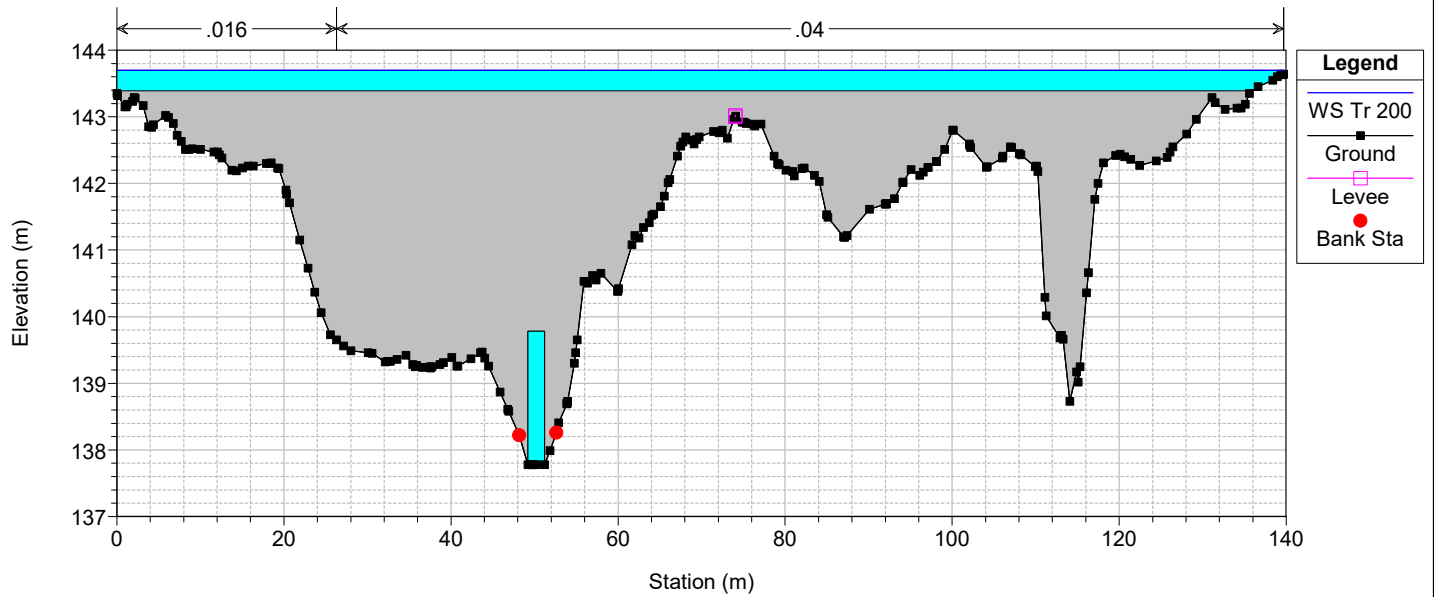
River = Riu_F_Regina Reach = TR0429 RS = 5286.138 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

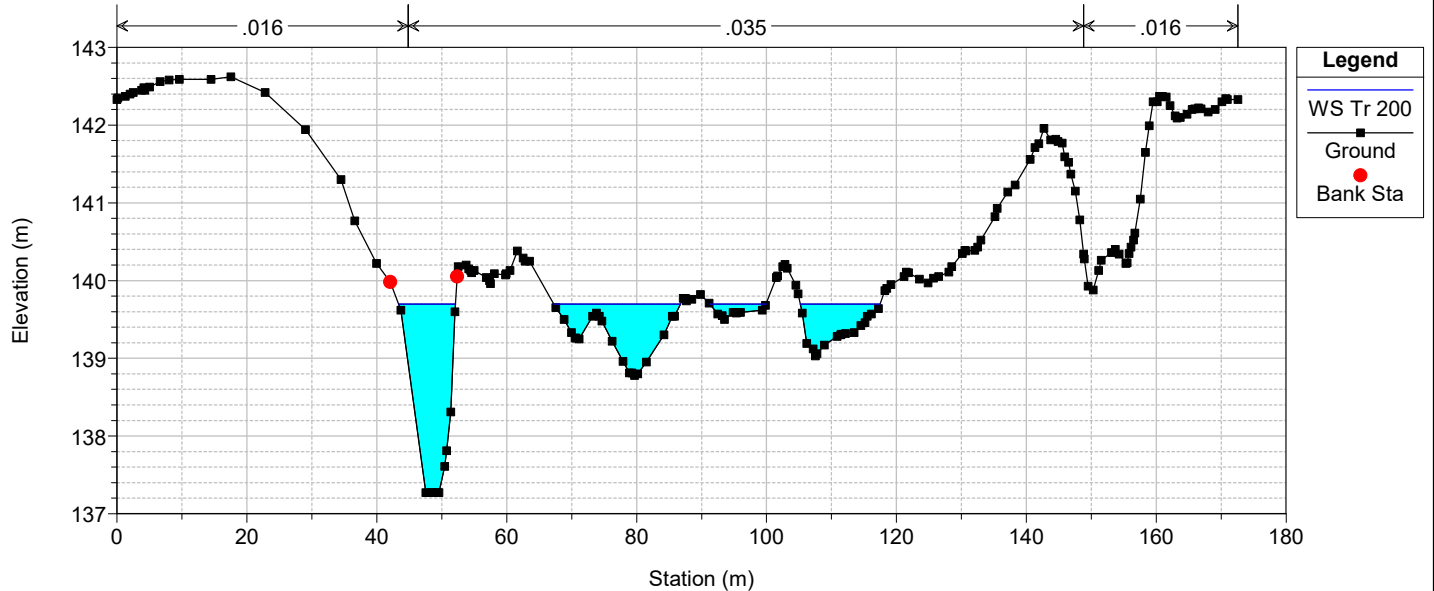
River = Riu_F_Regina Reach = TR0429 RS = 5262.816 Culv Var_Mascari COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

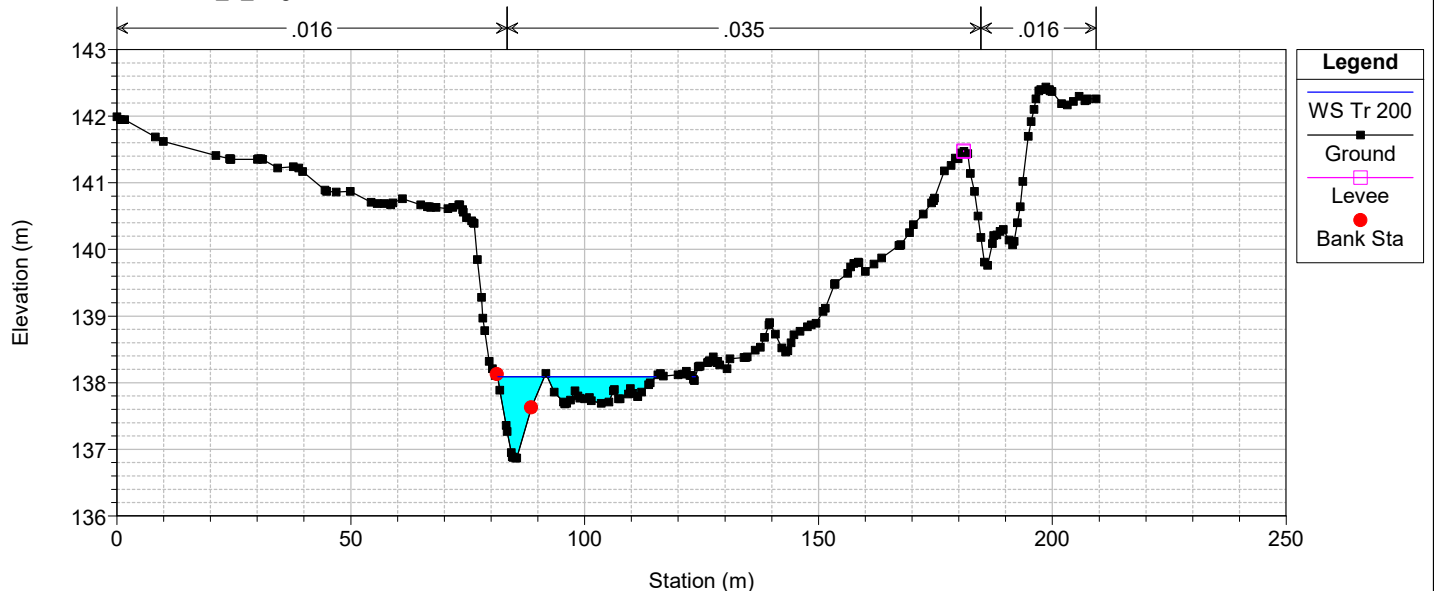
River = Riu_F_Regina Reach = TR0429 RS = 5238.017 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

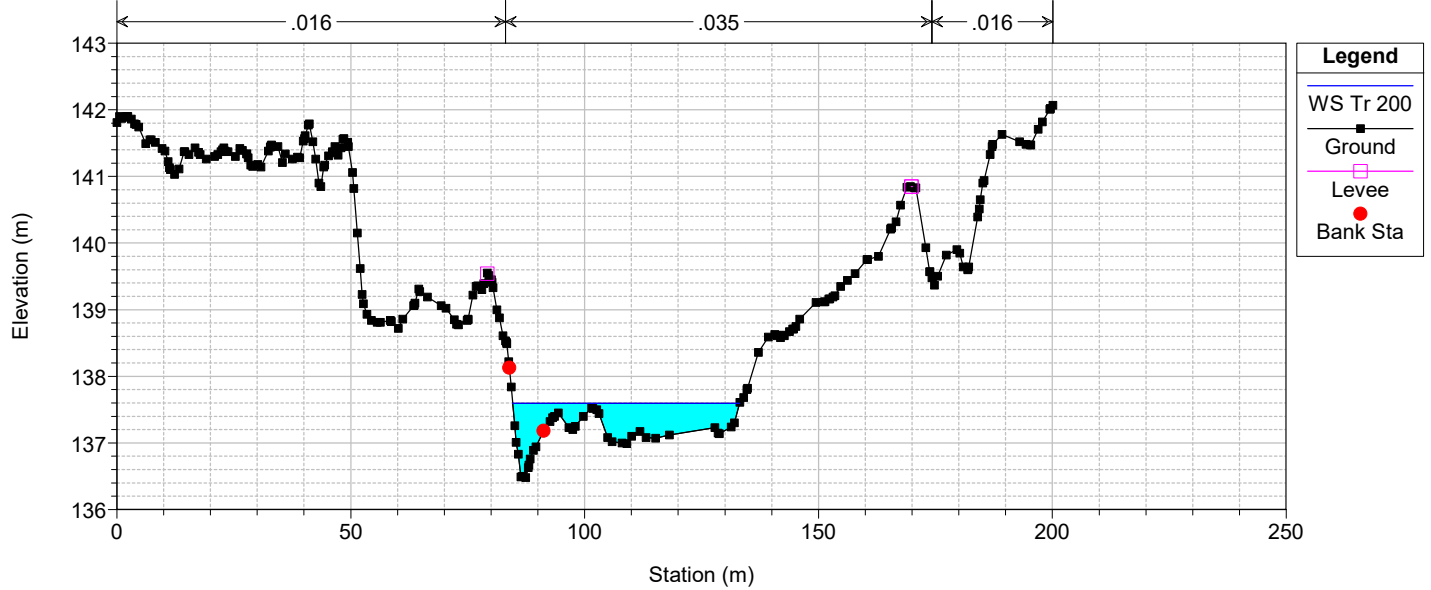
River = Riu_F_Regina Reach = TR0429 RS = 5223.326 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

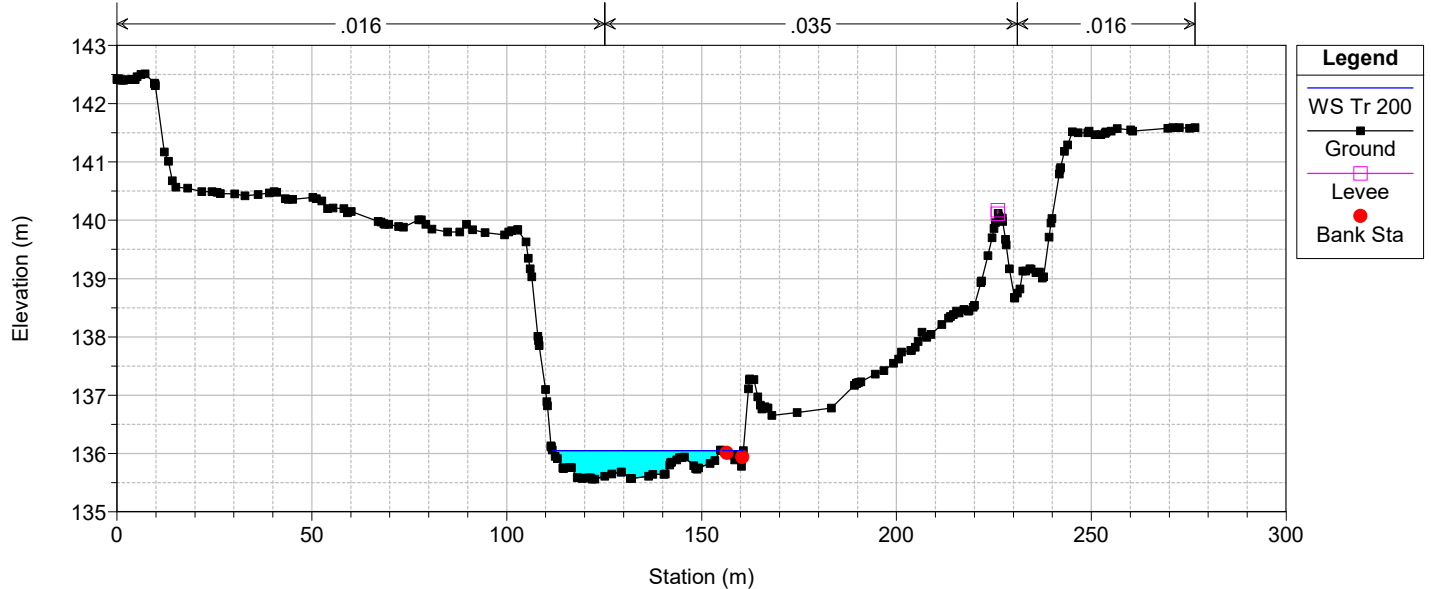
River = Riu_F_Regina Reach = TR0429 RS = 5188.108 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

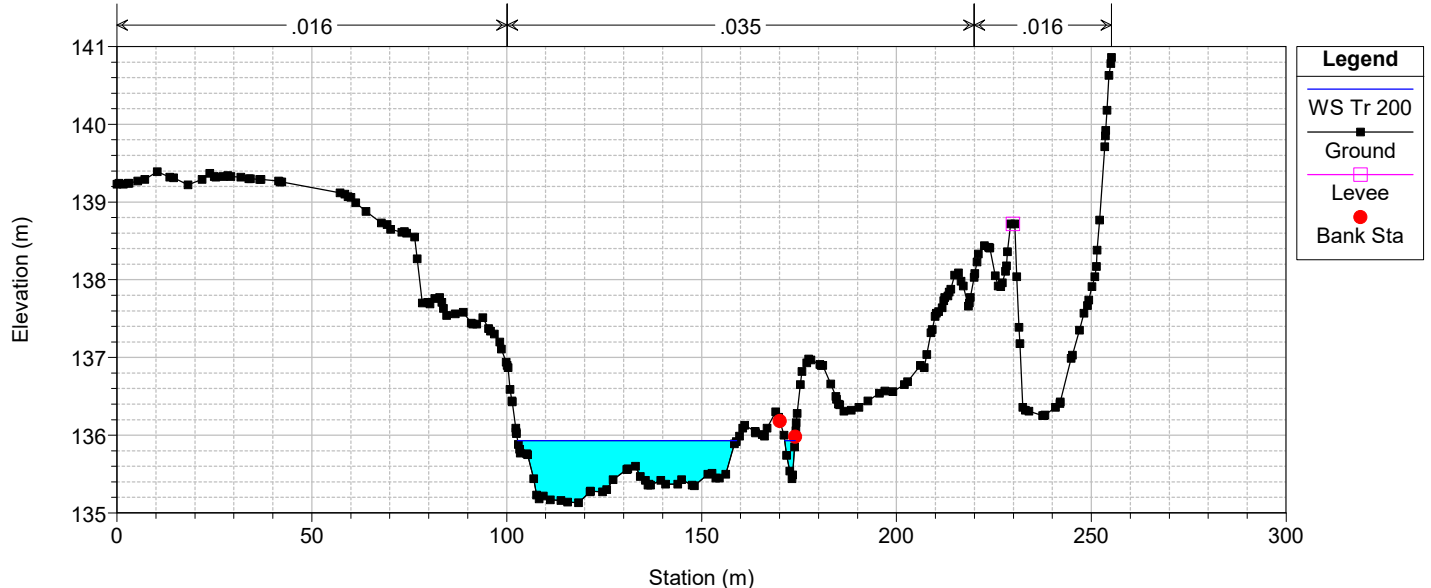
River = Riu_F_Regina Reach = TR0429 RS = 5152.979 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

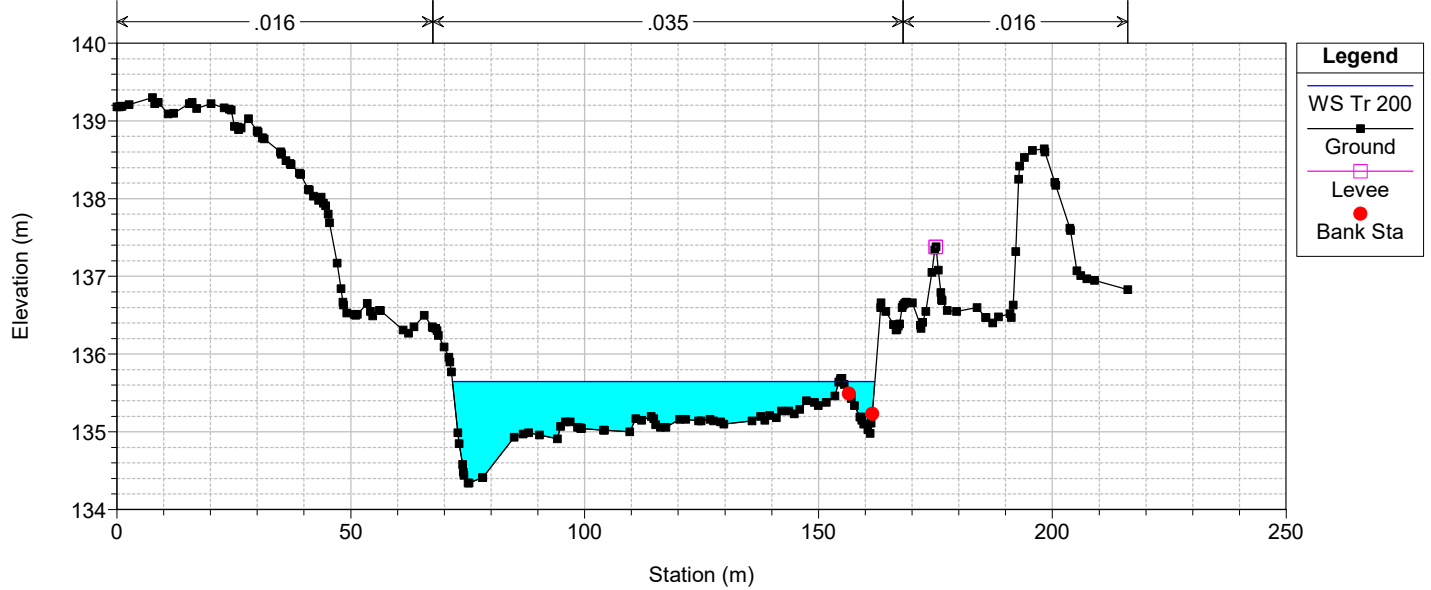
River = Riu_F_Regina Reach = TR0429 RS = 5118.624 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

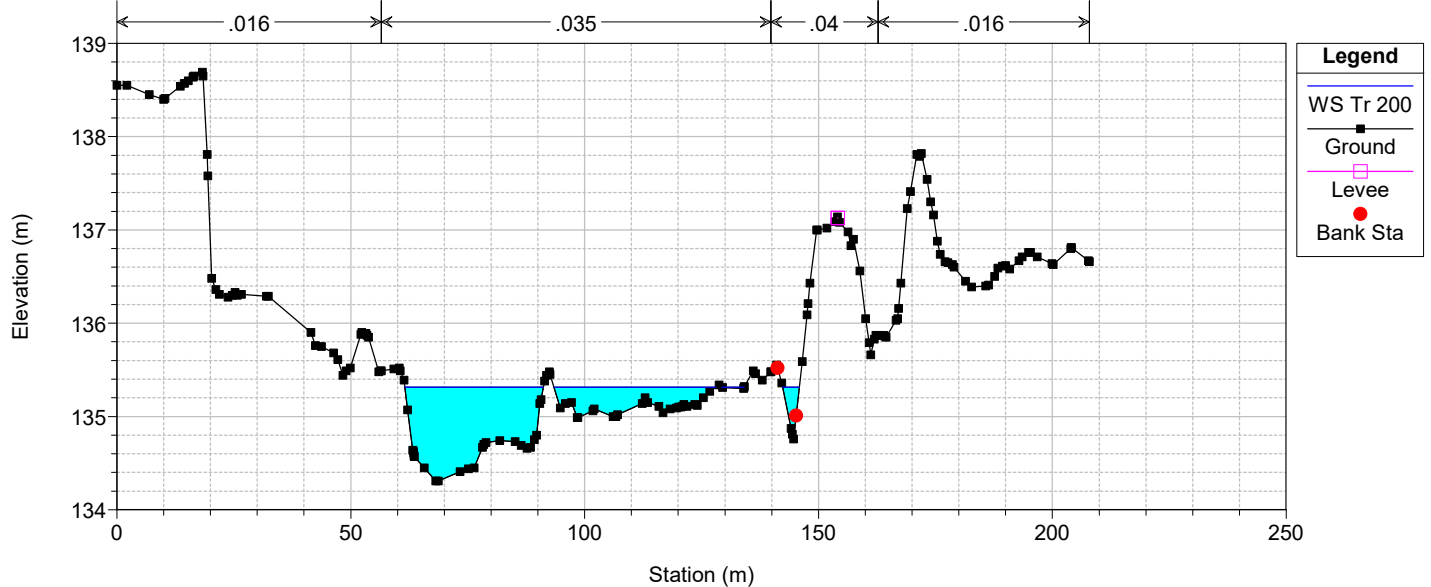
River = Riu_F_Regina Reach = TR0429 RS = 5048.814 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

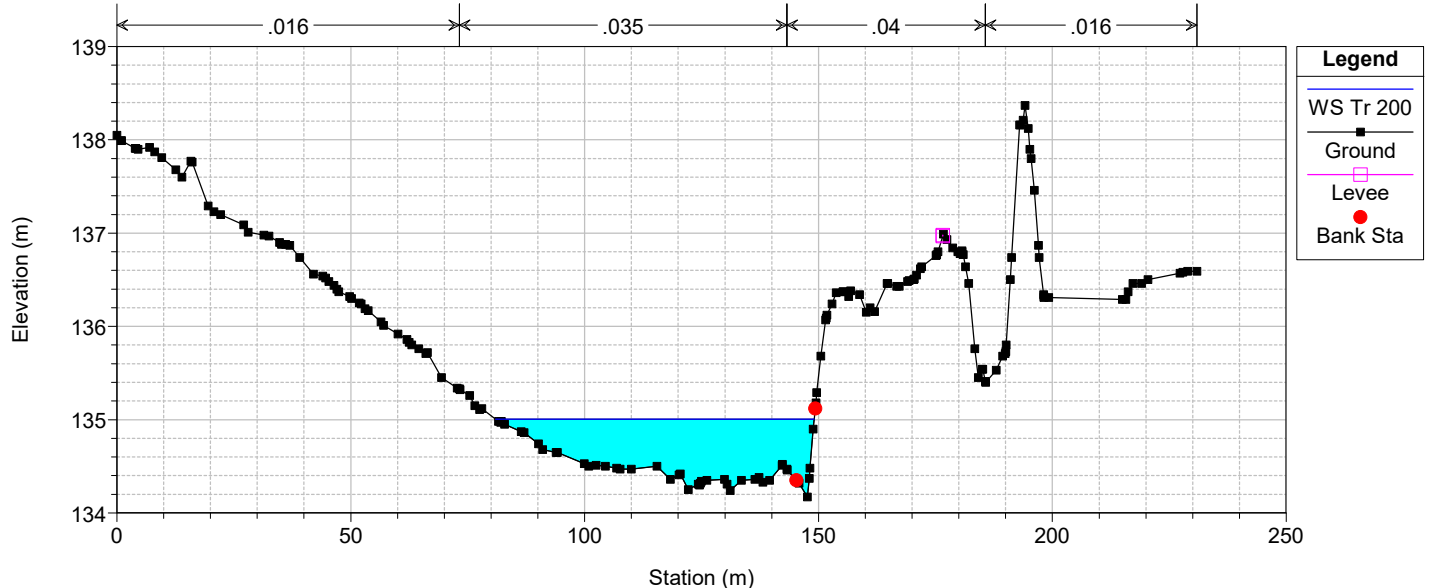
River = Riu_F_Regina Reach = TR0429 RS = 5013.664 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

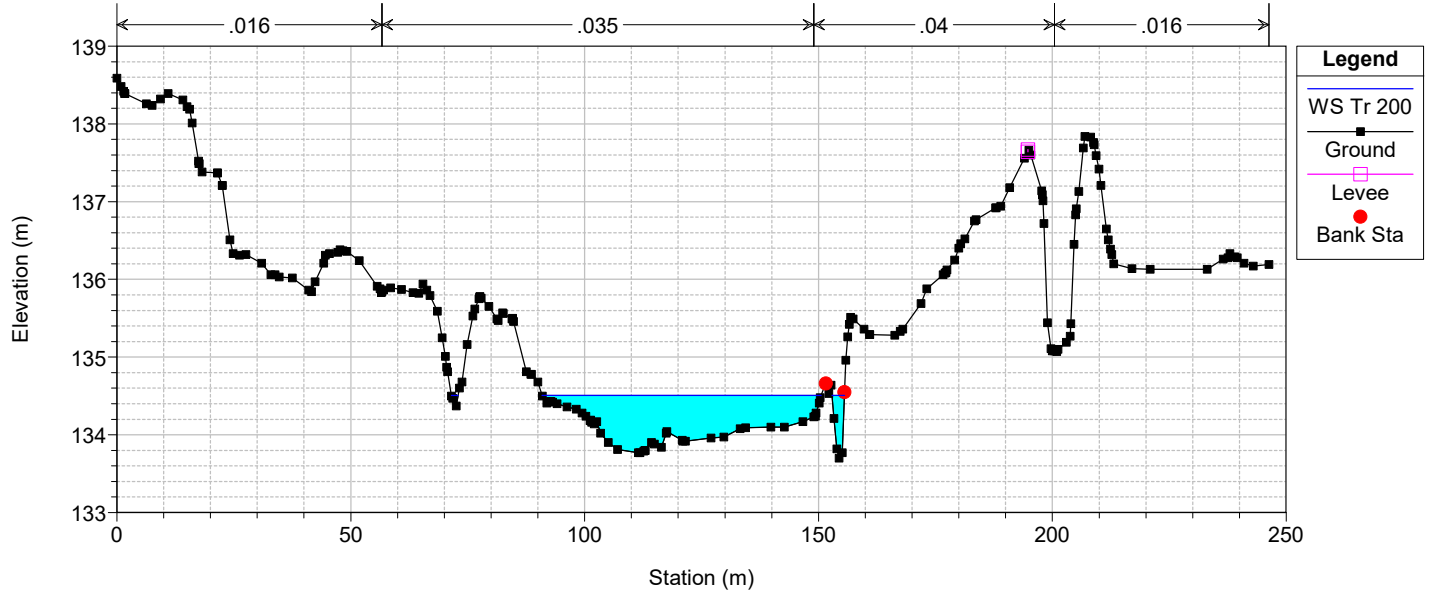
River = Riu_F_Regina Reach = TR0429 RS = 4978.664 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

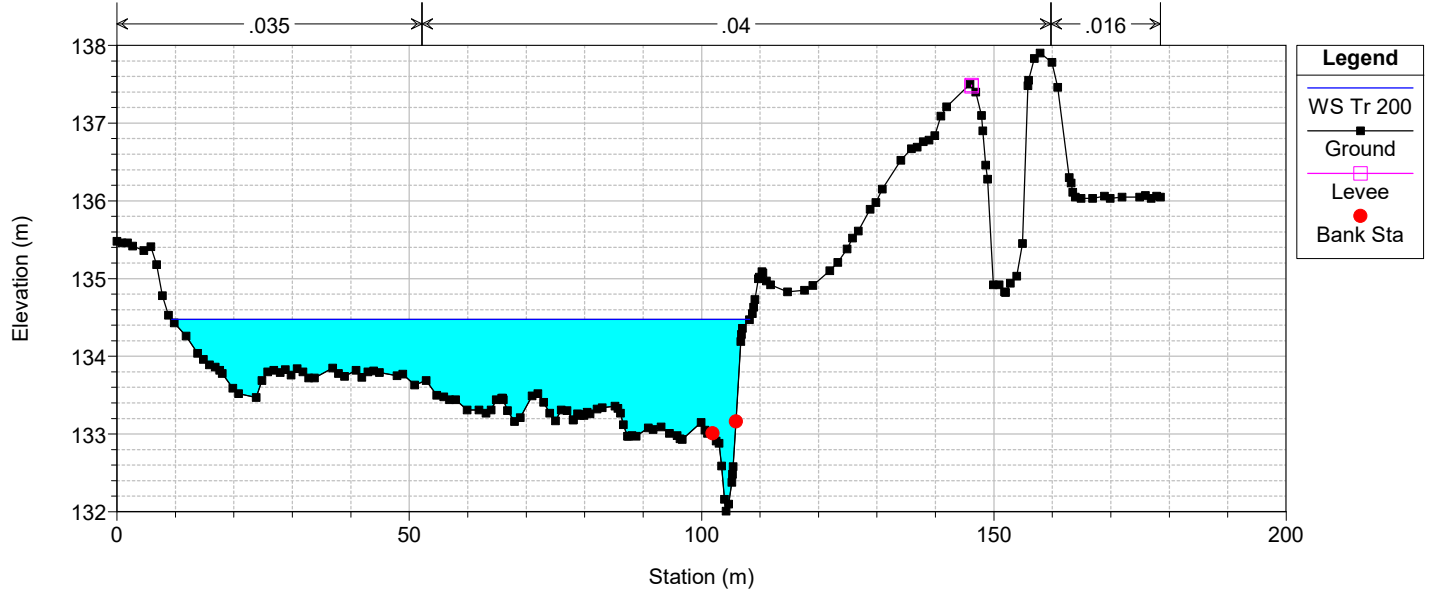
River = Riu_F_Regina Reach = TR0429 RS = 4943.561 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

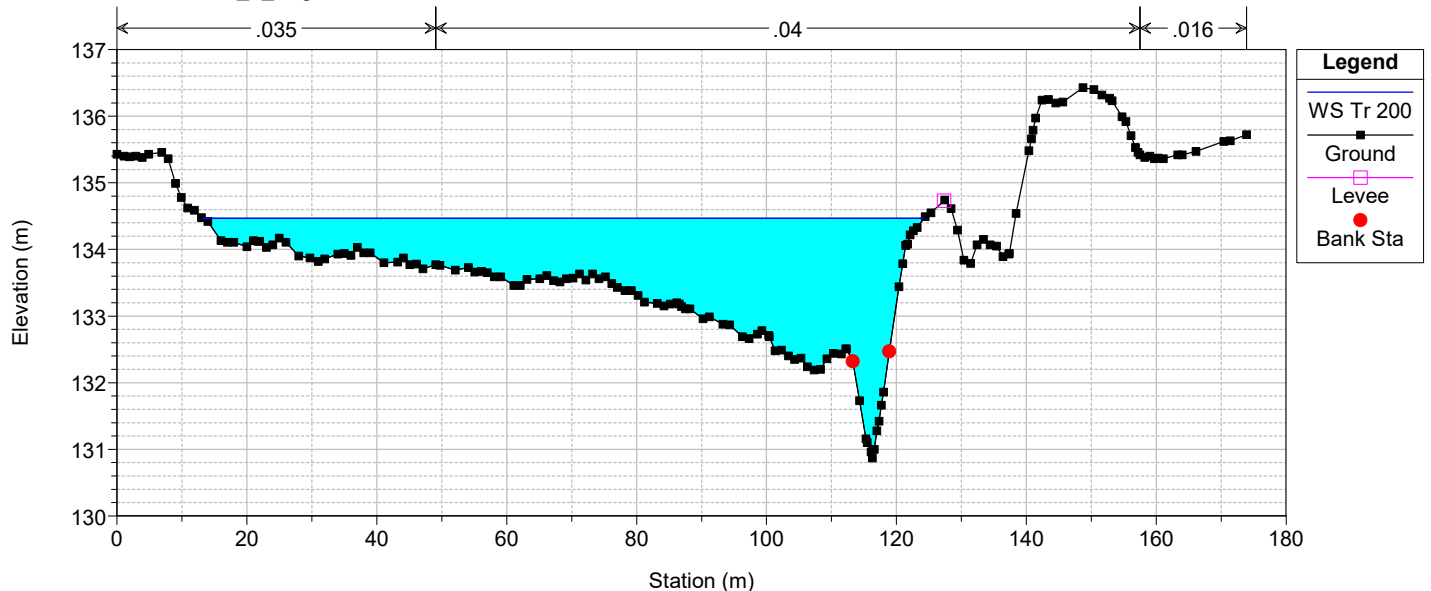
River = Riu_F_Regina Reach = TR0429 RS = 4908.565 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

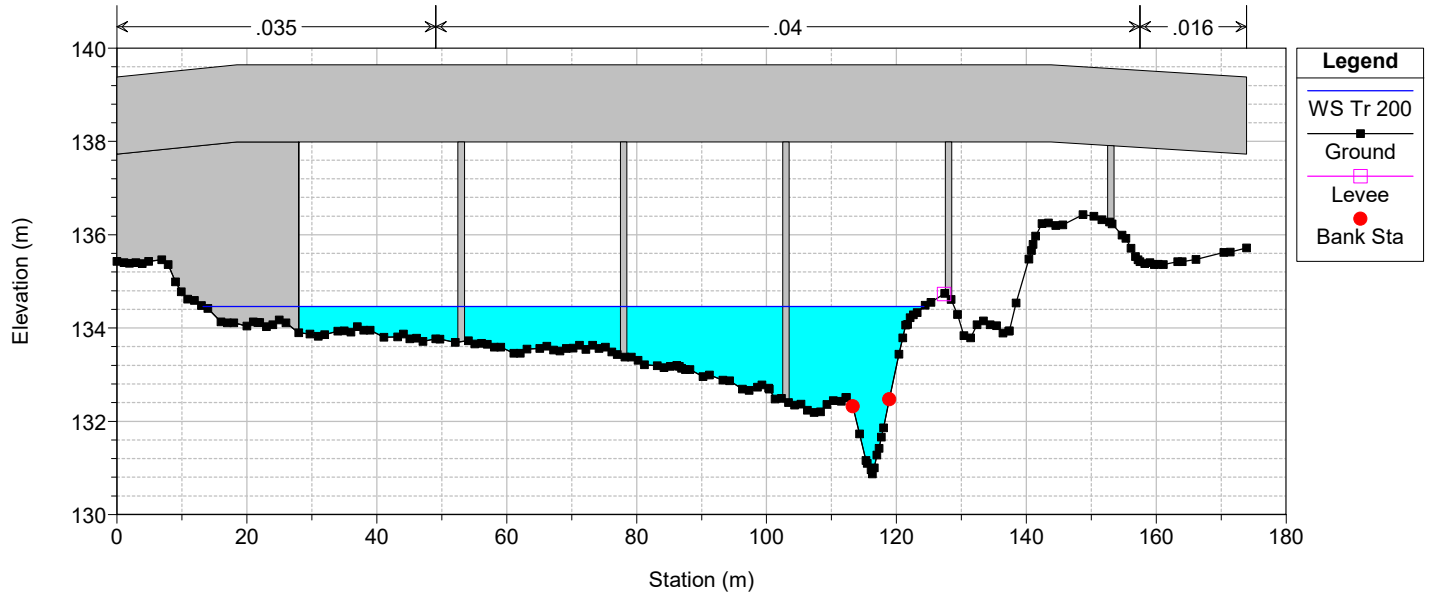
River = Riu_F_Regina Reach = TR0429 RS = 4879 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

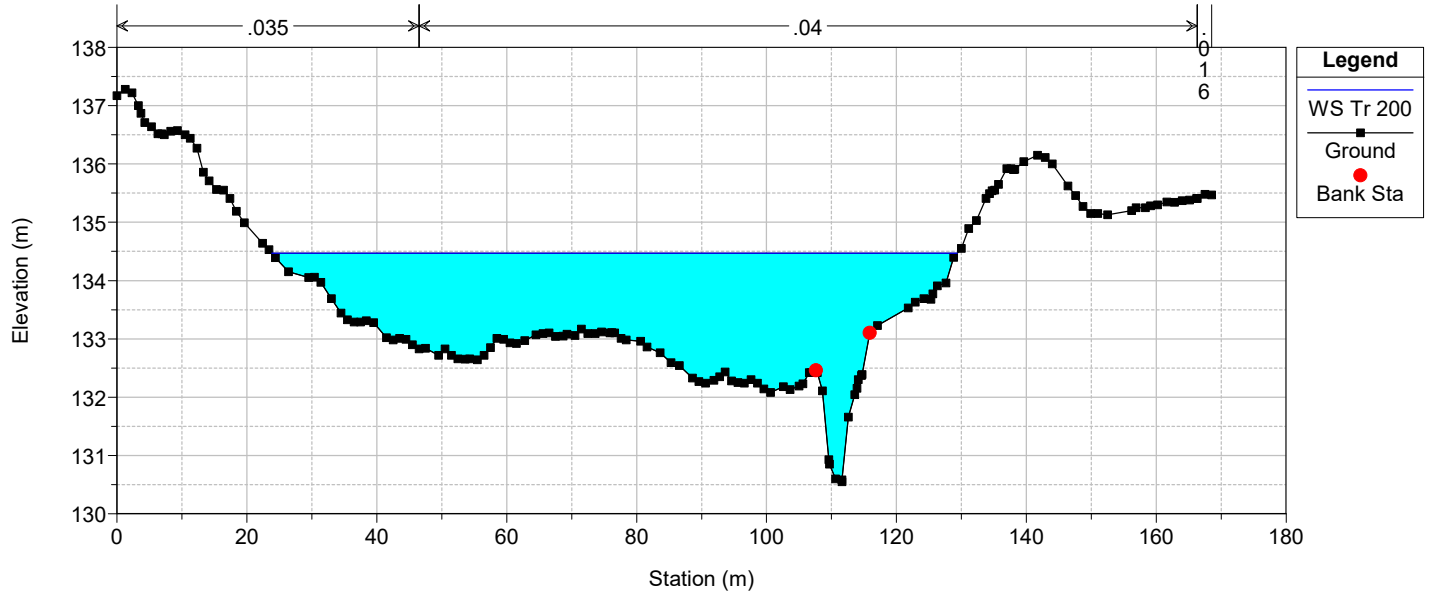
River = Riu_F_Regina Reach = TR0429 RS = 4868 BR C69 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

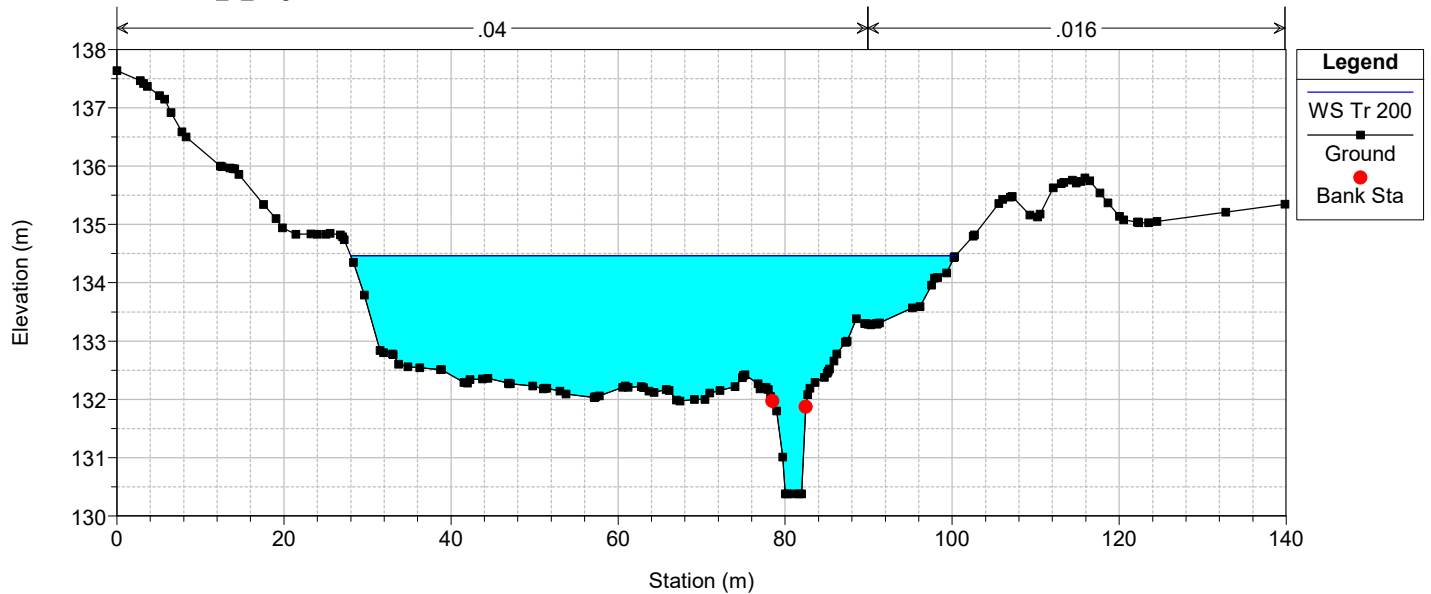
River = Riu_F_Regina Reach = TR0429 RS = 4860 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

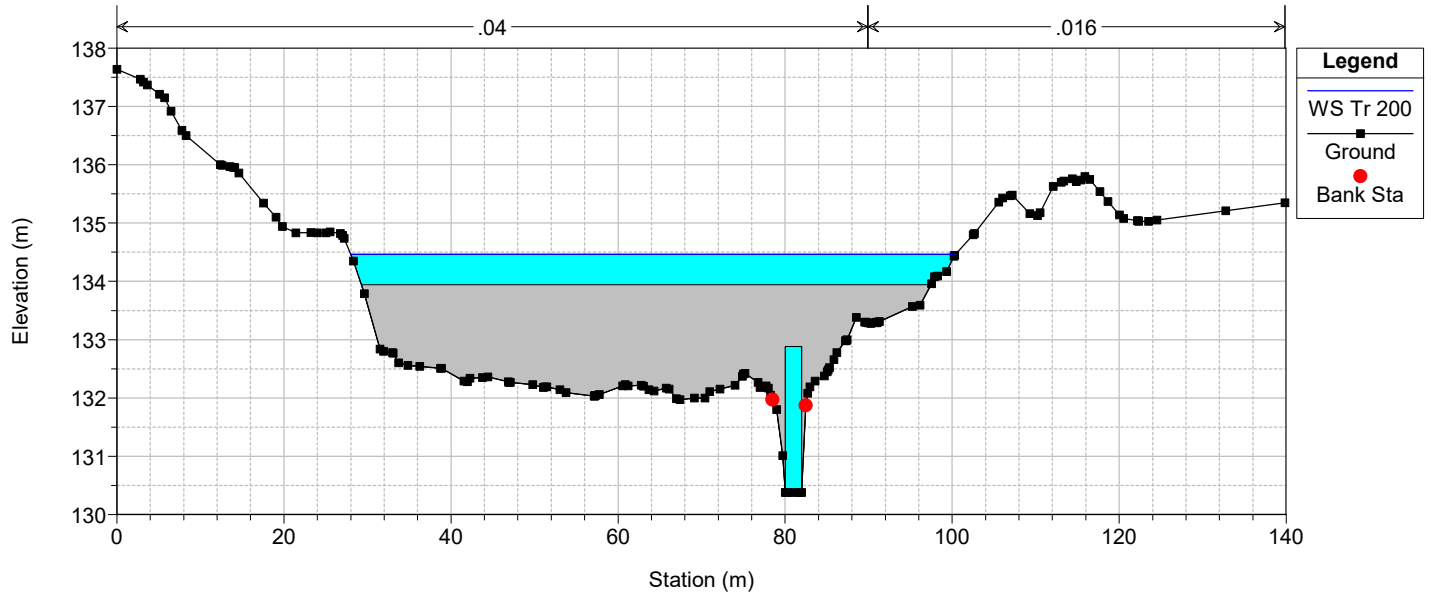
River = Riu_F_Regina Reach = TR0429 RS = 4857.115 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

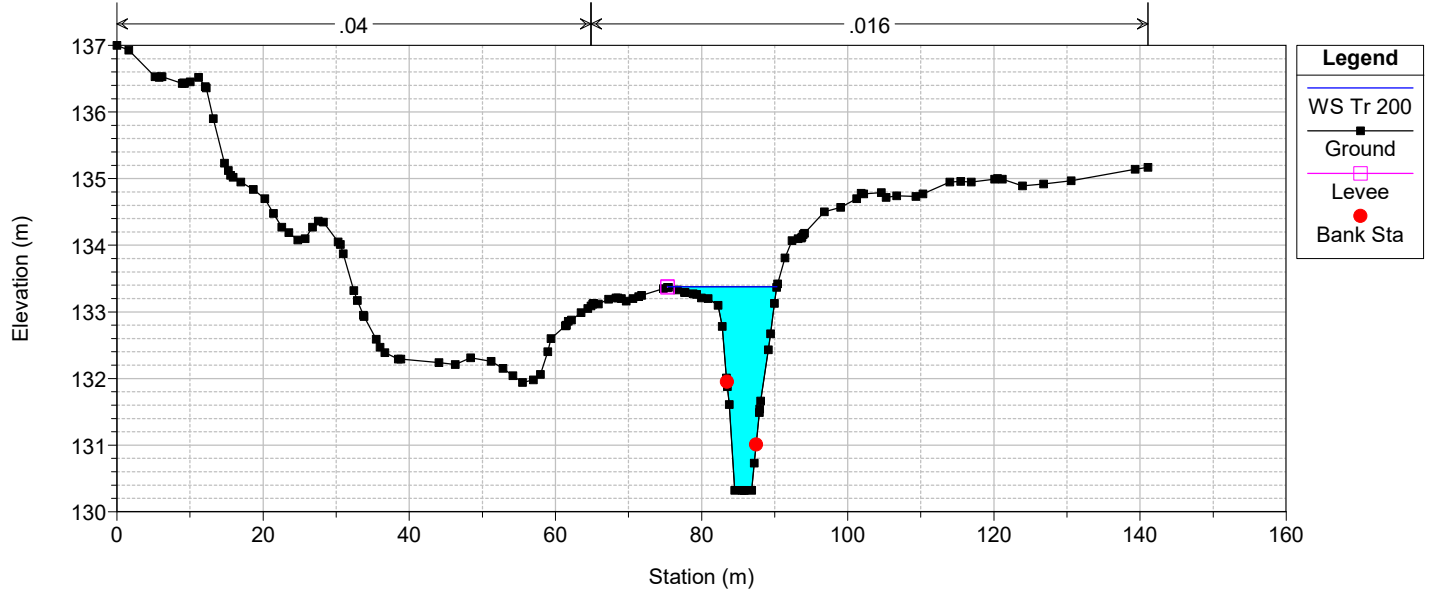
River = Riu_F_Regina Reach = TR0429 RS = 4849.11 Culv TR0429_A05 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

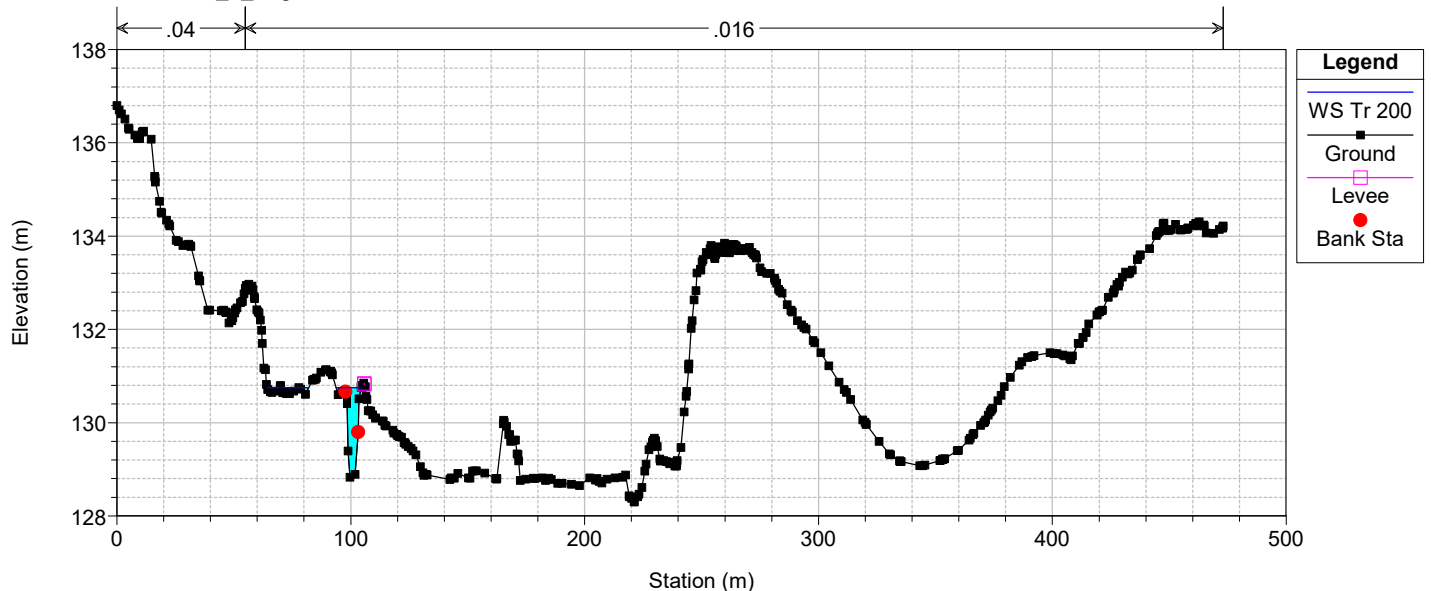
River = Riu_F_Regina Reach = TR0429 RS = 4843.136 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

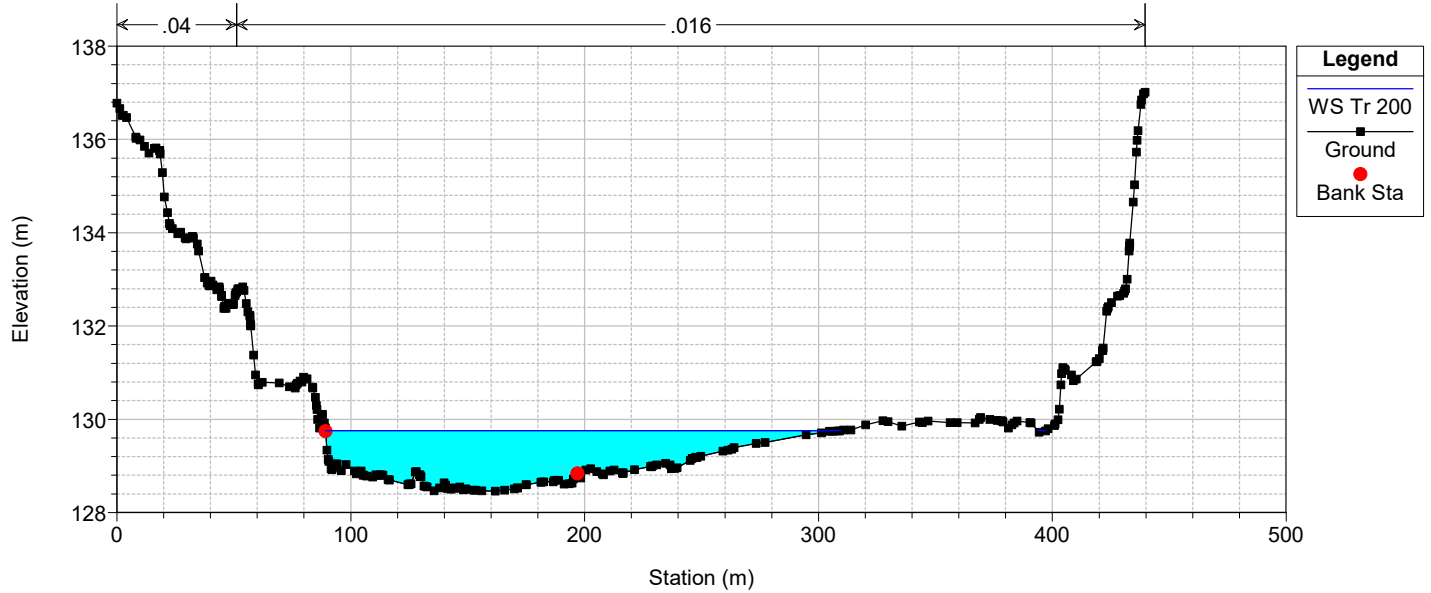
River = Riu_F_Regina Reach = TR0429 RS = 4804.068 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

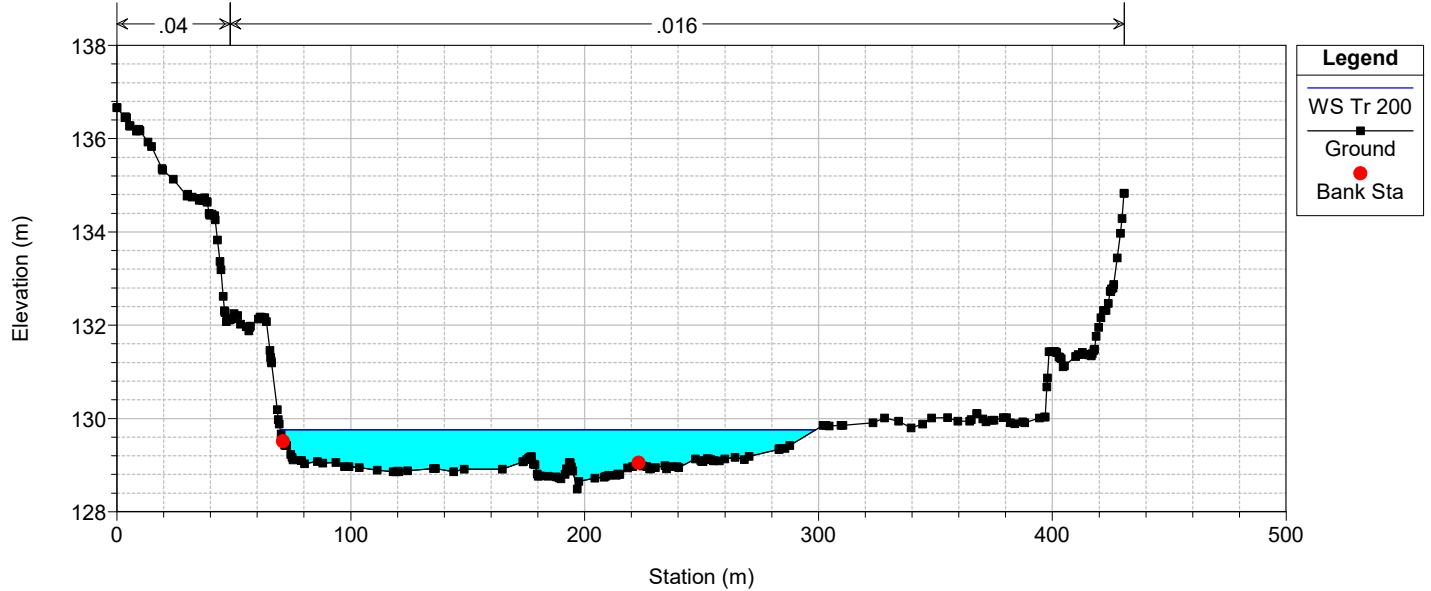
River = Riu_F_Regina Reach = TR0429 RS = 4768.796 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

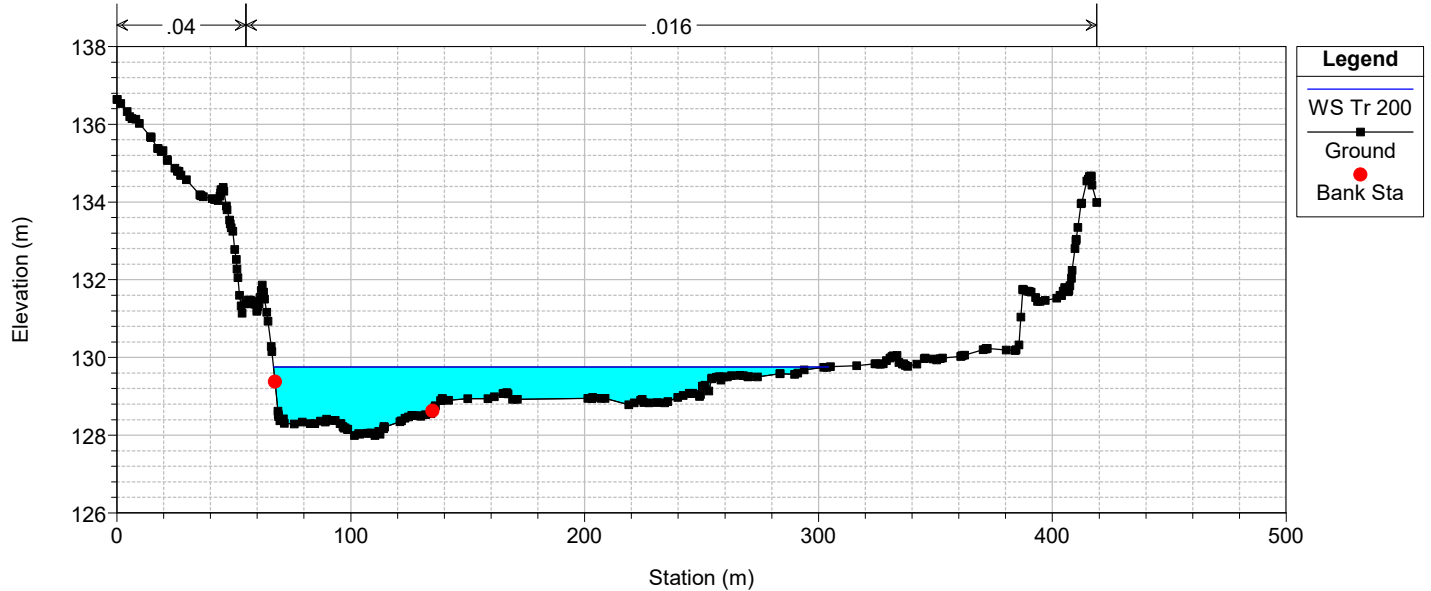
River = Riu_F_Regina Reach = TR0429 RS = 4733.664 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

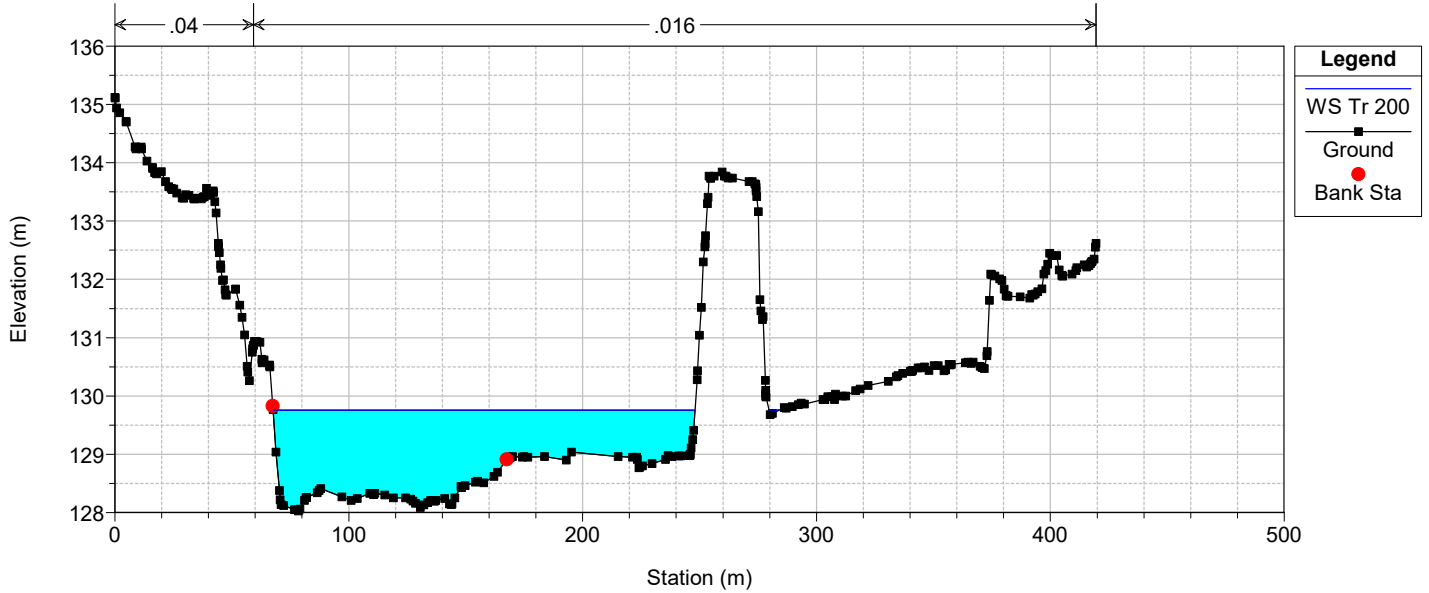
River = Riu_F_Regina Reach = TR0429 RS = 4695.79 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

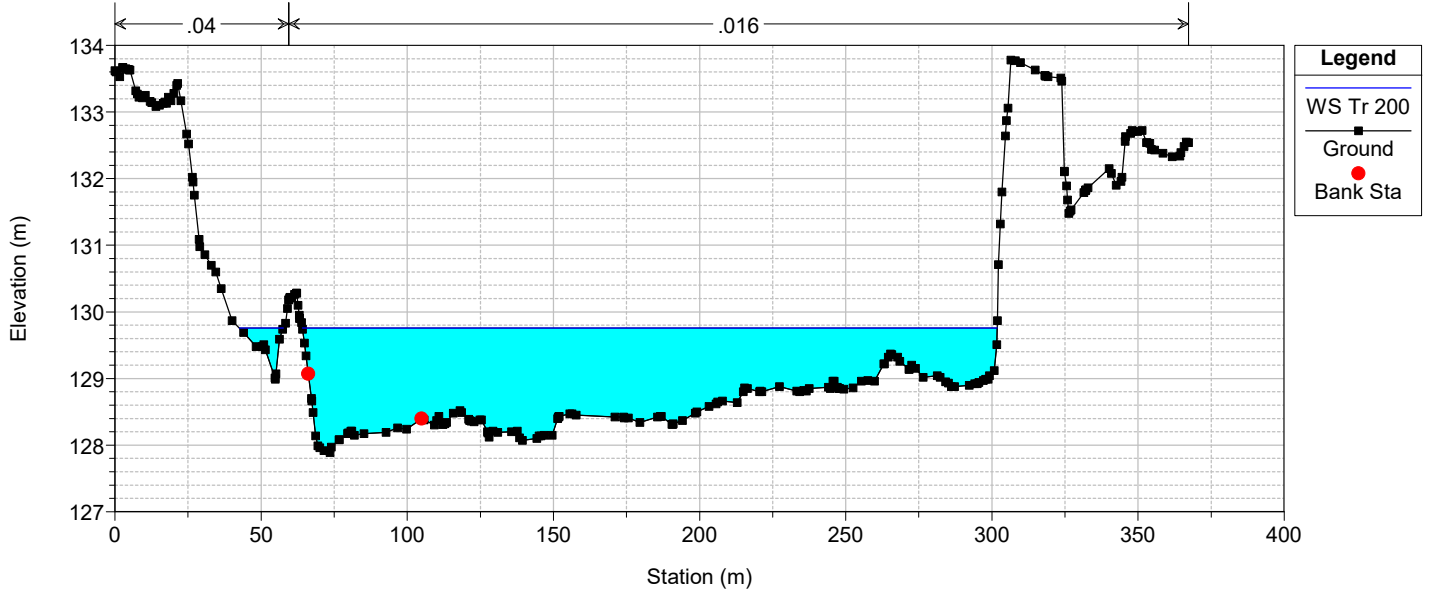
River = Riu_F_Regina Reach = TR0429 RS = 4668.34 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

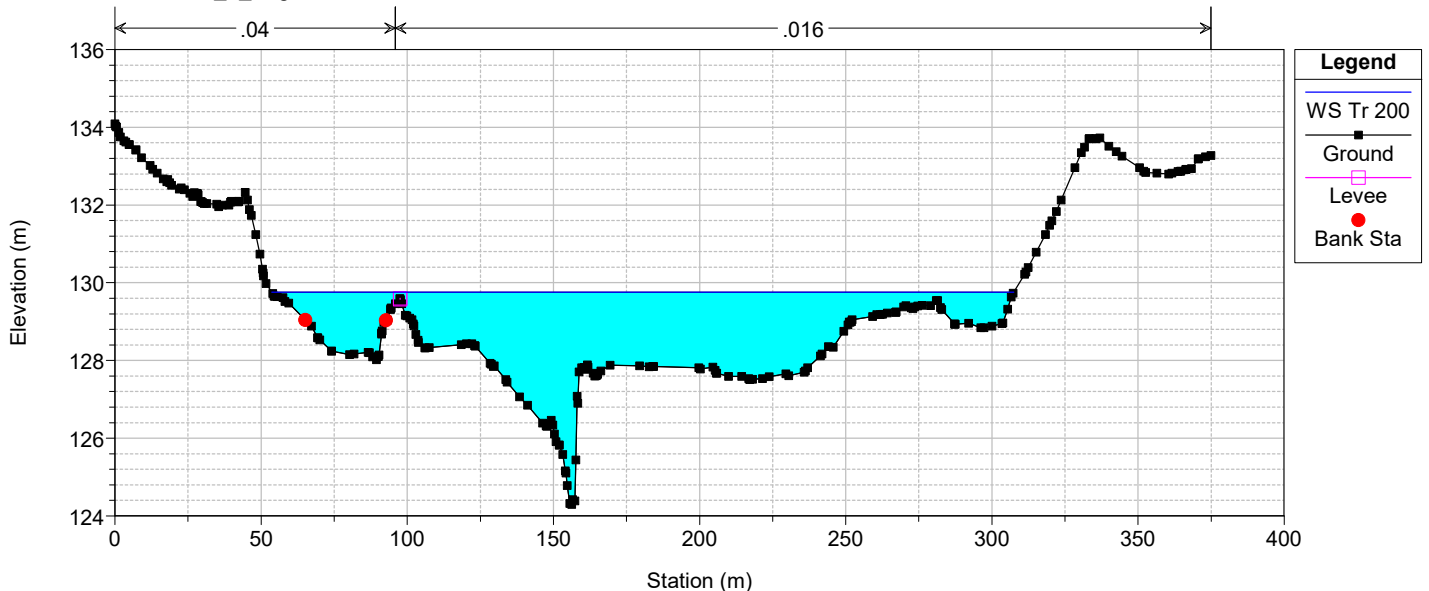
River = Riu_F_Regina Reach = TR0429 RS = 4632.78 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

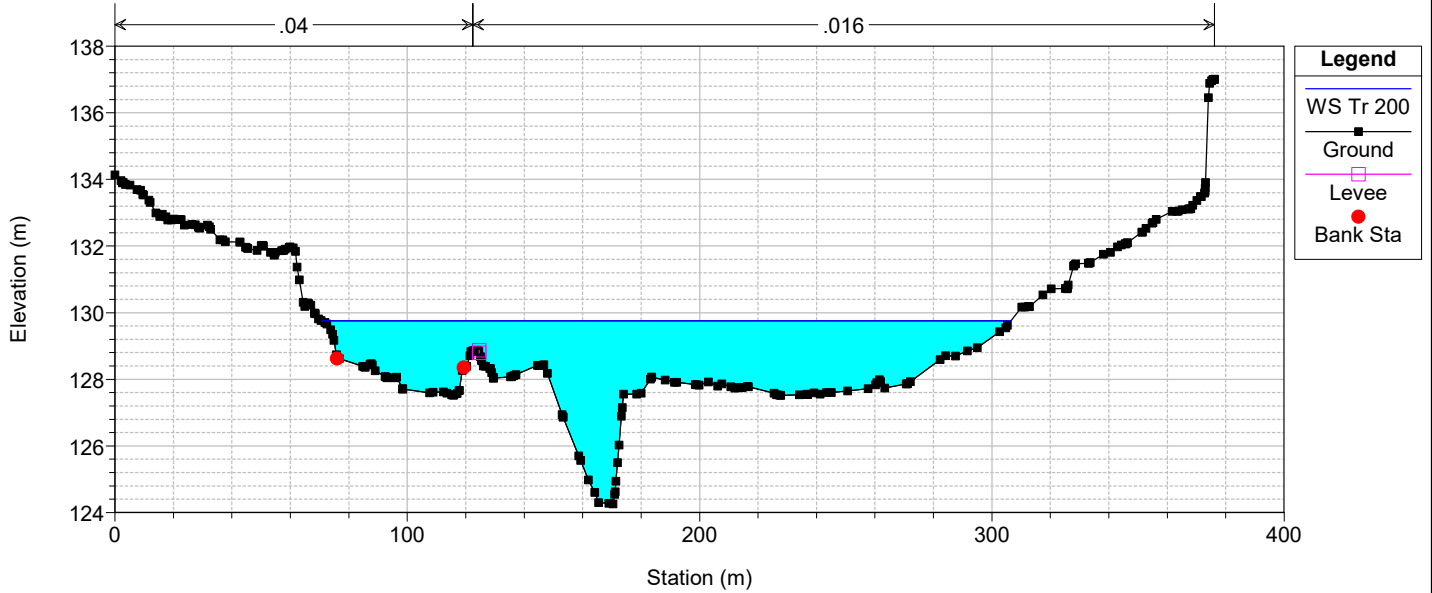
River = Riu_F_Regina Reach = TR0429 RS = 4596.563 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

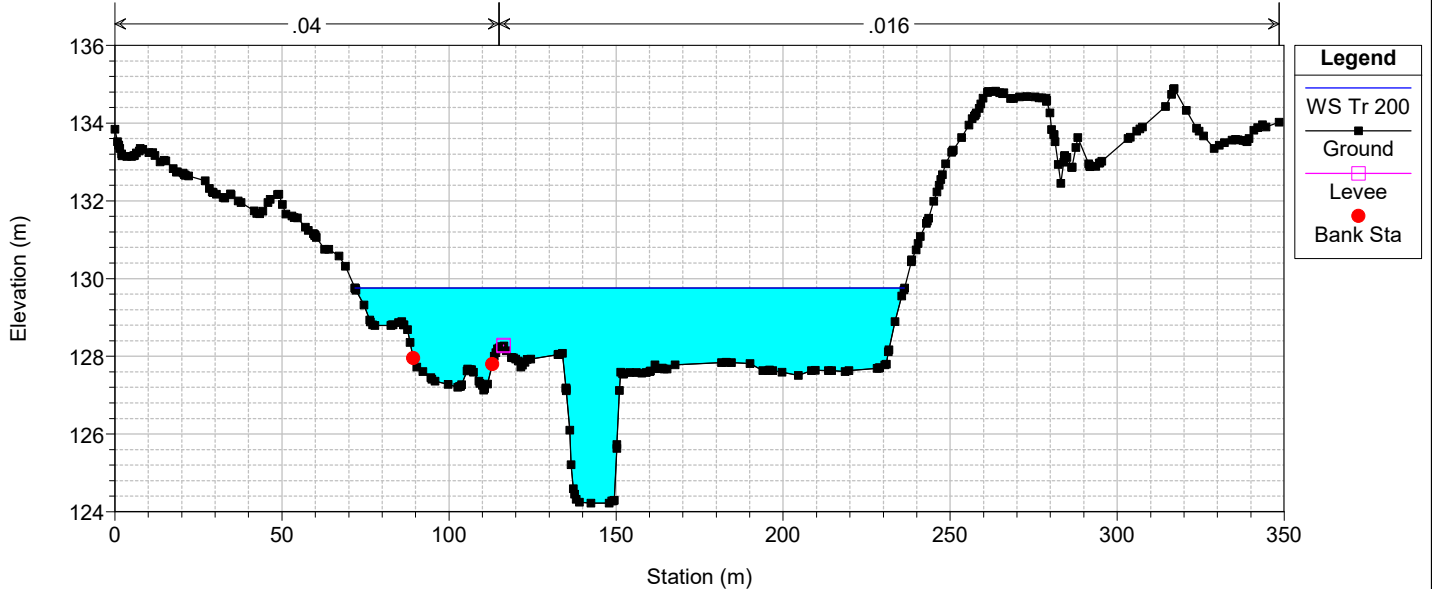
River = Riu_F_Regina Reach = TR0429 RS = 4560.91 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

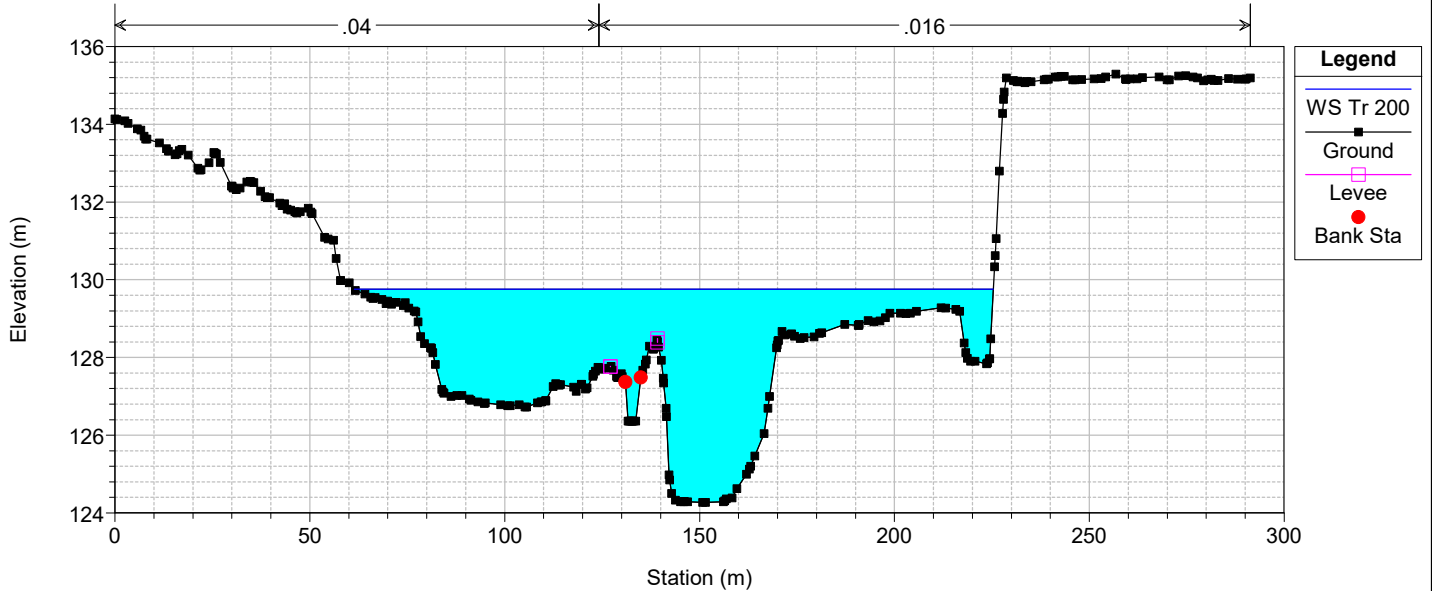
River = Riu_F_Regina Reach = TR0429 RS = 4524.7 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

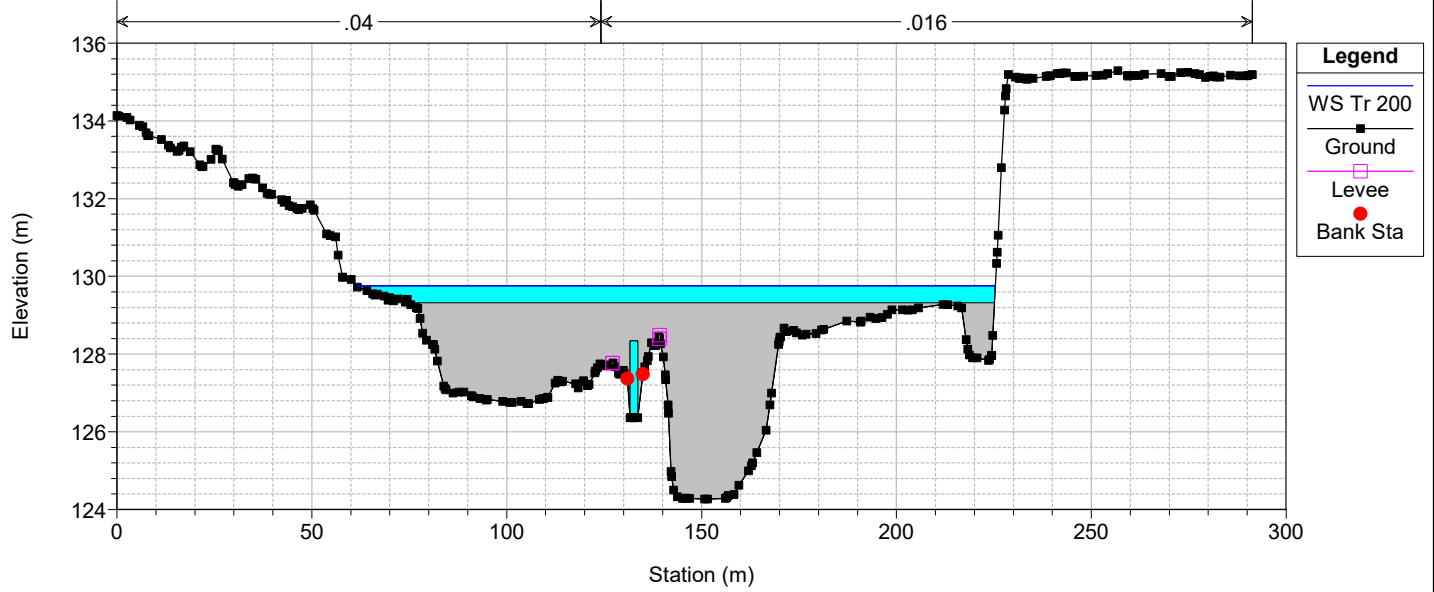
River = Riu_F_Regina Reach = TR0429 RS = 4483.87 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

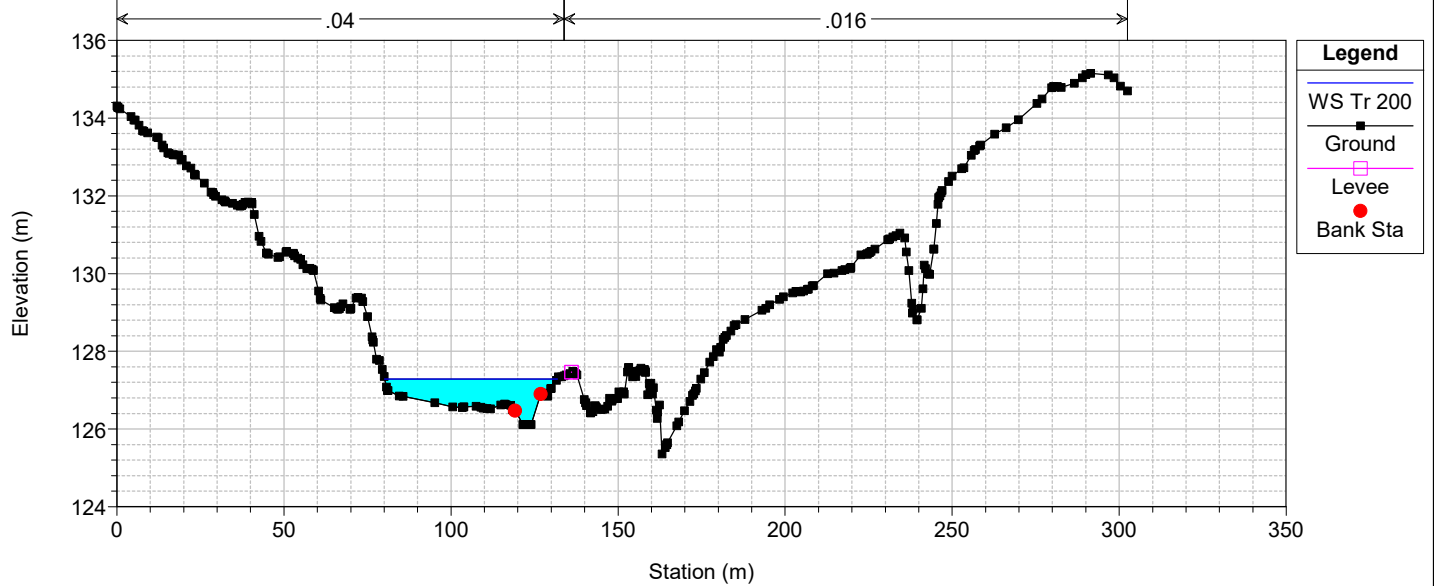
River = Riu_F_Regina Reach = TR0429 RS = 4476.708 Culv TR0429_A04 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

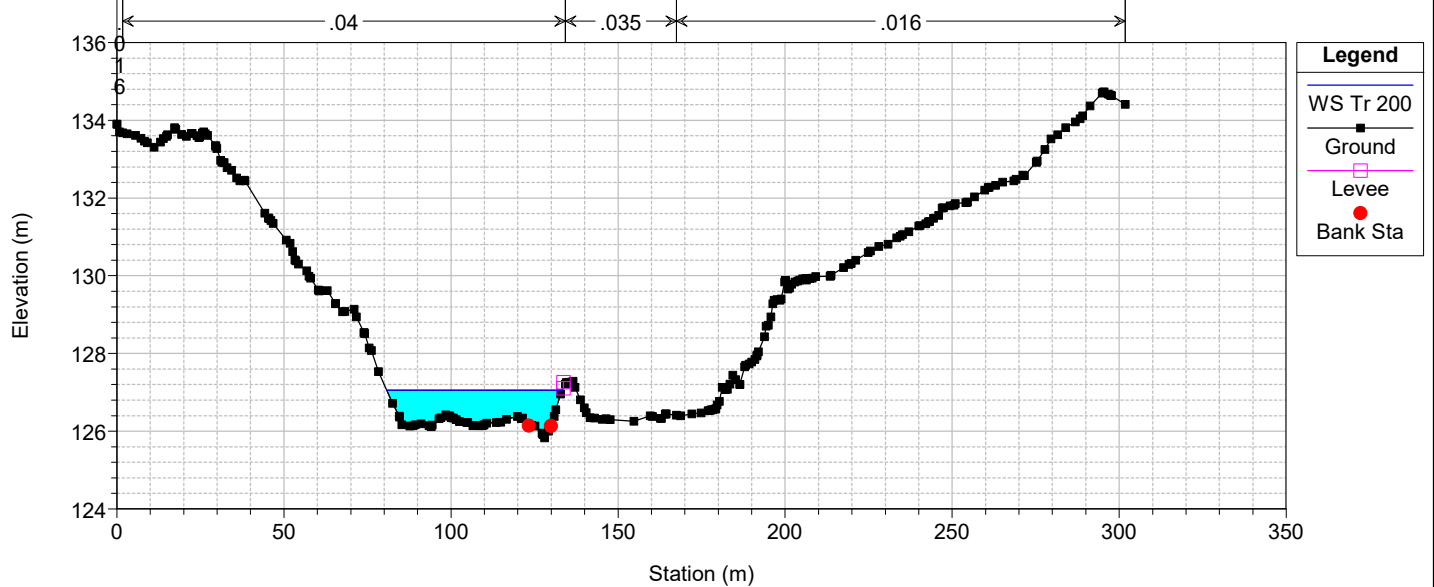
River = Riu_F_Regina Reach = TR0429 RS = 4470.825 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

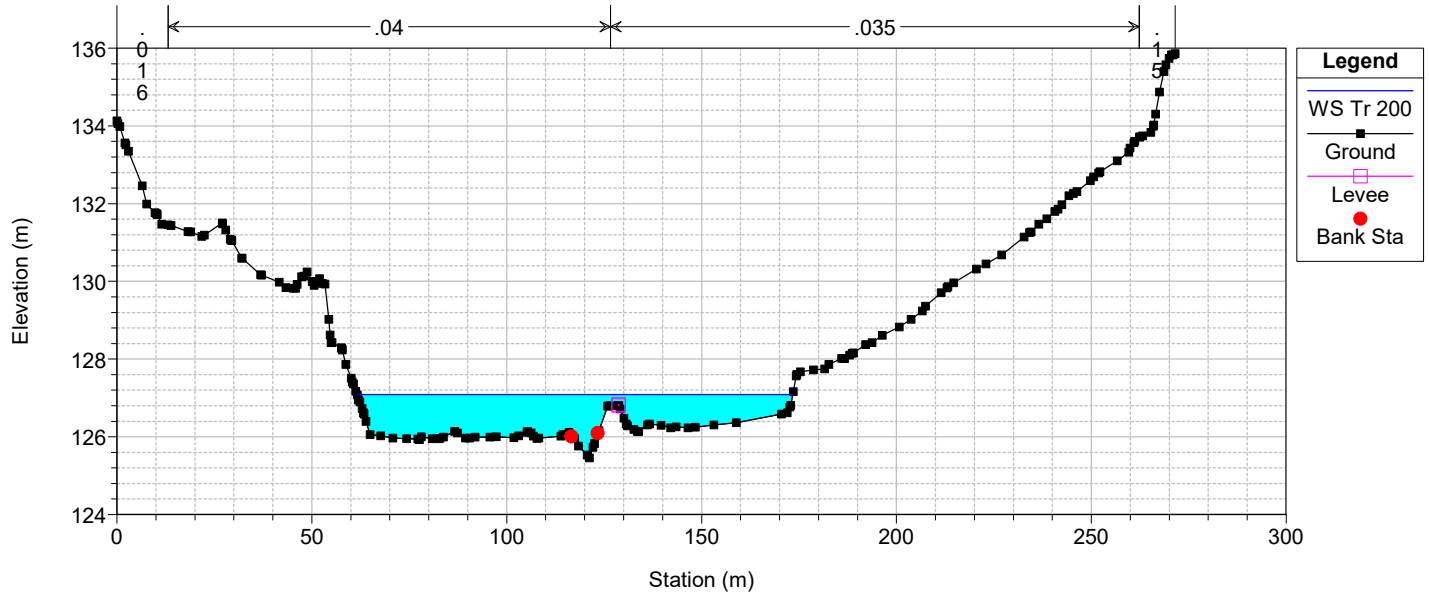
River = Riu_F_Regina Reach = TR0429 RS = 4444.248 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

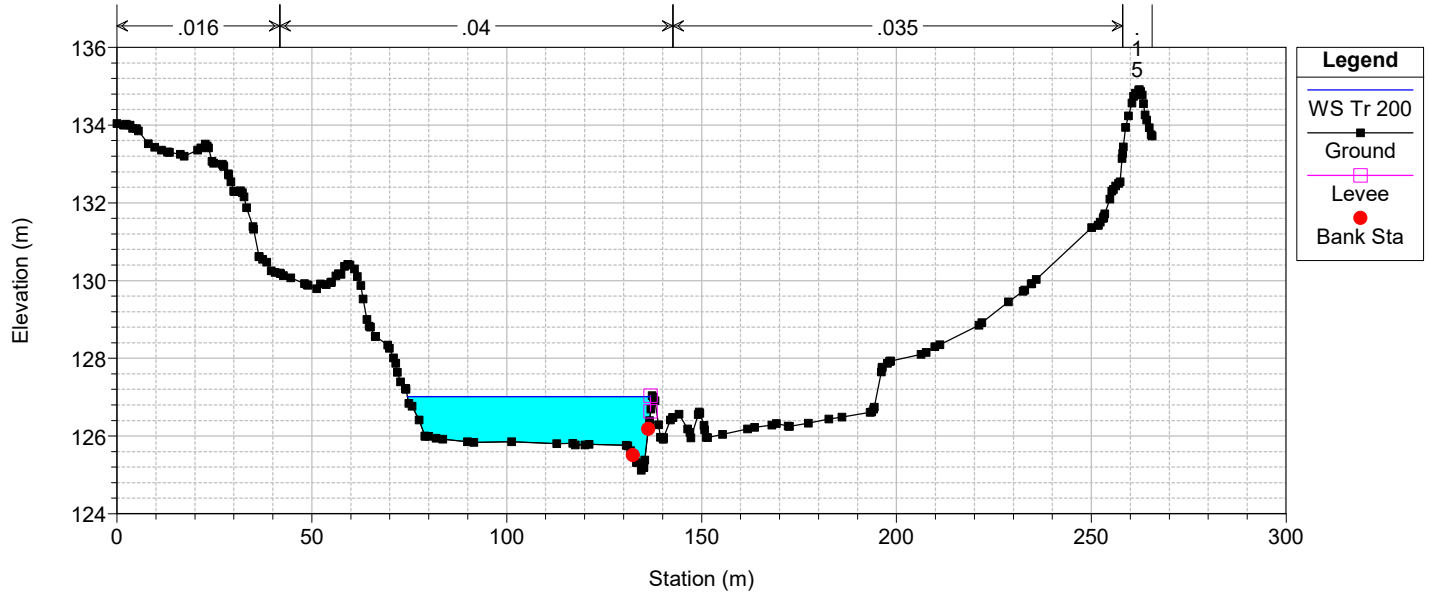
River = Riu_F_Regina Reach = TR0429 RS = 4409.721 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

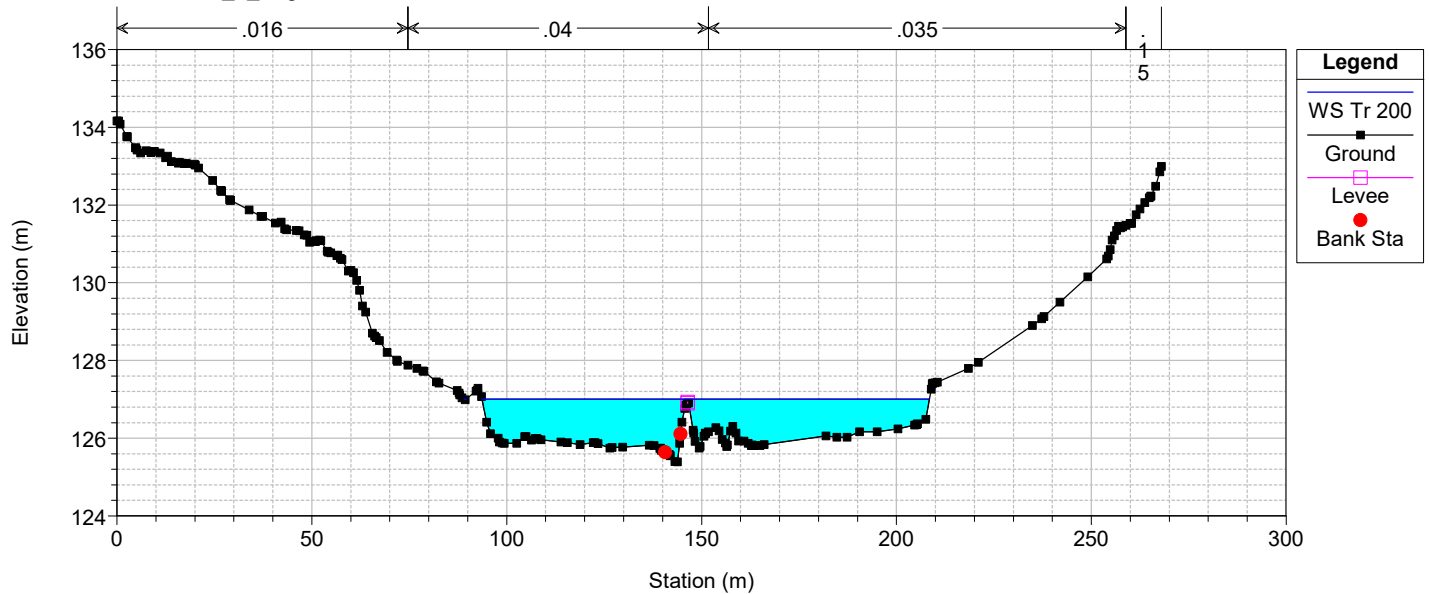
River = Riu_F_Regina Reach = TR0429 RS = 4374.171 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

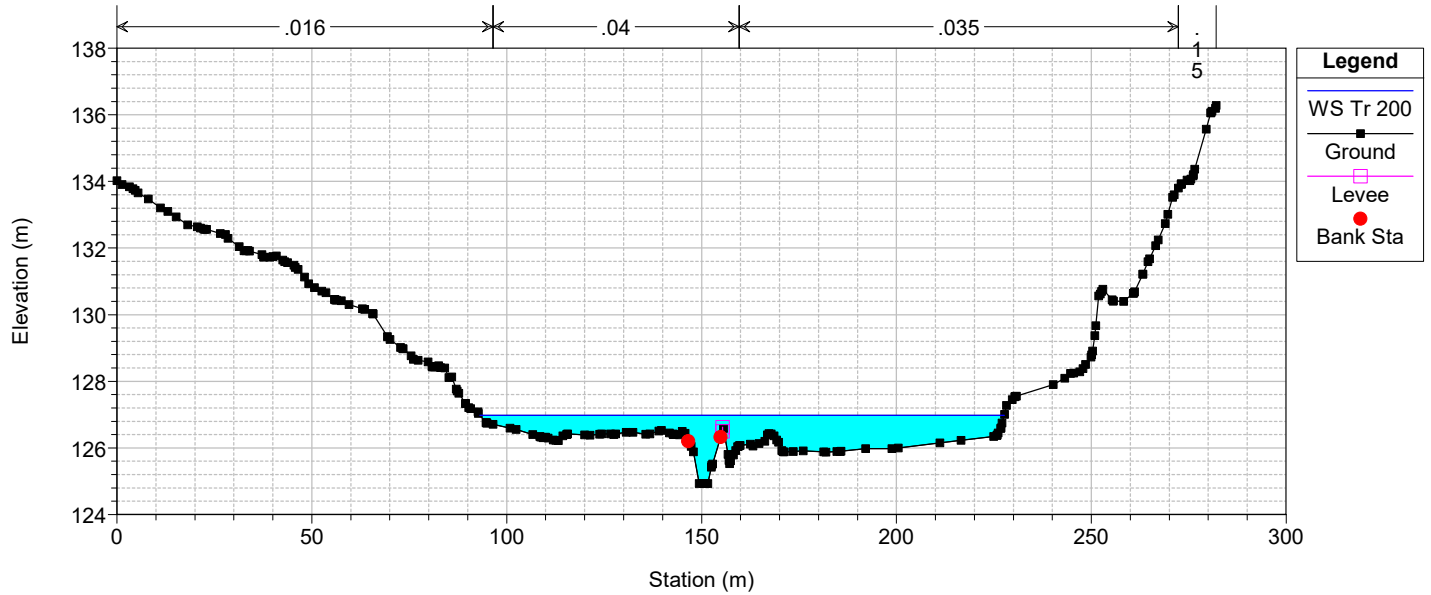
River = Riu_F_Regina Reach = TR0429 RS = 4339.51 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

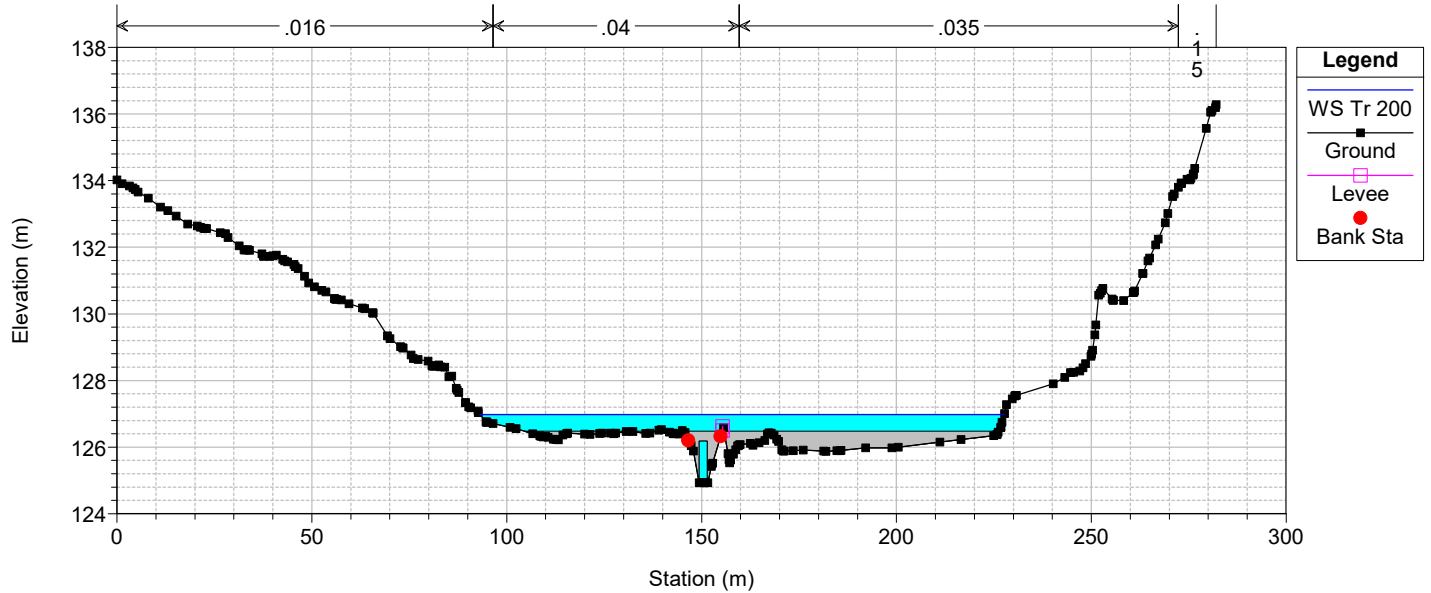
River = Riu_F_Regina Reach = TR0429 RS = 4316.249 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

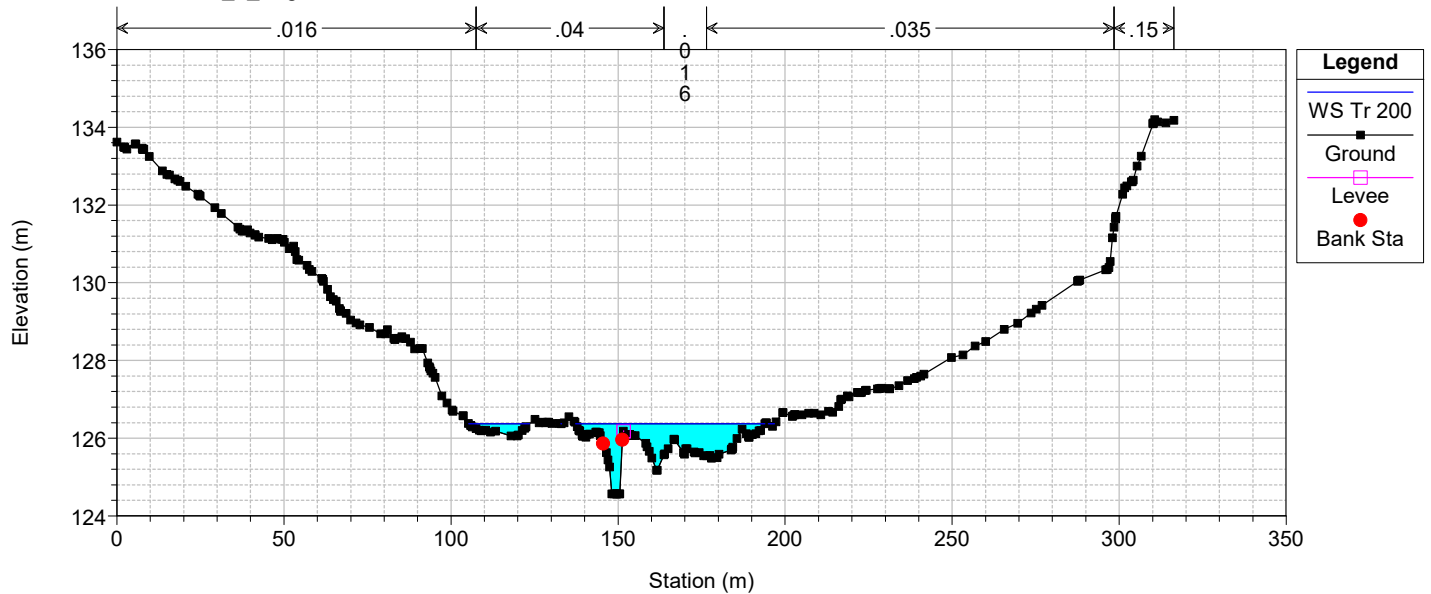
River = Riu_F_Regina Reach = TR0429 RS = 4309.188 Culv SV_LU_COLBU COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

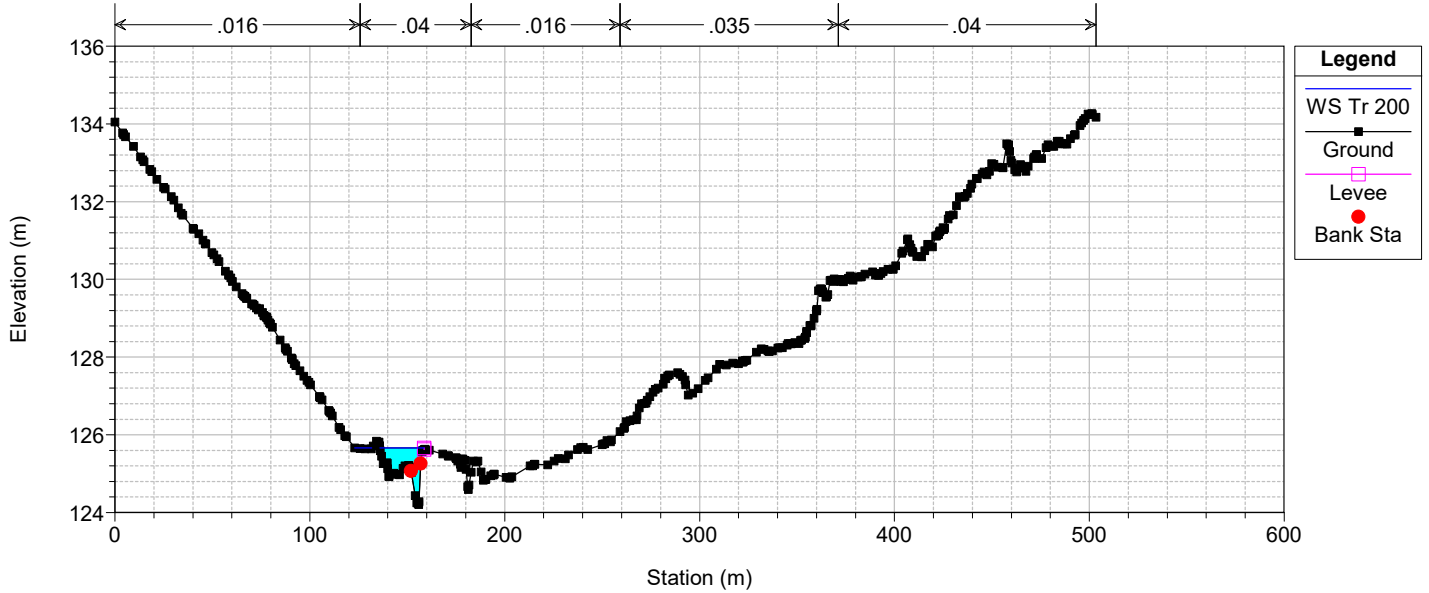
River = Riu_F_Regina Reach = TR0429 RS = 4303.12 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

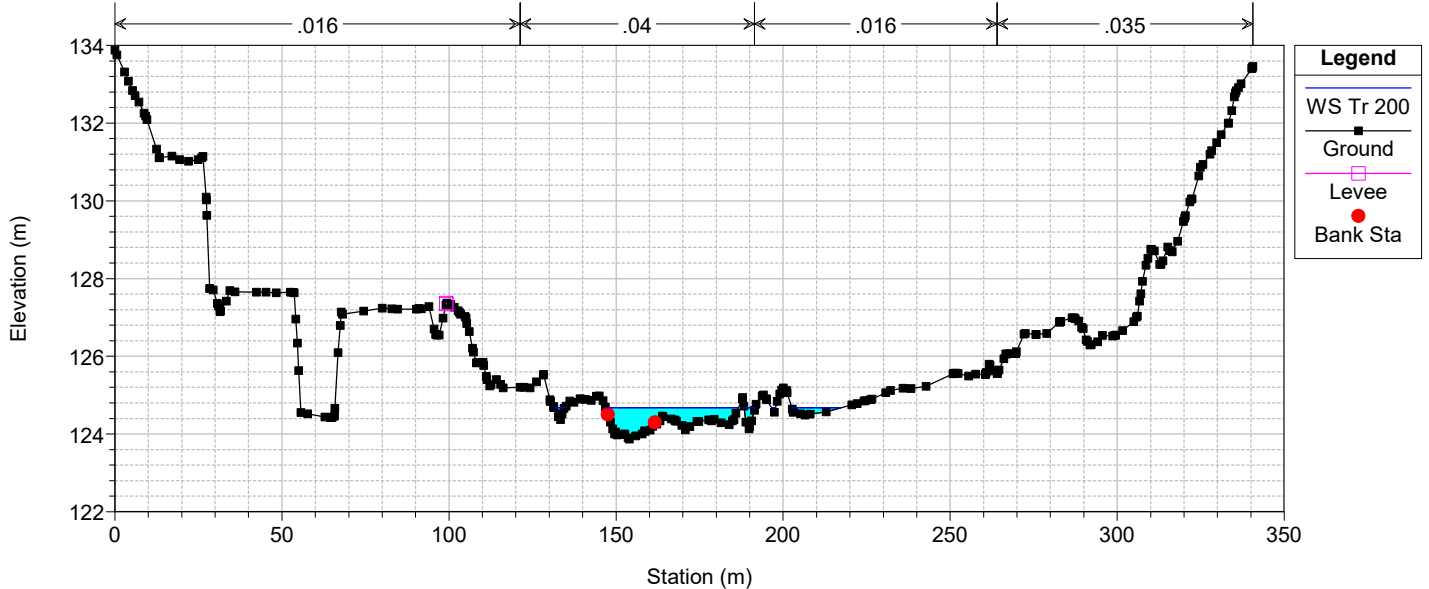
River = Riu_F_Regina Reach = TR0429 RS = 4269.413 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

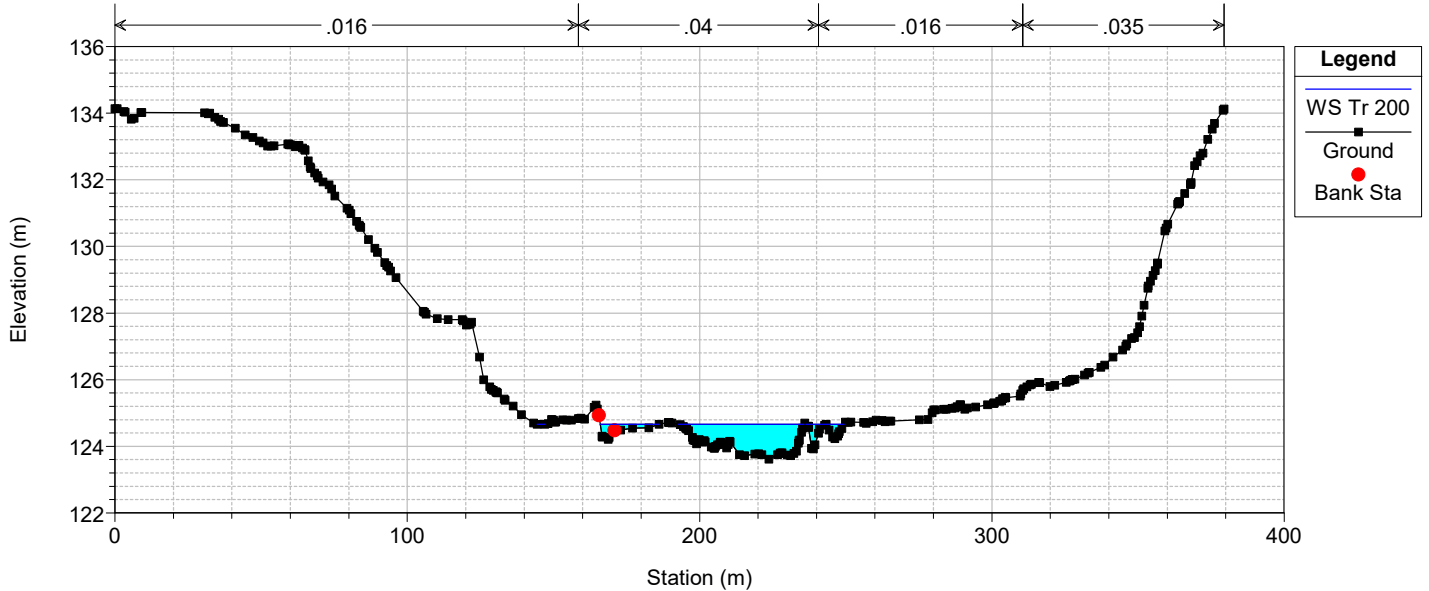
River = Riu_F_Regina Reach = TR0429 RS = 4235.354 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

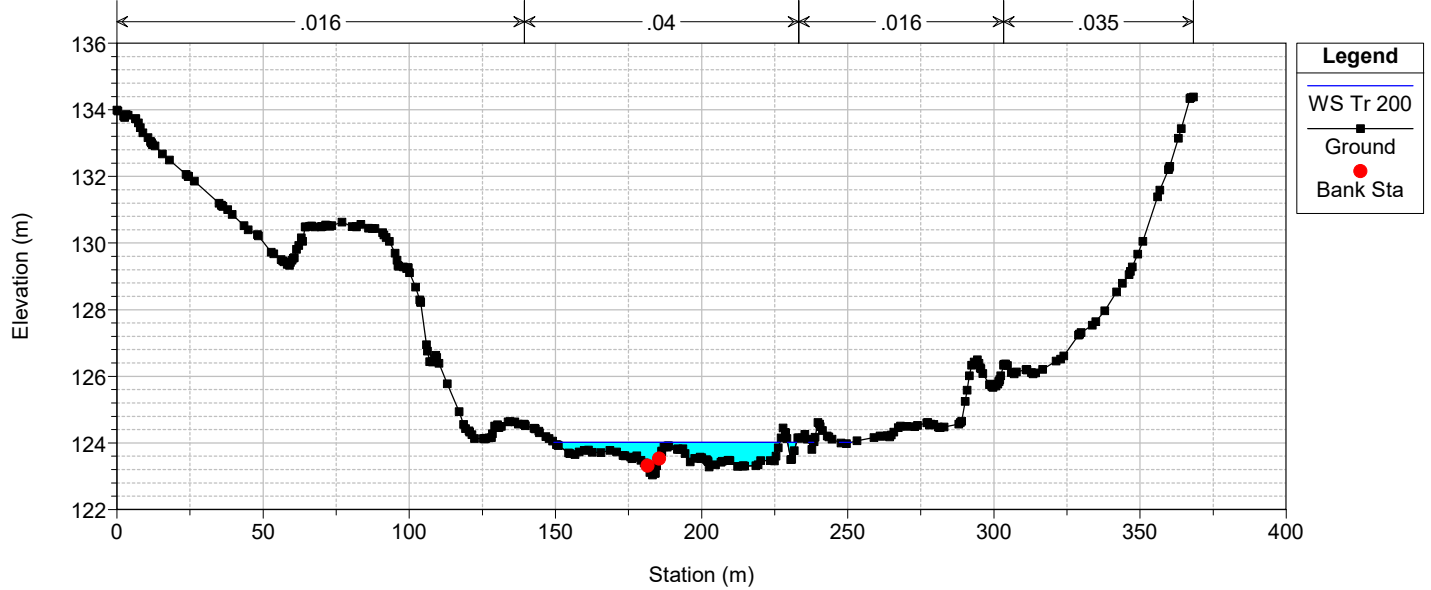
River = Riu_F_Regina Reach = TR0429 RS = 4199.87 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

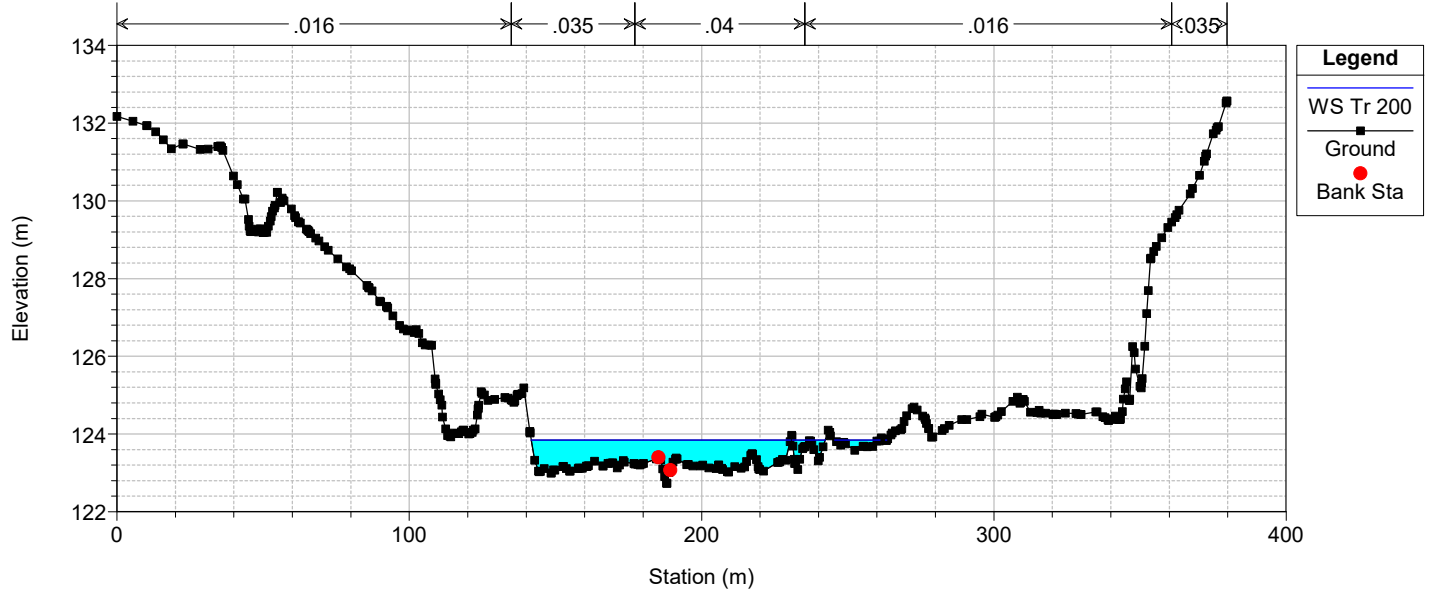
River = Riu_F_Regina Reach = TR0429 RS = 4164.408 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

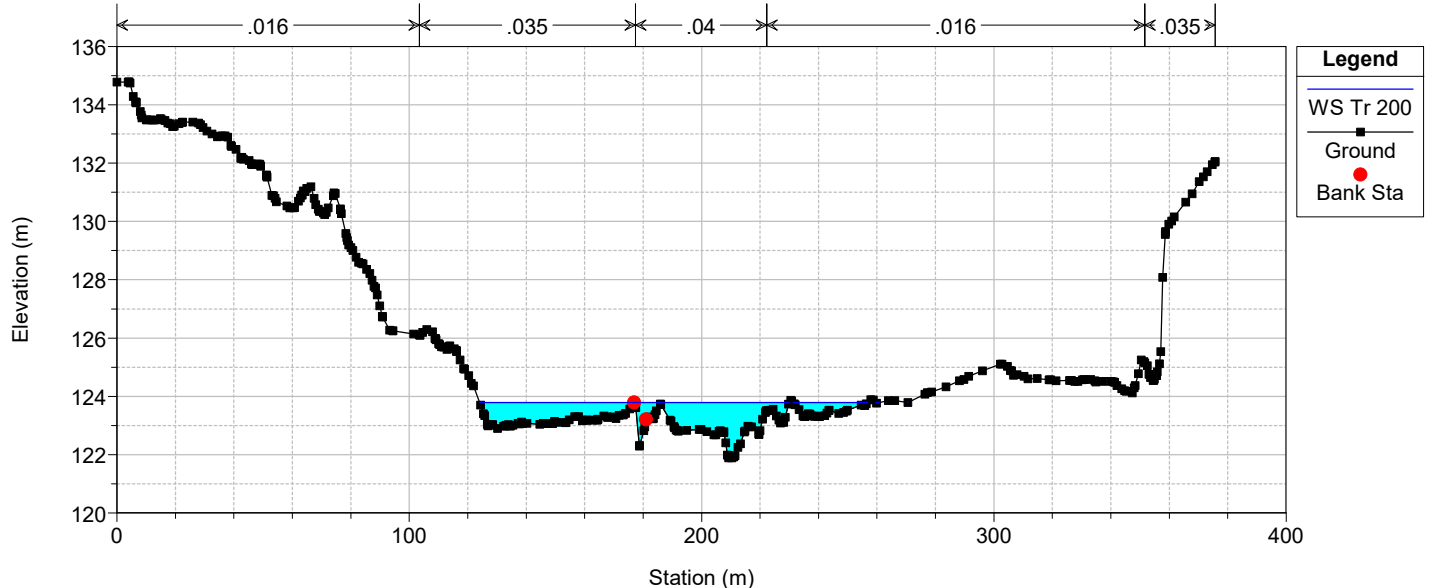
River = Riu_F_Regina Reach = TR0429 RS = 4129.718 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

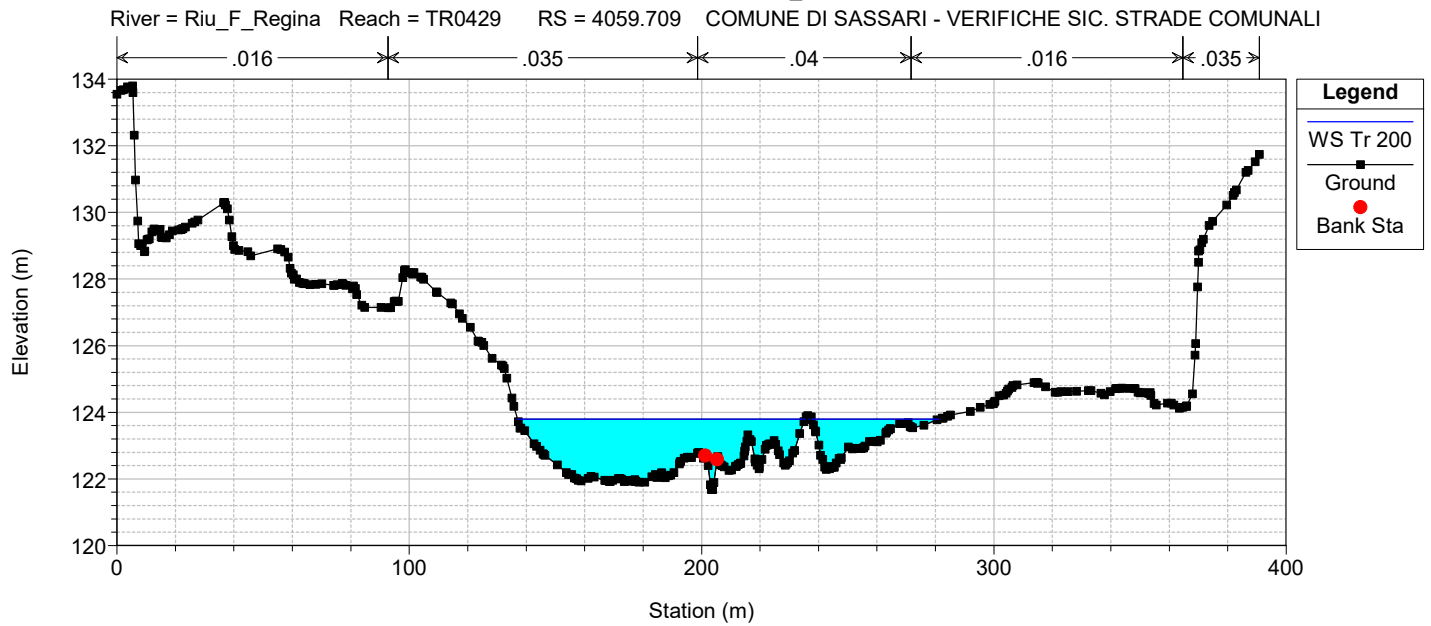
River = Riu_F_Regina Reach = TR0429 RS = 4094.824 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

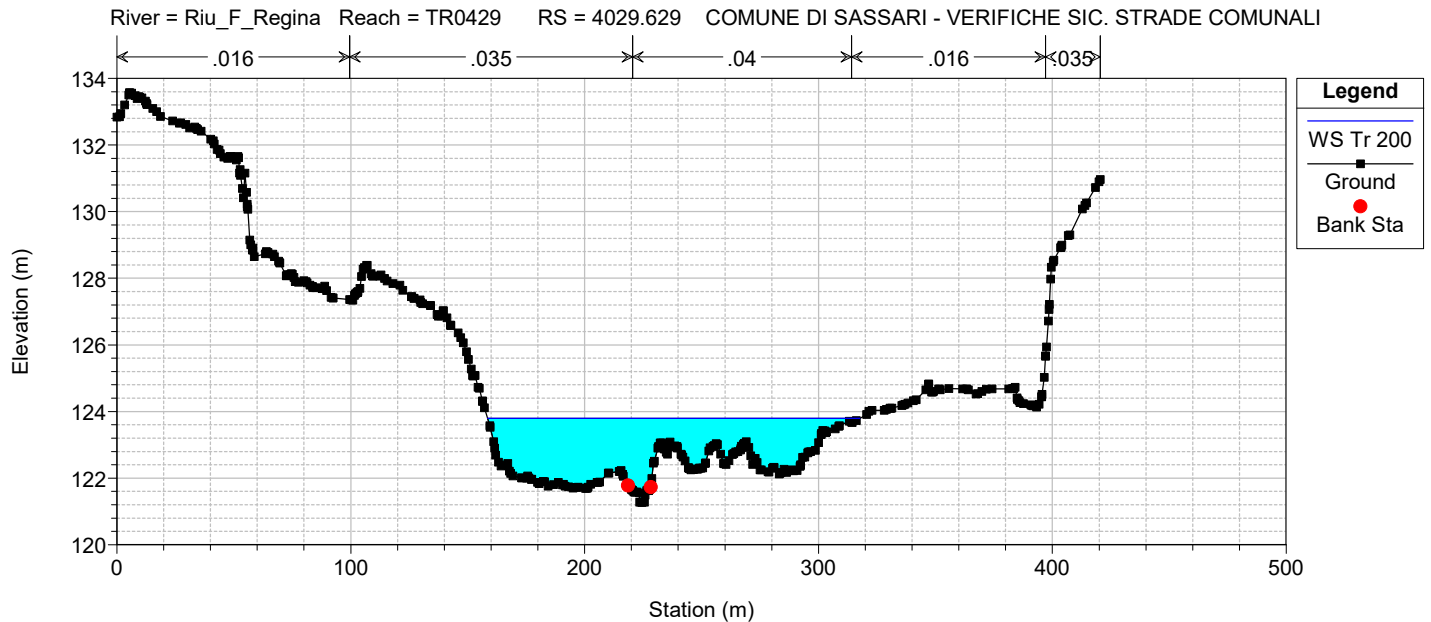
River = Riu_F_Regina Reach = TR0429 RS = 4059.709 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

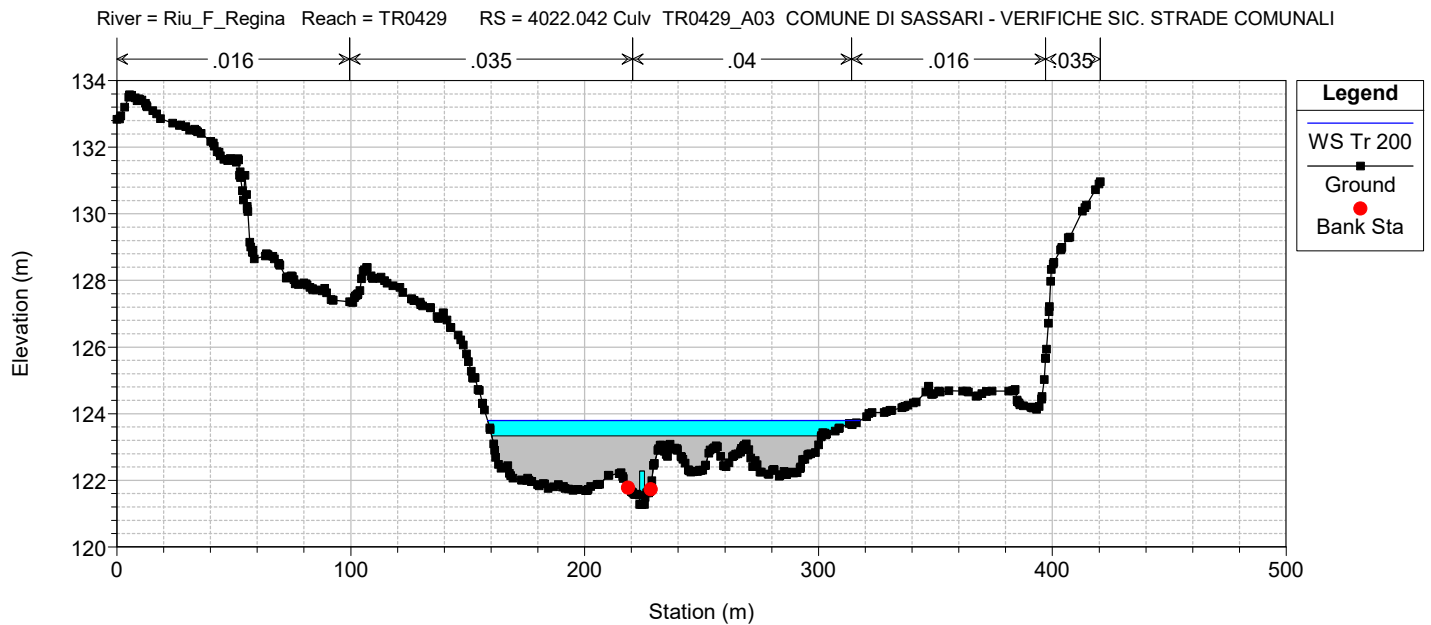
River = Riu_F_Regina Reach = TR0429 RS = 4029.629 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

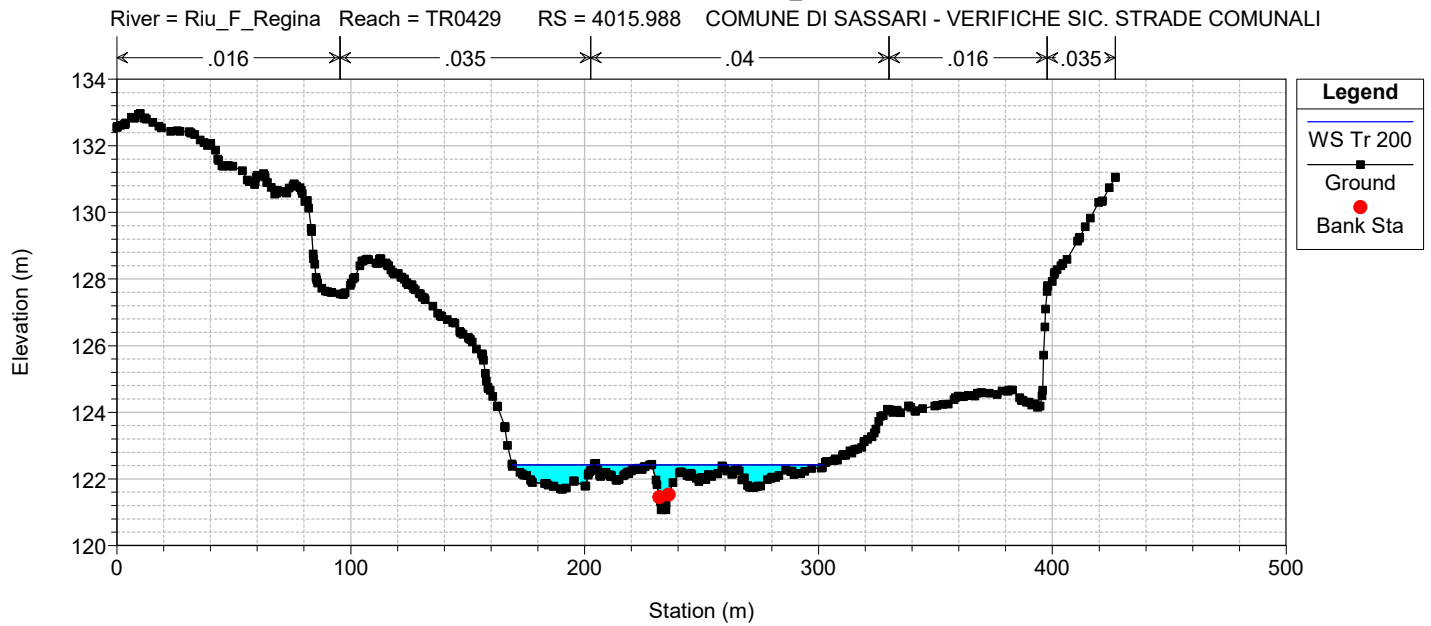
River = Riu_F_Regina Reach = TR0429 RS = 4022.042 Culv TR0429_A03 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

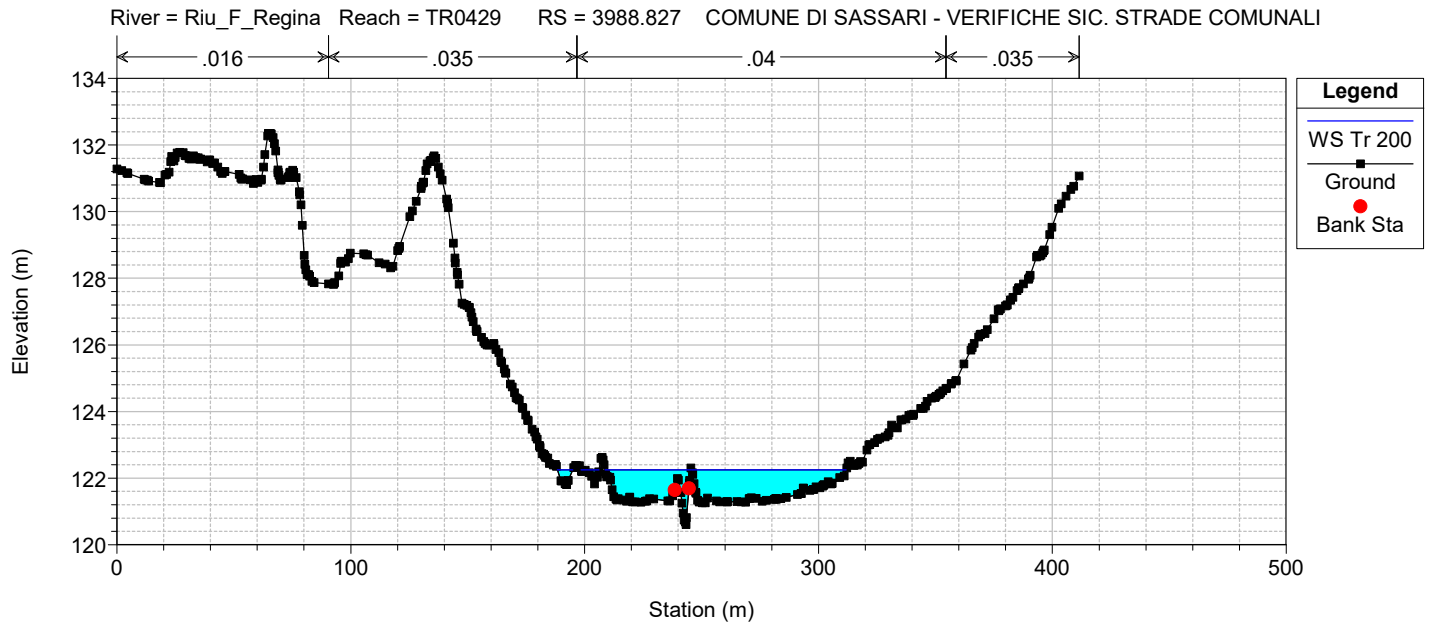
River = Riu_F_Regina Reach = TR0429 RS = 4015.988 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

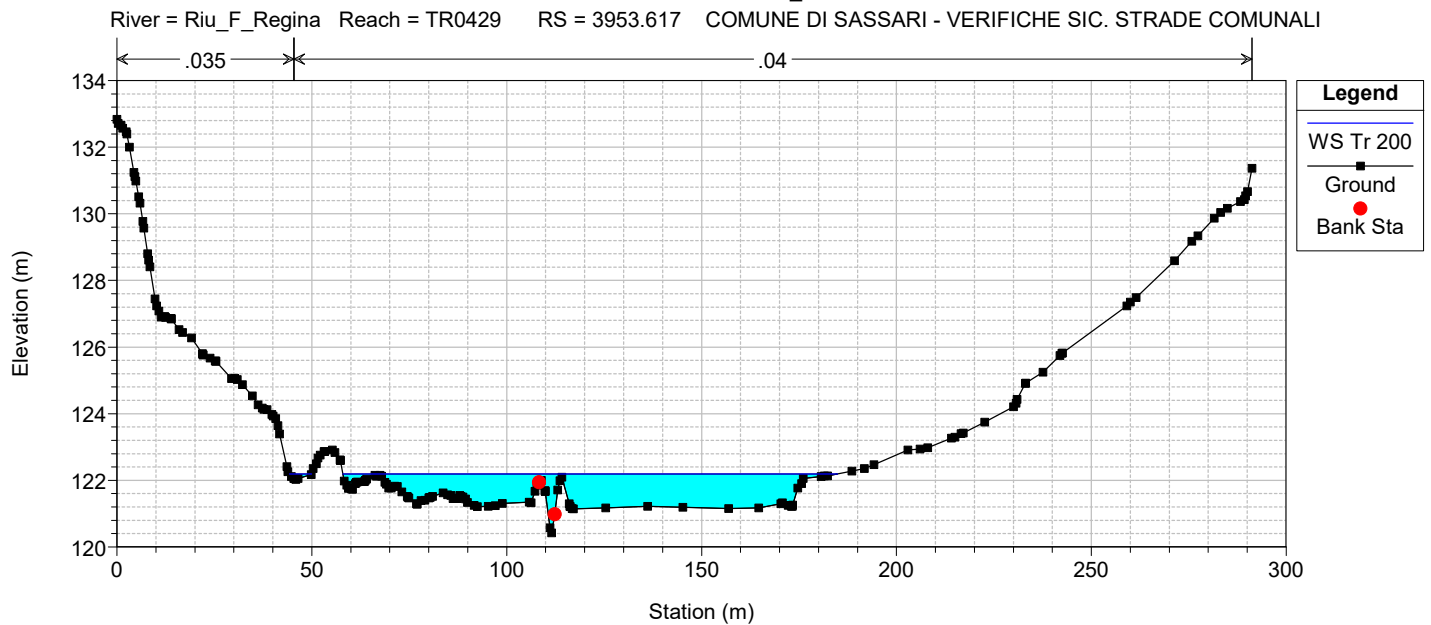
River = Riu_F_Regina Reach = TR0429 RS = 3988.827 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

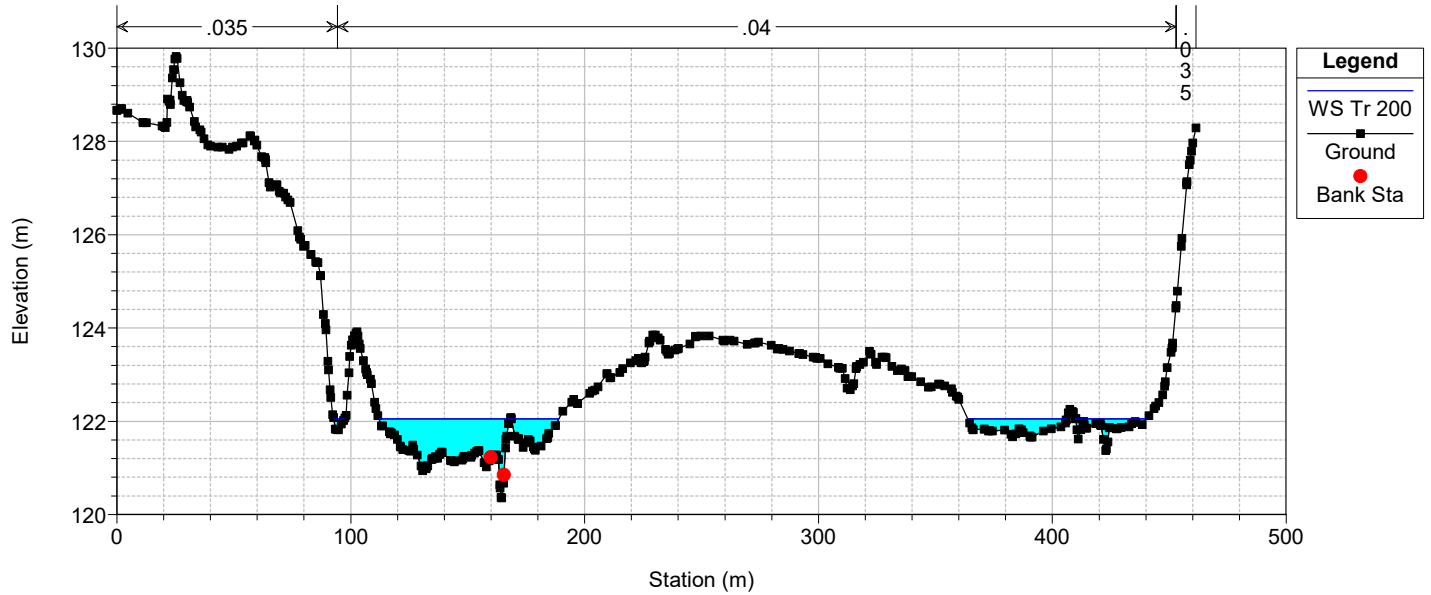
River = Riu_F_Regina Reach = TR0429 RS = 3953.617 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

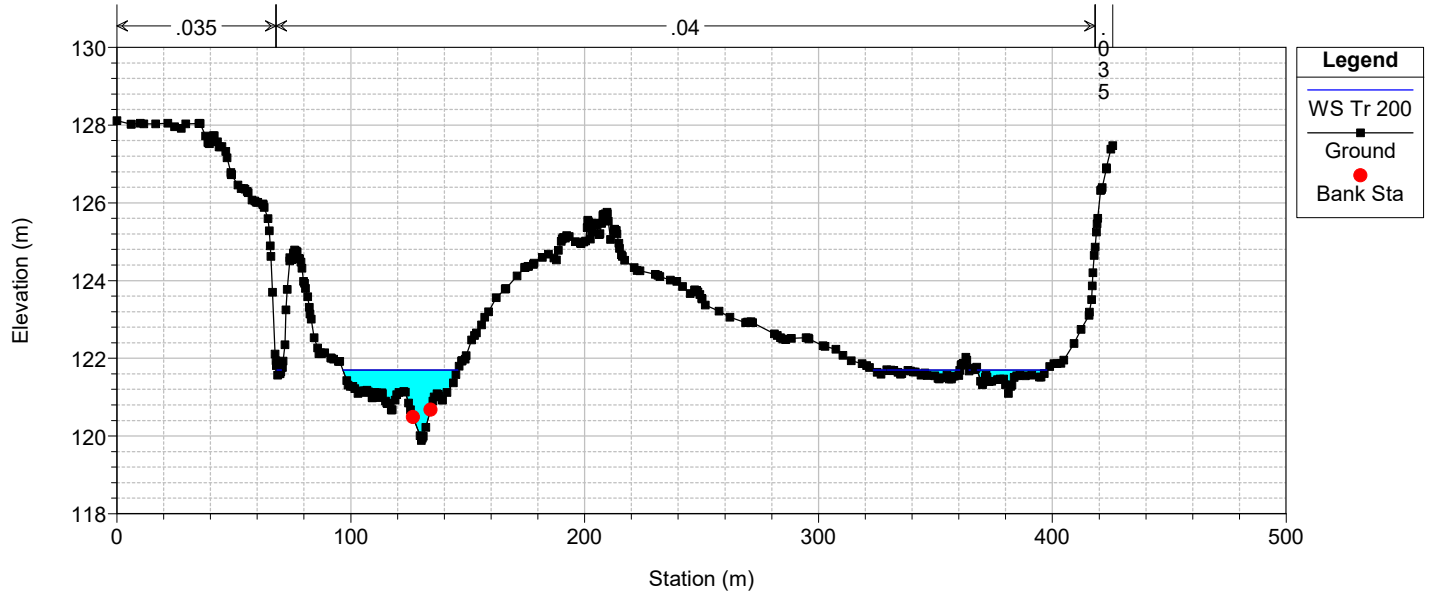
River = Riu_F_Regina Reach = TR0429 RS = 3918.545 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

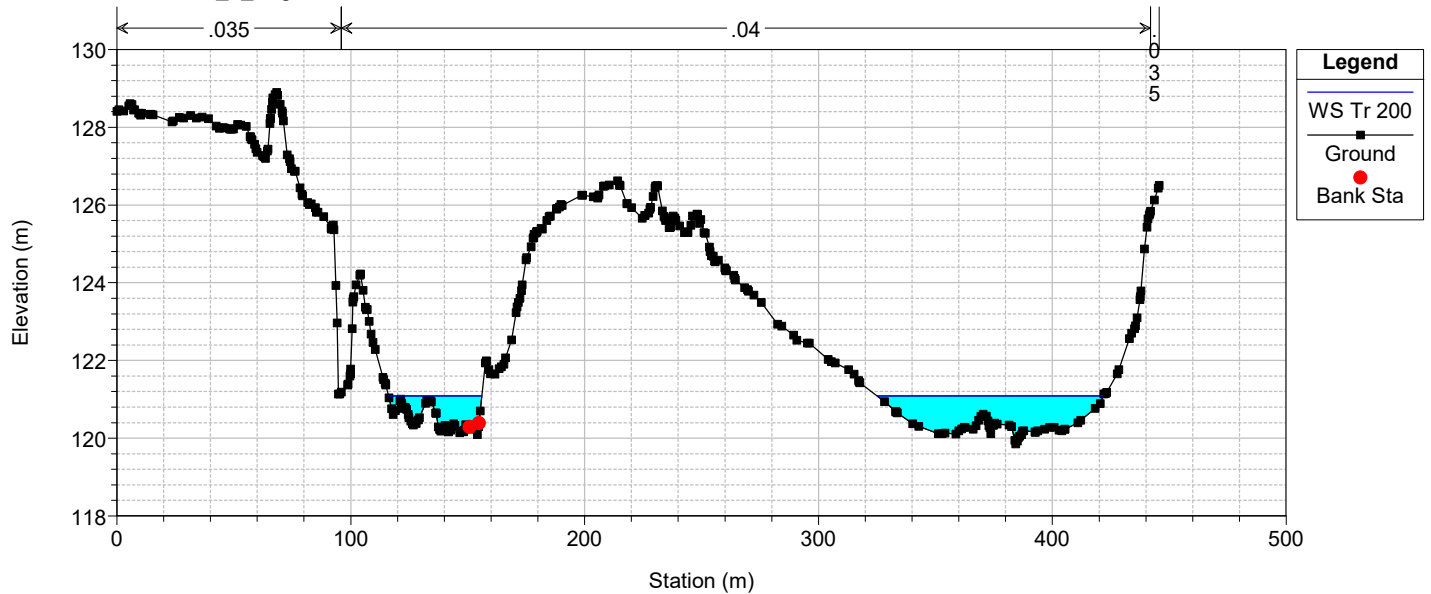
River = Riu_F_Regina Reach = TR0429 RS = 3883.461 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

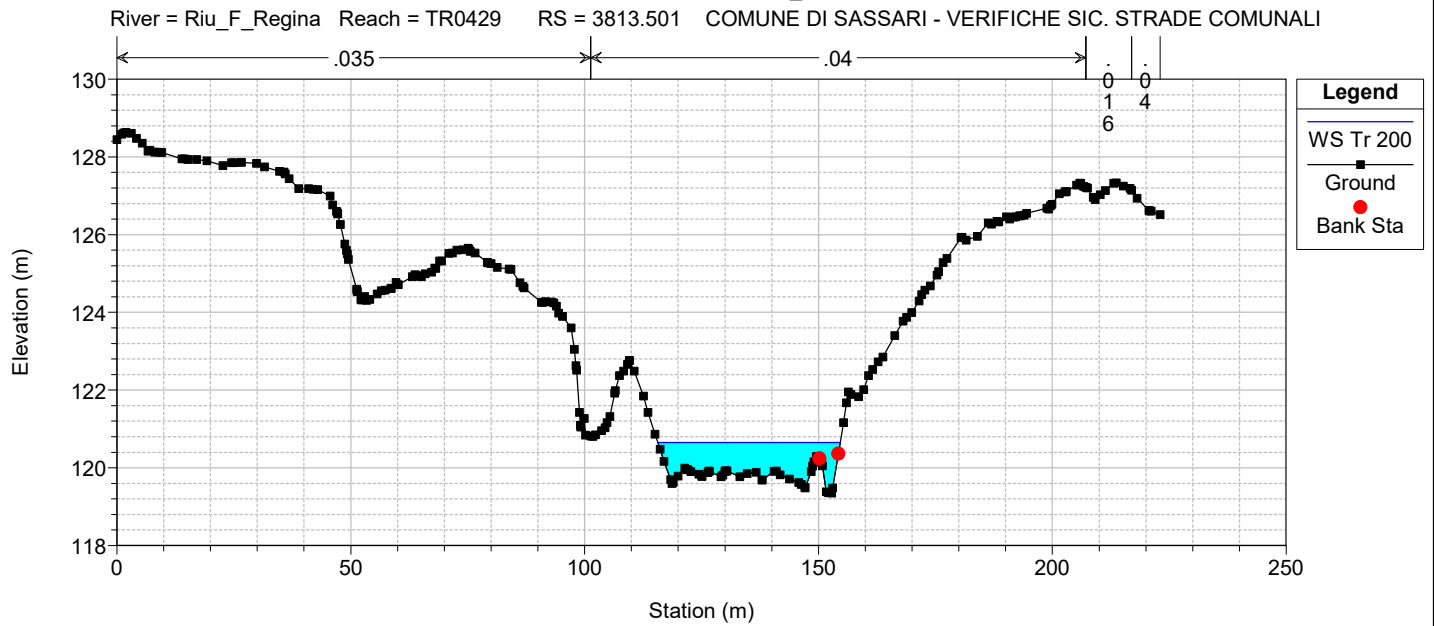
River = Riu_F_Regina Reach = TR0429 RS = 3848.833 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

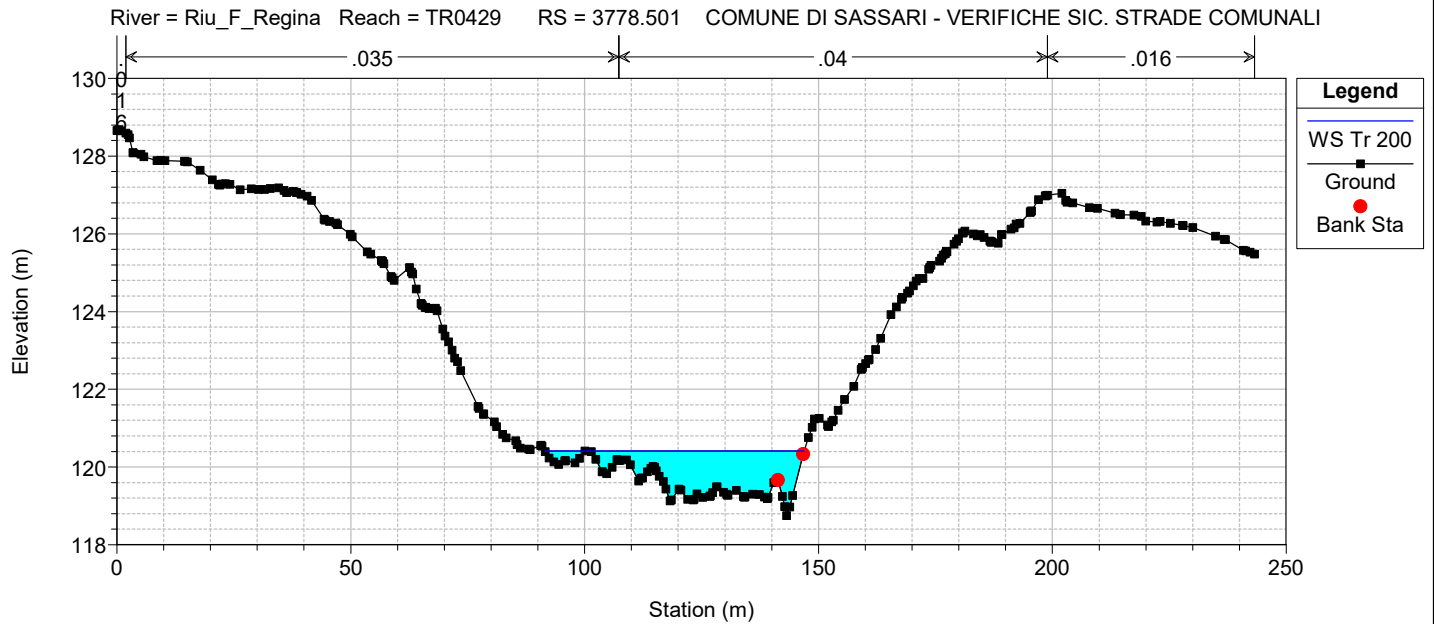
River = Riu_F_Regina Reach = TR0429 RS = 3813.501 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

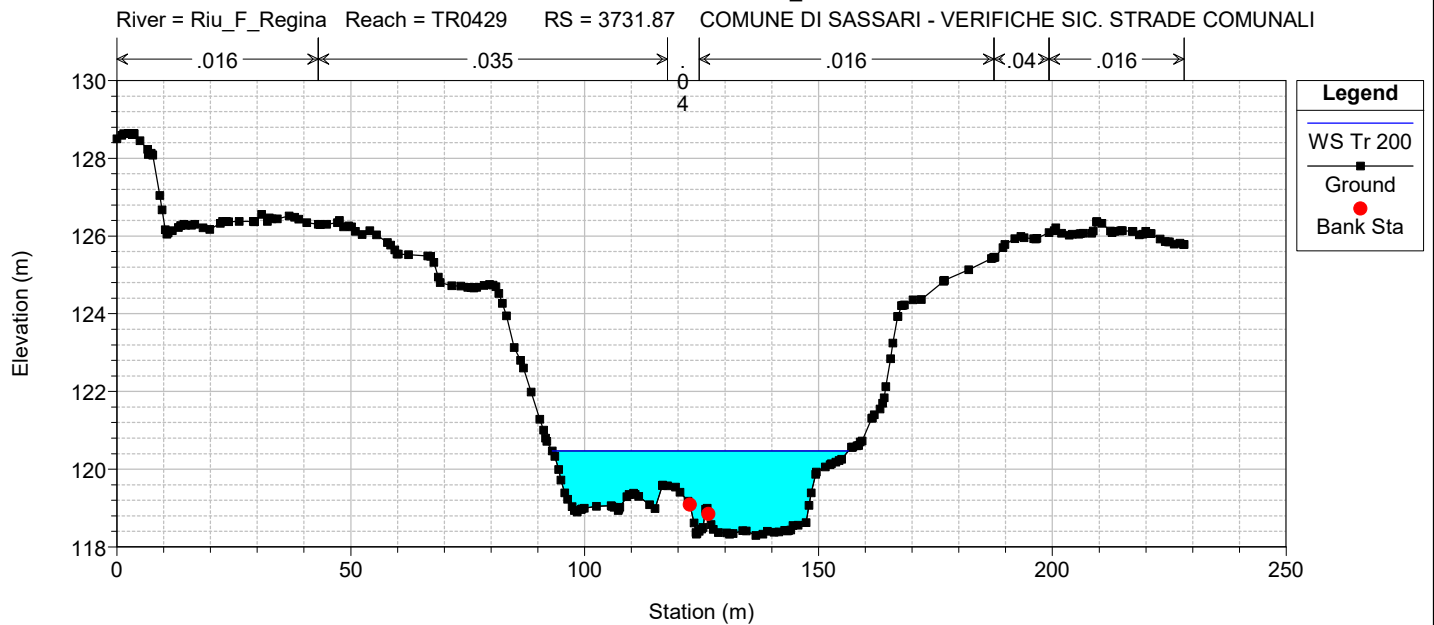
River = Riu_F_Regina Reach = TR0429 RS = 3778.501 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

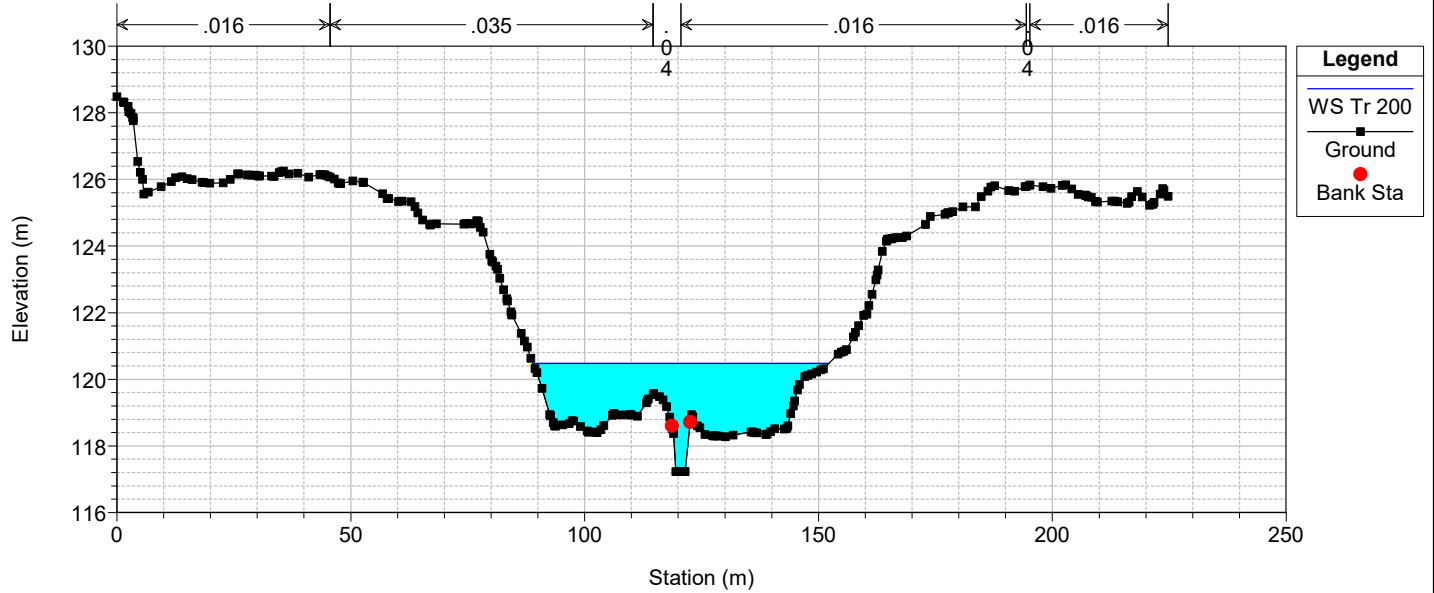
River = Riu_F_Regina Reach = TR0429 RS = 3731.87 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

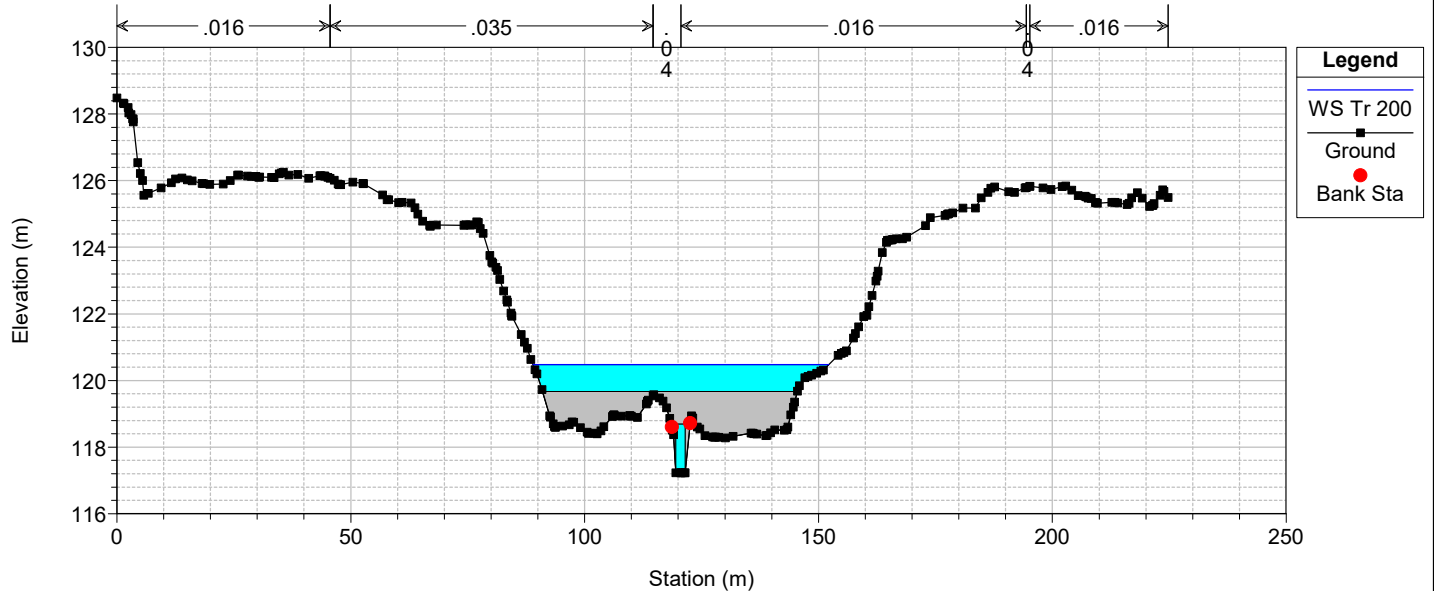
River = Riu_F_Regina Reach = TR0429 RS = 3728.917 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

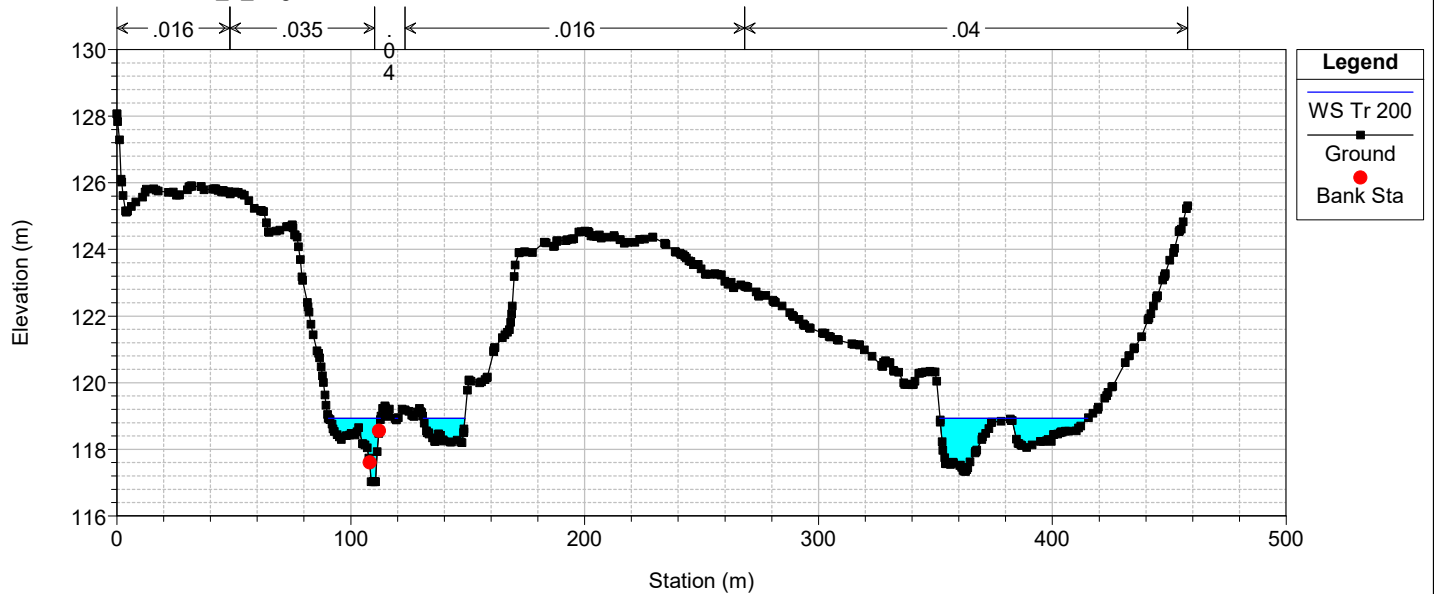
River = Riu_F_Regina Reach = TR0429 RS = 3720.398 Culv TR0429_A02 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

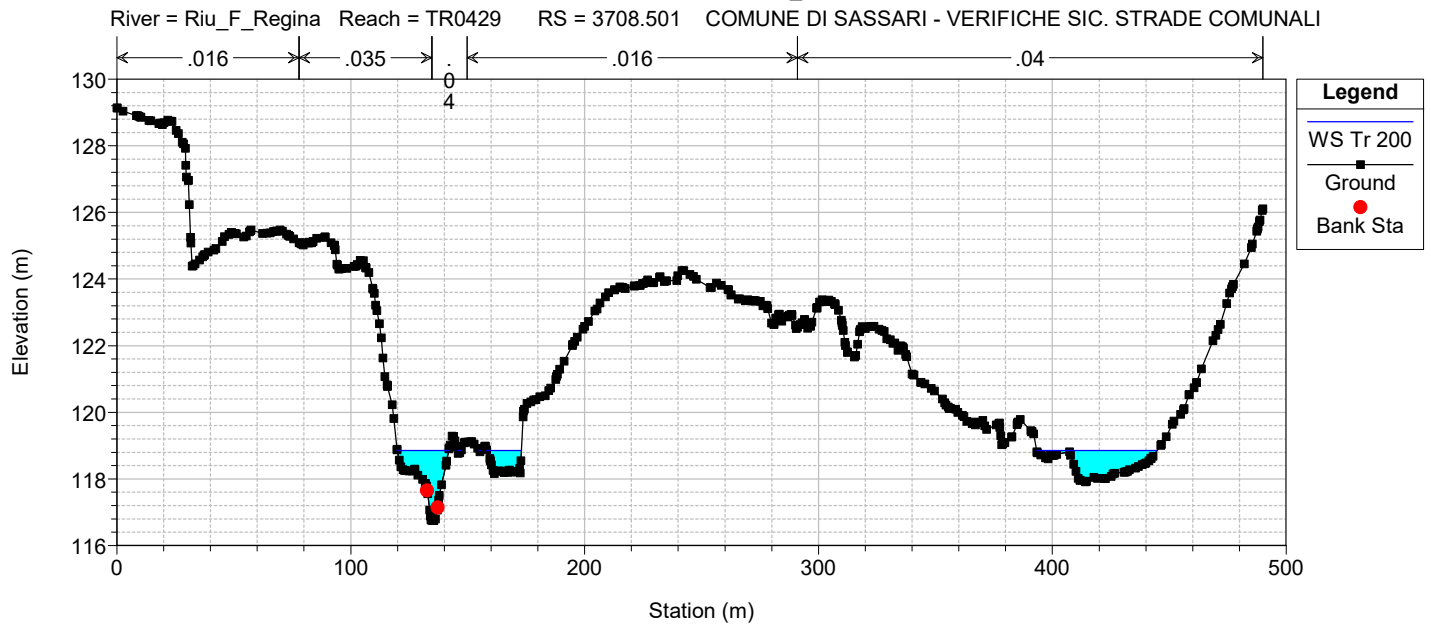
River = Riu_F_Regina Reach = TR0429 RS = 3715.067 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

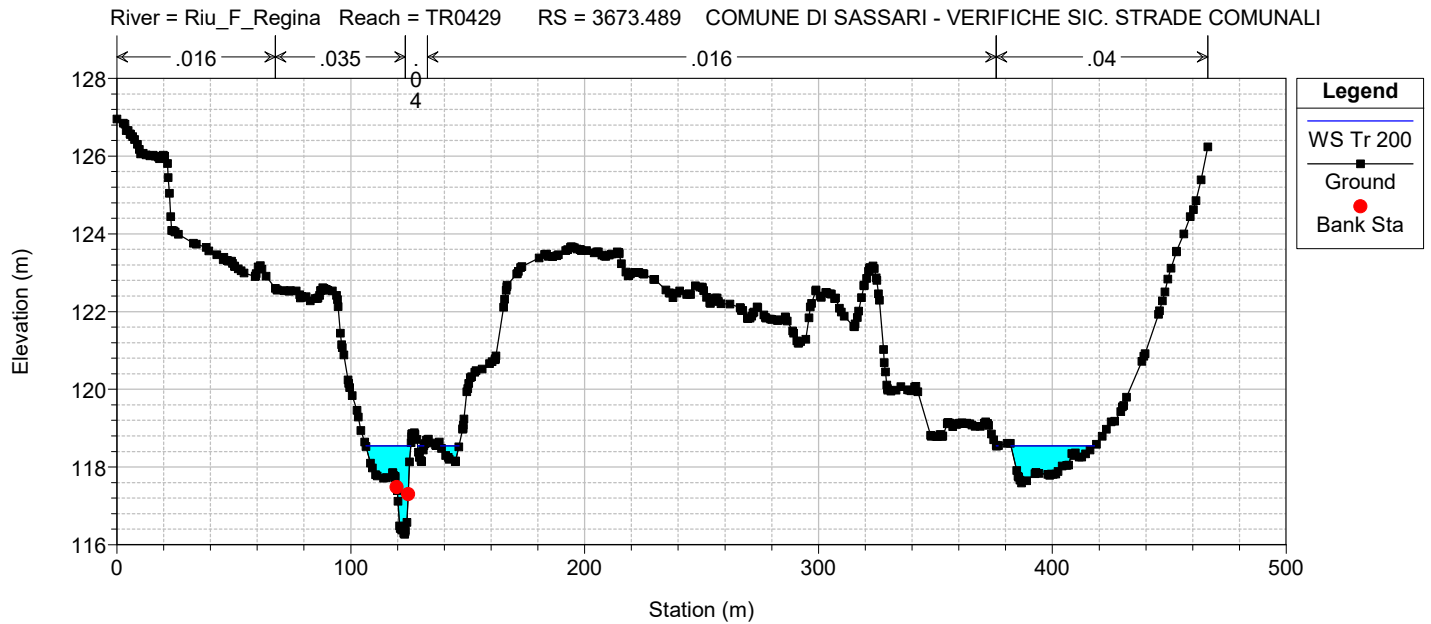
River = Riu_F_Regina Reach = TR0429 RS = 3708.501 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

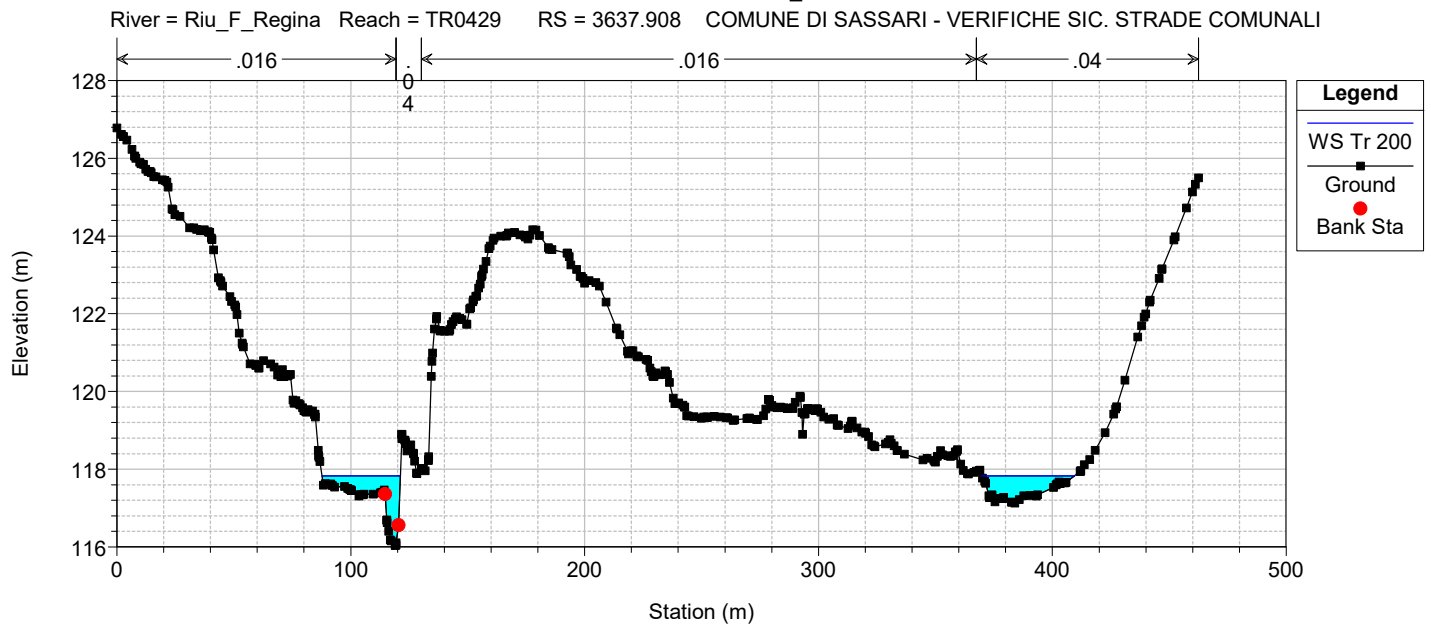
River = Riu_F_Regina Reach = TR0429 RS = 3673.489 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

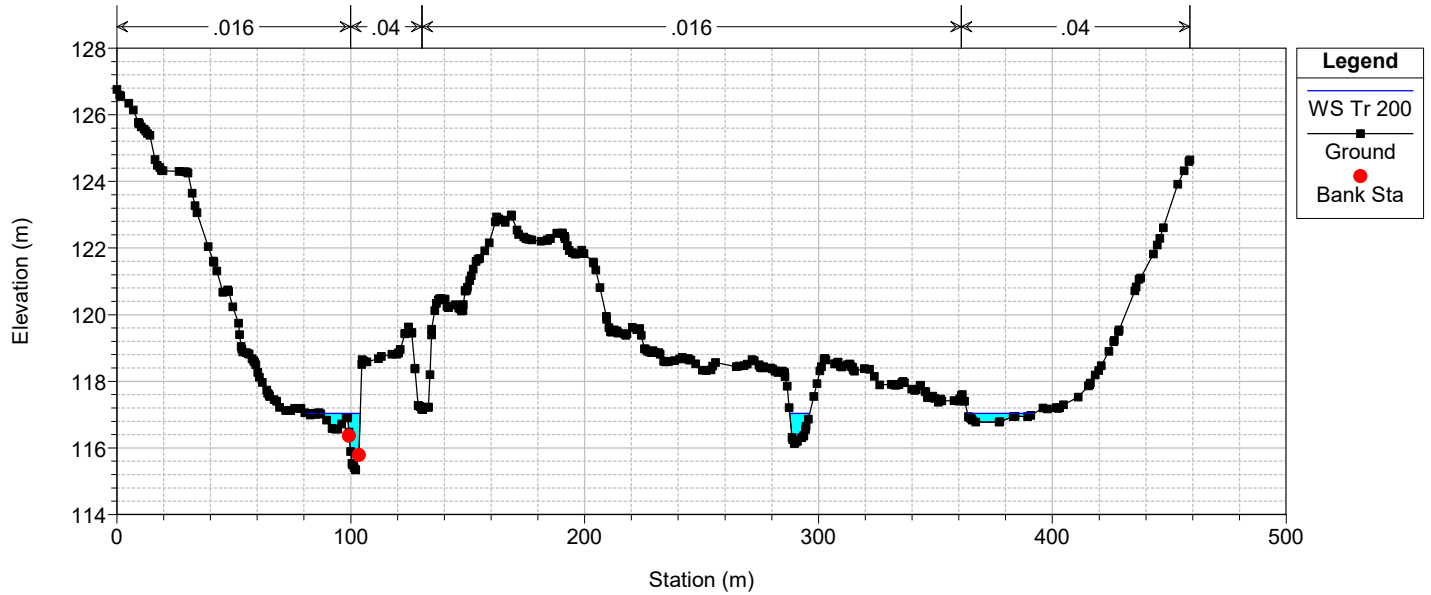
River = Riu_F_Regina Reach = TR0429 RS = 3637.908 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

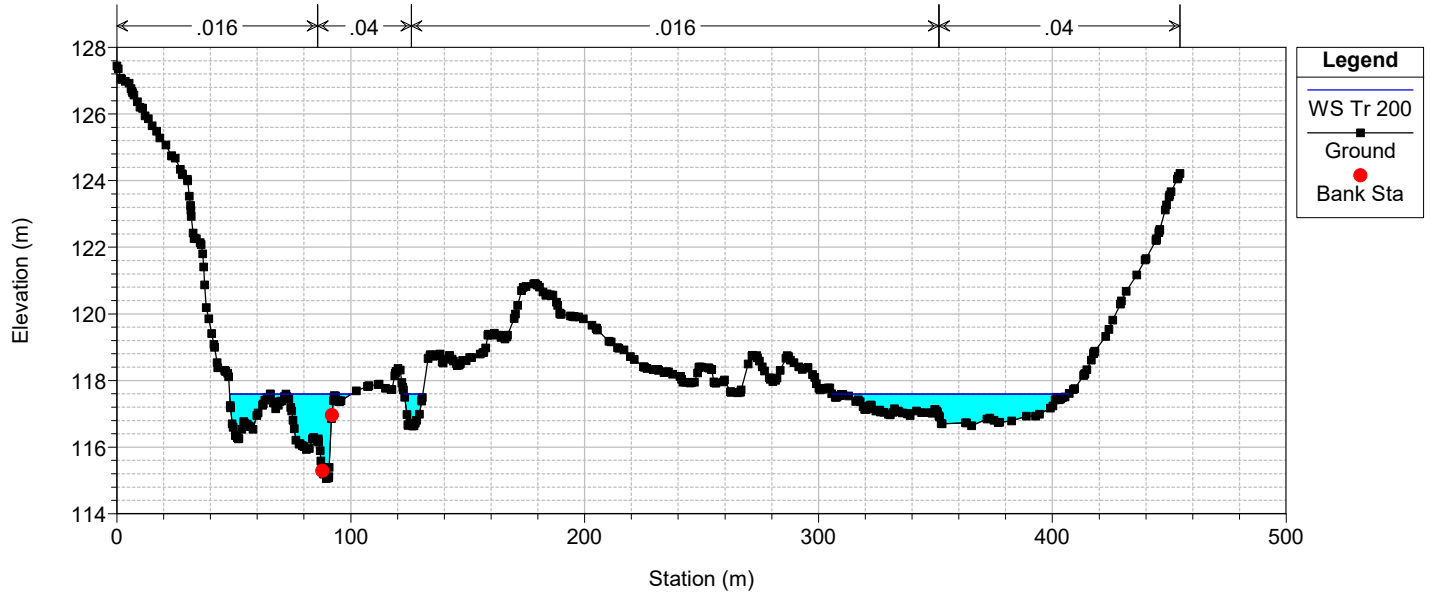
River = Riu_F_Regina Reach = TR0429 RS = 3602.587 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

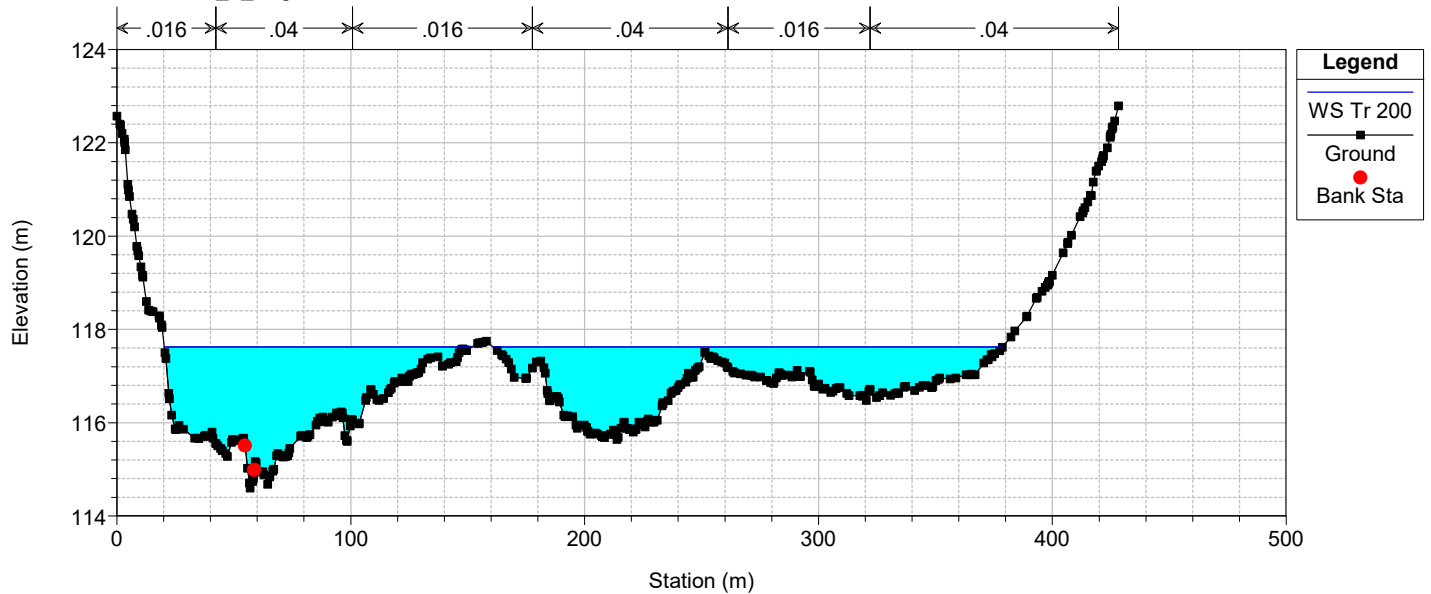
River = Riu_F_Regina Reach = TR0429 RS = 3568.979 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

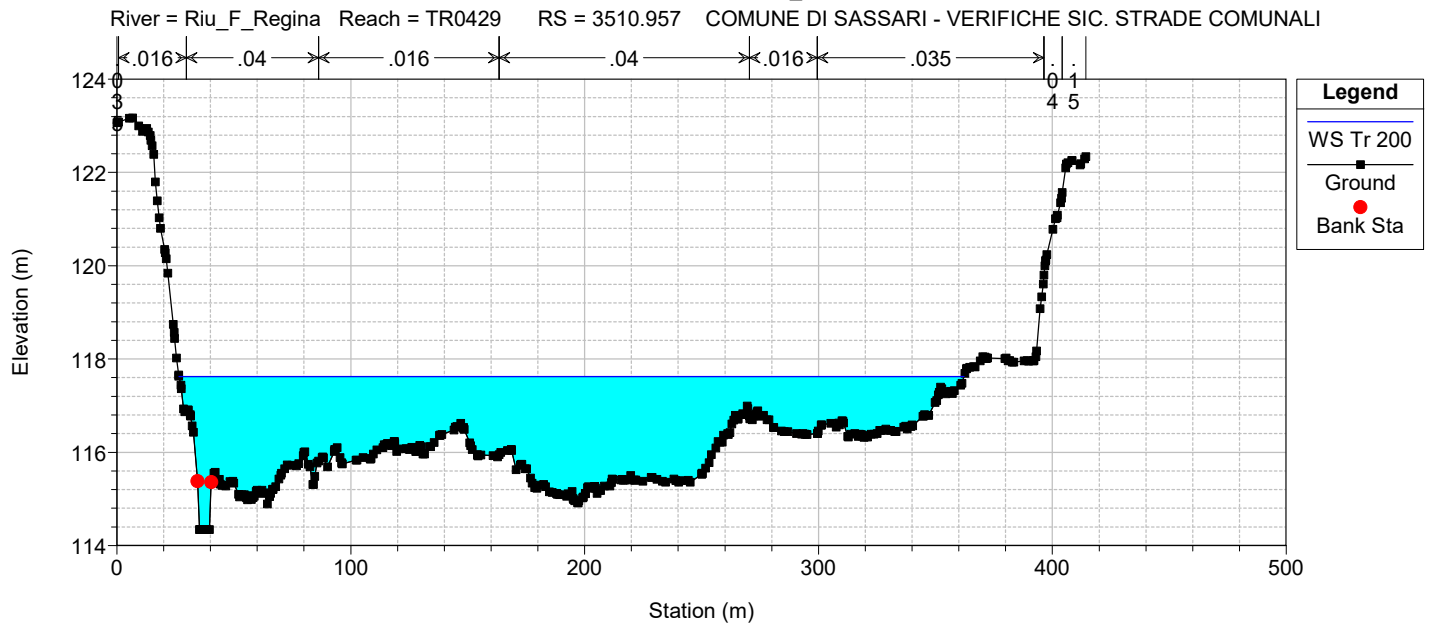
River = Riu_F_Regina Reach = TR0429 RS = 3535.642 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

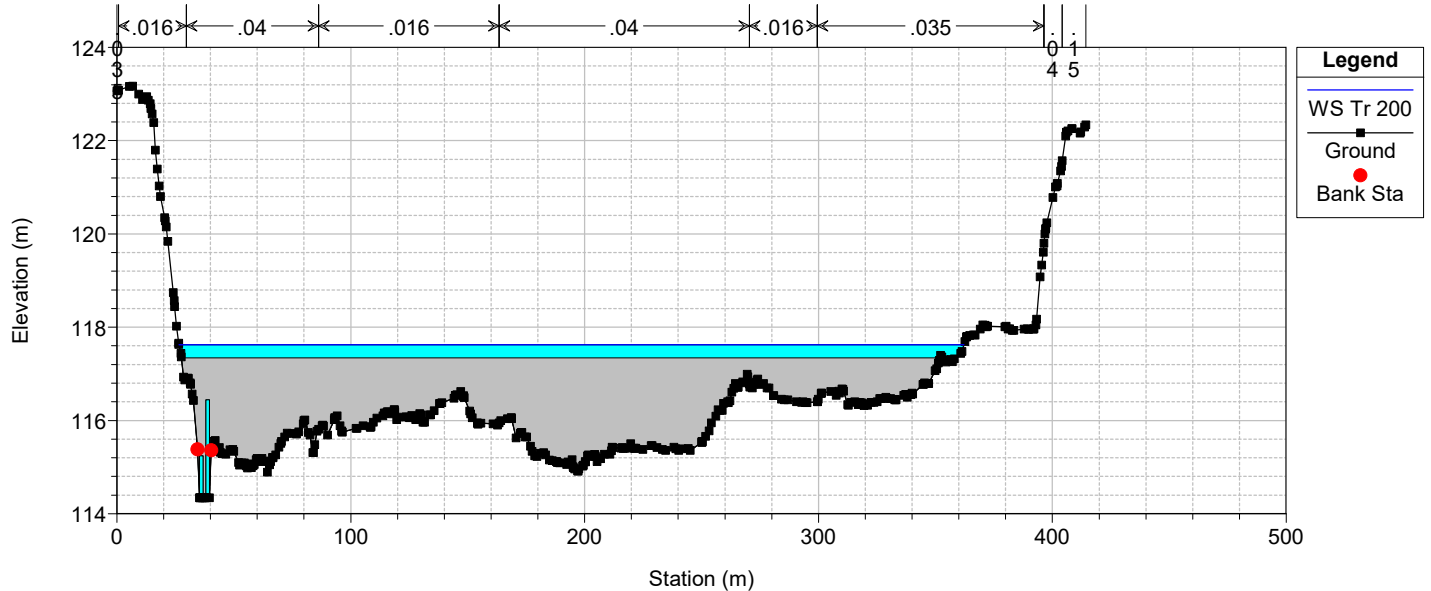
River = Riu_F_Regina Reach = TR0429 RS = 3510.957 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

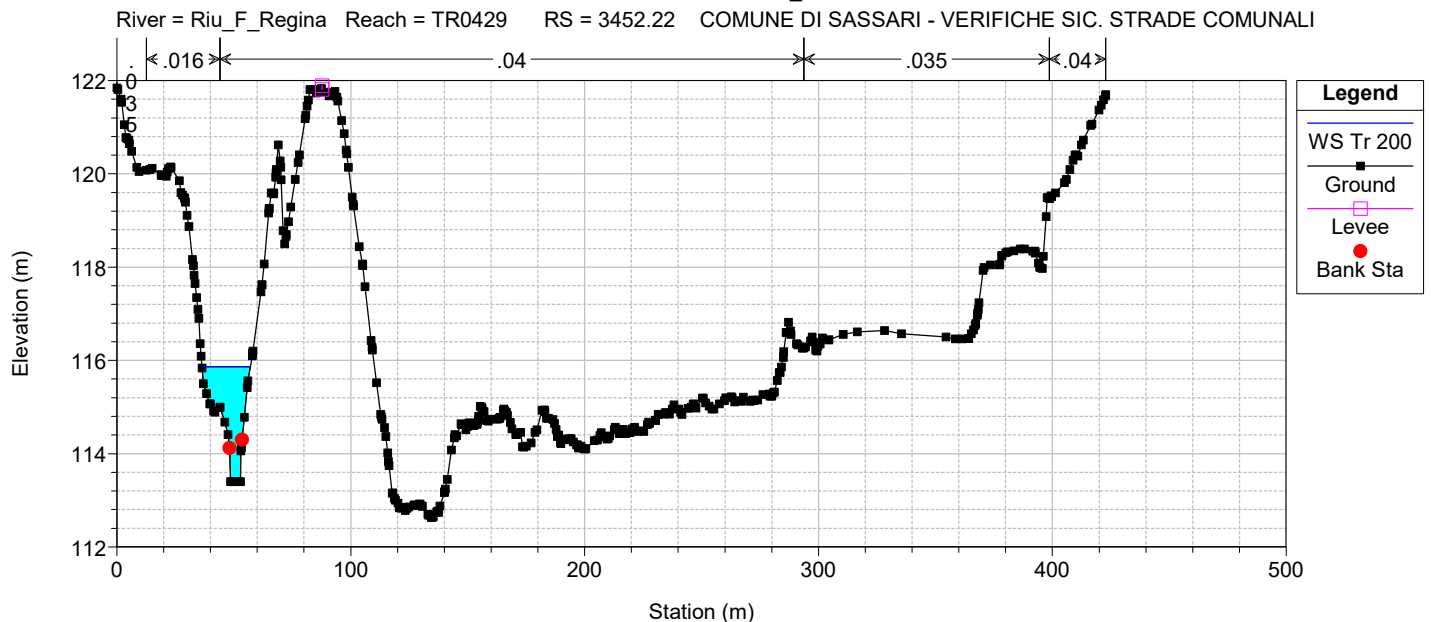
River = Riu_F_Regina Reach = TR0429 RS = 3478.919 Culv SS127bis COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

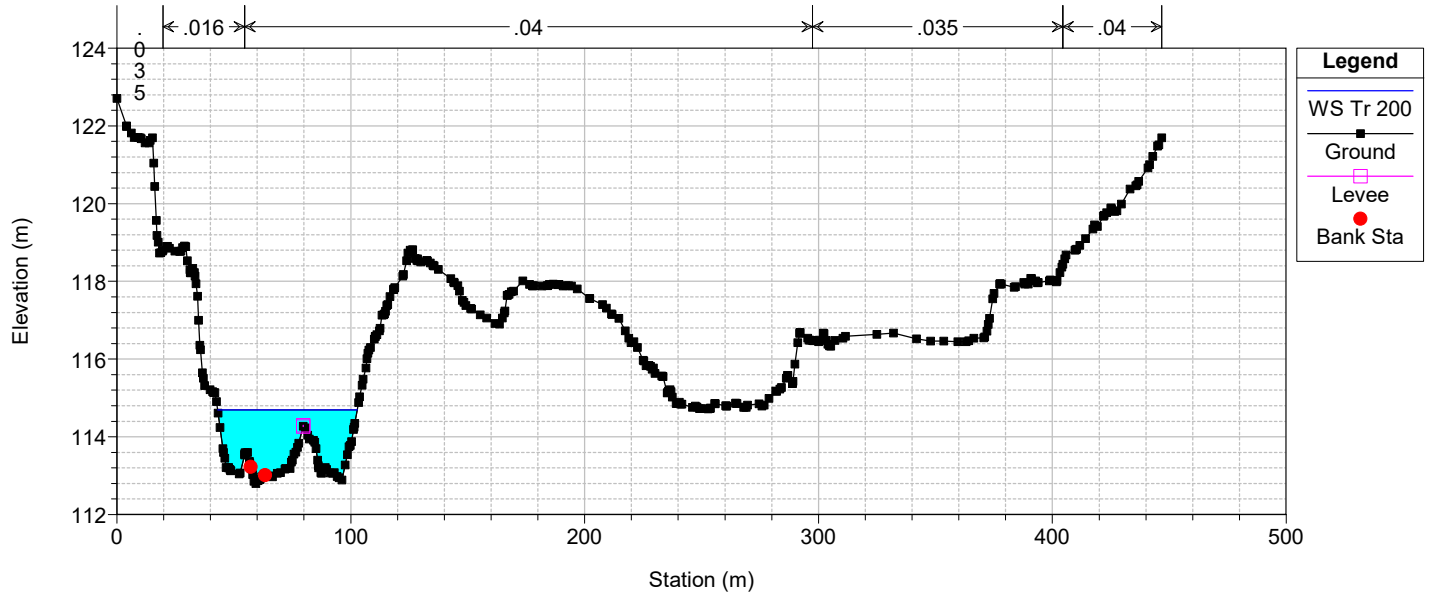
River = Riu_F_Regina Reach = TR0429 RS = 3452.22 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

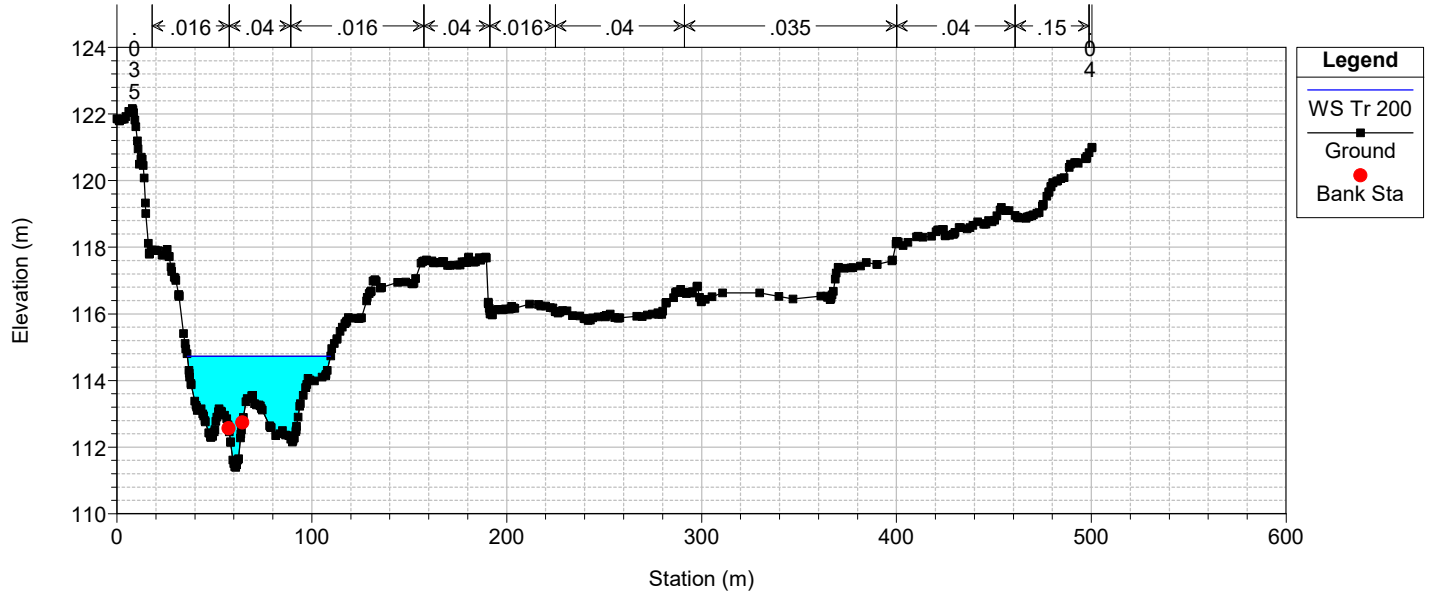
River = Riu_F_Regina Reach = TR0429 RS = 3429.228 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

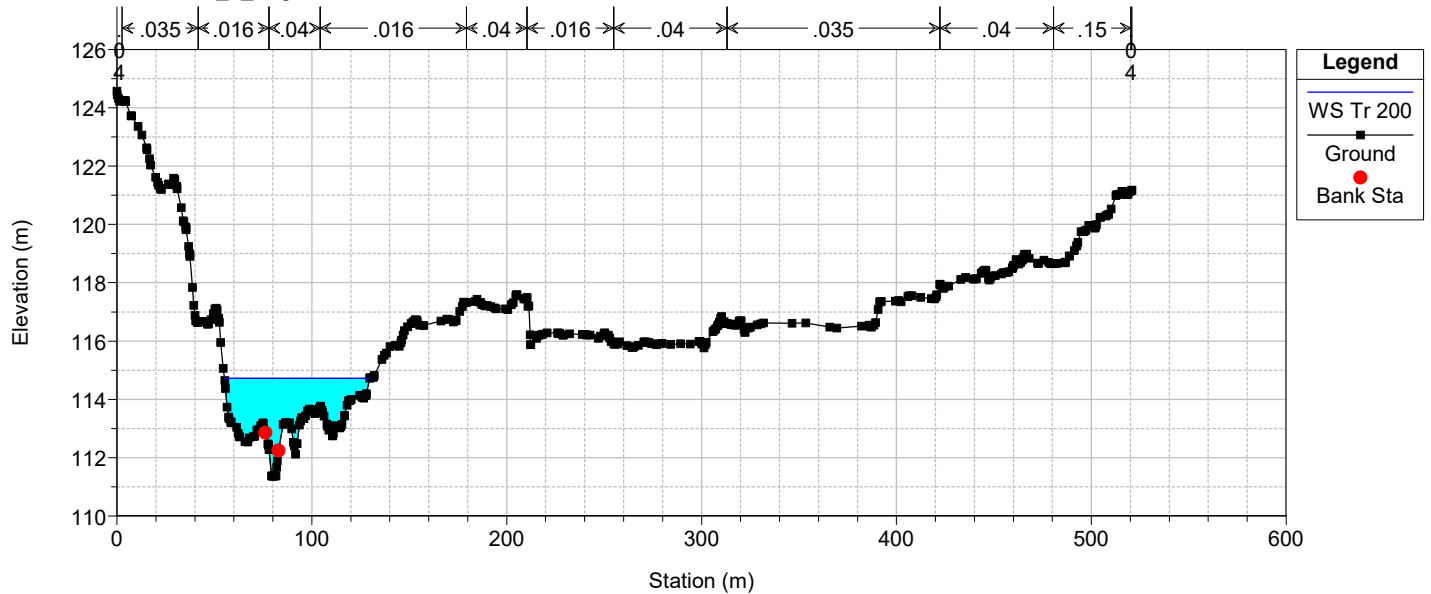
River = Riu_F_Regina Reach = TR0429 RS = 3393.604 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

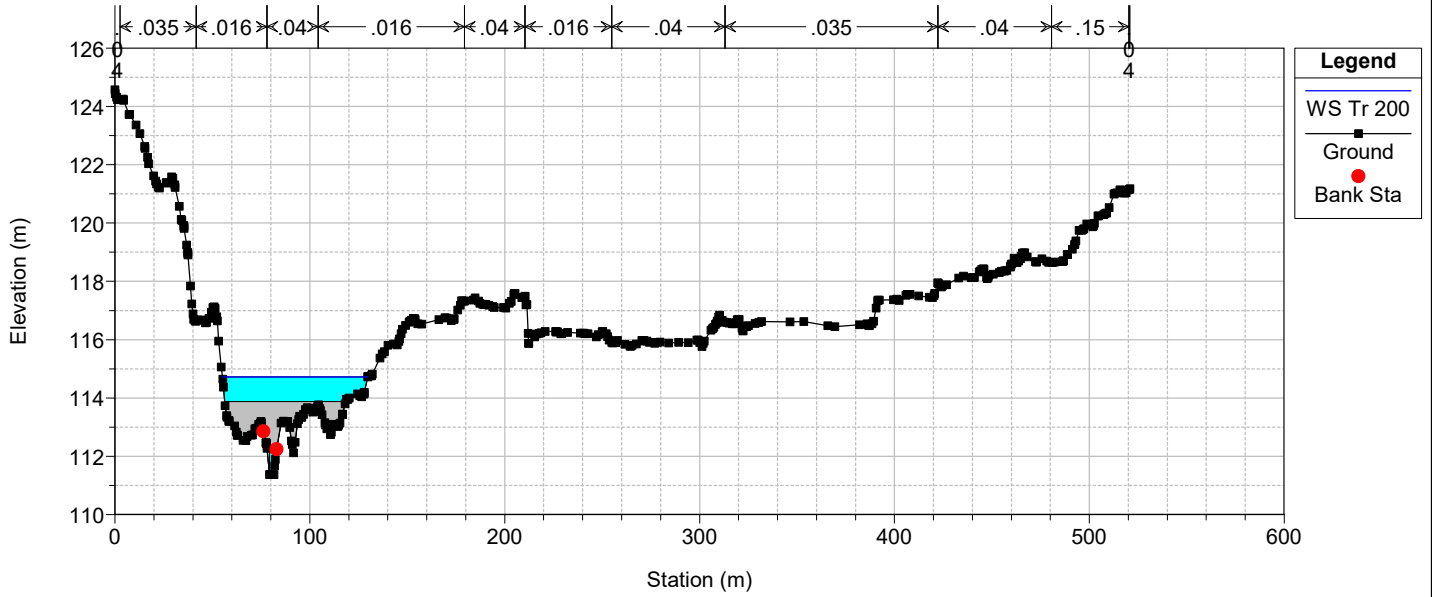
River = Riu_F_Regina Reach = TR0429 RS = 3376.094 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

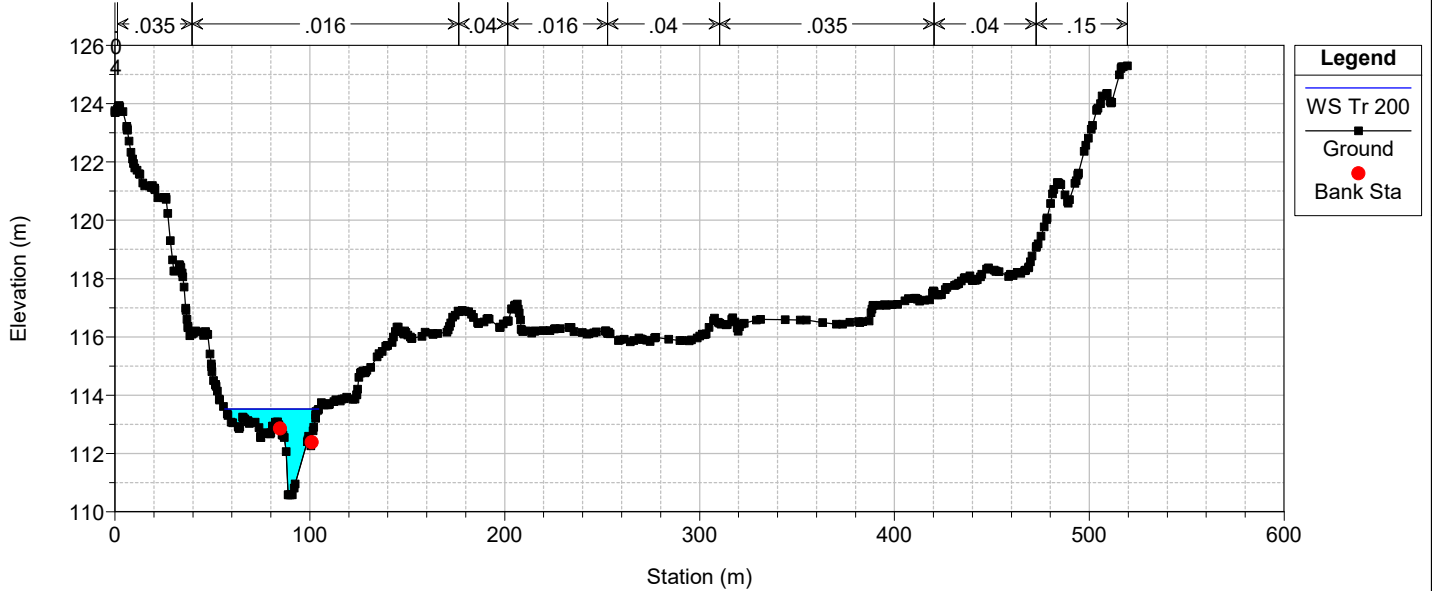
River = Riu_F_Regina Reach = TR0429 RS = 3366.039 Culv TR0429_A01 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

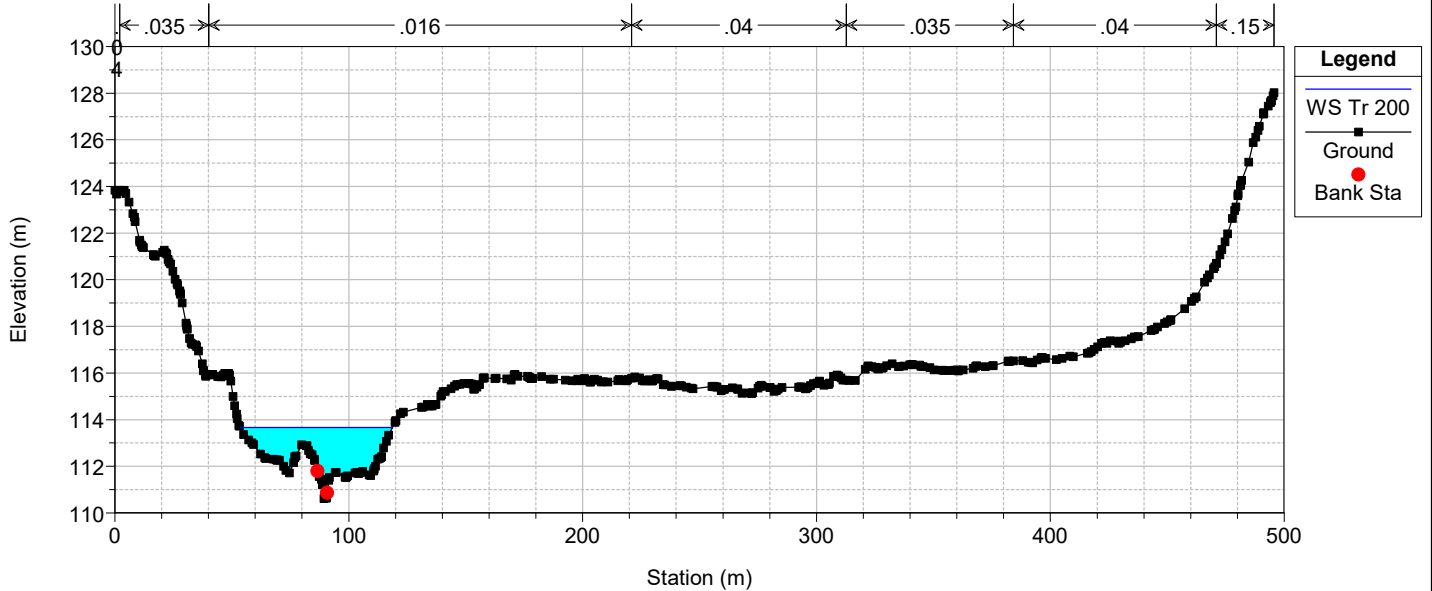
River = Riu_F_Regina Reach = TR0429 RS = 3360.207 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

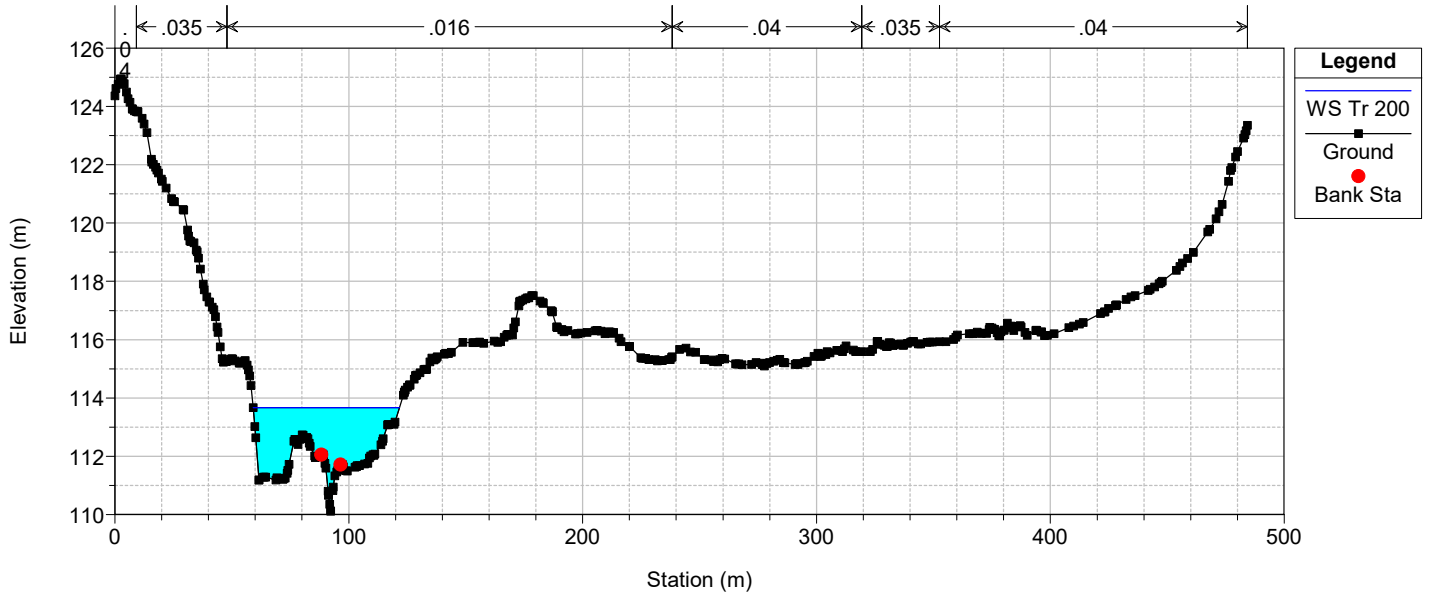
River = Riu_F_Regina Reach = TR0429 RS = 3350.523 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

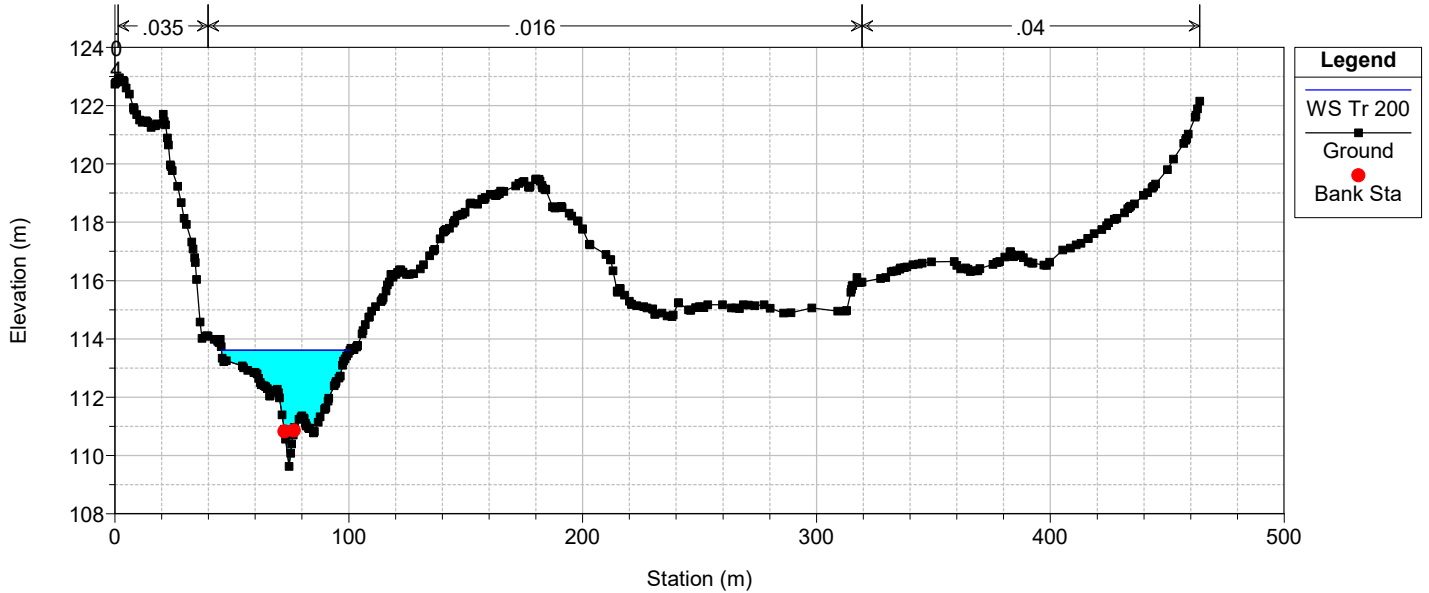
River = Riu_F_Regina Reach = TR0429 RS = 3323.781 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

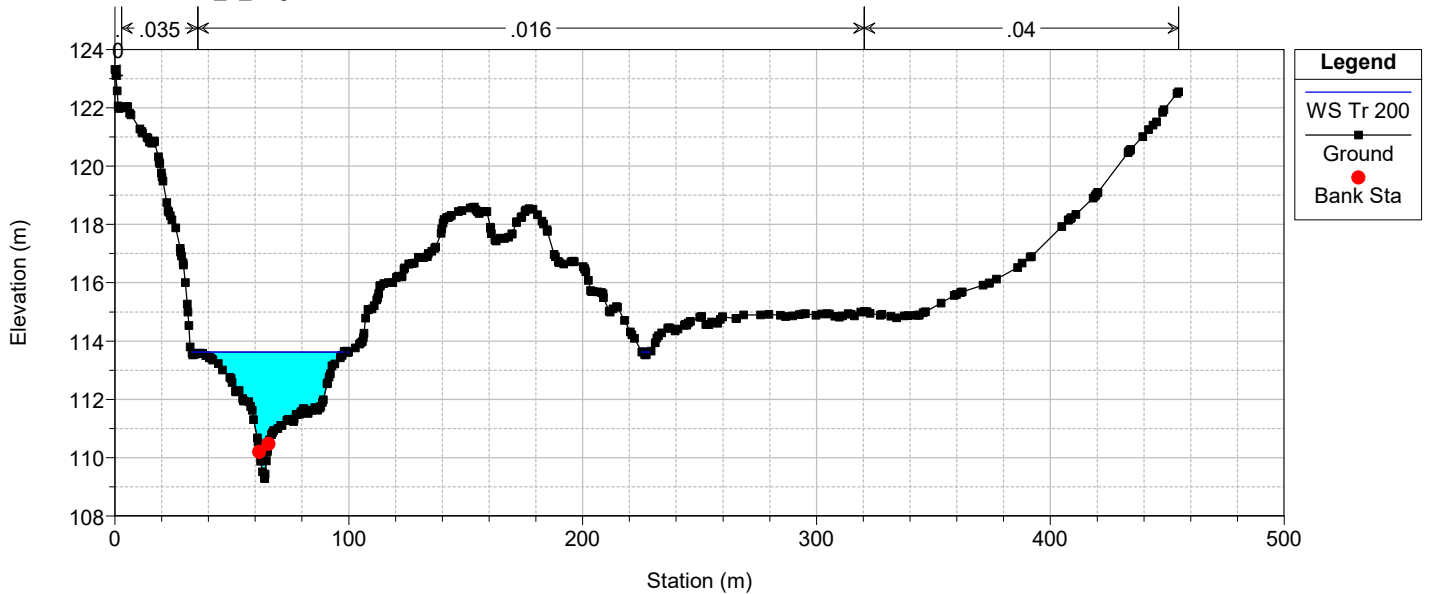
River = Riu_F_Regina Reach = TR0429 RS = 3288.527 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

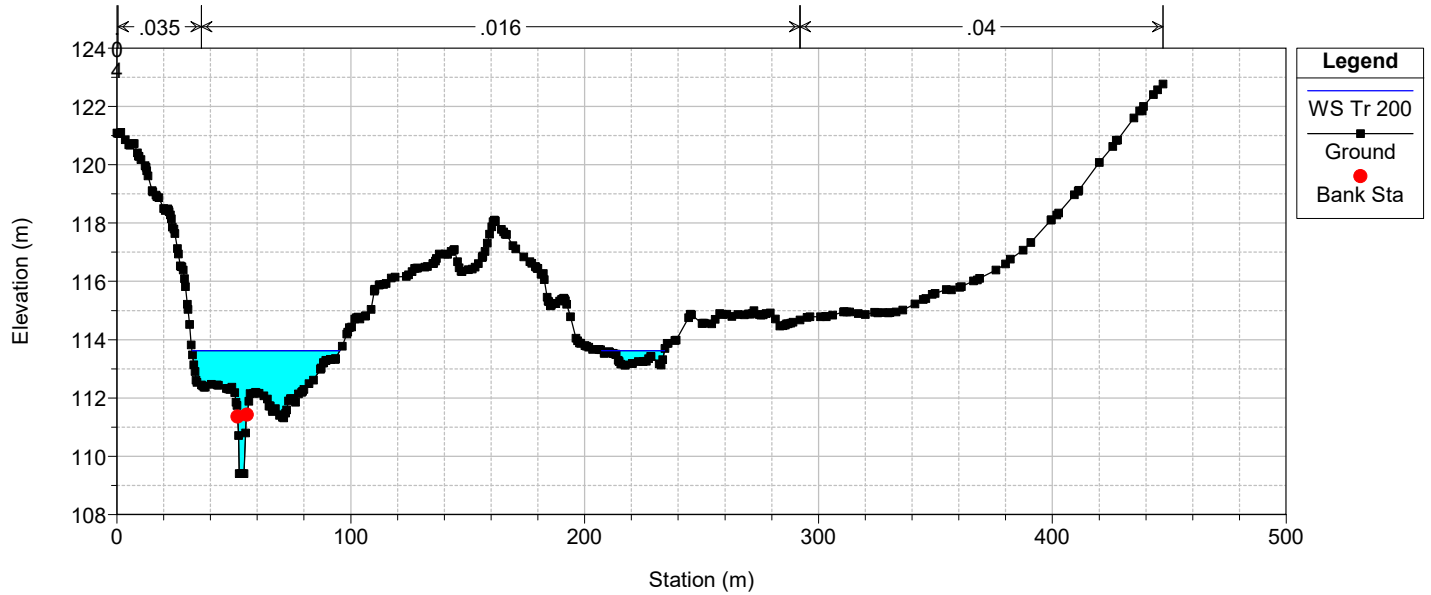
River = Riu_F_Regina Reach = TR0429 RS = 3253.658 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

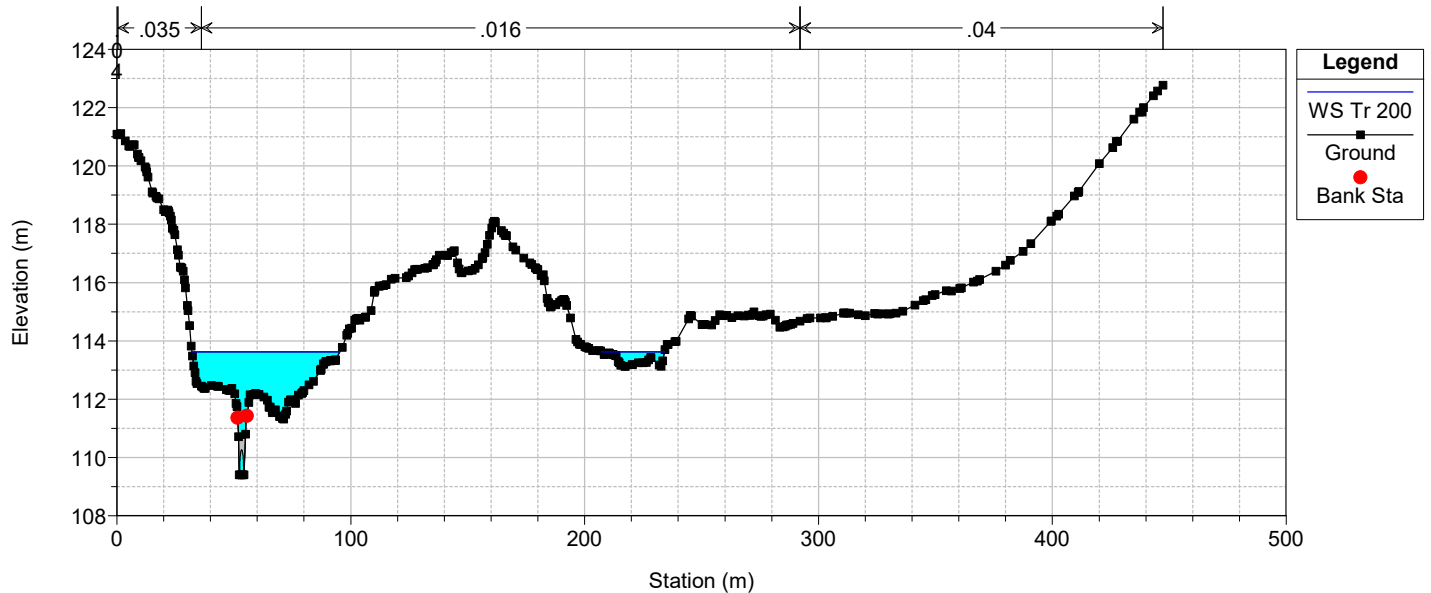
River = Riu_F_Regina Reach = TR0429 RS = 3226.643 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

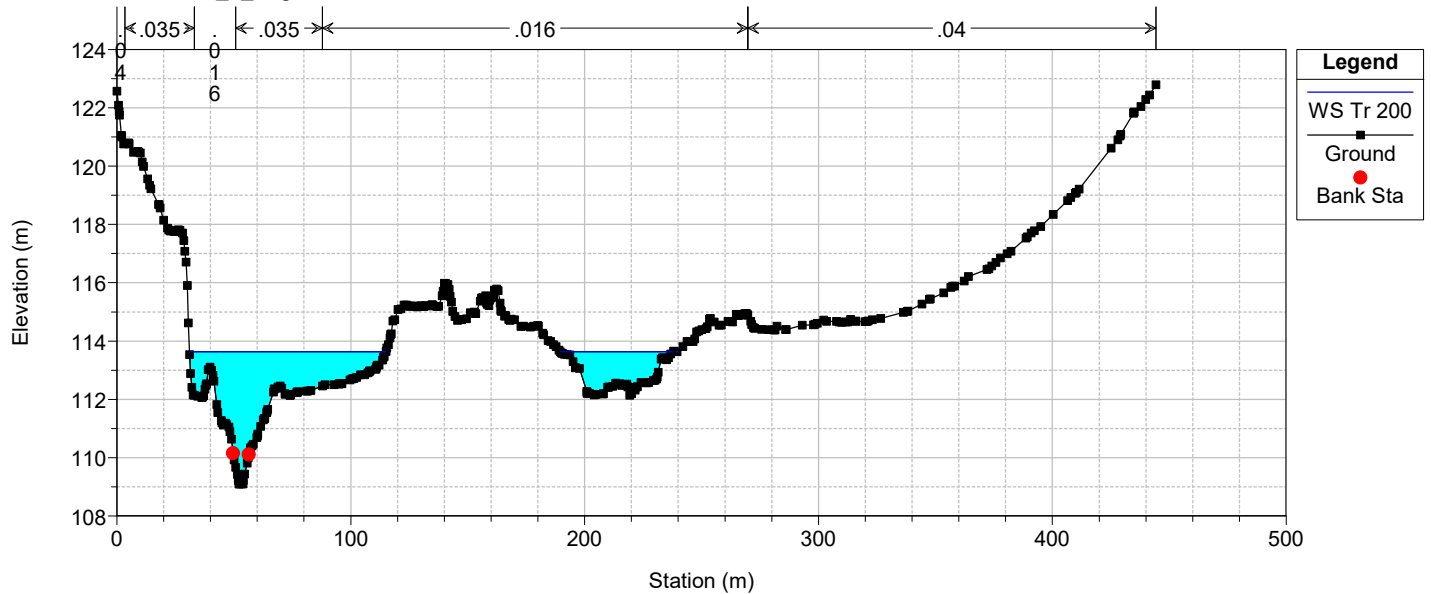
River = Riu_F_Regina Reach = TR0429 RS = 3220.356 Culv SS127bis COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

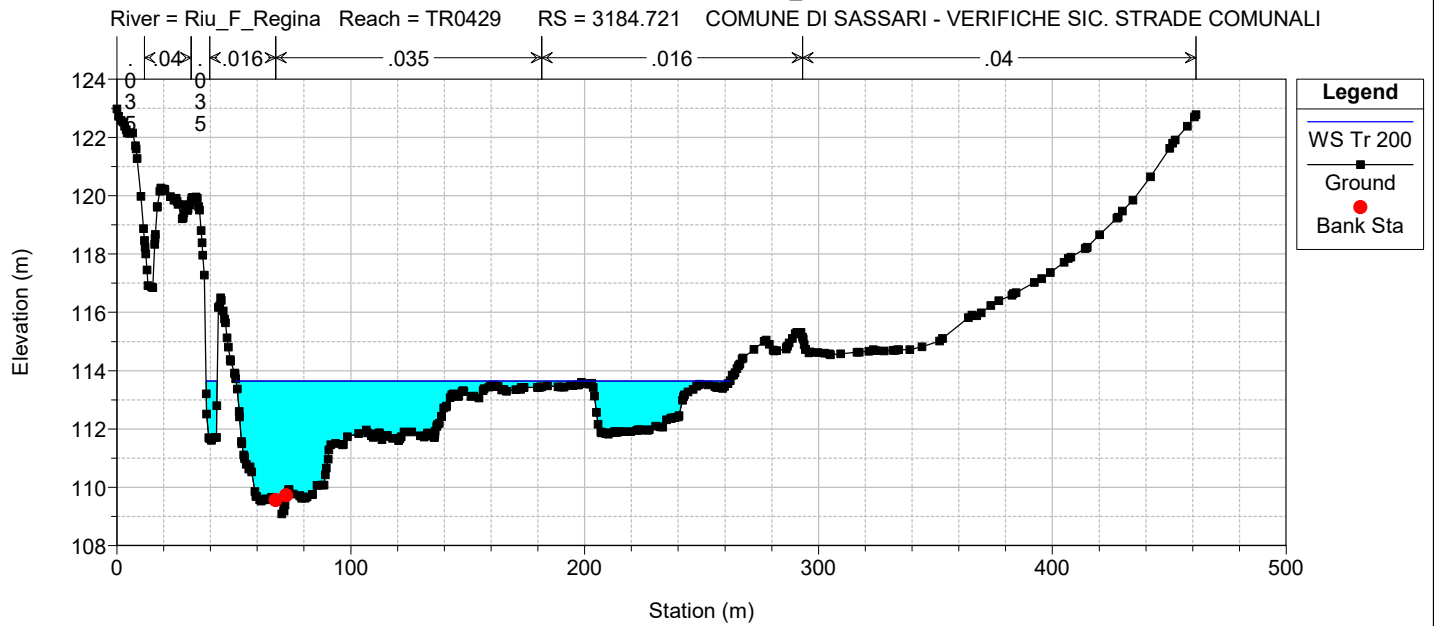
River = Riu_F_Regina Reach = TR0429 RS = 3213.703 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

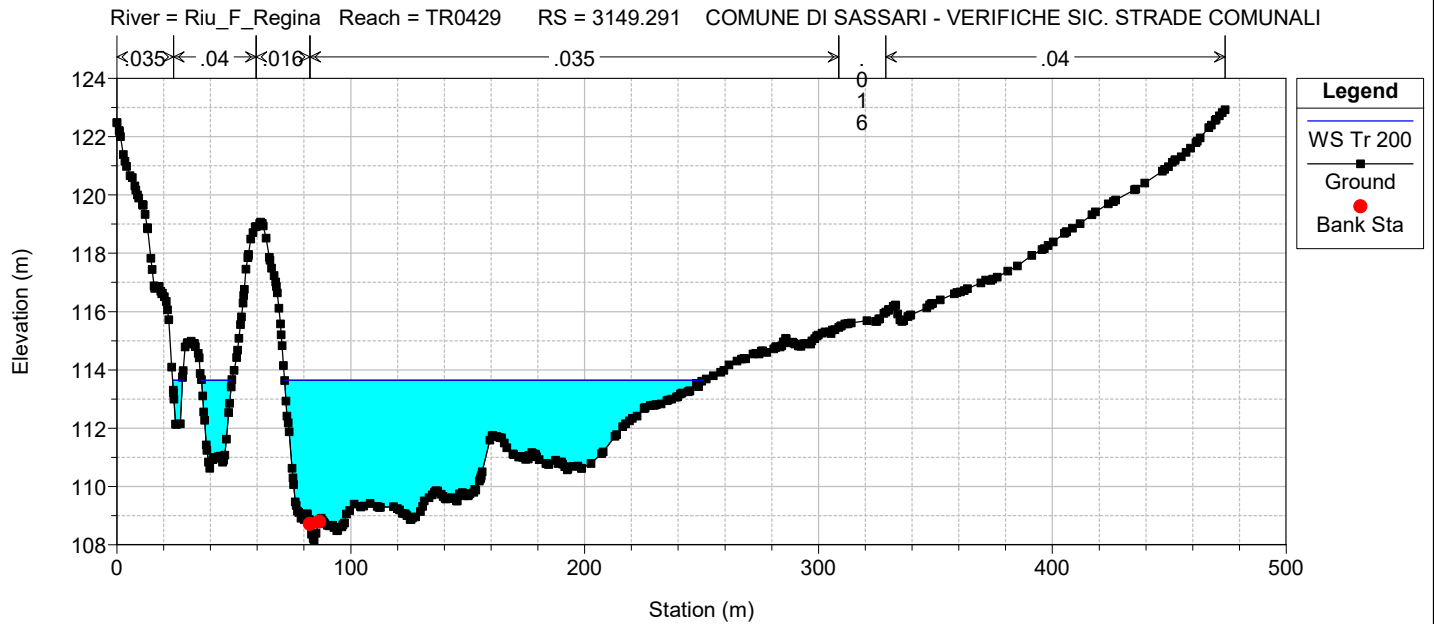
River = Riu_F_Regina Reach = TR0429 RS = 3184.721 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

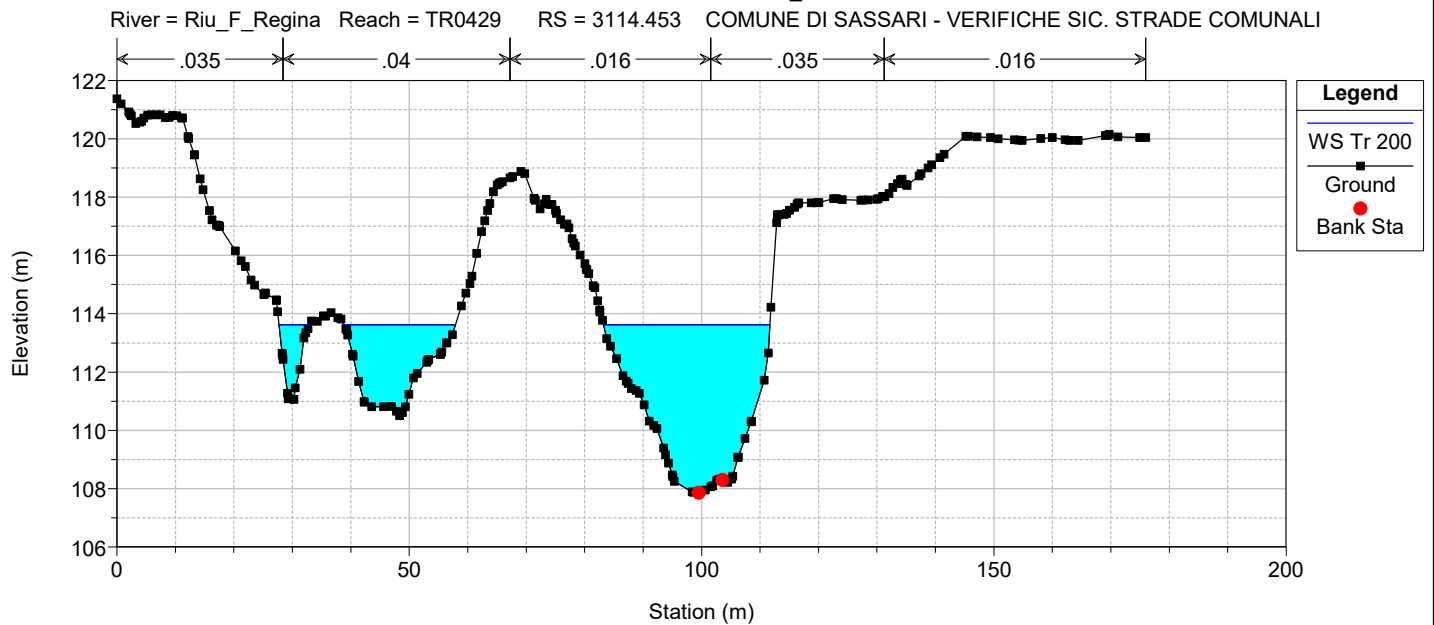
River = Riu_F_Regina Reach = TR0429 RS = 3149.291 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

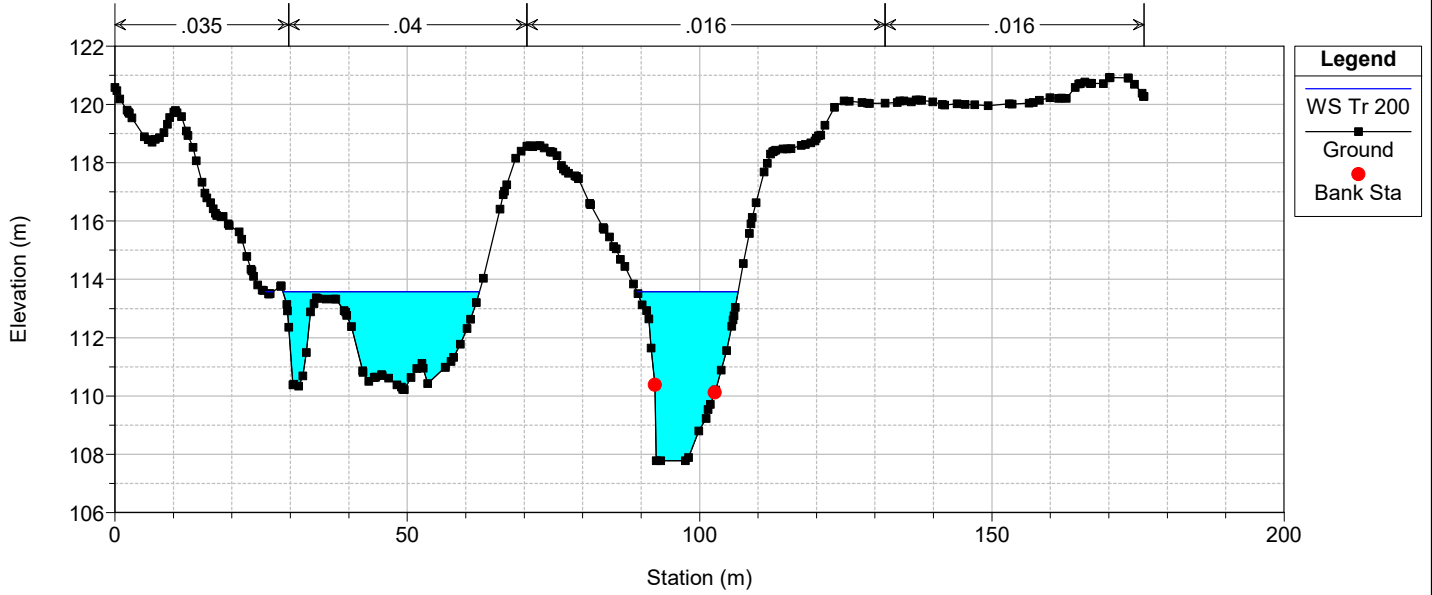
River = Riu_F_Regina Reach = TR0429 RS = 3114.453 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

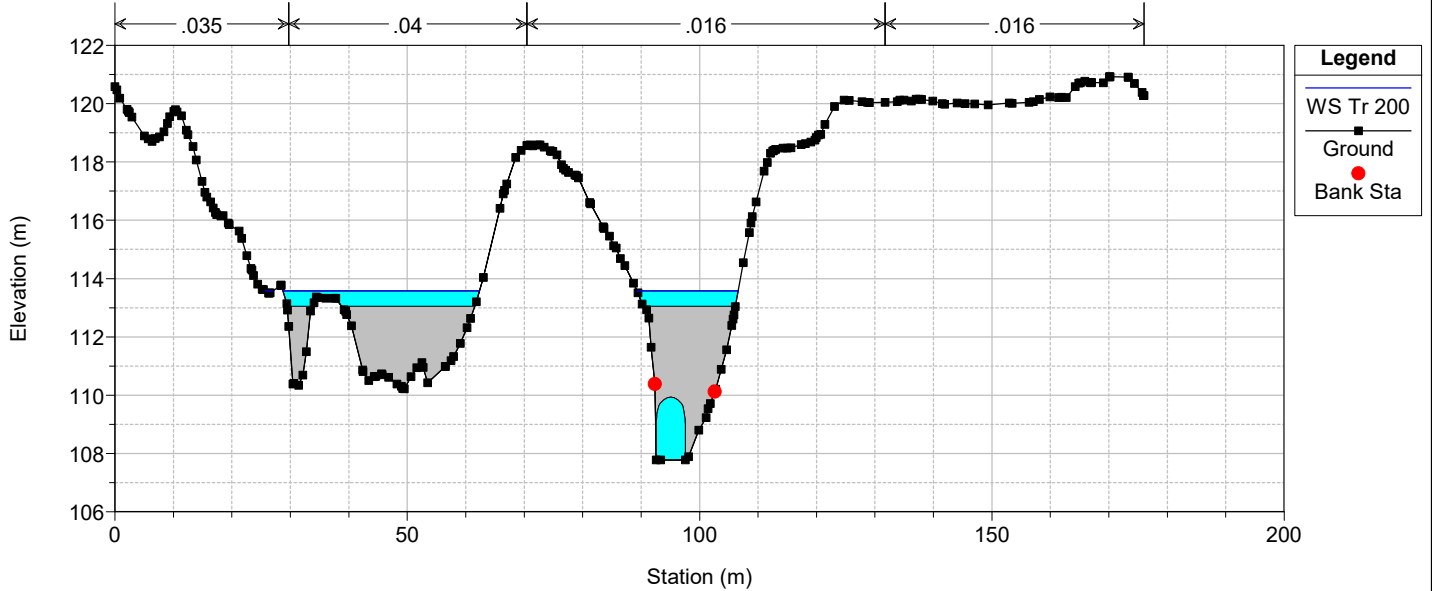
River = Riu_F_Regina Reach = TR0429 RS = 3107.44 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

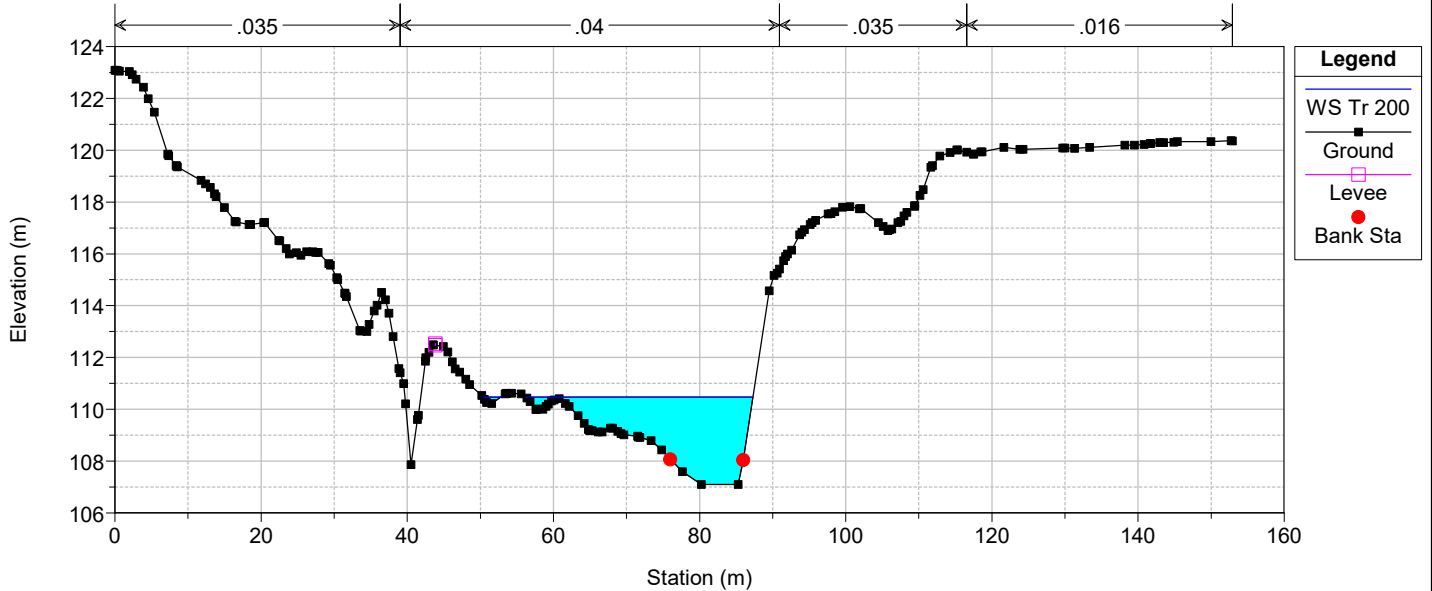
River = Riu_F_Regina Reach = TR0429 RS = 3095.866 Culv FS COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

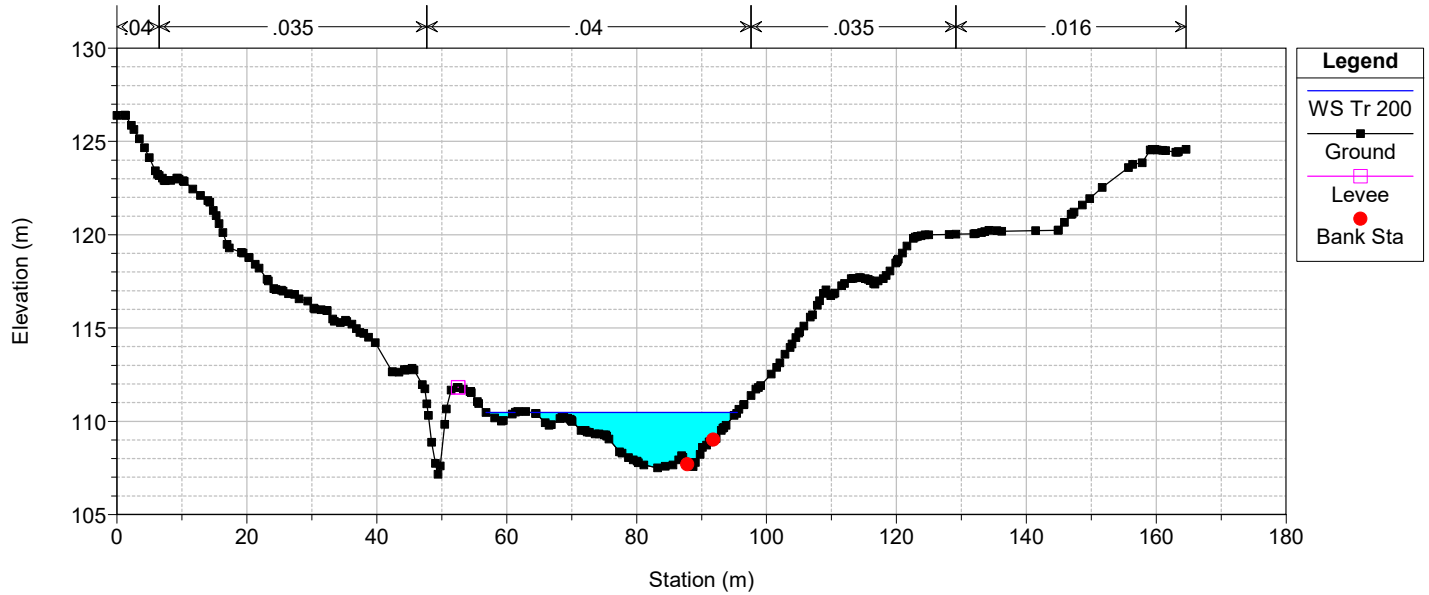
River = Riu_F_Regina Reach = TR0429 RS = 3085.776 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

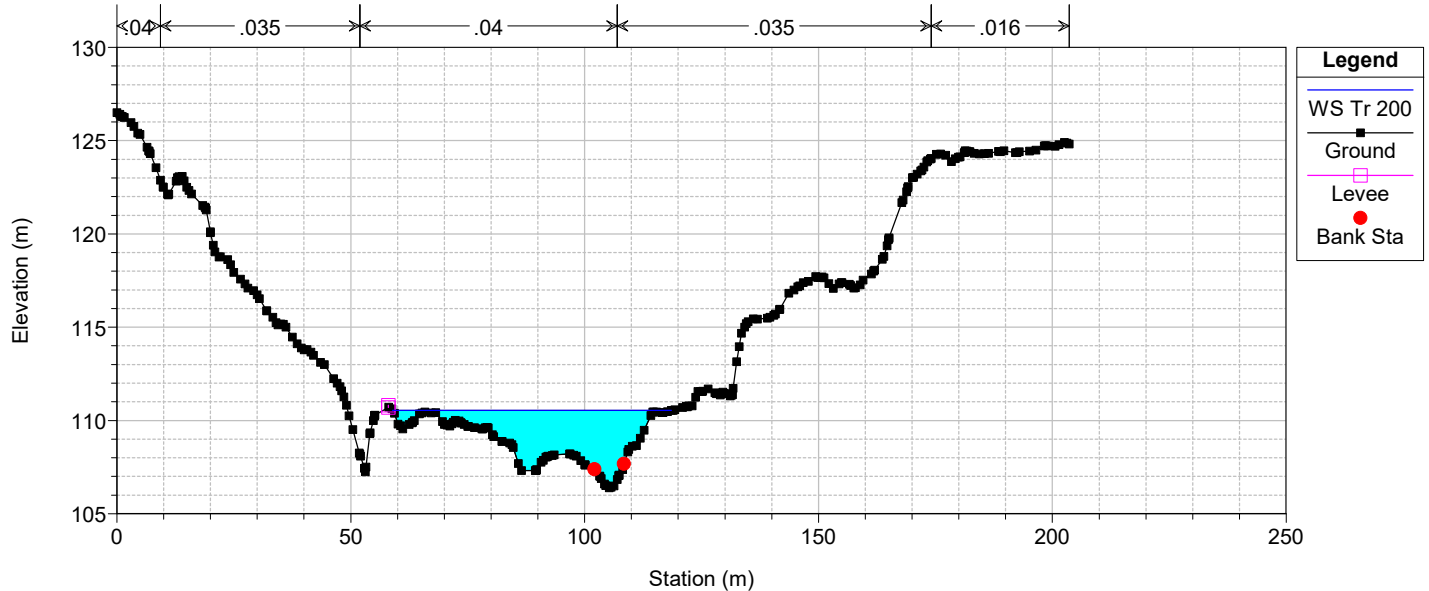
River = Riu_F_Regina Reach = TR0429 RS = 3080.698 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

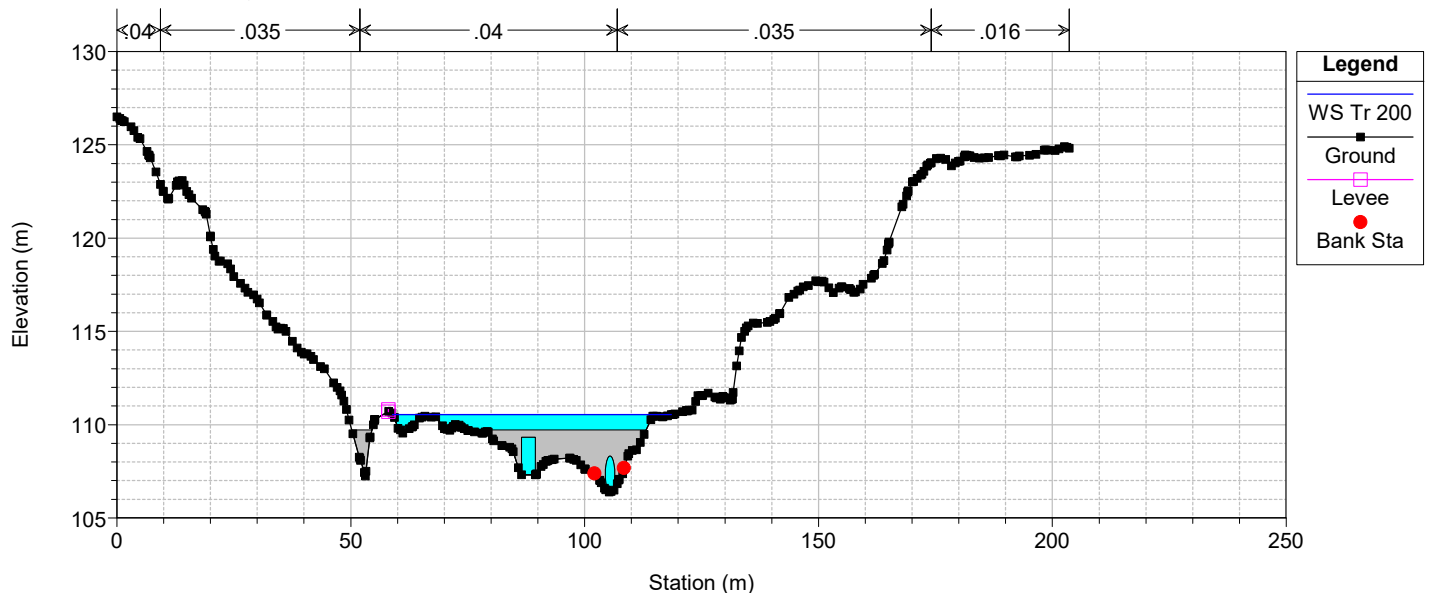
River = Riu_F_Regina Reach = TR0429 RS = 3059.812 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

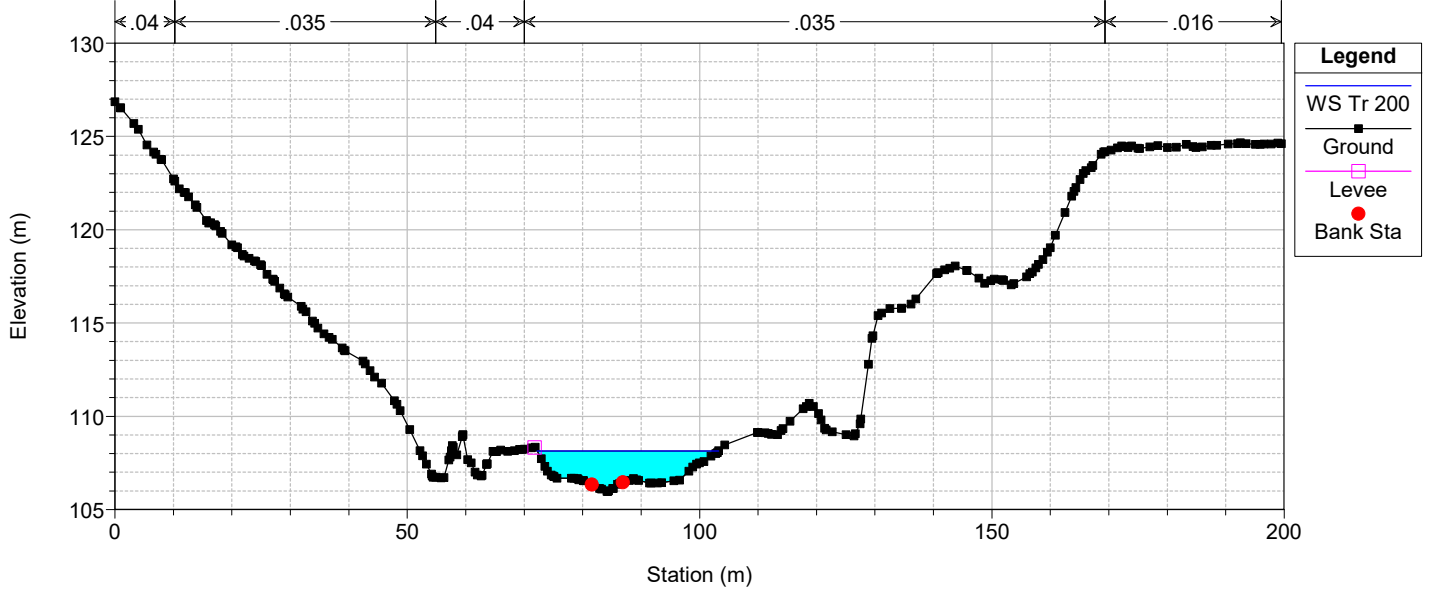
River = Riu_F_Regina Reach = TR0429 RS = 3052.582 Culv TR0429_A08_A11 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

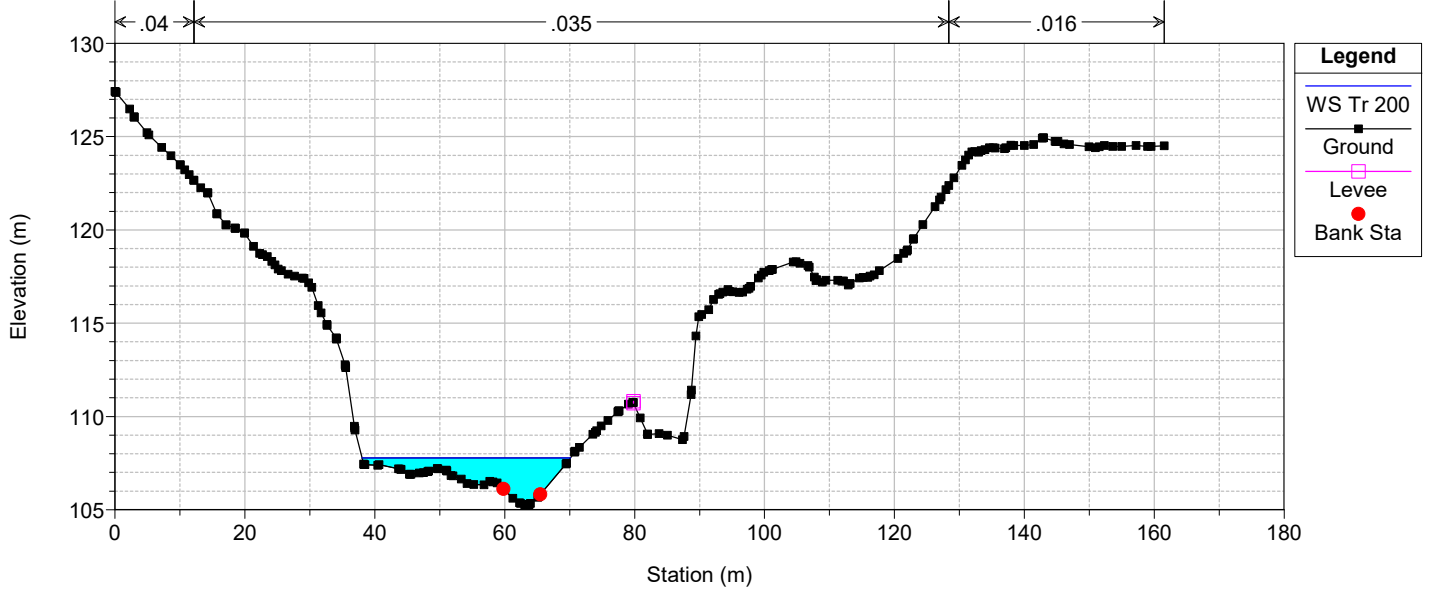
River = Riu_F_Regina Reach = TR0429 RS = 3041.313 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

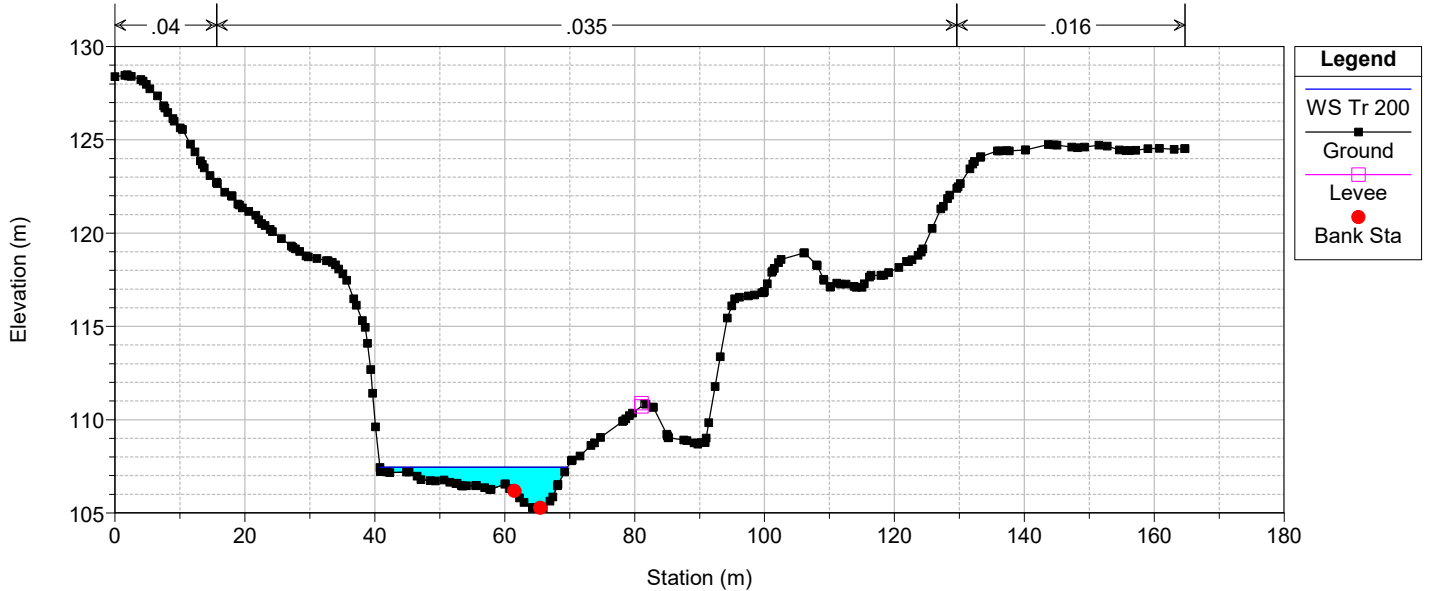
River = Riu_F_Regina Reach = TR0429 RS = 3014.388 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

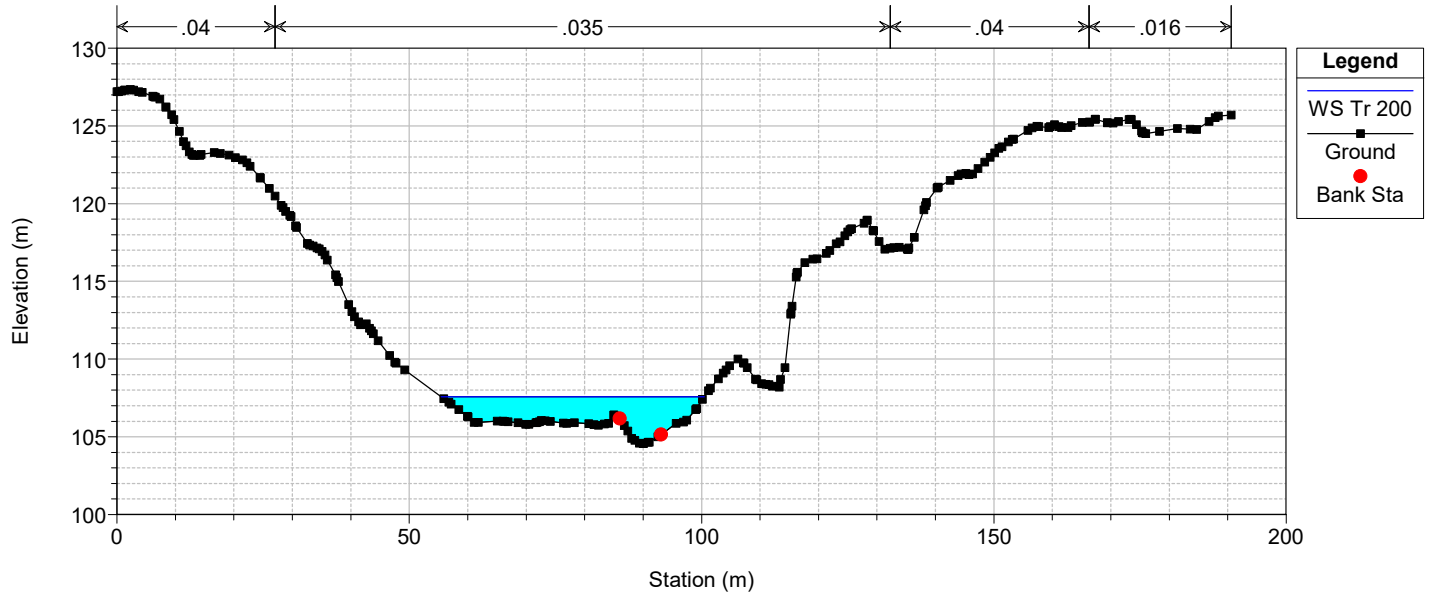
River = Riu_F_Regina Reach = TR0429 RS = 3008.535 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

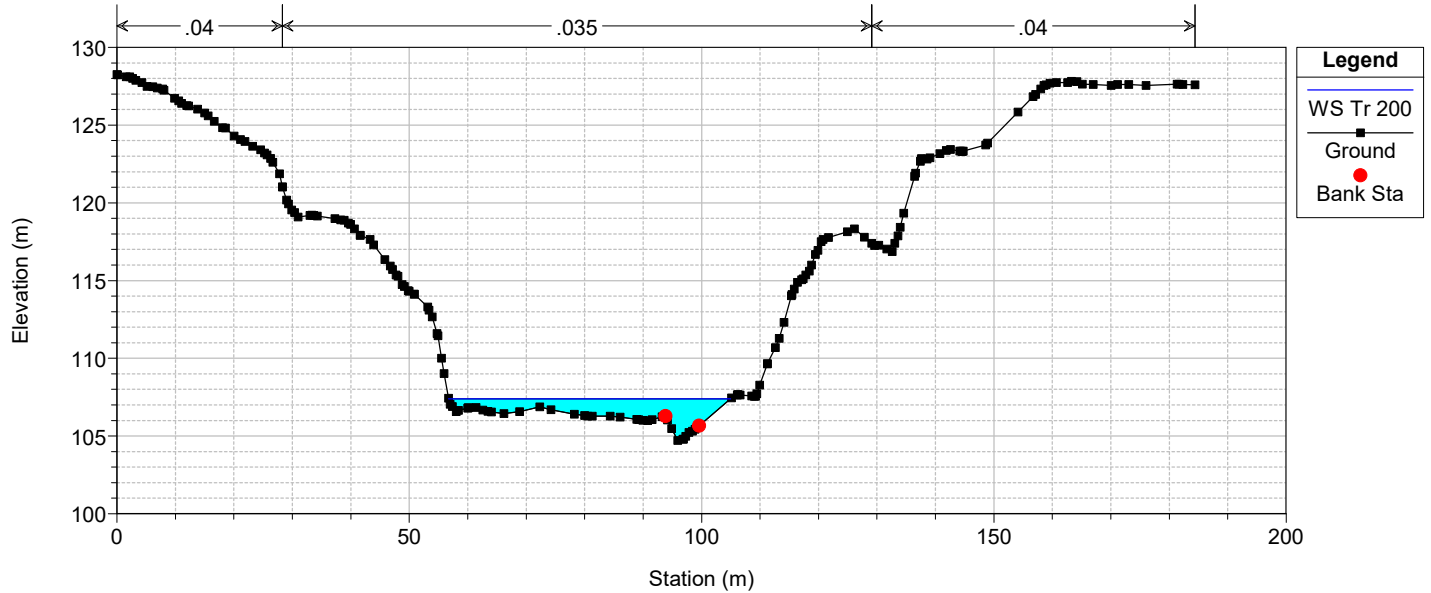
River = Riu_F_Regina Reach = TR0429 RS = 2973.401 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

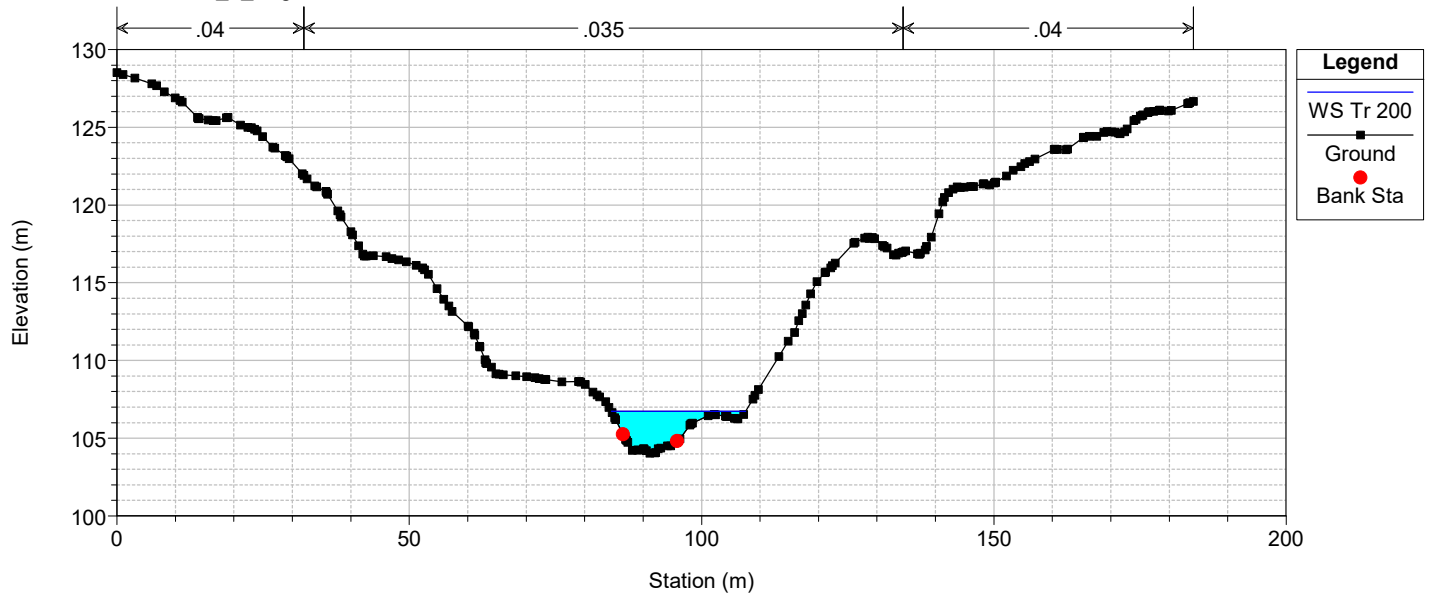
River = Riu_F_Regina Reach = TR0429 RS = 2938.293 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

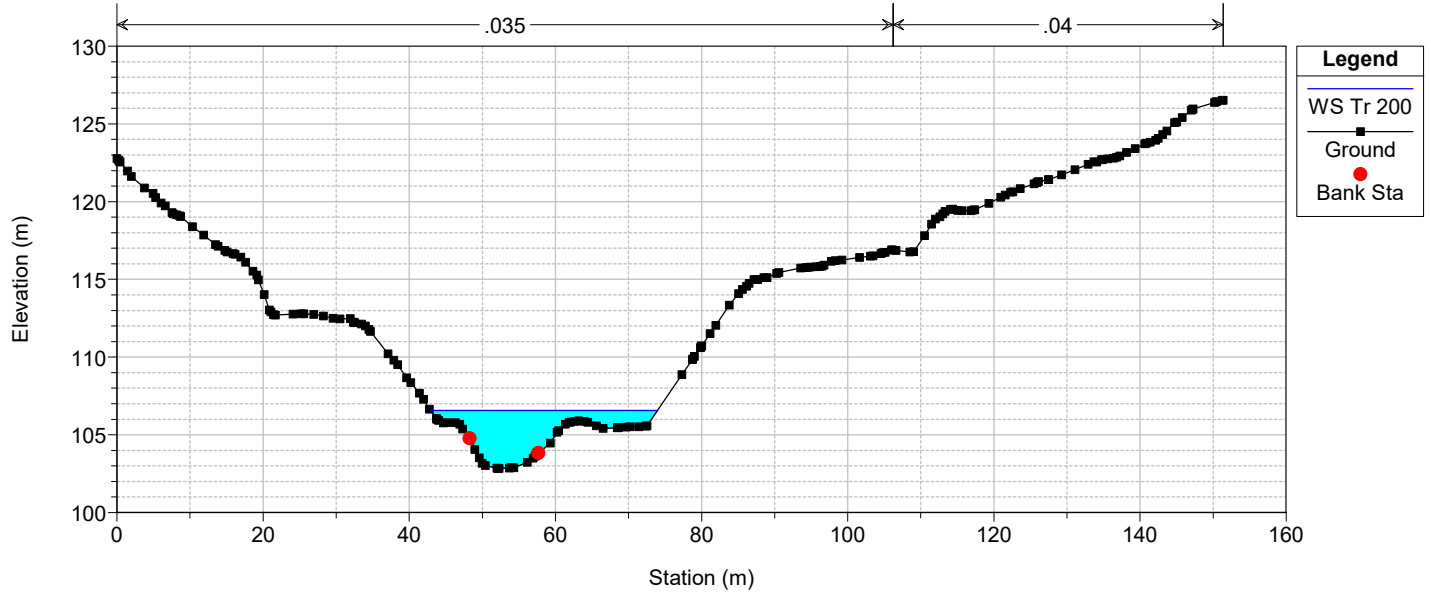
River = Riu_F_Regina Reach = TR0429 RS = 2903.278 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

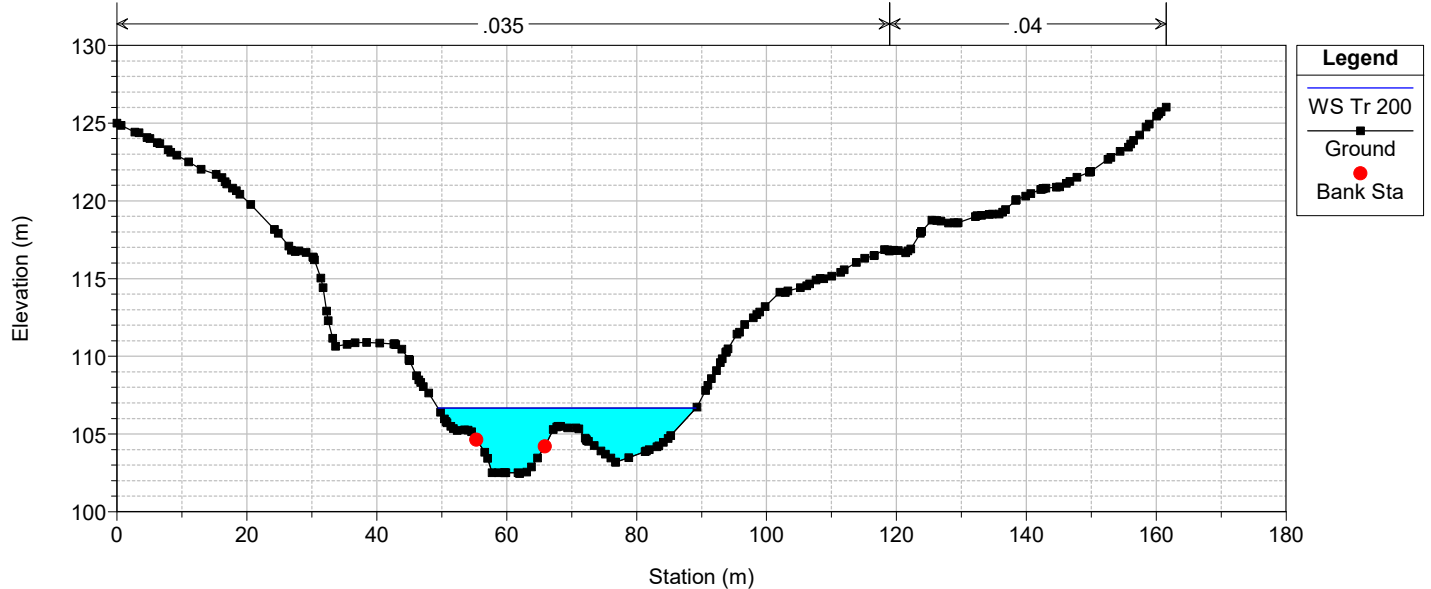
River = Riu_F_Regina Reach = TR0429 RS = 2875.722 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

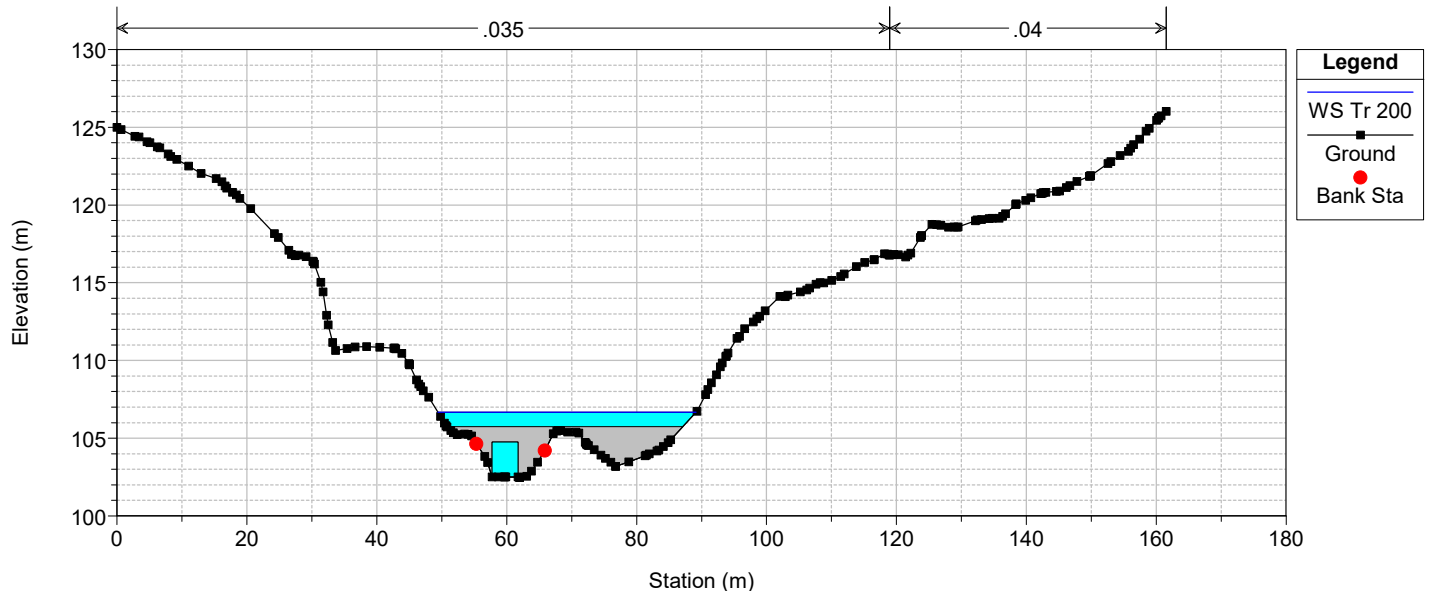
River = Riu_F_Regina Reach = TR0429 RS = 2858.212 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

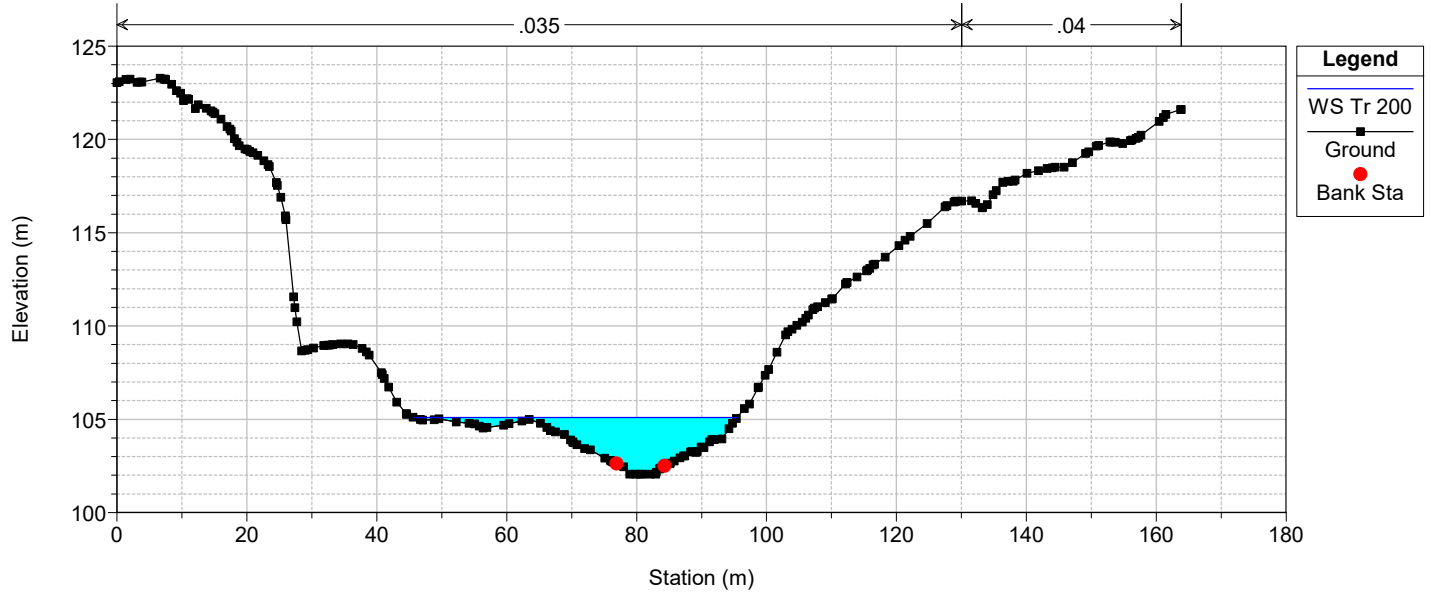
River = Riu_F_Regina Reach = TR0429 RS = 2847.292 Culv TR0429_A10 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

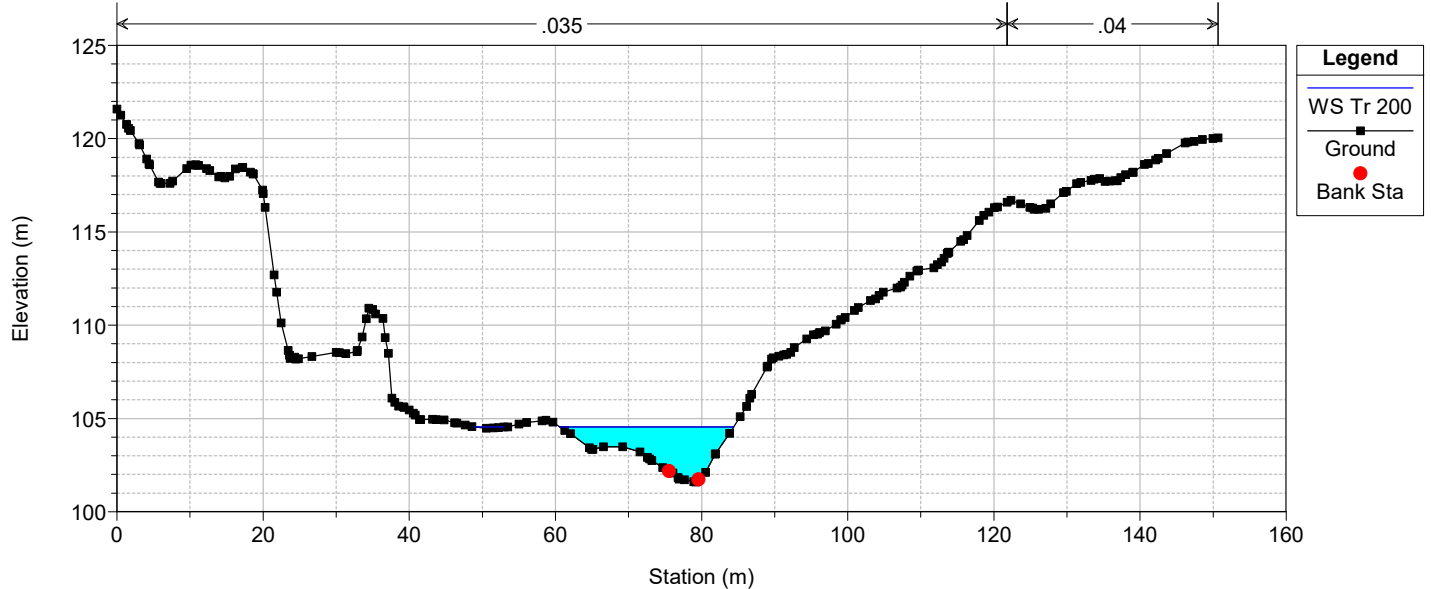
River = Riu_F_Regina Reach = TR0429 RS = 2838.605 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

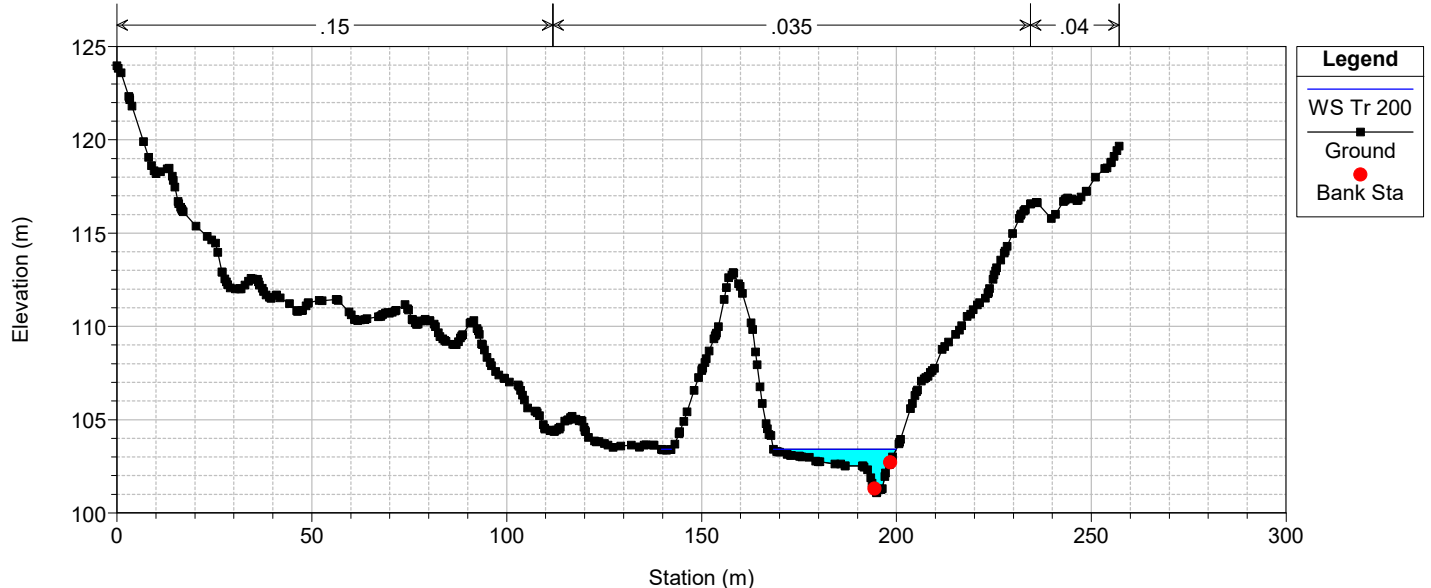
River = Riu_F_Regina Reach = TR0429 RS = 2824.898 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

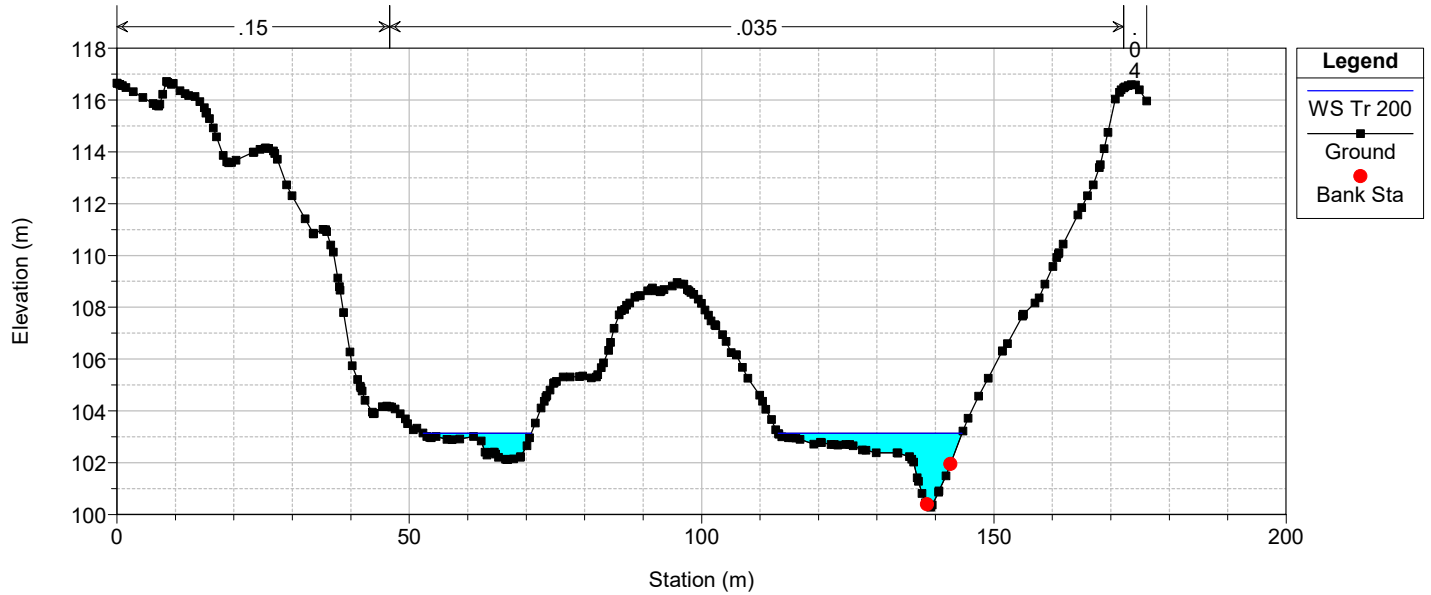
River = Riu_F_Regina Reach = TR0429 RS = 2793.809 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

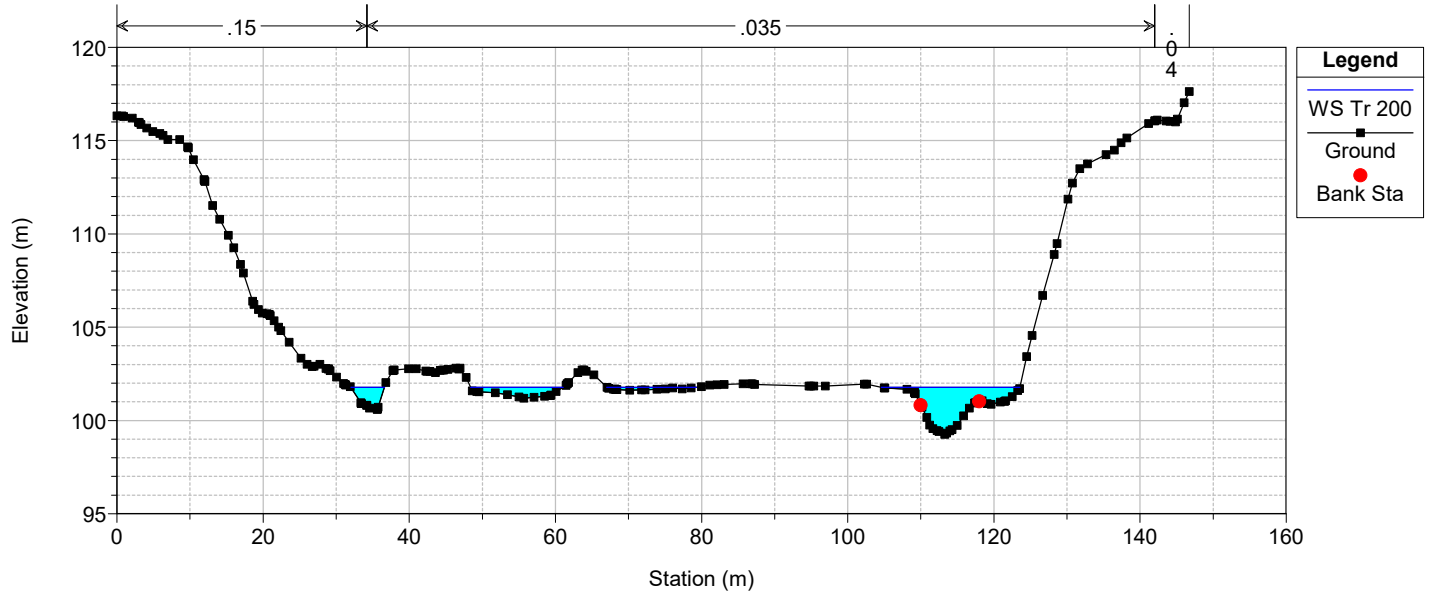
River = Riu_F_Regina Reach = TR0429 RS = 2765.183 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

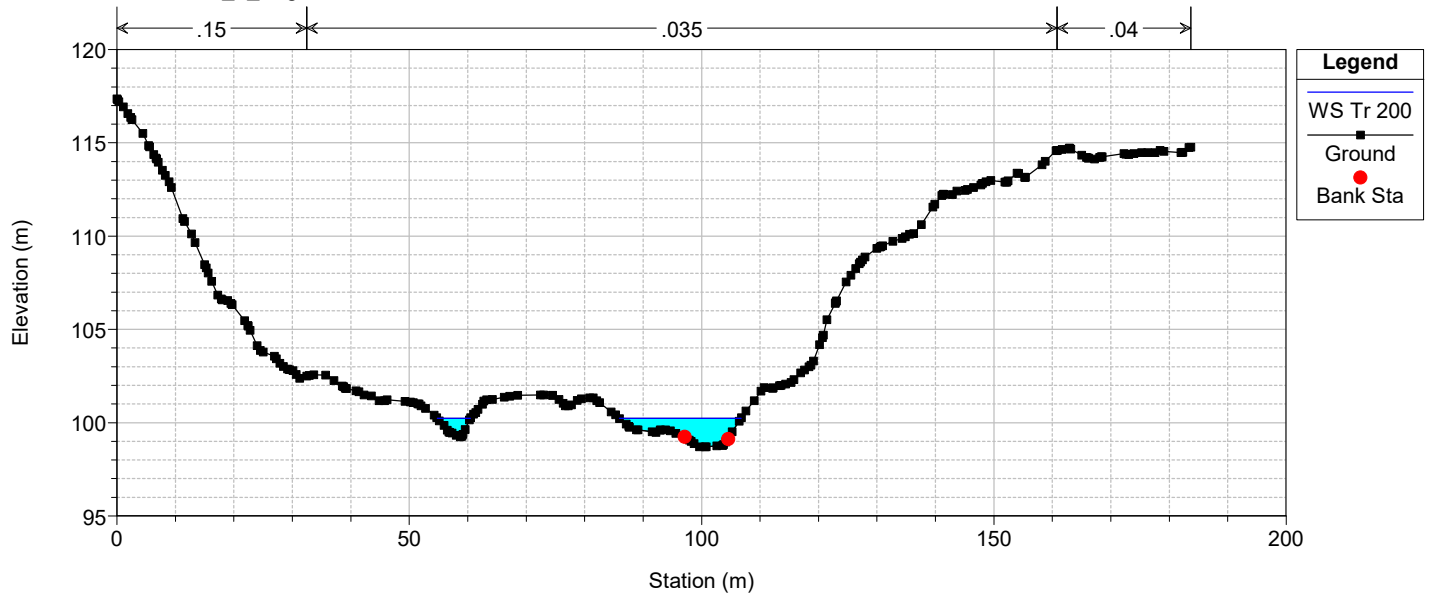
River = Riu_F_Regina Reach = TR0429 RS = 2711.341 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

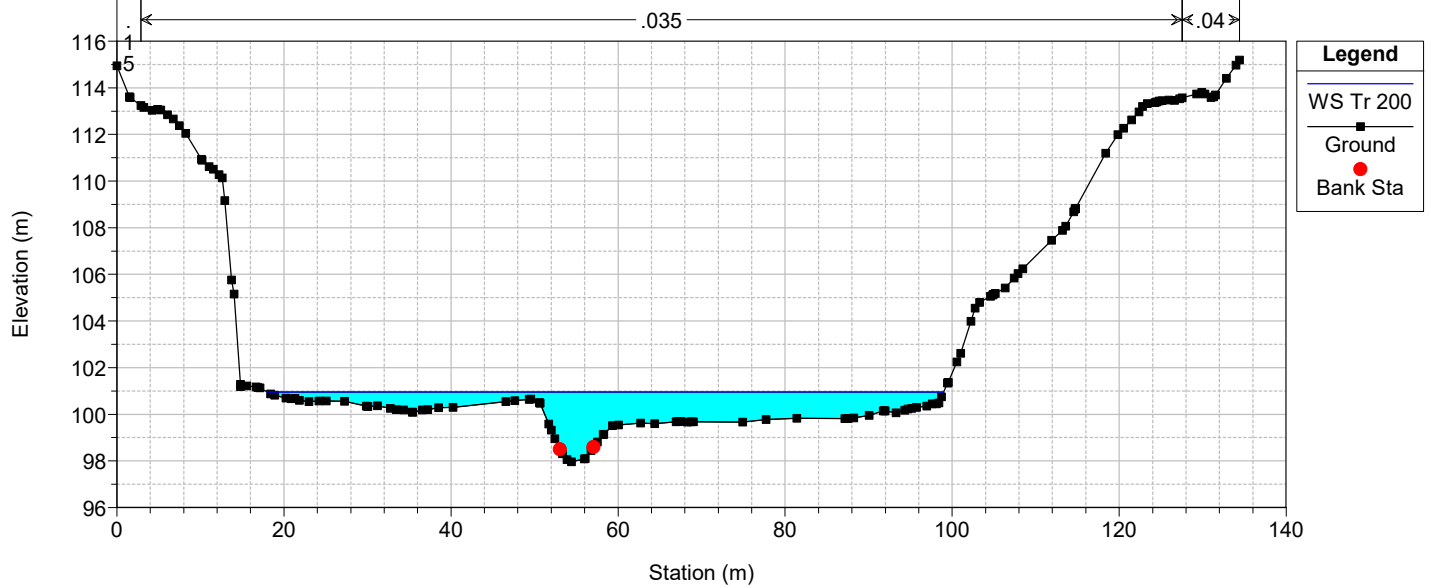
River = Riu_F_Regina Reach = TR0429 RS = 2672.75 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

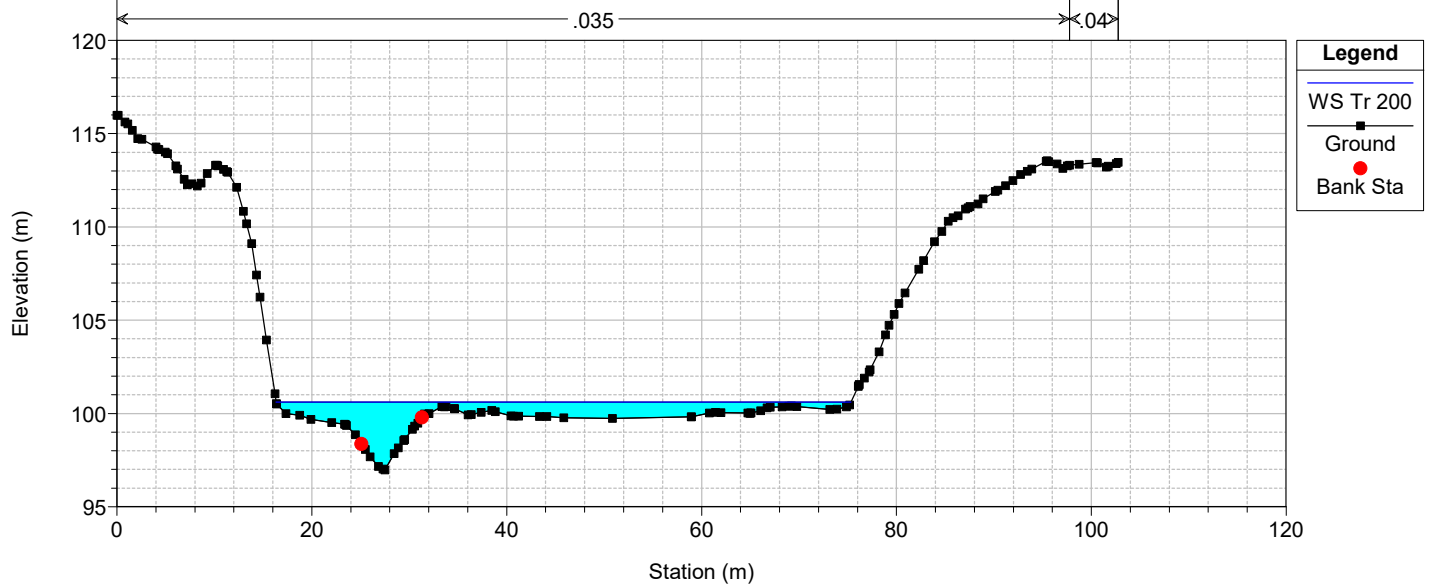
River = Riu_F_Regina Reach = TR0429 RS = 2636.684 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

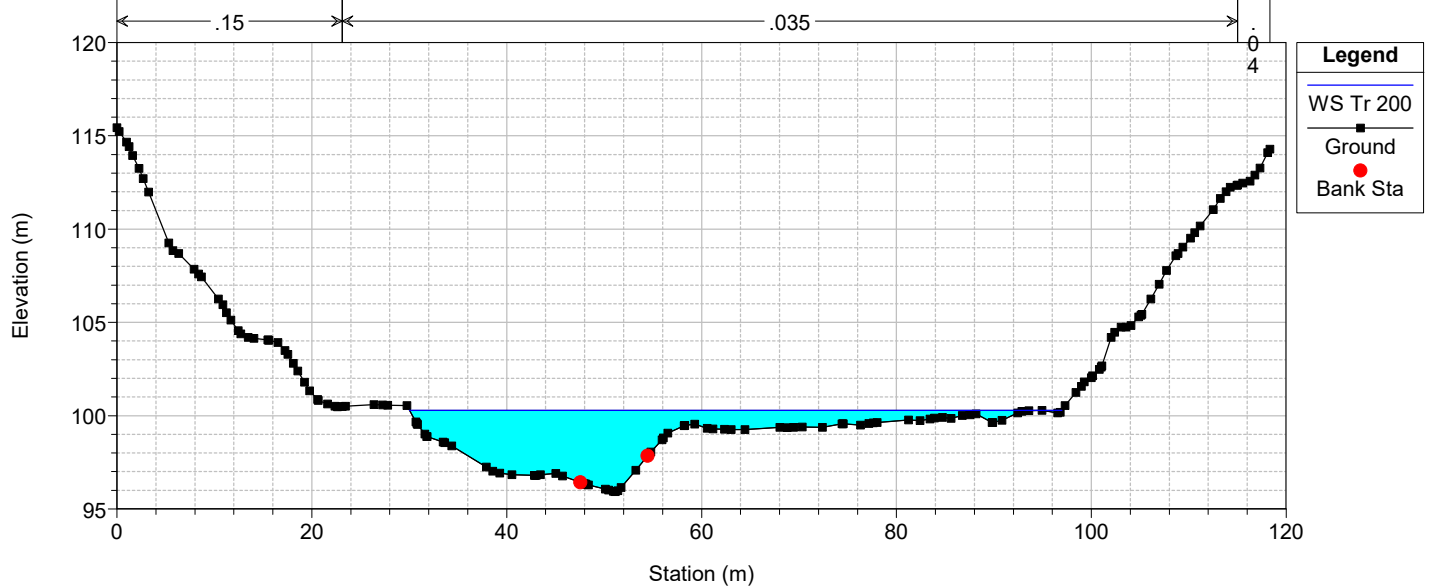
River = Riu_F_Regina Reach = TR0429 RS = 2607.956 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

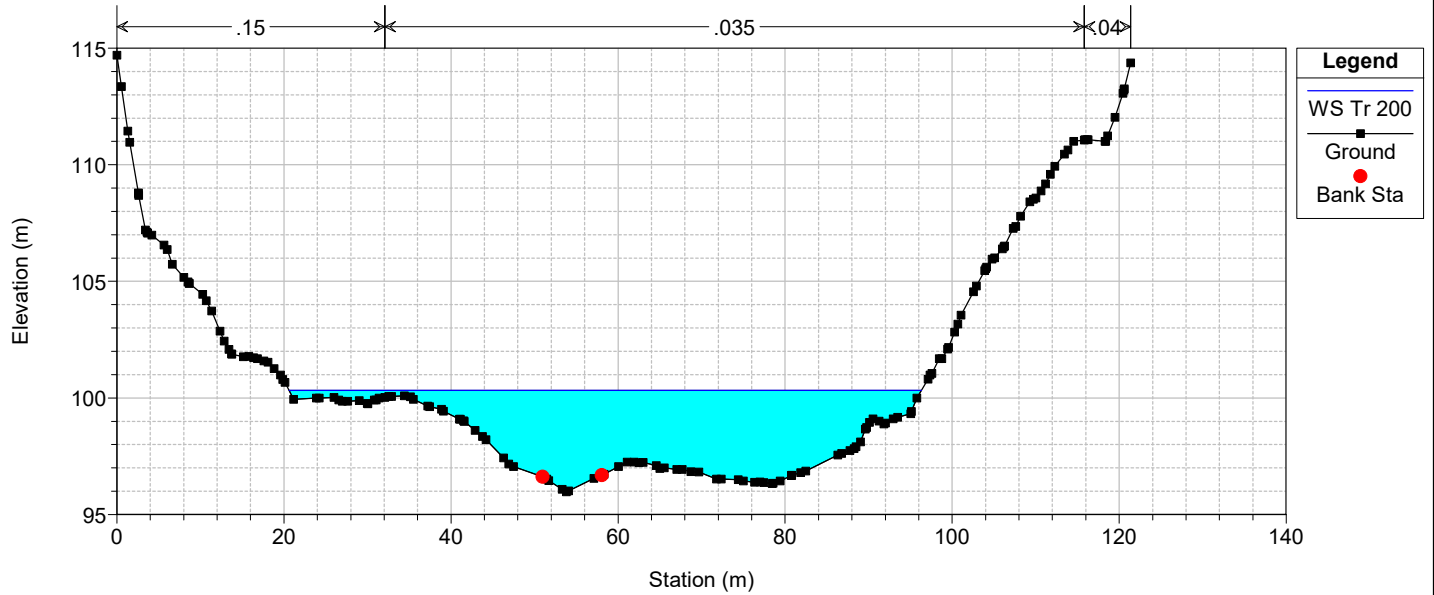
River = Riu_F_Regina Reach = TR0429 RS = 2572.985 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

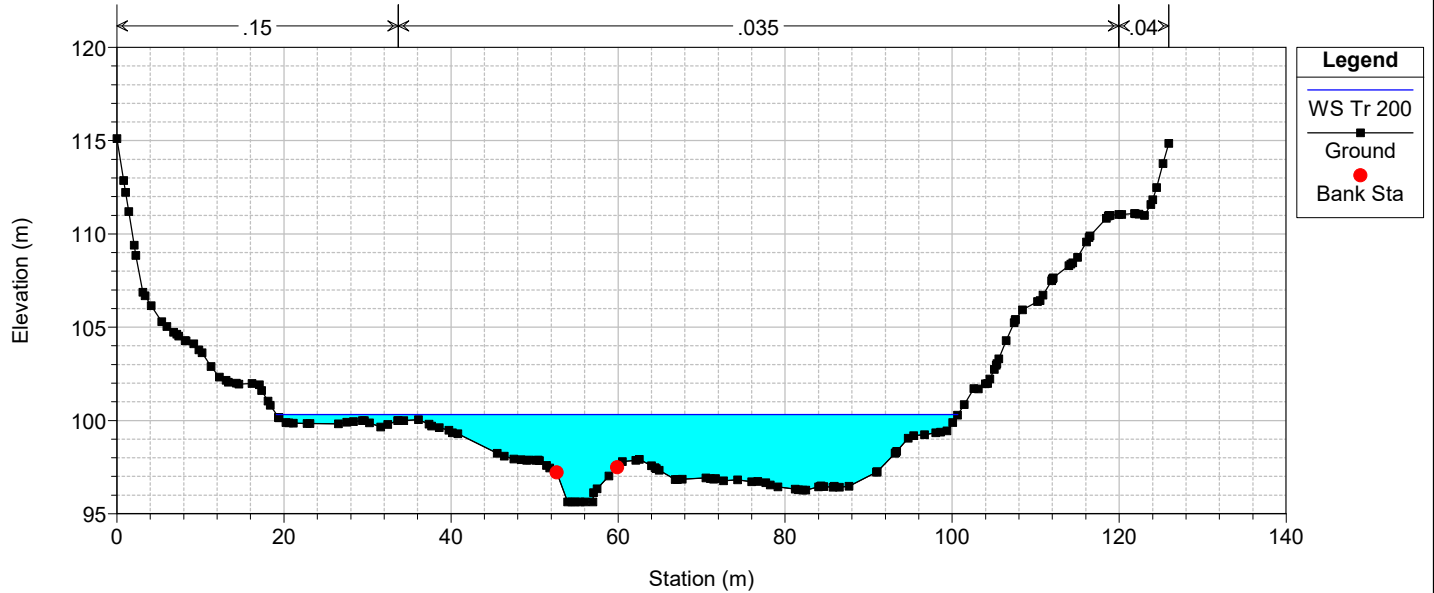
River = Riu_F_Regina Reach = TR0429 RS = 2543.273 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

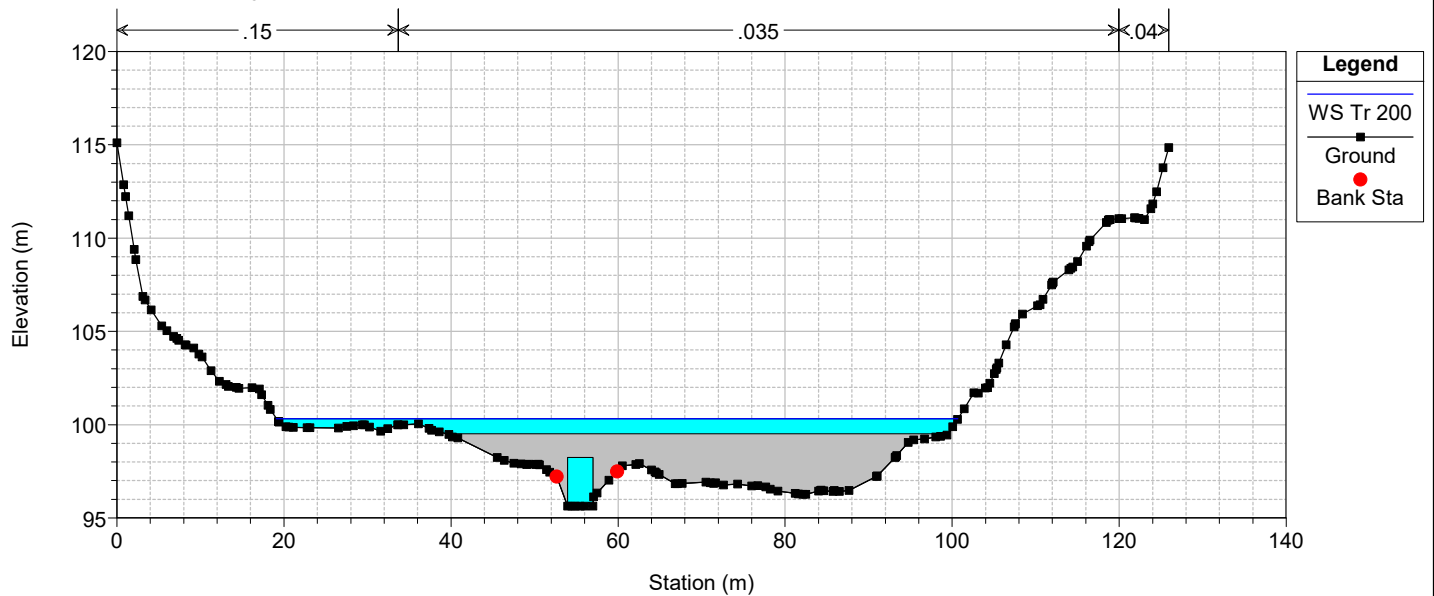
River = Riu_F_Regina Reach = TR0429 RS = 2536.233 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

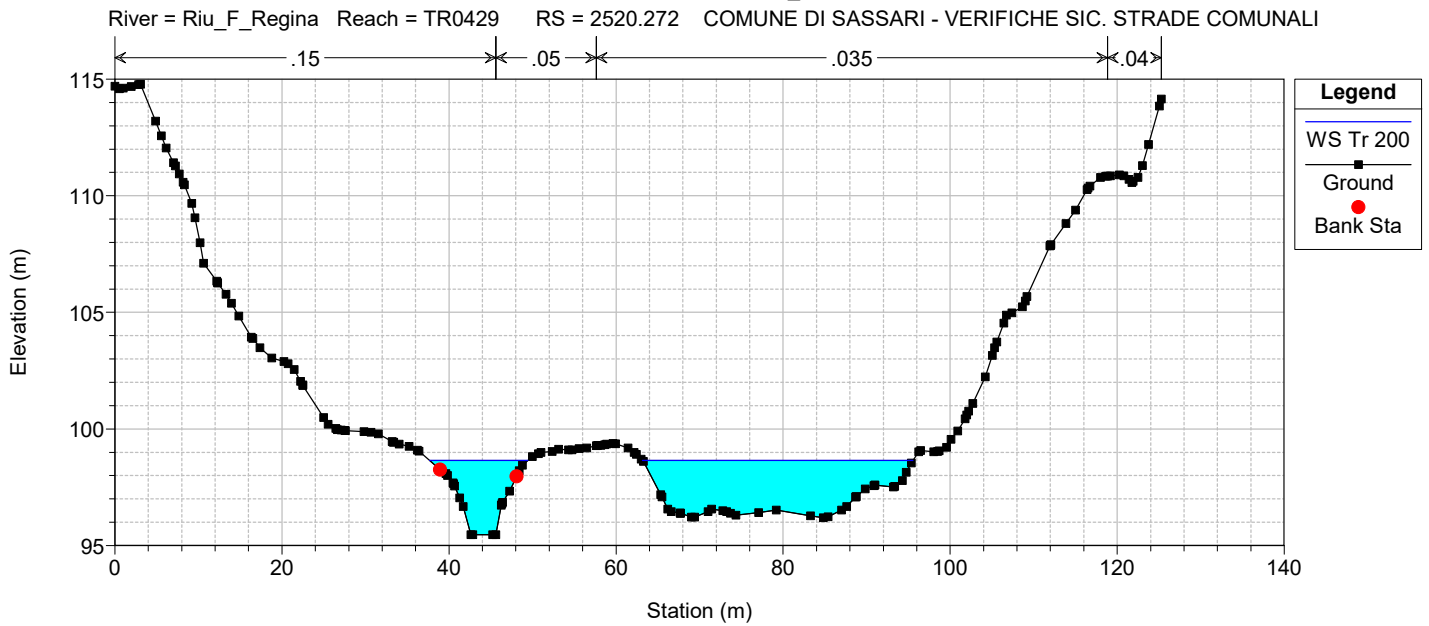
River = Riu_F_Regina Reach = TR0429 RS = 2527.762 Culv TR0429_A09 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

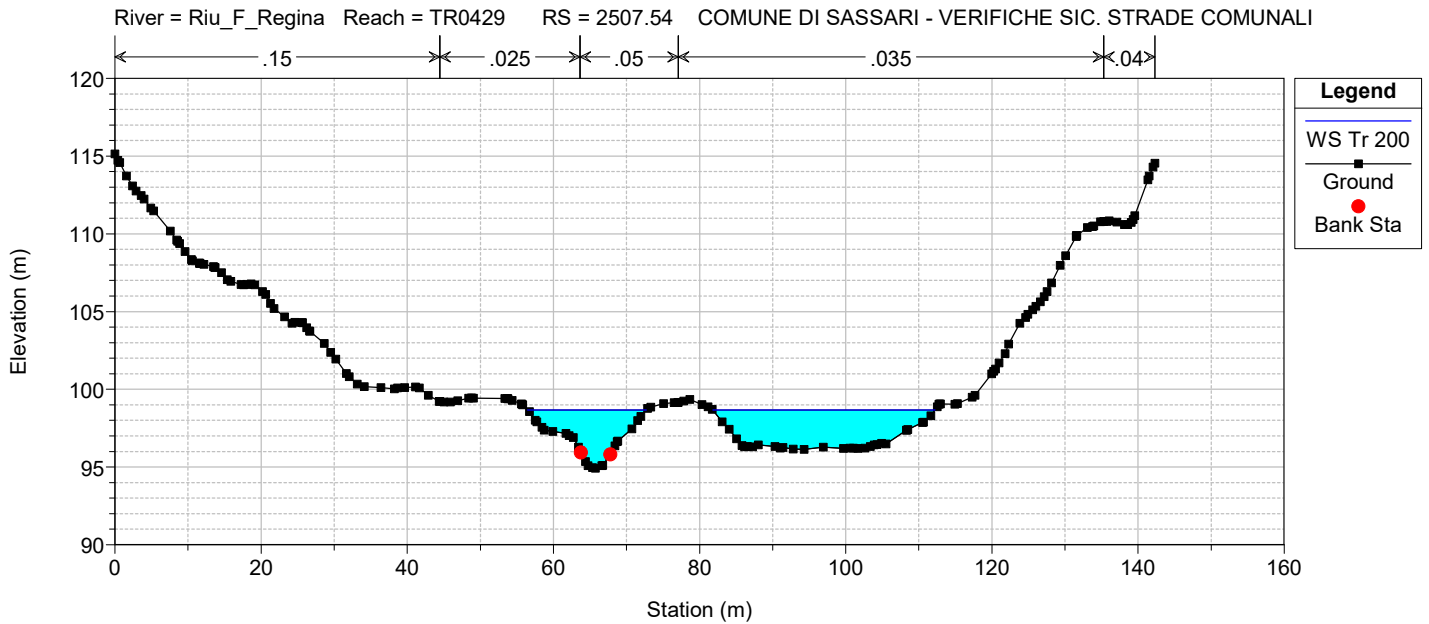
River = Riu_F_Regina Reach = TR0429 RS = 2520.272 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

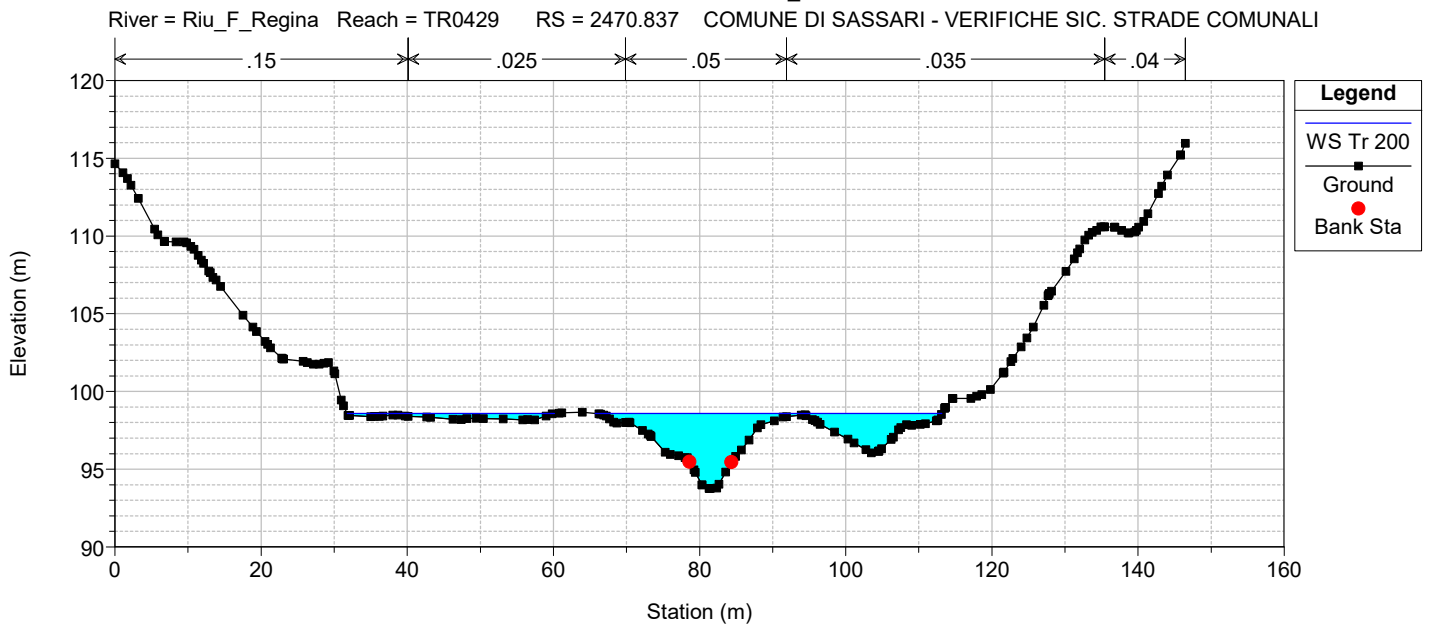
River = Riu_F_Regina Reach = TR0429 RS = 2507.54 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

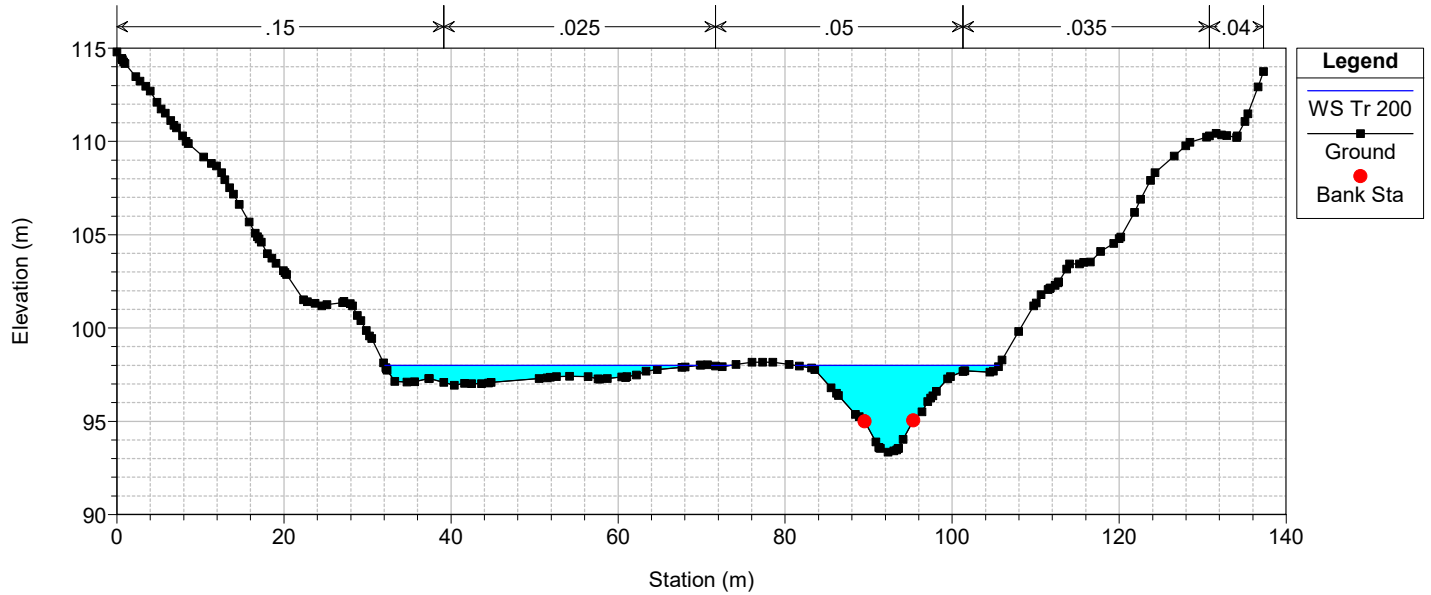
River = Riu_F_Regina Reach = TR0429 RS = 2470.837 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

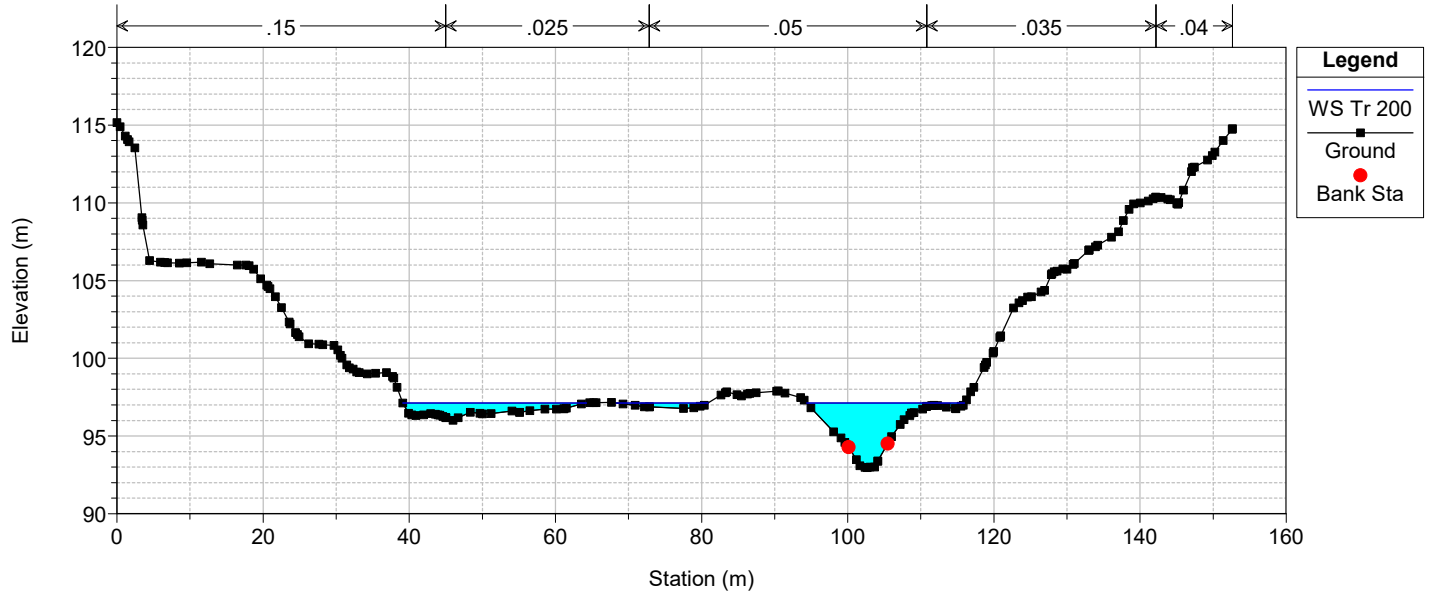
River = Riu_F_Regina Reach = TR0429 RS = 2436.356 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

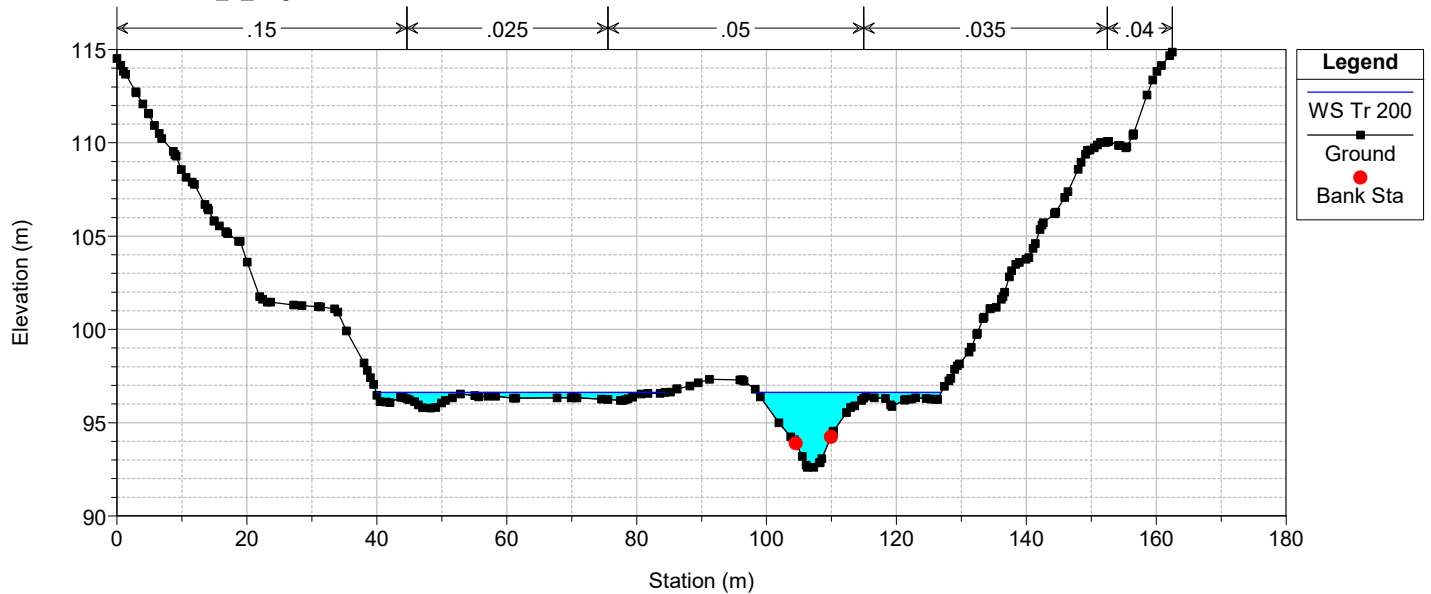
River = Riu_F_Regina Reach = TR0429 RS = 2401.738 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

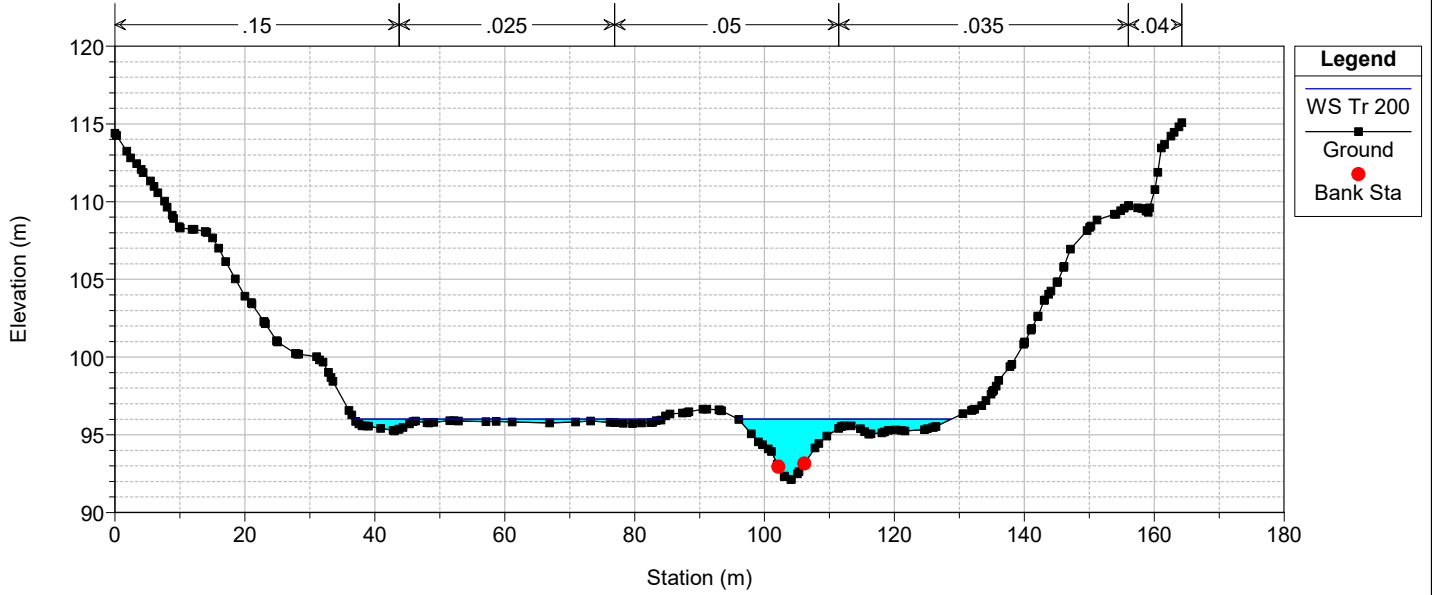
River = Riu_F_Regina Reach = TR0429 RS = 2376.064 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

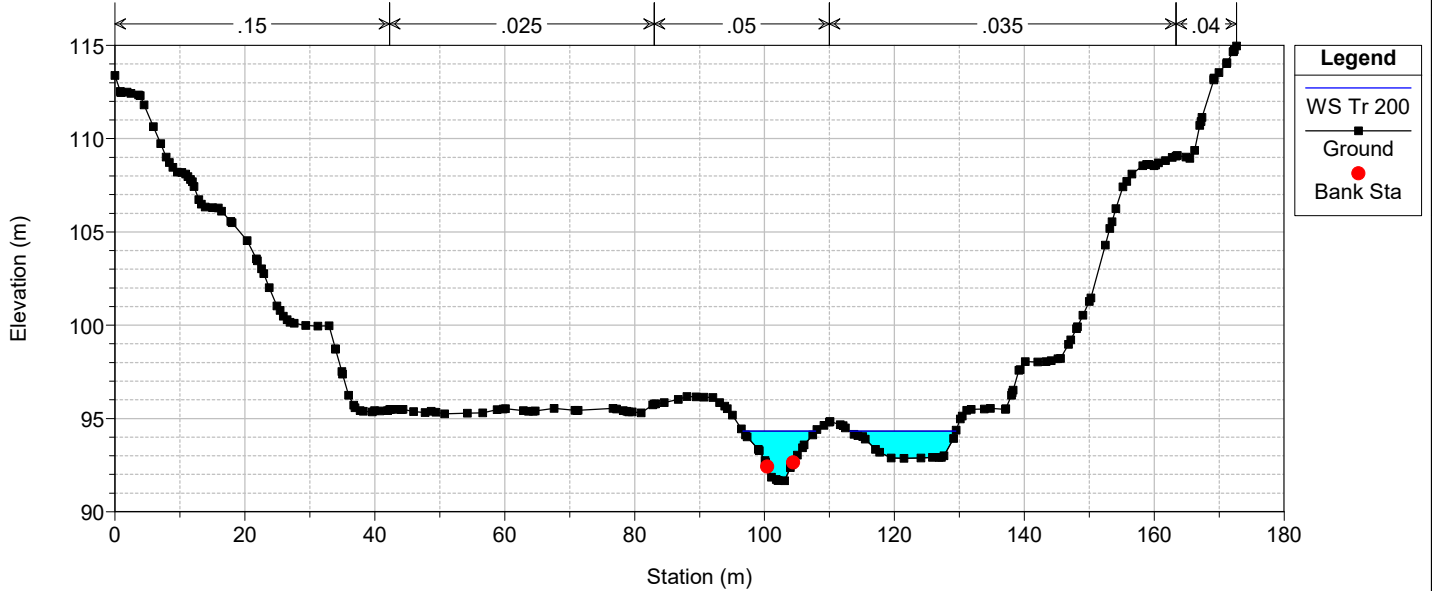
River = Riu_F_Regina Reach = TR0429 RS = 2344.69 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

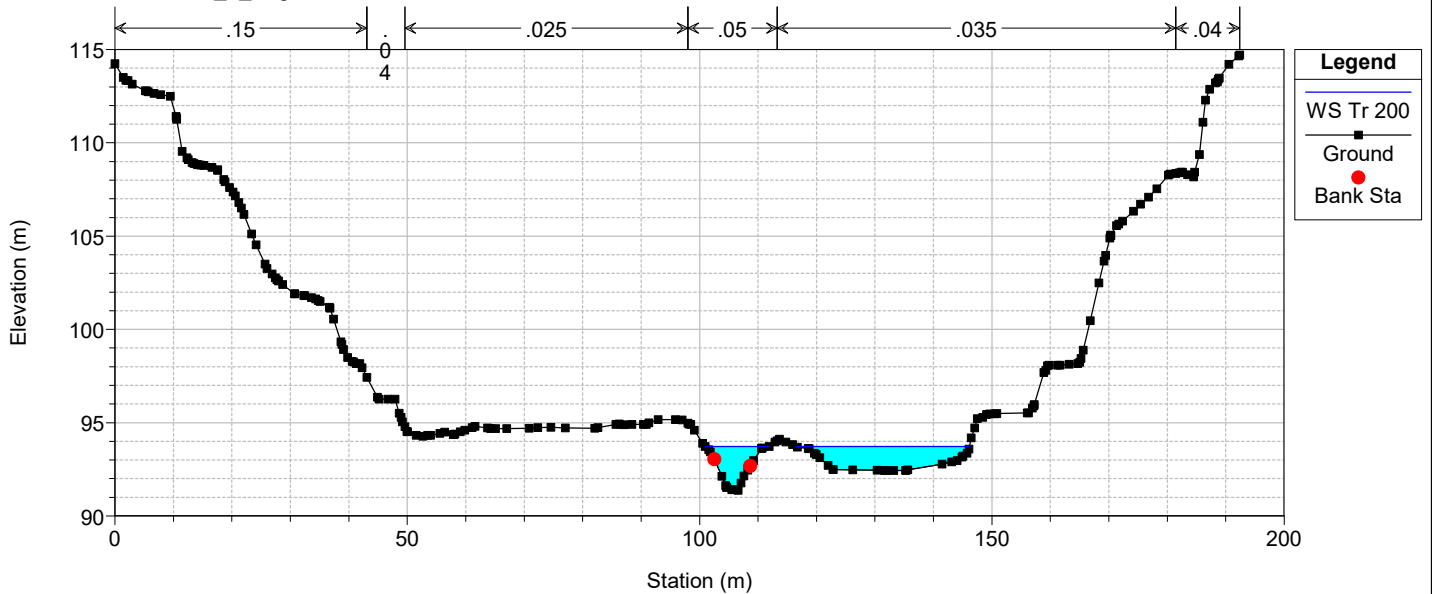
River = Riu_F_Regina Reach = TR0429 RS = 2312.751 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

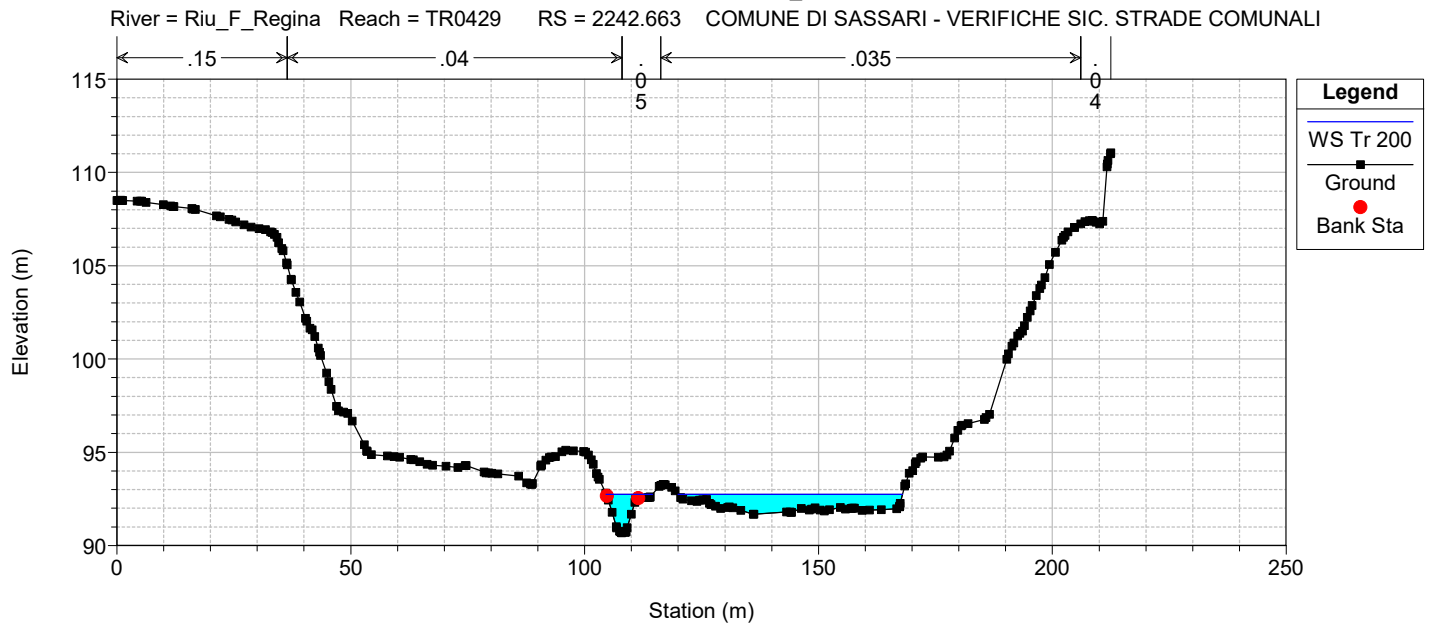
River = Riu_F_Regina Reach = TR0429 RS = 2280.032 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

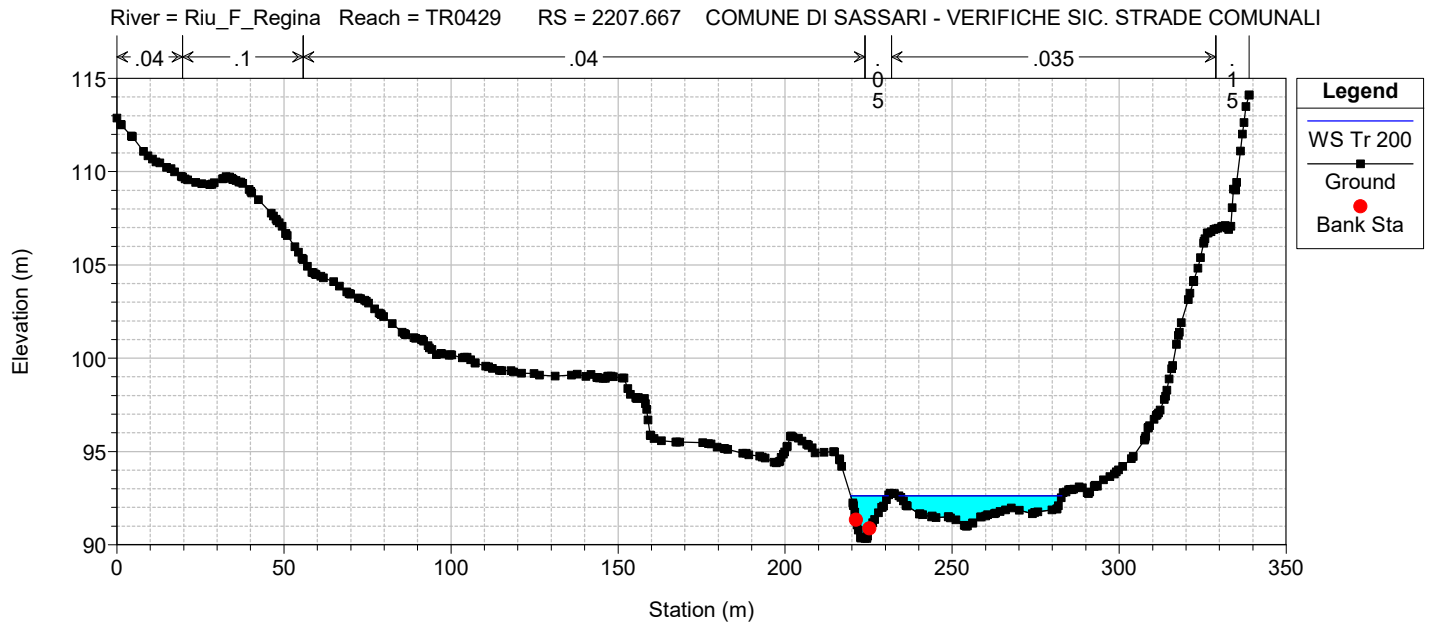
River = Riu_F_Regina Reach = TR0429 RS = 2242.663 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

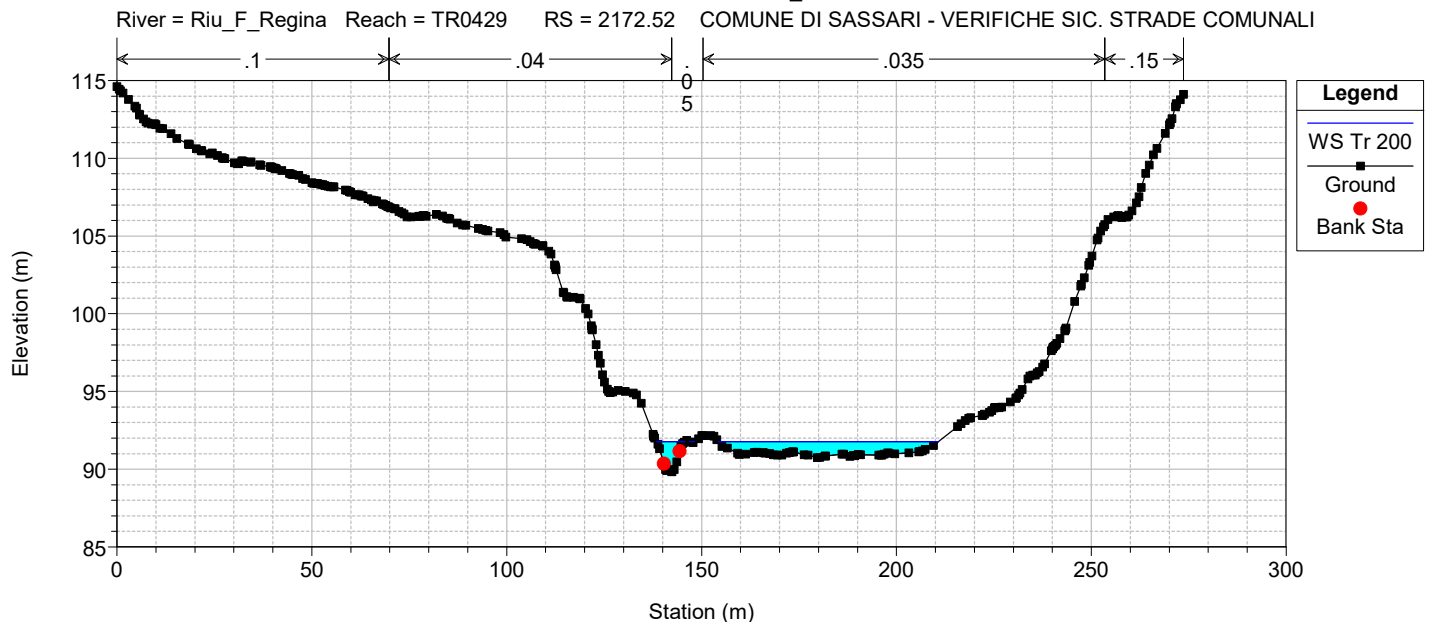
River = Riu_F_Regina Reach = TR0429 RS = 2207.667 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

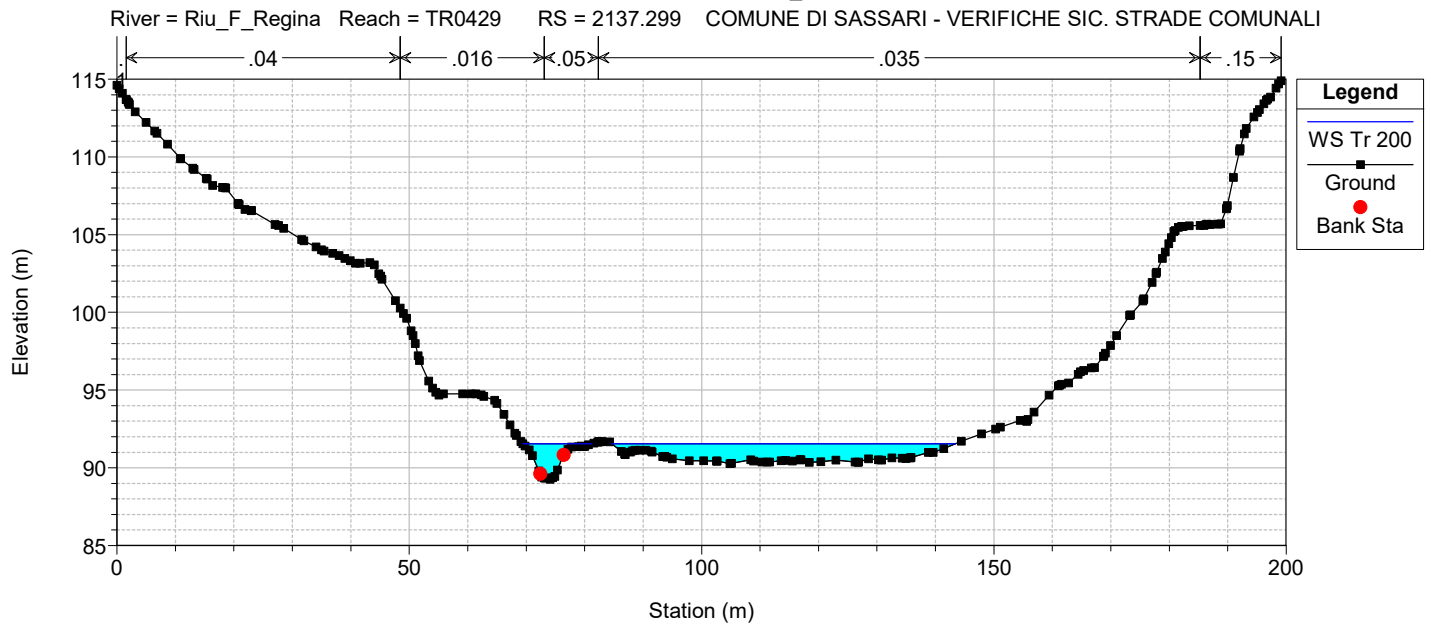
River = Riu_F_Regina Reach = TR0429 RS = 2172.52 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

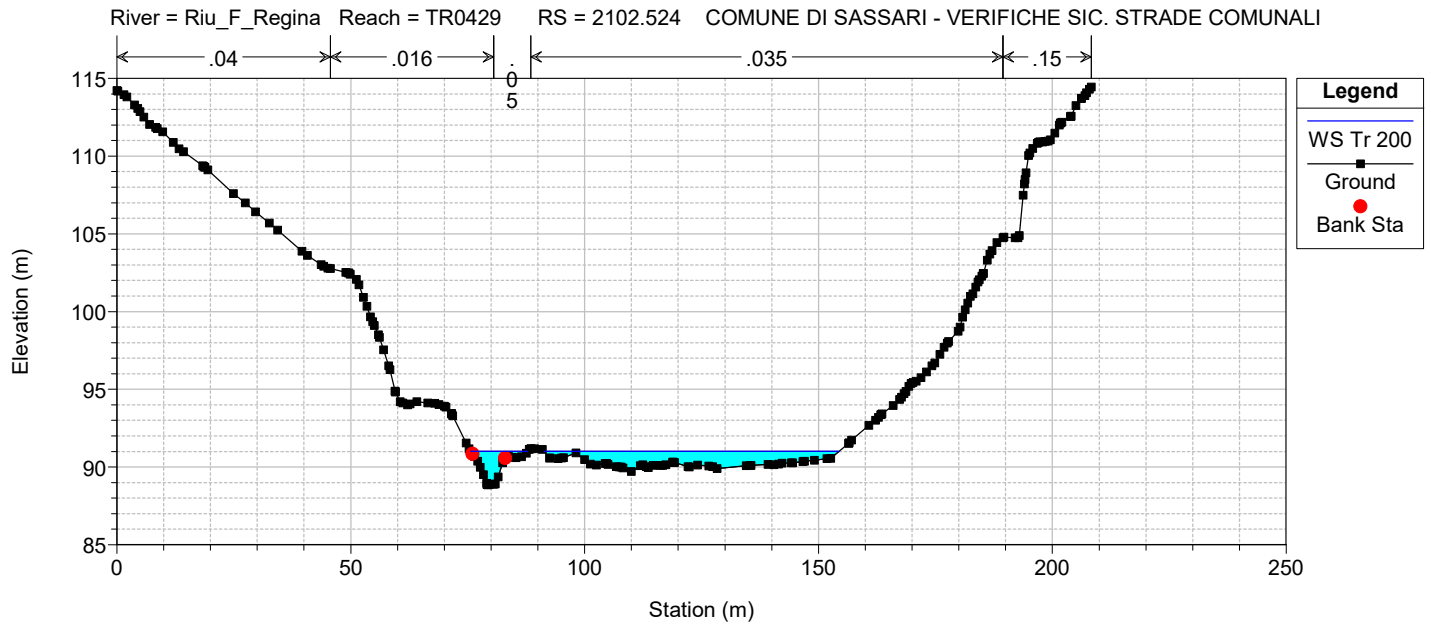
River = Riu_F_Regina Reach = TR0429 RS = 2137.299 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

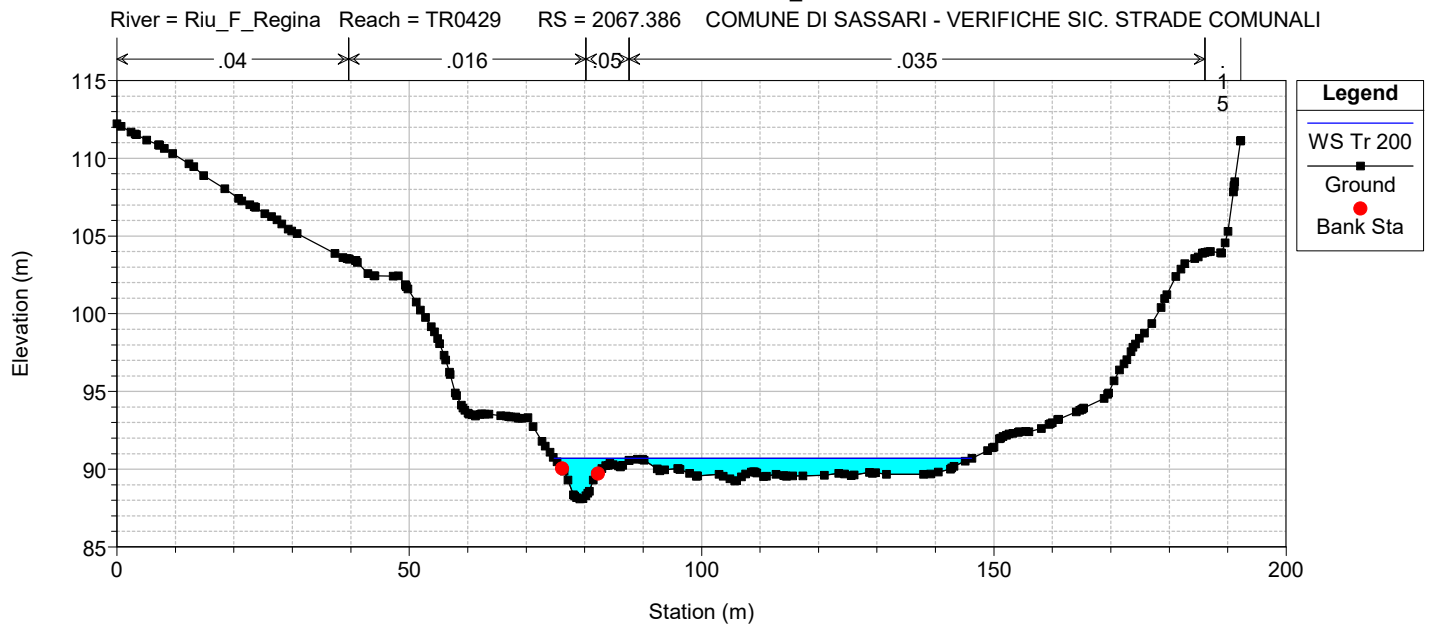
River = Riu_F_Regina Reach = TR0429 RS = 2102.524 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

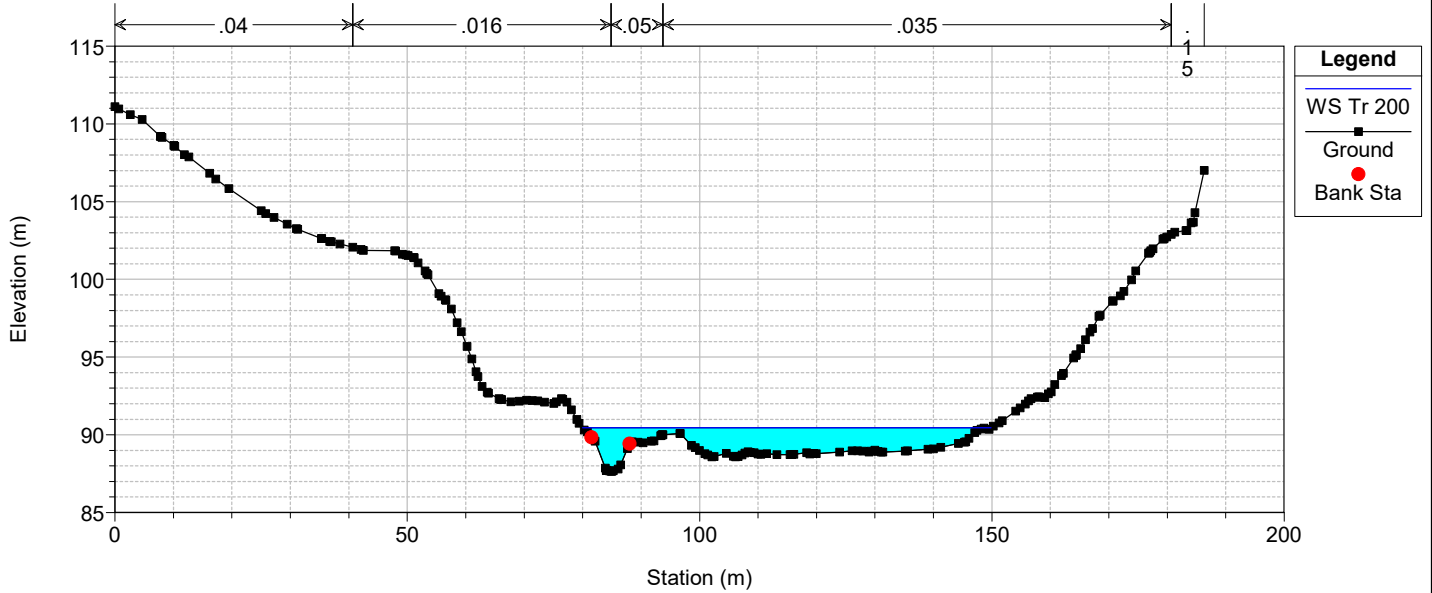
River = Riu_F_Regina Reach = TR0429 RS = 2067.386 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

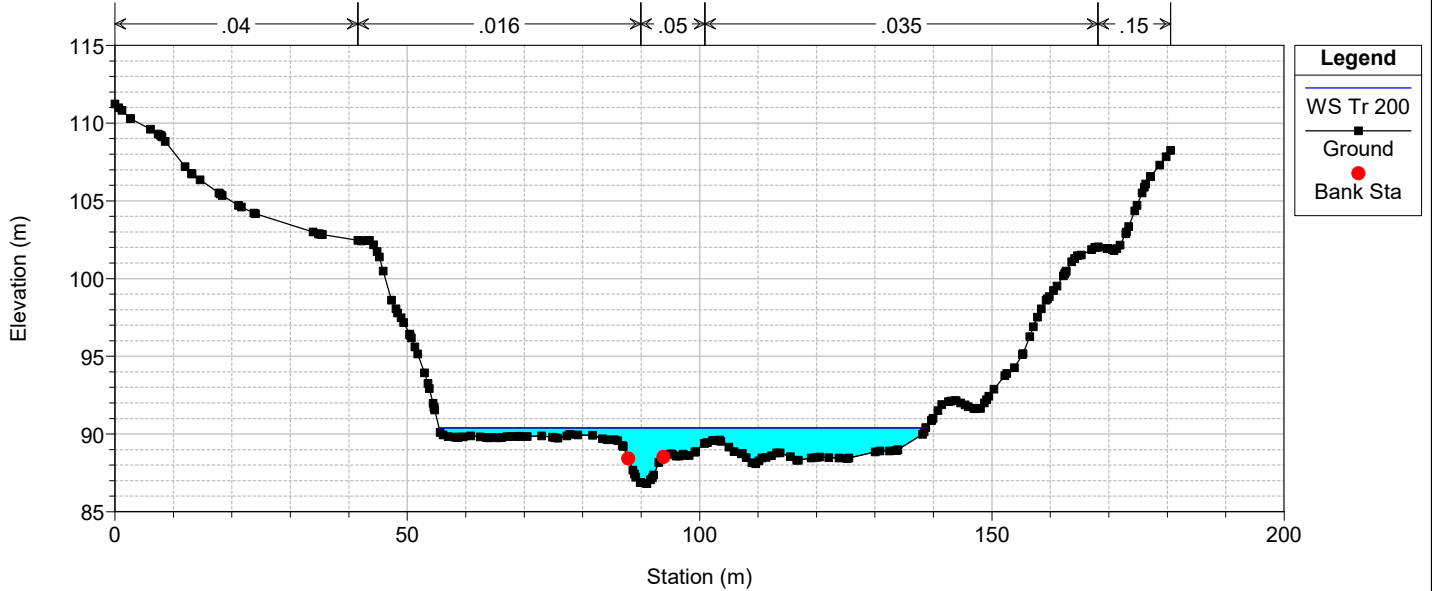
River = Riu_F_Regina Reach = TR0429 RS = 2032.28 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

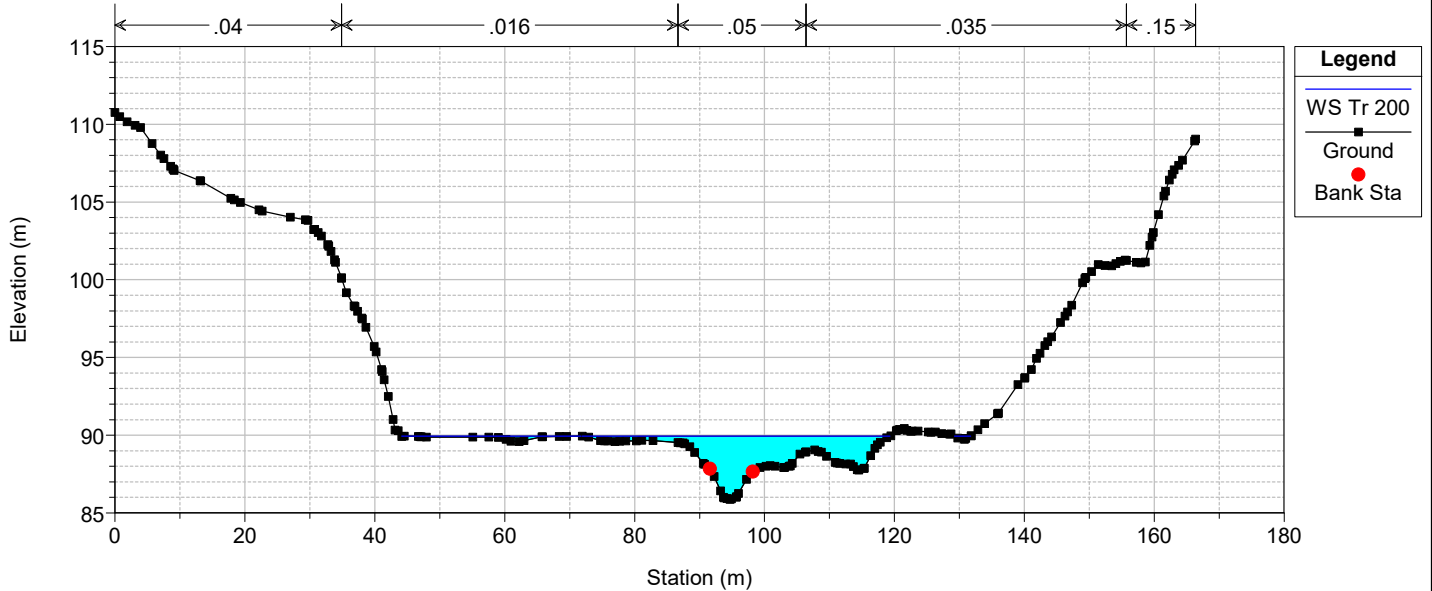
River = Riu_F_Regina Reach = TR0429 RS = 1998.382 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

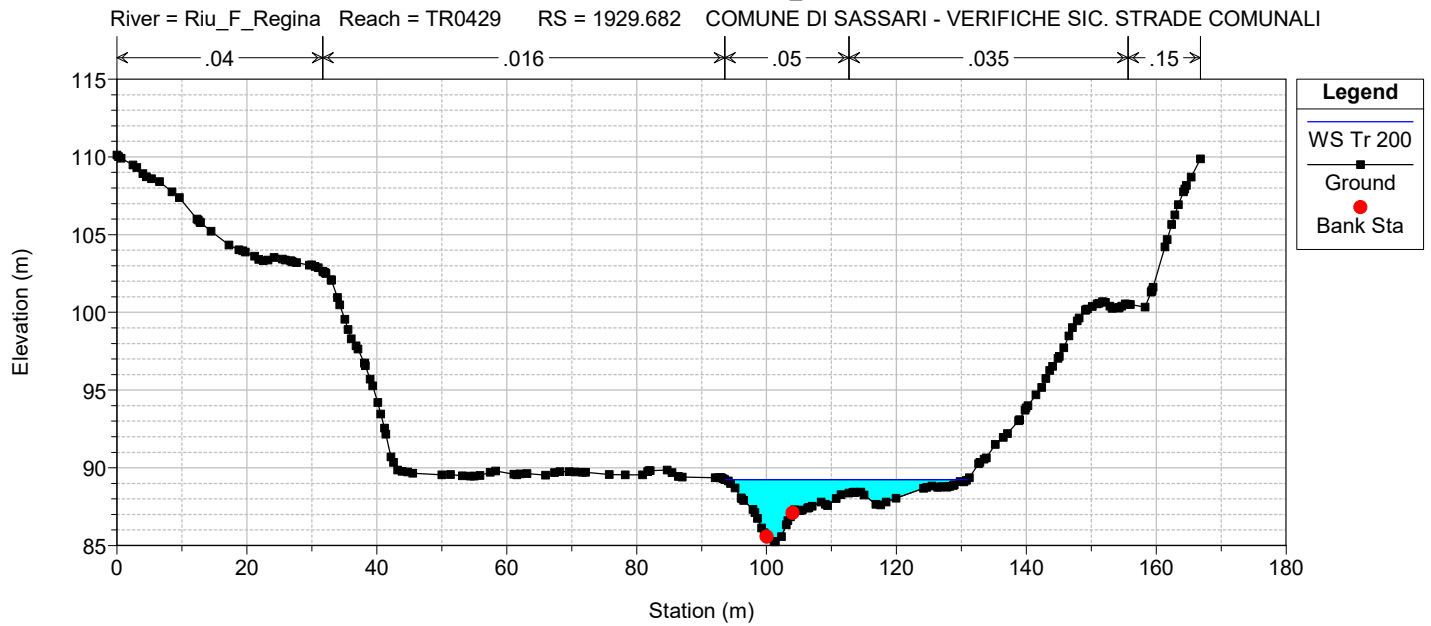
River = Riu_F_Regina Reach = TR0429 RS = 1962.579 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

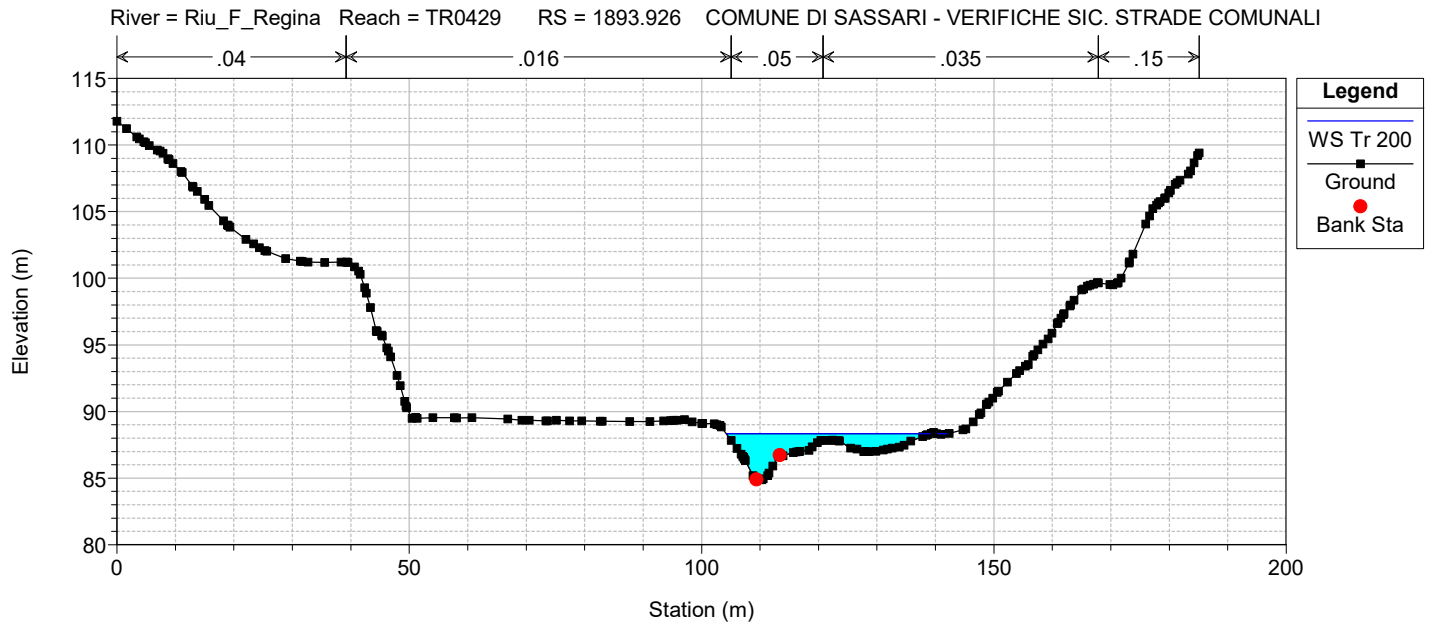
River = Riu_F_Regina Reach = TR0429 RS = 1929.682 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

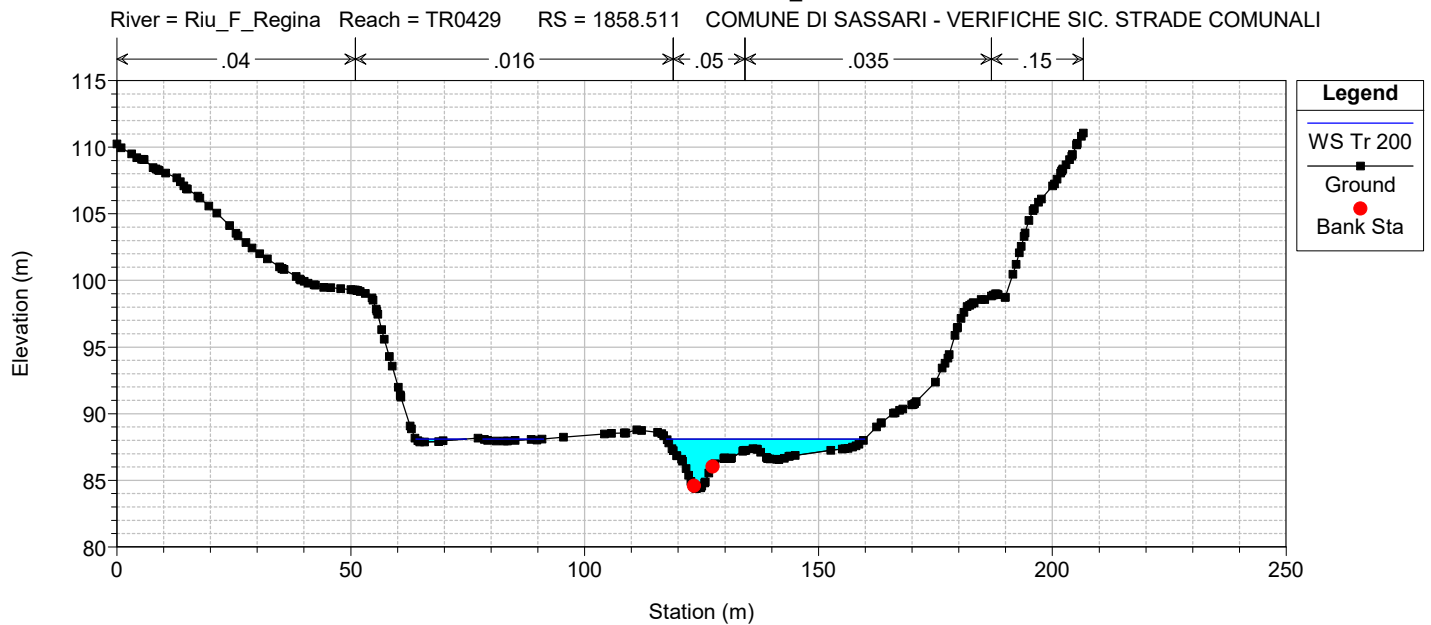
River = Riu_F_Regina Reach = TR0429 RS = 1893.926 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

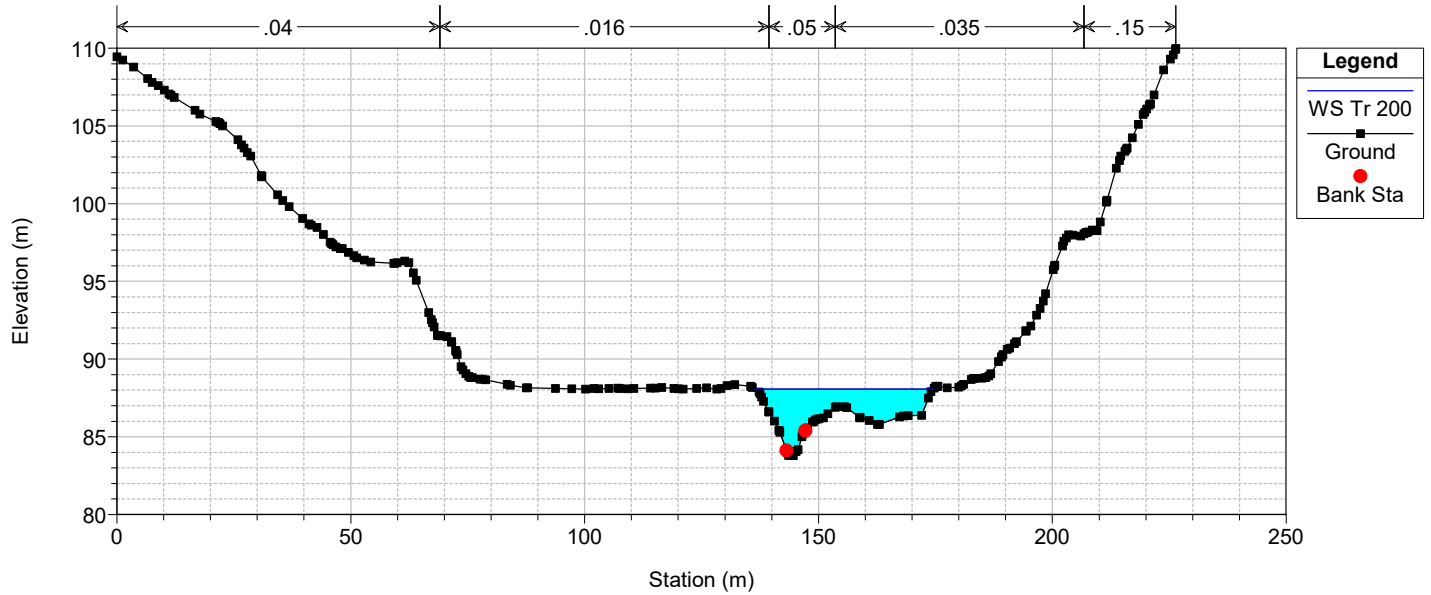
River = Riu_F_Regina Reach = TR0429 RS = 1858.511 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

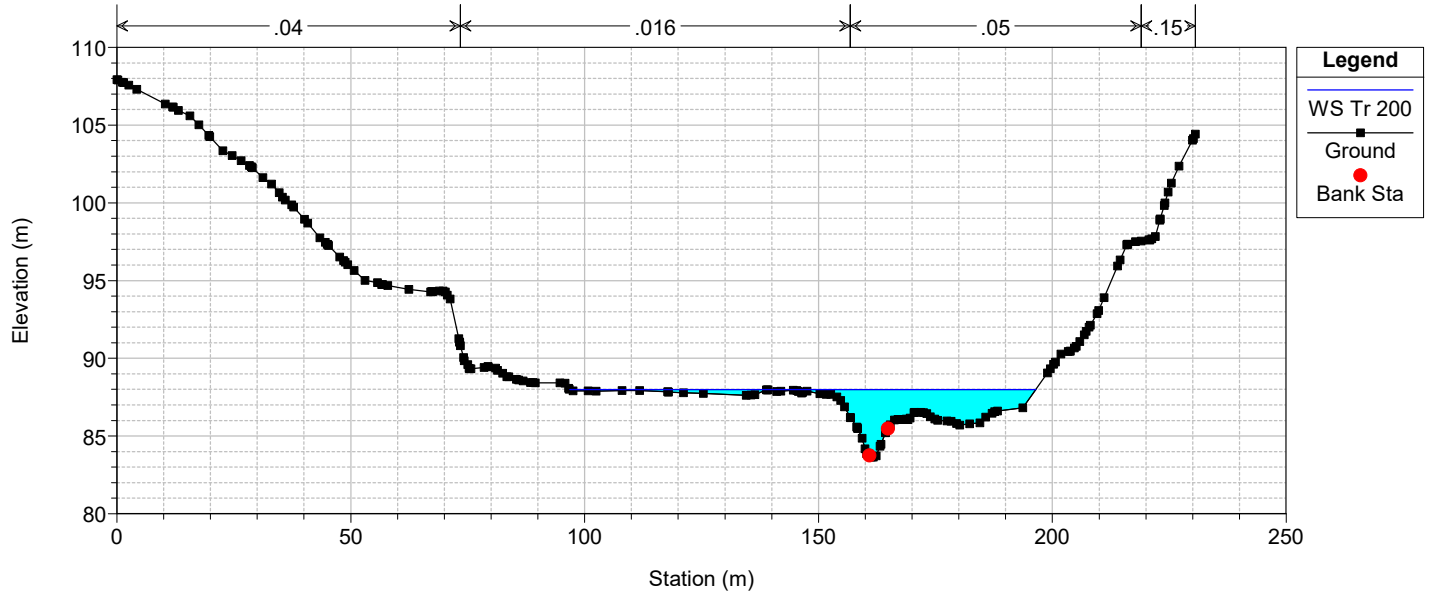
River = Riu_F_Regina Reach = TR0429 RS = 1824.518 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

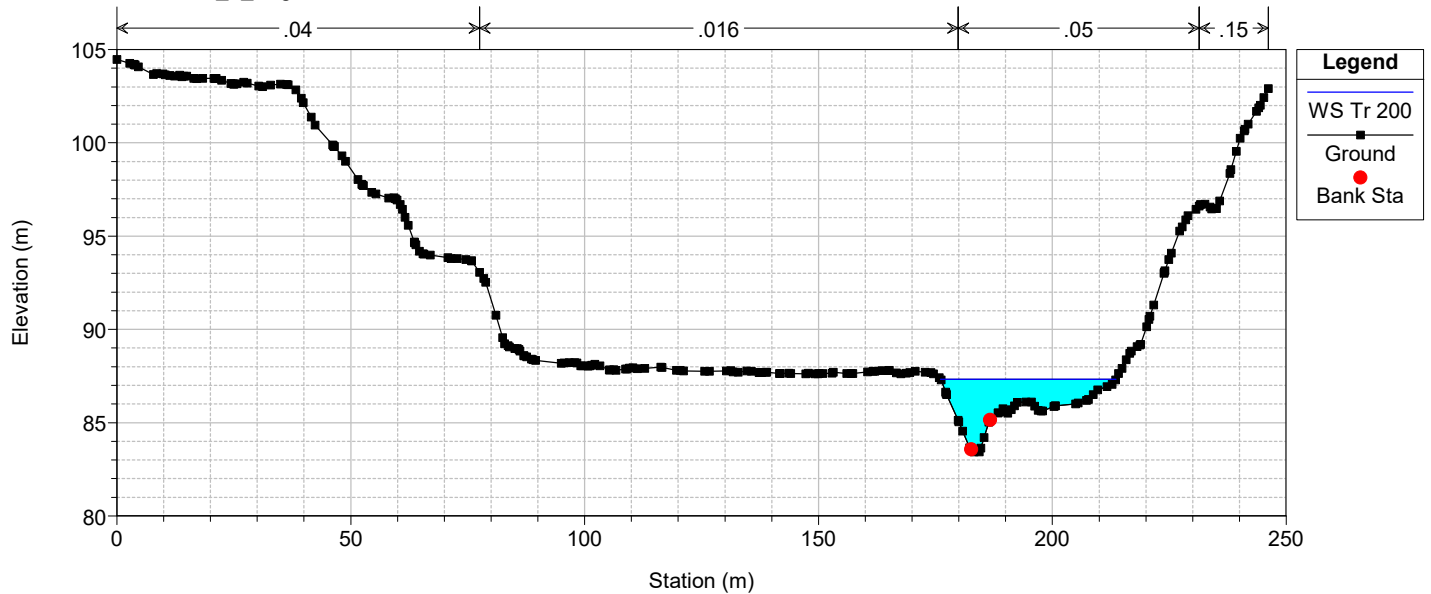
River = Riu_F_Regina Reach = TR0429 RS = 1790.146 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

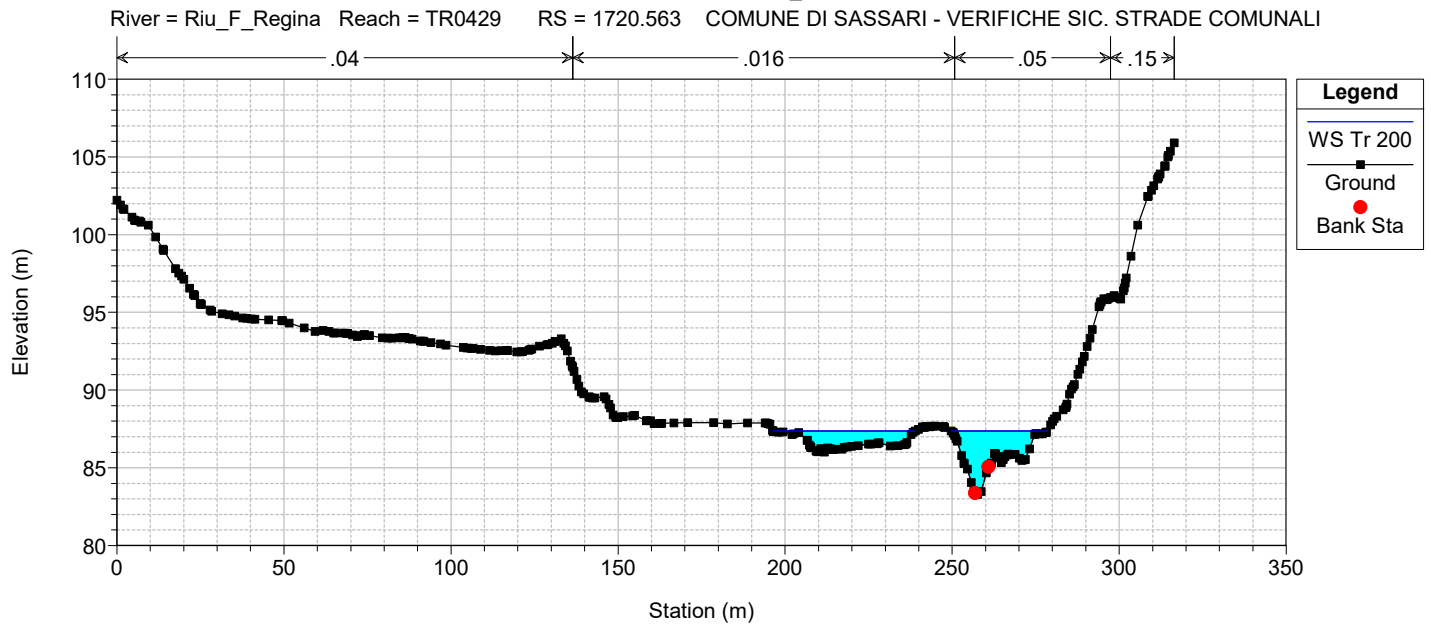
River = Riu_F_Regina Reach = TR0429 RS = 1754.264 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

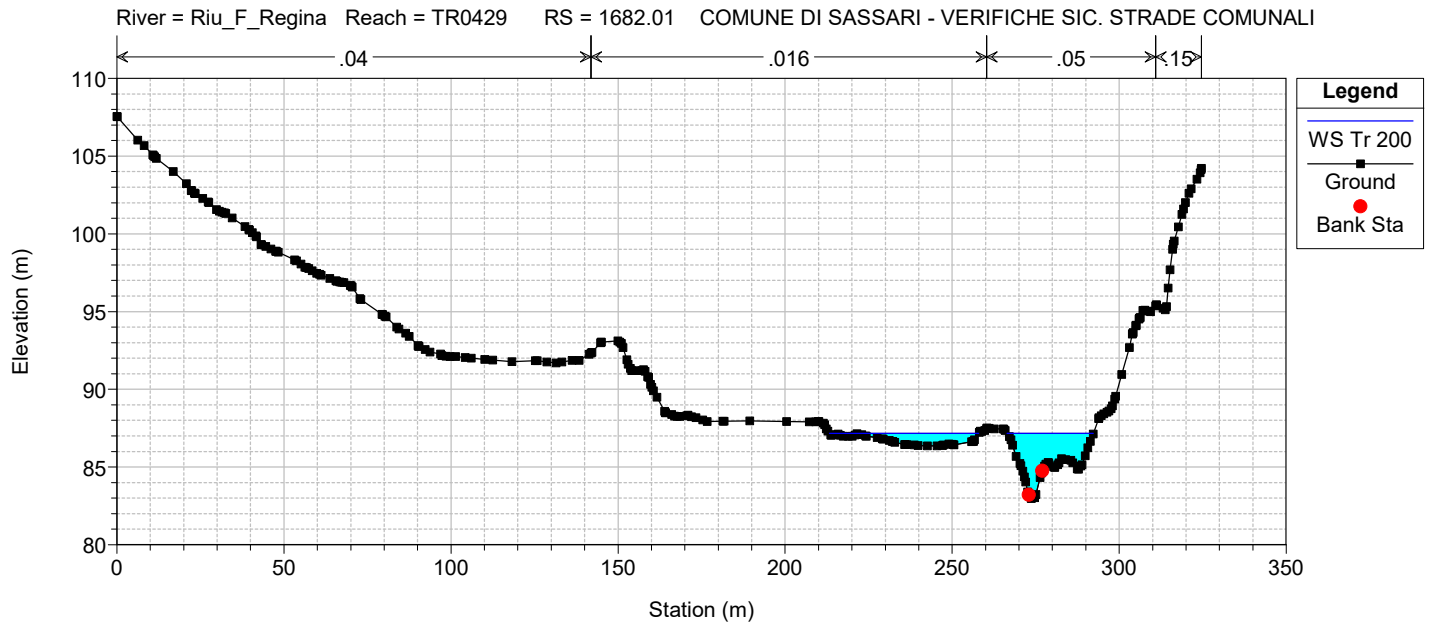
River = Riu_F_Regina Reach = TR0429 RS = 1720.563 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

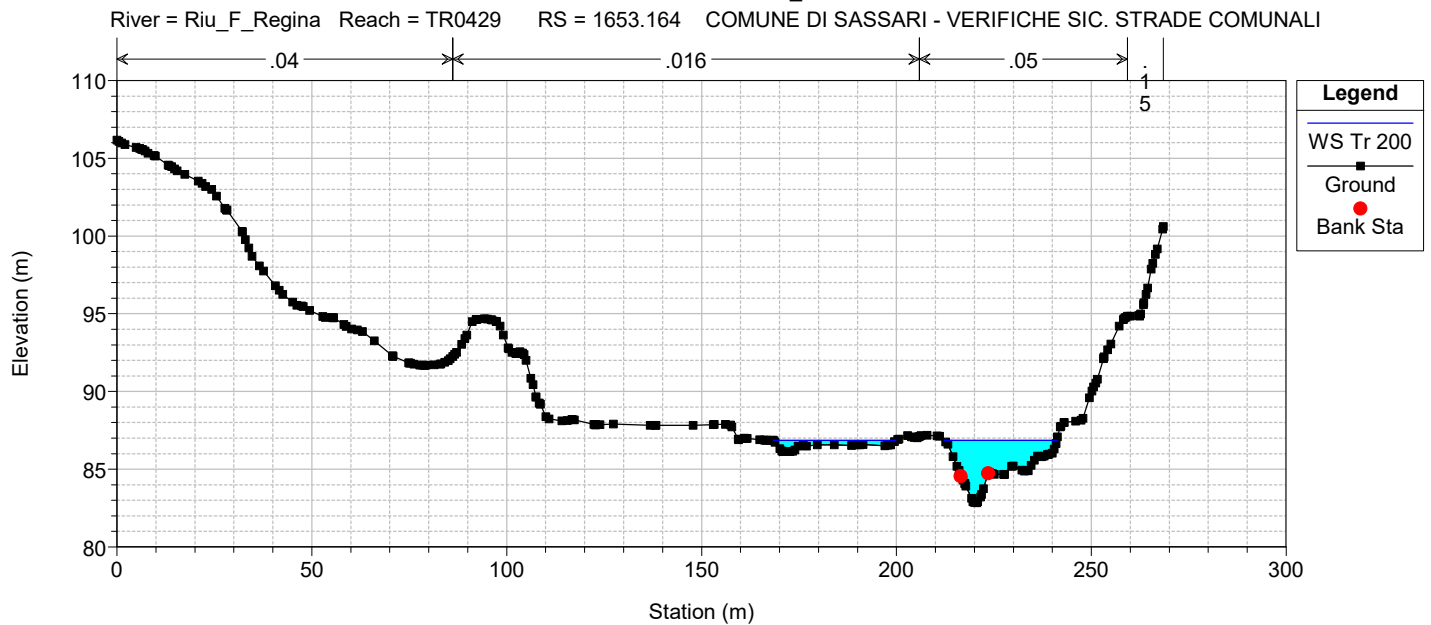
River = Riu_F_Regina Reach = TR0429 RS = 1682.01 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

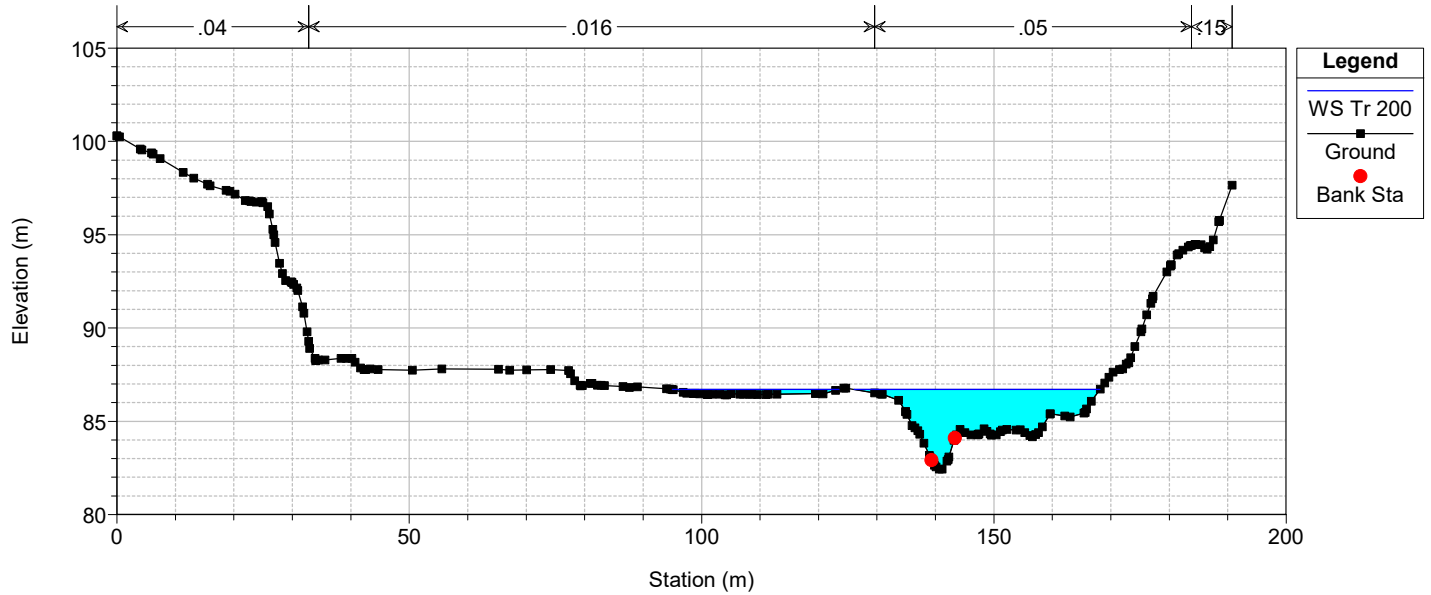
River = Riu_F_Regina Reach = TR0429 RS = 1653.164 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

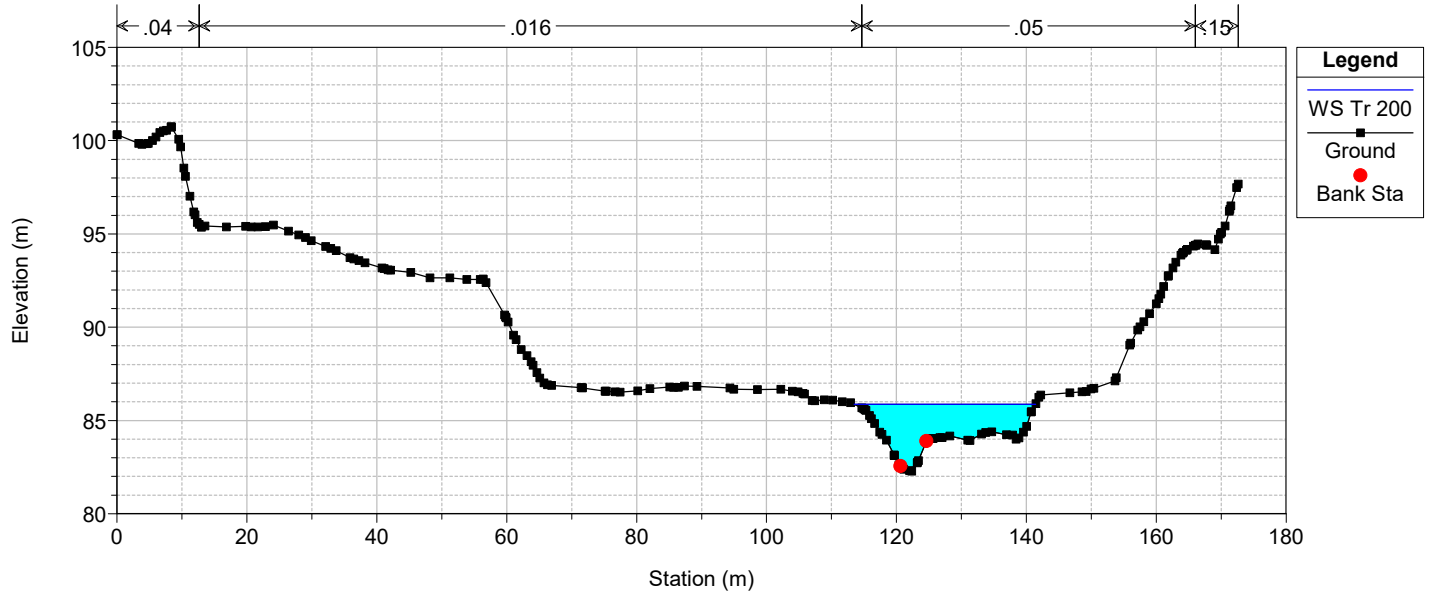
River = Riu_F_Regina Reach = TR0429 RS = 1616.415 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

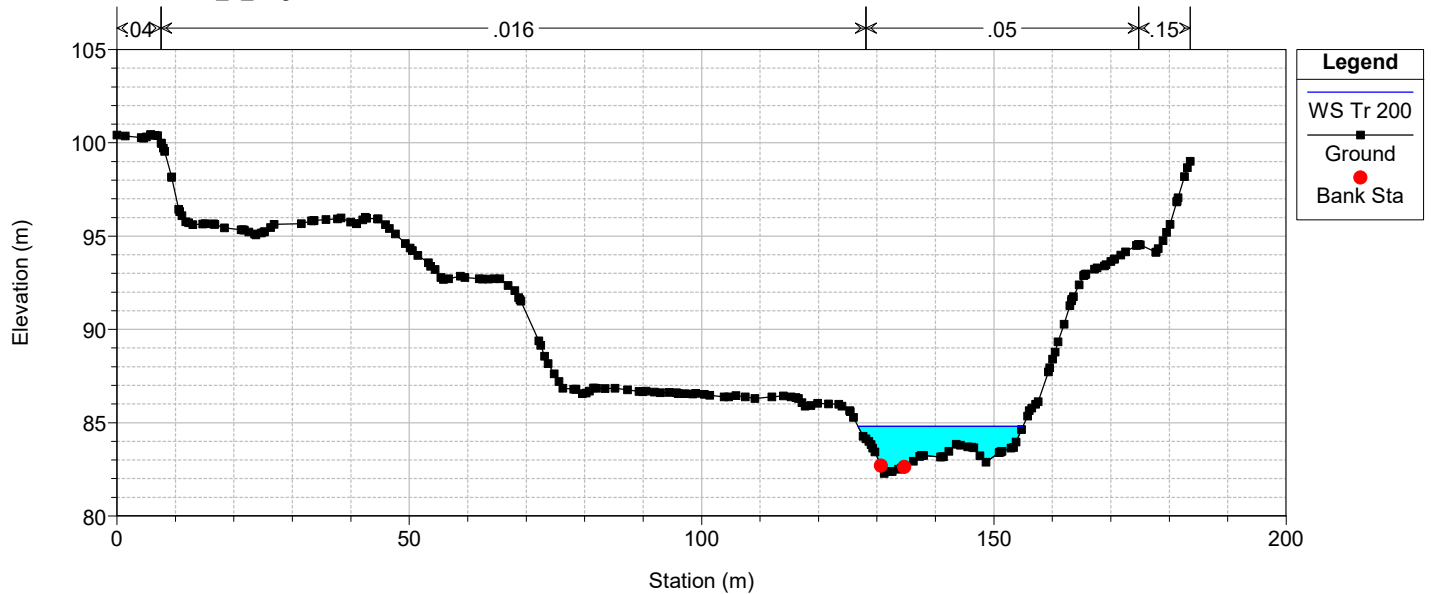
River = Riu_F_Regina Reach = TR0429 RS = 1584.739 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

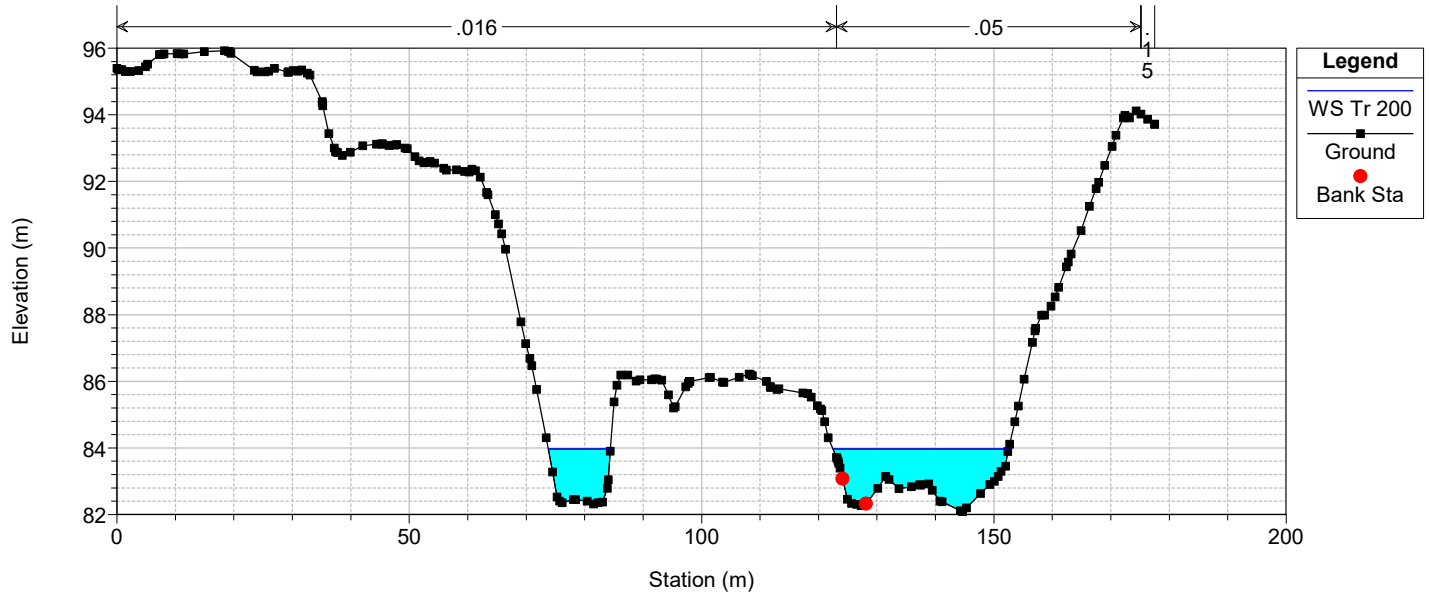
River = Riu_F_Regina Reach = TR0429 RS = 1549.678 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

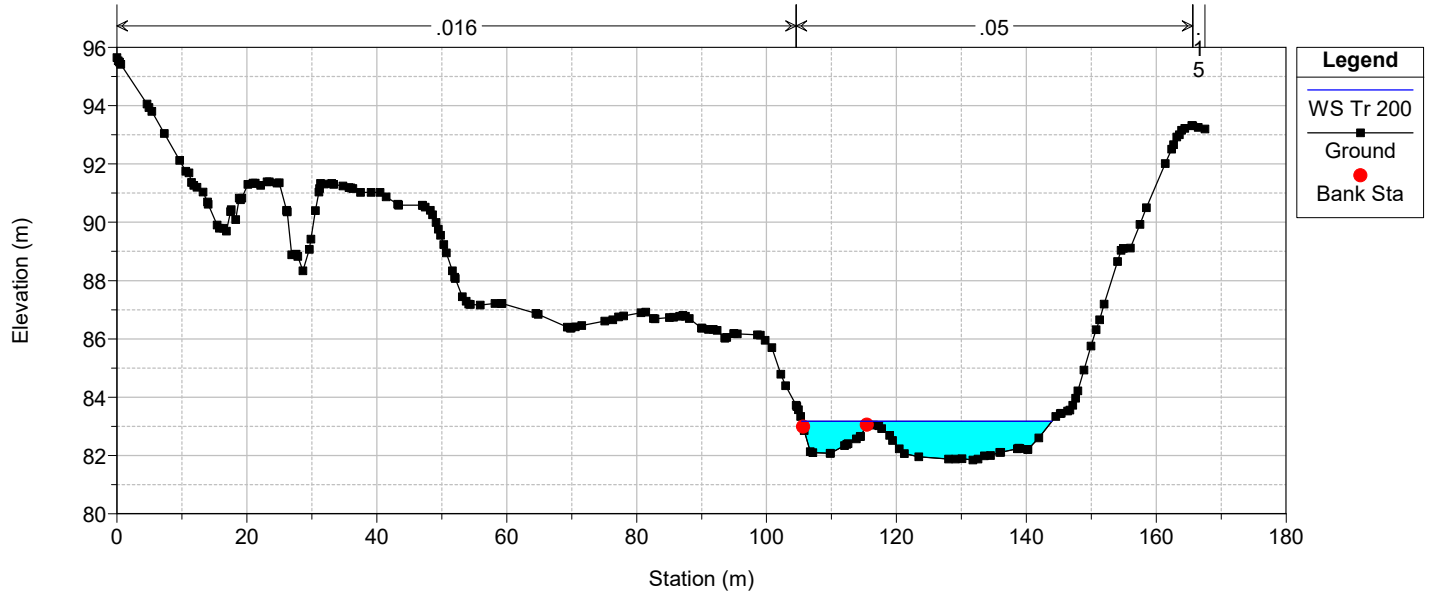
River = Riu_F_Regina Reach = TR0429 RS = 1514.613 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

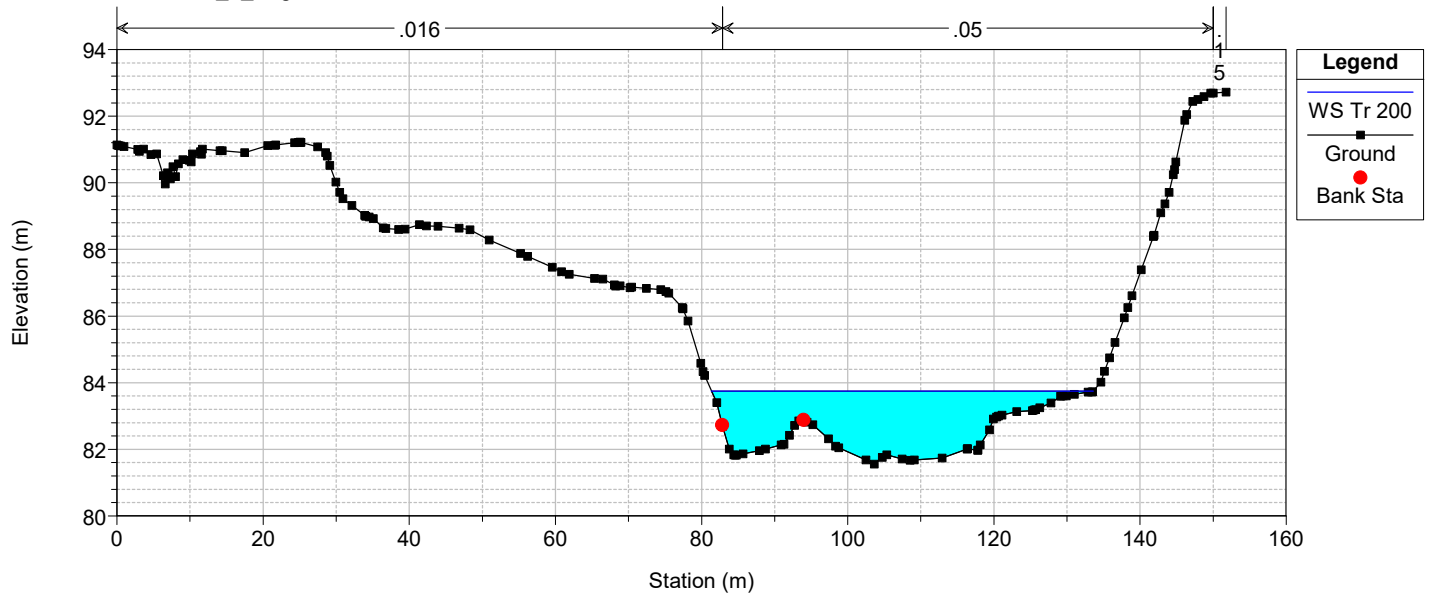
River = Riu_F_Regina Reach = TR0429 RS = 1479.824 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

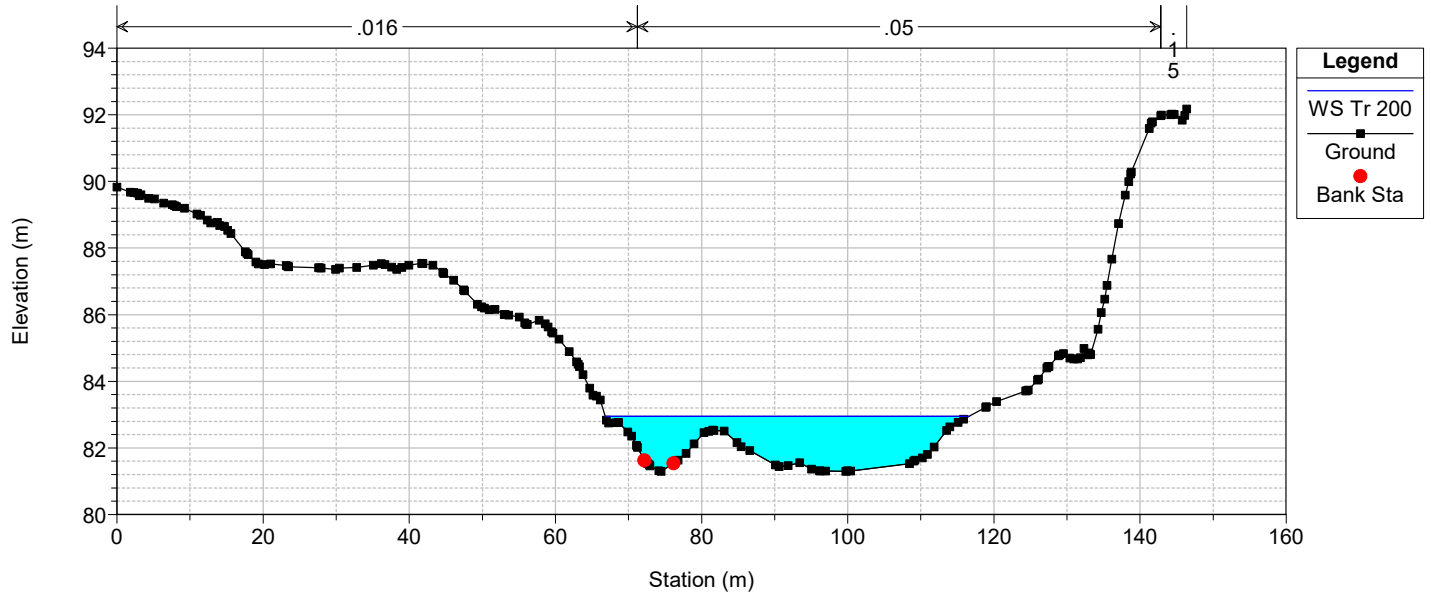
River = Riu_F_Regina Reach = TR0429 RS = 1445.344 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

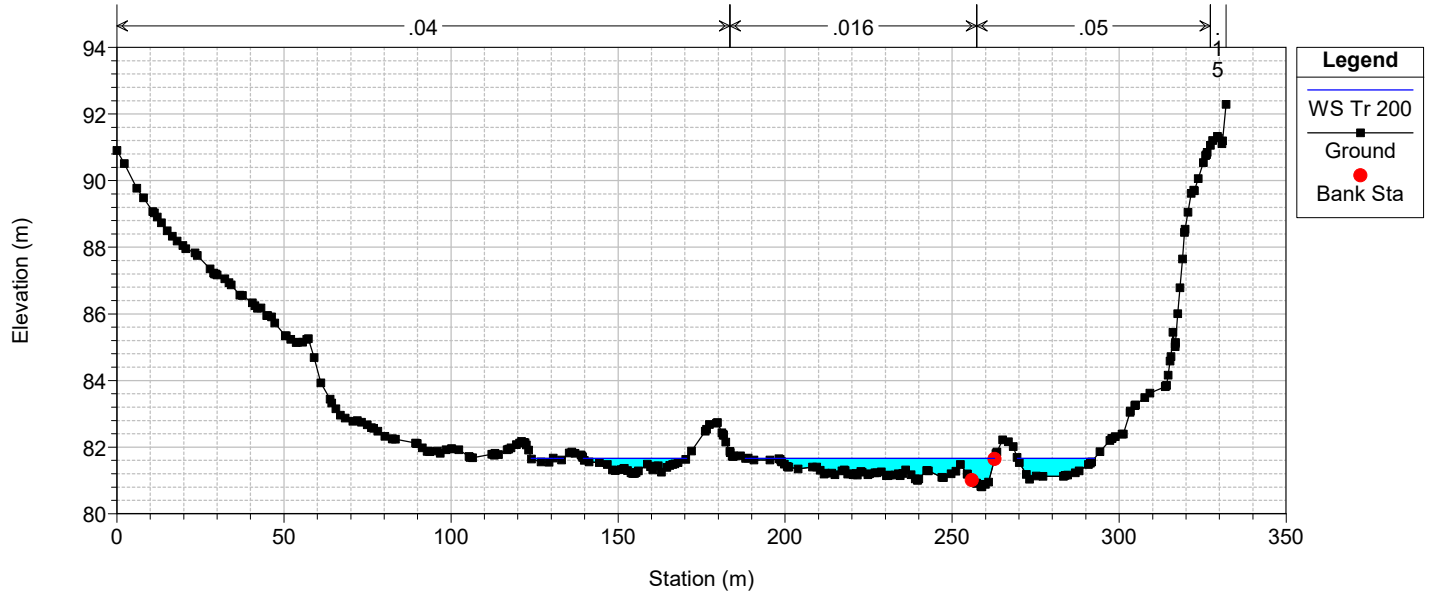
River = Riu_F_Regina Reach = TR0429 RS = 1410.038 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

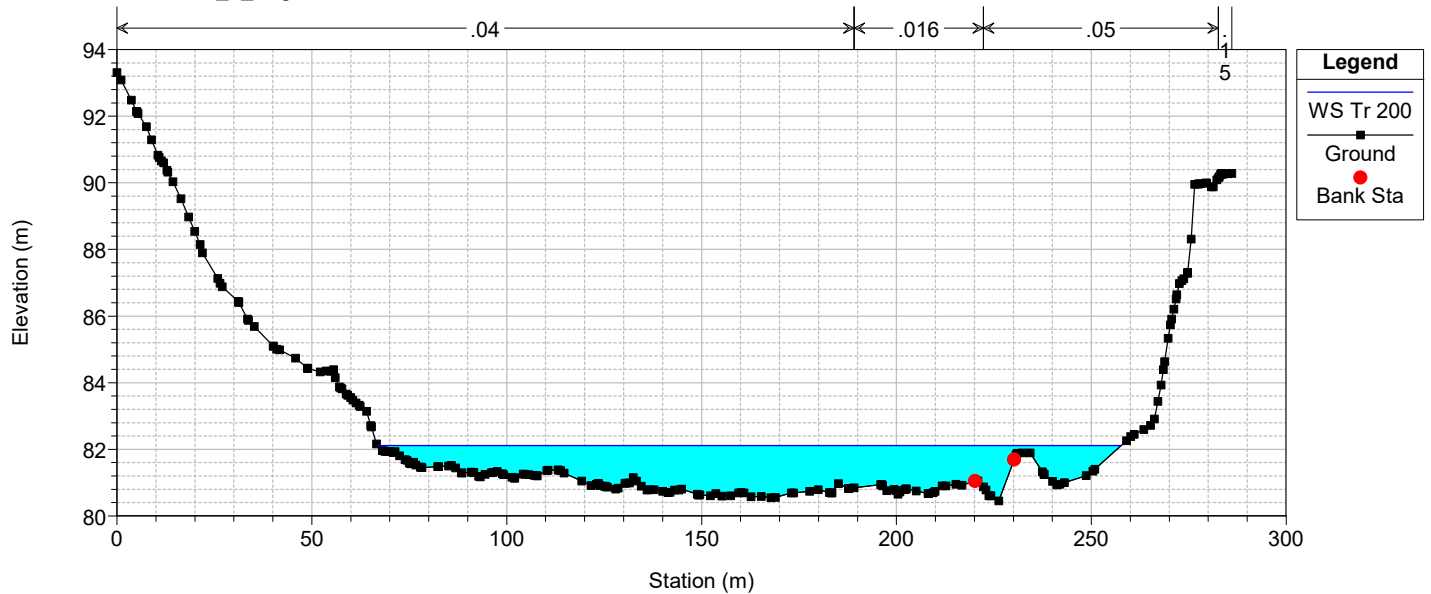
River = Riu_F_Regina Reach = TR0429 RS = 1375.613 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

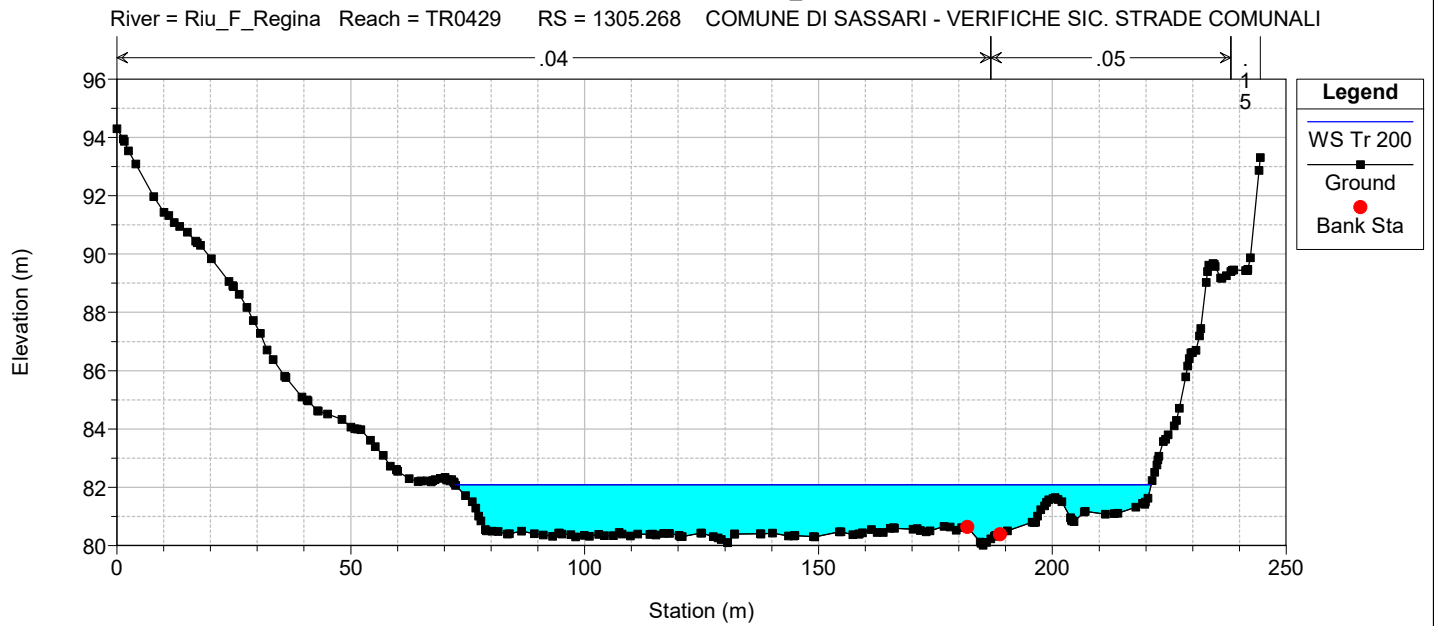
River = Riu_F_Regina Reach = TR0429 RS = 1340.338 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

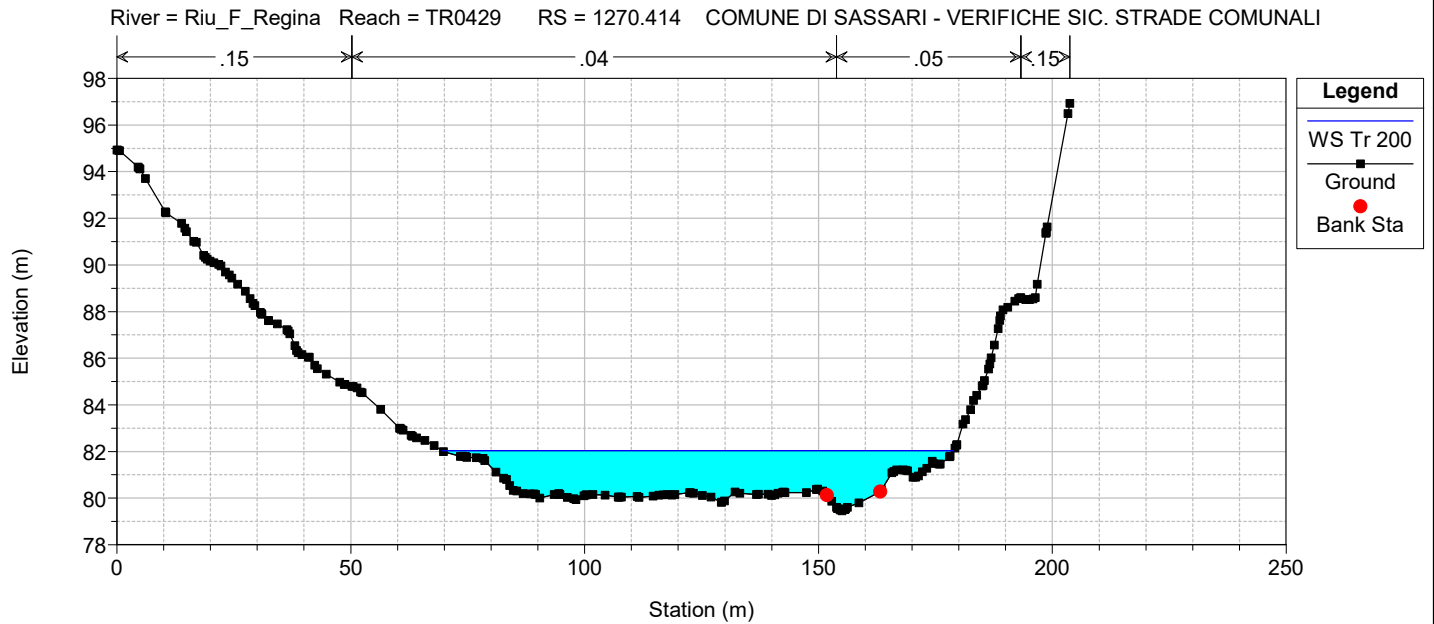
River = Riu_F_Regina Reach = TR0429 RS = 1305.268 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

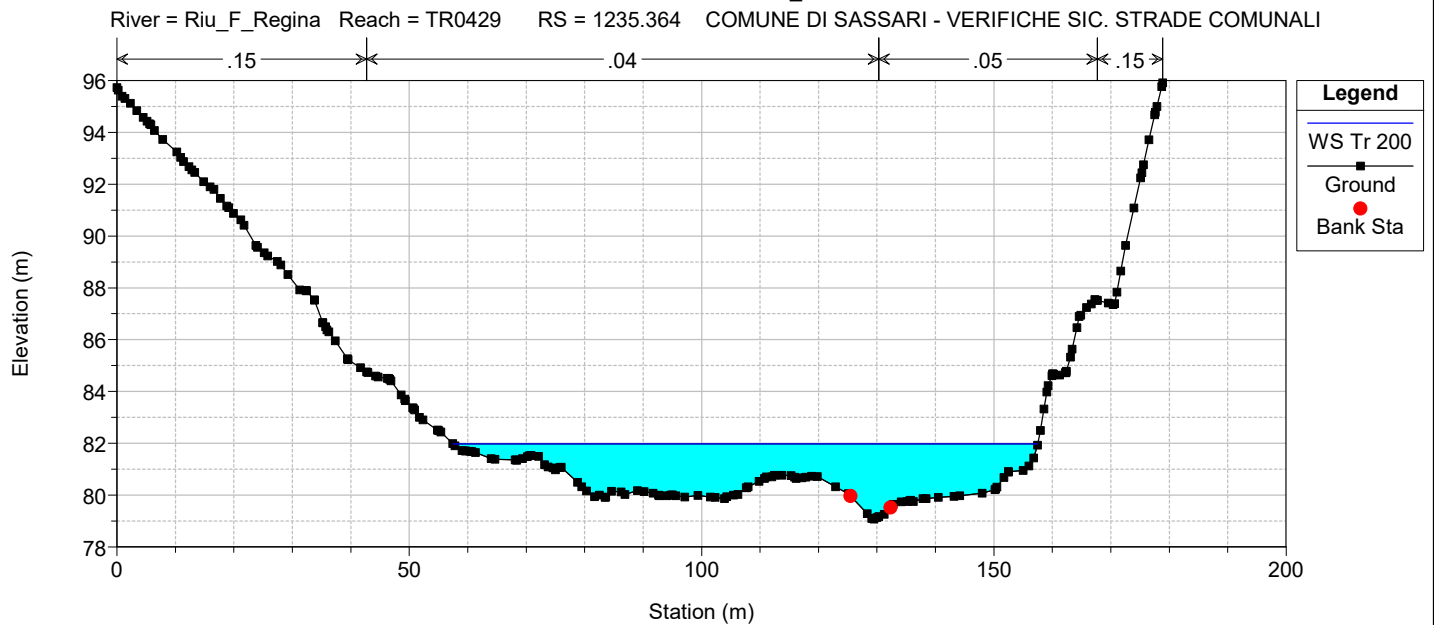
River = Riu_F_Regina Reach = TR0429 RS = 1270.414 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

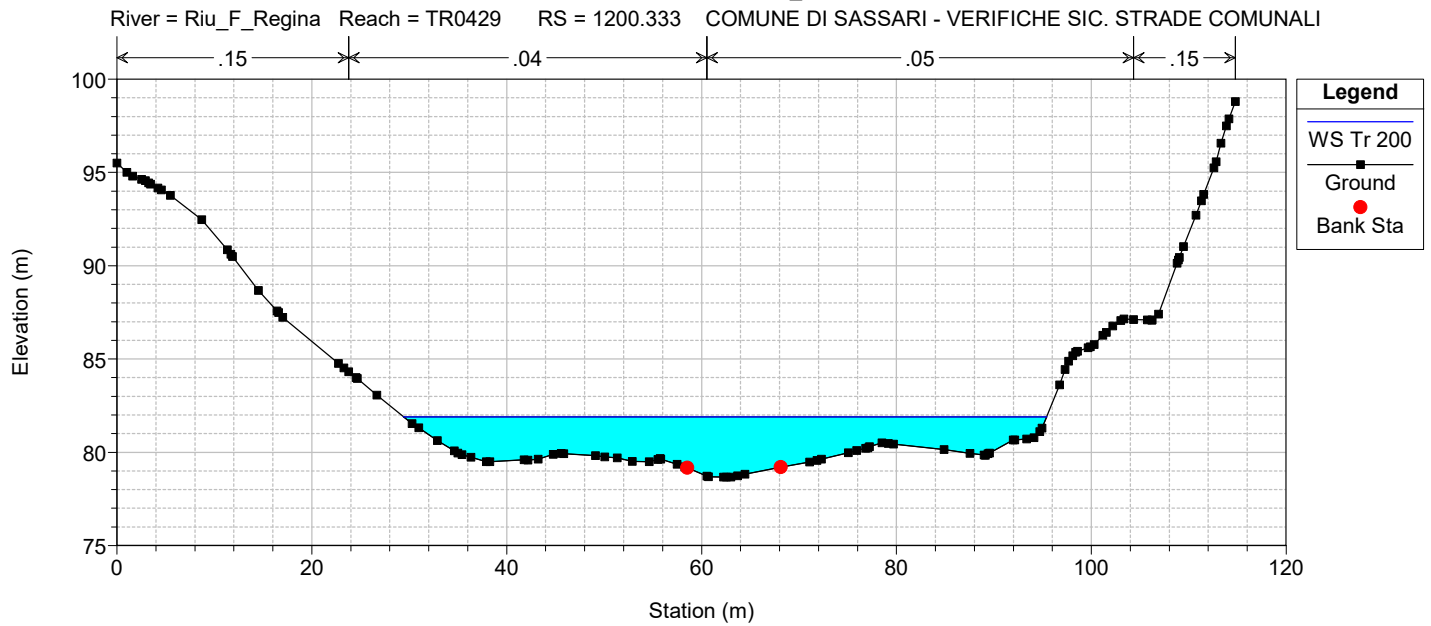
River = Riu_F_Regina Reach = TR0429 RS = 1235.364 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

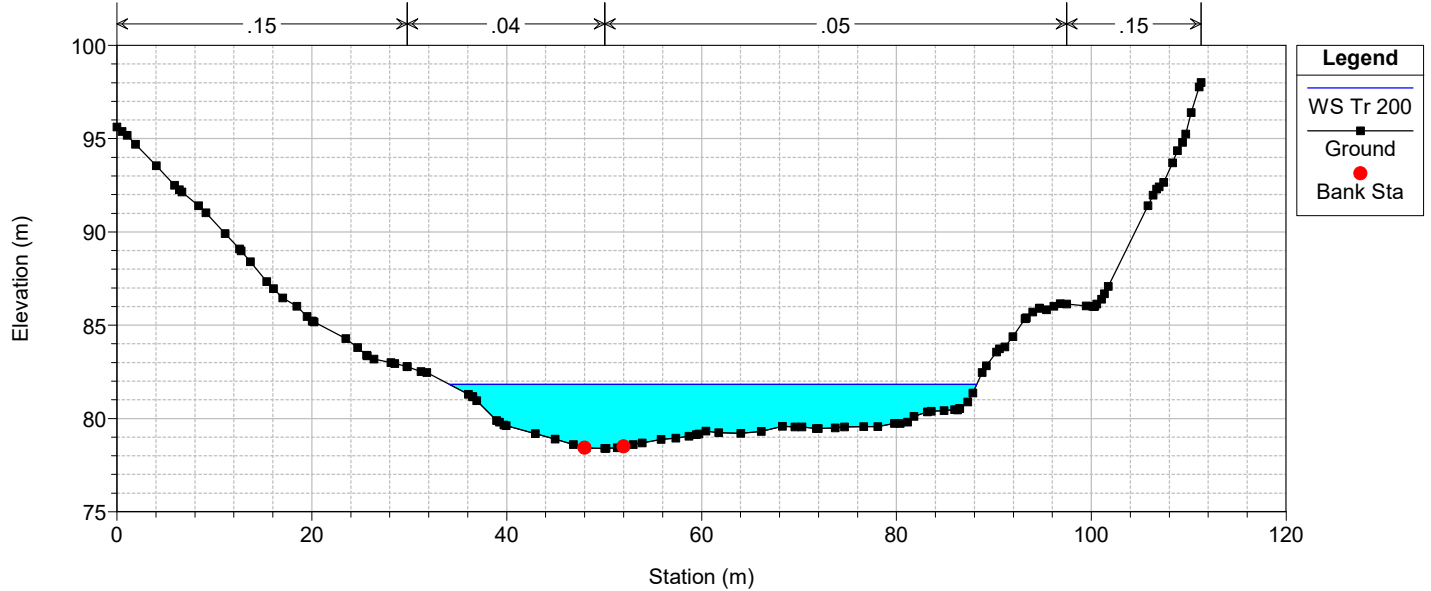
River = Riu_F_Regina Reach = TR0429 RS = 1200.333 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

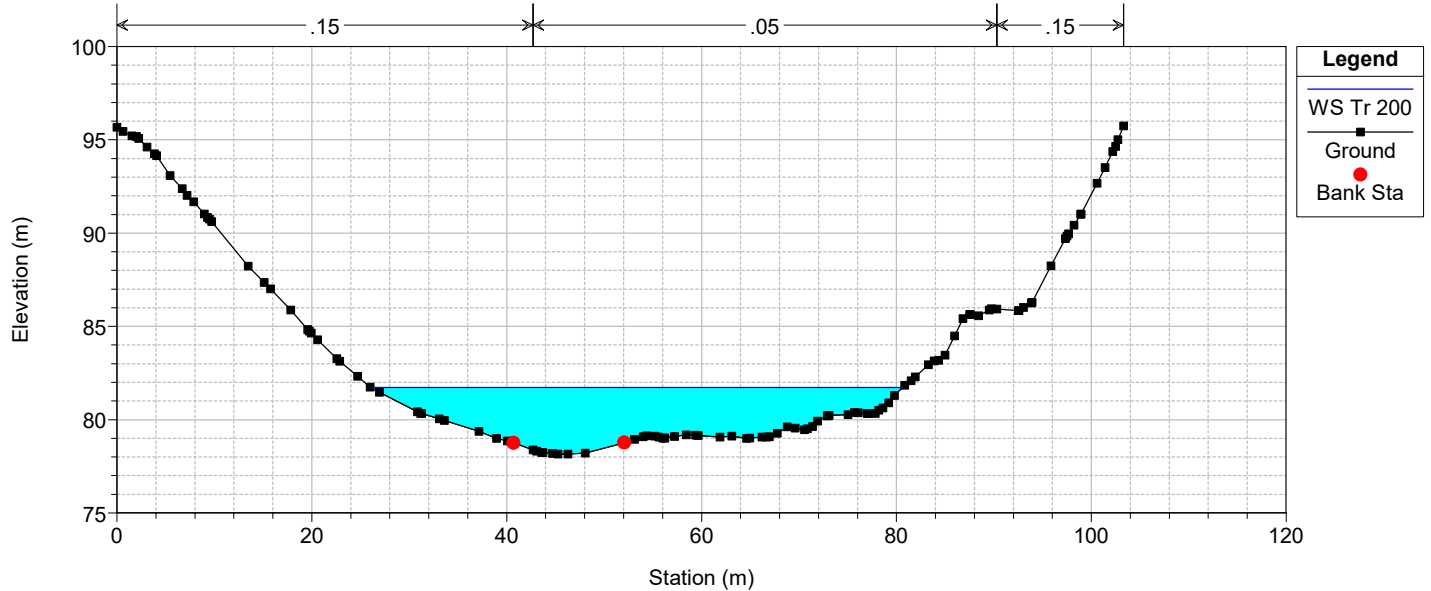
River = Riu_F_Regina Reach = TR0429 RS = 1165.246 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

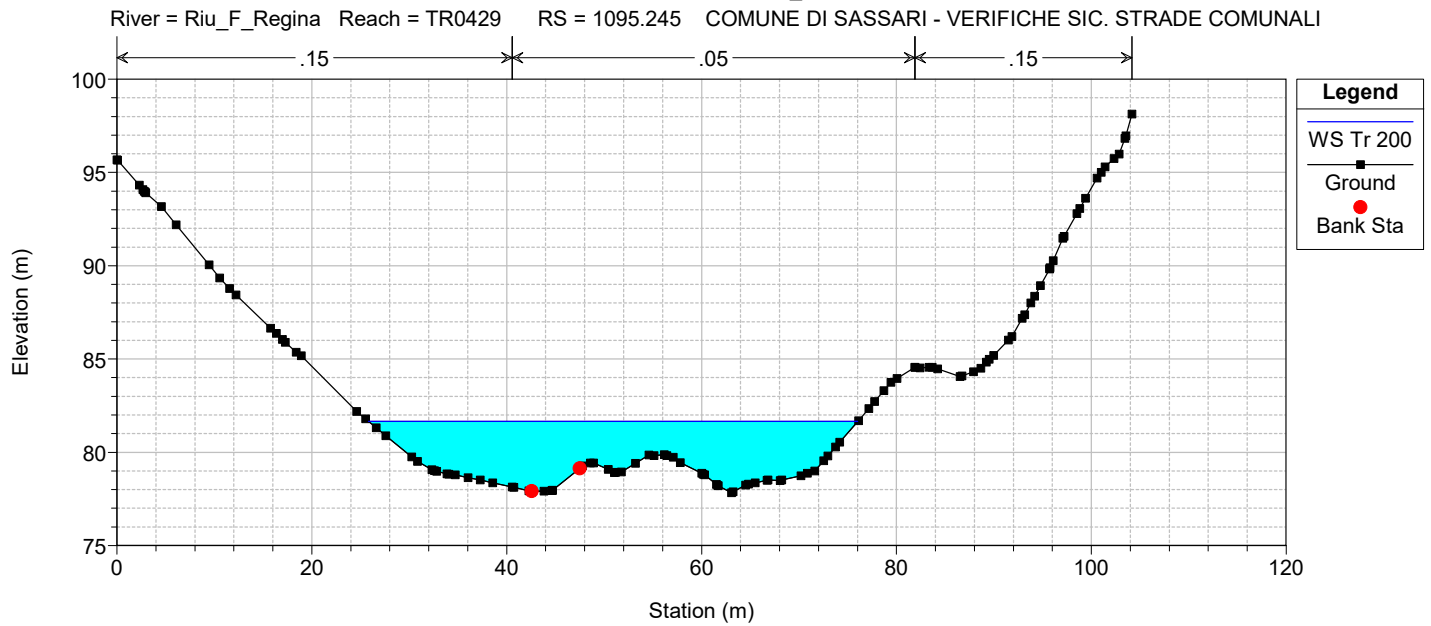
River = Riu_F_Regina Reach = TR0429 RS = 1130.246 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

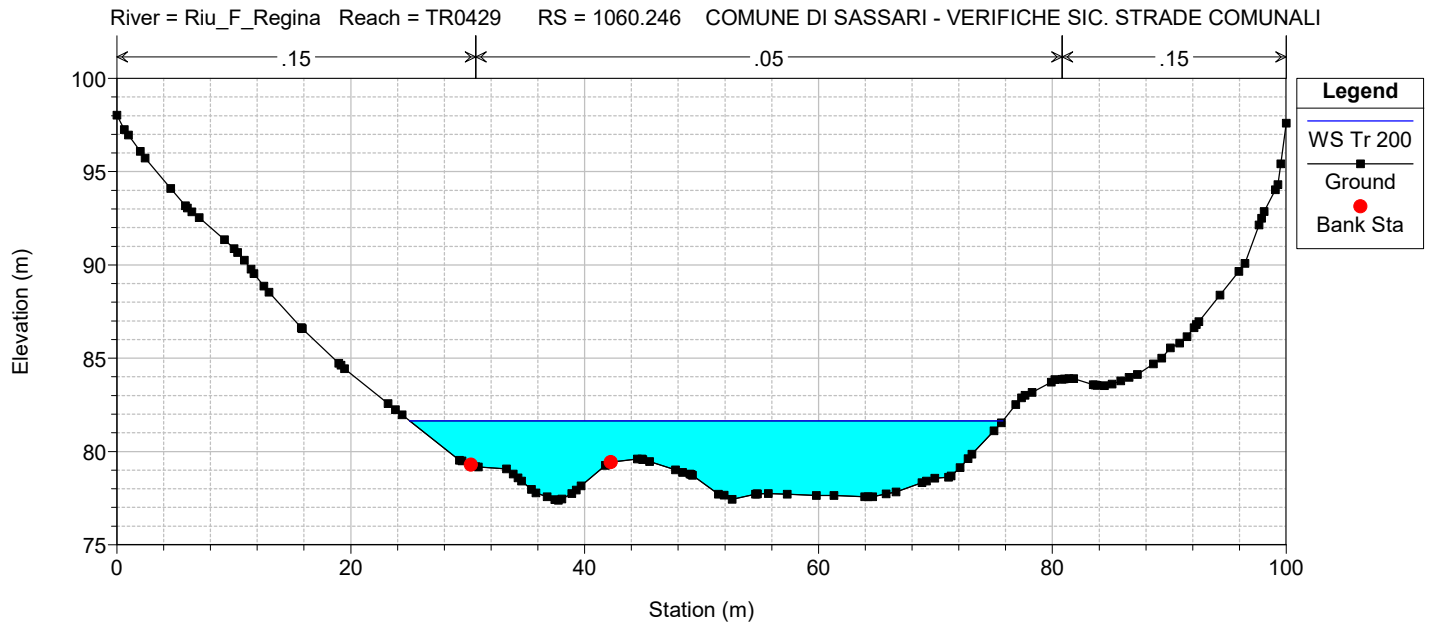
River = Riu_F_Regina Reach = TR0429 RS = 1095.245 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

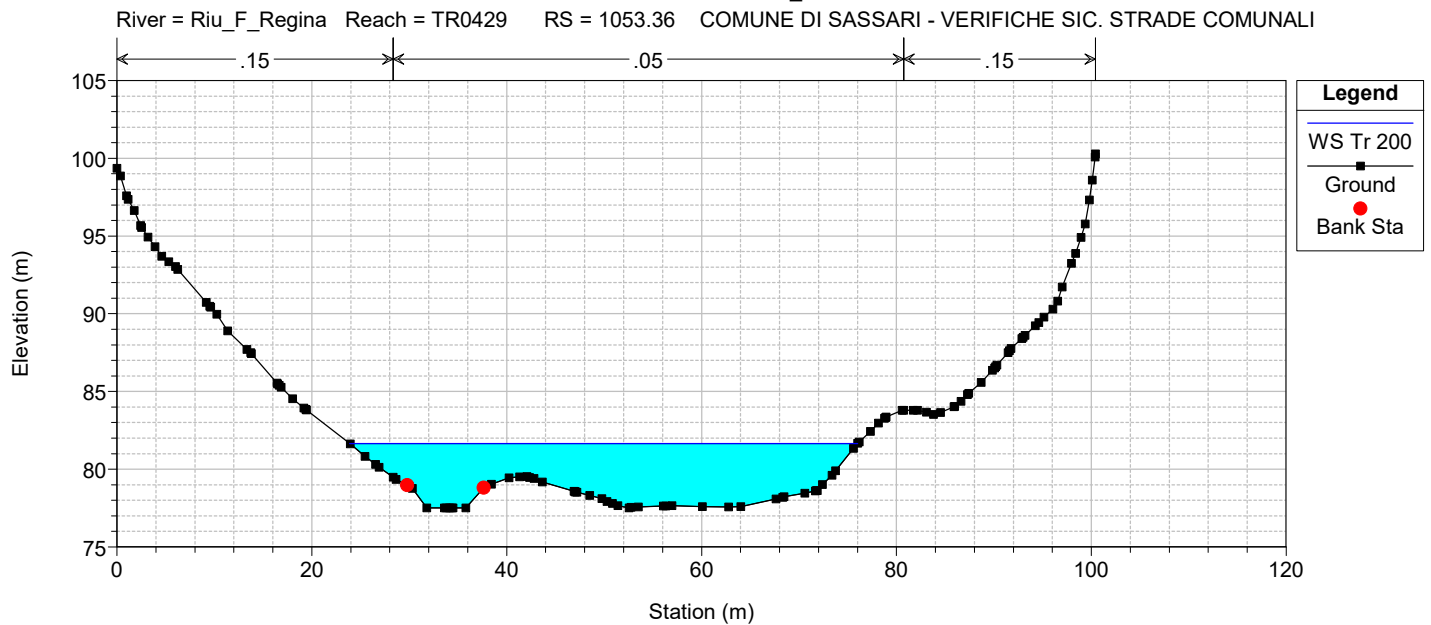
River = Riu_F_Regina Reach = TR0429 RS = 1060.246 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

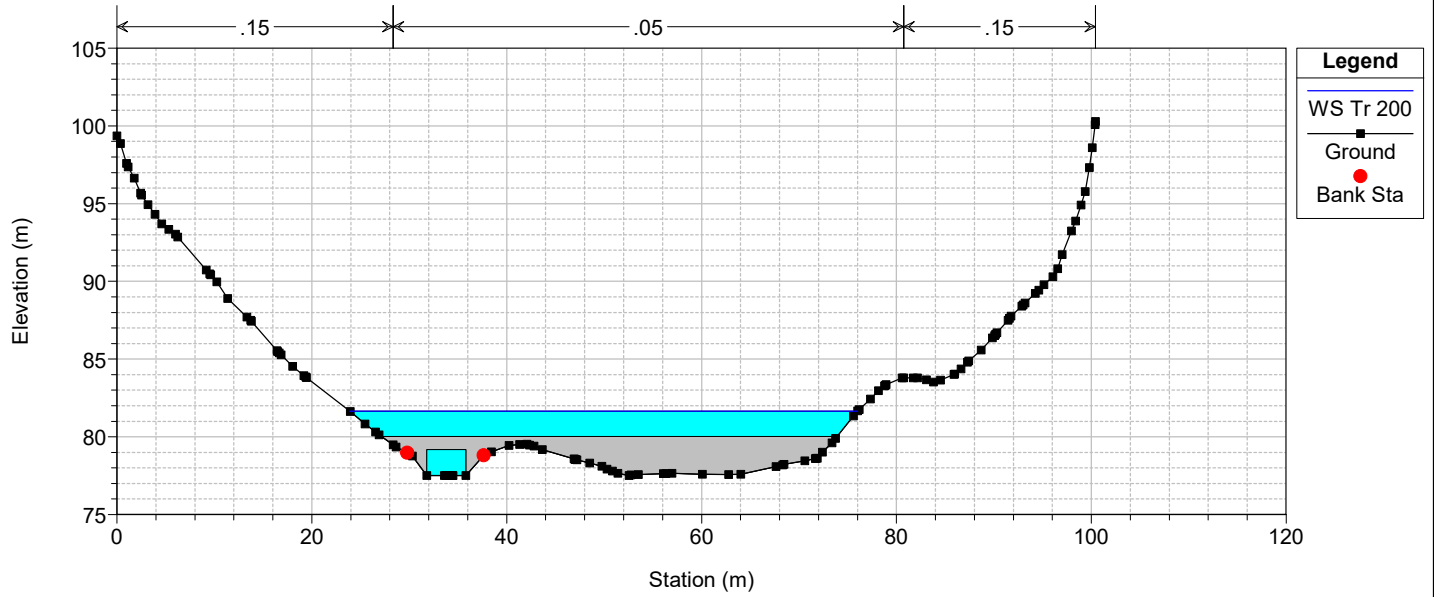
River = Riu_F_Regina Reach = TR0429 RS = 1053.36 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

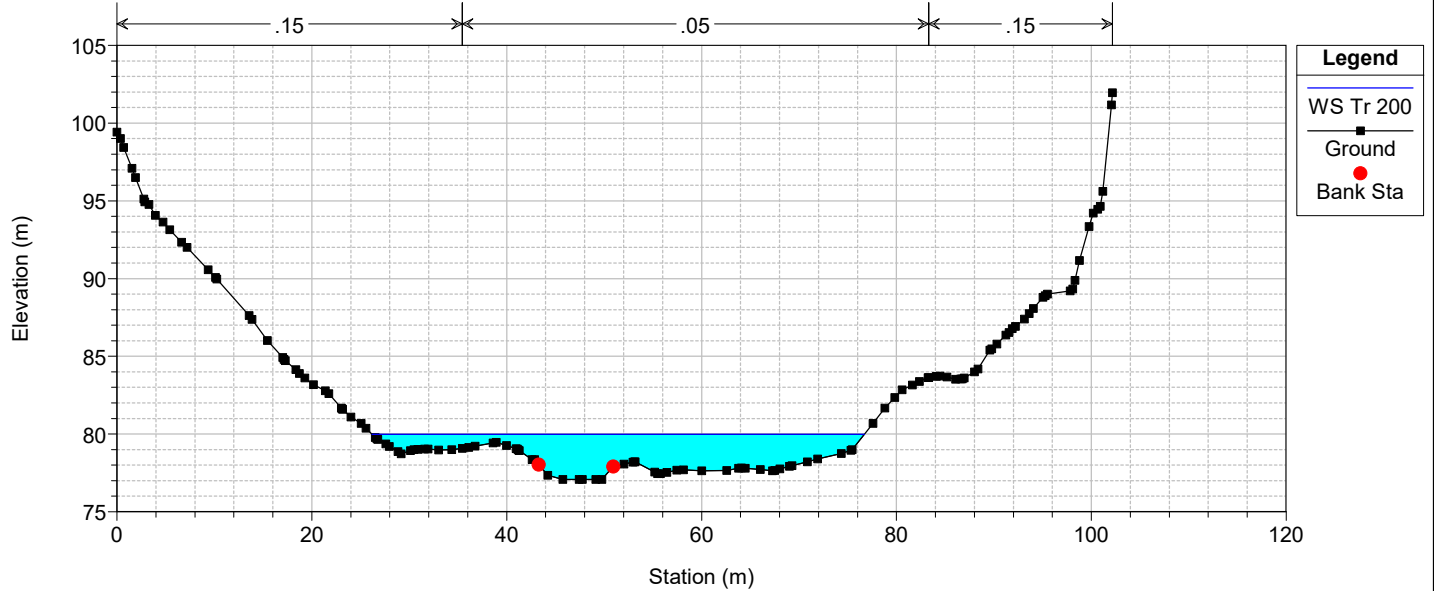
River = Riu_F_Regina Reach = TR0429 RS = 1041.753 Culv TR0429_P07 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

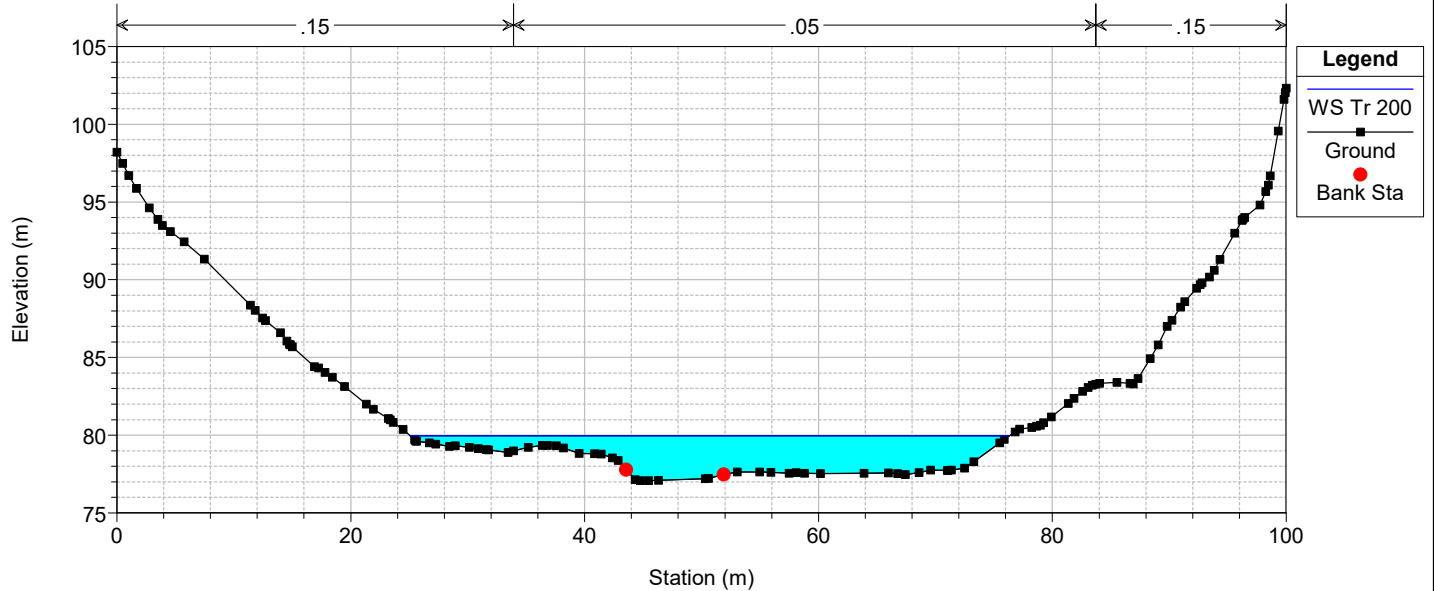
River = Riu_F_Regina Reach = TR0429 RS = 1032.636 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

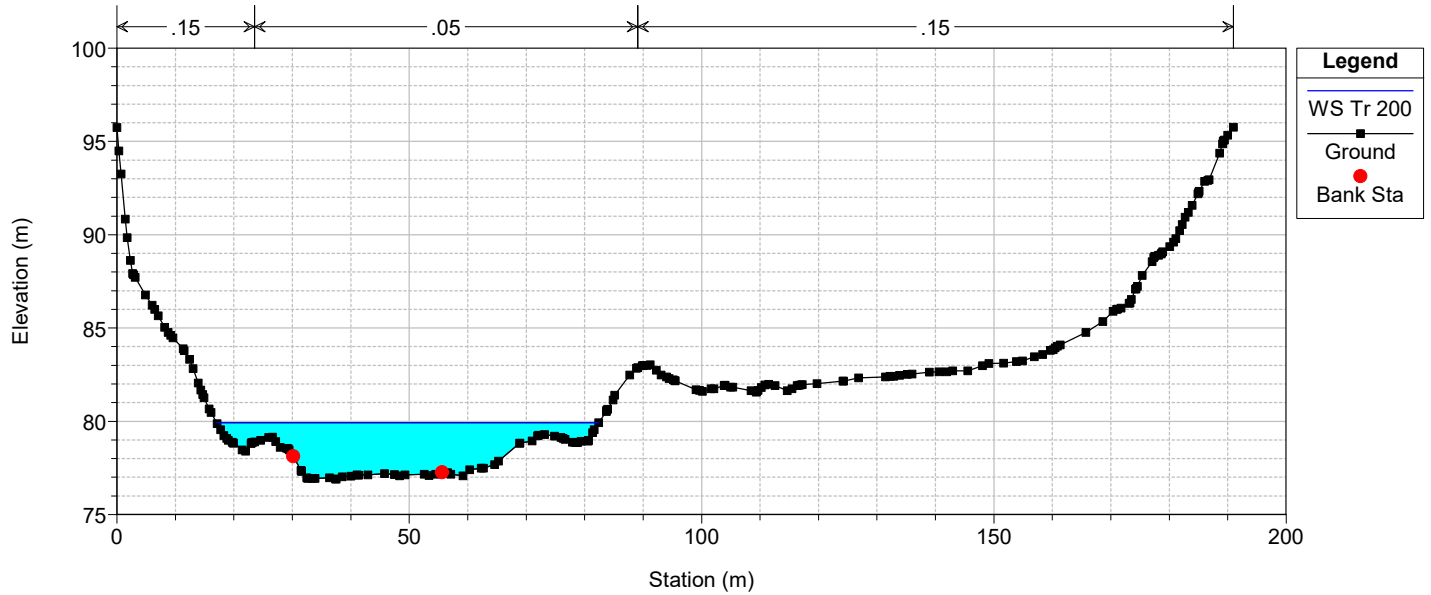
River = Riu_F_Regina Reach = TR0429 RS = 1024.863 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

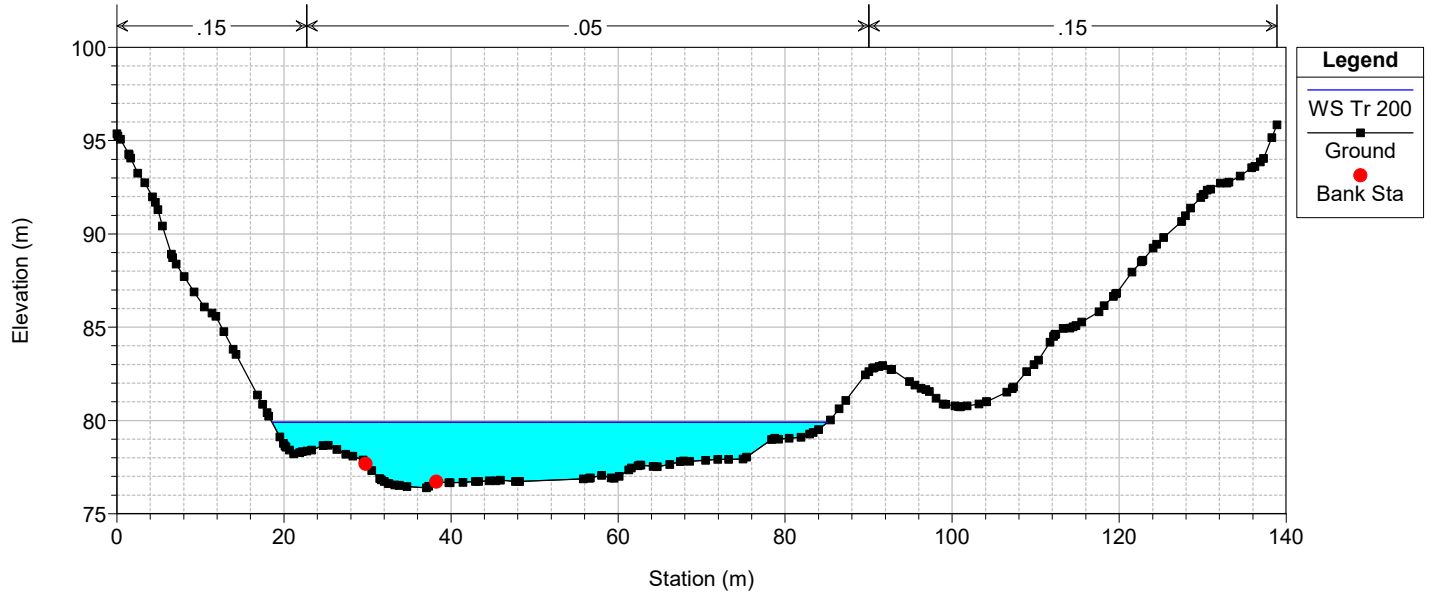
River = Riu_F_Regina Reach = TR0429 RS = 989.6494 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

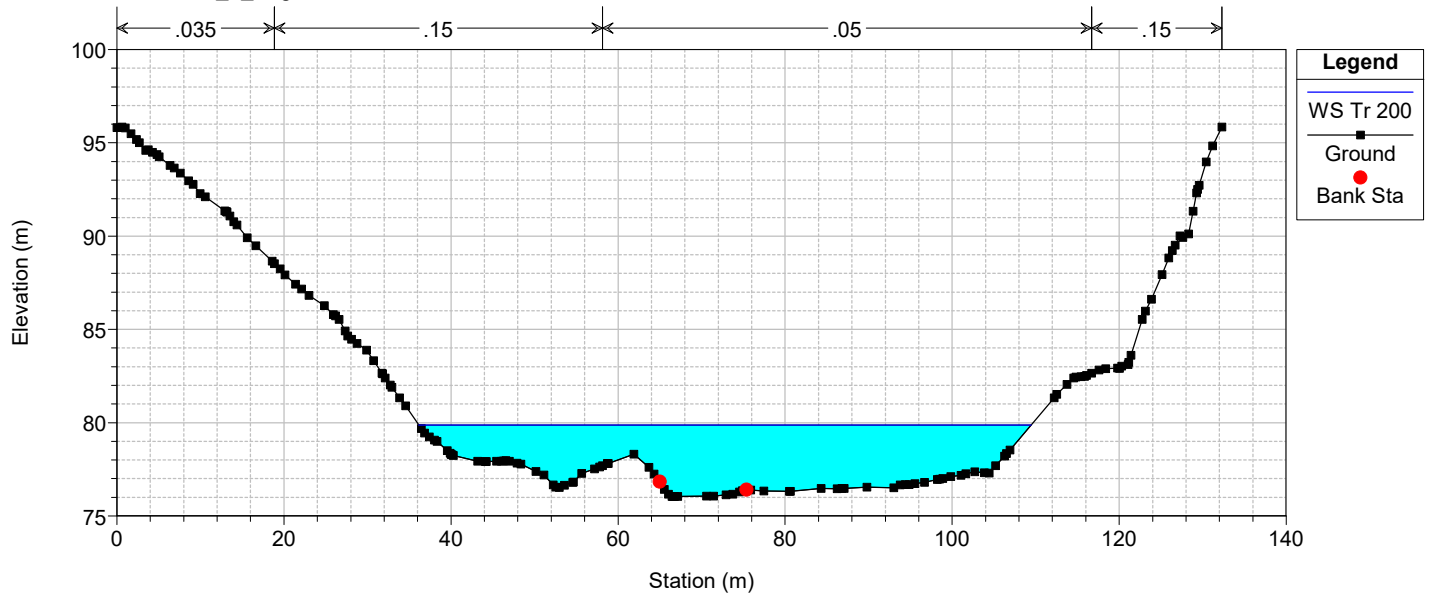
River = Riu_F_Regina Reach = TR0429 RS = 954.8049 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

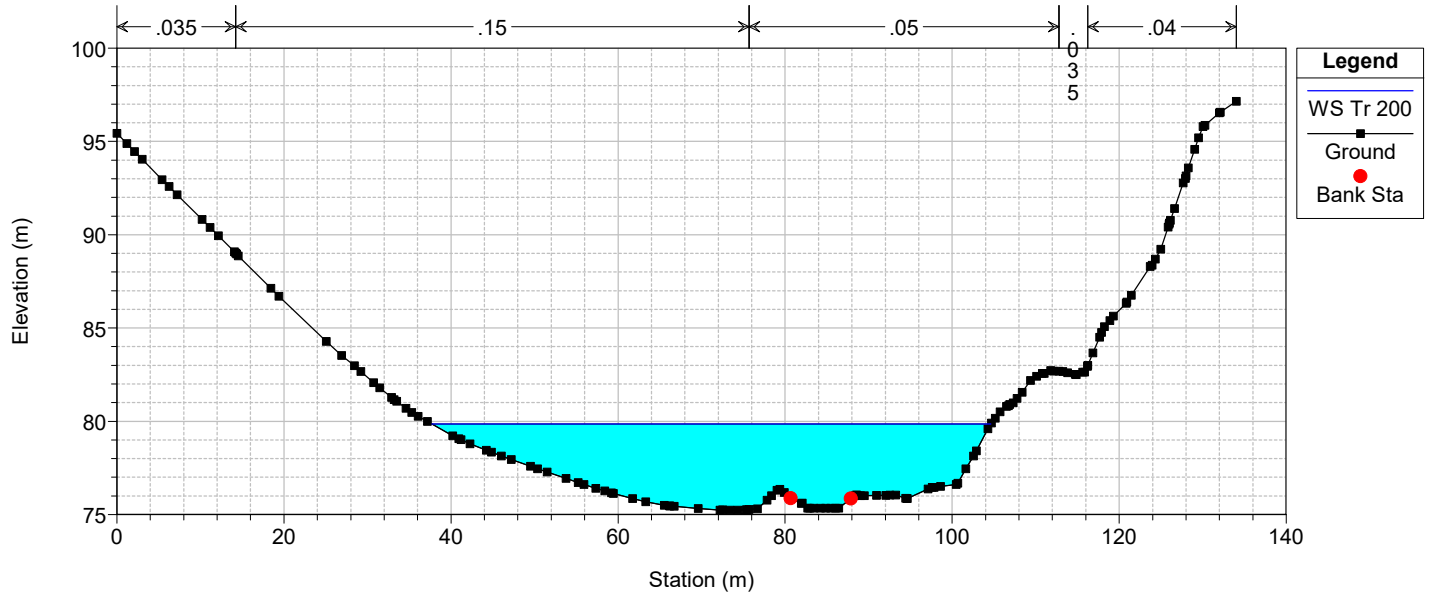
River = Riu_F_Regina Reach = TR0429 RS = 920.1212 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

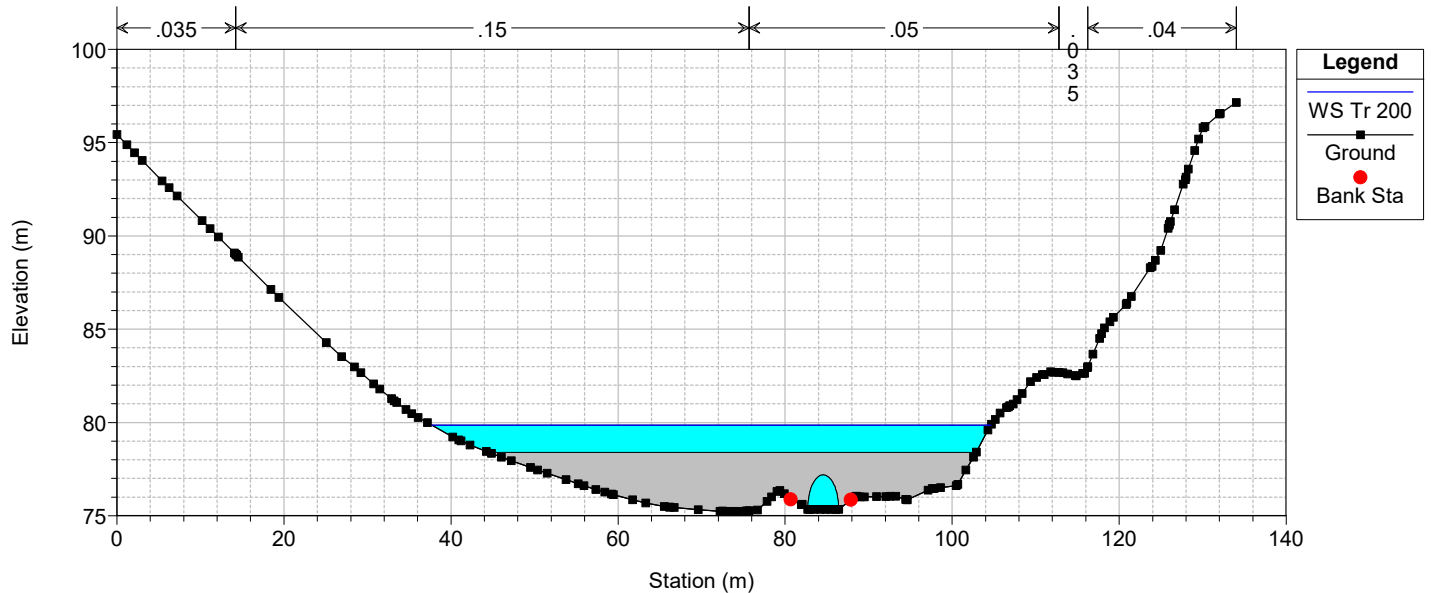
River = Riu_F_Regina Reach = TR0429 RS = 884.9309 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

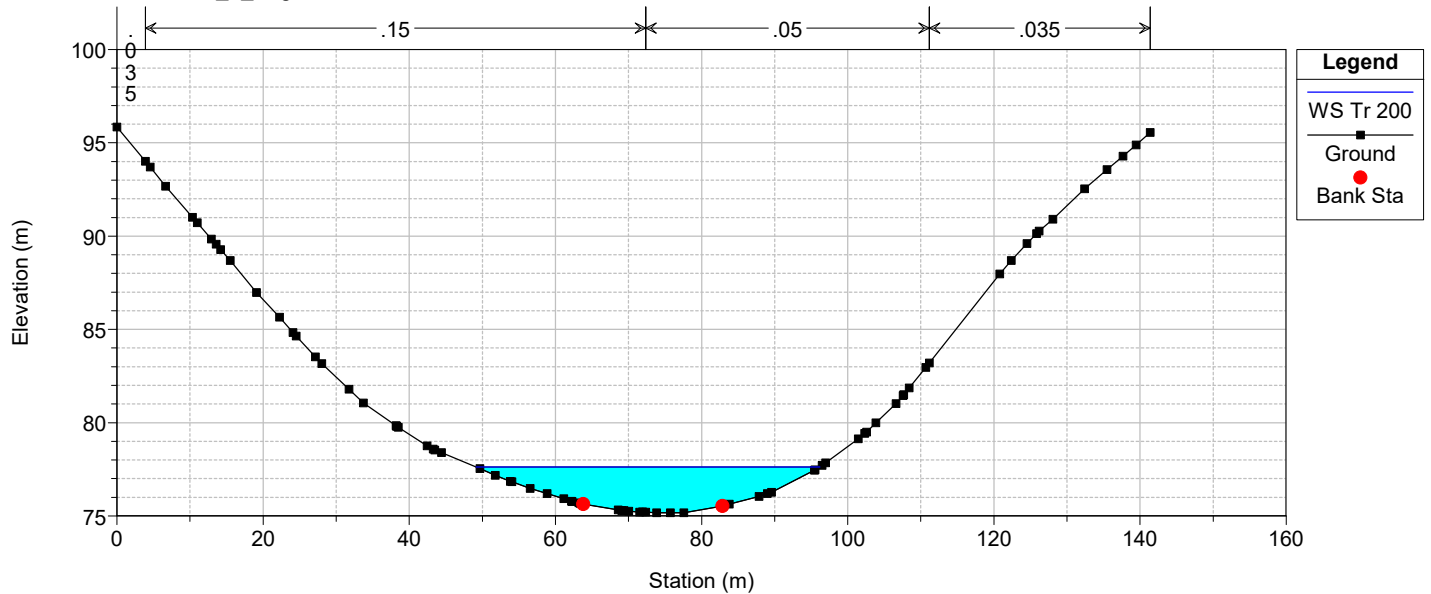
River = Riu_F_Regina Reach = TR0429 RS = 872.2943 Culv. TR0429_P06 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

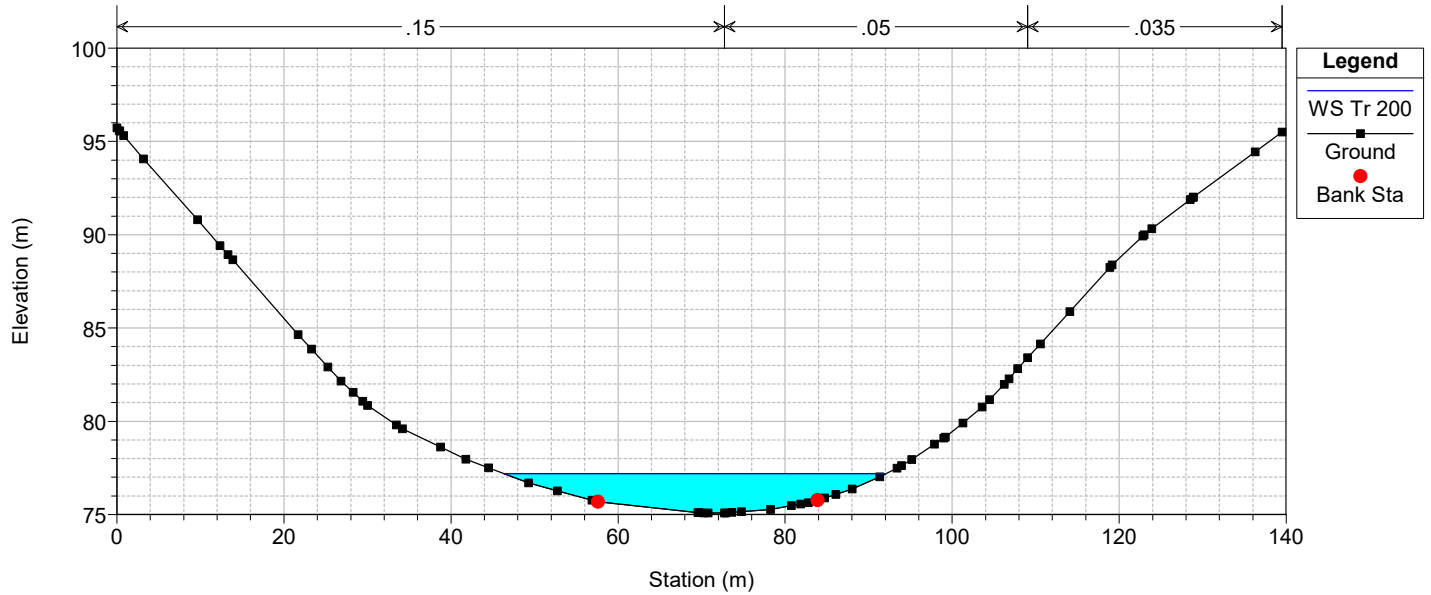
River = Riu_F_Regina Reach = TR0429 RS = 863.3535 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

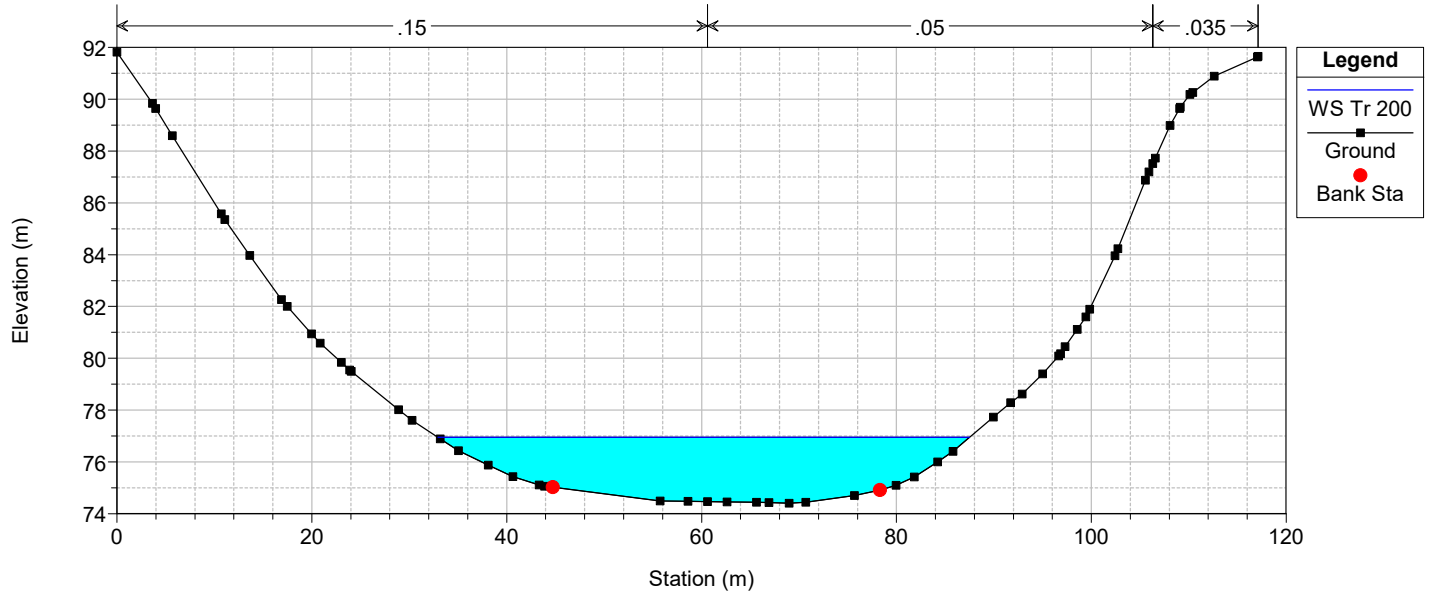
River = Riu_F_Regina Reach = TR0429 RS = 849.2375 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

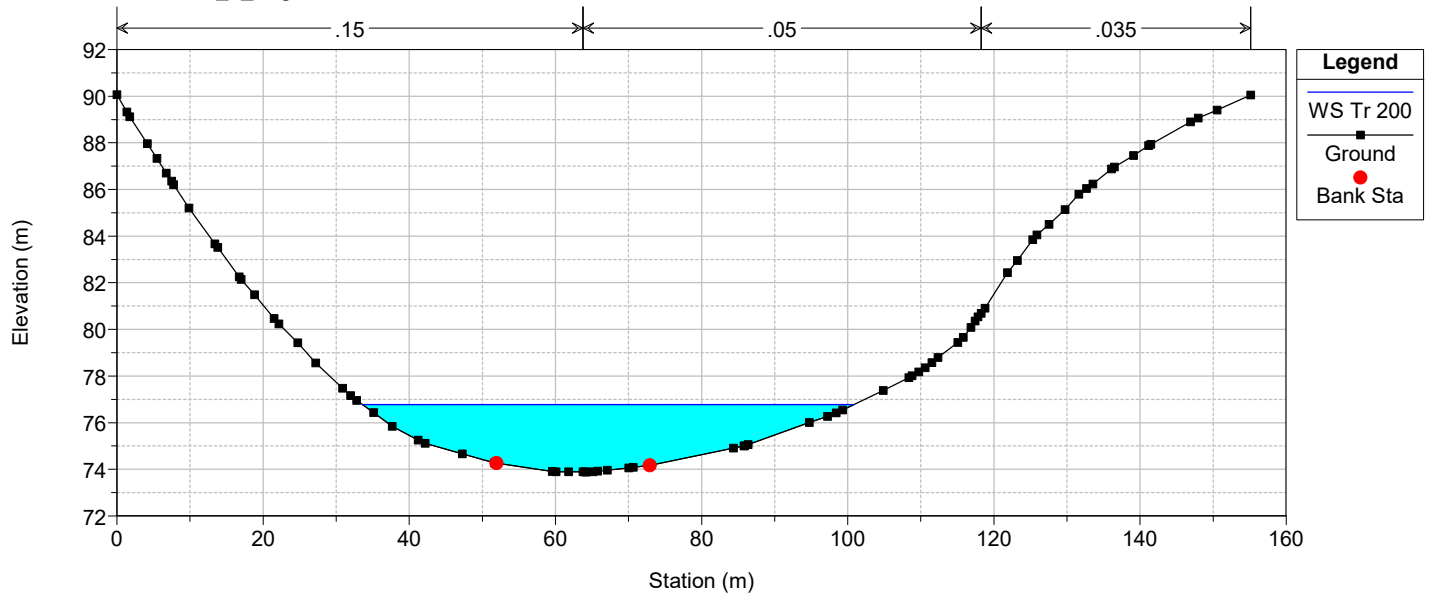
River = Riu_F_Regina Reach = TR0429 RS = 814.2578 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

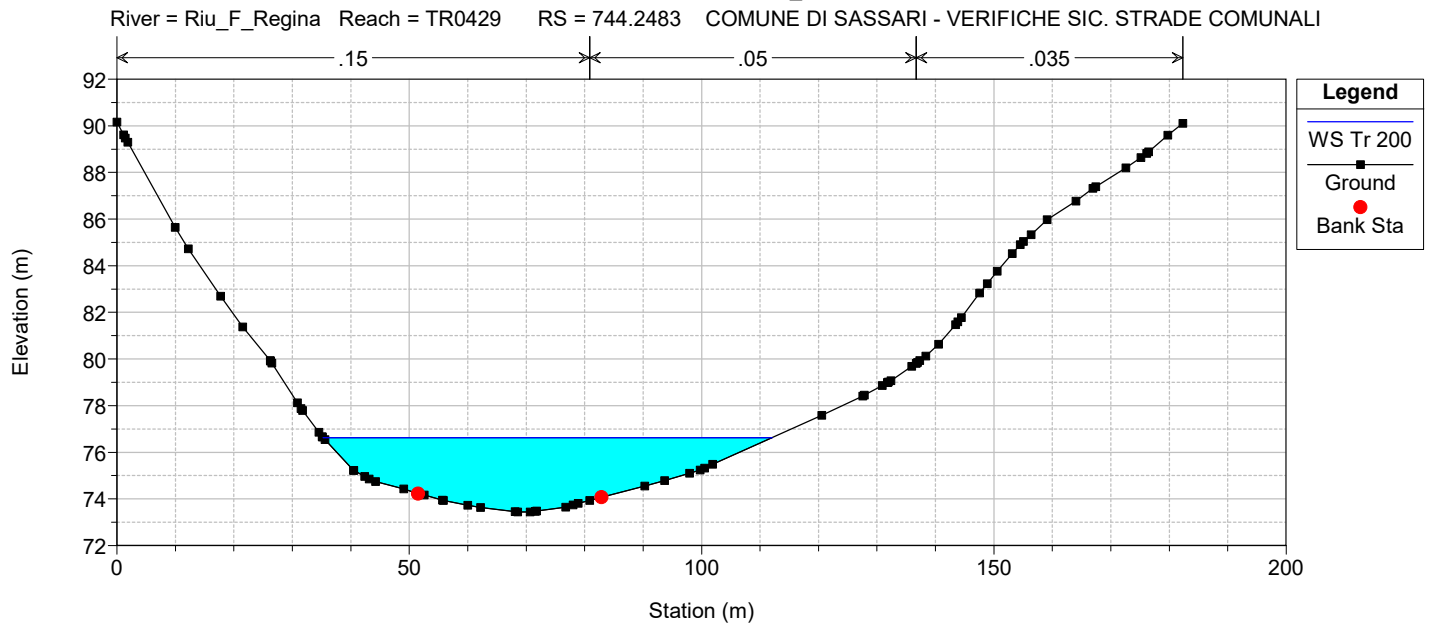
River = Riu_F_Regina Reach = TR0429 RS = 779.2201 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

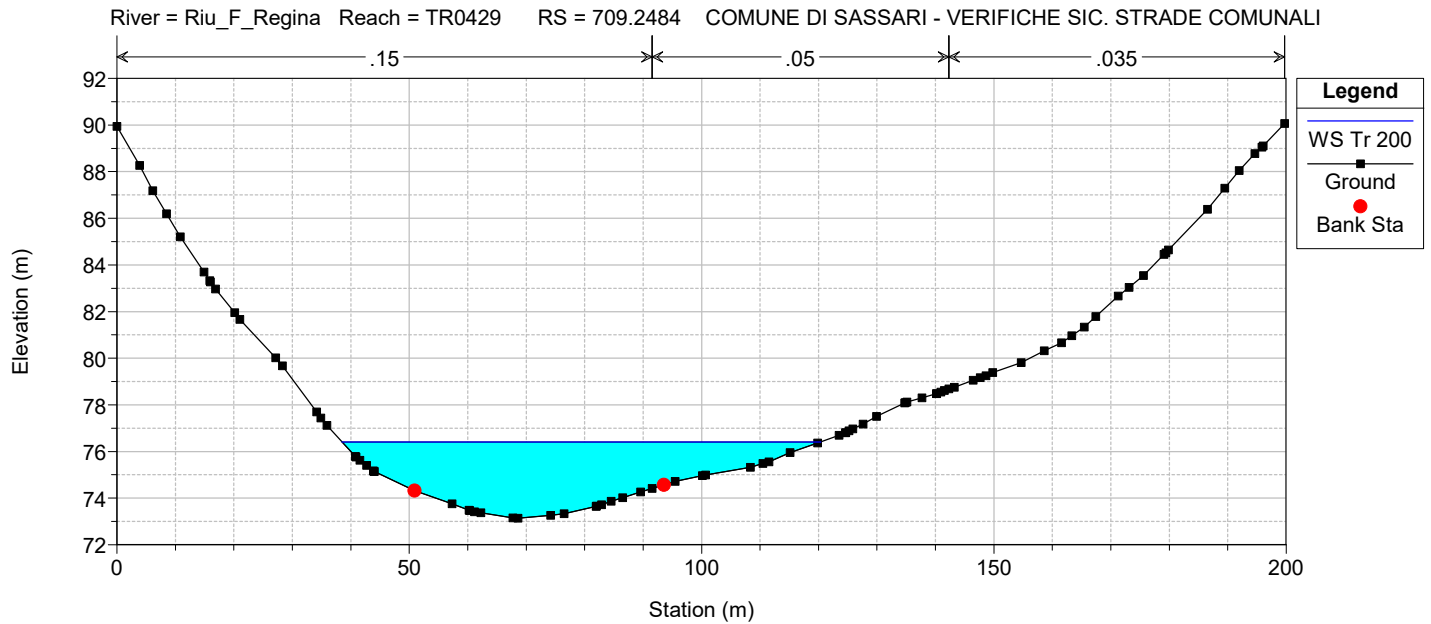
River = Riu_F_Regina Reach = TR0429 RS = 744.2483 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

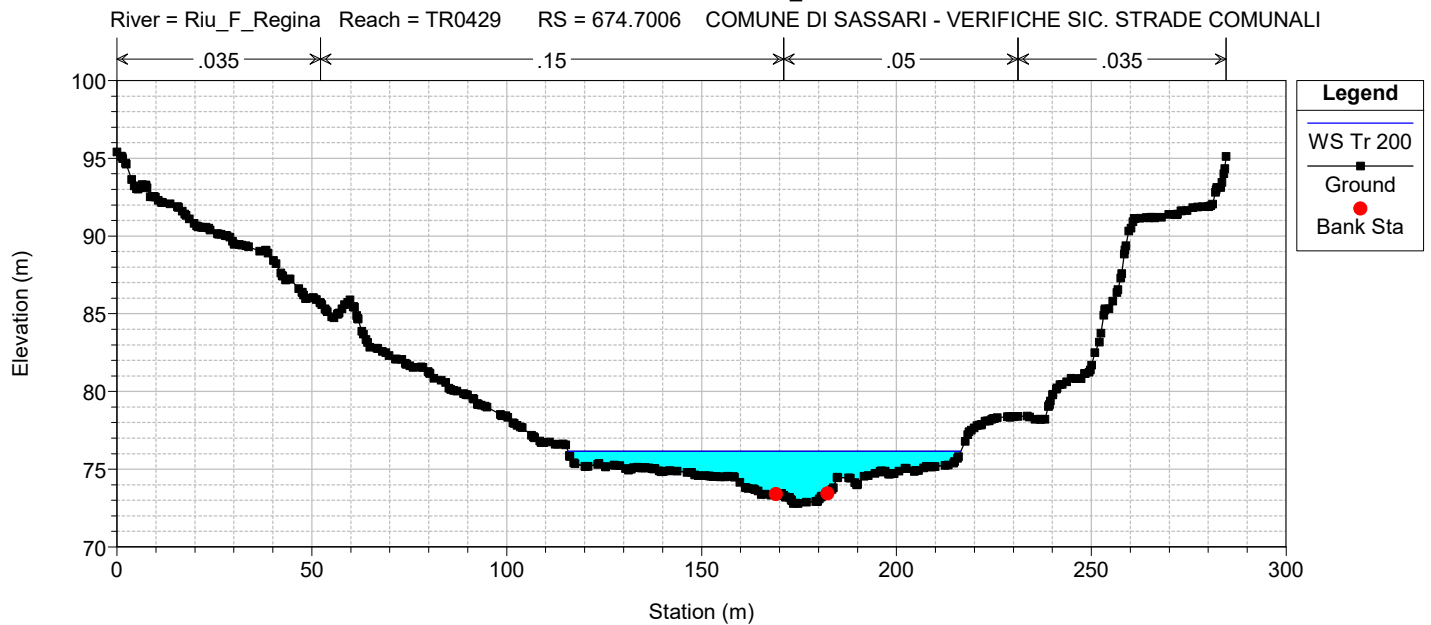
River = Riu_F_Regina Reach = TR0429 RS = 709.2484 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

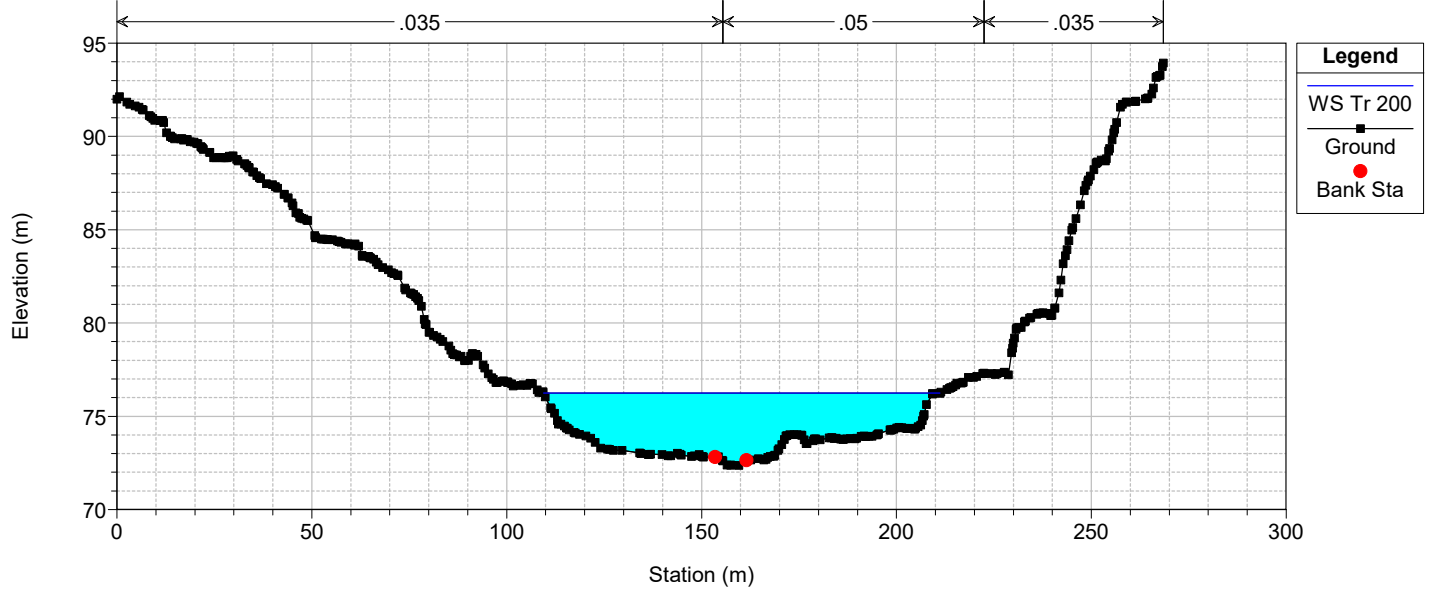
River = Riu_F_Regina Reach = TR0429 RS = 674.7006 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

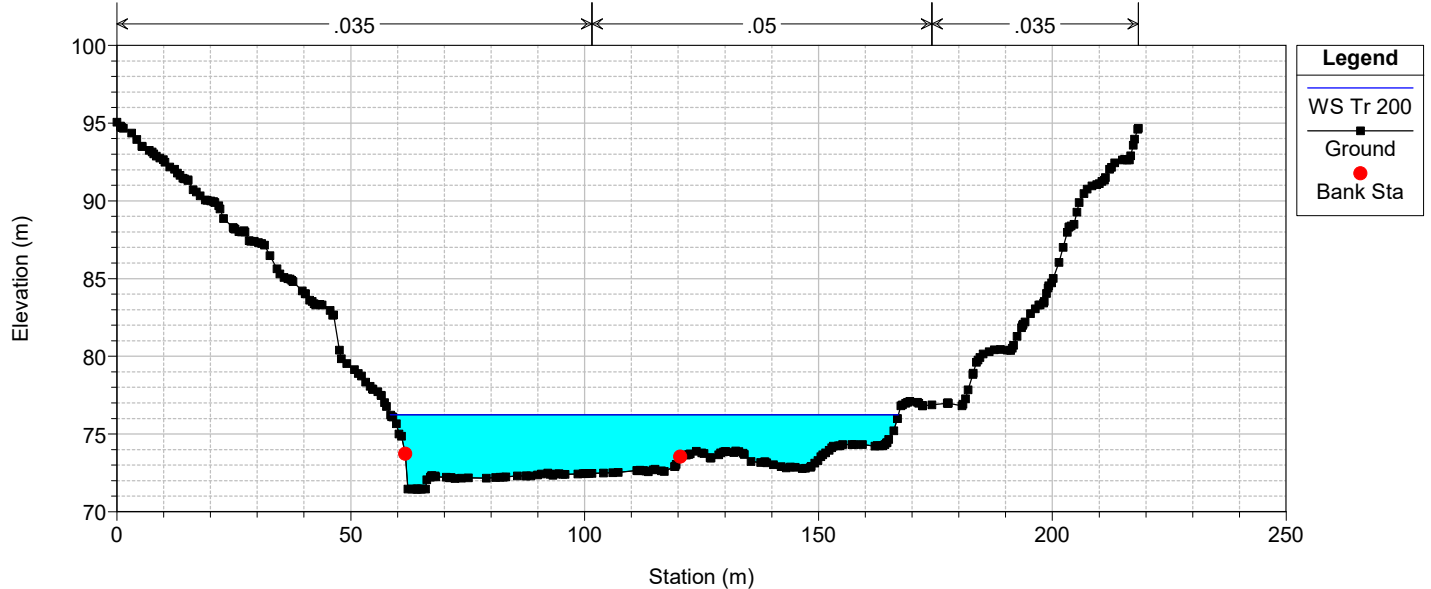
River = Riu_F_Regina Reach = TR0429 RS = 652.0206 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

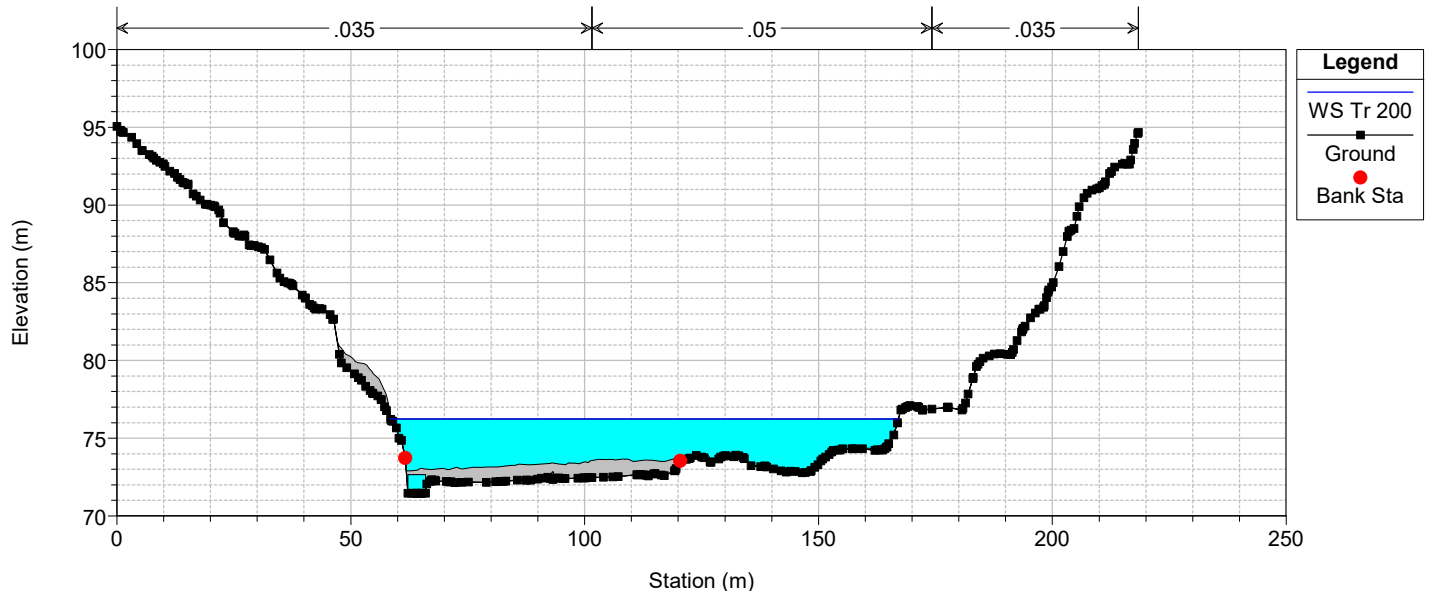
River = Riu_F_Regina Reach = TR0429 RS = 620.5991 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

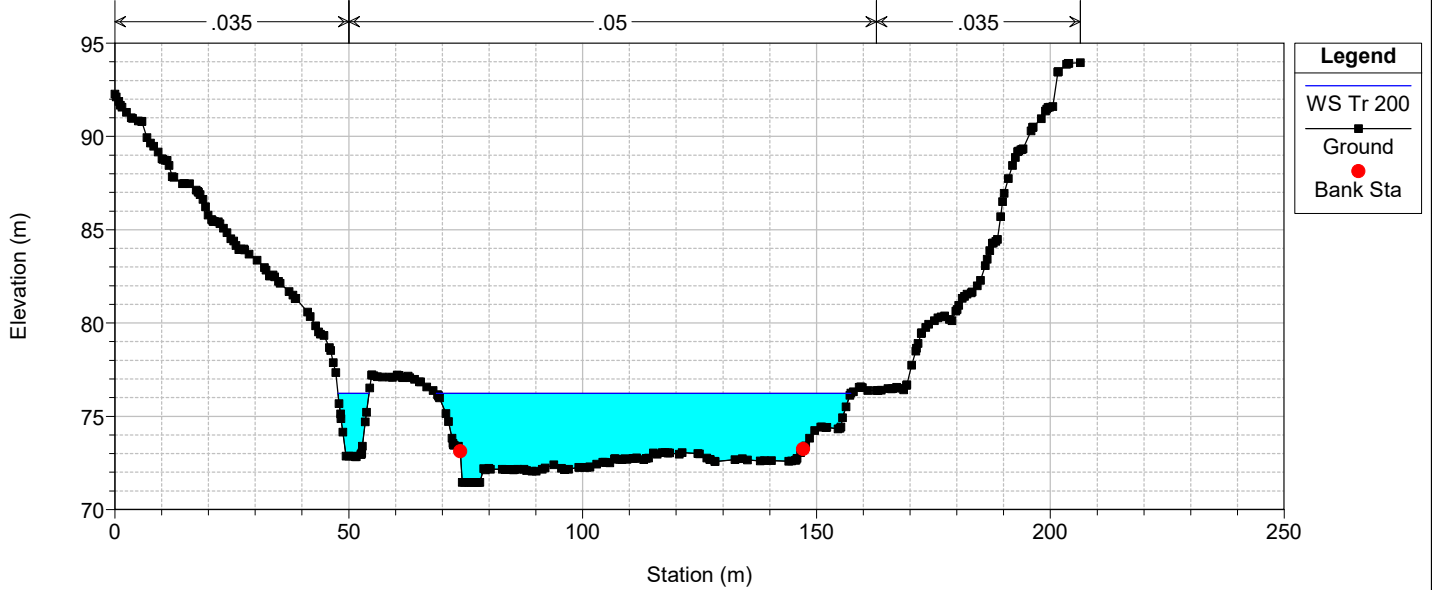
River = Riu_F_Regina Reach = TR0429 RS = 612.2656 Culv TR0429_T03_P04 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

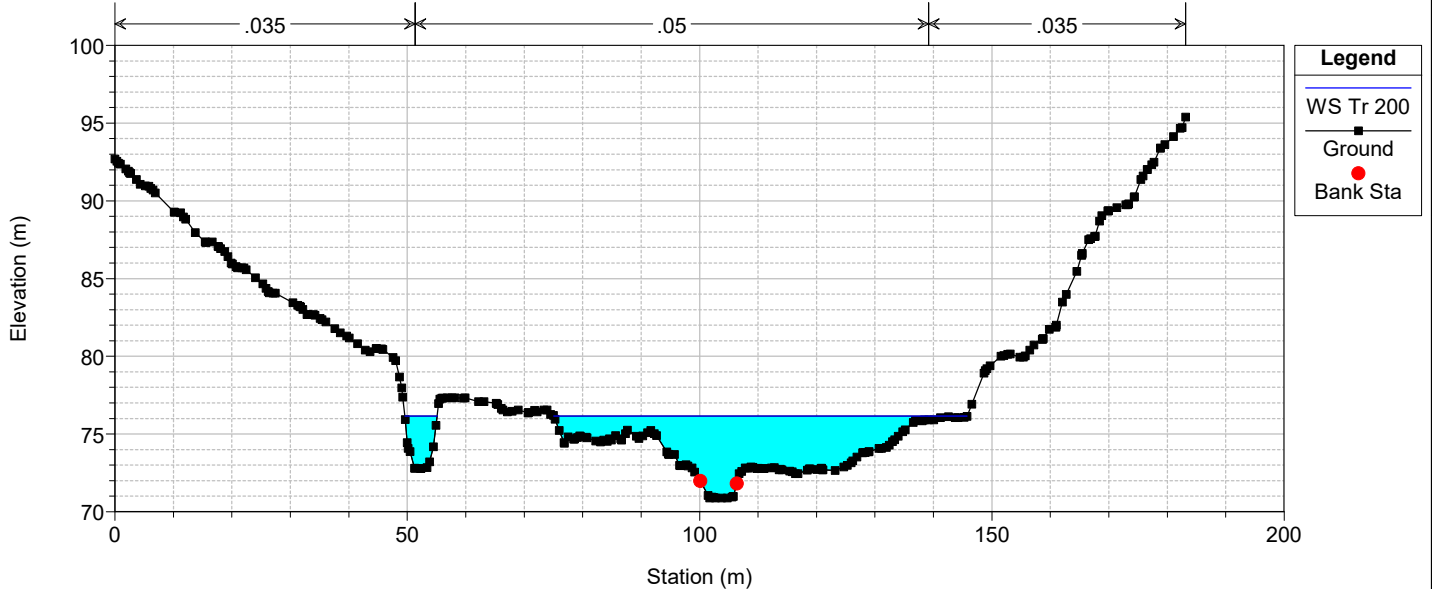
River = Riu_F_Regina Reach = TR0429 RS = 596.757 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

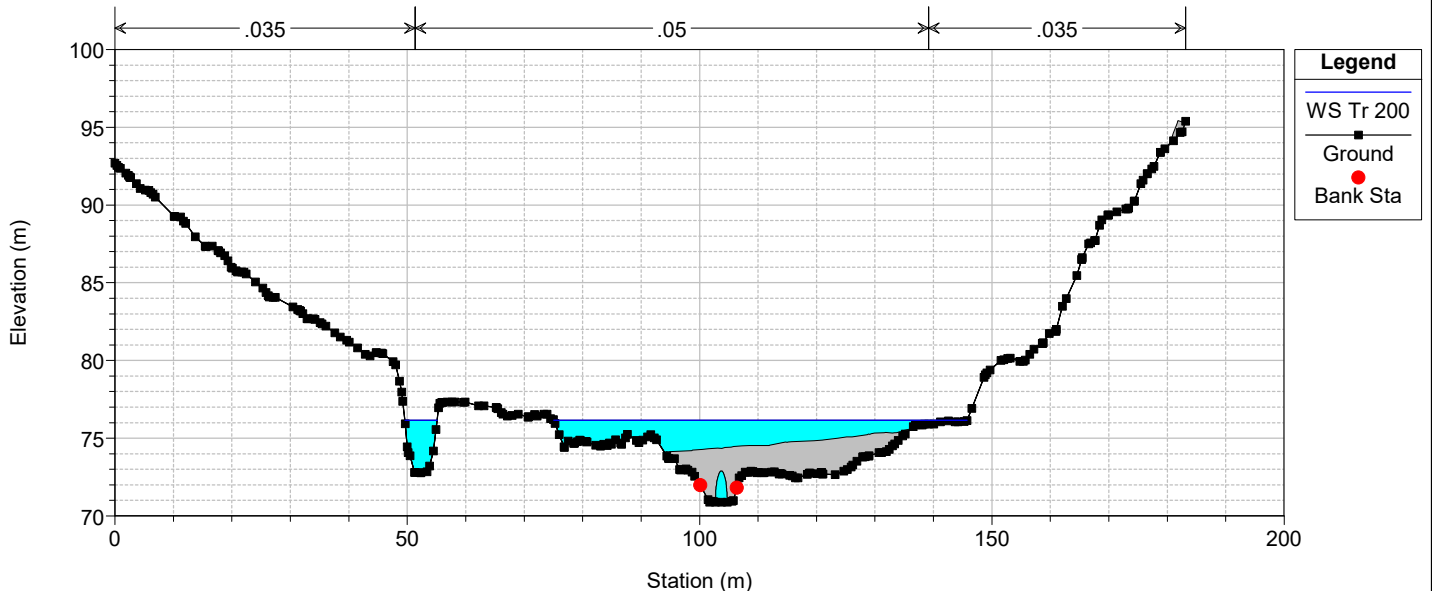
River = Riu_F_Regina Reach = TR0429 RS = 560.2986 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

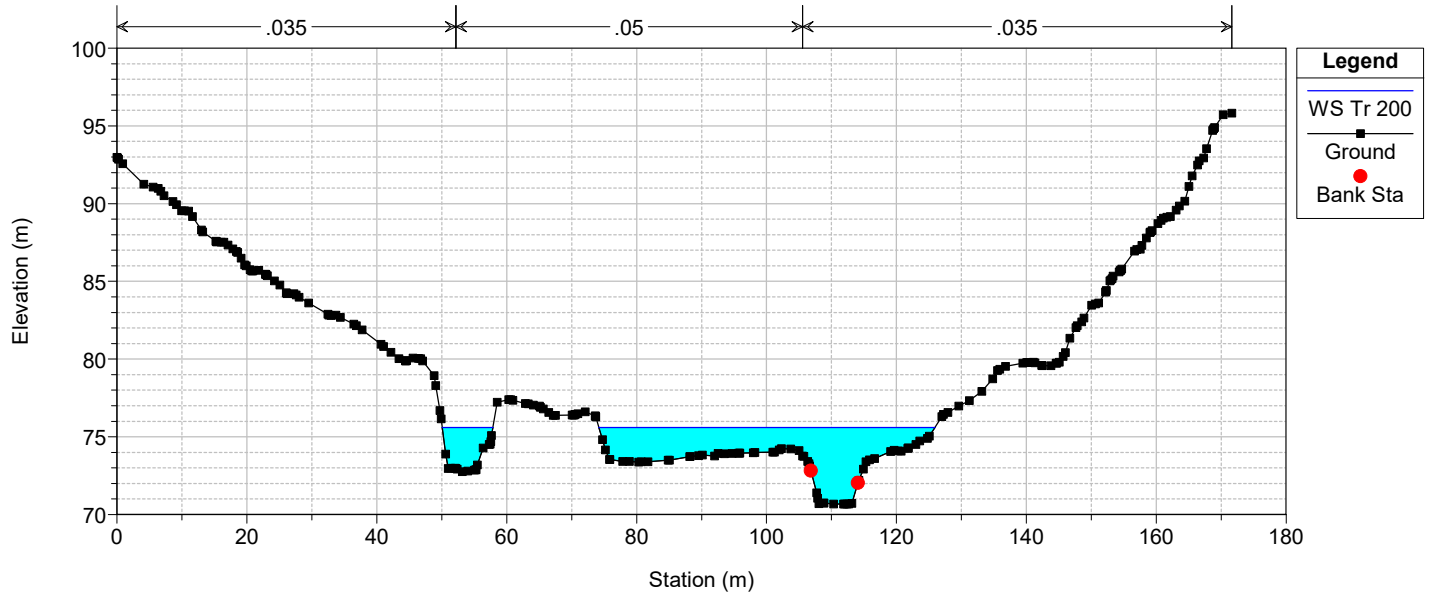
River = Riu_F_Regina Reach = TR0429 RS = 553.1542 Culv SS127bis COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

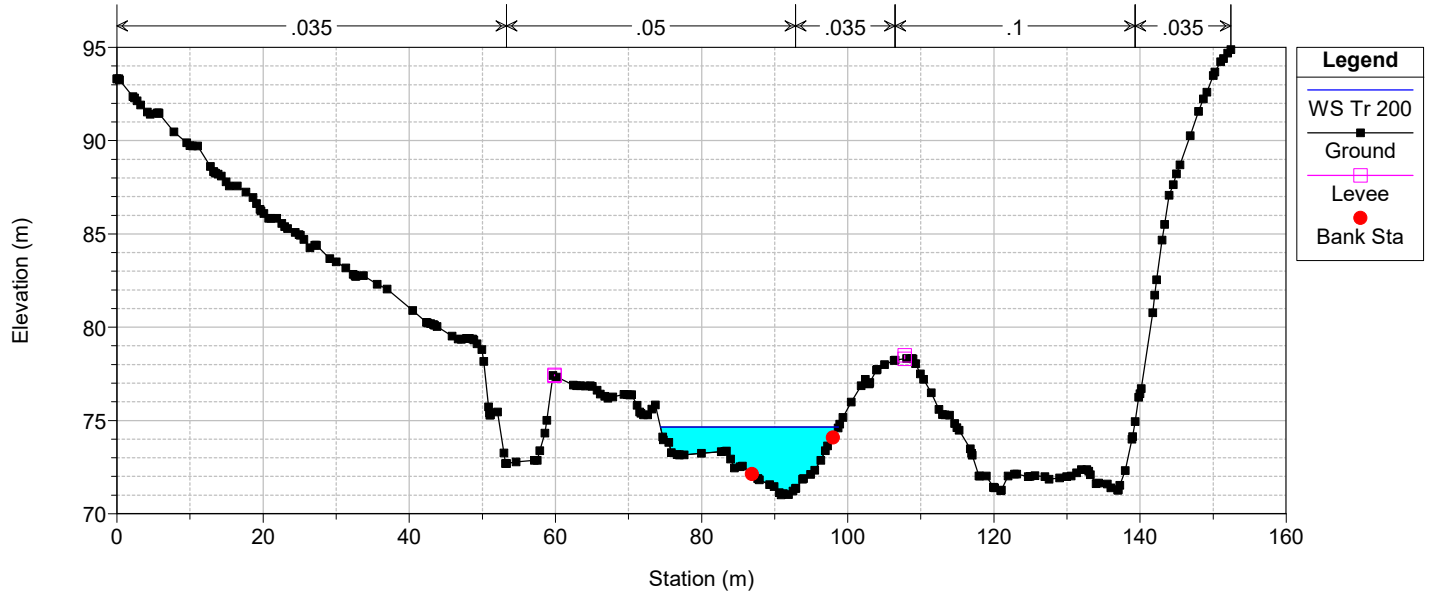
River = Riu_F_Regina Reach = TR0429 RS = 547.5156 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

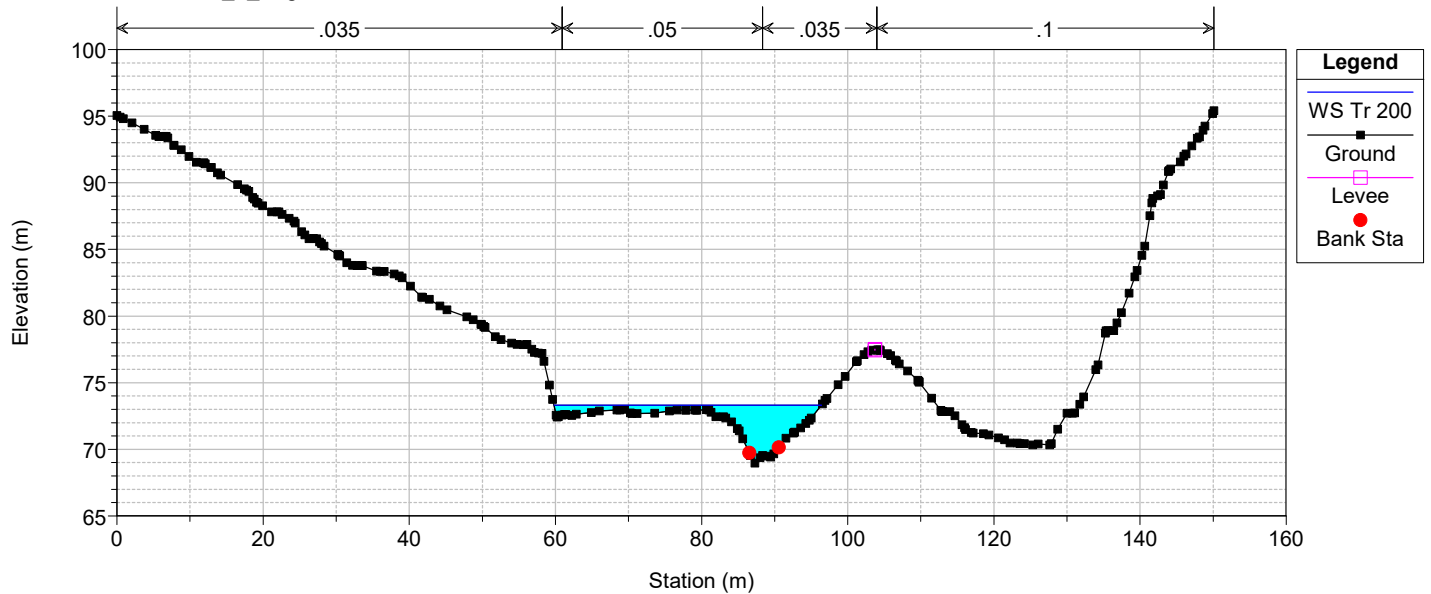
River = Riu_F_Regina Reach = TR0429 RS = 518.6987 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

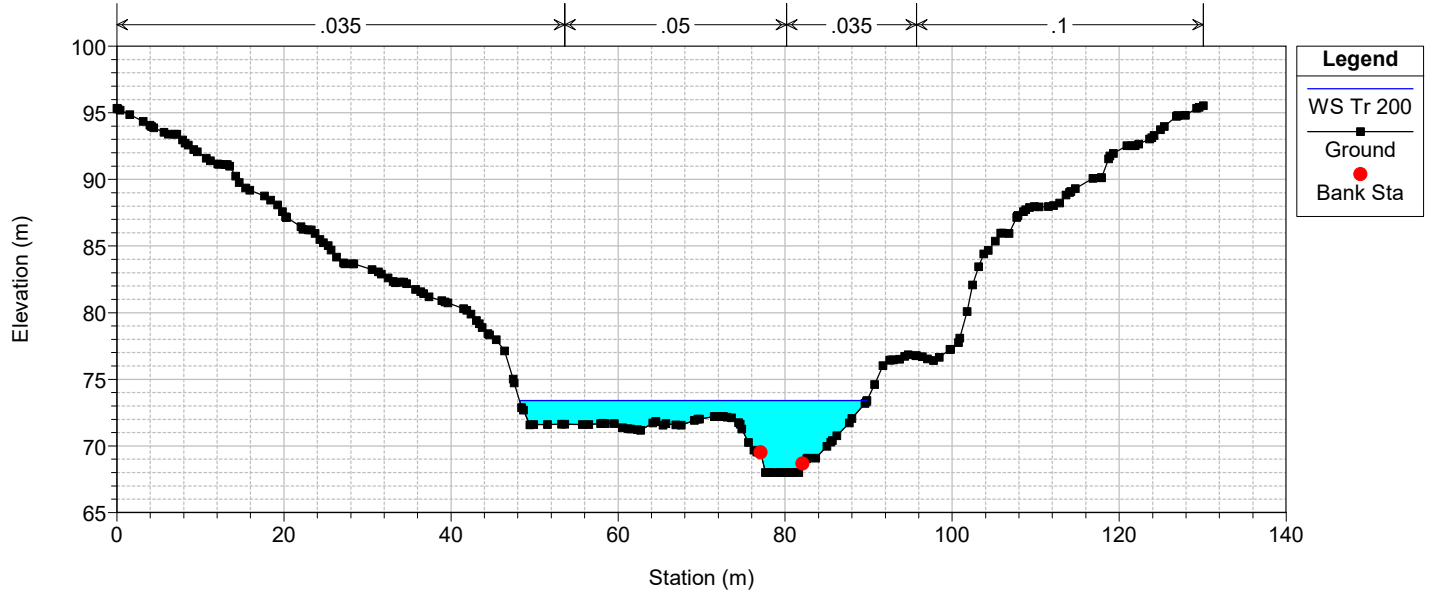
River = Riu_F_Regina Reach = TR0429 RS = 492.411 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

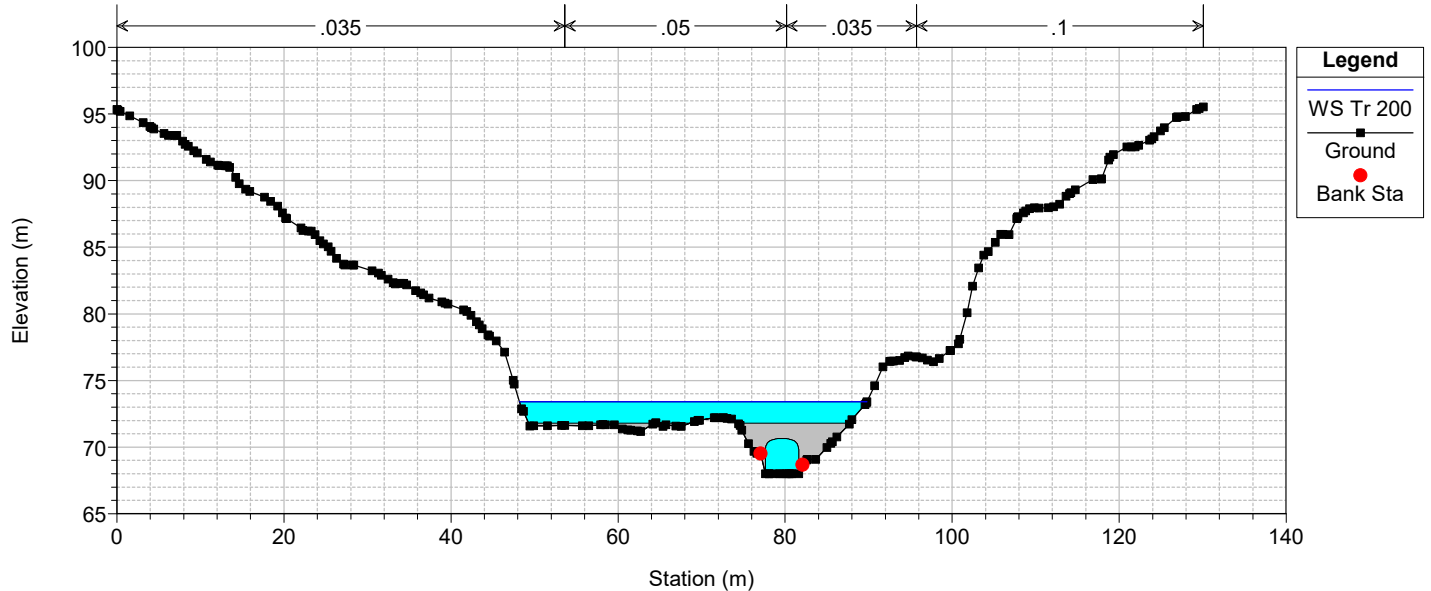
River = Riu_F_Regina Reach = TR0429 RS = 456.3481 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

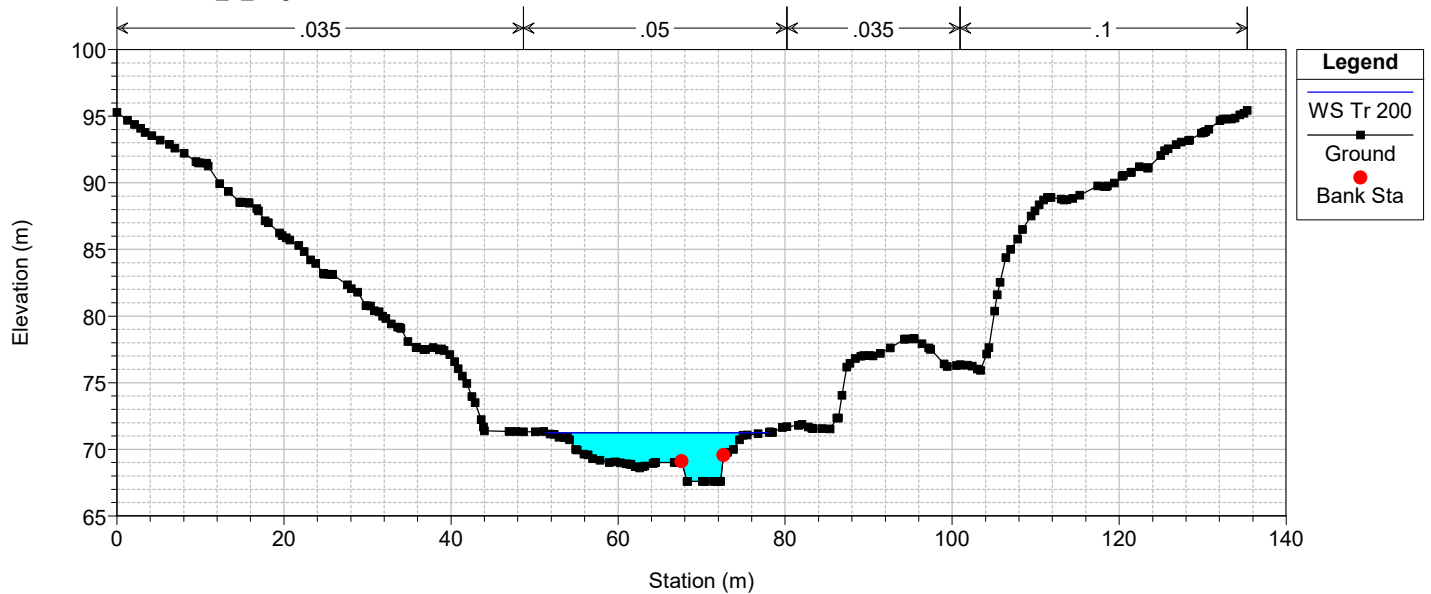
River = Riu_F_Regina Reach = TR0429 RS = 445.6811 Culv. TR0429_P03 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

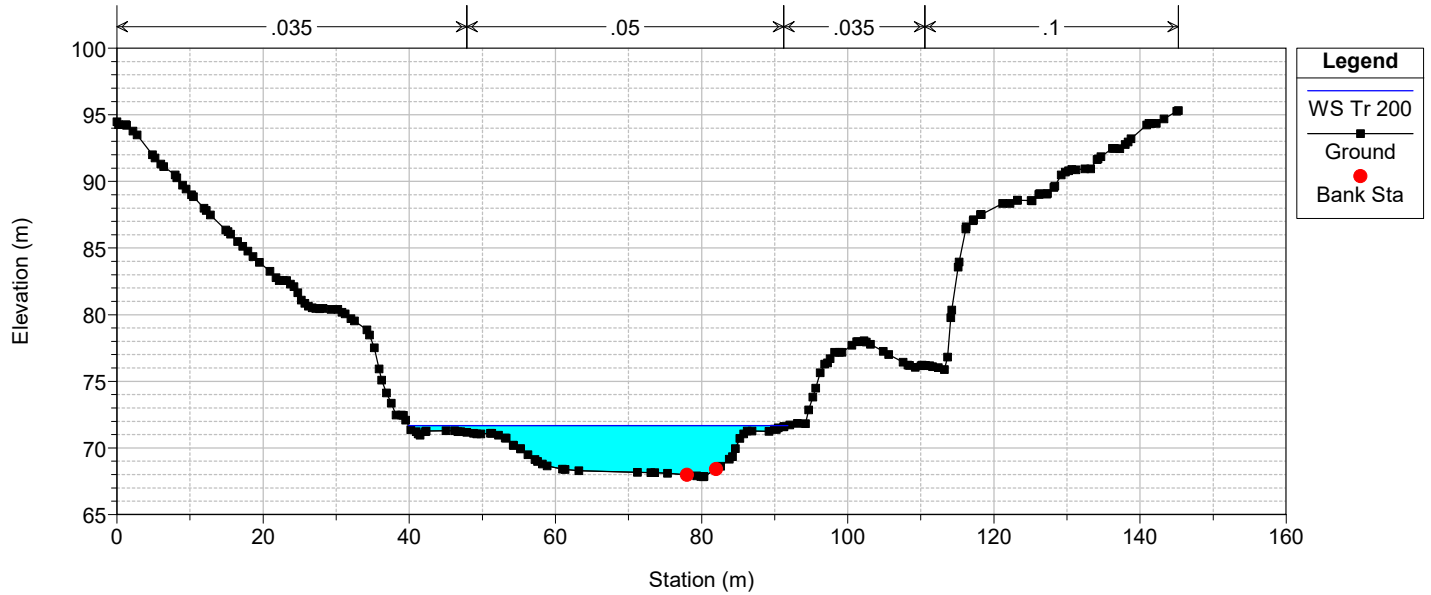
River = Riu_F_Regina Reach = TR0429 RS = 436.0836 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

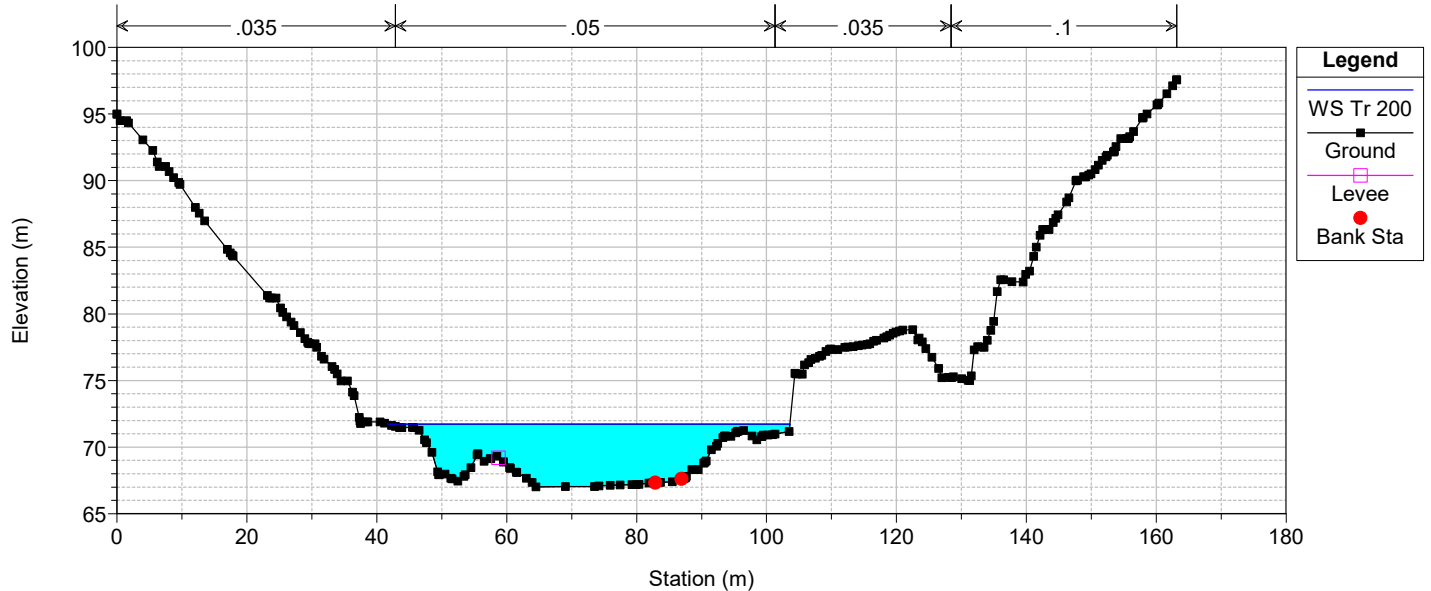
River = Riu_F_Regina Reach = TR0429 RS = 422.4837 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

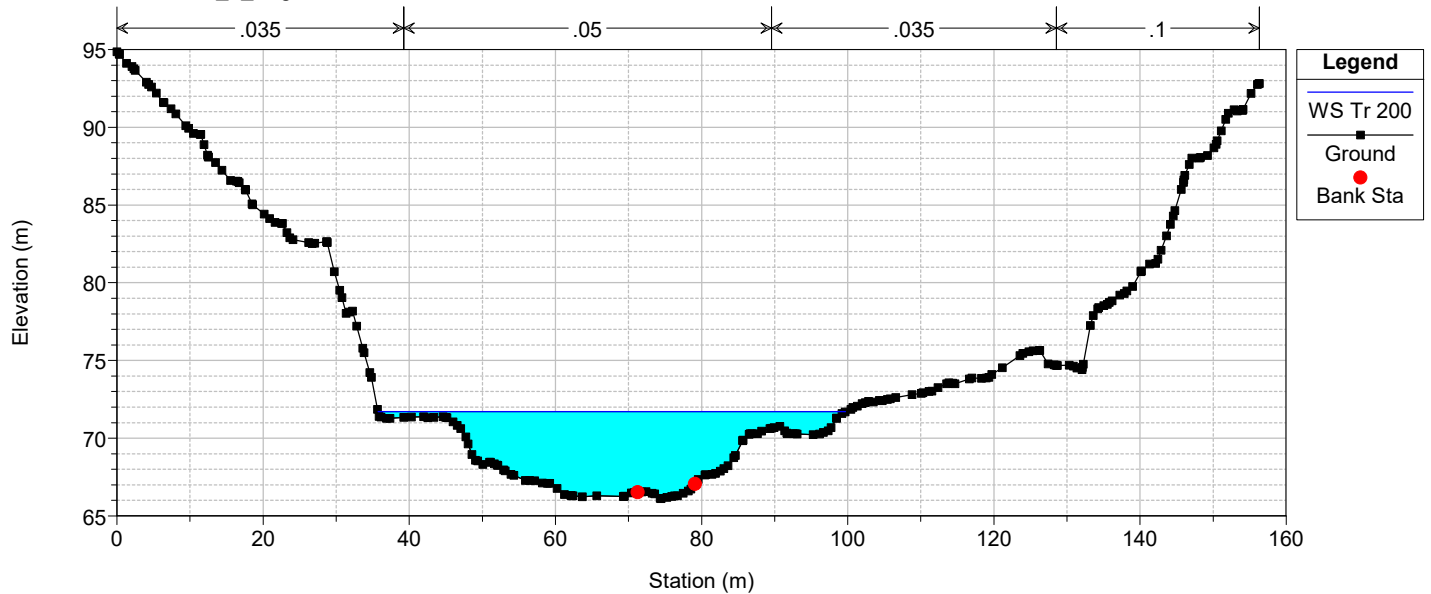
River = Riu_F_Regina Reach = TR0429 RS = 387.6736 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

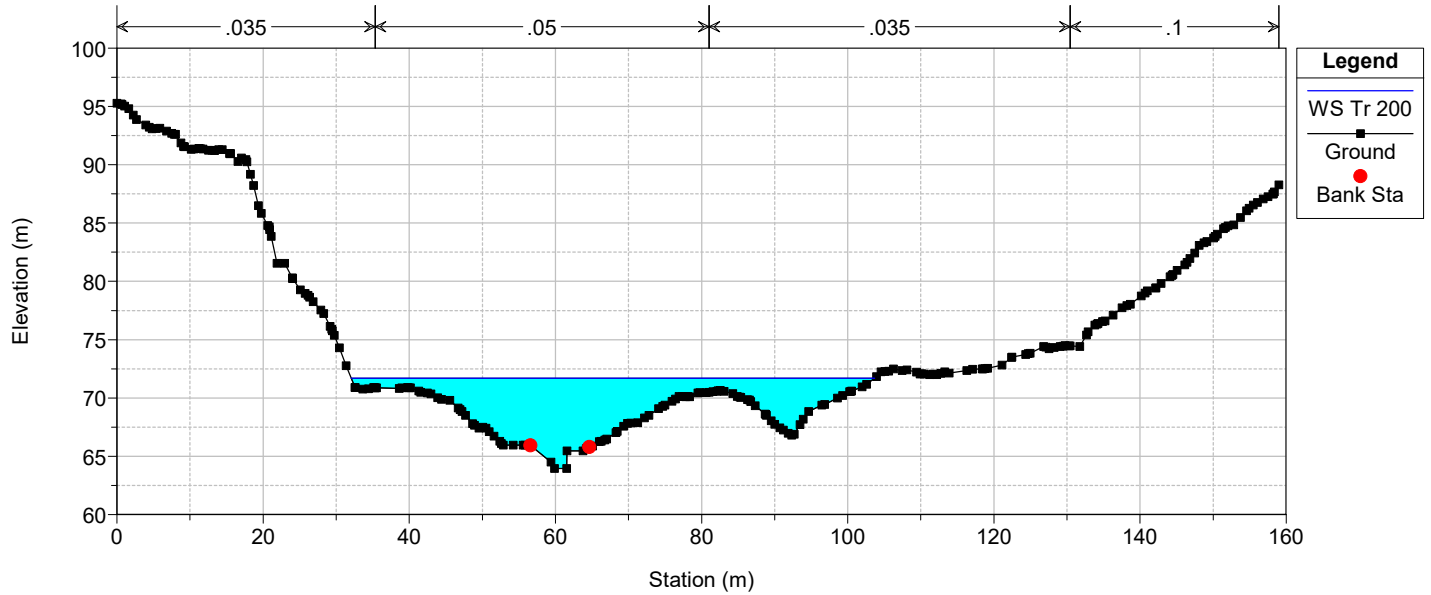
River = Riu_F_Regina Reach = TR0429 RS = 352.4879 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

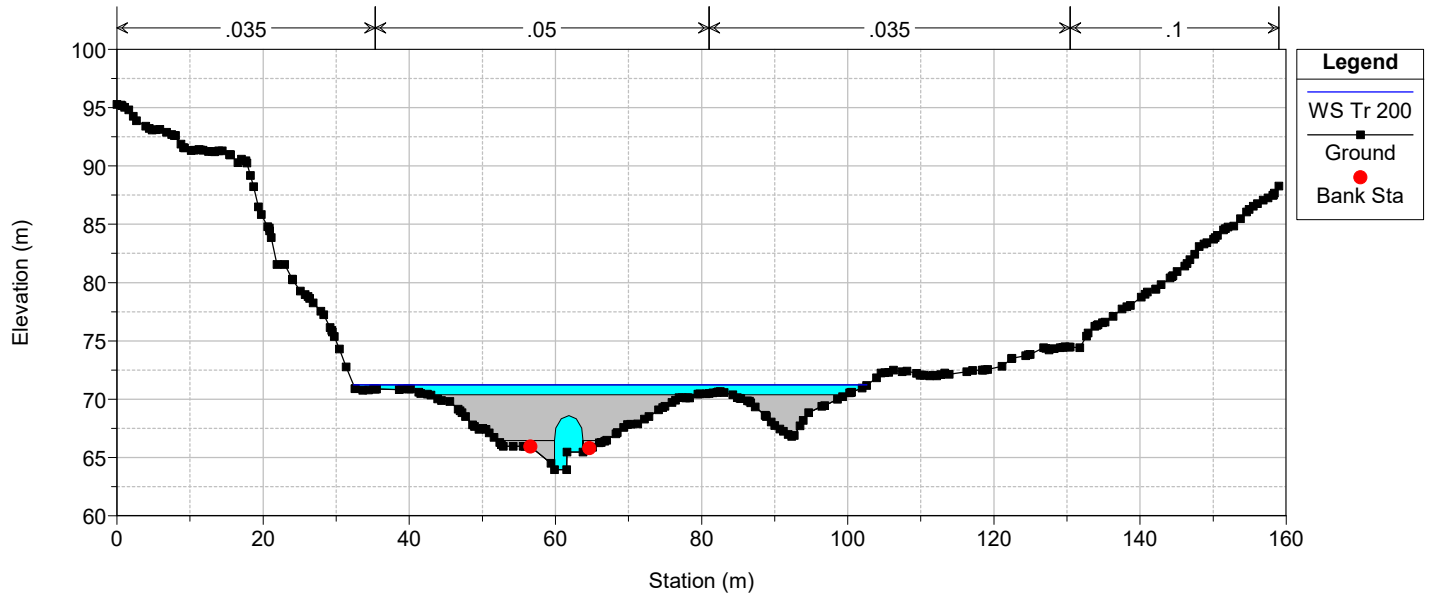
River = Riu_F_Regina Reach = TR0429 RS = 327.5559 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

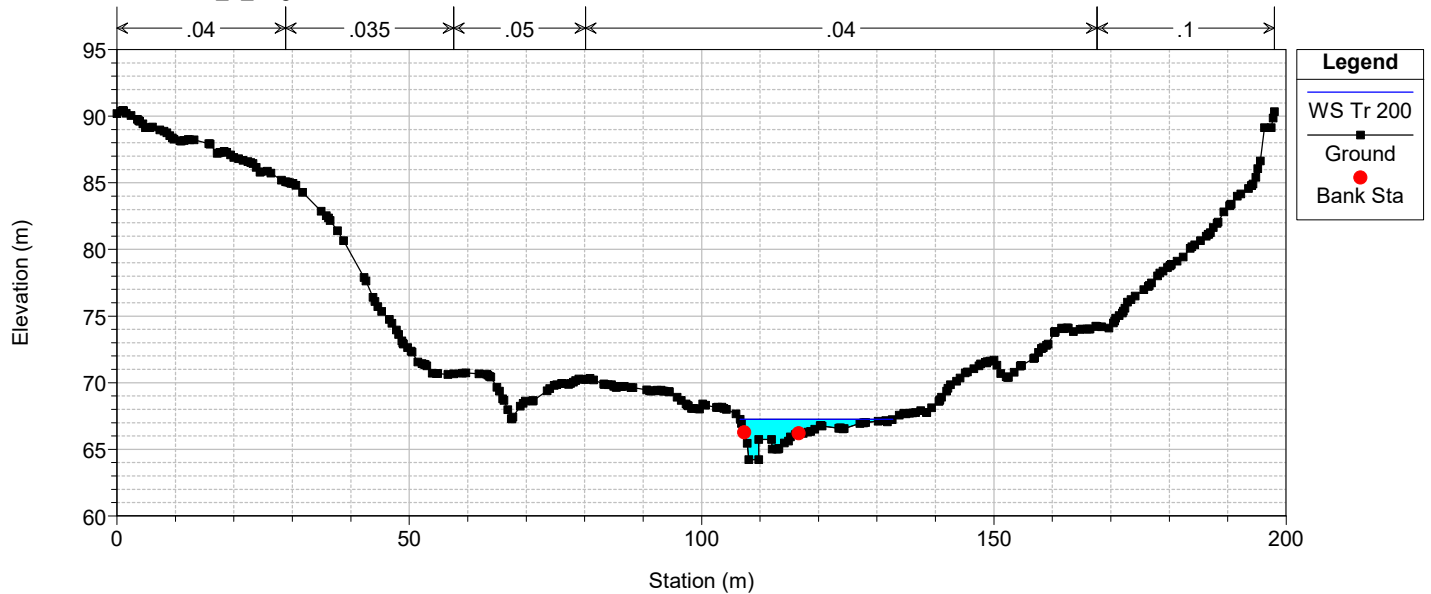
River = Riu_F_Regina Reach = TR0429 RS = 316.3062 BR TR0429_A06 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

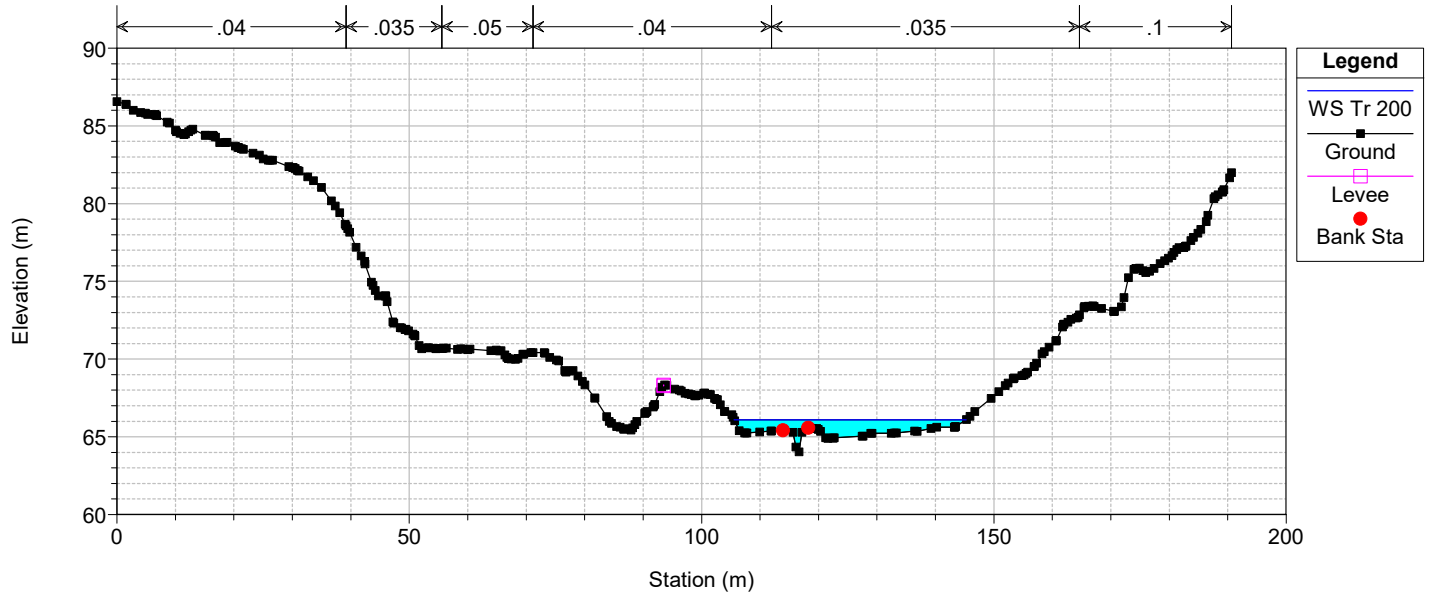
River = Riu_F_Regina Reach = TR0429 RS = 306.9537 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

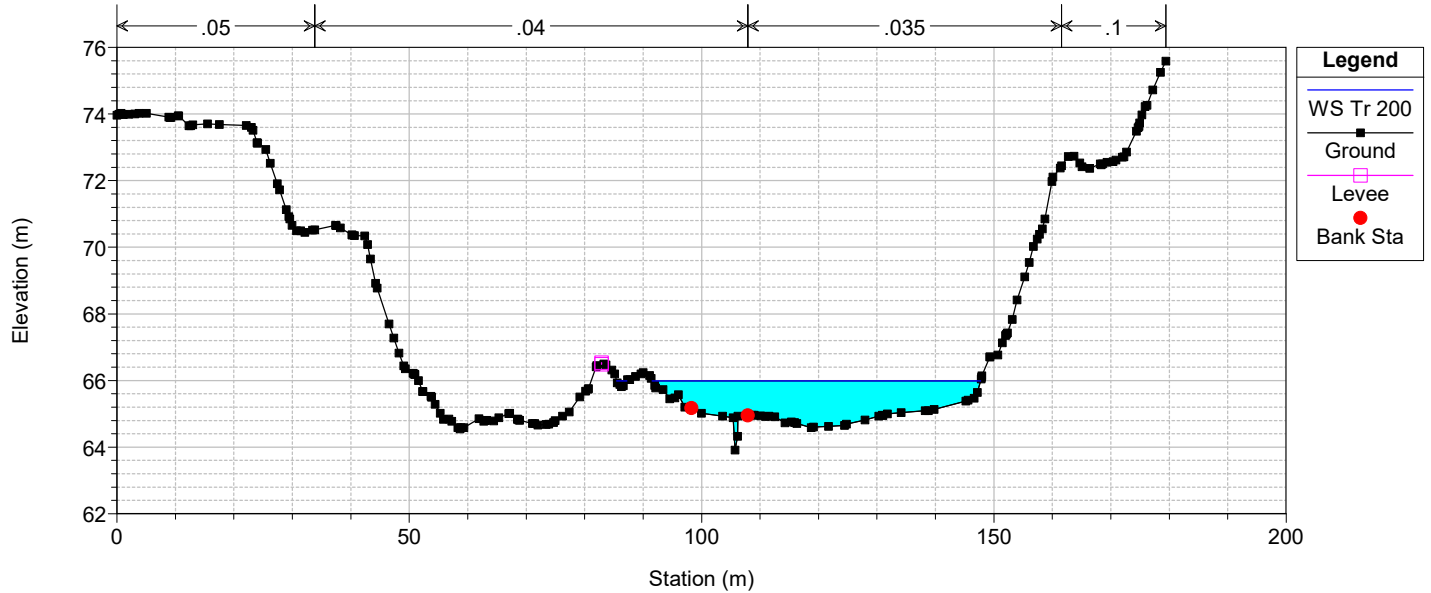
River = Riu_F_Regina Reach = TR0429 RS = 280.3244 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

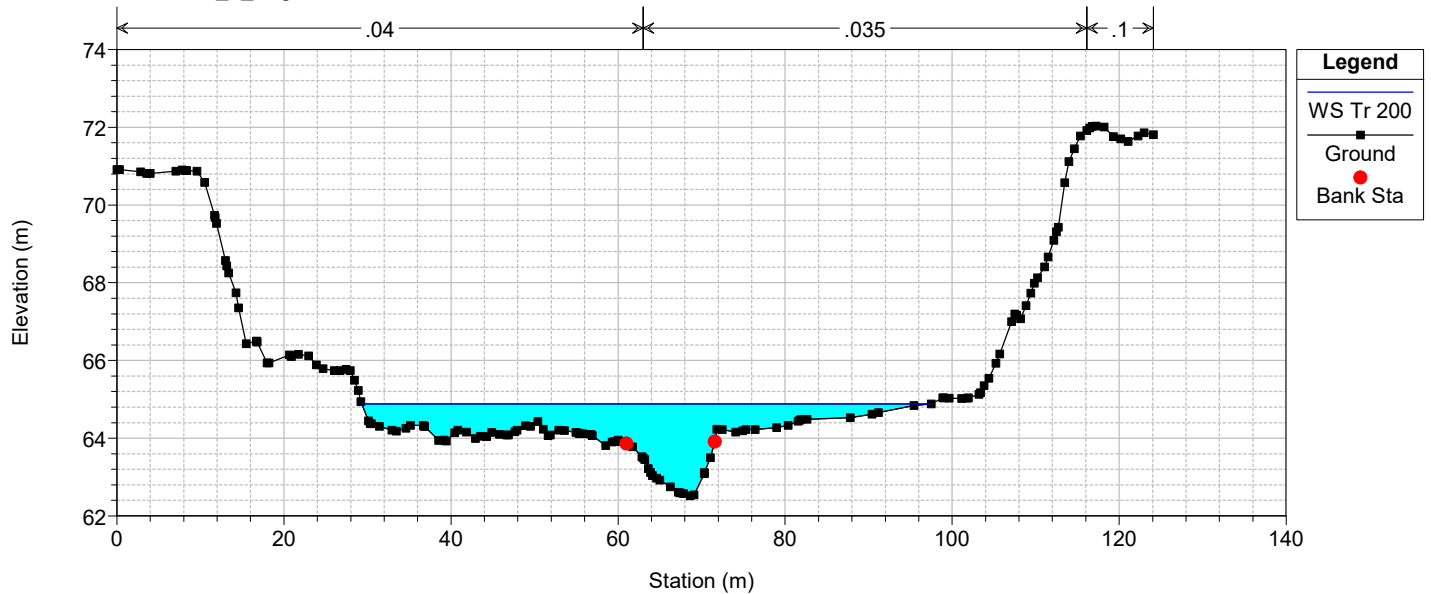
River = Riu_F_Regina Reach = TR0429 RS = 245.433 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

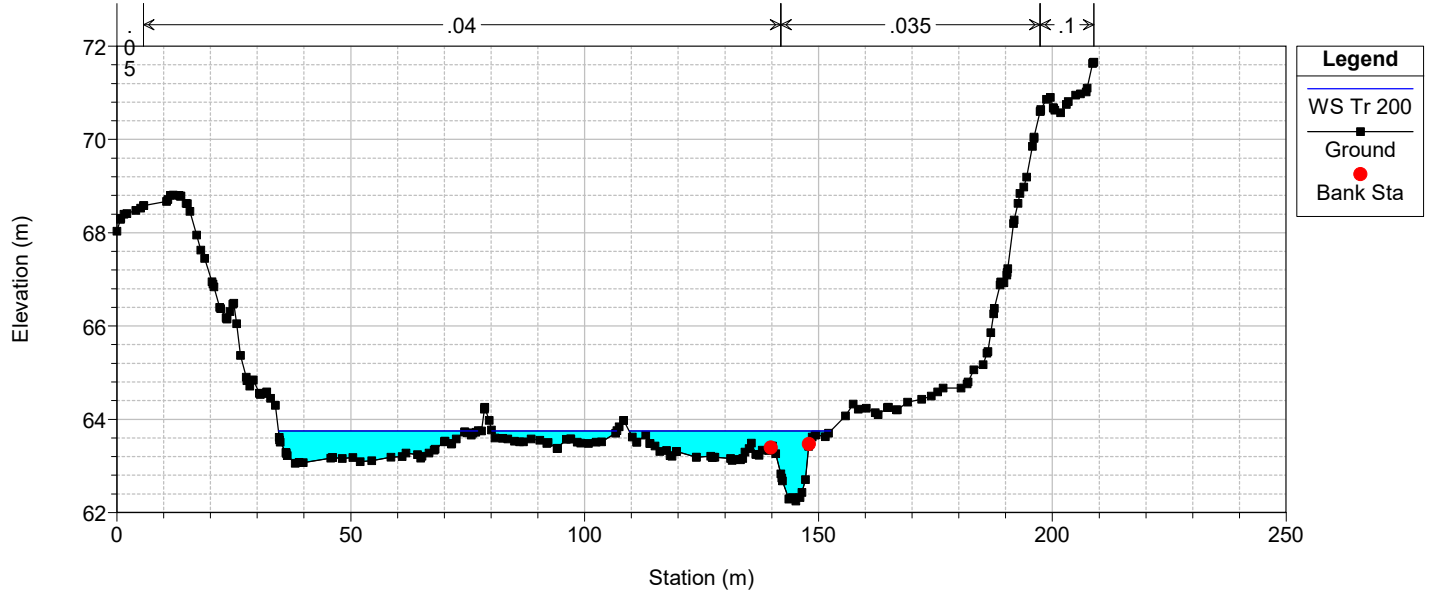
River = Riu_F_Regina Reach = TR0429 RS = 210.1815 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

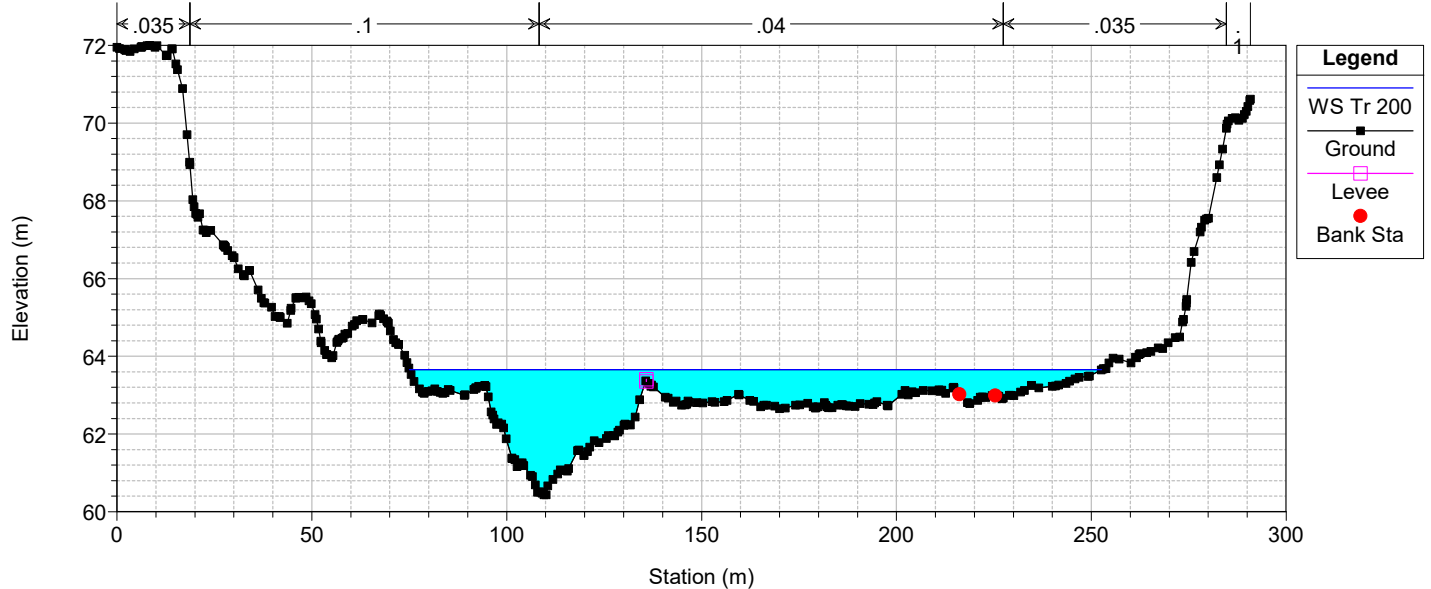
River = Riu_F_Regina Reach = TR0429 RS = 175.1176 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

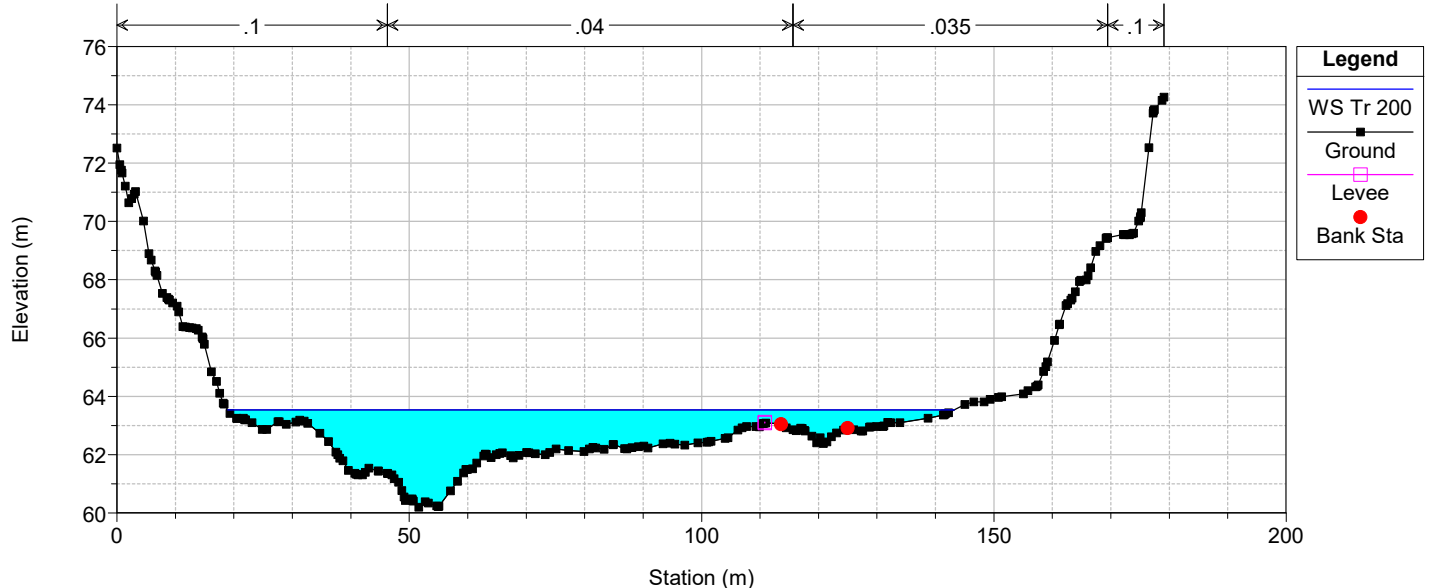
River = Riu_F_Regina Reach = TR0429 RS = 139.9141 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

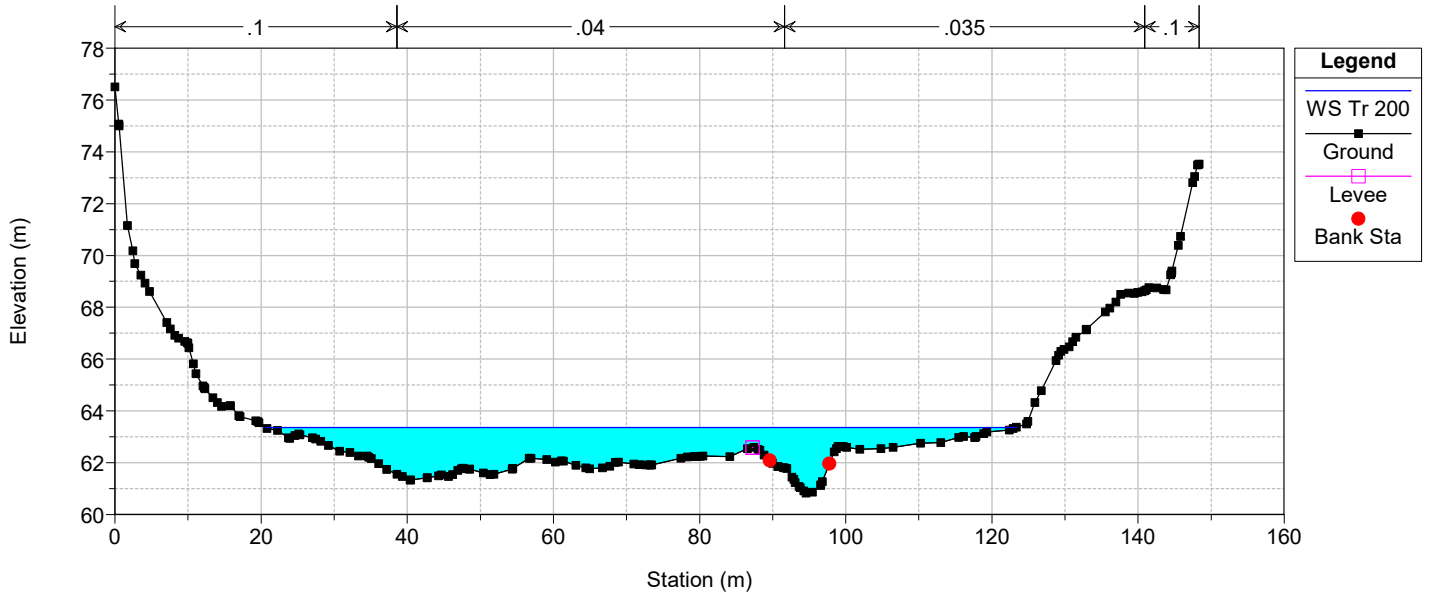
River = Riu_F_Regina Reach = TR0429 RS = 105.1144 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

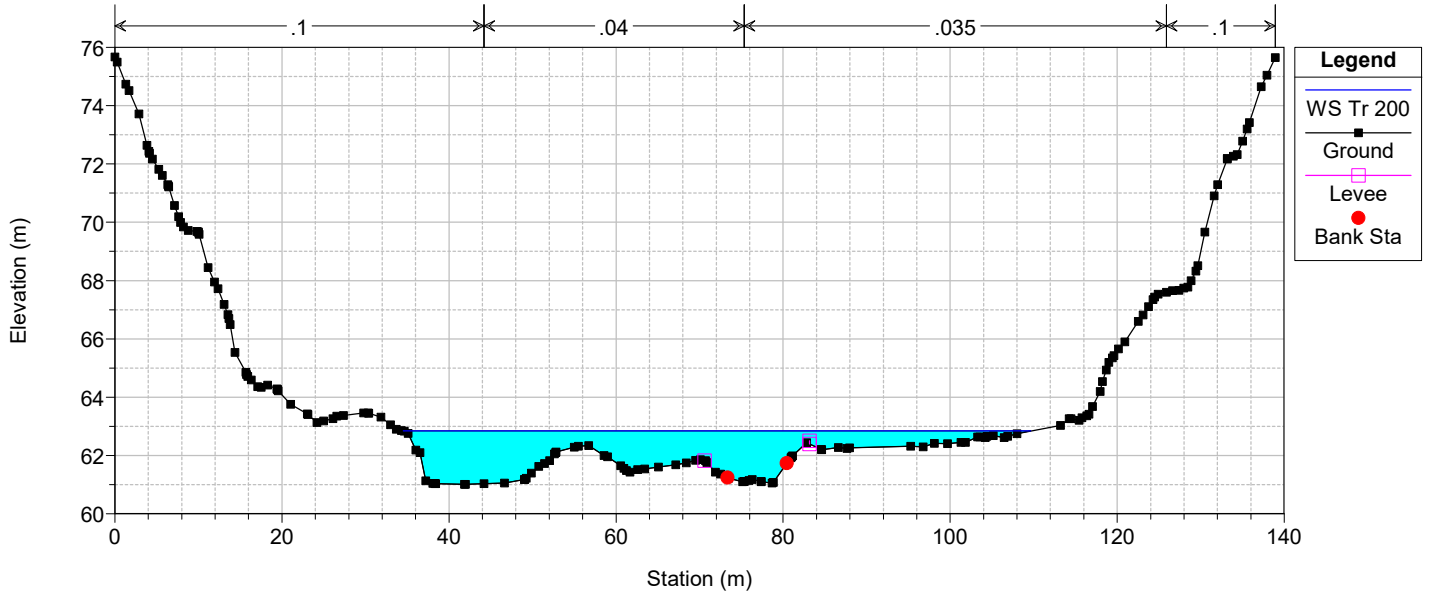
River = Riu_F_Regina Reach = TR0429 RS = 70.13564 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

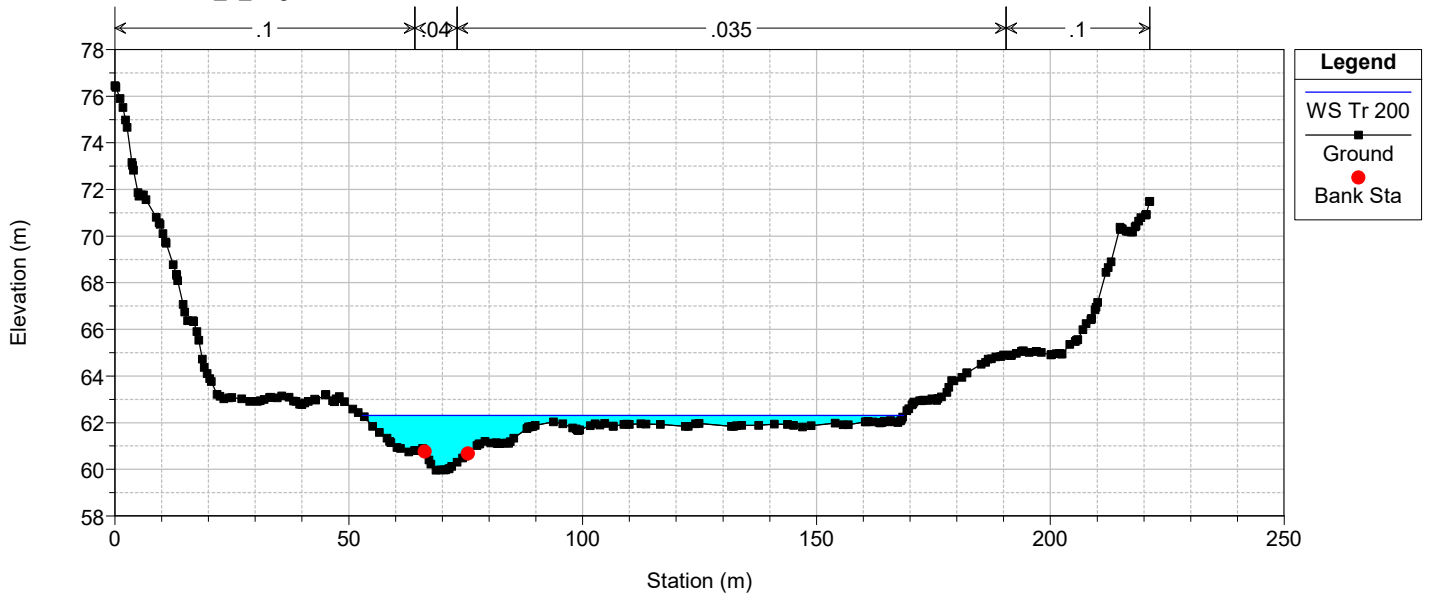
River = Riu_F_Regina Reach = TR0429 RS = 35.23813 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Calamasciu Plan: Calamasciu_ok 11/30/2021

Geom: Calamasciu_ok

River = Riu_F_Regina Reach = TR0429 RS = 0.673686 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Reach	River Sta	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)	
TR0429	5395.248	Tr 200	58.22	139.11	143.70	140.68	143.70	0.000005	0.12	487.54	156.93	0.02
TR0429	5363.499	Tr 200	58.22	138.75	143.70		143.70	0.000004	0.13	505.40	152.51	0.02
TR0429	5328.377	Tr 200	58.22	138.12	143.70		143.70	0.000003	0.11	534.61	136.00	0.02
TR0429	5293.162	Tr 200	58.22	137.92	143.70		143.70	0.000006	0.18	416.27	121.04	0.02
TR0429	5286.138	Tr 200	58.22	137.78	143.70	139.92	143.70	0.000012	0.27	314.26	139.71	0.04
TR0429	5262.816		Culvert									
TR0429	5238.017	Tr 200	58.22	137.27	139.70	139.70	140.04	0.006583	2.99	27.65	49.15	0.76
TR0429	5223.326	Tr 200	58.22	136.87	138.09	138.49	139.72	0.057871	6.67	12.74	33.85	2.39
TR0429	5188.108	Tr 200	58.22	136.48	137.60	137.72	138.02	0.026655	3.67	21.15	48.49	1.36
TR0429	5152.979	Tr 200	58.22	135.78	136.05	136.27	136.84	0.040522	1.55	15.00	48.31	1.32
TR0429	5118.624	Tr 200	58.22	135.44	135.93	135.87	136.11	0.010371	1.18	30.74	58.83	0.71
TR0429	5083.627	Tr 200	58.22	135.10	135.76	135.58	135.84	0.004821	1.27	44.18	81.02	0.55
TR0429	5048.814	Tr 200	58.22	134.98	135.65	135.41	135.71	0.003219	0.93	51.55	89.50	0.45
TR0429	5013.664	Tr 200	58.22	134.76	135.31	135.31	135.52	0.010761	1.17	29.45	72.59	0.67
TR0429	4978.664	Tr 200	58.22	134.17	135.00	134.91	135.15	0.009140	1.66	34.24	68.11	0.68
TR0429	4943.561	Tr 200	58.22	133.70	134.51	134.51	134.73	0.015899	1.80	27.94	63.76	0.79
TR0429	4908.565	Tr 200	58.22	132.01	134.47	133.75	134.49	0.000490	0.76	97.88	98.87	0.18
TR0429	4879	Tr 200	58.22	130.87	134.47	133.20	134.48	0.000249	0.73	122.44	111.03	0.14
TR0429	4868 C69-I452SC0008		Bridge									
TR0429	4860	Tr 200	58.22	130.55	134.47		134.47	0.000100	0.44	163.96	105.50	0.08
TR0429	4857.115	Tr 200	58.22	130.38	134.47	132.72	134.47	0.000098	0.45	141.72	72.43	0.08
TR0429	4849.11		Culvert									
TR0429	4843.136	Tr 200	58.22	130.32	133.38	133.38	133.60	0.000716	2.77	49.52	58.02	0.53
TR0429	4804.068	Tr 200	58.22	128.83	130.75	130.84	133.30	0.010917	7.22	9.60	27.44	1.93
TR0429	4768.796	Tr 200	77.02	128.46	129.76	129.03	129.77	0.000059	0.51	174.66	223.86	0.15
TR0429	4733.664	Tr 200	77.02	128.49	129.76		129.77	0.000075	0.48	170.56	228.92	0.17
TR0429	4695.79	Tr 200	77.02	127.99	129.75		129.76	0.000037	0.49	204.16	237.40	0.13
TR0429	4668.34	Tr 200	77.02	128.03	129.75		129.76	0.000027	0.41	206.89	184.50	0.11
TR0429	4632.78	Tr 200	77.02	127.89	129.76		129.76	0.000015	0.32	286.29	252.65	0.08
TR0429	4596.563	Tr 200	77.02	128.02	129.76	129.31	129.76	0.000006	0.08	392.81	253.80	0.02
TR0429	4560.91	Tr 200	77.02	127.53	129.76	128.67	129.76	0.000004	0.07	454.60	235.73	0.02
TR0429	4524.7	Tr 200	77.02	127.13	129.76	128.29	129.76	0.000005	0.10	361.46	164.45	0.02
TR0429	4483.87	Tr 200	77.02	126.36	129.76	127.88	129.76	0.000007	0.31	355.05	163.99	0.06
TR0429	4476.708		Culvert									
TR0429	4470.825	Tr 200	77.02	126.12	127.29	127.29	127.59	0.014979	2.96	32.88	51.71	0.96
TR0429	4444.248	Tr 200	77.02	125.83	127.05	126.87	127.24	0.007615	2.20	41.14	52.57	0.70
TR0429	4409.721	Tr 200	77.85	125.46	127.09	126.55	127.12	0.000949	0.93	101.43	111.78	0.26
TR0429	4374.171	Tr 200	77.85	125.12	127.02	126.39	127.08	0.001530	1.27	72.33	62.39	0.32
TR0429	4339.51	Tr 200	77.85	125.39	127.01	126.49	127.03	0.000632	0.77	115.87	115.34	0.20
TR0429	4316.249	Tr 200	77.85	124.93	126.98	126.62	127.01	0.000900	0.93	106.41	134.53	0.24
TR0429	4309.188		Culvert									
TR0429	4303.12	Tr 200	77.85	124.57	126.37	126.37	126.63	0.006940	2.21	37.56	76.80	0.61
TR0429	4269.413	Tr 200	77.85	124.21	125.66	125.66	125.82	0.003232	1.40	47.49	115.45	0.43
TR0429	4235.354	Tr 200	77.85	123.87	124.67	124.92	125.46	0.061784	4.55	21.02	62.10	1.83
TR0429	4199.87	Tr 200	77.85	124.21	124.66	124.66	124.90	0.013942	1.41	36.33	78.91	0.77
TR0429	4164.408	Tr 200	77.85	123.04	124.02	124.07	124.29	0.021670	3.18	35.47	86.32	1.12
TR0429	4129.718	Tr 200	77.85	122.73	123.85	123.61	123.93	0.003904	1.32	63.39	115.93	0.47
TR0429	4094.824	Tr 200	77.85	122.30	123.79		123.83	0.001572	0.80	85.15	132.96	0.28
TR0429	4059.709	Tr 200	77.85	121.68	123.79		123.81	0.000244	0.51	158.39	142.06	0.13
TR0429	4029.629	Tr 200	77.85	121.28	123.79	122.43	123.80	0.000103	0.44	218.87	159.22	0.09
TR0429	4022.042		Culvert									
TR0429	4015.988	Tr 200	77.85	121.08	122.42	122.42	122.58	0.010957	2.83	49.41	131.13	0.82
TR0429	3988.827	Tr 200	77.85	120.61	122.24	121.82	122.29	0.002165	0.98	81.64	116.84	0.33
TR0429	3953.617	Tr 200	77.15	120.42	122.19		122.22	0.001453	0.82	97.24	132.53	0.27
TR0429	3918.545	Tr 200	77.15	120.36	122.05		122.14	0.004662	1.69	67.03	153.51	0.52
TR0429	3883.461	Tr 200	77.15	119.89	121.70	121.70	121.92	0.007559	2.78	46.78	117.70	0.73
TR0429	3848.833	Tr 200	77.15	120.09	121.09	120.67	121.12	0.001850	0.94	92.53	136.51	0.33
TR0429	3813.501	Tr 200	77.15	119.35	120.65		120.96	0.013105	2.48	31.50	39.00	0.82
TR0429	3778.501	Tr 200	77.15	118.75	120.41		120.59	0.007009	1.96	41.15	55.40	0.63
TR0429	3731.87	Tr 200	77.15	118.33	120.47		120.53	0.000200	0.67	90.16	63.29	0.16
TR0429	3728.917	Tr 200	77.15	117.23	120.48	119.21	120.52	0.000148	0.67	104.02	63.27	0.13
TR0429	3720.398		Culvert									
TR0429	3715.067	Tr 200	77.15	117.03	118.93		119.00	0.002368	1.50	67.52	104.52	0.38
TR0429	3708.501	Tr 200	77.15	116.75	118.86		118.98	0.003359	2.25	54.44	91.00	0.52
TR0429	3673.489	Tr 200	77.15	116.27	118.55	118.55	118.82	0.006674	3.14	41.03	66.41	0.72
TR0429	3637.908	Tr 200	88.36	116.04	117.83	118.06	118.53	0.006933	4.89	35.78	73.21	1.28
TR0429	3602.587	Tr 200	88.36	115.35	117.04	117.32	118.08	0.025002	5.23	19.96	58.06	1.41
TR0429	3568.979	Tr 200	88.36	115.06	117.60	117.22	117.64	0.000579	0.86	106.61	161.21	0.19
TR0429	3535.642	Tr 200	88.36	114.60	117.62		117.63	0.000030	0.26	385.48	349.51	0.05
TR0429	3510.957	Tr 200	88.36	114.34	117.63	115.68	117.63	0.000010	0.15	559.73	335.73	0.03
TR0429	3478.919		Culvert									
TR0429	3452.22	Tr 200	88.36	113.40	115.87	115.87	116.51	0.008315	3.63	25.72	20.69	0.76
TR0429	3429.228	Tr 200	88.36	112.80	114.70	114.21	114.79	0.000848	1.05	79.32	59.69	0.25
TR0429	3393.604	Tr 200	88.36	111.39	114.73		114.76	0.000148	0.59	124.09	73.50	0.11
TR0429	3376.094	Tr 200	88.36	111.37	114.72	113.52	114.76	0.000149	0.67	116.94	74.57	0.13
TR0429	3366.039		Culvert									
TR0429	3360.207	Tr 200	88.36	110.58	113.53		113.77	0.000714	2.37	46.43	48.26	0.56
TR0429	3350.523	Tr 200	88.36	110.62	113.66		113.71	0.000128	1.23	95.21	65.19	0.25
TR0429	3323.781	Tr 200	96.46	110.12	113.66		113.70	0.000099	1.03	109.10	62.61	0.21
TR0429	3288.527	Tr 200	96.46	109.63	113.61		113.70	0.000180	1.69	82.40	54.89	0.29
TR0429	3253.658	Tr 200	96.46	109.29	113.63		113.68	0.000110	1.46	100.91	69.06	0.24
TR0429	3226.643	Tr 200	96.46	109.41	113.62	112.78	113.68	0.000180	1.42	98.31	90.11	0.24
TR0429	3220.356		Culvert									
TR0429	3213.703	Tr 200	96.46	109.10	113.64		113.65	0.000079	0.68	180.78	132.73	0.11
TR0429	3184.721	Tr 200	96.46	109.09	113.64		113.65	0.000025	0.36	322.58	215.86	0.06
TR0429	3149.291	Tr 200	96.46	108.14	113.64		113.65	0.000007	0.22	573.22	196.40	0.03
TR0429	3114.453	Tr 200	96.46	107.86	113.62		113.64	0.000050	1.01	149.45	52.78	0.14
TR0429	3107.44	Tr 200	96.46	107.78	113.57	110.46	113.64	0.000068	1.31	131.33	52.15	0.18
TR0429	3095.866		Culvert									
TR0429	3085.776	Tr 200	96.46	107.10	110.47	109.54	110.68	0.001923	2.27	54.48	33.62	0.41

Reach	River Sta	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)	
TR0429	3080.698	Tr 200	96.46	107.58	110.48	109.62	110.66	0.003106	2.22	51.64	36.26	0.48
TR0429	3059.812	Tr 200	96.46	106.39	110.55	108.80	110.61	0.000613	1.45	101.34	59.61	0.24
TR0429	3052.582		Culvert									
TR0429	3041.313	Tr 200	96.46	105.97	108.14	107.73	108.41	0.003887	2.76	43.24	31.03	0.63
TR0429	3014.388	Tr 200	96.46	105.28	107.77	107.77	108.26	0.006482	3.83	35.88	32.08	0.82
TR0429	3008.535	Tr 200	95.71	105.27	107.45	107.62	108.18	0.012732	4.83	28.38	28.90	1.12
TR0429	2973.401	Tr 200	95.71	104.58	107.59	106.70	107.68	0.001011	1.64	74.67	45.00	0.33
TR0429	2938.293	Tr 200	95.71	104.72	107.39		107.60	0.003680	2.66	51.21	48.19	0.58
TR0429	2903.278	Tr 200	95.71	104.04	106.73	106.73	107.40	0.006190	3.83	29.99	22.93	0.80
TR0429	2875.722	Tr 200	95.71	102.85	106.57	105.40	106.78	0.001401	2.26	54.35	31.08	0.39
TR0429	2858.212	Tr 200	95.71	102.48	106.66	104.74	106.72	0.000396	1.25	94.22	39.72	0.21
TR0429	2847.292		Culvert									
TR0429	2838.605	Tr 200	95.71	102.06	105.10		105.28	0.001649	2.32	60.63	49.71	0.43
TR0429	2824.898	Tr 200	113.52	101.60	104.55	104.55	105.19	0.006629	4.50	35.80	27.92	0.87
TR0429	2793.809	Tr 200	113.52	101.08	103.42	103.84	104.74	0.030080	6.58	25.17	34.05	1.59
TR0429	2765.183	Tr 200	113.52	100.29	103.14	103.40	104.01	0.015419	5.62	35.14	49.94	1.21
TR0429	2711.341	Tr 200	113.52	99.26	101.79	102.21	103.03	0.020514	5.65	28.68	48.54	1.35
TR0429	2672.75	Tr 200	113.52	98.70	100.23	100.76	101.96	0.036929	6.77	21.74	26.45	1.83
TR0429	2636.684	Tr 200	113.52	97.96	100.95	100.64	101.10	0.002053	2.47	79.49	80.99	0.47
TR0429	2607.956	Tr 200	113.52	96.97	100.62	100.62	100.98	0.005622	3.46	51.40	59.00	0.70
TR0429	2572.985	Tr 200	113.52	95.92	100.29	98.38	100.37	0.000514	1.50	104.25	66.94	0.25
TR0429	2543.273	Tr 200	113.52	95.98	100.33		100.35	0.000130	0.81	178.64	75.71	0.13
TR0429	2536.233	Tr 200	113.52	95.64	100.33	97.67	100.35	0.000126	0.73	186.90	81.58	0.11
TR0429	2527.762		Culvert									
TR0429	2520.272	Tr 200	113.52	95.46	98.65		98.79	0.001701	0.47	79.55	44.11	0.10
TR0429	2507.54	Tr 200	113.52	94.92	98.68		98.76	0.000898	1.25	90.23	46.65	0.22
TR0429	2470.837	Tr 200	113.52	93.76	98.58		98.71	0.001883	1.99	81.83	75.76	0.31
TR0429	2436.356	Tr 200	186.46	93.35	98.00	98.00	98.53	0.007893	4.02	68.15	64.09	0.64
TR0429	2401.738	Tr 200	186.46	92.96	97.12	97.44	98.10	0.016260	5.41	51.80	59.28	0.90
TR0429	2376.064	Tr 200	186.46									

HEC-RAS Plan: OK River: Riu_F_Regina Reach: TR0429 Profile: Tr 200 (Continued)

Reach	River Sta	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)	
TR0429	547.5156	Tr 200	198.57	70.68	75.61		75.80	0.001474	2.61	127.84	59.55	0.39
TR0429	518.6987	Tr 200	198.57	71.02	74.66	74.66	75.63	0.012926	4.84	49.10	24.35	0.94
TR0429	492.411	Tr 200	198.57	68.97	73.30	73.88	75.14	0.019367	7.20	43.51	36.57	1.18
TR0429	456.3481	Tr 200	198.57	68.00	73.40	72.53	73.66	0.002381	2.78	98.95	41.59	0.39
TR0429	445.6811		Culvert									
TR0429	436.0836	Tr 200	198.57	67.60	71.25	71.02	72.15	0.018249	4.69	49.23	26.59	0.80
TR0429	422.4837	Tr 200	197.80	67.83	71.68		71.86	0.002378	2.28	109.57	51.88	0.38
TR0429	387.6736	Tr 200	197.80	67.34	71.72	69.05	71.78	0.000622	1.32	185.66	61.91	0.20
TR0429	352.4879	Tr 200	197.80	66.11	71.71		71.76	0.000492	1.32	195.00	63.98	0.18
TR0429	327.5559	Tr 200	197.80	63.96	71.70	68.20	71.75	0.000369	1.17	221.53	71.61	0.14
TR0429	316.3062		Bridge									
TR0429	306.9537	Tr 200	197.80	64.23	67.25	68.22	70.83	0.087474	9.04	26.00	26.14	2.09
TR0429	280.3244	Tr 200	197.80	64.04	66.10	66.70	68.16	0.074159	6.34	31.30	39.66	2.03
TR0429	245.433	Tr 200	197.80	63.91	65.99	66.12	66.68	0.016959	3.11	55.34	57.86	0.96
TR0429	210.1815	Tr 200	197.80	62.52	64.88	65.23	65.99	0.019621	5.78	52.53	68.19	1.37
TR0429	175.1176	Tr 200	197.80	62.25	63.75	64.06	64.88	0.060957	6.79	48.75	112.32	2.10
TR0429	139.9141	Tr 200	197.80	62.78	63.65	63.41	63.72	0.002683	1.06	173.14	177.53	0.39
TR0429	105.1144	Tr 200	197.80	62.38	63.54	63.12	63.63	0.002281	1.17	150.13	124.29	0.41
TR0429	70.13564	Tr 200	197.80	60.83	63.36	62.94	63.53	0.003399	2.49	117.37	102.68	0.57
TR0429	35.23813	Tr 200	197.80	61.05	62.84	62.84	63.29	0.012256	4.20	73.27	75.10	1.04
TR0429	0.673686	Tr 200	197.80	59.96	62.31	62.47	62.87	0.011966	4.53	78.80	115.77	1.00

Reach	River Sta	Profile	E.G. US.	W.S. US.	E.G. IC	E.G. OC	Min El Weir Flow	Q Culv Group	Q Weir	Delta WS	Culv Vel US	Culv Vel DS
			(m)	(m)	(m)	(m)	(m)	(m3/s)	(m3/s)	(m)	(m/s)	(m/s)
TR0429	5262.816 Culvert #1	Tr 200	143.70	143.70	143.72	143.70	143.39	25.11	32.97	4.00	6.28	6.28
TR0429	4849.11 Culvert #1	Tr 200	134.47	134.47	134.49	134.47	133.94	19.87	38.35	1.09	4.06	4.06
TR0429	4476.708 Culvert #1	Tr 200	129.76	129.76	129.76	129.00	129.32	13.27	63.91	2.47	3.35	6.82
TR0429	4309.188 Culvert #1	Tr 200	127.01	126.98	127.02	127.01	126.48	7.58	70.27	0.61	3.03	3.03
TR0429	4022.042 Culvert #1	Tr 200	123.80	123.79	123.82	123.80	123.33	8.79	69.06	1.37	4.39	4.39
TR0429	3720.398 Culvert #1	Tr 200	120.52	120.48	120.55	120.52	119.67	14.09	62.98	1.55	4.83	4.83
TR0429	3478.919 Culvert #1	Tr 200	117.63	117.63	116.60	117.63	117.34	4.22	71.86	1.76	3.13	3.13
TR0429	3478.919 Culvert #2	Tr 200	117.63	117.63	118.39	117.63	117.34	12.11	71.86	1.76	3.85	3.85
TR0429	3366.039 Culvert #1	Tr 200	114.76	114.72	114.76	114.76	113.88	7.85	80.51	1.19	4.13	4.13
TR0429	3220.356 Culvert #1	Tr 200	113.68	113.62	109.86	113.68	110.66	0.86	96.43	0.01	0.76	0.76
TR0429	3095.866 Culvert #1	Tr 200	113.64	113.57	113.76	113.64	113.05	67.15	29.32	3.10	7.06	7.06
TR0429	3052.582 Culvert #1	Tr 200	110.61	110.55	110.61	110.22	109.72	22.26	56.05	2.41	3.81	6.99
TR0429	3052.582 Culvert #2	Tr 200	110.61	110.55	112.31	110.61	109.72	18.15	56.05	2.41	5.99	5.99
TR0429	2847.292 Culvert #1	Tr 200	106.72	106.66	106.85	106.72	105.75	44.86	50.85	1.57	5.03	5.03
TR0429	2527.762 Culvert #1	Tr 200	100.35	100.33	100.40	100.35	99.51	40.05	73.47	1.68	5.13	5.13
TR0429	1041.753 Culvert #1	Tr 200	81.72	81.65	81.76	81.72	80.02	34.31	152.15	1.67	5.17	5.17
TR0429	872.2943 Culvert #1	Tr 200	79.92	79.85	79.94	79.92	78.39	31.69	164.21	2.22	5.89	5.89
TR0429	612.2656 Culvert #1	Tr 200	76.26	76.24	72.19	76.26	72.78	3.11	193.74	0.01	0.68	0.68
TR0429	612.2656 Culvert #2	Tr 200	76.26	76.24	72.59	76.26	72.78	0.08	193.74	0.01	0.39	0.39
TR0429	553.1542 Culvert #1	Tr 200	76.23	76.16	76.17	76.23	72.81	9.56	189.01	0.55	3.04	3.04
TR0429	445.6811 Culvert #1	Tr 200	73.66	73.40	73.72	73.66	71.80	60.04	138.53	2.14	6.12	6.12

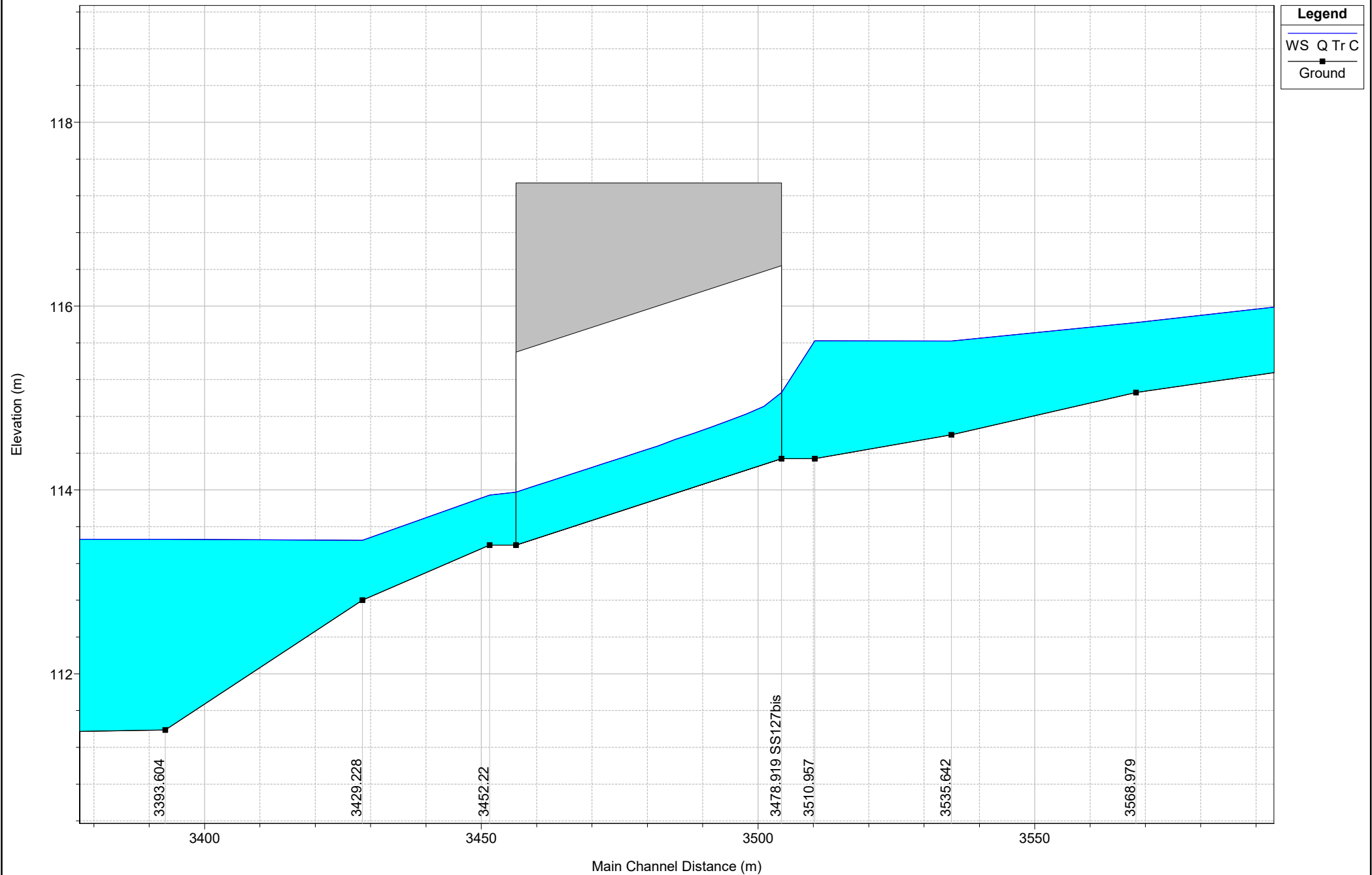
CALCOLO IDROLOGICO PORTATE DI PIENA

C64 - #1_Fiume 129716 (Rio Calamasciu)			
TR (anni)			1
Lunghezza asta	L	m	6133.9725
Curve Number	CN	-	96.49
Pend.za media bac.	i _{bac}	-	0.0630
Area bacino	A	kmq	7.7464
Altitudine massima	Hmax	m slm	257.41
Altitudine media	Hmed	m slm	180.39
Altitudine minima	Hmin	m slm	112.06
Pend.za media asta	iret	m/m	0.0394
	SCS	(ore)	1.205
	GIANDOTTI	(ore)	3.075
	PASINI	(ore)	1.971
	VAPI	(ore)	3.888
	KIRPICH	(ore)	0.778
	VIPARELLI	(ore)	1.704
	tc adott.	SCS (ore)	1.205
Tempi di ritorno	T	(anni)	1
Dati pluviometrici	Pgiorn.	(mm)	50
	Sottozona		2
Altezza di pioggia	n1	-	0.31570972
	a1	-	20.6914142
	n2 (ADOTTATO)	-	-0.0056593
	a2 (ADOTTATO)	-	0.44182
	n (ADOTTATO)	-	0.31005042
	a (ADOTTATO)	-	9.14188063
	h (ADOTTATO)	(mm)	9.685
	Coef.f.Ragg (ADOTTATO)	-	0.924
	h r (ADOTTATO)	(mm)	8.951
	S	(mm)	9.240
	Ia	(mm)	1.848
	Pnetta (ADOTTATO)	(mm)	3.087
	Coef.defl. (SCS)		0.734
	Coef.defl. (GIANDOTTI)		0.798
	Coef.defl. (PASINI)		0.770
	Coef.defl. (VAPI)		0.812
	Coef.defl. (KIRPICH)		0.692
	Coef.defl. (VIPARELLI)		0.760
	Coef.defl. (ADOTTATO)	-	0.319
PORTATE DI PIENA	Qpicco (SCS)	(mc/s)	65.434
	Qpicco (GIANDOTTI)	(mc/s)	37.028
	Qpicco (PASINI)	(mc/s)	48.685
	Qpicco (VAPI)	(mc/s)	31.980
	Qpicco (KIRPICH)	(mc/s)	80.868
	Qpicco (VIPARELLI)	(mc/s)	53.181
	Qpicco (ADOTTATO)	(mc/s)	5.515

Comune di Sassari (SS)
 VERIFICHE DI SICUREZZA IDRAULICA OPERE INTERFERENTI CON IL RETICOLO IDROGRAFICO
 Strade comunali - **ATTRAVERSAMENTO C64**

	River Sta	Profile	Culv Inv El DS	Culv Inv El US	W.S.	Q Culv	Culv Vel US	Culv Vel DS	QUOTA INTRADOS SO	FRANCHI DISPONIBILI	FRANCHI RICHIESTI	50% di FRANCHI RICHIESTI	VERIFICA	Deficit
			(m slm)	(m slm)	(m slm)	(m³/s)	(m/s)	(m/s)	(m slm)	(m)	(m)	(m)		(m)
UPSTREAM	3478.919 Culvert #1	TR 200 ANNI		114.34	117.63	88.36	3.13		115.24	-2.39	1.500		NON VERIF.	3.89
	3478.919 Culvert #1	Tr critico		114.34	115.62	5.52	2.59		115.24	-0.38	1.000	0.500	NON VERIF.	0.880
DOWNSTREAM	3478.919 Culvert #1	TR 200 ANNI	113.4		115.87	88.36		3.13	114.3	-1.57	1.367		NON VERIF.	2.93731233
	3478.919 Culvert #1	Tr critico	113.4		113.94	5.52		3.25	114.3	0.36	1.000	0.500	NON VERIF.	0.140

	River Sta	Profile	Culv Inv El DS	Culv Inv El US	W.S.	Q Culv	Culv Vel US	Culv Vel DS	QUOTA INTRADOS SO	FRANCHI DISPONIBILI	FRANCHI RICHIESTI	50% di FRANCHI RICHIESTI	VERIFICA	Deficit
			(m slm)	(m slm)	(m slm)	(m³/s)	(m/s)	(m/s)	(m slm)	(m)	(m)	(m)		(m)
UPSTREAM	3478.919 Culvert #2	TR 200 ANNI		114.34	117.63	88.36	3.85		116.44	-1.19	1.500		NON VERIF.	2.69
	3478.919 Culvert #2	Tr critico		114.34	115.85	6.65	2.88		116.44	0.59	1.069	0.535	OK	OK
DOWNSTREAM	3478.919 Culvert #2	TR 200 ANNI	113.4		115.87	88.36		3.85	115.5	-0.37	1.367		NON VERIF.	1.73731233
	3478.919 Culvert #2	Tr critico	113.4		114.02	6.65		3.54	115.5	1.48	1.000	0.500	OK	OK



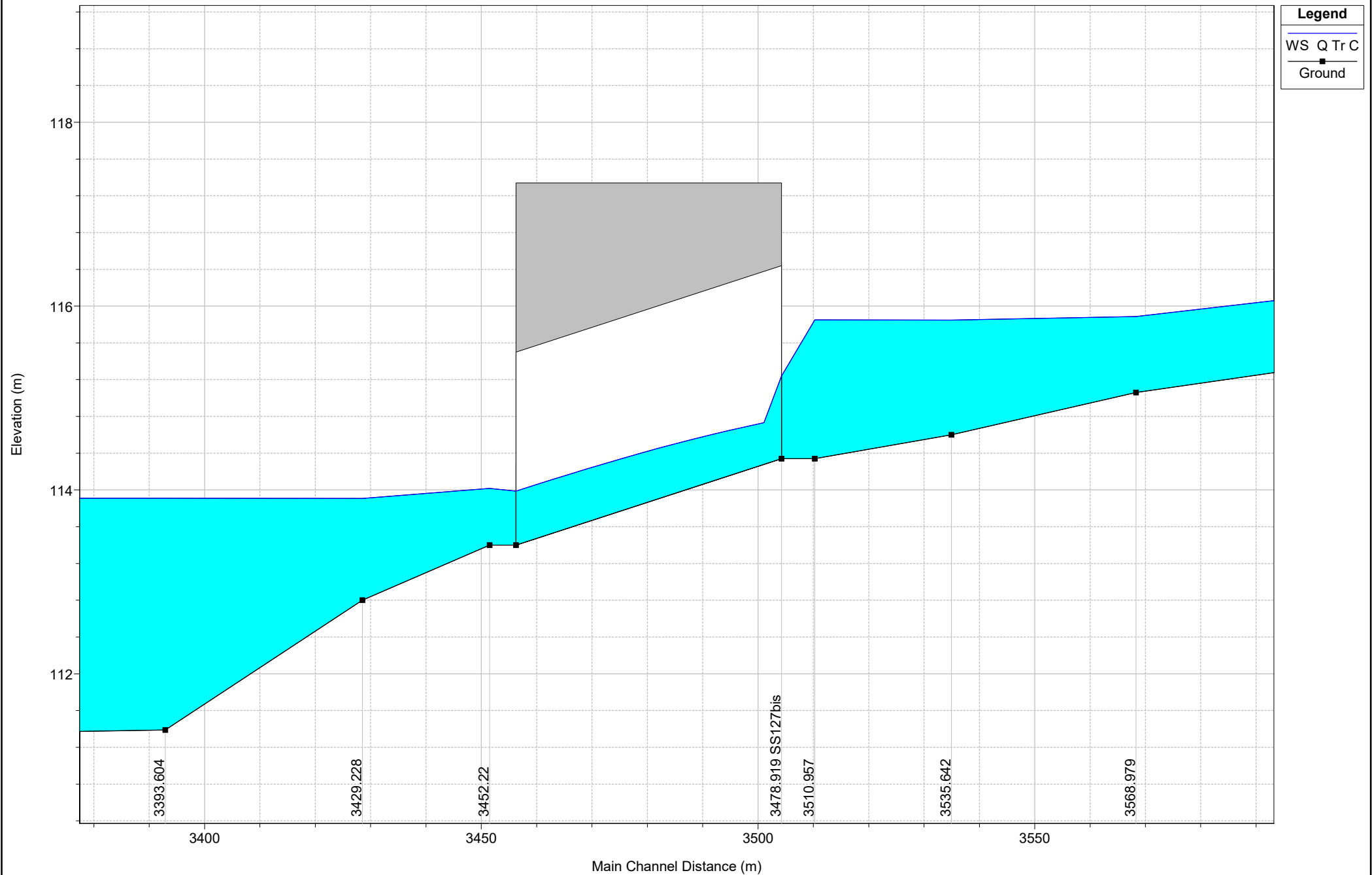
CALCOLO IDROLOGICO PORTATE DI PIENA

C64 - #2_Fiume 129716 (Rio Calamasciu)			
		TR (anni)	1.1
Lunghezza asta	L	m	6133.9725
Curve Number	CN	-	96.49
Pend.za media bac.	i _{bac}	-	0.0630
Area bacino	A	kmq	7.7464
Altitudine massima	Hmax	m slm	257.41
Altitudine media	Hmed	m slm	180.39
Altitudine minima	Hmin	m slm	112.06
Pend.za media asta	iret	m/m	0.0394
	SCS	(ore)	1.205
	GIANDOTTI	(ore)	3.075
	PASINI	(ore)	1.971
	VAPI	(ore)	3.888
	KIRPICH	(ore)	0.778
	VIPARELLI	(ore)	1.704
	tc adott.	SCS (ore)	1.205
Tempi di ritorno	T	(anni)	1.1
Dati pluviometrici	Pgiorn.	(mm)	50
	Sottozona		2
Altezza di pioggia	n1	-	0.31570972
	a1	-	20.6914142
	n2 (ADOTTATO)	-	-0.00582848
	a2 (ADOTTATO)	-	0.48659447
	n (ADOTTATO)	-	0.30988124
	a (ADOTTATO)	-	10.0683277
	h (ADOTTATO)	(mm)	10.666
	Coef.f.Ragg (ADOTTATO)	-	0.924
	h r (ADOTTATO)	(mm)	9.858
	S	(mm)	9.240
	Ia	(mm)	1.848
	Pnetta (ADOTTATO)	(mm)	3.720
	Coef.defl. (SCS)		0.734
	Coef.defl. (GIANDOTTI)		0.798
	Coef.defl. (PASINI)		0.770
	Coef.defl. (VAPI)		0.812
	Coef.defl. (KIRPICH)		0.692
	Coef.defl. (VIPARELLI)		0.760
	Coef.defl. (ADOTTATO)	-	0.349
PORTATE DI PIENA	Qpicco (SCS)	(mc/s)	65.434
	Qpicco (GIANDOTTI)	(mc/s)	37.028
	Qpicco (PASINI)	(mc/s)	48.685
	Qpicco (VAPI)	(mc/s)	31.980
	Qpicco (KIRPICH)	(mc/s)	80.868
	Qpicco (VIPARELLI)	(mc/s)	53.181
	Qpicco (ADOTTATO)	(mc/s)	6.644

Comune di Sassari (SS)
 VERIFICHE DI SICUREZZA IDRAULICA OPERE INTERFERENTI CON IL RETICOLO IDROGRAFICO
 Strade comunali - **ATTRAVERSAMENTO C64**

	River Sta	Profile	Culv Inv El DS	Culv Inv El US	W.S.	Q Culv	Culv Vel US	Culv Vel DS	QUOTA INTRADOS SO	FRANCHI DISPONIBILI	FRANCHI RICHIESTI	50% di FRANCHI RICHIESTI	VERIFICA	Deficit
			(m slm)	(m slm)	(m slm)	(m³/s)	(m/s)	(m/s)	(m slm)	(m)	(m)	(m)		(m)
UPSTREAM	3478.919 Culvert #1	TR 200 ANNI		114.34	117.63	88.36	3.13		115.24	-2.39	1.500		NON VERIF.	3.89
	3478.919 Culvert #1	Tr critico		114.34	115.62	5.52	2.59		115.24	-0.38	1.000	0.500	NON VERIF.	0.880
DOWNSTREAM	3478.919 Culvert #1	TR 200 ANNI	113.4		115.87	88.36		3.13	114.3	-1.57	1.367		NON VERIF.	2.93731233
	3478.919 Culvert #1	Tr critico	113.4		113.94	5.52		3.25	114.3	0.36	1.000	0.500	NON VERIF.	0.140

	River Sta	Profile	Culv Inv El DS	Culv Inv El US	W.S.	Q Culv	Culv Vel US	Culv Vel DS	QUOTA INTRADOS SO	FRANCHI DISPONIBILI	FRANCHI RICHIESTI	50% di FRANCHI RICHIESTI	VERIFICA	Deficit
			(m slm)	(m slm)	(m slm)	(m³/s)	(m/s)	(m/s)	(m slm)	(m)	(m)	(m)		(m)
UPSTREAM	3478.919 Culvert #2	TR 200 ANNI		114.34	117.63	88.36	3.85		116.44	-1.19	1.500		NON VERIF.	2.69
	3478.919 Culvert #2	Tr critico		114.34	115.85	6.65	2.88		116.44	0.59	1.069	0.535	OK	OK
DOWNSTREAM	3478.919 Culvert #2	TR 200 ANNI	113.4		115.87	88.36		3.85	115.5	-0.37	1.367		NON VERIF.	1.73731233
	3478.919 Culvert #2	Tr critico	113.4		114.02	6.65		3.54	115.5	1.48	1.000	0.500	OK	OK



COMUNE DI SASSARI

VERIFICHE DI SICUREZZA IDRAULICA OPERE INTERFERENTI CON IL RETICOLO IDROGRAFICO – ATTRAVERSAMENTI STRADE COMUNALI

Area di indagine: **TERRITORIO COMUNALE**

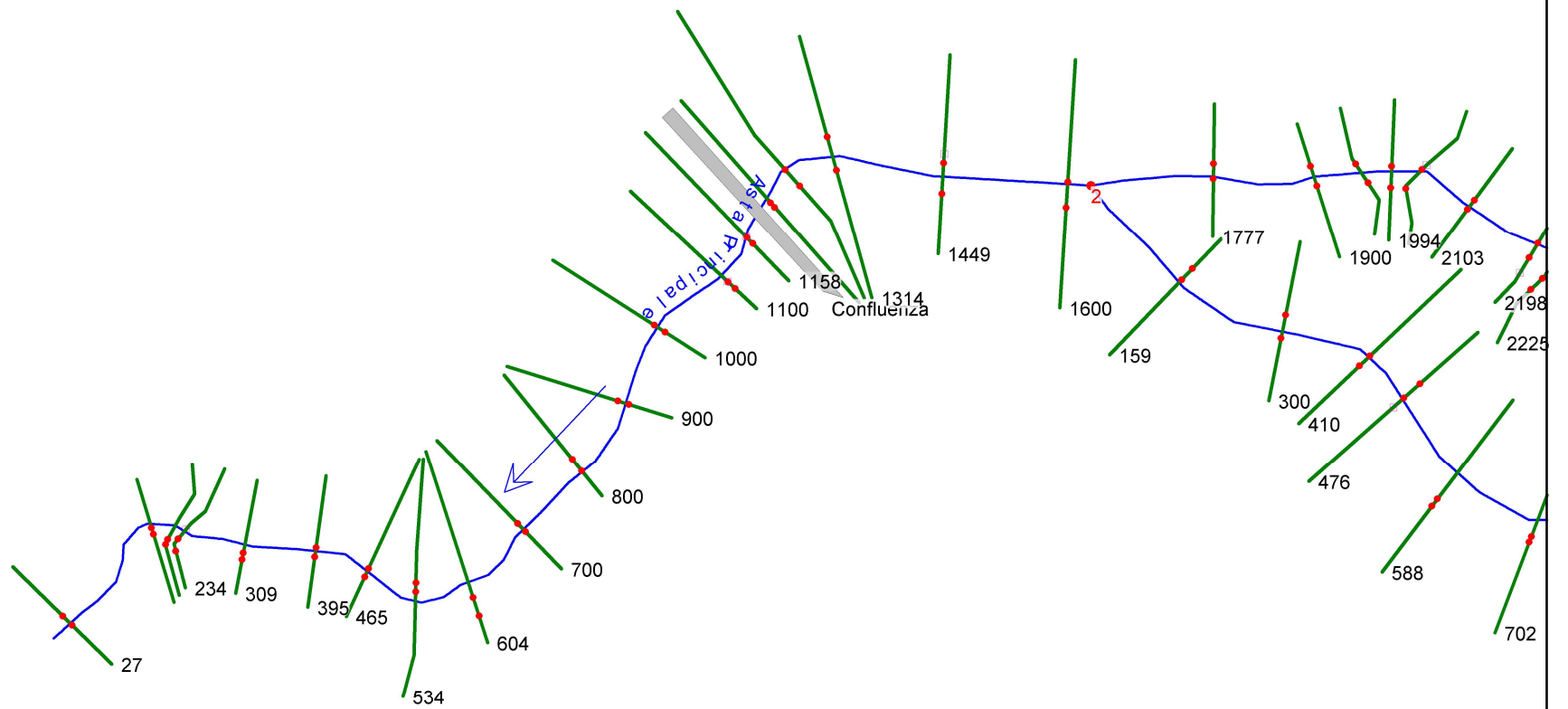
SIMULAZIONI IN MOTO PERMANENTE

ATTRAVERSAMENTO C09 sull'Area edificato Ottava

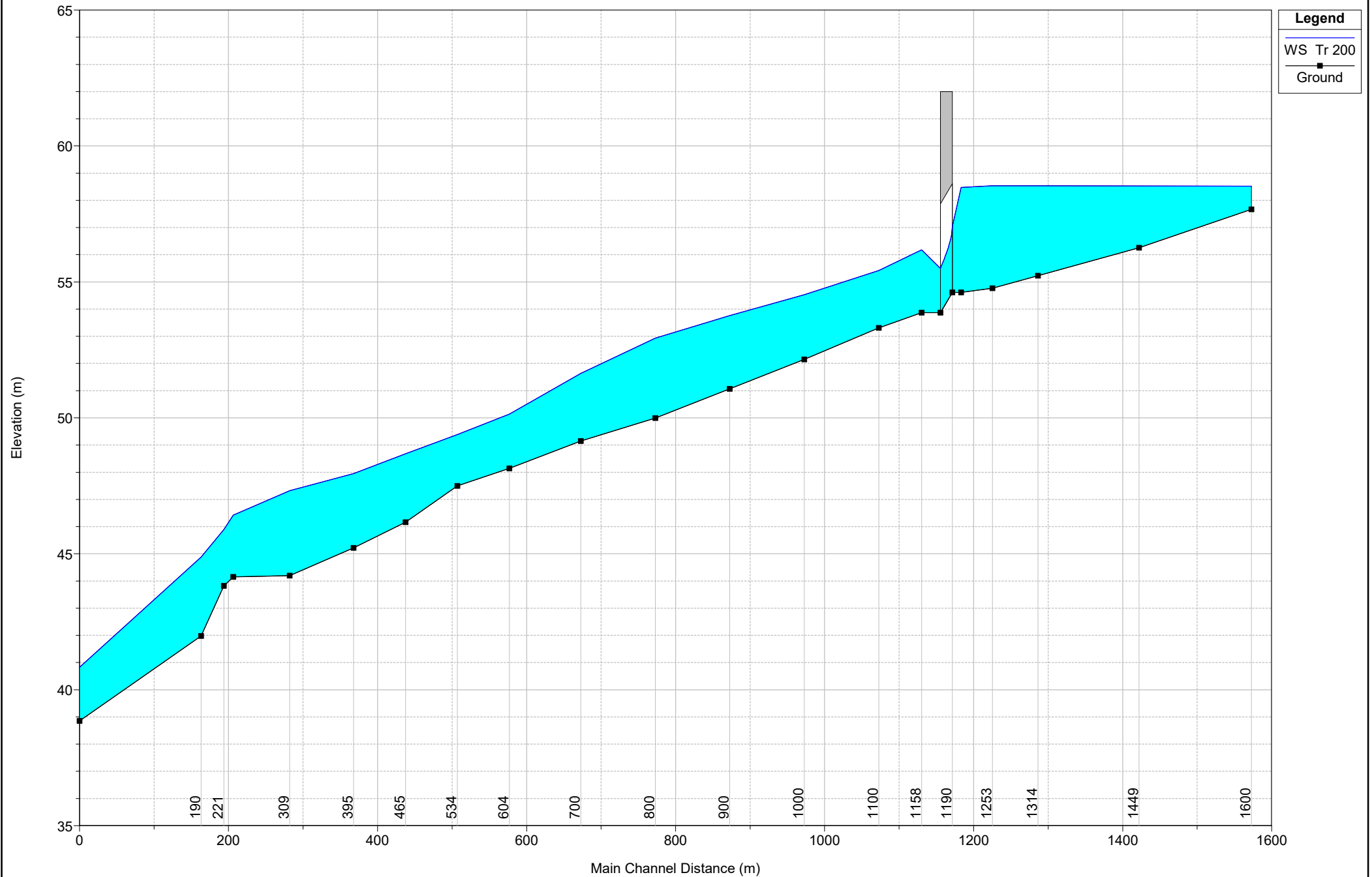
- Schema planimetrico del modello matematico;
- Profili longitudinali con livelli idrici per il tempo di ritorno di 200 anni;
- Sezioni trasversali con livelli idrici per il tempo di ritorno di 200 anni;
- Tabulati numerici di output per il tempo di ritorno di 200 anni;
- Calcolo della portata critica;
- Profilo longitudinale del livello idrico per il tempo di ritorno critico TC;
- Verifica dei franchi idraulici e della portata critica;

River	Reach	RS	PORTATE mc/s			
			Tr 50	Tr 100	Tr 200	Tr 500
Asta Principale	Abitato1	4745	13.16	15.647	18.161	21.519
Asta Principale	Confluenza	1600	34.271	40.672	47.128	55.718
Asta Secondaria	Abitato2	3400	16.574	19.732	22.923	27.178

River	Reach	PROFILI	condizioni al contorno	
			upstream	downstream
Asta Principale	Abitato1	all	Critical Depth	Junction = 2
Asta Principale	Confluenza	all	Junction = 2	Normal Depth S = 0.024456
Asta Secondaria	Abitato2	all	Critical Depth	Junction = 2



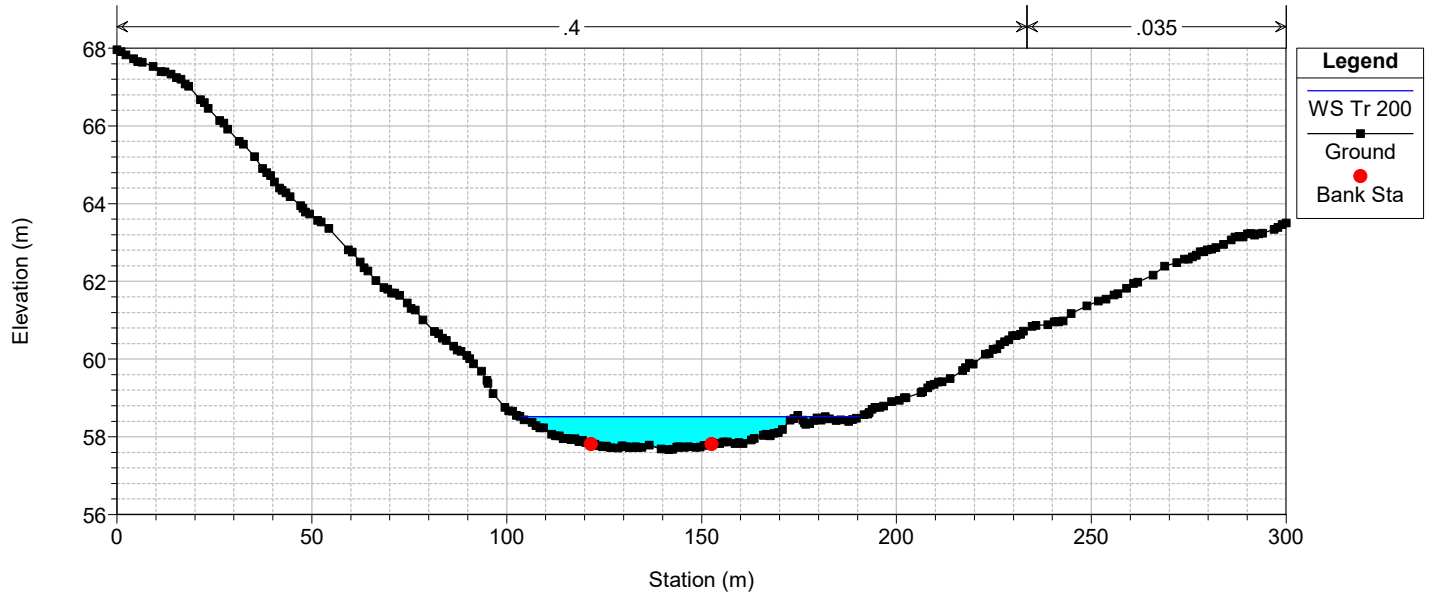
EDIFICATO OTTAVA Plan: 04022021_ 11/30/2021
Geom: 04022021_mod COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



EDIFICATO OTTAVA Plan: 04022021_ 11/30/2021

Geom: 04022021_mod

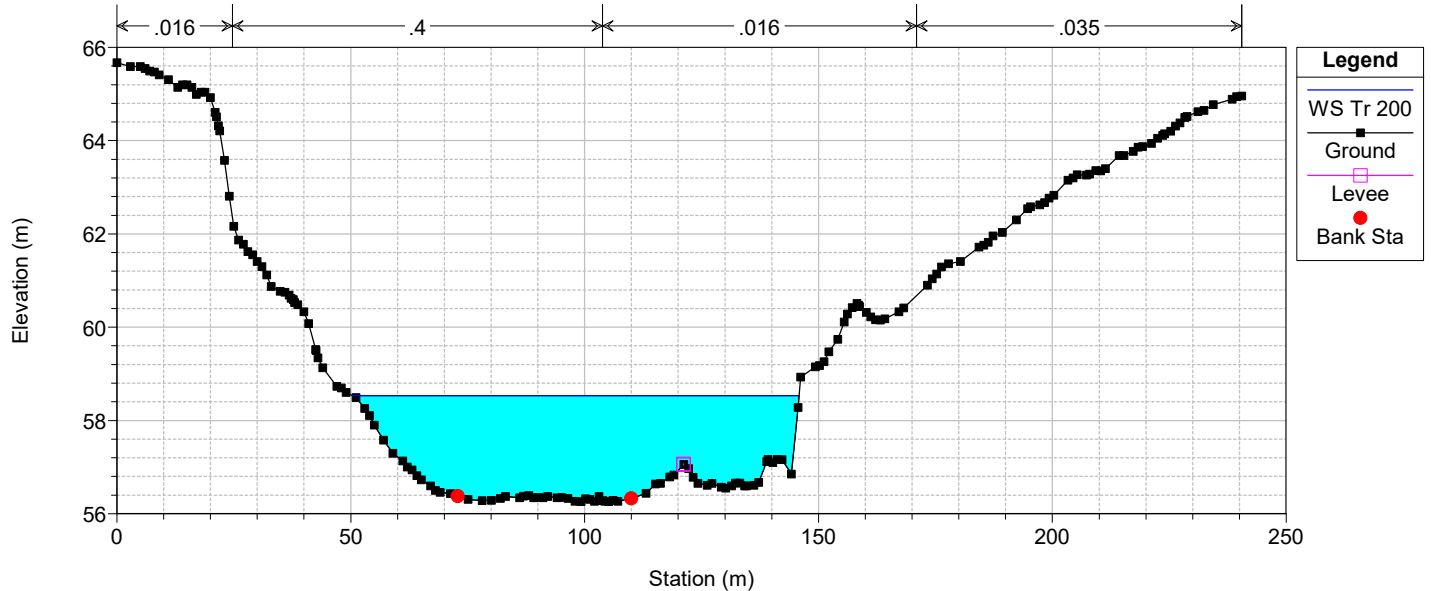
River = Asta Principale Reach = Confluenza RS = 1600 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



EDIFICATO OTTAVA Plan: 04022021_ 11/30/2021

Geom: 04022021_mod

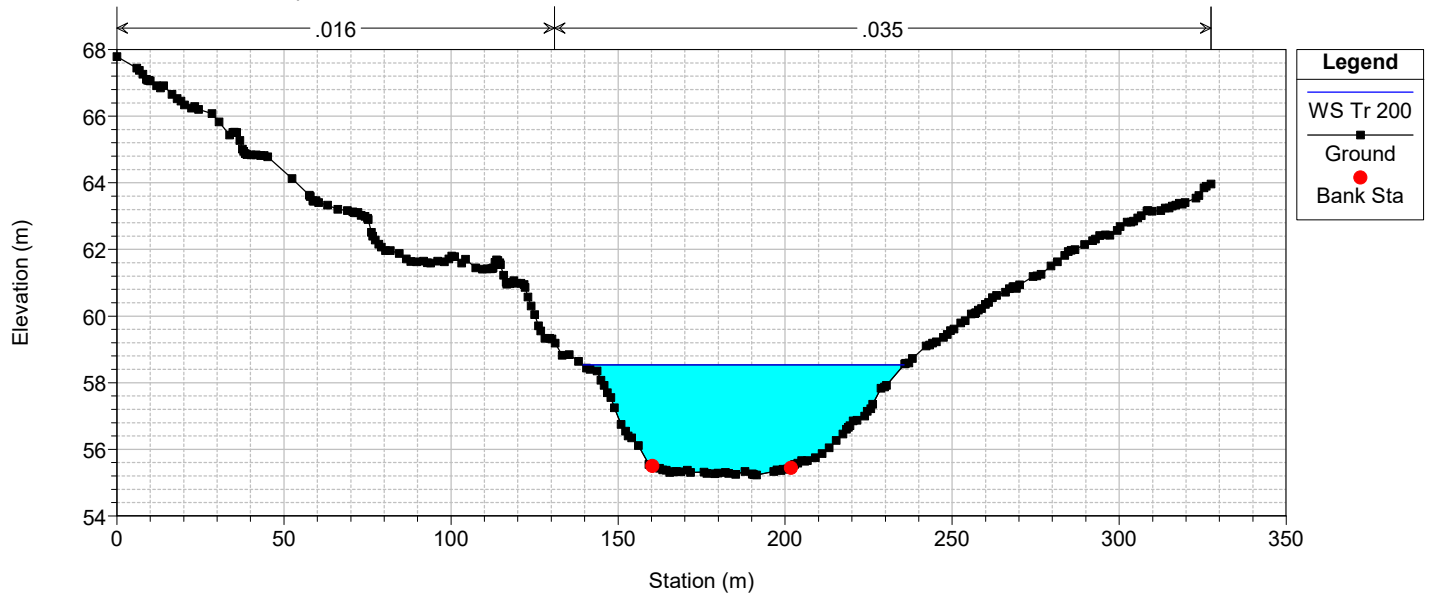
River = Asta Principale Reach = Confluenza RS = 1449 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



EDIFICATO OTTAVA Plan: 04022021_ 11/30/2021

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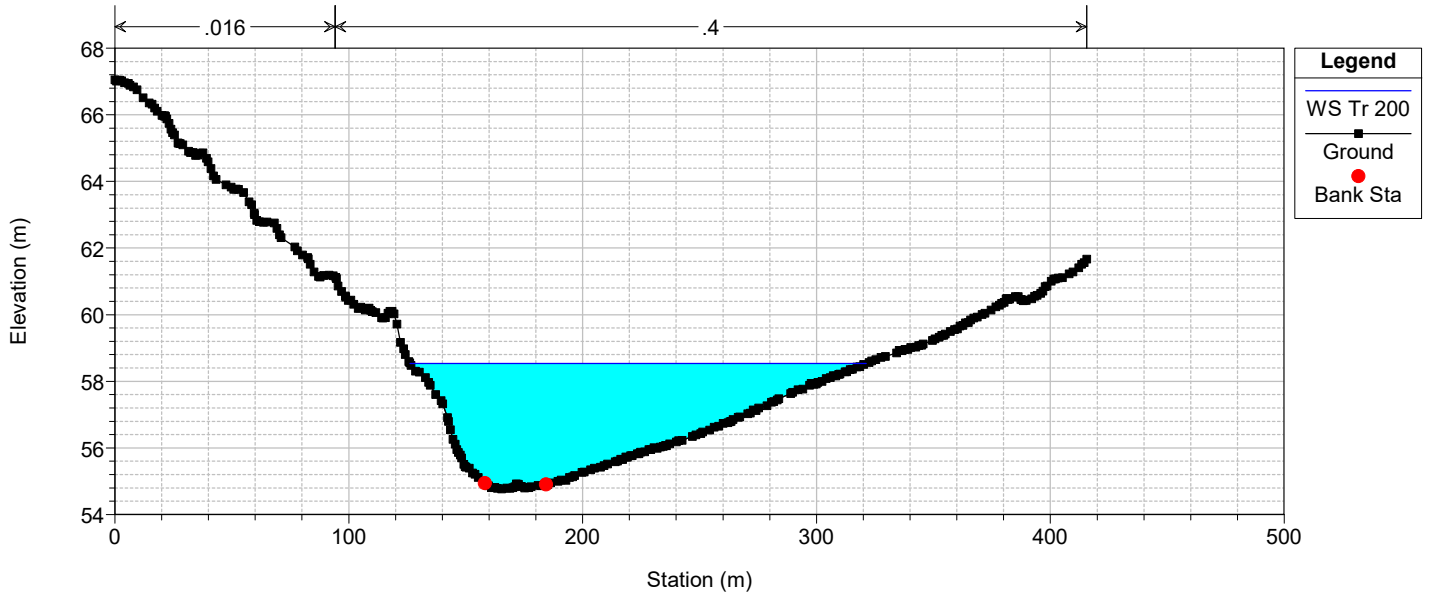
River = Asta Principale Reach = Confluenza RS = 1314 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



EDIFICATO OTTAVA Plan: 04022021_ 11/30/2021

Geom: 04022021_mod

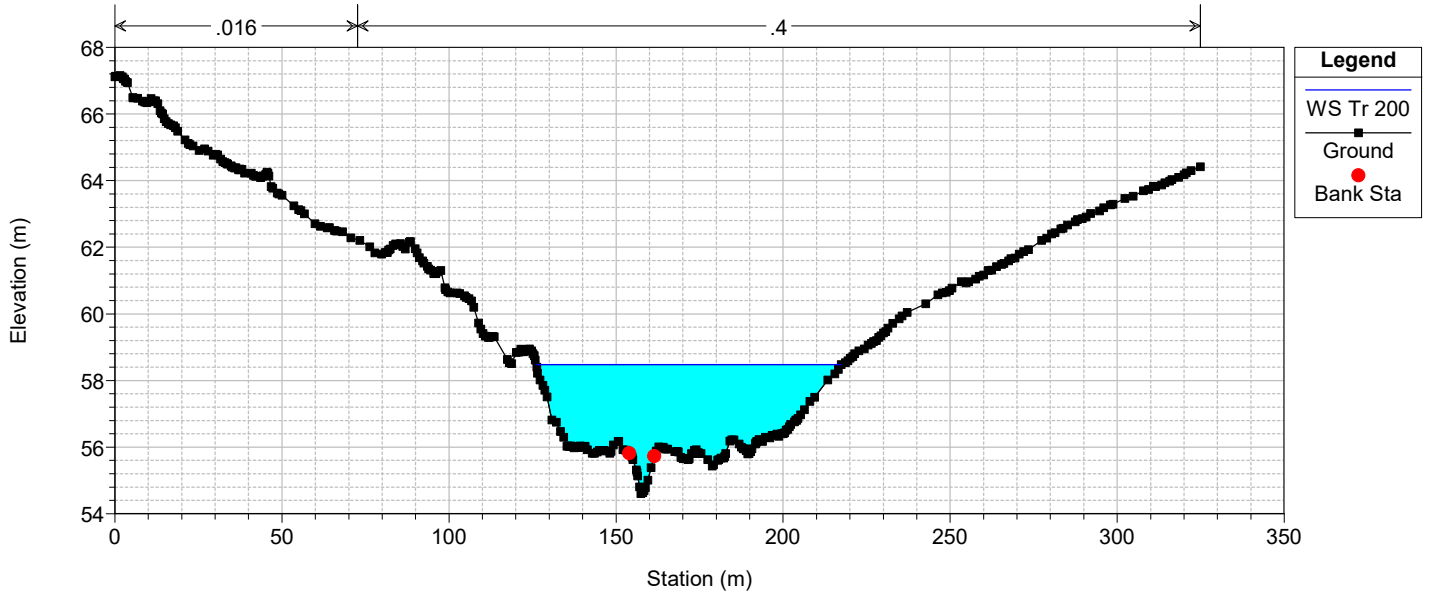
River = Asta Principale Reach = Confluenza RS = 1253 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



EDIFICATO OTTAVA Plan: 04022021_ 11/30/2021

Geom: 04022021_mod

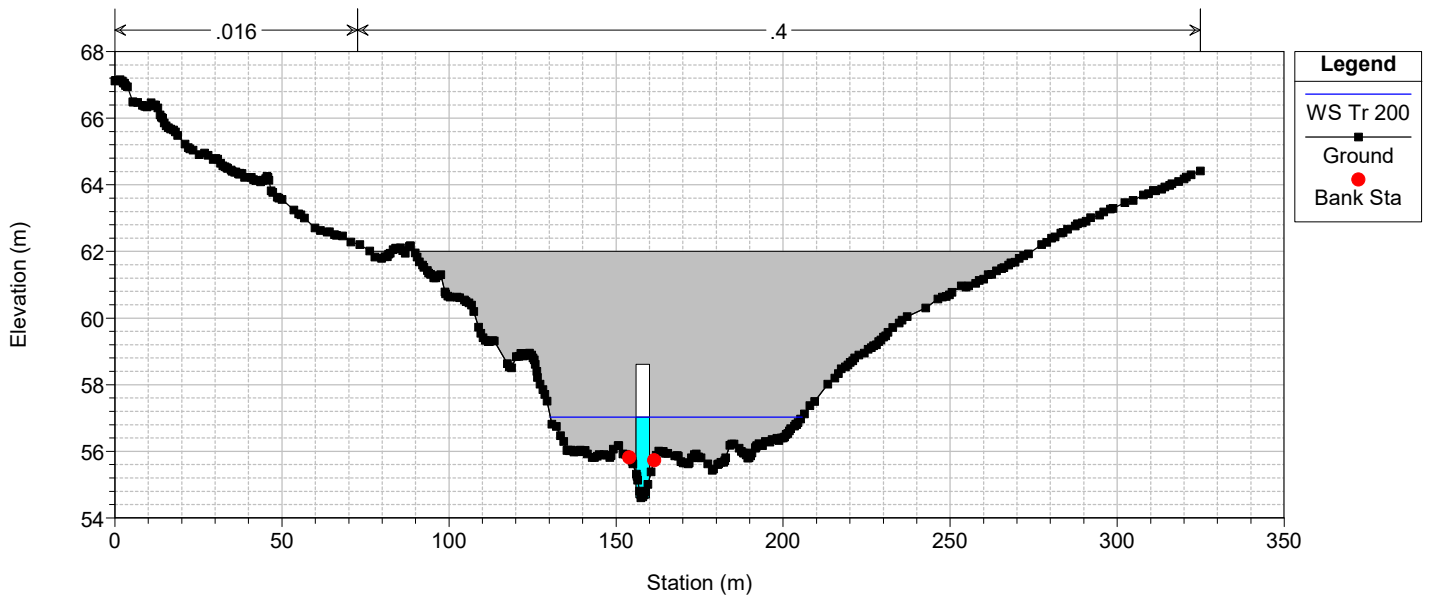
River = Asta Principale Reach = Confluenza RS = 1211 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



EDIFICATO OTTAVA Plan: 04022021_ 11/30/2021

Geom: 04022021_mod

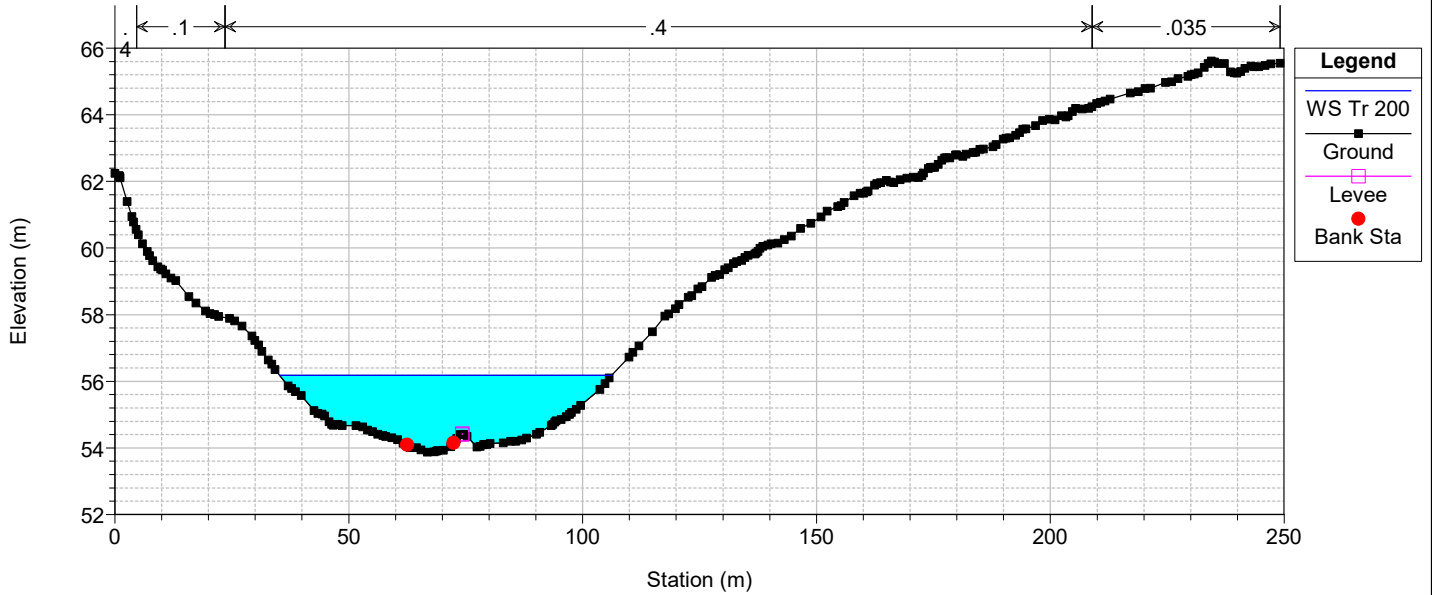
River = Asta Principale Reach = Confluenza RS = 1190 Culv COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



EDIFICATO OTTAVA Plan: 04022021_ 11/30/2021

Geom: 04022021_mod

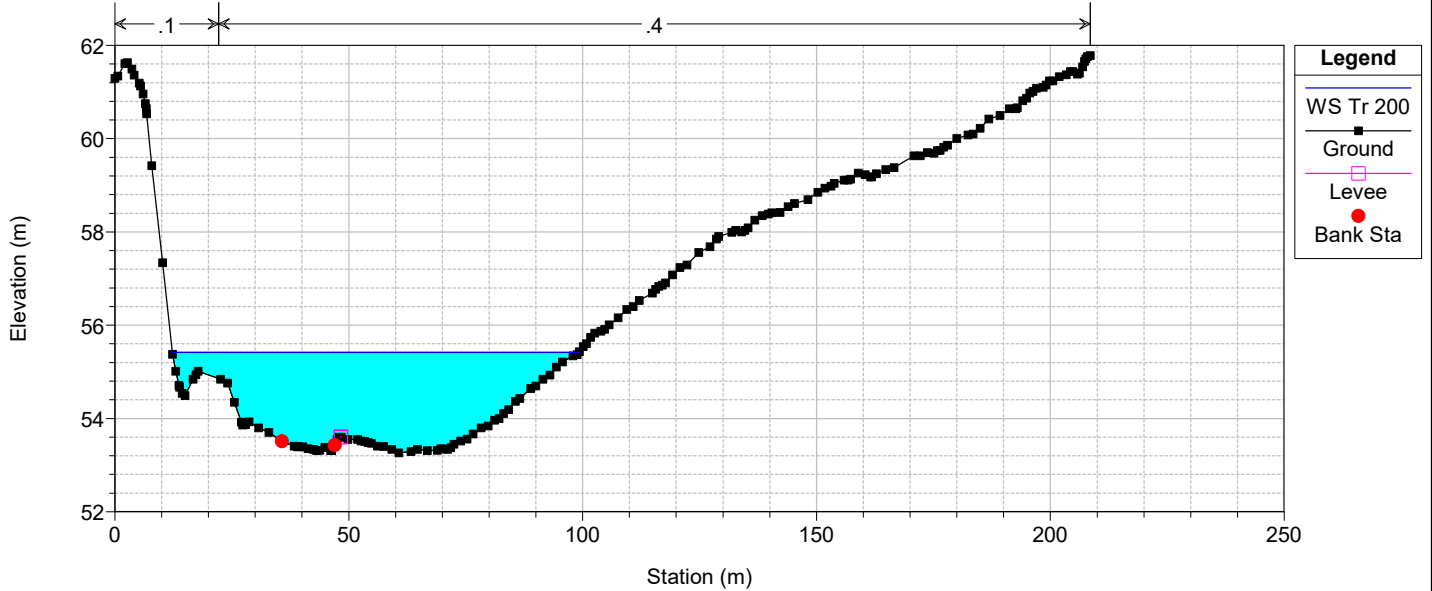
River = Asta Principale Reach = Confluenza RS = 1158 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



EDIFICATO OTTAVA Plan: 04022021_ 11/30/2021

Geom: 04022021_mod

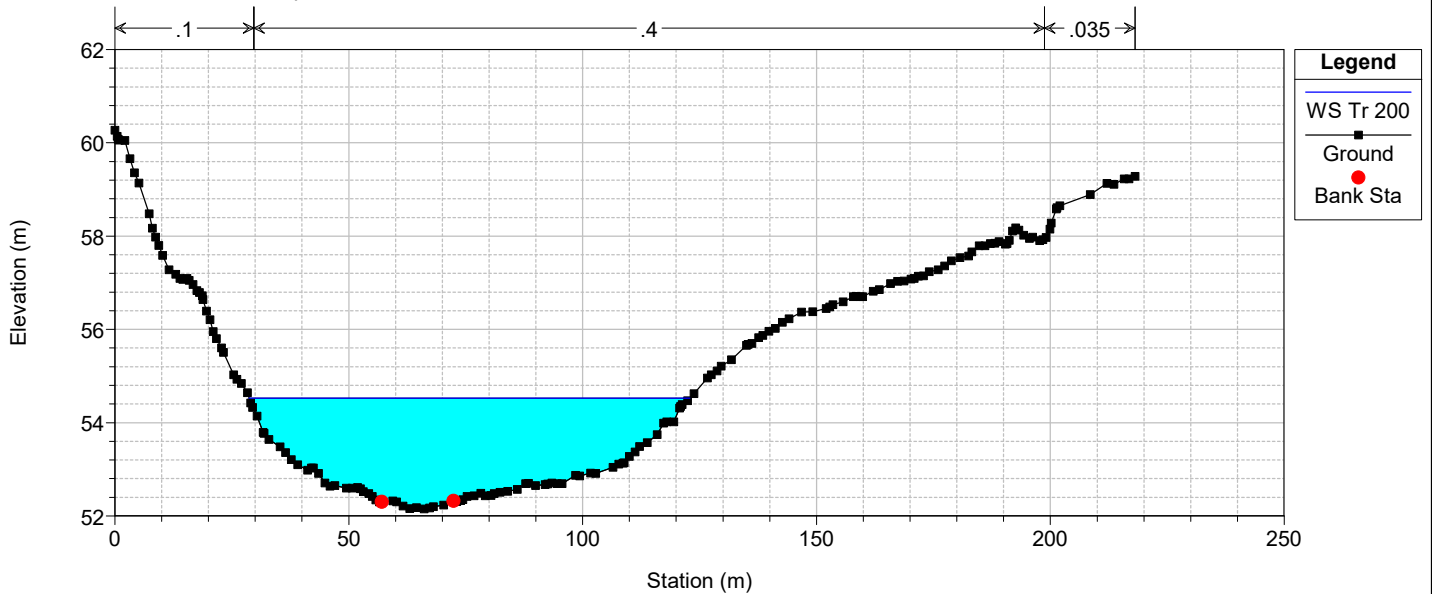
River = Asta Principale Reach = Confluenza RS = 1100 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



EDIFICATO OTTAVA Plan: 04022021_ 11/30/2021

Geom: 04022021_mod

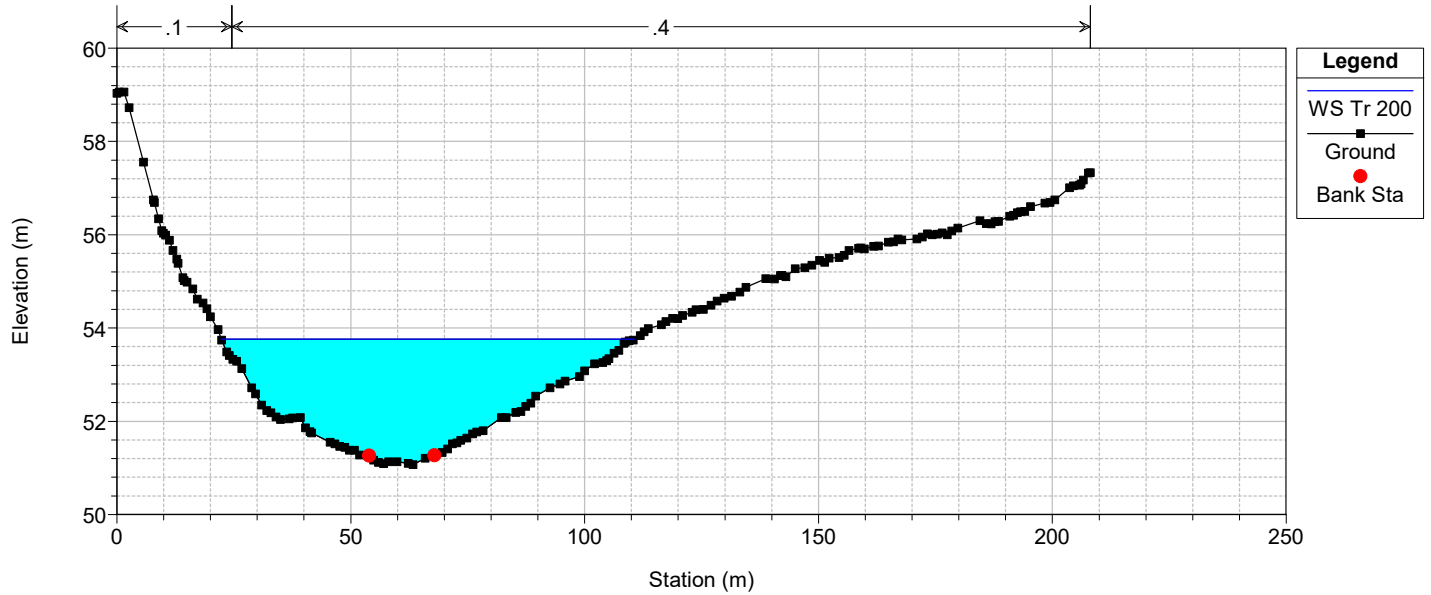
River = Asta Principale Reach = Confluenza RS = 1000 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



EDIFICATO OTTAVA Plan: 04022021_ 11/30/2021

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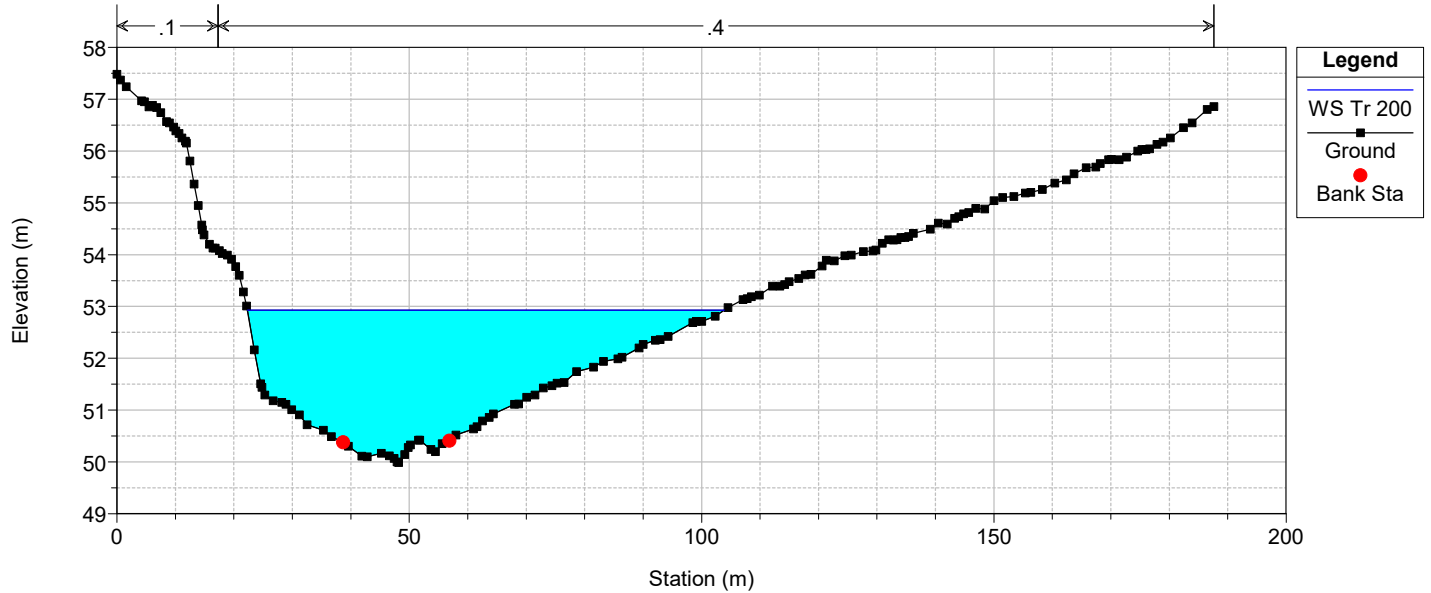
River = Asta Principale Reach = Confluenza RS = 900 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



EDIFICATO OTTAVA Plan: 04022021_ 11/30/2021

Geom: 04022021_mod

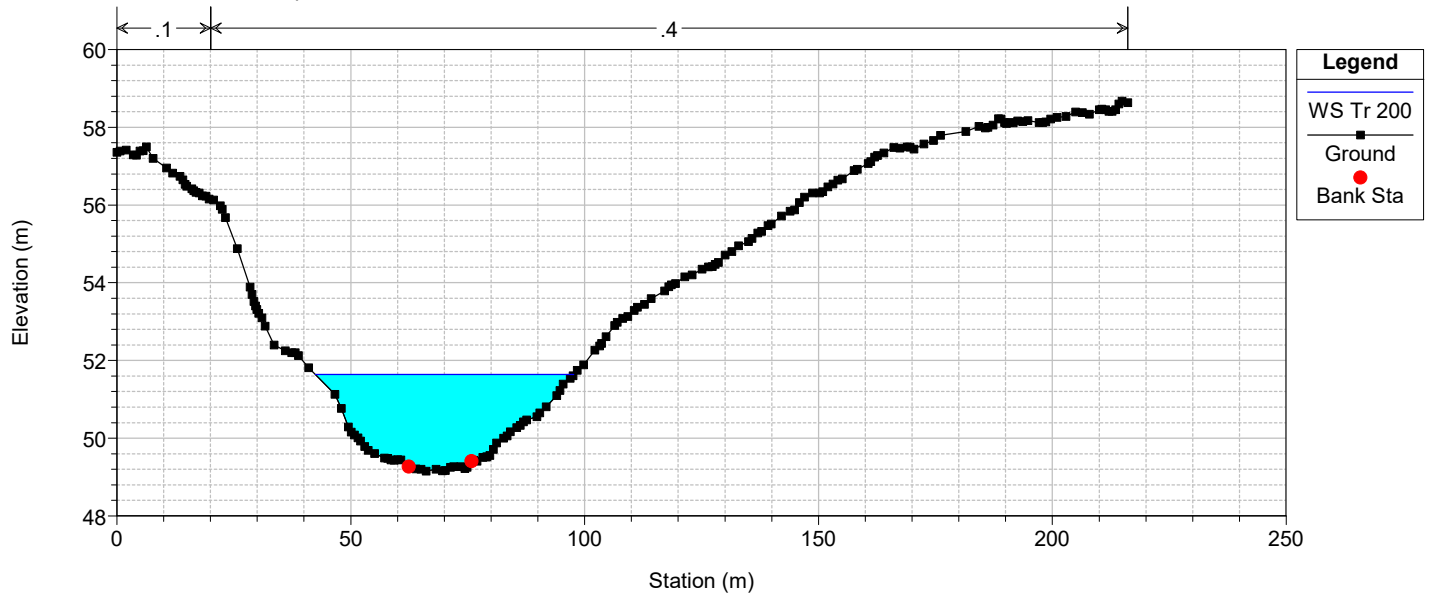
River = Asta Principale Reach = Confluenza RS = 800 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



EDIFICATO OTTAVA Plan: 04022021_ 11/30/2021

Geom: 04022021_mod

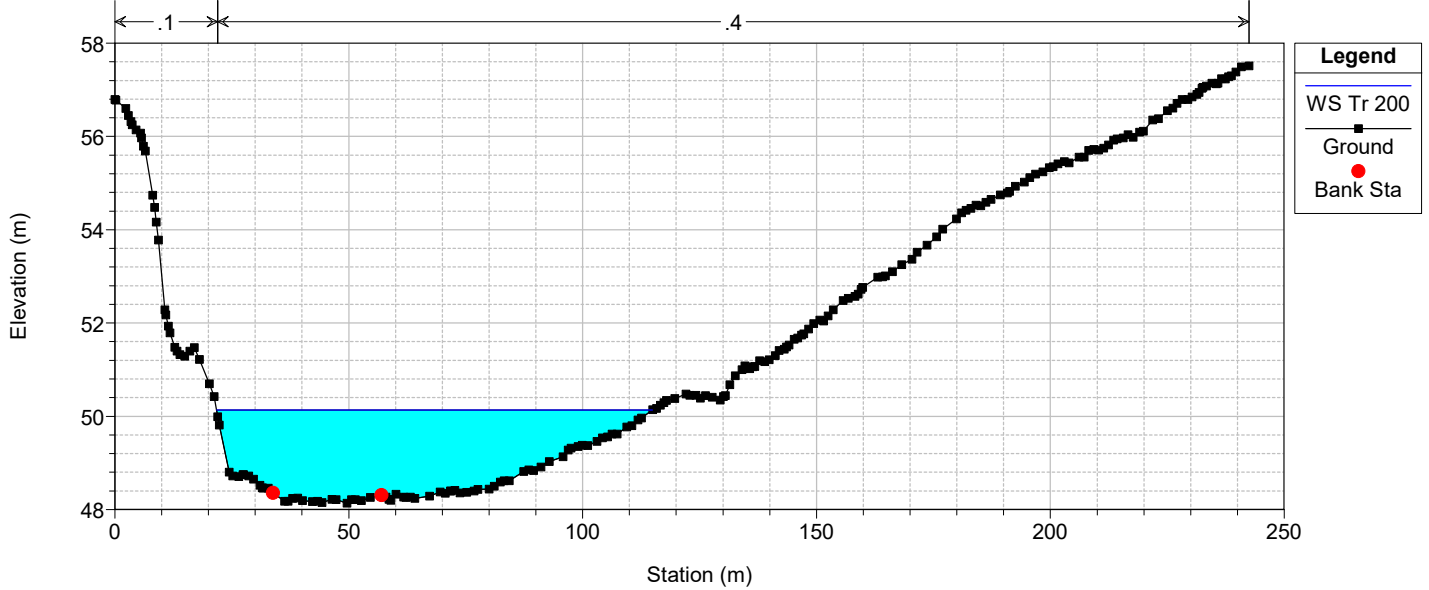
River = Asta Principale Reach = Confluenza RS = 700 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



EDIFICATO OTTAVA Plan: 04022021_ 11/30/2021

Geom: 04022021_mod

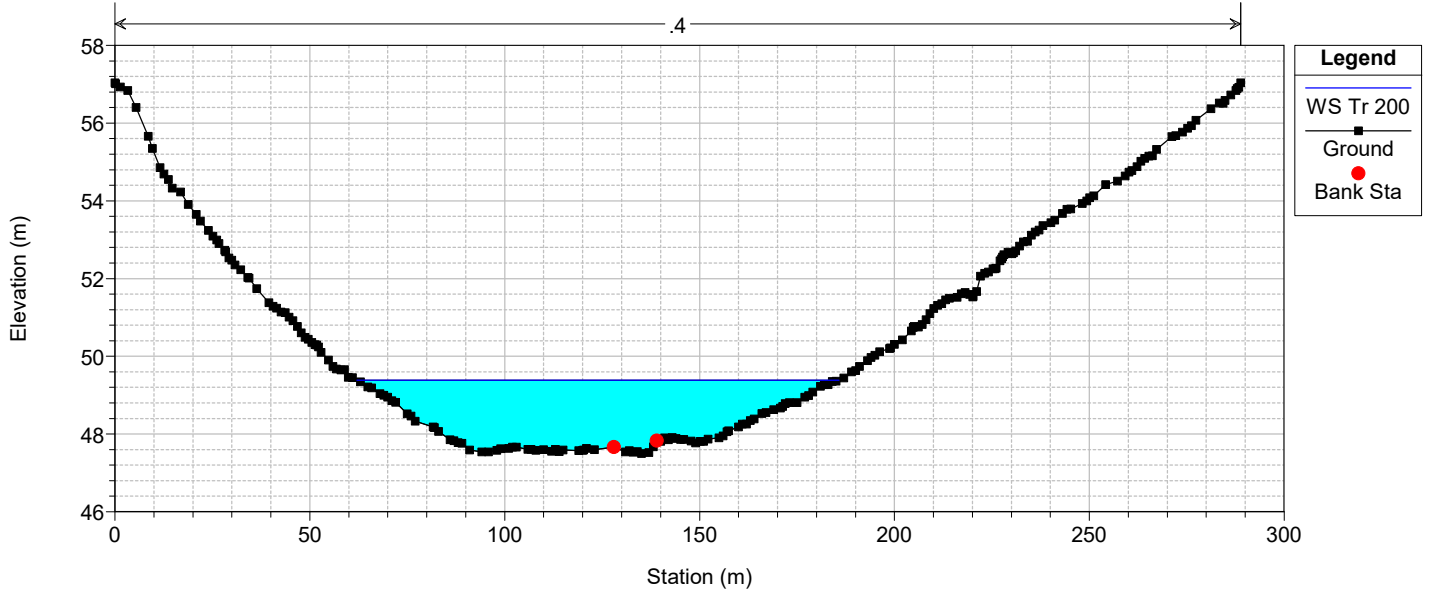
River = Asta Principale Reach = Confluenza RS = 604 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



EDIFICATO OTTAVA Plan: 04022021_ 11/30/2021

Geom: 04022021_mod

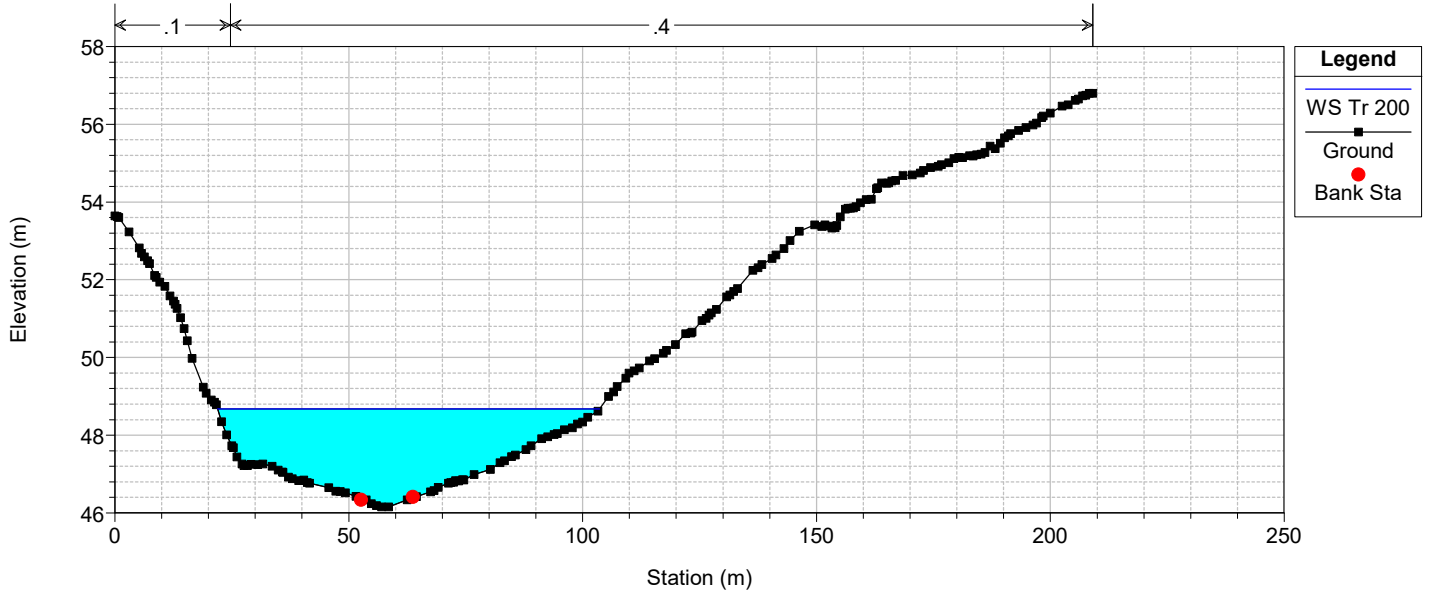
River = Asta Principale Reach = Confluenza RS = 534 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



EDIFICATO OTTAVA Plan: 04022021_ 11/30/2021

Geom: 04022021_mod

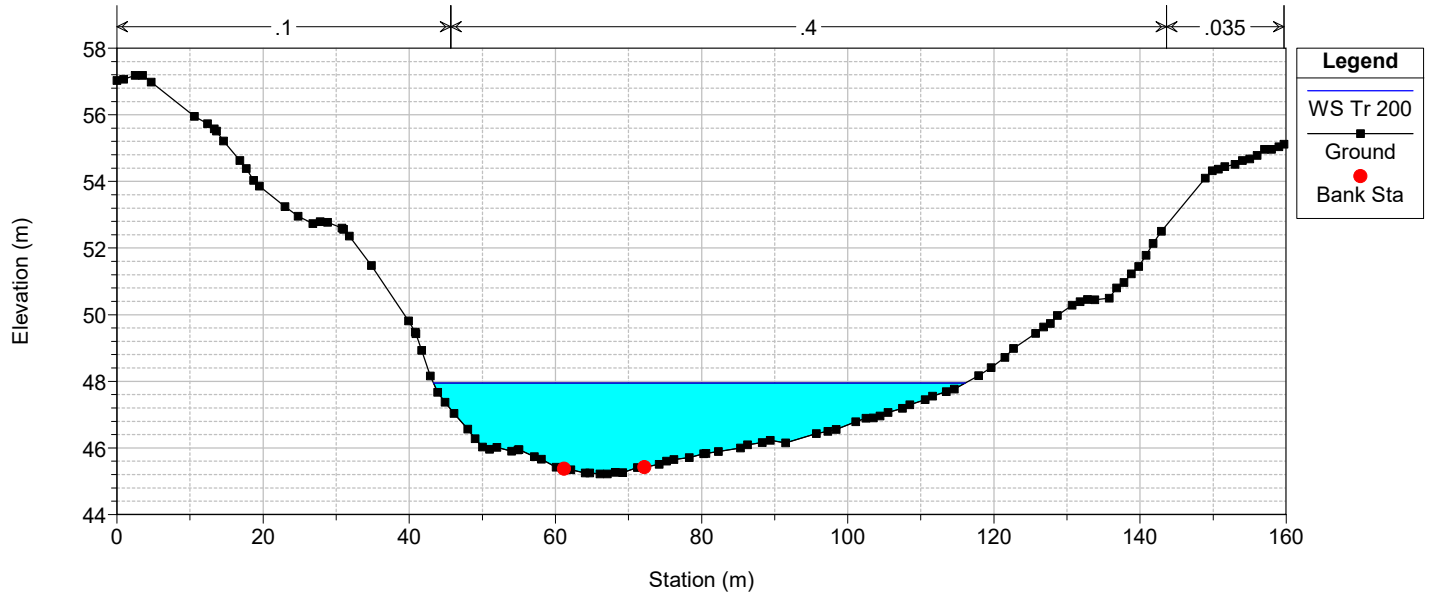
River = Asta Principale Reach = Confluenza RS = 465 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



EDIFICATO OTTAVA Plan: 04022021_ 11/30/2021

Geom: 04022021_mod

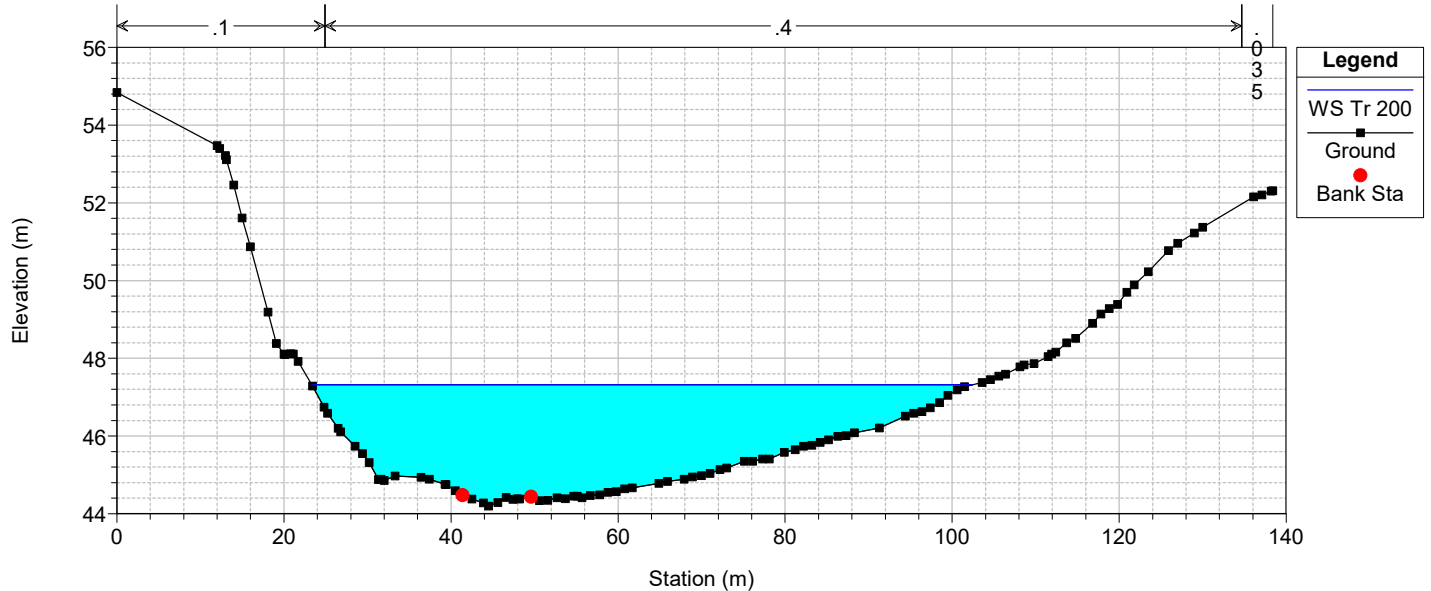
River = Asta Principale Reach = Confluenza RS = 395 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



EDIFICATO OTTAVA Plan: 04022021_ 11/30/2021

Geom: 04022021_mod

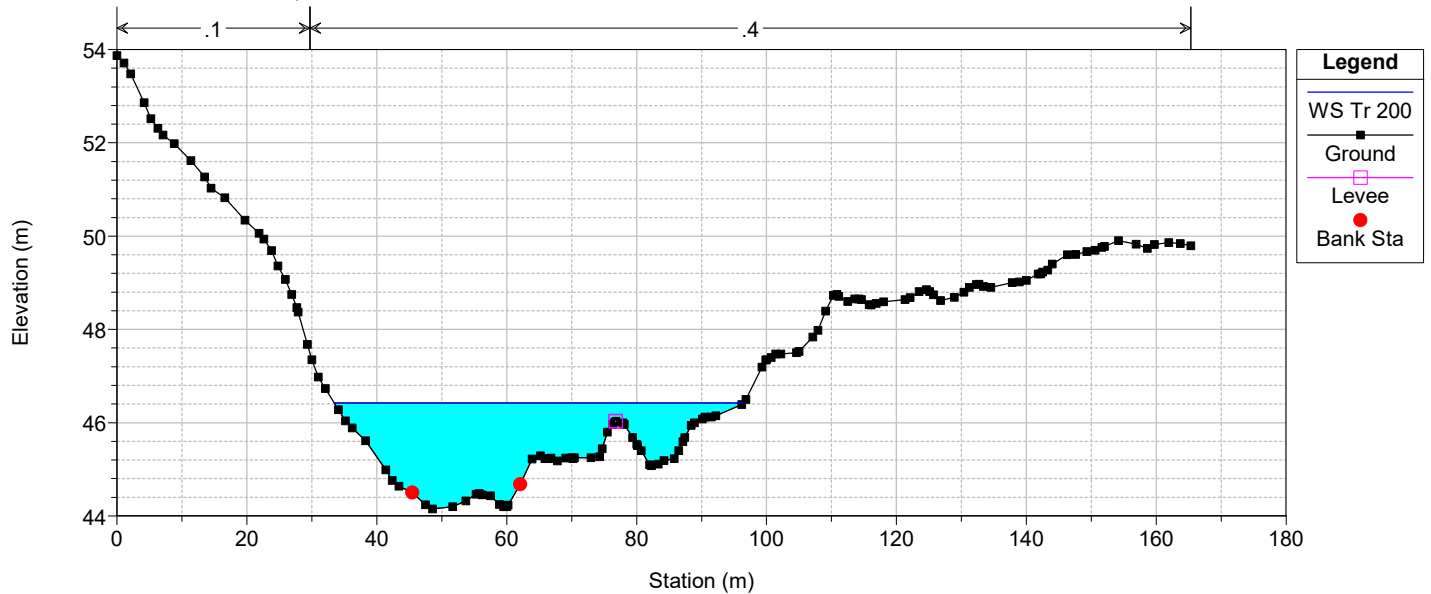
River = Asta Principale Reach = Confluenza RS = 309 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



EDIFICATO OTTAVA Plan: 04022021_ 11/30/2021

Geom: 04022021_mod

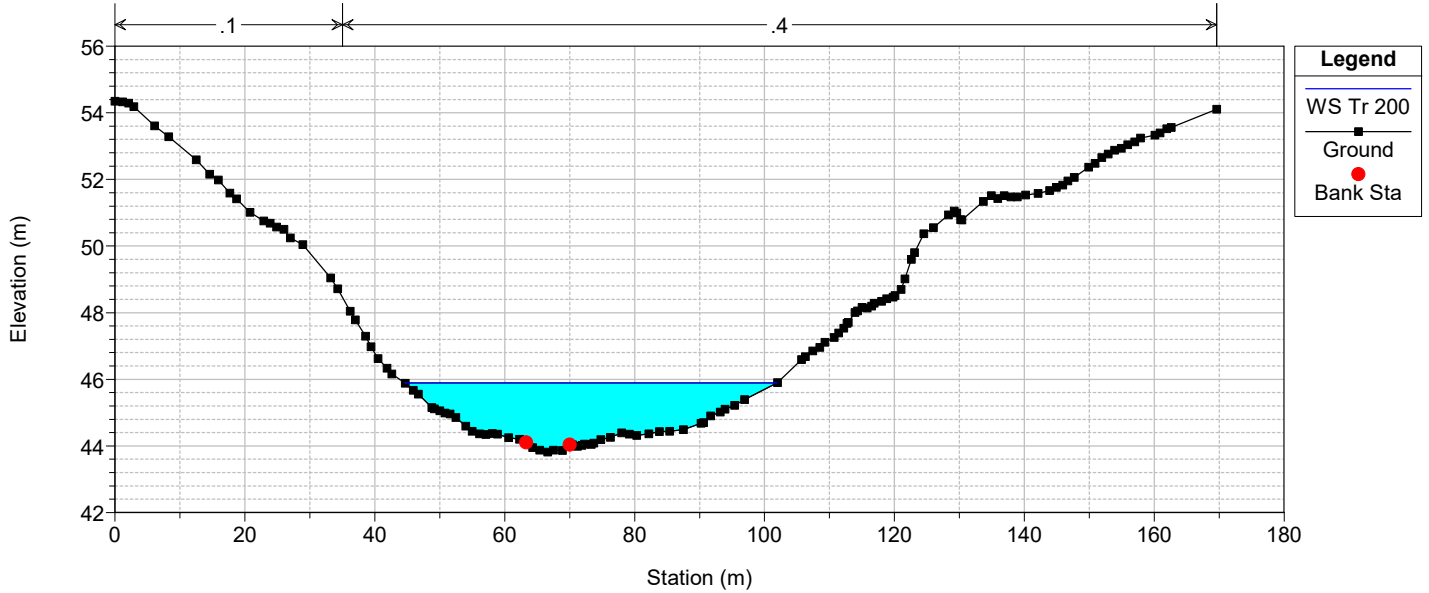
River = Asta Principale Reach = Confluenza RS = 234 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



EDIFICATO OTTAVA Plan: 04022021_ 11/30/2021

Geom: 04022021_mod

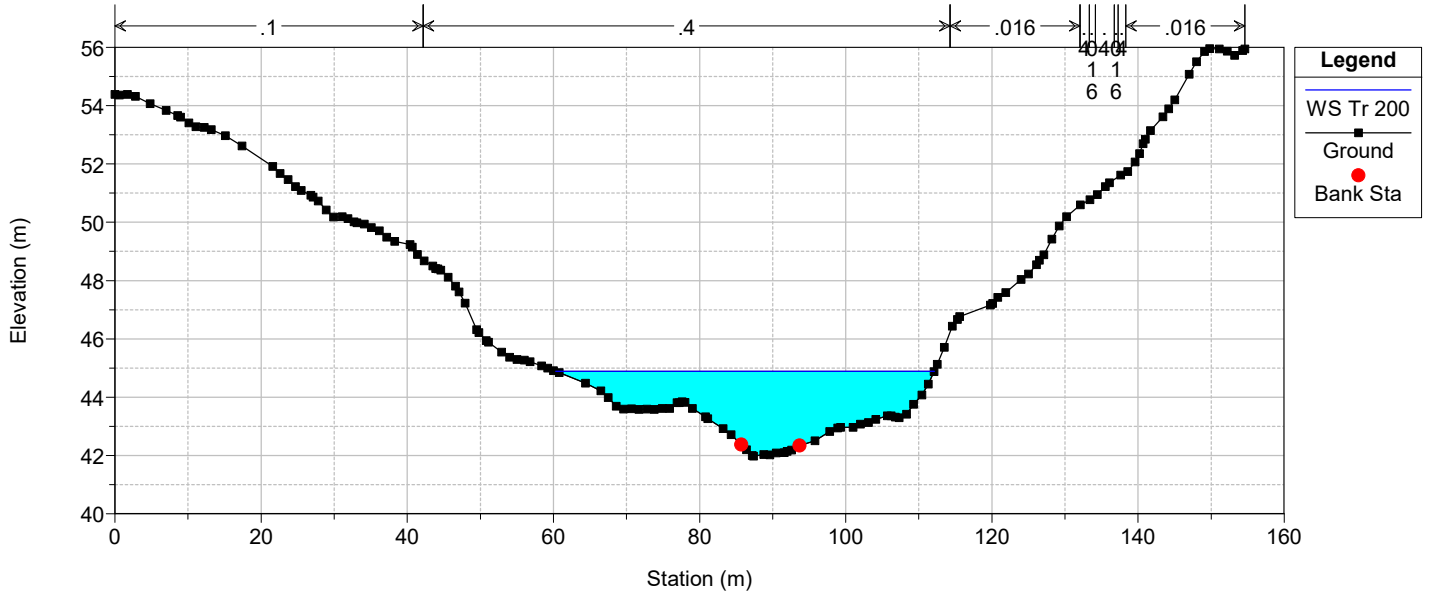
River = Asta Principale Reach = Confluenza RS = 221 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



EDIFICATO OTTAVA Plan: 04022021_ 11/30/2021

Geom: 04022021_mod

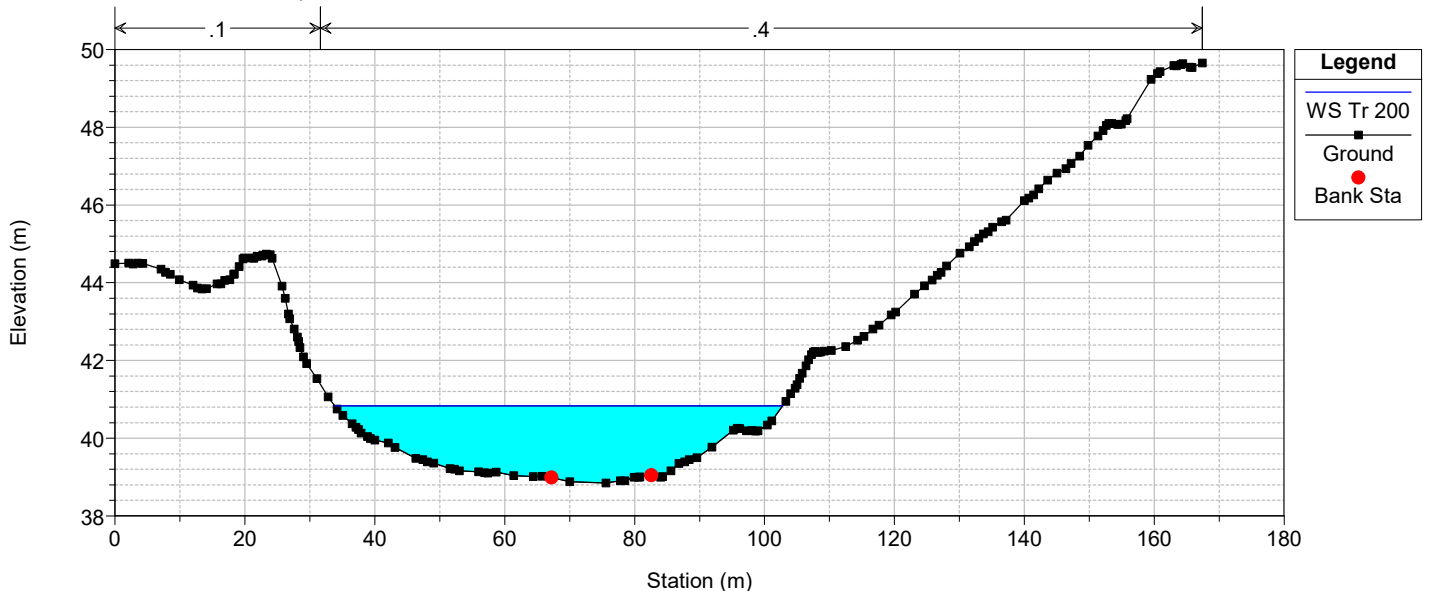
River = Asta Principale Reach = Confluenza RS = 190 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



EDIFICATO OTTAVA Plan: 04022021_ 11/30/2021

Geom: 04022021_mod

River = Asta Principale Reach = Confluenza RS = 27 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (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
Confluenza	1600	Tr 200	47.13	57.67	58.52		58.58	0.350848	1.25	43.94	86.20	0.45
Confluenza	1449	Tr 200	47.13	56.26	58.53	56.95	58.54	0.000040	0.14	174.82	95.52	0.03
Confluenza	1314	Tr 200	47.13	55.23	58.53		58.54	0.000016	0.25	224.43	96.12	0.04
Confluenza	1253	Tr 200	47.13	54.77	58.53		58.53	0.000686	0.16	416.26	195.05	0.03
Confluenza	1211	Tr 200	47.13	54.61	58.48	56.28	58.48	0.003096	0.30	200.55	91.27	0.05
Confluenza	1190		Culvert									
Confluenza	1158	Tr 200	47.13	53.87	56.18	54.83	56.19	0.016382	0.54	109.00	71.09	0.12
Confluenza	1100	Tr 200	47.13	53.31	55.42	53.93	55.42	0.011077	0.42	126.37	86.93	0.09
Confluenza	1000	Tr 200	47.13	52.15	54.53		54.53	0.007319	0.37	154.98	94.28	0.08
Confluenza	900	Tr 200	47.13	51.07	53.76		53.76	0.008066	0.43	143.63	88.35	0.08
Confluenza	800	Tr 200	47.13	49.99	52.93		52.94	0.008463	0.45	136.30	81.55	0.09
Confluenza	700	Tr 200	47.13	49.15	51.64		51.65	0.021841	0.66	89.11	55.24	0.14
Confluenza	604	Tr 200	47.13	48.14	50.14		50.14	0.011891	0.42	133.41	93.21	0.10
Confluenza	534	Tr 200	47.13	47.50	49.39		49.39	0.009649	0.36	159.02	123.66	0.09
Confluenza	465	Tr 200	47.13	46.16	48.68		48.69	0.010820	0.47	127.42	81.68	0.10
Confluenza	395	Tr 200	47.13	45.22	47.95		47.95	0.010219	0.48	124.17	72.72	0.09
Confluenza	309	Tr 200	47.13	44.20	47.32		47.32	0.005520	0.38	157.04	79.11	0.07
Confluenza	234	Tr 200	47.13	44.15	46.43	45.22	46.45	0.037499	0.79	77.55	62.94	0.17
Confluenza	221	Tr 200	47.13	43.82	45.90		45.92	0.046012	0.85	73.25	57.37	0.19
Confluenza	190	Tr 200	47.13	41.98	44.88	43.46	44.90	0.025298	0.78	82.28	51.80	0.15
Confluenza	27	Tr 200	47.13	38.85	40.83	39.60	40.84	0.024461	0.60	94.80	68.94	0.14

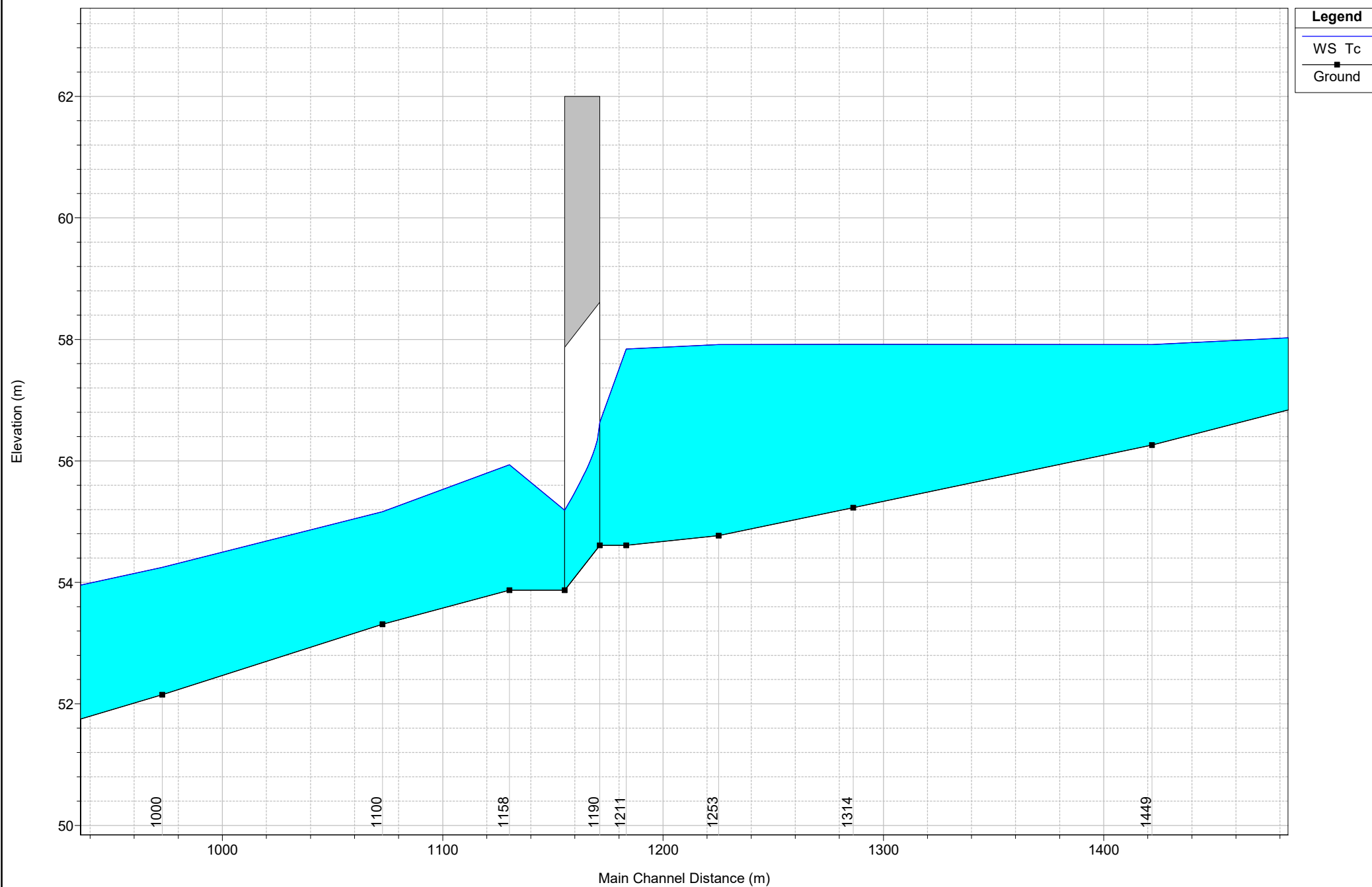
Reach	River Sta		Profile	E.G. US.	W.S. US.	E.G. IC	E.G. OC	Min El Weir Flow	Q Culv Group	Q Weir	Delta WS	Culv Vel US	Culv Vel DS
				(m)	(m)	(m)	(m)	(m)	(m3/s)	(m3/s)	(m)	(m/s)	(m/s)
Confluenza	1190	Culvert #1	Tr 200	58.48	58.48	58.42	58.48	62.00	47.13		2.30	4.87	7.24

CALCOLO IDROLOGICO PORTATE DI PIENA

EDIFICATO OTTAVA - 3 _C09			
		TR (anni)	60.1
Lunghezza asta	L	m	5443
Curve Number	CN	-	94.71
Pend.za media bac.	i _{bac}	-	0.0409
Area bacino	A	kmq	5.07
Altitudine massima	Hmax	m slm	101.31
Altitudine media	Hmed	m slm	74.33
Altitudine minima	Hmin	m slm	40.37
Pend.za media asta	iret	m/m	0.0112
	SCS	(ore)	1.491
	GIANDOTTI	(ore)	3.683
	PASINI	(ore)	3.084
	VAPI	(ore)	3.924
	KIRPICH	(ore)	0.837
	VIPARELLI	(ore)	1.512
	tc adott.	SCS	
		(ore)	1.491
Tempi di ritorno	T	(anni)	60.1
Dati pluviometrici	Pgiorn.	(mm)	50
	Sottozona		2
Altezza di pioggia	n1	-	0.31570972
	a1	-	20.6914142
	n2 (ADOTTATO)	-	-0.01292992
	a2 (ADOTTATO)	-	2.36602852
	n (ADOTTATO)	-	0.30277981
	a (ADOTTATO)	-	48.9564761
	h (ADOTTATO)	(mm)	55.255
	Coef.f.Ragg (ADOTTATO)	-	0.940
	n r (ADOTTATO)	(mm)	51.929
	S	(mm)	14.187
	Ia	(mm)	2.837
	Pnetta (ADOTTATO)	(mm)	38.085
	Coef.defl. (SCS)		0.689
	Coef.defl. (GIANDOTTI)		0.751
	Coef.defl. (PASINI)		0.738
	Coef.defl. (VAPI)		0.755
	Coef.defl. (KIRPICH)		0.624
	Coef.defl. (VIPARELLI)		0.683
	Coef.defl. (ADOTTATO)	-	0.689
PORTATE DI PIENA	Qpicco (SCS)	(mc/s)	35.948
	Qpicco (GIANDOTTI)	(mc/s)	20.103
	Qpicco (PASINI)	(mc/s)	22.371
	Qpicco (VAPI)	(mc/s)	19.344
	Qpicco (KIRPICH)	(mc/s)	45.795
	Qpicco (VIPARELLI)	(mc/s)	34.003
	Qpicco (ADOTTATO)	(mc/s)	35.964

Comune di Sassari (SS)
 VERIFICHE DI SICUREZZA IDRAULICA OPERE INTERFERENTI CON IL RETICOLO IDROGRAFICO
 Strade comunali - **ATTRAVERSAMENTO C09**

	River Sta	Profile	Culv Inv El DS	Culv Inv El US	W.S.	Q Culv	Culv Vel US	Culv Vel DS	QUOTA INTRADOS SO	FRANCHI DISPONIBILI	FRANCHI RICHIESTI	50% di FRANCHI RICHIESTI	VERIFICA	Deficit
			(m slm)	(m slm)	(m slm)	(m³/s)	(m/s)	(m/s)	(m slm)	(m)	(m)	(m)		(m)
UPSTREAM	1190 Culver	TR 200 ANNI		54.61	58.48	47.13	4.87		58.61	0.13	1.500		NON VERIF.	1.37
	1190 Culver	Tr critico		54.61	57.84	36	4.45		58.61	0.77	1.500	0.750	OK	OK
DOWNSTREAM	1190 Culver	TR 200 ANNI	53.87		56.18	47.13		7.24	57.87	1.69	1.871		NON VERIF.	0.18078768
	1190 Culver	Tr critico	53.87		55.94	36		6.84	57.87	1.93	1.775	0.887	OK	OK



COMUNE DI SASSARI

VERIFICHE DI SICUREZZA IDRAULICA OPERE INTERFERENTI CON IL RETICOLO IDROGRAFICO – ATTRAVERSAMENTI STRADE COMUNALI

Area di indagine: **TERRITORIO COMUNALE**

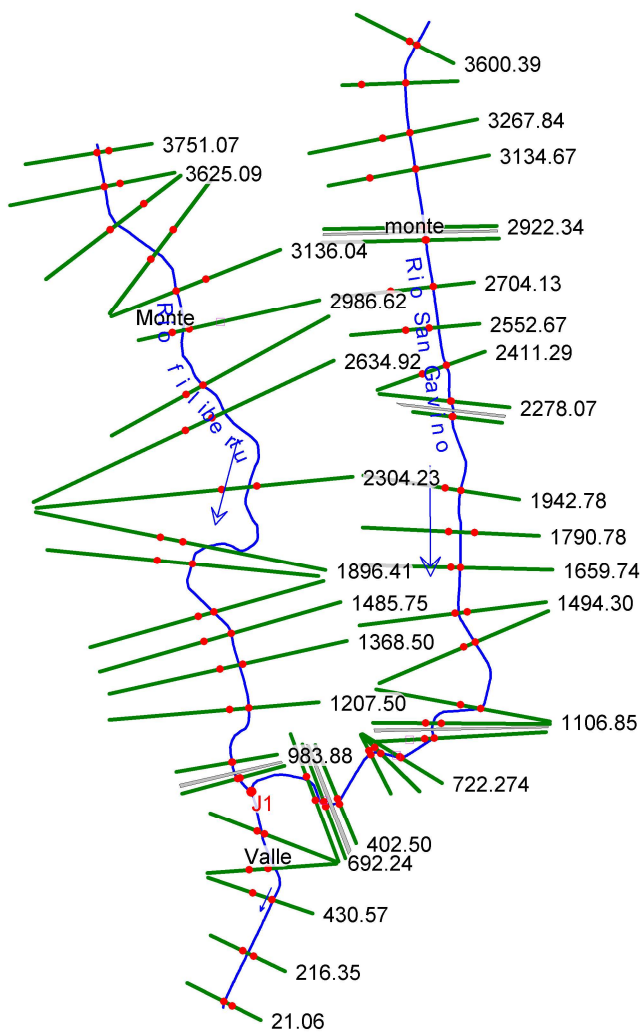
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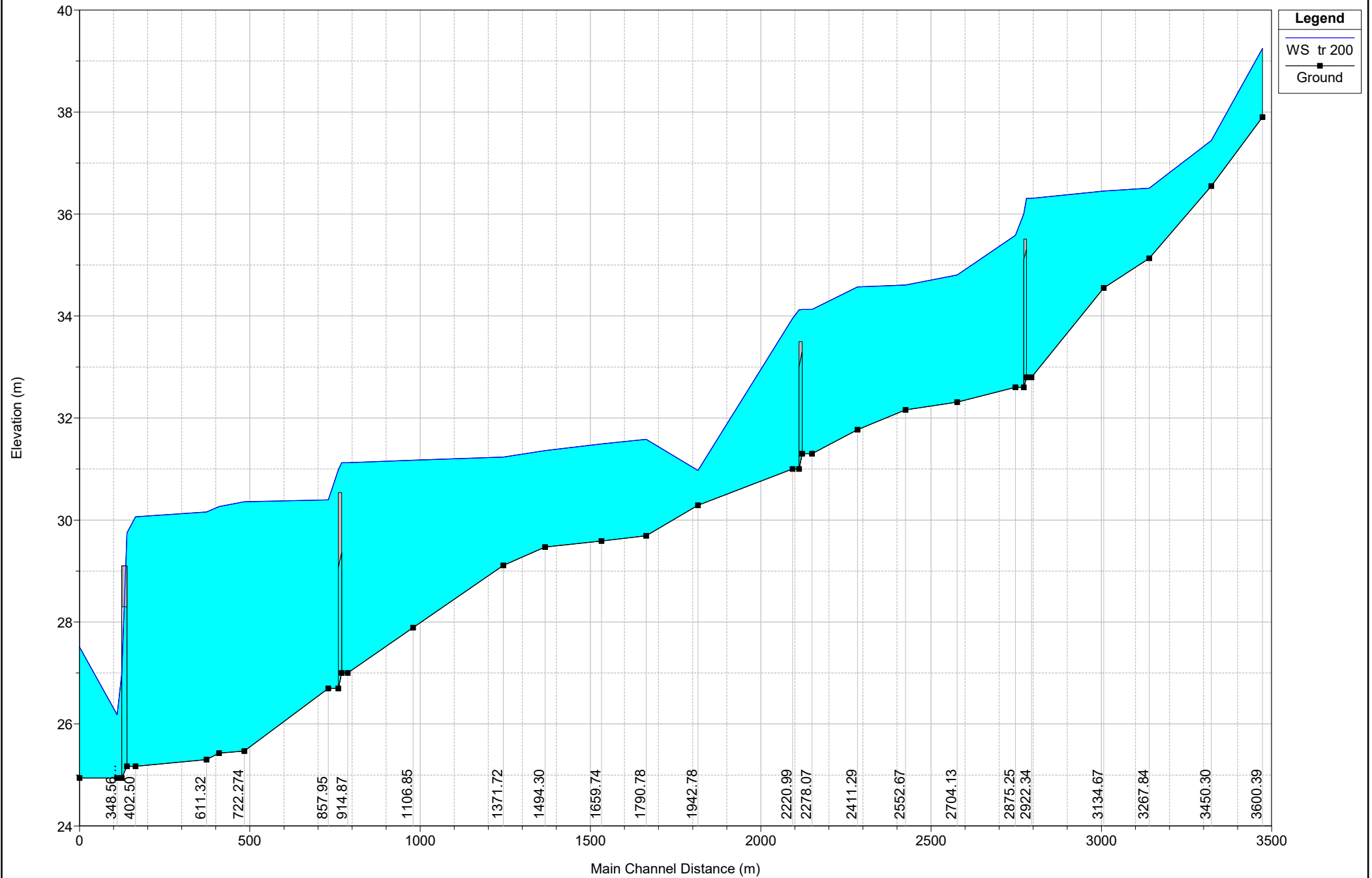
ATTRAVERSAMENTI C10, C11 e C12 sul rio San Gavino

- Schema planimetrico del modello matematico;
- Profili longitudinali con livelli idrici per il tempo di ritorno di 200 anni;
- Sezioni trasversali con livelli idrici per il tempo di ritorno di 200 anni;
- Tabulati numerici di output per il tempo di ritorno di 200 anni;
- Calcolo della portata critica;
- Profilo longitudinale del livello idrico per il tempo di ritorno critico TC;
- Verifica dei franchi idraulici e della portata critica;

River	Reach	RS	PORTATE mc/s			
			tr 50	tr 100	tr 200	tr 500
Rio filibertu	Monte	3751.07	135.514	160.655	185.994	219.696
Rio filibertu	Valle	692.24	314.363	370.759	427.423	502.557
Rio San Gavino	monte	3600.39	219.179	258.335	297.666	349.806

River	Reach	PROFILI	condizioni al contorno	
			upstream	downstream
Rio filibertu	Monte	all	Critical Depth	Junction = J1
Rio filibertu	Valle	all	Junction = J1	Normal Depth S = 0.007
Rio San Gavino	monte	all	Critical Depth	Junction = J1



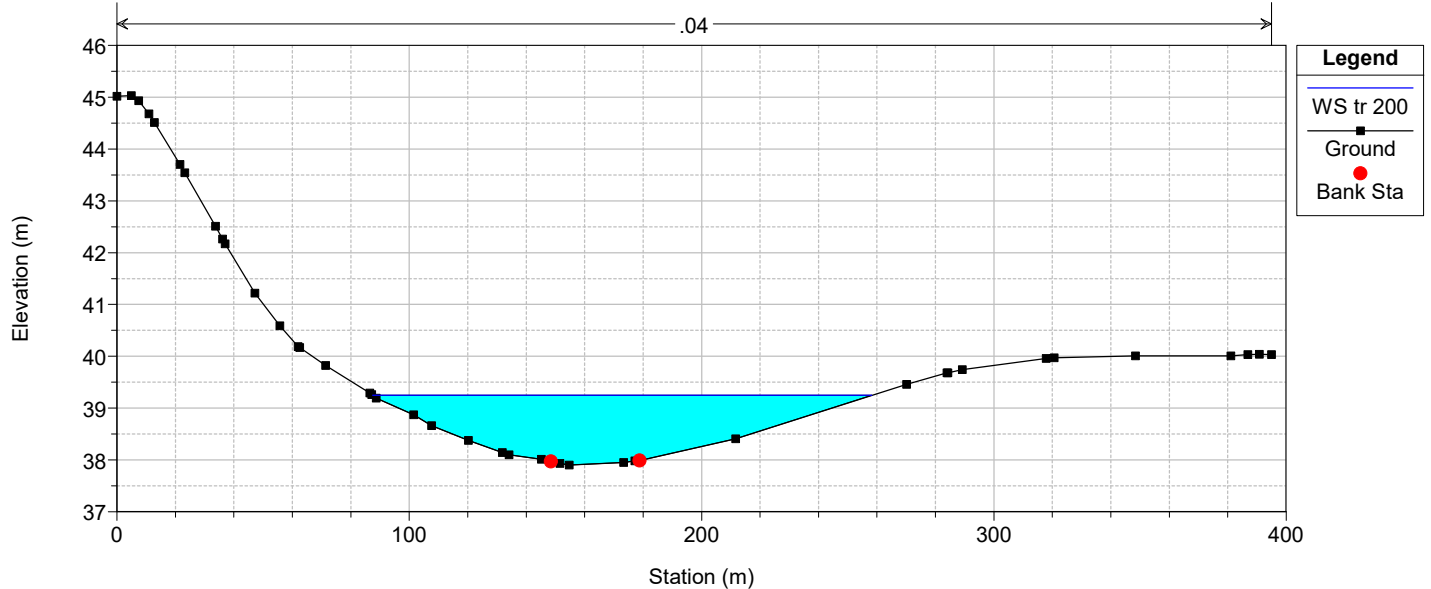


No Data for Plot

08022016 Plan: Plan 02 2/9/2021

Geom: 08022016

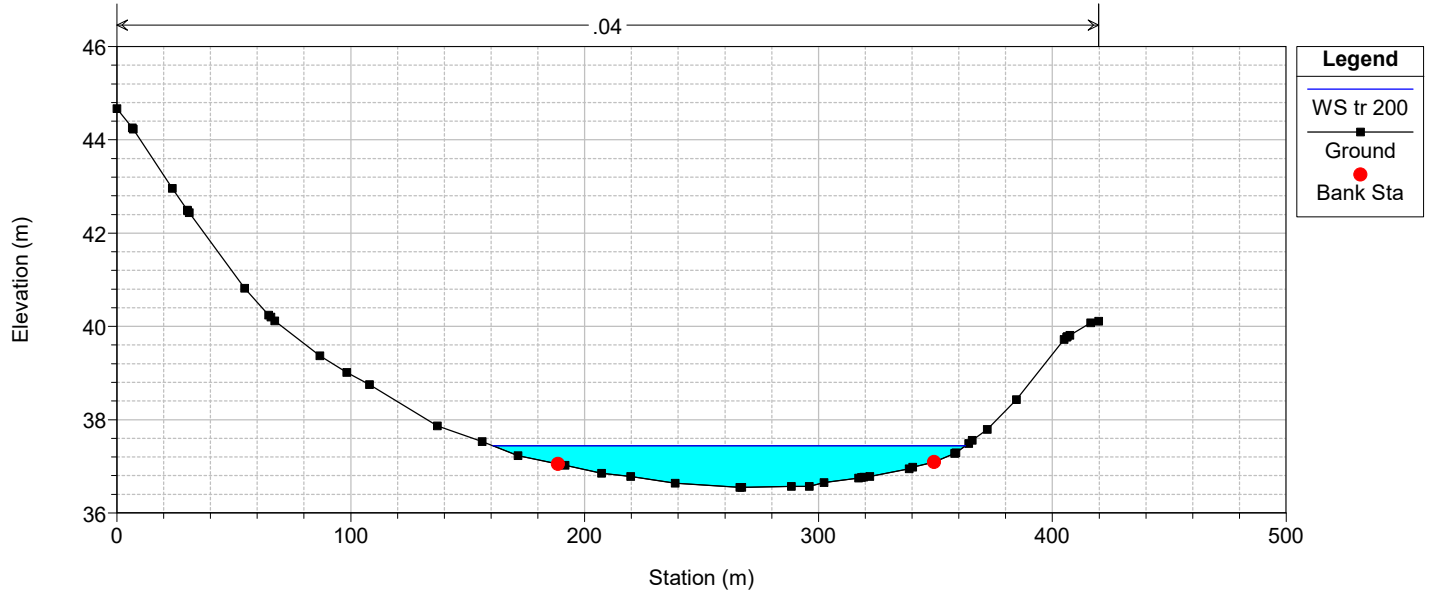
River = Rio San Gavino Reach = monte RS = 3600.39 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



08022016 Plan: Plan 02 2/9/2021

Geom: 08022016

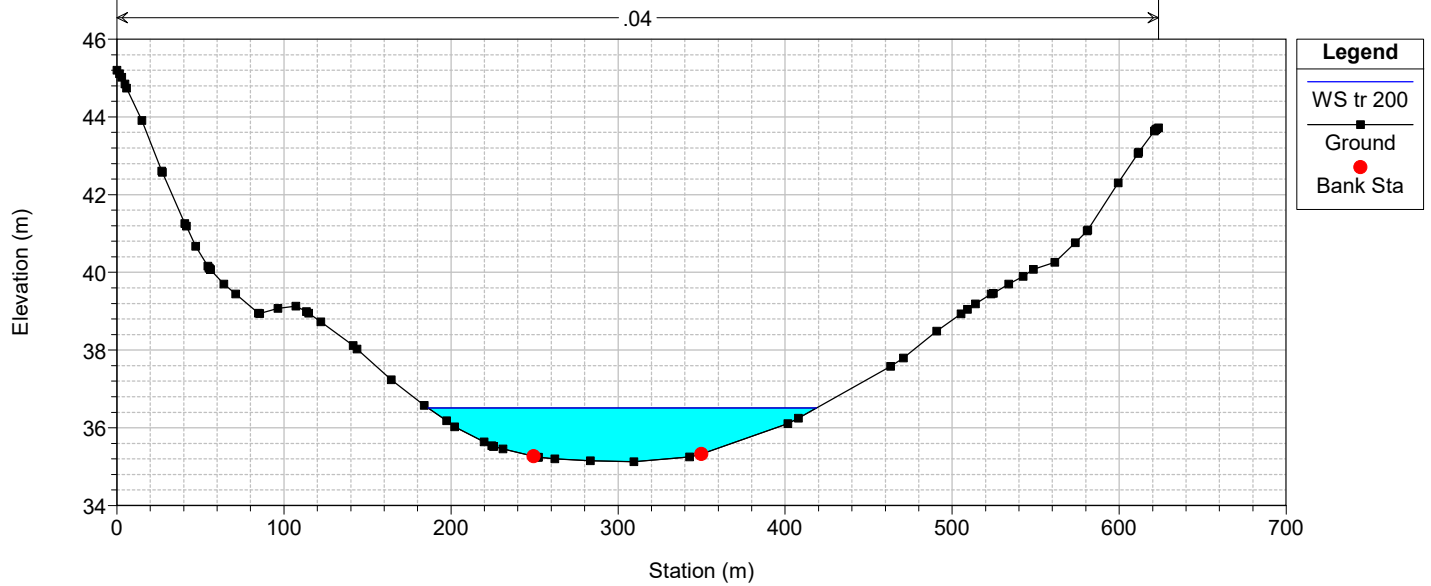
River = Rio San Gavino Reach = monte RS = 3450.30 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



08022016 Plan: Plan 02 2/9/2021

Geom: 08022016

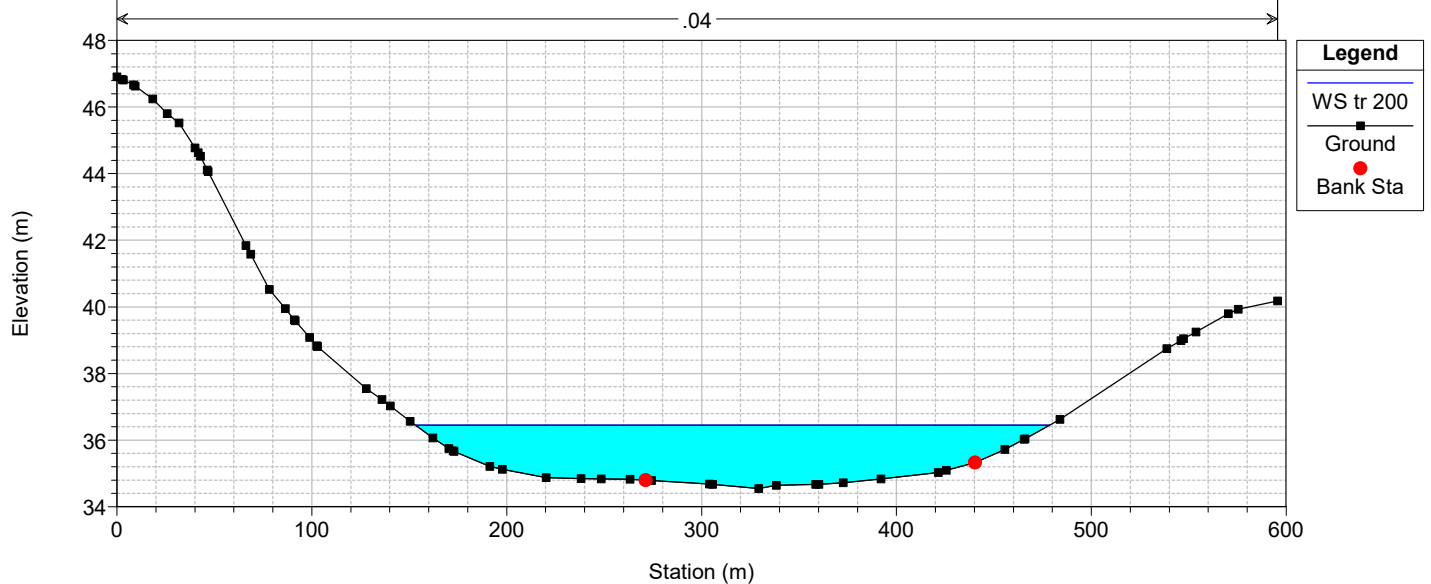
River = Rio San Gavino Reach = monte RS = 3267.84 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



08022016 Plan: Plan 02 2/9/2021

Geom: 08022016

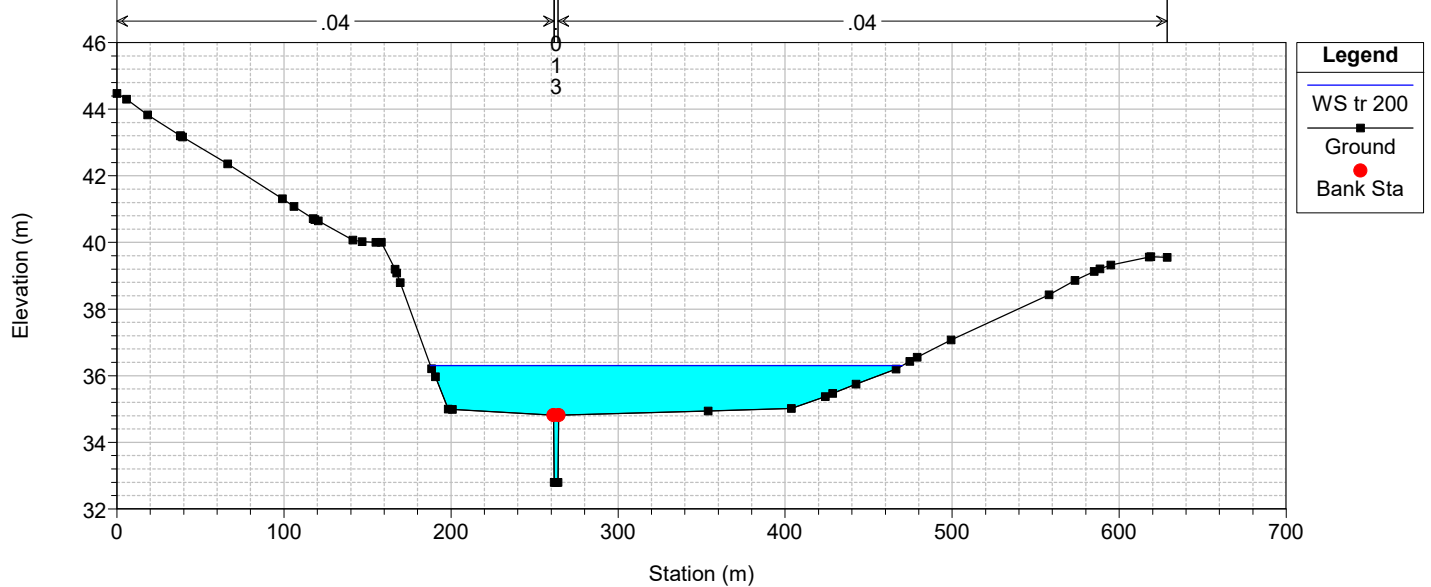
River = Rio San Gavino Reach = monte RS = 3134.67 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



08022016 Plan: Plan 02 2/9/2021

Geom: 08022016

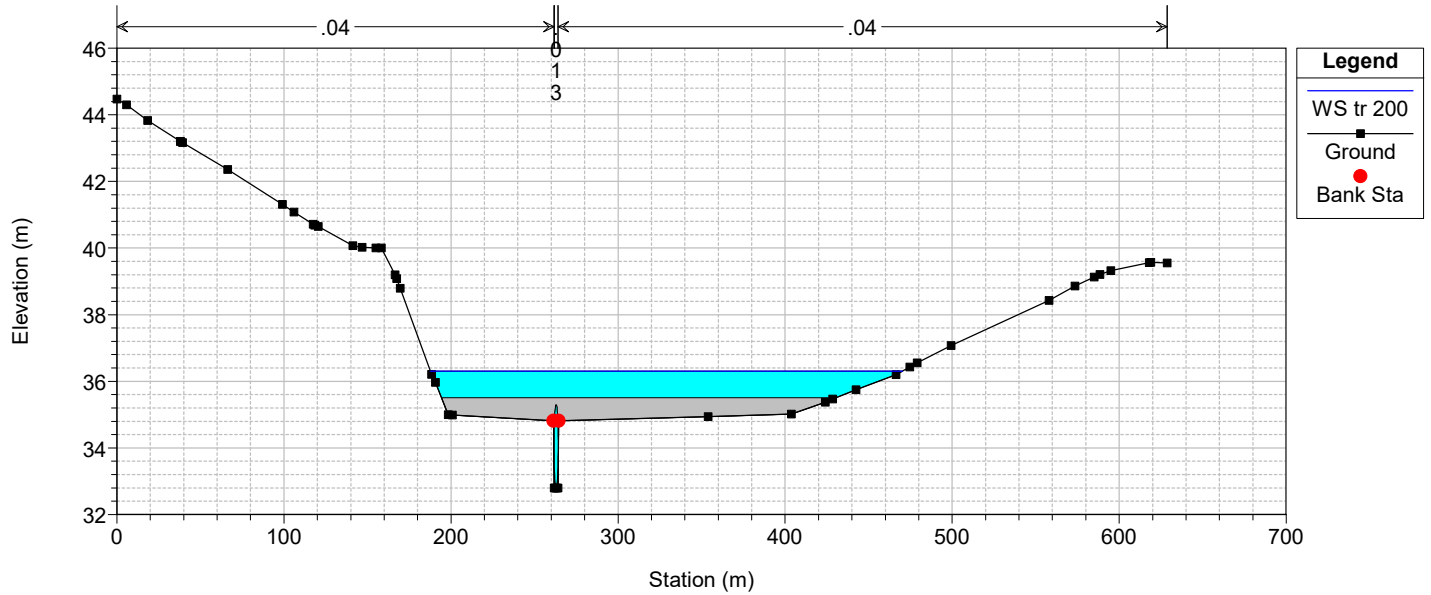
River = Rio San Gavino Reach = monte RS = 2922.34 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



08022016 Plan: Plan 02 2/9/2021

Geom: 08022016

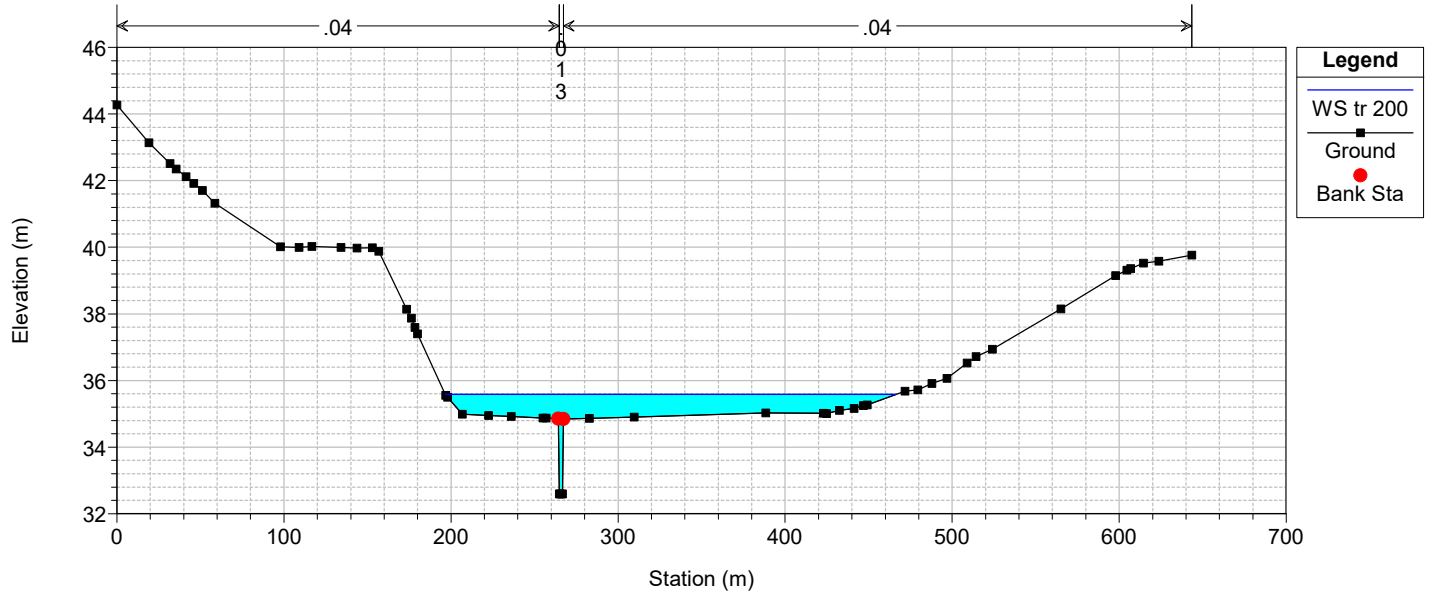
River = Rio San Gavino Reach = monte RS = 2893.46 Culv COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



08022016 Plan: Plan 02 2/9/2021

Geom: 08022016

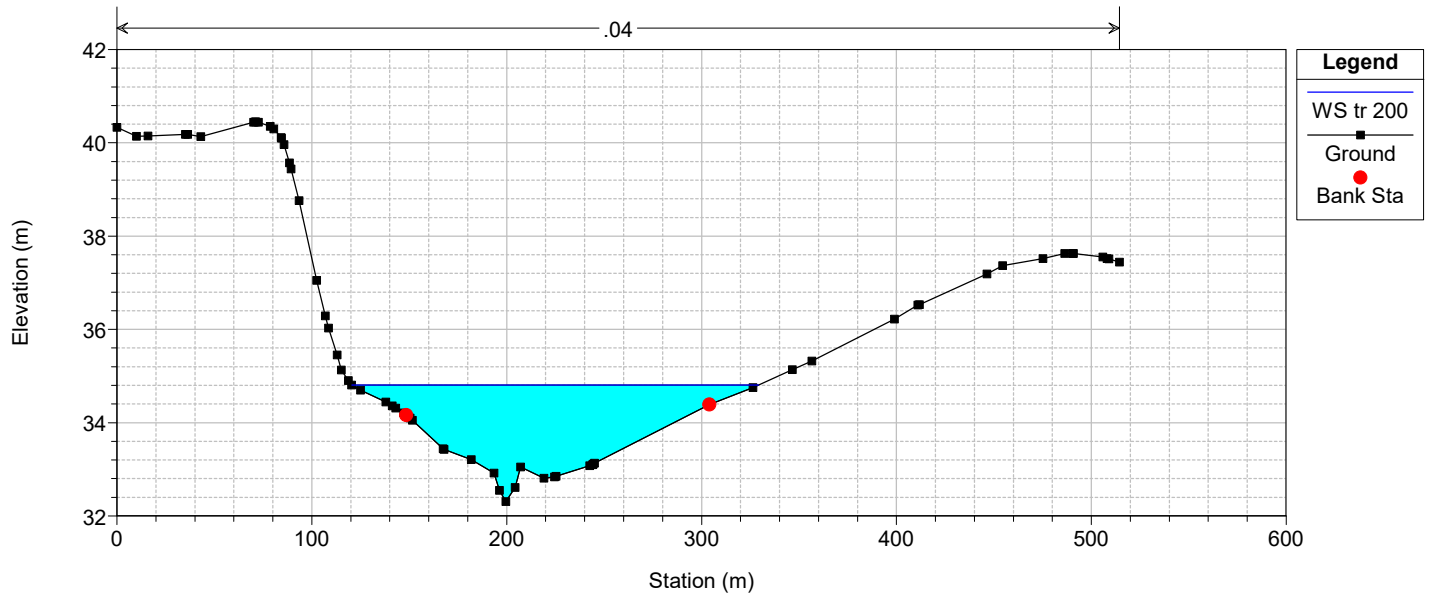
River = Rio San Gavino Reach = monte RS = 2875.25 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



08022016 Plan: Plan 02 2/9/2021

Geom: 08022016

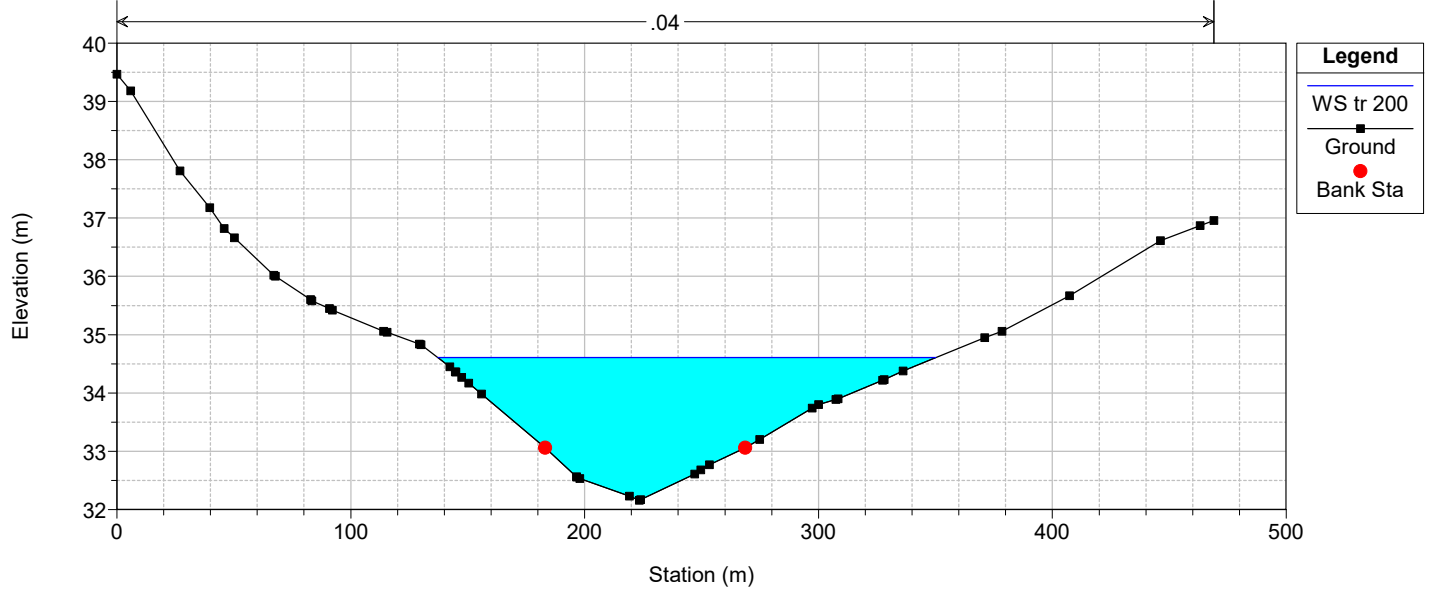
River = Rio San Gavino Reach = monte RS = 2704.13 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



08022016 Plan: Plan 02 2/9/2021

Geom: 08022016

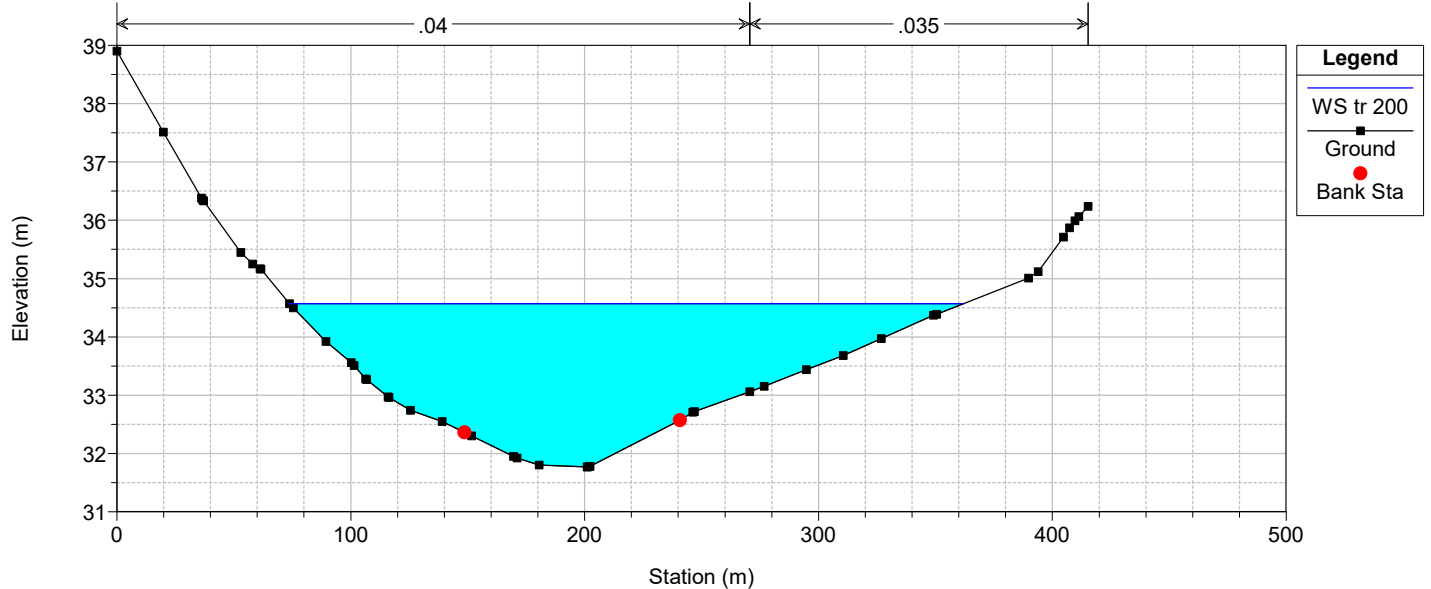
River = Rio San Gavino Reach = monte RS = 2552.67 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



08022016 Plan: Plan 02 2/9/2021

Geom: 08022016

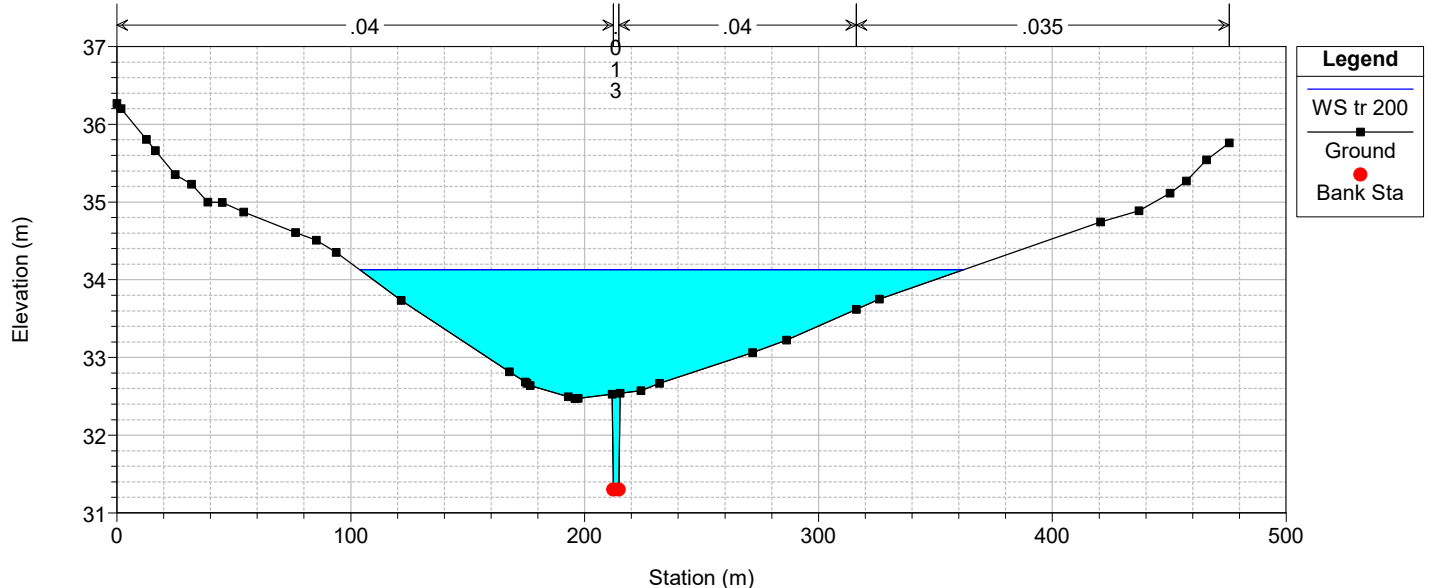
River = Rio San Gavino Reach = monte RS = 2411.29 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



08022016 Plan: Plan 02 2/9/2021

Geom: 08022016

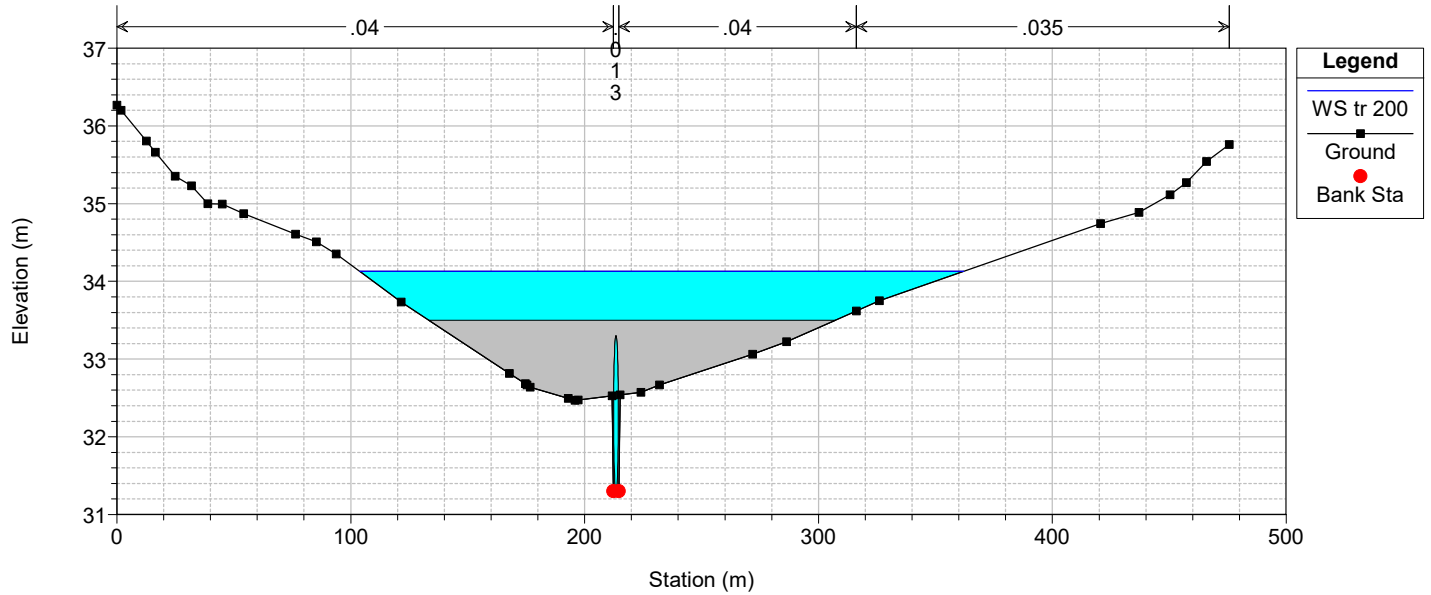
River = Rio San Gavino Reach = monte RS = 2278.07 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



08022016 Plan: Plan 02 2/9/2021

Geom: 08022016

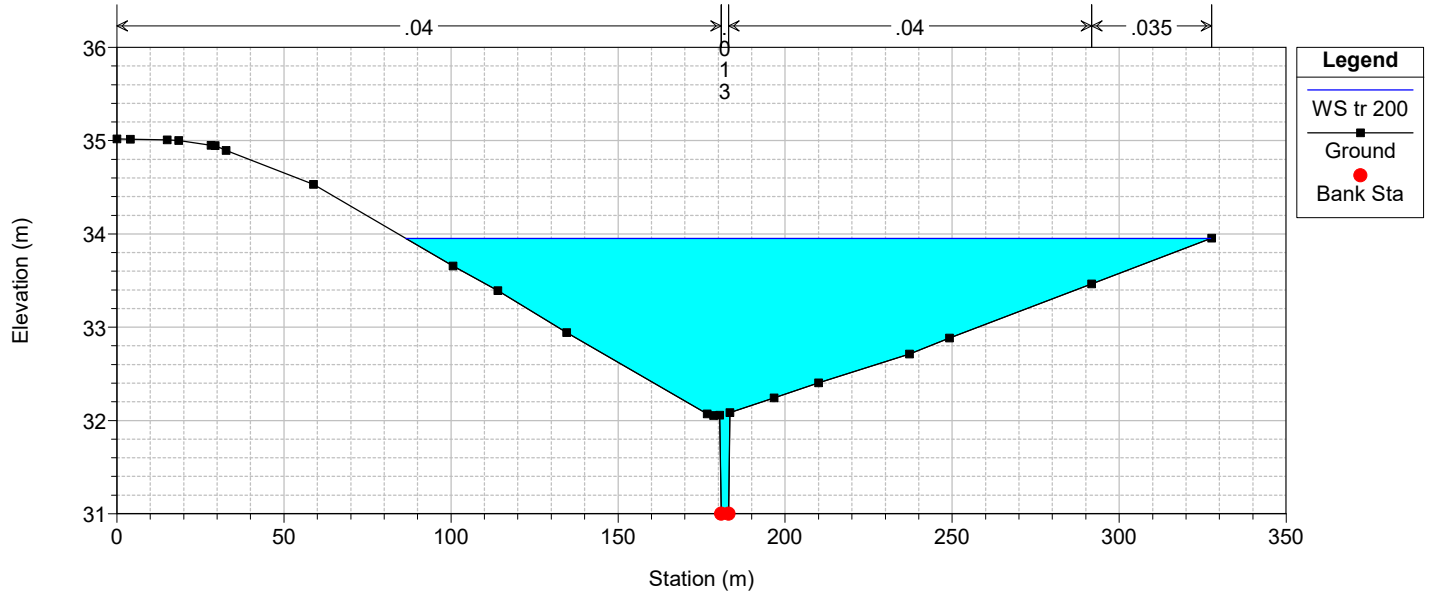
River = Rio San Gavino Reach = monte RS = 2237.09 Culv COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



08022016 Plan: Plan 02 2/9/2021

Geom: 08022016

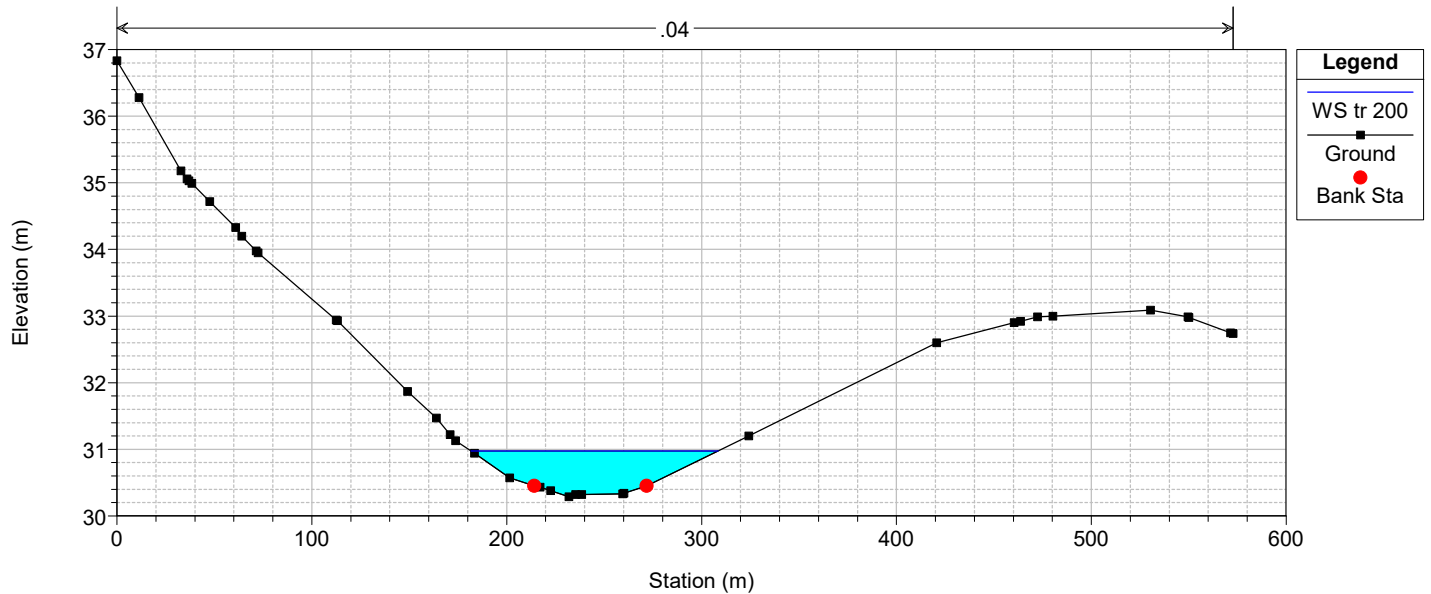
River = Rio San Gavino Reach = monte RS = 2220.99 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



08022016 Plan: Plan 02 2/9/2021

Geom: 08022016

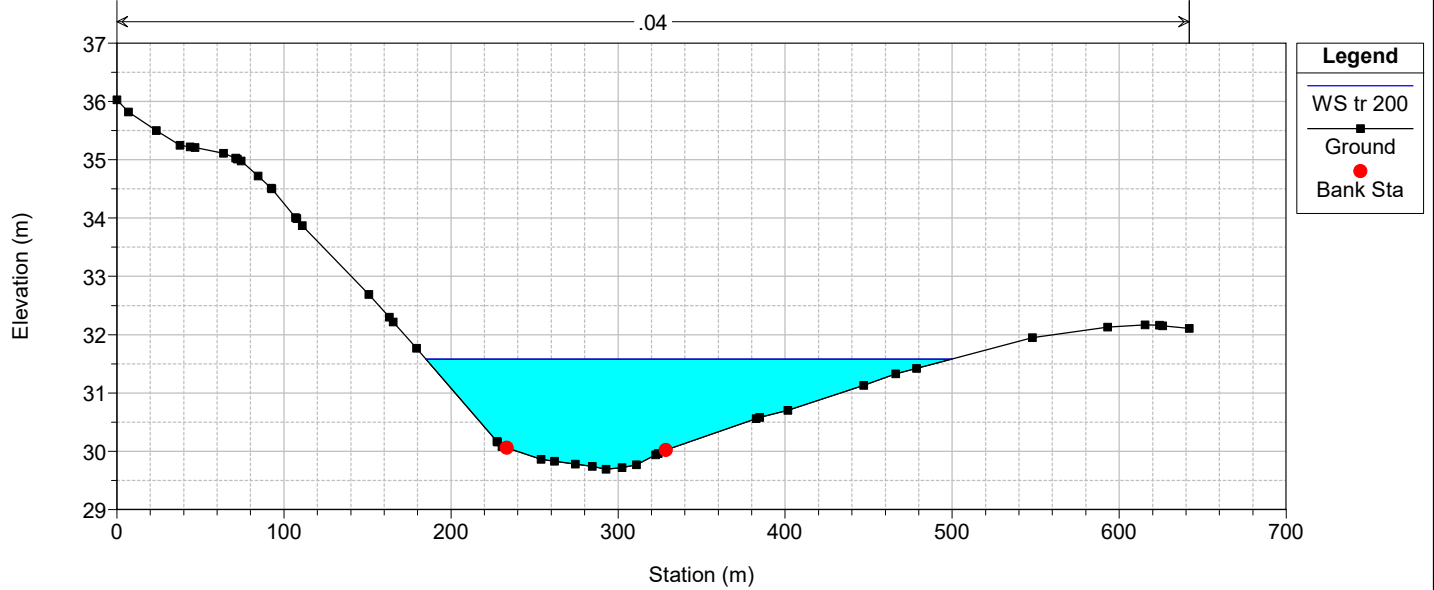
River = Rio San Gavino Reach = monte RS = 1942.78 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



08022016 Plan: Plan 02 2/9/2021

Geom: 08022016

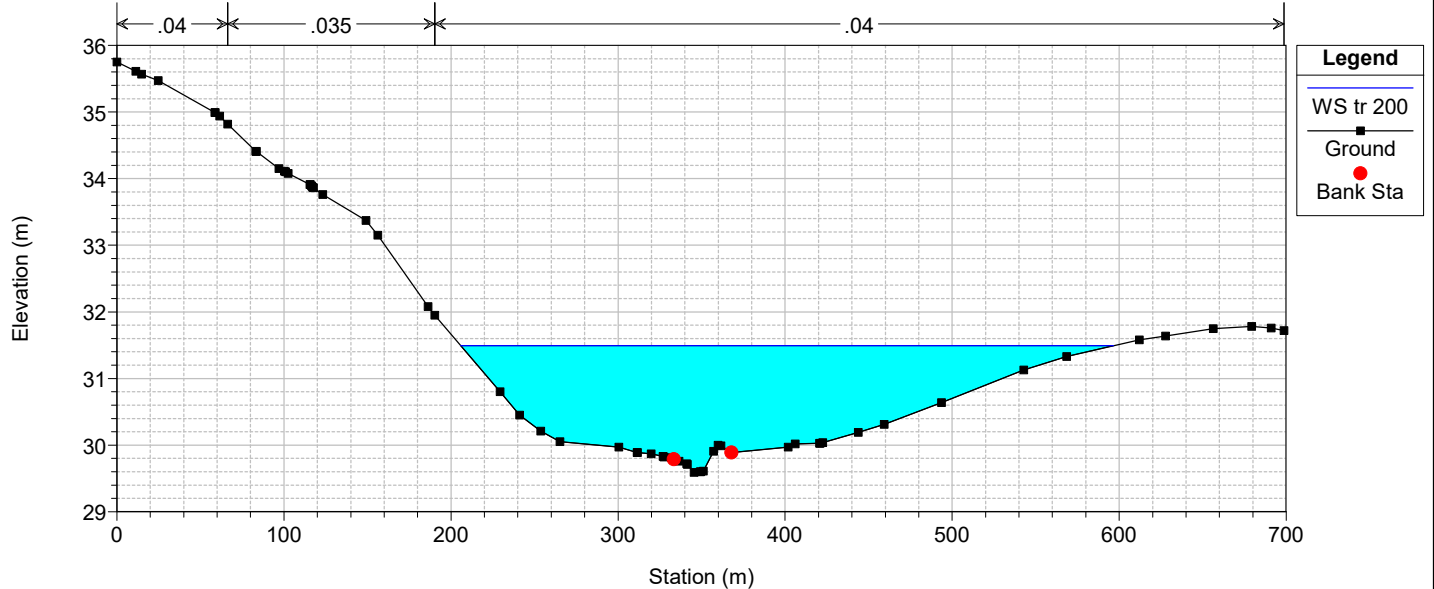
River = Rio San Gavino Reach = monte RS = 1790.78 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



08022016 Plan: Plan 02 2/9/2021

Geom: 08022016

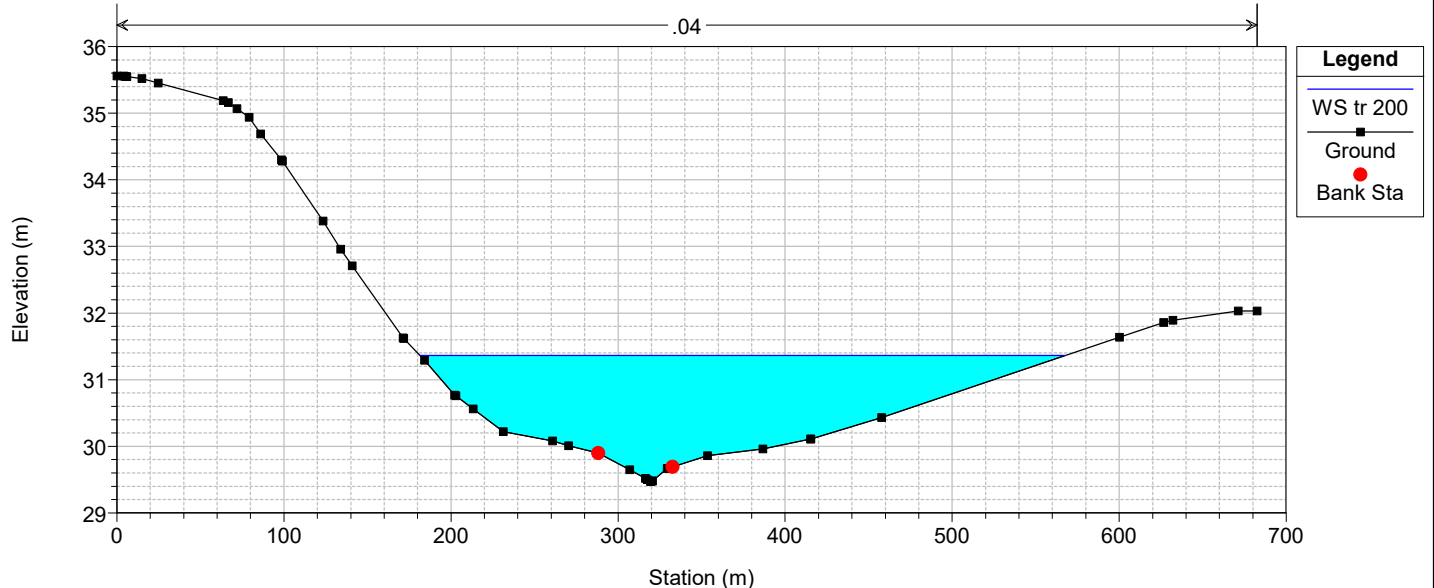
River = Rio San Gavino Reach = monte RS = 1659.74 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



08022016 Plan: Plan 02 2/9/2021

Geom: 08022016

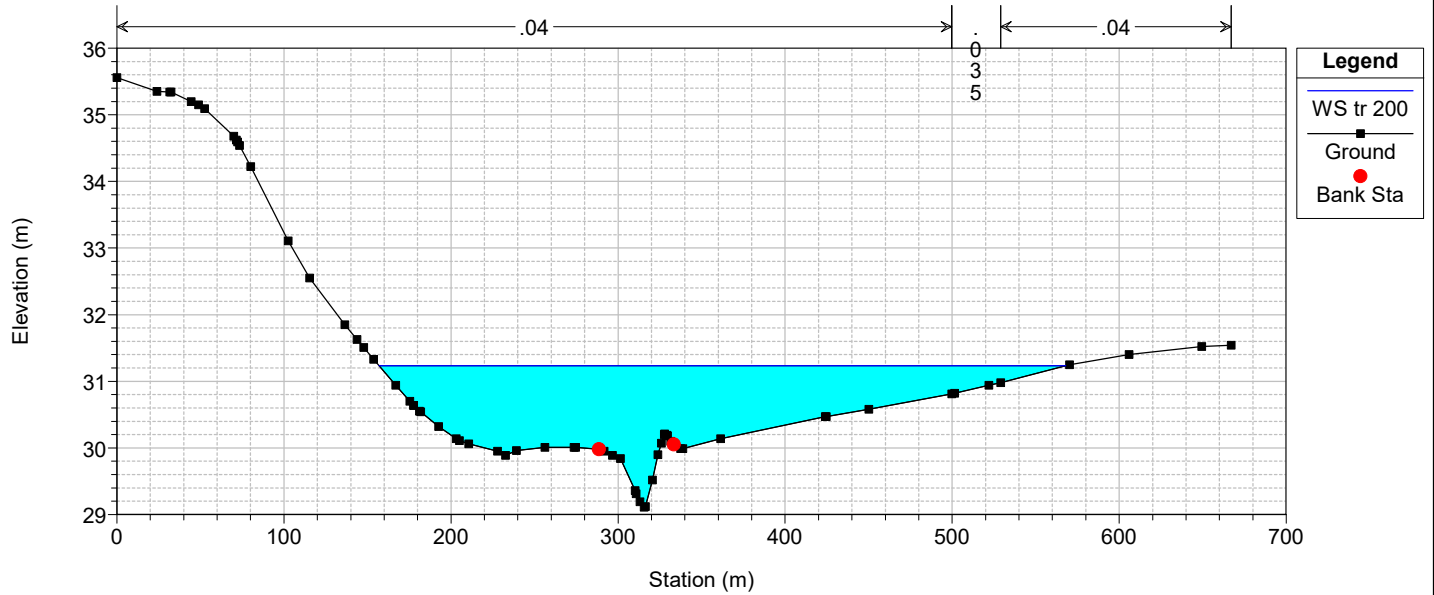
River = Rio San Gavino Reach = monte RS = 1494.30 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



08022016 Plan: Plan 02 2/9/2021

Geom: 08022016

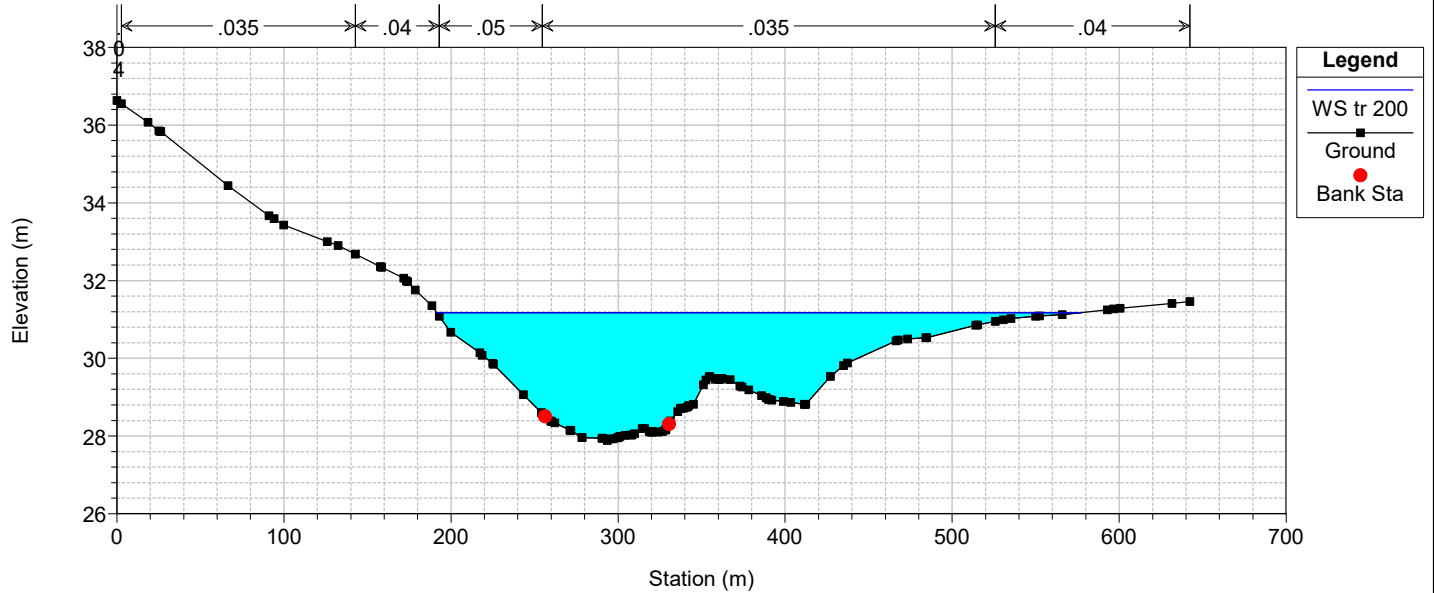
River = Rio San Gavino Reach = monte RS = 1371.72 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



08022016 Plan: Plan 02 2/9/2021

Geom: 08022016

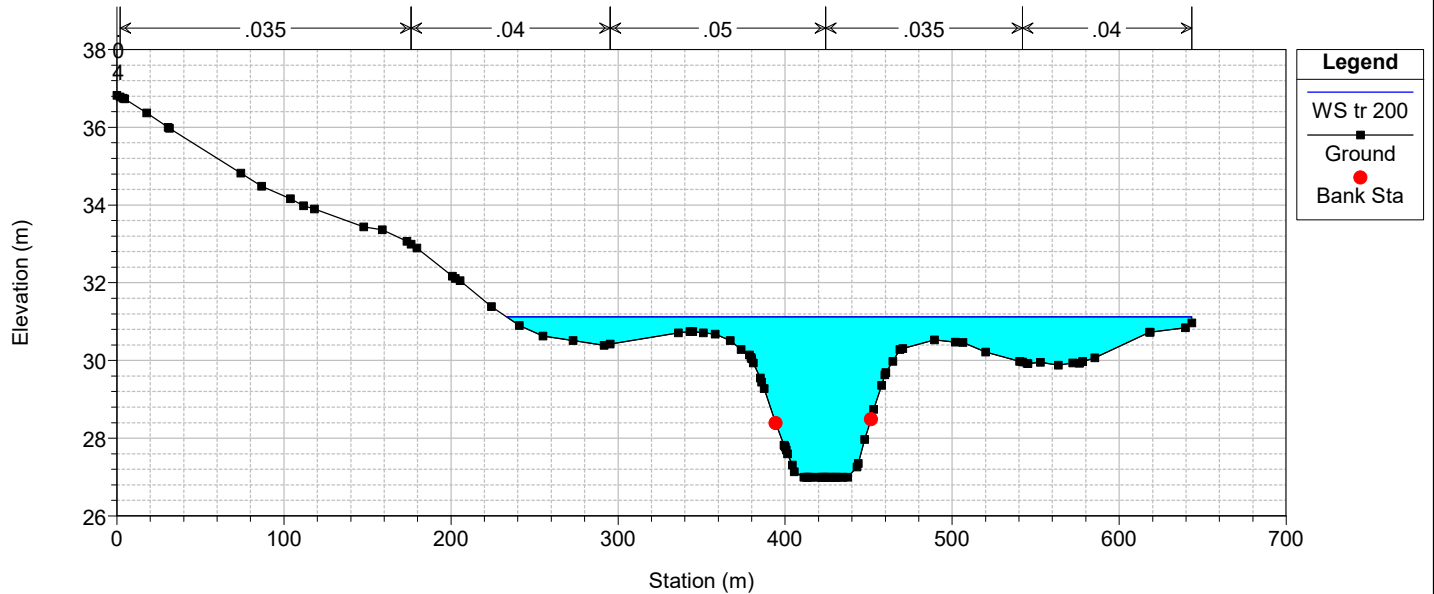
River = Rio San Gavino Reach = monte RS = 1106.85 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



08022016 Plan: Plan 02 2/9/2021

Geom: 08022016

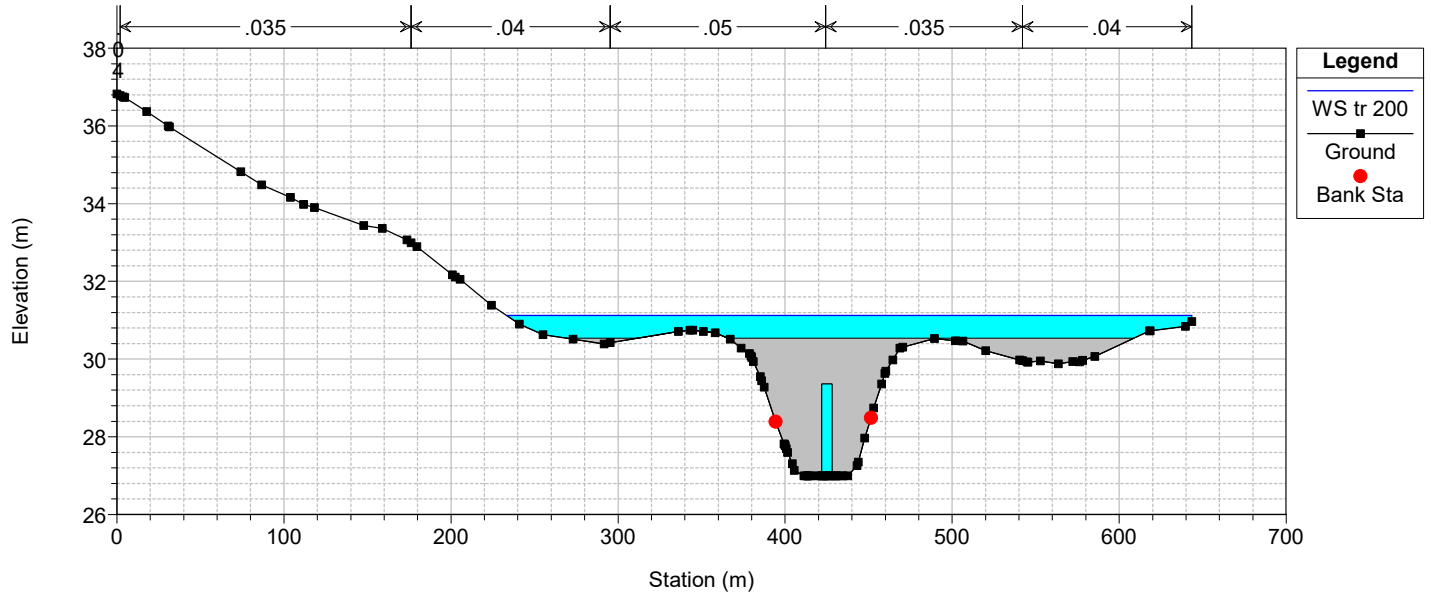
River = Rio San Gavino Reach = monte RS = 914.87 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



08022016 Plan: Plan 02 2/9/2021

Geom: 08022016

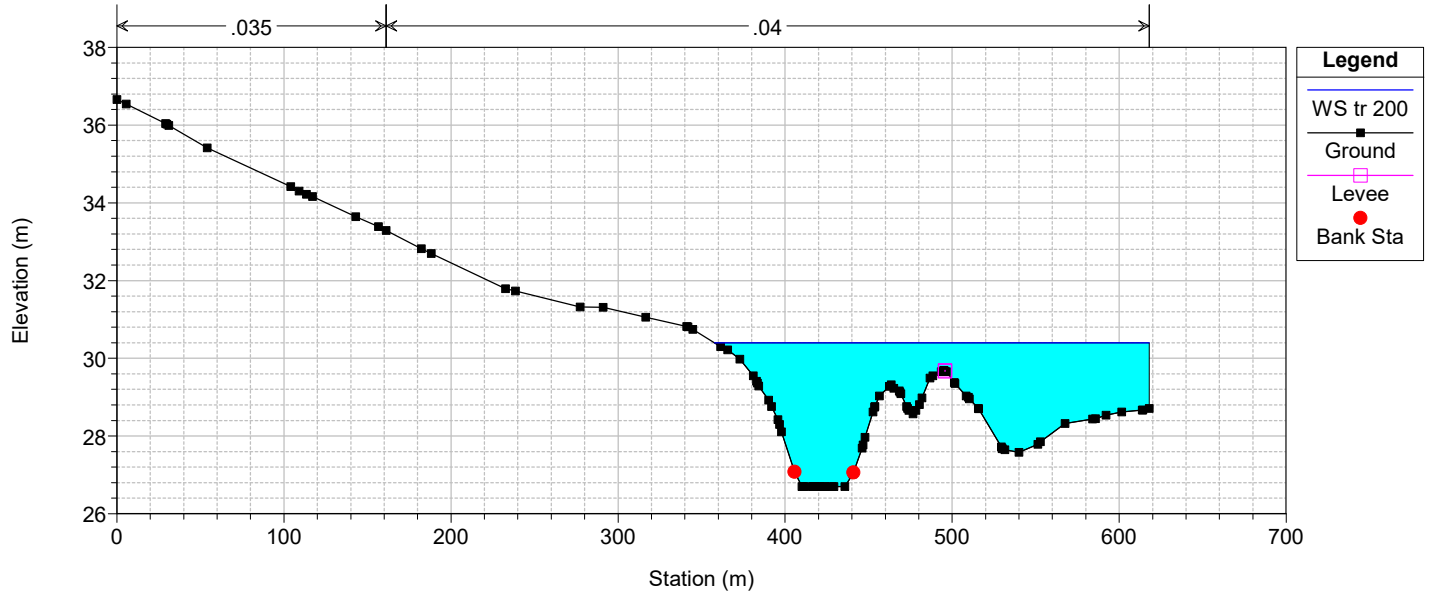
River = Rio San Gavino Reach = monte RS = 885 Culv COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



08022016 Plan: Plan 02 2/9/2021

Geom: 08022016

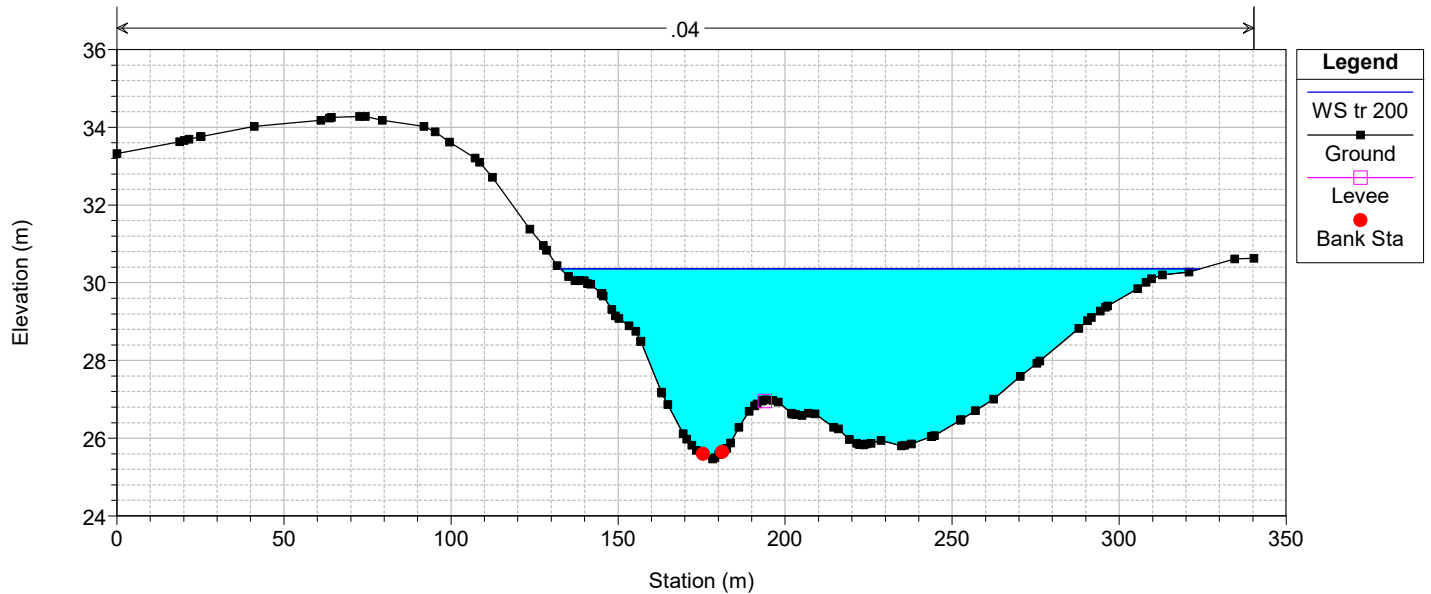
River = Rio San Gavino Reach = monte RS = 857.95 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



08022016 Plan: Plan 02 2/9/2021

Geom: 08022016

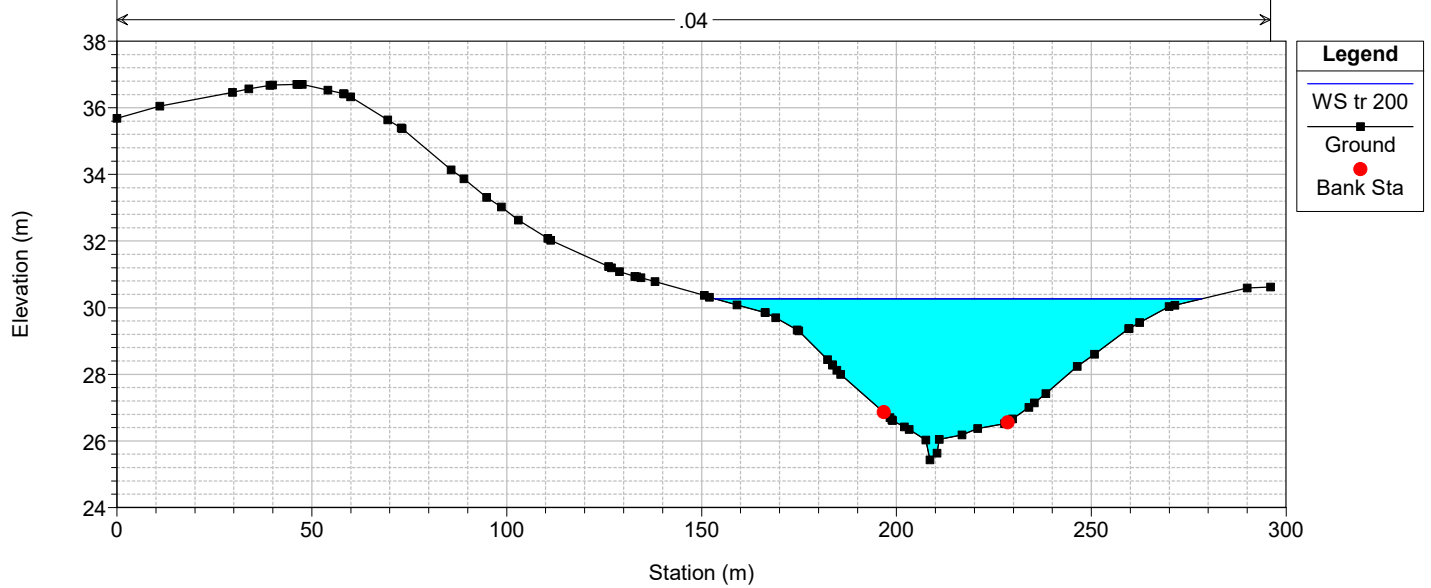
River = Rio San Gavino Reach = monte RS = 722.274 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



08022016 Plan: Plan 02 2/9/2021

Geom: 08022016

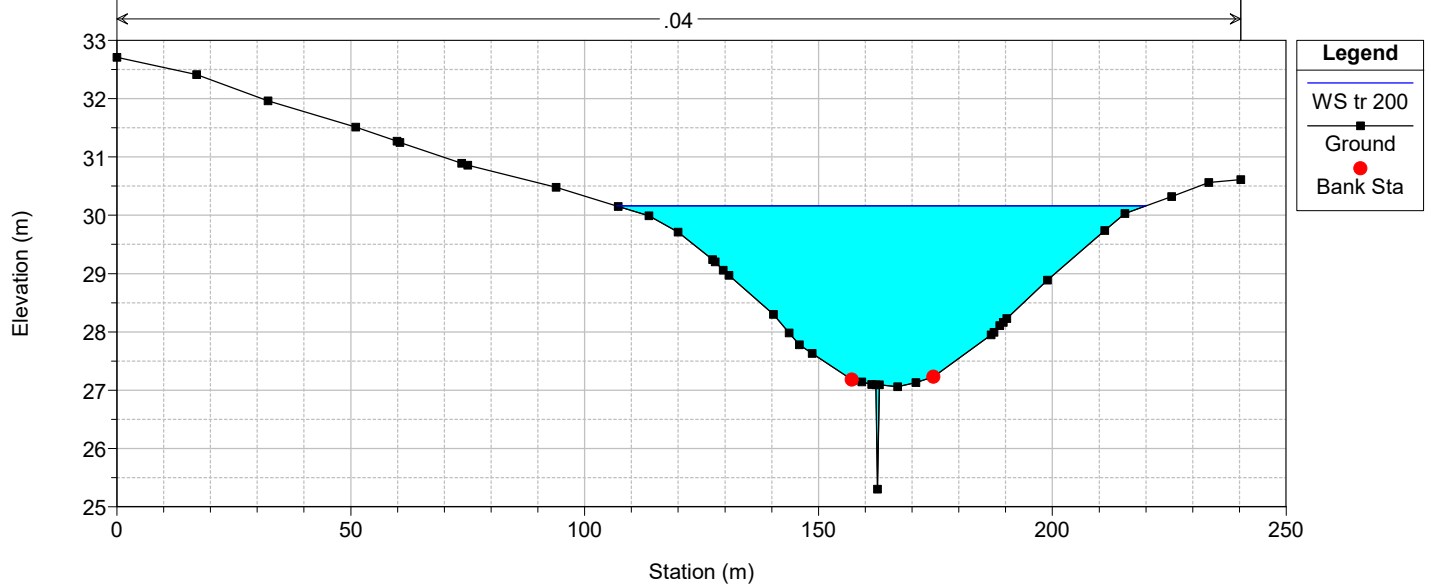
River = Rio San Gavino Reach = monte RS = 648.0927 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



08022016 Plan: Plan 02 2/9/2021

Geom: 08022016

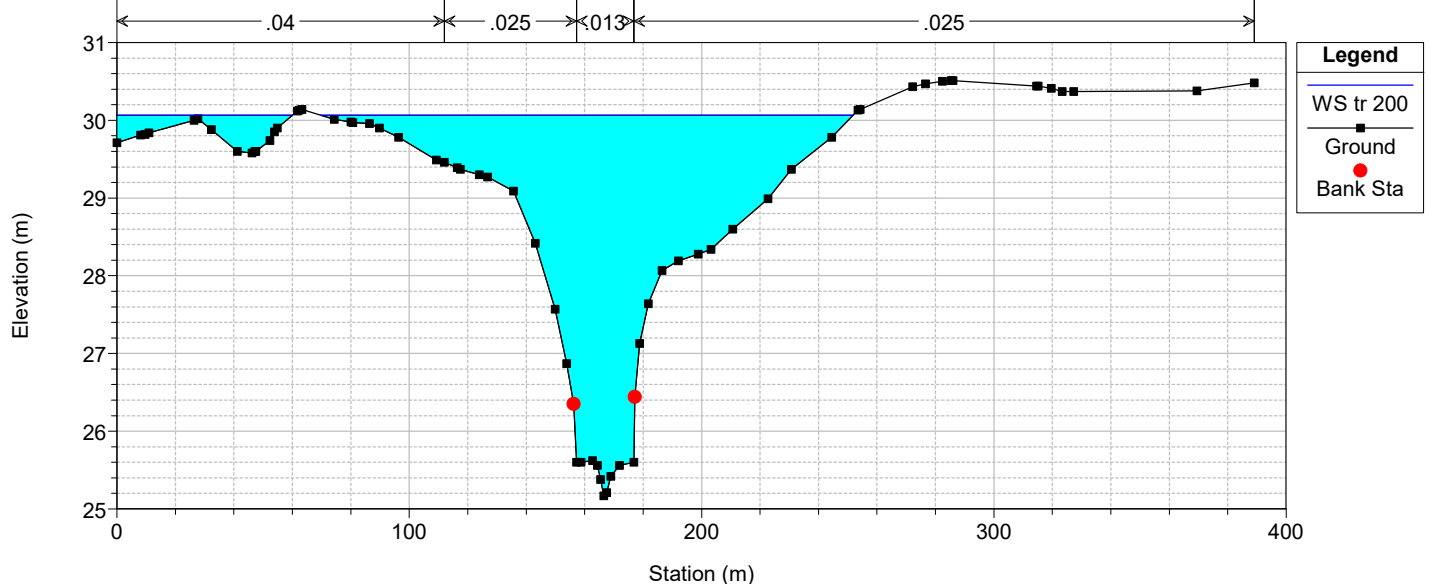
River = Rio San Gavino Reach = monte RS = 611.32 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



08022016 Plan: Plan 02 2/9/2021

Geom: 08022016

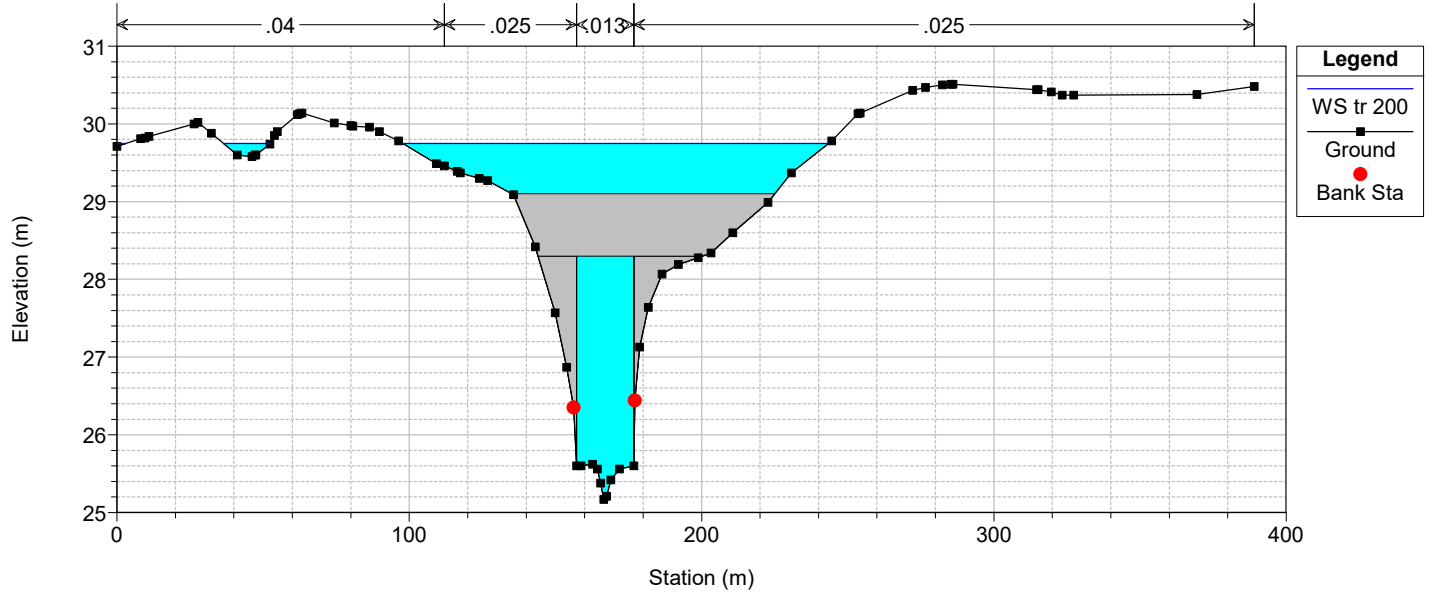
River = Rio San Gavino Reach = monte RS = 402.50 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



08022016 Plan: Plan 02 2/9/2021

Geom: 08022016

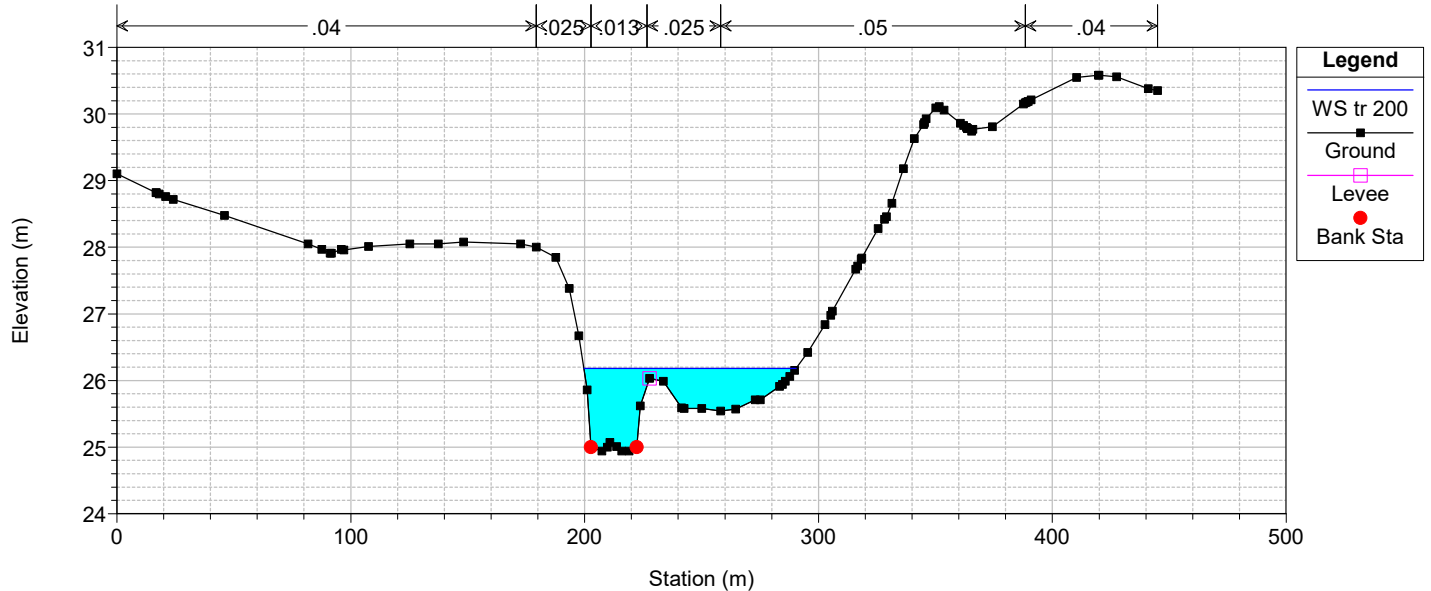
River = Rio San Gavino Reach = monte RS = 365 BR COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



08022016 Plan: Plan 02 2/9/2021

Geom: 08022016

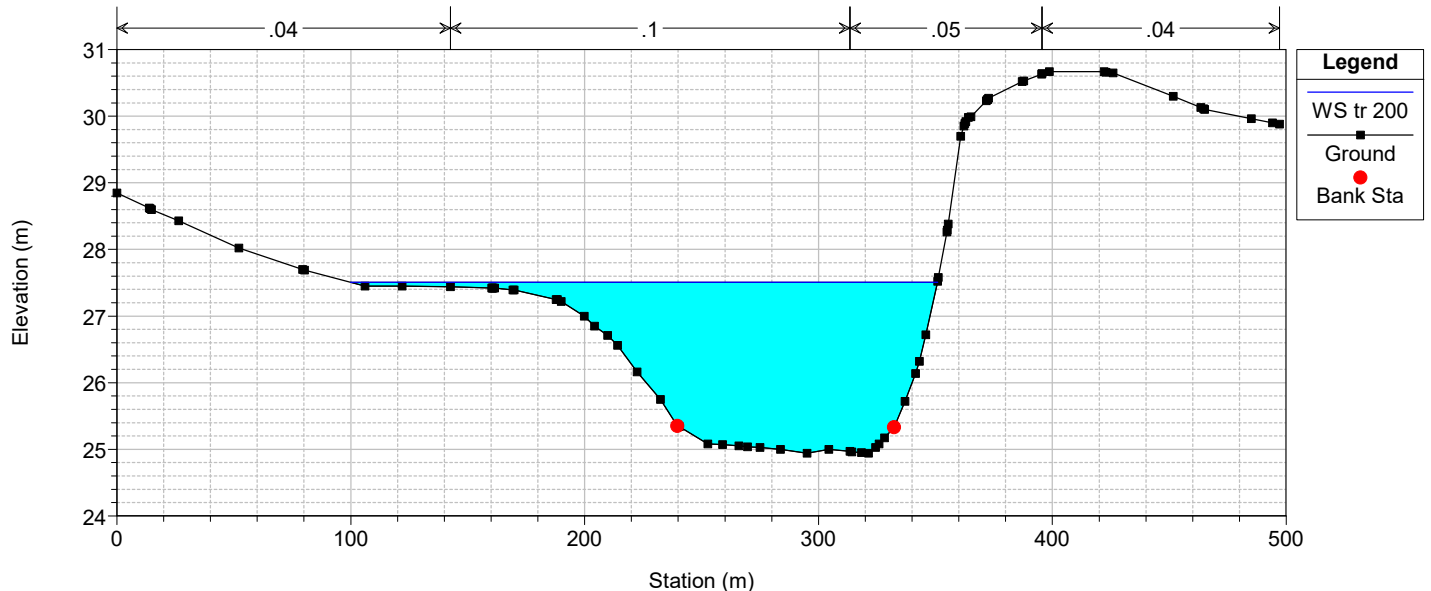
River = Rio San Gavino Reach = monte RS = 348.56 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



08022016 Plan: Plan 02 2/9/2021

Geom: 08022016

River = Rio San Gavino Reach = monte RS = 238.34 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Reach	River Sta	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)	
monte	3600.39	tr 200	297.67	37.90	39.25	39.11	39.51	0.008713	2.80	139.81	170.76	0.78
monte	3450.30	tr 200	297.67	36.55	37.44	37.44	37.76	0.016241	2.53	122.59	202.10	0.96
monte	3267.84	tr 200	297.67	35.13	36.51	36.04	36.61	0.002618	1.54	224.87	232.47	0.43
monte	3134.67	tr 200	297.67	34.55	36.45		36.47	0.000413	0.71	453.60	325.40	0.18
monte	2922.34	tr 200	297.67	32.80	36.31	35.52	36.35	0.000923	1.27	343.23	282.49	0.23
monte	2893.46		Culvert									
monte	2875.25	tr 200	297.67	32.60	35.58	35.58	35.84	0.009791	4.54	161.22	270.03	0.90
monte	2704.13	tr 200	297.67	32.31	34.81	34.04	34.89	0.001686	1.31	237.28	208.55	0.35
monte	2552.67	tr 200	297.67	32.16	34.61		34.68	0.001107	1.34	268.26	212.83	0.30
monte	2411.29	tr 200	297.67	31.77	34.57		34.60	0.000297	0.80	452.61	288.21	0.16
monte	2278.07	tr 200	297.67	31.30	34.13	34.13	34.48	0.001820	6.56	243.11	258.15	1.25
monte	2237.09		Culvert									
monte	2220.99	tr 200	297.67	31.00	33.95	33.95	34.33	0.001752	6.62	239.08	240.90	1.23
monte	1942.78	tr 200	297.67	30.29	30.97	31.42	32.67	0.119505	6.29	55.25	126.75	2.55
monte	1790.78	tr 200	297.67	29.69	31.58	30.76	31.63	0.000965	1.13	335.09	315.09	0.27
monte	1659.74	tr 200	297.67	29.59	31.49		31.52	0.000698	0.95	418.65	390.65	0.23
monte	1494.30	tr 200	297.67	29.47	31.36		31.39	0.000816	1.02	397.28	386.10	0.25
monte	1371.72	tr 200	297.67	29.11	31.24		31.28	0.001147	1.11	353.50	411.19	0.29
monte	1106.85	tr 200	297.67	27.89	31.17		31.19	0.000130	0.69	598.23	385.76	0.13
monte	914.87	tr 200	297.67	27.00	31.12	28.71	31.16	0.000253	0.93	492.52	410.07	0.15
monte	885		Culvert									
monte	857.95	tr 200	297.67	26.70	30.39	28.60	30.41	0.000190	0.82	514.38	260.16	0.14
monte	722.274	tr 200	297.67	25.47	30.36	27.29	30.38	0.000130	0.81	523.73	191.34	0.12
monte	648.0927	tr 200	297.67	25.43	30.26		30.35	0.000588	1.52	262.22	124.95	0.24
monte	611.32	tr 200	297.67	25.30	30.16		30.31	0.002006	2.14	185.63	113.14	0.39
monte	402.50	tr 200	297.67	25.17	30.07	28.43	30.23	0.000137	2.17	278.27	242.25	0.33
monte	365		Bridge									
monte	348.56	tr 200	297.67	24.94	26.18	26.97	29.74	0.012004	9.53	55.78	90.72	2.77
monte	238.34	tr 200	297.67	24.94	27.51	26.06	27.56	0.002489	1.09	313.07	250.98	0.22

Reach	River Sta	Profile	E.G. US.	W.S. US.	E.G. IC	E.G. OC	Min El Weir Flow	Q Culv Group	Q Weir	Delta WS	Culv Vel US	Culv Vel DS
			(m)	(m)	(m)	(m)	(m)	(m3/s)	(m3/s)	(m)	(m/s)	(m/s)
monte	2893.46 Culvert #1	tr 200	36.35	36.31	36.37	36.35	35.51	17.01	280.66	0.72	3.46	3.46
monte	2237.09 Culvert #1	tr 200	34.45	34.13	34.45	34.45	33.50	8.74	288.93	0.18	2.78	2.78
monte	885 Culvert #1	tr 200	31.16	31.12	31.13	31.16	30.54	49.13	248.54	0.73	3.47	3.47

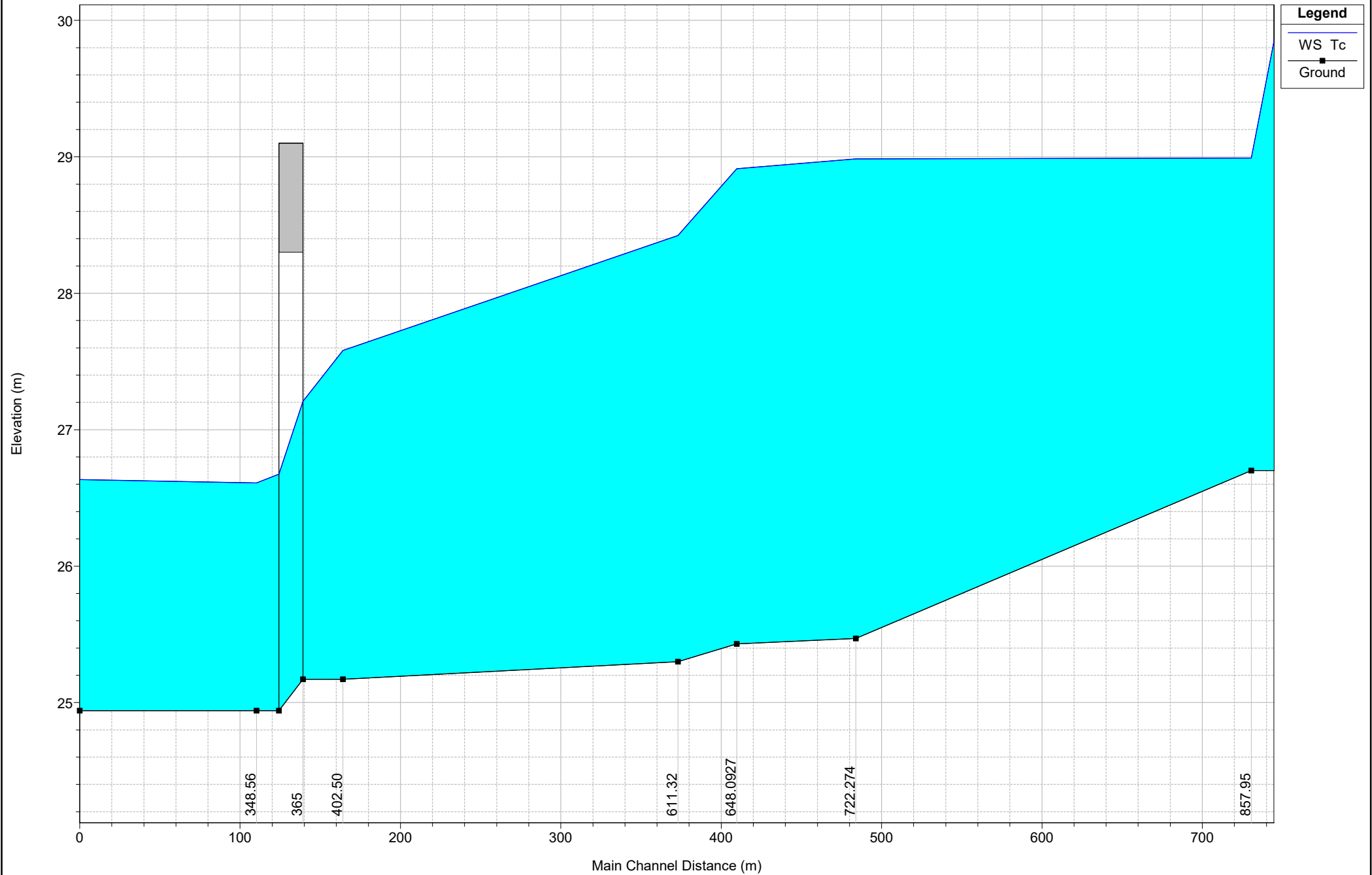
Reach	River Sta	Profile	E.G. US.	Min El Prs	BR Open Area	Prs O WS	Q Total	Min El Weir Flow	Q Weir	Delta EG	BR Sluice Coef
			(m)	(m)	(m2)	(m)	(m3/s)	(m)	(m3/s)	(m)	
monte	365	tr 200	30.23	28.30	54.64		297.67	29.10		0.49	

CALCOLO IDROLOGICO PORTATE DI PIENA

RIO FILIBERTU - 1 _ C10			
		TR (anni)	50
Lunghezza asta	L	m	10613
Curve Number	CN	-	94.94
Pend.za media bac.	i _{bac}	-	0.1012
Area bacino	A	kmq	21.73
Altitudine massima	Hmax	m slm	461.96
Altitudine media	Hmed	m slm	84.28
Altitudine minima	Hmin	m slm	19.59
Pend.za media asta	iret	m/m	0.0388
	SCS	(ore)	1.599
	GIANDOTTI	(ore)	5.372
	PASINI	(ore)	3.363
	VAPI	(ore)	3.978
	KIRPICH	(ore)	0.988
	VIPARELLI	(ore)	2.948
	tc adott.	SCS (ore)	1.599
Tempi di ritorno	T	(anni)	50
Dati pluviometrici	Pgiorn.	(mm)	50
	Sottozona		2
Altezza di pioggia	n1	-	0.31570972
	a1	-	20.6914142
	n2 (ADOTTATO)	-	-0.01260333
	a2 (ADOTTATO)	-	2.27959585
	n (ADOTTATO)	-	0.30310639
	a (ADOTTATO)	-	47.1680621
	h (ADOTTATO)	(mm)	54.379
	Coef.f.Ragg (ADOTTATO)	-	0.903
	h r (ADOTTATO)	(mm)	49.084
	S	(mm)	13.537
	Ia	(mm)	2.707
	Pnetta (ADOTTATO)	(mm)	35.898
	Coef.defl. (SCS)		0.660
	Coef.defl. (GIANDOTTI)		0.760
	Coef.defl. (PASINI)		0.725
	Coef.defl. (VAPI)		0.738
	Coef.defl. (KIRPICH)		0.611
	Coef.defl. (VIPARELLI)		0.715
	Coef.defl. (ADOTTATO)	-	0.660
PORTATE DI PIENA	Qpicco (SCS)	(mc/s)	135.514
	Qpicco (GIANDOTTI)	(mc/s)	67.075
	Qpicco (PASINI)	(mc/s)	88.673
	Qpicco (VAPI)	(mc/s)	80.308
	Qpicco (KIRPICH)	(mc/s)	175.086
	Qpicco (VIPARELLI)	(mc/s)	95.774
	Qpicco (ADOTTATO)	(mc/s)	135.514

Comune di Sassari (SS)
VERIFICHE DI SICUREZZA IDRAULICA OPERE INTERFERENTI CON IL RETICOLO IDROGRAFICO
Strade comunali - ATTRAVERSAMENTO C10

		River Sta	Profile	Bridge Inv El DS	Br Inv El US	W.S.	Q Bridge	Br Vel US	Br Vel DS	QUOTA INTRADOS SO	FRANCHI DISPONIBILI	V ² /2g	y	dh1	a	y'	dh2	0.7 V ² /2g	FRANCHI RICHIESTI	50% di FRANCHI RICHIESTI	VERIFICA	Deficit
				(m slm)	(m slm)	(m slm)	(m ³ /s)	(m/s)	(m/s)	(m slm)	(m)	(m)	(m)	(m)		(m)	(m)	(m)	(m)	(m)		(m)
UPSTREAM	Max H	0	TR 200 ANNI		25.17	30.07	297.66	2.17		28.3	-1.77	0.24	4.90	1.500	0.000	2.000	1.500	0.168	1.500		NON VERIF.	3.27
	Max V		TR 200 ANNI		25.17	29.75	297.66	3.34		28.3	-1.45	0.57	4.58	1.500	0.000	2.000	1.500	0.398	1.500		NON VERIF.	2.95
	Max H		Tr critico		25.17	27.58	135.51	3.08		28.3	0.72	0.48	2.41	1.351	0.000	2.000	1.351	0.339	1.351	0.675	OK	OK
	Max V	0	Tr critico		25.17	27.21	135.51	4.08		28.3	1.09	0.85	2.04	1.243	0.000	2.000	1.243	0.594	1.243	0.621	OK	OK
DOWNSTREAM																						
	Max H	0	TR 200 ANNI	24.94		26.98	297.67	7.57	7.57	28.3	1.32	2.92	2.04	1.243	0.275	2.000	1.793	2.045	2.045		NON VERIF.	0.72521575
	Max V		TR 200 ANNI	24.94		26.18	297.67	9.53		28.3	2.12	0.00	1.24	0.969	0.000	1.240	0.969	0.000	1.000		OK	OK
	Max H		Tr critico	24.94		26.67	135.51	4.08		28.3	1.63	0.00	1.73	1.144	0.000	1.730	1.144	0.000	1.144	0.572	OK	OK
	Max V	0	Tr critico	24.94		26.67	135.51	4.08	4.08	28.3	1.63	0.85	1.73	1.144	0.000	1.730	1.144	0.594	1.144	0.572	OK	OK

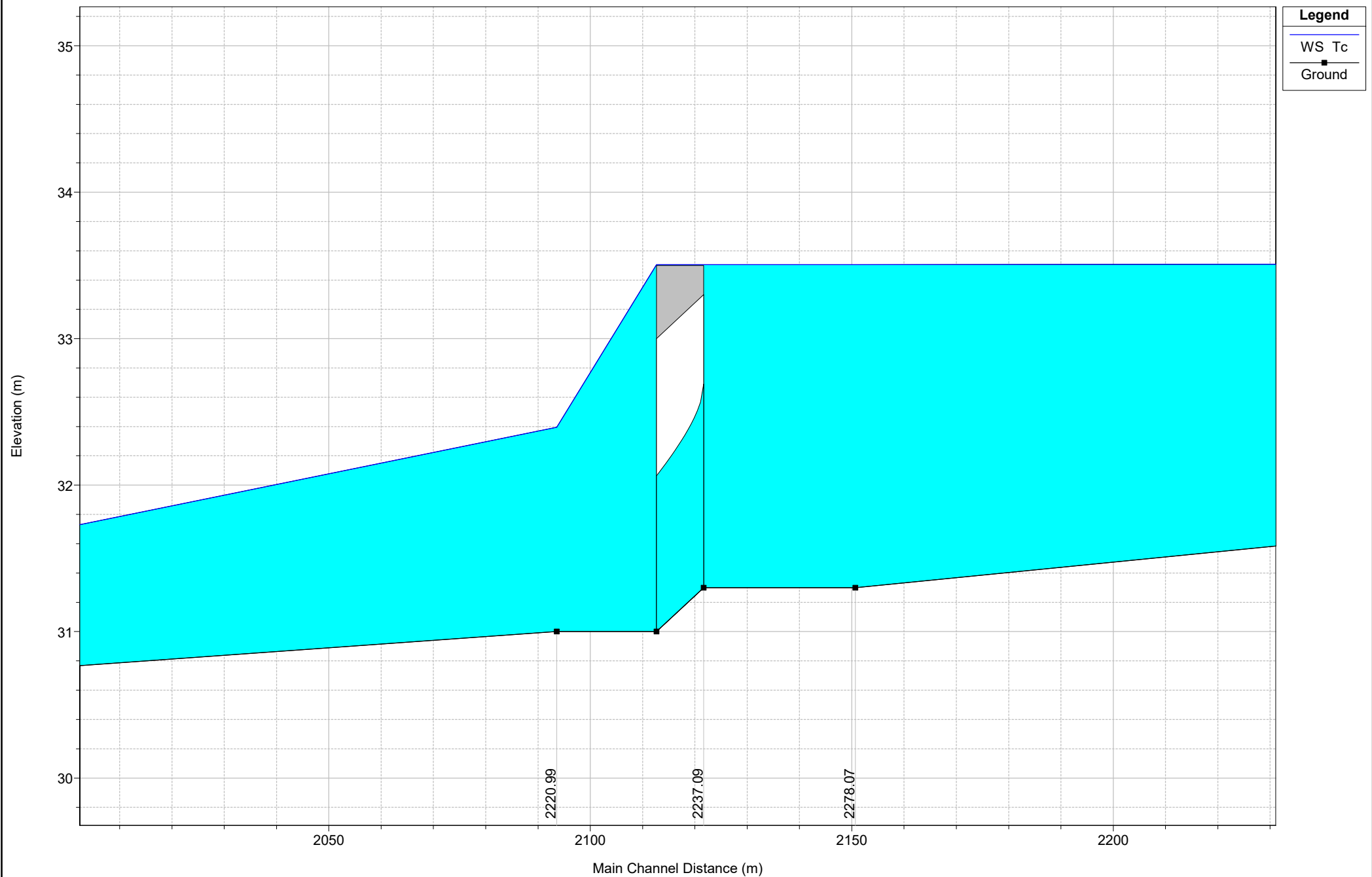


CALCOLO IDROLOGICO PORTATE DI PIENA

RIO FILIBERTU - 1 _ C11			
		TR (anni)	1
Lunghezza asta	L	m	10613
Curve Number	CN	-	94.94
Pend.za media bac.	i _{bac}	-	0.1012
Area bacino	A	kmq	21.73
Altitudine massima	Hmax	m slm	461.96
Altitudine media	Hmed	m slm	84.28
Altitudine minima	Hmin	m slm	19.59
Pend.za media asta	iret	m/m	0.0388
	SCS	(ore)	1.599
	GIANDOTTI	(ore)	5.372
	PASINI	(ore)	3.363
	VAPI	(ore)	3.978
	KIRPICH	(ore)	0.988
	VIPARELLI	(ore)	2.948
	tc adott.	SCS (ore)	1.599
Tempi di ritorno	T	(anni)	1
Dati pluviometrici	Pgiorn.	(mm)	50
	Sottozona		2
Altezza di pioggia	n1	-	0.31570972
	a1	-	20.6914142
	n2 (ADOTTATO)	-	-0.0056593
	a2 (ADOTTATO)	-	0.44182
	n (ADOTTATO)	-	0.31005042
	a (ADOTTATO)	-	9.14188063
	h (ADOTTATO)	(mm)	10.574
	Coef.f.Ragg (ADOTTATO)	-	0.903
	h r (ADOTTATO)	(mm)	9.544
	S	(mm)	13.537
	Ia	(mm)	2.707
	Pnetta (ADOTTATO)	(mm)	2.294
	Coef.defl. (SCS)		0.660
	Coef.defl. (GIANDOTTI)		0.760
	Coef.defl. (PASINI)		0.725
	Coef.defl. (VAPI)		0.738
	Coef.defl. (KIRPICH)		0.611
	Coef.defl. (VIPARELLI)		0.715
	Coef.defl. (ADOTTATO)	-	0.217
PORTATE DI PIENA	Qpicco (SCS)	(mc/s)	135.514
	Qpicco (GIANDOTTI)	(mc/s)	67.075
	Qpicco (PASINI)	(mc/s)	88.673
	Qpicco (VAPI)	(mc/s)	80.308
	Qpicco (KIRPICH)	(mc/s)	175.086
	Qpicco (VIPARELLI)	(mc/s)	95.774
	Qpicco (ADOTTATO)	(mc/s)	8.660

Comune di Sassari (SS)
 VERIFICHE DI SICUREZZA IDRAULICA OPERE INTERFERENTI CON IL RETICOLO IDROGRAFICO
 Strade comunali - **ATTRAVERSAMENTO C11**

	River Sta	Profile	Culv Inv El DS	Culv Inv El US	W.S.	Q Culv	Culv Vel US	Culv Vel DS	QUOTA INTRADOS SO	FRANCHI DISPONIBILI	FRANCHI RICHIESTI	50% di FRANCHI RICHIESTI	VERIFICA	Deficit
			(m slm)	(m slm)	(m slm)	(m³/s)	(m/s)	(m/s)	(m slm)	(m)	(m)	(m)		(m)
UPSTREAM	2237.09 Culve	TR 200 ANNI		31.3	34.13	297.67	2.76		33.3	-0.83	1.464		NON VERIF.	2.29356653
	2237.09 Culve	Tr critico		31.3	33.51	8.66	3.52		33.3	-0.21	1.293	0.647	NON VERIF.	0.857
DOWNSTREAM	2237.09 Culve	TR 200 ANNI	31		33.96	297.67		2.76	33	-0.96	1.497		NON VERIF.	2.4568046
	2237.09 Culve	Tr critico	31		32.4	8.66		4.84	33	0.6	1.029	0.515	OK	OK

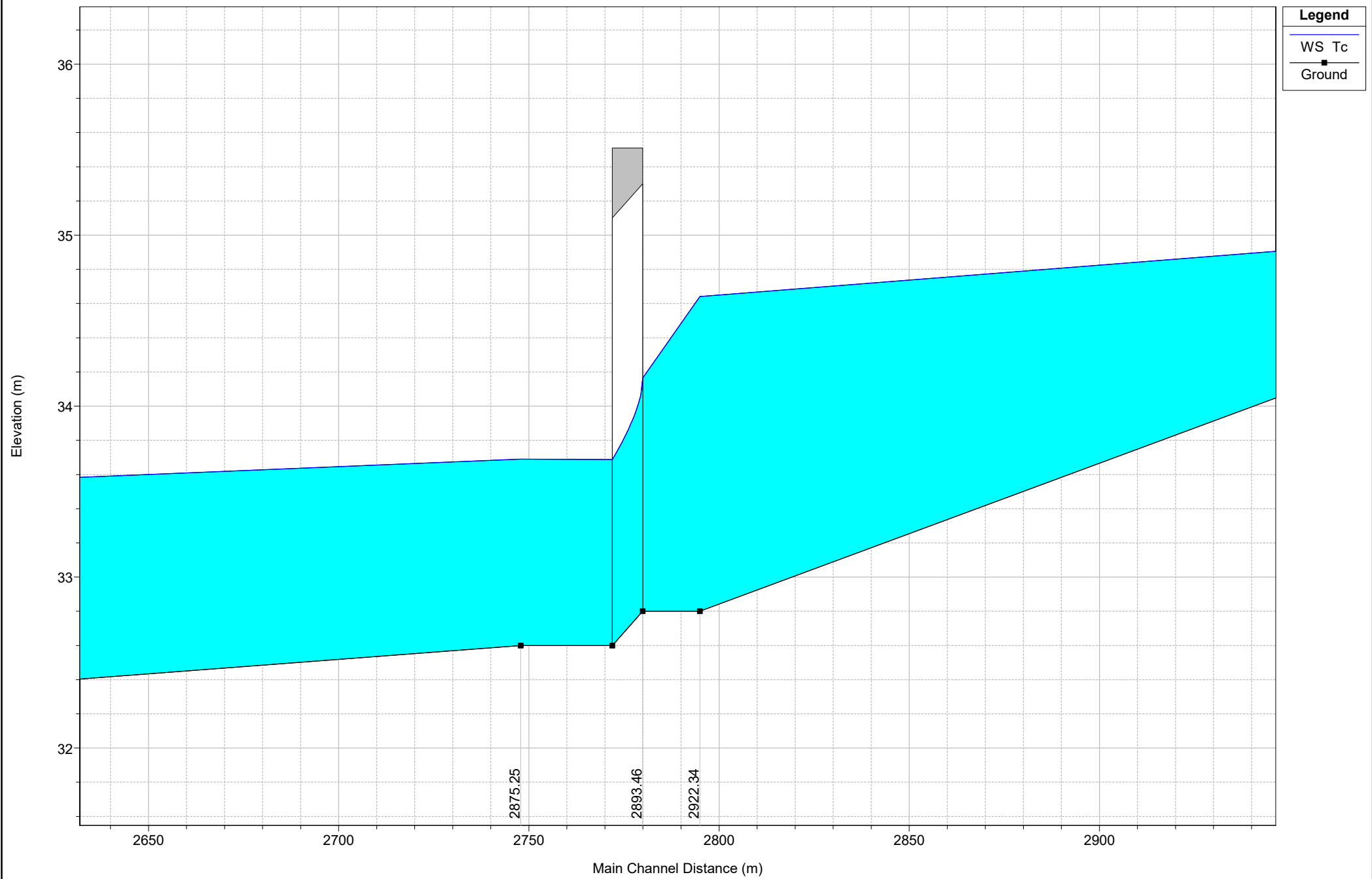


CALCOLO IDROLOGICO PORTATE DI PIENA

RIO FILIBERTU - 1 _ C12			
		TR (anni)	1
Lunghezza asta	L	m	10613
Curve Number	CN	-	94.94
Pend.za media bac.	i _{bac}	-	0.1012
Area bacino	A	kmq	21.73
Altitudine massima	Hmax	m slm	461.96
Altitudine media	Hmed	m slm	84.28
Altitudine minima	Hmin	m slm	19.59
Pend.za media asta	iret	m/m	0.0388
	SCS	(ore)	1.599
	GIANDOTTI	(ore)	5.372
	PASINI	(ore)	3.363
	VAPI	(ore)	3.978
	KIRPICH	(ore)	0.988
	VIPARELLI	(ore)	2.948
	tc adott.	SCS (ore)	1.599
Tempi di ritorno	T	(anni)	1
Dati pluviometrici	Pgiorn.	(mm)	50
	Sottozona		2
Altezza di pioggia	n1	-	0.31570972
	a1	-	20.6914142
	n2 (ADOTTATO)	-	-0.0056593
	a2 (ADOTTATO)	-	0.44182
	n (ADOTTATO)	-	0.31005042
	a (ADOTTATO)	-	9.14188063
	h (ADOTTATO)	(mm)	10.574
	Coef.f.Ragg (ADOTTATO)	-	0.903
	h r (ADOTTATO)	(mm)	9.544
	S	(mm)	13.537
	Ia	(mm)	2.707
	Pnetta (ADOTTATO)	(mm)	2.294
	Coef.defl. (SCS)		0.660
	Coef.defl. (GIANDOTTI)		0.760
	Coef.defl. (PASINI)		0.725
	Coef.defl. (VAPI)		0.738
	Coef.defl. (KIRPICH)		0.611
	Coef.defl. (VIPARELLI)		0.715
	Coef.defl. (ADOTTATO)	-	0.217
PORTATE DI PIENA	Qpicco (SCS)	(mc/s)	135.514
	Qpicco (GIANDOTTI)	(mc/s)	67.075
	Qpicco (PASINI)	(mc/s)	88.673
	Qpicco (VAPI)	(mc/s)	80.308
	Qpicco (KIRPICH)	(mc/s)	175.086
	Qpicco (VIPARELLI)	(mc/s)	95.774
	Qpicco (ADOTTATO)	(mc/s)	8.660

Comune di Sassari (SS)
 VERIFICHE DI SICUREZZA IDRAULICA OPERE INTERFERENTI CON IL RETICOLO IDROGRAFICO
 Strade comunali - **ATTRAVERSAMENTO C12**

	River Sta	Profile	Culv Inv El DS	Culv Inv El US	W.S.	Q Culv	Culv Vel US	Culv Vel DS	QUOTA INTRADOS SO	FRANCHI DISPONIBILI	FRANCHI RICHIESTI	50% di FRANCHI RICHIESTI	VERIFICA	Deficit
			(m slm)	(m slm)	(m slm)	(m³/s)	(m/s)	(m/s)	(m slm)	(m)	(m)	(m)		(m)
UPSTREAM	2893.46 Culve	TR 200 ANNI		32.8	36.31	297.67	3.46		35.3	-1.01	1.500		NON VERIF.	2.51
	2893.46 Culve	Tr critico		32.8	34.64	9	3.29		35.3	0.66	1.180	0.590	OK	OK
DOWNSTREAM	2893.46 Culve	TR 200 ANNI	32.6		35.58	297.67		3.46	35.1	-0.48	1.500		NON VERIF.	1.98
	2893.46 Culve	Tr critico	32.6		33.82	9		4.39	35.1	1.28	1.000	0.500	OK	OK



COMUNE DI SASSARI

VERIFICHE DI SICUREZZA IDRAULICA OPERE INTERFERENTI CON IL RETICOLO IDROGRAFICO – ATTRAVERSAMENTI STRADE COMUNALI

Area di indagine: **TERRITORIO COMUNALE**

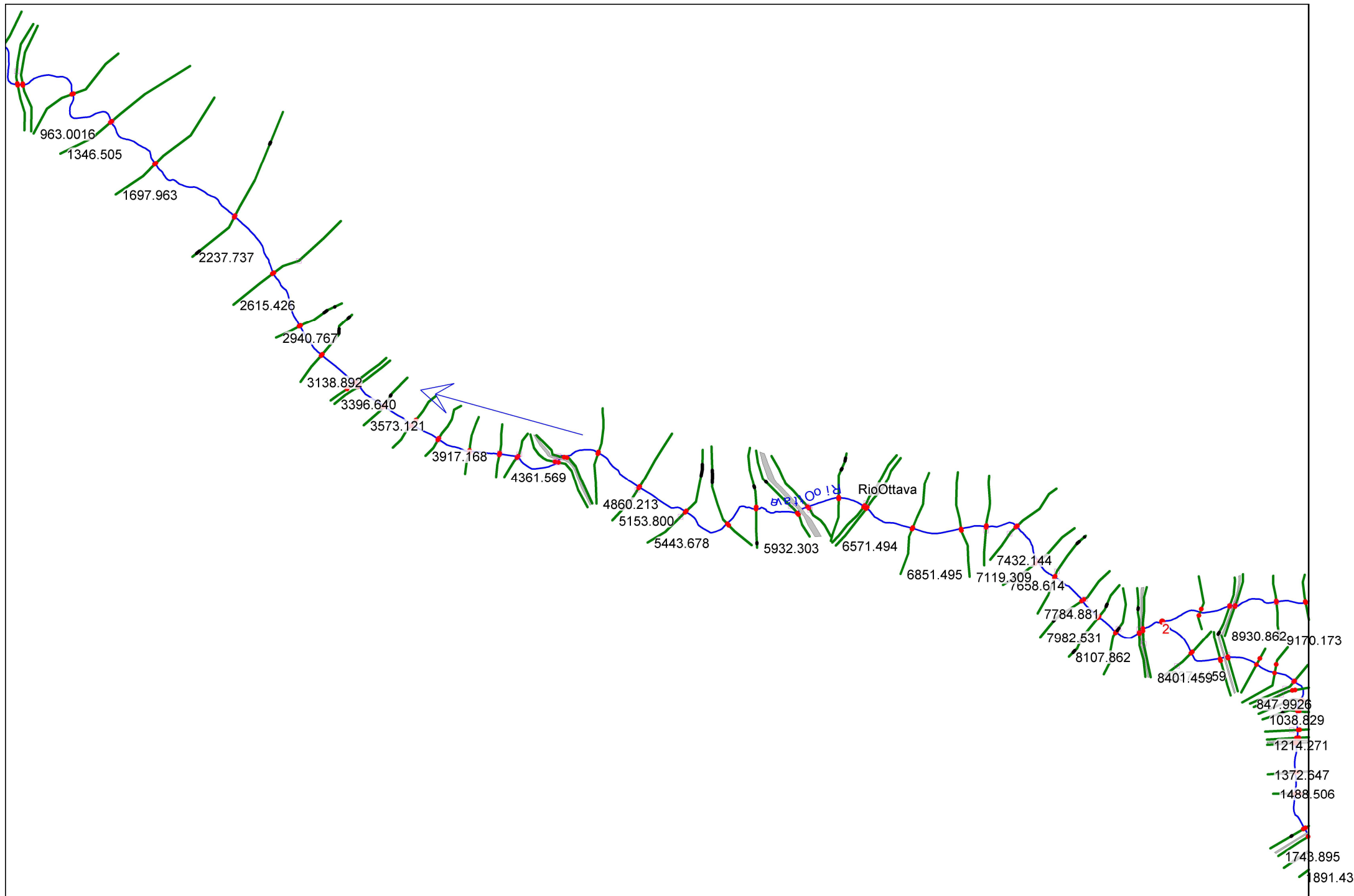
SIMULAZIONI IN MOTO PERMANENTE

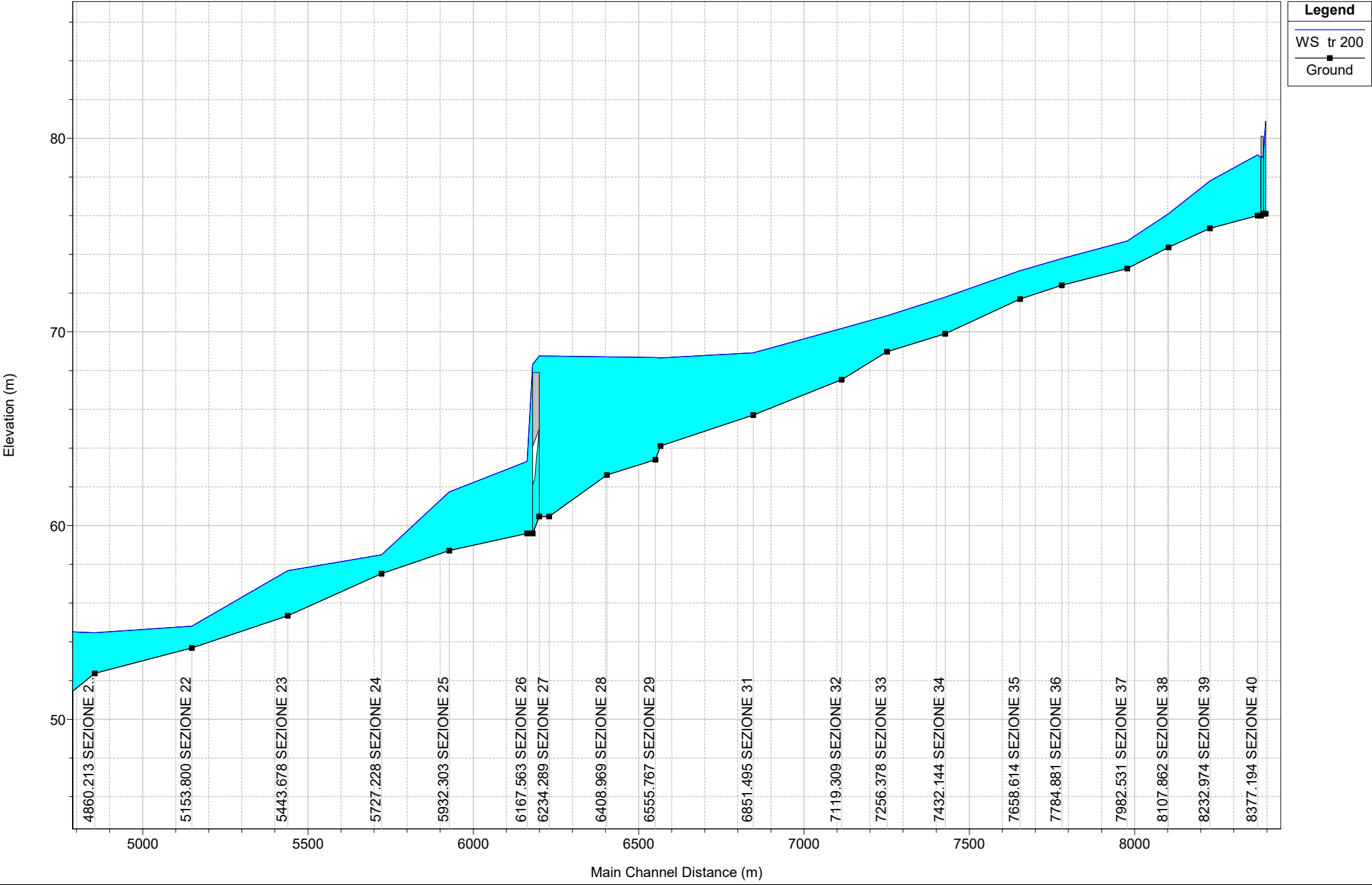
ATTRAVERSAMENTI C13 e C14 sul rio Ottava

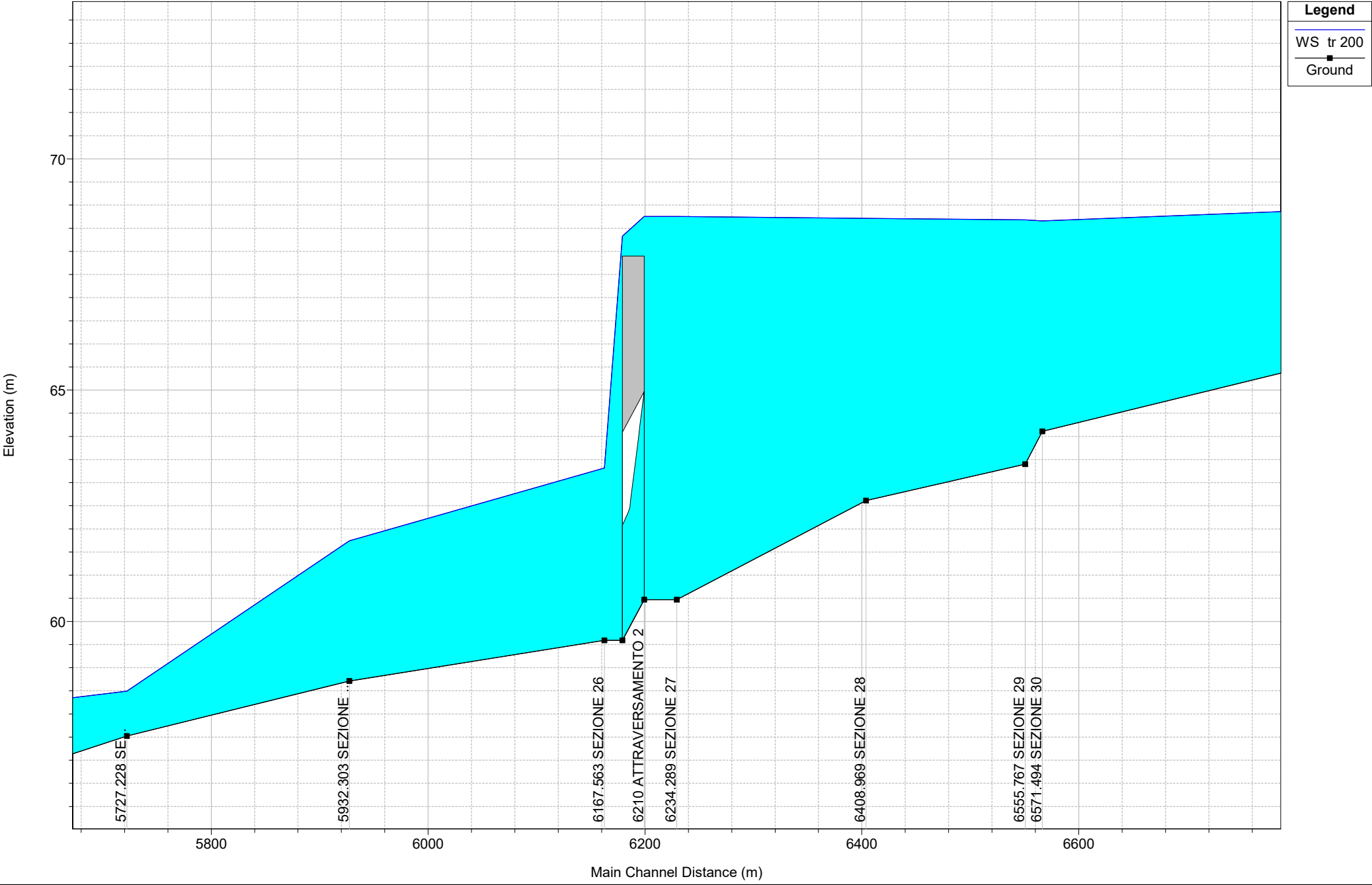
- Schema planimetrico del modello matematico;
- Profili longitudinali con livelli idrici per il tempo di ritorno di 200 anni;
- Sezioni trasversali con livelli idrici per il tempo di ritorno di 200 anni;
- Tabulati numerici di output per il tempo di ritorno di 200 anni;
- Calcolo della portata critica;
- Profilo longitudinale del livello idrico per il tempo di ritorno critico TC;
- Verifica dei franchi idraulici e della portata critica;

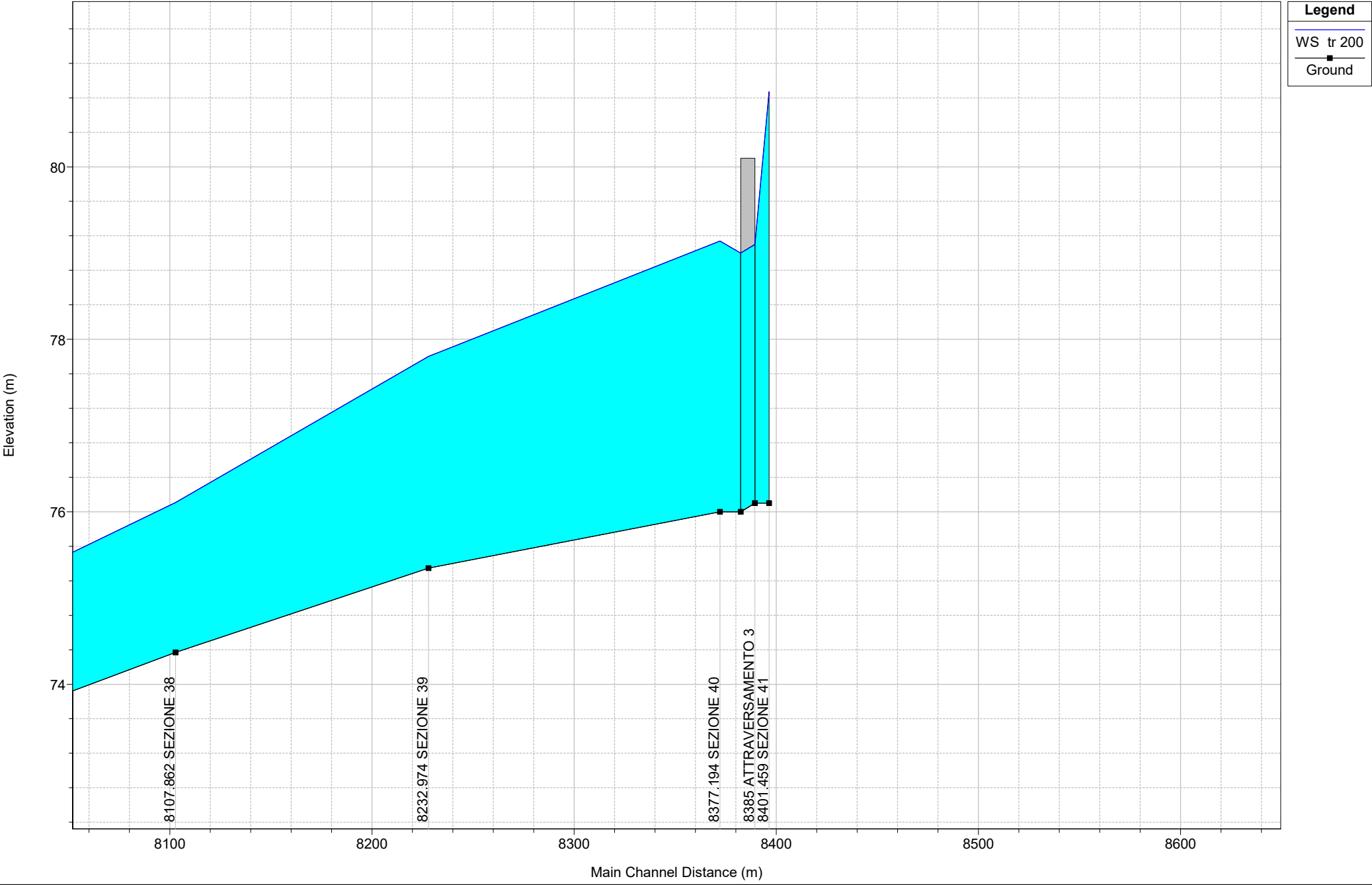
River	Reach	RS	PORTATE mc/s			
			tr 50	tr 100	tr 200	tr 500
Rio San Giovanni	Rio San Giovanni	8385.023	71.862	85.578	99.437	117.91
Rio San Giovanni	Rio San Giovanni	3922.604	84.683	100.367	116.17	137.183
Rio San Giovanni	Rio San Giovanni	1488.506	94.946	112.437	130.052	153.462
RioOttava	RioLogulentu	22141.27	62.054	74.678	87.54	104.912
RioOttava	RioLogulentu	18322.6	140.862	170.425	200.53	240.937
RioOttava	RioLogulentu	15575.54	164.347	198.17	232.545	278.602
RioOttava	RioLogulentu	13770.69	167.234	200.874	234.986	280.599
RioOttava	RioOttava	8401.459	264.456	313.025	361.886	426.74

River	Reach	PROFILI	condizioni al contorno	
			upstream	downstream
Rio San Giovanni	Rio San Giovanni	all	Critical Depth	Junction = 2
RioOttava	RioLogulentu	all	Critical Depth	Junction = 2
RioOttava	Rio Ottava	all	Junction = 2	Known WS





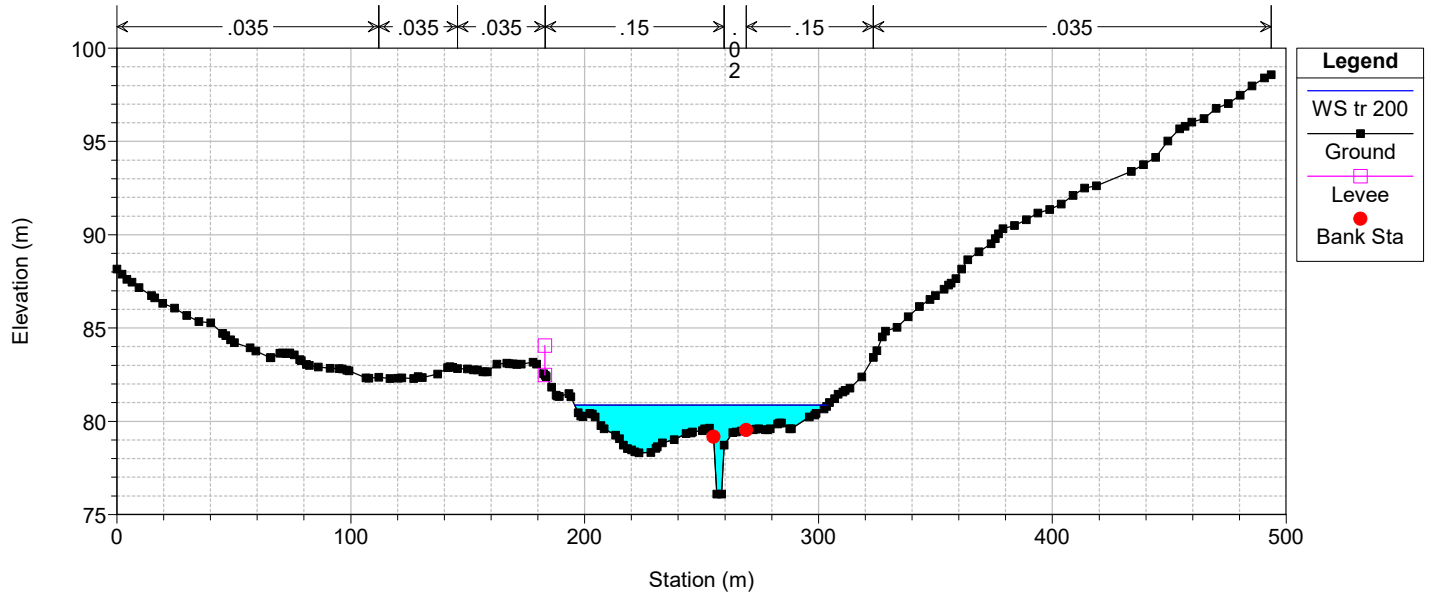




RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 9/16/2021

Geom: 05022021

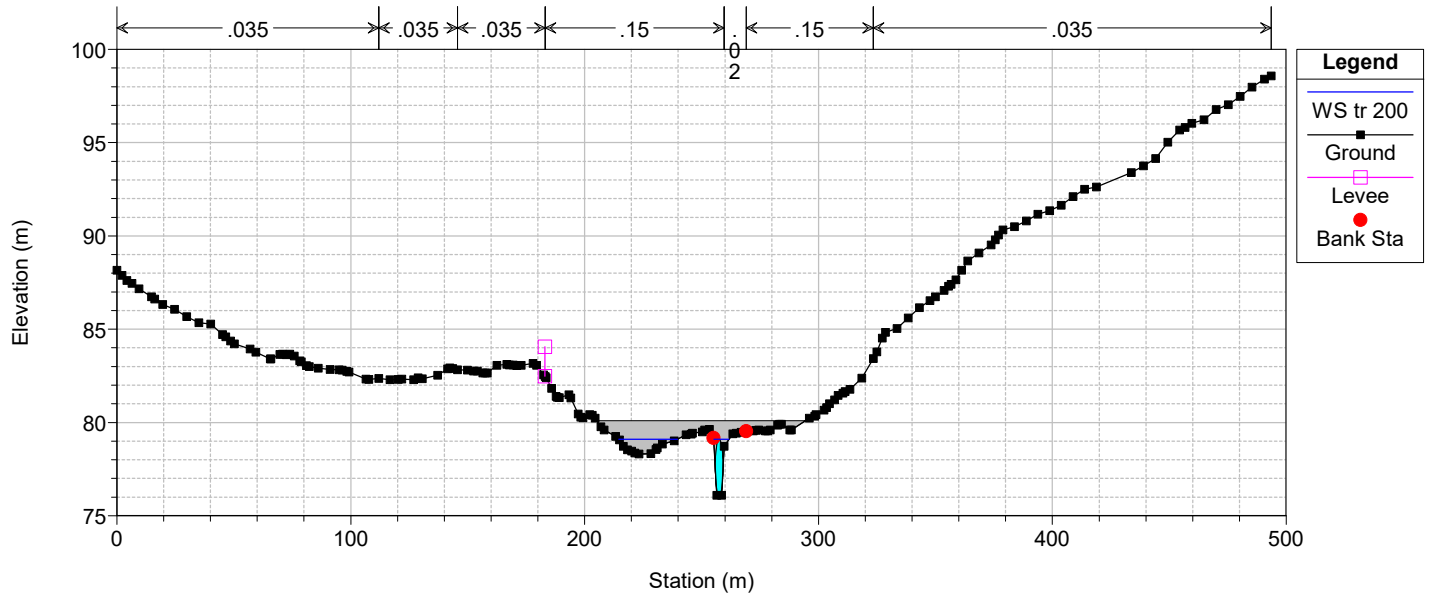
River = RioOttava Reach = RioOttava RS = 8401.459 SEZIONE 41 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 9/16/2021

Geom: 05022021

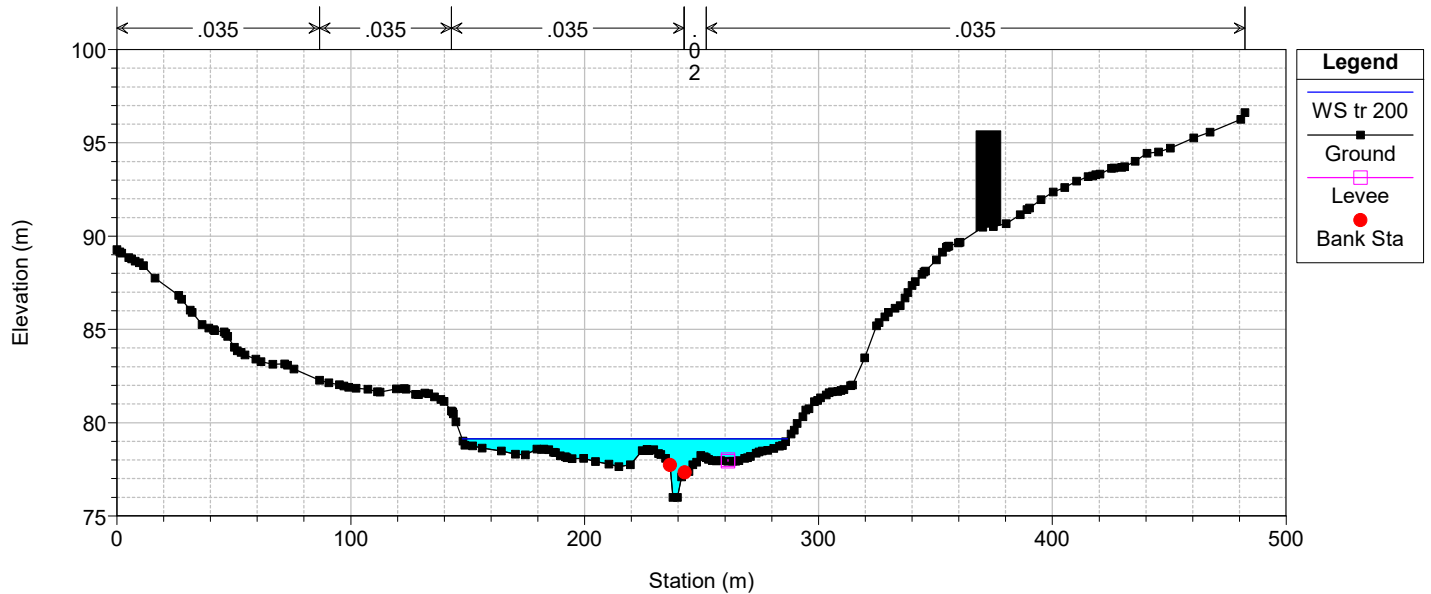
River = RioOttava Reach = RioOttava RS = 8385 Culv. ATTRAVERSAMENTO 3 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 9/16/2021

Geom: 05022021

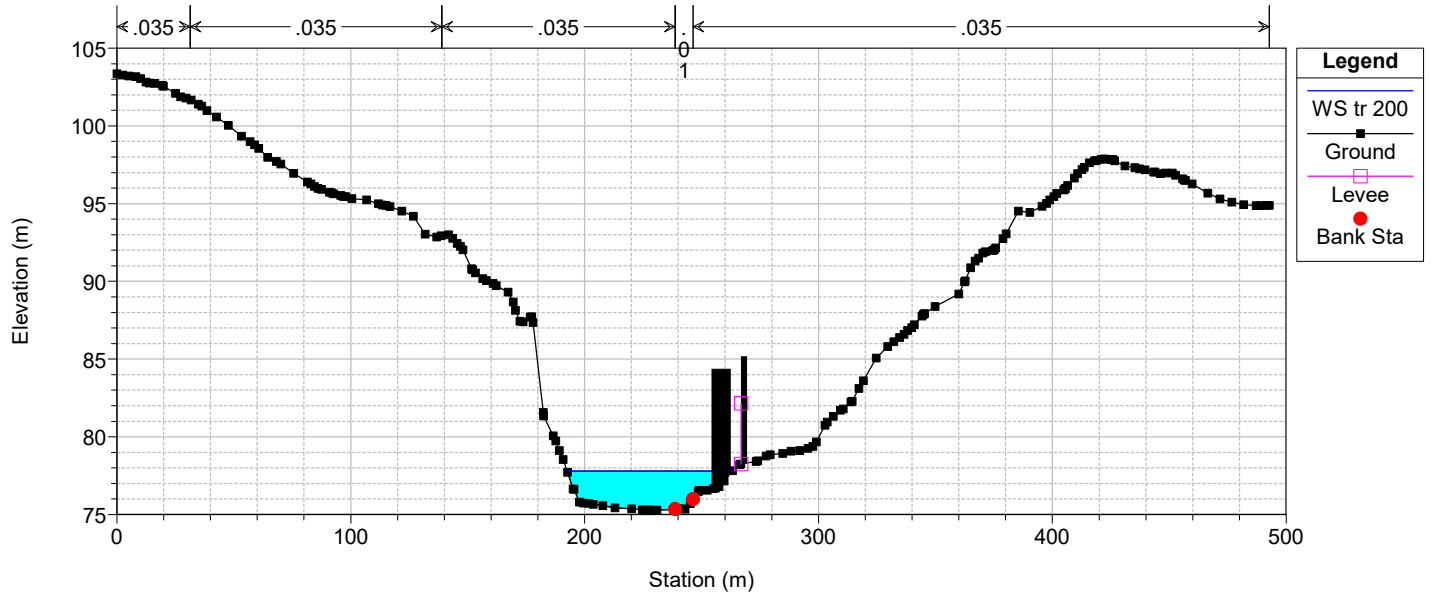
River = RioOttava Reach = RioOttava RS = 8377.194 SEZIONE 40 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 9/16/2021

Geom: 05022021

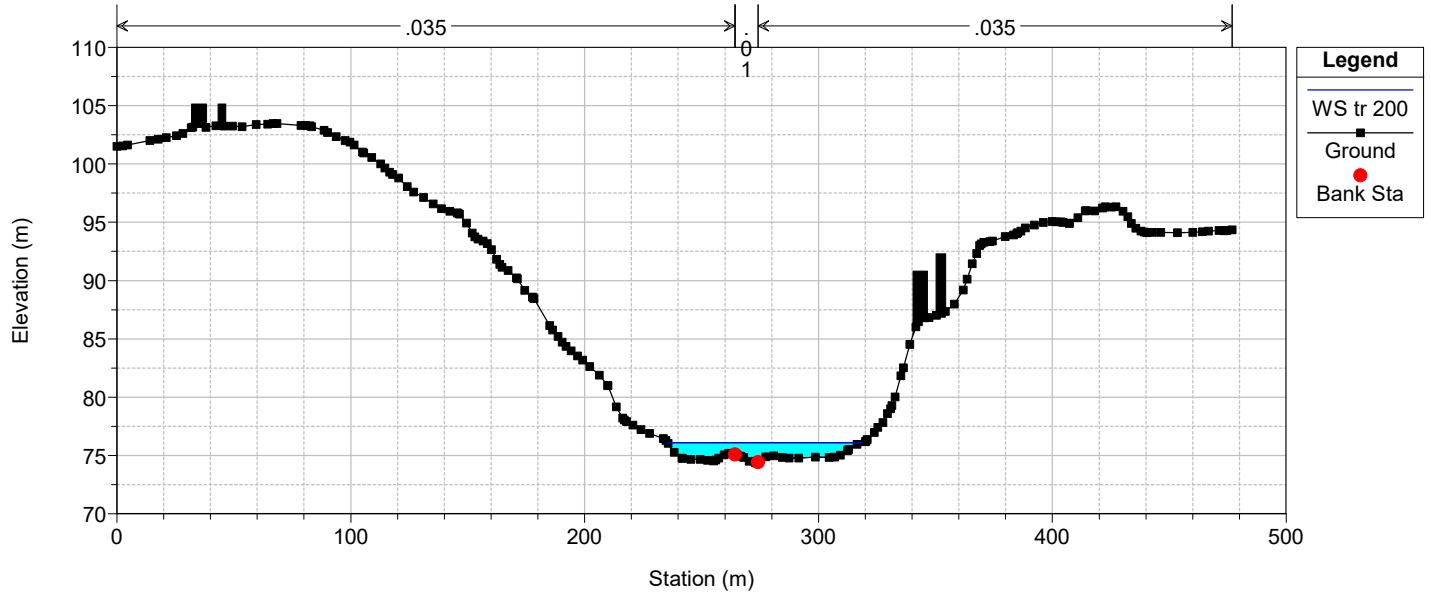
River = RioOttava Reach = RioOttava RS = 8232.974 SEZIONE 39 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 9/16/2021

Geom: 05022021

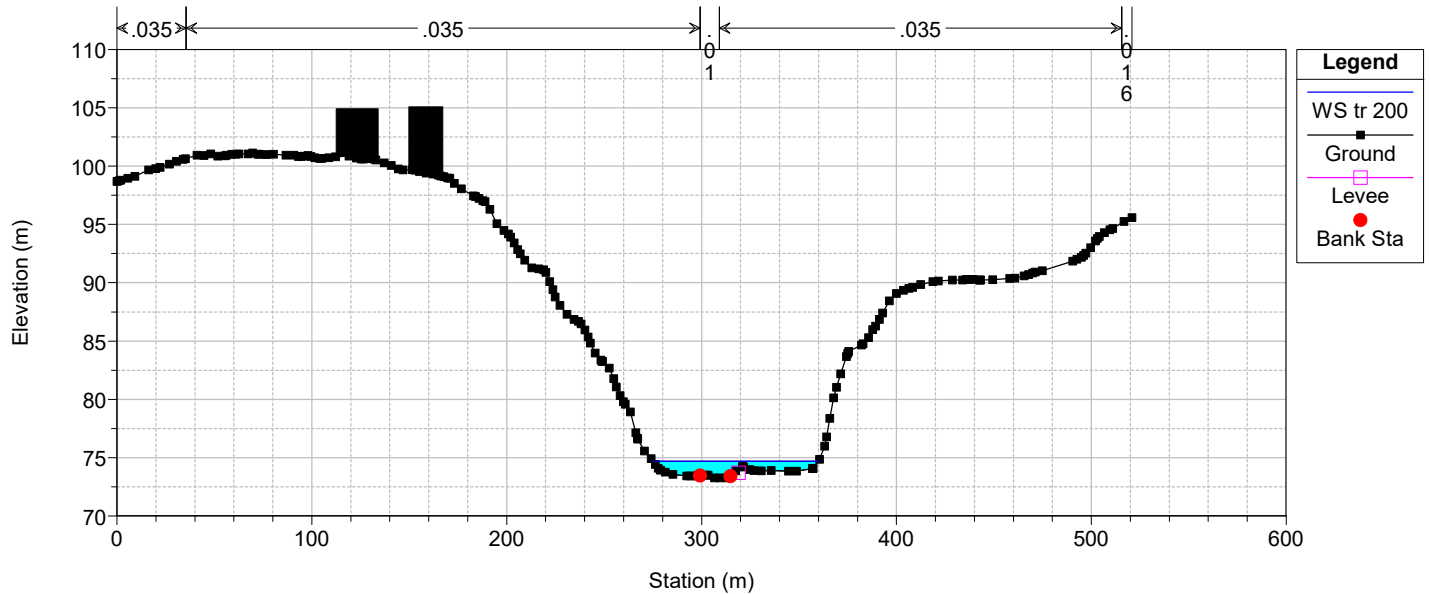
River = RioOttava Reach = RioOttava RS = 8107.862 SEZIONE 38 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 9/16/2021

Geom: 05022021

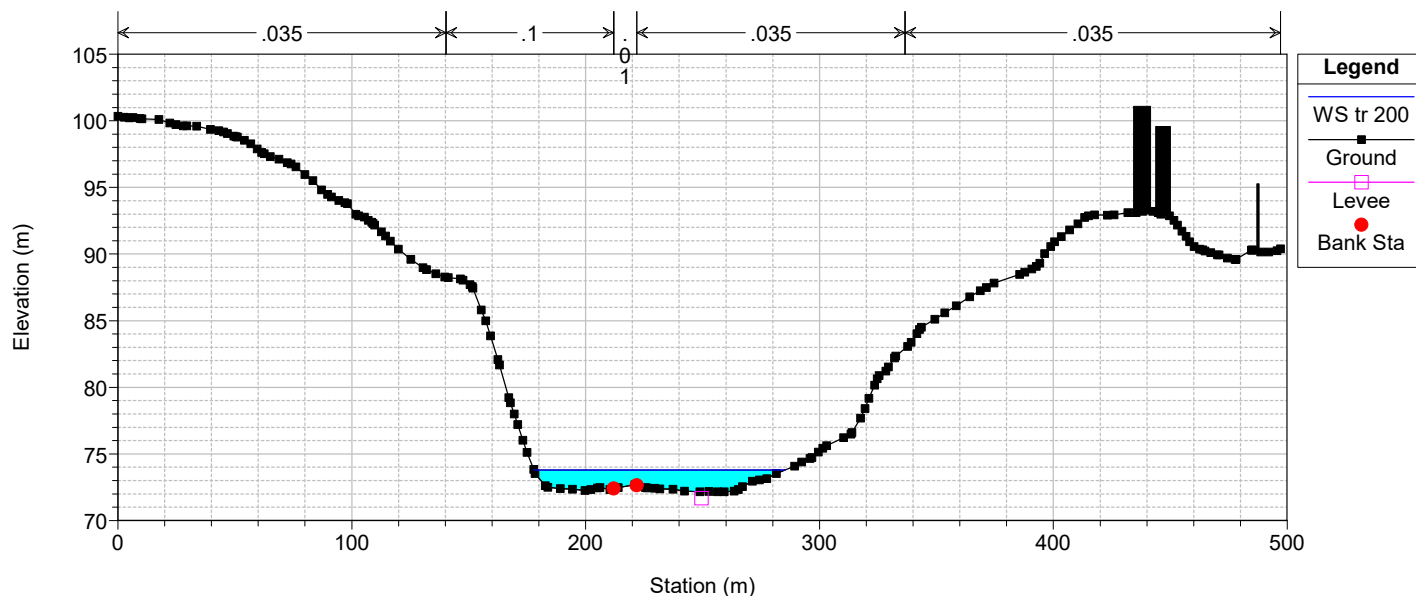
River = RioOttava Reach = RioOttava RS = 7982.531 SEZIONE 37 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Plan: 09022021 9/16/2021

Geom: 05022021

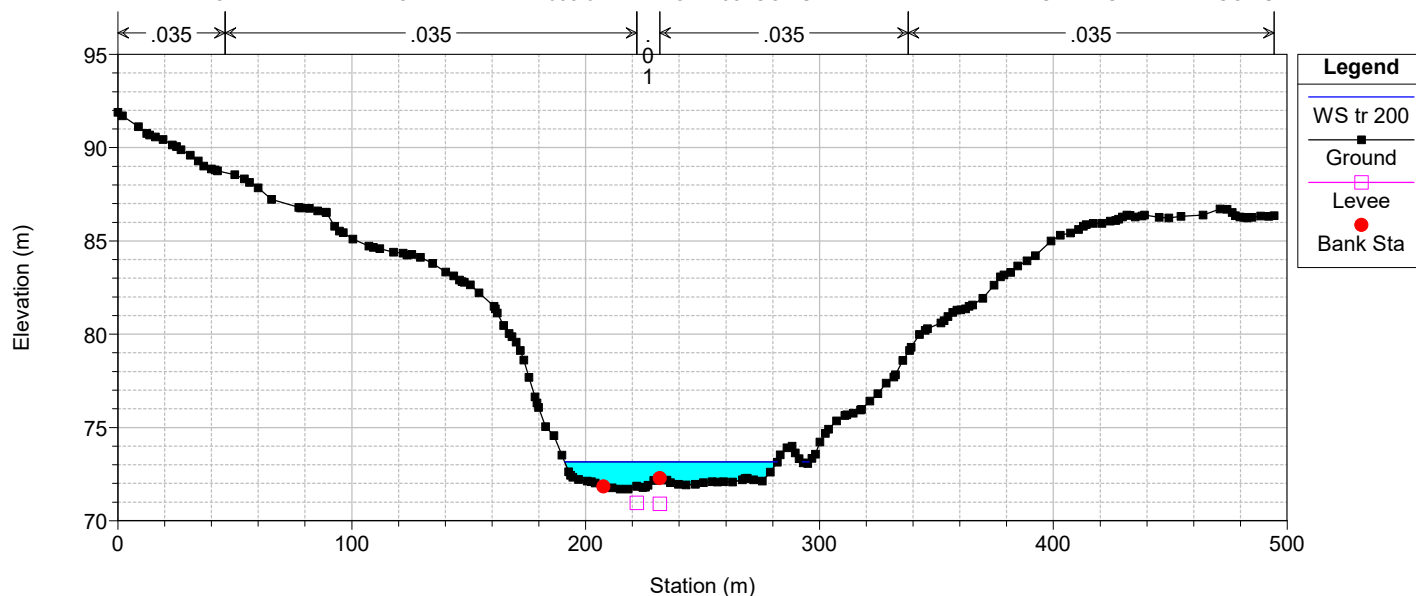
River = RioOttava Reach = RioOttava RS = 7784.881 SEZIONE 36 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Plan: 09022021 9/16/2021

Geom: 05022021

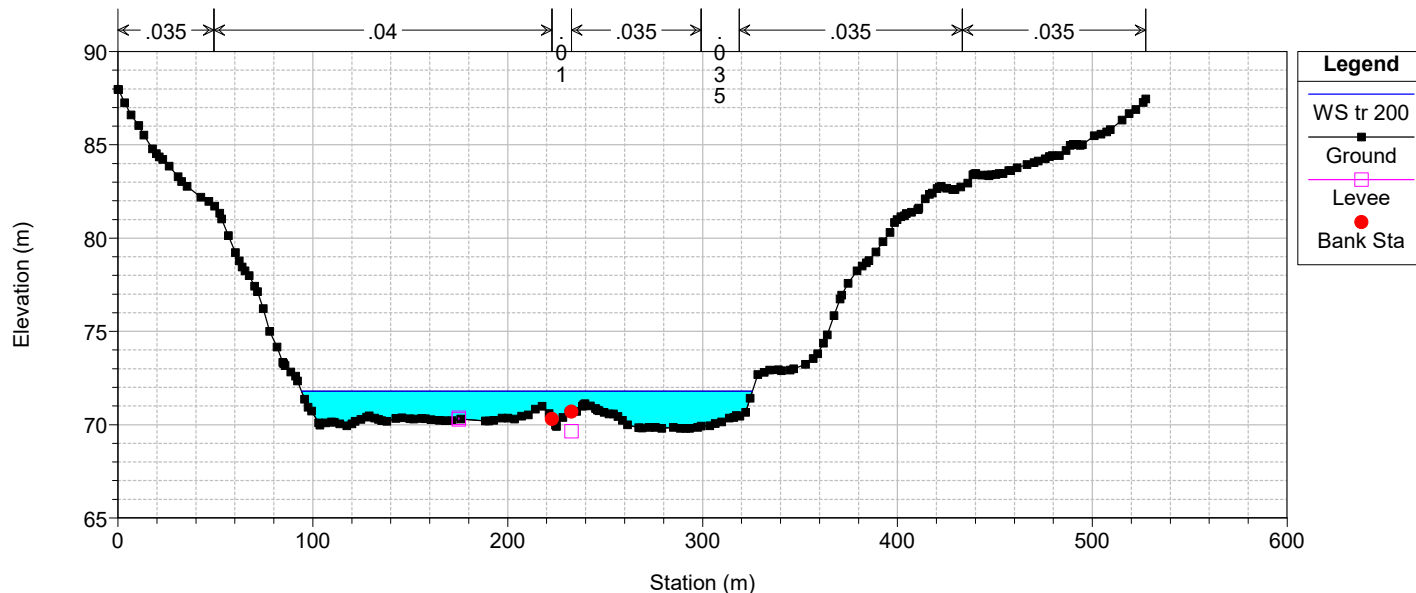
River = RioOttava Reach = RioOttava RS = 7658.614 SEZIONE 35 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Plan: 09022021 9/16/2021

Geom: 05022021

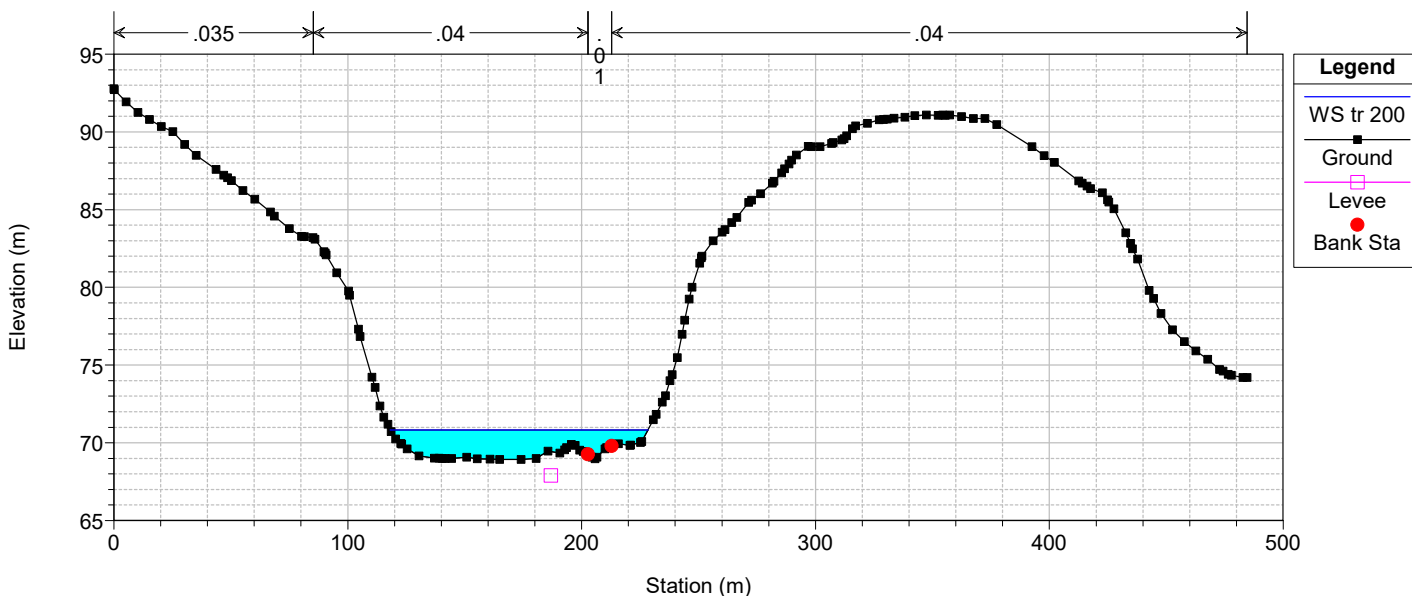
River = RioOttava Reach = RioOttava RS = 7432.144 SEZIONE 34 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Plan: 09022021 9/16/2021

Geom: 05022021

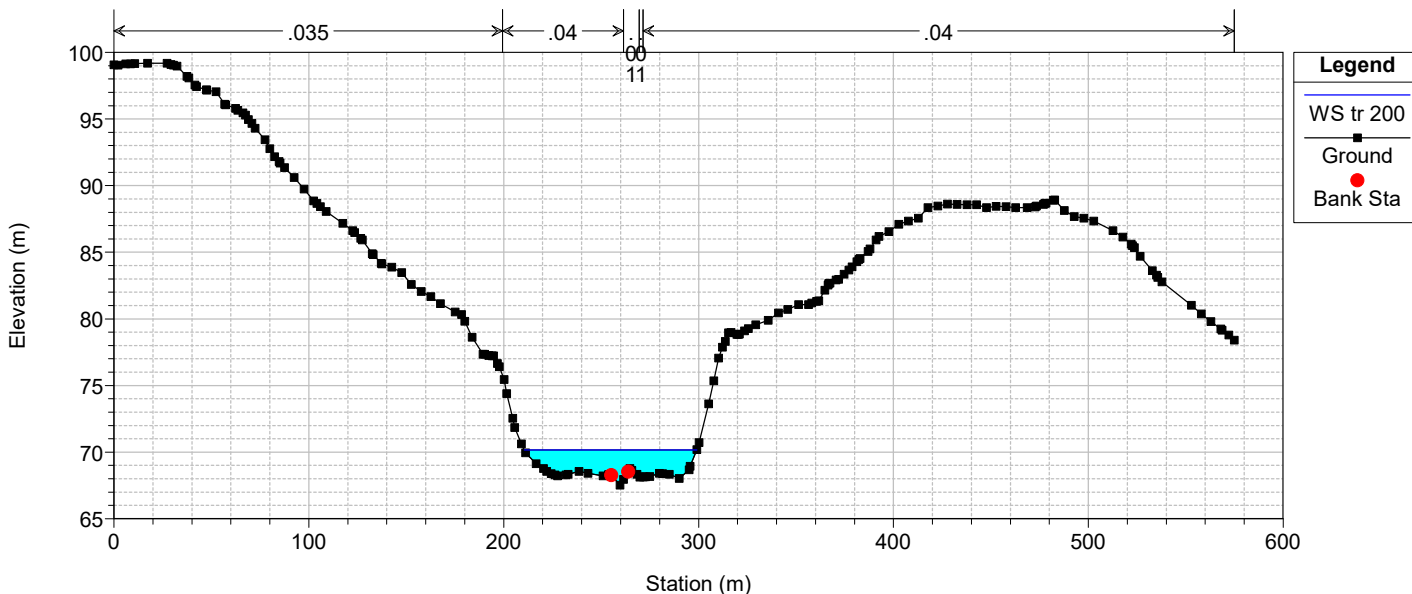
River = RioOttava Reach = RioOttava RS = 7256.378 SEZIONE 33 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Plan: 09022021 9/16/2021

Geom: 05022021

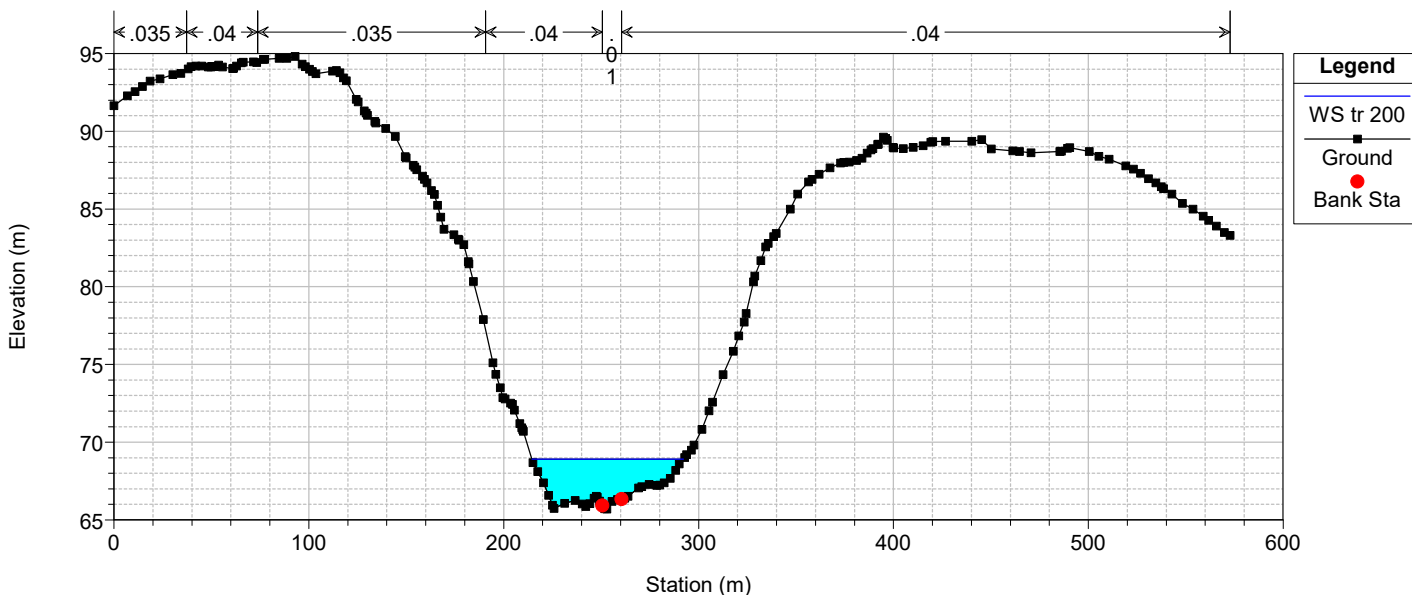
River = RioOttava Reach = RioOttava RS = 7119.309 SEZIONE 32 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Plan: 09022021 9/16/2021

Geom: 05022021

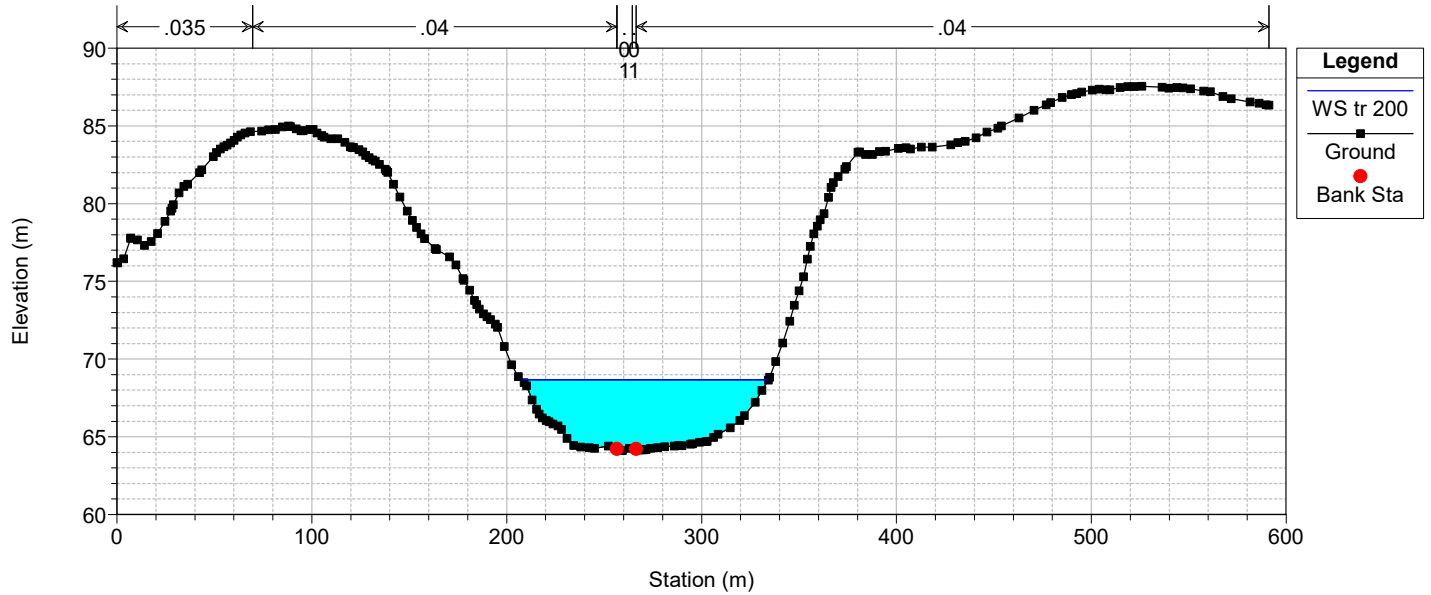
River = RioOttava Reach = RioOttava RS = 6851.495 SEZIONE 31 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 9/16/2021

Geom: 05022021

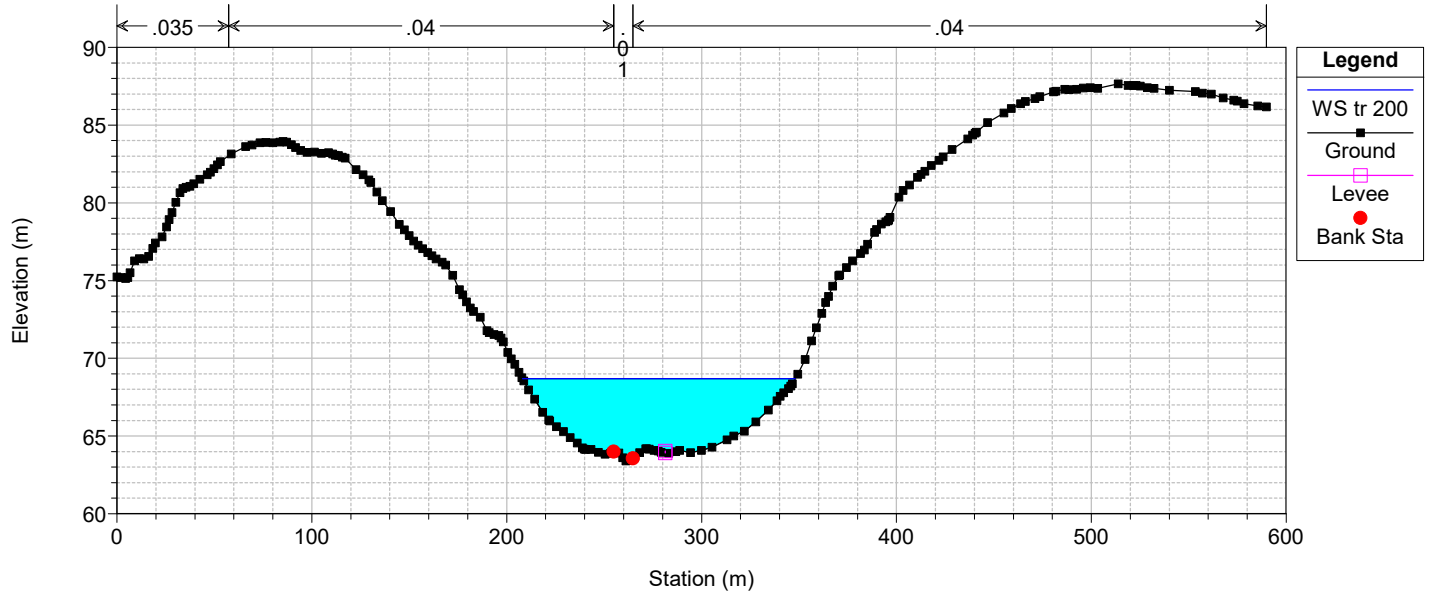
River = RioOttava Reach = RioOttava RS = 6571.494 SEZIONE 30 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 9/16/2021

Geom: 05022021

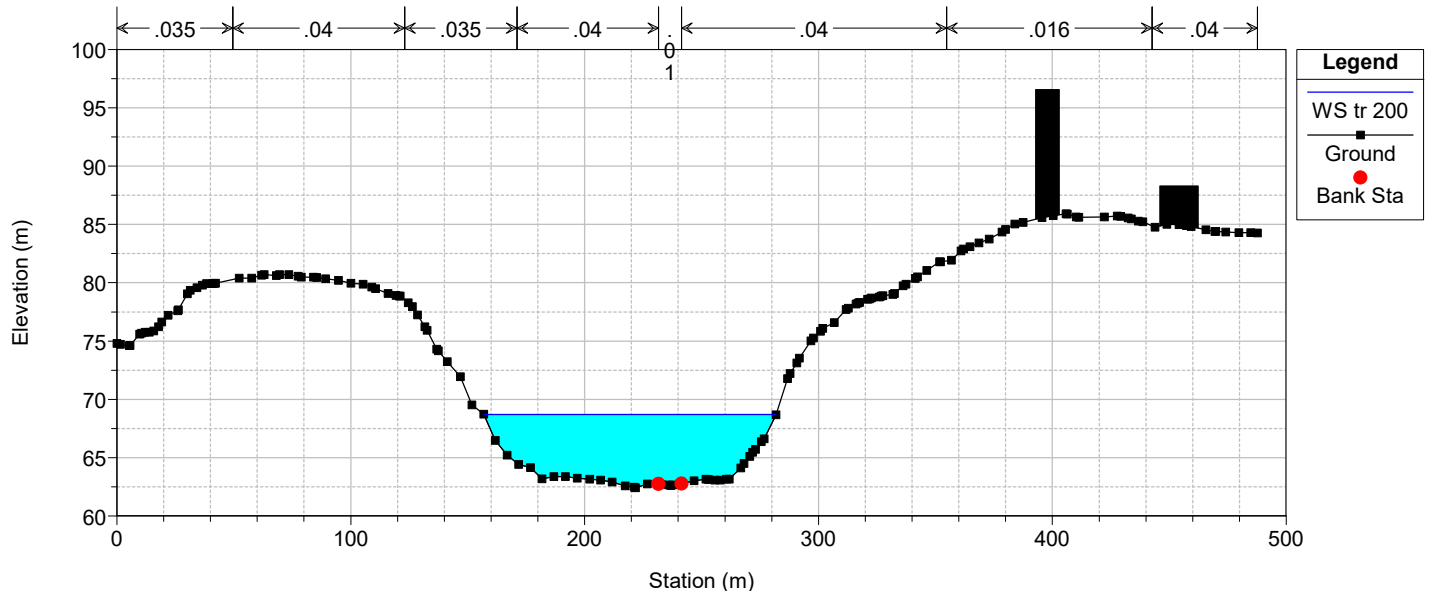
River = RioOttava Reach = RioOttava RS = 6555.767 SEZIONE 29 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 9/16/2021

Geom: 05022021

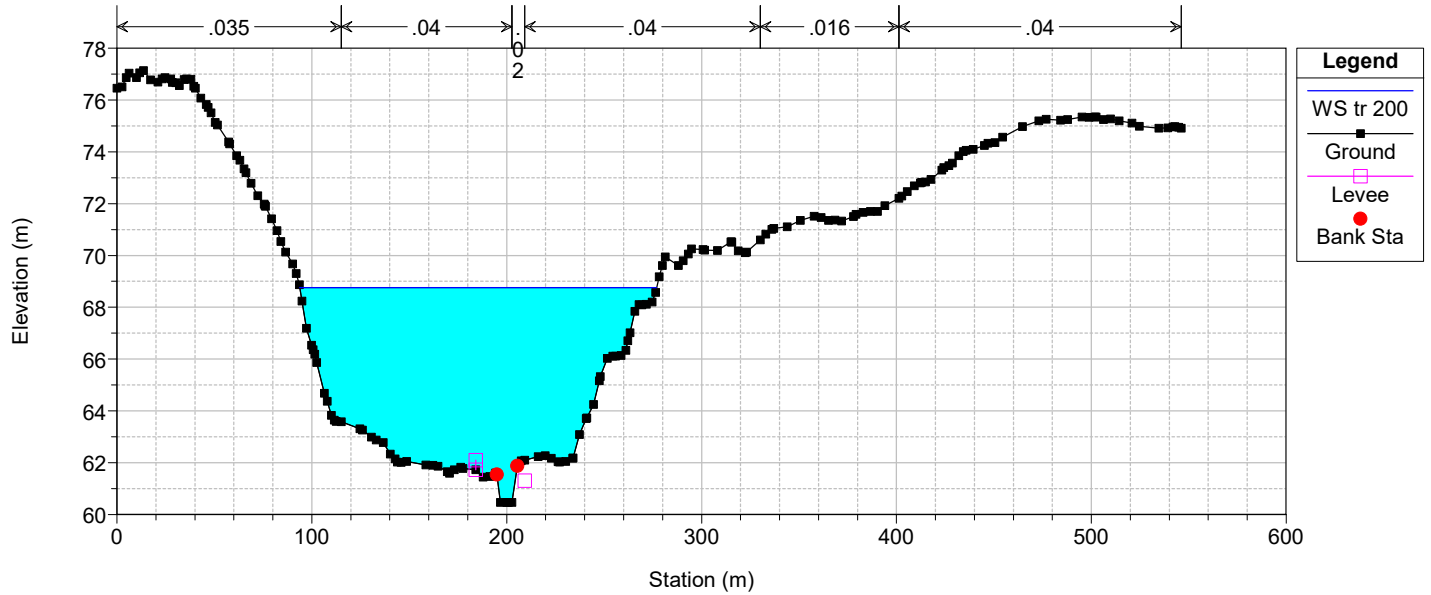
River = RioOttava Reach = RioOttava RS = 6408.969 SEZIONE 28 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 9/16/2021

Geom: 05022021

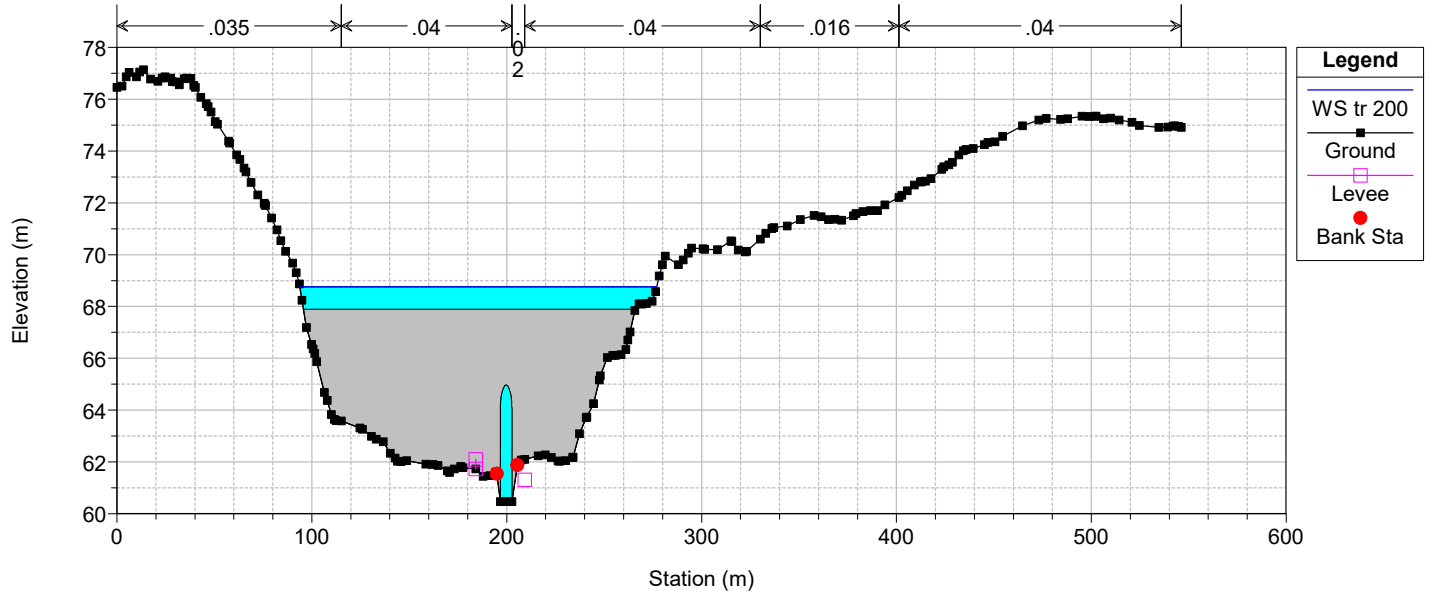
River = RioOttava Reach = RioOttava RS = 6234.289 SEZIONE 27 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 9/16/2021

Geom: 05022021

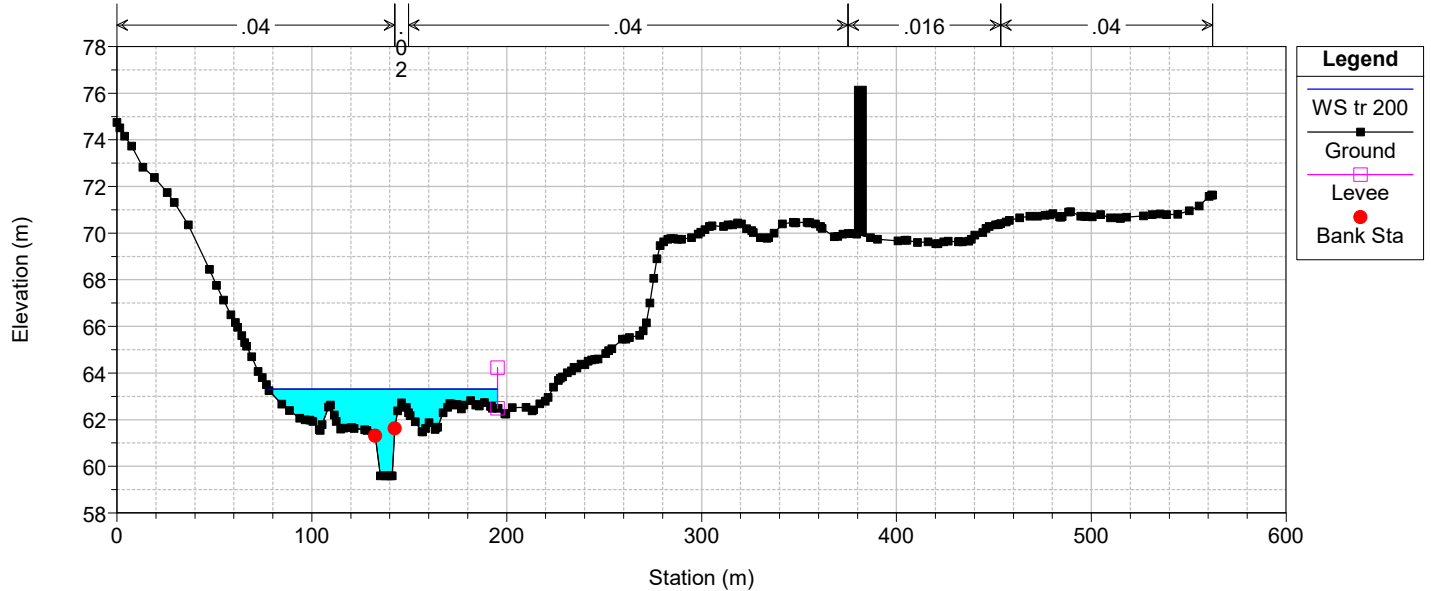
River = RioOttava Reach = RioOttava RS = 6210 Culv. ATTRAVERSAMENTO 2 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 9/16/2021

Geom: 05022021

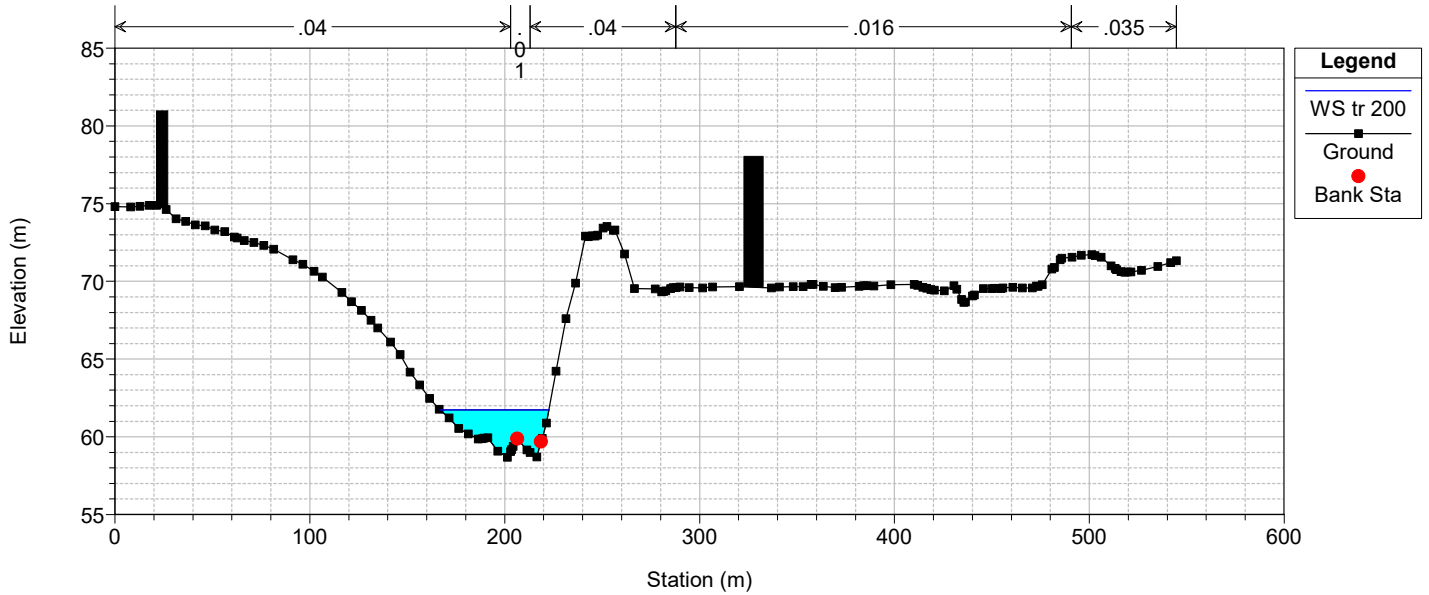
River = RioOttava Reach = RioOttava RS = 6167.563 SEZIONE 26 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 9/16/2021

Geom: 05022021

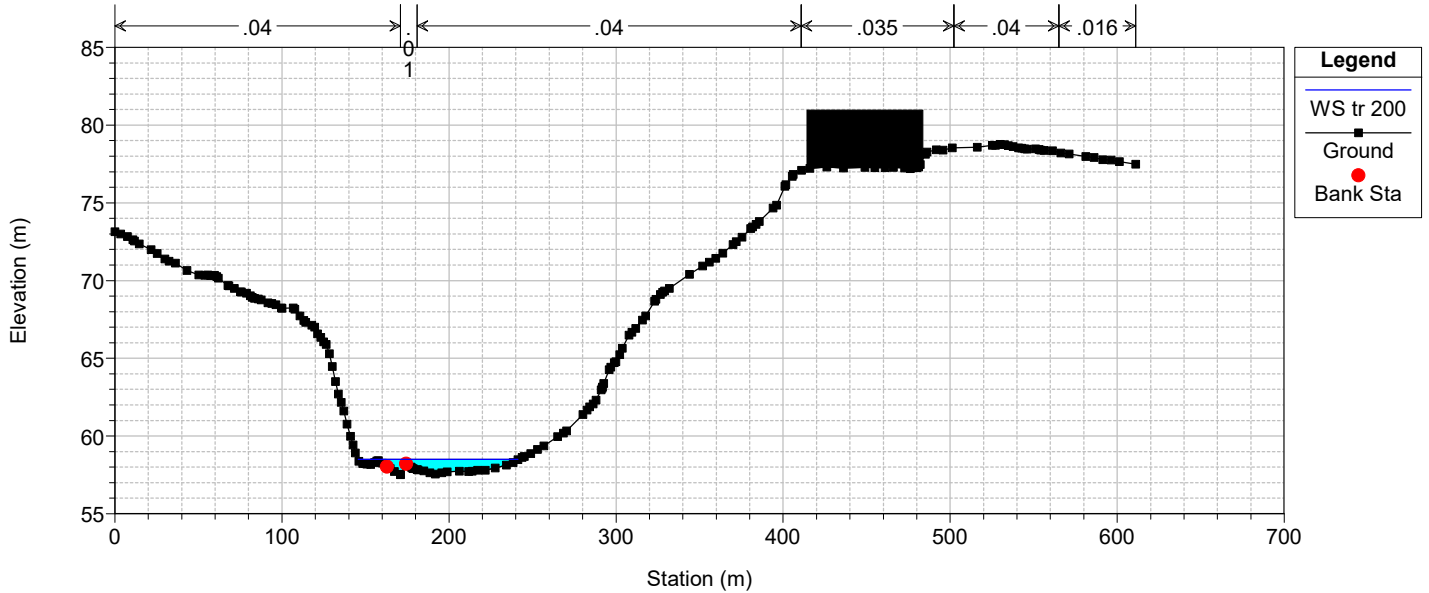
River = RioOttava Reach = RioOttava RS = 5932.303 SEZIONE 25 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 9/16/2021

Geom: 05022021

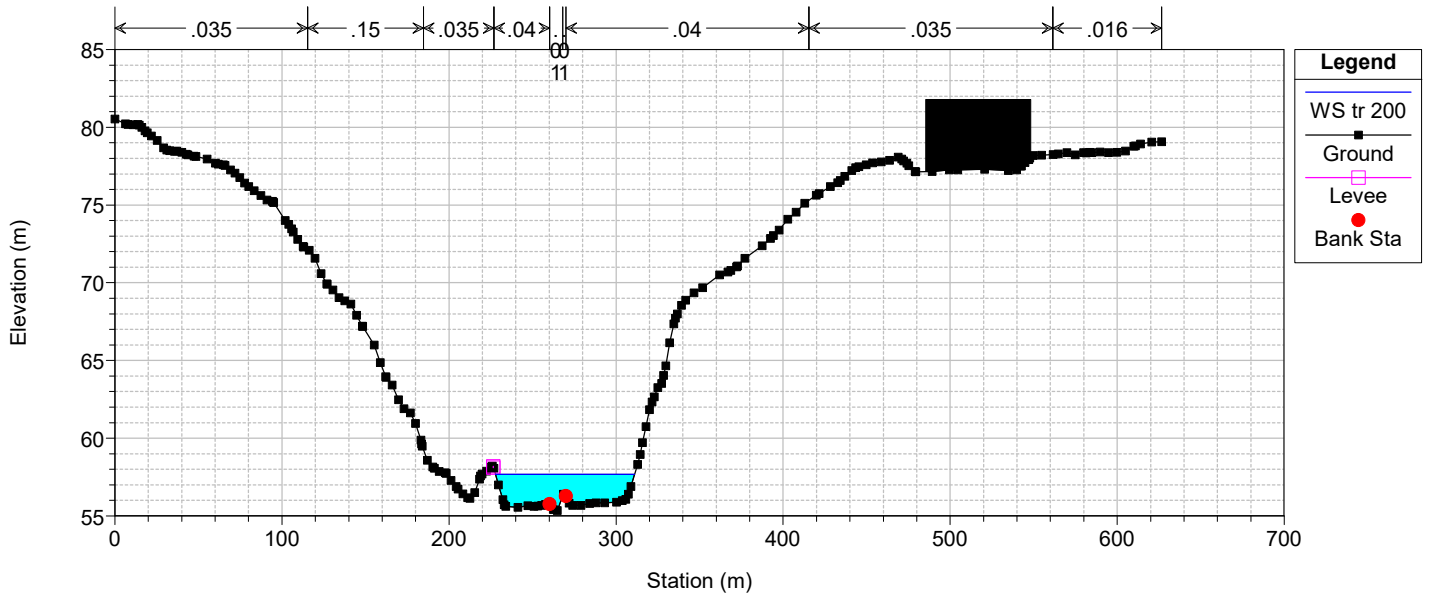
River = RioOttava Reach = RioOttava RS = 5727.228 SEZIONE 24 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 9/16/2021

Geom: 05022021

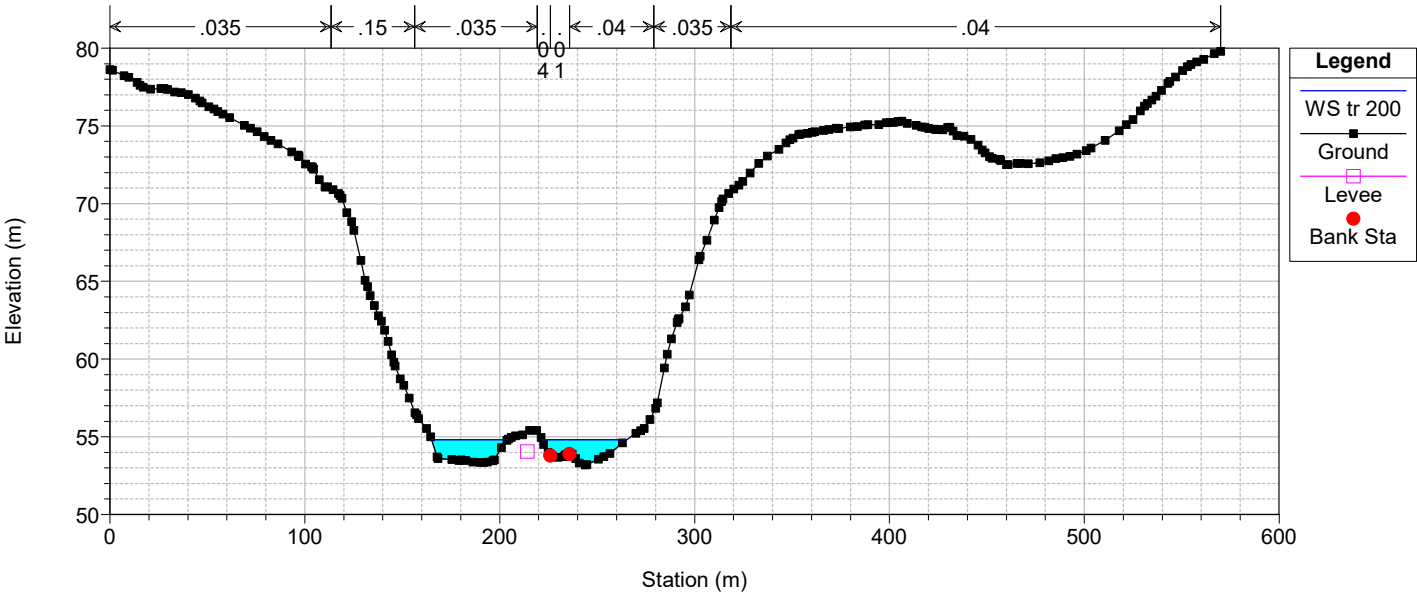
River = RioOttava Reach = RioOttava RS = 5443.678 SEZIONE 23 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 9/16/2021

Geom: 05022021

River = RioOttava Reach = RioOttava RS = 5153.800 SEZIONE 22 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



HEC-RAS Plan: 16092021 River: RioOttava Reach: RioOttava Profile: tr 200

Reach	River Sta	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)	
RioOttava	8401.459	tr 200	361.89	76.10	80.87	80.87	81.80	0.024940	5.77	162.65	108.10	1.20
RioOttava	8385		Culvert									
RioOttava	8377.194	tr 200	361.89	76.00	79.14	79.14	79.57	0.007077	4.05	136.02	139.18	0.81
RioOttava	8232.974	tr 200	361.89	75.35	77.80	77.89	79.01	0.001876	7.54	130.58	62.85	1.58
RioOttava	8107.862	tr 200	361.89	74.37	76.11	76.82	78.49	0.006688	10.32	98.52	83.23	2.76
RioOttava	7982.531	tr 200	361.89	73.27	74.69	75.43	77.36	0.012092	9.47	79.09	84.69	2.63
RioOttava	7784.881	tr 200	361.89	72.40	73.79	74.24	75.31	0.006413	9.16	135.32	107.38	2.64
RioOttava	7658.614	tr 200	361.89	71.70	73.16	73.46	74.25	0.008786	5.92	97.81	93.84	1.65
RioOttava	7432.144	tr 200	361.89	69.90	71.80	71.05	71.92	0.000730	3.48	345.20	231.36	0.92
RioOttava	7256.378	tr 200	361.89	68.98	70.84	70.84	71.63	0.002821	6.88	162.88	110.24	1.80
RioOttava	7119.309	tr 200	361.89	67.53	70.17	69.69	70.52	0.002657	2.61	151.44	88.58	0.56
RioOttava	6851.495	tr 200	361.89	65.71	68.92	68.92	70.03	0.001046	6.46	165.69	77.73	1.22
RioOttava	6571.494	tr 200	361.89	64.11	68.66	66.58	68.82	0.000116	2.91	435.04	126.63	0.44
RioOttava	6555.767	tr 200	361.89	63.40	68.68	66.25	68.81	0.000079	2.60	506.10	139.92	0.37
RioOttava	6408.969	tr 200	361.89	62.61	68.71		68.79	0.000037	2.01	610.03	125.05	0.26
RioOttava	6234.289	tr 200	361.89	60.47	68.75	63.10	68.76	0.000020	0.49	985.51	183.09	0.05
RioOttava	6210		Culvert									
RioOttava	6167.563	tr 200	361.89	59.59	63.32	63.16	63.66	0.004917	3.56	155.58	117.59	0.62
RioOttava	5932.303	tr 200	361.89	58.71	61.74	61.74	62.76	0.002669	5.80	103.48	55.93	1.17
RioOttava	5727.228	tr 200	361.89	57.52	58.49	59.12	61.04	0.078845	9.60	55.62	95.63	3.65
RioOttava	5443.678	tr 200	361.89	55.34	57.67	57.79	58.77	0.002250	7.25	149.45	83.24	1.68
RioOttava	5153.800	tr 200	361.89	53.68	54.81	55.76	57.34	0.012325	11.46	87.51	82.38	3.57

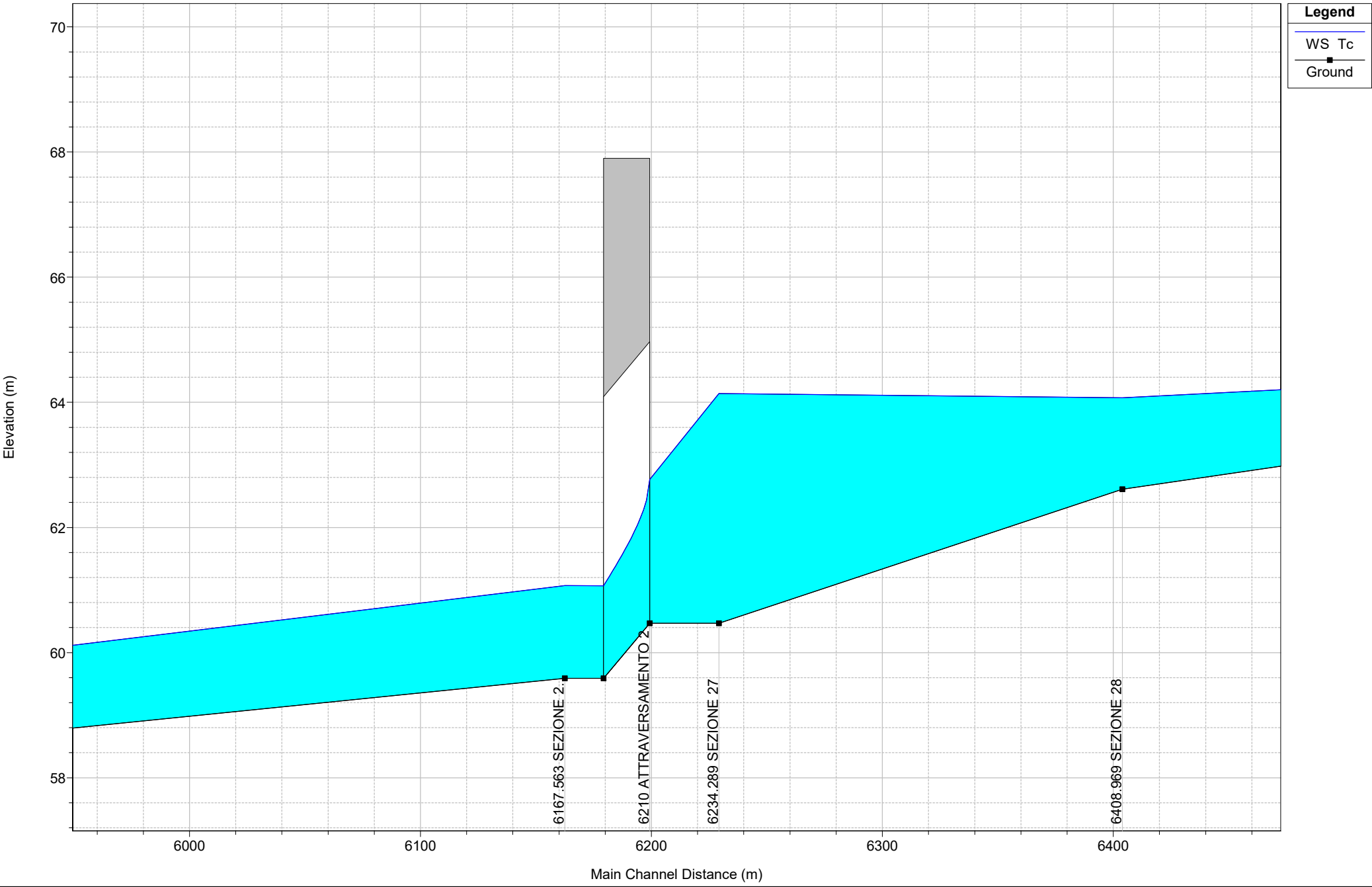
Reach	River Sta		Profile	E.G. US. (m)	W.S. US. (m)	E.G. IC (m)	E.G. OC (m)	Min El Weir Flow (m)	Q Culv Group (m3/s)	Q Weir (m3/s)	Delta WS (m)	Culv Vel US (m/s)	Culv Vel DS (m/s)
RioOttava	8385	Culvert #1	tr 200	81.80	80.87			80.10	50.29		1.73	6.47	6.47
RioOttava	6210	Culvert #1	tr 200	68.76	68.75	68.76	67.41	67.90	163.76	198.13	5.44	6.49	10.96
RioOttava	4630	Culvert #1	tr 200	54.66	54.62	54.74	54.66	53.35	132.66	229.23	2.24	6.06	6.06

CALCOLO IDROLOGICO PORTATE DI PIENA

RIO OTTAVA - 6_C13			
		TR (anni)	2.5
Lunghezza asta	L	m	25440
Curve Number	CN	-	94.13
Pend.za media bac.	i _{bac}	-	0.1253
Area bacino	A	kmq	66.68
Altitudine massima	Hmax	m slm	500.96
Altitudine media	Hmed	m slm	221.27
Altitudine minima	Hmin	m slm	25.75
Pend.za media asta	iret	m/m	0.0187
	SCS	(ore)	3.011
	GIANDOTTI	(ore)	6.331
	PASINI	(ore)	9.424
	VAPI	(ore)	8.413
	KIRPICH	(ore)	1.784
	VIPARELLI	(ore)	7.067
	tc adott.	SCS	
		(ore)	3.011
Tempi di ritorno	T	(anni)	2.5
Dati pluviometrici	Pgiorn.	(mm)	50
	Sottozona		2
Altezza di pioggia	n1	-	0.31570972
	a1	-	20.6914142
	n2 (ADOTTATO)	-	-0.00728576
	a2 (ADOTTATO)	-	0.87227171
	n (ADOTTATO)	-	0.30842396
	a (ADOTTATO)	-	18.0485352
	h (ADOTTATO)	(mm)	25.357
	Coef.f.Ragg (ADOTTATO)	-	0.888
	n r (ADOTTATO)	(mm)	22.509
	S	(mm)	15.849
	Ia	(mm)	3.170
	Pnetta (ADOTTATO)	(mm)	10.629
	Coef.defl. (SCS)		0.653
	Coef.defl. (GIANDOTTI)		0.720
	Coef.defl. (PASINI)		0.752
	Coef.defl. (VAPI)		0.743
	Coef.defl. (KIRPICH)		0.596
	Coef.defl. (VIPARELLI)		0.729
	Coef.defl. (ADOTTATO)	-	0.419
PORTATE DI PIENA	Qpicco (SCS)	(mc/s)	264.456
	Qpicco (GIANDOTTI)	(mc/s)	173.944
	Qpicco (PASINI)	(mc/s)	137.534
	Qpicco (VAPI)	(mc/s)	147.165
	Qpicco (KIRPICH)	(mc/s)	348.089
	Qpicco (VIPARELLI)	(mc/s)	163.122
	Qpicco (ADOTTATO)	(mc/s)	65.380

Comune di Sassari (SS)
 VERIFICHE DI SICUREZZA IDRAULICA OPERE INTERFERENTI CON IL RETICOLO IDROGRAFICO
 Strade comunali - **ATTRAVERSAMENTO C13**

	River Sta	Profile	Culv Inv El DS	Culv Inv El US	W.S.	Q Culv	Culv Vel US	Culv Vel DS	QUOTA INTRADOS SO	FRANCHI DISPONIBILI	FRANCHI RICHIESTI	50% di FRANCHI RICHIESTI	VERIFICA	Deficit
			(m slm)	(m slm)	(m slm)	(m³/s)	(m/s)	(m/s)	(m slm)	(m)	(m)	(m)		(m)
UPSTREAM	6210 Culver	TR 200 ANNI		60.47	68.75	361.89	6.49		64.97	-3.78	2.010		NON VERIF.	5.78950957
	6210 Culver	Tr critico		60.47	64.14	65.4	4.75		64.97	0.83	1.500	0.750	OK	OK
DOWNSTREAM	6210 Culver	TR 200 ANNI	59.59		63.32	361.89		10.96	64.09	0.77	6.124		NON VERIF.	5.35449715
	6210 Culver	Tr critico	59.59		61.93	65.4		7.37	64.09	2.16	1.939	0.969	OK	OK

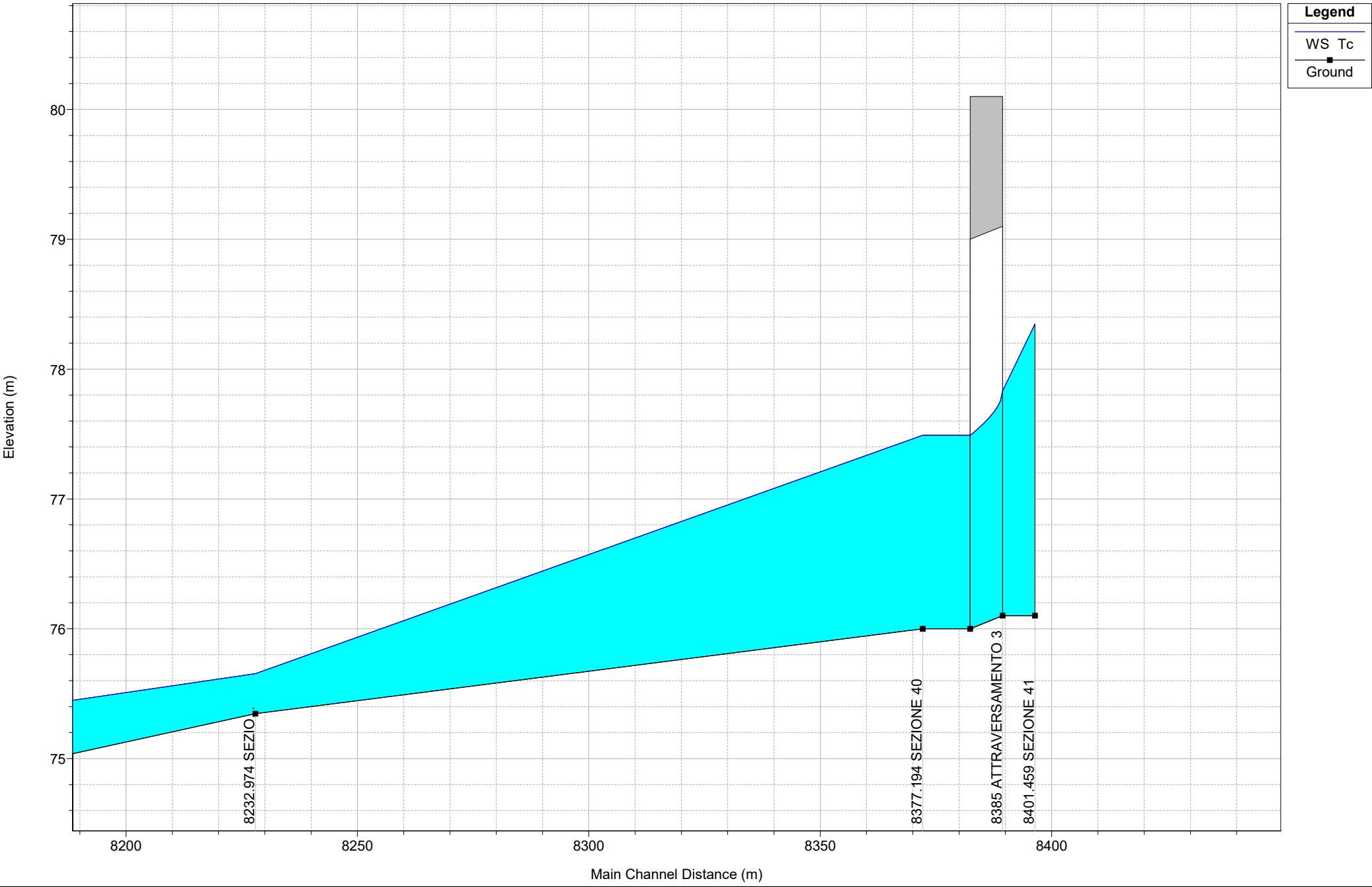


CALCOLO IDROLOGICO PORTATE DI PIENA

RIO OTTAVA - 6_C14			
		TR (anni)	1
Lunghezza asta	L	m	25440
Curve Number	CN	-	94.13
Pend.za media bac.	i _{bac}	-	0.1253
Area bacino	A	kmq	66.68
Altitudine massima	Hmax	m slm	500.96
Altitudine media	Hmed	m slm	221.27
Altitudine minima	Hmin	m slm	25.75
Pend.za media asta	iret	m/m	0.0187
	SCS	(ore)	3.011
	GIANDOTTI	(ore)	6.331
	PASINI	(ore)	9.424
	VAPI	(ore)	8.413
	KIRPICH	(ore)	1.784
	VIPARELLI	(ore)	7.067
	tc adott.		SCS
			(ore) 3.011
Tempi di ritorno	T	(anni)	1
Dati pluviometrici	Pgiorn.	(mm)	50
	Sottozona		2
Altezza di pioggia	n1	-	0.31570972
	a1	-	20.6914142
	n2 (ADOTTATO)	-	-0.0056593
	a2 (ADOTTATO)	-	0.44182
	n (ADOTTATO)	-	0.31005042
	a (ADOTTATO)	-	9.14188063
	h (ADOTTATO)	(mm)	12.867
	Coef.f.Ragg (ADOTTATO)	-	0.888
	n r (ADOTTATO)	(mm)	11.422
	S	(mm)	15.849
	la	(mm)	3.170
	Pnetta (ADOTTATO)	(mm)	2.825
	Coef.defl. (SCS)		0.653
	Coef.defl. (GIANDOTTI)		0.720
	Coef.defl. (PASINI)		0.752
	Coef.defl. (VAPI)		0.743
	Coef.defl. (KIRPICH)		0.596
	Coef.defl. (VIPARELLI)		0.729
	Coef.defl. (ADOTTATO)	-	0.220
PORTATE DI PIENA	Qpicco (SCS)	(mc/s)	264.456
	Qpicco (GIANDOTTI)	(mc/s)	173.944
	Qpicco (PASINI)	(mc/s)	137.534
	Qpicco (VAPI)	(mc/s)	147.165
	Qpicco (KIRPICH)	(mc/s)	348.089
	Qpicco (VIPARELLI)	(mc/s)	163.122
	Qpicco (ADOTTATO)	(mc/s)	17.379

Comune di Sassari (SS)
 VERIFICHE DI SICUREZZA IDRAULICA OPERE INTERFERENTI CON IL RETICOLO IDROGRAFICO
 Strade comunali - **ATTRAVERSAMENTO C14**

	River Sta	Profile	Culv Inv El DS	Culv Inv El US	W.S.	Q Culv	Culv Vel US	Culv Vel DS	QUOTA INTRADOS SO	FRANCHI DISPONIBILI	FRANCHI RICHIESTI	50% di FRANCHI RICHIESTI	VERIFICA	Deficit
			(m slm)	(m slm)	(m slm)	(m³/s)	(m/s)	(m/s)	(m slm)	(m)	(m)	(m)		(m)
UPSTREAM	8385 Culver	TR 200 ANNI		76.1	80.87	361.89	6.47		79.1	-1.77	2.009		NON VERIF.	3.77872389
	8385 Culver	Tr critico		76.1	78.35	17.4	3.74		79.1	0.75	1.305	0.653	OK	OK
DOWNSTREAM	8385 Culver	TR 200 ANNI	76		79.14	361.89		6.47	79	-0.14	2.009		NON VERIF.	2.14872389
	8385 Culver	Tr critico	76		77.57	17.4		4.51	79	1.43	1.090	0.545	OK	OK



COMUNE DI SASSARI

VERIFICHE DI SICUREZZA IDRAULICA OPERE INTERFERENTI CON IL RETICOLO IDROGRAFICO – ATTRAVERSAMENTI STRADE COMUNALI

Area di indagine: **TERRITORIO COMUNALE**

SIMULAZIONI IN MOTO PERMANENTE

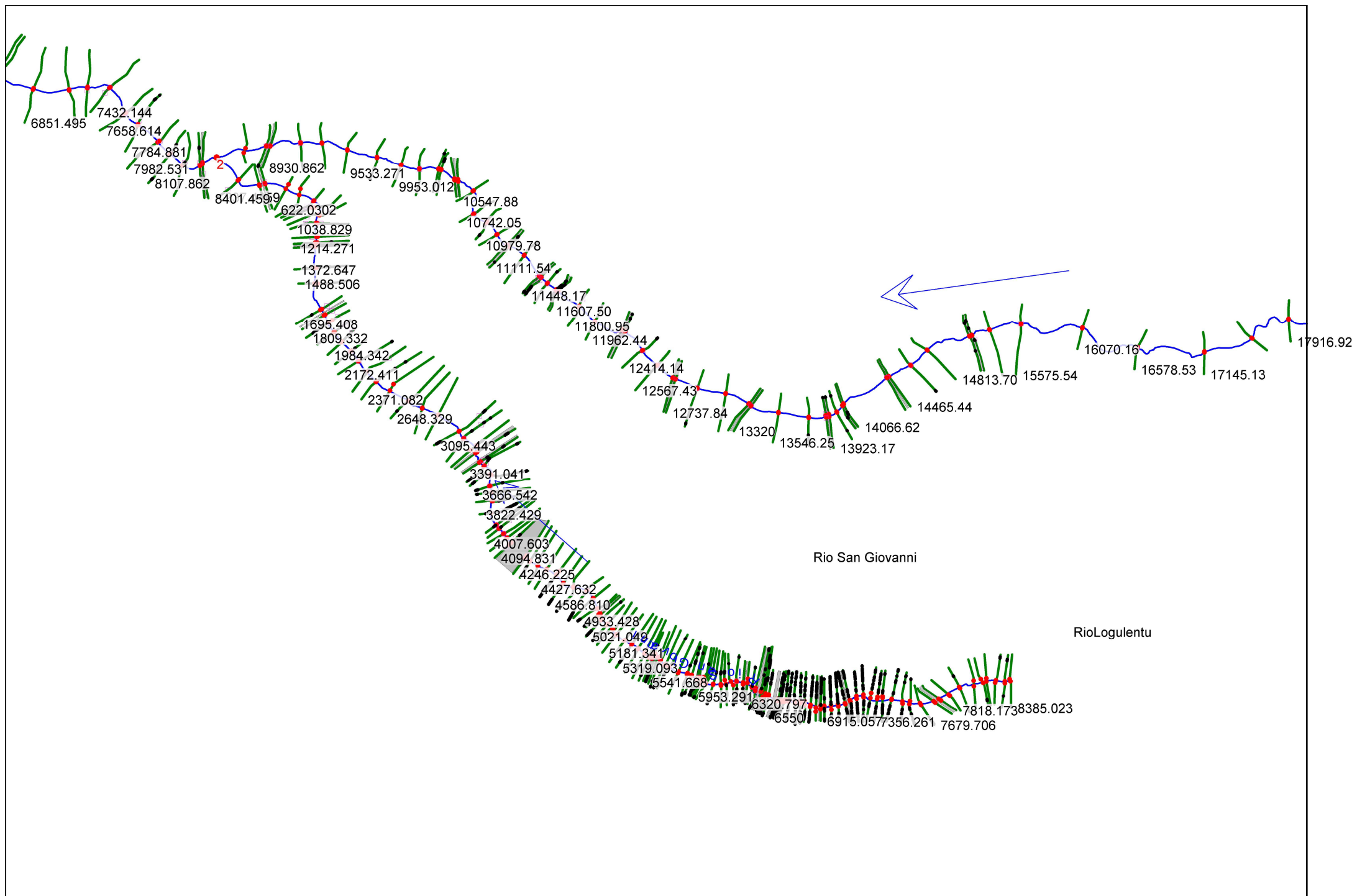
ATTRAVERSAMENTO C25 sul Fiume 828

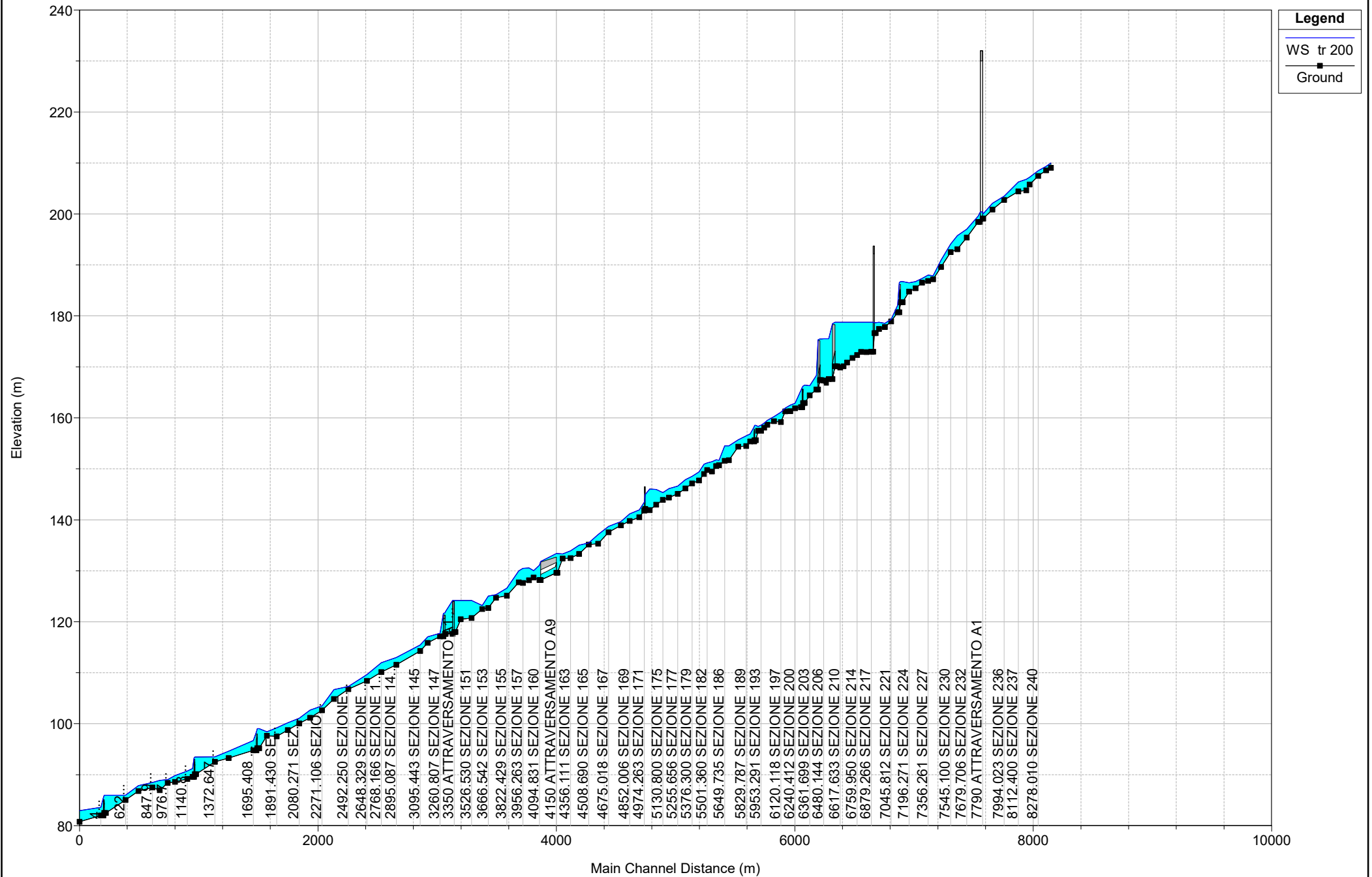
ATTRAVERSAMENTI C26, C27, C28, E03, C29, C31, C32, C33, C34, C35 sul rio S. Giovanni

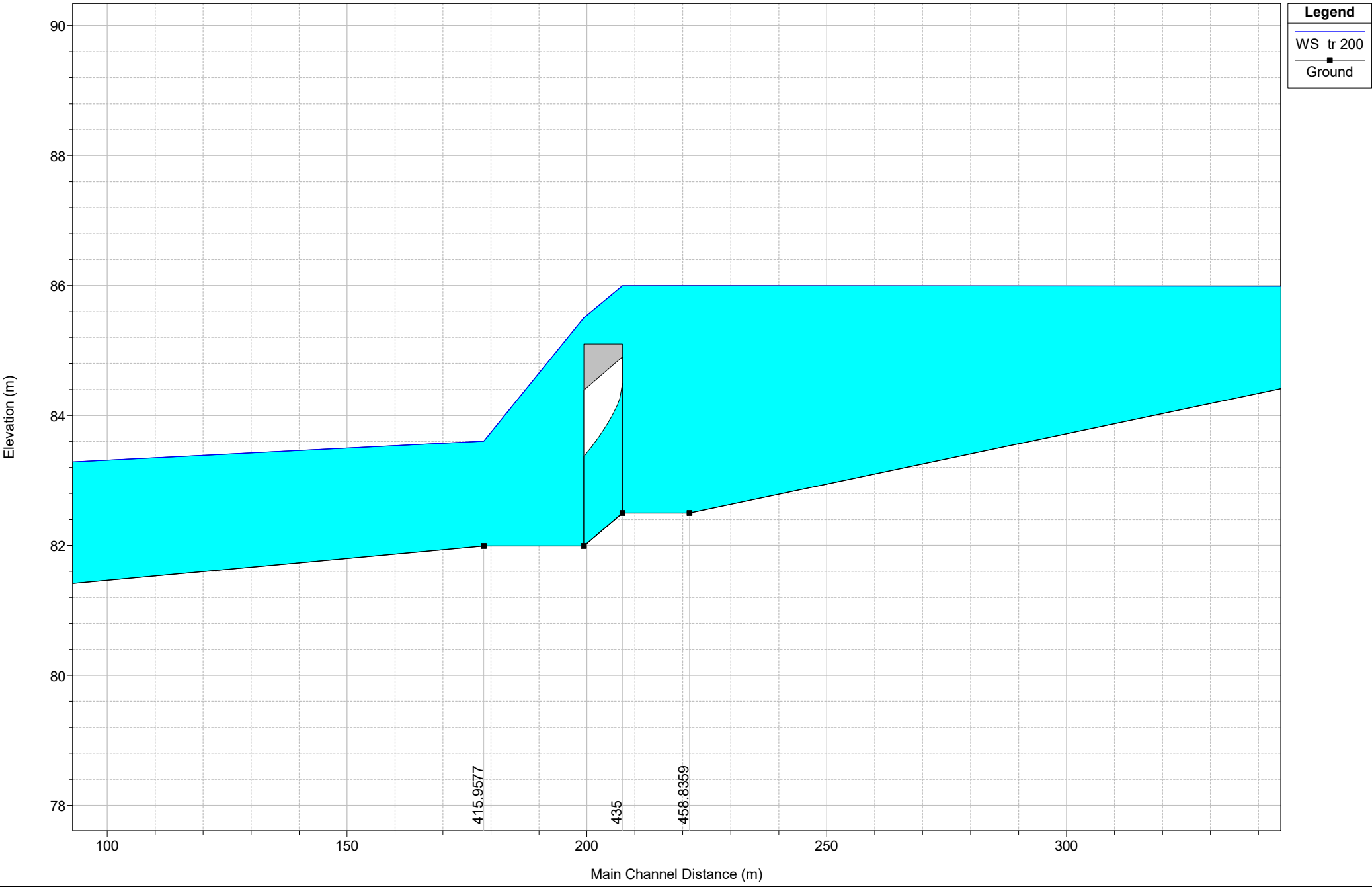
- Schema planimetrico del modello matematico;
- Profili longitudinali con livelli idrici per il tempo di ritorno di 200 anni;
- Sezioni trasversali con livelli idrici per il tempo di ritorno di 200 anni;
- Tabulati numerici di output per il tempo di ritorno di 200 anni;
- Calcolo della portata critica;
- Profilo longitudinale del livello idrico per il tempo di ritorno critico TC;
- Verifica dei franchi idraulici e della portata critica;

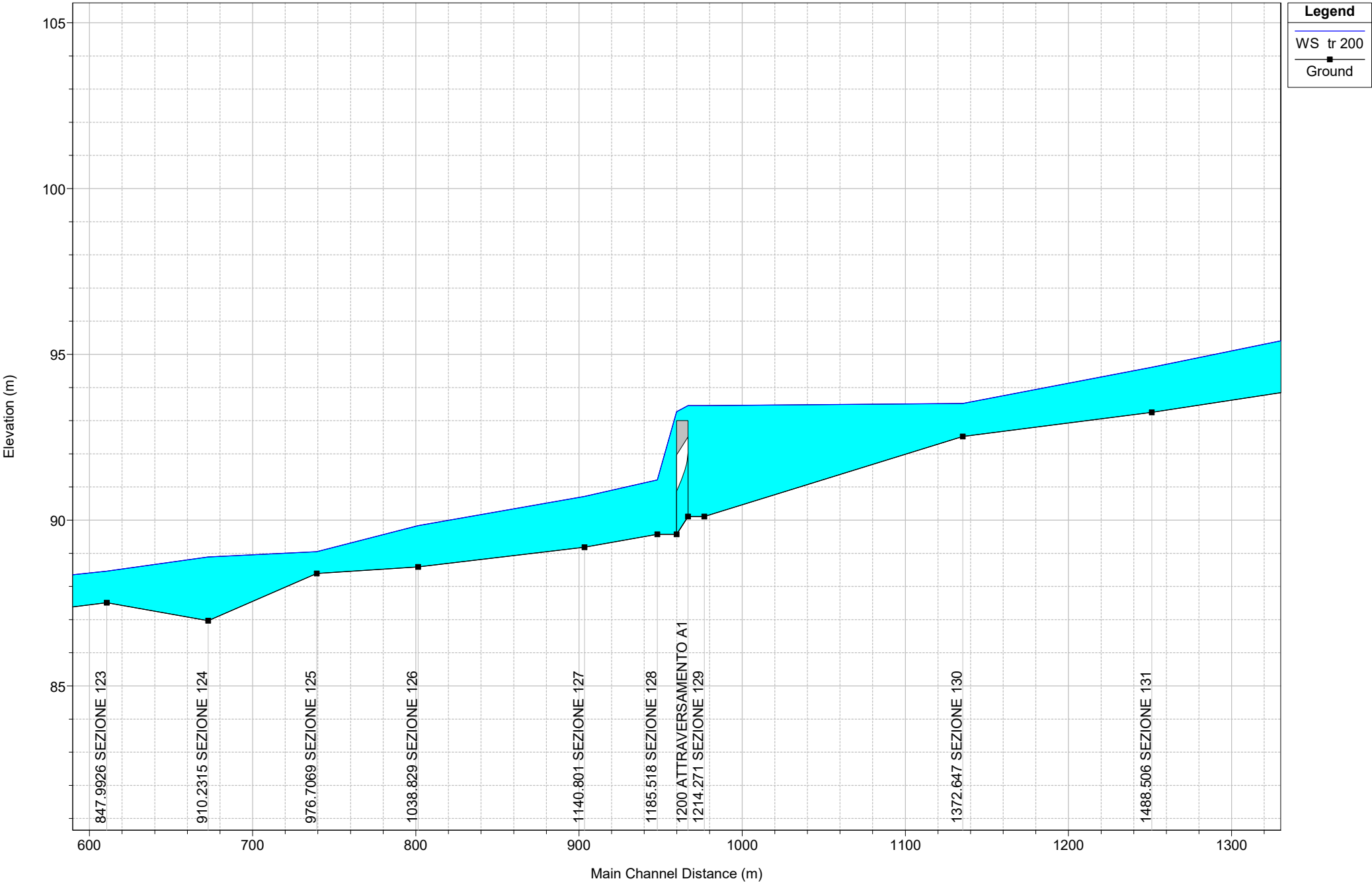
River	Reach	RS	PORTATE mc/s			
			tr 50	tr 100	tr 200	tr 500
Rio San Giovanni	Rio San Giovanni	8385.023	71.862	85.578	99.437	117.91
Rio San Giovanni	Rio San Giovanni	3922.604	84.683	100.367	116.17	137.183
Rio San Giovanni	Rio San Giovanni	1488.506	94.946	112.437	130.052	153.462
RioOttava	RioLogulentu	22141.27	62.054	74.678	87.54	104.912
RioOttava	RioLogulentu	18322.6	140.862	170.425	200.53	240.937
RioOttava	RioLogulentu	15575.54	164.347	198.17	232.545	278.602
RioOttava	RioLogulentu	13770.69	167.234	200.874	234.986	280.599
RioOttava	RioOttava	8401.459	264.456	313.025	361.886	426.74

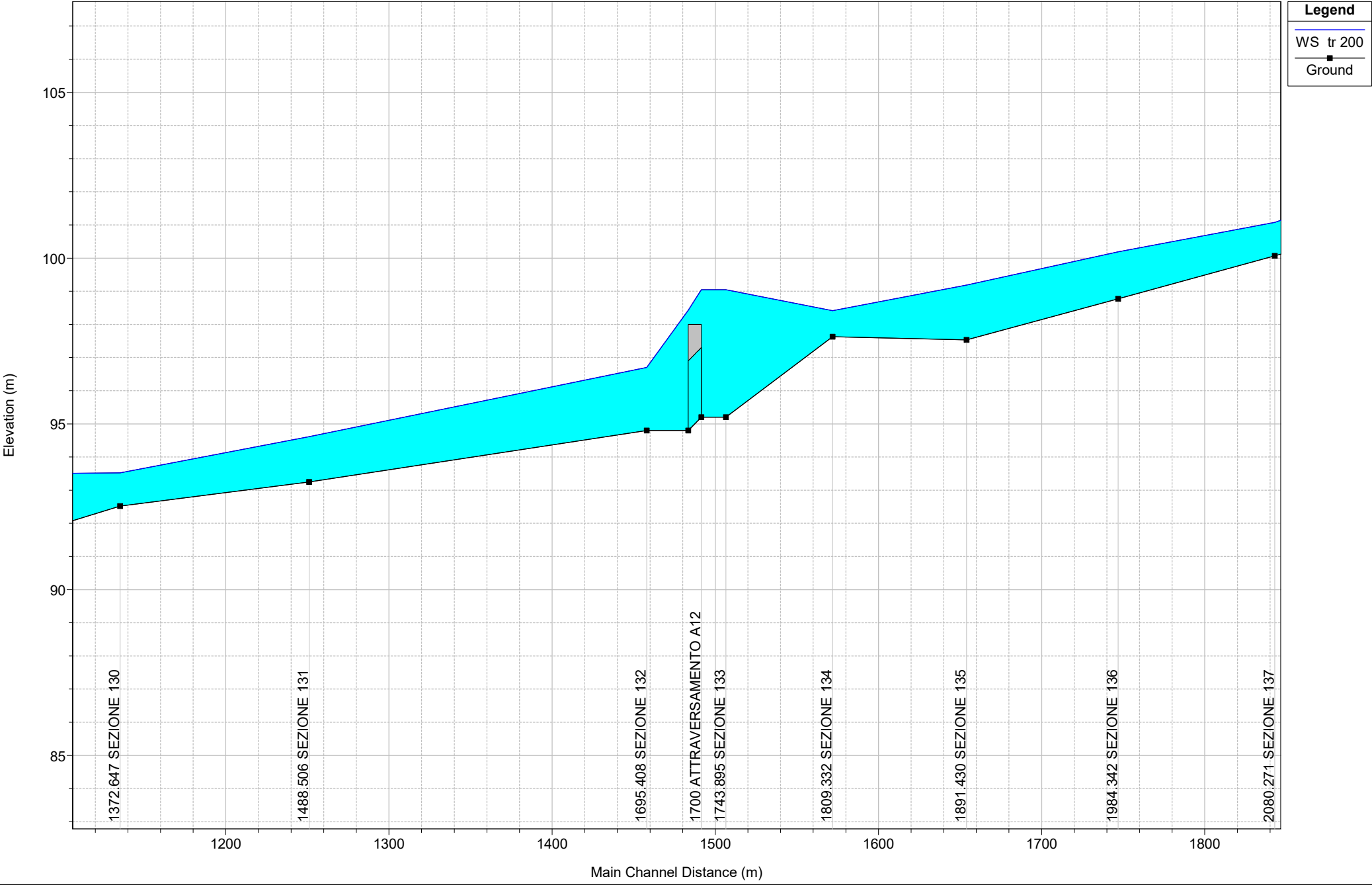
River	Reach	PROFILI	condizioni al contorno	
			upstream	downstream
Rio San Giovanni	Rio San Giovanni	all	Critical Depth	Junction = 2
RioOttava	RioLogulentu	all	Critical Depth	Junction = 2
RioOttava	Rio Ottava	all	Junction = 2	Known WS

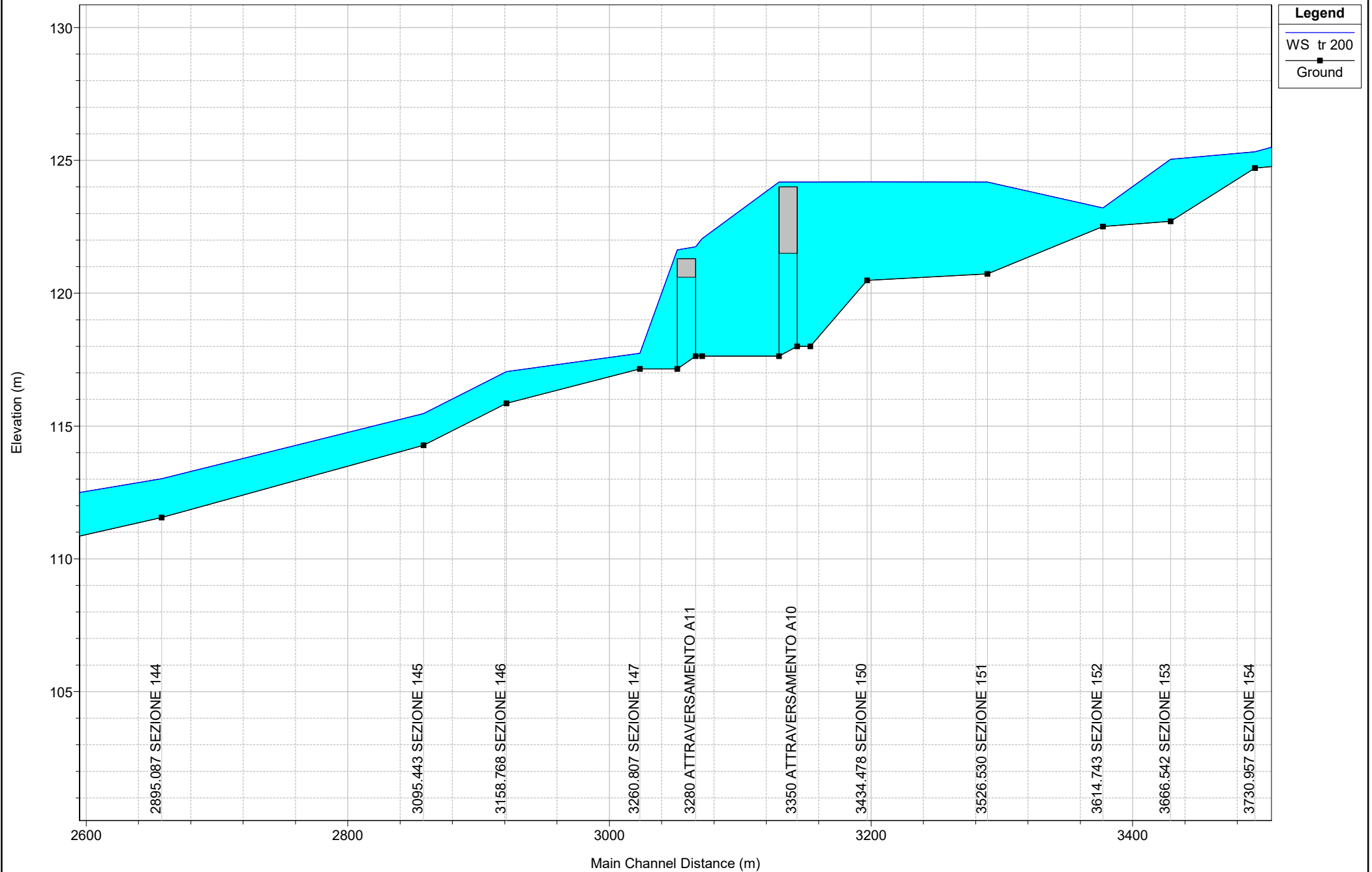


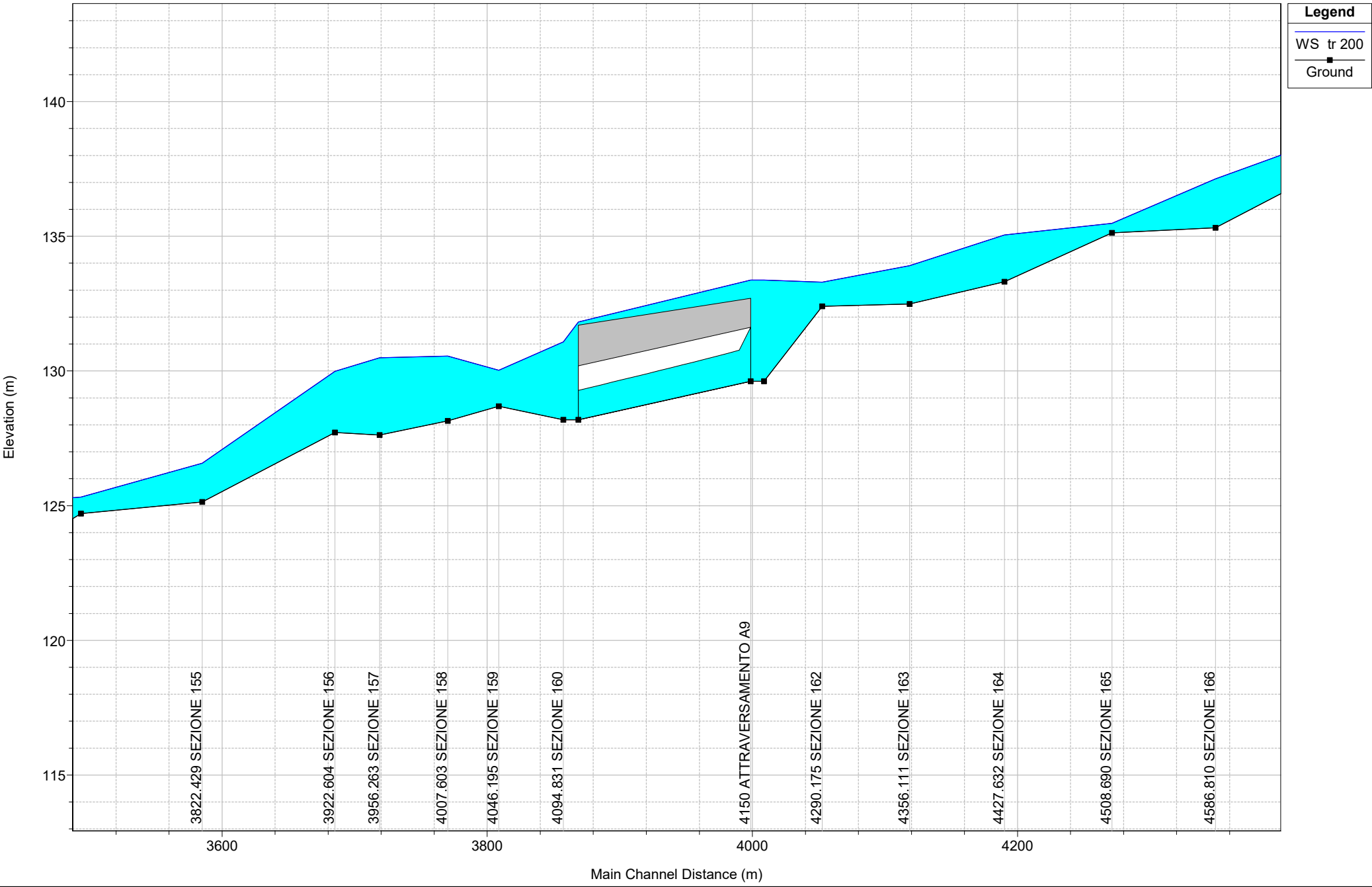


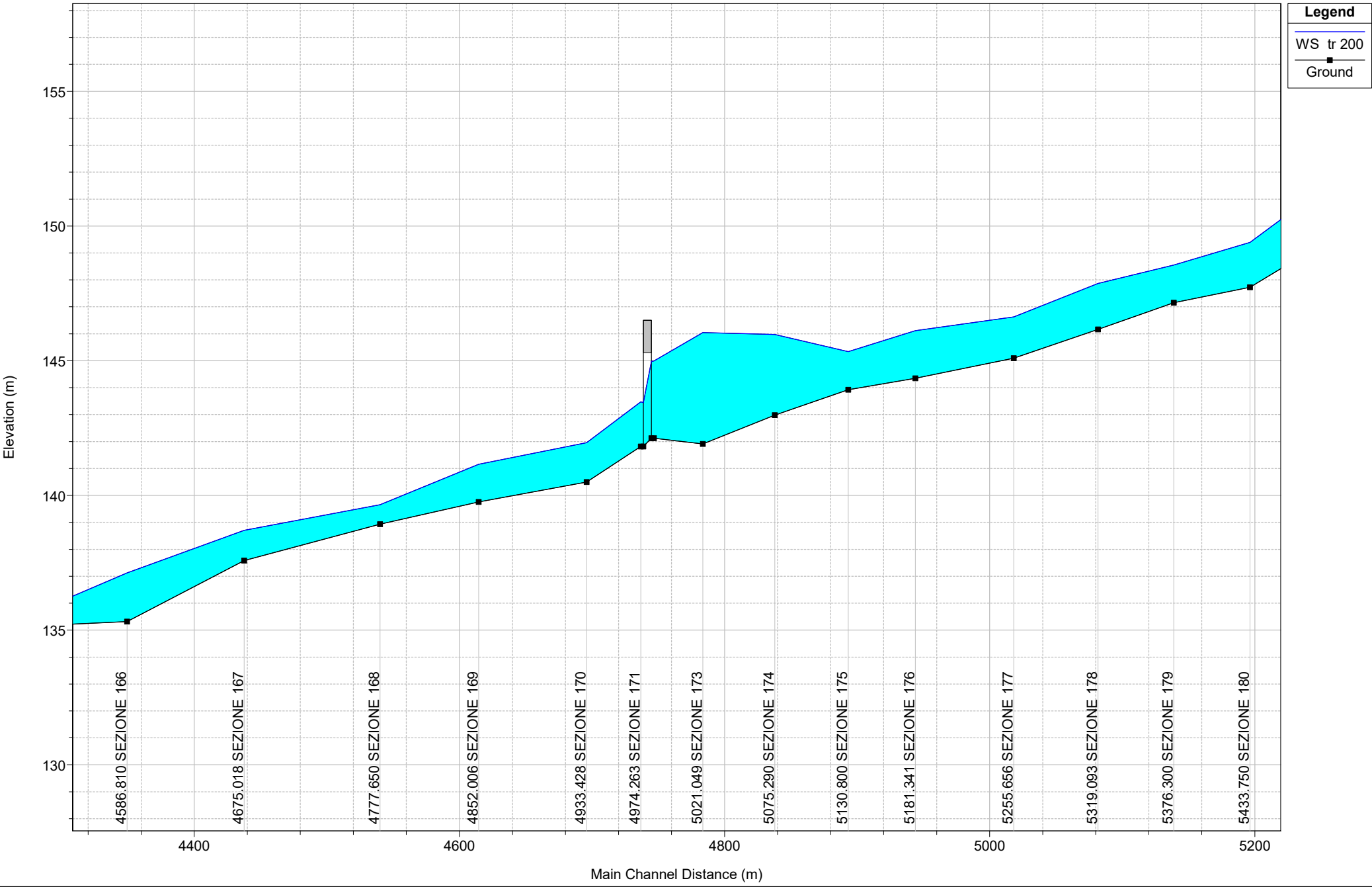


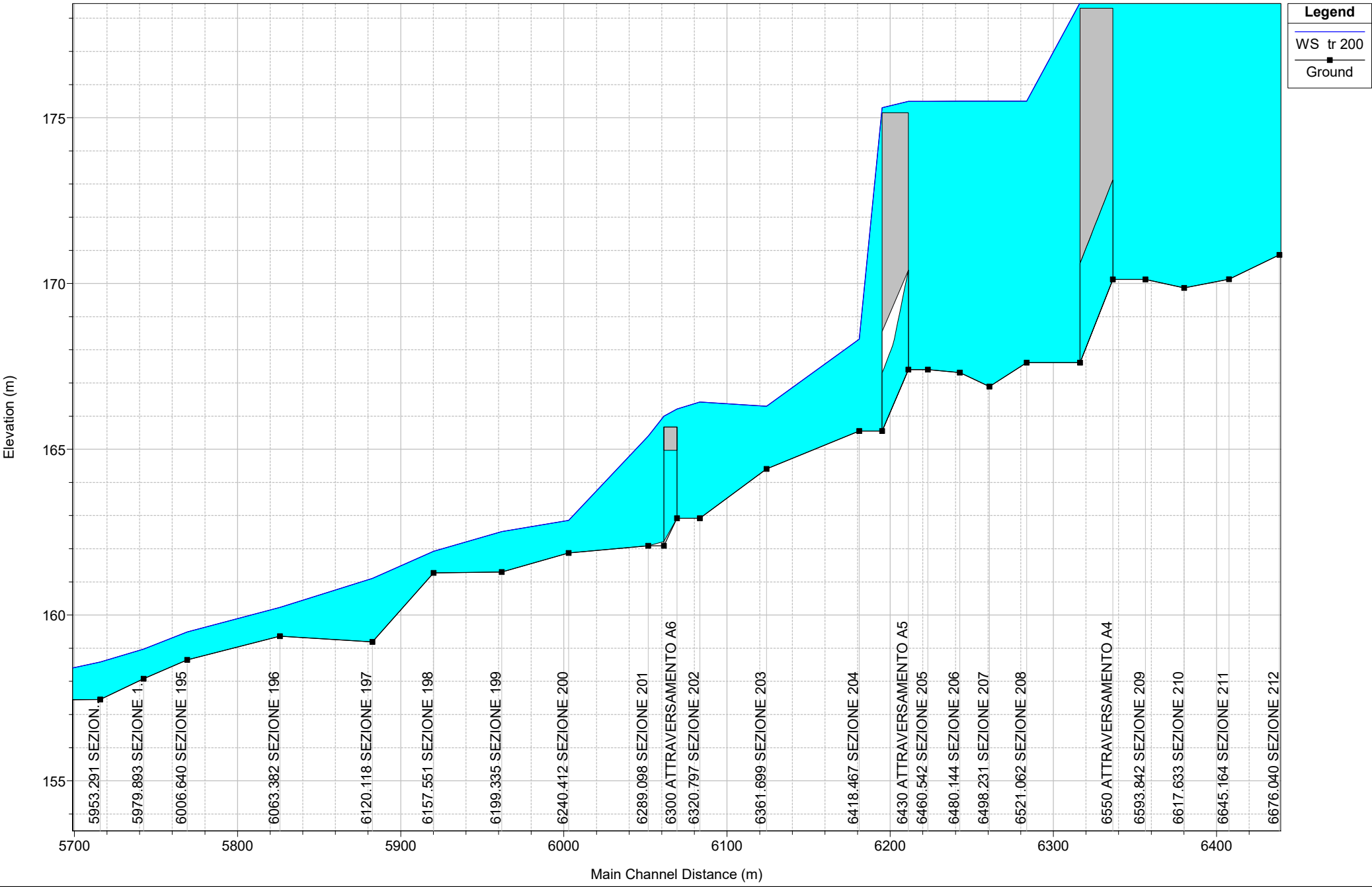


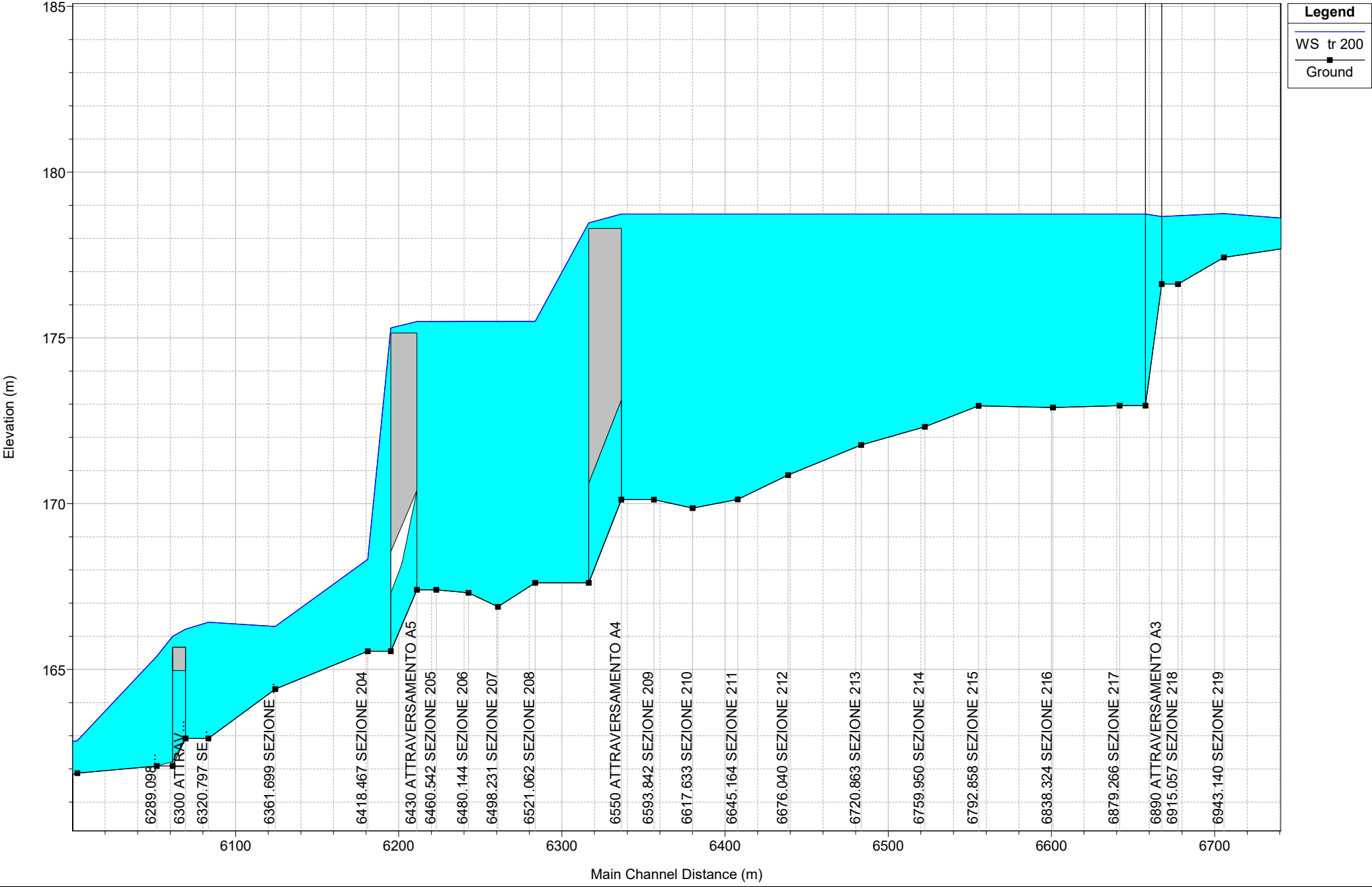


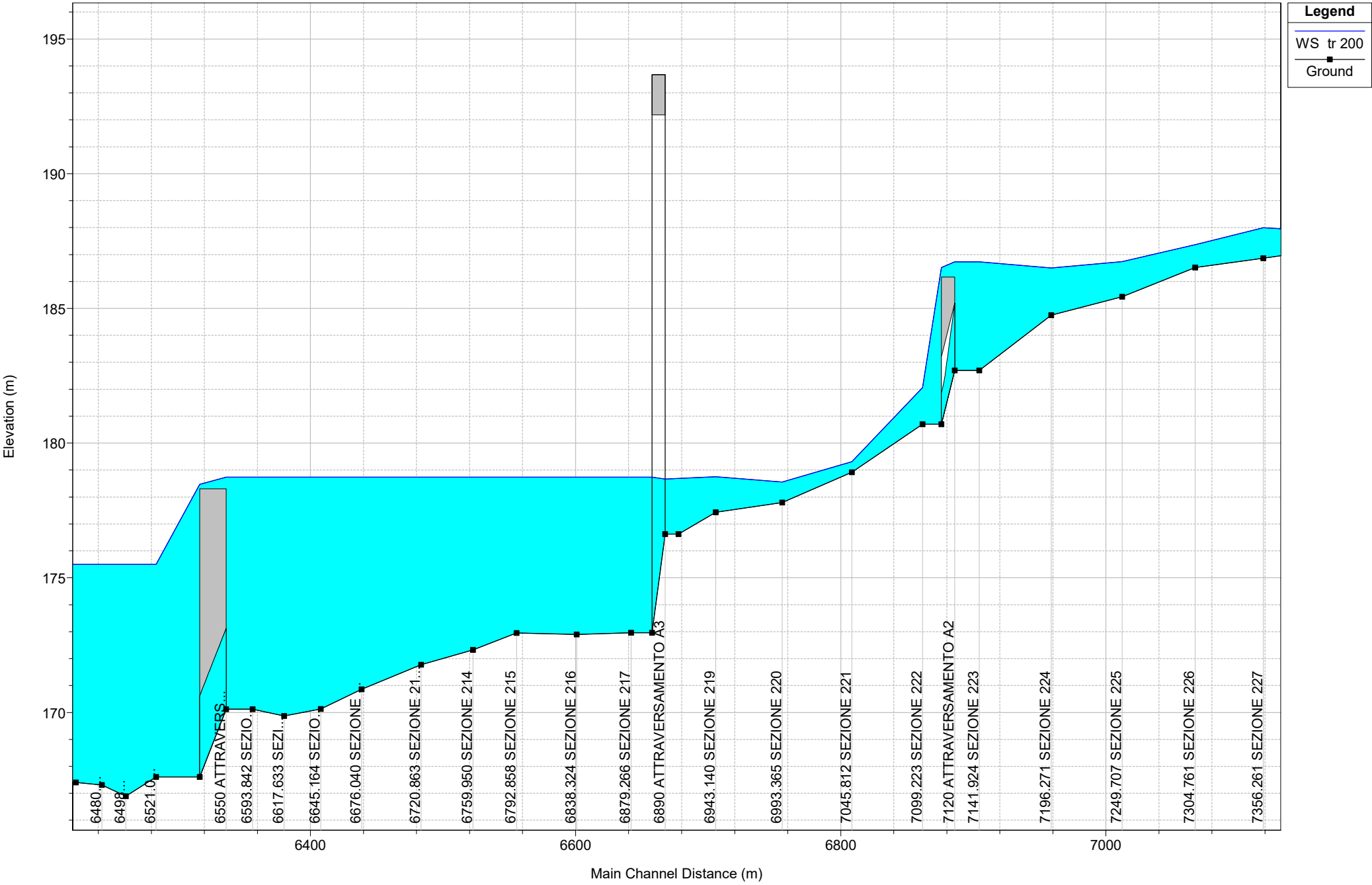


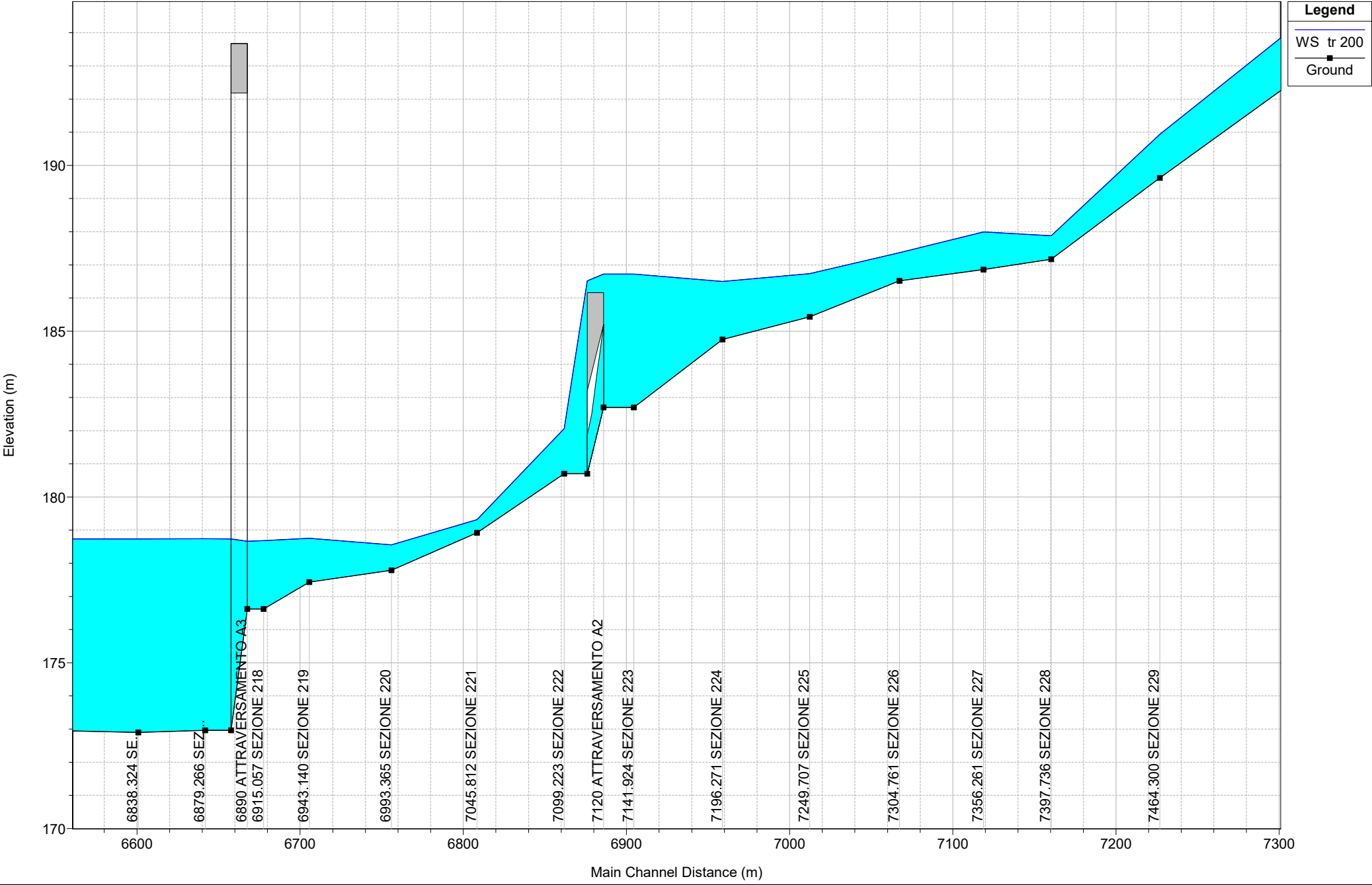


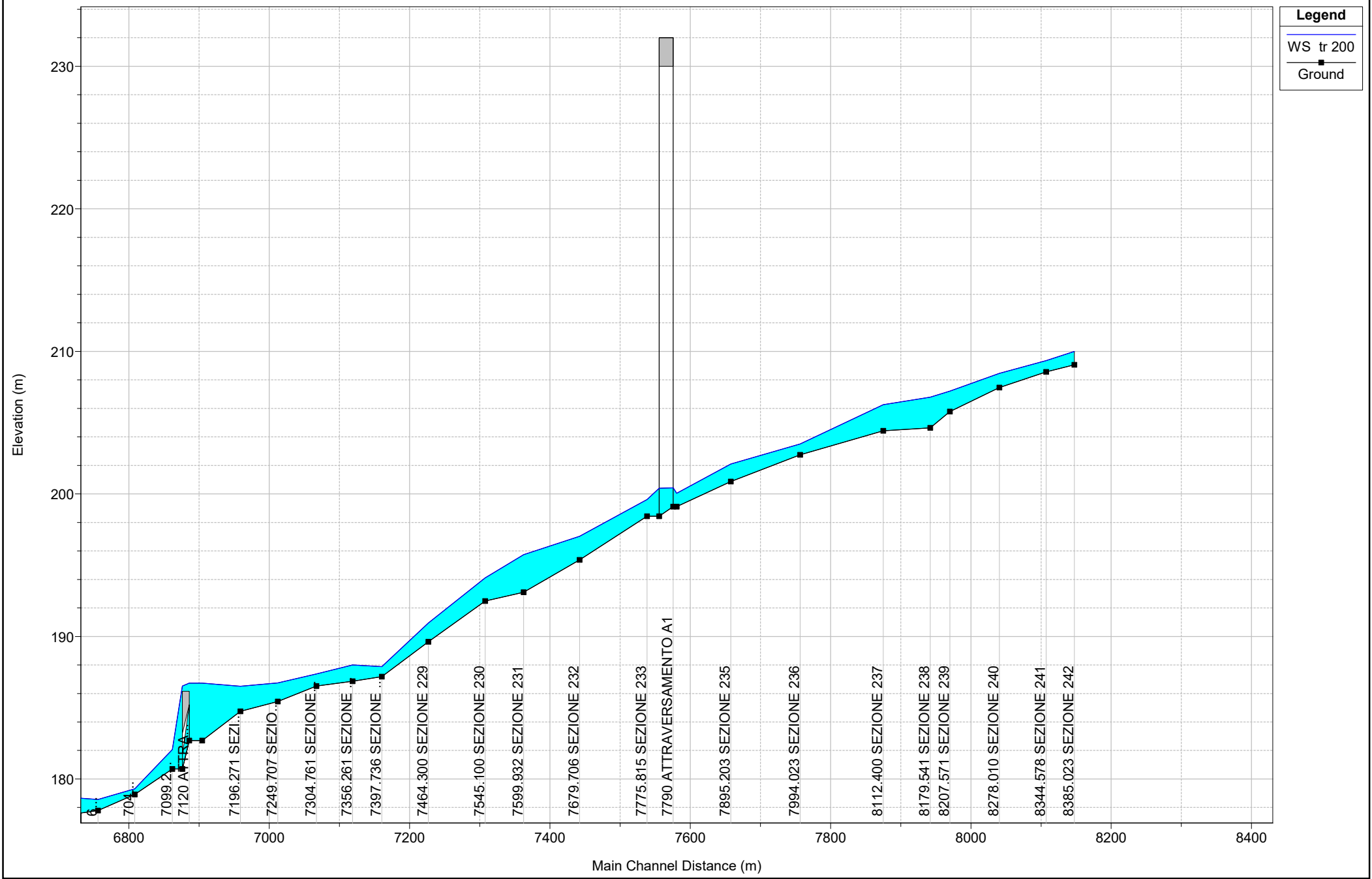








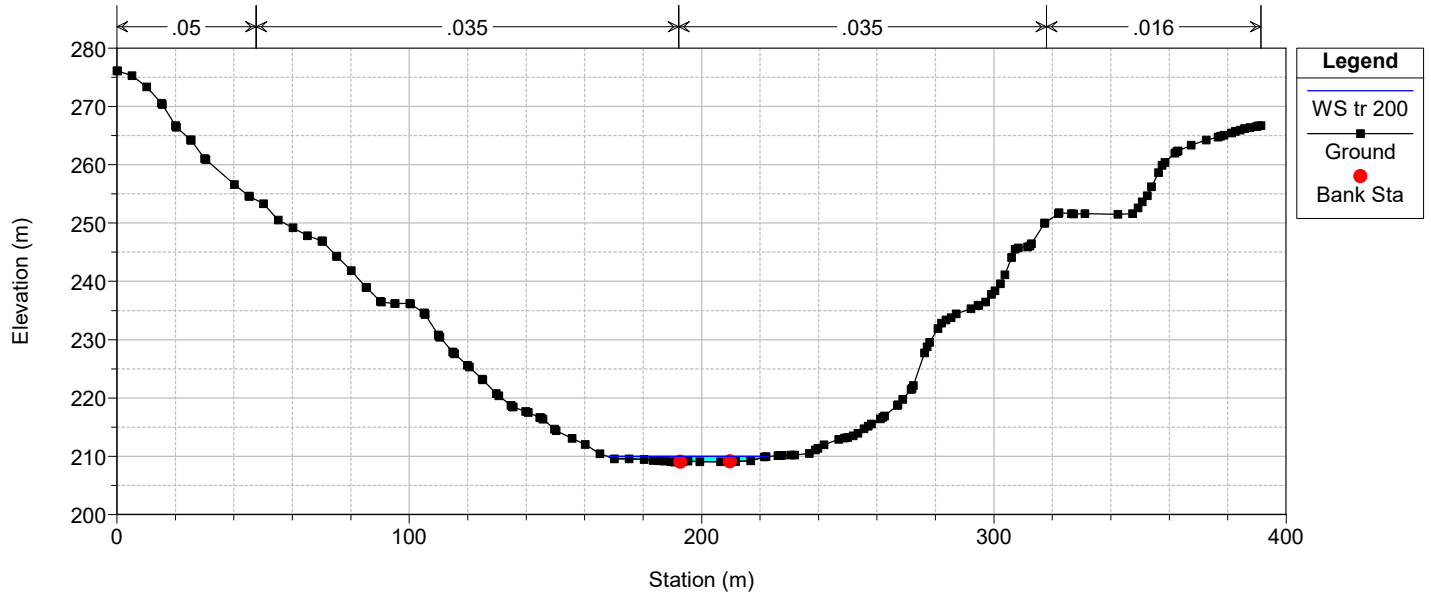




RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

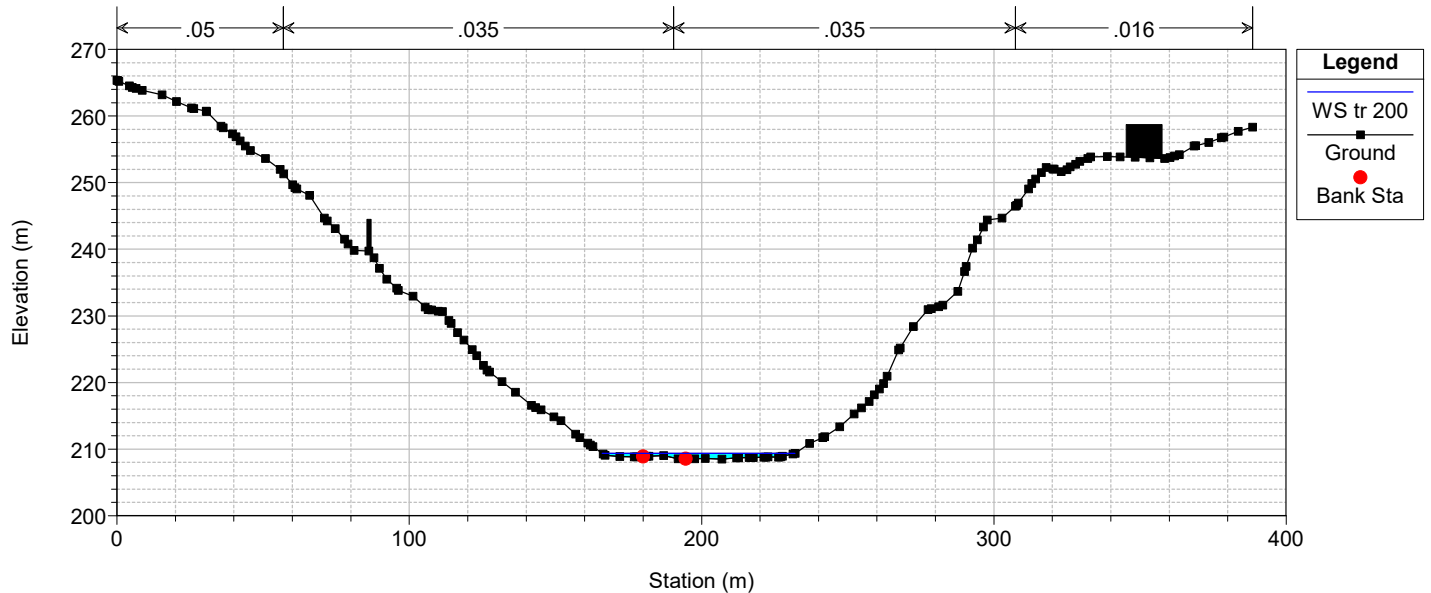
River = Rio San Giovanni Reach = Rio San Giovanni RS = 8385.023 SEZIONE 242 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

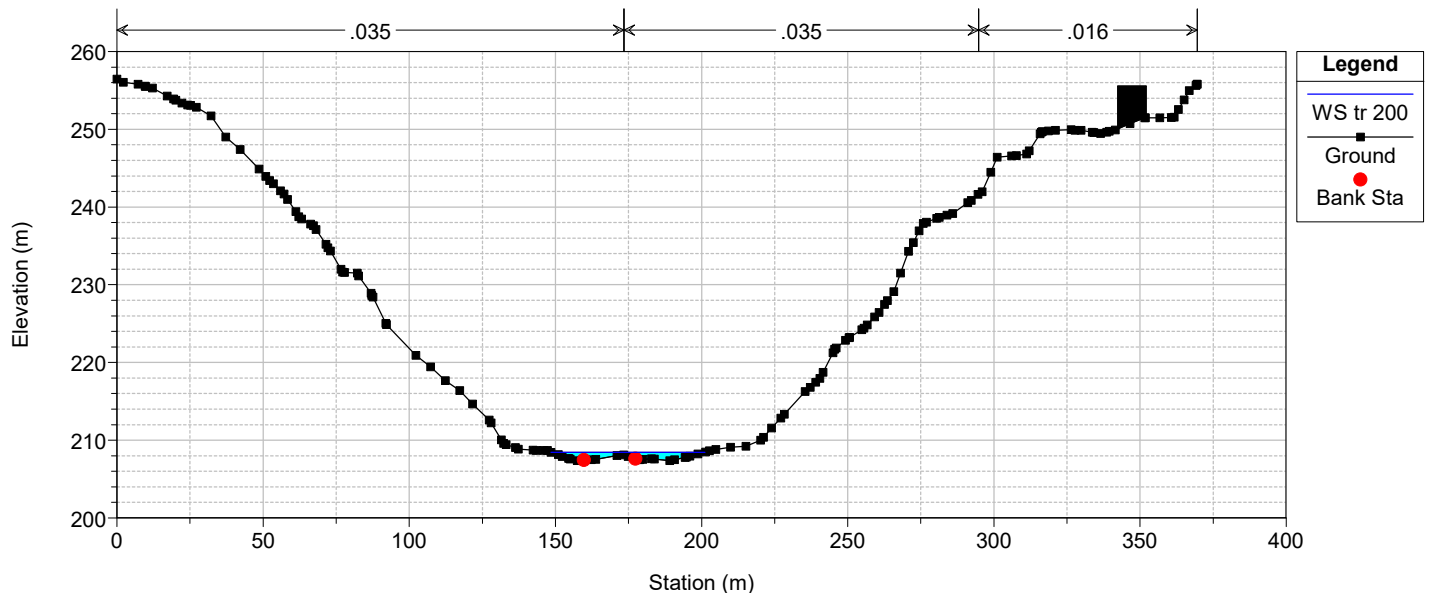
River = Rio San Giovanni Reach = Rio San Giovanni RS = 8344.578 SEZIONE 241 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

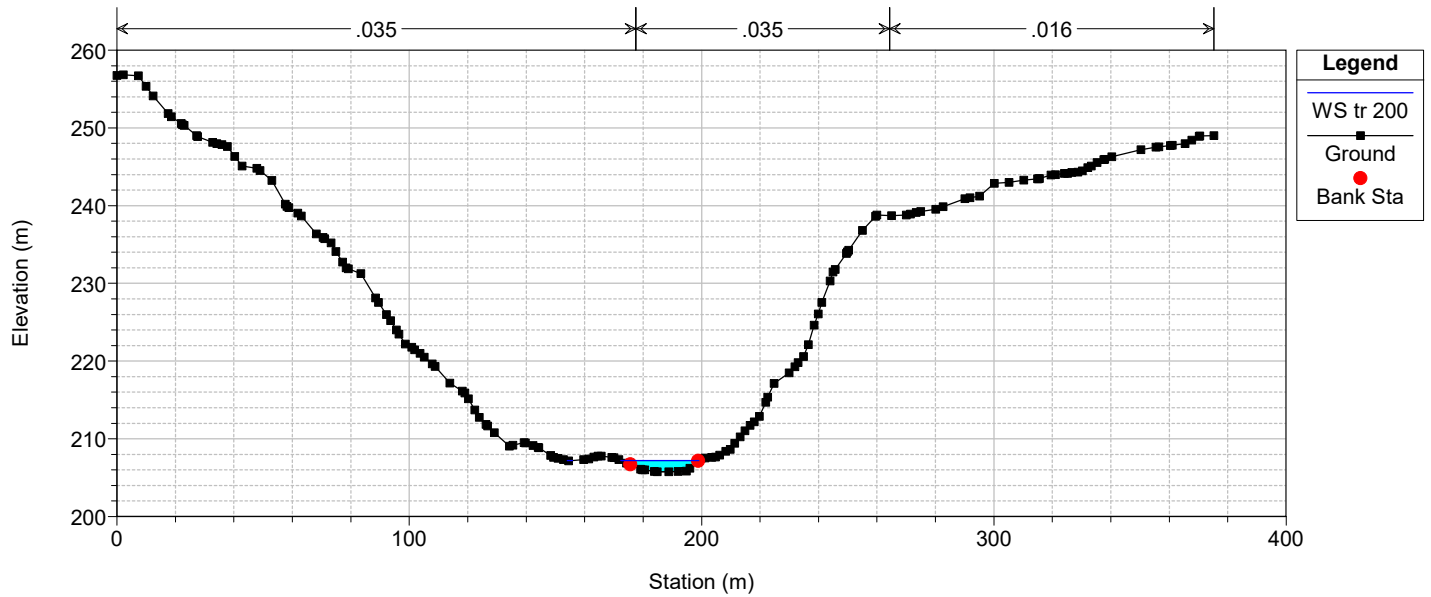
River = Rio San Giovanni Reach = Rio San Giovanni RS = 8278.010 SEZIONE 240 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

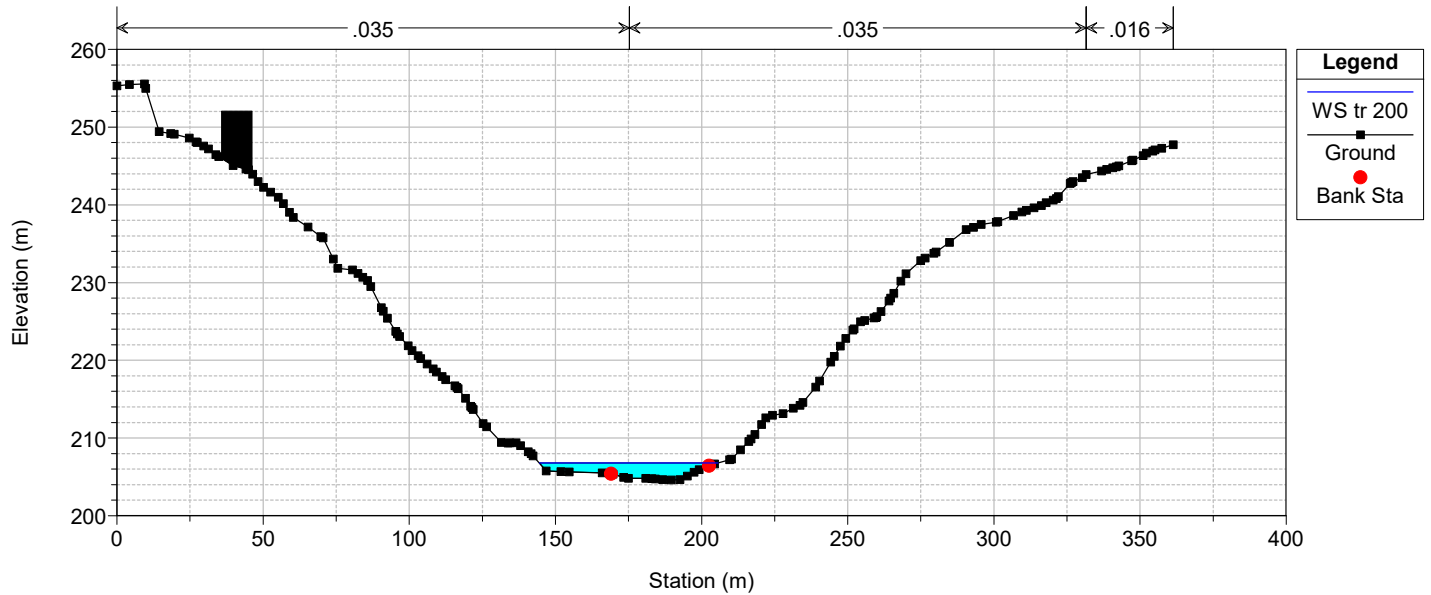
River = Rio San Giovanni Reach = Rio San Giovanni RS = 8207.571 SEZIONE 239 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

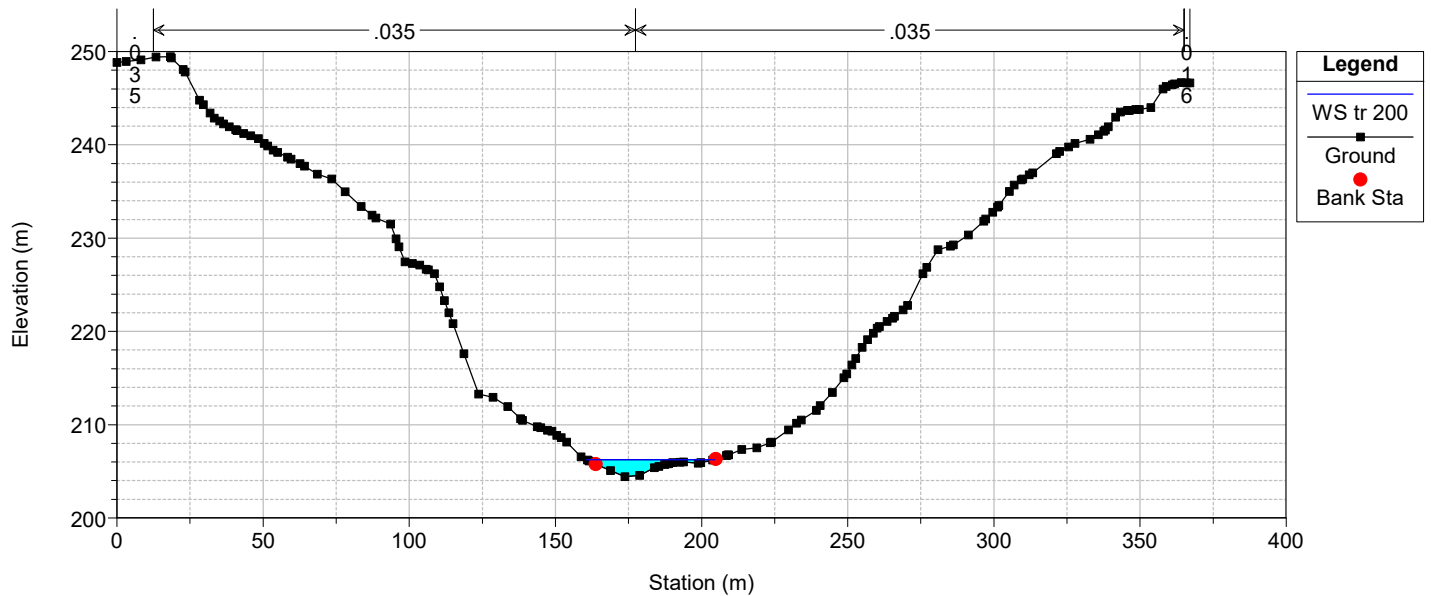
River = Rio San Giovanni Reach = Rio San Giovanni RS = 8179.541 SEZIONE 238 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

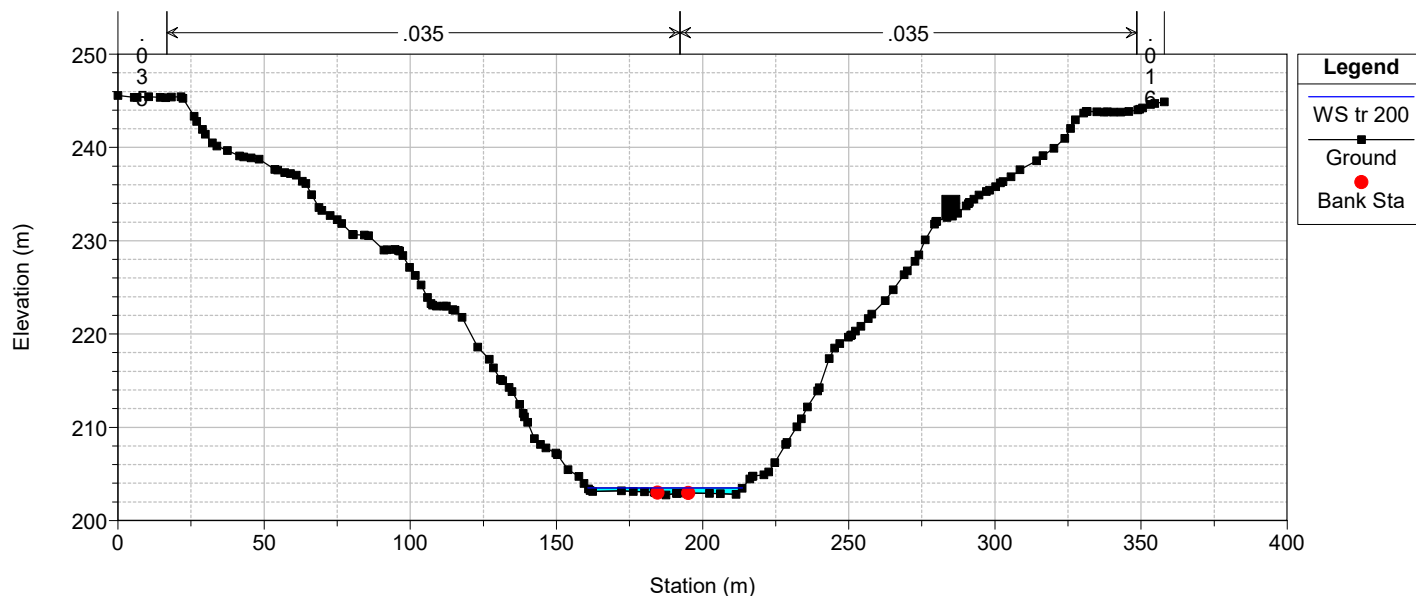
River = Rio San Giovanni Reach = Rio San Giovanni RS = 8112.400 SEZIONE 237 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

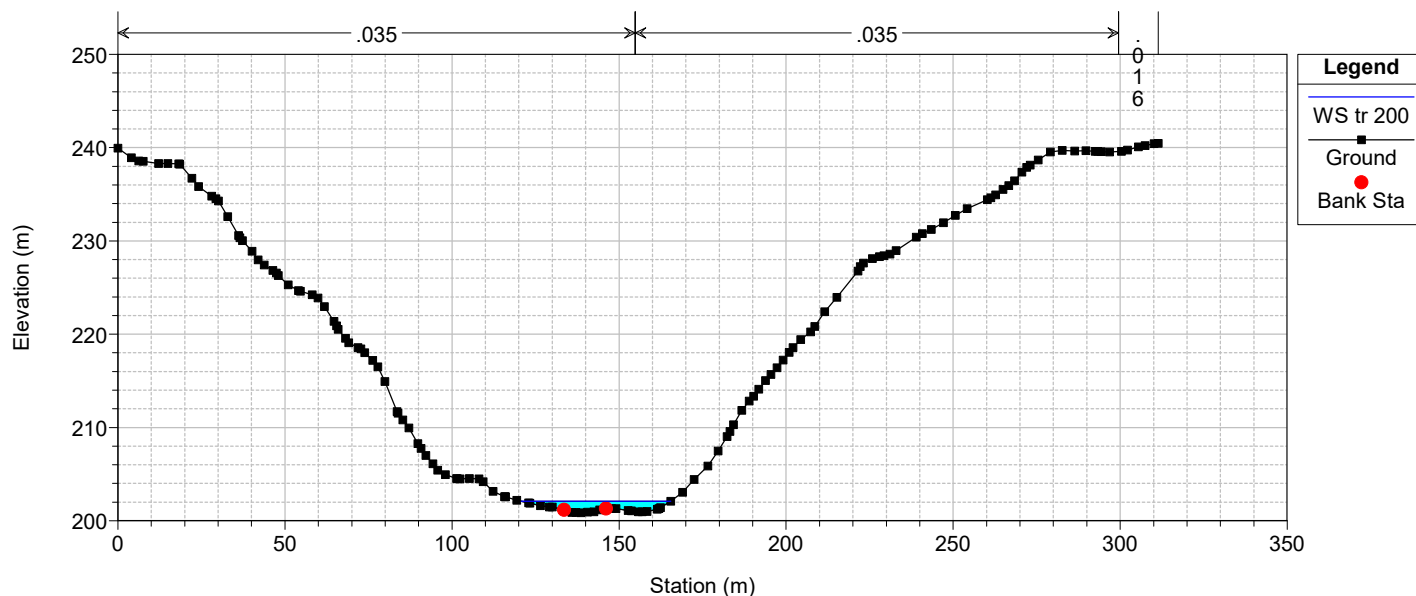
River = Rio San Giovanni Reach = Rio San Giovanni RS = 7994.023 SEZIONE 236 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

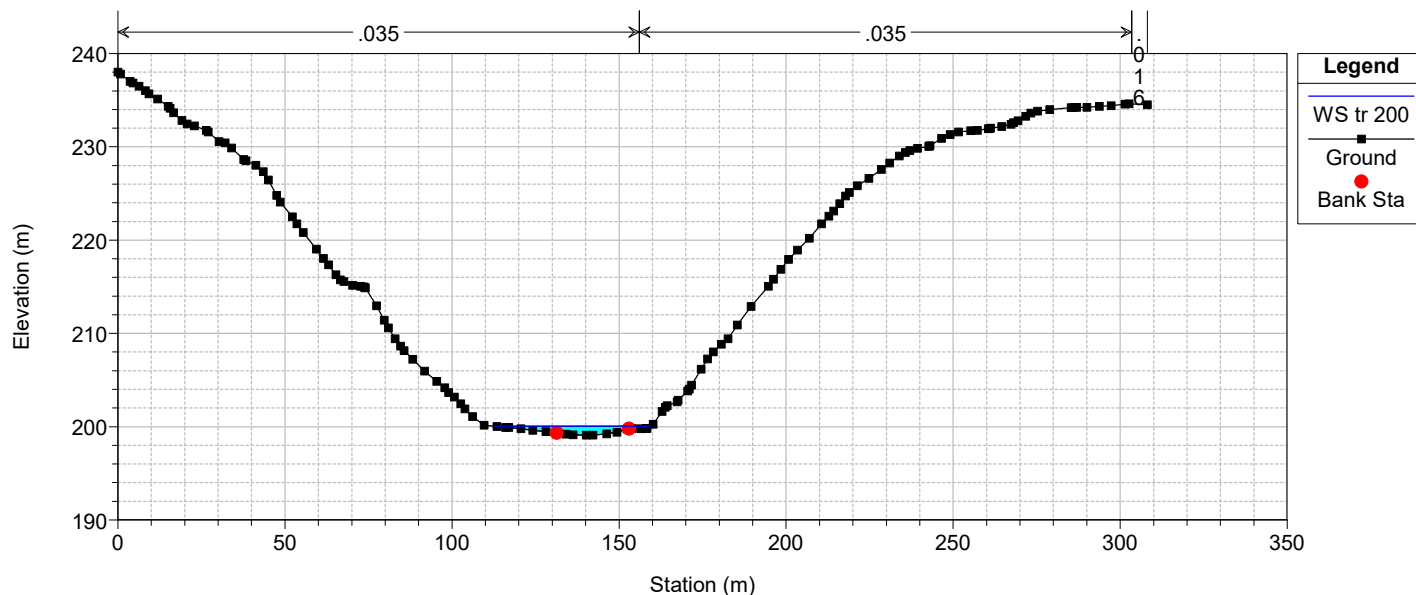
River = Rio San Giovanni Reach = Rio San Giovanni RS = 7895.203 SEZIONE 235 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

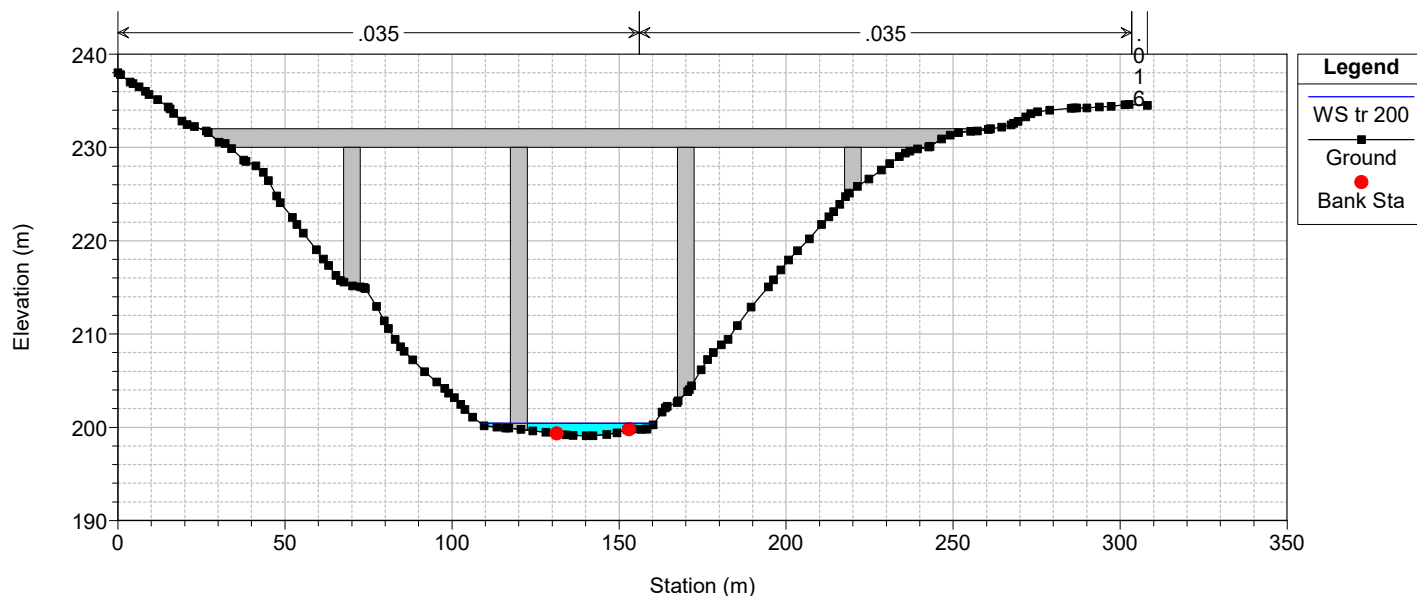
River = Rio San Giovanni Reach = Rio San Giovanni RS = 7818.173 SEZIONE 234 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

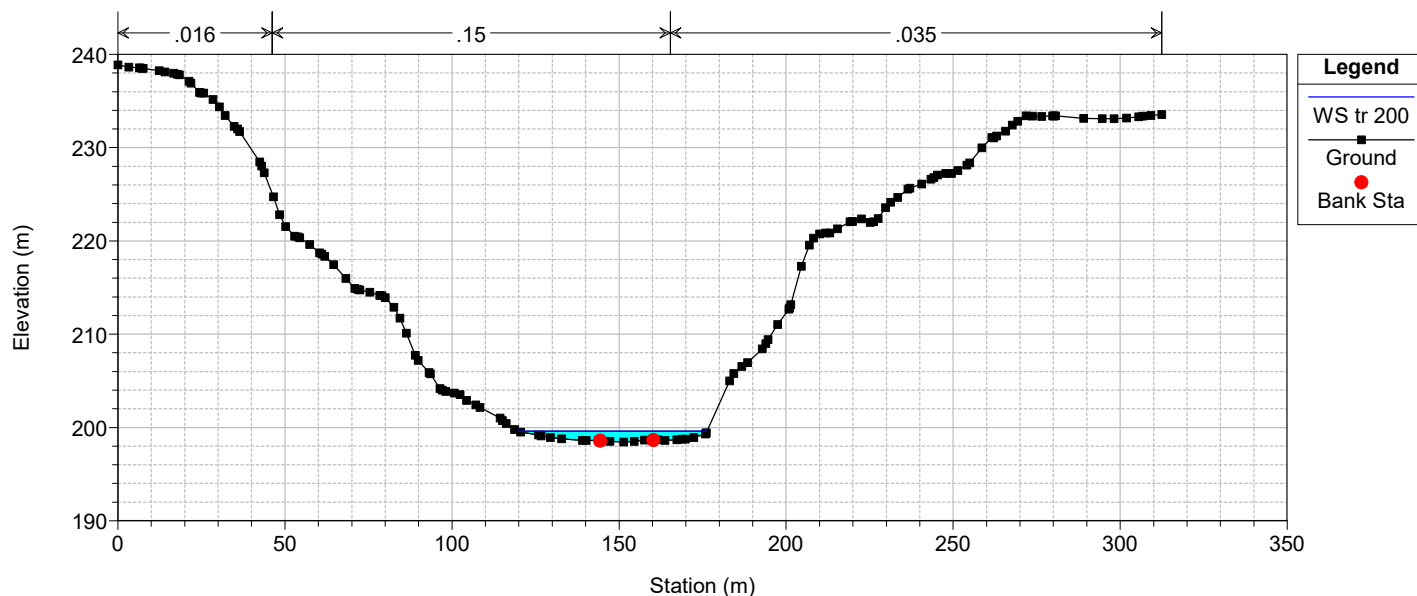
River = Rio San Giovanni Reach = Rio San Giovanni RS = 7790 BR ATTRAVERSAMENTO A1 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

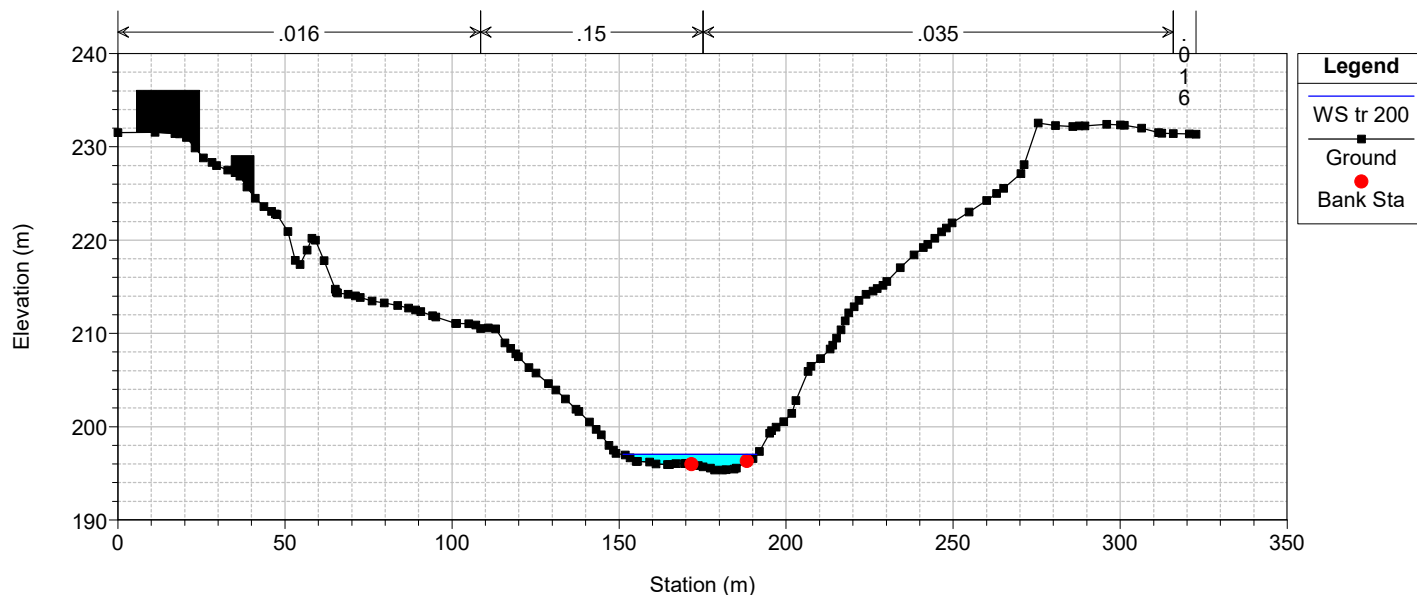
River = Rio San Giovanni Reach = Rio San Giovanni RS = 7775.815 SEZIONE 233 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

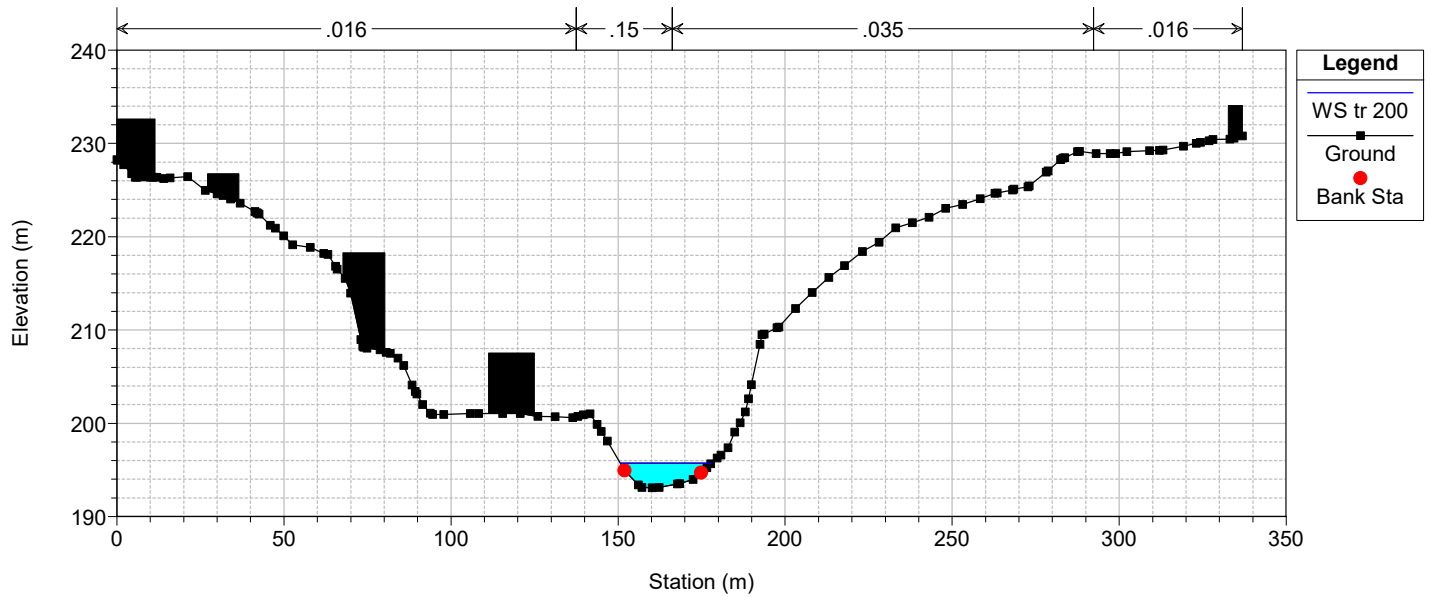
River = Rio San Giovanni Reach = Rio San Giovanni RS = 7679.706 SEZIONE 232 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

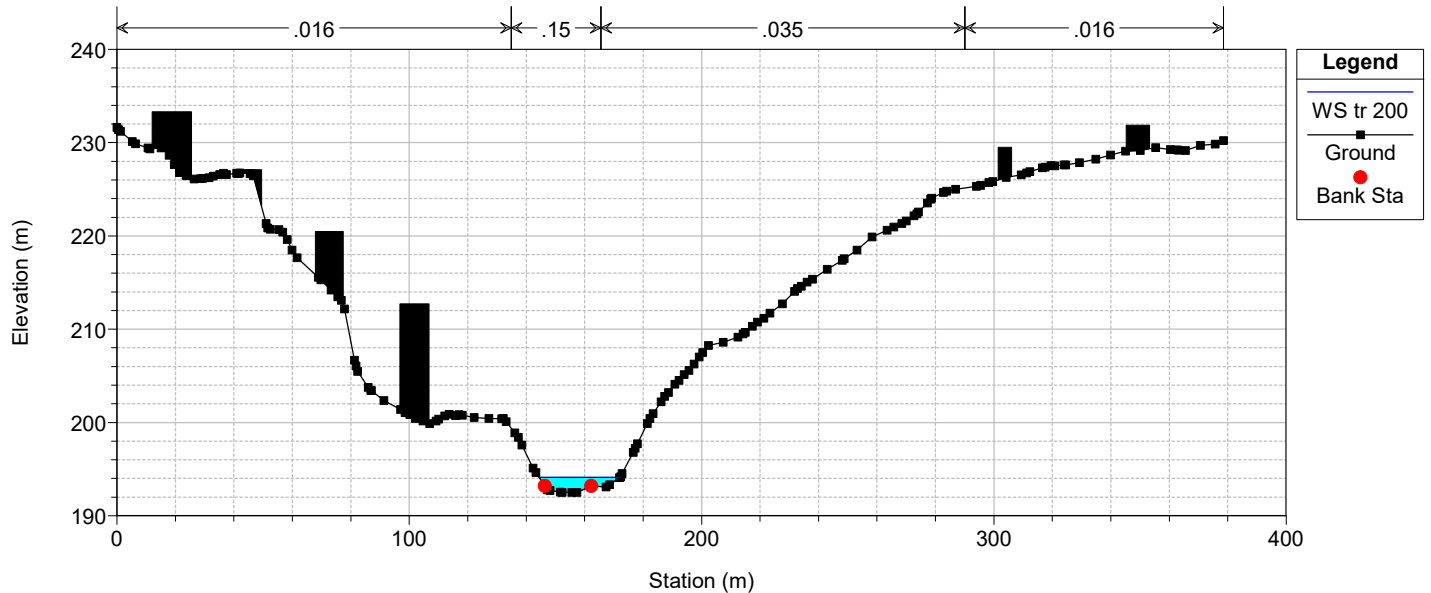
River = Rio San Giovanni Reach = Rio San Giovanni RS = 7599.932 SEZIONE 231 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

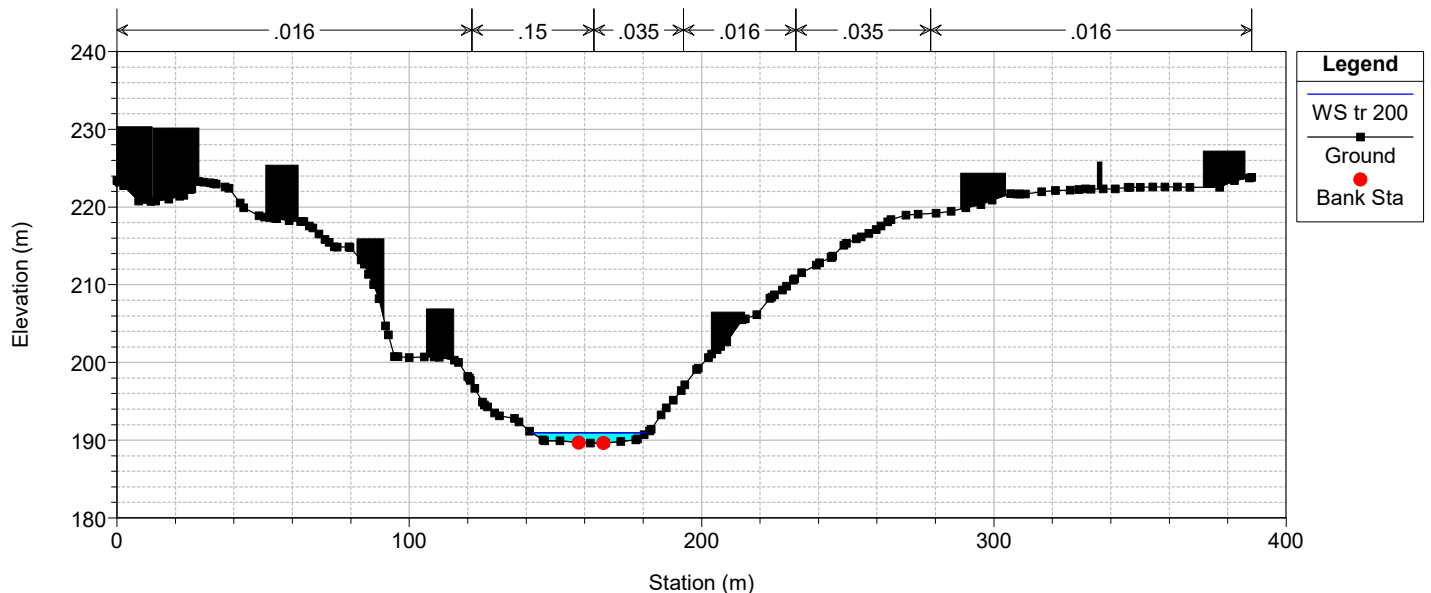
River = Rio San Giovanni Reach = Rio San Giovanni RS = 7545.100 SEZIONE 230 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

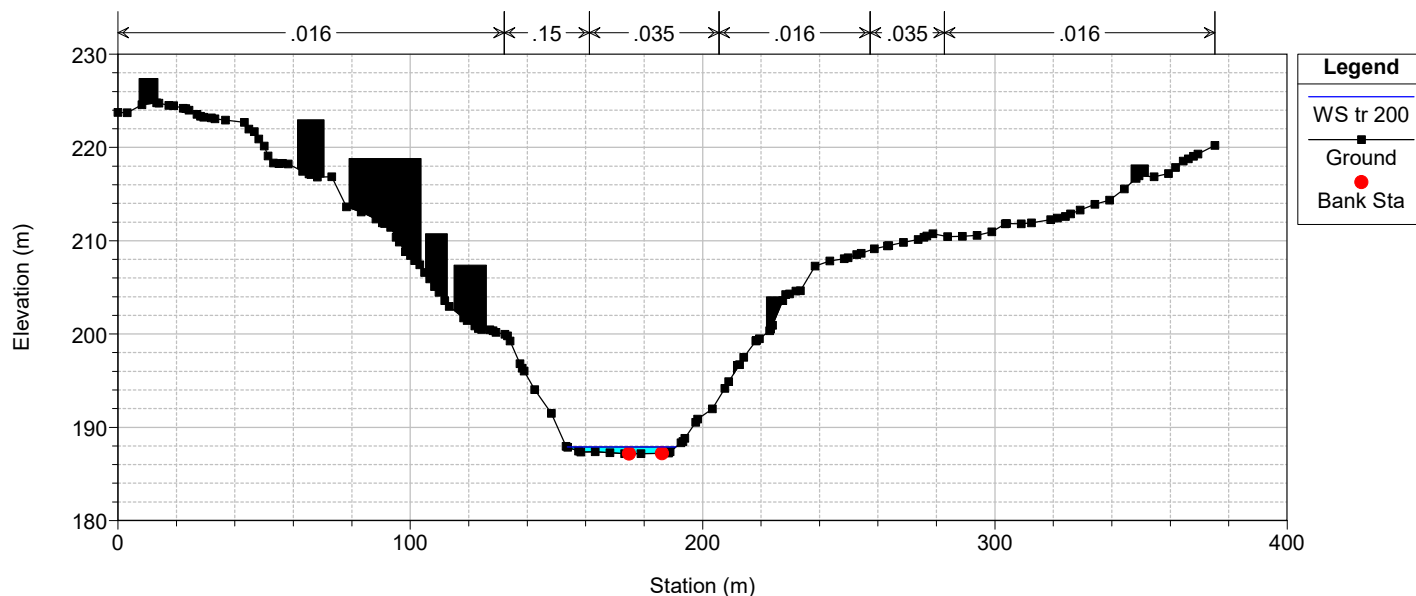
River = Rio San Giovanni Reach = Rio San Giovanni RS = 7464.300 SEZIONE 229 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

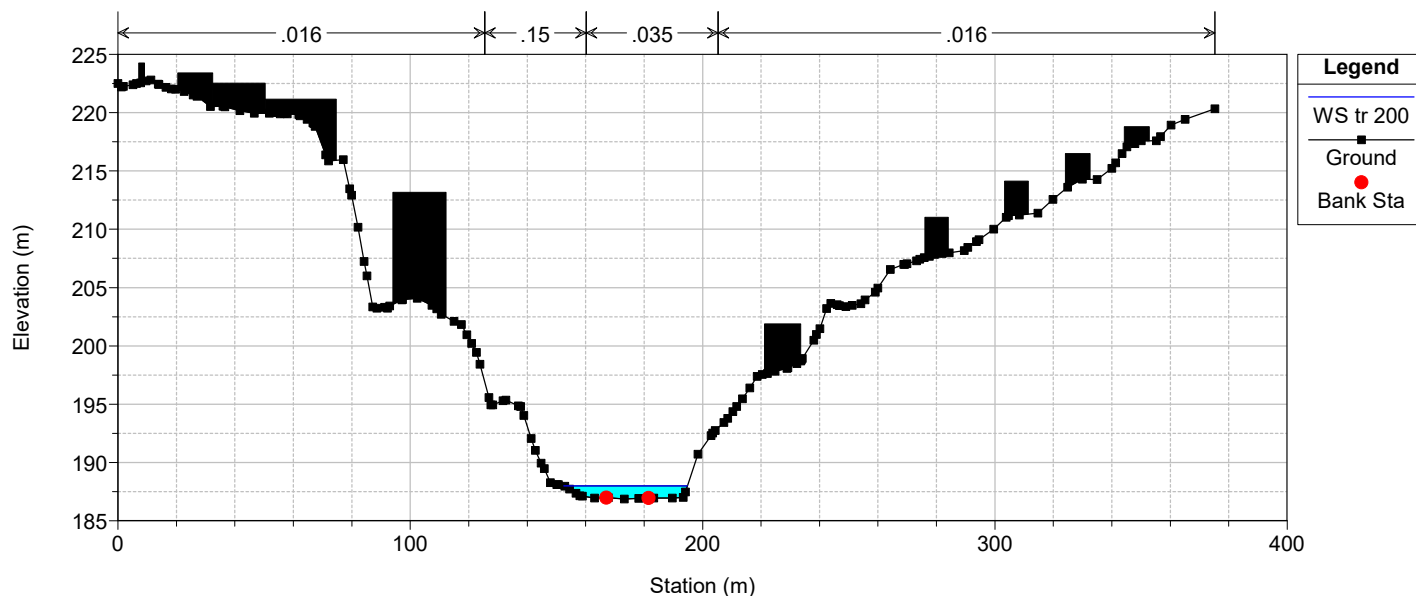
River = Rio San Giovanni Reach = Rio San Giovanni RS = 7397.736 SEZIONE 228 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

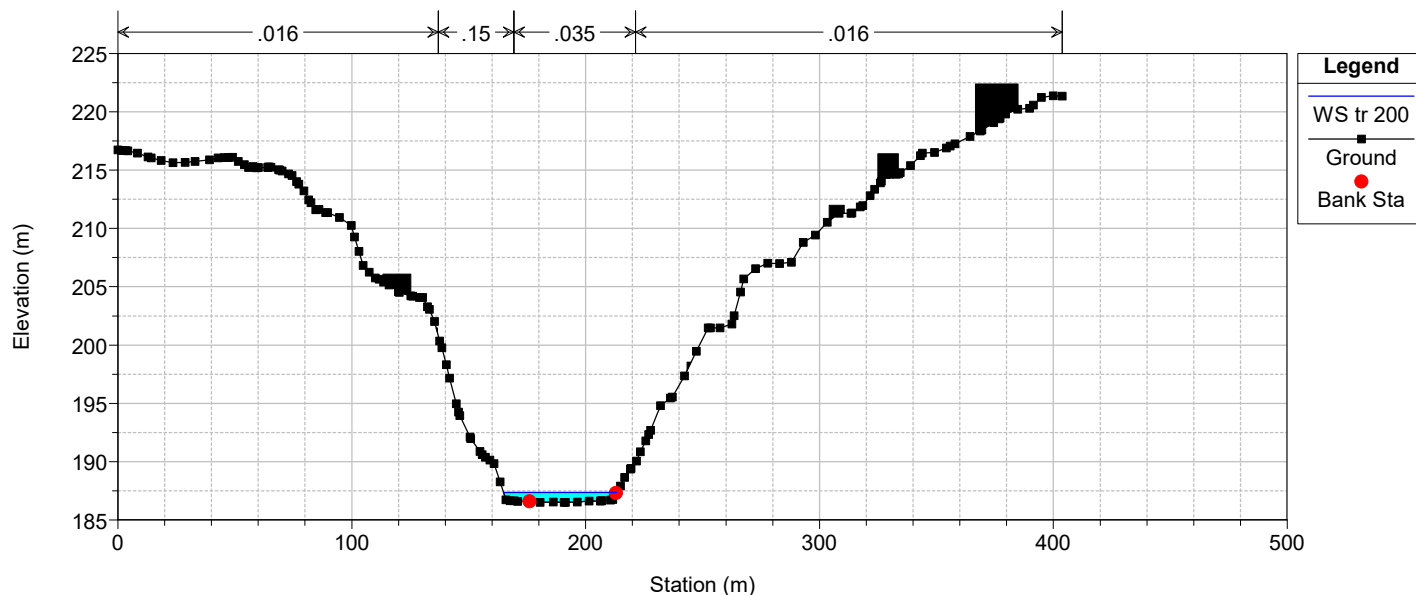
River = Rio San Giovanni Reach = Rio San Giovanni RS = 7356.261 SEZIONE 227 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

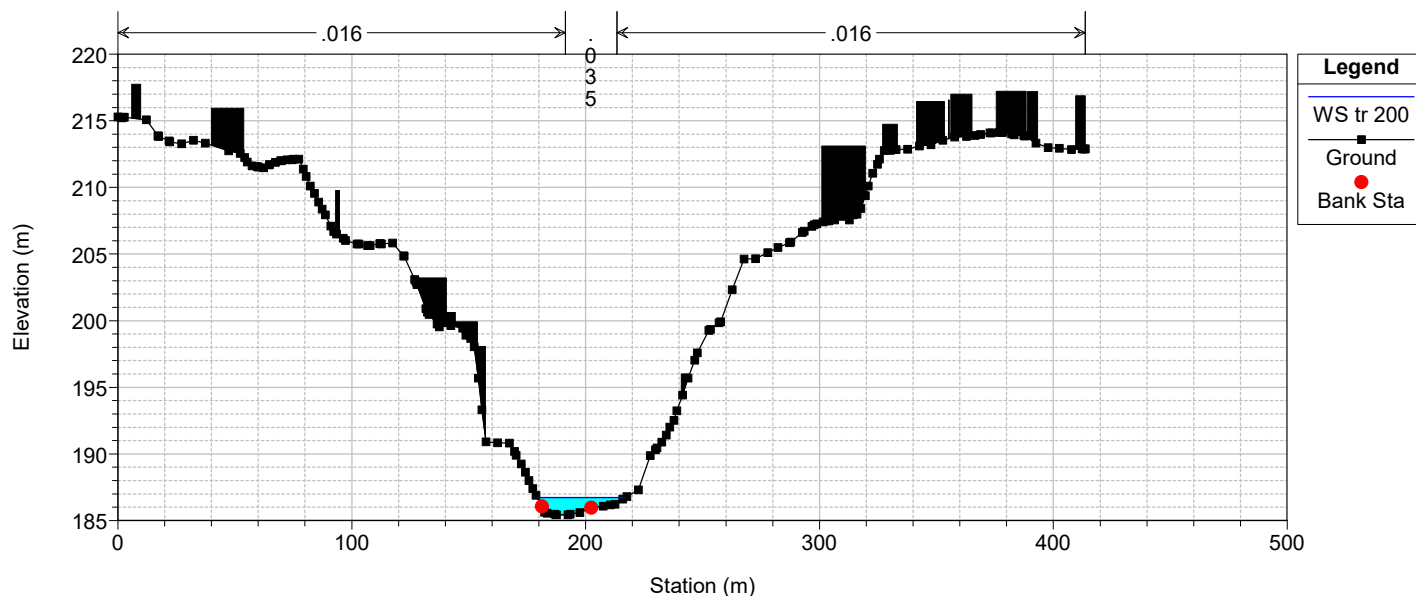
River = Rio San Giovanni Reach = Rio San Giovanni RS = 7304.761 SEZIONE 226 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

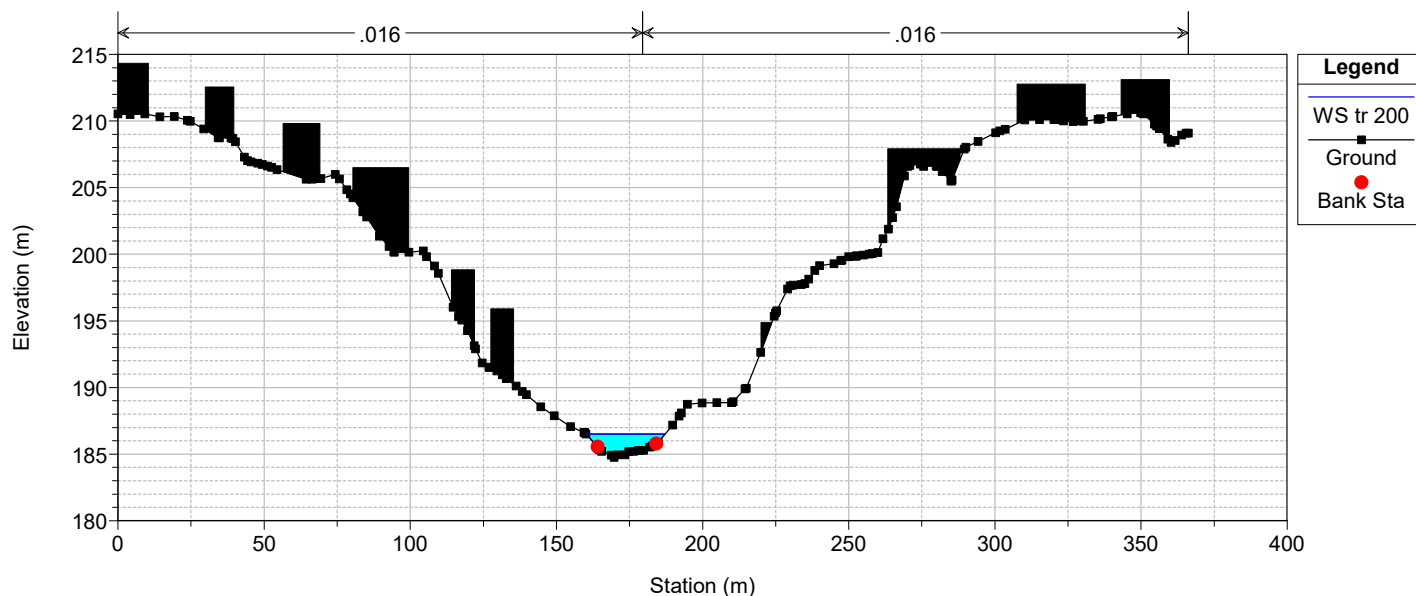
River = Rio San Giovanni Reach = Rio San Giovanni RS = 7249.707 SEZIONE 225 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

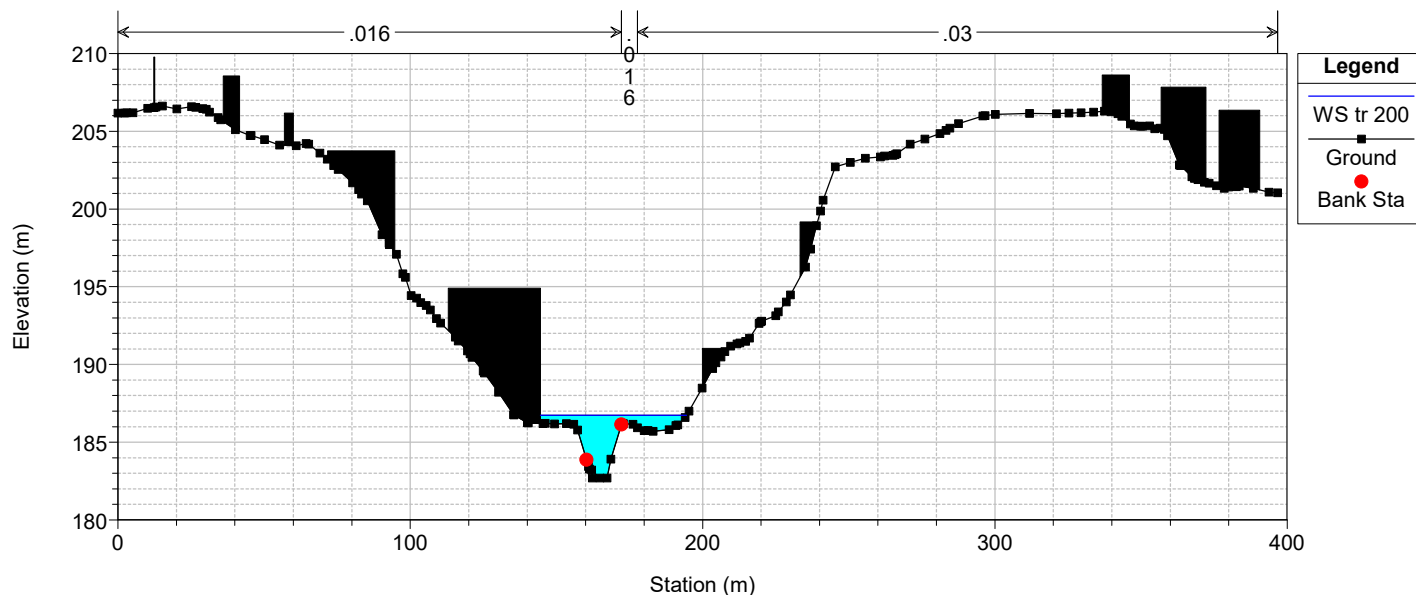
River = Rio San Giovanni Reach = Rio San Giovanni RS = 7196.271 SEZIONE 224 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

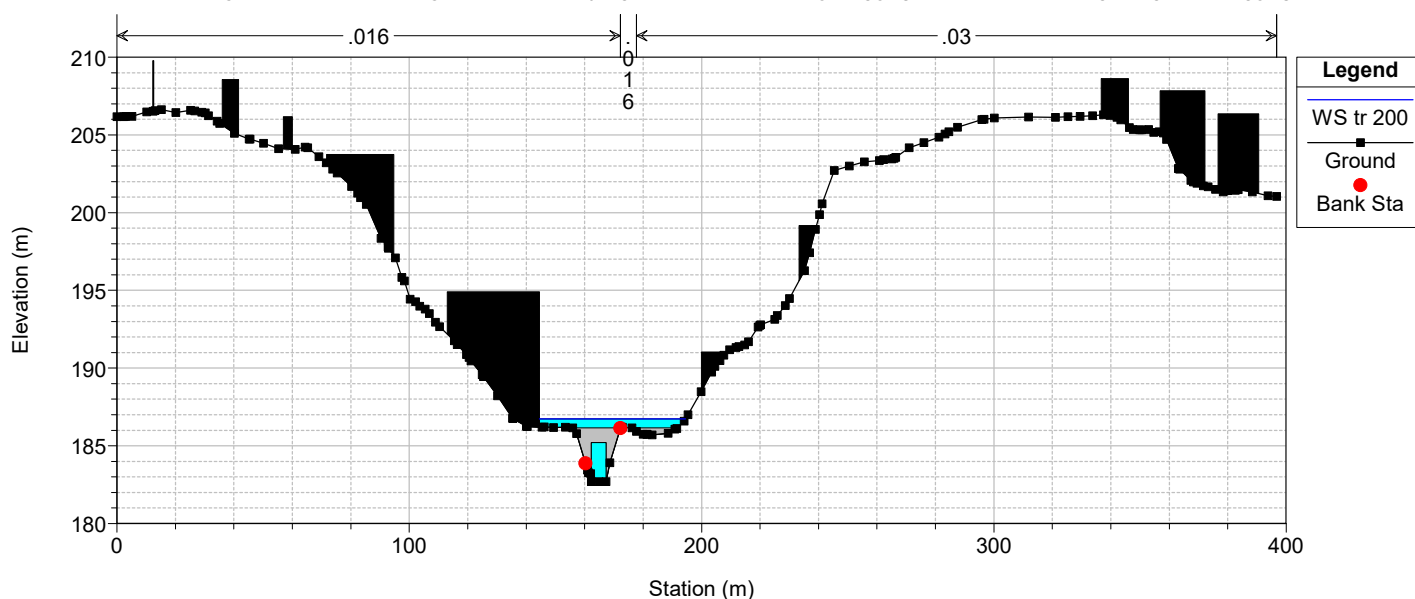
River = Rio San Giovanni Reach = Rio San Giovanni RS = 7141.924 SEZIONE 223 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

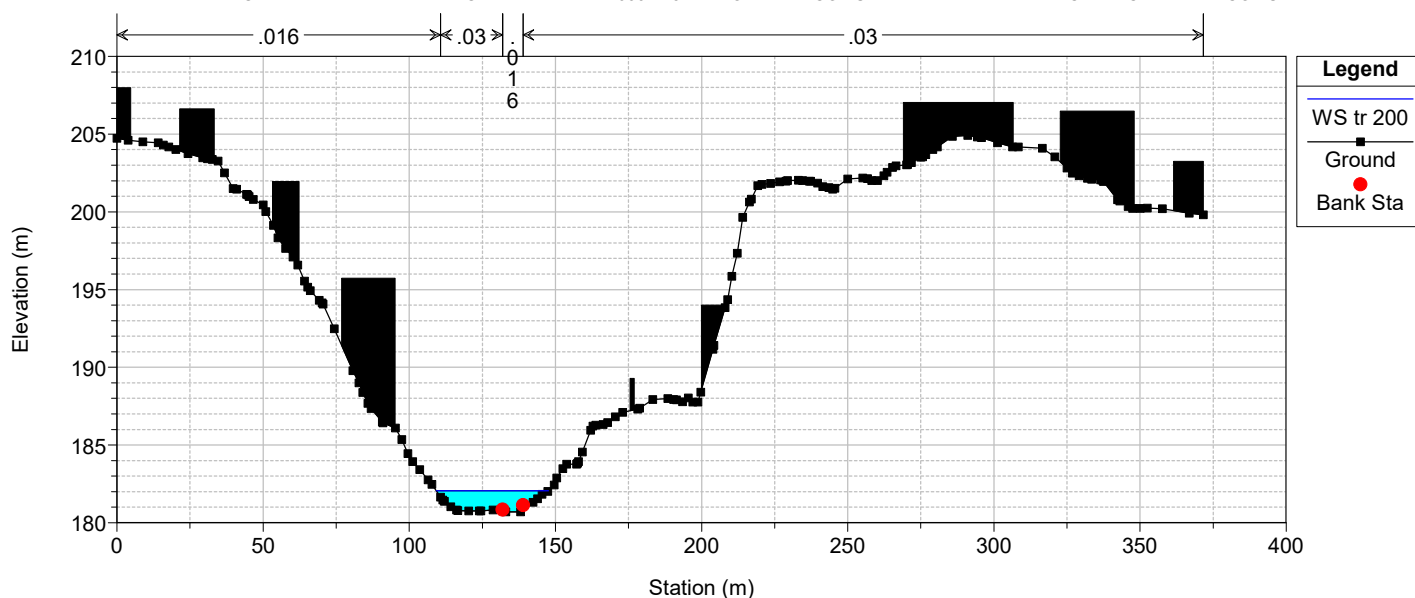
River = Rio San Giovanni Reach = Rio San Giovanni RS = 7120 Culv ATTRAVERSAMENTO A2 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

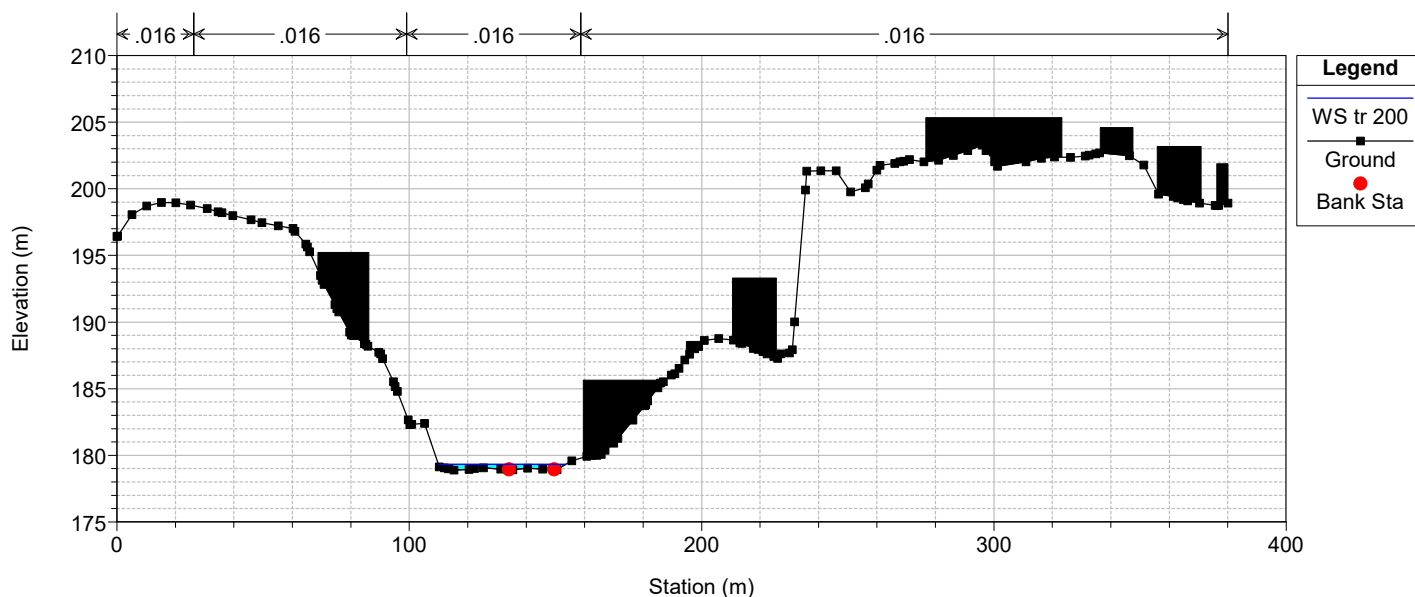
River = Rio San Giovanni Reach = Rio San Giovanni RS = 7099.223 SEZIONE 222 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

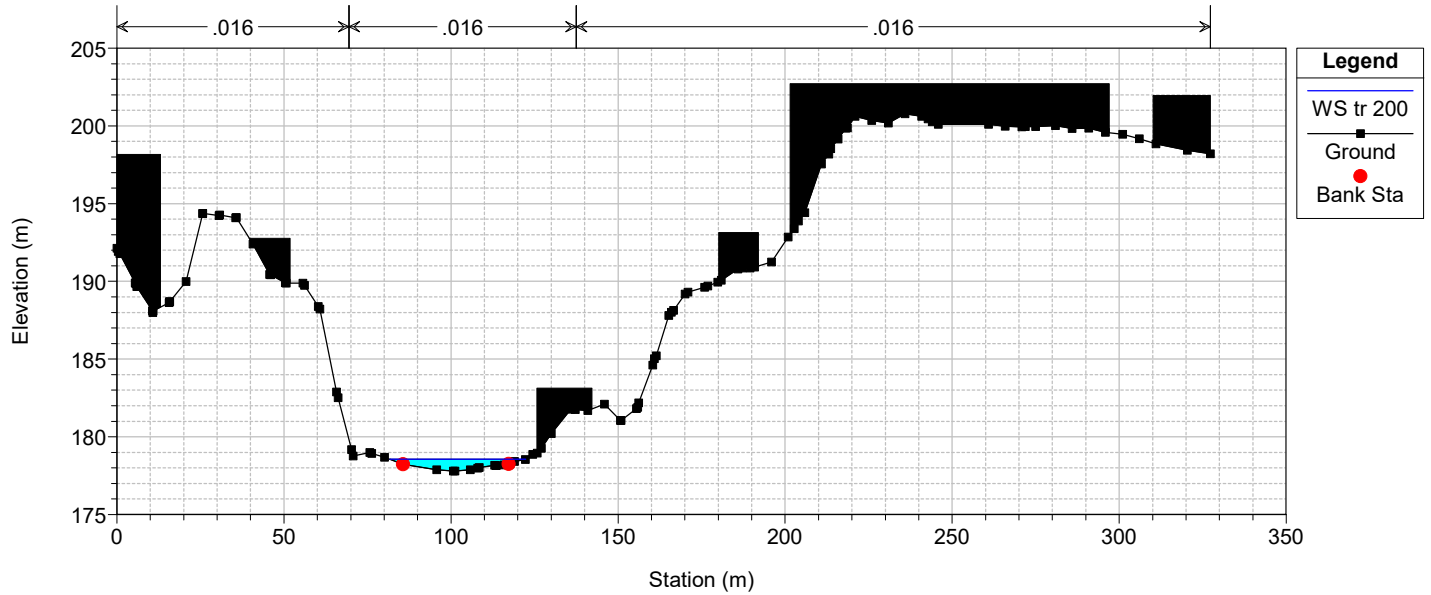
River = Rio San Giovanni Reach = Rio San Giovanni RS = 7045.812 SEZIONE 221 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

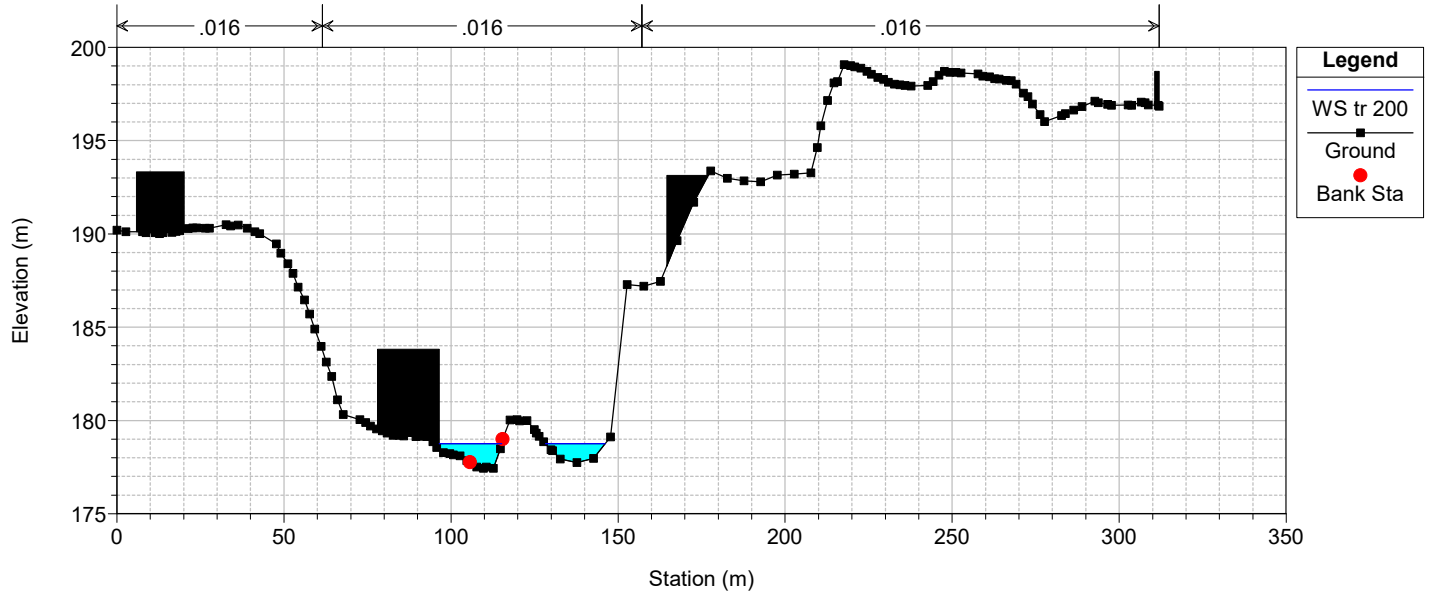
River = Rio San Giovanni Reach = Rio San Giovanni RS = 6993.365 SEZIONE 220 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

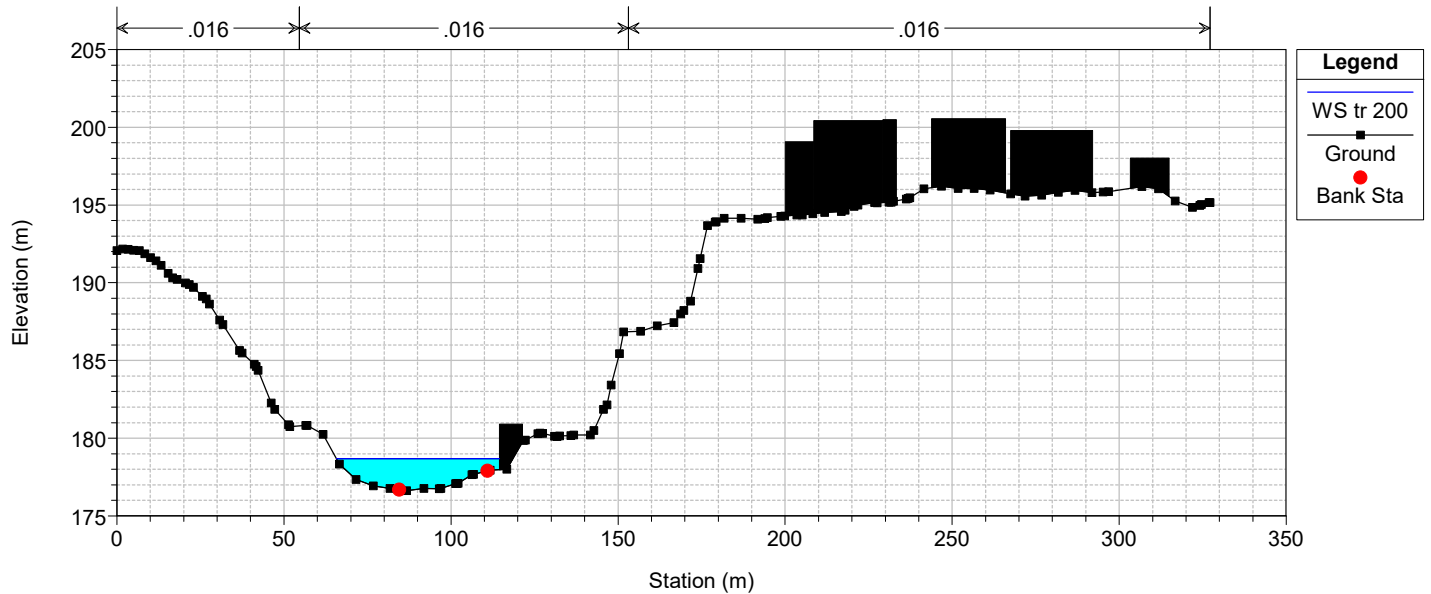
River = Rio San Giovanni Reach = Rio San Giovanni RS = 6943.140 SEZIONE 219 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

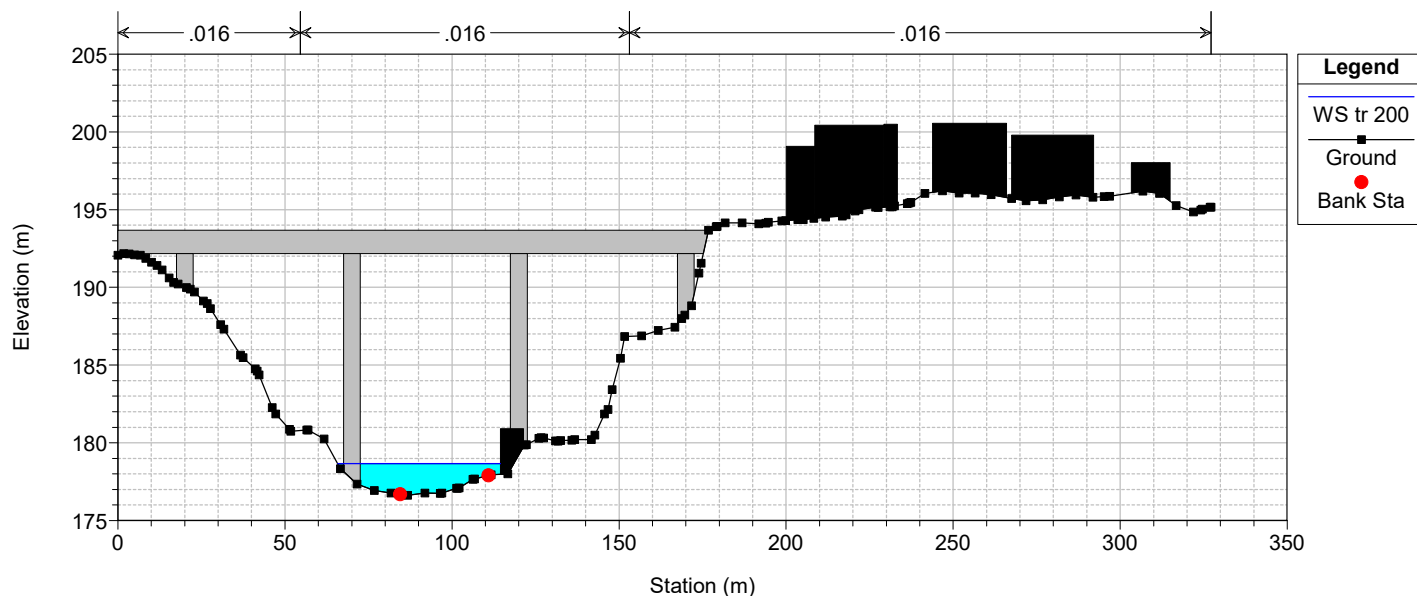
River = Rio San Giovanni Reach = Rio San Giovanni RS = 6915.057 SEZIONE 218 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

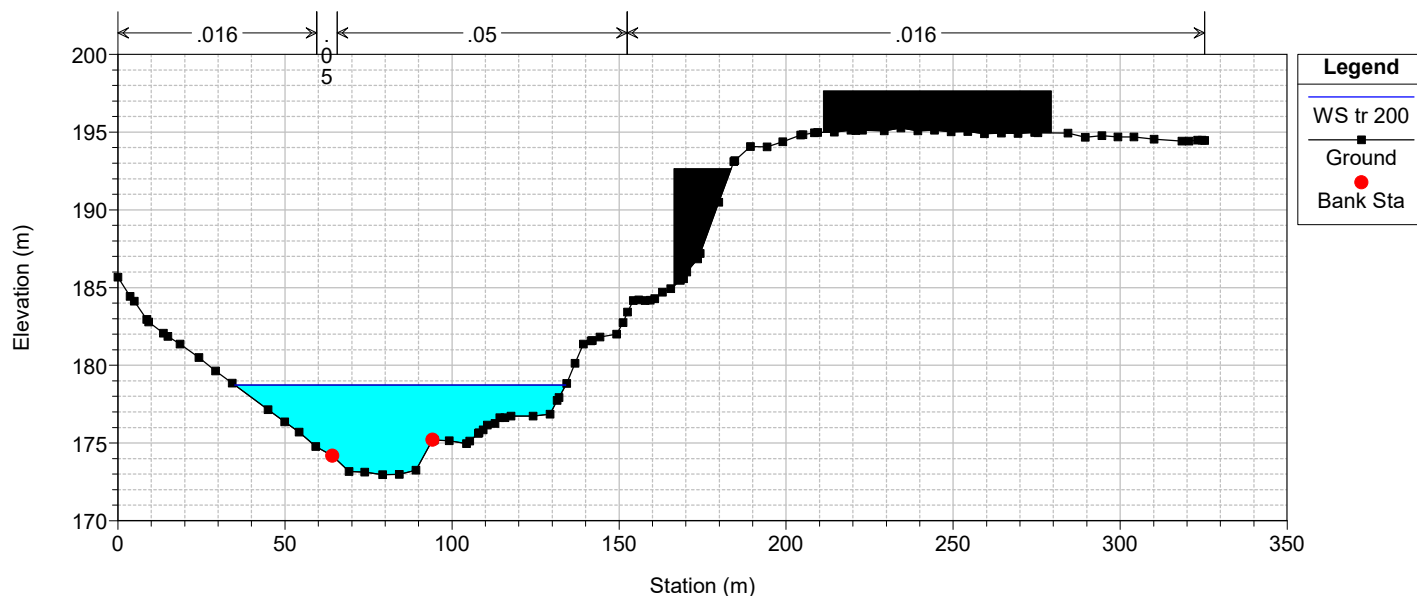
River = Rio San Giovanni Reach = Rio San Giovanni RS = 6890 BR ATTRAVERSAMENTO A3 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

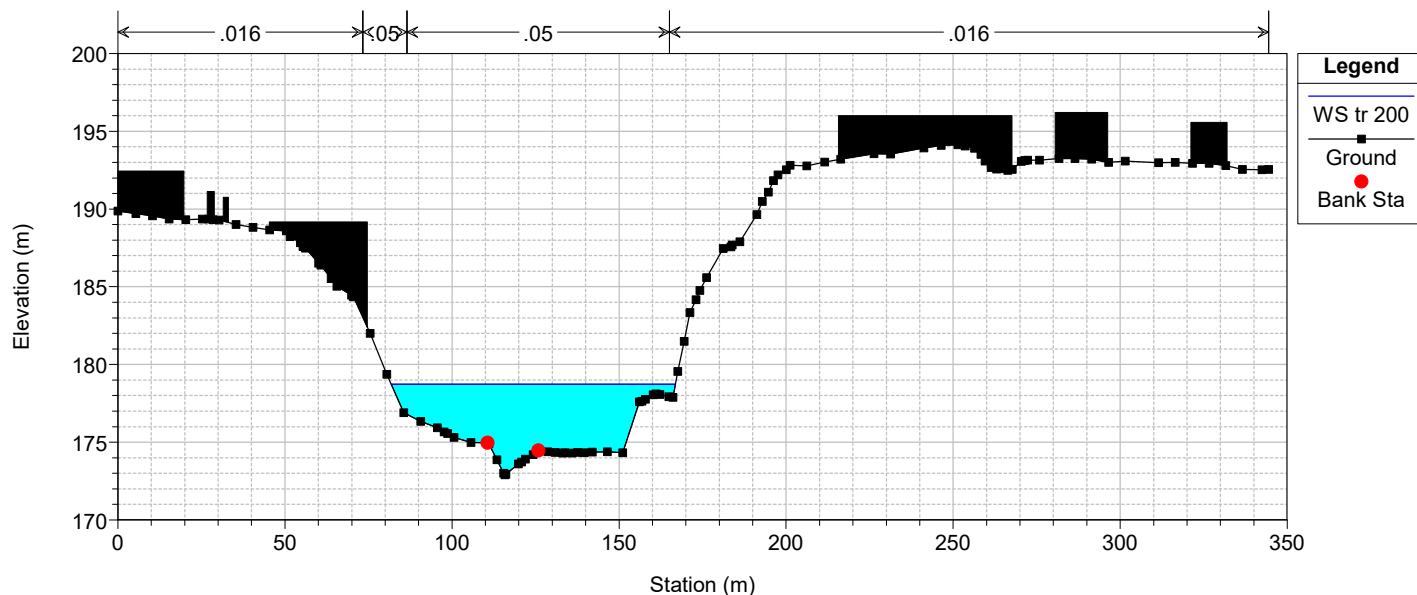
River = Rio San Giovanni Reach = Rio San Giovanni RS = 6879.266 SEZIONE 217 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

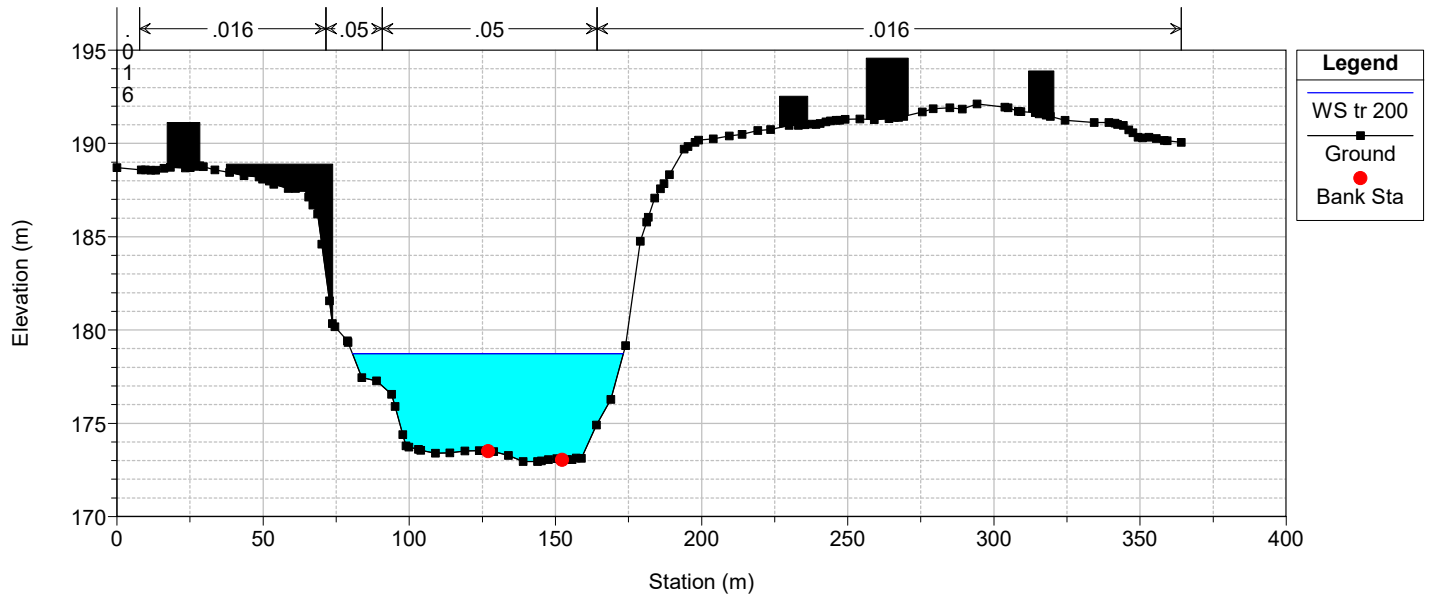
River = Rio San Giovanni Reach = Rio San Giovanni RS = 6838.324 SEZIONE 216 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

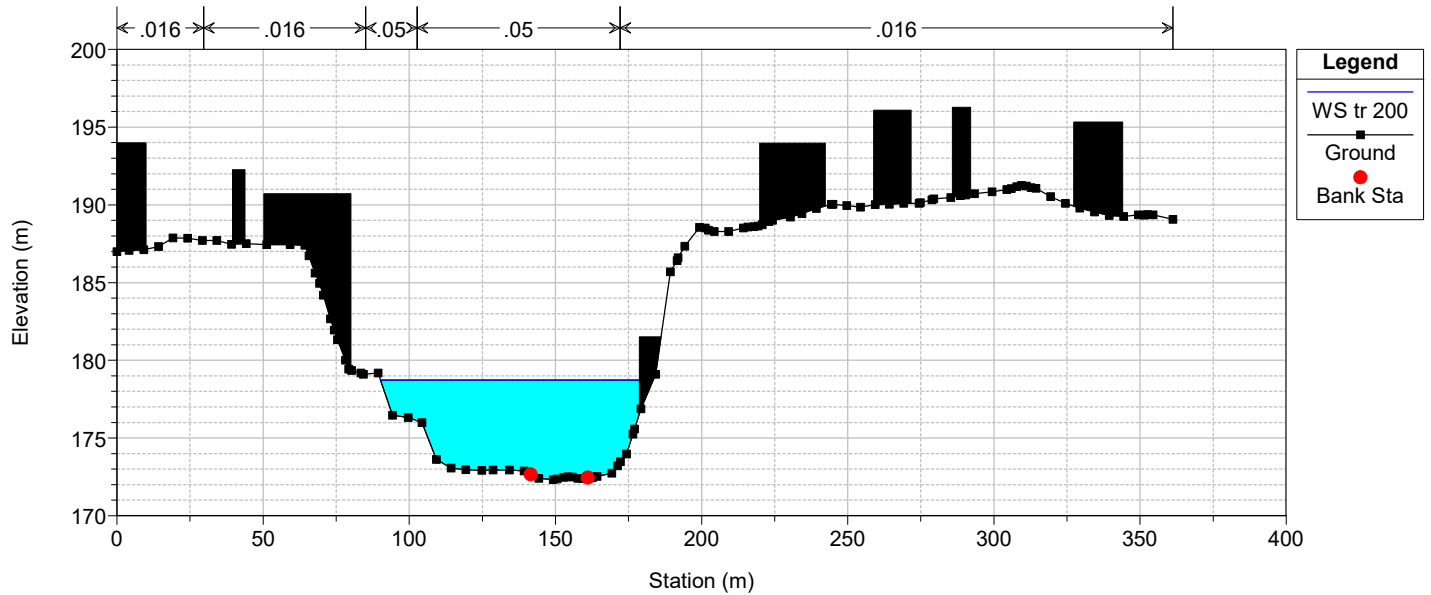
River = Rio San Giovanni Reach = Rio San Giovanni RS = 6792.858 SEZIONE 215 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

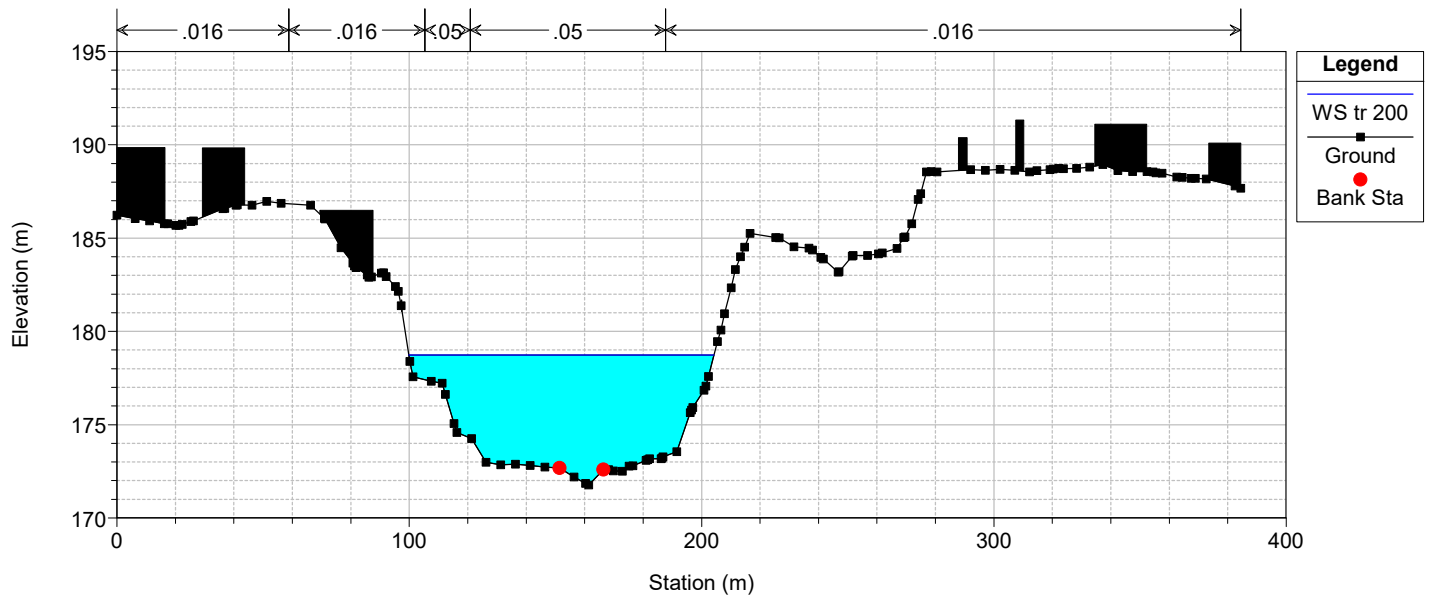
River = Rio San Giovanni Reach = Rio San Giovanni RS = 6759.950 SEZIONE 214 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

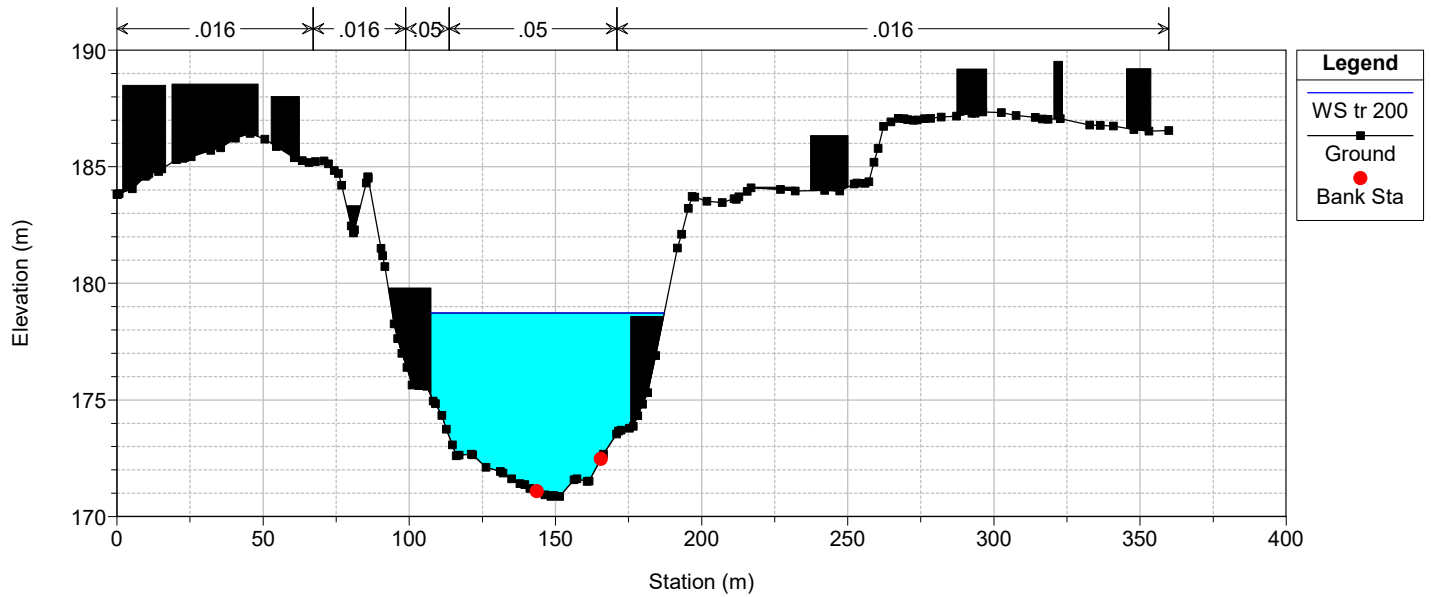
River = Rio San Giovanni Reach = Rio San Giovanni RS = 6720.863 SEZIONE 213 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

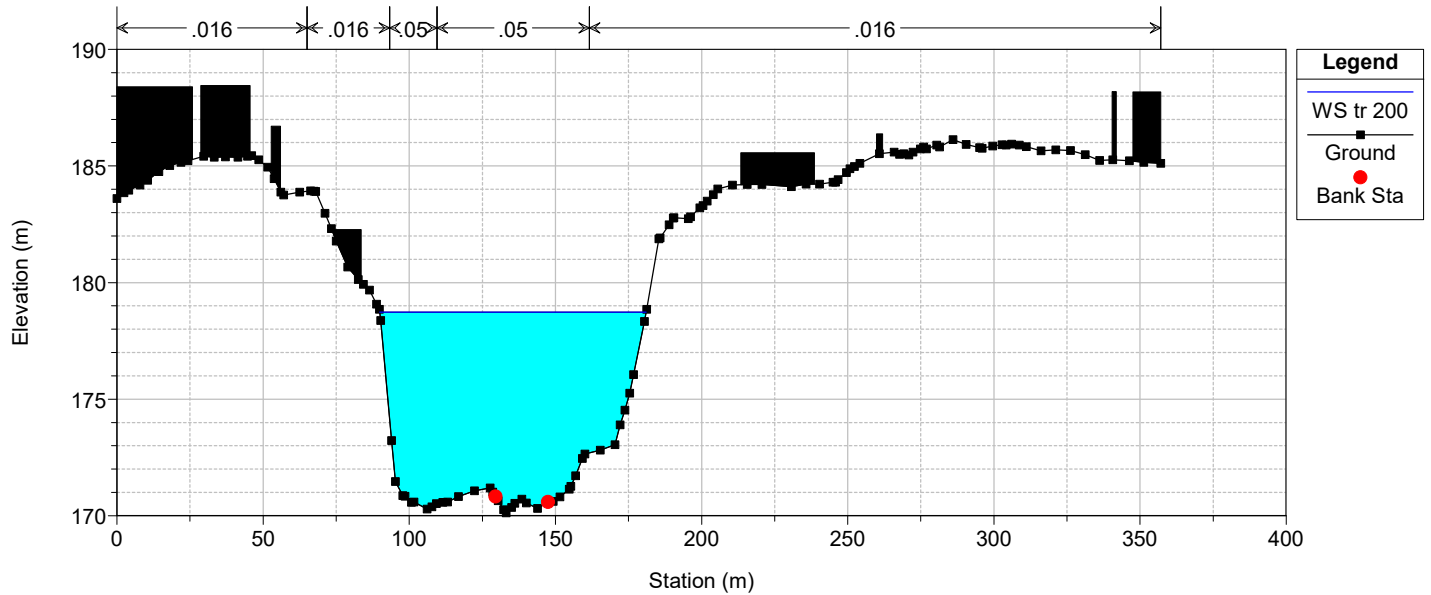
River = Rio San Giovanni Reach = Rio San Giovanni RS = 6676.040 SEZIONE 212 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

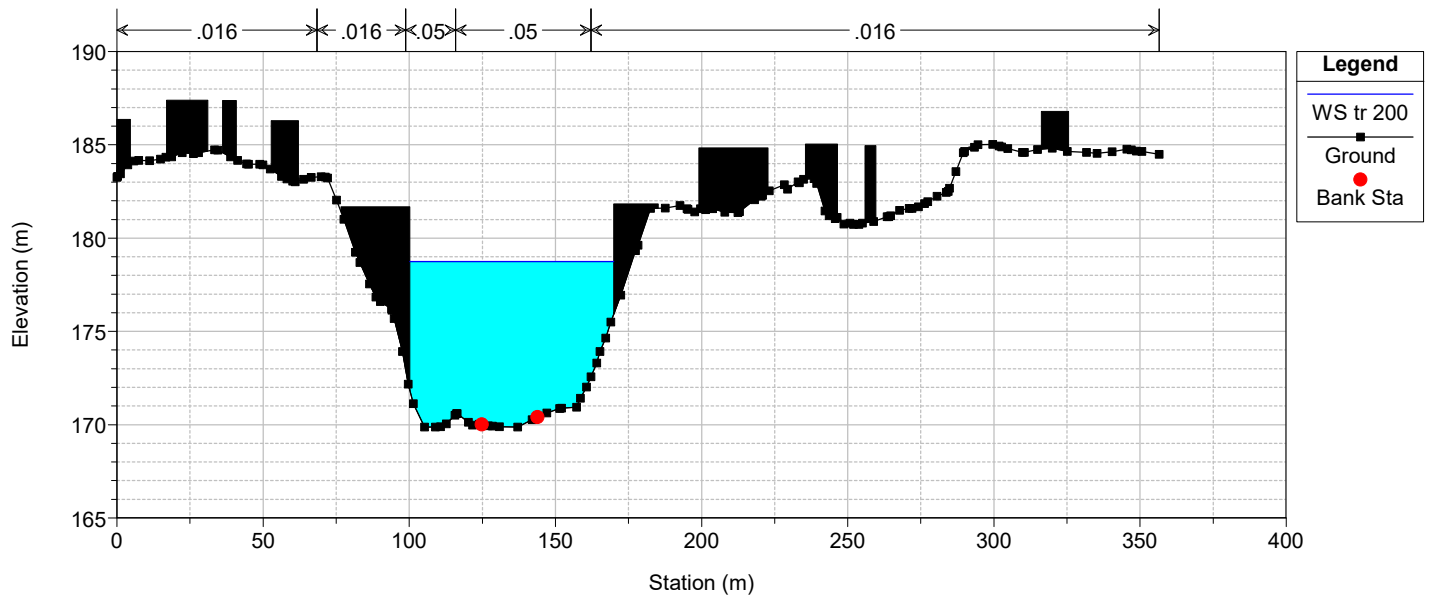
River = Rio San Giovanni Reach = Rio San Giovanni RS = 6645.164 SEZIONE 211 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

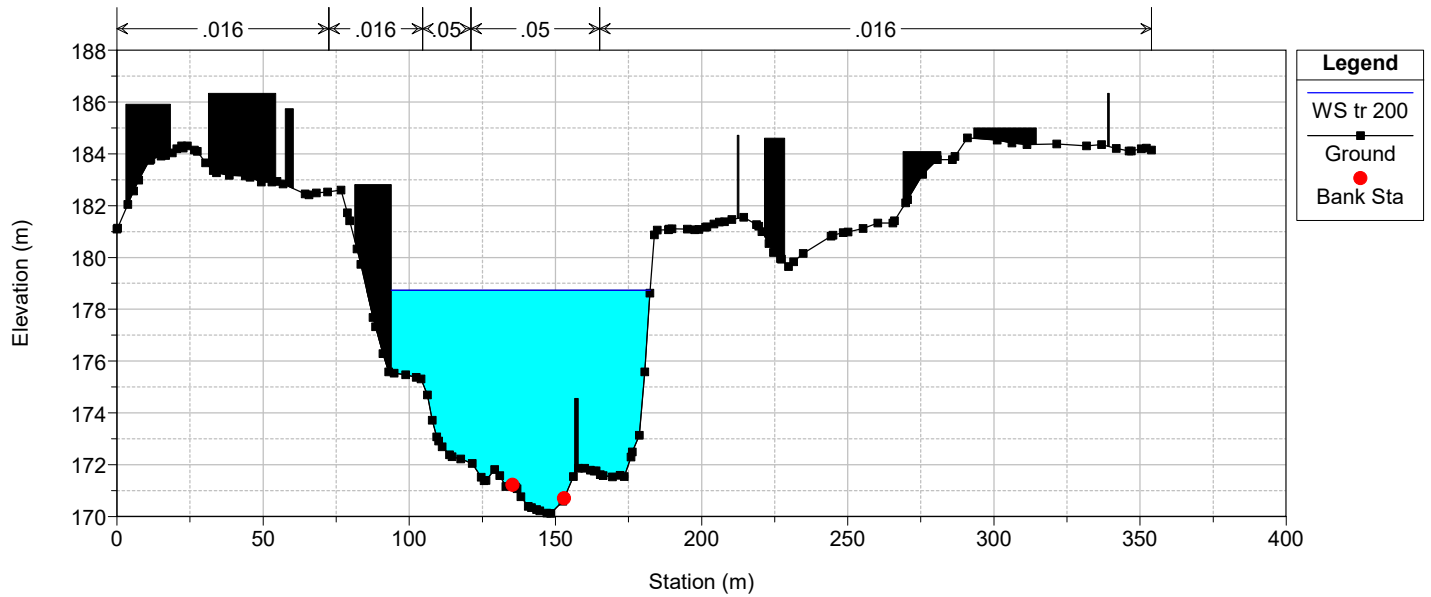
River = Rio San Giovanni Reach = Rio San Giovanni RS = 6617.633 SEZIONE 210 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

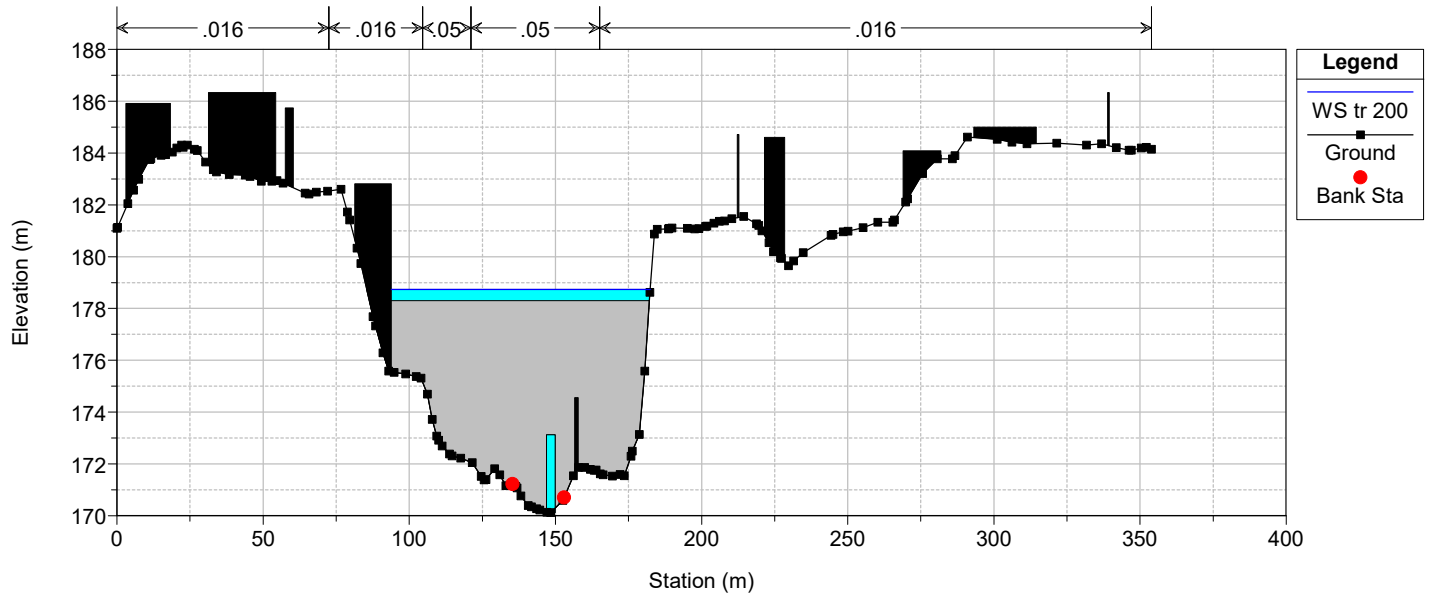
River = Rio San Giovanni Reach = Rio San Giovanni RS = 6593.842 SEZIONE 209 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

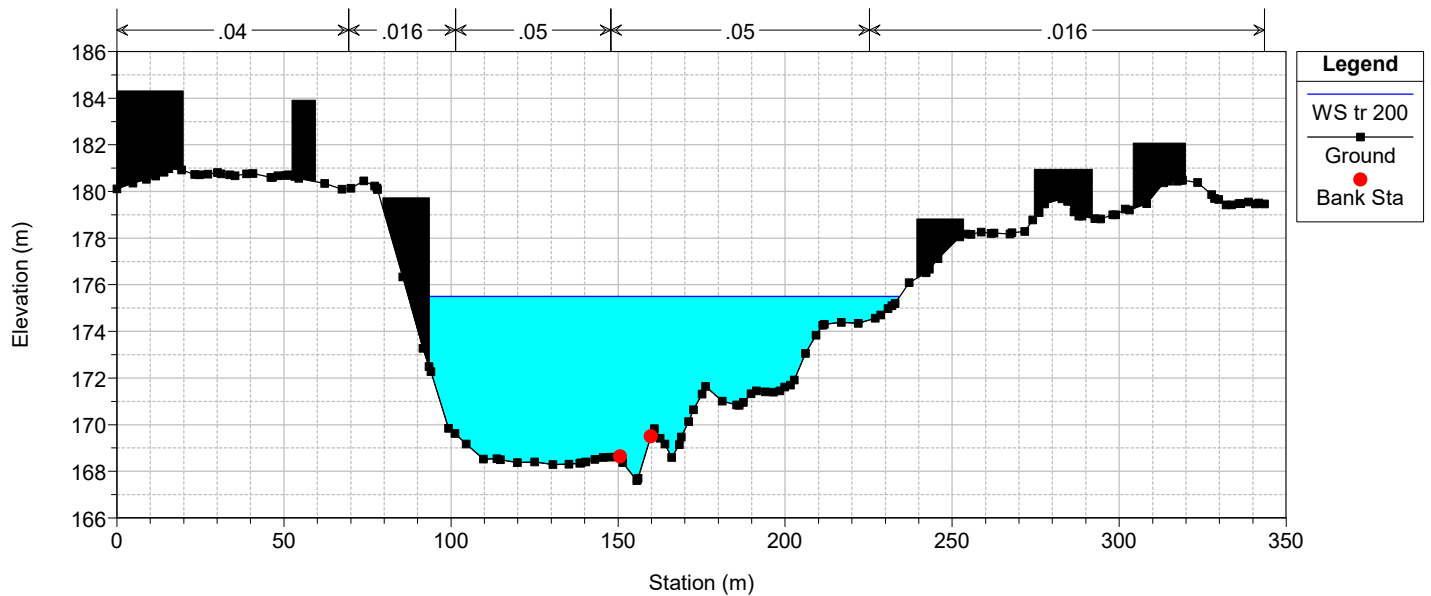
River = Rio San Giovanni Reach = Rio San Giovanni RS = 6550 Culv. ATTRAVERSAMENTO A4 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

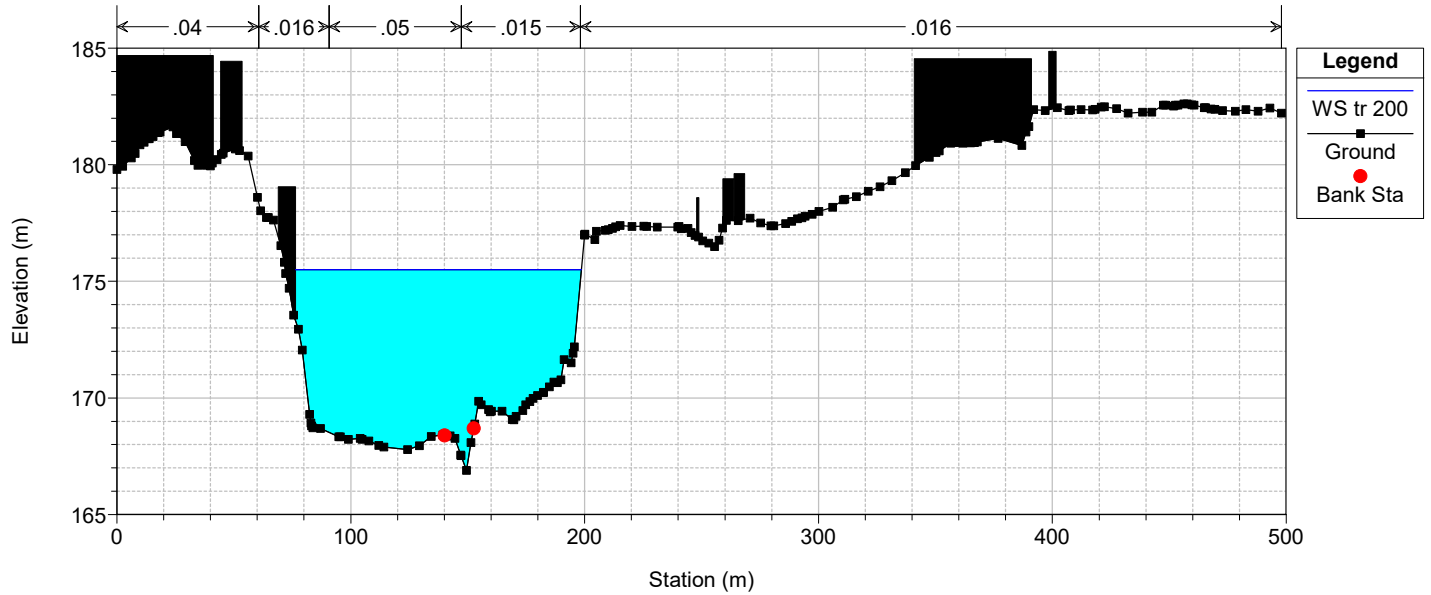
River = Rio San Giovanni Reach = Rio San Giovanni RS = 6521.062 SEZIONE 208 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

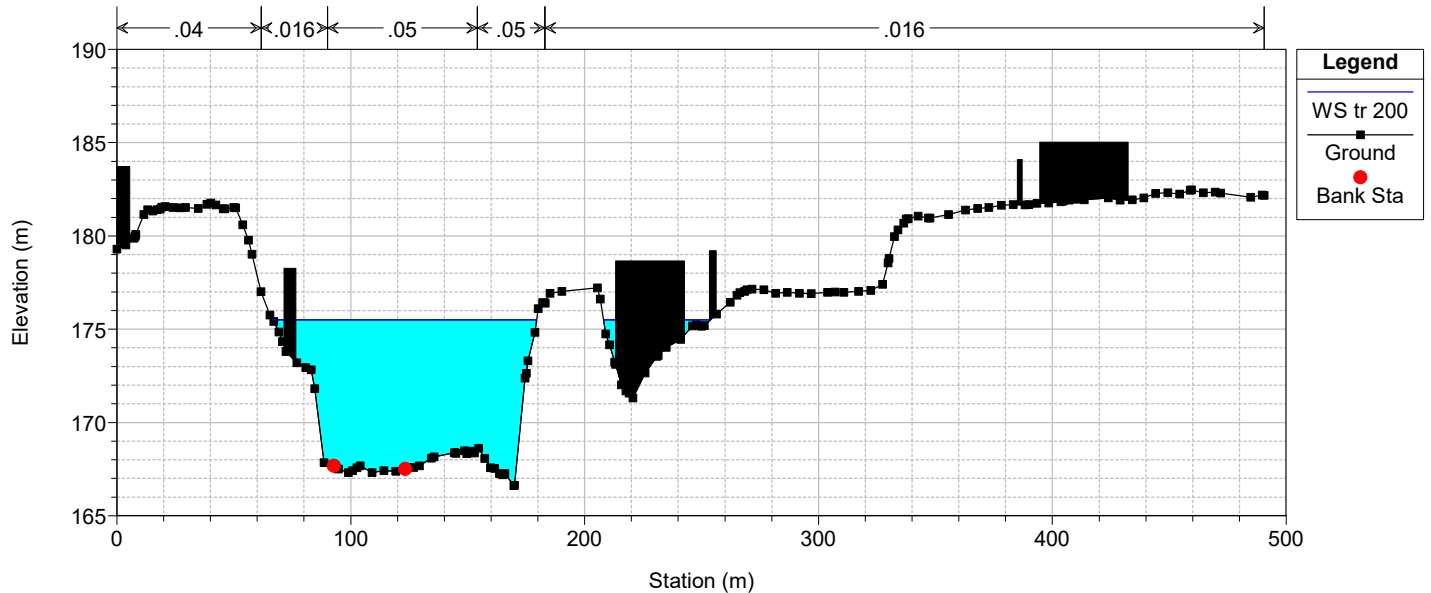
River = Rio San Giovanni Reach = Rio San Giovanni RS = 6498.231 SEZIONE 207 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

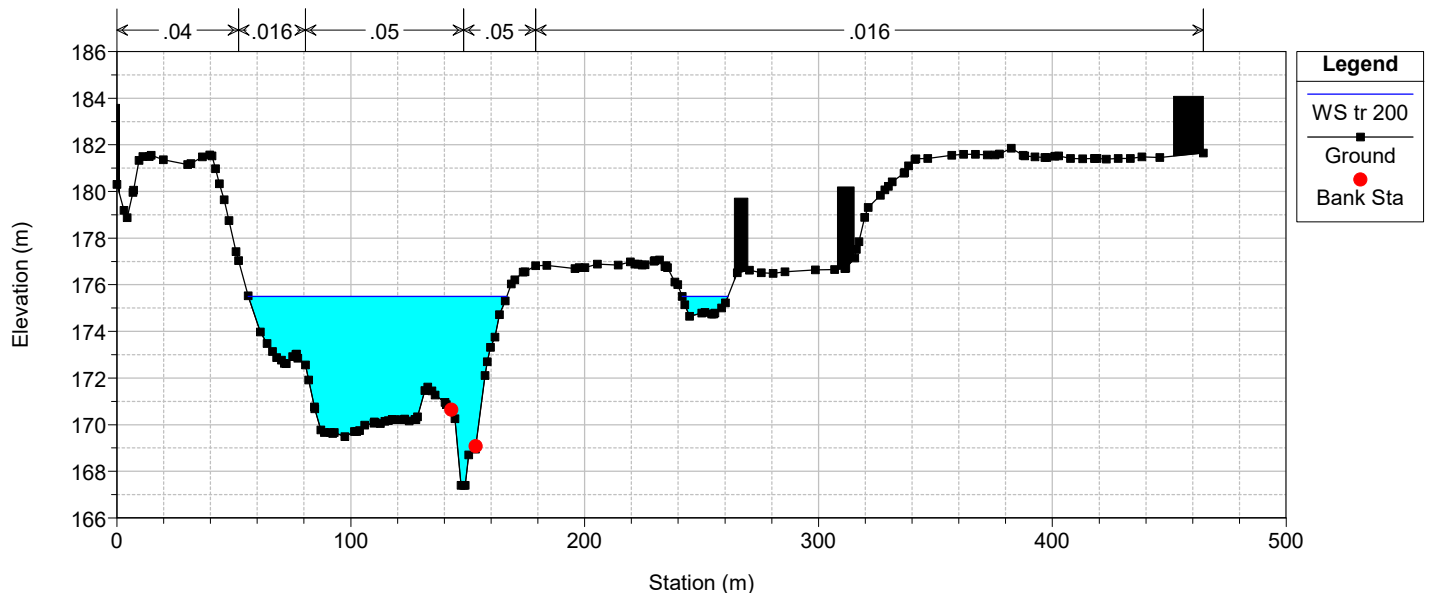
River = Rio San Giovanni Reach = Rio San Giovanni RS = 6480.144 SEZIONE 206 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

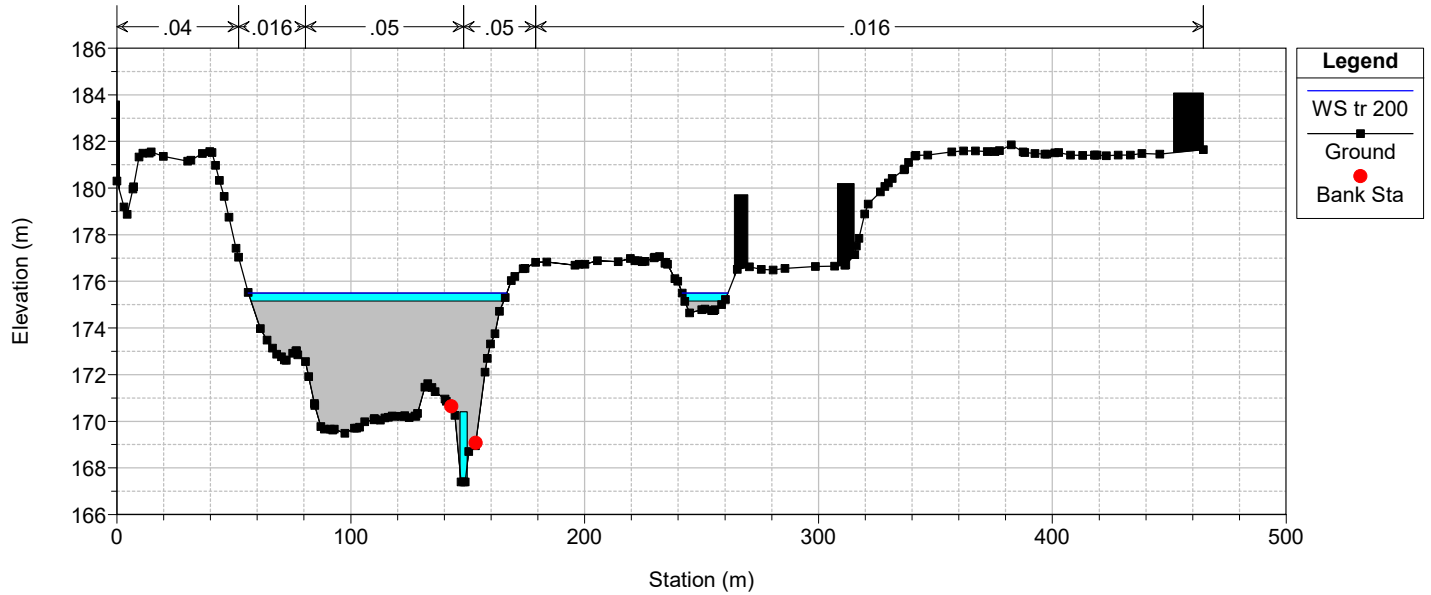
River = Rio San Giovanni Reach = Rio San Giovanni RS = 6460.542 SEZIONE 205 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

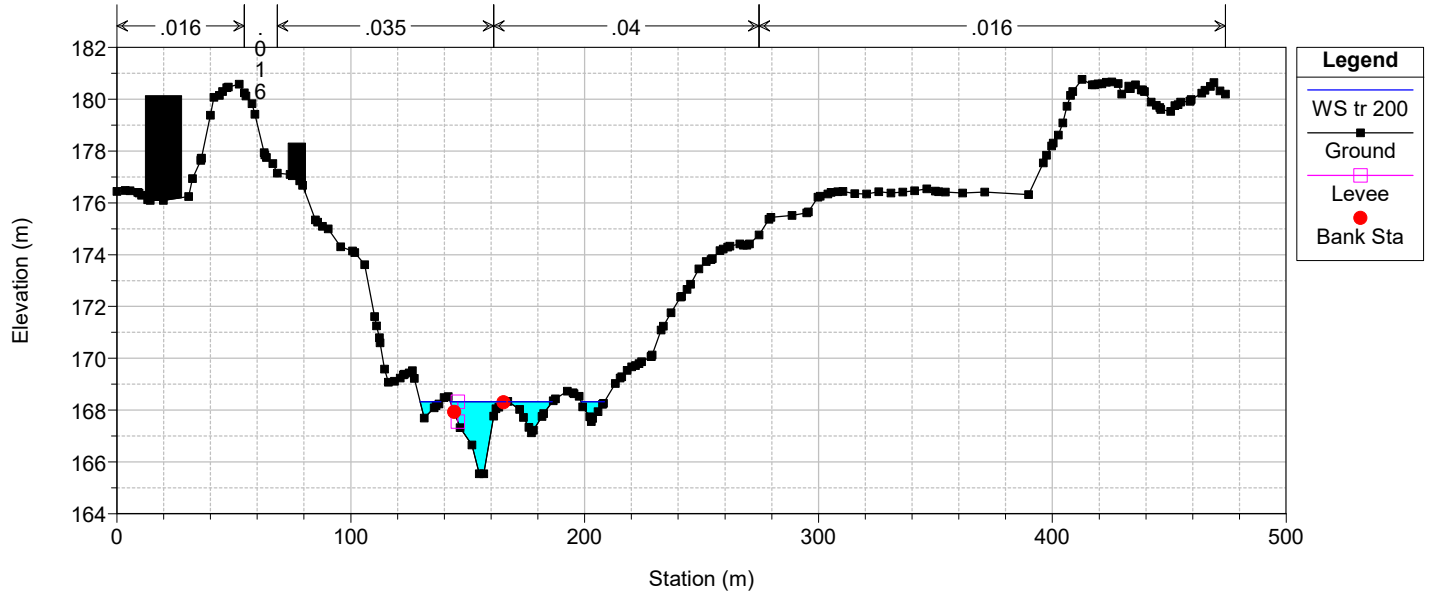
River = Rio San Giovanni Reach = Rio San Giovanni RS = 6430 Culv ATTRAVERSAMENTO A5 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

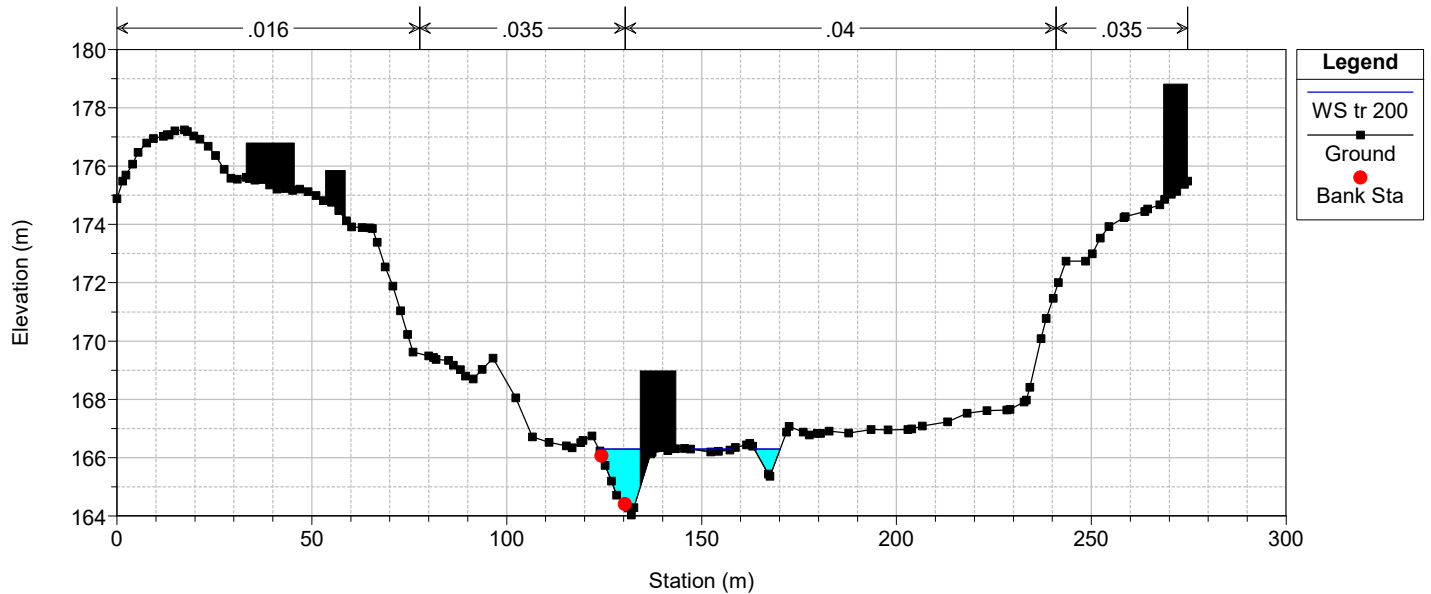
River = Rio San Giovanni Reach = Rio San Giovanni RS = 6418.467 SEZIONE 204 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

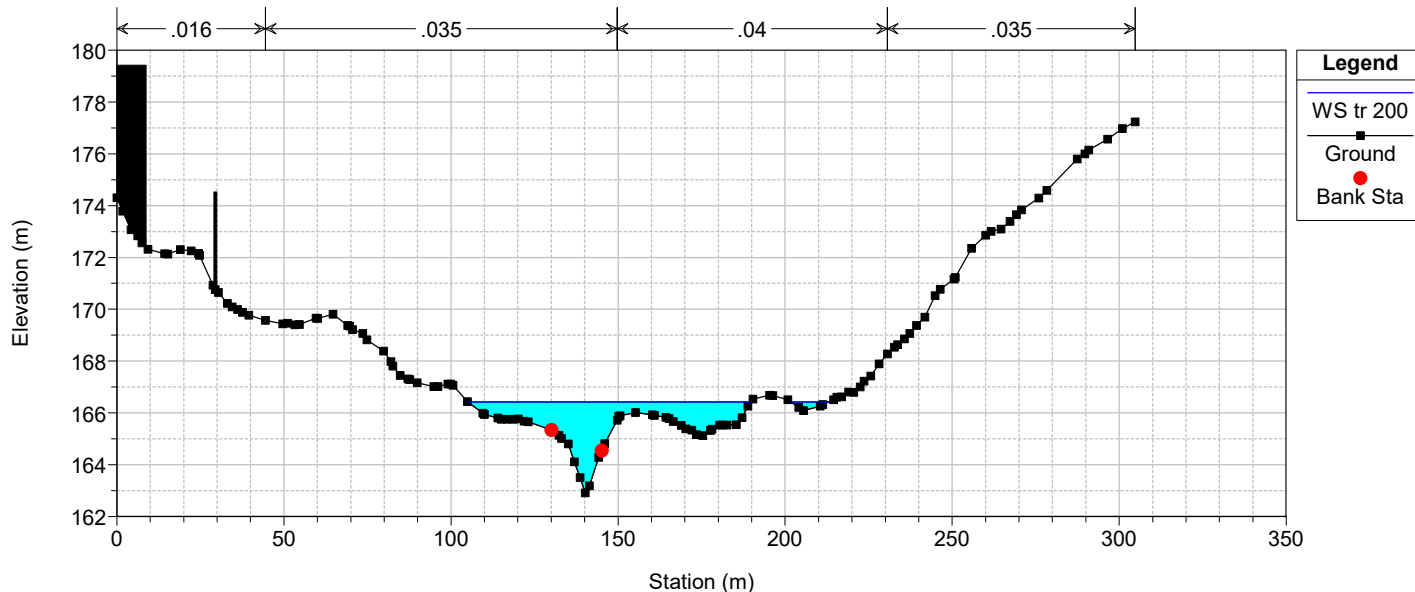
River = Rio San Giovanni Reach = Rio San Giovanni RS = 6361.699 SEZIONE 203 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

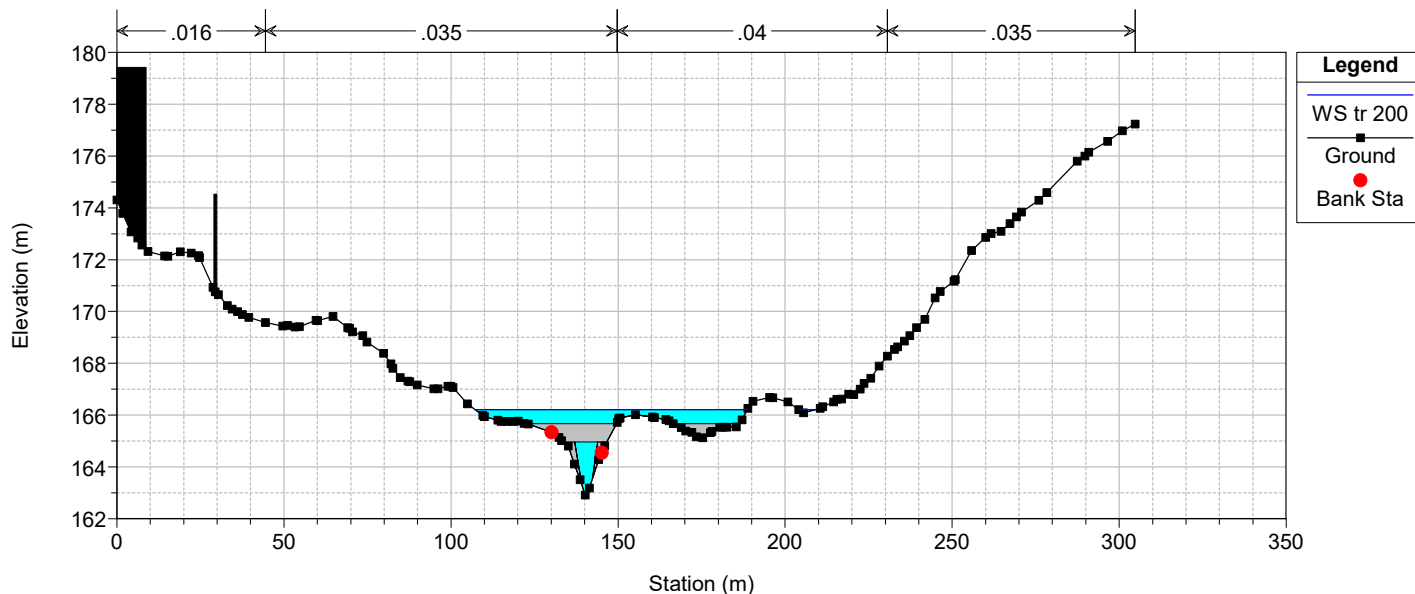
River = Rio San Giovanni Reach = Rio San Giovanni RS = 6320.797 SEZIONE 202 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

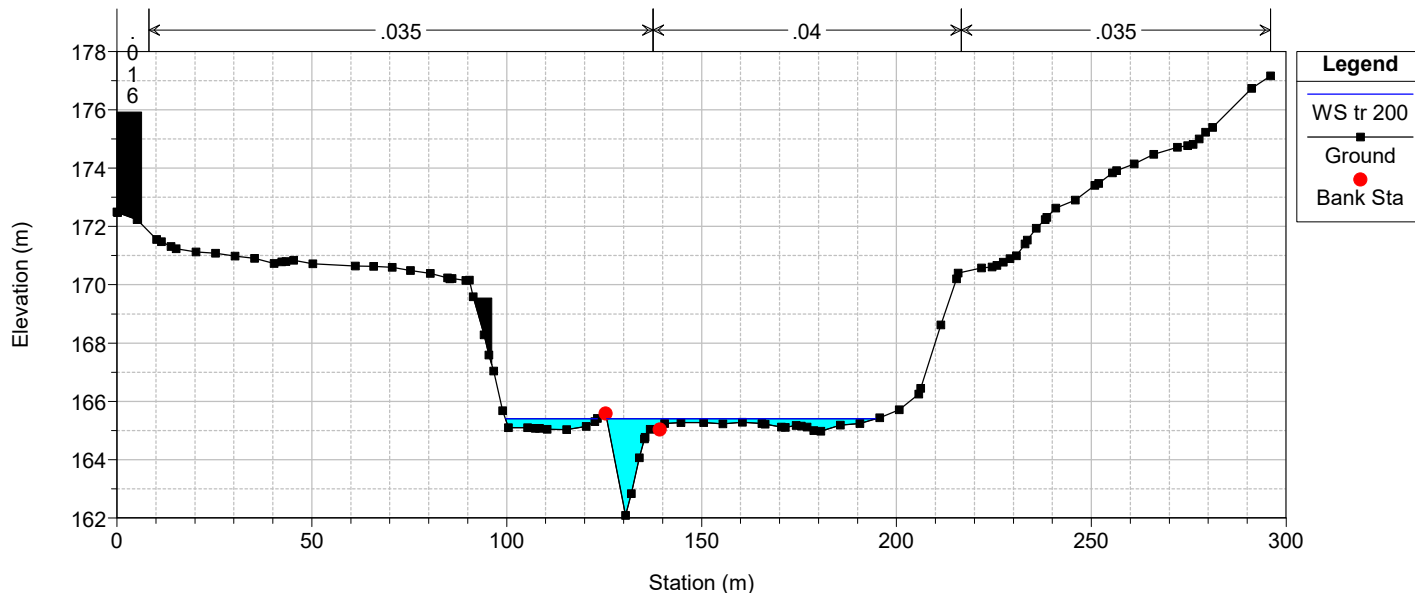
River = Rio San Giovanni Reach = Rio San Giovanni RS = 6300 BR ATTRAVERSAMENTO A6 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

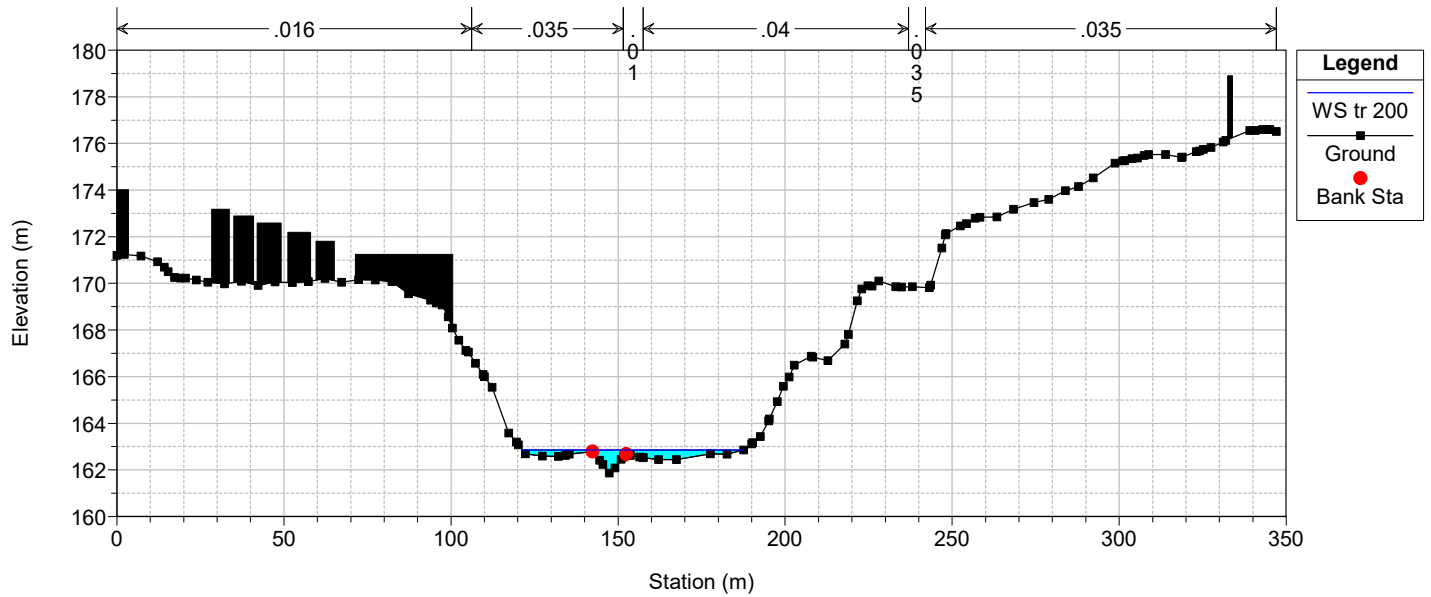
River = Rio San Giovanni Reach = Rio San Giovanni RS = 6289.098 SEZIONE 201 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

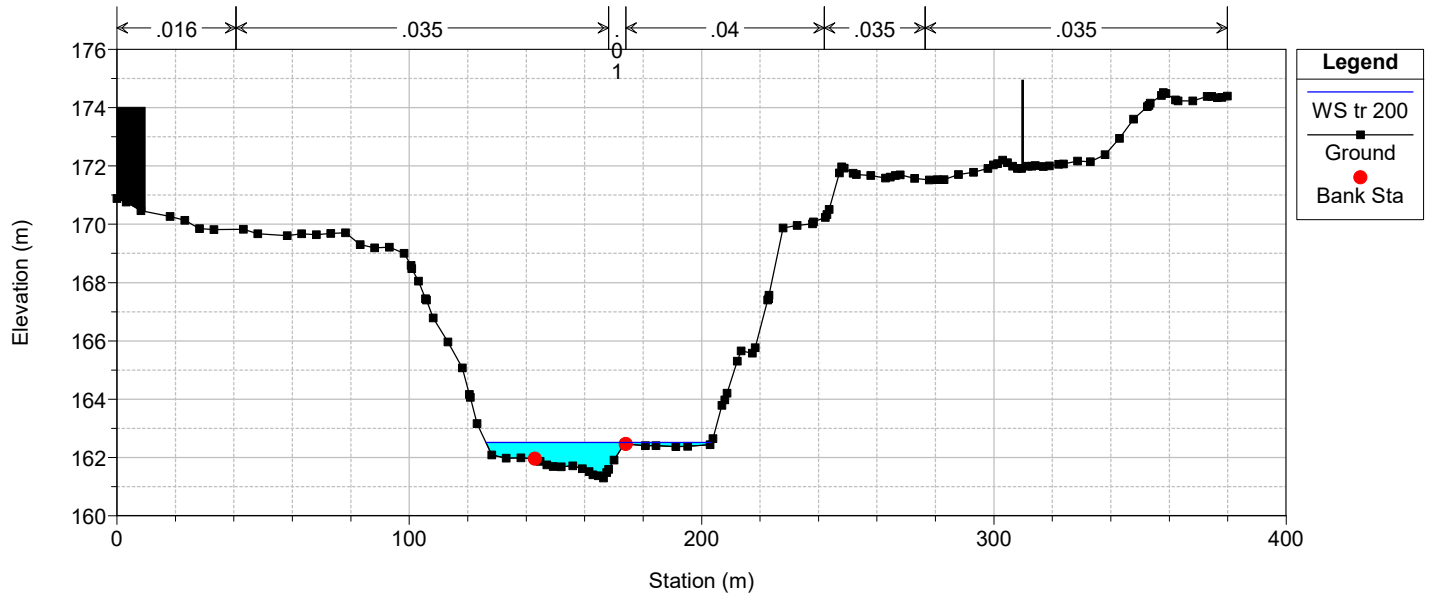
River = Rio San Giovanni Reach = Rio San Giovanni RS = 6240.412 SEZIONE 200 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

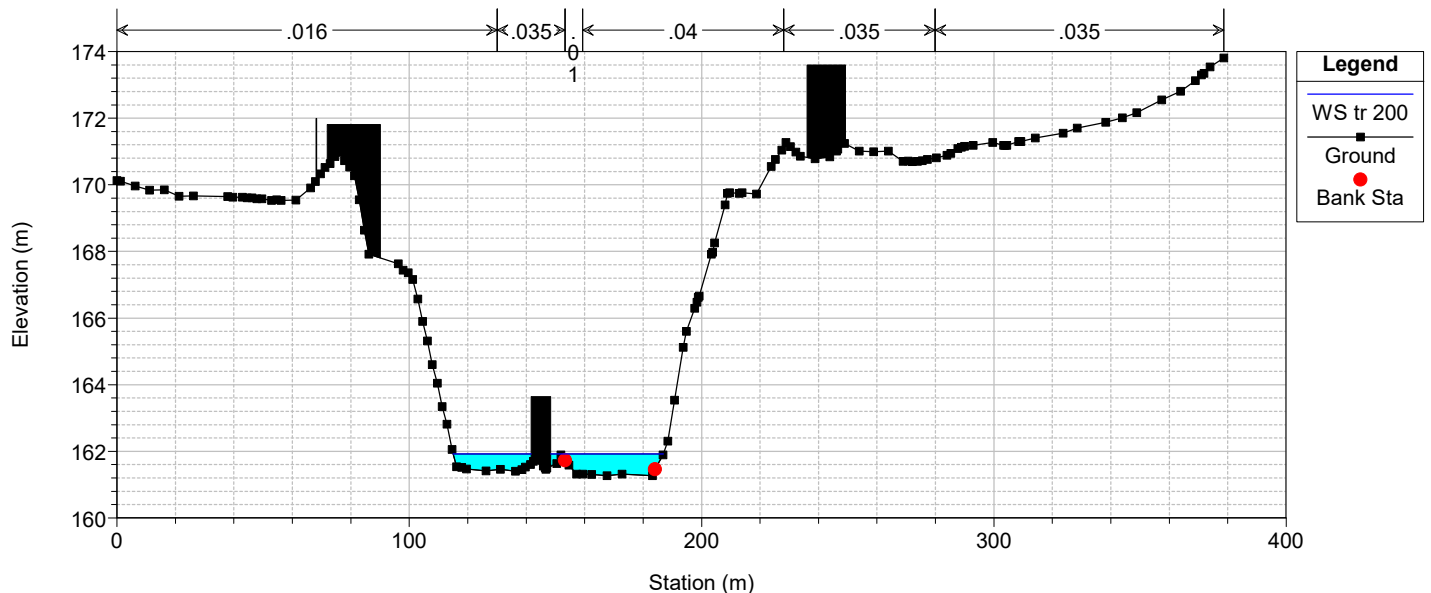
River = Rio San Giovanni Reach = Rio San Giovanni RS = 6199.335 SEZIONE 199 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

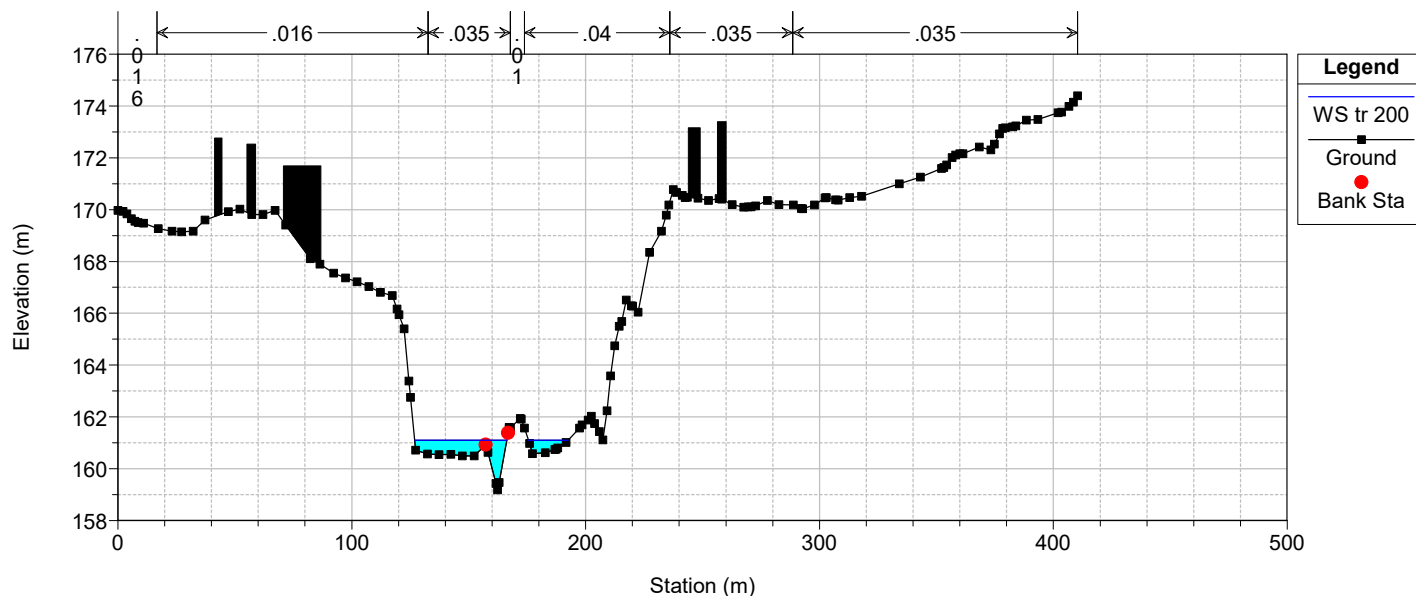
River = Rio San Giovanni Reach = Rio San Giovanni RS = 6157.551 SEZIONE 198 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

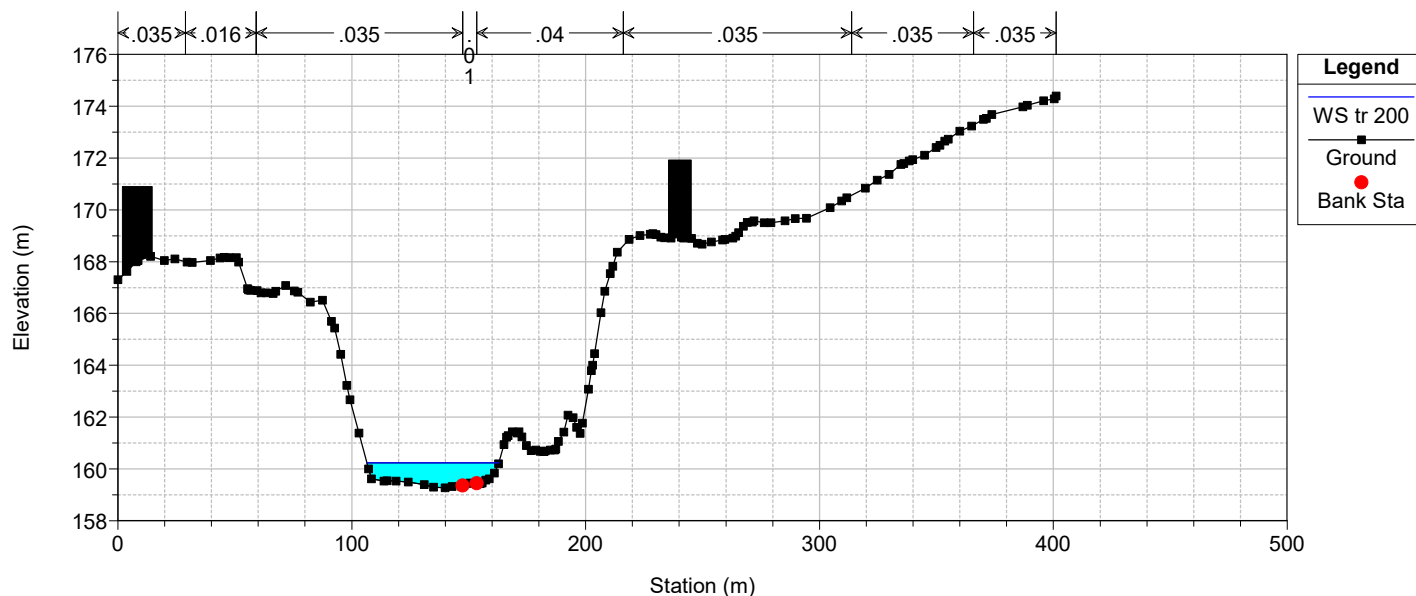
River = Rio San Giovanni Reach = Rio San Giovanni RS = 6120.118 SEZIONE 197 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

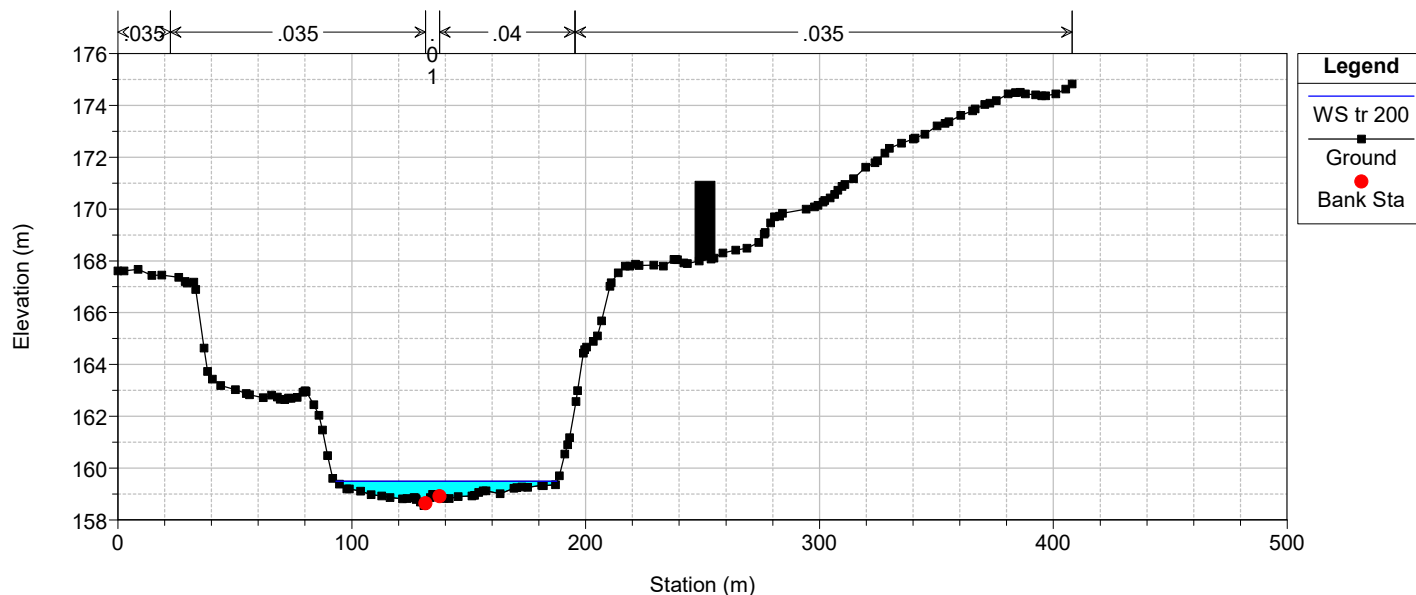
River = Rio San Giovanni Reach = Rio San Giovanni RS = 6063.382 SEZIONE 196 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

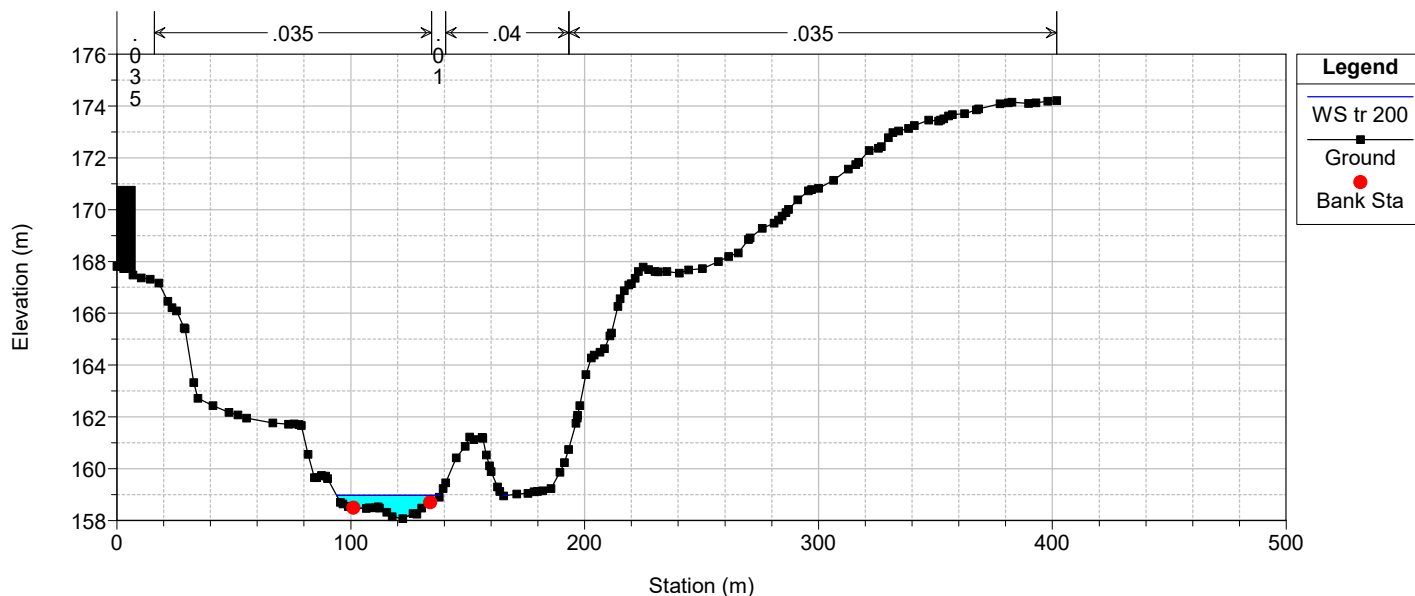
River = Rio San Giovanni Reach = Rio San Giovanni RS = 6006.640 SEZIONE 195 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

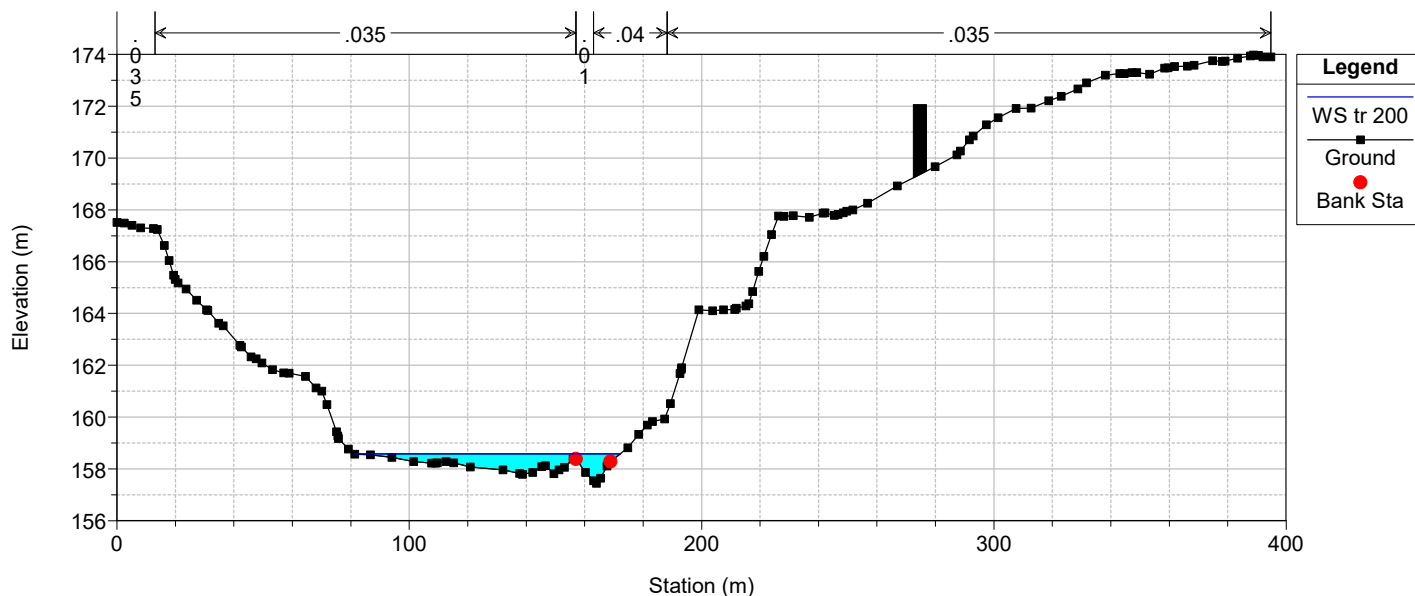
River = Rio San Giovanni Reach = Rio San Giovanni RS = 5979.893 SEZIONE 194 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

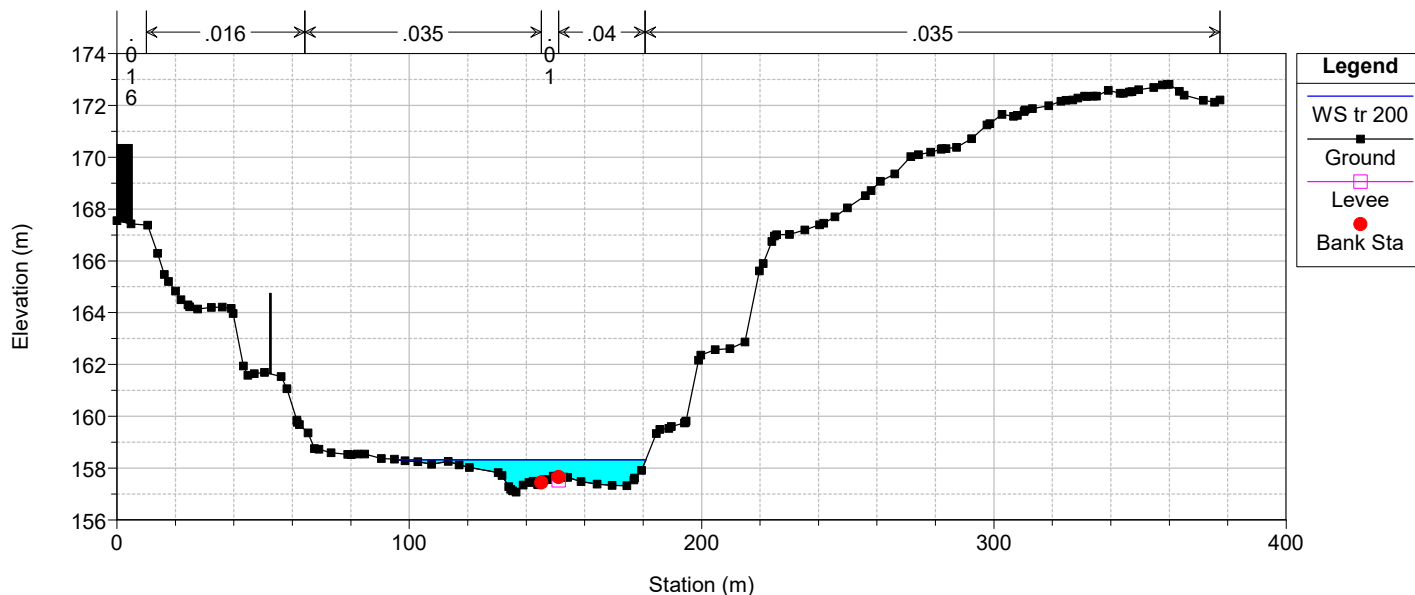
River = Rio San Giovanni Reach = Rio San Giovanni RS = 5953.291 SEZIONE 193 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

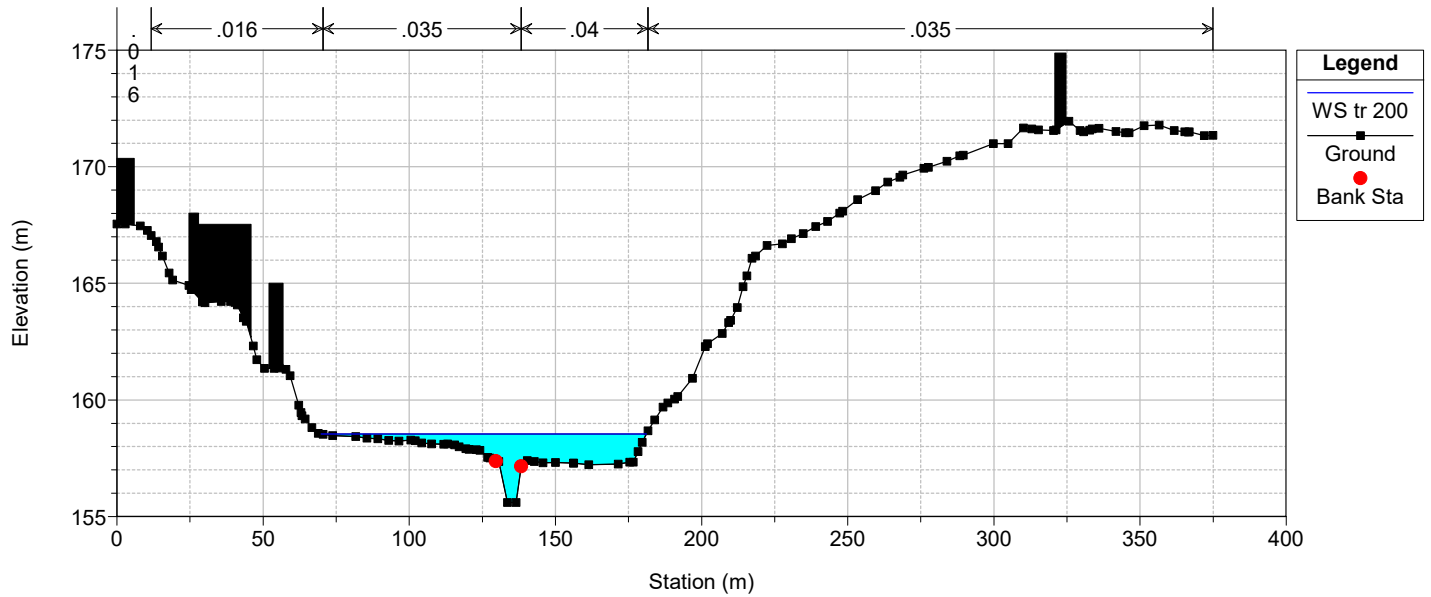
River = Rio San Giovanni Reach = Rio San Giovanni RS = 5929.370 SEZIONE 192 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

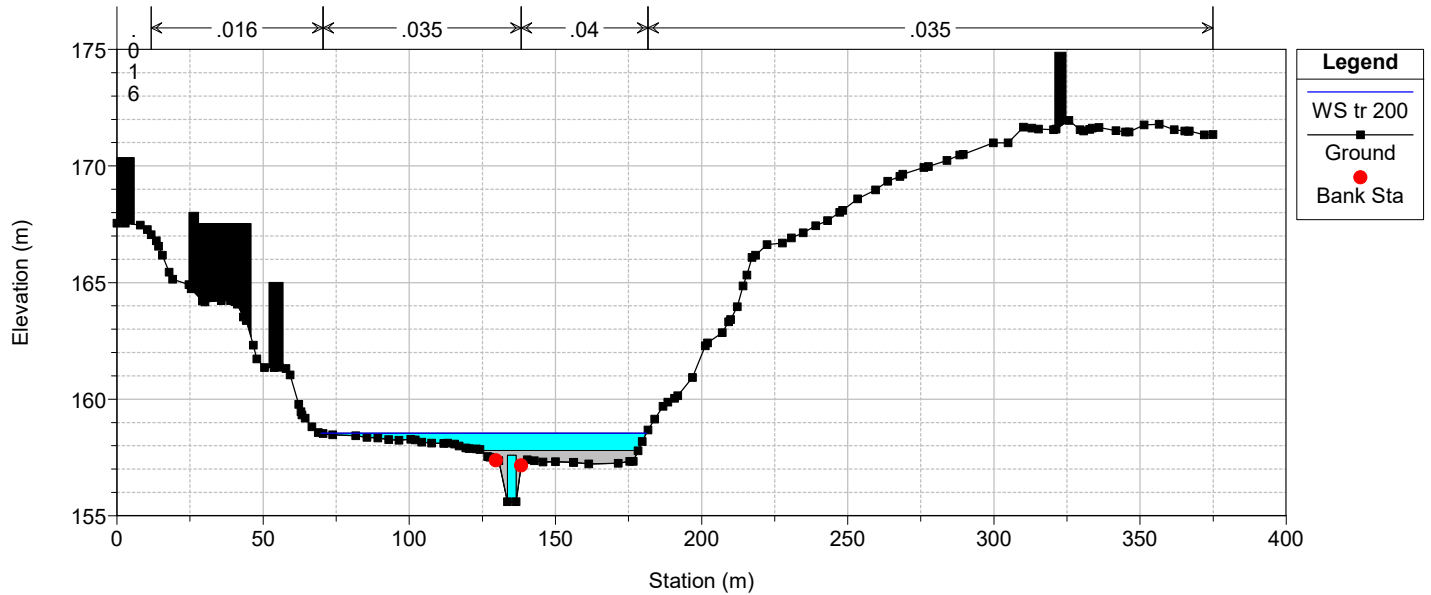
River = Rio San Giovanni Reach = Rio San Giovanni RS = 5909.507 SEZIONE 191 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

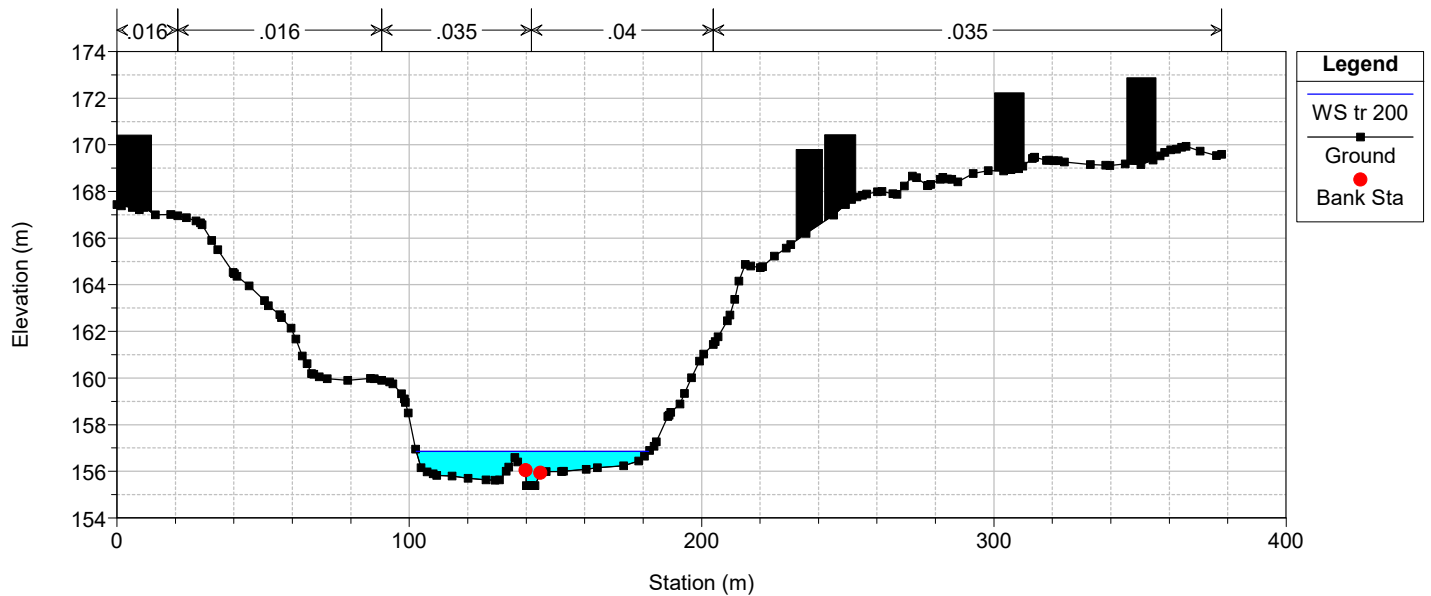
River = Rio San Giovanni Reach = Rio San Giovanni RS = 5890 Culv. ATTRAVERSAMENTO A7 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

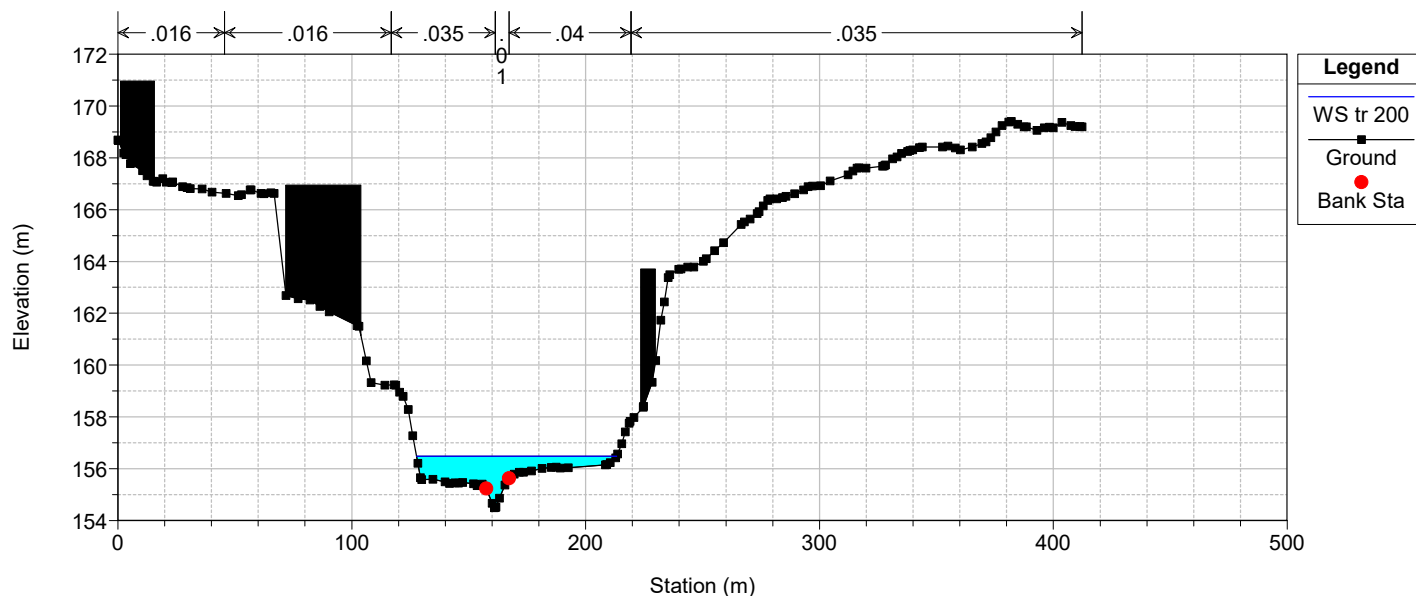
River = Rio San Giovanni Reach = Rio San Giovanni RS = 5862.809 SEZIONE 190 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

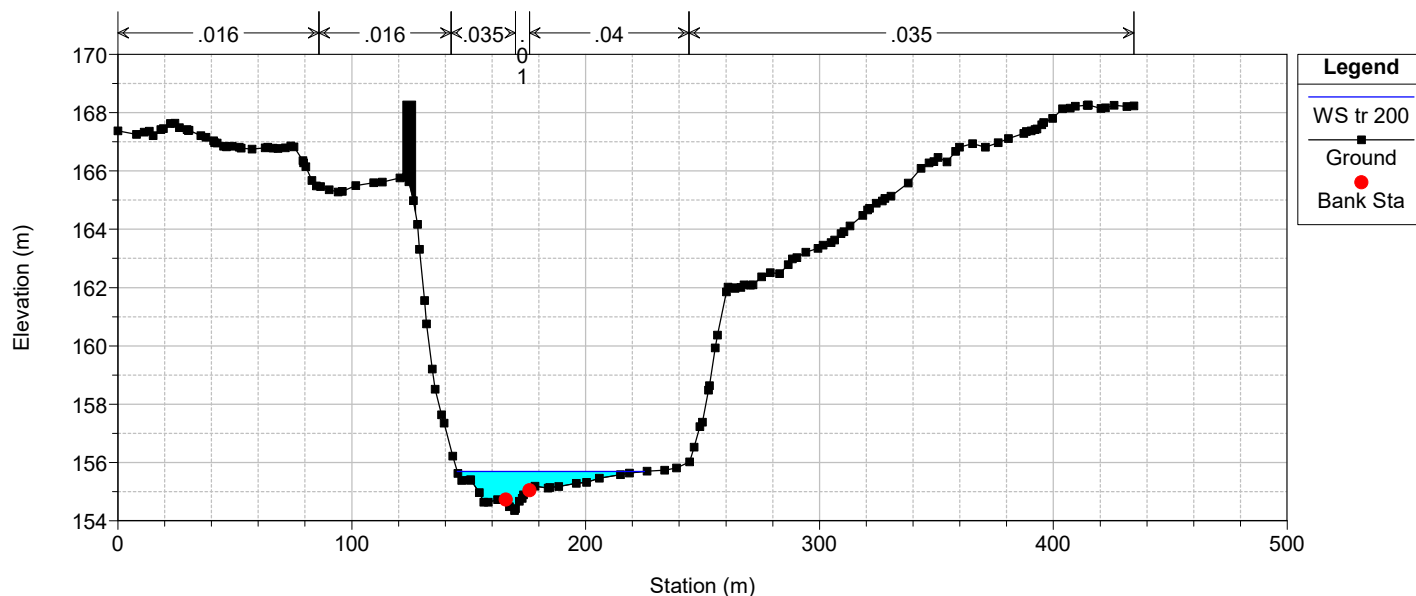
River = Rio San Giovanni Reach = Rio San Giovanni RS = 5829.787 SEZIONE 189 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

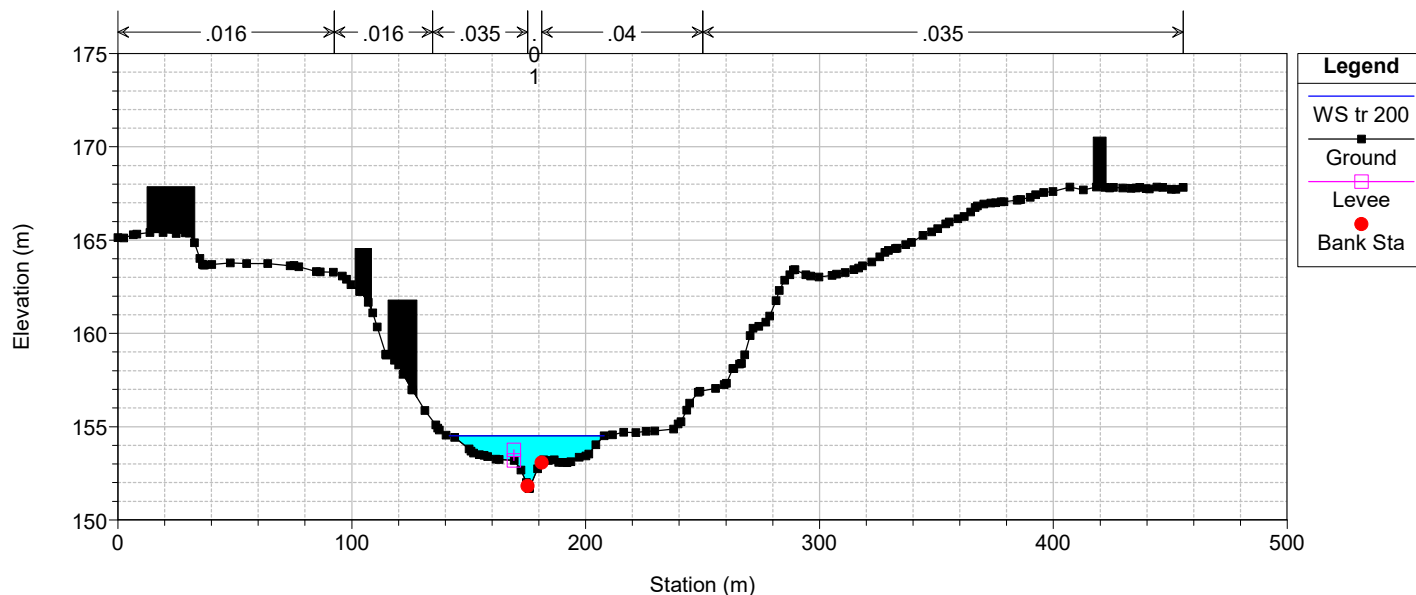
River = Rio San Giovanni Reach = Rio San Giovanni RS = 5762.535 SEZIONE 188 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

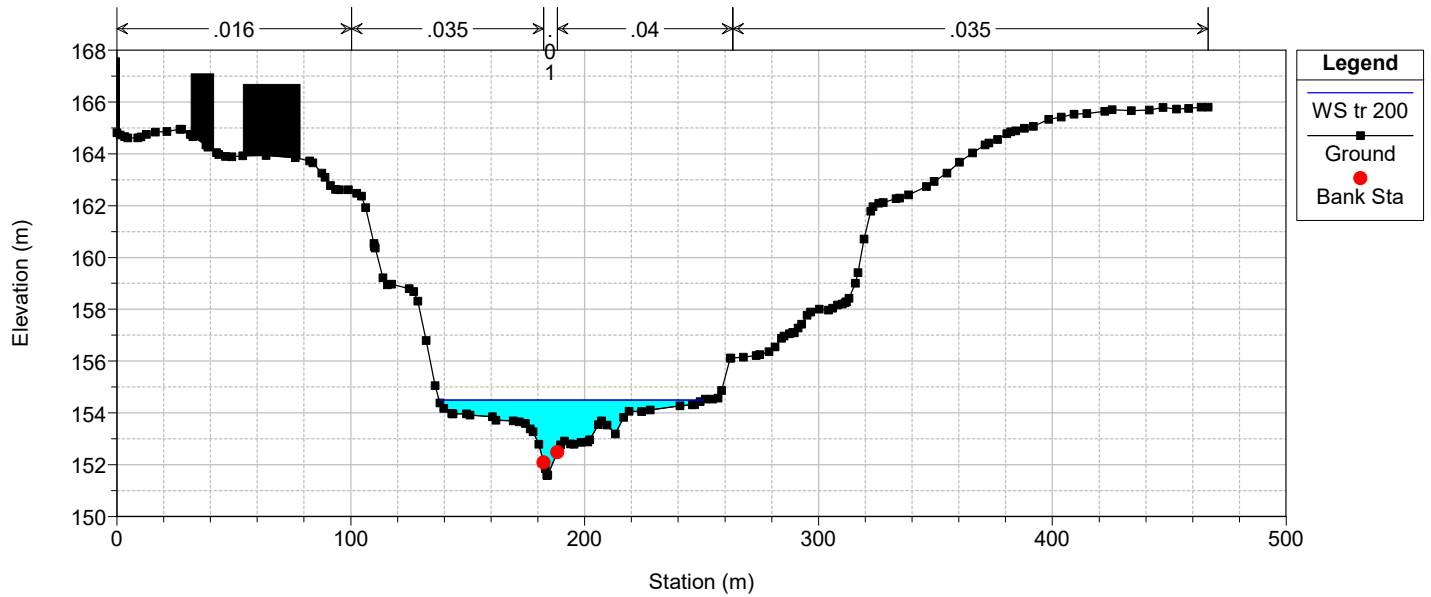
River = Rio San Giovanni Reach = Rio San Giovanni RS = 5683.757 SEZIONE 187 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

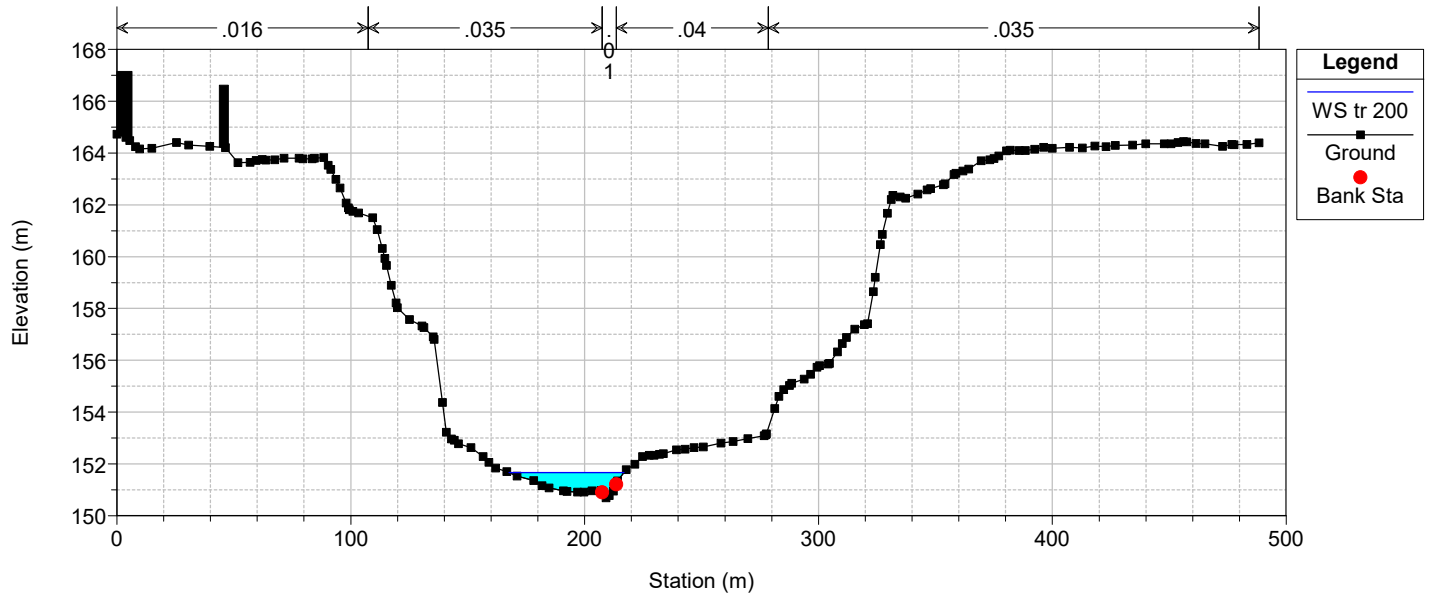
River = Rio San Giovanni Reach = Rio San Giovanni RS = 5649.735 SEZIONE 186 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

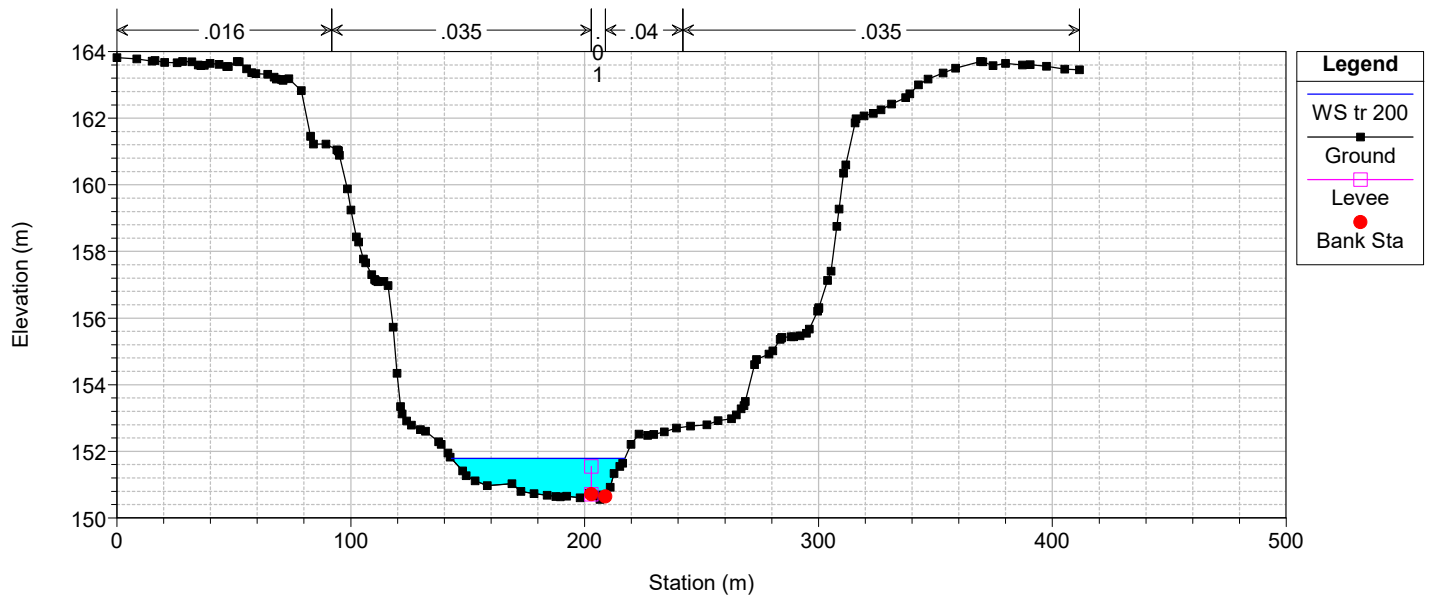
River = Rio San Giovanni Reach = Rio San Giovanni RS = 5602.582 SEZIONE 185 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

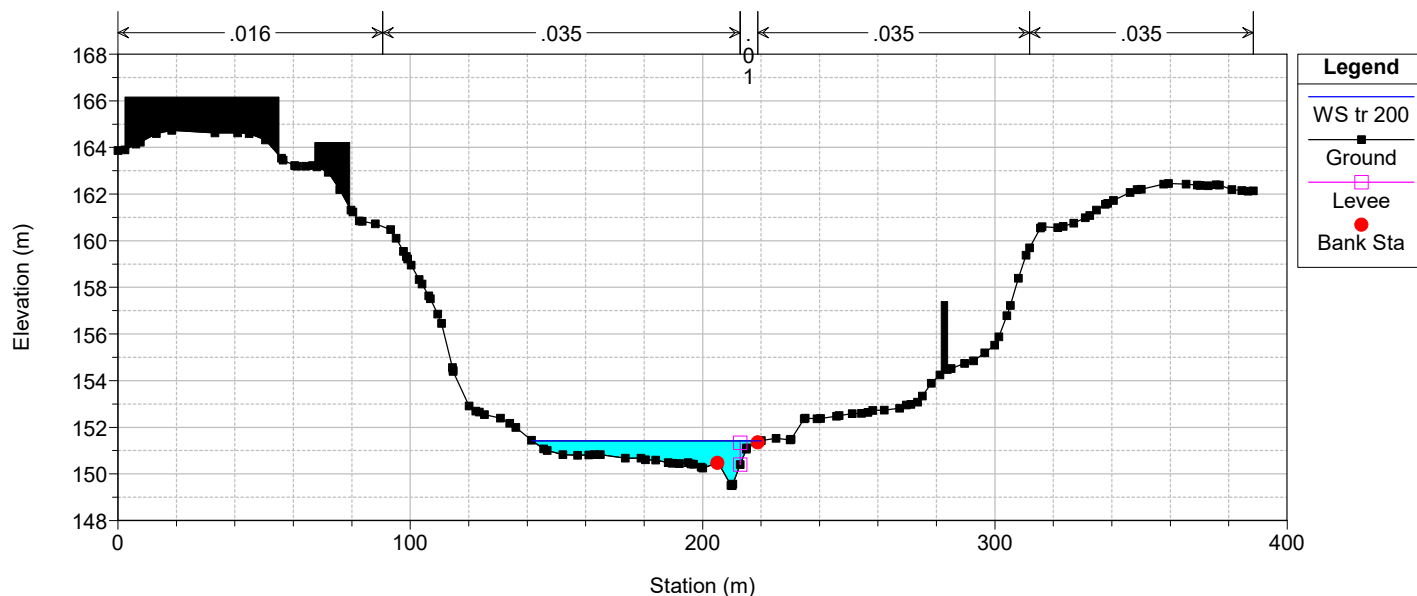
River = Rio San Giovanni Reach = Rio San Giovanni RS = 5578.024 SEZIONE 184 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

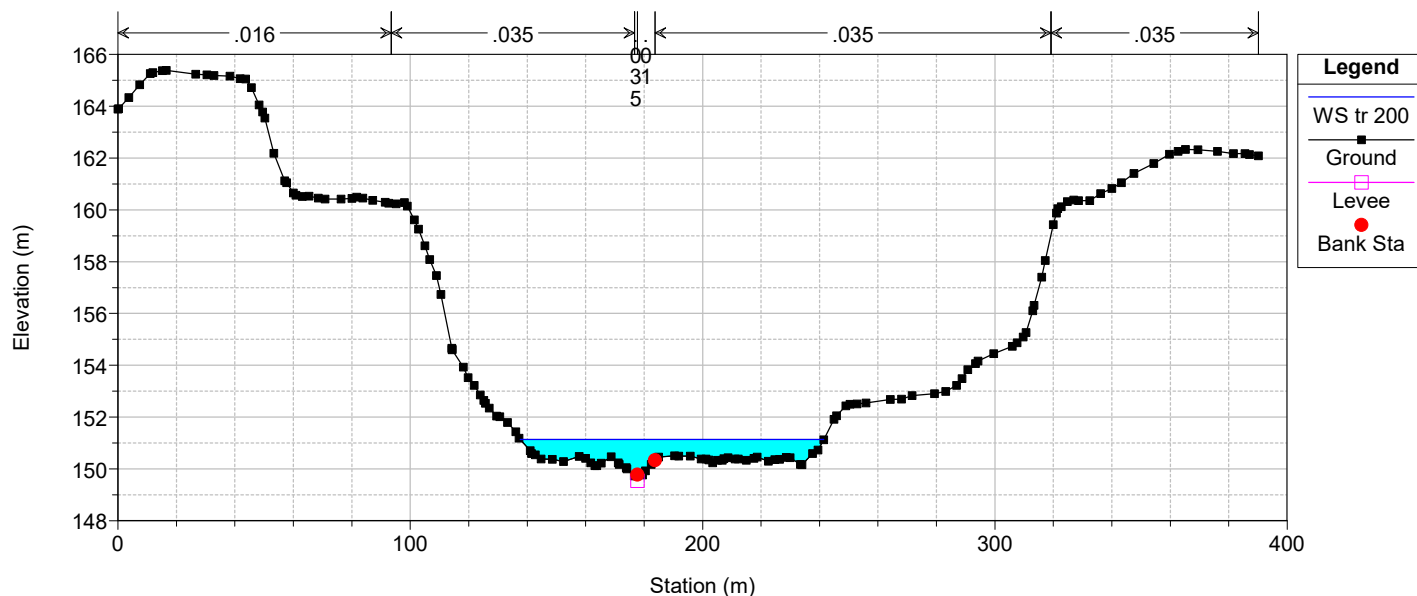
River = Rio San Giovanni Reach = Rio San Giovanni RS = 5541.668 SEZIONE 183 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

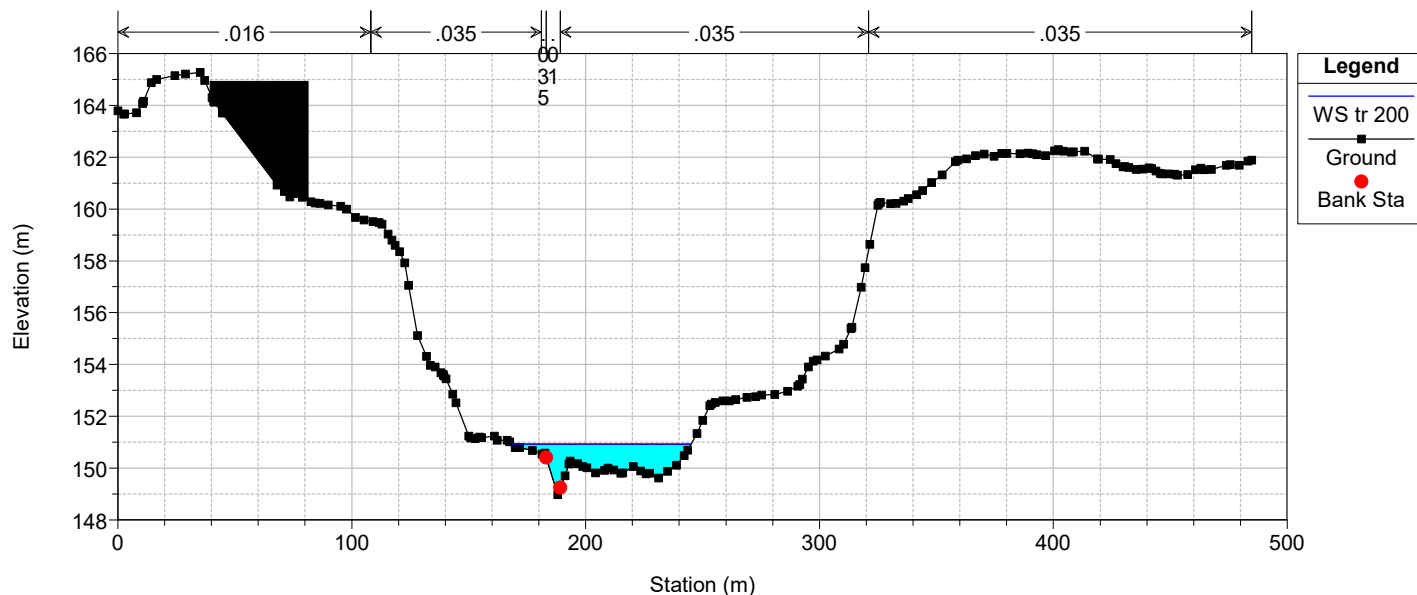
River = Rio San Giovanni Reach = Rio San Giovanni RS = 5501.360 SEZIONE 182 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

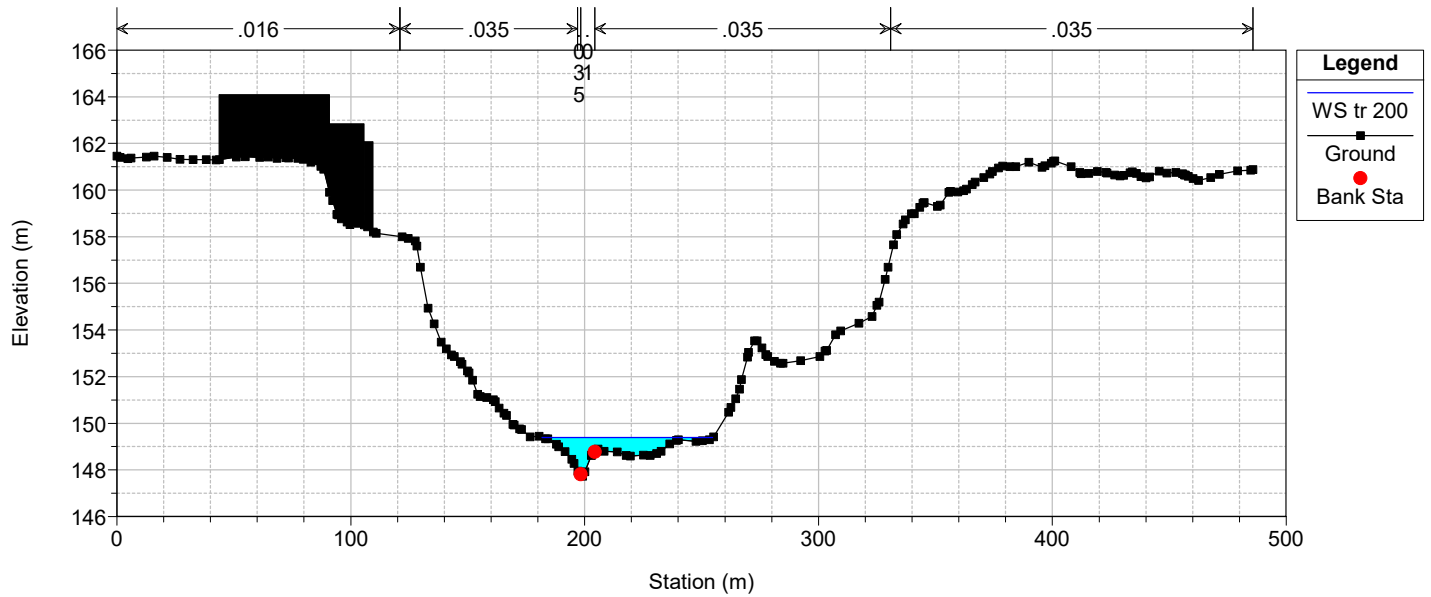
River = Rio San Giovanni Reach = Rio San Giovanni RS = 5476.022 SEZIONE 181 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

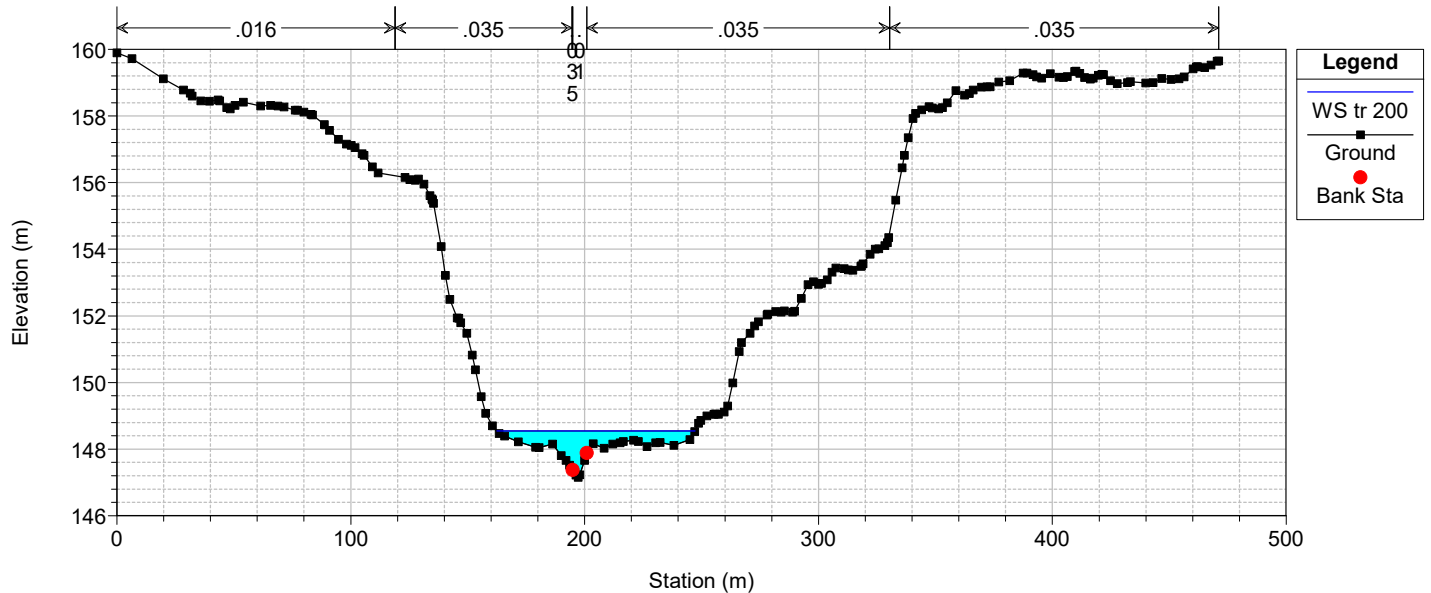
River = Rio San Giovanni Reach = Rio San Giovanni RS = 5433.750 SEZIONE 180 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

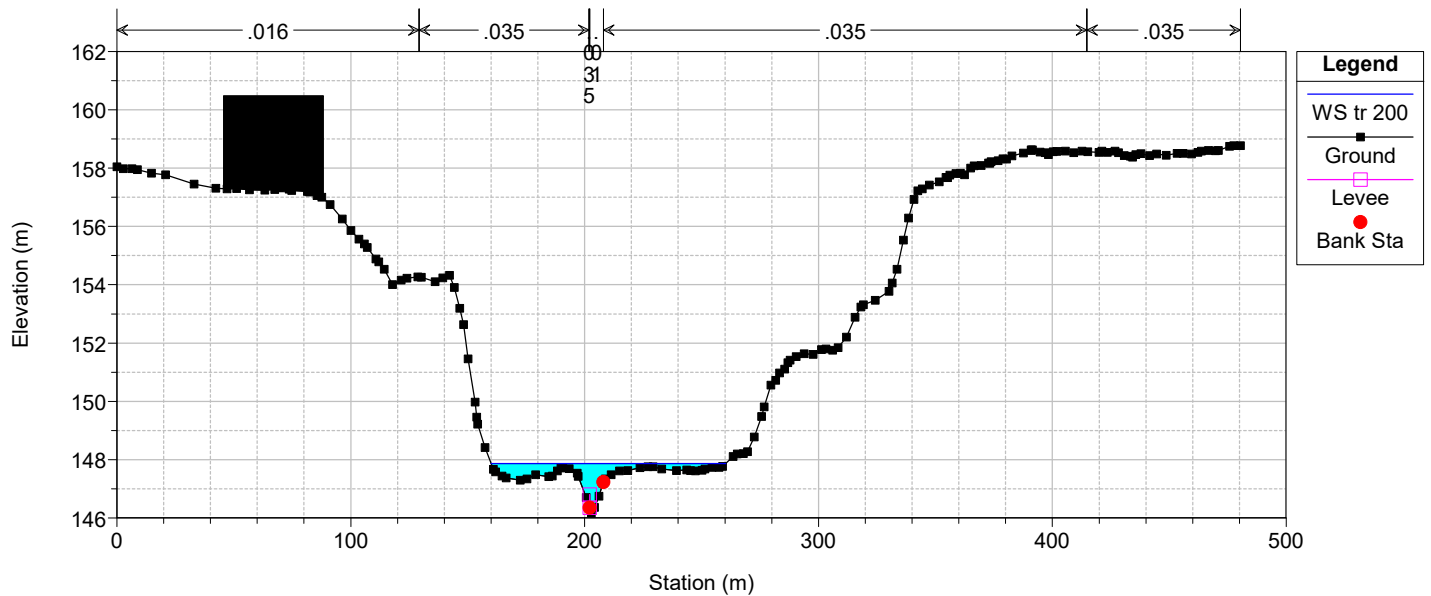
River = Rio San Giovanni Reach = Rio San Giovanni RS = 5376.300 SEZIONE 179 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

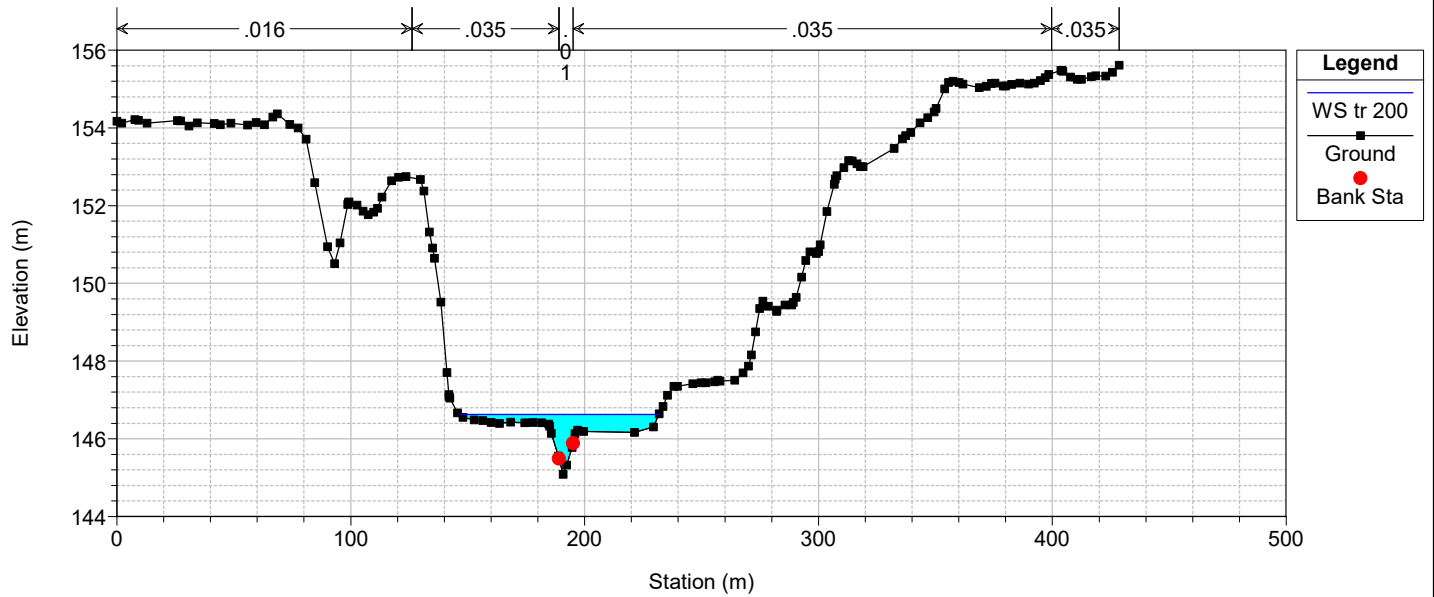
River = Rio San Giovanni Reach = Rio San Giovanni RS = 5319.093 SEZIONE 178 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

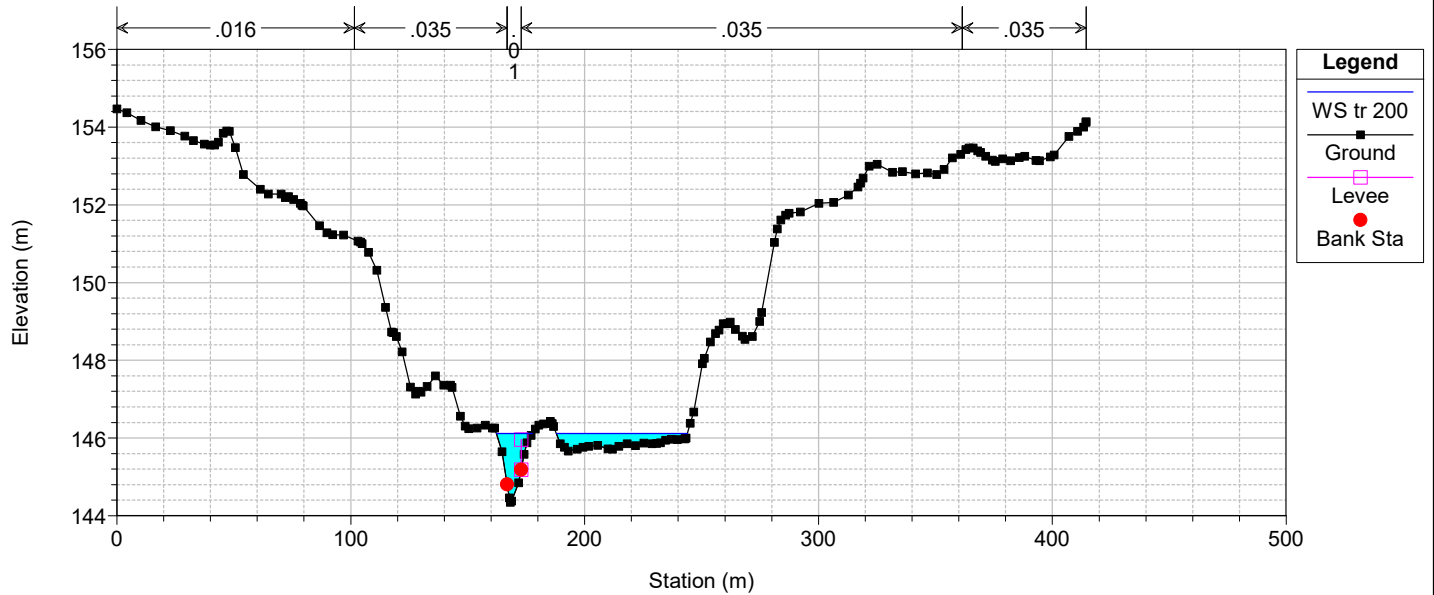
River = Rio San Giovanni Reach = Rio San Giovanni RS = 5255.656 SEZIONE 177 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

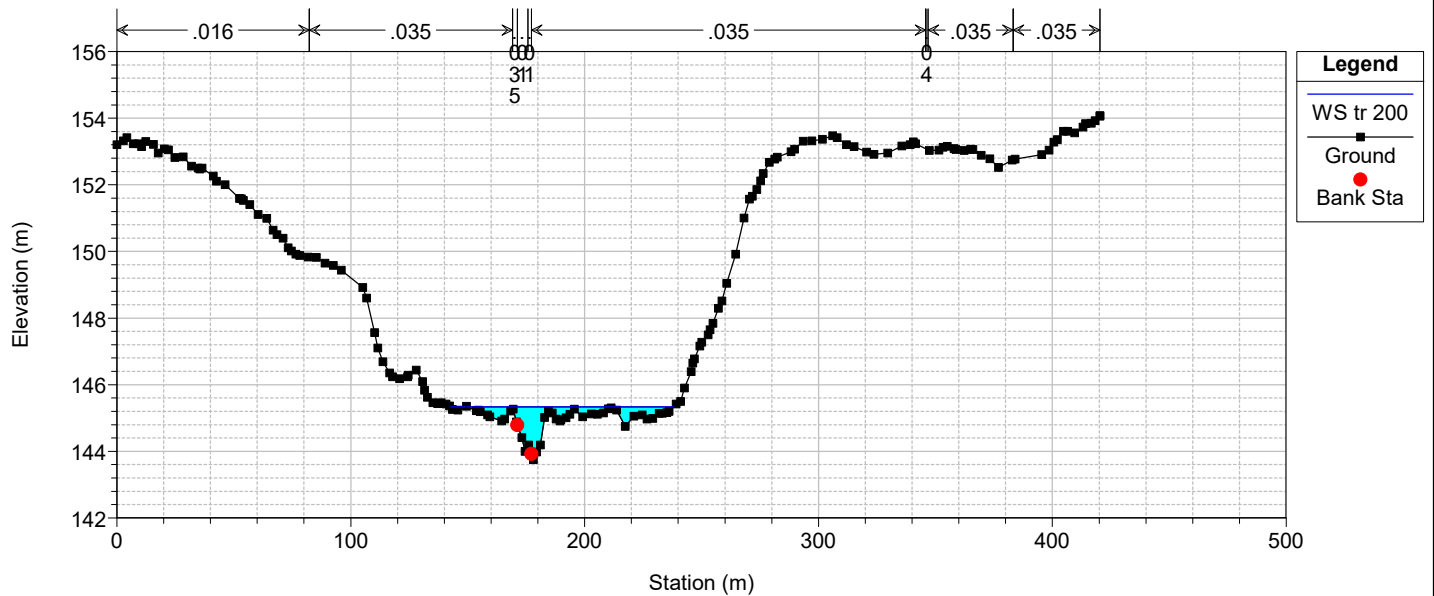
River = Rio San Giovanni Reach = Rio San Giovanni RS = 5181.341 SEZIONE 176 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

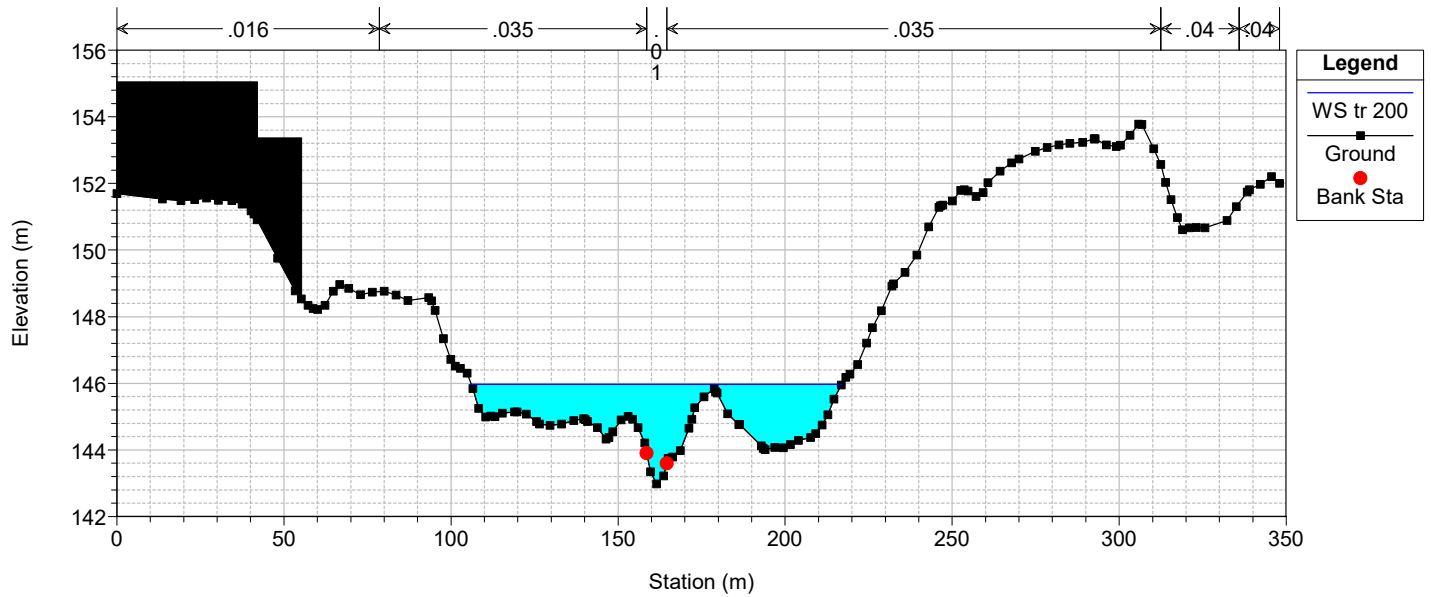
River = Rio San Giovanni Reach = Rio San Giovanni RS = 5130.800 SEZIONE 175 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

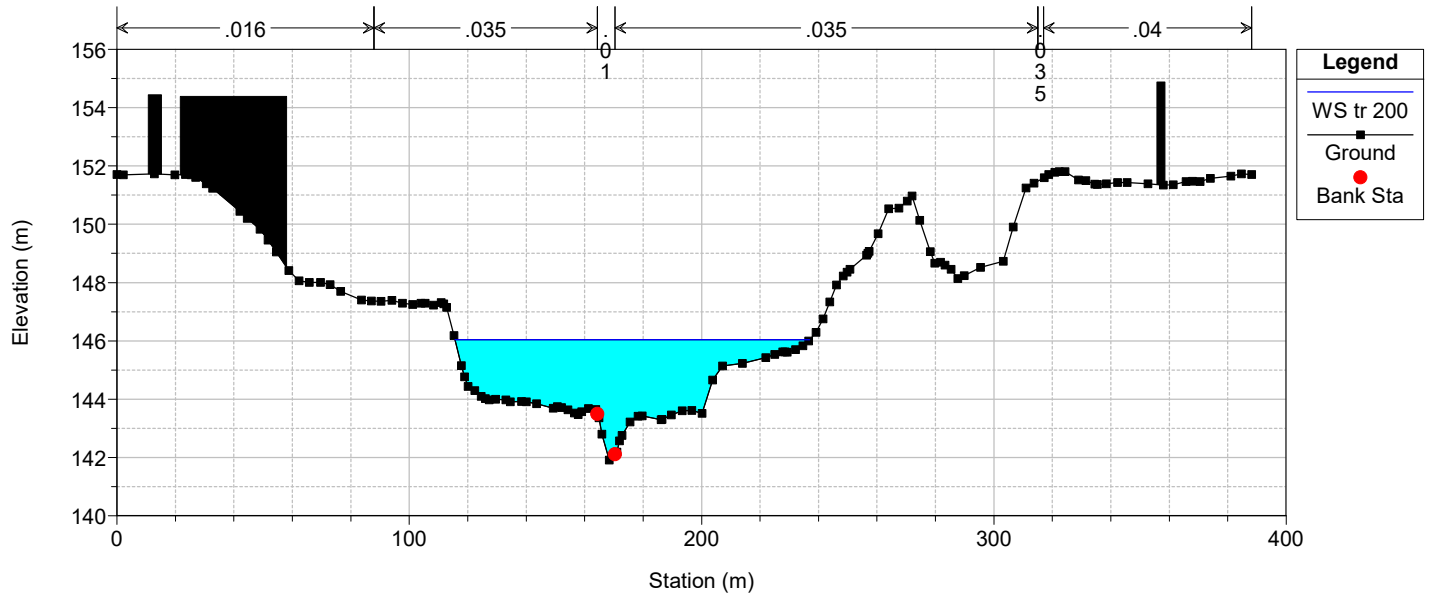
River = Rio San Giovanni Reach = Rio San Giovanni RS = 5075.290 SEZIONE 174 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

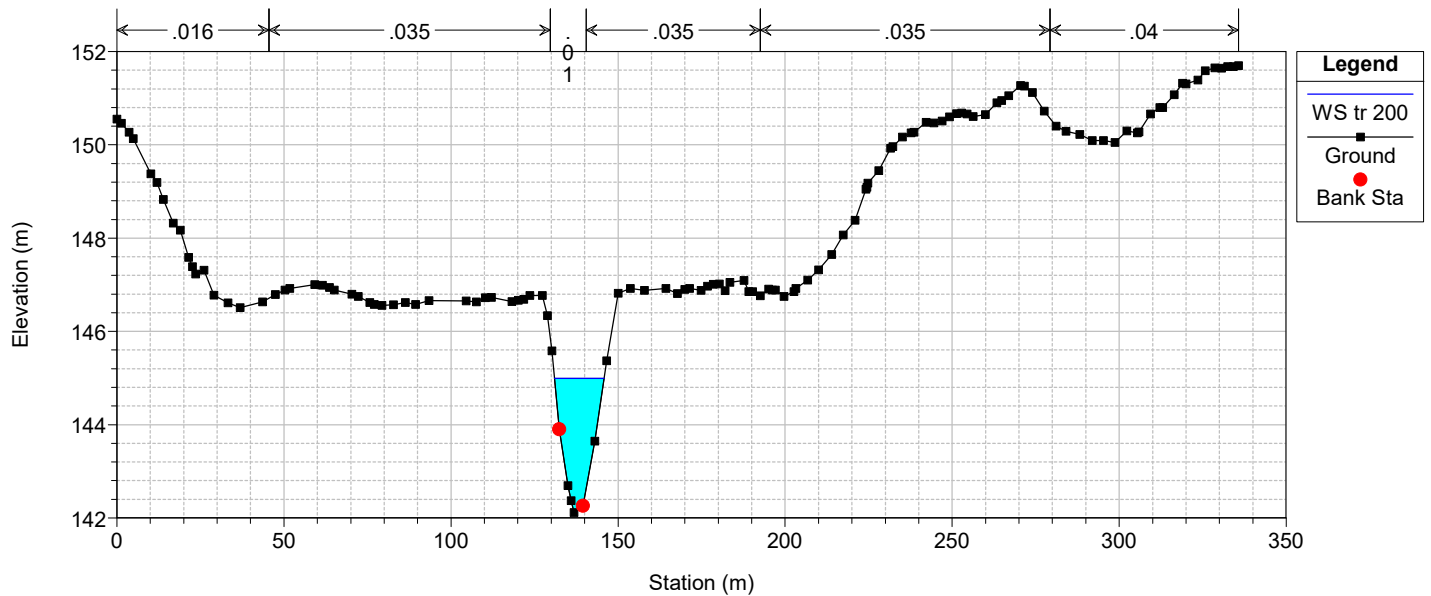
River = Rio San Giovanni Reach = Rio San Giovanni RS = 5021.049 SEZIONE 173 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

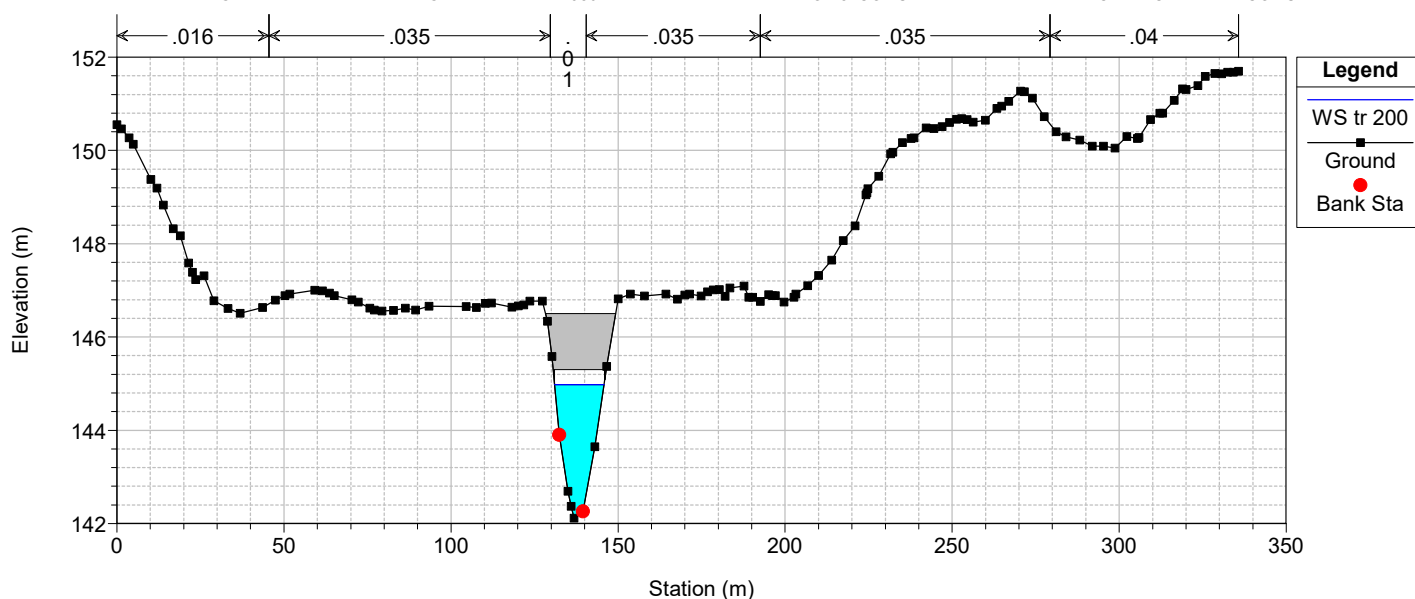
River = Rio San Giovanni Reach = Rio San Giovanni RS = 4984.191 SEZIONE 172 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

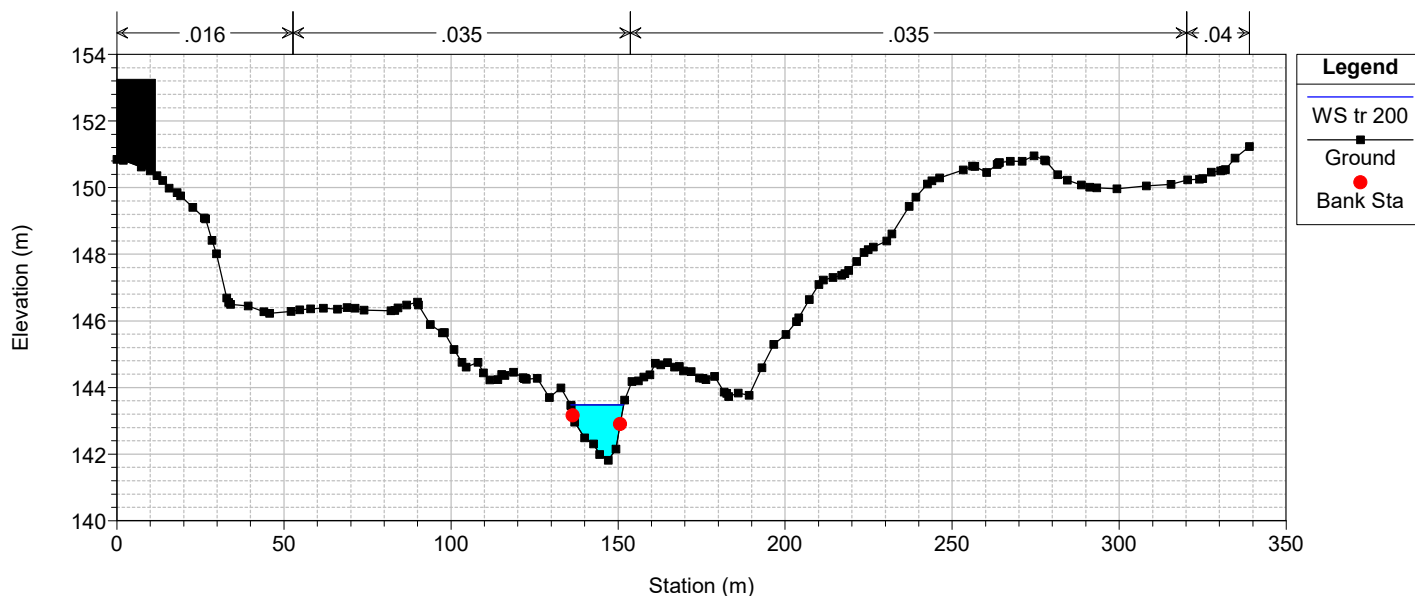
River = Rio San Giovanni Reach = Rio San Giovanni RS = 4980 BR ATTRAVERSAMENTO A8 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

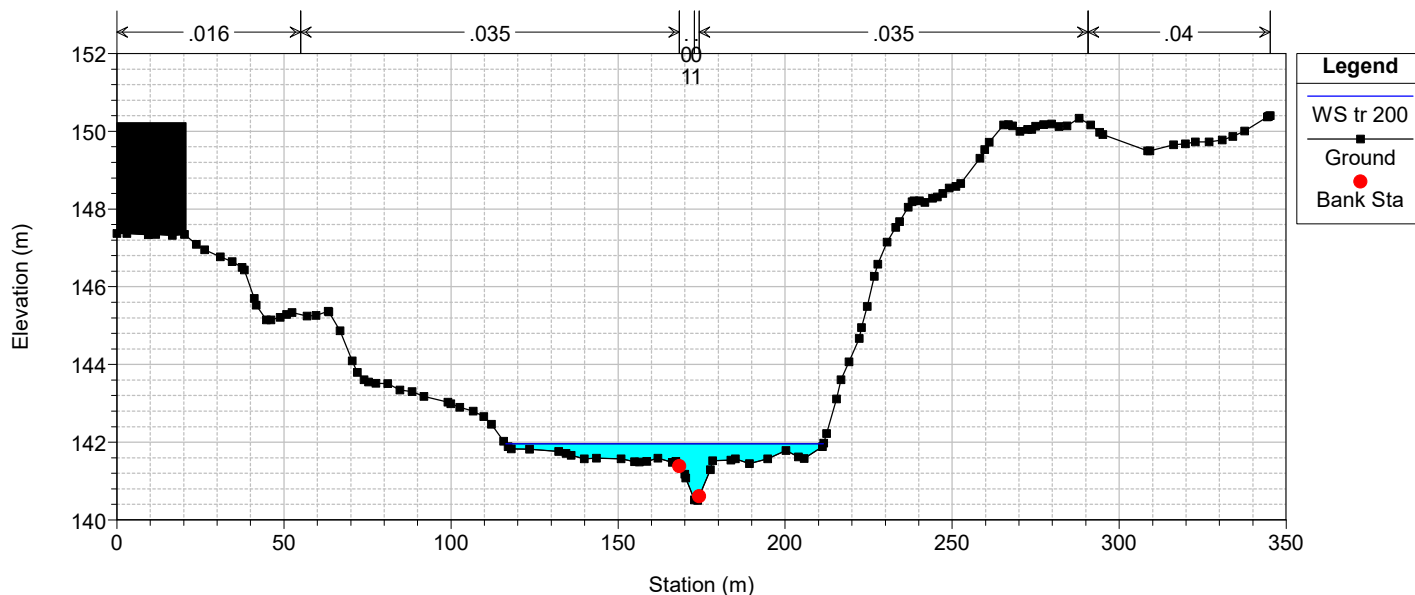
River = Rio San Giovanni Reach = Rio San Giovanni RS = 4974.263 SEZIONE 171 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

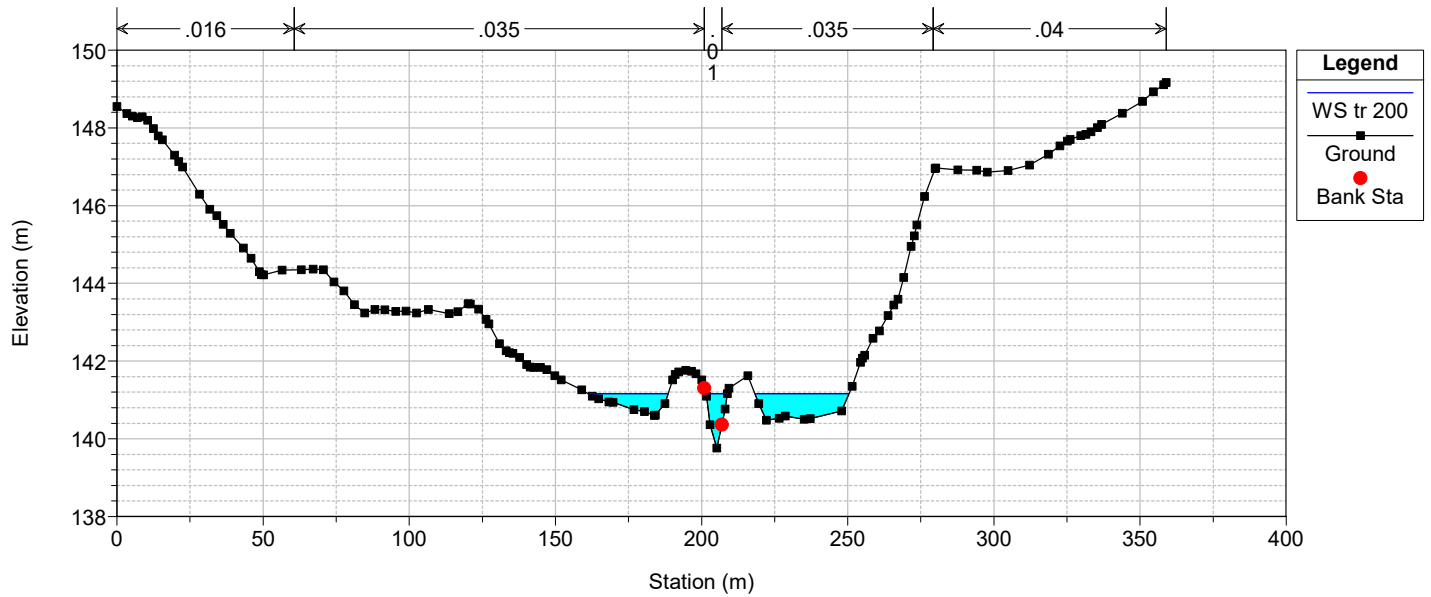
River = Rio San Giovanni Reach = Rio San Giovanni RS = 4933.428 SEZIONE 170 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

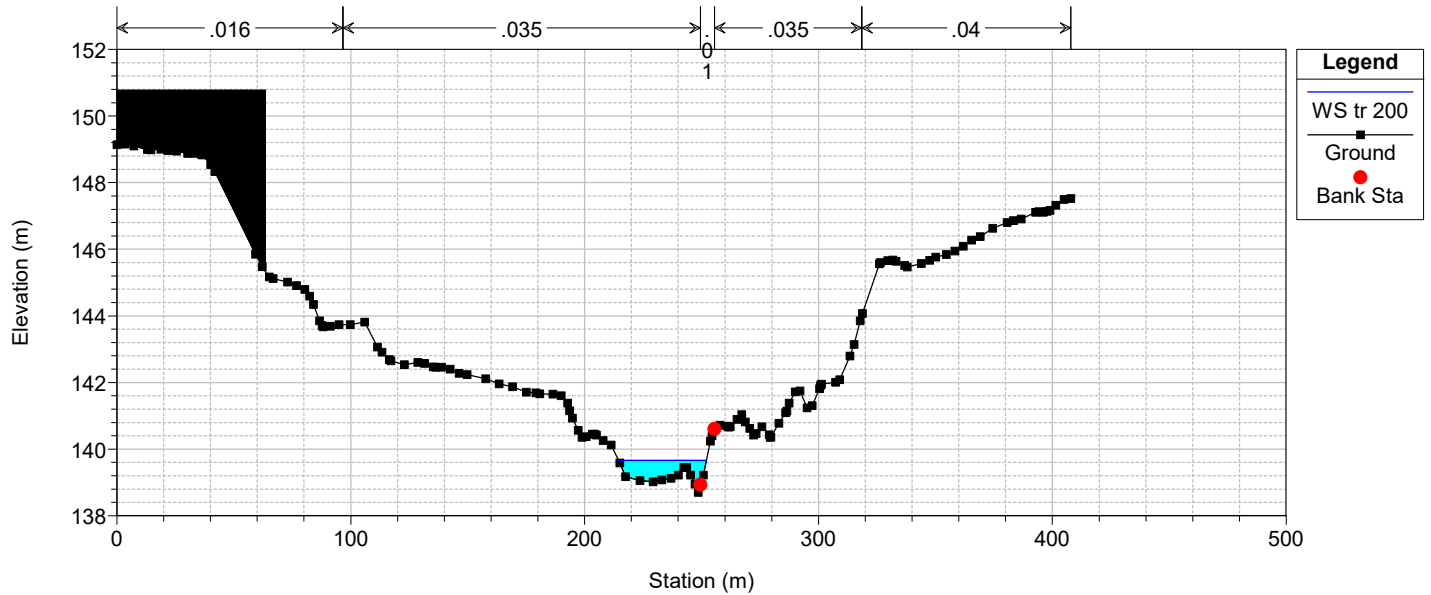
River = Rio San Giovanni Reach = Rio San Giovanni RS = 4852.006 SEZIONE 169 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

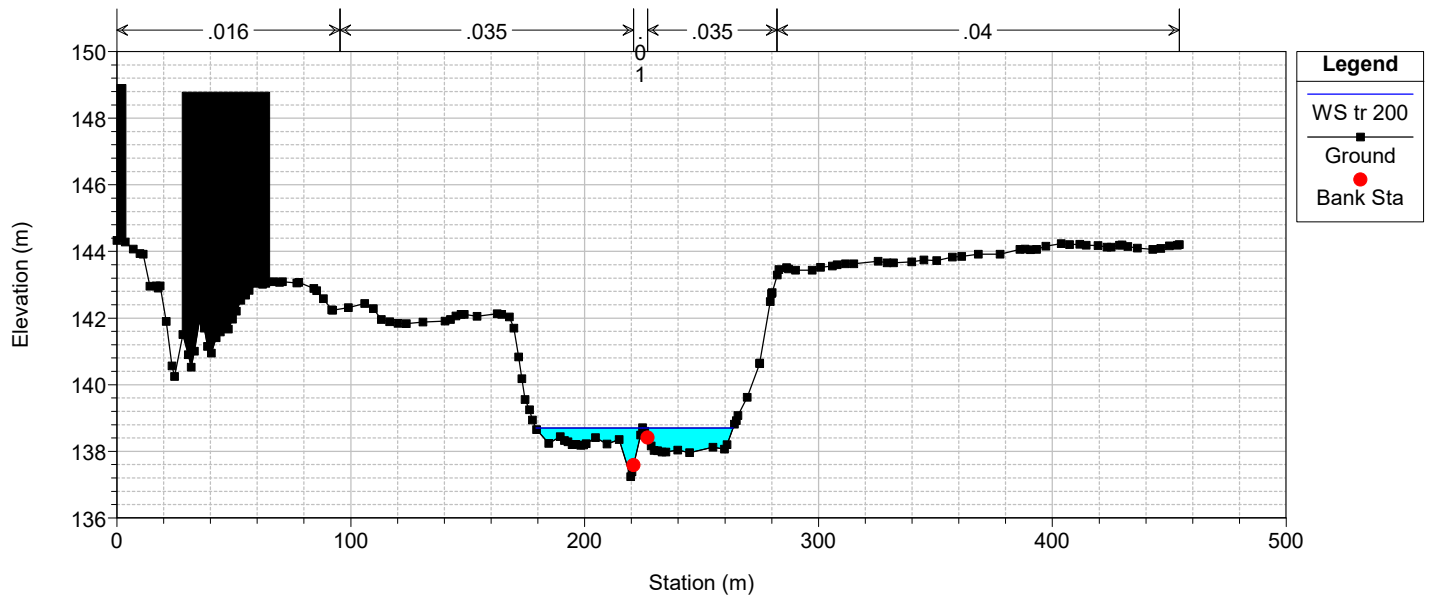
River = Rio San Giovanni Reach = Rio San Giovanni RS = 4777.650 SEZIONE 168 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

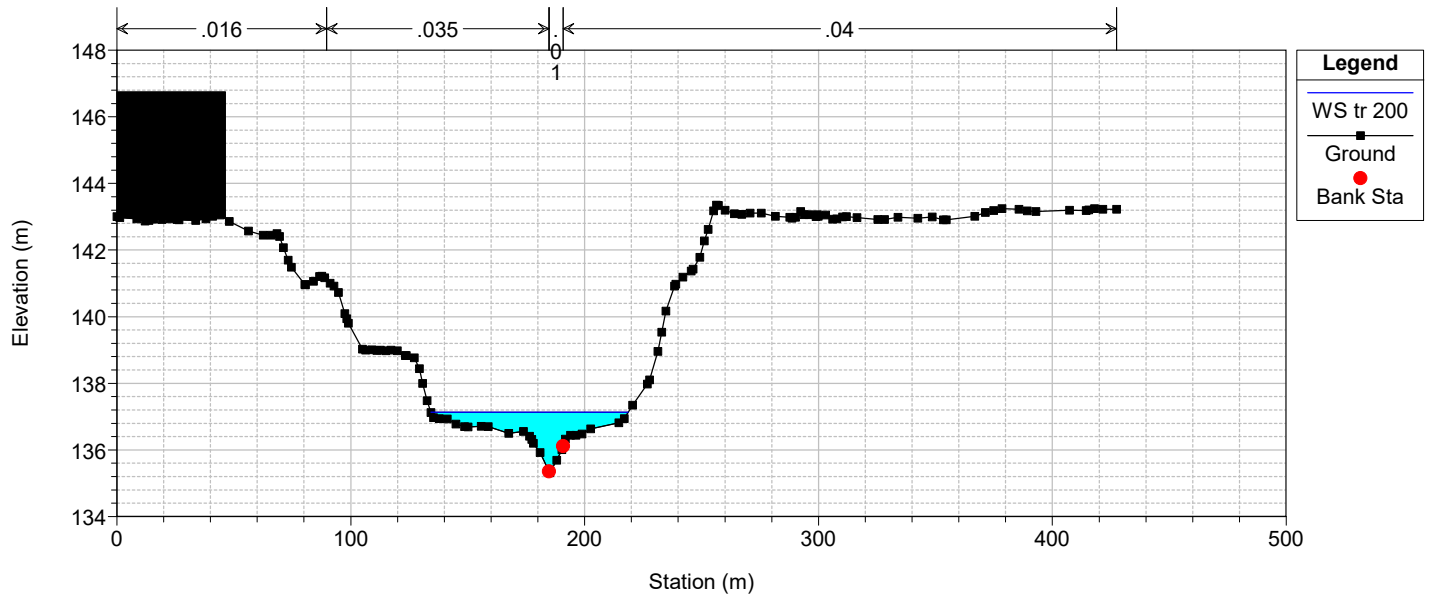
River = Rio San Giovanni Reach = Rio San Giovanni RS = 4675.018 SEZIONE 167 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

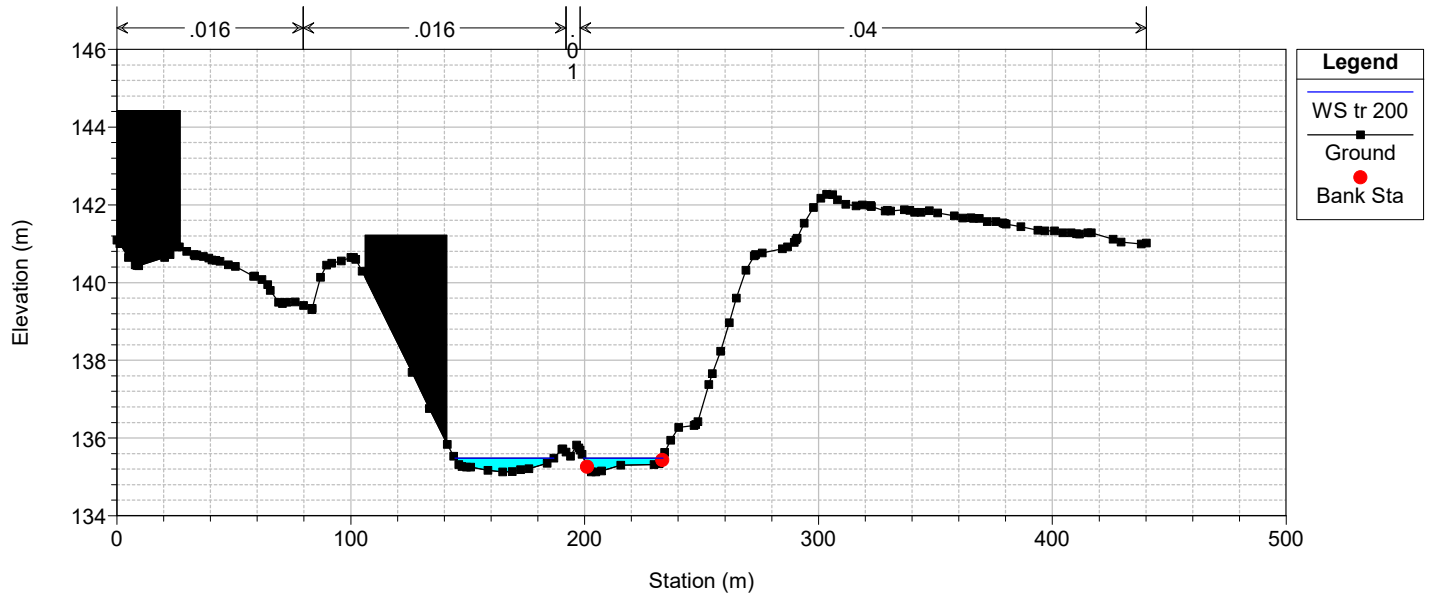
River = Rio San Giovanni Reach = Rio San Giovanni RS = 4586.810 SEZIONE 166 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

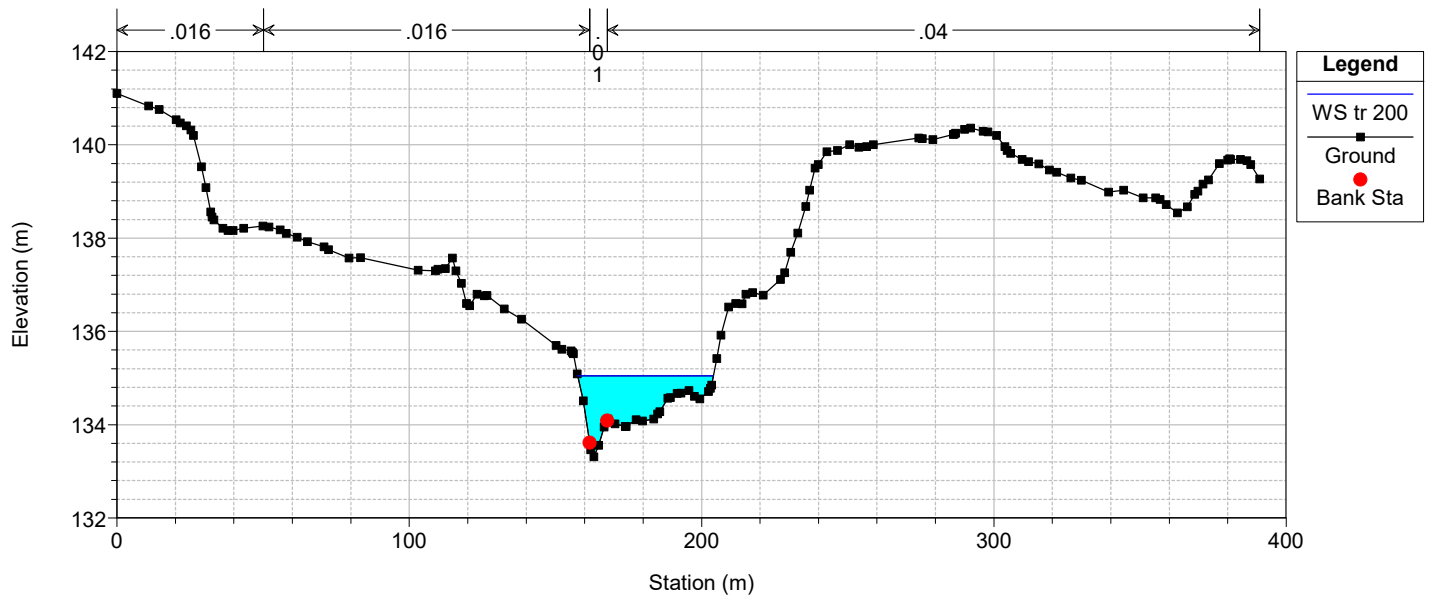
River = Rio San Giovanni Reach = Rio San Giovanni RS = 4508.690 SEZIONE 165 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

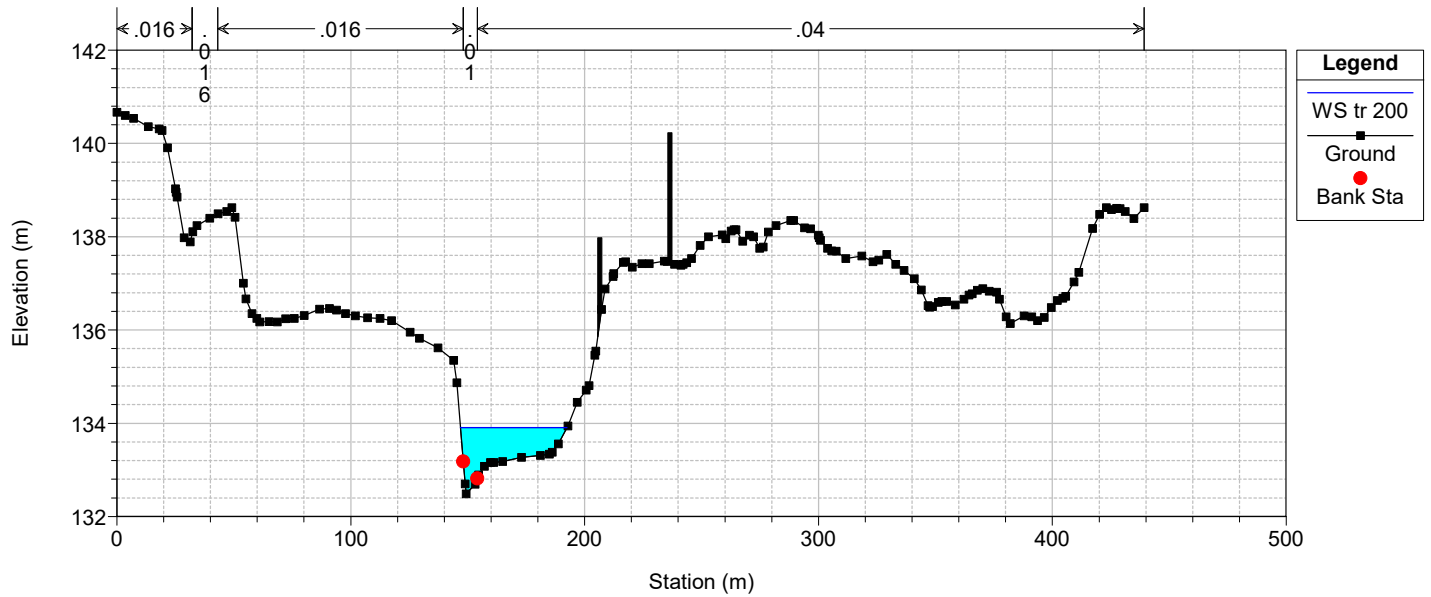
River = Rio San Giovanni Reach = Rio San Giovanni RS = 4427.632 SEZIONE 164 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

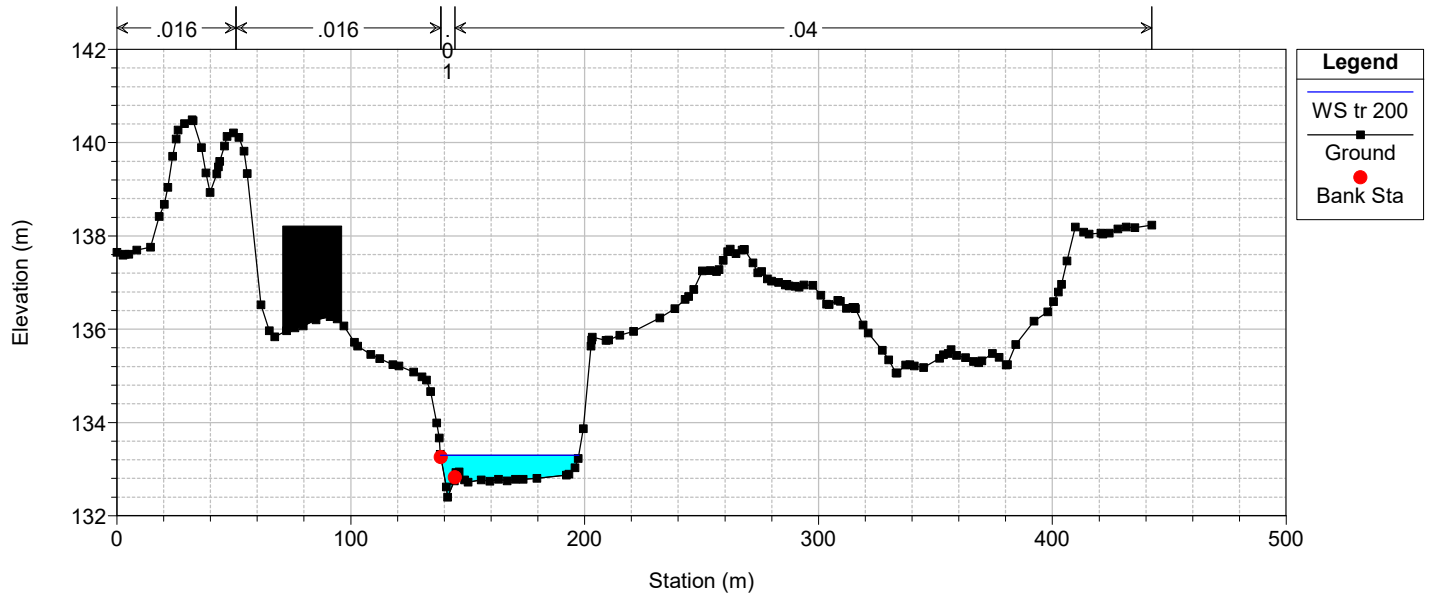
River = Rio San Giovanni Reach = Rio San Giovanni RS = 4356.111 SEZIONE 163 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

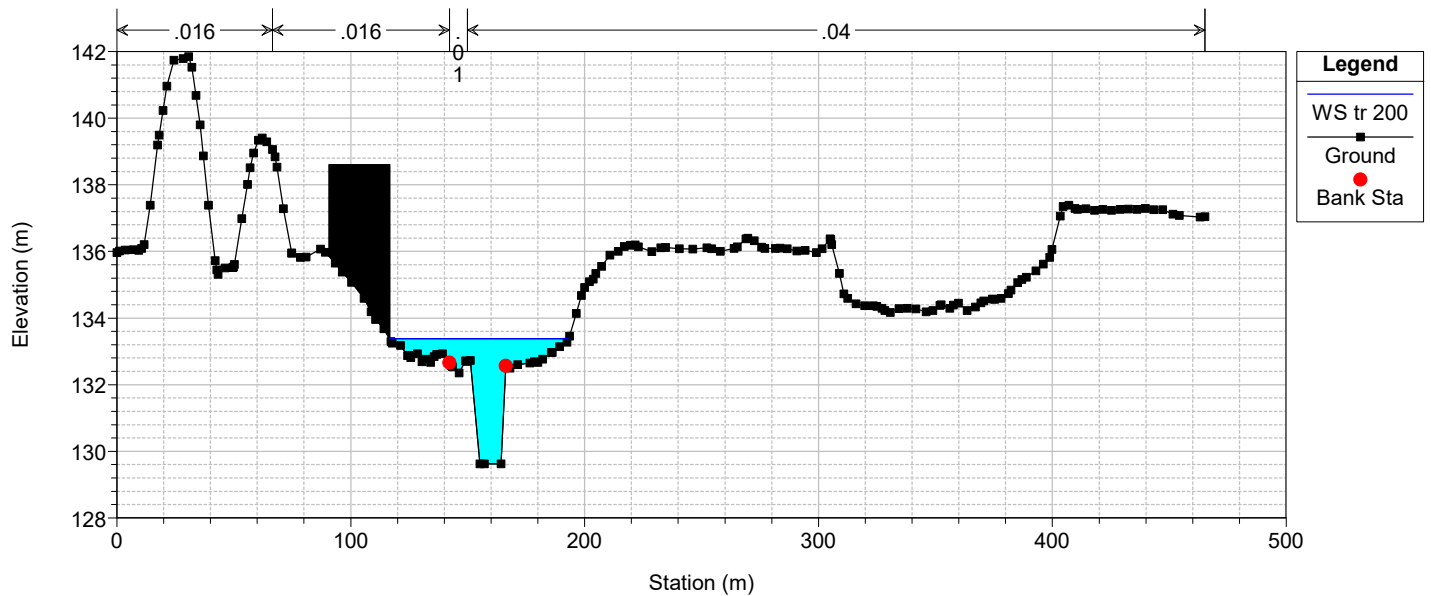
River = Rio San Giovanni Reach = Rio San Giovanni RS = 4290.175 SEZIONE 162 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

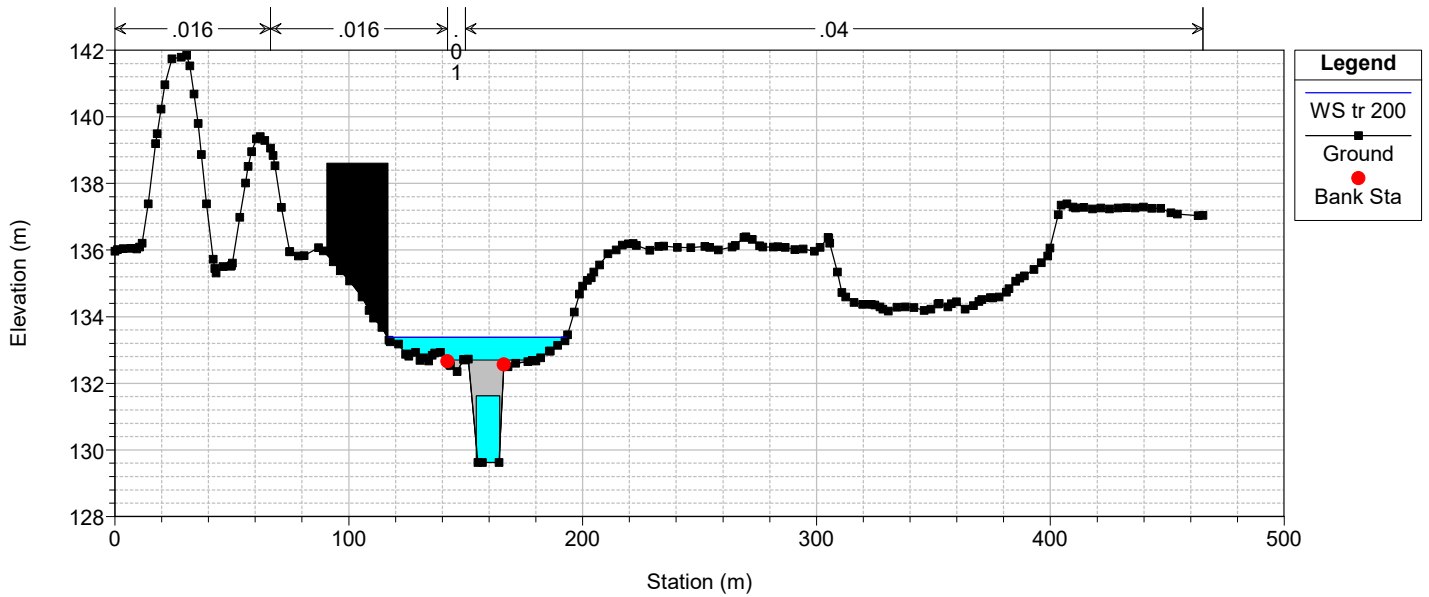
River = Rio San Giovanni Reach = Rio San Giovanni RS = 4246.225 SEZIONE 161 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

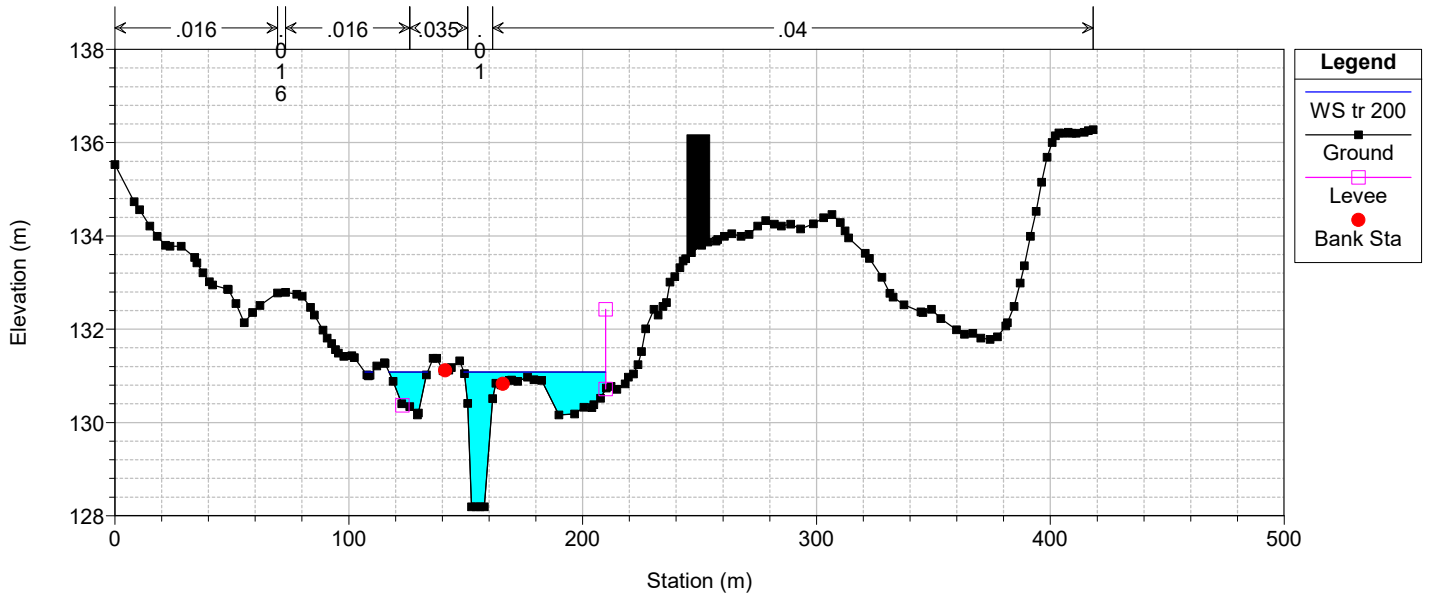
River = Rio San Giovanni Reach = Rio San Giovanni RS = 4150 Culv ATTRAVERSAMENTO A9 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

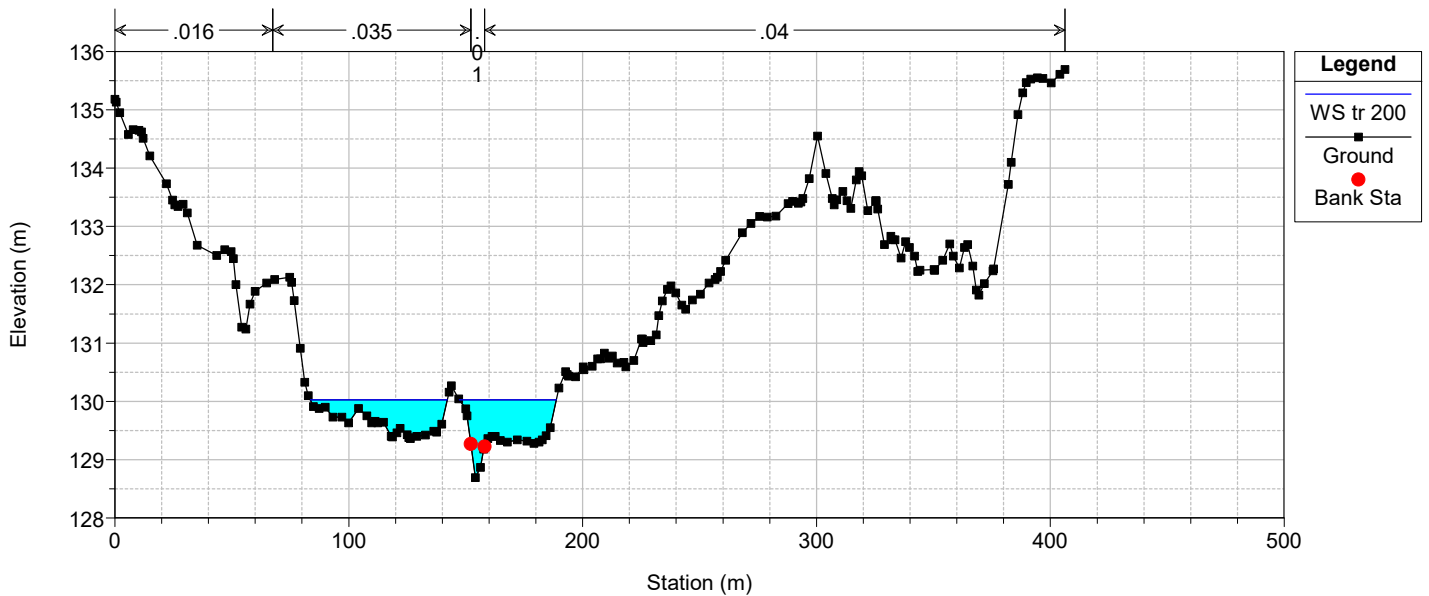
River = Rio San Giovanni Reach = Rio San Giovanni RS = 4094.831 SEZIONE 160 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

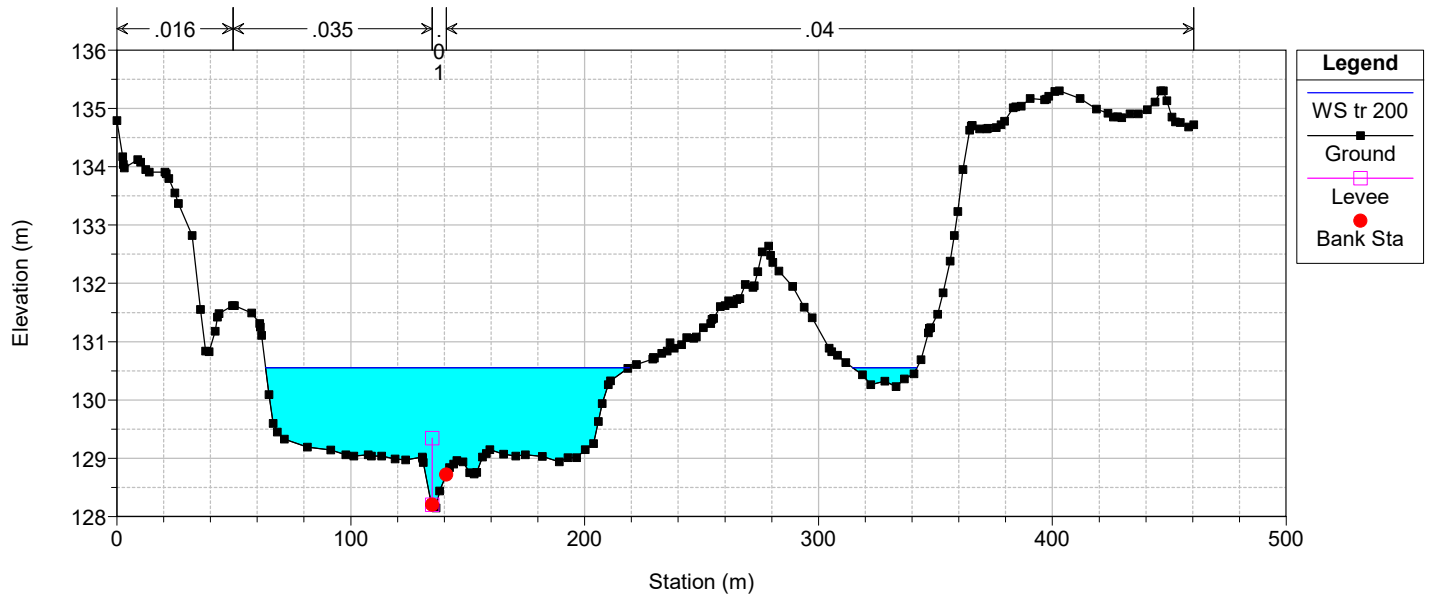
River = Rio San Giovanni Reach = Rio San Giovanni RS = 4046.195 SEZIONE 159 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

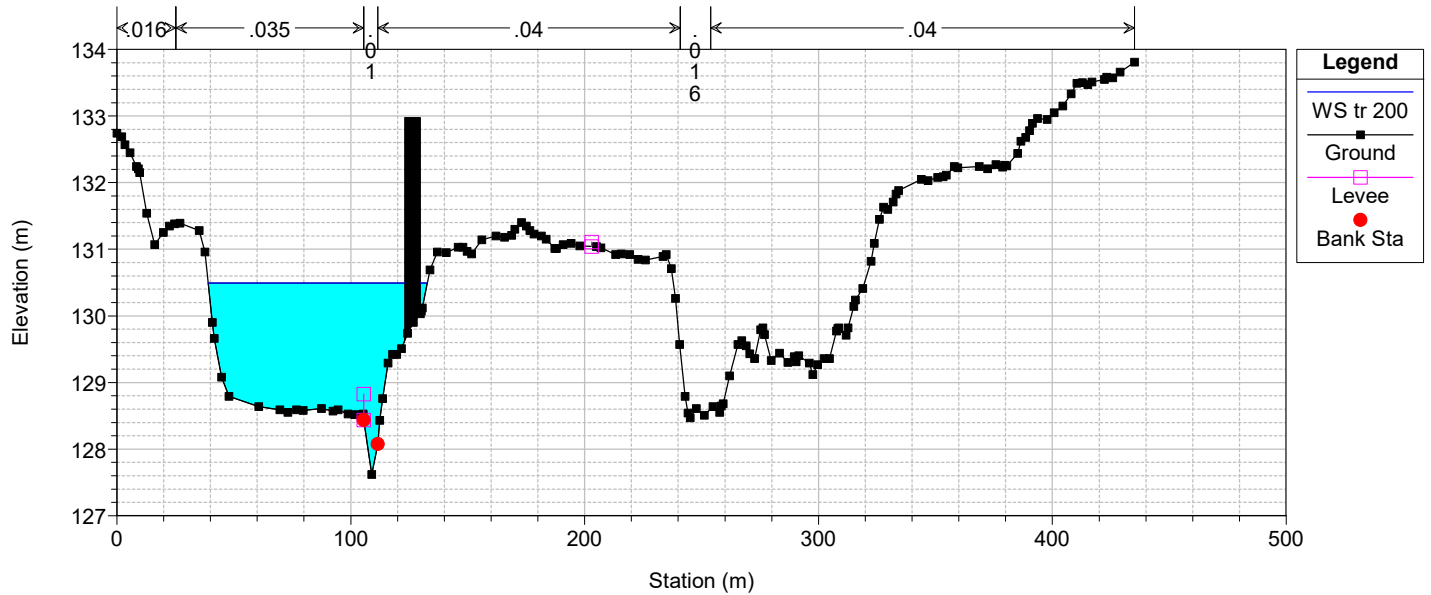
River = Rio San Giovanni Reach = Rio San Giovanni RS = 4007.603 SEZIONE 158 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

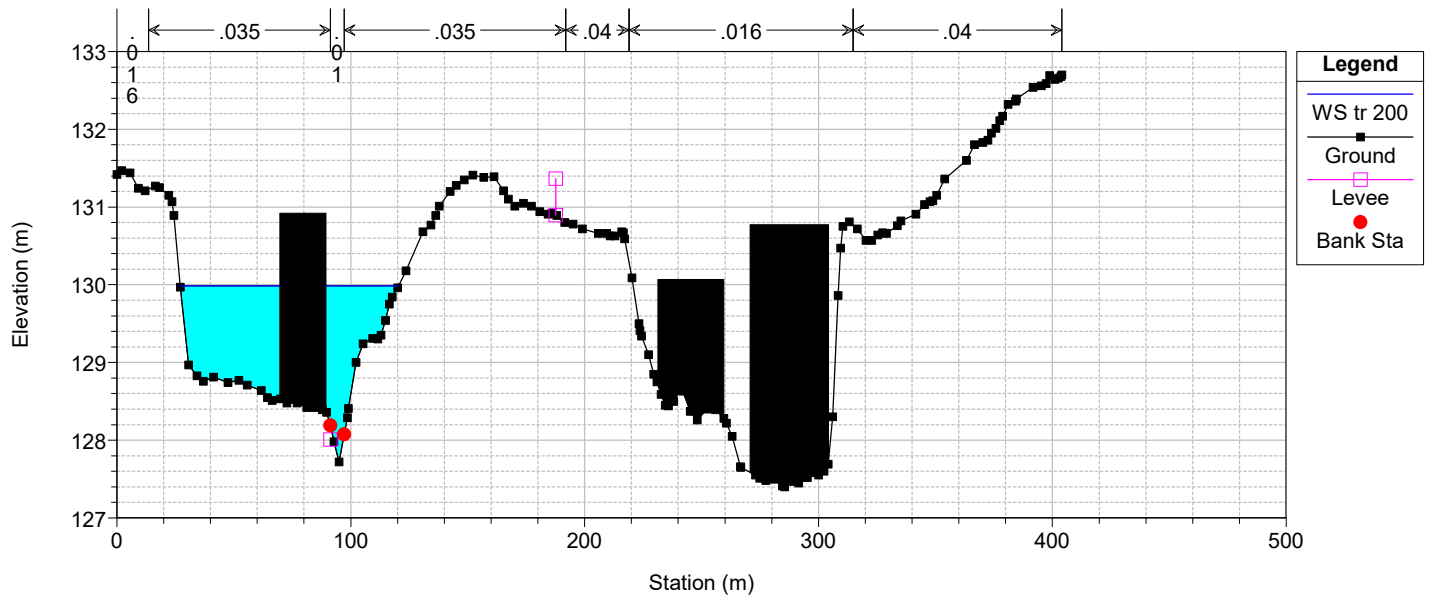
River = Rio San Giovanni Reach = Rio San Giovanni RS = 3956.263 SEZIONE 157 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

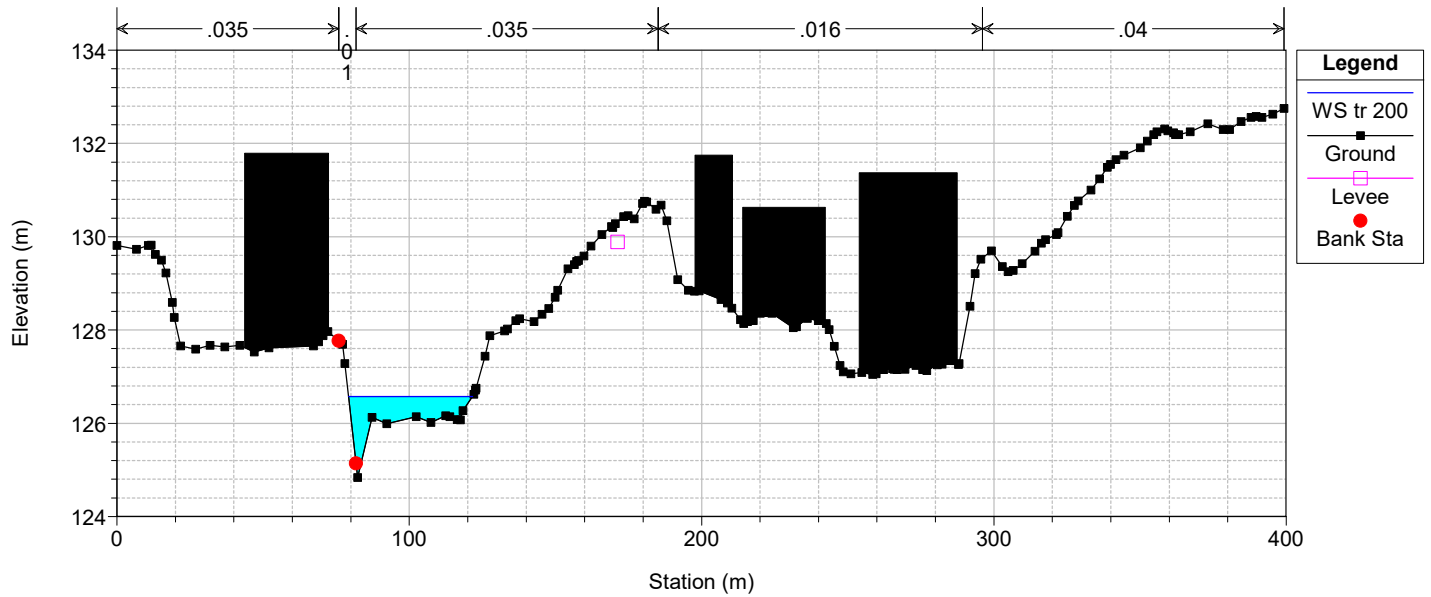
River = Rio San Giovanni Reach = Rio San Giovanni RS = 3922.604 SEZIONE 156 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

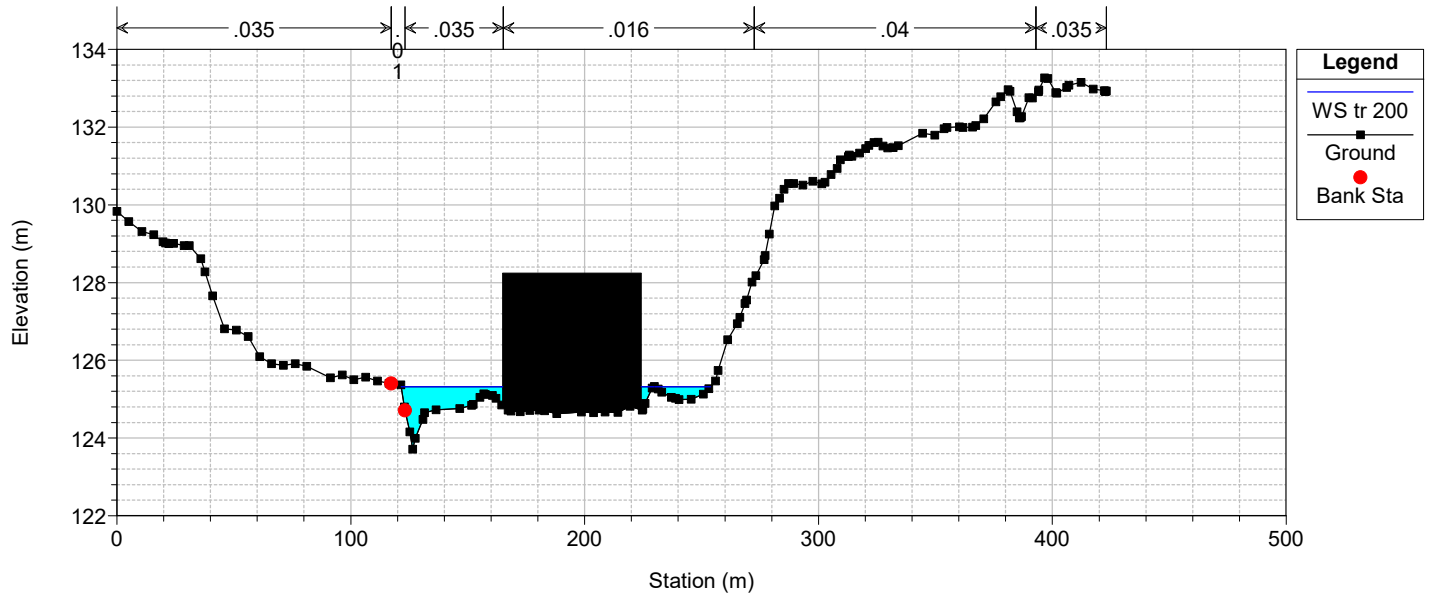
River = Rio San Giovanni Reach = Rio San Giovanni RS = 3822.429 SEZIONE 155 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

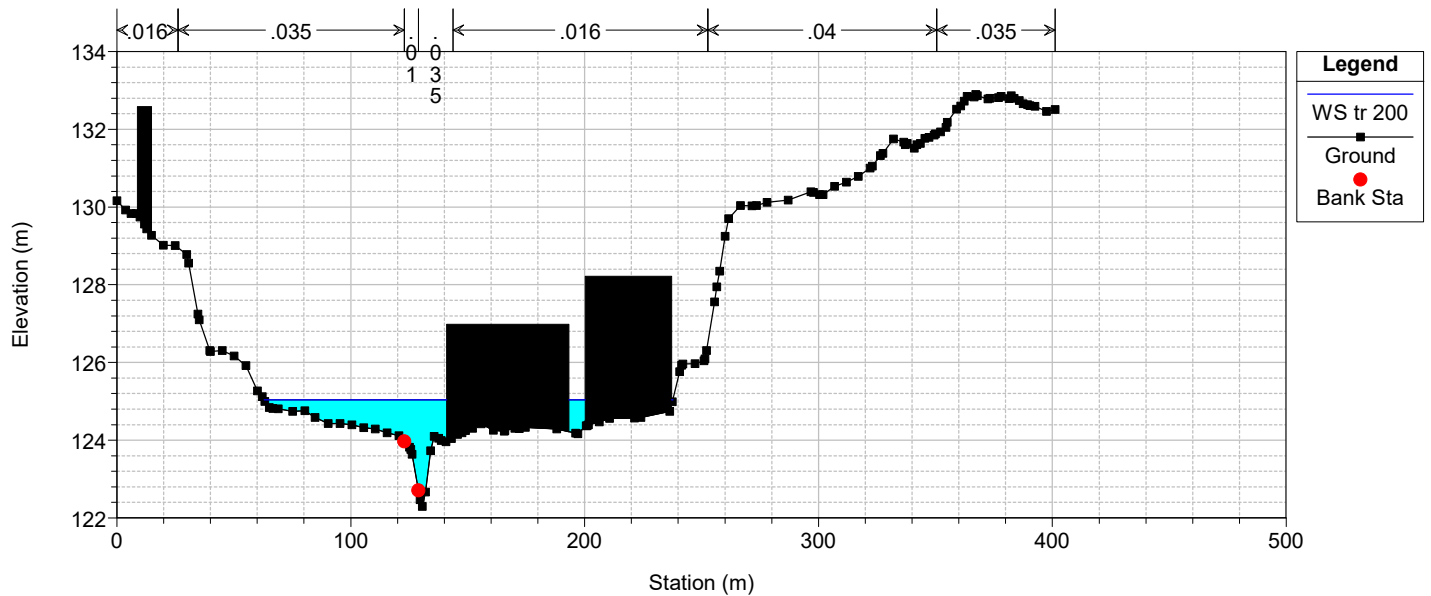
River = Rio San Giovanni Reach = Rio San Giovanni RS = 3730.957 SEZIONE 154 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

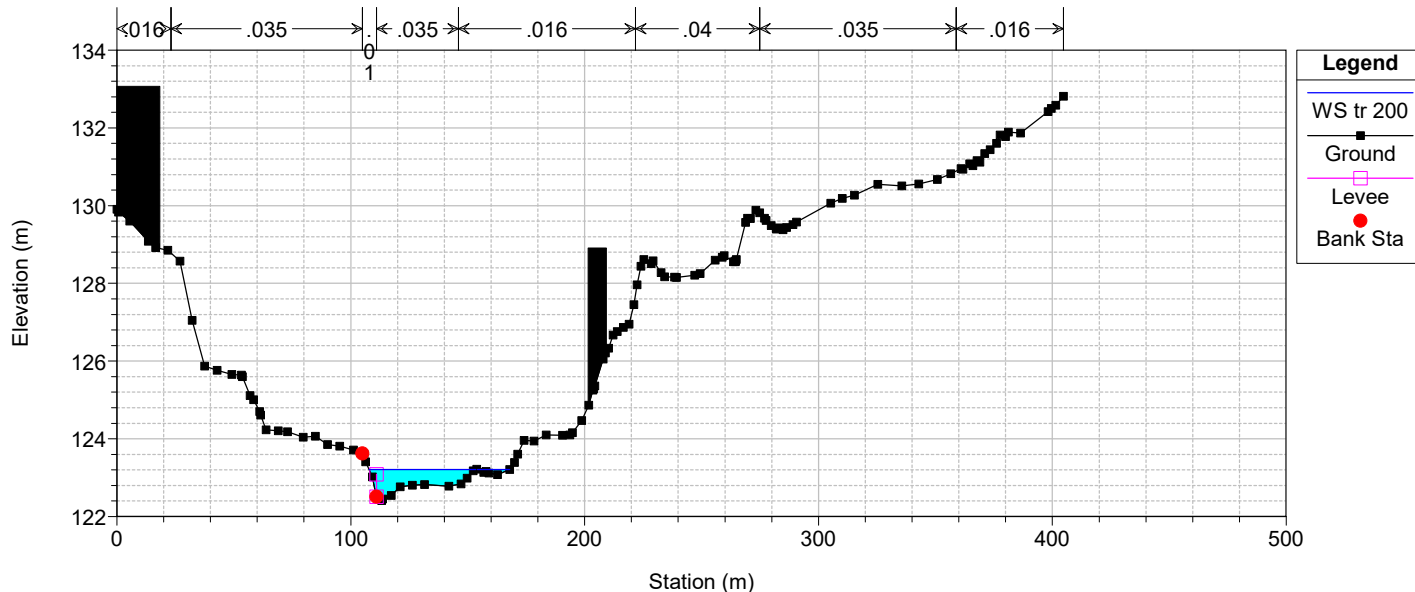
River = Rio San Giovanni Reach = Rio San Giovanni RS = 3666.542 SEZIONE 153 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

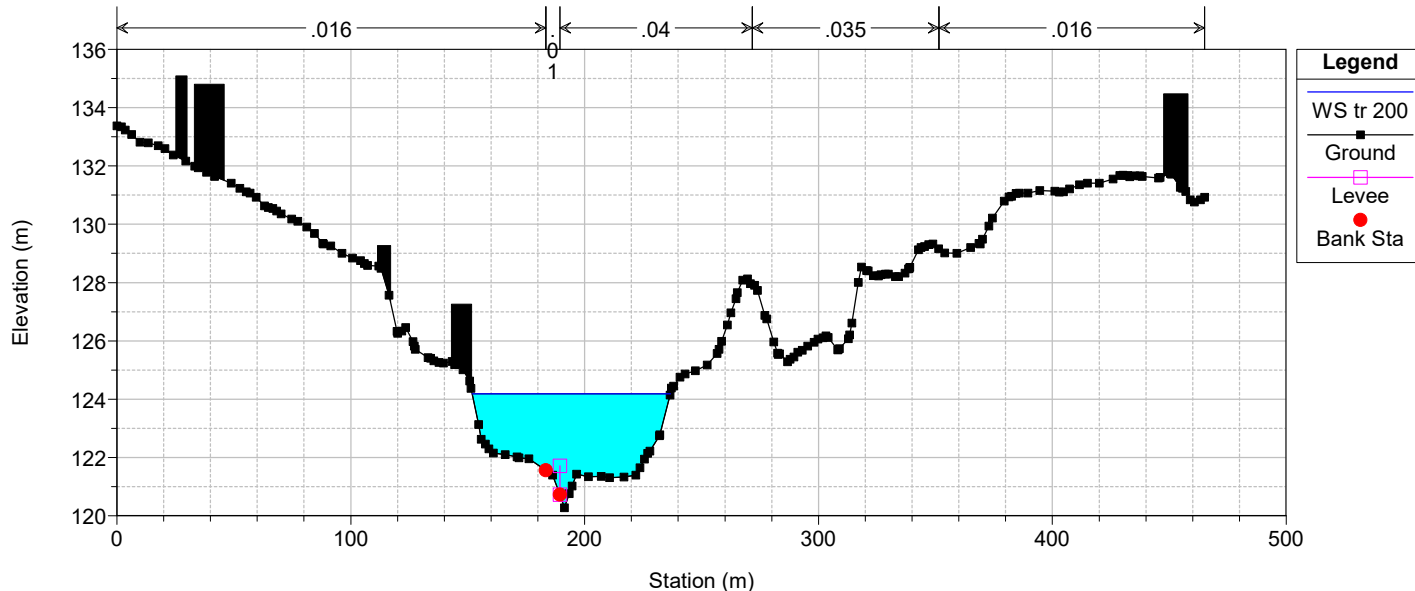
River = Rio San Giovanni Reach = Rio San Giovanni RS = 3614.743 SEZIONE 152 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

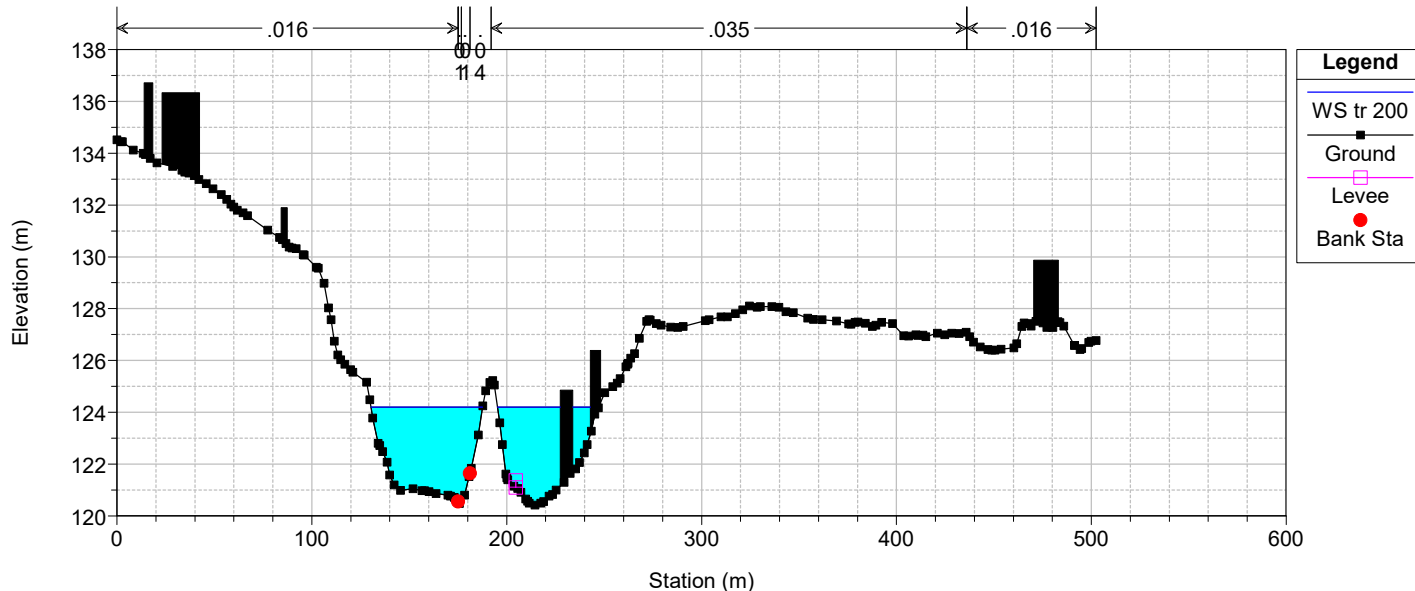
River = Rio San Giovanni Reach = Rio San Giovanni RS = 3526.530 SEZIONE 151 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

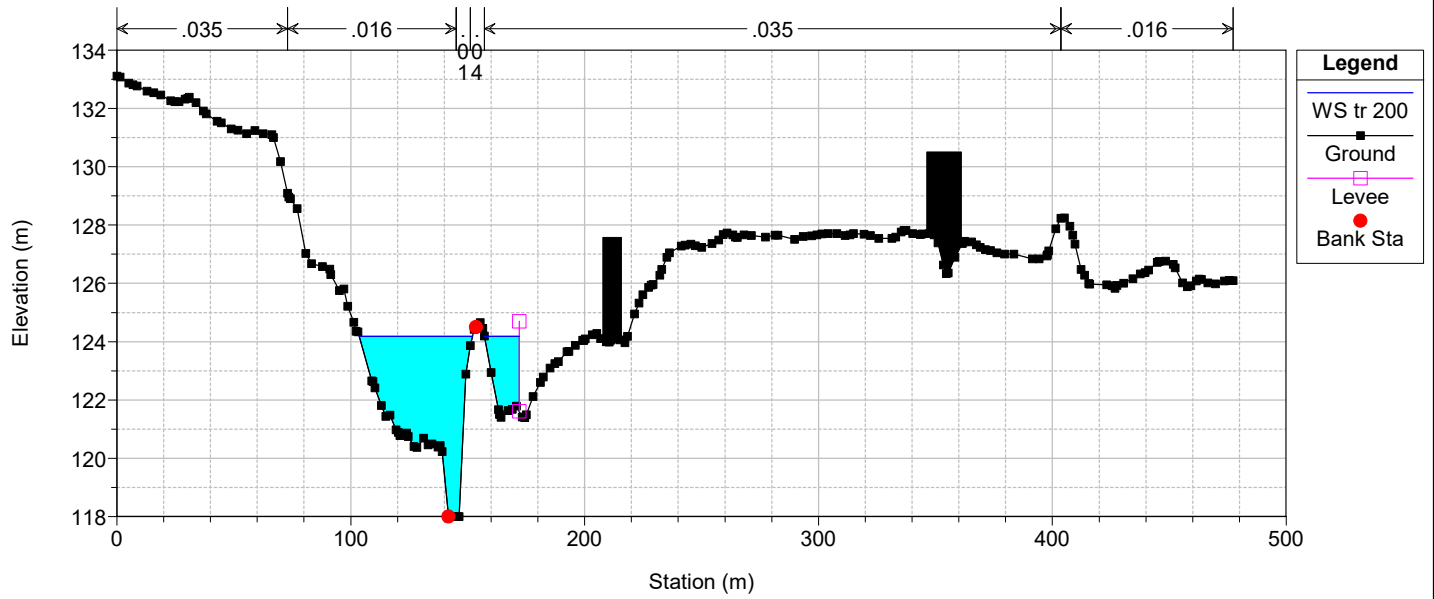
River = Rio San Giovanni Reach = Rio San Giovanni RS = 3434.478 SEZIONE 150 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

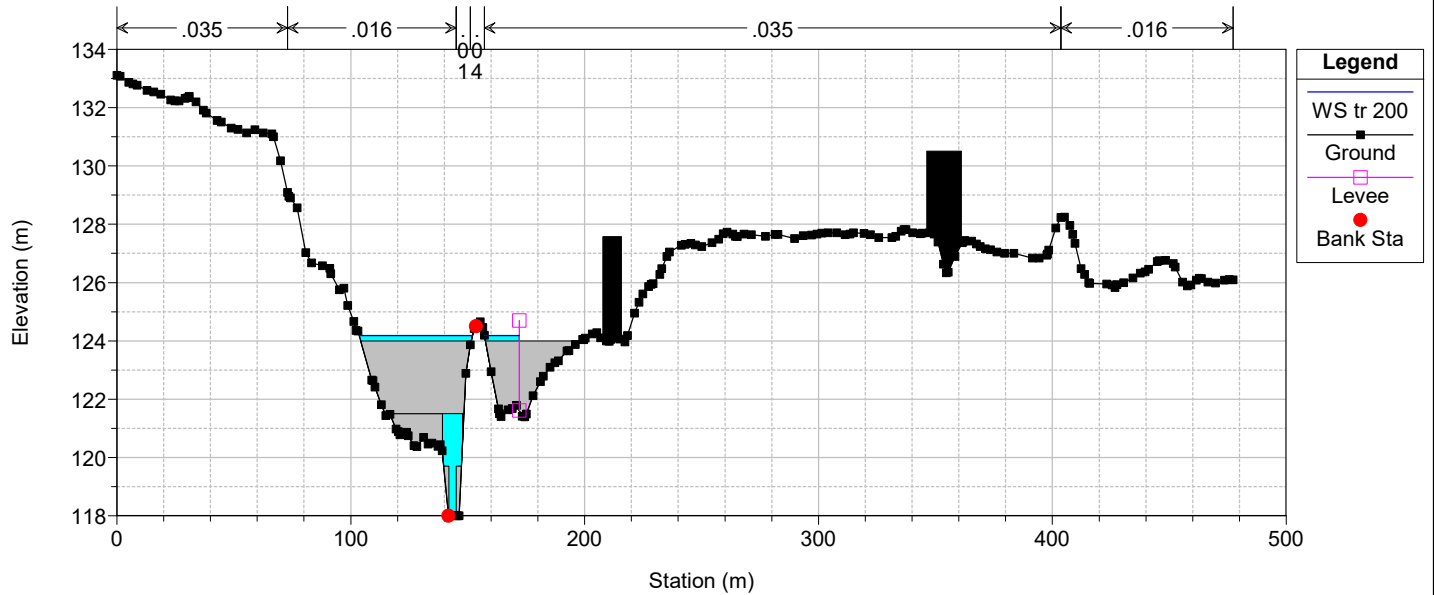
River = Rio San Giovanni Reach = Rio San Giovanni RS = 3391.041 SEZIONE 149 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

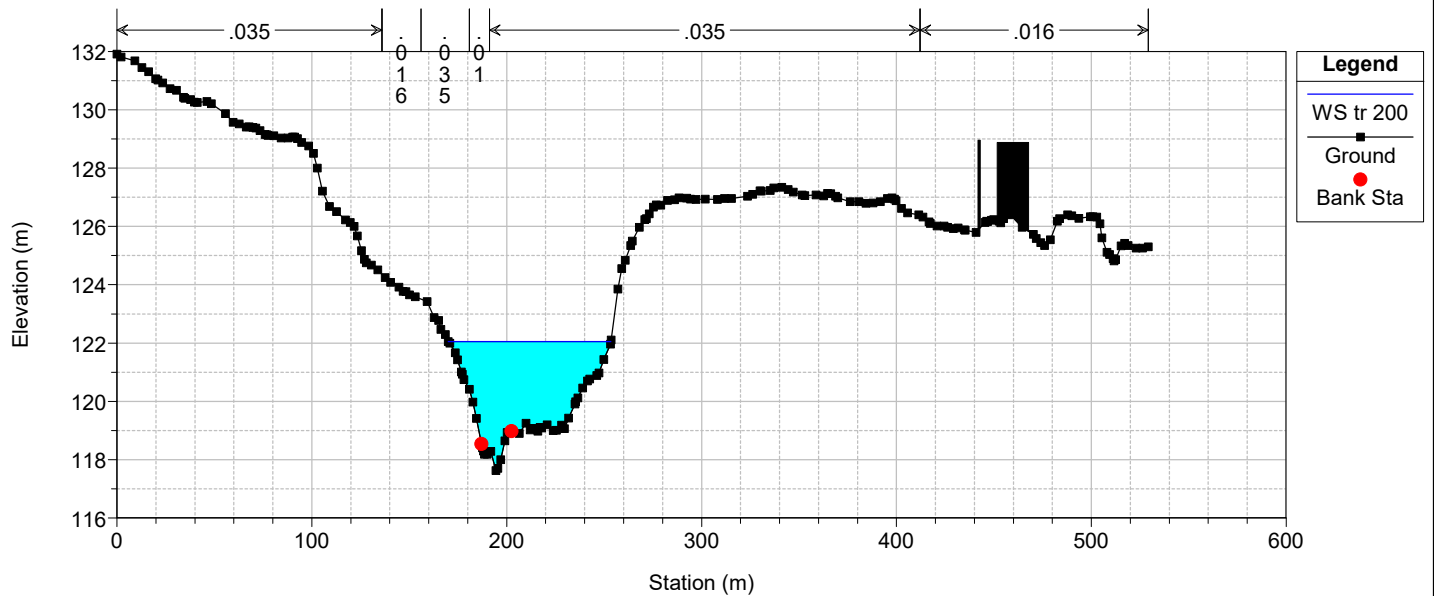
River = Rio San Giovanni Reach = Rio San Giovanni RS = 3350 BR ATTRAVERSAMENTO A10 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

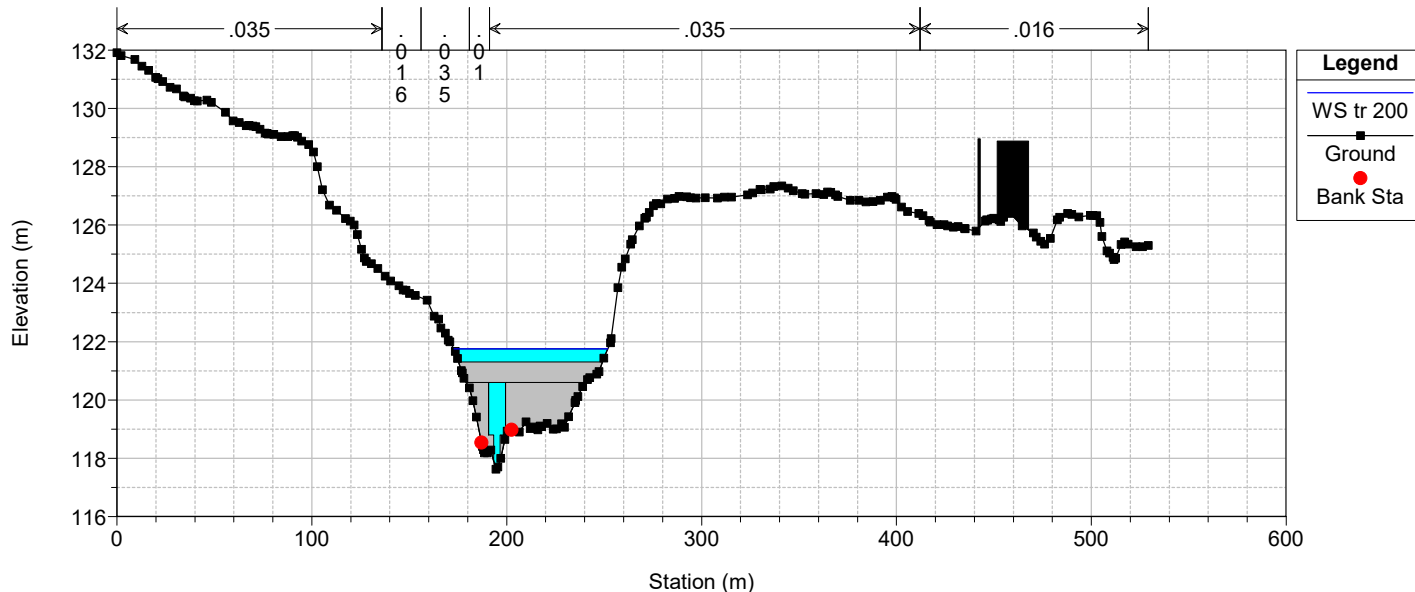
River = Rio San Giovanni Reach = Rio San Giovanni RS = 3308.381 SEZIONE 148 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

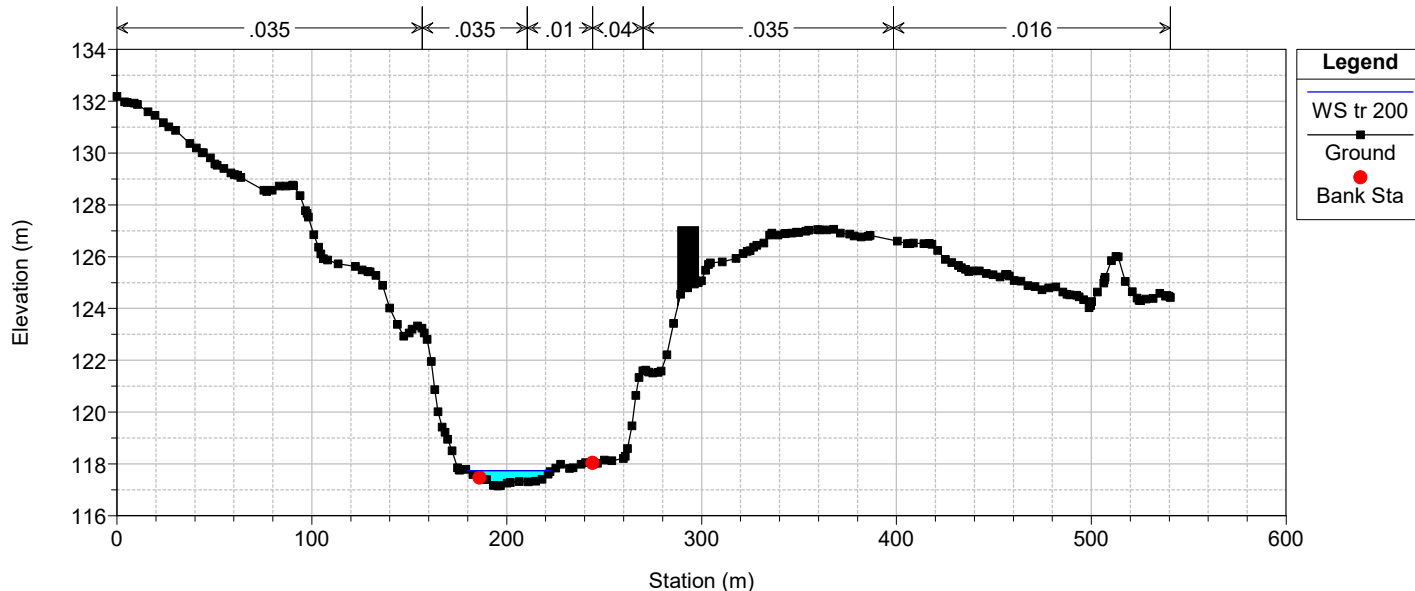
River = Rio San Giovanni Reach = Rio San Giovanni RS = 3280 BR ATTRAVERSAMENTO A11 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

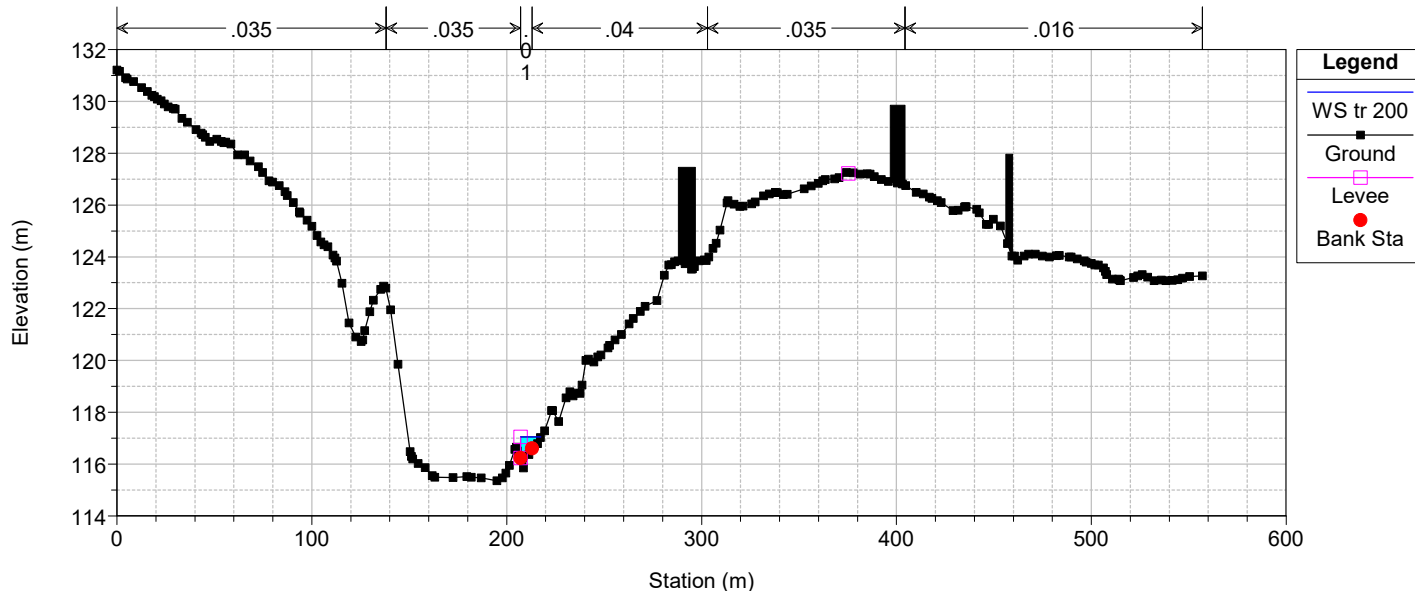
River = Rio San Giovanni Reach = Rio San Giovanni RS = 3260.807 SEZIONE 147 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

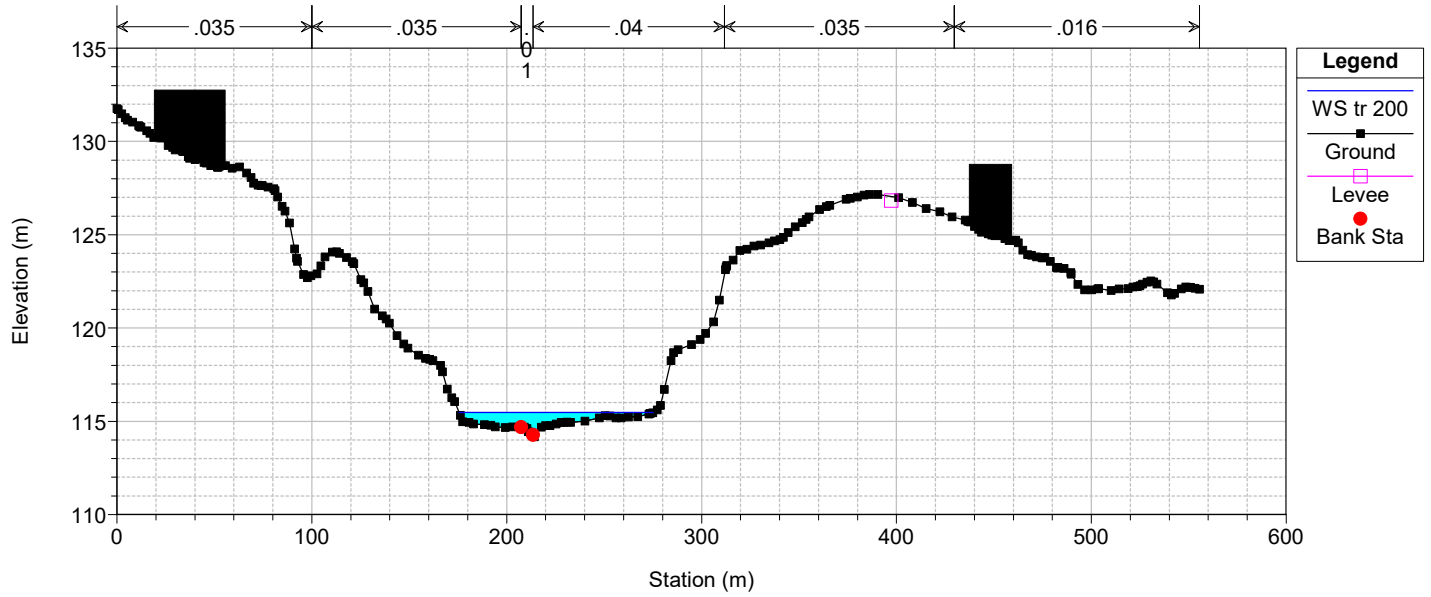
River = Rio San Giovanni Reach = Rio San Giovanni RS = 3158.768 SEZIONE 146 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

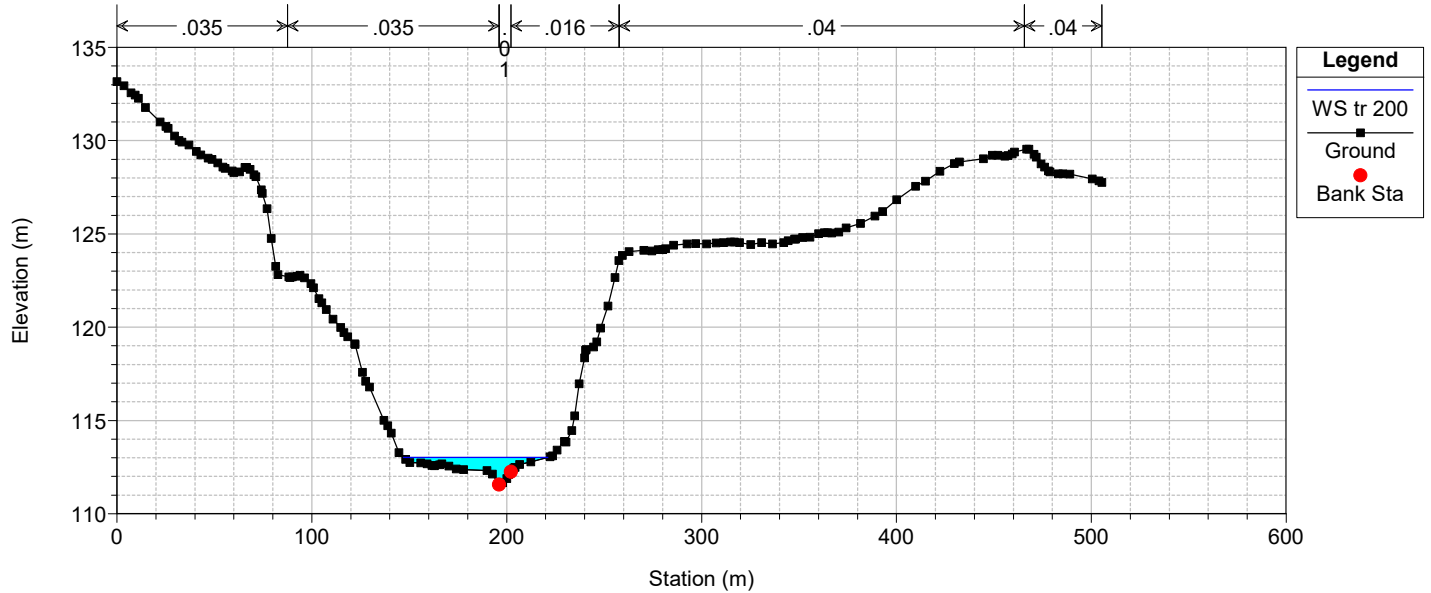
River = Rio San Giovanni Reach = Rio San Giovanni RS = 3095.443 SEZIONE 145 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

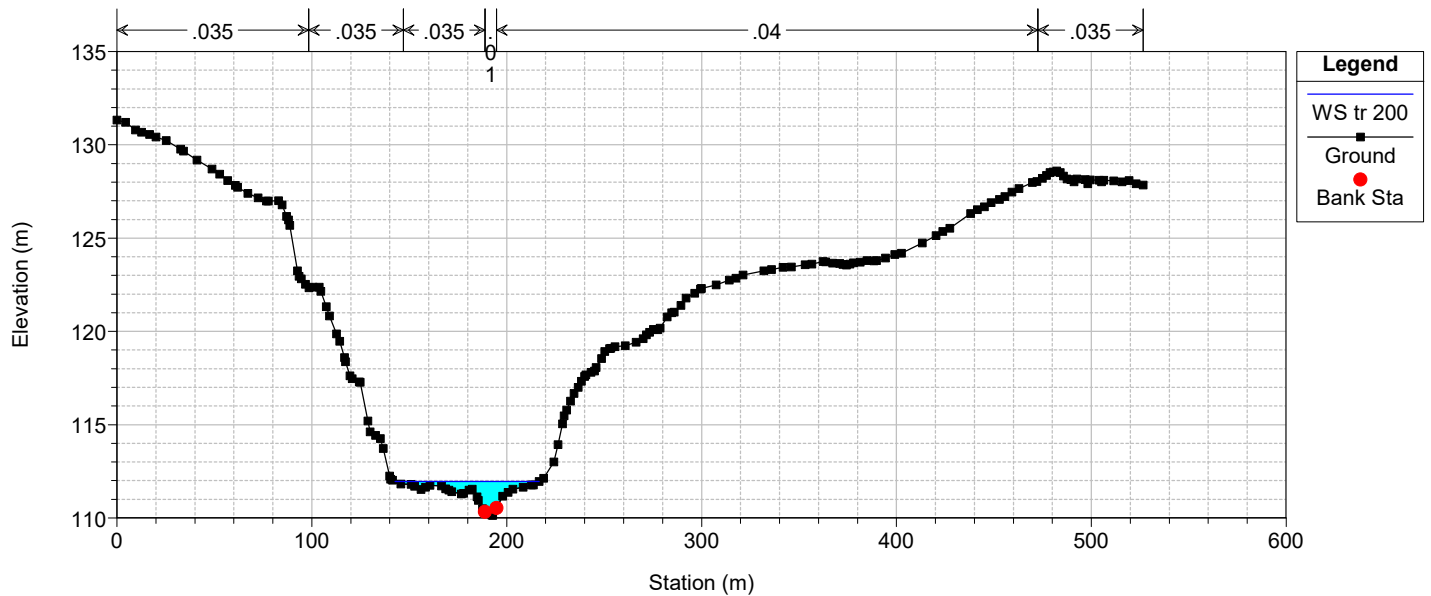
River = Rio San Giovanni Reach = Rio San Giovanni RS = 2895.087 SEZIONE 144 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

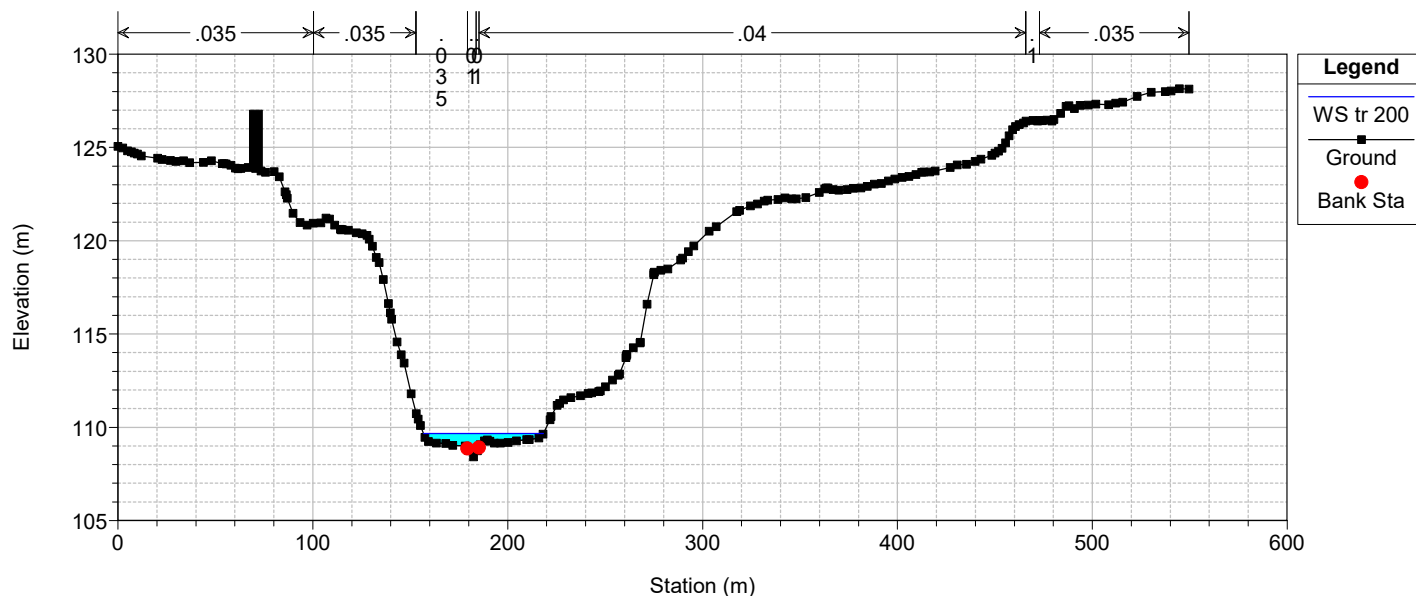
River = Rio San Giovanni Reach = Rio San Giovanni RS = 2768.166 SEZIONE 143 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

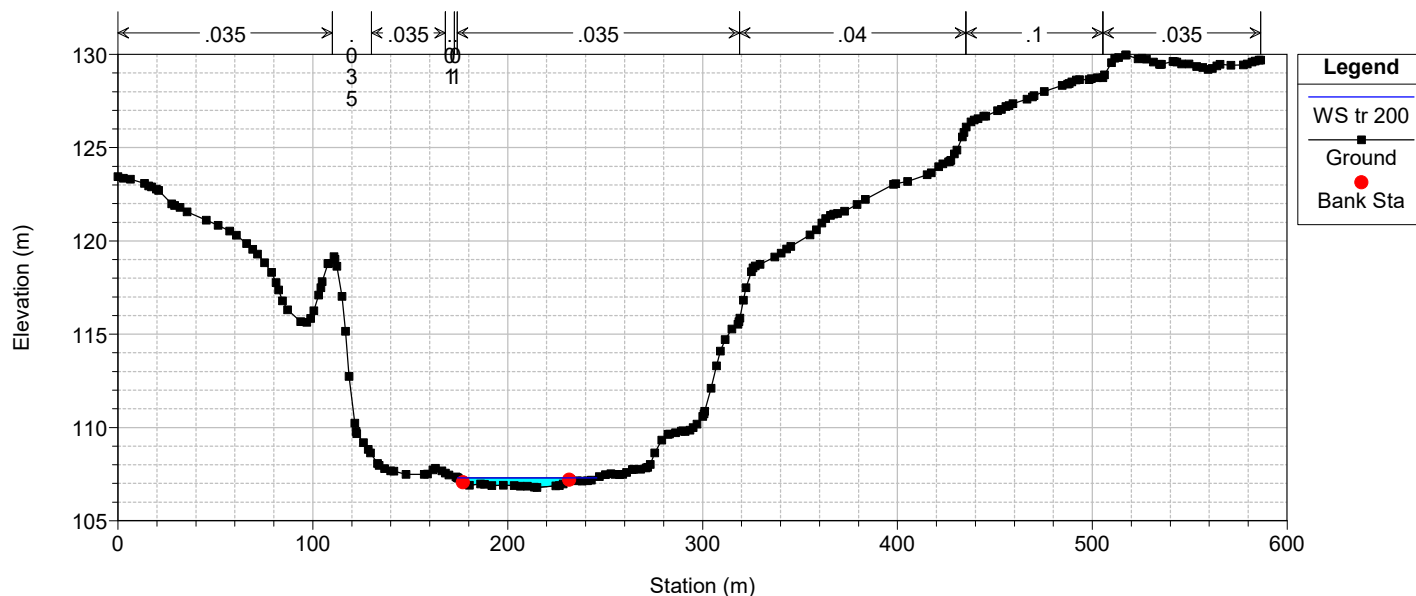
River = Rio San Giovanni Reach = Rio San Giovanni RS = 2648.329 SEZIONE 142 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

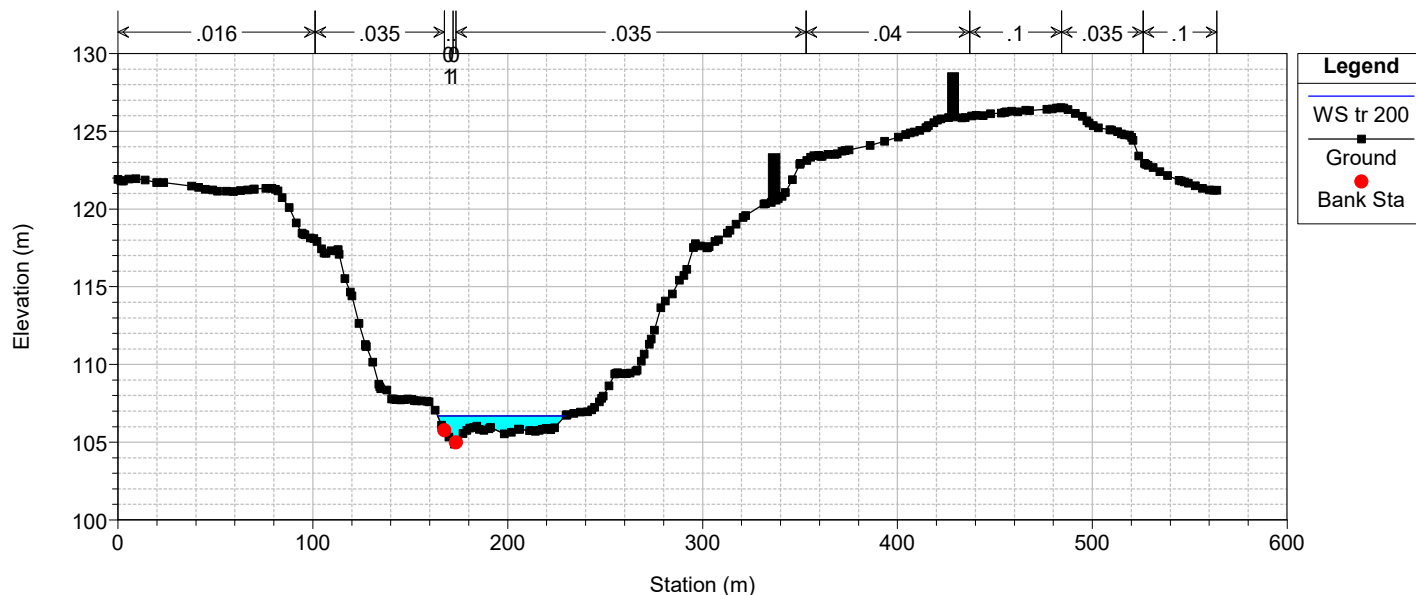
River = Rio San Giovanni Reach = Rio San Giovanni RS = 2492.250 SEZIONE 141 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

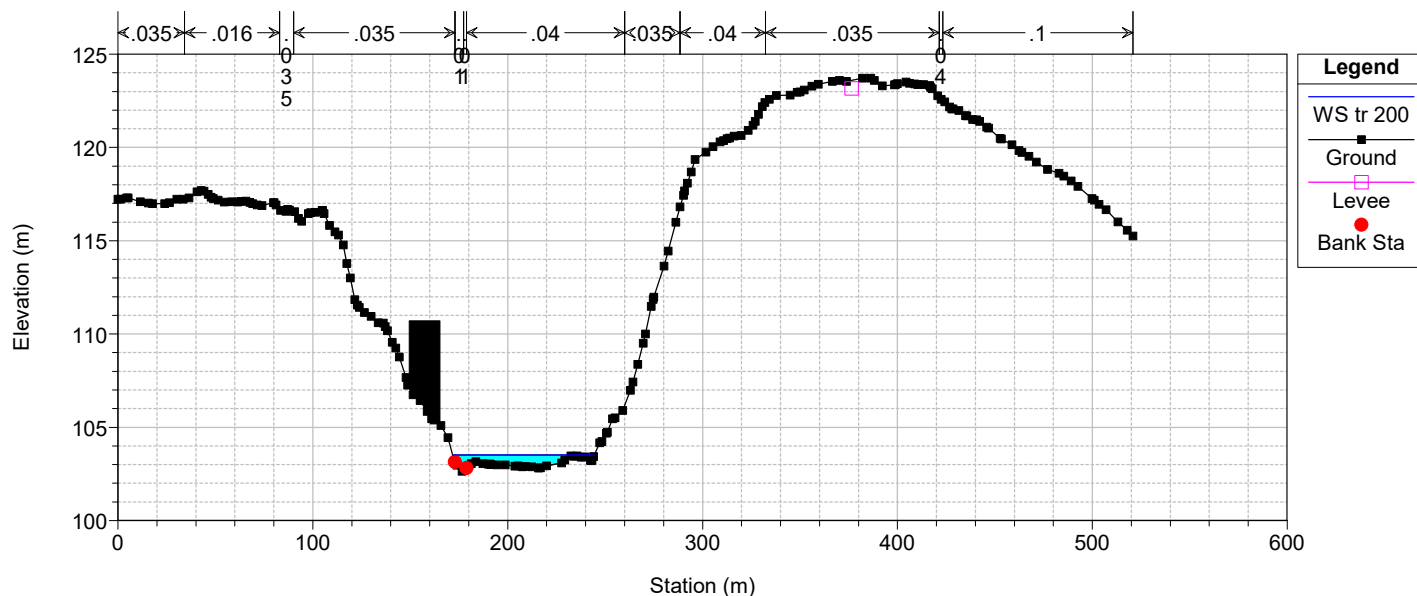
River = Rio San Giovanni Reach = Rio San Giovanni RS = 2371.082 SEZIONE 140 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

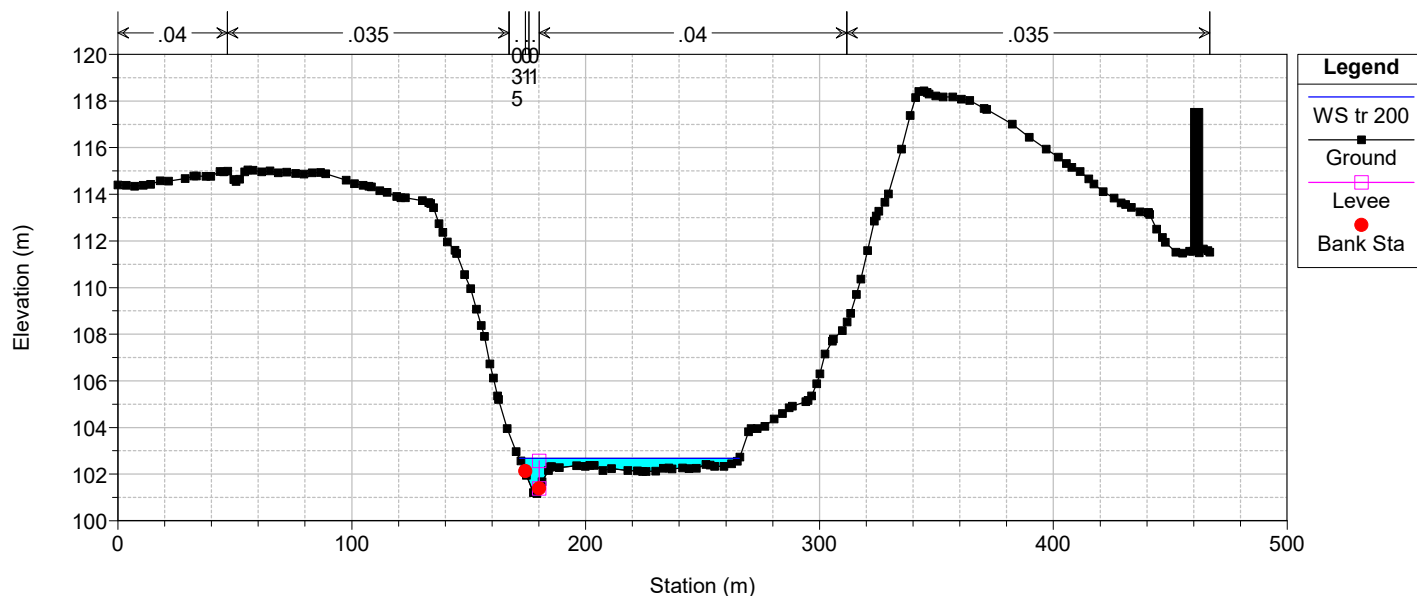
River = Rio San Giovanni Reach = Rio San Giovanni RS = 2271.106 SEZIONE 139 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



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Geom: 05022021

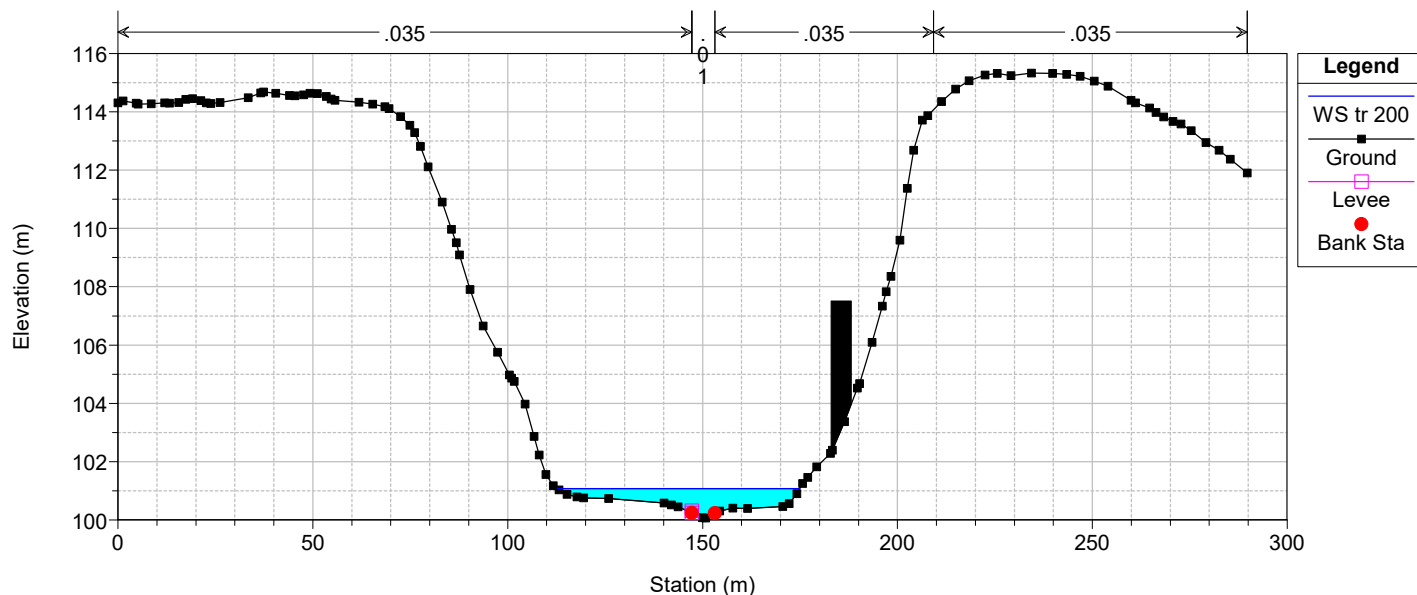
River = Rio San Giovanni Reach = Rio San Giovanni RS = 2172.411 SEZIONE 138 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

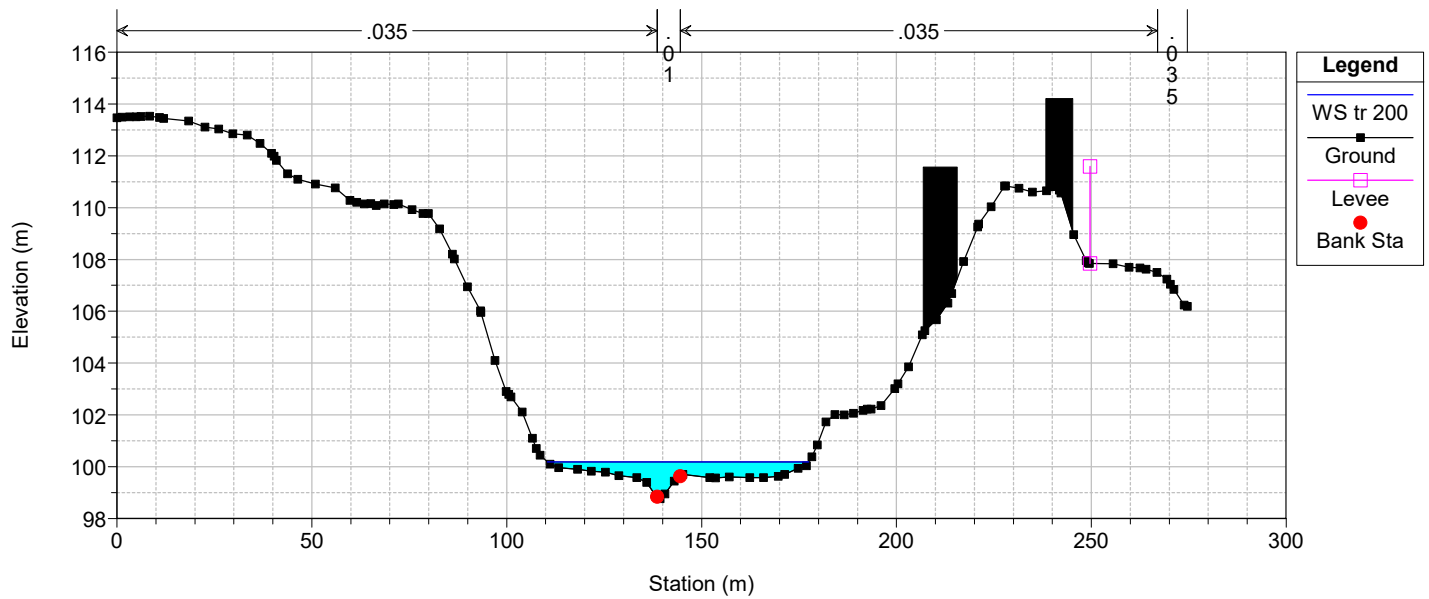
River = Rio San Giovanni Reach = Rio San Giovanni RS = 2080.271 SEZIONE 137 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

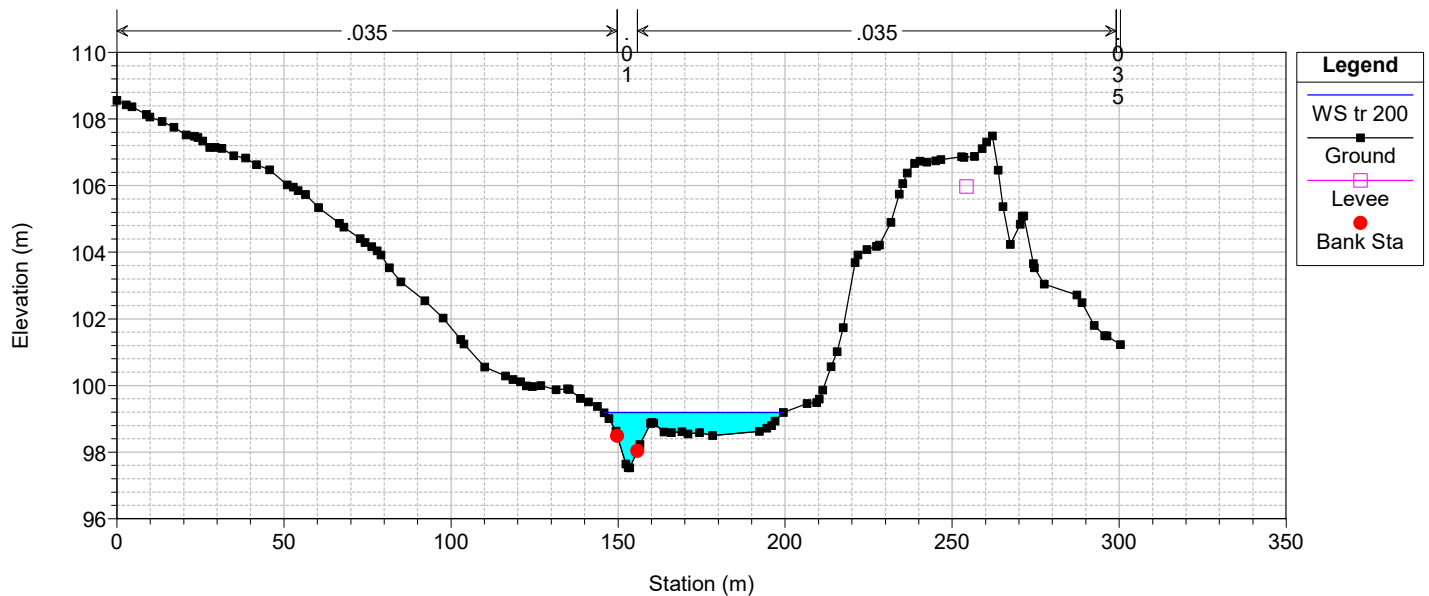
River = Rio San Giovanni Reach = Rio San Giovanni RS = 1984.342 SEZIONE 136 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

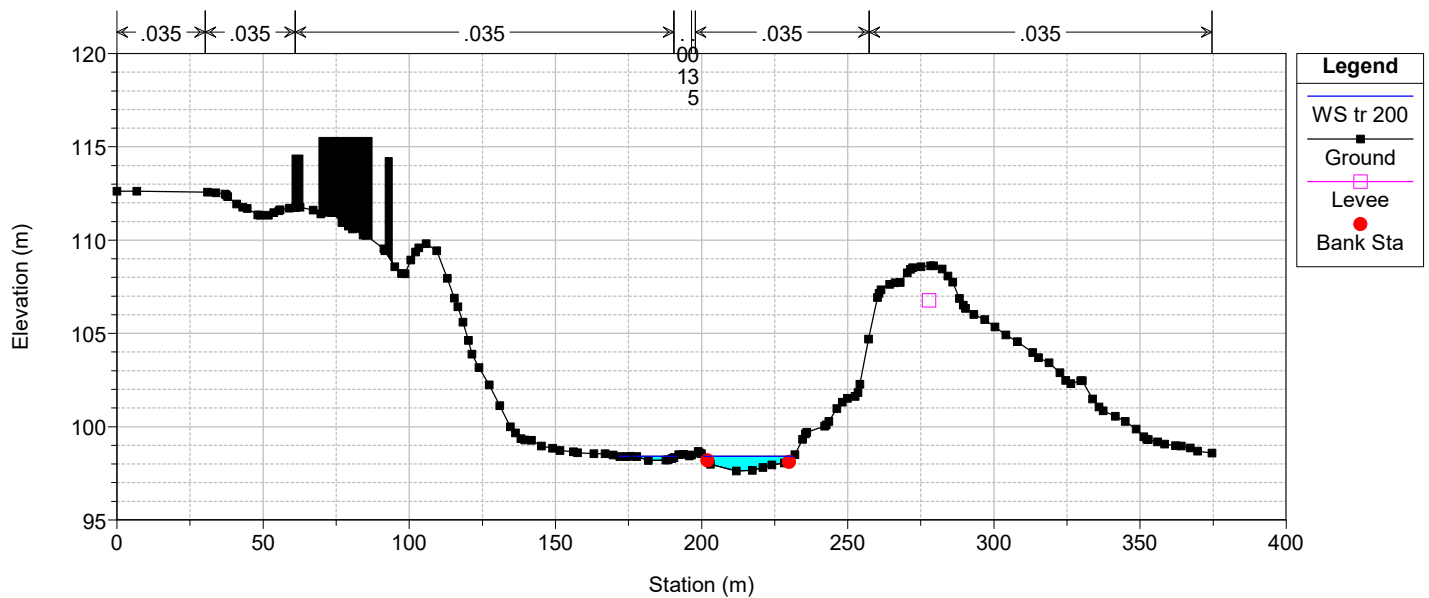
River = Rio San Giovanni Reach = Rio San Giovanni RS = 1891.430 SEZIONE 135 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

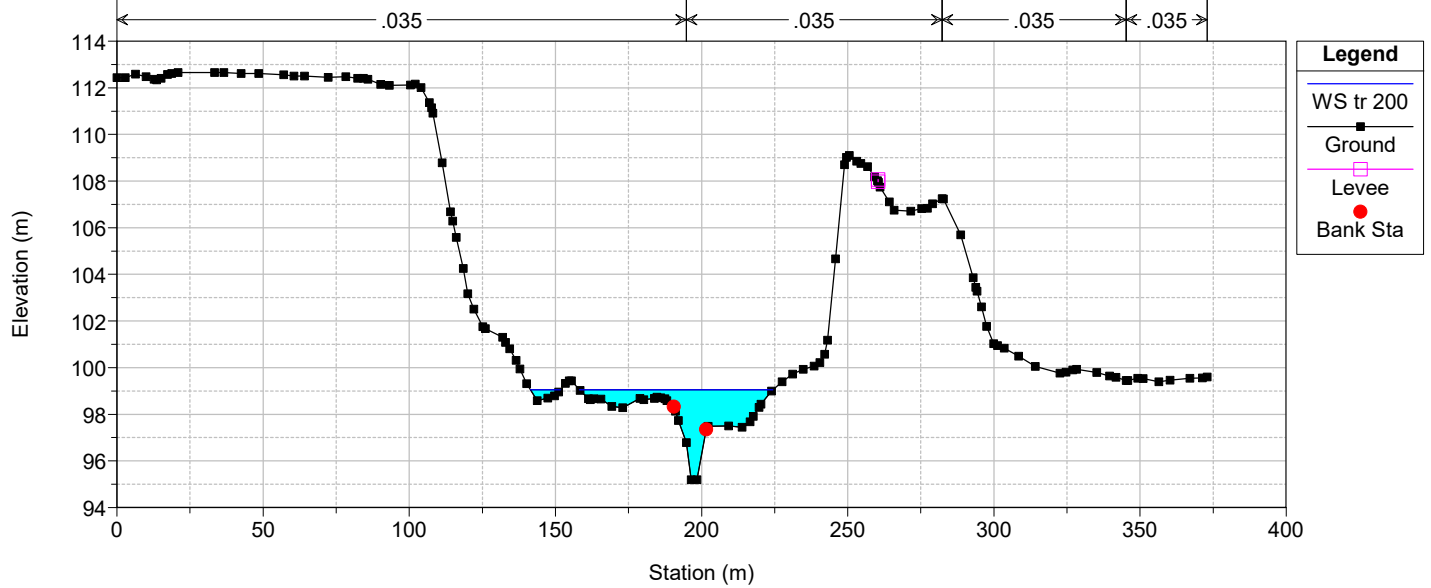
River = Rio San Giovanni Reach = Rio San Giovanni RS = 1809.332 SEZIONE 134 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

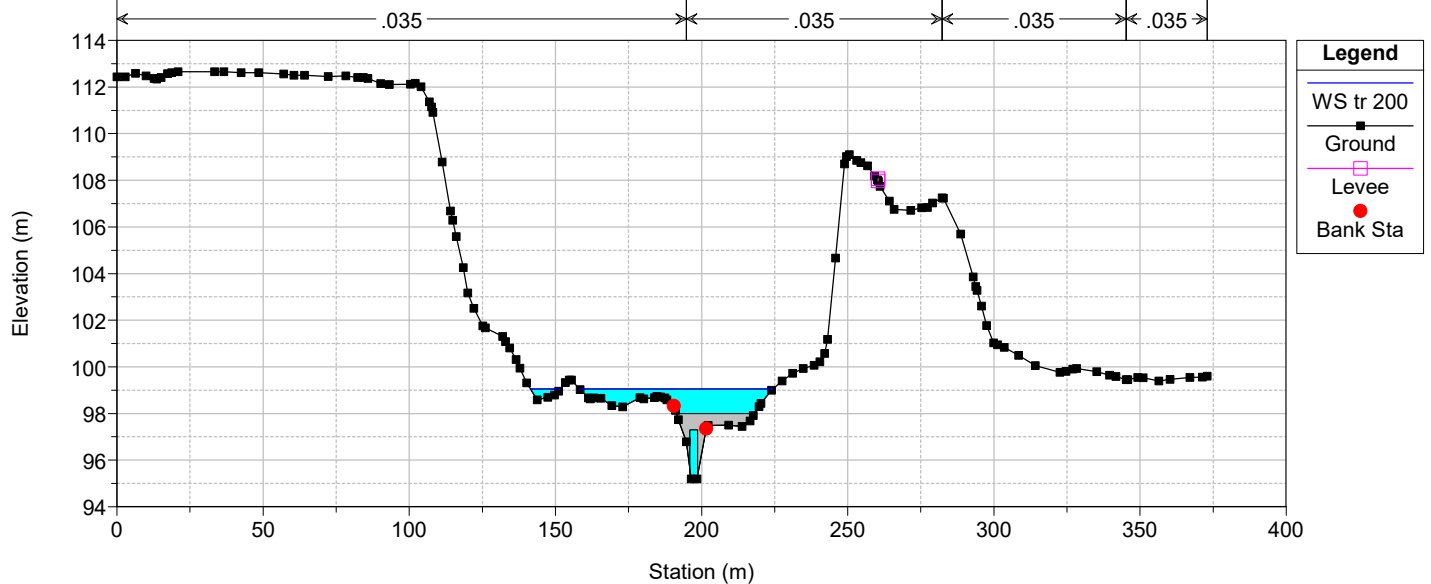
River = Rio San Giovanni Reach = Rio San Giovanni RS = 1743.895 SEZIONE 133 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

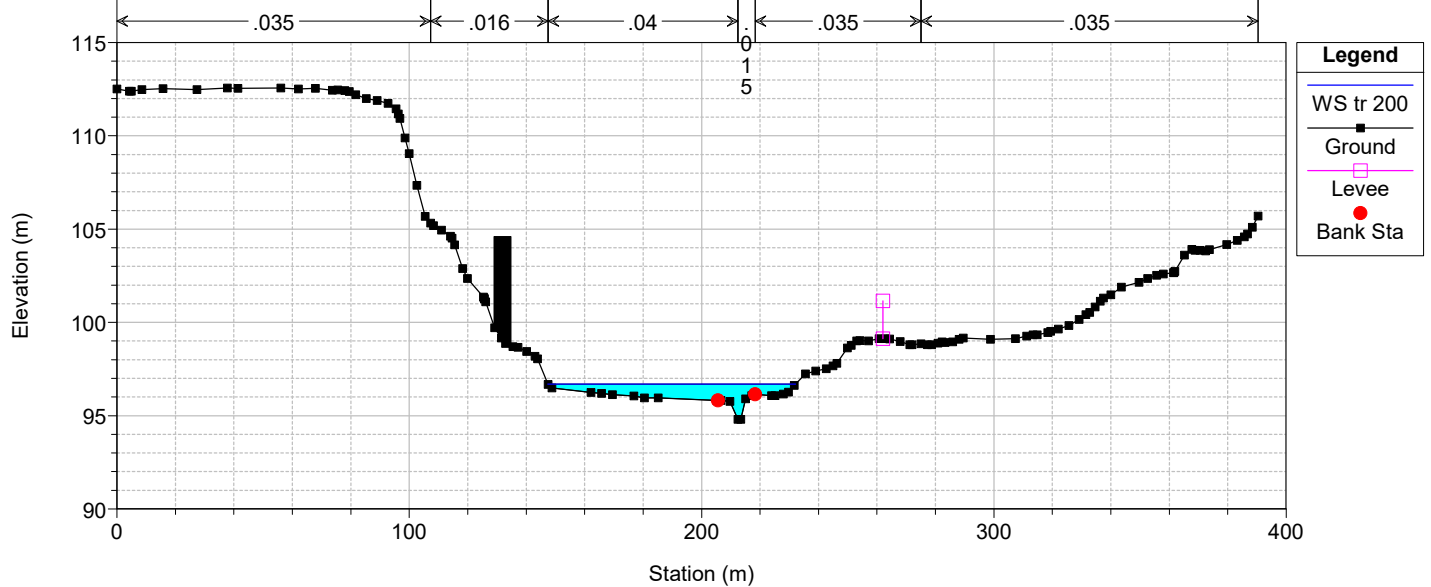
River = Rio San Giovanni Reach = Rio San Giovanni RS = 1700 Culv. ATTRAVERSAMENTO A12 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

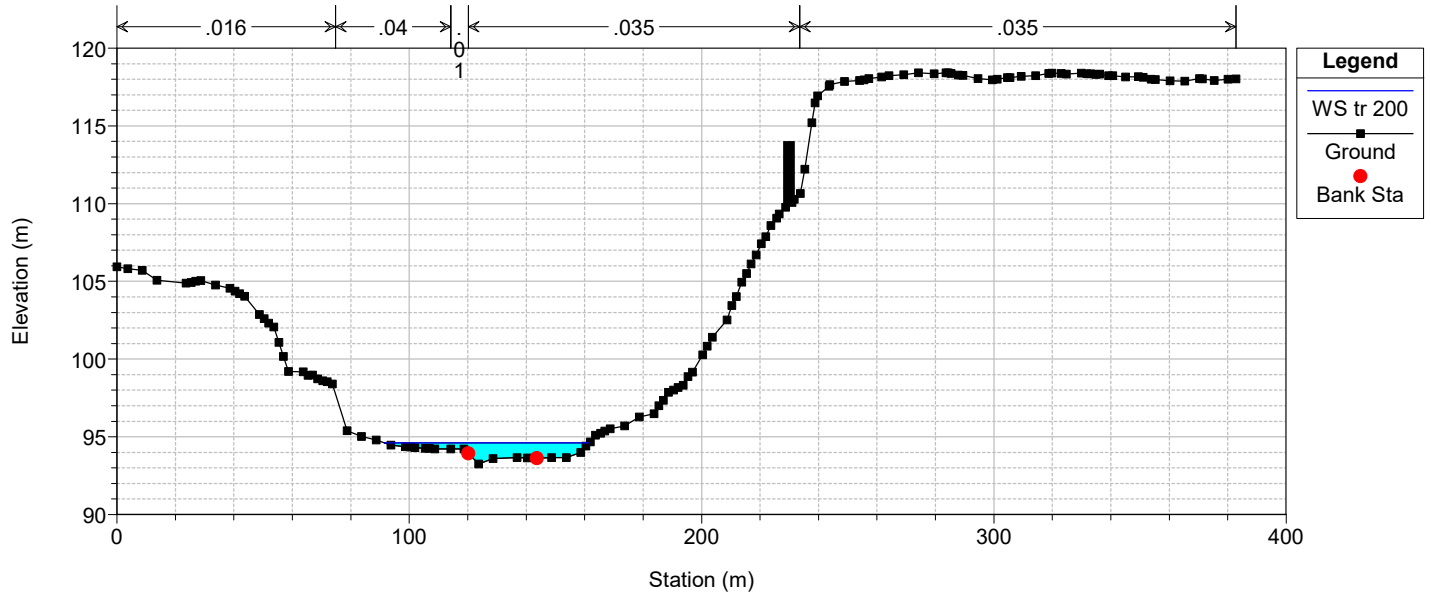
River = Rio San Giovanni Reach = Rio San Giovanni RS = 1695.408 SEZIONE 132 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

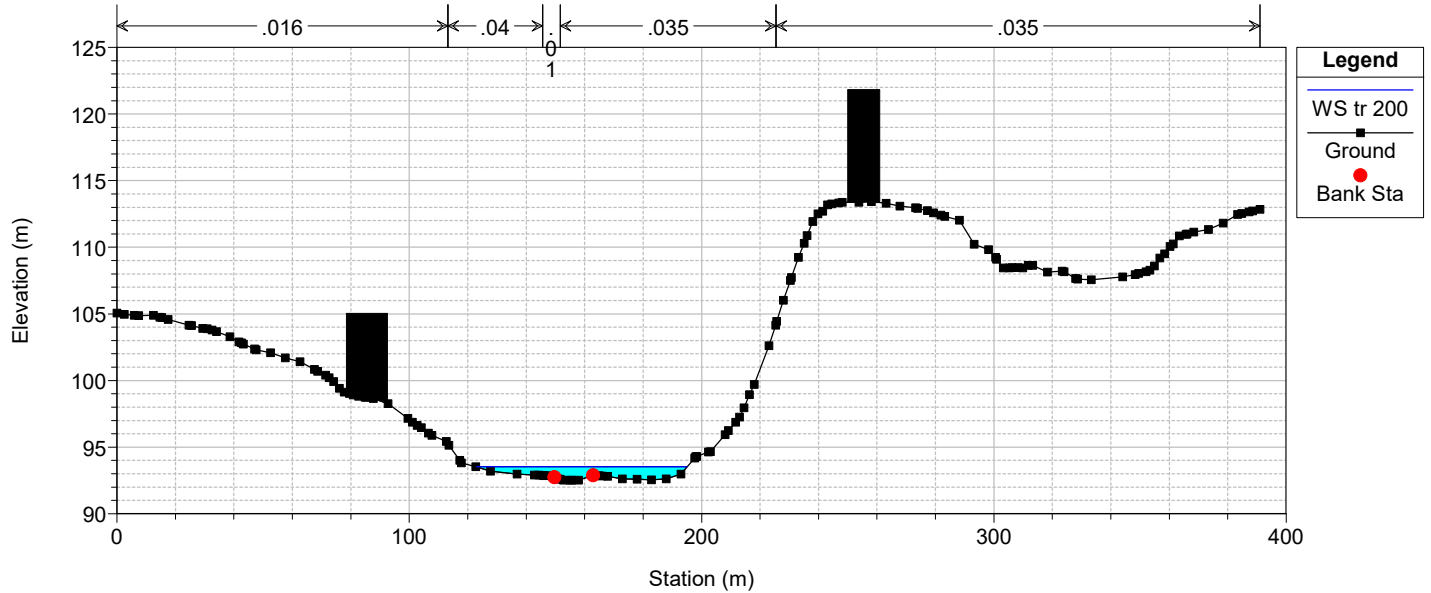
River = Rio San Giovanni Reach = Rio San Giovanni RS = 1488.506 SEZIONE 131 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

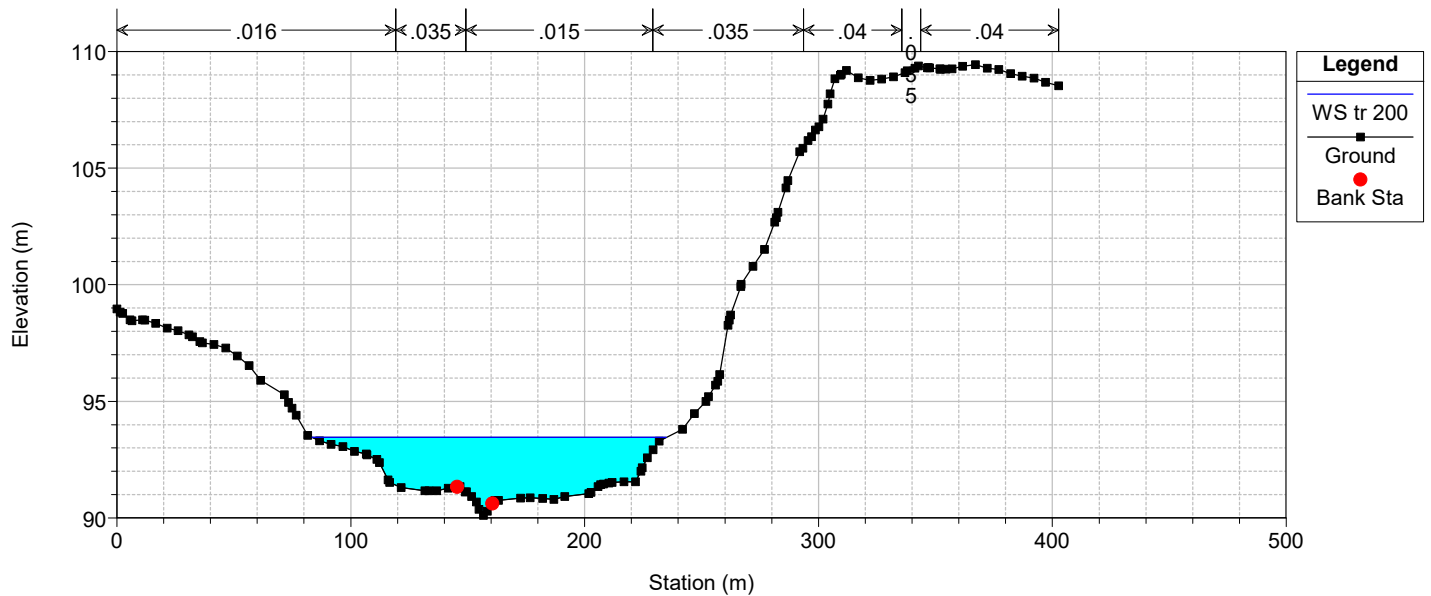
River = Rio San Giovanni Reach = Rio San Giovanni RS = 1372.647 SEZIONE 130 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

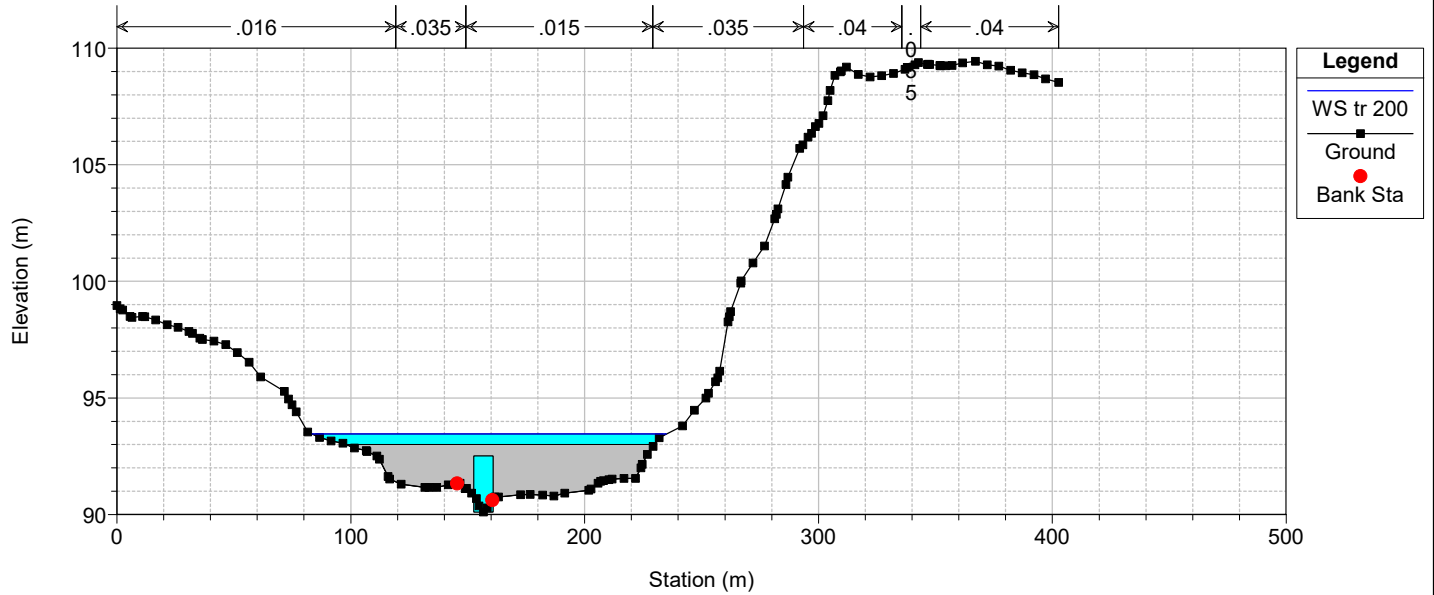
River = Rio San Giovanni Reach = Rio San Giovanni RS = 1214.271 SEZIONE 129 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

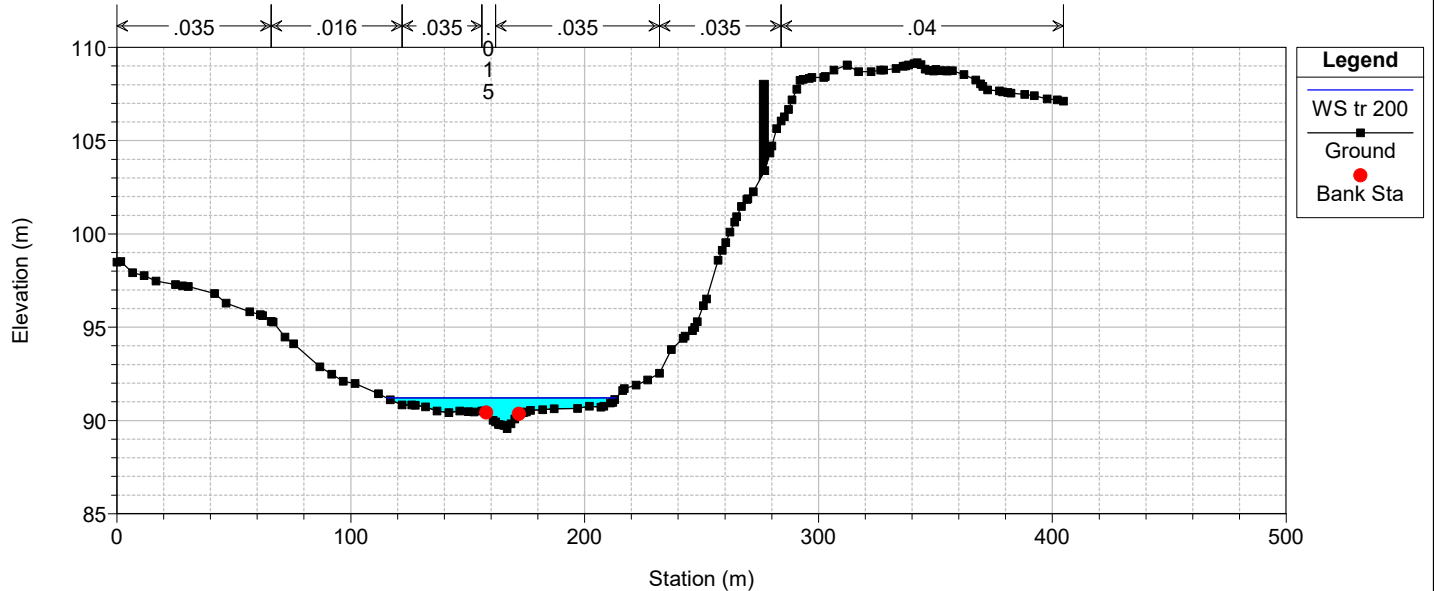
River = Rio San Giovanni Reach = Rio San Giovanni RS = 1200 Culv ATTRAVERSAMENTO A1 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

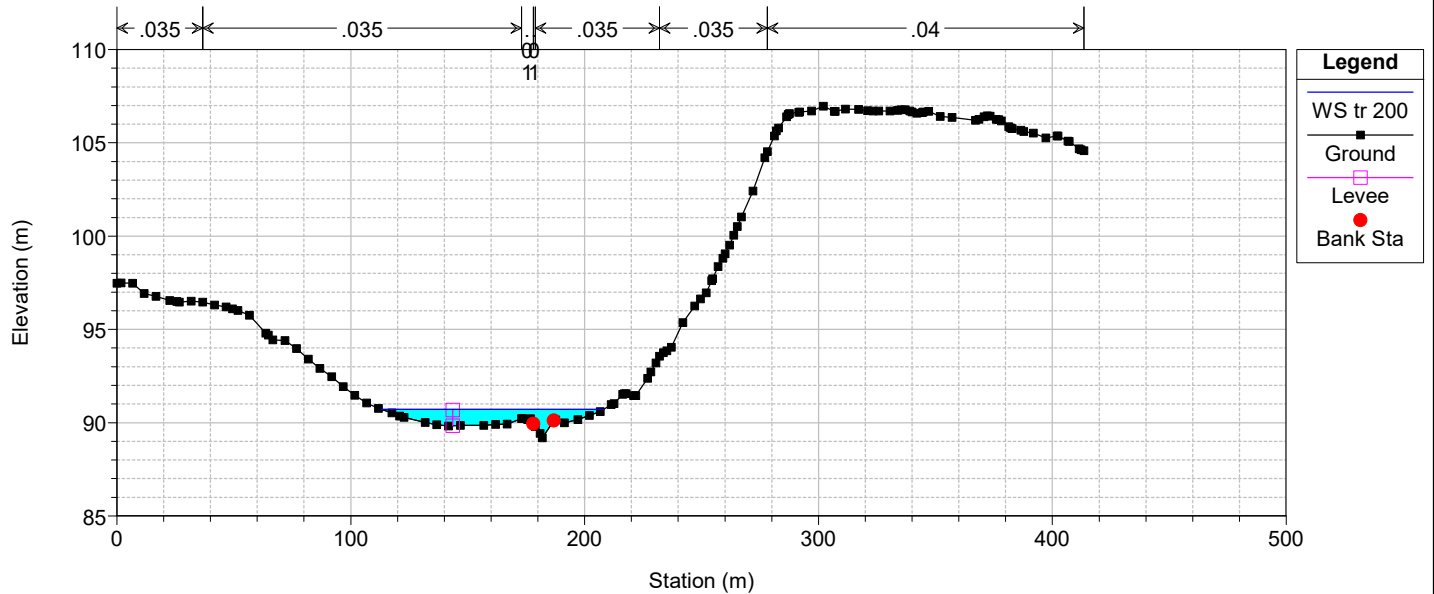
River = Rio San Giovanni Reach = Rio San Giovanni RS = 1185.518 SEZIONE 128 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

River = Rio San Giovanni Reach = Rio San Giovanni RS = 1140.801 SEZIONE 127 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI

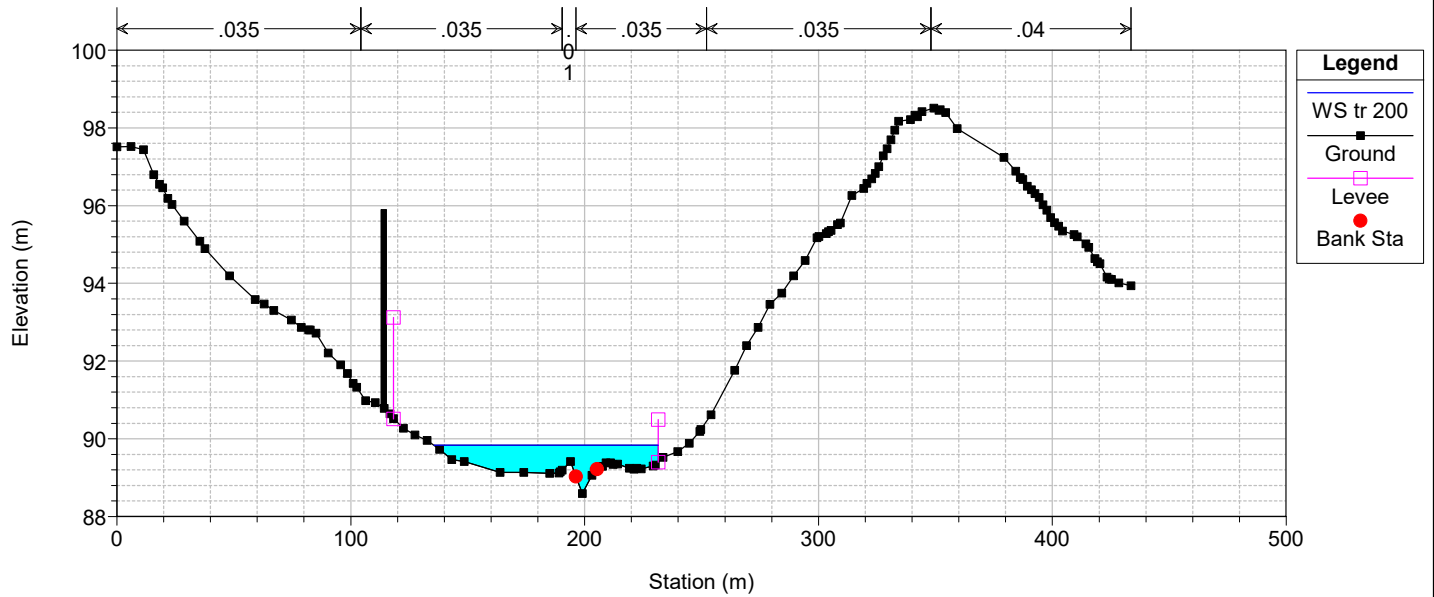


RIO S.GIOVANNI - RIO OTTAVA

Plan: 09022021 11/25/2021

Geom: 05022021

River = Rio San Giovanni Reach = Rio San Giovanni RS = 1038.829 SEZIONE 126 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI

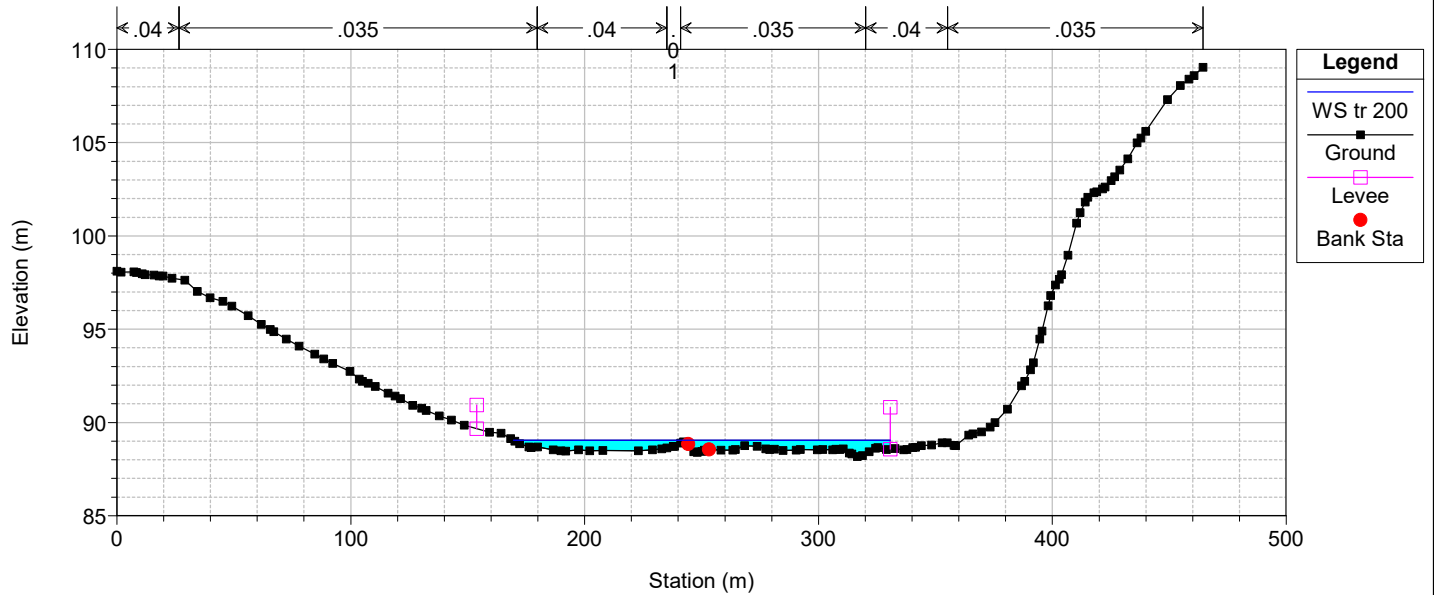


RIO S.GIOVANNI - RIO OTTAVA

Plan: 09022021 11/25/2021

Geom: 05022021

River = Rio San Giovanni Reach = Rio San Giovanni RS = 976.7069 SEZIONE 125 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI

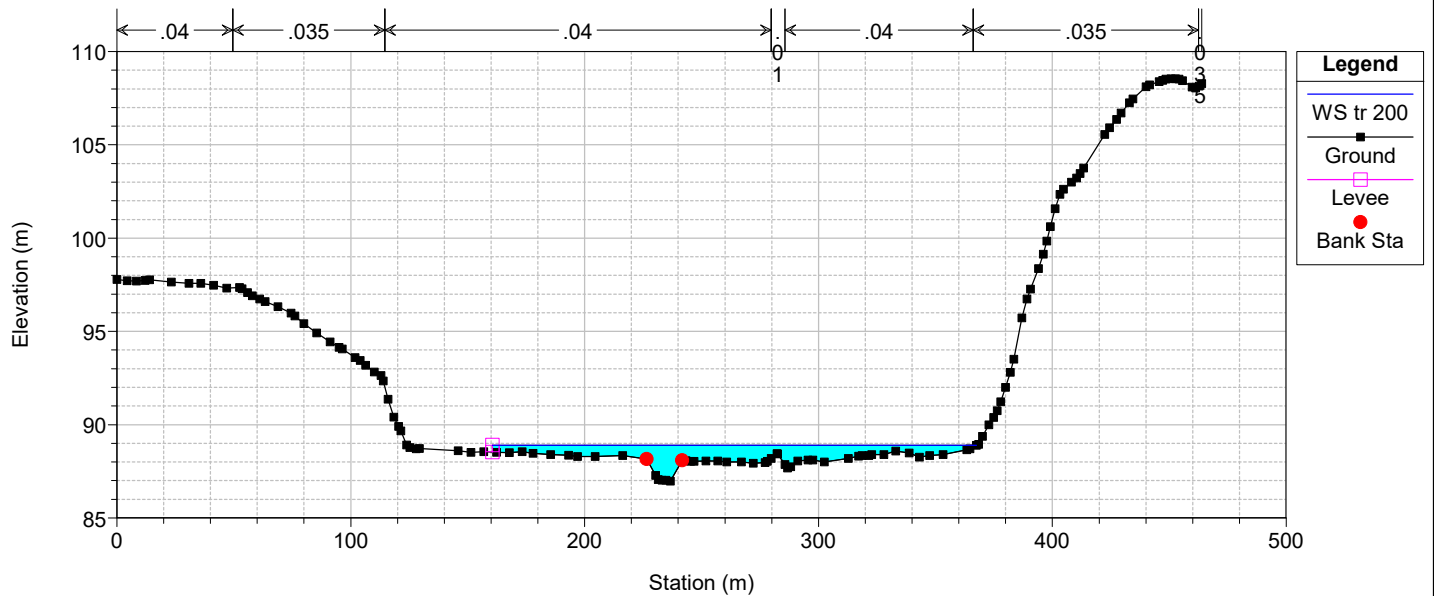


RIO S.GIOVANNI - RIO OTTAVA

Plan: 09022021 11/25/2021

Geom: 05022021

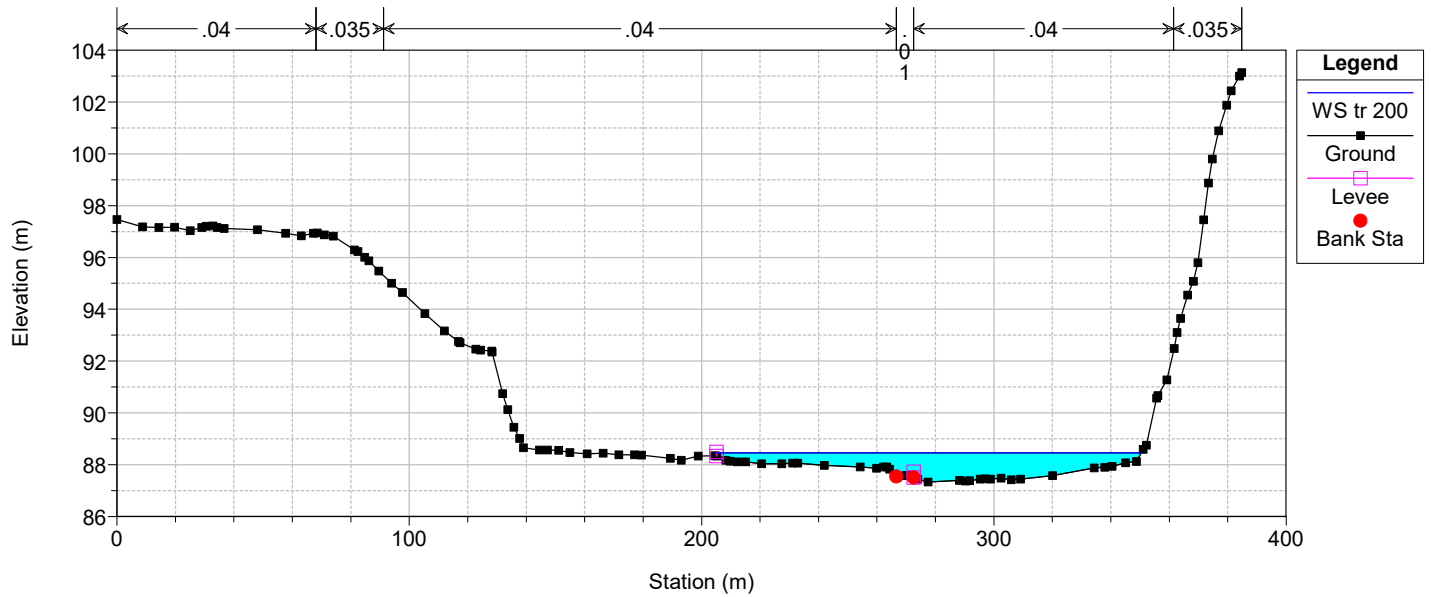
River = Rio San Giovanni Reach = Rio San Giovanni RS = 910.2315 SEZIONE 124 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

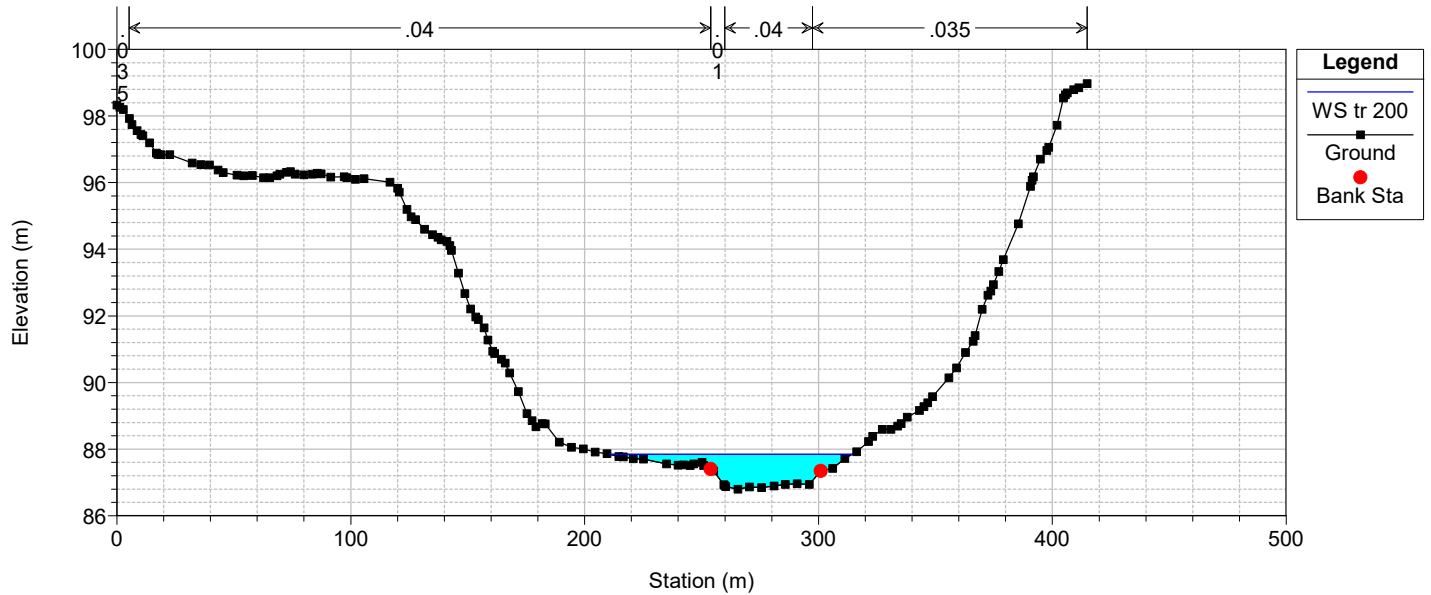
River = Rio San Giovanni Reach = Rio San Giovanni RS = 847.9926 SEZIONE 123 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

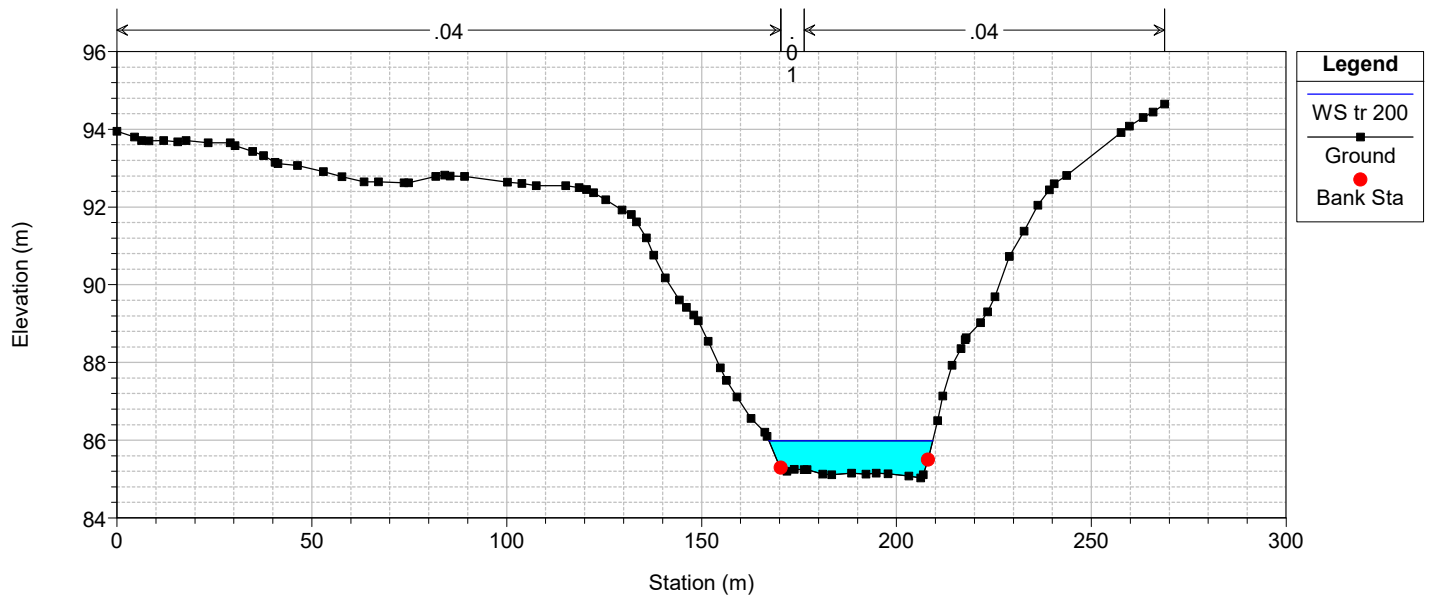
River = Rio San Giovanni Reach = Rio San Giovanni RS = 730.7009 SEZIONE 122 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

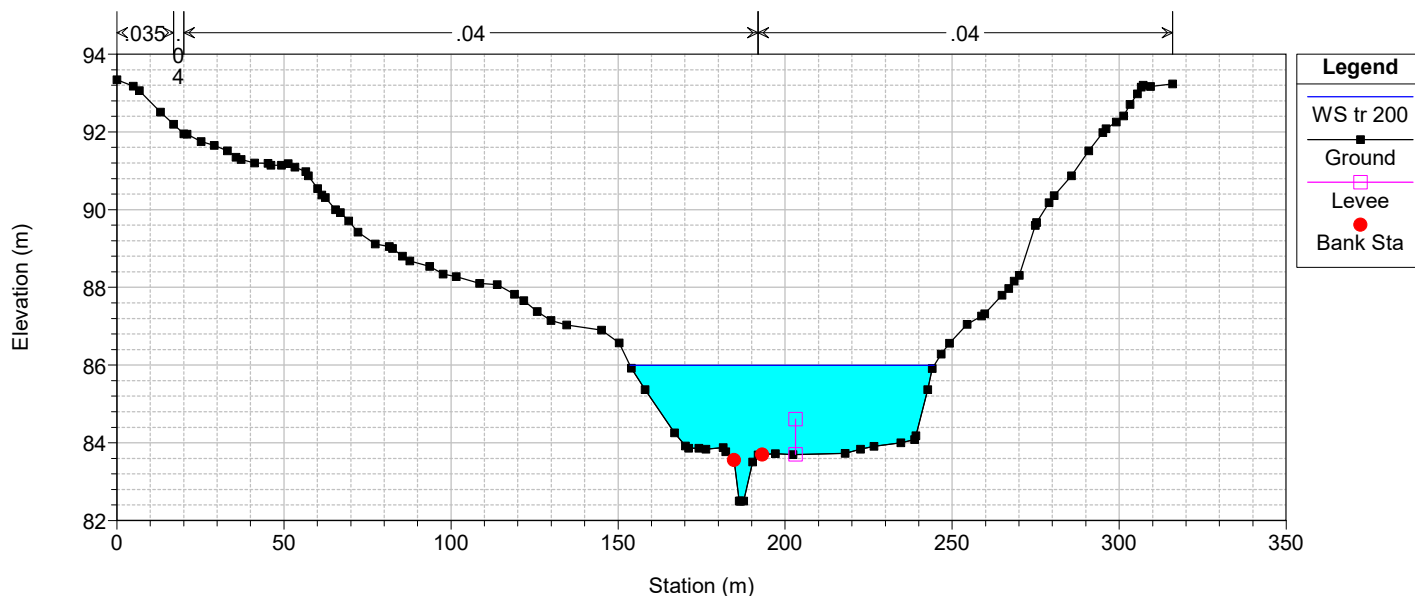
River = Rio San Giovanni Reach = Rio San Giovanni RS = 622.0302 SEZIONE 121 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

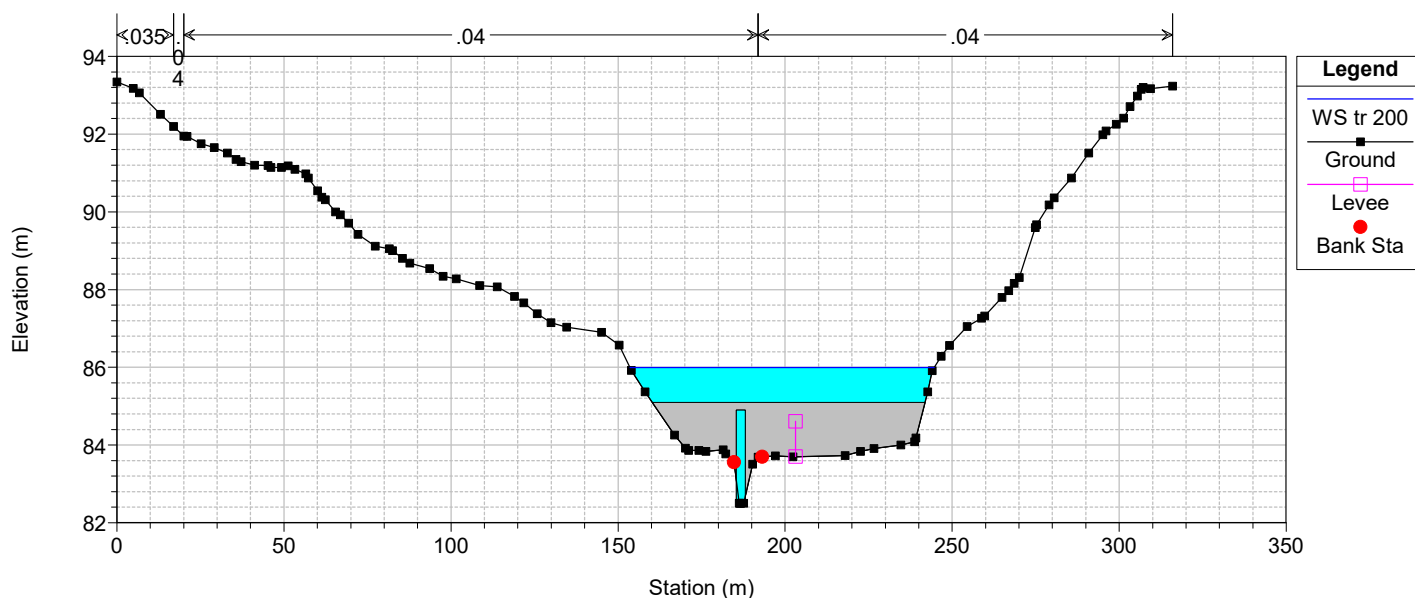
River = Rio San Giovanni Reach = Rio San Giovanni RS = 458.8359 SEZIONE 120 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

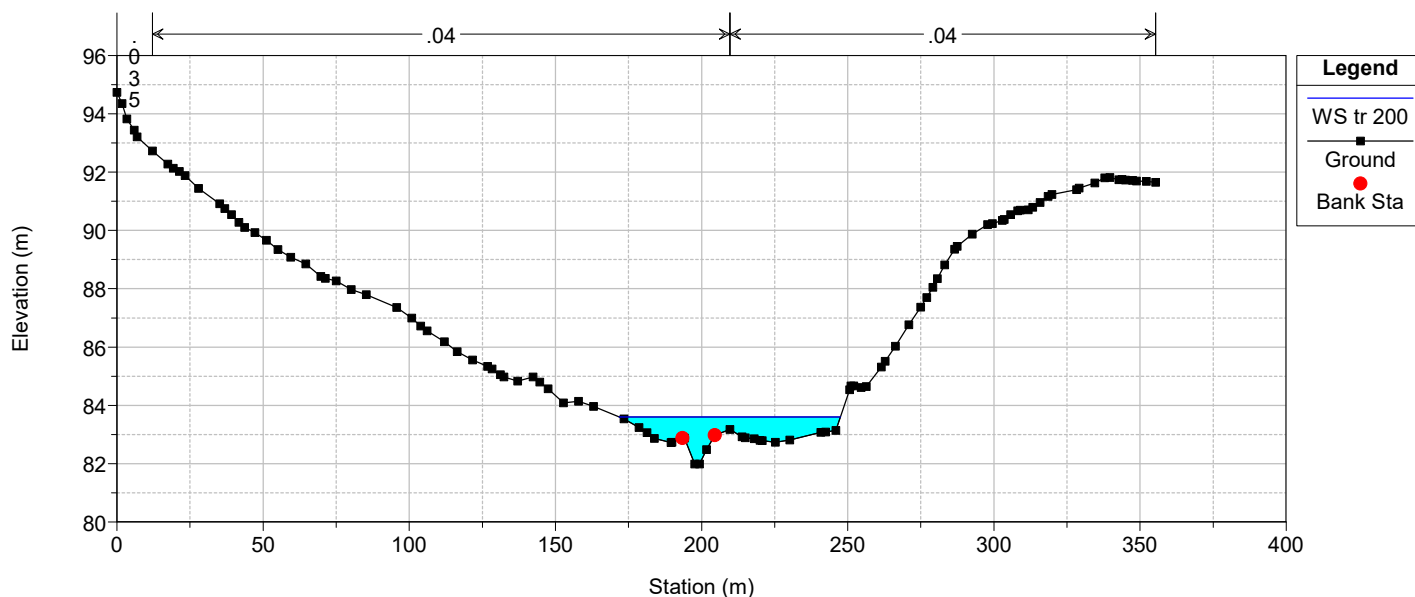
River = Rio San Giovanni Reach = Rio San Giovanni RS = 435 Culv. ATTRAVERSAMENTO A14 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



RIO S.GIOVANNI - RIO OTTAVA Plan: 09022021 11/25/2021

Geom: 05022021

River = Rio San Giovanni Reach = Rio San Giovanni RS = 415.9577 SEZIONE 119 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI

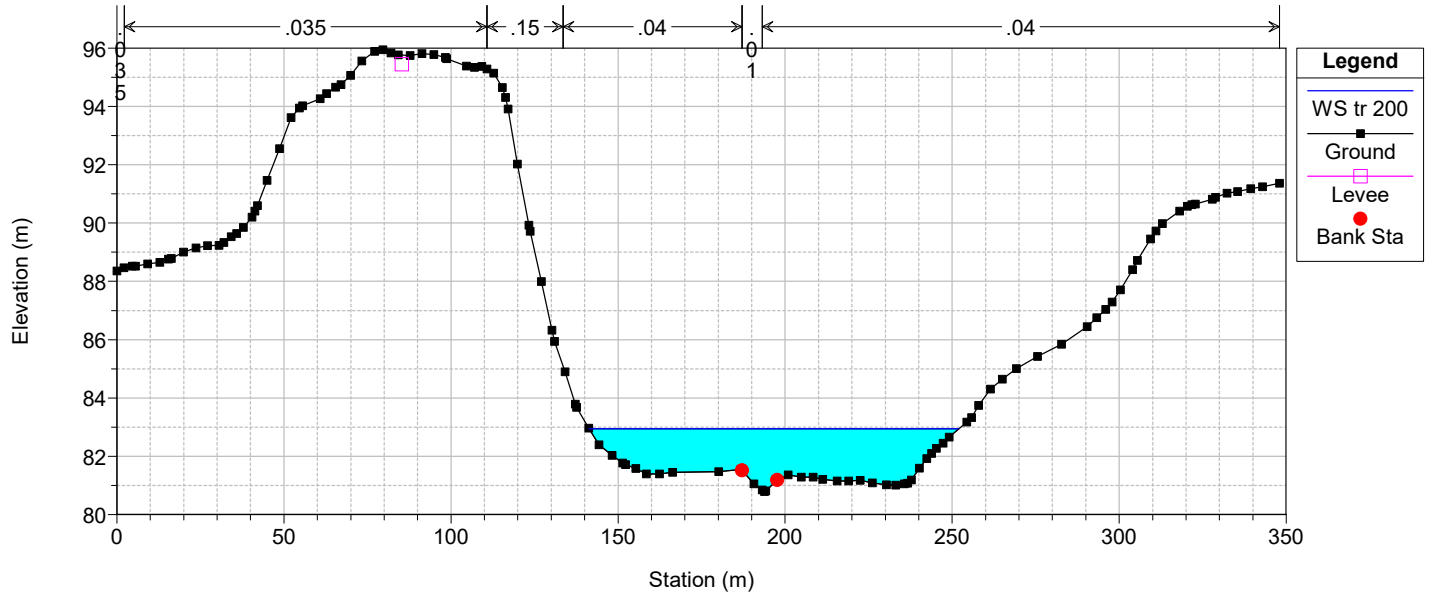


RIO S.GIOVANNI - RIO OTTAVA

Plan: 09022021 11/25/2021

Geom: 05022021

River = Rio San Giovanni Reach = Rio San Giovanni RS = 237.4459 SEZIONE 118 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI



Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (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
Rio San Giovanni	8385.023	tr 200	99.44	209.06	209.99	209.99	210.35	0.013017	3.03	38.18	55.22	1.02
Rio San Giovanni	8344.578	tr 200	99.44	208.56	209.35	209.41	209.73	0.018654	2.62	36.76	65.91	1.17
Rio San Giovanni	8278.010	tr 200	99.44	207.46	208.46	208.46	208.82	0.013339	2.58	37.69	52.70	0.99
Rio San Giovanni	8207.571	tr 200	99.44	205.78	207.21	207.30	207.86	0.012748	3.60	28.22	28.39	1.06
Rio San Giovanni	8179.541	tr 200	99.44	204.63	206.79	205.96	206.86	0.000930	1.26	86.58	61.12	0.30
Rio San Giovanni	8112.400	tr 200	99.44	204.42	206.26	206.26	206.67	0.010524	2.85	35.32	43.79	0.99
Rio San Giovanni	7994.023	tr 200	99.44	202.74	203.50	203.74	204.33	0.047272	4.50	25.38	52.90	1.83
Rio San Giovanni	7895.203	tr 200	99.44	200.87	202.09	202.09	202.51	0.011196	3.20	36.18	44.69	0.98
Rio San Giovanni	7818.173	tr 200	99.44	199.10	200.05	200.34	201.01	0.037449	4.69	24.74	46.64	1.69
Rio San Giovanni	7790	Bridge										
Rio San Giovanni	7775.815	tr 200	99.44	198.44	199.60	199.60	200.06	0.057722	1.67	46.45	56.43	0.52
Rio San Giovanni	7679.706	tr 200	99.44	195.37	197.02	197.02	197.63	0.014108	3.70	41.22	39.98	1.00
Rio San Giovanni	7599.932	tr 200	99.44	193.10	195.74	194.85	195.94	0.008092	1.98	50.87	27.29	0.43
Rio San Giovanni	7545.100	tr 200	99.44	192.49	194.11	194.11	194.79	0.105908	2.74	31.03	27.58	0.73
Rio San Giovanni	7464.300	tr 200	99.44	189.62	190.94	190.98	191.52	0.021309	2.67	39.86	39.21	0.75
Rio San Giovanni	7397.736	tr 200	99.44	187.17	187.88	188.25	189.13	0.066968	5.76	20.82	37.05	2.22
Rio San Giovanni	7356.261	tr 200	99.44	186.86	187.99	187.88	188.34	0.008933	2.85	39.79	42.32	0.87
Rio San Giovanni	7304.761	tr 200	99.44	186.52	187.37	187.37	187.76	0.014240	2.88	36.71	48.33	1.04
Rio San Giovanni	7249.707	tr 200	99.44	185.43	186.73	186.83	187.31	0.004938	3.55	32.76	37.72	1.05
Rio San Giovanni	7196.271	tr 200	99.44	184.75	186.50	186.54	187.13	0.002292	3.59	29.25	27.00	1.00
Rio San Giovanni	7141.924	tr 200	99.44	182.70	186.73	185.39	186.91	0.000291	2.10	67.26	49.91	0.38
Rio San Giovanni	7120	Culvert										
Rio San Giovanni	7099.223	tr 200	99.44	180.70	182.06	182.06	182.57	0.003341	4.30	39.09	38.38	1.20
Rio San Giovanni	7045.812	tr 200	99.44	178.92	179.31	179.82	181.90	0.058009	7.27	14.02	43.51	4.01
Rio San Giovanni	6993.365	tr 200	99.44	177.79	178.56	178.97	180.07	0.017065	5.51	18.83	40.64	2.36
Rio San Giovanni	6943.140	tr 200	99.44	177.43	178.75	178.92	179.43	0.004334	4.26	28.25	36.51	1.30
Rio San Giovanni	6915.057	tr 200	99.44	176.62	178.69	177.88	178.78	0.000277	1.44	72.69	48.81	0.36
Rio San Giovanni	6890	Bridge										
Rio San Giovanni	6879.266	tr 200	99.44	172.96	178.74		178.74	0.000027	0.31	329.82	99.11	0.04
Rio San Giovanni	6838.324	tr 200	99.44	172.90	178.74		178.74	0.000055	0.42	287.73	85.07	0.06
Rio San Giovanni	6792.858	tr 200	99.44	172.95	178.74		178.74	0.000017	0.26	407.09	92.68	0.03
Rio San Giovanni	6759.950	tr 200	99.44	172.32	178.74		178.74	0.000011	0.23	450.16	88.61	0.03
Rio San Giovanni	6720.863	tr 200	99.44	171.77	178.74		178.74	0.000008	0.20	502.16	104.41	0.02
Rio San Giovanni	6676.040	tr 200	99.44	170.86	178.74		178.74	0.000010	0.24	445.68	79.79	0.03
Rio San Giovanni	6645.164	tr 200	99.44	170.13	178.74		178.74	0.000003	0.15	627.94	91.11	0.02
Rio San Giovanni	6617.633	tr 200	99.44	169.87	178.74		178.74	0.000005	0.19	552.35	69.73	0.02
Rio San Giovanni	6593.842	tr 200	99.44	170.12	178.74	171.94	178.74	0.000003	0.15	567.41	88.55	0.02
Rio San Giovanni	6550	Culvert										
Rio San Giovanni	6521.062	tr 200	99.44	167.61	175.50		175.50	0.000005	0.15	691.76	140.81	0.02
Rio San Giovanni	6498.231	tr 200	99.44	166.89	175.50		175.50	0.000001	0.10	780.46	122.30	0.01
Rio San Giovanni	6480.144	tr 200	99.44	167.31	175.50		175.50	0.000003	0.14	725.10	123.68	0.02
Rio San Giovanni	6460.542	tr 200	99.44	167.40	175.50	170.52	175.50	0.000011	0.21	490.30	130.05	0.03
Rio San Giovanni	6430	Culvert										
Rio San Giovanni	6418.467	tr 200	99.44	165.55	168.32	168.32	168.66	0.006109	2.79	45.36	61.32	0.76
Rio San Giovanni	6361.699	tr 200	99.44	164.41	166.30	166.84	167.84	0.038521	6.16	18.49	27.74	1.80
Rio San Giovanni	6320.797	tr 200	99.44	162.92	166.42	165.92	166.52	0.001324	1.72	87.10	96.02	0.37
Rio San Giovanni	6300	Bridge										
Rio San Giovanni	6289.098	tr 200	99.44	162.09	165.40	165.62	166.07	0.013738	4.05	37.20	92.56	1.08
Rio San Giovanni	6240.412	tr 200	99.44	161.87	162.85	163.20	164.49	0.114858	6.95	19.16	66.09	2.98
Rio San Giovanni	6199.335	tr 200	99.44	161.30	162.52	162.64	162.99	0.012196	3.27	36.36	77.06	1.17
Rio San Giovanni	6157.551	tr 200	99.44	161.27	161.93	162.05	162.42	0.015005	3.05	32.29	65.24	1.26
Rio San Giovanni	6120.118	tr 200	99.44	159.19	161.10	161.27	161.72	0.022288	4.09	30.93	56.38	1.30
Rio San Giovanni	6063.382	tr 200	99.44	159.36	160.23	160.47	161.08	0.006009	6.68	42.23	56.39	2.38
Rio San Giovanni	6006.640	tr 200	99.44	158.65	159.49	159.80	160.58	0.012823	8.04	42.85	94.43	3.31
Rio San Giovanni	5979.893	tr 200	99.44	158.08	158.97	159.28	159.95	0.046523	4.43	23.14	46.07	1.81
Rio San Giovanni	5953.291	tr 200	99.44	157.45	158.59	158.80	159.27	0.012849	5.15	39.96	91.02	1.94
Rio San Giovanni	5929.370	tr 200	99.44	157.45	158.32	158.56	159.05	0.006711	6.58	49.36	84.69	2.47
Rio San Giovanni	5909.507	tr 200	99.44	155.60	158.55	158.01	158.63	0.001386	1.71	93.04	111.30	0.36
Rio San Giovanni	5890	Culvert										
Rio San Giovanni	5862.809	tr 200	99.44	155.38	156.85		156.97	0.003493	1.78	67.83	79.44	0.49
Rio San Giovanni	5829.787	tr 200	99.44	154.49	156.49	156.49	156.87	0.001729	3.62	64.75	85.57	0.94
Rio San Giovanni	5762.535	tr 200	99.44	154.35	155.69	156.00	156.60	0.007214	5.43	40.49	79.94	1.71
Rio San Giovanni	5683.757	tr 200	99.44	151.68	154.50	154.41	155.00	0.000668	4.18	77.05	66.25	0.91
Rio San Giovanni	5649.735	tr 200	99.44	151.58	154.50	154.50	154.97	0.000463	3.92	98.35	113.03	0.79
Rio San Giovanni	5602.582	tr 200	99.44	150.69	151.67	152.31	154.65	0.014668	10.47	26.66	49.15	3.71
Rio San Giovanni	5578.024	tr 200	99.44	150.56	151.78	151.78	152.20	0.002205	4.70	63.67	74.04	1.40
Rio San Giovanni	5541.668	tr 200	99.44	149.49	151.42	151.33	151.58	0.004152	2.28	59.67	78.21	0.73
Rio San Giovanni	5501.360	tr 200	99.44	149.77	151.14	151.14	151.47	0.001600	4.37	80.18	103.88	1.30
Rio San Giovanni	5476.022	tr 200	99.44	148.98	150.93	150.98	151.42	0.001606	4.77	65.02	76.72	1.31
Rio San Giovanni	5433.750	tr 200	99.44	147.73	149.39	149.87	151.17	0.005315	7.89	40.08	72.95	2.35
Rio San Giovanni	5376.300	tr 200	99.44	147.15	148.55	149.01	150.80	0.006101	8.54	39.24	84.70	2.53
Rio San Giovanni	5319.093	tr 200	99.44	146.16	147.87	148.40	150.42	0.006196	8.66	37.70	100.22	2.46
Rio San Giovanni	5255.656	tr 200	99.44	145.09	146.62	147.23	149.92	0.007240	9.56	32.42	85.10	2.77
Rio San Giovanni	5181.341	tr 200	99.44	144.35	146.11	146.80	149.43	0.005965	9.03	28.88	71.37	2.38
Rio San Giovanni	5130.800	tr 200	99.44	143.92	145.34	145.91	149.02	0.009981	10.35	31.97	94.78	3.20
Rio San Giovanni	5075.290	tr 200	99.44	142.98	145.97	145.49	146.13	0.000196	2.65	141.67	110.93	0.51
Rio San Giovanni	5021.049	tr 200	99.44	141.91	146.05		146.10	0.000051	1.62	232.08	121.36	0.27
Rio San Giovanni	4984.191	tr 200	99.44	142.12	144.99	144.97	145.99	0.000806	4.84	26.39	14.83	1.01
Rio San Giovanni	4980	Bridge										
Rio San Giovanni	4974.263	tr 200	99.44	141.82	143.47	144.19	145.30	0.037609	6.01	16.81	15.85	1.78
Rio San Giovanni	4933.428	tr 200	99.44	140.50	141.96	142.46	144.62	0.007656	9.27	37.94	95.07	2.86
Rio San Giovanni	4852.006	tr 200	99.44	139.76	141.16	141.71	143.83	0.012627	10.05	31.28	66.83	3.37
Rio San Giovanni	4777.650	tr 200	99.44	138.93	139.66	140.14	141.90	0.066190	13.50	19.17	37.57	6.85

Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (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
Rio San Giovanni	4675.018	tr 200	99.44	137.58	138.70	138.73	139.10	0.011015	5.60	45.06	84.17	2.82
Rio San Giovanni	4586.810	tr 200	99.44	135.32	137.13	137.54	138.56	0.002812	6.79	50.39	84.33	1.79
Rio San Giovanni	4508.690	tr 200	99.44	135.13	135.48	135.86	137.83	0.091792	2.75	17.80	76.19	1.88
Rio San Giovanni	4427.632	tr 200	99.44	133.31	135.05	135.52	136.87	0.003560	7.42	36.29	46.36	1.99
Rio San Giovanni	4356.111	tr 200	99.44	132.49	133.91	134.55	136.47	0.005921	8.71	31.80	45.54	2.49
Rio San Giovanni	4290.175	tr 200	99.44	132.40	133.30	133.85	135.73	0.025131	10.82	28.95	59.13	4.54
Rio San Giovanni	4246.225	tr 200	99.44	129.62	133.38	131.75	133.47	0.000785	1.45	82.17	76.23	0.31
Rio San Giovanni	4150		Culvert									
Rio San Giovanni	4094.831	tr 200	99.44	128.19	131.08	131.08	131.54	0.000475	3.23	58.05	80.42	0.82
Rio San Giovanni	4046.195	tr 200	99.44	128.69	130.02	130.42	131.40	0.004947	7.36	50.30	100.01	2.25
Rio San Giovanni	4007.603	tr 200	99.44	128.15	130.56	129.74	130.59	0.000131	1.69	223.53	183.25	0.37
Rio San Giovanni	3956.263	tr 200	99.44	127.62	130.49	129.63	130.58	0.000154	2.18	149.09	87.00	0.44
Rio San Giovanni	3922.604	tr 200	116.17	127.72	129.98	129.98	130.52	0.000819	4.60	83.77	73.68	1.02
Rio San Giovanni	3822.429	tr 200	116.17	125.14	126.58	127.21	129.99	0.042878	15.16	24.03	42.41	5.70
Rio San Giovanni	3730.957	tr 200	116.17	124.71	125.32	125.51	126.05	0.028984	7.69	32.22	72.59	4.32
Rio San Giovanni	3666.542	tr 200	116.17	122.70	125.04	125.22	125.74	0.001789	5.45	66.73	85.52	1.42
Rio San Giovanni	3614.743	tr 200	116.17	122.51	123.21	123.62	125.31	0.094489	12.27	20.45	59.44	7.09
Rio San Giovanni	3526.530	tr 200	116.17	120.72	124.18	122.53	124.22	0.000062	1.44	200.46	84.71	0.27
Rio San Giovanni	3434.478	tr 200	116.17	120.48	124.19	121.66	124.21	0.000019	0.95	273.22	98.39	0.17
Rio San Giovanni	3391.041	tr 200	116.17	118.00	124.19	121.42	124.21	0.000029	0.77	185.21	63.44	0.12
Rio San Giovanni	3350		Bridge									
Rio San Giovanni	3308.381	tr 200	116.17	117.63	122.05	119.83	122.08	0.000057	0.86	198.56	83.44	0.14
Rio San Giovanni	3280		Bridge									
Rio San Giovanni	3260.807	tr 200	116.17	117.15	117.74	118.26	120.65	0.098773	7.62	15.88	43.05	3.82
Rio San Giovanni	3158.768	tr 200	116.17	115.85	117.05	117.05	117.18	0.001391	3.01	84.37	68.00	1.05
Rio San Giovanni	3095.443	tr 200	116.17	114.27	115.47	115.86	116.88	0.007361	8.16	52.67	99.46	2.70
Rio San Giovanni	2895.087	tr 200	116.17	111.55	113.02	113.54	115.39	0.006620	9.06	38.85	73.97	2.66
Rio San Giovanni	2768.166	tr 200	116.17	110.14	111.96	112.63	114.74	0.003649	8.53	40.20	73.83	2.10
Rio San Giovanni	2648.329	tr 200	116.17	108.42	109.66	110.41	113.85	0.013063	11.54	31.10	61.47	3.64
Rio San Giovanni	2492.250	tr 200	116.17	106.79	107.31	107.65	108.54	0.102154	5.01	24.38	71.57	2.51
Rio San Giovanni	2371.082	tr 200	116.17	104.87	106.68	106.88	107.59	0.002332	6.13	59.52	65.41	1.64
Rio San Giovanni	2271.106	tr 200	116.17	102.65	103.52	104.13	106.81	0.023257	11.99	33.91	72.62	4.57
Rio San Giovanni	2172.411	tr 200	116.17	101.17	102.68	103.22	105.28	0.008940	9.36	44.42	93.91	2.72
Rio San Giovanni	2080.271	tr 200	116.17	100.07	101.07	101.73	104.24	0.013117	10.79	32.83	62.17	3.58
Rio San Giovanni	1984.342	tr 200	116.17	98.77	100.19	100.80	103.04	0.010113	10.12	36.32	67.03	3.20
Rio San Giovanni	1891.430	tr 200	116.17	97.53	99.19	99.96	102.27	0.006542	9.56	33.90	53.78	2.65
Rio San Giovanni	1809.332	tr 200	116.17	97.63	98.41	98.87	100.61	0.114636	6.73	18.79	49.03	2.82
Rio San Giovanni	1743.895	tr 200	116.17	95.20	99.05	98.48	99.22	0.002062	2.19	74.08	76.34	0.44
Rio San Giovanni	1700		Culvert									
Rio San Giovanni	1695.408	tr 200	116.17	94.80	96.70	96.70	96.99	0.008506	3.23	56.65	84.71	0.99
Rio San Giovanni	1488.506	tr 200	130.05	93.25	94.61	94.65	95.01	0.010596	2.98	47.41	70.07	0.94
Rio San Giovanni	1372.647	tr 200	130.05	92.52	93.52	93.54	93.90	0.008624	3.34	49.94	72.04	1.12
Rio San Giovanni	1214.271	tr 200	130.05	90.11	93.45	91.66	93.47	0.000024	0.57	281.07	151.39	0.11
Rio San Giovanni	1200		Culvert									
Rio San Giovanni	1185.518	tr 200	130.05	89.57	91.22	91.22	91.51	0.005418	3.17	65.14	98.33	0.90
Rio San Giovanni	1140.801	tr 200	130.05	89.18	90.72	90.68	90.96	0.006936	2.90	62.70	95.13	0.88
Rio San Giovanni	1038.829	tr 200	130.05	88.59	89.83	89.83	90.12	0.009927	2.70	56.27	95.81	0.89
Rio San Giovanni	976.7069	tr 200	130.05	88.39	89.05	88.97	89.19	0.008814	1.76	78.25	161.13	0.77
Rio San Giovanni	910.2315	tr 200	130.05	86.97	88.89	88.61	88.94	0.001673	1.33	141.66	207.03	0.35
Rio San Giovanni	847.9926	tr 200	130.05	87.51	88.46	88.46	88.78	0.002914	4.96	100.00	145.28	1.66
Rio San Giovanni	730.7009	tr 200	130.05	86.80	87.84	87.89	88.21	0.009258	2.79	55.29	103.68	0.94
Rio San Giovanni	622.0302	tr 200	130.05	85.03	85.99	86.21	86.82	0.017291	4.06	32.88	42.04	1.42
Rio San Giovanni	458.8359	tr 200	130.05	82.50	85.99	84.61	86.02	0.000347	0.90	178.94	91.04	0.17
Rio San Giovanni	435		Culvert									
Rio San Giovanni	415.9577	tr 200	130.05	81.99	83.61	83.61	83.95	0.014311	3.30	52.96	75.68	0.97
Rio San Giovanni	237.4459	tr 200	130.05	80.79	82.94	82.09	83.02	0.000416	1.99	160.86	110.65	0.46

Reach	River Sta		Profile	E.G. US.	W.S. US.	E.G. IC	E.G. OC	Min El Weir Flow	Q Culv Group	Q Weir	Delta WS	Culv Vel US	Culv Vel DS
				(m)	(m)	(m)	(m)	(m)	(m3/s)	(m3/s)	(m)	(m/s)	(m/s)
Rio San Giovanni	7120	Culvert #1	tr 200	186.91	186.73	186.91	186.46	186.16	56.38	43.06	4.66	4.51	9.70
Rio San Giovanni	6550	Culvert #1	tr 200	178.74	178.74	178.71	178.74	178.30	64.00	35.44	3.24	7.11	7.11
Rio San Giovanni	6430	Culvert #1	tr 200	175.50	175.50	175.50	173.46	175.15	63.64	35.79	7.17	7.07	12.09
Rio San Giovanni	5890	Culvert #1	tr 200	158.63	158.55	158.63	158.33	157.80	20.91	78.53	1.69	3.48	6.67
Rio San Giovanni	4150	Culvert #1	tr 200	133.47	133.38	133.47	132.78	132.70	86.74	12.68	2.30	4.34	7.94
Rio San Giovanni	1700	Culvert #1	tr 200	99.22	99.05	99.26	99.22	98.00	30.57	85.60	2.35	5.60	5.60
Rio San Giovanni	1200	Culvert #1	tr 200	93.47	93.45	93.47	93.19	93.00	68.66	61.40	2.24	4.35	6.43
Rio San Giovanni	435	Culvert #1	tr 200	86.02	85.99	86.02	85.69	85.10	23.80	106.26	2.39	4.42	6.39

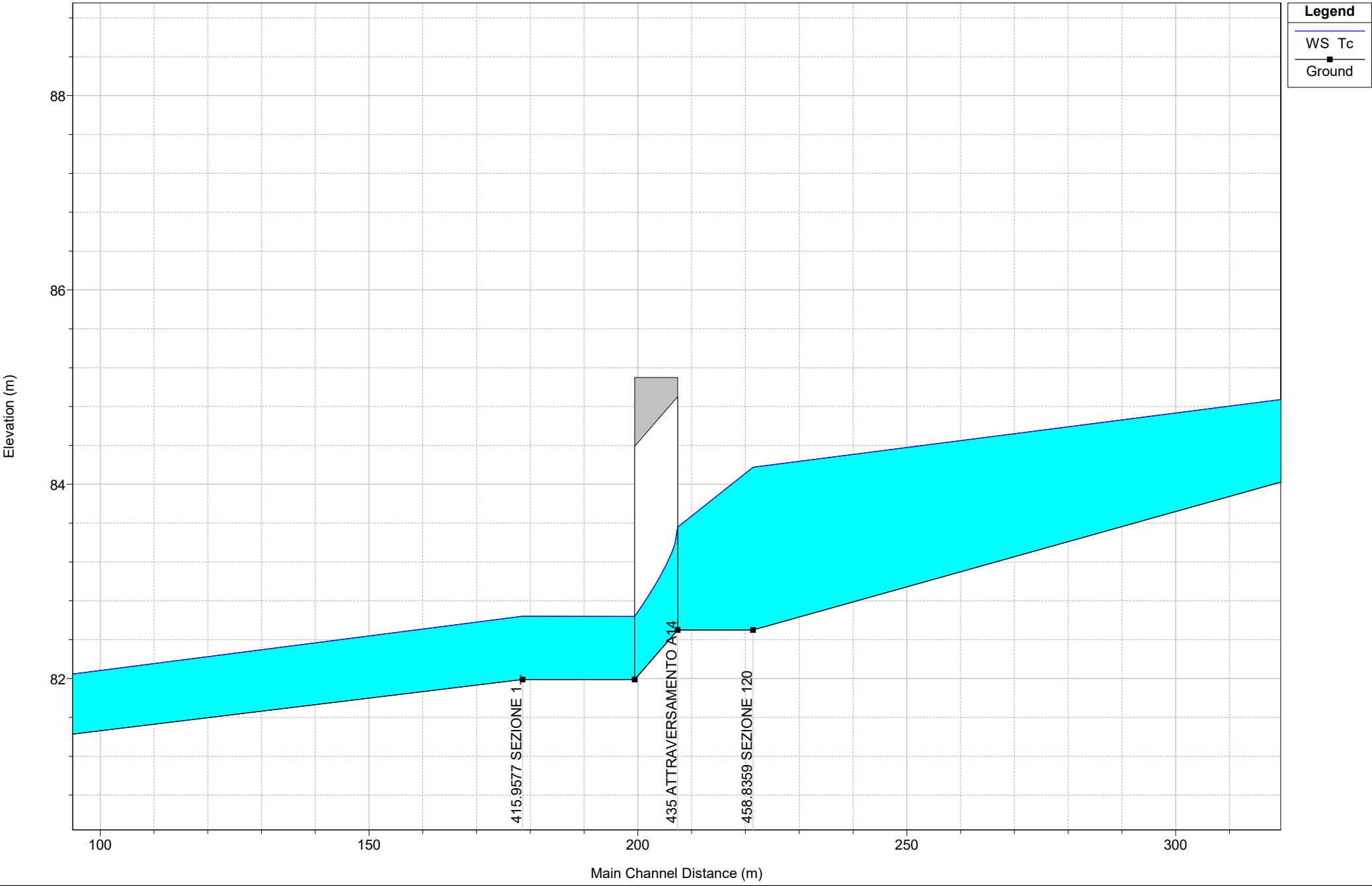
Reach	River Sta	Profile	E.G. US.	Min El Prs	BR Open Area	Prs O WS	Q Total	Min El Weir Flow	Q Weir	Delta EG	BR Sluice Coef
			(m)	(m)	(m2)	(m)	(m3/s)	(m)	(m3/s)	(m)	
Rio San Giovanni	7790	tr 200	201.01	230.00	3386.17	200.05	99.44	232.00		0.95	
Rio San Giovanni	6890	tr 200	178.78	192.18	1470.80		99.44	193.68		0.04	
Rio San Giovanni	6300	tr 200	166.52	164.97	8.75		99.44	165.67		0.45	
Rio San Giovanni	4980	tr 200	145.99	145.30	31.04		99.44	146.50		0.69	
Rio San Giovanni	3350	tr 200	124.21	121.50	20.71		116.17	124.00	8.35	2.13	
Rio San Giovanni	3280	tr 200	122.08	120.60	19.02		116.17	121.30		1.43	

CALCOLO IDROLOGICO PORTATE DI PIENA

RIO SAN GIOVANNI - 3_C25			
		TR (anni)	1.2
Lunghezza asta	L	m	11626
Curve Number	CN	-	94.72
Pend.za media bac.	i _{bac}	-	0.0840
Area bacino	A	kmq	16.84
Altitudine massima	Hmax	m slm	414.35
Altitudine media	Hmed	m slm	209.43
Altitudine minima	Hmin	m slm	79.26
Pend.za media asta	iret	m/m	0.0288
	SCS	(ore)	1.909
	GIANDOTTI	(ore)	3.709
	PASINI	(ore)	3.694
	VAPI	(ore)	5.315
	KIRPICH	(ore)	1.139
	VIPARELLI	(ore)	3.229
	tc adott.	SCS	
		(ore)	1.909
Tempi di ritorno	T	(anni)	1.2
Dati pluviometrici	Pgiorn.	(mm)	50
	Sottozona		2
Altezza di pioggia	n1	-	0.31570972
	a1	-	20.6914142
	n2 (ADOTTATO)	-	-0.00598293
	a2 (ADOTTATO)	-	0.52747035
	n (ADOTTATO)	-	0.30972679
	a (ADOTTATO)	-	10.9141076
	h (ADOTTATO)	(mm)	13.334
	Coef.f.Ragg (ADOTTATO)	-	0.917
	n r (ADOTTATO)	(mm)	12.223
	S	(mm)	14.159
	Ia	(mm)	2.832
	Pnetta (ADOTTATO)	(mm)	3.745
	Coef.defl. (SCS)		0.675
	Coef.defl. (GIANDOTTI)		0.731
	Coef.defl. (PASINI)		0.730
	Coef.defl. (VAPI)		0.757
	Coef.defl. (KIRPICH)		0.626
	Coef.defl. (VIPARELLI)		0.720
	Coef.defl. (ADOTTATO)	-	0.281
PORTATE DI PIENA	Qpicco (SCS)	(mc/s)	94.946
	Qpicco (GIANDOTTI)	(mc/s)	64.665
	Qpicco (PASINI)	(mc/s)	64.821
	Qpicco (VAPI)	(mc/s)	52.138
	Qpicco (KIRPICH)	(mc/s)	126.099
	Qpicco (VIPARELLI)	(mc/s)	70.162
	Qpicco (ADOTTATO)	(mc/s)	9.177

Comune di Sassari (SS)
 VERIFICHE DI SICUREZZA IDRAULICA OPERE INTERFERENTI CON IL RETICOLO IDROGRAFICO
 Strade comunali - **ATTRAVERSAMENTO C25**

	River Sta	Profile	Culv Inv El DS	Culv Inv El US	W.S.	Q Culv	Culv Vel US	Culv Vel DS	QUOTA INTRADOS SO	FRANCHI DISPONIBILI	FRANCHI RICHIESTI	50% di FRANCHI RICHIESTI	VERIFICA	Deficit
			(m slm)	(m slm)	(m slm)	(m³/s)	(m/s)	(m/s)	(m slm)	(m)	(m)	(m)		(m)
UPSTREAM	435 Culvert	TR 200 ANNI		82.5	85.99	130.05	4.42		84.9	-1.09	1.500		NON VERIF.	2.59
	435 Culvert	Tr critico		82.5	84.18	9.2	3.22		84.9	0.72	1.128	0.564	OK	OK
DOWNSTREAM	435 Culvert	TR 200 ANNI	81.99		83.61	130.05		6.39	84.39	0.78	1.517		NON VERIF.	0.7368401
	435 Culvert	Tr critico	81.99		82.88	9.2		5.25	84.39	1.51	1.025	0.512	OK	OK

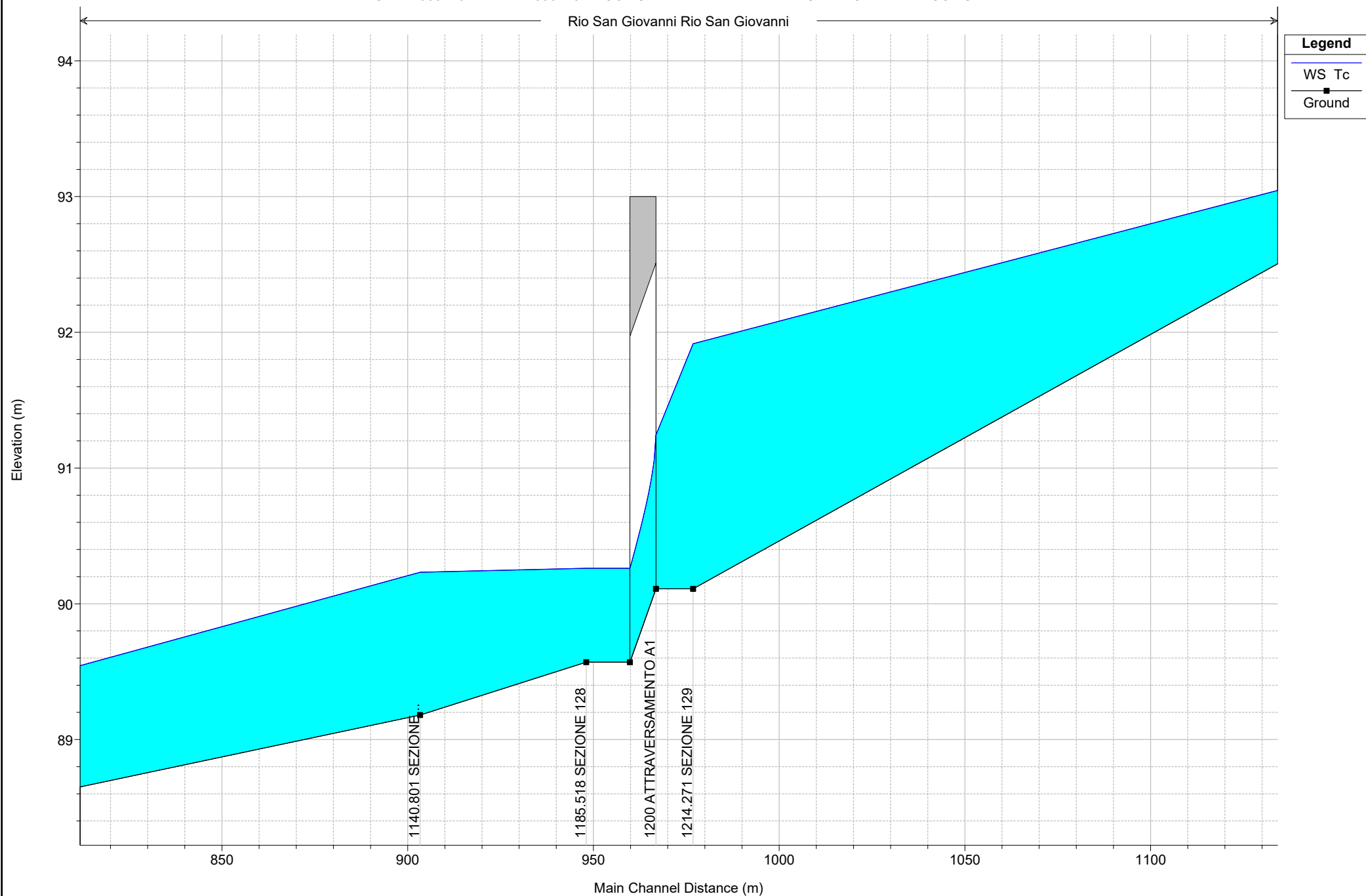


CALCOLO IDROLOGICO PORTATE DI PIENA

RIO SAN GIOVANNI - 3_C26			
		TR (anni)	3.5
Lunghezza asta	L	m	11626
Curve Number	CN	-	94.72
Pend.za media bac.	i _{bac}	-	0.0840
Area bacino	A	kmq	16.84
Altitudine massima	Hmax	m slm	414.35
Altitudine media	Hmed	m slm	209.43
Altitudine minima	Hmin	m slm	79.26
Pend.za media asta	iret	m/m	0.0288
	SCS	(ore)	1.909
	GIANDOTTI	(ore)	3.709
	PASINI	(ore)	3.694
	VAPI	(ore)	5.315
	KIRPICH	(ore)	1.139
	VIPARELLI	(ore)	3.229
	tc adott.	SCS	
		(ore)	1.909
Tempi di ritorno	T	(anni)	3.5
Dati pluviometrici	Pgiorn.	(mm)	50
	Sottozona		2
Altezza di pioggia	n1	-	0.31570972
	a1	-	20.6914142
	n2 (ADOTTATO)	-	-0.00788301
	a2 (ADOTTATO)	-	1.0303384
	n (ADOTTATO)	-	0.30782671
	a (ADOTTATO)	-	21.3191587
	h (ADOTTATO)	(mm)	26.014
	Coef.f.Ragg (ADOTTATO)	-	0.917
	h r (ADOTTATO)	(mm)	23.847
	S	(mm)	14.159
	Ia	(mm)	2.832
	Pnetta (ADOTTATO)	(mm)	12.555
	Coef.defl. (SCS)		0.675
	Coef.defl. (GIANDOTTI)		0.731
	Coef.defl. (PASINI)		0.730
	Coef.defl. (VAPI)		0.757
	Coef.defl. (KIRPICH)		0.626
	Coef.defl. (VIPARELLI)		0.720
	Coef.defl. (ADOTTATO)	-	0.483
PORTATE DI PIENA	Qpicco (SCS)	(mc/s)	94.946
	Qpicco (GIANDOTTI)	(mc/s)	64.665
	Qpicco (PASINI)	(mc/s)	64.821
	Qpicco (VAPI)	(mc/s)	52.138
	Qpicco (KIRPICH)	(mc/s)	126.099
	Qpicco (VIPARELLI)	(mc/s)	70.162
	Qpicco (ADOTTATO)	(mc/s)	30.768

Comune di Sassari (SS)
VERIFICHE DI SICUREZZA IDRAULICA OPERE INTERFERENTI CON IL RETICOLO IDROGRAFICO
Strade comunali - **ATTRAVERSAMENTO C26**

	River Sta	Profile	Culv Inv El DS	Culv Inv El US	W.S.	Q Culv	Culv Vel US	Culv Vel DS	QUOTA INTRADOS SO	FRANCHI DISPONIBILI	FRANCHI RICHIESTI	50% di FRANCHI RICHIESTI	VERIFICA	Deficit
			(m slm)	(m slm)	(m slm)	(m³/s)	(m/s)	(m/s)	(m slm)	(m)	(m)	(m)		(m)
UPSTREAM	1200 Culver	TR 200 ANNI		90.11	93.45	130.05	4.35		92.51	-0.94	1.500		NON VERIF.	2.44
	1200 Culver	Tr critico		90.11	91.92	31	3.33		92.51	0.59	1.170	0.585	OK	OK
DOWNSTREAM	1200 Culver	TR 200 ANNI	89.57		91.22	130.05		6.43	91.97	0.75	1.536		NON VERIF.	0.78593307
	1200 Culver	Tr critico	89.57		90.74	31		5.46	91.97	1.23	1.214	0.607	OK	OK

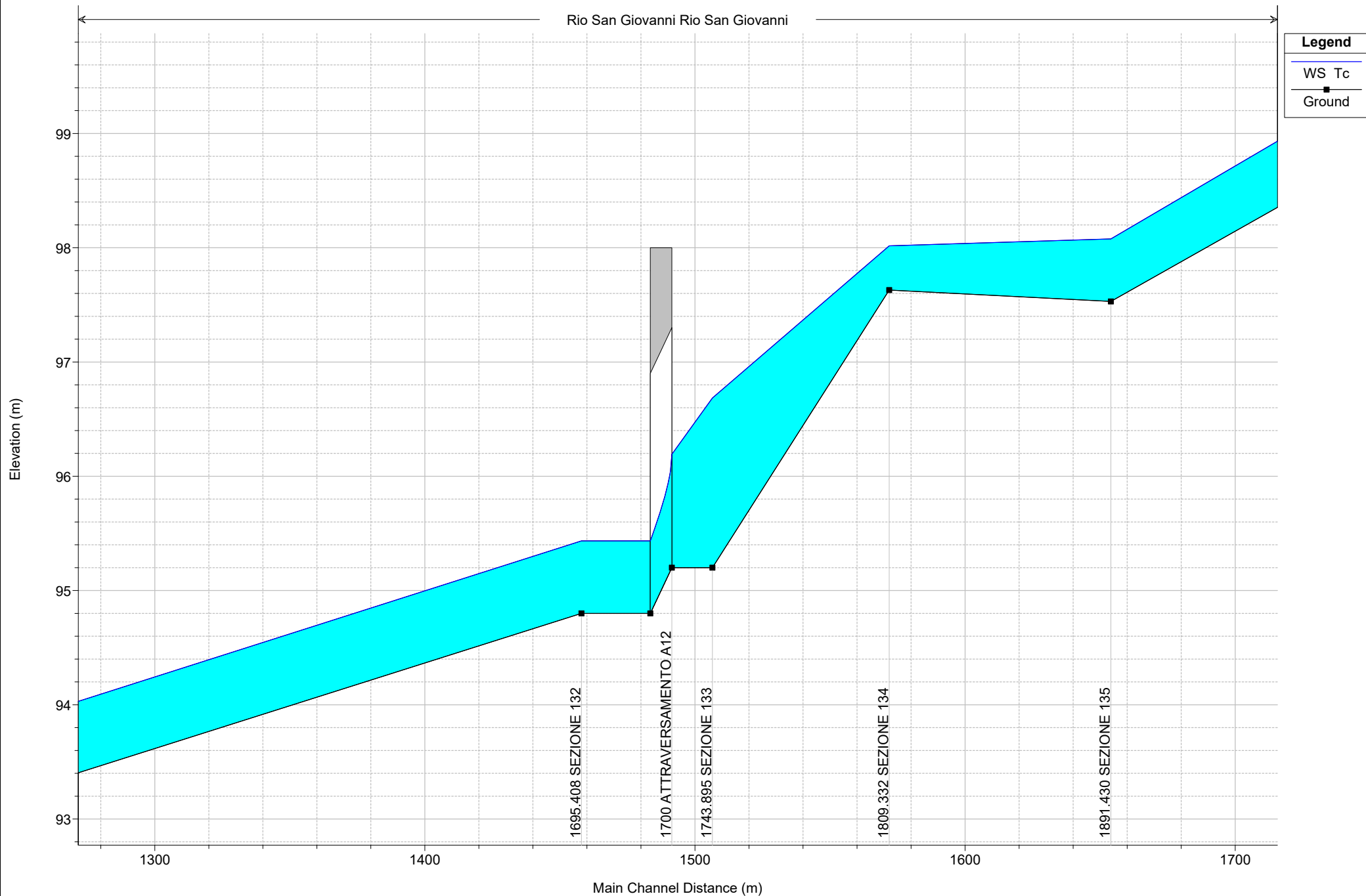


CALCOLO IDROLOGICO PORTATE DI PIENA

RIO SAN GIOVANNI - 2 _C27			
		TR (anni)	1.2
Lunghezza asta	L	m	10813
Curve Number	CN	-	94.75
Pend.za media bac.	i _{bac}	-	0.0900
Area bacino	A	kmq	14.12
Altitudine massima	Hmax	m slm	414.35
Altitudine media	Hmed	m slm	226.82
Altitudine minima	Hmin	m slm	92.44
Pend.za media asta	iret	m/m	0.0298
	SCS	(ore)	1.738
	GIANDOTTI	(ore)	3.370
	PASINI	(ore)	3.345
	VAPI	(ore)	5.174
	KIRPICH	(ore)	1.049
	VIPARELLI	(ore)	3.004
	tc adott.	SCS	
		(ore)	1.738
Tempi di ritorno	T	(anni)	1.2
Dati pluviometrici	Pgiorn.	(mm)	50
	Sottozona		2
Altezza di pioggia	n1	-	0.31570972
	a1	-	20.6914142
	n2 (ADOTTATO)	-	-0.00598293
	a2 (ADOTTATO)	-	0.52747035
	n (ADOTTATO)	-	0.30972679
	a (ADOTTATO)	-	10.9141076
	h (ADOTTATO)	(mm)	12.951
	Coef.f.Ragg (ADOTTATO)	-	0.919
	h r (ADOTTATO)	(mm)	11.899
	S	(mm)	14.074
	Ia	(mm)	2.815
	Pnetta (ADOTTATO)	(mm)	3.563
	Coef.defl. (SCS)		0.673
	Coef.defl. (GIANDOTTI)		0.728
	Coef.defl. (PASINI)		0.727
	Coef.defl. (VAPI)		0.759
	Coef.defl. (KIRPICH)		0.624
	Coef.defl. (VIPARELLI)		0.719
	Coef.defl. (ADOTTATO)	-	0.275
PORTATE DI PIENA	Qpicco (SCS)	(mc/s)	84.683
	Qpicco (GIANDOTTI)	(mc/s)	57.760
	Qpicco (PASINI)	(mc/s)	58.007
	Qpicco (VAPI)	(mc/s)	44.678
	Qpicco (KIRPICH)	(mc/s)	111.757
	Qpicco (VIPARELLI)	(mc/s)	61.809
	Qpicco (ADOTTATO)	(mc/s)	8.043

Comune di Sassari (SS)
VERIFICHE DI SICUREZZA IDRAULICA OPERE INTERFERENTI CON IL RETICOLO IDROGRAFICO
Strade comunali - **ATTRAVERSAMENTO C27**

	River Sta		Profile	Culv Inv El DS	Culv Inv El US	W.S.	Q Culv	Culv Vel US	Culv Vel DS	QUOTA INTRADOS SO	FRANCHI DISPONIBILI	FRANCHI RICHIESTI	50% di FRANCHI RICHIESTI	VERIFICA	Deficit
				(m slm)	(m slm)	(m slm)	(m³/s)	(m/s)	(m/s)	(m slm)	(m)	(m)	(m)		(m)
UPSTREAM	1700	Culver	TR 200 ANNI		95.2	99.05	116.17	5.6		97.3	-1.75	1.973		NON VERIF.	3.72328638
	1700	Culver	Tr critico		95.2	96.68	8.04	3.12		97.3	0.62	1.058	0.529	OK	OK
DOWNSTREAM	1700	Culver	TR 200 ANNI	94.8		96.7	116.17		5.6	96.9	0.2	1.649		NON VERIF.	1.4488343
	1700	Culver	Tr critico	94.8		95.94	8.04		4.88	96.9	0.96	1.000	0.500	OK	OK

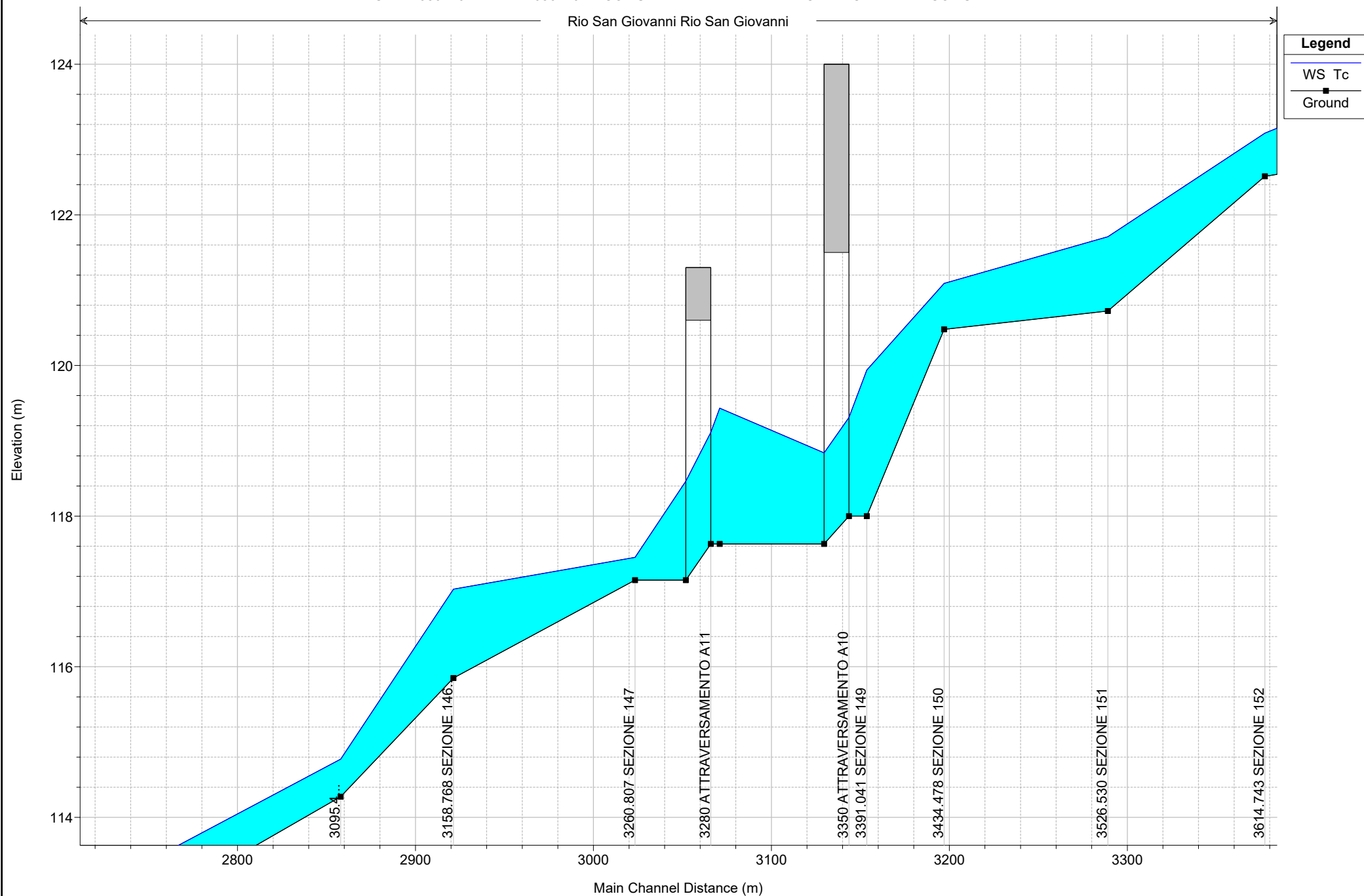


CALCOLO IDROLOGICO PORTATE DI PIENA

RIO SAN GIOVANNI - 2 _C28			
		TR (anni)	1.8
Lunghezza asta	L	m	10813
Curve Number	CN	-	94.75
Pend.za media bac.	i _{bac}	-	0.0900
Area bacino	A	kmq	14.12
Altitudine massima	Hmax	m slm	414.35
Altitudine media	Hmed	m slm	226.82
Altitudine minima	Hmin	m slm	92.44
Pend.za media asta	iret	m/m	0.0298
	SCS	(ore)	1.738
	GIANDOTTI	(ore)	3.370
	PASINI	(ore)	3.345
	VAPI	(ore)	5.174
	KIRPICH	(ore)	1.049
	VIPARELLI	(ore)	3.004
	tc adott.	SCS	
		(ore)	1.738
Tempi di ritorno	T	(anni)	1.8
Dati pluviometrici	Pgiorn.	(mm)	50
	Sottozona		2
Altezza di pioggia	n1	-	0.31570972
	a1	-	20.6914142
	n2 (ADOTTATO)	-	-0.00670265
	a2 (ADOTTATO)	-	0.71794827
	n (ADOTTATO)	-	0.30900707
	a (ADOTTATO)	-	14.855365
	h (ADOTTATO)	(mm)	17.621
	Coef.f.Ragg (ADOTTATO)	-	0.919
	h r (ADOTTATO)	(mm)	16.189
	S	(mm)	14.074
	Ia	(mm)	2.815
	Pnetta (ADOTTATO)	(mm)	6.517
	Coef.defl. (SCS)		0.673
	Coef.defl. (GIANDOTTI)		0.728
	Coef.defl. (PASINI)		0.727
	Coef.defl. (VAPI)		0.759
	Coef.defl. (KIRPICH)		0.624
	Coef.defl. (VIPARELLI)		0.719
	Coef.defl. (ADOTTATO)	-	0.370
PORTATE DI PIENA	Qpicco (SCS)	(mc/s)	84.683
	Qpicco (GIANDOTTI)	(mc/s)	57.760
	Qpicco (PASINI)	(mc/s)	58.007
	Qpicco (VAPI)	(mc/s)	44.678
	Qpicco (KIRPICH)	(mc/s)	111.757
	Qpicco (VIPARELLI)	(mc/s)	61.809
	Qpicco (ADOTTATO)	(mc/s)	14.710

Comune di Sassari (SS)
VERIFICHE DI SICUREZZA IDRAULICA OPERE INTERFERENTI CON IL RETICOLO IDROGRAFICO
Strade comunali - ATTRAVERSAMENTO C28

		River Sta	Profile	Bridge Inv EI DS	Br Inv EI US	W.S.	Q Bridge	Br Vel US	Br Vel DS	QUOTA INTRADOS SO	FRANCHI DISPONIBILI	$v^2/2g$	y	dh1	a	y'	dh2	$0.7 v^2/2g$	FRANCHI RICHIESTI	50% di FRANCHI RICHIESTI	VERIFICA	Deficit
				(m slm)	(m slm)	(m slm)	(m³/s)	(m/s)	(m/s)	(m slm)	(m)	(m)	(m)	(m)		(m)	(m)	(m)	(m)	(m)		(m)
UPSTREAM	Max H	0	TR 200 ANNI		118	124.19	116.22	0.77		120.6	-3.59	0.03	6.19	1.500	0.000	2.000	1.500	0.021	1.500		NON VERIF.	5.09
	Max V		TR 200 ANNI		118	124.19	116.22	5.06		120.6	-3.59	1.31	6.19	1.500	0.225	2.000	1.950	0.914	1.950		NON VERIF.	5.53988888
	Max H		Tr critico		118	119.94	15	1.35		120.6	0.66	0.09	1.94	1.212	0.000	1.940	1.212	0.065	1.212	0.606	OK	OK
	Max V	0	Tr critico		118	119.31	15	3.58		120.6	1.29	0.65	1.31	0.996	0.000	1.310	0.996	0.457	1.000	0.500	OK	OK
DOWNSTREAM	Max H	0	TR 200 ANNI	117.63		124.19	116.21	4.39	4.39	120.6	-3.59	0.98	6.56	1.500	0.000	2.000	1.500	0.688	1.500		NON VERIF.	5.09
	Max V		TR 200 ANNI	117.63		124.19	116.21	4.39		120.6	-3.59	0.00	6.56	1.500	0.000	2.000	1.500	0.000	1.500		NON VERIF.	5.09
	Max H		Tr critico	117.63		119.43	15.01	0.68		120.6	1.17	0.00	1.80	1.167	0.000	1.800	1.167	0.000	1.167	0.584	OK	OK
	Max V	0	Tr critico	117.63		118.84	15.01	4.3	4.3	120.6	1.76	0.94	1.21	0.957	0.000	1.210	0.957	0.660	1.000	0.500	OK	OK

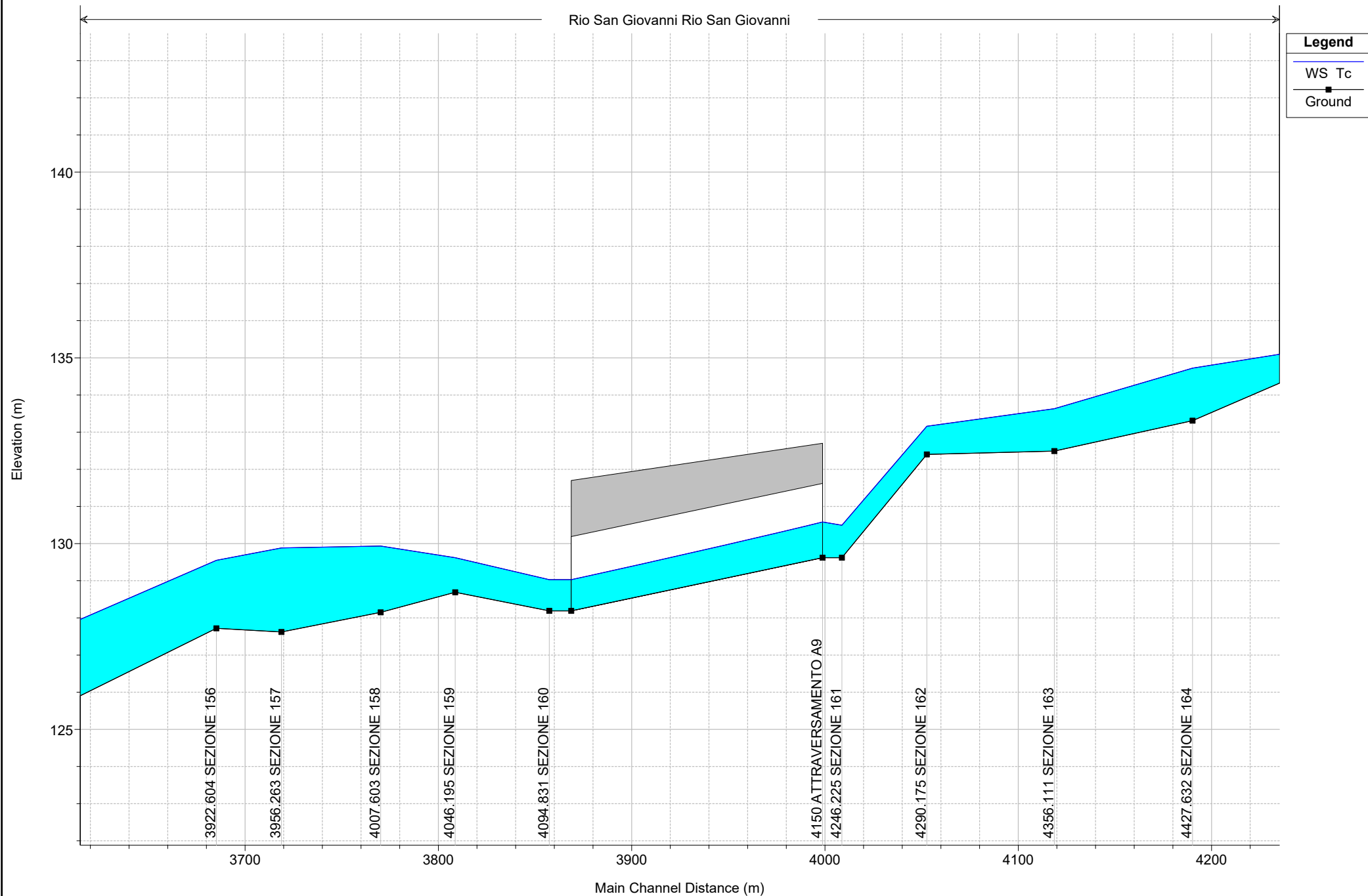


CALCOLO IDROLOGICO PORTATE DI PIENA

RIO SAN GIOVANNI - 2 _E03			
		TR (anni)	17.2
Lunghezza asta	L	m	10813
Curve Number	CN	-	94.75
Pend.za media bac.	i _{bac}	-	0.0900
Area bacino	A	kmq	14.12
Altitudine massima	Hmax	m slm	414.35
Altitudine media	Hmed	m slm	226.82
Altitudine minima	Hmin	m slm	92.44
Pend.za media asta	iret	m/m	0.0298
	SCS	(ore)	1.738
	GIANDOTTI	(ore)	3.370
	PASINI	(ore)	3.345
	VAPI	(ore)	5.174
	KIRPICH	(ore)	1.049
	VIPARELLI	(ore)	3.004
	tc adott.	SCS	
		(ore)	1.738
Tempi di ritorno	T	(anni)	17.2
Dati pluviometrici	Pgiorn.	(mm)	50
	Sottozona		2
Altezza di pioggia	n1	-	0.31570972
	a1	-	20.6914142
	n2 (ADOTTATO)	-	-0.01070915
	a2 (ADOTTATO)	-	1.77829112
	n (ADOTTATO)	-	0.30500057
	a (ADOTTATO)	-	36.7953582
	h (ADOTTATO)	(mm)	43.549
	Coef.f.Ragg (ADOTTATO)	-	0.919
	h r (ADOTTATO)	(mm)	40.010
	S	(mm)	14.074
	Ia	(mm)	2.815
	Pnetta (ADOTTATO)	(mm)	26.985
	Coef.defl. (SCS)		0.673
	Coef.defl. (GIANDOTTI)		0.728
	Coef.defl. (PASINI)		0.727
	Coef.defl. (VAPI)		0.759
	Coef.defl. (KIRPICH)		0.624
	Coef.defl. (VIPARELLI)		0.719
	Coef.defl. (ADOTTATO)	-	0.620
PORTATE DI PIENA	Qpicco (SCS)	(mc/s)	84.683
	Qpicco (GIANDOTTI)	(mc/s)	57.760
	Qpicco (PASINI)	(mc/s)	58.007
	Qpicco (VAPI)	(mc/s)	44.678
	Qpicco (KIRPICH)	(mc/s)	111.757
	Qpicco (VIPARELLI)	(mc/s)	61.809
	Qpicco (ADOTTATO)	(mc/s)	60.912

Comune di Sassari (SS)
VERIFICHE DI SICUREZZA IDRAULICA OPERE INTERFERENTI CON IL RETICOLO IDROGRAFICO
Strade comunali - **ATTRAVERSAMENTO E03**

	River Sta	Profile	Culv Inv El DS	Culv Inv El US	W.S.	Q Culv	Culv Vel US	Culv Vel DS	QUOTA INTRADOS SO	FRANCHI DISPONIBILI	FRANCHI RICHIESTI	50% di FRANCHI RICHIESTI	VERIFICA	Deficit
			(m slm)	(m slm)	(m slm)	(m³/s)	(m/s)	(m/s)	(m slm)	(m)	(m)	(m)		(m)
UPSTREAM	4150 Culver	TR 200 ANNI		129.62	133.38	99.44	4.34		131.62	-1.76	1.500		NON VERIF.	3.26
	4150 Culver	Tr critico		129.62	130.49	61	6.34		131.62	1.13	1.435	0.717	OK	OK
DOWNSTREAM	4150 Culver	TR 200 ANNI	128.19		131.08	99.44		7.94	130.19	-0.89	2.250		NON VERIF.	3.14003034
	4150 Culver	Tr critico	128.19		129.1	61		7.28	130.19	1.09	1.892	0.946	OK	OK

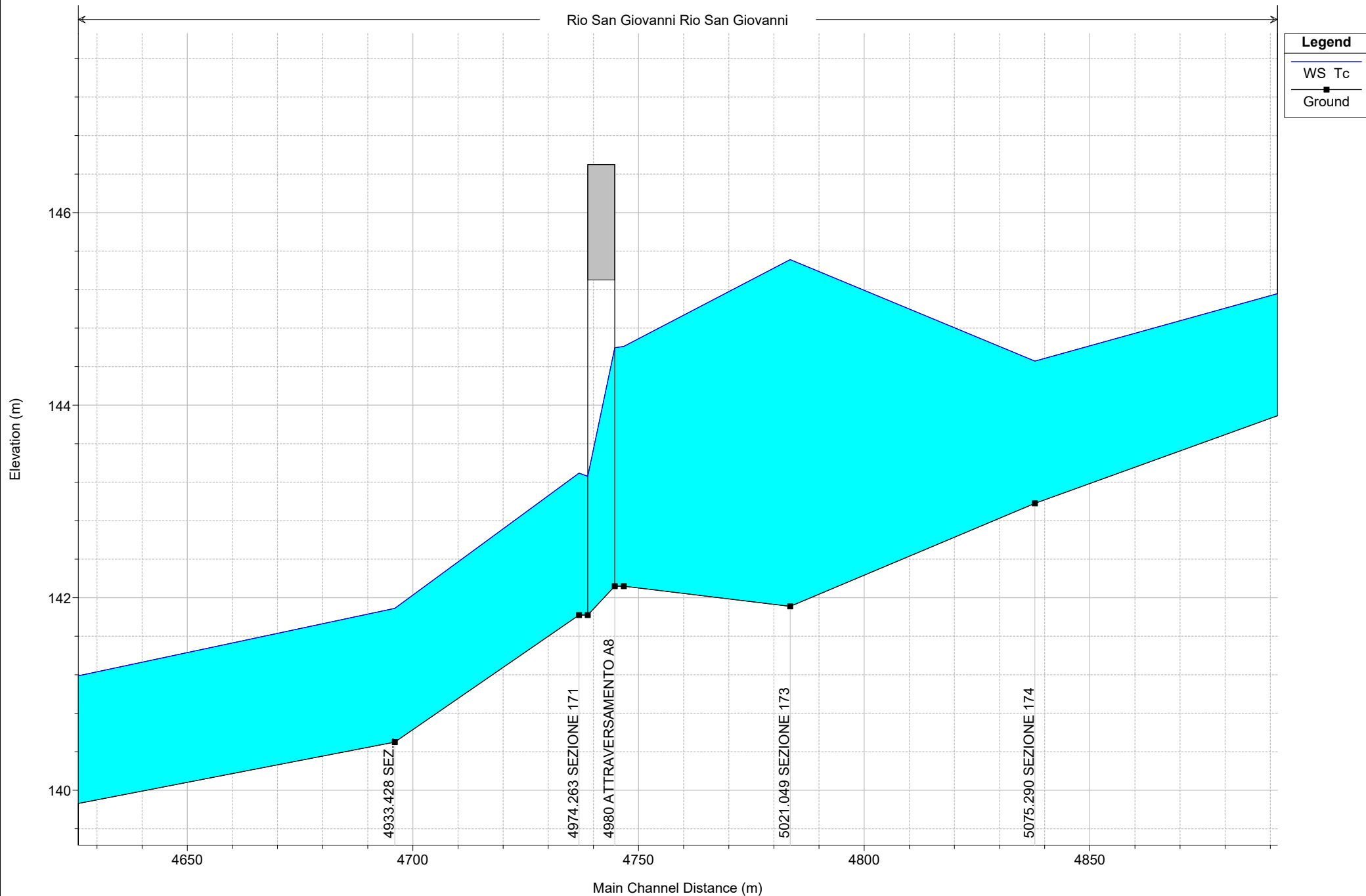


CALCOLO IDROLOGICO PORTATE DI PIENA

RIO SAN GIOVANNI - 1 _C29			
TR (anni)		61.6	
Lunghezza asta	L	m	7773
Curve Number	CN	-	94.66
Pend.za media bac.	i _{bac}	-	0.1040
Area bacino	A	kmq	9.87
Altitudine massima	Hmax	m slm	414.35
Altitudine media	Hmed	m slm	255.66
Altitudine minima	Hmin	m slm	131.4
Pend.za media asta	iret	m/m	0.0364
	SCS	(ore)	1.247
	GIANDOTTI	(ore)	2.717
	PASINI	(ore)	2.405
	VAPI	(ore)	4.652
	KIRPICH	(ore)	0.769
	VIPARELLI	(ore)	2.159
	tc adott.	SCS	
		(ore)	1.247
Tempi di ritorno	T	(anni)	61.6
Dati pluviometrici	Pgiorn.	(mm)	50
	Sottozona		2
Altezza di pioggia	n1	-	0.31570972
	a1	-	20.6914142
	n2 (ADOTTATO)	-	-0.01297367
	a2 (ADOTTATO)	-	2.37760946
	n (ADOTTATO)	-	0.30273605
	a (ADOTTATO)	-	49.1961021
	h (ADOTTATO)	(mm)	52.595
	Coef.f.Ragg (ADOTTATO)	-	0.919
	h r (ADOTTATO)	(mm)	48.311
	S	(mm)	14.329
	Ia	(mm)	2.866
	Pnetta (ADOTTATO)	(mm)	34.552
	Coef.defl. (SCS)		0.648
	Coef.defl. (GIANDOTTI)		0.715
	Coef.defl. (PASINI)		0.706
	Coef.defl. (VAPI)		0.755
	Coef.defl. (KIRPICH)		0.592
	Coef.defl. (VIPARELLI)		0.697
	Coef.defl. (ADOTTATO)	-	0.657
PORTATE DI PIENA	Qpicco (SCS)	(mc/s)	71.862
	Qpicco (GIANDOTTI)	(mc/s)	46.096
	Qpicco (PASINI)	(mc/s)	49.495
	Qpicco (VAPI)	(mc/s)	33.442
	Qpicco (KIRPICH)	(mc/s)	88.660
	Qpicco (VIPARELLI)	(mc/s)	52.691
	Qpicco (ADOTTATO)	(mc/s)	75.973

Comune di Sassari (SS)
VERIFICHE DI SICUREZZA IDRAULICA OPERE INTERFERENTI CON IL RETICOLO IDROGRAFICO
Strade comunali - ATTRAVERSAMENTO C29

		River Sta	Profile	Bridge Inv EI DS	Br Inv EI US	W.S.	Q Bridge	Br Vel US	Br Vel DS	QUOTA INTRADOS SO	FRANCHI DISPONIBILI	$v^2/2g$	y	dh1	a	y'	dh2	$0.7 v^2/2g$	FRANCHI RICHIESTI	50% di FRANCHI RICHIESTI	VERIFICA	Deficit
				(m slm)	(m slm)	(m slm)	(m³/s)	(m/s)	(m/s)	(m slm)	(m)	(m)	(m)	(m)		(m)	(m)	(m)	(m)	(m)		(m)
UPSTREAM	Max H	0	TR 200 ANNI		142.12	144.99	99.43	4.84		145.3	0.31	1.19	2.87	1.474	0.000	2.000	1.474	0.836	1.474		NON VERIF.	1.16387347
	Max V		TR 200 ANNI		142.12	144.98	99.43	4.86		145.3	0.32	1.20	2.86	1.471	0.000	2.000	1.471	0.843	1.471		NON VERIF.	1.1513035
	Max H		Tr critico		142.12	144.61	76	4.47		145.3	0.69	1.02	2.49	1.373	0.000	2.000	1.373	0.713	1.373	0.686	OK	OK
	Max V	0	Tr critico		142.12	144.6	76	4.51		145.3	0.7	1.04	2.48	1.370	0.000	2.000	1.370	0.726	1.370	0.685	OK	OK
DOWNSTREAM	Max H	0	TR 200 ANNI	141.82		143.47	99.44	6.01	6.01	145.3	1.83	1.84	1.65	1.118	0.245	1.650	1.522	1.289	1.522		OK	OK
	Max V		TR 200 ANNI	141.82		143.45	99.44	6.17		145.3	1.85	0.00	1.63	1.111	0.000	1.630	1.111	0.000	1.111		OK	OK
	Max H		Tr critico	141.82		143.29	76	5.46		145.3	2.01	0.00	1.47	1.055	0.000	1.470	1.055	0.000	1.055	0.527	OK	OK
	Max V	0	Tr critico	141.82		143.26	76	5.66	5.66	145.3	2.04	1.63	1.44	1.044	0.238	1.440	1.387	1.143	1.387	0.693	OK	OK

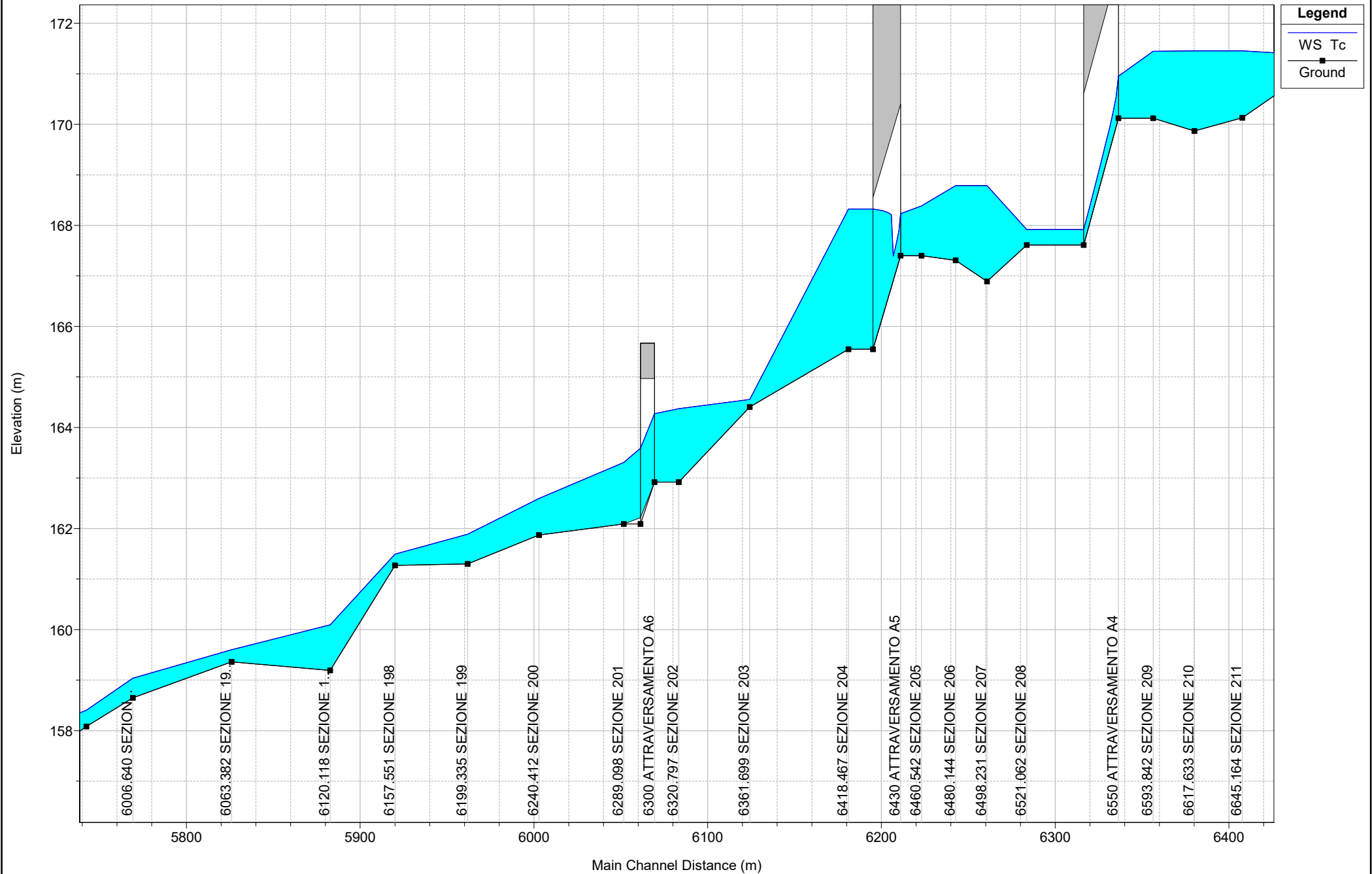


CALCOLO IDROLOGICO PORTATE DI PIENA

RIO SAN GIOVANNI - 1 _C31			
		TR (anni)	1.3
Lunghezza asta	L	m	7773
Curve Number	CN	-	94.66
Pend.za media bac.	i _{bac}	-	0.1040
Area bacino	A	kmq	9.87
Altitudine massima	Hmax	m slm	414.35
Altitudine media	Hmed	m slm	255.66
Altitudine minima	Hmin	m slm	131.4
Pend.za media asta	iret	m/m	0.0364
	SCS	(ore)	1.247
	GIANDOTTI	(ore)	2.717
	PASINI	(ore)	2.405
	VAPI	(ore)	4.652
	KIRPICH	(ore)	0.769
	VIPARELLI	(ore)	2.159
	tc adott.	SCS	
		(ore)	1.247
Tempi di ritorno	T	(anni)	1.3
Dati pluviometrici	Pgiorn.	(mm)	50
	Sottozona		2
Altezza di pioggia	n1	-	0.31570972
	a1	-	20.6914142
	n2 (ADOTTATO)	-	-0.00612501
	a2 (ADOTTATO)	-	0.56507252
	n (ADOTTATO)	-	0.30958471
	a (ADOTTATO)	-	11.6921497
	h (ADOTTATO)	(mm)	12.519
	Coef.f.Ragg (ADOTTATO)	-	0.919
	n r (ADOTTATO)	(mm)	11.499
	S	(mm)	14.329
	Ia	(mm)	2.866
	Pnetta (ADOTTATO)	(mm)	3.246
	Coef.defl. (SCS)		0.648
	Coef.defl. (GIANDOTTI)		0.715
	Coef.defl. (PASINI)		0.706
	Coef.defl. (VAPI)		0.755
	Coef.defl. (KIRPICH)		0.592
	Coef.defl. (VIPARELLI)		0.697
	Coef.defl. (ADOTTATO)	-	0.259
PORTATE DI PIENA	Qpicco (SCS)	(mc/s)	71.862
	Qpicco (GIANDOTTI)	(mc/s)	46.096
	Qpicco (PASINI)	(mc/s)	49.495
	Qpicco (VAPI)	(mc/s)	33.442
	Qpicco (KIRPICH)	(mc/s)	88.660
	Qpicco (VIPARELLI)	(mc/s)	52.691
	Qpicco (ADOTTATO)	(mc/s)	7.138

Comune di Sassari (SS)
VERIFICHE DI SICUREZZA IDRAULICA OPERE INTERFERENTI CON IL RETICOLO IDROGRAFICO
Strade comunali - ATTRAVERSAMENTO C31

		River Sta	Profile	Bridge Inv El DS	Br Inv El US	W.S.	Q Bridge	Br Vel US	Br Vel DS	QUOTA INTRADOS SO	FRANCHI DISPONIBILI	V ² /2g	y	dh1	a	y'	dh2	0.7 v ² /2g	FRANCHI RICHIESTI	50% di FRANCHI RICHIESTI	VERIFICA	Deficit
				(m slm)	(m slm)	(m slm)	(m ³ /s)	(m/s)	(m/s)	(m slm)	(m)	(m)	(m)	(m)		(m)	(m)	(m)	(m)	(m)		(m)
UPSTREAM	Max H	0	TR 200 ANNI		162.92	166.42	99.44	1.72		164.97	-1.45	0.15	3.50	1.500	0.000	2.000	1.500	0.106	1.500		NON VERIF.	2.95
	Max V		TR 200 ANNI		162.92	166.21	99.44	2.51		164.97	-1.24	0.32	3.29	1.500	0.000	2.000	1.500	0.225	1.500		NON VERIF.	2.74
	Max H		Tr critico		162.92	164.37	7.14	1.14		164.97	0.6	0.07	1.45	1.048	0.000	1.450	1.048	0.046	1.048	0.524	OK	OK
	Max V	0	Tr critico		162.92	164.27	7.14	1.59		164.97	0.7	0.13	1.35	1.011	0.000	1.350	1.011	0.090	1.011	0.505	OK	OK
DOWNSTREAM																						
	Max H	0	TR 200 ANNI	162.21		166	99.44	2.88	2.88	164.97	-1.03	0.42	3.79	1.500	0.000	2.000	1.500	0.296	1.500		NON VERIF.	2.53
	Max V		TR 200 ANNI	162.21		165.4	99.44	4.05		164.97	-0.43	0.00	3.19	1.500	0.000	2.000	1.500	0.000	1.500		NON VERIF.	1.93
	Max H		Tr critico	162.21		163.59	7.14	2.67		164.97	1.38	0.00	1.38	1.022	0.000	1.380	1.022	0.000	1.022	0.511	OK	OK
	Max V	0	Tr critico	162.21		163.31	7.14	2.82	2.82	164.97	1.66	0.41	1.10	0.912	0.000	1.100	0.912	0.284	1.000	0.500	OK	OK

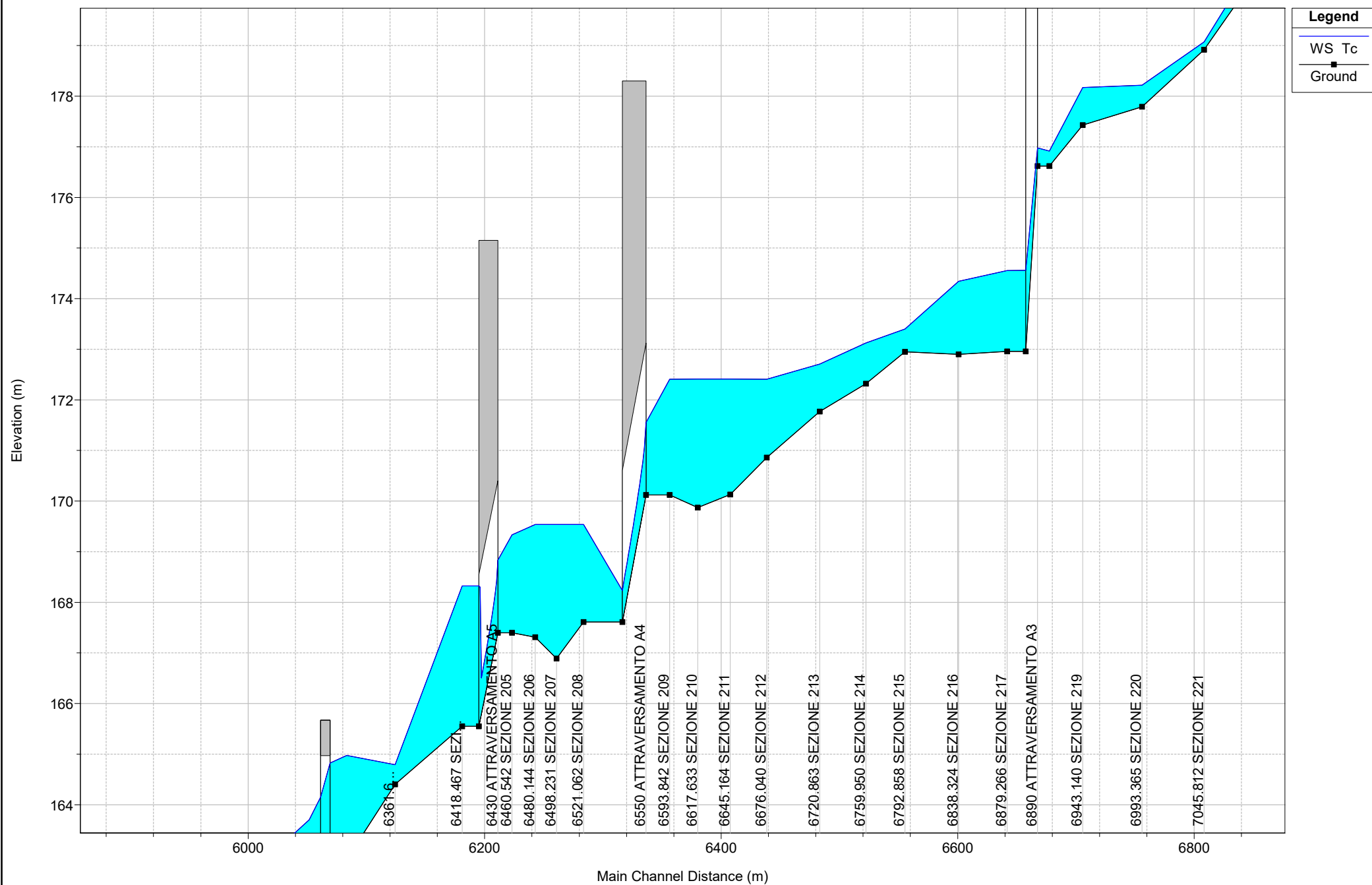


CALCOLO IDROLOGICO PORTATE DI PIENA

RIO SAN GIOVANNI - 1 _C32			
		TR (anni)	2.4
Lunghezza asta	L	m	7773
Curve Number	CN	-	94.66
Pend.za media bac.	i _{bac}	-	0.1040
Area bacino	A	kmq	9.87
Altitudine massima	Hmax	m slm	414.35
Altitudine media	Hmed	m slm	255.66
Altitudine minima	Hmin	m slm	131.4
Pend.za media asta	iret	m/m	0.0364
	SCS	(ore)	1.247
	GIANDOTTI	(ore)	2.717
	PASINI	(ore)	2.405
	VAPI	(ore)	4.652
	KIRPICH	(ore)	0.769
	VIPARELLI	(ore)	2.159
	tc adott.	SCS	
		(ore)	1.247
Tempi di ritorno	T	(anni)	2.4
Dati pluviometrici	Pgiorn.	(mm)	50
	Sottozona		2
Altezza di pioggia	n1	-	0.31570972
	a1	-	20.6914142
	n2 (ADOTTATO)	-	-0.0072133
	a2 (ADOTTATO)	-	0.8530945
	n (ADOTTATO)	-	0.30849642
	a (ADOTTATO)	-	17.6517317
	h (ADOTTATO)	(mm)	18.895
	Coef.f.Ragg (ADOTTATO)	-	0.919
	n r (ADOTTATO)	(mm)	17.356
	S	(mm)	14.329
	Ia	(mm)	2.866
	Pnetta (ADOTTATO)	(mm)	7.286
	Coef.defl. (SCS)		0.648
	Coef.defl. (GIANDOTTI)		0.715
	Coef.defl. (PASINI)		0.706
	Coef.defl. (VAPI)		0.755
	Coef.defl. (KIRPICH)		0.592
	Coef.defl. (VIPARELLI)		0.697
	Coef.defl. (ADOTTATO)	-	0.386
PORTATE DI PIENA	Qpicco (SCS)	(mc/s)	71.862
	Qpicco (GIANDOTTI)	(mc/s)	46.096
	Qpicco (PASINI)	(mc/s)	49.495
	Qpicco (VAPI)	(mc/s)	33.442
	Qpicco (KIRPICH)	(mc/s)	88.660
	Qpicco (VIPARELLI)	(mc/s)	52.691
	Qpicco (ADOTTATO)	(mc/s)	16.020

Comune di Sassari (SS)
 VERIFICHE DI SICUREZZA IDRAULICA OPERE INTERFERENTI CON IL RETICOLO IDROGRAFICO
 Strade comunali - **ATTRAVERSAMENTO C32**

	River Sta	Profile	Culv Inv El DS	Culv Inv El US	W.S.	Q Culv	Culv Vel US	Culv Vel DS	QUOTA INTRADOS SO	FRANCHI DISPONIBILI	FRANCHI RICHIESTI	50% di FRANCHI RICHIESTI	VERIFICA	Deficit
			(m slm)	(m slm)	(m slm)	(m³/s)	(m/s)	(m/s)	(m slm)	(m)	(m)	(m)		(m)
UPSTREAM	6550 Culver	TR 200 ANNI		170.12	178.74	99.44	7.11		173.12	-5.62	2.033		NON VERIF.	7.65329167
	6550 Culver	Tr critico		170.12	172.41	16.1	3.75		173.12	0.71	1.317	0.658	OK	OK
DOWNSTREAM	6550 Culver	TR 200 ANNI	167.61		175.5	99.44		7.11	170.61	-4.89	2.033		NON VERIF.	6.92329167
	6550 Culver	Tr critico	167.61		169.54	16.1		8.63	170.61	1.07	3.797	1.899	NON VERIF.	0.829

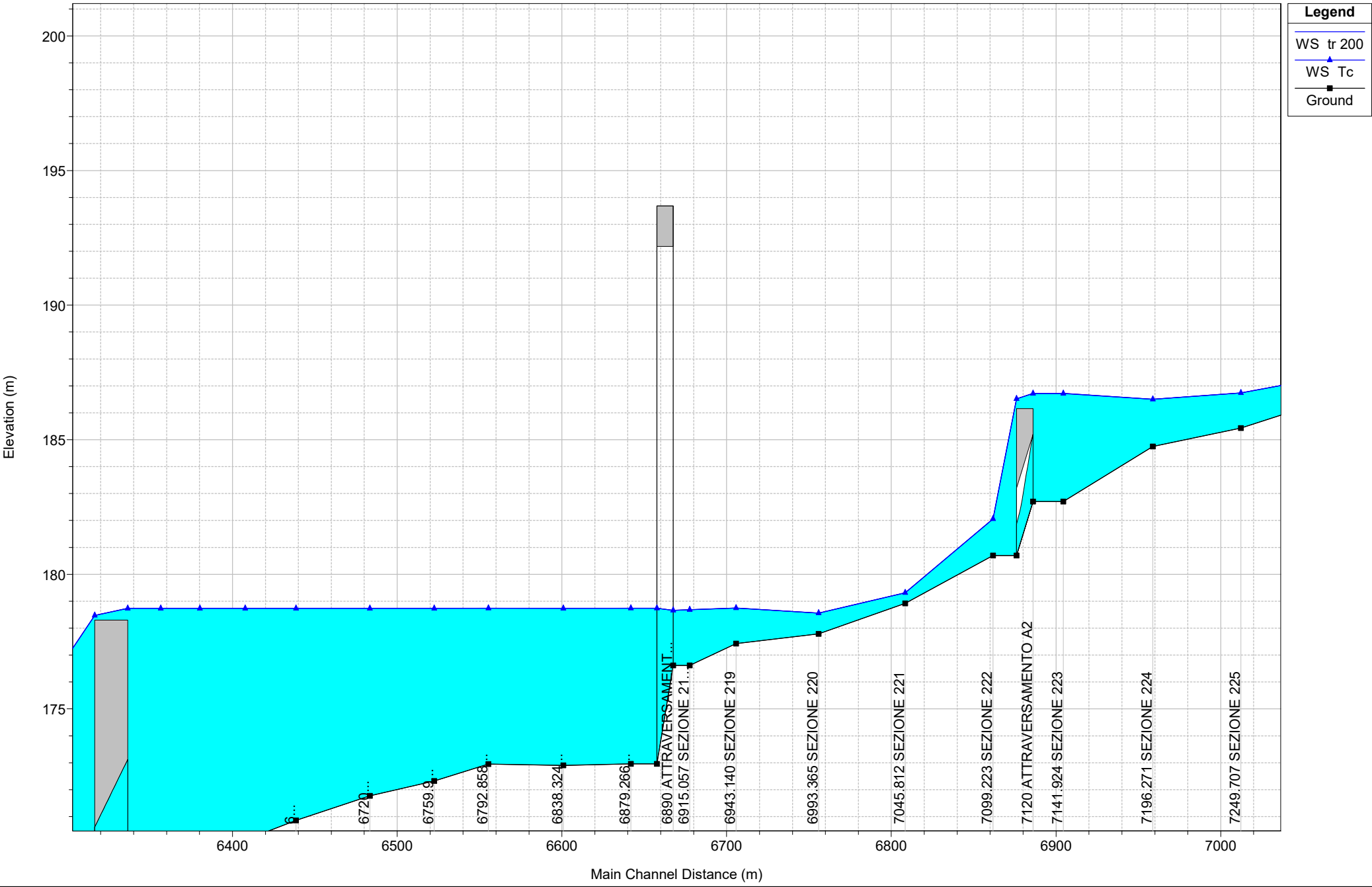


CALCOLO IDROLOGICO PORTATE DI PIENA

RIO SAN GIOVANNI - 1 _ C33			
		TR (anni)	200
Lunghezza asta	L	m	7773
Curve Number	CN	-	94.66
Pend.za media bac.	i _{bac}	-	0.1040
Area bacino	A	kmq	9.87
Altitudine massima	Hmax	m slm	414.35
Altitudine media	Hmed	m slm	255.66
Altitudine minima	Hmin	m slm	131.4
Pend.za media asta	iret	m/m	0.0364
	SCS	(ore)	1.247
	GIANDOTTI	(ore)	2.717
	PASINI	(ore)	2.405
	VAPI	(ore)	4.652
	KIRPICH	(ore)	0.769
	VIPARELLI	(ore)	2.159
	tc adott.	SCS	
		(ore)	1.247
Tempi di ritorno	T	(anni)	200
Dati pluviometrici	Pgiorn.	(mm)	50
	Sottozona		2
Altezza di pioggia	n1	-	0.31570972
	a1	-	20.6914142
	n2 (ADOTTATO)	-	-0.01506407
	a2 (ADOTTATO)	-	2.93084415
	n (ADOTTATO)	-	0.30064565
	a (ADOTTATO)	-	60.6433102
	h (ADOTTATO)	(mm)	64.803
	Coef.f.Ragg (ADOTTATO)	-	0.919
	n r (ADOTTATO)	(mm)	59.525
	S	(mm)	14.329
	Ia	(mm)	2.866
	Pnetta (ADOTTATO)	(mm)	45.223
	Coef.defl. (SCS)		0.648
	Coef.defl. (GIANDOTTI)		0.715
	Coef.defl. (PASINI)		0.706
	Coef.defl. (VAPI)		0.755
	Coef.defl. (KIRPICH)		0.592
	Coef.defl. (VIPARELLI)		0.697
	Coef.defl. (ADOTTATO)	-	0.698
PORTATE DI PIENA	Qpicco (SCS)	(mc/s)	71.862
	Qpicco (GIANDOTTI)	(mc/s)	46.096
	Qpicco (PASINI)	(mc/s)	49.495
	Qpicco (VAPI)	(mc/s)	33.442
	Qpicco (KIRPICH)	(mc/s)	88.660
	Qpicco (VIPARELLI)	(mc/s)	52.691
	Qpicco (ADOTTATO)	(mc/s)	99.437

Comune di Sassari (SS)
VERIFICHE DI SICUREZZA IDRAULICA OPERE INTERFERENTI CON IL RETICOLO IDROGRAFICO
Strade comunali - ATTRAVERSAMENTO C33

		River Sta	Profile	Bridge Inv El DS	Br Inv El US	W.S.	Q Bridge	Br Vel US	Br Vel DS	QUOTA INTRADOS SO	FRANCHI DISPONIBILI	$V^2/2g$	y	dh1	a	y'	dh2	$0.7 V^2/2g$	FRANCHI RICHIESTI	50% di FRANCHI RICHIESTI	VERIFICA	Deficit
				(m slm)	(m slm)	(m slm)	(m³/s)	(m/s)	(m/s)	(m slm)	(m)	(m)	(m)	(m)		(m)	(m)	(m)	(m)	(m)		(m)
UPSTREAM	Max H	0	TR 200 ANNI		176.62	178.69	99.44	1.44		192.27	13.58	0.11	2.07	1.252	0.000	2.000	1.252	0.074	1.252		OK	OK
	Max V		TR 200 ANNI		176.62	178.66	99.44	1.54		192.27	13.61	0.12	2.04	1.243	0.000	2.000	1.243	0.085	1.243		OK	OK
	Max H		Tr critico		176.62	178.68	99.5	1.44		192.27	13.59	0.11	2.06	1.249	0.000	2.000	1.249	0.074	1.249	0.624	OK	OK
	Max V	0	Tr critico		176.62	178.66	99.5	1.54		192.27	13.61	0.12	2.04	1.243	0.000	2.000	1.243	0.085	1.243	0.621	OK	OK
DOWNSTREAM																						
	Max H	0	TR 200 ANNI	172.96		178.74	99.44	0.31	0.31	192.273	13.533	0.00	5.78	1.500	0.000	2.000	1.500	0.003	1.500		OK	OK
	Max V		TR 200 ANNI	172.96		178.74	99.44	0.31		192.273	13.533	0.00	5.78	1.500	0.000	2.000	1.500	0.000	1.500		OK	OK
	Max H		Tr critico	172.96		178.74	99.5	0.31		192.273	13.533	0.00	5.78	1.500	0.000	2.000	1.500	0.000	1.500	0.750	OK	OK
	Max V	0	Tr critico	172.96		178.74	99.5	0.31	0.31	192.273	13.533	0.00	5.78	1.500	0.000	2.000	1.500	0.003	1.500	0.750	OK	OK

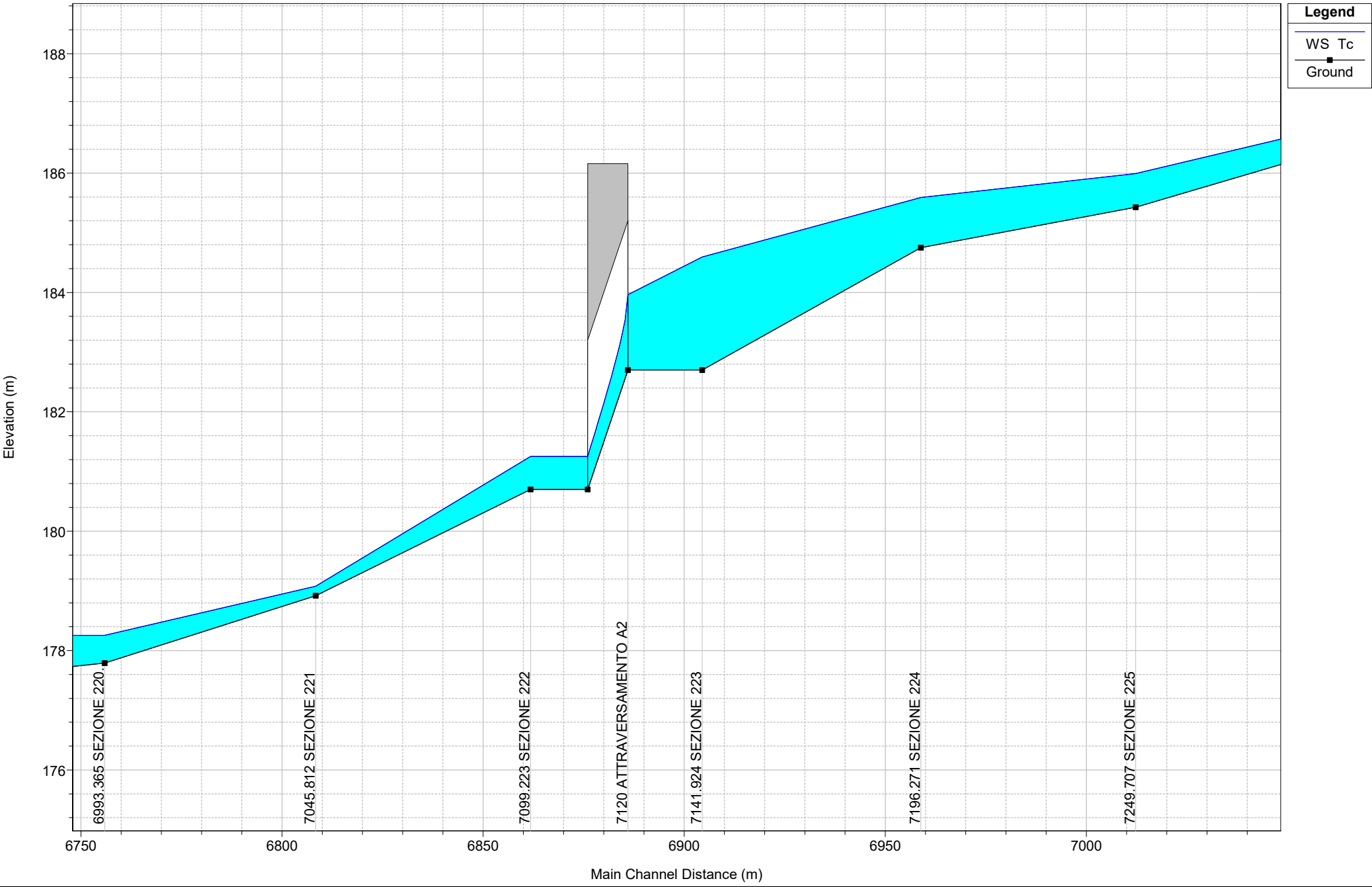


CALCOLO IDROLOGICO PORTATE DI PIENA

RIO SAN GIOVANNI - 1 _C34			
TR (anni)		3.5	
Lunghezza asta	L	m	7773
Curve Number	CN	-	94.66
Pend.za media bac.	i _{bac}	-	0.1040
Area bacino	A	kmq	9.87
Altitudine massima	Hmax	m slm	414.35
Altitudine media	Hmed	m slm	255.66
Altitudine minima	Hmin	m slm	131.4
Pend.za media asta	iret	m/m	0.0364
	SCS	(ore)	1.247
	GIANDOTTI	(ore)	2.717
	PASINI	(ore)	2.405
	VAPI	(ore)	4.652
	KIRPICH	(ore)	0.769
	VIPARELLI	(ore)	2.159
	tc adott.	SCS	
		(ore)	1.247
Tempi di ritorno	T	(anni)	3.5
Dati pluviometrici	Pgiorn.	(mm)	50
	Sottozona		2
Altezza di pioggia	n1	-	0.31570972
	a1	-	20.6914142
	n2 (ADOTTATO)	-	-0.00788301
	a2 (ADOTTATO)	-	1.0303384
	n (ADOTTATO)	-	0.30782671
	a (ADOTTATO)	-	21.3191587
	h (ADOTTATO)	(mm)	22.818
	Coef.f.Ragg (ADOTTATO)	-	0.919
	n r (ADOTTATO)	(mm)	20.959
	S	(mm)	14.329
	Ia	(mm)	2.866
	Pnetta (ADOTTATO)	(mm)	10.097
	Coef.defl. (SCS)		0.648
	Coef.defl. (GIANDOTTI)		0.715
	Coef.defl. (PASINI)		0.706
	Coef.defl. (VAPI)		0.755
	Coef.defl. (KIRPICH)		0.592
	Coef.defl. (VIPARELLI)		0.697
	Coef.defl. (ADOTTATO)	-	0.443
PORTATE DI PIENA	Qpicco (SCS)	(mc/s)	71.862
	Qpicco (GIANDOTTI)	(mc/s)	46.096
	Qpicco (PASINI)	(mc/s)	49.495
	Qpicco (VAPI)	(mc/s)	33.442
	Qpicco (KIRPICH)	(mc/s)	88.660
	Qpicco (VIPARELLI)	(mc/s)	52.691
	Qpicco (ADOTTATO)	(mc/s)	22.202

Comune di Sassari (SS)
 VERIFICHE DI SICUREZZA IDRAULICA OPERE INTERFERENTI CON IL RETICOLO IDROGRAFICO
 Strade comunali - **ATTRAVERSAMENTO C34**

	River Sta	Profile	Culv Inv El DS	Culv Inv El US	W.S.	Q Culv	Culv Vel US	Culv Vel DS	QUOTA INTRADOS SO	FRANCHI DISPONIBILI	FRANCHI RICHIESTI	50% di FRANCHI RICHIESTI	VERIFICA	Deficit
			(m slm)	(m slm)	(m slm)	(m³/s)	(m/s)	(m/s)	(m slm)	(m)	(m)	(m)		(m)
UPSTREAM	7120 Culver	TR 200 ANNI		182.7	186.73	99.44	4.51		185.2	-1.53	1.500		NON VERIF.	3.03
	7120 Culver	Tr critico		182.7	184.59	22.2	3.52		185.2	0.61	1.196	0.598	OK	OK
DOWNSTREAM	7120 Culver	TR 200 ANNI	180.7		182.06	99.44		9.7	183.2	1.14	4.797		NON VERIF.	3.65725492
	7120 Culver	Tr critico	180.7		181.29	22.2		8.02	183.2	1.91	3.279	1.640	OK	OK



CALCOLO IDROLOGICO PORTATE DI PIENA

RIO SAN GIOVANNI - 1 _ C35			
TR (anni)		200	
Lunghezza asta	L	m	7773
Curve Number	CN	-	94.66
Pend.za media bac.	i _{bac}	-	0.1040
Area bacino	A	kmq	9.87
Altitudine massima	Hmax	m slm	414.35
Altitudine media	Hmed	m slm	255.66
Altitudine minima	Hmin	m slm	131.4
Pend.za media asta	iret	m/m	0.0364
	SCS	(ore)	1.247
	GIANDOTTI	(ore)	2.717
	PASINI	(ore)	2.405
	VAPI	(ore)	4.652
	KIRPICH	(ore)	0.769
	VIPARELLI	(ore)	2.159
	tc adott.	SCS	
		(ore)	1.247
Tempi di ritorno	T	(anni)	200
Dati pluviometrici	Pgiorn.	(mm)	50
	Sottozona		2
Altezza di pioggia	n1	-	0.31570972
	a1	-	20.6914142
	n2 (ADOTTATO)	-	-0.01506407
	a2 (ADOTTATO)	-	2.93084415
	n (ADOTTATO)	-	0.30064565
	a (ADOTTATO)	-	60.6433102
	h (ADOTTATO)	(mm)	64.803
	Coef.f.Ragg (ADOTTATO)	-	0.919
	h r (ADOTTATO)	(mm)	59.525
	S	(mm)	14.329
	Ia	(mm)	2.866
	Pnetta (ADOTTATO)	(mm)	45.223
	Coef.defl. (SCS)		0.648
	Coef.defl. (GIANDOTTI)		0.715
	Coef.defl. (PASINI)		0.706
	Coef.defl. (VAPI)		0.755
	Coef.defl. (KIRPICH)		0.592
	Coef.defl. (VIPARELLI)		0.697
	Coef.defl. (ADOTTATO)	-	0.698
PORTATE DI PIENA	Qpicco (SCS)	(mc/s)	71.862
	Qpicco (GIANDOTTI)	(mc/s)	46.096
	Qpicco (PASINI)	(mc/s)	49.495
	Qpicco (VAPI)	(mc/s)	33.442
	Qpicco (KIRPICH)	(mc/s)	88.660
	Qpicco (VIPARELLI)	(mc/s)	52.691
	Qpicco (ADOTTATO)	(mc/s)	99.437

Comune di Sassari (SS)
 VERIFICHE DI SICUREZZA IDRAULICA OPERE INTERFERENTI CON IL RETICOLO IDROGRAFICO
 Strade comunali - ATTRAVERSAMENTO C35

		River Sta	Profile	Bridge Inv El DS	Br Inv El US	W.S.	Q Bridge	Br Vel US	Br Vel DS	QUOTA INTRADOS SO	FRANCHI DISPONIBILI	$V^2/2g$	y	dh1	a	y'	dh2	$0.7 V^2/2g$	FRANCHI RICHIESTI	50% di FRANCHI RICHIESTI	VERIFICA	Deficit
				(m slm)	(m slm)	(m slm)	(m³/s)	(m/s)	(m/s)	(m slm)	(m)	(m)	(m)	(m)		(m)	(m)	(m)	(m)	(m)		(m)
UPSTREAM	Max H	0	TR 200 ANNI		199.1	200.42	99.43	2.8		230.08	29.66	0.40	1.32	1.000	0.000	1.320	1.000	0.280	1.000		OK	OK
	Max V		TR 200 ANNI		199.1	200.05	99.43	4.69		230.08	30.03	1.12	0.95	0.848	0.000	0.950	0.848	0.785	1.000		OK	OK
	Max H		Tr critico		199.1	200.42	99.5	2.8		230.08	29.66	0.40	1.32	1.000	0.000	1.320	1.000	0.280	1.000	0.500	OK	OK
	Max V	0	Tr critico		199.1	200.05	99.5	4.69		230.08	30.03	1.12	0.95	0.848	0.000	0.950	0.848	0.785	1.000	0.500	OK	OK
DOWNSTREAM																						
	Max H	0	TR 200 ANNI	198.44		200.39	99.44	1.11	1.11	230.08	29.69	0.06	1.95	1.215	0.000	1.950	1.215	0.044	1.215		OK	OK
	Max V		TR 200 ANNI	198.44		199.6	99.44	1.67		230.08	30.48	0.00	1.16	0.937	0.000	1.160	0.937	0.000	1.000		OK	OK
	Max H		Tr critico	198.44		200.39	99.5	1.11		230.08	29.69	0.00	1.95	1.215	0.000	1.950	1.215	0.000	1.215	0.607	OK	OK
	Max V	0	Tr critico	198.44		199.6	99.5	1.67	1.67	230.08	30.48	0.14	1.16	0.937	0.000	1.160	0.937	0.100	1.000	0.500	OK	OK

Geom: 05022021 COMUNE DI SASSARI - VERIFICHE SIC. STRADE COMUNALI

