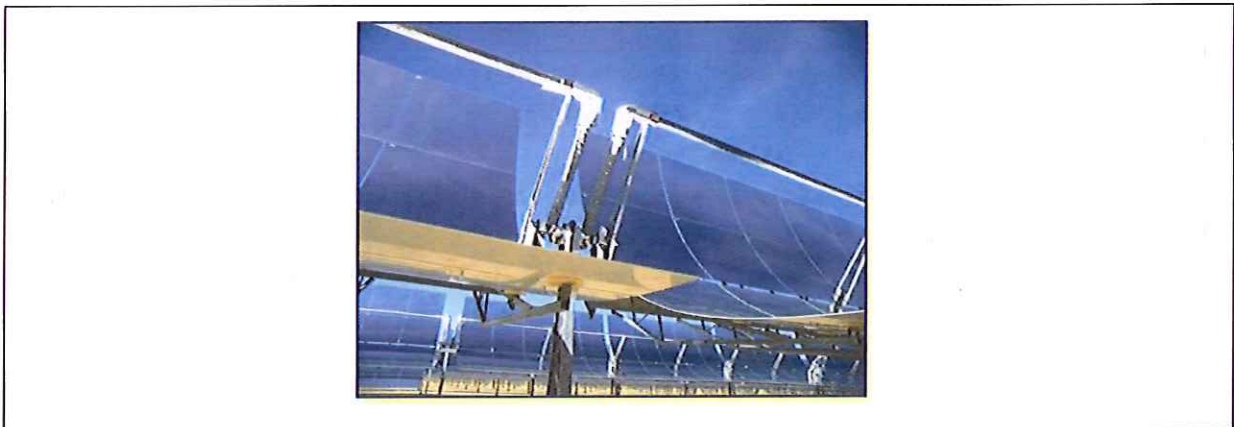


Proponente <div style="text-align: center;">FLUMINI MANNU</div>	<div style="text-align: center;">FLUMINI MANNU LIMITED</div> Sede Legale: Bow Road 221 - Londra - Regno Unito Filiale Italiana: Corso Umberto I, 08015 Macomer (NU)
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Provincia di Cagliari
Comuni di Villasor e Decimoputzu

Nome progetto
**Impianto Solare Termodinamico della potenza lorda di
 55 MWe denominato "FLUMINI MANNU"**





VALUTAZIONE DI IMPATTO AMBIENTALE
STUDIO DI COMPATIBILITÀ IDRAULICA

Titolo Documento:
ALLEGATI

Sviluppo: 	Energogreen Renewables S.r.l. Via E. Fermi 19, 62010 Pollenza (MC) www.energogreen.com e-mail: info@energogreen.com
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Documento realizzato da:

Dott. Geol. Mauro Pompei 	Dott. Ing. Alessandro Salis 
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			SCIALL001
0	11/2014	Prima Emissione	
Rev.	Data	Descrizione	Codice di Riferimento
Proprietà e diritti del presente documento sono riservati - la riproduzione è vietata			

Gruppo di lavoro Energogreen Renewables:



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- 2. Dott. Ing. Loretta Maccari*
- 3. Dott. Ing. Devis Bozzi*

Consulenza Esterna:

- Dott. Arch. Luciano Viridis: Analisi Territoriale*
- Dott. Manuel Floris: "Rapporto Tecnico di Analisi delle Misure di DNI - Sito Flumini Mannu (CA)*
- Dott. Agr. Vincenzo Satta: "Relazioni su Flora, Vegetazione, Pedologia e Uso del Suolo"*
- Dott. Agr. Vincenzo Sechi: "Relazione faunistica"*
- Dott. Agr. V. Satta e Dott. Agr. V. Sechi: "Relazione Agronomica"*
- Dott. Geol. Eugenio Pistolesi: "Indagine Geologica Preliminare di Fattibilità"*
- Studio Associato Ingg. Deffenu e Lostia: "Documento di Previsione d'Impatto Acustico"*
- Dott. Arch. Leonardo Annessi: Rendering e Fotoinserimenti*
- Tecsa S.r.l.: "Rapporto Preliminare di Sicurezza"*
- Enviroware srl, Dott. Roberto Bellasio: "Studio d'impatto atmosferico dei riscaldatori ausiliari dell'impianto solare termodinamico "Flumini Mannu"*
- Geotechna Srl: "Relazione Geologica", "Relazione Geotecnica" e "Studio di compatibilità idraulica"*
- Progetto Engineering srl: "Progetto elettrico definitivo"*

COMUNE DI VILLASOR

Provincia di Cagliari

REALIZZAZIONE DI UN IMPIANTO SOLARE TERMODINAMICO
DENOMINATO «»FLUMINI MANNU»

STUDIO DI COMPATIBILITÀ IDRAULICA

ALLEGATI

DATA: novembre 2014

REDATTO DA: Mauro Pompei
Alessandro Salis

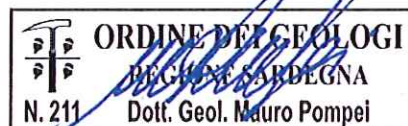


GEOTECHNA

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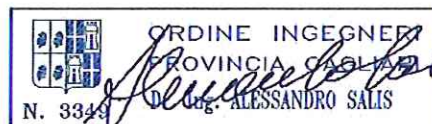
IL GEOLOGO:

Mauro Pompei



L'INGEGNERE IDRAULICO:

Alessandro Salis



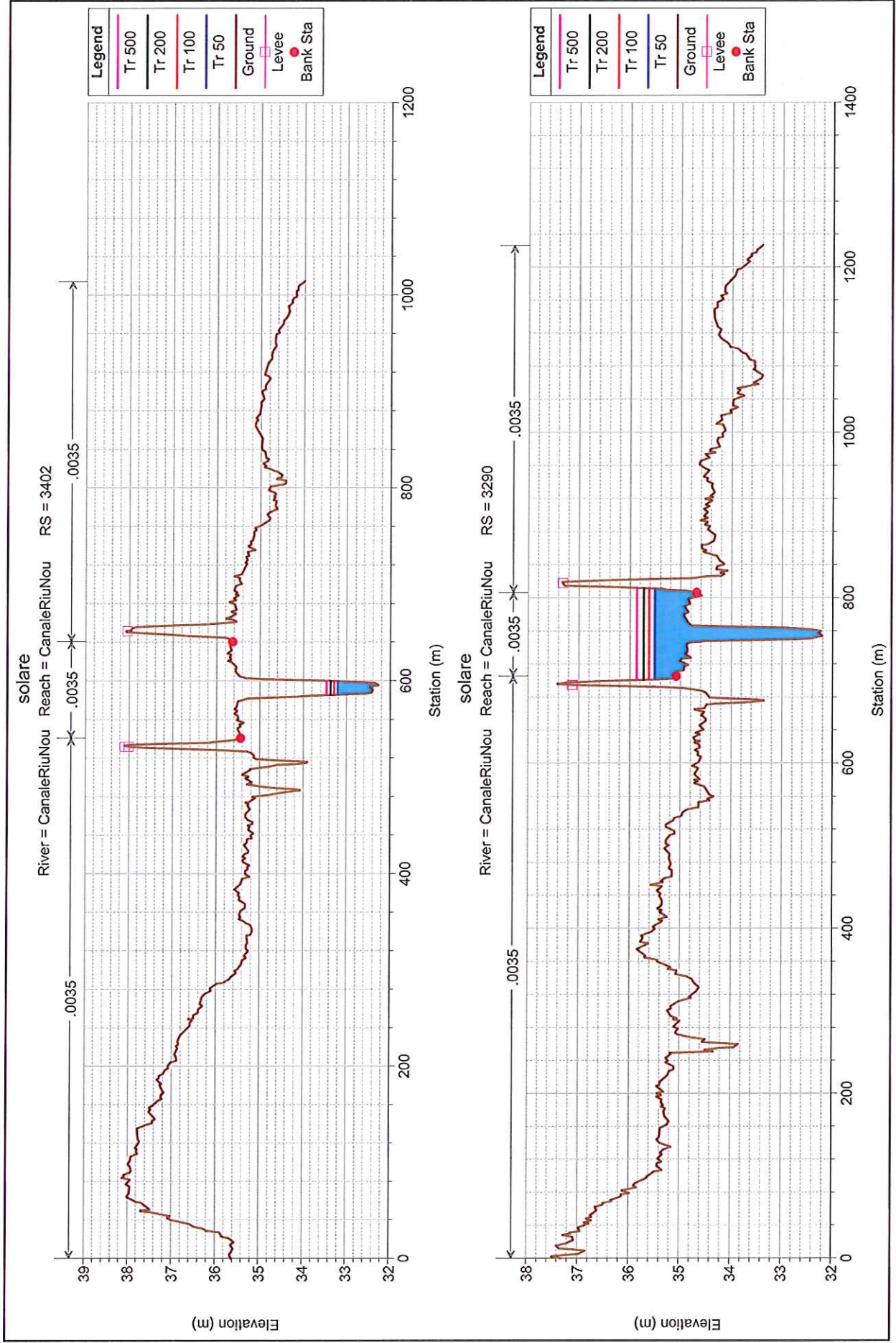
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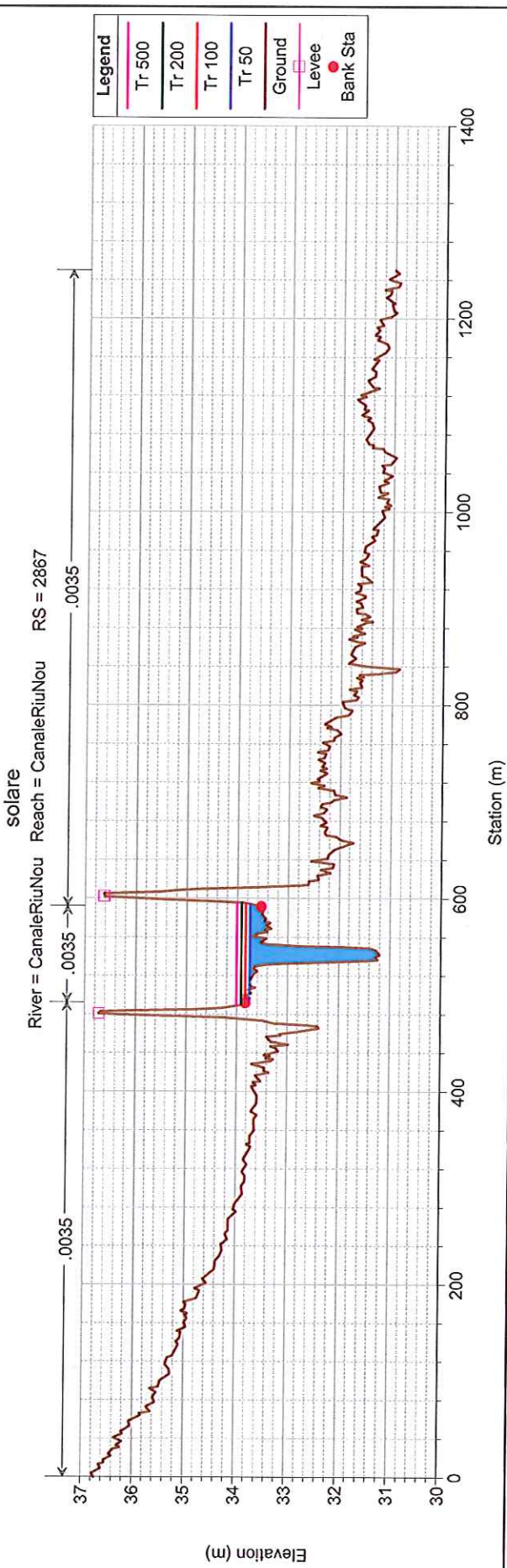
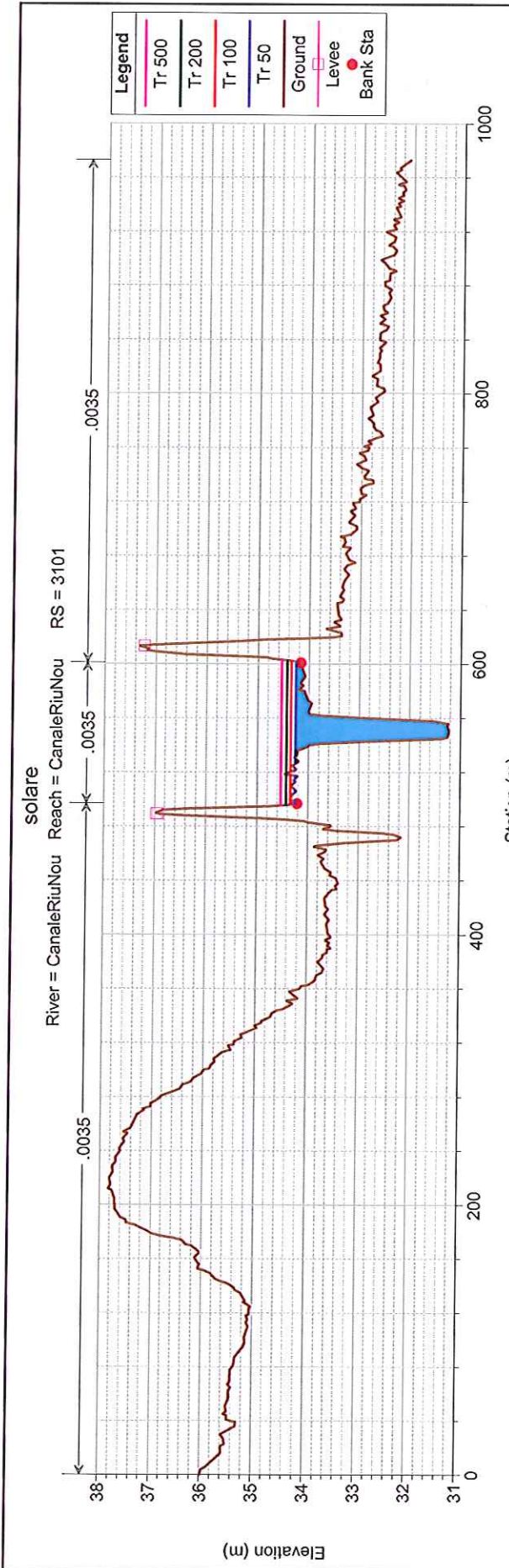
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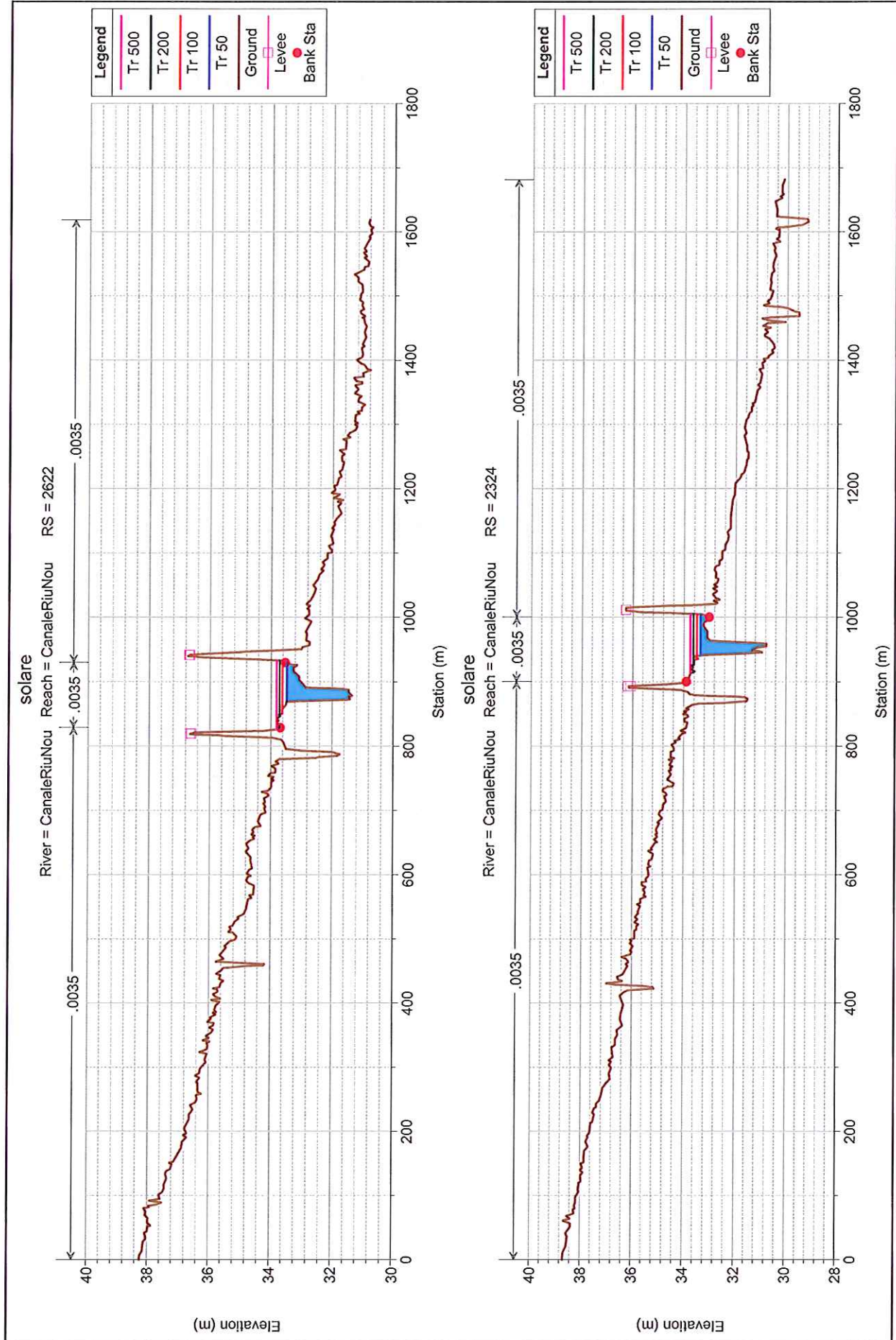
Energogreen Renewables S.r.l.
Via Enrico Fermi n. 19
62010 Pollenza (MC)

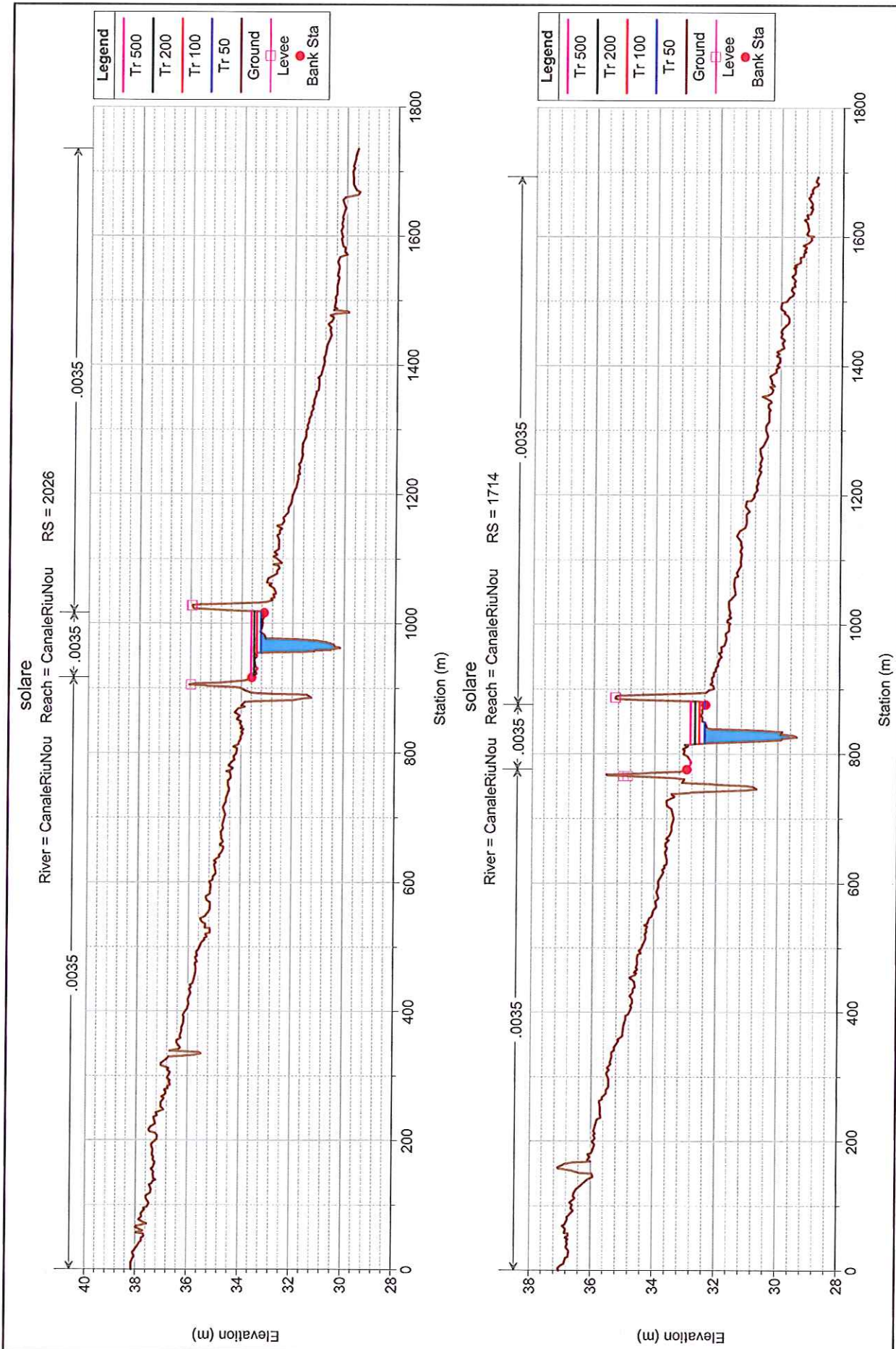
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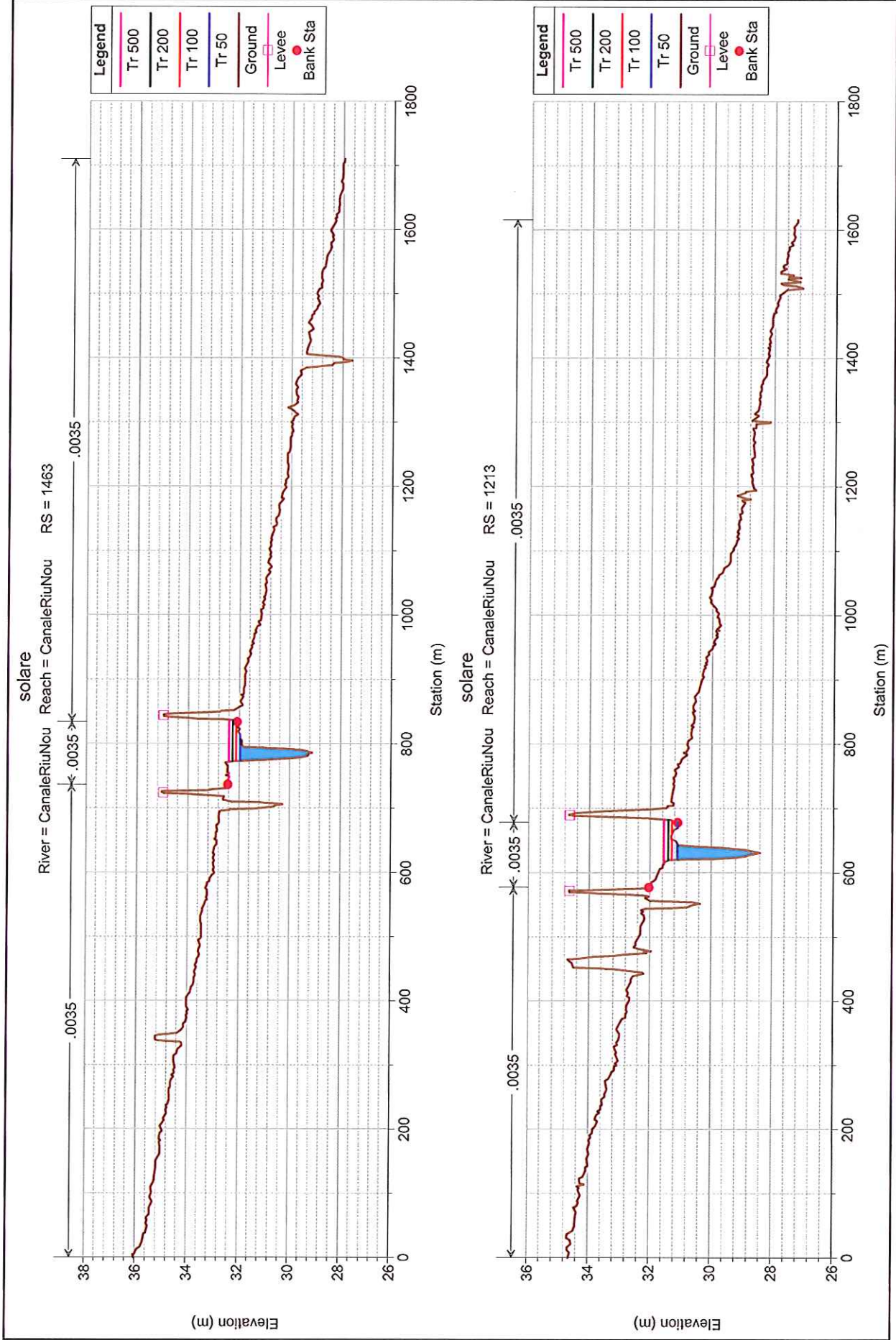
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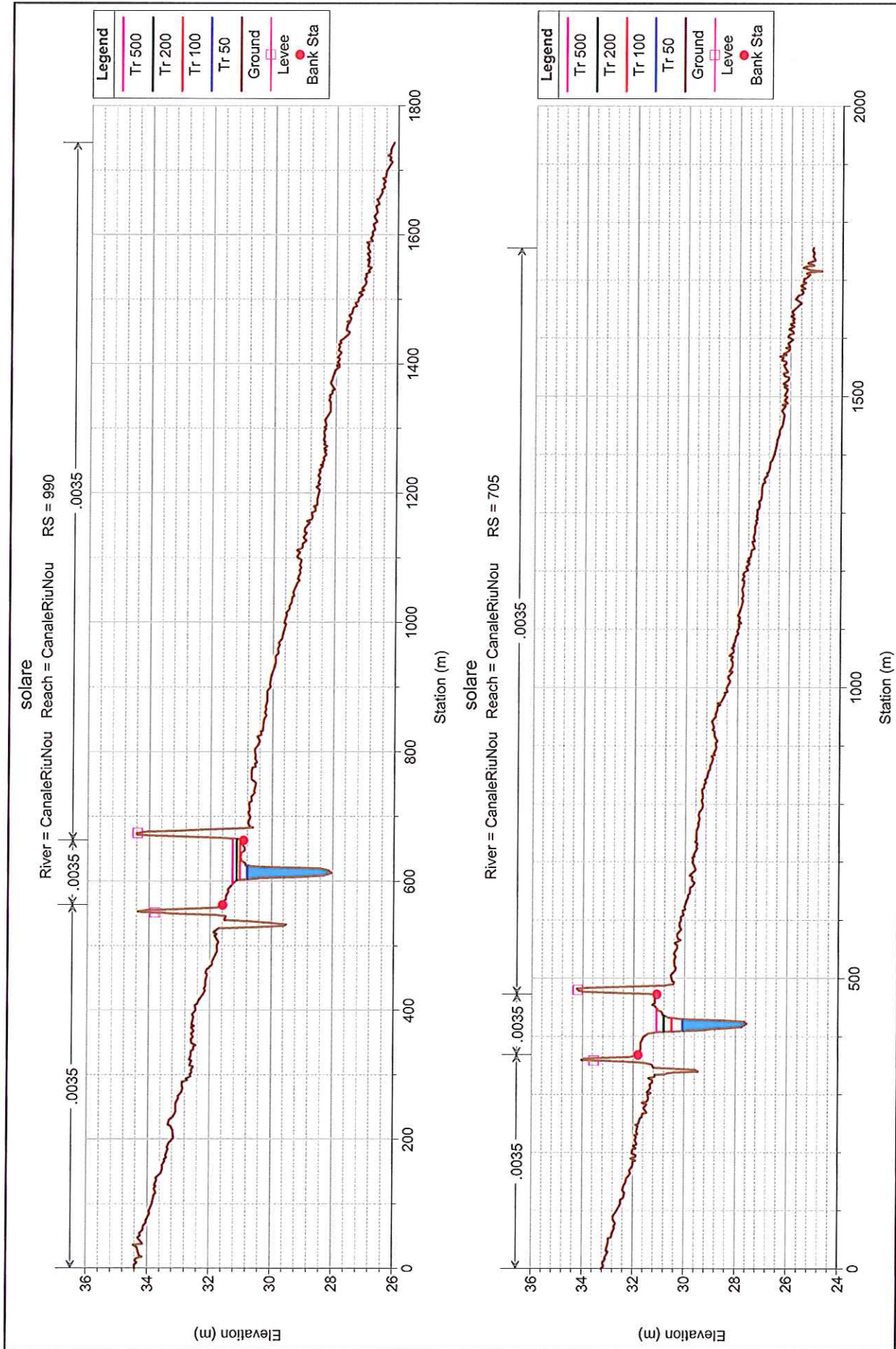


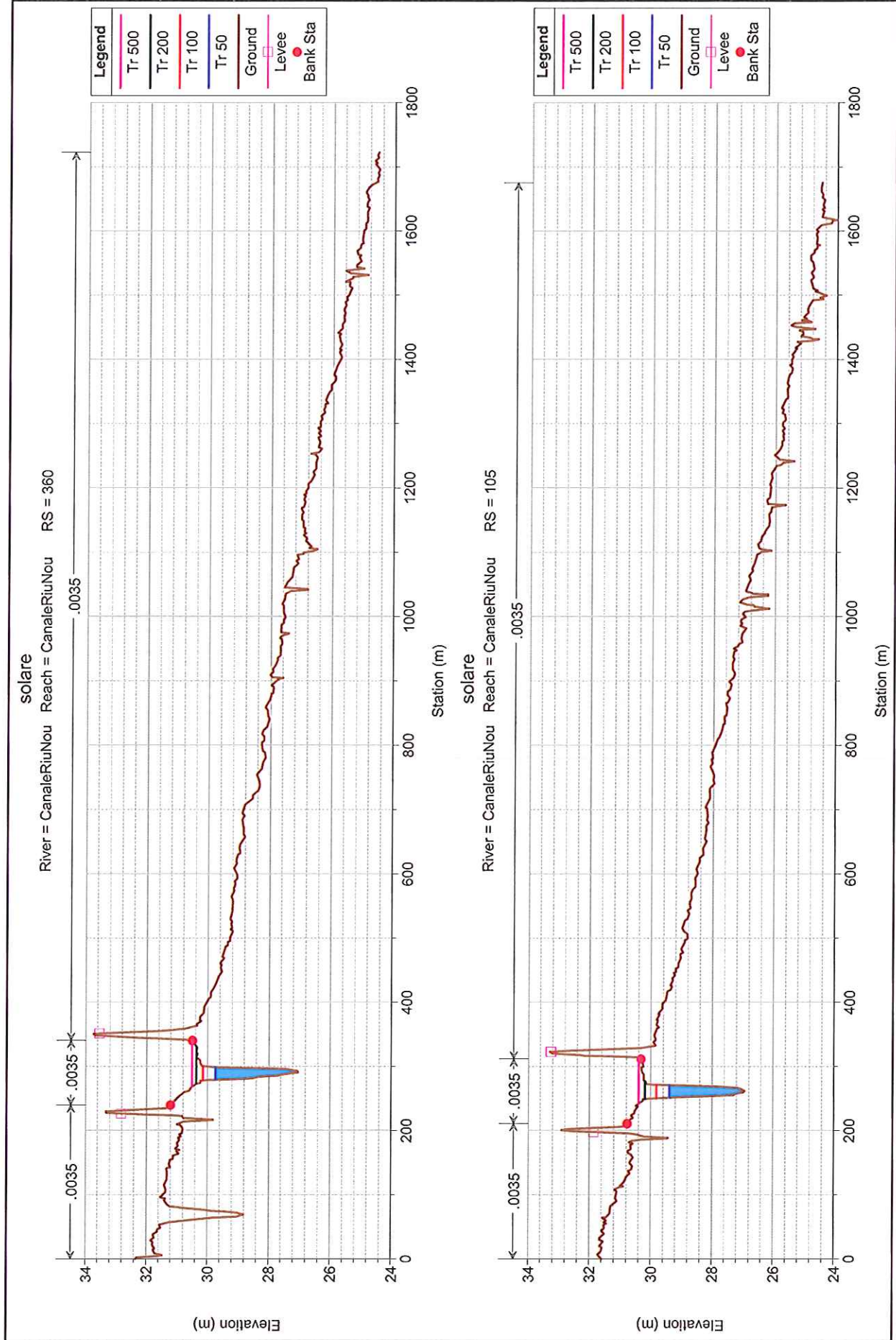












PROFILI

TABULATI

HEC-RAS Plan: N_P_River: CanaleRiuNou Reach: CanaleRiuNou

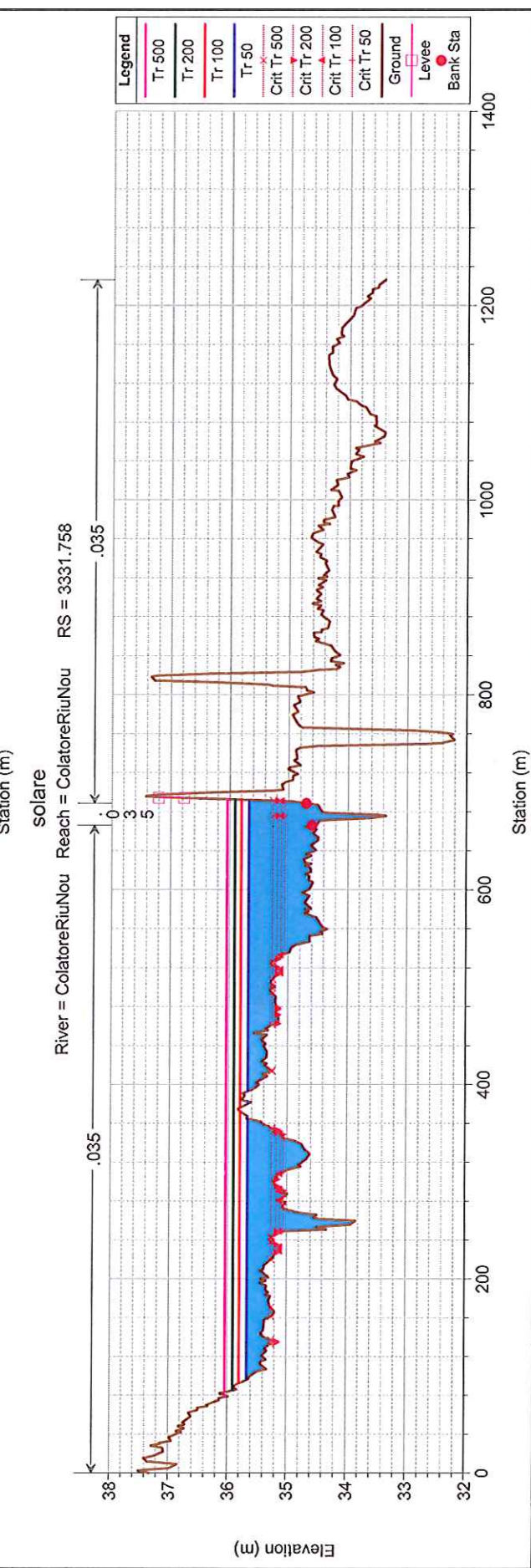
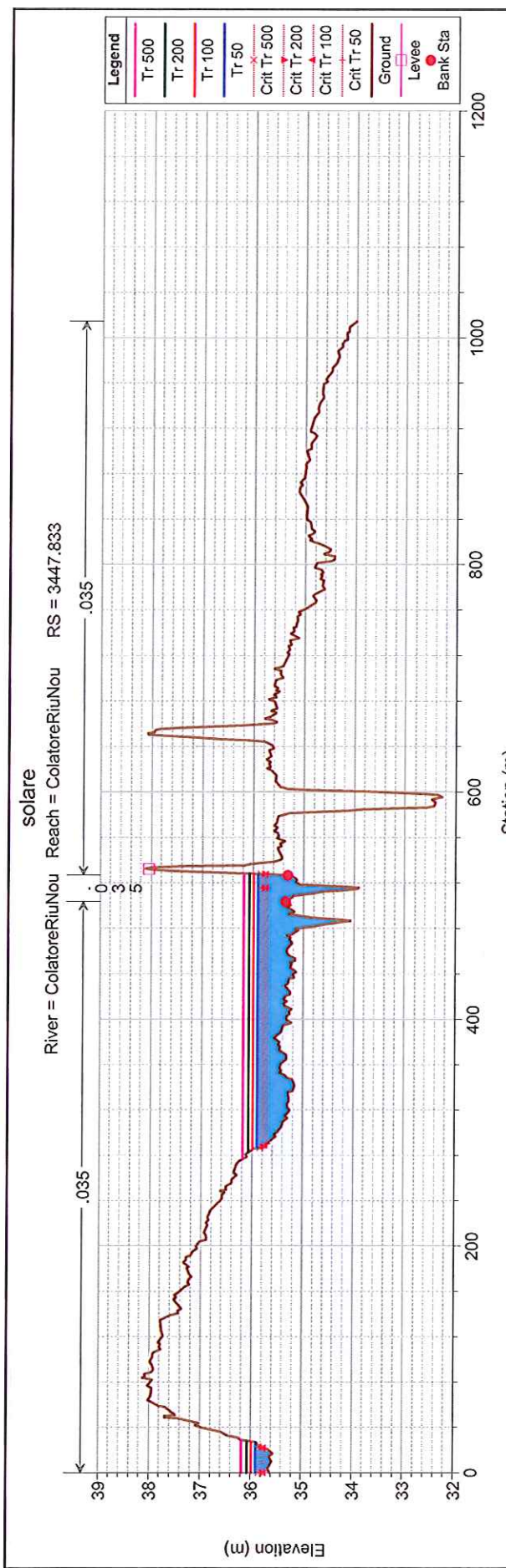
Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
CanaleRiuNou	3402	Tr 50	338.76	32.27	33.22	36.08	86.81	0.020001	32.43	10.45	14.12	12.04
CanaleRiuNou	3402	Tr 100	396.38	32.27	33.30	36.21	93.13	0.020016	34.27	11.57	14.37	12.19
CanaleRiuNou	3402	Tr 200	453.95	32.27	33.37	36.31	99.11	0.020025	35.92	12.64	14.60	12.32
CanaleRiuNou	3402	Tr 500	529.96	32.27	33.47	36.44	106.57	0.020029	37.88	13.99	14.88	12.47
CanaleRiuNou	3290	Tr 50	338.76	32.21	35.52	35.52	36.01	0.000117	3.15	109.36	109.81	0.98
CanaleRiuNou	3290	Tr 100	396.38	32.21	35.63	35.63	36.18	0.000113	3.32	121.53	110.28	0.98
CanaleRiuNou	3290	Tr 200	453.95	32.21	35.73	35.73	36.33	0.000111	3.47	133.07	110.73	0.99
CanaleRiuNou	3290	Tr 500	529.96	32.21	35.86	35.86	36.53	0.000107	3.65	147.84	111.30	0.99
CanaleRiuNou	3101	Tr 50	338.76	31.23	34.26	34.72	35.86	0.000582	5.61	60.47	82.25	2.07
CanaleRiuNou	3101	Tr 100	396.38	31.23	34.35	34.83	36.02	0.000679	5.73	69.37	103.31	2.21
CanaleRiuNou	3101	Tr 200	453.95	31.23	34.43	34.94	36.18	0.000631	5.86	77.76	106.28	2.16
CanaleRiuNou	3101	Tr 500	529.96	31.23	34.53	35.07	36.37	0.000567	6.02	88.48	107.60	2.09
CanaleRiuNou	2867	Tr 50	338.76	31.20	33.76	34.26	35.66	0.000886	6.12	55.53	91.90	2.48
CanaleRiuNou	2867	Tr 100	396.38	31.20	33.84	34.38	35.81	0.000870	6.23	63.98	102.62	2.48
CanaleRiuNou	2867	Tr 200	453.95	31.20	33.92	34.48	35.98	0.000796	6.38	71.70	105.67	2.41
CanaleRiuNou	2867	Tr 500	529.96	31.20	34.01	34.62	36.19	0.000716	6.57	81.57	106.89	2.34
CanaleRiuNou	2622	Tr 50	338.76	31.34	33.49	34.07	35.48	0.000567	6.26	54.15	60.43	2.11
CanaleRiuNou	2622	Tr 100	396.38	31.34	33.62	34.18	35.63	0.000617	6.28	63.17	76.80	2.18
CanaleRiuNou	2622	Tr 200	453.95	31.34	33.71	34.29	35.80	0.000651	6.41	71.15	88.75	2.24
CanaleRiuNou	2622	Tr 500	529.96	31.34	33.81	34.43	36.01	0.000730	6.58	81.11	106.90	2.36
CanaleRiuNou	2324	Tr 50	338.76	30.77	33.36	33.98	35.30	0.000548	6.18	55.41	64.21	2.07
CanaleRiuNou	2324	Tr 100	396.38	30.77	33.51	34.09	35.45	0.000484	6.20	64.71	67.54	1.98
CanaleRiuNou	2324	Tr 200	453.95	30.77	33.63	34.20	35.59	0.000536	6.24	73.57	81.24	2.06
CanaleRiuNou	2324	Tr 500	529.96	30.77	33.75	34.33	35.77	0.000552	6.33	84.45	92.70	2.10
CanaleRiuNou	2026	Tr 50	338.76	30.14	33.25	33.82	35.12	0.000509	6.06	55.96	61.19	2.00
CanaleRiuNou	2026	Tr 100	396.38	30.14	33.39	33.94	35.28	0.000494	6.10	65.25	69.14	1.98
CanaleRiuNou	2026	Tr 200	453.95	30.14	33.51	34.05	35.39	0.000657	6.08	74.93	98.61	2.21
CanaleRiuNou	2026	Tr 500	529.96	30.14	33.61	34.18	35.58	0.000606	6.22	85.50	103.36	2.16
CanaleRiuNou	1714	Tr 50	338.76	29.39	32.40	33.19	34.91	0.000449	7.02	48.40	41.22	1.97
CanaleRiuNou	1714	Tr 100	396.38	29.39	32.57	33.31	35.05	0.000670	6.99	57.22	64.53	2.30

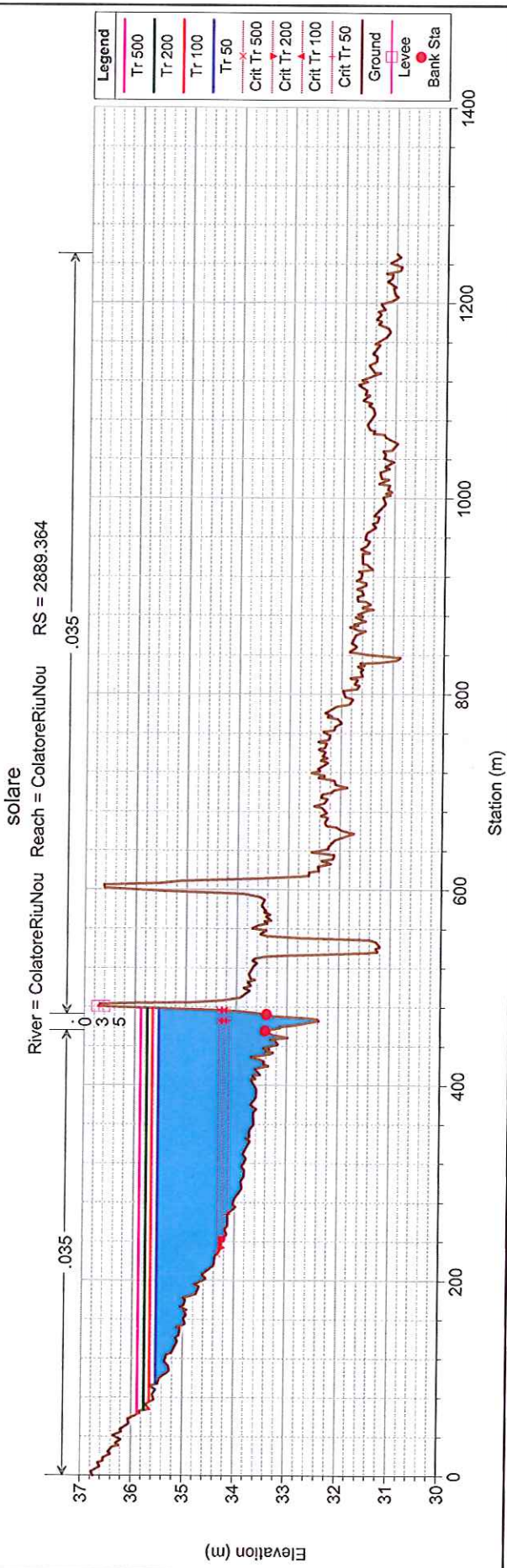
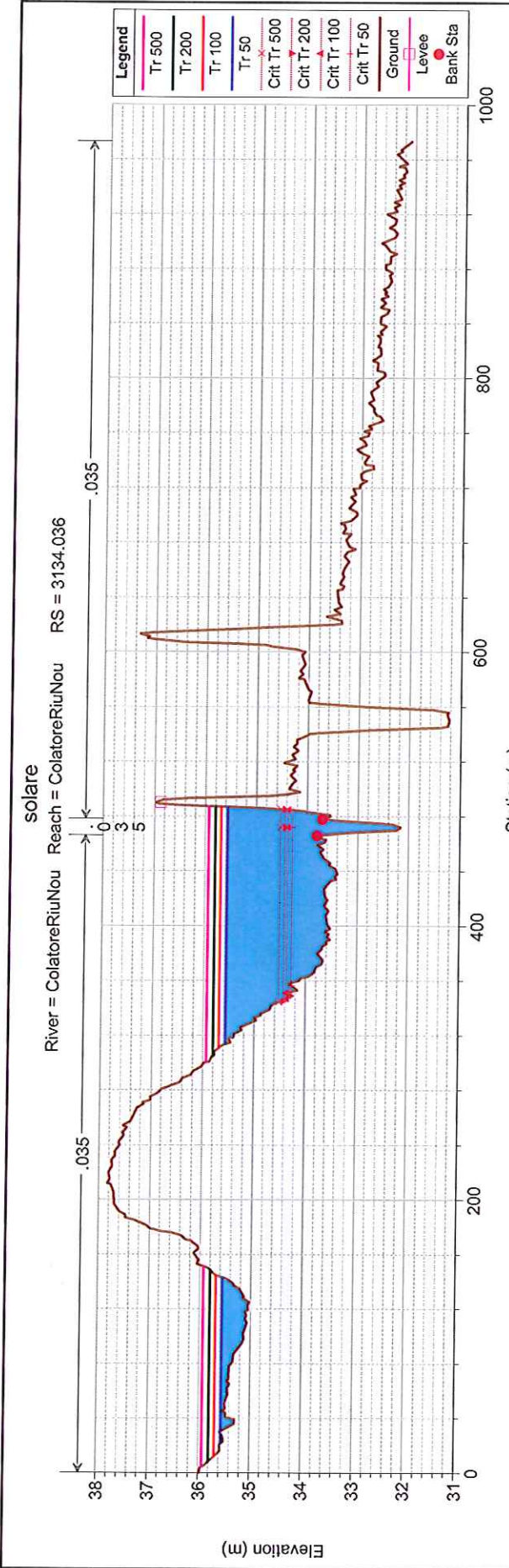
HEC-RAS Plan: N_P River: CanaleRiuNou Reach: CanaleRiuNou (Continued)

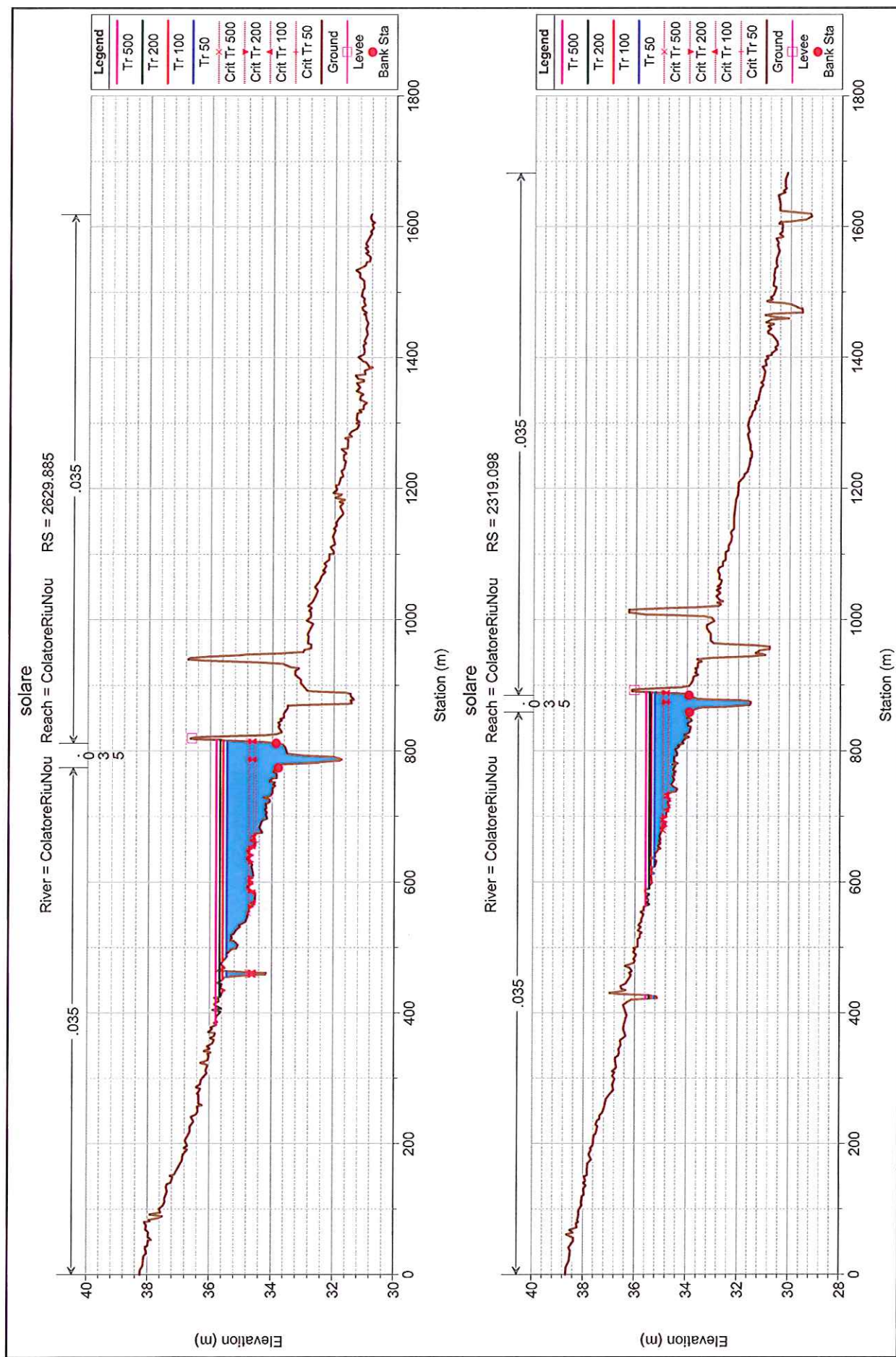
Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
CanaleRiuNou	1714	Tr 200	453.95	29.39	32.70	33.42	35.14	0.000556	6.95	66.18	65.32	2.14
CanaleRiuNou	1714	Tr 500	529.96	29.39	32.86	33.55	35.35	0.000555	7.03	76.39	73.24	2.15
CanaleRiuNou	1463	Tr 50	338.76	29.11	31.97	32.76	34.75	0.000583	7.40	45.81	40.03	2.21
CanaleRiuNou	1463	Tr 100	396.38	29.11	32.12	32.87	34.84	0.000784	7.31	54.27	61.88	2.47
CanaleRiuNou	1463	Tr 200	453.95	29.11	32.25	32.98	34.97	0.000658	7.30	62.38	63.47	2.31
CanaleRiuNou	1463	Tr 500	529.96	29.11	32.40	33.12	35.17	0.000619	7.38	72.24	69.27	2.27
CanaleRiuNou	1213	Tr 50	338.76	28.39	31.11	32.03	34.54	0.000651	8.20	41.32	33.83	2.36
CanaleRiuNou	1213	Tr 100	396.38	28.39	31.30	32.14	34.58	0.000872	8.03	49.62	55.15	2.63
CanaleRiuNou	1213	Tr 200	453.95	28.39	31.42	32.25	34.72	0.000876	8.06	56.76	62.86	2.64
CanaleRiuNou	1213	Tr 500	529.96	28.39	31.55	32.39	34.93	0.000844	8.17	65.56	69.02	2.62
CanaleRiuNou	990	Tr 50	338.76	28.03	30.81	31.75	34.41	0.000410	8.40	40.32	21.68	1.97
CanaleRiuNou	990	Tr 100	396.38	28.03	31.04	31.86	34.36	0.001105	8.07	49.22	62.96	2.88
CanaleRiuNou	990	Tr 200	453.95	28.03	31.15	31.97	34.51	0.000963	8.13	56.10	64.23	2.74
CanaleRiuNou	990	Tr 500	529.96	28.03	31.28	32.10	34.72	0.000933	8.24	64.68	70.91	2.72
CanaleRiuNou	705	Tr 50	338.76	27.57	30.08	31.55	34.23	0.000475	9.02	37.55	20.33	2.12
CanaleRiuNou	705	Tr 100	396.38	27.57	30.51	31.83	34.15	0.000374	8.46	46.85	23.33	1.91
CanaleRiuNou	705	Tr 200	453.95	27.57	30.82	31.94	34.33	0.000371	8.30	54.68	28.02	1.90
CanaleRiuNou	705	Tr 500	529.96	27.57	31.10	32.08	34.51	0.000551	8.19	64.70	46.40	2.21
CanaleRiuNou	360	Tr 50	338.76	27.04	29.75	31.00	34.04	0.000494	9.18	36.91	19.94	2.15
CanaleRiuNou	360	Tr 100	396.38	27.04	30.16	31.15	34.00	0.000393	8.68	45.66	22.64	1.95
CanaleRiuNou	360	Tr 200	453.95	27.04	30.38	31.28	34.11	0.001040	8.56	53.05	57.82	2.85
CanaleRiuNou	360	Tr 500	529.96	27.04	30.51	31.42	34.22	0.001126	8.53	62.12	72.69	2.94
CanaleRiuNou	105	Tr 50	338.76	26.93	29.41	30.87	33.89	0.000514	9.38	36.12	19.56	2.20
CanaleRiuNou	105	Tr 100	396.38	26.93	29.82	30.99	33.88	0.000395	8.93	44.39	21.18	1.97
CanaleRiuNou	105	Tr 200	453.95	26.93	30.20	31.10	33.95	0.000413	8.58	52.92	28.00	1.99
CanaleRiuNou	105	Tr 500	529.96	26.93	30.41	31.23	33.89	0.000971	8.27	64.25	72.34	2.76

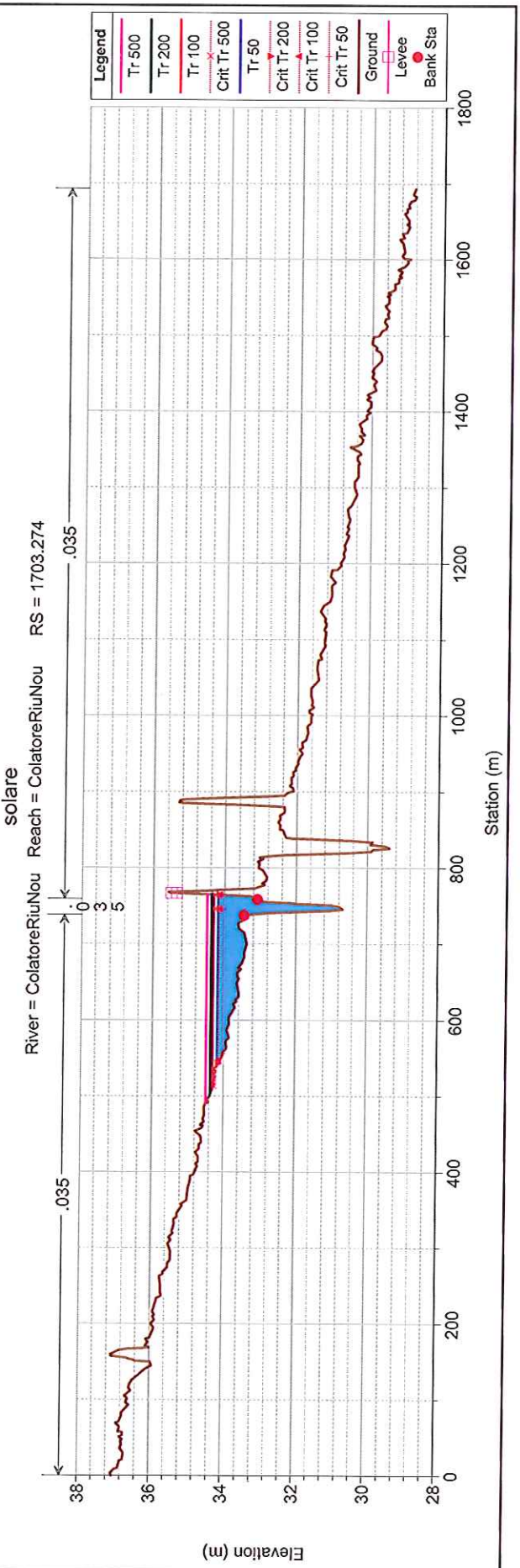
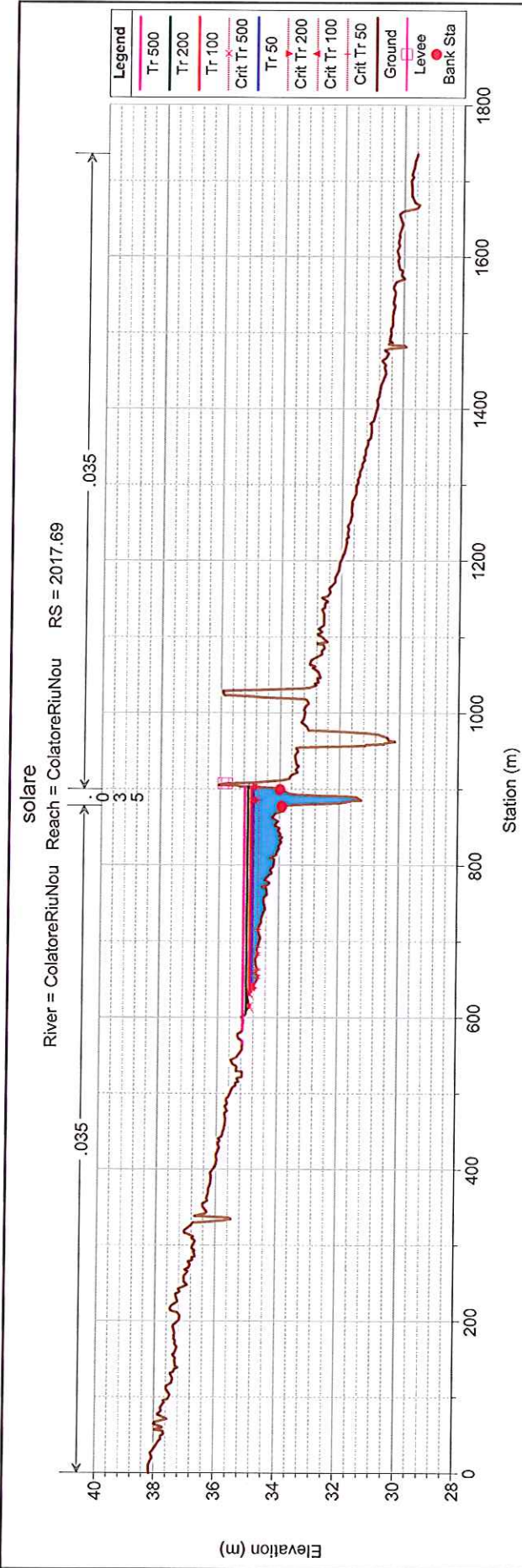
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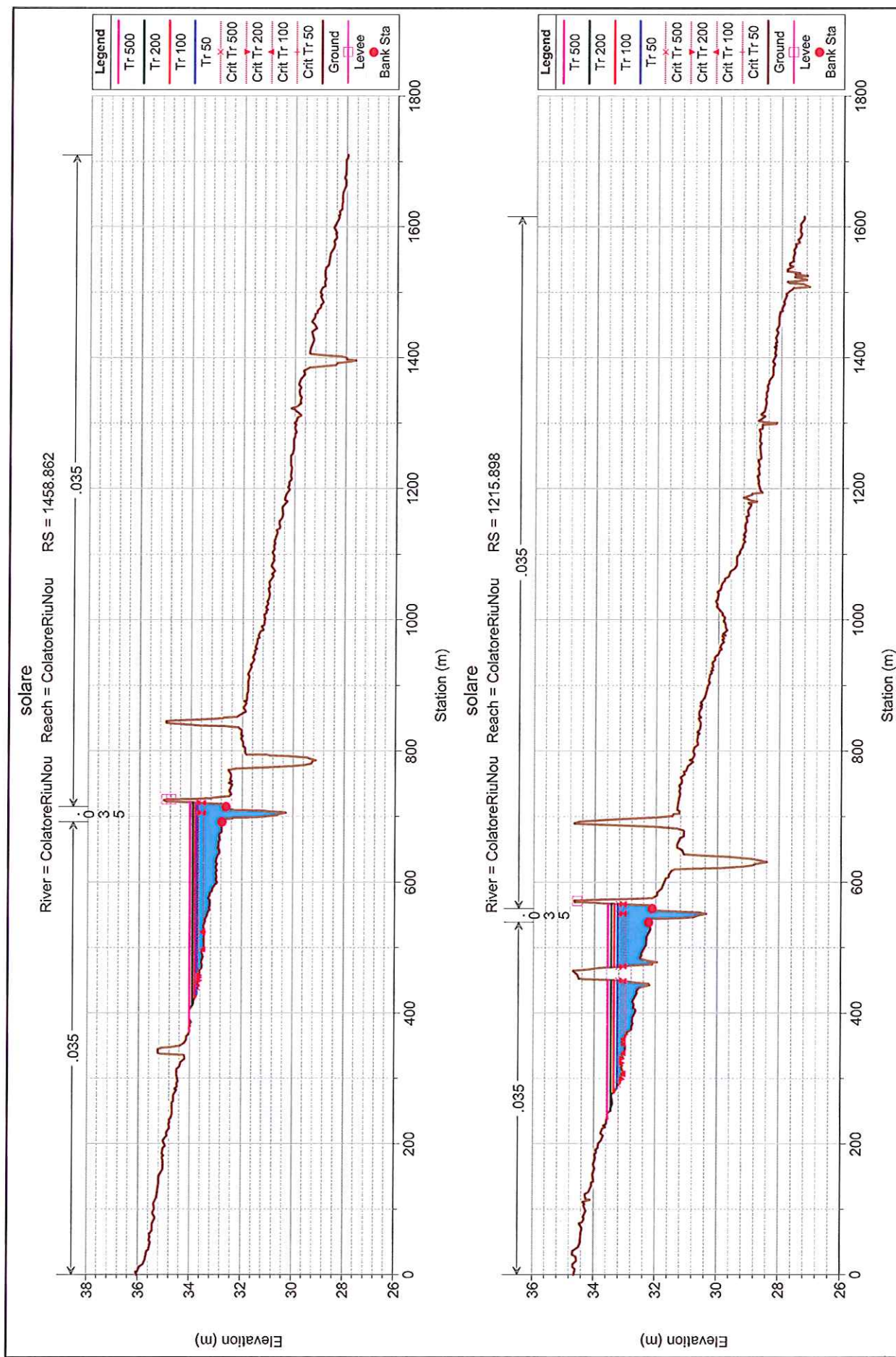
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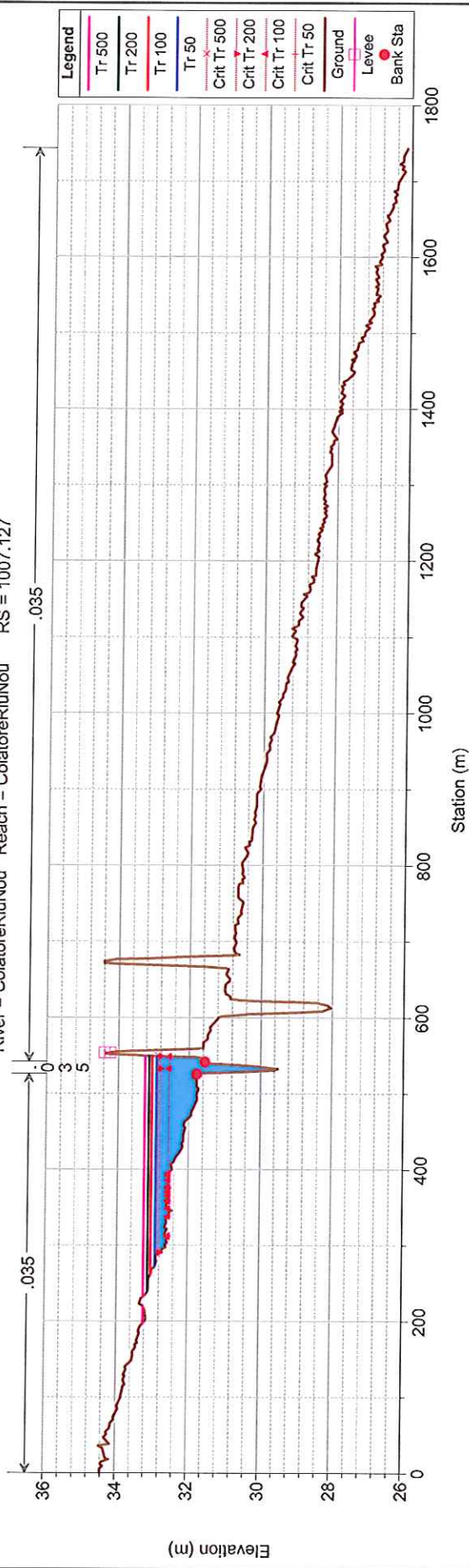






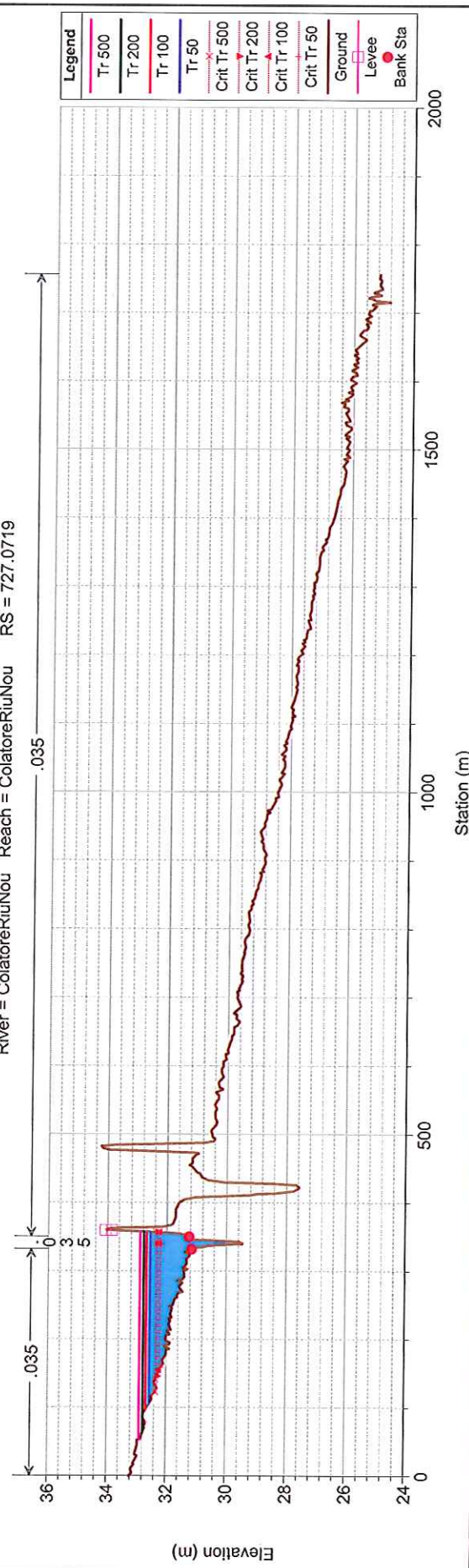
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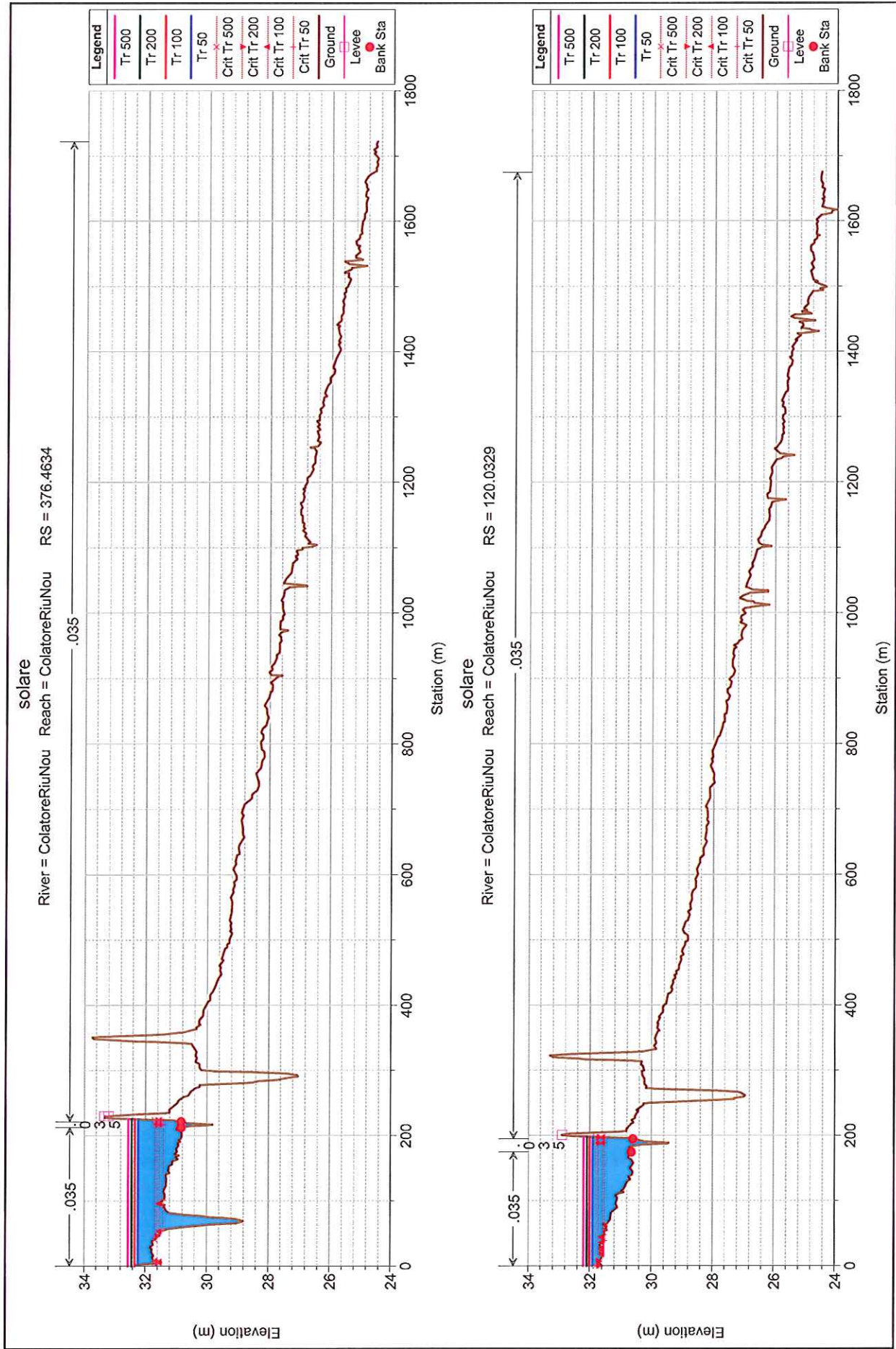
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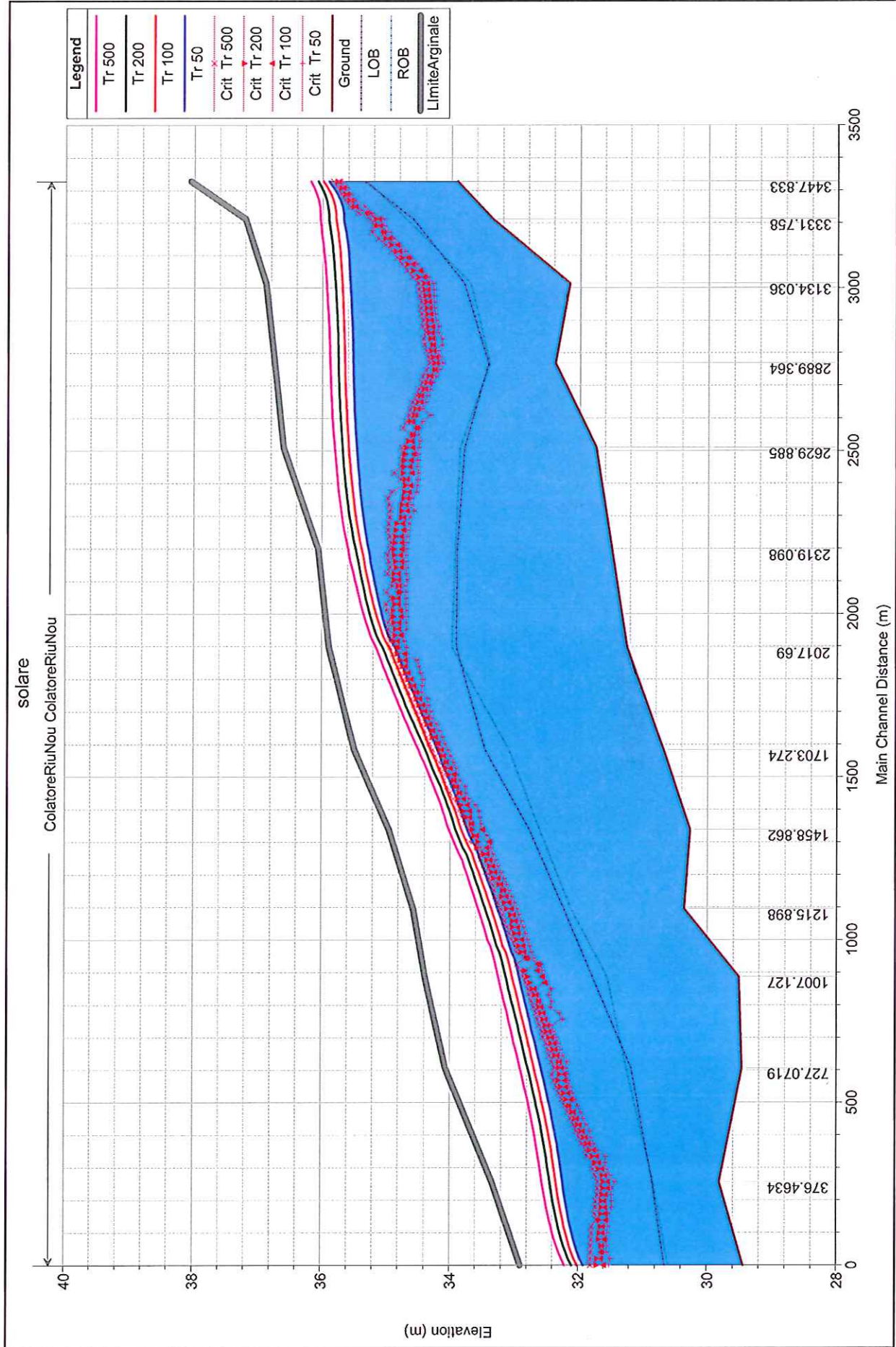
solare

River = ColatoreRiuNou Reach = ColatoreRiuNou RS = 727.0719





PROFILI



TABULATI

HEC-RAS Plan: ColatRN River: ColatoreRiuNou Reach: ColatoreRiuNou

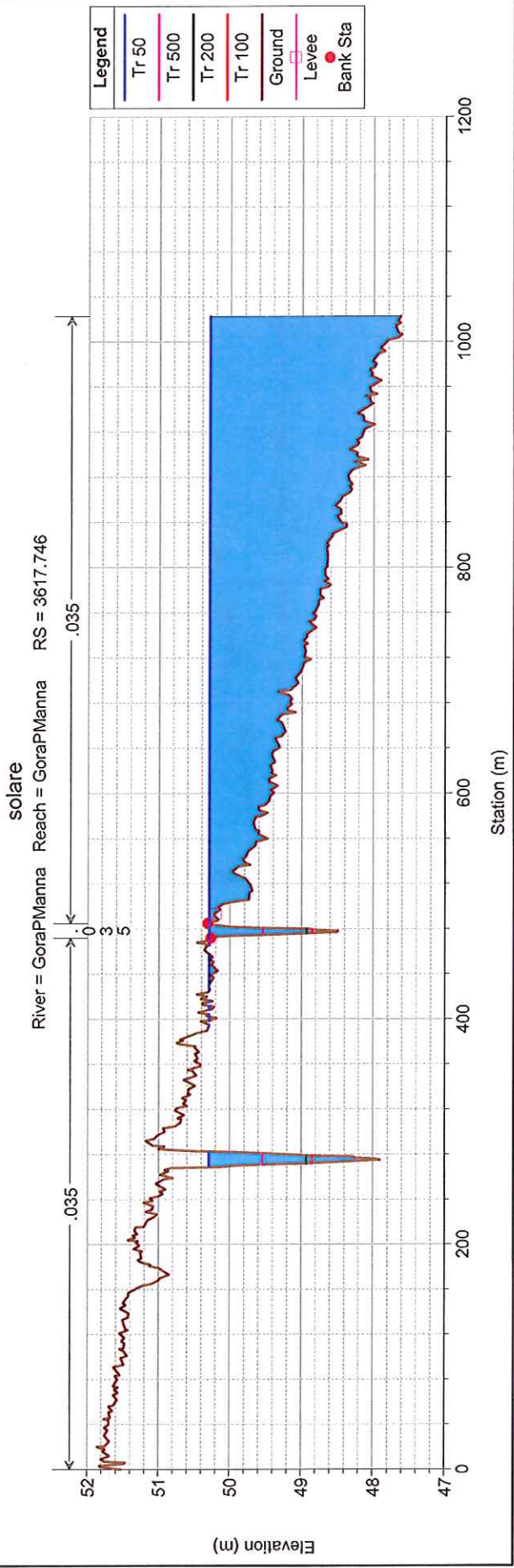
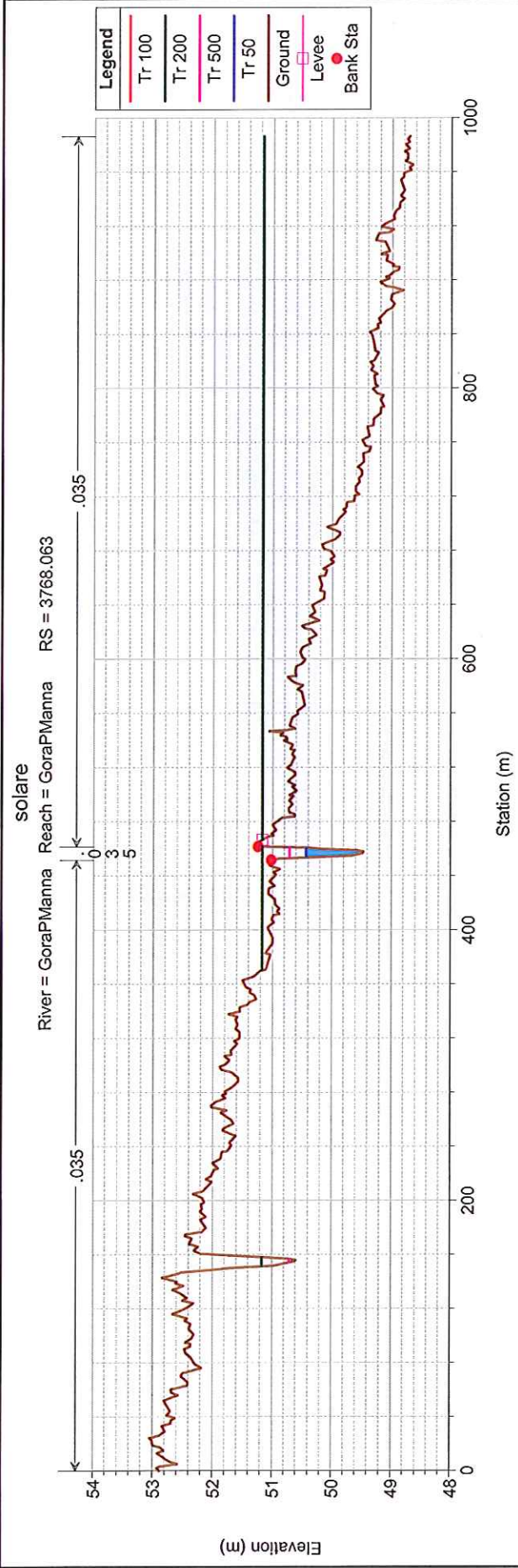
Reach	River Sta	Profile	Q Total (m3/s)	Min Ch El (m)	W.S. Elev (m)	Crit W.S. (m)	E.G. Elev (m)	E.G. Slope (m/m)	Vel Chnl (m/s)	Flow Area (m2)	Top Width (m)	Froude # Chl
ColatoreRiuNou	3447.833	Tr 50	191.37	33.91	35.91	35.69	35.98	0.003119	1.58	161.92	268.88	0.50
ColatoreRiuNou	3447.833	Tr 100	226.26	33.91	35.99	35.74	36.07	0.002909	1.61	184.17	270.58	0.49
ColatoreRiuNou	3447.833	Tr 200	261.44	33.91	36.07	35.78	36.16	0.002722	1.63	206.58	273.81	0.48
ColatoreRiuNou	3447.833	Tr 500	308.25	33.91	36.19	35.84	36.27	0.002467	1.65	238.03	280.80	0.47
ColatoreRiuNou	3331.758	Tr 50	191.37	33.36	35.67	35.05	35.69	0.000560	0.85	365.88	571.13	0.23
ColatoreRiuNou	3331.758	Tr 100	226.26	33.36	35.80	35.12	35.81	0.000465	0.82	438.55	596.05	0.21
ColatoreRiuNou	3331.758	Tr 200	261.44	33.36	35.91	35.19	35.92	0.000408	0.80	504.10	607.66	0.20
ColatoreRiuNou	3331.758	Tr 500	308.25	33.36	36.04	35.26	36.06	0.000349	0.78	585.52	611.86	0.19
ColatoreRiuNou	3134.036	Tr 50	191.37	32.16	35.57	34.28	35.59	0.000259	0.88	316.54	293.33	0.17
ColatoreRiuNou	3134.036	Tr 100	226.26	32.16	35.70	34.36	35.72	0.000278	0.94	355.43	309.13	0.18
ColatoreRiuNou	3134.036	Tr 200	261.44	32.16	35.81	34.43	35.83	0.000304	1.01	389.73	322.64	0.19
ColatoreRiuNou	3134.036	Tr 500	308.25	32.16	35.94	34.52	35.97	0.000326	1.08	433.69	333.84	0.19
ColatoreRiuNou	2889.364	Tr 50	191.37	32.38	35.52	34.13	35.53	0.000102	0.55	527.75	385.57	0.11
ColatoreRiuNou	2889.364	Tr 100	226.26	32.38	35.65	34.22	35.66	0.000108	0.58	576.70	404.12	0.11
ColatoreRiuNou	2889.364	Tr 200	261.44	32.38	35.75	34.26	35.76	0.000123	0.63	619.41	411.94	0.12
ColatoreRiuNou	2889.364	Tr 500	308.25	32.38	35.88	34.33	35.89	0.000132	0.68	673.02	416.42	0.12
ColatoreRiuNou	2629.885	Tr 50	191.37	31.74	35.46	34.50	35.48	0.000276	0.83	355.92	337.20	0.17
ColatoreRiuNou	2629.885	Tr 100	226.26	31.74	35.58	34.59	35.61	0.000288	0.88	397.32	359.53	0.18
ColatoreRiuNou	2629.885	Tr 200	261.44	31.74	35.68	34.71	35.71	0.000307	0.93	434.79	392.38	0.18
ColatoreRiuNou	2629.885	Tr 500	308.25	31.74	35.81	34.76	35.83	0.000330	0.99	485.69	427.47	0.19
ColatoreRiuNou	2319.098	Tr 50	191.37	31.49	35.28	34.70	35.33	0.000772	1.38	226.92	266.12	0.28
ColatoreRiuNou	2319.098	Tr 100	226.26	31.49	35.38	34.75	35.45	0.000859	1.50	256.89	296.69	0.30
ColatoreRiuNou	2319.098	Tr 200	261.44	31.49	35.47	34.89	35.54	0.000880	1.56	284.32	307.52	0.31
ColatoreRiuNou	2319.098	Tr 500	308.25	31.49	35.59	34.94	35.66	0.000867	1.59	322.38	327.85	0.31
ColatoreRiuNou	2017.69	Tr 50	191.37	31.25	34.86	34.68	35.00	0.002051	2.12	162.08	264.94	0.45
ColatoreRiuNou	2017.69	Tr 100	226.26	31.25	34.95	34.82	35.09	0.002025	2.16	186.01	274.37	0.45
ColatoreRiuNou	2017.69	Tr 200	261.44	31.25	35.05	34.83	35.19	0.001984	2.20	214.83	295.79	0.45
ColatoreRiuNou	2017.69	Tr 500	308.25	31.25	35.16	34.94	35.29	0.001927	2.23	246.12	317.83	0.45
ColatoreRiuNou	1703.274	Tr 50	191.37	30.68	34.20	34.03	34.35	0.002033	2.15	153.81	225.67	0.46
ColatoreRiuNou	1703.274	Tr 100	226.26	30.68	34.31	34.13	34.45	0.001946	2.17	179.66	255.62	0.45

HEC-RAS Plan: ColatRN River: ColatoreRiuNou Reach: ColatoreRiuNou (Continued)

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
ColatoreRiuNou	1703.274	Tr 200	261.44	30.68	34.39	34.17	34.54	0.002155	2.33	199.29	264.32	0.48
ColatoreRiuNou	1703.274	Tr 500	308.25	30.68	34.50	34.27	34.65	0.002110	2.38	229.13	275.03	0.47
ColatoreRiuNou	1458.862	Tr 50	191.37	30.27	33.74	33.48	33.84	0.001878	1.92	178.43	292.40	0.43
ColatoreRiuNou	1458.862	Tr 100	226.26	30.27	33.83	33.48	33.93	0.001804	1.94	206.28	299.80	0.42
ColatoreRiuNou	1458.862	Tr 200	261.44	30.27	33.92	33.67	34.02	0.001765	1.97	232.78	310.37	0.42
ColatoreRiuNou	1458.862	Tr 500	308.25	30.27	34.02	33.70	34.13	0.001826	2.06	266.23	349.17	0.43
ColatoreRiuNou	1215.898	Tr 50	191.37	30.36	33.26	32.95	33.35	0.001835	1.81	170.71	261.16	0.42
ColatoreRiuNou	1215.898	Tr 100	226.26	30.36	33.36	33.03	33.45	0.001775	1.84	197.04	268.69	0.42
ColatoreRiuNou	1215.898	Tr 200	261.44	30.36	33.45	33.13	33.55	0.001752	1.89	223.73	292.99	0.42
ColatoreRiuNou	1215.898	Tr 500	308.25	30.36	33.56	33.21	33.66	0.001727	1.94	256.68	311.03	0.42
ColatoreRiuNou	1007.127	Tr 50	191.37	29.51	32.93	32.55	33.01	0.001368	1.82	197.18	277.26	0.38
ColatoreRiuNou	1007.127	Tr 100	226.26	29.51	33.03	32.55	33.11	0.001318	1.84	227.23	287.48	0.37
ColatoreRiuNou	1007.127	Tr 200	261.44	29.51	33.13	32.80	33.21	0.001329	1.89	256.53	310.79	0.38
ColatoreRiuNou	1007.127	Tr 500	308.25	29.51	33.25	32.86	33.33	0.001268	1.91	294.58	340.25	0.37
ColatoreRiuNou	727.0719	Tr 50	191.37	29.46	32.58	32.19	32.64	0.001237	1.58	203.13	252.80	0.35
ColatoreRiuNou	727.0719	Tr 100	226.26	29.46	32.69	32.25	32.75	0.001212	1.62	230.71	262.30	0.35
ColatoreRiuNou	727.0719	Tr 200	261.44	29.46	32.79	32.31	32.86	0.001309	1.74	257.39	294.44	0.37
ColatoreRiuNou	727.0719	Tr 500	308.25	29.46	32.91	32.36	32.98	0.001259	1.76	293.64	304.89	0.36
ColatoreRiuNou	376.4634	Tr 50	191.37	29.81	32.24	31.42	32.28	0.000633	1.03	247.61	223.21	0.25
ColatoreRiuNou	376.4634	Tr 100	226.26	29.81	32.35	31.53	32.38	0.000668	1.10	270.67	225.46	0.26
ColatoreRiuNou	376.4634	Tr 200	261.44	29.81	32.44	31.61	32.49	0.000691	1.16	292.52	225.78	0.26
ColatoreRiuNou	376.4634	Tr 500	308.25	29.81	32.56	31.69	32.61	0.000718	1.23	319.60	226.01	0.27
ColatoreRiuNou	120.0329	Tr 50	191.37	29.44	31.92	31.51	32.00	0.002002	1.69	163.56	197.85	0.43
ColatoreRiuNou	120.0329	Tr 100	226.26	29.44	32.01	31.58	32.10	0.002003	1.76	181.74	198.01	0.44
ColatoreRiuNou	120.0329	Tr 200	261.44	29.44	32.10	31.72	32.20	0.002000	1.82	199.03	198.15	0.44
ColatoreRiuNou	120.0329	Tr 500	308.25	29.44	32.21	31.80	32.32	0.002001	1.89	220.46	198.33	0.45

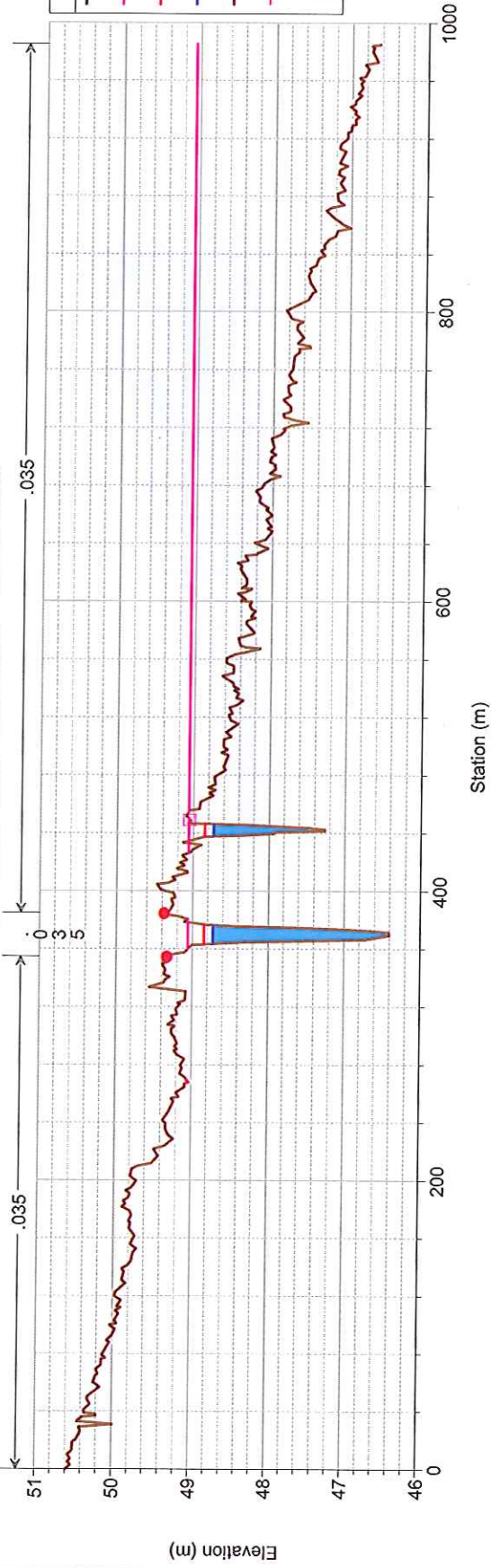
GORA PISCINA MANNA

SEZIONI



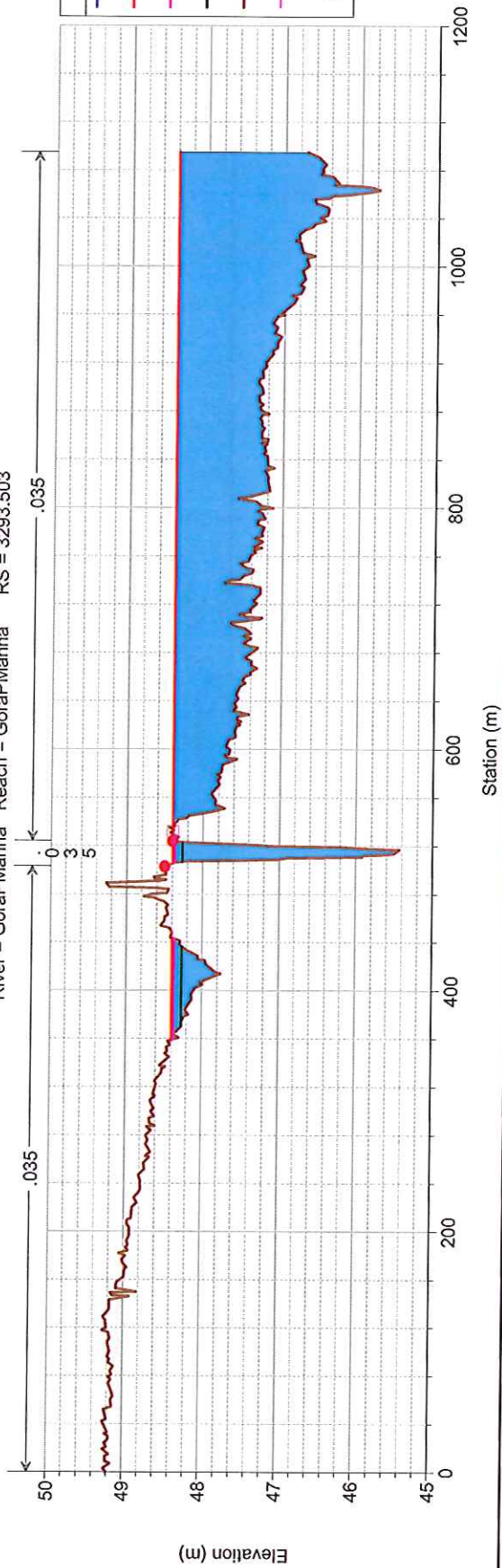
Solare

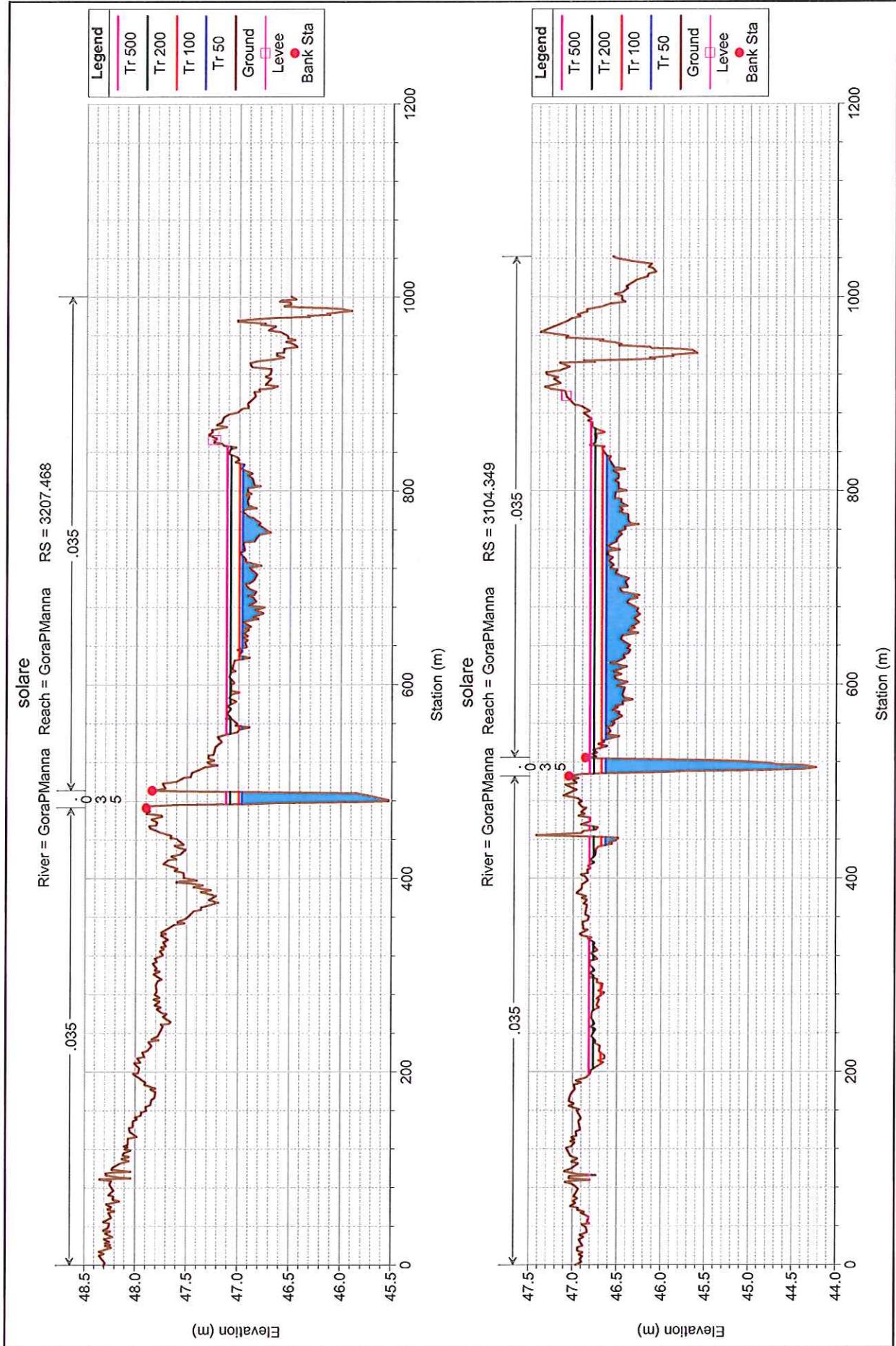
River = GoraPManna Reach = GoraPManna RS = 3416.969



solare

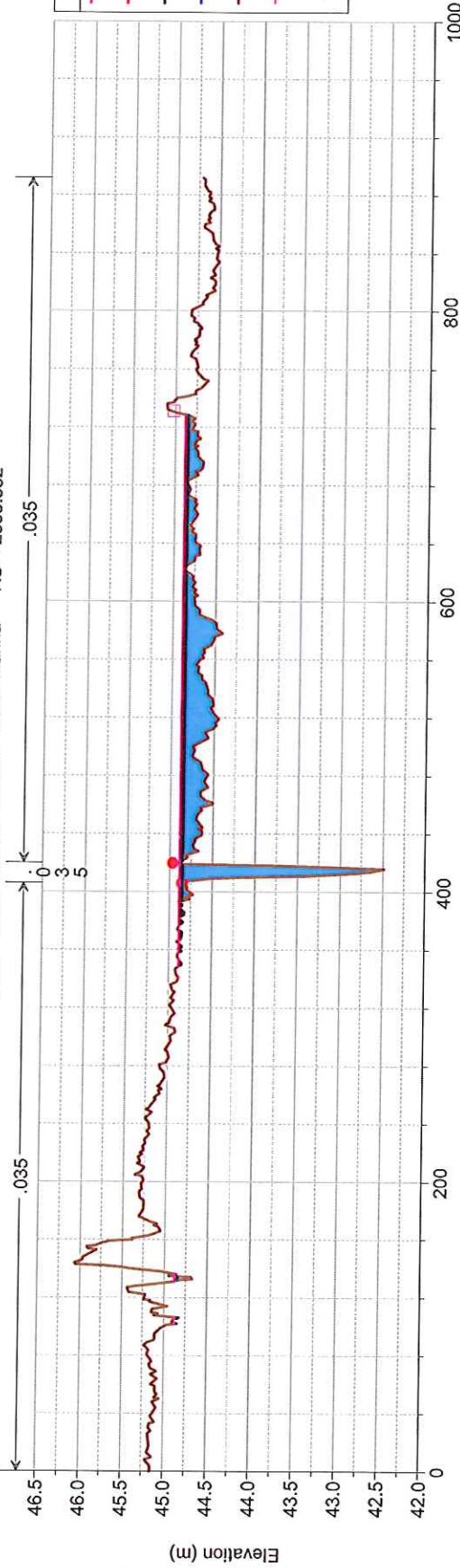
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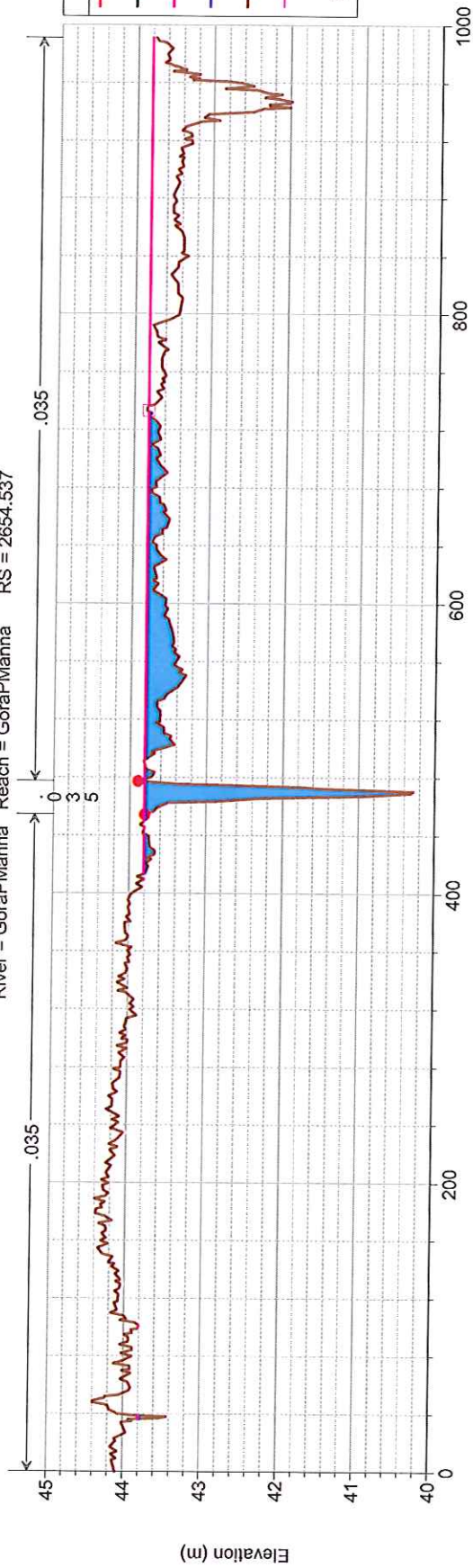
Solare

River = GoraPManna Reach = GoraPManna RS = 2835.352



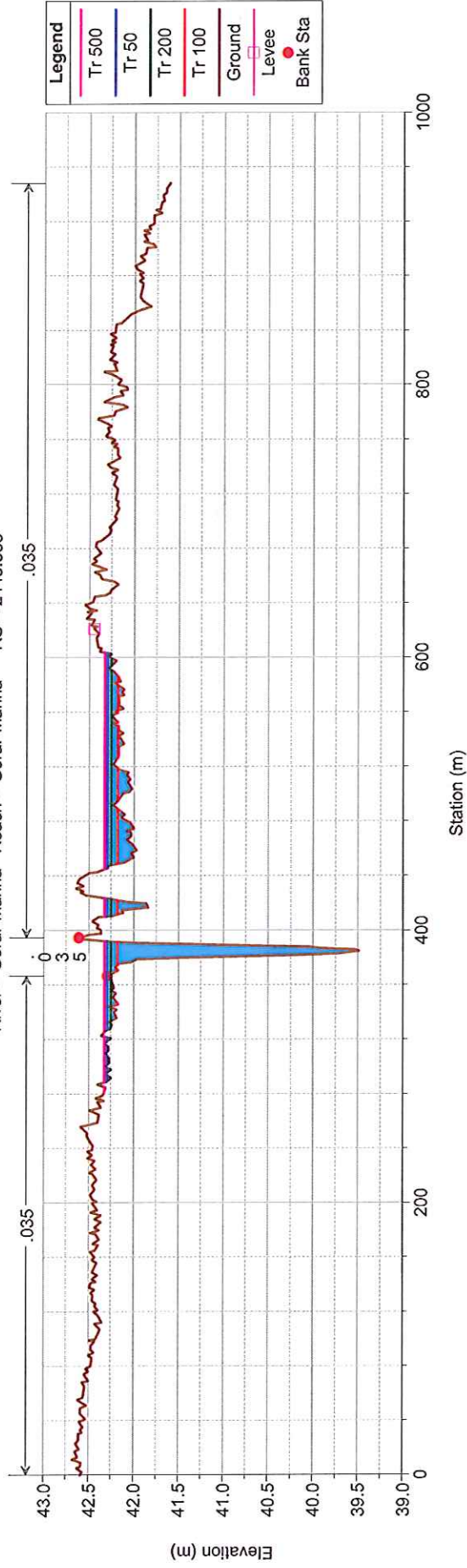
Solare

River = GoraPManna Reach = GoraPManna RS = 2654.537



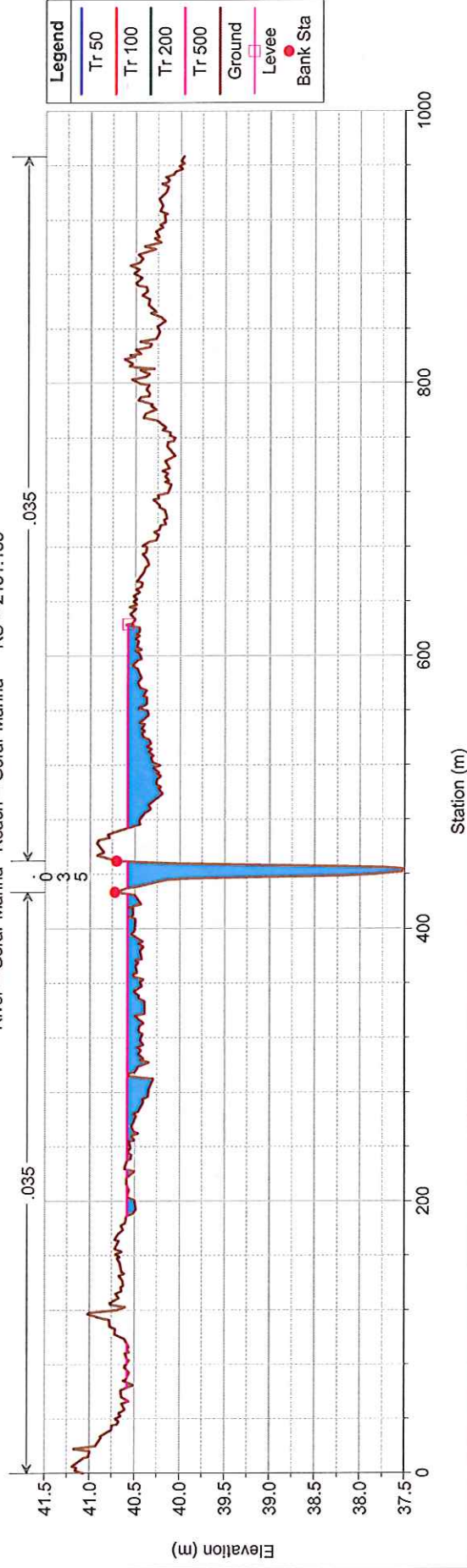
solare

River = GoraPManna Reach = GoraPManna RS = 2443.388



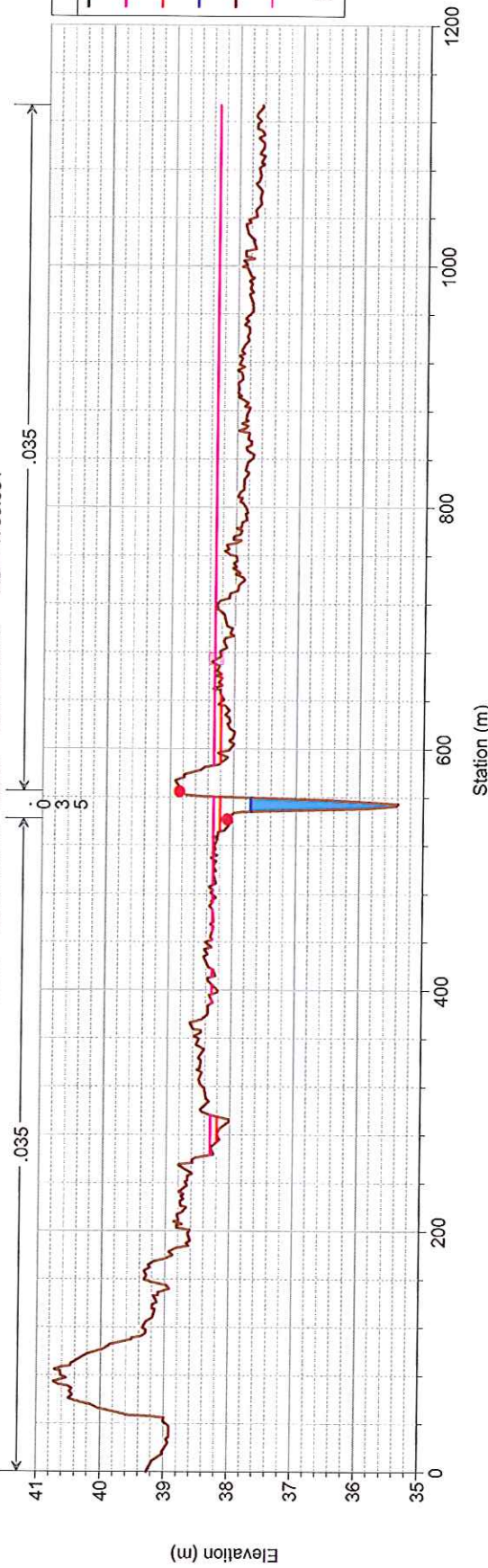
solare

River = GoraPManna Reach = GoraPManna RS = 2131.133



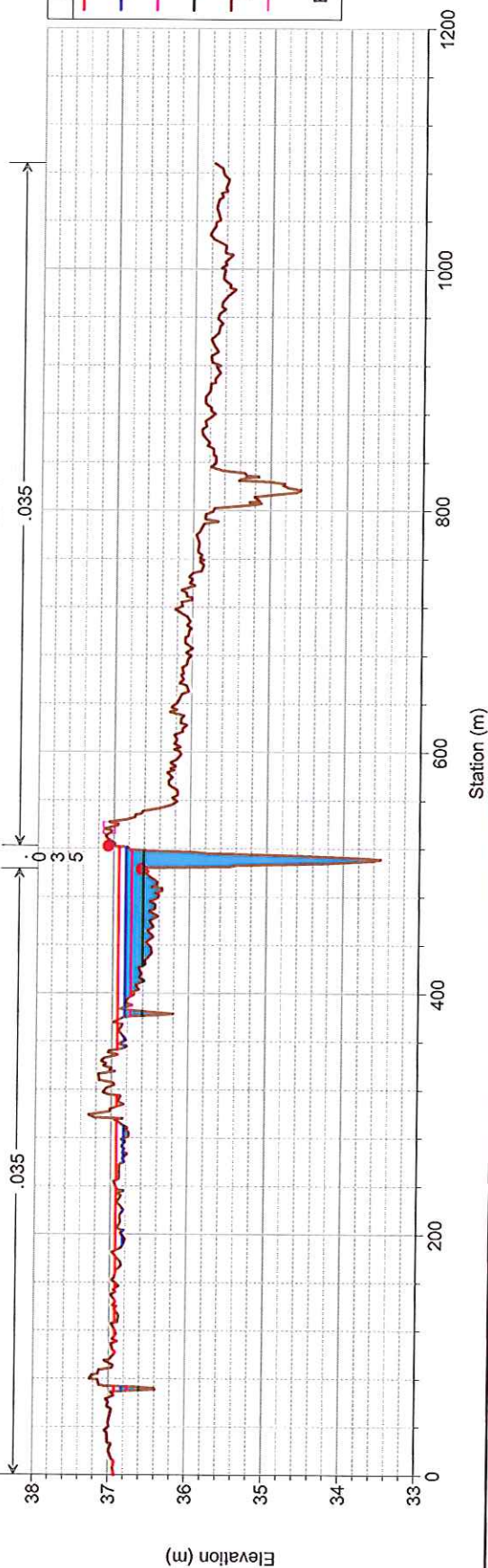
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River = GoraPManna Reach = GoraPManna RS = 1735.551



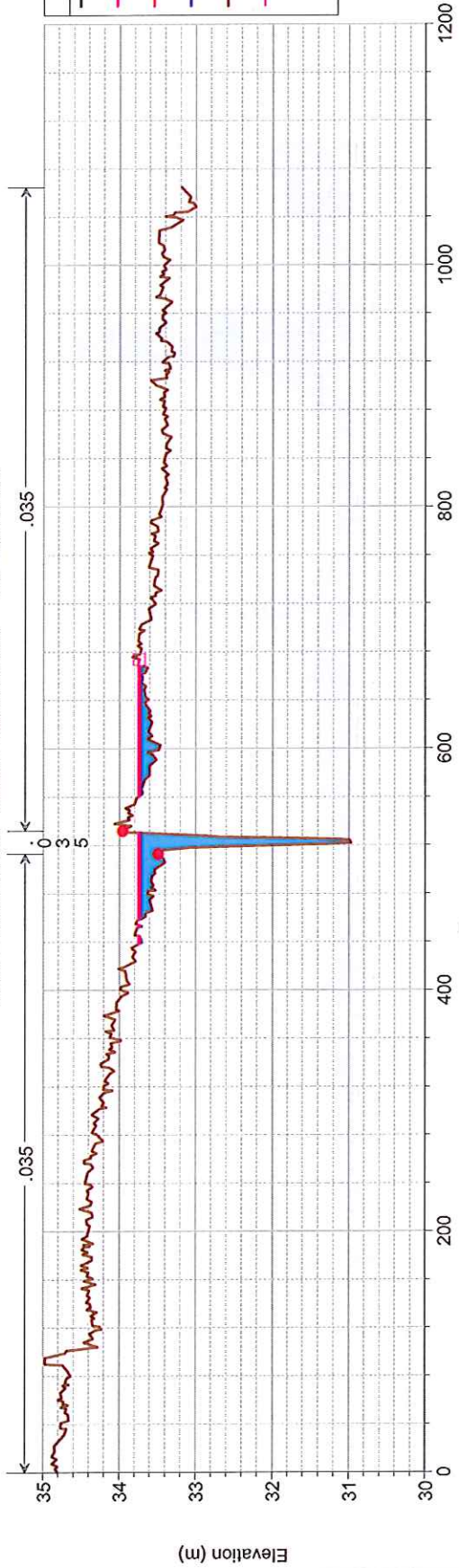
Solare

River = GoraPManna Reach = GoraPManna RS = 1403.777



solare

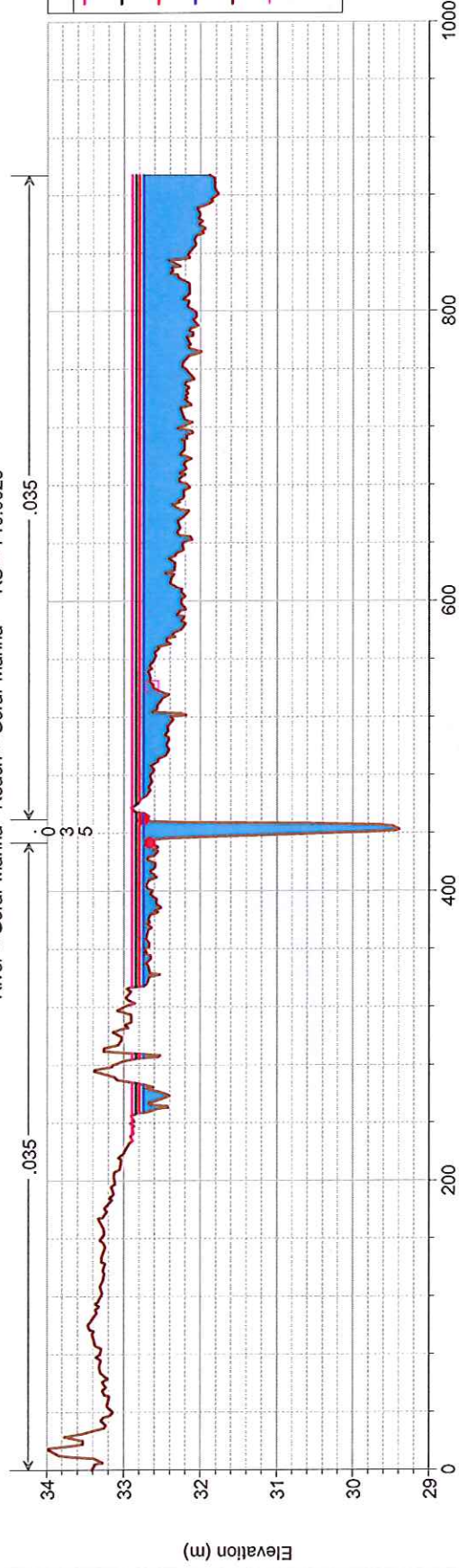
River = GoraPManna Reach = GoraPManna RS = 951.5483



Legend	
Tr-200	[Blue line]
Tr-500	[Red line]
Tr-100	[Green line]
Tr-50	[Purple line]
Ground	[Brown line]
Levee	[Pink line]
Bank Sta	[Red dot]

solare

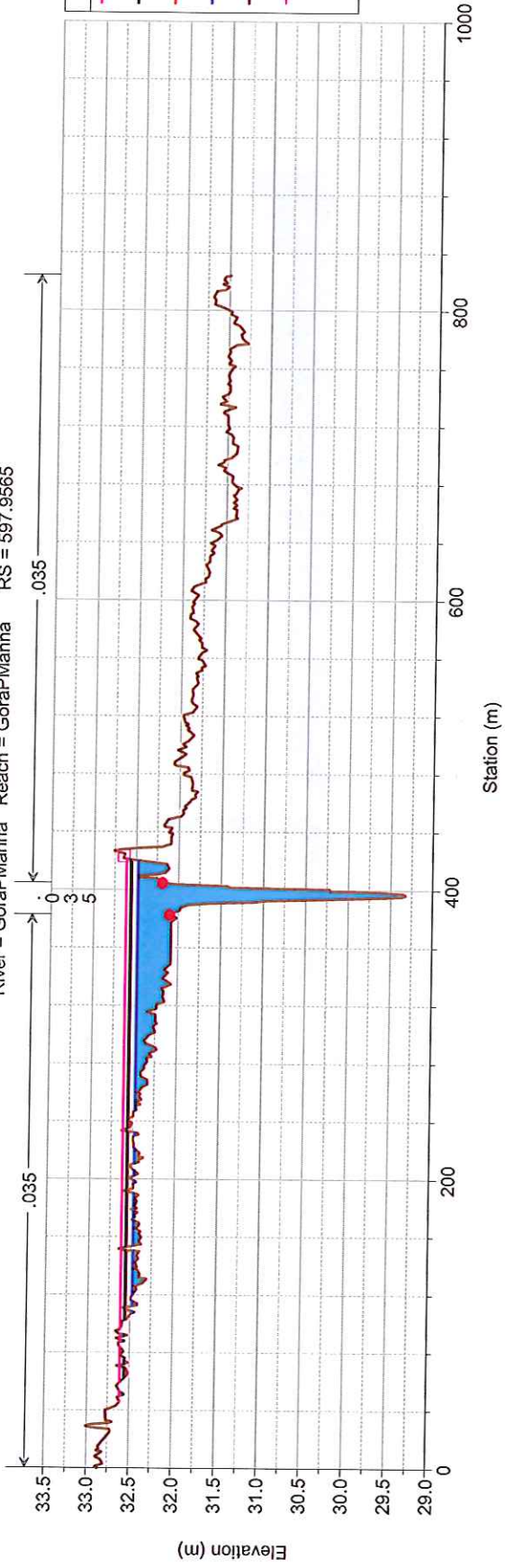
River = GoraPManna Reach = GoraPManna RS = 710.0026



Legend	
Tr-500	[Red line]
Tr-200	[Blue line]
Tr-100	[Green line]
Tr-50	[Purple line]
Ground	[Brown line]
Levee	[Pink line]
Bank Sta	[Red dot]

Solare

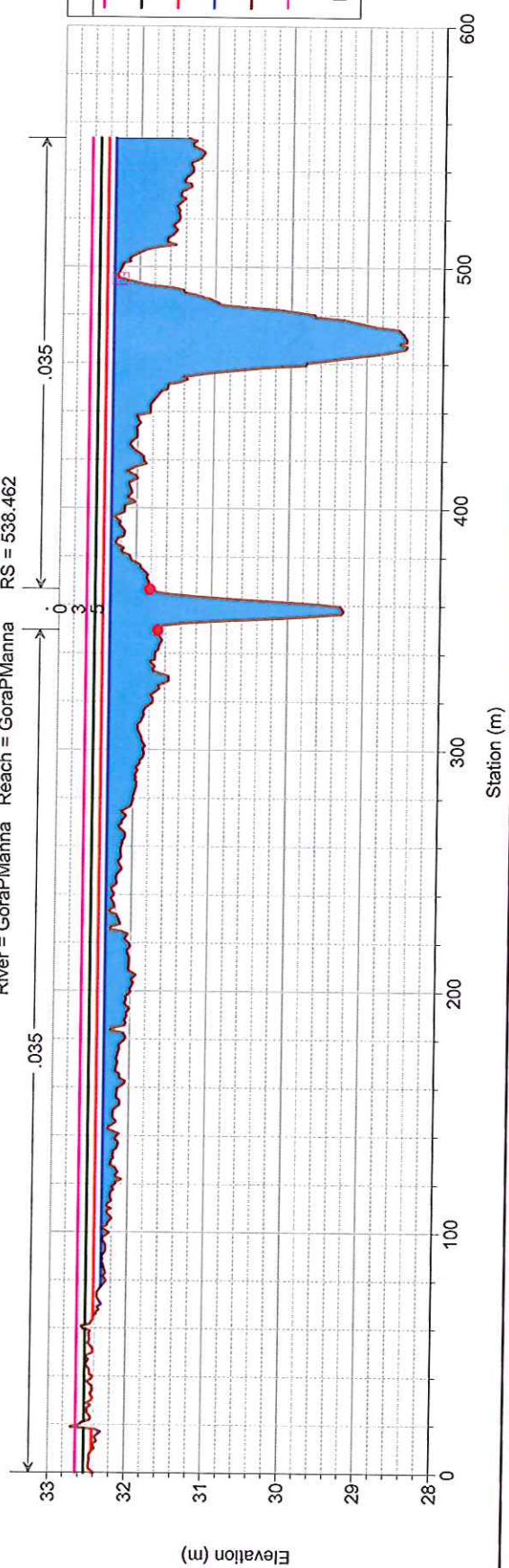
River = GoraPManna Reach = GoraPManna RS = 597.9565



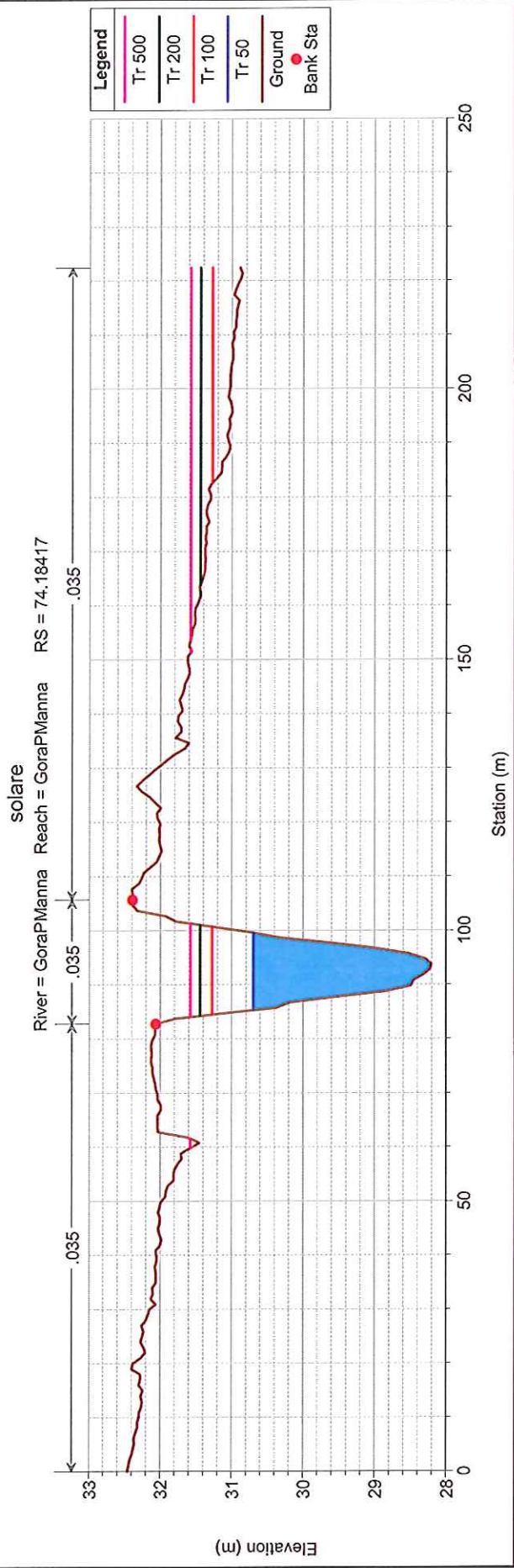
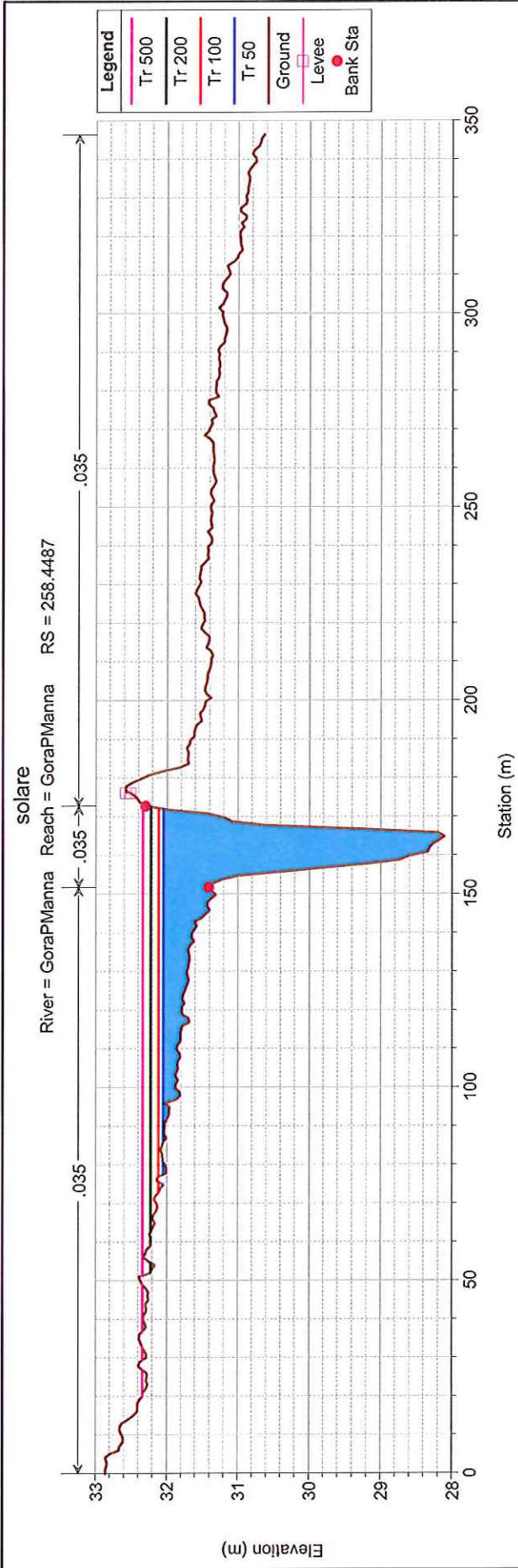
Legend	
Tr 500	(Pink line)
Tr 200	(Black line)
Tr 100	(Red line)
Tr 50	(Blue line)
Ground	(Brown line)
Levee	(Green line)
Bank Sta	(Red dot)

Solare

River = GoraPManna Reach = GoraPManna RS = 538.462



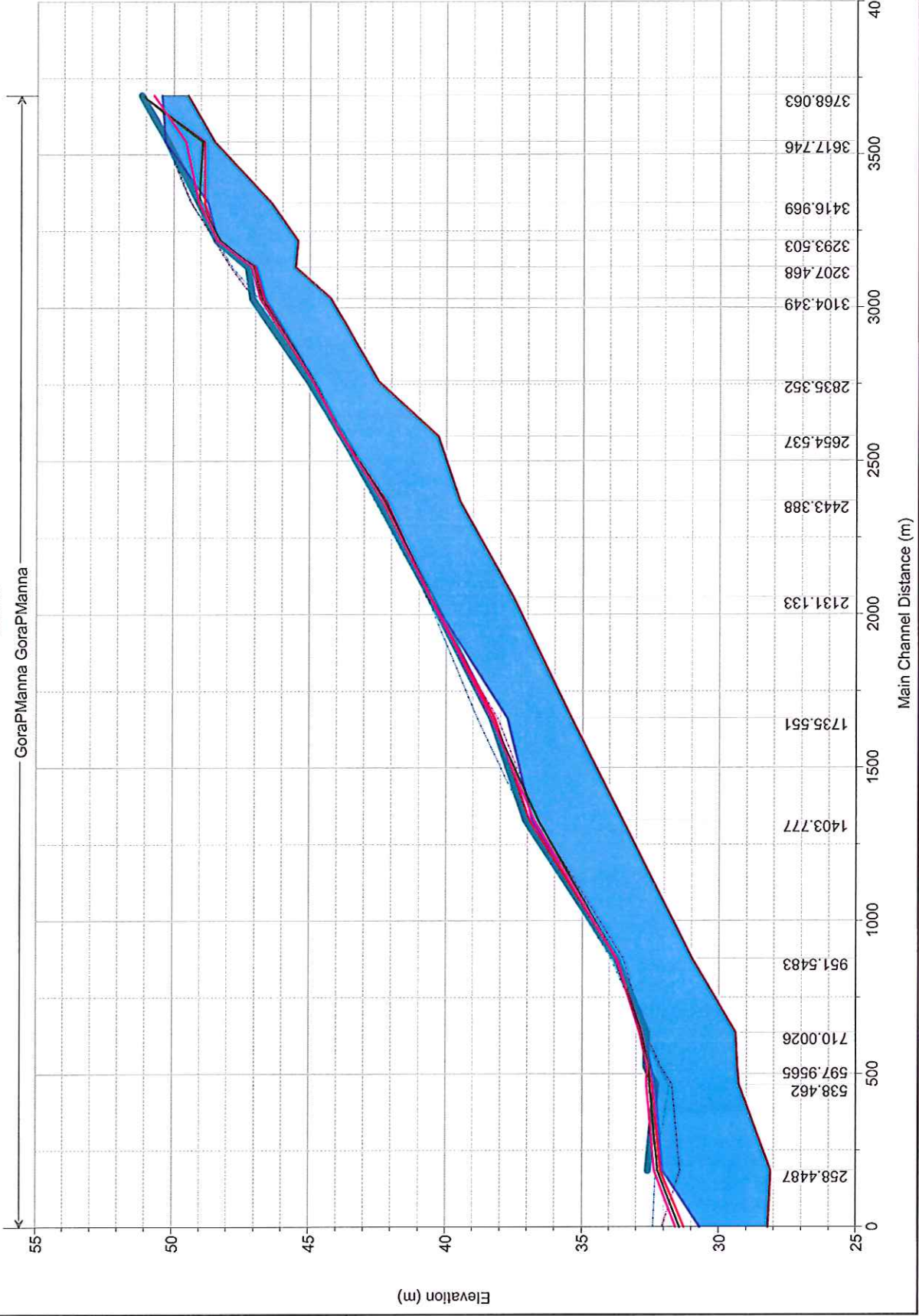
Legend	
Tr 500	(Pink line)
Tr 200	(Black line)
Tr 100	(Red line)
Tr 50	(Blue line)
Ground	(Brown line)
Levee	(Green line)
Bank Sta	(Red dot)



PROFILI

solare
GoraPManna GoraPManna

Legend	
Tr 500	(Pink line)
Tr 200	(Black line)
Tr 100	(Red line)
Tr 50	(Blue line)
Ground	(Black line)
LOB	(Black line)
ROB	(Black line)
Right Levee	(Blue shaded area)



TABULATI

HEC-RAS Plan: N_P_River: GoraPManna Reach: GoraPManna

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
GoraPManna	3768.063	Tr 50	22.49	49.46	50.44	50.84	51.55	0.050043	4.67	4.82	7.28	1.83	
GoraPManna	3768.063	Tr 100	27.20	49.46	51.17	51.17	51.17	0.000001	0.03	752.49	618.20	0.01	
GoraPManna	3768.063	Tr 200	32.00	49.46	51.17	51.17	51.17	0.000001	0.04	752.48	618.19	0.01	
GoraPManna	3768.063	Tr 500	38.43	49.46	50.72	51.17	52.25	0.050033	5.50	7.15	10.85	1.89	
GoraPManna	3617.746	Tr 50	22.49	48.49	50.30	49.24	50.30	0.000001	0.02	804.77	609.58	0.01	
GoraPManna	3617.746	Tr 100	27.20	48.49	48.85	49.34	50.96	0.127556	3.59	4.41	9.96	2.46	
GoraPManna	3617.746	Tr 200	32.00	48.49	48.94	49.43	50.97	0.111151	3.75	5.30	11.04	2.36	
GoraPManna	3617.746	Tr 500	38.43	48.49	49.54	49.54	49.96	0.012869	2.36	13.72	16.32	0.92	
GoraPManna	3416.969	Tr 50	93.34	46.40	48.73	48.73	49.35	0.010448	3.69	27.58	21.30	0.94	
GoraPManna	3416.969	Tr 100	108.63	46.40	48.85	48.85	49.55	0.011458	3.90	30.15	22.49	0.99	
GoraPManna	3416.969	Tr 200	123.91	46.40	49.06	49.06	49.06	0.000031	0.19	684.21	573.36	0.05	
GoraPManna	3416.969	Tr 500	144.08	46.40	49.06	49.06	49.06	0.000042	0.22	684.20	573.36	0.06	
GoraPManna	3293.503	Tr 50	93.34	45.43	48.40	48.40	48.40	0.000018	0.16	704.45	670.05	0.04	
GoraPManna	3293.503	Tr 100	108.63	45.43	48.40	48.40	48.40	0.000024	0.19	704.44	670.05	0.05	
GoraPManna	3293.503	Tr 200	123.91	45.43	48.27	48.40	48.98	0.009801	3.90	40.91	81.70	0.94	
GoraPManna	3293.503	Tr 500	144.08	45.43	48.37	48.40	49.06	0.010538	3.98	50.13	103.04	0.97	
GoraPManna	3207.468	Tr 50	93.34	45.53	46.97	47.19	48.27	0.037656	5.59	29.60	201.09	1.72	
GoraPManna	3207.468	Tr 100	108.63	45.53	47.00	47.22	48.27	0.039004	5.77	35.90	218.29	1.75	
GoraPManna	3207.468	Tr 200	123.91	45.53	47.08	47.26	47.72	0.023169	4.61	56.31	283.32	1.36	
GoraPManna	3207.468	Tr 500	144.08	45.53	47.12	47.26	47.74	0.023613	4.72	67.19	310.24	1.38	
GoraPManna	3104.349	Tr 50	93.34	44.23	46.64	46.72	46.87	0.004816	2.59	75.37	317.02	0.65	
GoraPManna	3104.349	Tr 100	108.63	44.23	46.68	46.75	46.89	0.004664	2.57	90.81	353.75	0.64	
GoraPManna	3104.349	Tr 200	123.91	44.23	46.77	46.78	46.89	0.003271	2.17	125.03	464.55	0.54	
GoraPManna	3104.349	Tr 500	144.08	44.23	46.82	46.82	46.93	0.003163	2.12	149.79	549.52	0.53	
GoraPManna	2835.352	Tr 50	93.34	42.48	44.84	44.93	45.11	0.009378	3.06	66.05	326.88	0.86	
GoraPManna	2835.352	Tr 100	108.63	42.48	44.87	44.96	45.12	0.009821	3.09	78.21	365.36	0.88	
GoraPManna	2835.352	Tr 200	123.91	42.48	44.85	44.96	45.24	0.014598	3.76	71.12	342.43	1.07	
GoraPManna	2835.352	Tr 500	144.08	42.48	44.88	45.02	45.27	0.015690	3.91	81.74	373.20	1.11	
GoraPManna	2654.537	Tr 50	93.34	40.28	43.79	43.81	43.95	0.004401	2.14	78.30	298.36	0.60	
GoraPManna	2654.537	Tr 100	108.63	40.28	43.81	43.81	43.84	0.001144	1.10	191.47	567.32	0.31	

HEC-RAS Plan: N_P River: GoraPManna Reach: GoraPManna (Continued)

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
GoraPManna	2654.537	Tr 200	123.91	40.28	43.81	43.81	43.84	0.001489	1.25	191.46	567.31	0.35
GoraPManna	2654.537	Tr 500	144.08	40.28	43.81	43.81	43.86	0.002013	1.45	191.45	567.30	0.41
GoraPManna	2443.388	Tr 50	93.34	39.49	42.30	42.40	42.58	0.010200	2.74	55.89	260.33	0.89
GoraPManna	2443.388	Tr 100	108.63	39.49	42.18	42.45	43.11	0.021122	4.48	32.69	142.19	1.30
GoraPManna	2443.388	Tr 200	123.91	39.49	42.26	42.45	42.97	0.023302	4.18	45.81	219.78	1.34
GoraPManna	2443.388	Tr 500	144.08	39.49	42.33	42.45	42.84	0.018870	3.79	64.21	277.68	1.21
GoraPManna	2131.133	Tr 50	93.34	37.52	40.58	40.58	40.61	0.001290	1.23	179.24	754.43	0.33
GoraPManna	2131.133	Tr 100	108.63	37.52	40.58	40.58	40.63	0.001748	1.43	179.22	754.41	0.38
GoraPManna	2131.133	Tr 200	123.91	37.52	40.58	40.58	40.64	0.002274	1.64	179.22	754.39	0.44
GoraPManna	2131.133	Tr 500	144.08	37.52	40.58	40.58	40.66	0.003075	1.90	179.21	754.38	0.51
GoraPManna	1735.551	Tr 50	93.34	35.39	37.73	38.31	39.15	0.022198	5.29	17.65	11.54	1.36
GoraPManna	1735.551	Tr 100	108.63	35.39	38.21	38.31	39.00	0.015583	4.10	33.64	104.37	1.14
GoraPManna	1735.551	Tr 200	123.91	35.39	38.31	38.31	38.33	0.000780	0.96	251.79	687.38	0.26
GoraPManna	1735.551	Tr 500	144.08	35.39	38.31	38.31	38.33	0.001055	1.11	251.78	687.37	0.30
GoraPManna	1403.777	Tr 50	93.34	33.51	36.84	36.84	37.03	0.003681	2.26	66.03	181.92	0.57
GoraPManna	1403.777	Tr 100	108.63	33.51	36.93	36.93	37.09	0.003171	2.15	89.39	337.38	0.53
GoraPManna	1403.777	Tr 200	123.91	33.51	36.61	36.98	37.56	0.013159	4.48	36.20	102.18	1.07
GoraPManna	1403.777	Tr 500	144.08	33.51	36.76	37.04	37.45	0.010946	4.09	54.20	130.66	0.98
GoraPManna	951.5483	Tr 50	93.34	30.97	33.71	33.75	34.25	0.011853	3.51	40.99	180.63	0.99
GoraPManna	951.5483	Tr 100	108.63	30.97	33.73	33.75	34.38	0.014437	3.90	44.18	186.52	1.09
GoraPManna	951.5483	Tr 200	123.91	30.97	33.75	33.75	33.80	0.002423	1.61	166.57	580.44	0.45
GoraPManna	951.5483	Tr 500	144.08	30.97	33.75	33.75	33.82	0.003277	1.87	166.57	580.44	0.52
GoraPManna	710.0026	Tr 50	93.34	29.39	32.75	32.33	32.76	0.000385	0.76	248.01	569.67	0.18
GoraPManna	710.0026	Tr 100	108.63	29.39	32.80	32.64	32.81	0.000399	0.77	274.53	574.47	0.18
GoraPManna	710.0026	Tr 200	123.91	29.39	32.84	32.64	32.85	0.000403	0.77	301.30	579.75	0.18
GoraPManna	710.0026	Tr 500	144.08	29.39	32.89	32.64	32.90	0.000419	0.80	330.26	601.12	0.19
GoraPManna	597.9565	Tr 50	93.34	29.32	32.48	32.48	32.65	0.003648	2.10	73.01	259.74	0.56
GoraPManna	597.9565	Tr 100	108.63	29.32	32.55	32.55	32.70	0.003295	2.06	93.72	317.32	0.54
GoraPManna	597.9565	Tr 200	123.91	29.32	32.57	32.57	32.74	0.003879	2.26	98.93	326.06	0.58
GoraPManna	597.9565	Tr 500	144.08	29.32	32.62	32.62	32.78	0.003934	2.32	115.55	356.38	0.59

HEC-RAS Plan: N_P_River: GoraPManna Reach: GoraPManna (Continued)

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
GoraPManna	538.462	Tr 50	93.34	29.26	32.33	30.15	32.34	0.000201	0.57	270.54	477.21	0.14	
GoraPManna	538.462	Tr 100	108.63	29.26	32.42	30.26	32.43	0.000185	0.57	316.20	499.81	0.13	
GoraPManna	538.462	Tr 200	123.91	29.26	32.53	30.37	32.53	0.000160	0.55	370.14	548.74	0.12	
GoraPManna	538.462	Tr 500	144.08	29.26	32.64	30.51	32.64	0.000146	0.54	431.63	552.61	0.12	
GoraPManna	258.4487	Tr 50	93.34	28.11	32.05	30.65	32.20	0.001542	1.81	65.77	89.35	0.38	
GoraPManna	258.4487	Tr 100	108.63	28.11	32.12	30.87	32.30	0.001811	1.99	72.06	98.17	0.42	
GoraPManna	258.4487	Tr 200	123.91	28.11	32.23	31.11	32.41	0.001849	2.06	83.61	113.59	0.42	
GoraPManna	258.4487	Tr 500	144.08	28.11	32.34	31.54	32.53	0.001892	2.13	98.24	144.59	0.43	
GoraPManna	74.18417	Tr 50	93.34	28.21	30.70	30.70	31.52	0.011547	4.02	23.20	14.24	1.01	
GoraPManna	74.18417	Tr 100	108.63	28.21	31.28	31.28	31.73	0.005432	3.11	42.49	55.91	0.71	
GoraPManna	74.18417	Tr 200	123.91	28.21	31.44	31.44	31.86	0.004968	3.07	53.32	75.30	0.68	
GoraPManna	74.18417	Tr 500	144.08	28.21	31.58	31.58	31.98	0.004811	3.10	64.64	88.43	0.67	

