Indagini idrologico-idrauliche

Allegato idraulico

COMUNE DI POGGIBONSI

PIANO STRUTTURALE

APPROVAZIONE

Lucia Coccheri - *Sindaco*

Giampiero Signorini - *Assessore all'Urbanistica*

Fabio Galli - *Dirigente Settore Edilizia e Urbanistica*

Pietro Bucciarelli - *Progettista*

Roberto Gori - *Cartografia e SIT*

Paolo Rinaldi, Sabrina Santi, Duccio Del Matto - *Collaboratori*

Paola Todaro - *Responsabile del procedimento*

Carla Bimbi, Fabiola Conforti, Stefania Polidori, Tiziana Viti - *Collaboratori al procedimento*

Tatiana Marsili - *Garante della comunicazione*

Idp progetti gis - *Sistema informativo e schedatura edifici*

Studio Aleph - *Mobilità*

Elisabetta Norci - *V.A.S.*

Monica Coletta - *Studi Agronomici e Paesaggistici*

Michele Sani - *Ind. geologiche*

Alessio Gabbrielli - *Studi idraulici*

Sociolab - *Partecipazione*

INDICE ALLEGATO IDRAULICO

FIUME ELSA – Tratto di valle

Tabella di Output HecRas - Sezioni Pag. 3
Tabella di Output HecRas – Aree di Potenziale Esondazione Pag. 11
Profili idraulici D=9 ore Pag. 17
Sezioni con livelli idrometrici D=9 ore Pag. 18

FIUME ELSA – Tratto di monte

Tabella di Output HecRas - Sezioni Pag. 24
Tabella di Output HecRas – Aree di Potenziale Esondazione Pag. 29
Profili idraulici D=6 ore Pag. 30
Sezioni con livelli idrometrici D=6 ore Pag. 31

TORRENTE STAGGIA

Tabella di Output HecRas - Sezioni Pag. 42
Tabella di Output HecRas – Aree di Potenziale Esondazione Pag. 46
Profili idraulici D=4 ore Pag. 49
Sezioni con livelli idrometrici D=4 ore Pag. 50

TORRENTE FOCI

Tabella di Output HecRas - Sezioni Pag. 61
Tabella di Output HecRas – Aree di Potenziale Esondazione Pag. 64
Profili idraulici D=5 ore Pag. 66
Sezioni con livelli idrometrici D=5 ore Pag. 67

TORRENTE DROVE

Tabella di Output HecRas - Sezioni Pag. 73
Tabella di Output HecRas – Aree di Potenziale Esondazione Pag. 77
Profili idraulici Drove di Tattera D=4 ore Pag. 80
Profili idraulici Drove di Cinciano D=4 ore Pag. 81
Profili idraulici Drove valle D=4 ore Pag. 82
Sezioni con livelli idrometrici Drove di Tattera D=4 ore Pag. 83
Sezioni con livelli idrometrici Drove di Cinciano D=4 ore Pag. 87
Sezioni con livelli idrometrici Drove valle D=4 ore Pag. 91

BOTRO DI BACCHERETO

Tabella di Output HecRas - Sezioni Pag. 95
Tabella di Output HecRas – Aree di Potenziale Esondazione Pag. 97
Profili idraulici Dcr Pag. 98
Sezioni con livelli idrometrici Dcr Pag. 99

BORRO DI MELACHECCA

Tabella di Output HecRas - Sezioni Pag. 103
Tabella di Output HecRas – Aree di Potenziale Esondazione Pag. 104
Profili idraulici Dcr Pag. 105
Sezioni con livelli idrometrici Dcr Pag. 106

BORRO DI PAPAIANO

Tabella di Output HecRas - Sezioni Pag. 109
Tabella di Output HecRas – Aree di Potenziale Esondazione Pag. 111
Profili idraulici Dcr Pag. 112
Sezioni con livelli idrometrici Dcr Pag. 113

TORRENTE CARFINI

Tabella di Output HecRas - Sezioni Pag. 117
Tabella di Output HecRas – Aree di Potenziale Esondazione Pag. 118
Profili idraulici Dcr Pag. 119
Sezioni con livelli idrometrici Dcr Pag. 120

HEC-RAS River: FIUME ELSA Reach: POGGIB.-CERTALDO Profile: Max WS

Reach	River Sta	Profile	Plan	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)	
POGGIB.-CERTALDO	357.3	Max WS	elsa tr500 sa	877.57	84.05	92.30		93.41	0.004364	4.66	188.19	39.41	0.68
POGGIB.-CERTALDO	357.3	Max WS	200-9-SA	693.87	84.05	91.60		92.55	0.004313	4.31	161.13	38.37	0.67
POGGIB.-CERTALDO	357.3	Max WS	100-9-SA	574.02	84.05	91.14		91.95	0.004168	4.00	143.50	37.68	0.65
POGGIB.-CERTALDO	357.3	Max WS	30-9-SA	399.12	84.05	90.13		90.83	0.004636	3.72	107.15	34.10	0.67
POGGIB.-CERTALDO	357.2	Max WS	elsa tr500 sa	877.57	84.05	92.27		93.39	0.004431	4.69	187.21	39.37	0.69
POGGIB.-CERTALDO	357.2	Max WS	200-9-SA	693.87	84.05	91.58		92.53	0.004386	4.33	160.22	38.34	0.68
POGGIB.-CERTALDO	357.2	Max WS	100-9-SA	574.02	84.05	91.12		91.94	0.004239	4.02	142.68	37.63	0.66
POGGIB.-CERTALDO	357.2	Max WS	30-9-SA	399.12	84.05	90.10		90.82	0.004747	3.76	106.27	34.00	0.68
POGGIB.-CERTALDO	357	Max WS	elsa tr500 sa	877.52	84.25	92.64		92.83	0.000668	1.91	458.42	97.07	0.28
POGGIB.-CERTALDO	357	Max WS	200-9-SA	693.83	84.25	91.83		92.00	0.000747	1.82	380.76	94.86	0.29
POGGIB.-CERTALDO	357	Max WS	100-9-SA	574.41	84.25	91.30		91.45	0.000627	1.71	335.07	88.87	0.27
POGGIB.-CERTALDO	357	Max WS	30-9-SA	399.19	84.25	90.16		90.29	0.000787	1.63	245.55	76.19	0.29
POGGIB.-CERTALDO	356	Max WS	elsa tr500 sa	877.49	84.00	92.58		92.77	0.000652	1.93	462.46	99.25	0.28
POGGIB.-CERTALDO	356	Max WS	200-9-SA	693.80	84.00	91.76		91.94	0.000724	1.85	375.94	89.32	0.29
POGGIB.-CERTALDO	356	Max WS	100-9-SA	574.26	84.00	91.24		91.39	0.000751	1.74	329.31	87.88	0.29
POGGIB.-CERTALDO	356	Max WS	30-9-SA	399.15	84.00	90.06		90.22	0.000864	1.74	230.04	68.73	0.30
POGGIB.-CERTALDO	355	Max WS	elsa tr500 sa	877.46	83.36	92.40		92.62	0.000735	2.11	415.77	81.50	0.30
POGGIB.-CERTALDO	355	Max WS	200-9-SA	693.75	83.36	91.58		91.78	0.000780	1.98	349.98	79.16	0.30
POGGIB.-CERTALDO	355	Max WS	100-9-SA	574.23	83.36	91.05		91.23	0.000767	1.86	309.19	76.31	0.29
POGGIB.-CERTALDO	355	Max WS	30-9-SA	399.13	83.36	89.87		90.03	0.000851	1.77	225.43	64.62	0.30
POGGIB.-CERTALDO	354	Max WS	elsa tr500 sa	877.45	83.34	92.23		92.58	0.001214	2.59	338.26	70.84	0.38
POGGIB.-CERTALDO	354	Max WS	200-9-SA	693.75	83.34	91.42		91.73	0.001249	2.45	282.77	65.82	0.38
POGGIB.-CERTALDO	354	Max WS	100-9-SA	574.16	83.34	90.91		91.18	0.001204	2.29	250.24	62.70	0.37
POGGIB.-CERTALDO	354	Max WS	30-9-SA	399.12	83.34	89.72		89.97	0.001484	2.22	179.62	55.30	0.39
POGGIB.-CERTALDO	353.9	Max WS	elsa tr500 sa	877.45	83.34	92.22	89.37	92.56	0.001226	2.60	337.03	70.73	0.38
POGGIB.-CERTALDO	353.9	Max WS	200-9-SA	693.75	83.34	91.40	88.87	91.71	0.001263	2.46	281.61	65.72	0.38
POGGIB.-CERTALDO	353.9	Max WS	100-9-SA	574.14	83.34	90.90	88.45	91.17	0.001219	2.30	249.17	62.59	0.37
POGGIB.-CERTALDO	353.9	Max WS	30-9-SA	399.13	83.34	89.70	87.65	89.95	0.001513	2.24	178.44	55.17	0.40
POGGIB.-CERTALDO	353.5			Bridge									
POGGIB.-CERTALDO	353.1	Max WS	elsa tr500 sa	877.45	83.34	92.18		92.53	0.001252	2.62	334.44	70.51	0.38
POGGIB.-CERTALDO	353.1	Max WS	200-9-SA	693.74	83.34	91.37		91.68	0.001294	2.48	279.23	65.49	0.38
POGGIB.-CERTALDO	353.1	Max WS	100-9-SA	574.13	83.34	90.86		91.14	0.001248	2.32	247.05	62.38	0.37
POGGIB.-CERTALDO	353.1	Max WS	30-9-SA	399.13	83.34	89.66		89.92	0.001568	2.27	176.21	54.92	0.40
POGGIB.-CERTALDO	353	Max WS	elsa tr500 sa	877.46	82.70	92.20		92.52	0.000940	2.50	351.58	62.81	0.34
POGGIB.-CERTALDO	353	Max WS	200-9-SA	693.74	82.70	91.40		91.67	0.000898	2.29	302.71	59.54	0.32
POGGIB.-CERTALDO	353	Max WS	100-9-SA	574.14	82.70	90.90		91.13	0.000822	2.10	273.53	57.50	0.31
POGGIB.-CERTALDO	353	Max WS	30-9-SA	399.13	82.70	89.72		89.91	0.000872	1.92	208.18	52.65	0.31
POGGIB.-CERTALDO	352	Max WS	elsa tr500 sa	877.46	82.60	92.24		92.46	0.000650	2.08	424.53	79.42	0.28
POGGIB.-CERTALDO	352	Max WS	200-9-SA	693.74	82.60	91.42		91.61	0.000651	1.93	360.04	72.17	0.28
POGGIB.-CERTALDO	352	Max WS	100-9-SA	574.17	82.60	90.92		91.08	0.000615	1.77	323.72	70.62	0.26
POGGIB.-CERTALDO	352	Max WS	30-9-SA	399.13	82.60	89.71		89.85	0.000696	1.66	241.06	64.24	0.27
POGGIB.-CERTALDO	351	Max WS	elsa tr500 sa	877.46	81.90	91.93		92.30	0.001219	2.76	338.26	74.09	0.38
POGGIB.-CERTALDO	351	Max WS	200-9-SA	693.73	81.90	91.04		91.42	0.001373	2.73	254.50	51.62	0.39
POGGIB.-CERTALDO	351	Max WS	100-9-SA	574.15	81.90	90.58		90.89	0.001256	2.49	231.00	50.56	0.37
POGGIB.-CERTALDO	351	Max WS	30-9-SA	399.12	81.90	89.40		89.67	0.001110	2.29	174.61	39.27	0.35
POGGIB.-CERTALDO	350.99			Lat Struct									
POGGIB.-CERTALDO	350.66	Max WS	elsa tr500 sa	847.84	82.08	91.65		92.17	0.001578	3.17	267.36	45.61	0.42
POGGIB.-CERTALDO	350.66	Max WS	200-9-SA	685.03	82.08	90.82		91.27	0.001598	2.98	229.90	44.19	0.42
POGGIB.-CERTALDO	350.66	Max WS	100-9-SA	570.36	82.08	90.39		90.76	0.001428	2.71	210.84	43.45	0.39
POGGIB.-CERTALDO	350.66	Max WS	30-9-SA	399.12	82.08	89.22		89.53	0.001541	2.48	161.22	41.18	0.40
POGGIB.-CERTALDO	350.33	Max WS	elsa tr500 sa	766.68	81.63	91.79		92.12	0.001222	2.53	307.42	64.90	0.36
POGGIB.-CERTALDO	350.33	Max WS	200-9-SA	627.47	81.63	90.89		91.20	0.001282	2.49	251.63	52.70	0.36
POGGIB.-CERTALDO	350.33	Max WS	100-9-SA	533.22	81.63	90.39		90.67	0.001291	2.36	225.65	51.94	0.36
POGGIB.-CERTALDO	350.33	Max WS	30-9-SA	399.12	81.63	89.06		89.38	0.001595	2.50	159.87	39.38	0.40
POGGIB.-CERTALDO	350	Max WS	elsa tr500 sa	688.87	81.70	91.83		92.11	0.000867	2.36	299.17	54.48	0.31
POGGIB.-CERTALDO	350	Max WS	200-9-SA	586.69	81.70	90.87		91.17	0.001120	2.42	242.62	48.84	0.35
POGGIB.-CERTALDO	350	Max WS	100-9-SA	512.24	81.70	90.34		90.62	0.001180	2.36	216.90	47.43	0.35
POGGIB.-CERTALDO	350	Max WS	30-9-SA	399.11	81.70	88.93		89.28	0.001990	2.61	152.67	43.17	0.44
POGGIB.-CERTALDO	349.99			Lat Struct									
POGGIB.-CERTALDO	349	Max WS	elsa tr500 sa	986.82	81.40	91.34		91.79	0.001263	2.96	338.74	58.28	0.38
POGGIB.-CERTALDO	349	Max WS	200-9-SA	813.25	81.40	90.44		90.86	0.001320	2.86	284.67	51.05	0.39
POGGIB.-CERTALDO	349	Max WS	100-9-SA	700.21	81.40	89.97		90.34	0.001241	2.68	261.02	49.43	0.37
POGGIB.-CERTALDO	349	Max WS	30-9-SA	507.91	81.40	88.67		89.00	0.001307	2.54	199.71	43.08	0.38
POGGIB.-CERTALDO	348.99			Lat Struct									
POGGIB.-CERTALDO	348.9	Max WS	elsa tr500 sa	969.77	81.40	91.36		91.79	0.001206	2.90	339.94	58.28	0.37
POGGIB.-CERTALDO	348.9	Max WS	200-9-SA	810.43	81.40	90.44		90.85	0.001316	2.85	284.21	51.02	0.39
POGGIB.-CERTALDO	348.9	Max WS	100-9-SA	701.38	81.40	89.96		90.33	0.001256	2.70	260.18	49.37	0.37
POGGIB.-CERTALDO	348.9	Max WS	30-9-SA	507.88	81.40	88.66		88.99	0.001314	2.55	199.06	42.88	0.38
POGGIB.-CERTALDO	348.5	Max WS	elsa tr500 sa	1155.39	81.24	90.18		90.91	0.005162	3.81	303.50	103.28	0.71
POGGIB.-CERTALDO	348.5	Max WS	200-9-SA	893.76	81.24	89.62		90.25	0.003331	3.52	253.64	68.01	0.58
POGGIB.-CERTALDO	348.5	Max WS	100-9-SA	737.76	81.24	89.32		89.83	0.002943	3.16	233.71	67.69	0.54
POGGIB.-CERTALDO	348.5	Max WS	30-9-SA	507.06	81.24	88.14		88.63	0.002037	3.09	164.14	51.99	0.46
POGGIB.-CERTALDO	348.48			Lat Struct									
POGGIB.-CERTALDO	348	Max WS	elsa tr500 sa	1118.06	80.83	89.58		90.46	0.005469	4.16	268.56	82.92	0.74
POGGIB.-CERTALDO	348	Max WS	200-9-SA	875.41	80.83	89.14		89.86	0.005336	3.77	232.49	82.46	0.72
POGGIB.-CERTALDO	348	Max WS	100-9-SA	730.90	80.83	88.83		89.46	0.005090	3.54	206.76	77.85	0.69
POGGIB.-CERTALDO	348	Max WS	30-9-SA	506.34	80.83	87.91		88.41	0.002458	3.15	160.50	39.40	0.50
POGGIB.-CERTALDO	347.5	Max WS	elsa tr500 sa	1084.00	79.61	89.95		90.13	0.000913	1.88	575.87	150.52	0.31
POGGIB.-CERTALDO	347.5	Max WS	200-9-SA	864.84	79.61	89.39		89.54	0.000981	1.76	490.68	150.50	0.31
POGGIB.-CERTALDO	347.5	Max WS	100-9-SA	730.23	79.61	89.01		89.16	0.001045	1.68	434.26	150.49	0.32

HEC-RAS River: FIUME ELSA Reach: POGGIB.-CERTALDO Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	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)	
POGGIB.-CERTALDO	347.5	Max WS	30-9-SA	506.93	79.61	88.09		88.24	0.001129	1.68	302.15	128.06	0.32
POGGIB.-CERTALDO	347.49			Lat Struct									
POGGIB.-CERTALDO	347	Max WS	elsa tr500 sa	935.52	81.20	89.48		89.88	0.001544	2.79	335.19	72.42	0.41
POGGIB.-CERTALDO	347	Max WS	200-9-SA	791.86	81.20	88.92		89.29	0.001666	2.69	294.77	72.42	0.43
POGGIB.-CERTALDO	347	Max WS	100-9-SA	700.47	81.20	88.55		88.90	0.001769	2.61	267.95	72.42	0.43
POGGIB.-CERTALDO	347	Max WS	30-9-SA	505.87	81.20	87.71		88.01	0.001699	2.42	209.05	62.34	0.42
POGGIB.-CERTALDO	346.5	Max WS	elsa tr500 sa	758.14	79.50	89.56		89.60	0.000147	0.92	822.17	165.56	0.13
POGGIB.-CERTALDO	346.5	Max WS	200-9-SA	676.93	79.50	89.00		89.04	0.000173	0.93	728.87	165.56	0.14
POGGIB.-CERTALDO	346.5	Max WS	100-9-SA	612.15	79.50	88.63		88.67	0.000189	0.92	667.61	165.56	0.15
POGGIB.-CERTALDO	346.5	Max WS	30-9-SA	494.34	79.50	87.77		87.81	0.000269	0.94	525.60	165.56	0.17
POGGIB.-CERTALDO	346	Max WS	elsa tr500 sa	733.13	80.80	88.85		89.75	0.003042	4.20	176.50	39.04	0.53
POGGIB.-CERTALDO	346	Max WS	200-9-SA	624.48	80.80	88.38		89.14	0.002755	3.87	161.45	27.07	0.51
POGGIB.-CERTALDO	346	Max WS	100-9-SA	555.00	80.80	88.08		88.75	0.002529	3.62	153.24	26.97	0.48
POGGIB.-CERTALDO	346	Max WS	30-9-SA	480.21	80.80	87.10		87.83	0.003259	3.78	127.19	26.63	0.55
POGGIB.-CERTALDO	345.98			Lat Struct									
POGGIB.-CERTALDO	345.5	Max WS	elsa tr500 sa	770.49	79.47	89.15		89.30	0.000620	1.69	456.05	108.15	0.26
POGGIB.-CERTALDO	345.5	Max WS	200-9-SA	640.85	79.47	88.65		88.78	0.000632	1.60	401.07	105.71	0.26
POGGIB.-CERTALDO	345.5	Max WS	100-9-SA	565.16	79.47	88.30		88.42	0.000557	1.54	367.14	92.75	0.25
POGGIB.-CERTALDO	345.5	Max WS	30-9-SA	499.90	79.47	87.27		87.43	0.000894	1.79	279.41	80.76	0.31
POGGIB.-CERTALDO	345	Max WS	elsa tr500 sa	680.95	79.80	89.09		89.21	0.000757	1.55	440.51	142.77	0.28
POGGIB.-CERTALDO	345	Max WS	200-9-SA	635.36	79.80	88.44		88.61	0.001401	1.82	348.65	140.75	0.37
POGGIB.-CERTALDO	345	Max WS	100-9-SA	599.71	79.80	87.99		88.21	0.001854	2.08	287.84	117.01	0.42
POGGIB.-CERTALDO	345	Max WS	30-9-SA	501.27	79.80	86.92		87.23	0.001594	2.47	202.78	55.66	0.41
POGGIB.-CERTALDO	344.5	Max WS	elsa tr500 sa	784.09	79.03	88.67		89.02	0.001265	2.60	301.91	59.87	0.37
POGGIB.-CERTALDO	344.5	Max WS	200-9-SA	697.36	79.03	87.99		88.35	0.001540	2.66	261.74	58.47	0.40
POGGIB.-CERTALDO	344.5	Max WS	100-9-SA	632.12	79.03	87.55		87.92	0.001728	2.68	236.23	57.55	0.42
POGGIB.-CERTALDO	344.5	Max WS	30-9-SA	501.62	79.03	86.58		86.96	0.002027	2.73	183.66	48.54	0.45
POGGIB.-CERTALDO	344	Max WS	elsa tr500 sa	854.22	79.80	88.24		88.83	0.002427	3.39	251.73	56.82	0.51
POGGIB.-CERTALDO	344	Max WS	200-9-SA	739.30	79.80	87.55		88.16	0.003050	3.48	212.65	55.66	0.57
POGGIB.-CERTALDO	344	Max WS	100-9-SA	658.38	79.80	87.10		87.72	0.003477	3.50	188.15	53.93	0.60
POGGIB.-CERTALDO	344	Max WS	30-9-SA	502.05	79.80	86.04		86.78	0.004113	3.81	131.70	48.02	0.65
POGGIB.-CERTALDO	343.98			Lat Struct									
POGGIB.-CERTALDO	343	Max WS	elsa tr500 sa	995.68	77.80	87.43		88.06	0.002332	3.52	282.57	57.60	0.51
POGGIB.-CERTALDO	343	Max WS	200-9-SA	813.89	77.80	86.88		87.41	0.002214	3.24	251.14	56.32	0.49
POGGIB.-CERTALDO	343	Max WS	100-9-SA	696.98	77.80	86.52		86.98	0.002075	3.01	231.46	55.50	0.47
POGGIB.-CERTALDO	343	Max WS	30-9-SA	502.02	77.80	85.68		86.05	0.001837	2.69	186.88	48.81	0.44
POGGIB.-CERTALDO	342	Max WS	elsa tr500 sa	907.69	77.80	87.02		87.52	0.001775	3.14	289.05	57.84	0.45
POGGIB.-CERTALDO	342	Max WS	200-9-SA	755.96	77.80	86.41		86.86	0.001792	2.97	254.18	56.10	0.45
POGGIB.-CERTALDO	342	Max WS	100-9-SA	662.39	77.80	86.01		86.43	0.001796	2.85	232.16	54.97	0.44
POGGIB.-CERTALDO	342	Max WS	30-9-SA	501.88	77.80	85.02		85.42	0.002185	2.80	179.44	51.12	0.48
POGGIB.-CERTALDO	341.99			Lat Struct									
POGGIB.-CERTALDO	341.6	Max WS	elsa tr500 sa	1100.92	77.00	86.21		86.78	0.002857	3.35	329.06	83.33	0.54
POGGIB.-CERTALDO	341.6	Max WS	200-9-SA	864.08	77.00	85.86		86.28	0.002103	2.86	302.12	77.53	0.46
POGGIB.-CERTALDO	341.6	Max WS	100-9-SA	720.02	77.00	85.61		85.94	0.001795	2.55	282.65	77.53	0.43
POGGIB.-CERTALDO	341.6	Max WS	30-9-SA	501.85	77.00	84.82		85.06	0.000862	2.16	232.71	47.30	0.31
POGGIB.-CERTALDO	341.5	Max WS	elsa tr500 sa	1100.94	77.00	86.14		86.75	0.002327	3.45	318.94	66.58	0.50
POGGIB.-CERTALDO	341.5	Max WS	200-9-SA	864.09	77.00	85.83		86.26	0.001778	2.90	297.93	66.58	0.44
POGGIB.-CERTALDO	341.5	Max WS	100-9-SA	720.00	77.00	85.59		85.92	0.001465	2.55	282.19	66.47	0.40
POGGIB.-CERTALDO	341.5	Max WS	30-9-SA	501.86	77.00	84.82		85.05	0.000820	2.12	237.27	46.71	0.30
POGGIB.-CERTALDO	341.4	Max WS	elsa tr500 sa	1100.82	77.00	86.11		86.71	0.003034	3.44	320.46	81.06	0.55
POGGIB.-CERTALDO	341.4	Max WS	200-9-SA	864.04	77.00	85.79		86.22	0.002427	2.94	294.32	80.64	0.49
POGGIB.-CERTALDO	341.4	Max WS	100-9-SA	719.85	77.00	85.55		85.90	0.002069	2.62	275.18	80.18	0.45
POGGIB.-CERTALDO	341.4	Max WS	30-9-SA	501.82	77.00	84.78		85.03	0.000947	2.24	224.42	55.11	0.32
POGGIB.-CERTALDO	341.39			Lat Struct									
POGGIB.-CERTALDO	341.38			Lat Struct									
POGGIB.-CERTALDO	341	Max WS	elsa tr500 sa	872.46	77.30	85.92		86.20	0.000904	2.31	377.37	71.69	0.32
POGGIB.-CERTALDO	341	Max WS	200-9-SA	708.76	77.30	85.58		85.79	0.000738	2.01	352.70	71.69	0.29
POGGIB.-CERTALDO	341	Max WS	100-9-SA	620.59	77.30	85.31		85.49	0.000676	1.86	333.47	71.69	0.28
POGGIB.-CERTALDO	341	Max WS	30-9-SA	499.59	77.30	84.58		84.74	0.000757	1.78	280.90	71.69	0.29
POGGIB.-CERTALDO	340	Max WS	elsa tr500 sa	813.31	77.70	85.95		86.11	0.000539	1.77	459.26	90.20	0.25
POGGIB.-CERTALDO	340	Max WS	200-9-SA	688.15	77.70	85.57		85.70	0.000496	1.62	424.70	90.20	0.24
POGGIB.-CERTALDO	340	Max WS	100-9-SA	616.28	77.70	85.28		85.40	0.000486	1.54	399.02	90.20	0.23
POGGIB.-CERTALDO	340	Max WS	30-9-SA	499.88	77.70	84.53		84.65	0.000581	1.51	331.42	90.20	0.25
POGGIB.-CERTALDO	339.98			Lat Struct									
POGGIB.-CERTALDO	339	Max WS	elsa tr500 sa	773.80	76.80	85.84		86.09	0.000901	2.24	351.36	123.09	0.32
POGGIB.-CERTALDO	339	Max WS	200-9-SA	664.25	76.80	85.46		85.68	0.000866	2.09	323.23	123.09	0.31
POGGIB.-CERTALDO	339	Max WS	100-9-SA	602.13	76.80	85.17		85.38	0.000873	2.03	302.04	122.23	0.31
POGGIB.-CERTALDO	339	Max WS	30-9-SA	499.90	76.80	84.40		84.61	0.001082	2.06	246.80	118.85	0.34
POGGIB.-CERTALDO	338	Max WS	elsa tr500 sa	807.69	75.80	84.43		85.18	0.003148	3.85	209.68	45.94	0.58
POGGIB.-CERTALDO	338	Max WS	200-9-SA	716.47	75.80	83.97		84.70	0.003447	3.80	188.42	45.84	0.60
POGGIB.-CERTALDO	338	Max WS	100-9-SA	652.02	75.80	83.68		84.38	0.003523	3.72	175.22	44.98	0.60
POGGIB.-CERTALDO	338	Max WS	30-9-SA	499.50	75.80	83.13		83.68	0.003194	3.31	150.93	43.35	0.57
POGGIB.-CERTALDO	337.99			Lat Struct									
POGGIB.-CERTALDO	337.87			Lat Struct									
POGGIB.-CERTALDO	337	Max WS	elsa tr500 sa	769.37	75.60	84.42		84.71	0.001122	2.38	322.63	70.63	0.36
POGGIB.-CERTALDO	337	Max WS	200-9-SA	701.73	75.60	83.83		84.15	0.001395	2.49	281.43	68.32	0.39
POGGIB.-CERTALDO	337	Max WS	100-9-SA	650.38	75.60	83.45		83.78	0.001592	2.54	255.66	66.83	0.42

HEC-RAS River: FIUME ELSA Reach: POGGIB.-CERTALDO Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	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)	
POGGIB.-CERTALDO	337	Max WS	30-9-SA	493.77	75.60	82.88		83.14	0.001478	2.26	218.34	64.93	0.39
POGGIB.-CERTALDO	336.98			Lat Struct									
POGGIB.-CERTALDO	336	Max WS	elsa tr500 sa	790.19	75.60	84.16		84.49	0.001124	2.53	311.84	61.67	0.36
POGGIB.-CERTALDO	336	Max WS	200-9-SA	696.95	75.60	83.57		83.89	0.001279	2.53	275.37	60.74	0.38
POGGIB.-CERTALDO	336	Max WS	100-9-SA	622.40	75.60	83.22		83.53	0.001299	2.45	254.54	60.21	0.38
POGGIB.-CERTALDO	336	Max WS	30-9-SA	478.23	75.60	82.66		82.90	0.001186	2.16	221.11	59.34	0.36
POGGIB.-CERTALDO	335	Max WS	elsa tr500 sa	873.47	74.60	83.91		84.24	0.001125	2.59	345.42	73.03	0.35
POGGIB.-CERTALDO	335	Max WS	200-9-SA	729.51	74.60	83.39		83.69	0.000989	2.40	303.97	56.46	0.33
POGGIB.-CERTALDO	335	Max WS	100-9-SA	633.45	74.60	83.10		83.35	0.000835	2.20	287.99	53.55	0.30
POGGIB.-CERTALDO	335	Max WS	30-9-SA	476.55	74.60	82.60		82.76	0.000569	1.82	262.14	48.40	0.25
POGGIB.-CERTALDO	334.99			Lat Struct									
POGGIB.-CERTALDO	334	Max WS	elsa tr500 sa	871.29	74.40	83.40		83.80	0.002140	2.83	307.71	82.99	0.47
POGGIB.-CERTALDO	334	Max WS	200-9-SA	734.31	74.40	82.78		83.19	0.002690	2.86	256.61	81.76	0.52
POGGIB.-CERTALDO	334	Max WS	100-9-SA	649.72	74.40	82.35		82.79	0.003303	2.92	222.18	80.28	0.56
POGGIB.-CERTALDO	334	Max WS	30-9-SA	487.40	74.40	81.49		82.00	0.005202	3.16	154.39	70.01	0.68
POGGIB.-CERTALDO	333.58			Lat Struct									
POGGIB.-CERTALDO	333.5	Max WS	elsa tr500 sa	1046.13	74.60	82.70		83.20	0.002321	3.12	335.16	86.66	0.51
POGGIB.-CERTALDO	333.5	Max WS	200-9-SA	827.49	74.60	82.23		82.63	0.002108	2.81	294.99	83.33	0.48
POGGIB.-CERTALDO	333.5	Max WS	100-9-SA	695.30	74.60	81.86		82.21	0.002074	2.63	264.58	81.56	0.47
POGGIB.-CERTALDO	333.5	Max WS	30-9-SA	492.68	74.60	81.10		81.36	0.001052	2.23	221.29	66.34	0.34
POGGIB.-CERTALDO	333	Max WS	elsa tr500 sa	1031.58	74.49	82.49		83.01	0.001900	3.31	326.49	150.27	0.47
POGGIB.-CERTALDO	333	Max WS	200-9-SA	828.17	74.49	82.04		82.44	0.001688	2.95	295.55	149.37	0.44
POGGIB.-CERTALDO	333	Max WS	100-9-SA	695.46	74.49	81.70		82.04	0.001417	2.75	273.18	144.94	0.40
POGGIB.-CERTALDO	333	Max WS	30-9-SA	492.68	74.49	81.00		81.25	0.001131	2.40	229.38	139.53	0.36
POGGIB.-CERTALDO	332.5	Max WS	elsa tr500 sa	1033.51	74.49	82.27		82.85	0.002797	3.36	305.20	148.64	0.49
POGGIB.-CERTALDO	332.5	Max WS	200-9-SA	830.93	74.49	81.85		82.31	0.002377	3.03	277.39	146.25	0.45
POGGIB.-CERTALDO	332.5	Max WS	100-9-SA	696.97	74.49	81.56		81.93	0.001975	2.79	258.70	142.64	0.41
POGGIB.-CERTALDO	332.5	Max WS	30-9-SA	492.68	74.49	80.90		81.17	0.001537	2.43	218.76	137.55	0.36
POGGIB.-CERTALDO	332.49			Lat Struct									
POGGIB.-CERTALDO	332.25	Max WS	elsa tr500 sa	1033.43	74.29	82.03		82.61	0.002291	3.52	308.38	149.74	0.51
POGGIB.-CERTALDO	332.25	Max WS	200-9-SA	830.93	74.29	81.66		82.10	0.001891	3.13	283.18	147.51	0.46
POGGIB.-CERTALDO	332.25	Max WS	100-9-SA	696.97	74.29	81.40		81.76	0.001518	2.84	266.72	144.17	0.42
POGGIB.-CERTALDO	332.25	Max WS	30-9-SA	492.67	74.29	80.78		81.04	0.001147	2.42	228.14	139.37	0.36
POGGIB.-CERTALDO	332	Max WS	elsa tr500 sa	1025.39	74.20	82.30		82.52	0.000870	2.10	487.33	110.71	0.32
POGGIB.-CERTALDO	332	Max WS	200-9-SA	828.46	74.20	81.85		82.03	0.000797	1.89	437.86	109.72	0.30
POGGIB.-CERTALDO	332	Max WS	100-9-SA	696.59	74.20	81.55		81.70	0.000719	1.72	405.22	108.88	0.28
POGGIB.-CERTALDO	332	Max WS	30-9-SA	492.67	74.20	80.88		80.99	0.000511	1.45	339.75	91.23	0.24
POGGIB.-CERTALDO	331	Max WS	elsa tr500 sa	996.26	73.50	82.15		82.43	0.000954	2.35	424.80	82.04	0.33
POGGIB.-CERTALDO	331	Max WS	200-9-SA	814.53	73.50	81.73		81.95	0.000836	2.09	390.14	82.04	0.31
POGGIB.-CERTALDO	331	Max WS	100-9-SA	690.11	73.50	81.45		81.63	0.000727	1.88	367.41	82.04	0.28
POGGIB.-CERTALDO	331	Max WS	30-9-SA	492.60	73.50	80.81		80.94	0.000608	1.56	314.82	82.04	0.25
POGGIB.-CERTALDO	330.9	Max WS	elsa tr500 sa	996.28	73.50	82.15	79.38	82.43	0.000956	2.35	424.45	82.04	0.33
POGGIB.-CERTALDO	330.9	Max WS	200-9-SA	814.53	73.50	81.73	78.38	81.95	0.000838	2.09	389.87	82.04	0.31
POGGIB.-CERTALDO	330.9	Max WS	100-9-SA	690.11	73.50	81.45	77.96	81.63	0.000728	1.88	367.19	82.04	0.28
POGGIB.-CERTALDO	330.9	Max WS	30-9-SA	492.60	73.50	80.81	77.22	80.93	0.000609	1.57	314.67	82.04	0.26
POGGIB.-CERTALDO	330.5			Bridge									
POGGIB.-CERTALDO	330.1	Max WS	elsa tr500 sa	996.25	73.50	82.08		82.37	0.000996	2.38	418.98	82.04	0.34
POGGIB.-CERTALDO	330.1	Max WS	200-9-SA	814.53	73.50	81.67		81.90	0.000869	2.11	385.39	82.04	0.31
POGGIB.-CERTALDO	330.1	Max WS	100-9-SA	690.11	73.50	81.41		81.59	0.000752	1.90	363.51	82.04	0.29
POGGIB.-CERTALDO	330.1	Max WS	30-9-SA	492.60	73.50	80.77		80.90	0.000627	1.58	311.80	82.04	0.26
POGGIB.-CERTALDO	330.09			Lat Struct									
POGGIB.-CERTALDO	330	Max WS	elsa tr500 sa	969.76	73.65	81.27		82.35	0.004049	4.60	210.72	40.57	0.64
POGGIB.-CERTALDO	330	Max WS	200-9-SA	801.10	73.65	81.08		81.87	0.003106	3.95	202.80	40.57	0.56
POGGIB.-CERTALDO	330	Max WS	100-9-SA	682.97	73.65	80.95		81.56	0.002440	3.45	197.69	40.57	0.50
POGGIB.-CERTALDO	330	Max WS	30-9-SA	492.60	73.65	80.49		80.87	0.001723	2.75	178.95	40.57	0.42
POGGIB.-CERTALDO	329.98			Lat Struct									
POGGIB.-CERTALDO	329	Max WS	elsa tr500 sa	995.04	72.60	81.57		82.18	0.002509	3.47	286.86	63.79	0.52
POGGIB.-CERTALDO	329	Max WS	200-9-SA	795.11	72.60	81.35		81.78	0.001877	2.91	272.88	63.79	0.45
POGGIB.-CERTALDO	329	Max WS	100-9-SA	670.36	72.60	81.16		81.50	0.001538	2.57	260.91	63.79	0.41
POGGIB.-CERTALDO	329	Max WS	30-9-SA	485.10	72.60	80.59		80.83	0.001279	2.16	224.52	62.87	0.36
POGGIB.-CERTALDO	328	Max WS	elsa tr500 sa	875.43	72.60	81.50		81.97	0.001874	3.04	288.07	63.17	0.45
POGGIB.-CERTALDO	328	Max WS	200-9-SA	764.23	72.60	81.10		81.53	0.001909	2.91	262.82	63.17	0.46
POGGIB.-CERTALDO	328	Max WS	100-9-SA	670.88	72.60	80.89		81.26	0.001605	2.68	249.95	59.53	0.42
POGGIB.-CERTALDO	328	Max WS	30-9-SA	492.58	72.60	80.37		80.63	0.001308	2.25	218.98	58.91	0.37
POGGIB.-CERTALDO	327.99			Lat Struct									
POGGIB.-CERTALDO	327	Max WS	elsa tr500 sa	850.19	72.60	81.39		81.92	0.002110	3.21	264.52	58.63	0.48
POGGIB.-CERTALDO	327	Max WS	200-9-SA	757.93	72.60	80.94		81.46	0.002342	3.19	237.93	58.63	0.50
POGGIB.-CERTALDO	327	Max WS	100-9-SA	669.65	72.60	80.74		81.19	0.002140	2.96	226.38	58.63	0.48
POGGIB.-CERTALDO	327	Max WS	30-9-SA	493.05	72.60	80.26		80.57	0.001720	2.49	198.08	56.73	0.43
POGGIB.-CERTALDO	326.98			Lat Struct									
POGGIB.-CERTALDO	326	Max WS	elsa tr500 sa	874.66	72.50	80.77		81.31	0.002752	3.26	268.19	72.83	0.54
POGGIB.-CERTALDO	326	Max WS	200-9-SA	744.25	72.50	80.41		80.89	0.002683	3.07	242.58	71.11	0.53
POGGIB.-CERTALDO	326	Max WS	100-9-SA	664.87	72.50	80.23		80.66	0.002509	2.89	230.22	70.42	0.51
POGGIB.-CERTALDO	326	Max WS	30-9-SA	493.07	72.50	79.84		80.14	0.002033	2.43	202.62	68.71	0.45
POGGIB.-CERTALDO	325.99			Lat Struct									
POGGIB.-CERTALDO	325.58			Lat Struct									

Reach	River Sta	Profile	Plan	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)	
POGGIB.-CERTALDO	325	Max WS	elsa tr500 sa	762.88	72.20	80.47		80.75	0.001115	2.37	321.74	69.93	0.35
POGGIB.-CERTALDO	325	Max WS	200-9-SA	679.82	72.20	80.01		80.29	0.001232	2.34	290.00	69.93	0.37
POGGIB.-CERTALDO	325	Max WS	100-9-SA	619.01	72.20	79.84		80.09	0.001168	2.23	278.04	69.93	0.36
POGGIB.-CERTALDO	325	Max WS	30-9-SA	459.43	72.20	79.53		79.69	0.000834	1.79	256.36	69.89	0.30
POGGIB.-CERTALDO	324	Max WS	elsa tr500 sa	593.28	72.30	80.23		80.66	0.001992	2.91	203.65	50.28	0.46
POGGIB.-CERTALDO	324	Max WS	200-9-SA	494.29	72.30	79.87		80.23	0.001835	2.66	185.75	49.81	0.44
POGGIB.-CERTALDO	324	Max WS	100-9-SA	430.47	72.30	79.77		80.06	0.001492	2.38	180.92	49.17	0.40
POGGIB.-CERTALDO	324	Max WS	30-9-SA	314.28	72.30	79.49		79.67	0.000969	1.88	167.45	46.93	0.32
POGGIB.-CERTALDO	323	Max WS	elsa tr500 sa	348.11	72.35	80.42		80.50	0.000285	1.20	289.74	62.25	0.18
POGGIB.-CERTALDO	323	Max WS	200-9-SA	322.89	72.35	79.96		80.04	0.000342	1.24	260.96	62.25	0.19
POGGIB.-CERTALDO	323	Max WS	100-9-SA	290.79	72.35	79.82		79.89	0.000308	1.15	252.44	62.25	0.18
POGGIB.-CERTALDO	323	Max WS	30-9-SA	249.22	72.35	79.46		79.52	0.000304	1.08	229.93	62.25	0.18
POGGIB.-CERTALDO	322	Max WS	elsa tr500 sa	628.56	72.32	79.89		80.06	0.001136	1.86	338.42	113.15	0.34
POGGIB.-CERTALDO	322	Max WS	200-9-SA	546.75	72.32	79.32		79.52	0.001526	1.98	275.79	104.72	0.39
POGGIB.-CERTALDO	322	Max WS	100-9-SA	529.99	72.32	79.04		79.28	0.001886	2.14	247.97	98.76	0.43
POGGIB.-CERTALDO	322	Max WS	30-9-SA	452.26	72.32	78.67		78.90	0.002023	2.13	212.73	89.93	0.44
POGGIB.-CERTALDO	321.98			Lat Struct									
POGGIB.-CERTALDO	321	Max WS	elsa tr500 sa	705.29	72.30	79.34		79.71	0.001728	2.68	263.20	68.05	0.43
POGGIB.-CERTALDO	321	Max WS	200-9-SA	559.97	72.30	78.88		79.18	0.001613	2.41	232.03	66.94	0.41
POGGIB.-CERTALDO	321	Max WS	100-9-SA	525.47	72.30	78.56		78.87	0.001935	2.50	210.25	66.15	0.45
POGGIB.-CERTALDO	321	Max WS	30-9-SA	452.28	72.30	78.16		78.47	0.002175	2.46	184.17	65.19	0.47
POGGIB.-CERTALDO	320.99			Lat Struct									
POGGIB.-CERTALDO	320	Max WS	elsa tr500 sa	730.43	71.80	78.69		79.23	0.003026	3.26	224.23	65.73	0.56
POGGIB.-CERTALDO	320	Max WS	200-9-SA	591.22	71.80	78.21		78.69	0.003187	3.07	192.78	64.62	0.57
POGGIB.-CERTALDO	320	Max WS	100-9-SA	516.43	71.80	78.00		78.42	0.003059	2.88	179.26	64.14	0.55
POGGIB.-CERTALDO	320	Max WS	30-9-SA	404.60	71.80	77.80		78.10	0.002386	2.43	166.21	63.68	0.48
POGGIB.-CERTALDO	319.99			Lat Struct									
POGGIB.-CERTALDO	319.98			Lat Struct									
POGGIB.-CERTALDO	319	Max WS	elsa tr500 sa	465.62	71.60	78.48		78.81	0.001193	2.54	183.11	34.45	0.35
POGGIB.-CERTALDO	319	Max WS	200-9-SA	416.06	71.60	77.74		78.09	0.001489	2.64	157.80	34.45	0.39
POGGIB.-CERTALDO	319	Max WS	100-9-SA	399.74	71.60	77.31		77.71	0.001855	2.80	142.96	34.45	0.44
POGGIB.-CERTALDO	319	Max WS	30-9-SA	382.17	71.60	76.62		77.14	0.002969	3.21	119.07	34.45	0.55
POGGIB.-CERTALDO	318.58			Lat Struct									
POGGIB.-CERTALDO	318	Max WS	elsa tr500 sa	821.96	71.20	77.27		77.81	0.002039	3.24	254.04	53.78	0.48
POGGIB.-CERTALDO	318	Max WS	200-9-SA	630.93	71.20	77.03		77.38	0.001422	2.62	240.71	53.78	0.40
POGGIB.-CERTALDO	318	Max WS	100-9-SA	528.07	71.20	76.84		77.10	0.001046	2.29	230.70	50.13	0.34
POGGIB.-CERTALDO	318	Max WS	30-9-SA	397.31	71.20	76.39		76.57	0.000809	1.91	208.25	49.53	0.30
POGGIB.-CERTALDO	317.6	Max WS	elsa tr500 sa	830.41	71.20	77.36		77.78	0.001484	2.87	289.16	56.99	0.41
POGGIB.-CERTALDO	317.6	Max WS	200-9-SA	637.14	71.20	77.08		77.36	0.001043	2.33	273.16	56.99	0.34
POGGIB.-CERTALDO	317.6	Max WS	100-9-SA	532.87	71.20	76.88		77.09	0.000835	2.04	261.63	56.99	0.30
POGGIB.-CERTALDO	317.6	Max WS	30-9-SA	399.34	71.20	76.42		76.56	0.000655	1.70	235.31	56.99	0.27
POGGIB.-CERTALDO	317.56	Max WS	elsa tr500 sa	841.78	71.20	77.28		77.74	0.001837	2.99	281.97	56.99	0.43
POGGIB.-CERTALDO	317.56	Max WS	200-9-SA	645.44	71.20	77.03		77.33	0.001271	2.41	267.73	56.99	0.36
POGGIB.-CERTALDO	317.56	Max WS	100-9-SA	539.52	71.20	76.84		77.07	0.001011	2.10	256.93	56.99	0.32
POGGIB.-CERTALDO	317.56	Max WS	30-9-SA	404.59	71.20	76.39		76.55	0.000765	1.75	231.51	55.99	0.27
POGGIB.-CERTALDO	317.54	Max WS	elsa tr500 sa	842.96	71.20	77.24		77.71	0.001886	3.01	279.86	56.99	0.43
POGGIB.-CERTALDO	317.54	Max WS	200-9-SA	646.23	71.20	77.01		77.31	0.001294	2.43	266.43	56.99	0.36
POGGIB.-CERTALDO	317.54	Max WS	100-9-SA	540.08	71.20	76.83		77.05	0.001025	2.11	255.95	56.99	0.32
POGGIB.-CERTALDO	317.54	Max WS	30-9-SA	404.81	71.20	76.38		76.54	0.000772	1.75	230.83	55.99	0.28
POGGIB.-CERTALDO	317.5	Max WS	elsa tr500 sa	842.94	71.20	77.24		77.70	0.001687	3.00	281.37	58.28	0.44
POGGIB.-CERTALDO	317.5	Max WS	200-9-SA	646.23	71.20	77.01		77.30	0.001161	2.42	267.55	58.28	0.36
POGGIB.-CERTALDO	317.5	Max WS	100-9-SA	540.08	71.20	76.82		77.05	0.000922	2.10	256.82	58.28	0.32
POGGIB.-CERTALDO	317.5	Max WS	30-9-SA	404.81	71.20	76.38		76.53	0.000721	1.75	230.81	57.77	0.28
POGGIB.-CERTALDO	317.49			Lat Struct									
POGGIB.-CERTALDO	317.48			Lat Struct									
POGGIB.-CERTALDO	317.4	Max WS	elsa tr500 sa	816.70	71.20	77.29		77.70	0.001483	2.84	287.50	58.85	0.41
POGGIB.-CERTALDO	317.4	Max WS	200-9-SA	632.79	71.20	77.02		77.30	0.001060	2.33	271.92	58.85	0.35
POGGIB.-CERTALDO	317.4	Max WS	100-9-SA	532.70	71.20	76.83		77.04	0.000861	2.05	260.38	58.85	0.31
POGGIB.-CERTALDO	317.4	Max WS	30-9-SA	404.56	71.20	76.37		76.52	0.000696	1.73	233.44	58.33	0.28
POGGIB.-CERTALDO	317	Max WS	elsa tr500 sa	703.27	71.06	76.67		77.48	0.004279	3.99	176.31	49.33	0.67
POGGIB.-CERTALDO	317	Max WS	200-9-SA	584.02	71.06	76.38		77.04	0.003820	3.60	162.17	48.92	0.63
POGGIB.-CERTALDO	317	Max WS	100-9-SA	515.93	71.06	76.20		76.77	0.003573	3.37	152.97	48.65	0.61
POGGIB.-CERTALDO	317	Max WS	30-9-SA	404.52	71.06	75.80		76.27	0.003265	3.02	134.15	47.37	0.57
POGGIB.-CERTALDO	316	Max WS	elsa tr500 sa	663.49	71.22	76.96	75.24	77.37	0.001862	2.82	234.97	59.08	0.45
POGGIB.-CERTALDO	316	Max WS	200-9-SA	567.70	71.22	76.53	74.98	76.91	0.001955	2.71	209.72	59.08	0.46
POGGIB.-CERTALDO	316	Max WS	100-9-SA	511.37	71.22	76.27	74.82	76.62	0.002024	2.63	194.24	59.05	0.46
POGGIB.-CERTALDO	316	Max WS	30-9-SA	404.52	71.22	75.83	74.50	76.12	0.001963	2.40	168.20	57.58	0.45
POGGIB.-CERTALDO	315.5			Inl Struct									
POGGIB.-CERTALDO	315	Max WS	elsa tr500 sa	663.04	67.50	76.59		76.63	0.000102	0.95	699.05	97.21	0.11
POGGIB.-CERTALDO	315	Max WS	200-9-SA	567.14	67.50	76.04		76.08	0.000096	0.88	645.38	97.21	0.11
POGGIB.-CERTALDO	315	Max WS	100-9-SA	511.07	67.50	75.64		75.67	0.000095	0.84	606.39	97.21	0.11
POGGIB.-CERTALDO	315	Max WS	30-9-SA	404.34	67.50	74.91		74.94	0.000087	0.75	535.75	96.51	0.10
POGGIB.-CERTALDO	314.99			Lat Struct									
POGGIB.-CERTALDO	314.98			Lat Struct									
POGGIB.-CERTALDO	314.59			Lat Struct									

HEC-RAS River: FIUME ELSA Reach: POGGIB.-CERTALDO Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	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)	
POGGIB.-CERTALDO	314	Max WS	elsa tr500 sa	667.06	67.40	76.50		76.63	0.000431	1.59	419.20	82.04	0.22
POGGIB.-CERTALDO	314	Max WS	200-9-SA	554.24	67.40	75.96		76.07	0.000423	1.48	375.20	81.97	0.22
POGGIB.-CERTALDO	314	Max WS	100-9-SA	497.00	67.40	75.56		75.67	0.000453	1.45	342.52	81.31	0.23
POGGIB.-CERTALDO	314	Max WS	30-9-SA	401.45	67.40	74.84		74.93	0.000374	1.38	290.11	73.26	0.21
POGGIB.-CERTALDO	313	Max WS	elsa tr500 sa	666.94	67.30	76.40		76.61	0.000796	2.01	331.09	69.98	0.30
POGGIB.-CERTALDO	313	Max WS	200-9-SA	554.10	67.30	75.88		76.06	0.000800	1.88	294.15	69.98	0.29
POGGIB.-CERTALDO	313	Max WS	100-9-SA	496.95	67.30	75.47		75.65	0.000884	1.87	266.06	69.61	0.30
POGGIB.-CERTALDO	313	Max WS	30-9-SA	401.41	67.30	74.74		74.92	0.001121	1.86	215.37	68.18	0.33
POGGIB.-CERTALDO	312.9	Max WS	elsa tr500 sa	666.93	67.30	76.40	72.38	76.61	0.000797	2.02	330.97	69.98	0.30
POGGIB.-CERTALDO	312.9	Max WS	200-9-SA	554.10	67.30	75.87	71.92	76.06	0.000801	1.88	294.02	69.98	0.29
POGGIB.-CERTALDO	312.9	Max WS	100-9-SA	496.97	67.30	75.47	71.69	75.65	0.000885	1.87	265.93	69.61	0.31
POGGIB.-CERTALDO	312.9	Max WS	30-9-SA	401.42	67.30	74.74	71.25	74.91	0.001125	1.87	215.19	68.17	0.34
POGGIB.-CERTALDO	312.5			Bridge									
POGGIB.-CERTALDO	312.1	Max WS	elsa tr500 sa	666.89	67.30	76.36		76.59	0.000701	2.23	321.96	58.21	0.28
POGGIB.-CERTALDO	312.1	Max WS	200-9-SA	554.05	67.30	75.84		76.04	0.000644	2.04	291.94	58.21	0.26
POGGIB.-CERTALDO	312.1	Max WS	100-9-SA	496.94	67.30	75.44		75.63	0.000659	1.99	268.80	58.21	0.26
POGGIB.-CERTALDO	312.1	Max WS	30-9-SA	401.41	67.30	74.72		74.89	0.000695	1.89	226.46	57.76	0.27
POGGIB.-CERTALDO	312	Max WS	elsa tr500 sa	666.92	67.30	76.37		76.59	0.000742	2.07	322.90	58.21	0.28
POGGIB.-CERTALDO	312	Max WS	200-9-SA	554.09	67.30	75.85		76.04	0.000697	1.89	292.68	58.21	0.27
POGGIB.-CERTALDO	312	Max WS	100-9-SA	496.94	67.30	75.46		75.63	0.000726	1.84	269.47	58.21	0.27
POGGIB.-CERTALDO	312	Max WS	30-9-SA	401.41	67.30	74.73		74.89	0.000810	1.77	227.09	57.77	0.28
POGGIB.-CERTALDO	311.99			Lat Struct									
POGGIB.-CERTALDO	311.98			Lat Struct									
POGGIB.-CERTALDO	311	Max WS	elsa tr500 sa	637.39	67.30	76.16		76.58	0.001499	2.88	221.33	43.49	0.41
POGGIB.-CERTALDO	311	Max WS	200-9-SA	541.93	67.30	75.64		76.02	0.001498	2.73	198.63	42.98	0.41
POGGIB.-CERTALDO	311	Max WS	100-9-SA	496.01	67.30	75.21		75.60	0.001579	2.74	180.72	40.49	0.41
POGGIB.-CERTALDO	311	Max WS	30-9-SA	401.35	67.30	74.50		74.85	0.001637	2.63	152.79	37.64	0.42
POGGIB.-CERTALDO	310.98			Lat Struct									
POGGIB.-CERTALDO	310.19			Lat Struct									
POGGIB.-CERTALDO	310	Max WS	elsa tr500 sa	652.55	66.10	75.91		76.14	0.000691	2.09	312.43	54.04	0.28
POGGIB.-CERTALDO	310	Max WS	200-9-SA	610.20	66.10	75.23		75.48	0.000890	2.21	275.69	54.04	0.31
POGGIB.-CERTALDO	310	Max WS	100-9-SA	545.62	66.10	74.82		75.06	0.000924	2.15	253.50	54.04	0.32
POGGIB.-CERTALDO	310	Max WS	30-9-SA	404.94	66.10	74.22		74.39	0.000784	1.83	220.92	54.04	0.29
POGGIB.-CERTALDO	309.99			Lat Struct									
POGGIB.-CERTALDO	309.28			Lat Struct									
POGGIB.-CERTALDO	309	Max WS	elsa tr500 sa	840.15	65.20	75.05		75.49	0.001817	2.96	284.22	63.72	0.45
POGGIB.-CERTALDO	309	Max WS	200-9-SA	704.18	65.20	74.45		74.87	0.001830	2.84	247.81	59.51	0.44
POGGIB.-CERTALDO	309	Max WS	100-9-SA	616.43	65.20	74.11		74.48	0.001753	2.71	227.62	57.04	0.43
POGGIB.-CERTALDO	309	Max WS	30-9-SA	467.88	65.20	73.66		73.93	0.001367	2.31	202.79	53.84	0.38
POGGIB.-CERTALDO	308.98			Lat Struct									
POGGIB.-CERTALDO	308	Max WS	elsa tr500 sa	681.81	65.00	74.97		75.19	0.000864	2.07	329.02	72.11	0.31
POGGIB.-CERTALDO	308	Max WS	200-9-SA	573.68	65.00	74.33		74.54	0.000965	2.03	283.24	70.50	0.32
POGGIB.-CERTALDO	308	Max WS	100-9-SA	513.80	65.00	73.92		74.13	0.001061	2.02	254.90	68.92	0.33
POGGIB.-CERTALDO	308	Max WS	30-9-SA	444.25	65.00	73.30		73.52	0.001365	2.09	212.84	66.50	0.37
POGGIB.-CERTALDO	307	Max WS	elsa tr500 sa	501.02	64.00	74.97		75.06	0.000308	1.33	377.47	72.01	0.19
POGGIB.-CERTALDO	307	Max WS	200-9-SA	437.30	64.00	74.31		74.40	0.000358	1.32	330.39	72.01	0.20
POGGIB.-CERTALDO	307	Max WS	100-9-SA	439.02	64.00	73.84		73.95	0.000512	1.48	295.93	72.01	0.23
POGGIB.-CERTALDO	307	Max WS	30-9-SA	438.86	64.00	73.08		73.25	0.000977	1.81	241.87	72.01	0.32
POGGIB.-CERTALDO	306.98			Lat Struct									
POGGIB.-CERTALDO	306.58			Lat Struct									
POGGIB.-CERTALDO	306	Max WS	elsa tr500 sa	447.80	63.80	74.93		75.04	0.000355	1.47	304.39	52.14	0.19
POGGIB.-CERTALDO	306	Max WS	200-9-SA	406.33	63.80	74.26		74.38	0.000425	1.51	269.84	52.14	0.21
POGGIB.-CERTALDO	306	Max WS	100-9-SA	427.97	63.80	73.75		73.91	0.000652	1.76	243.11	52.14	0.26
POGGIB.-CERTALDO	306	Max WS	30-9-SA	438.82	63.80	72.96		73.20	0.001229	2.17	201.89	52.14	0.35
POGGIB.-CERTALDO	305.98			Lat Struct									
POGGIB.-CERTALDO	305	Max WS	elsa tr500 sa	442.04	64.00	74.71		74.88	0.000558	1.85	238.42	38.44	0.24
POGGIB.-CERTALDO	305	Max WS	200-9-SA	432.85	64.00	73.98		74.20	0.000778	2.06	210.57	38.44	0.28
POGGIB.-CERTALDO	305	Max WS	100-9-SA	452.20	64.00	73.39		73.68	0.001200	2.41	187.83	38.44	0.35
POGGIB.-CERTALDO	305	Max WS	30-9-SA	438.55	64.00	72.54		72.94	0.001678	2.78	157.67	33.66	0.41
POGGIB.-CERTALDO	304.98			Lat Struct									
POGGIB.-CERTALDO	304.97			Lat Struct									
POGGIB.-CERTALDO	304.9	Max WS	elsa tr500 sa	496.77	63.74	74.46		74.68	0.000699	2.08	239.07	38.44	0.27
POGGIB.-CERTALDO	304.9	Max WS	200-9-SA	493.31	63.74	73.67		73.96	0.001038	2.36	208.66	38.44	0.32
POGGIB.-CERTALDO	304.9	Max WS	100-9-SA	470.55	63.74	73.15		73.47	0.001283	2.49	188.63	38.44	0.36
POGGIB.-CERTALDO	304.9	Max WS	30-9-SA	436.90	63.74	72.30		72.69	0.001644	2.76	158.39	33.70	0.41
POGGIB.-CERTALDO	304	Max WS	elsa tr500 sa	715.29	63.40	74.20		74.36	0.000810	1.77	404.06	107.83	0.29
POGGIB.-CERTALDO	304	Max WS	200-9-SA	633.31	63.40	73.51		73.69	0.000714	1.88	336.06	102.97	0.28
POGGIB.-CERTALDO	304	Max WS	100-9-SA	549.81	63.40	73.07		73.24	0.000725	1.81	303.85	92.68	0.28
POGGIB.-CERTALDO	304	Max WS	30-9-SA	444.60	63.40	72.33		72.49	0.000834	1.77	251.40	75.36	0.30
POGGIB.-CERTALDO	303.7	Max WS	elsa tr500 sa	861.20	63.80	73.60	70.62	74.09	0.001454	3.12	276.36	46.14	0.41
POGGIB.-CERTALDO	303.7	Max WS	200-9-SA	776.88	63.80	72.90	70.32	73.42	0.001723	3.18	244.25	46.14	0.44
POGGIB.-CERTALDO	303.7	Max WS	100-9-SA	657.81	63.80	72.60	69.87	73.01	0.001484	2.86	230.11	46.14	0.41
POGGIB.-CERTALDO	303.7	Max WS	30-9-SA	469.69	63.80	72.09	69.05	72.36	0.001049	2.27	206.90	46.14	0.34
POGGIB.-CERTALDO	303.65			Bridge									

HEC-RAS River: FIUME ELSA Reach: POGGIB.-CERTALDO Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	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)	
POGGIB.-CERTALDO	303.6	Max WS	elsa tr500 sa	861.10	63.80	73.58		74.08	0.001468	3.13	275.49	46.14	0.41
POGGIB.-CERTALDO	303.6	Max WS	200-9-SA	776.21	63.80	72.88		73.40	0.001745	3.19	243.14	46.14	0.44
POGGIB.-CERTALDO	303.6	Max WS	100-9-SA	657.79	63.80	72.58		73.00	0.001502	2.87	229.18	46.14	0.41
POGGIB.-CERTALDO	303.6	Max WS	30-9-SA	469.68	63.80	72.08		72.35	0.001059	2.28	206.29	46.14	0.34
POGGIB.-CERTALDO	303.59			Lat Struct									
POGGIB.-CERTALDO	303.58			Lat Struct									
POGGIB.-CERTALDO	303	Max WS	elsa tr500 sa	807.52	63.80	73.36		73.85	0.001533	3.11	259.96	46.14	0.42
POGGIB.-CERTALDO	303	Max WS	200-9-SA	712.90	63.80	72.66		73.16	0.001794	3.13	227.60	46.14	0.45
POGGIB.-CERTALDO	303	Max WS	100-9-SA	620.88	63.80	72.32		72.76	0.001667	2.93	212.17	45.42	0.43
POGGIB.-CERTALDO	303	Max WS	30-9-SA	467.58	63.80	71.83		72.14	0.001287	2.46	190.28	43.96	0.38
POGGIB.-CERTALDO	302.58			Lat Struct									
POGGIB.-CERTALDO	302	Max WS	elsa tr500 sa	768.75	63.00	73.29		73.53	0.000879	2.16	355.20	72.24	0.31
POGGIB.-CERTALDO	302	Max WS	200-9-SA	650.82	63.00	72.60		72.83	0.001018	2.13	305.46	72.24	0.33
POGGIB.-CERTALDO	302	Max WS	100-9-SA	559.70	63.00	72.26		72.46	0.000986	1.99	280.77	72.24	0.32
POGGIB.-CERTALDO	302	Max WS	30-9-SA	439.15	63.00	71.70		71.87	0.000998	1.83	240.46	72.24	0.32
POGGIB.-CERTALDO	301.99			Lat Struct									
POGGIB.-CERTALDO	301	Max WS	elsa tr500 sa	601.36	63.00	72.93		73.28	0.001041	2.63	228.90	35.78	0.33
POGGIB.-CERTALDO	301	Max WS	200-9-SA	496.86	63.00	72.30		72.59	0.000967	2.41	206.29	35.78	0.32
POGGIB.-CERTALDO	301	Max WS	100-9-SA	456.13	63.00	71.91		72.19	0.001004	2.37	192.34	35.78	0.33
POGGIB.-CERTALDO	301	Max WS	30-9-SA	434.41	63.00	71.09		71.45	0.001500	2.67	162.94	35.78	0.40
POGGIB.-CERTALDO	300.98			Lat Struct									
POGGIB.-CERTALDO	300.29			Lat Struct									
POGGIB.-CERTALDO	300	Max WS	elsa tr500 sa	583.50	62.70	72.67		72.99	0.001066	2.52	231.57	41.03	0.34
POGGIB.-CERTALDO	300	Max WS	200-9-SA	524.65	62.70	71.87		72.23	0.001364	2.64	198.88	40.80	0.38
POGGIB.-CERTALDO	300	Max WS	100-9-SA	502.27	62.70	71.33		71.74	0.001758	2.84	177.09	39.94	0.43
POGGIB.-CERTALDO	300	Max WS	30-9-SA	449.67	62.70	70.34		70.87	0.002537	3.22	139.62	34.29	0.51
POGGIB.-CERTALDO	299.5	Max WS	elsa tr500 sa	751.37	61.57	72.62		72.73	0.000277	1.48	508.88	77.86	0.18
POGGIB.-CERTALDO	299.5	Max WS	200-9-SA	634.31	61.57	71.85		71.95	0.000292	1.41	448.96	77.86	0.19
POGGIB.-CERTALDO	299.5	Max WS	100-9-SA	560.81	61.57	71.35		71.44	0.000305	1.37	409.52	77.86	0.19
POGGIB.-CERTALDO	299.5	Max WS	30-9-SA	445.95	61.57	70.41		70.49	0.000336	1.32	338.02	73.79	0.20
POGGIB.-CERTALDO	299	Max WS	elsa tr500 sa	923.26	61.30	71.90		72.43	0.002097	3.21	287.50	60.46	0.47
POGGIB.-CERTALDO	299	Max WS	200-9-SA	768.22	61.30	71.11		71.63	0.002545	3.20	239.81	59.47	0.51
POGGIB.-CERTALDO	299	Max WS	100-9-SA	650.70	61.30	70.66		71.14	0.002601	3.04	213.70	58.53	0.51
POGGIB.-CERTALDO	299	Max WS	30-9-SA	458.33	61.30	69.92		70.27	0.002086	2.64	173.36	49.51	0.45
POGGIB.-CERTALDO	298.98			Lat Struct									
POGGIB.-CERTALDO	298.7	Max WS	elsa tr500 sa	892.33	61.20	71.66		72.14	0.001555	3.07	298.19	144.38	0.41
POGGIB.-CERTALDO	298.7	Max WS	200-9-SA	740.72	61.20	70.84		71.30	0.001838	3.04	249.76	144.38	0.44
POGGIB.-CERTALDO	298.7	Max WS	100-9-SA	637.51	61.20	70.34		70.78	0.001969	2.94	220.80	138.24	0.45
POGGIB.-CERTALDO	298.7	Max WS	30-9-SA	457.46	61.20	69.62		69.95	0.001794	2.55	179.58	48.96	0.42
POGGIB.-CERTALDO	298.62	Max WS	elsa tr500 sa	969.26	61.50	71.58		71.97	0.000854	2.84	368.72	124.43	0.33
POGGIB.-CERTALDO	298.62	Max WS	200-9-SA	759.67	61.50	70.86		71.17	0.000771	2.52	323.83	121.72	0.31
POGGIB.-CERTALDO	298.62	Max WS	100-9-SA	639.19	61.50	70.39		70.66	0.000715	2.31	294.90	120.68	0.30
POGGIB.-CERTALDO	298.62	Max WS	30-9-SA	453.30	61.50	69.67		69.85	0.000571	1.90	249.75	116.91	0.26
POGGIB.-CERTALDO	298.61	Max WS	elsa tr500 sa	988.28	61.50	71.60		71.89	0.000617	2.42	429.55	99.56	0.28
POGGIB.-CERTALDO	298.61	Max WS	200-9-SA	760.77	61.50	70.91		71.12	0.000513	2.08	383.97	99.56	0.25
POGGIB.-CERTALDO	298.61	Max WS	100-9-SA	636.23	61.50	70.45		70.63	0.000457	1.87	353.70	99.56	0.23
POGGIB.-CERTALDO	298.61	Max WS	30-9-SA	451.78	61.50	69.72		69.83	0.000352	1.52	305.25	99.56	0.20
POGGIB.-CERTALDO	298.6	Max WS	elsa tr500 sa	988.19	61.50	71.61		71.90	0.000886	2.39	419.86	71.50	0.31
POGGIB.-CERTALDO	298.6	Max WS	200-9-SA	760.78	61.50	70.90		71.12	0.000752	2.08	369.80	70.09	0.28
POGGIB.-CERTALDO	298.6	Max WS	100-9-SA	636.23	61.50	70.44		70.62	0.000683	1.90	337.35	69.15	0.27
POGGIB.-CERTALDO	298.6	Max WS	30-9-SA	451.74	61.50	69.70		69.82	0.000546	1.58	286.72	67.68	0.24
POGGIB.-CERTALDO	298.4	Max WS	elsa tr500 sa	988.11	61.50	71.60		71.89	0.000891	2.39	419.01	71.48	0.31
POGGIB.-CERTALDO	298.4	Max WS	200-9-SA	760.72	61.50	70.89		71.11	0.000756	2.09	369.12	70.07	0.28
POGGIB.-CERTALDO	298.4	Max WS	100-9-SA	636.18	61.50	70.43		70.61	0.000686	1.91	336.74	69.14	0.27
POGGIB.-CERTALDO	298.4	Max WS	30-9-SA	451.74	61.50	69.69		69.82	0.000548	1.58	286.27	67.66	0.24
POGGIB.-CERTALDO	298.38			Lat Struct									
POGGIB.-CERTALDO	298.36	Max WS	elsa tr500 sa	984.56	61.50	71.60		71.89	0.000750	2.38	417.56	66.52	0.30
POGGIB.-CERTALDO	298.36	Max WS	200-9-SA	758.29	61.50	70.90		71.11	0.000638	2.05	371.23	65.37	0.27
POGGIB.-CERTALDO	298.36	Max WS	100-9-SA	634.58	61.50	70.43		70.61	0.000580	1.87	341.06	64.61	0.26
POGGIB.-CERTALDO	298.36	Max WS	30-9-SA	451.47	61.50	69.69		69.82	0.000464	1.54	293.83	63.40	0.22
POGGIB.-CERTALDO	298.09	Max WS	elsa tr500 sa	932.71	60.57	71.45		71.83	0.001285	2.74	344.73	66.25	0.38
POGGIB.-CERTALDO	298.09	Max WS	200-9-SA	698.26	60.57	70.71		70.99	0.001154	2.38	295.95	64.89	0.35
POGGIB.-CERTALDO	298.09	Max WS	100-9-SA	583.41	60.57	70.25		70.50	0.001117	2.21	266.41	64.05	0.34
POGGIB.-CERTALDO	298.09	Max WS	30-9-SA	433.70	60.57	69.48		69.69	0.001154	2.00	217.89	62.65	0.34
POGGIB.-CERTALDO	298.08			Lat Struct									
POGGIB.-CERTALDO	298	Max WS	elsa tr500 sa	1108.00	62.50	71.03		71.41	0.001567	2.73	405.66	96.66	0.43
POGGIB.-CERTALDO	298	Max WS	200-9-SA	823.65	62.50	70.40		70.69	0.001325	2.37	347.31	90.21	0.39
POGGIB.-CERTALDO	298	Max WS	100-9-SA	669.80	62.50	70.00		70.23	0.001179	2.15	311.74	86.05	0.36
POGGIB.-CERTALDO	298	Max WS	30-9-SA	459.80	62.50	69.32		69.49	0.000960	1.80	255.69	79.04	0.32
POGGIB.-CERTALDO	297.99			Lat Struct									
POGGIB.-CERTALDO	297.98			Lat Struct									
POGGIB.-CERTALDO	296.18			Lat Struct									
POGGIB.-CERTALDO	296	Max WS	elsa tr500 sa	1047.93	61.70	70.11		70.88	0.003187	3.88	269.91	61.45	0.59
POGGIB.-CERTALDO	296	Max WS	200-9-SA	804.27	61.70	69.65		70.22	0.002630	3.32	242.03	60.74	0.53
POGGIB.-CERTALDO	296	Max WS	100-9-SA	662.35	61.70	69.37		69.81	0.002234	2.94	225.13	60.31	0.49
POGGIB.-CERTALDO	296	Max WS	30-9-SA	460.35	61.70	68.87		69.15	0.001699	2.36	194.70	59.53	0.42

HEC-RAS River: FIUME ELSA Reach: POGGIB.-CERTALDO Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	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)	
POGGIB.-CERTALDO	295	Max WS	elsa tr500 sa	749.69	61.20	70.23		70.61	0.001357	2.76	271.86	53.37	0.39
POGGIB.-CERTALDO	295	Max WS	200-9-SA	597.42	61.20	69.61		69.93	0.001258	2.50	239.36	52.39	0.37
POGGIB.-CERTALDO	295	Max WS	100-9-SA	517.02	61.20	69.23		69.51	0.001226	2.36	219.27	51.65	0.37
POGGIB.-CERTALDO	295	Max WS	30-9-SA	425.07	61.20	68.47		68.75	0.001492	2.35	180.62	50.20	0.40
POGGIB.-CERTALDO	294.19			Lat Struct									
POGGIB.-CERTALDO	294	Max WS	elsa tr500 sa	917.92	62.20	68.95		69.68	0.003221	3.78	242.84	59.46	0.60
POGGIB.-CERTALDO	294	Max WS	200-9-SA	732.12	62.20	68.57		69.13	0.002759	3.32	220.24	58.62	0.55
POGGIB.-CERTALDO	294	Max WS	100-9-SA	629.06	62.20	68.29		68.78	0.002574	3.08	204.01	58.00	0.52
POGGIB.-CERTALDO	294	Max WS	30-9-SA	447.82	62.20	67.89		68.20	0.001890	2.48	180.64	56.69	0.44
POGGIB.-CERTALDO	293.98			Lat Struct									
POGGIB.-CERTALDO	293.59			Lat Struct									
POGGIB.-CERTALDO	293	Max WS	elsa tr500 sa	761.66	61.90	68.96		69.20	0.000998	2.18	348.92	81.57	0.34
POGGIB.-CERTALDO	293	Max WS	200-9-SA	585.43	61.90	68.56		68.74	0.000797	1.85	316.93	80.89	0.30
POGGIB.-CERTALDO	293	Max WS	100-9-SA	492.02	61.90	68.27		68.41	0.000721	1.68	292.99	80.37	0.28
POGGIB.-CERTALDO	293	Max WS	30-9-SA	372.87	61.90	67.78		67.89	0.000653	1.47	253.78	79.53	0.26
POGGIB.-CERTALDO	292	Max WS	elsa tr500 sa	564.18	61.90	68.73		69.09	0.001671	2.69	209.64	50.57	0.42
POGGIB.-CERTALDO	292	Max WS	200-9-SA	437.19	61.90	68.38		68.64	0.001320	2.28	191.93	50.42	0.37
POGGIB.-CERTALDO	292	Max WS	100-9-SA	366.94	61.90	68.10		68.32	0.001165	2.06	178.08	49.77	0.35
POGGIB.-CERTALDO	292	Max WS	30-9-SA	282.81	61.90	67.61		67.78	0.001076	1.84	153.97	48.62	0.33
POGGIB.-CERTALDO	291	Max WS	elsa tr500 sa	585.14	62.00	68.61		68.82	0.000923	2.05	285.97	66.58	0.32
POGGIB.-CERTALDO	291	Max WS	200-9-SA	412.72	62.00	68.36		68.48	0.000556	1.53	269.33	66.58	0.24
POGGIB.-CERTALDO	291	Max WS	100-9-SA	334.15	62.00	68.10		68.19	0.000451	1.33	251.77	66.40	0.22
POGGIB.-CERTALDO	291	Max WS	30-9-SA	240.49	62.00	67.62		67.68	0.000356	1.09	220.03	65.58	0.19
POGGIB.-CERTALDO	290.98			Lat Struct									
POGGIB.-CERTALDO	290.49			Lat Struct									
POGGIB.-CERTALDO	290	Max WS	elsa tr500 sa	507.76	61.90	68.41		68.63	0.000998	2.08	244.13	59.70	0.33
POGGIB.-CERTALDO	290	Max WS	200-9-SA	527.30	61.90	67.68		68.03	0.001991	2.63	200.56	59.02	0.46
POGGIB.-CERTALDO	290	Max WS	100-9-SA	480.38	61.90	67.37		67.73	0.002213	2.63	182.58	58.41	0.48
POGGIB.-CERTALDO	290	Max WS	30-9-SA	380.41	61.90	66.94		67.23	0.002212	2.42	157.20	57.44	0.47
POGGIB.-CERTALDO	289	Max WS	elsa tr500 sa	507.15	61.80	68.24		68.46	0.001000	2.09	242.43	58.39	0.33
POGGIB.-CERTALDO	289	Max WS	200-9-SA	493.02	61.80	67.46		67.78	0.001836	2.51	196.62	58.39	0.44
POGGIB.-CERTALDO	289	Max WS	100-9-SA	456.71	61.80	67.08		67.43	0.002291	2.61	174.89	58.39	0.48
POGGIB.-CERTALDO	289	Max WS	30-9-SA	380.38	61.80	66.48		66.85	0.003012	2.70	140.71	55.12	0.54
POGGIB.-CERTALDO	288.48			Lat Struct									
POGGIB.-CERTALDO	288	Max WS	elsa tr500 sa	742.76	62.00	68.00		68.24	0.001332	2.18	341.30	98.70	0.37
POGGIB.-CERTALDO	288	Max WS	200-9-SA	596.65	62.00	67.39		67.62	0.001625	2.13	280.60	98.70	0.40
POGGIB.-CERTALDO	288	Max WS	100-9-SA	513.91	62.00	67.08		67.30	0.001748	2.05	250.36	98.70	0.41
POGGIB.-CERTALDO	288	Max WS	30-9-SA	412.95	62.00	66.46		66.70	0.002729	2.18	189.52	95.85	0.49
POGGIB.-CERTALDO	287.6	Max WS	elsa tr500 sa	742.76	62.00	67.99	66.30	68.23	0.001346	2.18	340.13	98.70	0.38
POGGIB.-CERTALDO	287.6	Max WS	200-9-SA	596.61	62.00	67.37	66.03	67.61	0.001649	2.14	279.30	98.70	0.41
POGGIB.-CERTALDO	287.6	Max WS	100-9-SA	513.91	62.00	67.07	65.71	67.28	0.001780	2.06	249.01	98.70	0.41
POGGIB.-CERTALDO	287.6	Max WS	30-9-SA	412.90	62.00	66.43	65.32	66.68	0.002834	2.21	187.24	95.67	0.50
POGGIB.-CERTALDO	287.5			Inl Struct									
POGGIB.-CERTALDO	287.4	Max WS	elsa tr500 sa	742.76	58.70	67.84		67.87	0.000125	0.82	909.19	195.32	0.12
POGGIB.-CERTALDO	287.4	Max WS	200-9-SA	596.51	58.70	67.22		67.25	0.000129	0.76	787.92	195.32	0.12
POGGIB.-CERTALDO	287.4	Max WS	100-9-SA	513.88	58.70	66.91		66.94	0.000124	0.71	727.91	195.32	0.12
POGGIB.-CERTALDO	287.4	Max WS	30-9-SA	411.95	58.70	66.21		66.24	0.000158	0.70	591.34	195.32	0.13
POGGIB.-CERTALDO	287	Max WS	elsa tr500 sa	742.76	58.70	67.83		67.87	0.000125	0.82	908.30	195.32	0.12
POGGIB.-CERTALDO	287	Max WS	200-9-SA	596.52	58.70	67.21		67.24	0.000129	0.76	787.09	195.32	0.12
POGGIB.-CERTALDO	287	Max WS	100-9-SA	513.88	58.70	66.91		66.93	0.000124	0.71	727.20	195.32	0.12
POGGIB.-CERTALDO	287	Max WS	30-9-SA	411.93	58.70	66.21		66.23	0.000158	0.70	590.57	195.32	0.13
POGGIB.-CERTALDO	286.99			Lat Struct									
POGGIB.-CERTALDO	286	Max WS	elsa tr500 sa	816.74	59.00	67.80		67.85	0.000183	0.99	827.94	178.02	0.15
POGGIB.-CERTALDO	286	Max WS	200-9-SA	638.34	59.00	67.19		67.23	0.000177	0.89	719.31	178.02	0.14
POGGIB.-CERTALDO	286	Max WS	100-9-SA	540.28	59.00	66.89		66.92	0.000163	0.81	665.75	178.02	0.13
POGGIB.-CERTALDO	286	Max WS	30-9-SA	416.68	59.00	66.19		66.22	0.000191	0.77	542.20	178.02	0.14
POGGIB.-CERTALDO	285.99			Lat Struct									
POGGIB.-CERTALDO	285.98			Lat Struct									
POGGIB.-CERTALDO	285	Max WS	elsa tr500 sa	965.26	59.00	67.40		67.72	0.002337	2.54	380.50	133.93	0.48
POGGIB.-CERTALDO	285	Max WS	200-9-SA	737.34	59.00	66.80		67.11	0.002954	2.45	300.73	133.93	0.52
POGGIB.-CERTALDO	285	Max WS	100-9-SA	614.94	59.00	66.52		66.80	0.003170	2.33	263.44	133.50	0.53
POGGIB.-CERTALDO	285	Max WS	30-9-SA	406.42	59.00	65.91		66.17	0.004604	2.23	182.60	132.03	0.60
POGGIB.-CERTALDO	284	Max WS	elsa tr500 sa	992.60	58.90	67.37		67.67	0.001795	2.45	405.64	124.40	0.43
POGGIB.-CERTALDO	284	Max WS	200-9-SA	753.65	58.90	66.80		67.06	0.001889	2.25	335.67	122.42	0.43
POGGIB.-CERTALDO	284	Max WS	100-9-SA	626.48	58.90	66.53		66.75	0.001819	2.07	303.15	122.01	0.42
POGGIB.-CERTALDO	284	Max WS	30-9-SA	447.65	58.90	65.98		66.16	0.002100	1.90	236.01	120.87	0.43
POGGIB.-CERTALDO	283	Max WS	elsa tr500 sa	1095.74	58.60	67.13		67.40	0.001800	2.30	475.84	160.77	0.43
POGGIB.-CERTALDO	283	Max WS	200-9-SA	799.47	58.60	66.61		66.82	0.001719	2.04	392.54	153.98	0.41
POGGIB.-CERTALDO	283	Max WS	100-9-SA	649.46	58.60	66.37		66.54	0.001501	1.82	356.67	149.35	0.38
POGGIB.-CERTALDO	283	Max WS	30-9-SA	410.49	58.60	65.87		65.97	0.001121	1.44	284.19	134.90	0.32
POGGIB.-CERTALDO	282	Max WS	elsa tr500 sa	1095.23	58.50	67.07		67.35	0.001529	2.33	470.72	138.19	0.40
POGGIB.-CERTALDO	282	Max WS	200-9-SA	799.46	58.50	66.56		66.77	0.001361	1.99	401.08	136.26	0.37
POGGIB.-CERTALDO	282	Max WS	100-9-SA	648.84	58.50	66.34		66.49	0.001158	1.75	370.40	135.39	0.34
POGGIB.-CERTALDO	282	Max WS	30-9-SA	410.18	58.50	65.85		65.94	0.000864	1.34	305.20	133.49	0.28
POGGIB.-CERTALDO	281.9	Max WS	elsa tr500 sa	1083.68	58.50	66.77	65.32	67.32	0.002429	3.28	330.07	137.06	0.52
POGGIB.-CERTALDO	281.9	Max WS	200-9-SA	799.12	58.50	66.39	64.83	66.75	0.001837	2.67	298.94	135.58	0.44

HEC-RAS River: FIUME ELSA Reach: POGGIB.-CERTALDO Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	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)	
POGGIB.-CERTALDO	281.9	Max WS	100-9-SA	644.46	58.50	66.22	63.69	66.48	0.001395	2.26	285.36	134.93	0.38
POGGIB.-CERTALDO	281.9	Max WS	30-9-SA	409.46	58.50	65.80	62.69	65.94	0.000856	1.63	251.67	133.28	0.29
POGGIB.-CERTALDO	281.5			Bridge									
POGGIB.-CERTALDO	281.1	Max WS	elsa tr500 sa	1089.56	58.80	66.92		67.20	0.000881	2.34	465.05	89.54	0.33
POGGIB.-CERTALDO	281.1	Max WS	200-9-SA	799.37	58.80	66.50		66.68	0.000594	1.87	428.54	86.39	0.27
POGGIB.-CERTALDO	281.1	Max WS	100-9-SA	648.00	58.80	66.31		66.43	0.000436	1.57	411.75	84.90	0.23
POGGIB.-CERTALDO	281.1	Max WS	30-9-SA	410.20	58.80	65.85		65.91	0.000228	1.10	373.80	81.44	0.16
POGGIB.-CERTALDO	281	Max WS	elsa tr500 sa	1085.96	58.80	66.91		67.19	0.000880	2.34	464.07	89.46	0.33
POGGIB.-CERTALDO	281	Max WS	200-9-SA	799.37	58.80	66.50		66.68	0.000596	1.87	427.93	86.34	0.27
POGGIB.-CERTALDO	281	Max WS	100-9-SA	647.84	58.80	66.30		66.43	0.000437	1.57	411.34	84.87	0.23
POGGIB.-CERTALDO	281	Max WS	30-9-SA	410.13	58.80	65.85		65.91	0.000228	1.10	373.58	81.42	0.16
POGGIB.-CERTALDO	280	Max WS	elsa tr500 sa	1083.60	58.00	66.87		67.13	0.000866	2.28	476.30	94.48	0.32
POGGIB.-CERTALDO	280	Max WS	200-9-SA	799.28	58.00	66.47		66.64	0.000602	1.82	438.88	92.56	0.27
POGGIB.-CERTALDO	280	Max WS	100-9-SA	647.30	58.00	66.28		66.40	0.000445	1.54	421.61	91.66	0.23
POGGIB.-CERTALDO	280	Max WS	30-9-SA	409.95	58.00	65.84		65.90	0.000241	1.08	381.27	89.52	0.17
POGGIB.-CERTALDO	279.99			Lat Struct									
POGGIB.-CERTALDO	279.98			Lat Struct									
POGGIB.-CERTALDO	279.58			Lat Struct									
POGGIB.-CERTALDO	279	Max WS	elsa tr500 sa	1012.92	58.10	66.73		67.08	0.001054	2.62	387.14	157.37	0.36
POGGIB.-CERTALDO	279	Max WS	200-9-SA	695.91	58.10	66.37		66.56	0.000623	1.93	361.27	157.37	0.27
POGGIB.-CERTALDO	279	Max WS	100-9-SA	624.96	58.10	66.21		66.37	0.000558	1.79	349.58	157.34	0.26
POGGIB.-CERTALDO	279	Max WS	30-9-SA	407.00	58.10	65.80		65.88	0.000311	1.27	320.44	156.48	0.19
POGGIB.-CERTALDO	278	Max WS	elsa tr500 sa	989.68	58.10	66.65		67.09	0.001387	2.93	337.98	130.62	0.40
POGGIB.-CERTALDO	278	Max WS	200-9-SA	736.11	58.10	66.33		66.60	0.000938	2.32	317.59	130.62	0.33
POGGIB.-CERTALDO	278	Max WS	100-9-SA	609.58	58.10	66.17		66.37	0.000715	1.98	307.35	130.62	0.29
POGGIB.-CERTALDO	278	Max WS	30-9-SA	425.35	58.10	65.74		65.86	0.000460	1.52	280.52	129.49	0.23
POGGIB.-CERTALDO	277	Max WS	elsa tr500 sa	810.31	57.60	66.79		67.12	0.001058	2.54	319.60	58.25	0.35
POGGIB.-CERTALDO	277	Max WS	200-9-SA	634.54	57.60	66.37		66.61	0.000832	2.15	295.10	58.25	0.30
POGGIB.-CERTALDO	277	Max WS	100-9-SA	541.20	57.60	66.17		66.36	0.000686	1.91	283.49	58.25	0.28
POGGIB.-CERTALDO	277	Max WS	30-9-SA	408.88	57.60	65.70		65.83	0.000528	1.60	256.00	57.17	0.24
POGGIB.-CERTALDO	276.99			Lat Struct									
POGGIB.-CERTALDO	276	Max WS	elsa tr500 sa	670.12	57.88	66.76		67.18	0.001294	2.86	234.17	37.67	0.37
POGGIB.-CERTALDO	276	Max WS	200-9-SA	558.49	57.88	66.24		66.58	0.001169	2.60	214.49	37.67	0.35
POGGIB.-CERTALDO	276	Max WS	100-9-SA	516.21	57.88	65.98		66.31	0.001147	2.52	204.81	37.67	0.35
POGGIB.-CERTALDO	276	Max WS	30-9-SA	447.69	57.88	65.43		65.73	0.001136	2.43	184.41	35.95	0.34
POGGIB.-CERTALDO	275	Max WS	elsa tr500 sa	592.26	57.47	66.27		67.05	0.003331	3.93	150.83	29.05	0.55
POGGIB.-CERTALDO	275	Max WS	200-9-SA	540.58	57.47	65.36		66.31	0.004793	4.33	124.77	27.99	0.66
POGGIB.-CERTALDO	275	Max WS	100-9-SA	510.23	57.47	64.96		65.99	0.005569	4.48	113.82	27.46	0.70
POGGIB.-CERTALDO	275	Max WS	30-9-SA	447.67	57.47	64.21		65.37	0.006446	4.77	93.94	22.91	0.75
POGGIB.-CERTALDO	274	Max WS	elsa tr500 sa	612.43	57.39	66.51		66.70	0.000644	1.94	314.97	60.10	0.27
POGGIB.-CERTALDO	274	Max WS	200-9-SA	540.57	57.39	65.64		65.85	0.000873	2.05	263.21	59.07	0.31
POGGIB.-CERTALDO	274	Max WS	100-9-SA	510.23	57.39	65.22		65.46	0.001038	2.13	239.02	57.87	0.34
POGGIB.-CERTALDO	274	Max WS	30-9-SA	447.67	57.39	64.46		64.73	0.001439	2.29	195.80	54.84	0.39
POGGIB.-CERTALDO	273	Max WS	elsa tr500 sa	474.70	56.94	66.62		66.69	0.000241	1.22	390.53	73.51	0.17
POGGIB.-CERTALDO	273	Max WS	200-9-SA	538.87	56.94	65.60		65.74	0.000605	1.71	315.66	72.68	0.26
POGGIB.-CERTALDO	273	Max WS	100-9-SA	510.22	56.94	65.16		65.33	0.000741	1.79	284.34	70.93	0.29
POGGIB.-CERTALDO	273	Max WS	30-9-SA	447.68	56.94	64.34		64.54	0.001122	1.97	227.59	67.81	0.34
POGGIB.-CERTALDO	272	Max WS	elsa tr500 sa	1097.65	56.54	65.30		65.90	0.002658	3.45	318.08	75.59	0.54
POGGIB.-CERTALDO	272	Max WS	200-9-SA	773.02	56.54	64.87		65.24	0.001842	2.71	285.65	74.73	0.44
POGGIB.-CERTALDO	272	Max WS	100-9-SA	655.93	56.54	64.56		64.87	0.001730	2.50	262.55	74.19	0.42
POGGIB.-CERTALDO	272	Max WS	30-9-SA	480.65	56.54	63.85		64.11	0.001793	2.28	211.04	70.55	0.42
POGGIB.-CERTALDO	271.99			Lat Struct									
POGGIB.-CERTALDO	271	Max WS	elsa tr500 sa	969.96	56.53	65.33		65.70	0.001427	2.71	357.30	75.35	0.40
POGGIB.-CERTALDO	271	Max WS	200-9-SA	742.45	56.53	64.74		65.02	0.001247	2.37	313.60	73.95	0.37
POGGIB.-CERTALDO	271	Max WS	100-9-SA	653.87	56.53	64.38		64.64	0.001279	2.28	286.92	73.38	0.37
POGGIB.-CERTALDO	271	Max WS	30-9-SA	480.66	56.53	63.65		63.87	0.001310	2.05	234.33	72.24	0.36
POGGIB.-CERTALDO	270	Max WS	elsa tr500 sa	806.09	54.36	65.33		65.64	0.001040	2.46	327.57	61.07	0.34
POGGIB.-CERTALDO	270	Max WS	200-9-SA	717.84	54.36	64.50		64.84	0.001366	2.59	277.57	60.02	0.38
POGGIB.-CERTALDO	270	Max WS	100-9-SA	653.60	54.36	64.09		64.43	0.001515	2.59	252.61	59.40	0.40
POGGIB.-CERTALDO	270	Max WS	30-9-SA	480.66	54.36	63.40		63.66	0.001409	2.27	212.14	58.39	0.38
POGGIB.-CERTALDO	269	Max WS	elsa tr500 sa	942.90	54.91	64.75		65.15	0.001695	2.81	336.00	77.15	0.43
POGGIB.-CERTALDO	269	Max WS	200-9-SA	742.65	54.91	64.02		64.38	0.001825	2.65	280.54	74.94	0.44
POGGIB.-CERTALDO	269	Max WS	100-9-SA	652.68	54.91	63.60		63.95	0.002029	2.62	249.07	73.24	0.45
POGGIB.-CERTALDO	269	Max WS	30-9-SA	477.90	54.91	62.85		63.16	0.002318	2.45	195.39	70.59	0.47
POGGIB.-CERTALDO	268.1	Max WS	elsa tr500 sa	1109.11	54.27	63.69		64.61	0.004038	4.26	260.43	58.54	0.64
POGGIB.-CERTALDO	268.1	Max WS	200-9-SA	758.84	54.27	63.68		64.12	0.001896	2.92	260.16	58.54	0.44
POGGIB.-CERTALDO	268.1	Max WS	100-9-SA	652.70	54.27	63.33		63.71	0.001819	2.72	239.67	58.52	0.43
POGGIB.-CERTALDO	268.1	Max WS	30-9-SA	477.89	54.27	62.60		62.90	0.001802	2.43	196.98	57.97	0.42
POGGIB.-CERTALDO	268	Max WS	elsa tr500 sa	1109.12	54.27	63.68	62.53	64.61	0.004058	4.27	260.02	58.54	0.65
POGGIB.-CERTALDO	268	Max WS	200-9-SA	745.18	54.27	63.68	61.54	64.10	0.001832	2.87	260.02	58.54	0.43
POGGIB.-CERTALDO	268	Max WS	100-9-SA	652.71	54.27	63.33	61.28	63.71	0.001822	2.72	239.54	58.52	0.43
POGGIB.-CERTALDO	268	Max WS	30-9-SA	477.88	54.27	62.60	60.03	62.90	0.001805	2.43	196.85	57.94	0.42

HEC-RAS Profile: Max WS

Storage Area	Profile	Plan	W.S. Elev	SA Min El	Net Flux	SA Area	SA Volume
			(m)	(m)	(m3/s)	(1000 m2)	(1000 m3)
D0	Max WS	elsa tr500 sa	89.57	86.90	0.75	69.79	72.28
D0	Max WS	200-9-SA	88.98	86.90	0.44	45.17	37.01
D0	Max WS	100-9-SA	88.59	86.90	-0.19	34.61	20.41
D0	Max WS	30-9-SA	86.90	86.90	0.00	0.00	0.00
D10A	Max WS	elsa tr500 sa	76.24	68.80	0.02	4.69	8.72
D10A	Max WS	200-9-SA	75.75	68.80	0.25	4.61	6.42
D10A	Max WS	100-9-SA	75.58	68.80	0.02	4.55	5.63
D10A	Max WS	30-9-SA	73.97	68.80	0.20	0.57	1.11
D10B	Max WS	elsa tr500 sa	76.34	71.90	0.05	19.81	28.69
D10B	Max WS	200-9-SA	75.87	71.90	0.03	18.97	19.63
D10B	Max WS	100-9-SA	75.71	71.90	-0.63	18.29	16.65
D10B	Max WS	30-9-SA	74.38	71.90	0.04	1.39	0.78
D11A	Max WS	elsa tr500 sa	75.79	71.40	-43.65	73.71	146.08
D11A	Max WS	200-9-SA	74.95	71.40	-13.41	72.97	83.73
D11A	Max WS	100-9-SA	74.45	71.40	1.91	72.07	47.43
D11A	Max WS	30-9-SA	72.81	71.40	0.02	0.49	0.12
D11B	Max WS	elsa tr500 sa	74.98	65.90	7.18	67.73	145.76
D11B	Max WS	200-9-SA	74.31	65.90	5.16	67.06	101.19
D11B	Max WS	100-9-SA	73.86	65.90	5.90	66.68	70.69
D11B	Max WS	30-9-SA	73.08	65.90	1.39	55.08	20.99
D11C	Max WS	elsa tr500 sa	76.31	72.40	44.38	30.38	59.76
D11C	Max WS	200-9-SA	75.17	72.40	14.79	27.39	26.49
D11C	Max WS	100-9-SA	74.36	72.40	1.08	18.75	6.08
D11C	Max WS	30-9-SA	72.40	72.40	0.00	0.00	0.00
D12A	Max WS	elsa tr500 sa	75.20	72.50	0.23	39.81	21.11
D12A	Max WS	200-9-SA	74.44	72.50	0.15	15.44	4.28
D12A	Max WS	100-9-SA	74.14	72.50	0.16	4.87	1.26
D12A	Max WS	30-9-SA	72.81	72.50	0.00	0.05	0.00
D12B	Max WS	elsa tr500 sa	74.94	69.80	1.33	196.97	319.46
D12B	Max WS	200-9-SA	74.29	69.80	1.82	172.29	198.47
D12B	Max WS	100-9-SA	73.84	69.80	0.76	144.38	128.34
D12B	Max WS	30-9-SA	73.02	69.80	2.95	90.95	34.03
D13	Max WS	elsa tr500 sa	74.81	66.10	0.03	12.83	29.23
D13	Max WS	200-9-SA	74.12	66.10	1.14	12.82	20.30
D13	Max WS	100-9-SA	73.57	66.10	0.93	12.70	13.26
D13	Max WS	30-9-SA	72.75	66.10	0.12	7.00	3.55
D14	Max WS	elsa tr500 sa	74.45	69.50	52.51	175.15	255.82
D14	Max WS	200-9-SA	73.72	69.50	27.85	147.99	135.66
D14	Max WS	100-9-SA	73.21	69.50	18.84	115.99	69.15
D14	Max WS	30-9-SA	72.24	69.50	2.30	32.91	10.61
D15A	Max WS	elsa tr500 sa	73.48	68.70	-64.38	54.49	98.94
D15A	Max WS	200-9-SA	72.69	68.70	-31.72	54.06	56.32
D15A	Max WS	100-9-SA	72.33	68.70	-14.34	53.64	36.78
D15A	Max WS	30-9-SA	71.79	68.70	-1.20	28.91	11.56
D15B	Max WS	elsa tr500 sa	73.15	67.50	4.80	60.41	152.09
D15B	Max WS	200-9-SA	72.48	67.50	5.32	60.40	111.38
D15B	Max WS	100-9-SA	72.11	67.50	3.33	60.32	89.09
D15B	Max WS	30-9-SA	71.41	67.50	1.05	60.02	46.95
D16	Max WS	elsa tr500 sa	74.41	69.80	37.12	129.68	275.55
D16	Max WS	200-9-SA	73.03	69.80	19.42	87.55	118.91
D16	Max WS	100-9-SA	72.12	69.80	2.61	61.41	53.65
D16	Max WS	30-9-SA	71.18	69.80	0.55	21.76	5.95

HEC-RAS Profile: Max WS (Continued)

Storage Area	Profile	Plan	W.S. Elev	SA Min El	Net Flux	SA Area	SA Volume
			(m)	(m)	(m3/s)	(1000 m2)	(1000 m3)
D17A	Max WS	elsa tr500 sa	72.64	63.70	7.68	140.83	415.21
D17A	Max WS	200-9-SA	71.85	63.70	2.98	140.52	304.94
D17A	Max WS	100-9-SA	71.32	63.70	0.72	139.66	230.69
D17A	Max WS	30-9-SA	70.30	63.70	2.28	134.05	89.61
D17B	Max WS	elsa tr500 sa	71.46	67.20	32.18	59.29	154.46
D17B	Max WS	200-9-SA	70.74	67.20	0.64	56.24	112.61
D17B	Max WS	100-9-SA	70.28	67.20	1.90	54.16	87.10
D17B	Max WS	30-9-SA	69.50	67.20	0.57	52.43	45.63
D17C	Max WS	elsa tr500 sa	71.75	67.90	-0.04	48.45	136.16
D17C	Max WS	200-9-SA	70.89	67.90	-0.27	48.25	94.54
D17C	Max WS	100-9-SA	70.37	67.90	-1.86	47.70	69.87
D17C	Max WS	30-9-SA	69.62	67.90	0.03	47.13	34.30
D17D	Max WS	elsa tr500 sa	71.86	67.80	0.03	14.60	23.83
D17D	Max WS	200-9-SA	71.41	67.80	0.06	13.31	17.67
D17D	Max WS	100-9-SA	71.04	67.80	0.31	11.30	13.22
D17D	Max WS	30-9-SA	70.24	67.80	-0.08	8.75	5.40
D18	Max WS	elsa tr500 sa	71.11	65.20	1.27	148.52	165.18
D18	Max WS	200-9-SA	70.43	65.20	1.41	104.19	80.96
D18	Max WS	100-9-SA	70.02	65.20	1.09	78.44	44.52
D18	Max WS	30-9-SA	69.29	65.20	0.07	21.81	13.95
D19	Max WS	elsa tr500 sa	68.40	63.30	3.09	427.63	863.16
D19	Max WS	200-9-SA	67.45	63.30	8.31	391.83	470.96
D19	Max WS	100-9-SA	66.66	63.30	14.20	276.29	210.05
D19	Max WS	30-9-SA	63.30	63.30	0.00	0.00	0.00
D1A	Max WS	elsa tr500 sa	89.57	82.80	3.03	83.71	137.63
D1A	Max WS	200-9-SA	88.99	82.80	2.69	82.21	88.93
D1A	Max WS	100-9-SA	88.58	82.80	4.83	76.54	56.41
D1A	Max WS	30-9-SA	87.70	82.80	1.86	24.07	9.12
D1B	Max WS	elsa tr500 sa	87.13	82.30	9.57	106.31	134.75
D1B	Max WS	200-9-SA	86.57	82.30	5.63	94.66	77.58
D1B	Max WS	100-9-SA	86.22	82.30	1.57	85.35	46.11
D1B	Max WS	30-9-SA	82.30	82.30	0.00	0.00	0.00
D1C	Max WS	elsa tr500 sa	86.00	82.70	5.17	112.37	126.91
D1C	Max WS	200-9-SA	85.64	82.70	2.36	104.73	87.65
D1C	Max WS	100-9-SA	85.36	82.70	0.48	80.02	60.97
D1C	Max WS	30-9-SA	84.56	82.70	0.66	31.29	14.18
D1D	Max WS	elsa tr500 sa	89.11	82.50	2.89	129.28	71.03
D1D	Max WS	200-9-SA	88.58	82.50	1.34	51.73	17.50
D1D	Max WS	100-9-SA	86.64	82.50	0.04	0.12	0.15
D1D	Max WS	30-9-SA	82.50	82.50	0.00	0.00	0.00
D2	Max WS	elsa tr500 sa	83.57	76.50	0.25	83.91	118.43
D2	Max WS	200-9-SA	82.89	76.50	0.94	77.65	62.68
D2	Max WS	100-9-SA	82.42	76.50	0.70	68.53	28.87
D2	Max WS	30-9-SA	81.83	76.50	0.15	19.55	7.42
D20	Max WS	elsa tr500 sa	66.96	61.90	6.17	116.73	91.25
D20	Max WS	200-9-SA	61.90	61.90	0.00	0.02	0.00
D20	Max WS	100-9-SA	61.90	61.90	0.00	0.02	0.00
D20	Max WS	30-9-SA	61.90	61.90	0.00	0.02	0.00
D21	Max WS	elsa tr500 sa	67.61	61.80	1.18	21.43	16.82
D21	Max WS	200-9-SA	61.80	61.80	0.00	0.01	0.00
D21	Max WS	100-9-SA	61.80	61.80	0.00	0.01	0.00
D21	Max WS	30-9-SA	61.80	61.80	0.00	0.01	0.00

HEC-RAS Profile: Max WS (Continued)

Storage Area	Profile	Plan	W.S. Elev	SA Min El	Net Flux	SA Area	SA Volume
			(m)	(m)	(m3/s)	(1000 m2)	(1000 m3)
D22	Max WS	elsa tr500 sa	66.65	58.20	5.61	251.65	701.74
D22	Max WS	200-9-SA	66.15	58.20	4.80	217.74	581.23
D22	Max WS	100-9-SA	64.23	58.20	10.47	146.02	246.43
D22	Max WS	30-9-SA	58.20	58.20	0.00	0.03	0.00
D23	Max WS	elsa tr500 sa	66.14	58.80	29.86	373.62	923.83
D23	Max WS	200-9-SA	65.19	58.80	26.10	319.93	587.60
D23	Max WS	100-9-SA	63.46	58.80	6.41	178.16	158.40
D23	Max WS	30-9-SA	58.80	58.80	0.00	0.02	0.00
D3	Max WS	elsa tr500 sa	83.57	80.40	0.01	6.45	3.90
D3	Max WS	200-9-SA	82.87	80.40	0.08	2.10	0.89
D3	Max WS	100-9-SA	80.40	80.40	0.00	0.02	0.00
D3	Max WS	30-9-SA	80.40	80.40	0.00	0.02	0.00
D4A	Max WS	elsa tr500 sa	83.56	80.50	-0.14	23.49	14.41
D4A	Max WS	200-9-SA	82.87	80.50	0.22	9.12	3.04
D4A	Max WS	100-9-SA	82.15	80.50	0.00	0.62	0.18
D4A	Max WS	30-9-SA	80.50	80.50	0.00	0.01	0.00
D4B	Max WS	elsa tr500 sa	83.12	80.30	0.06	28.71	17.68
D4B	Max WS	200-9-SA	82.78	80.30	0.03	20.22	8.80
D4B	Max WS	100-9-SA	82.05	80.30	0.11	3.38	0.54
D4B	Max WS	30-9-SA	80.30	80.30	0.00	0.00	0.00
D5	Max WS	elsa tr500 sa	81.51	76.00	2.61	20.68	29.60
D5	Max WS	200-9-SA	81.22	76.00	0.55	18.64	24.10
D5	Max WS	100-9-SA	81.03	76.00	2.26	16.27	21.01
D5	Max WS	30-9-SA	80.51	76.00	0.62	11.62	13.89
D6A	Max WS	elsa tr500 sa	81.09	77.20	2.54	16.95	22.09
D6A	Max WS	200-9-SA	80.68	77.20	2.24	15.25	15.39
D6A	Max WS	100-9-SA	80.49	77.20	1.18	13.83	12.62
D6A	Max WS	30-9-SA	77.20	77.20	0.00	0.03	0.00
D6B	Max WS	elsa tr500 sa	81.11	75.70	0.15	8.79	7.46
D6B	Max WS	200-9-SA	80.92	75.70	-0.01	6.51	5.96
D6B	Max WS	100-9-SA	78.17	75.70	0.08	0.38	0.57
D6B	Max WS	30-9-SA	75.70	75.70	0.00	0.03	0.00
D7	Max WS	elsa tr500 sa	80.26	74.70	1.69	69.34	137.22
D7	Max WS	200-9-SA	79.78	74.70	5.58	60.66	105.30
D7	Max WS	100-9-SA	79.59	74.70	3.10	56.80	93.96
D7	Max WS	30-9-SA	79.24	74.70	0.74	53.44	74.40
D8A	Max WS	elsa tr500 sa	78.47	73.50	6.59	80.78	154.53
D8A	Max WS	200-9-SA	77.86	73.50	0.66	72.04	108.02
D8A	Max WS	100-9-SA	77.51	73.50	0.81	67.36	84.02
D8A	Max WS	30-9-SA	76.68	73.50	1.24	57.74	31.83
D8B	Max WS	elsa tr500 sa	76.98	74.20	0.06	56.24	100.64
D8B	Max WS	200-9-SA	76.44	74.20	0.35	54.59	70.73
D8B	Max WS	100-9-SA	76.17	74.20	0.03	51.83	56.48
D8B	Max WS	30-9-SA	75.46	74.20	1.65	44.43	22.05
D8C	Max WS	elsa tr500 sa	76.82	72.90	0.67	9.31	17.40
D8C	Max WS	200-9-SA	76.34	72.90	0.17	9.31	12.98
D8C	Max WS	100-9-SA	76.06	72.90	0.34	9.29	10.37
D8C	Max WS	30-9-SA	75.38	72.90	0.32	8.54	4.23
D9	Max WS	elsa tr500 sa	76.33	73.80	0.17	23.11	11.86
D9	Max WS	200-9-SA	75.87	73.80	-0.09	10.49	4.45
D9	Max WS	100-9-SA	75.71	73.80	0.69	8.08	3.00
D9	Max WS	30-9-SA	74.38	73.80	0.00	0.10	0.02

HEC-RAS Profile: Max WS (Continued)

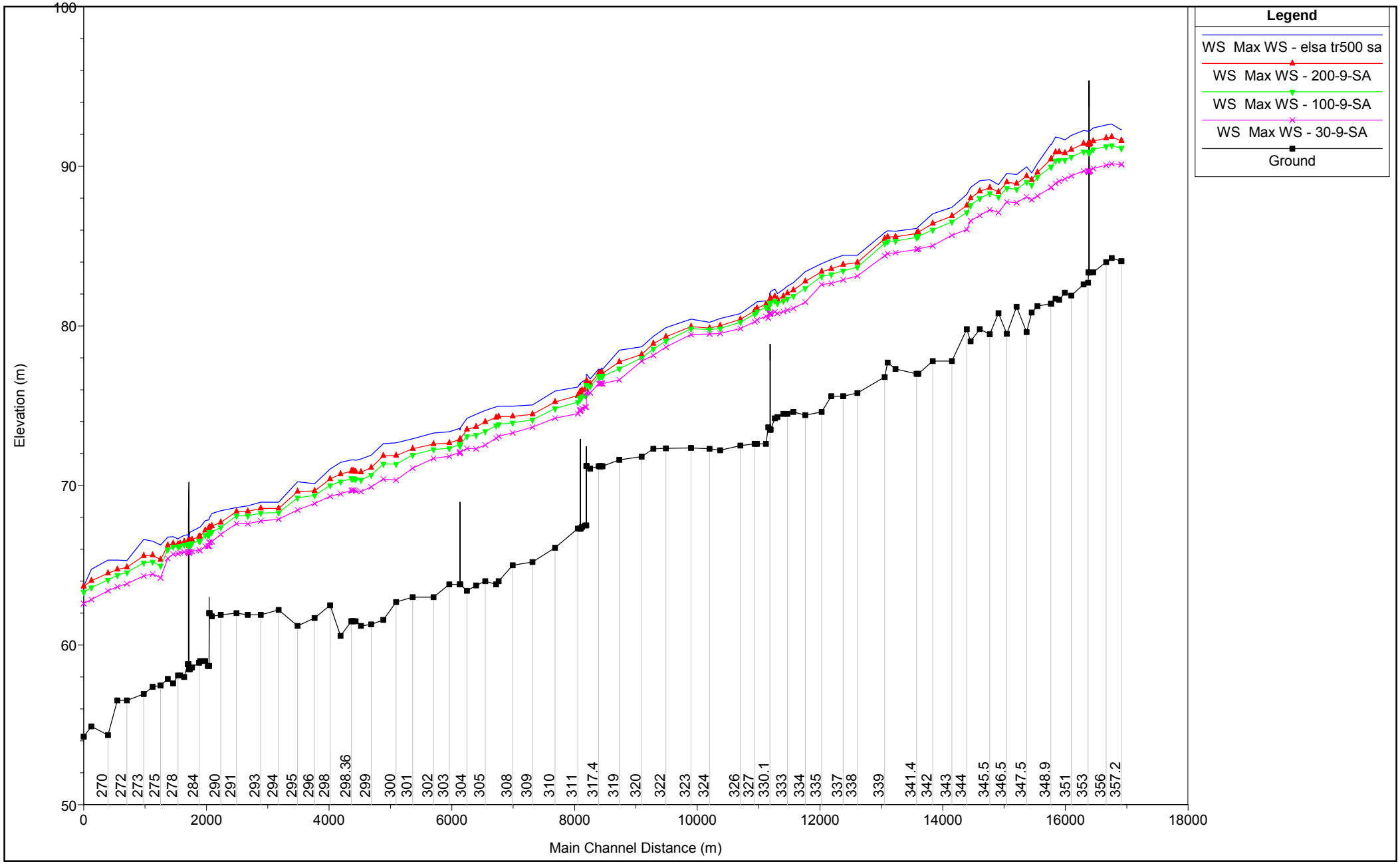
Storage Area	Profile	Plan	W.S. Elev	SA Min El	Net Flux	SA Area	SA Volume
			(m)	(m)	(m3/s)	(1000 m2)	(1000 m3)
S10A	Max WS	elsa tr500 sa	69.97	63.90	5.65	234.36	538.14
S10A	Max WS	200-9-SA	69.43	63.90	2.99	234.07	410.78
S10A	Max WS	100-9-SA	69.06	63.90	2.07	233.76	324.17
S10A	Max WS	30-9-SA	68.31	63.90	0.82	230.62	150.31
S10B	Max WS	elsa tr500 sa	69.21	66.40	0.25	73.26	90.19
S10B	Max WS	200-9-SA	68.68	66.40	0.39	62.31	54.97
S10B	Max WS	100-9-SA	68.32	66.40	0.14	49.62	34.52
S10B	Max WS	30-9-SA	67.79	66.40	0.47	27.32	13.63
S11A	Max WS	elsa tr500 sa	69.11	65.20	-24.27	34.16	67.17
S11A	Max WS	200-9-SA	68.60	65.20	-16.91	33.87	50.12
S11A	Max WS	100-9-SA	68.23	65.20	-15.04	33.63	37.45
S11A	Max WS	30-9-SA	67.61	65.20	-9.56	32.94	16.89
S11B	Max WS	elsa tr500 sa	68.72	63.00	-19.75	49.22	136.34
S11B	Max WS	200-9-SA	68.35	63.00	3.97	49.18	118.28
S11B	Max WS	100-9-SA	68.07	63.00	-2.21	49.15	104.52
S11B	Max WS	30-9-SA	67.57	63.00	0.84	48.83	80.17
S11C	Max WS	elsa tr500 sa	69.17	65.80	25.73	66.91	109.26
S11C	Max WS	200-9-SA	68.64	65.80	18.96	61.91	75.09
S11C	Max WS	100-9-SA	68.28	65.80	16.62	54.86	54.13
S11C	Max WS	30-9-SA	67.76	65.80	10.42	41.04	28.69
S11D	Max WS	elsa tr500 sa	68.80	64.40	-0.09	70.22	94.10
S11D	Max WS	200-9-SA	68.45	64.40	0.81	66.90	70.37
S11D	Max WS	100-9-SA	68.16	64.40	0.88	61.16	52.19
S11D	Max WS	30-9-SA	67.71	64.40	0.43	44.40	28.44
S11E	Max WS	elsa tr500 sa	68.79	63.10	21.86	122.89	203.70
S11E	Max WS	200-9-SA	68.44	63.10	12.08	121.13	161.60
S11E	Max WS	100-9-SA	68.15	63.10	6.24	117.31	127.40
S11E	Max WS	30-9-SA	67.57	63.10	1.18	81.74	71.03
S12A	Max WS	elsa tr500 sa	68.28	63.40	0.95	31.52	103.27
S12A	Max WS	200-9-SA	67.54	63.40	6.35	31.52	80.18
S12A	Max WS	100-9-SA	67.19	63.40	0.35	31.34	68.97
S12A	Max WS	30-9-SA	66.54	63.40	0.07	30.59	48.74
S12B	Max WS	elsa tr500 sa	67.93	60.40	0.24	120.21	150.09
S12B	Max WS	200-9-SA	67.27	60.40	0.30	84.55	82.05
S12B	Max WS	100-9-SA	66.95	60.40	0.42	64.35	57.96
S12B	Max WS	30-9-SA	66.21	60.40	2.16	37.83	19.76
S13A	Max WS	elsa tr500 sa	66.39	62.10	5.39	95.59	236.91
S13A	Max WS	200-9-SA	65.46	62.10	5.69	80.17	153.38
S13A	Max WS	100-9-SA	65.13	62.10	0.46	74.32	128.67
S13A	Max WS	30-9-SA	64.53	62.10	0.50	68.19	85.80
S13B	Max WS	elsa tr500 sa	65.09	57.90	0.05	173.52	473.19
S13B	Max WS	200-9-SA	64.29	57.90	1.65	147.11	344.27
S13B	Max WS	100-9-SA	61.53	57.90	2.36	72.03	21.76
S13B	Max WS	30-9-SA	57.90	57.90	0.00	0.00	0.00
S1A	Max WS	elsa tr500 sa	91.59	89.10	0.12	56.11	45.12
S1A	Max WS	200-9-SA	90.20	89.10	0.18	1.38	0.36
S1A	Max WS	100-9-SA	89.10	89.10	0.00	0.00	0.00
S1A	Max WS	30-9-SA	89.10	89.10	0.00	0.00	0.00
S1B	Max WS	elsa tr500 sa	91.60	86.70	0.27	54.61	101.82
S1B	Max WS	200-9-SA	90.72	86.70	0.02	47.86	57.15
S1B	Max WS	100-9-SA	90.23	86.70	0.61	39.41	35.36
S1B	Max WS	30-9-SA	86.70	86.70	0.00	0.01	0.00

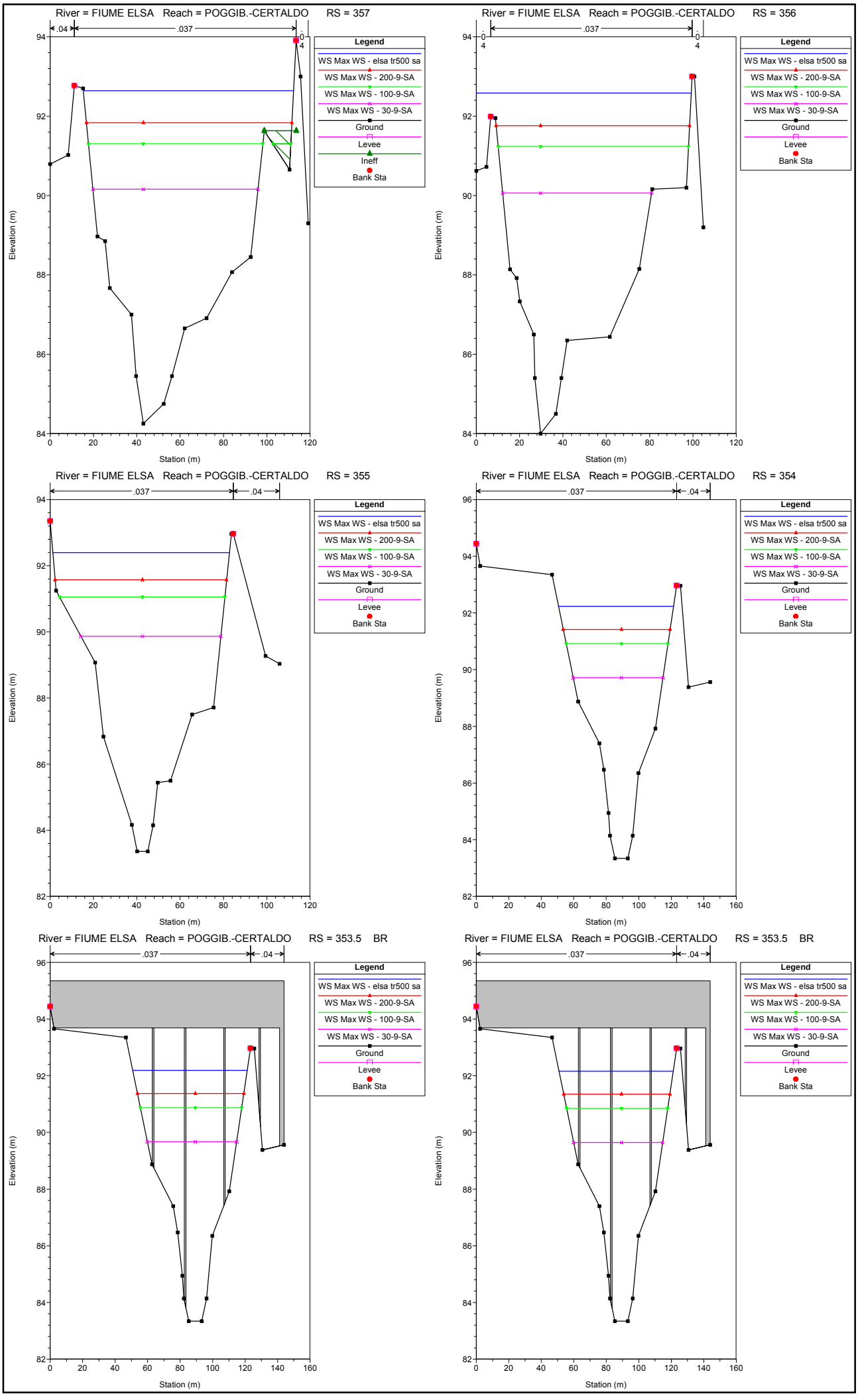
HEC-RAS Profile: Max WS (Continued)

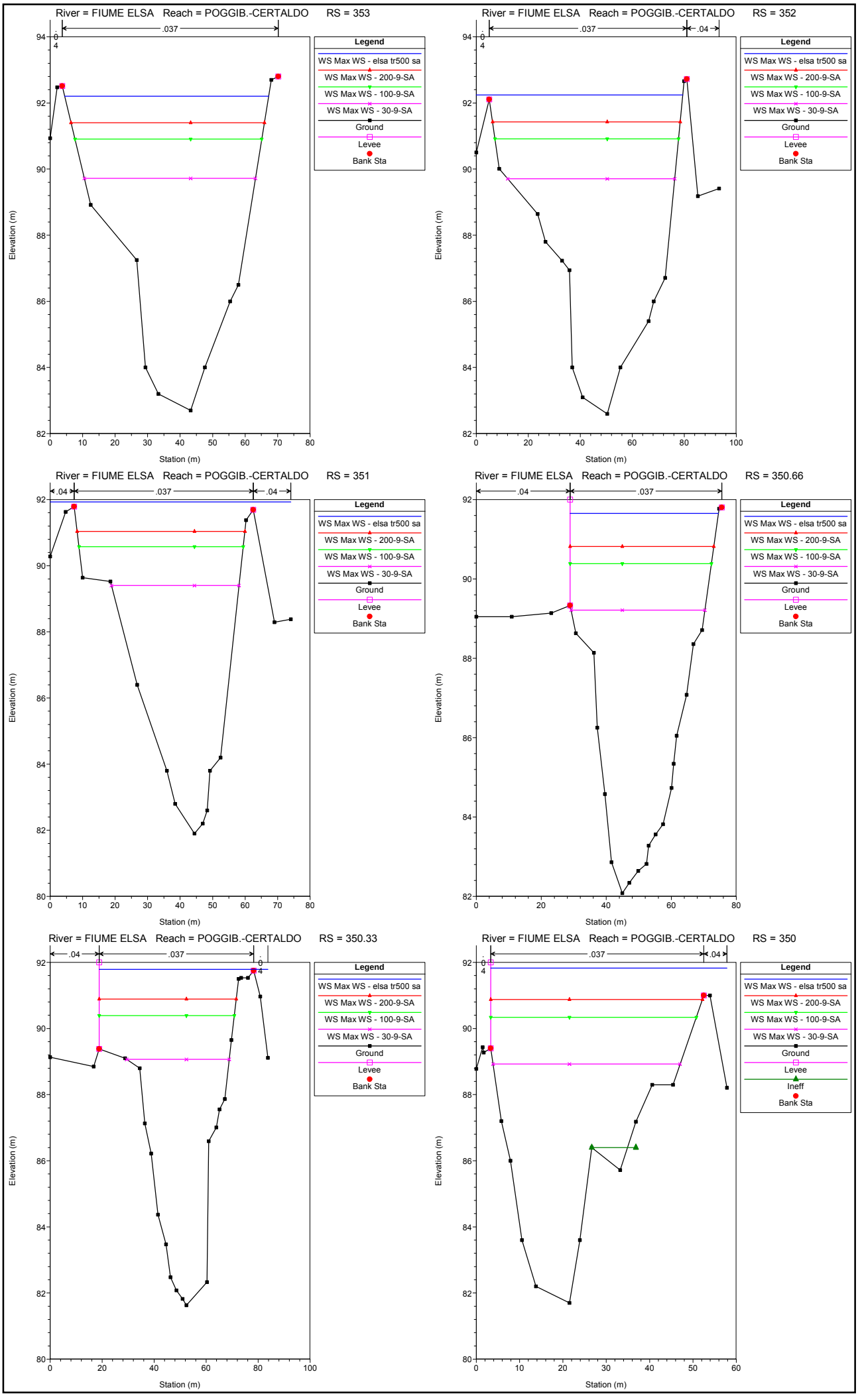
Storage Area	Profile	Plan	W.S. Elev	SA Min El	Net Flux	SA Area	SA Volume
			(m)	(m)	(m3/s)	(1000 m2)	(1000 m3)
S1C	Max WS	elsa tr500 sa	91.60	89.20	0.07	43.61	26.46
S1C	Max WS	200-9-SA	89.20	89.20	0.00	0.01	0.00
S1C	Max WS	100-9-SA	89.20	89.20	0.00	0.01	0.00
S1C	Max WS	30-9-SA	89.20	89.20	0.00	0.01	0.00
S2A	Max WS	elsa tr500 sa	91.03	82.70	0.14	53.43	81.90
S2A	Max WS	200-9-SA	90.39	82.70	0.10	45.69	49.81
S2A	Max WS	100-9-SA	89.99	82.70	0.42	35.84	32.31
S2A	Max WS	30-9-SA	82.70	82.70	0.00	0.00	0.00
S2B	Max WS	elsa tr500 sa	89.03	82.50	13.58	120.77	189.80
S2B	Max WS	200-9-SA	88.53	82.50	8.93	100.87	134.35
S2B	Max WS	100-9-SA	88.20	82.50	9.48	91.92	102.75
S2B	Max WS	30-9-SA	87.33	82.50	0.86	54.01	42.78
S2C	Max WS	elsa tr500 sa	86.35	83.70	0.87	49.14	38.01
S2C	Max WS	200-9-SA	85.49	83.70	0.17	20.39	9.81
S2C	Max WS	100-9-SA	85.13	83.70	0.20	11.83	3.69
S2C	Max WS	30-9-SA	83.70	83.70	0.00	0.01	0.00
S3A	Max WS	elsa tr500 sa	85.30	81.20	1.24	278.88	460.13
S3A	Max WS	200-9-SA	84.93	81.20	0.61	259.02	359.86
S3A	Max WS	100-9-SA	84.67	81.20	1.09	235.22	295.81
S3A	Max WS	30-9-SA	82.82	81.20	2.29	504.11	11.24
S3B	Max WS	elsa tr500 sa	84.31	79.90	-0.15	180.67	166.19
S3B	Max WS	200-9-SA	83.69	79.90	0.02	105.96	77.19
S3B	Max WS	100-9-SA	83.30	79.90	0.76	71.12	43.12
S3B	Max WS	30-9-SA	82.53	79.90	0.55	19.94	7.33
S4A	Max WS	elsa tr500 sa	82.40	78.60	1.77	230.97	119.03
S4A	Max WS	200-9-SA	82.12	78.60	0.75	156.07	65.39
S4A	Max WS	100-9-SA	82.01	78.60	0.76	156.07	48.32
S4A	Max WS	30-9-SA	81.57	78.60	1.05	38.26	10.46
S4B	Max WS	elsa tr500 sa	81.09	75.20	4.14	275.19	271.98
S4B	Max WS	200-9-SA	80.28	75.20	1.07	152.01	101.06
S4B	Max WS	100-9-SA	79.70	75.20	0.17	72.48	38.90
S4B	Max WS	30-9-SA	78.85	75.20	-0.06	16.63	5.05
S5	Max WS	elsa tr500 sa	80.14	74.30	5.27	764.32	1665.08
S5	Max WS	200-9-SA	79.57	74.30	8.83	734.73	1233.31
S5	Max WS	100-9-SA	78.98	74.30	18.98	646.25	809.91
S5	Max WS	30-9-SA	78.09	74.30	8.69	407.64	330.49
S6A	Max WS	elsa tr500 sa	78.98	74.10	2.02	95.66	277.34
S6A	Max WS	200-9-SA	78.51	74.10	0.24	95.61	232.73
S6A	Max WS	100-9-SA	78.13	74.10	0.88	95.29	196.67
S6A	Max WS	30-9-SA	77.56	74.10	2.91	94.31	142.24
S6B	Max WS	elsa tr500 sa	76.32	73.00	0.45	111.62	120.07
S6B	Max WS	200-9-SA	75.75	73.00	0.86	83.51	62.59
S6B	Max WS	100-9-SA	75.43	73.00	0.69	71.71	38.03
S6B	Max WS	30-9-SA	74.96	73.00	0.29	30.30	13.31
S6C	Max WS	elsa tr500 sa	78.00	73.30	4.18	65.43	161.77
S6C	Max WS	200-9-SA	77.47	73.30	0.95	65.42	126.78
S6C	Max WS	100-9-SA	77.12	73.30	2.18	65.34	104.00
S6C	Max WS	30-9-SA	76.51	73.30	1.74	64.65	64.15
S7A	Max WS	elsa tr500 sa	76.05	67.50	1.72	171.78	291.24
S7A	Max WS	200-9-SA	75.41	67.50	1.36	159.90	187.06
S7A	Max WS	100-9-SA	74.99	67.50	-0.23	128.45	123.00
S7A	Max WS	30-9-SA	74.43	67.50	0.03	90.77	61.31

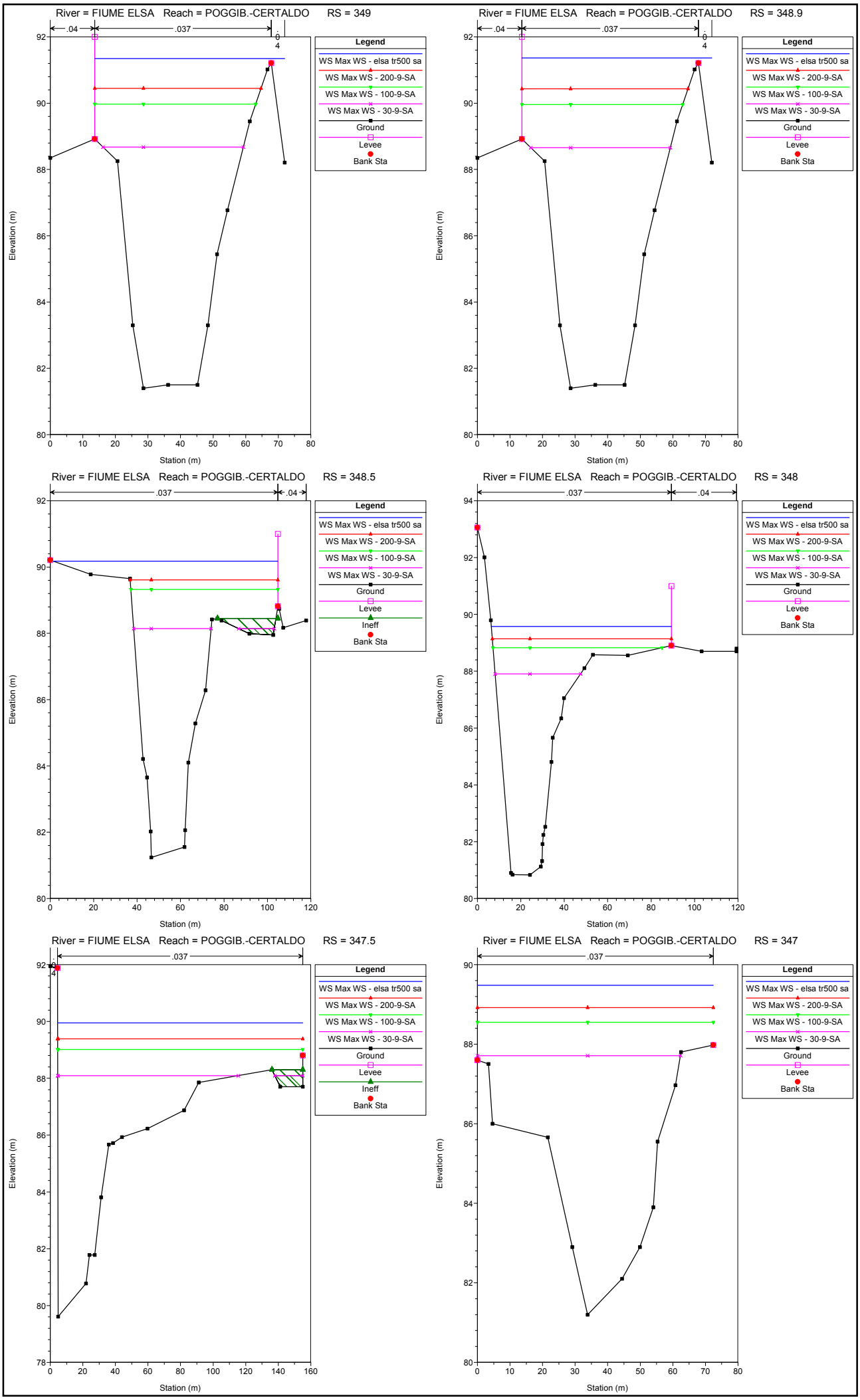
HEC-RAS Profile: Max WS (Continued)

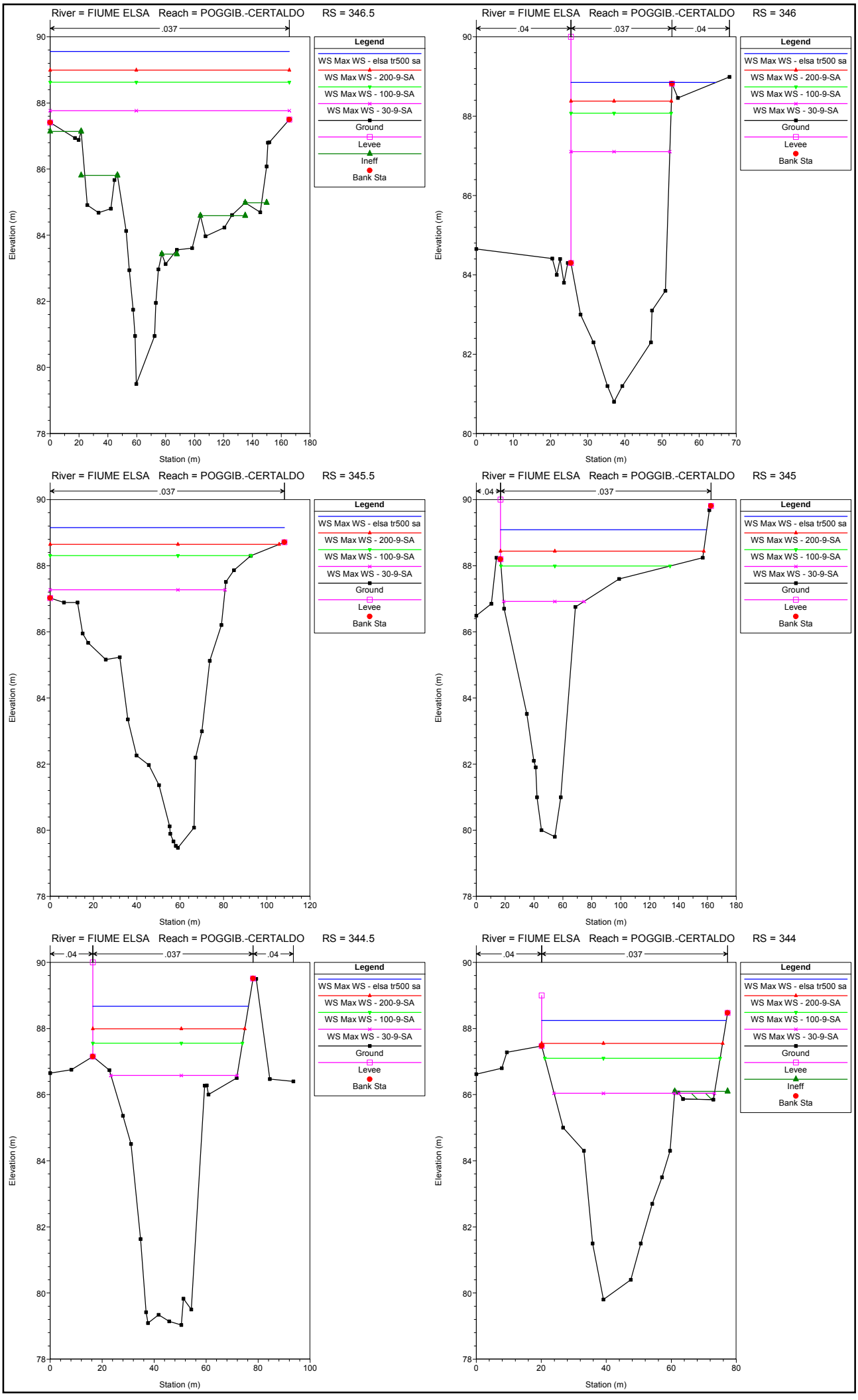
Storage Area	Profile	Plan	W.S. Elev	SA Min El	Net Flux	SA Area	SA Volume
			(m)	(m)	(m3/s)	(1000 m2)	(1000 m3)
S7B	Max WS	elsa tr500 sa	75.18	69.80	4.07	46.23	74.65
S7B	Max WS	200-9-SA	74.49	69.80	1.17	44.05	43.17
S7B	Max WS	100-9-SA	74.05	69.80	0.41	42.17	24.55
S7B	Max WS	30-9-SA	73.07	69.80	0.13	1.43	0.58
S8	Max WS	elsa tr500 sa	74.81	65.70	7.63	124.88	274.36
S8	Max WS	200-9-SA	74.15	65.70	8.32	116.46	195.23
S8	Max WS	100-9-SA	73.66	65.70	1.87	111.53	139.24
S8	Max WS	30-9-SA	72.62	65.70	0.49	82.16	37.36
S9A	Max WS	elsa tr500 sa	73.32	66.90	2.79	67.12	116.53
S9A	Max WS	200-9-SA	72.63	66.90	2.05	62.55	71.64
S9A	Max WS	100-9-SA	72.29	66.90	0.46	58.31	51.18
S9A	Max WS	30-9-SA	71.75	66.90	0.20	48.61	22.00
S9B	Max WS	elsa tr500 sa	72.98	66.00	7.07	173.01	376.06
S9B	Max WS	200-9-SA	72.30	66.00	6.78	166.57	260.48
S9B	Max WS	100-9-SA	71.89	66.00	2.31	160.84	193.71
S9B	Max WS	30-9-SA	70.99	66.00	1.33	104.95	63.00
S9C	Max WS	elsa tr500 sa	72.79	65.00	3.41	60.05	145.22
S9C	Max WS	200-9-SA	71.99	65.00	2.78	54.98	98.44
S9C	Max WS	100-9-SA	71.44	65.00	0.74	50.84	69.39
S9C	Max WS	30-9-SA	70.23	65.00	2.27	36.08	16.85

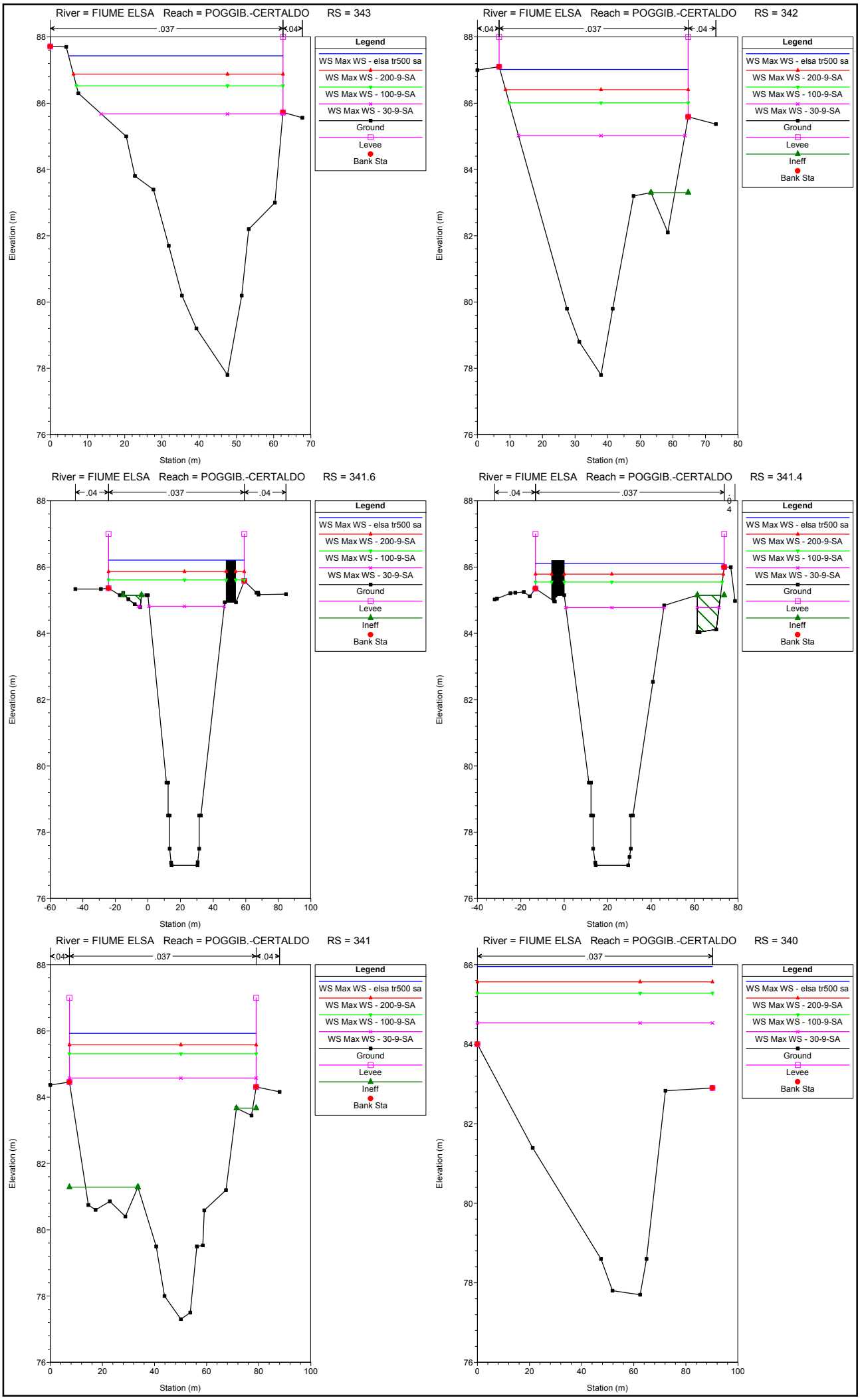

Legend
WS Max WS - elsa tr500 sa
WS Max WS - 200-9-SA
WS Max WS - 100-9-SA
WS Max WS - 30-9-SA
Ground
Elevation (m)
Main Channel Distance (m)
100
90
80
70
60
50
0
2000
4000
6000
8000
10000
12000
14000
16000
18000
270
272
273
275
278
284
290
291
293
294
295
296
298
298.36
299
300
301
302
303
304
305
308
309
310
311
317.4
319
320
322
323
324
326
327
330.1
333
334
335
337
338
339
341.4
342
343
344
345.5
346.5
347.5
348.9
351
353
356
357.2

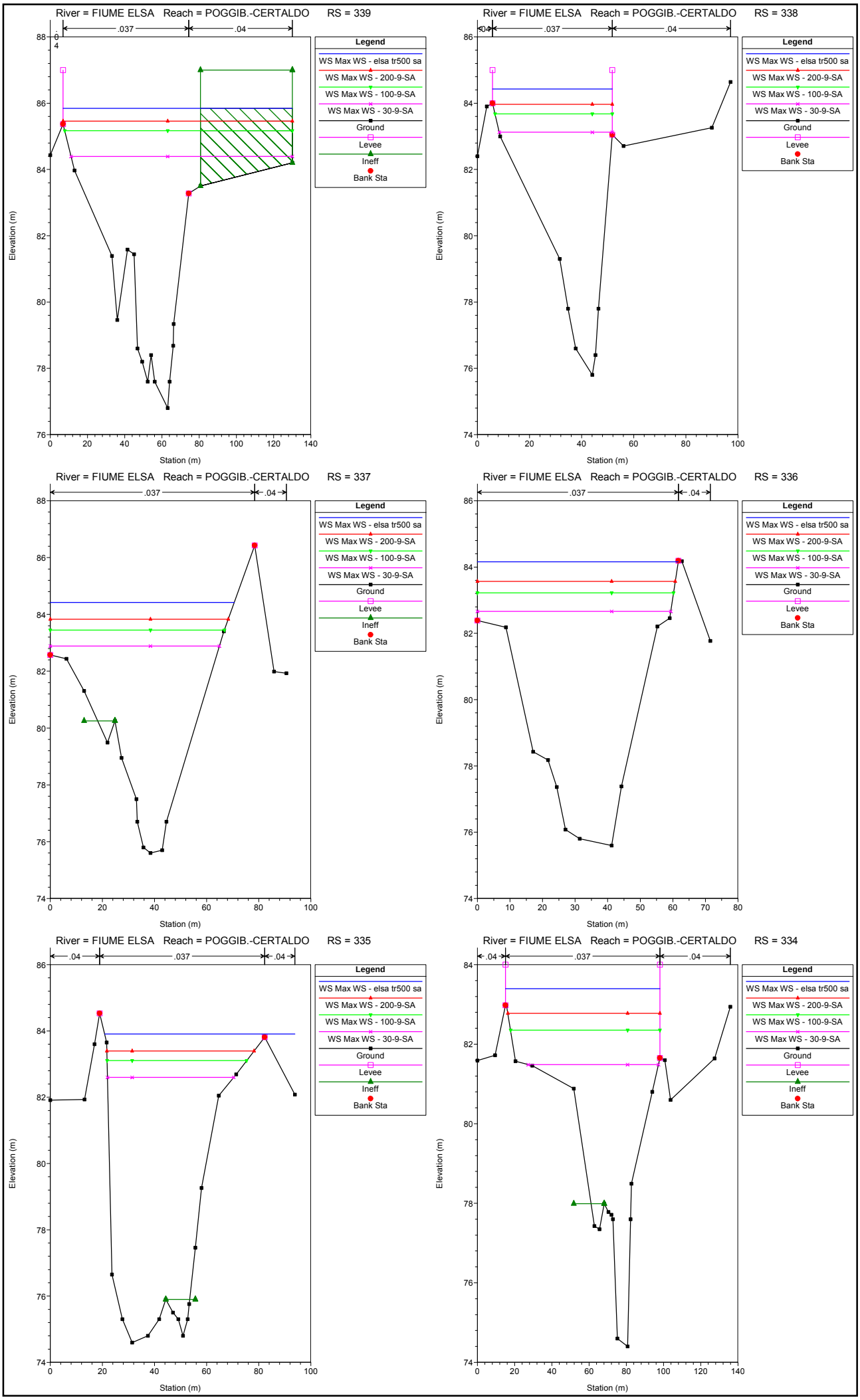

River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 357
.04
.037
0
4
Legend
WS Max WS - elsa tr500 sa
WS Max WS - 200-9-SA
WS Max WS - 100-9-SA
WS Max WS - 30-9-SA
Ground
Levee
Ineff
Bank Sta
Elevation (m)
Station (m)
River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 356
.037
0
4
Legend
WS Max WS - elsa tr500 sa
WS Max WS - 200-9-SA
WS Max WS - 100-9-SA
WS Max WS - 30-9-SA
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 355
.037
.04
Legend
WS Max WS - elsa tr500 sa
WS Max WS - 200-9-SA
WS Max WS - 100-9-SA
WS Max WS - 30-9-SA
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 354
.037
.04
Legend
WS Max WS - elsa tr500 sa
WS Max WS - 200-9-SA
WS Max WS - 100-9-SA
WS Max WS - 30-9-SA
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 353.5 BR
.037
.04
Legend
WS Max WS - elsa tr500 sa
WS Max WS - 200-9-SA
WS Max WS - 100-9-SA
WS Max WS - 30-9-SA
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 353.5 BR
.037
.04
Legend
WS Max WS - elsa tr500 sa
WS Max WS - 200-9-SA
WS Max WS - 100-9-SA
WS Max WS - 30-9-SA
Ground
Levee
Bank Sta
Elevation (m)
Station (m)


River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 353
River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 352
River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 351
River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 350.66
River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 350.33
River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 350
Legend
WS Max WS - elsa tr500 sa
WS Max WS - 200-9-SA
WS Max WS - 100-9-SA
WS Max WS - 30-9-SA
Ground
Levee
Ineff
Bank Sta
Elevation (m)
Station (m)


River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 349
River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 348.9
River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 348.5
River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 348
River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 347.5
River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 347
.04
.037
Legend
WS Max WS - elsa tr500 sa
WS Max WS - 200-9-SA
WS Max WS - 100-9-SA
WS Max WS - 30-9-SA
Ground
Levee
Ineff
Bank Sta
Elevation (m)
Station (m)


River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 346.5
.037
Legend
WS Max WS - elsa tr500 sa
WS Max WS - 200-9-SA
WS Max WS - 100-9-SA
WS Max WS - 30-9-SA
Ground
Levee
Ineff
Bank Sta
Elevation (m)
Station (m)
River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 346
.04
.037
.04
Legend
WS Max WS - elsa tr500 sa
WS Max WS - 200-9-SA
WS Max WS - 100-9-SA
WS Max WS - 30-9-SA
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 345.5
.037
Legend
WS Max WS - elsa tr500 sa
WS Max WS - 200-9-SA
WS Max WS - 100-9-SA
WS Max WS - 30-9-SA
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 345
.04
.037
Legend
WS Max WS - elsa tr500 sa
WS Max WS - 200-9-SA
WS Max WS - 100-9-SA
WS Max WS - 30-9-SA
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 344.5
.04
.037
.04
Legend
WS Max WS - elsa tr500 sa
WS Max WS - 200-9-SA
WS Max WS - 100-9-SA
WS Max WS - 30-9-SA
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 344
.04
.037
Legend
WS Max WS - elsa tr500 sa
WS Max WS - 200-9-SA
WS Max WS - 100-9-SA
WS Max WS - 30-9-SA
Ground
Levee
Ineff
Bank Sta
Elevation (m)
Station (m)


River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 343
River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 342
River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 341.6
River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 341.4
River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 341
River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 340
.04
.037
Legend
WS Max WS - elsa tr500 sa
WS Max WS - 200-9-SA
WS Max WS - 100-9-SA
WS Max WS - 30-9-SA
Ground
Levee
Ineff
Bank Sta
Elevation (m)
Station (m)


River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 339
.037
.04
Legend
WS Max WS - elsa tr500 sa
WS Max WS - 200-9-SA
WS Max WS - 100-9-SA
WS Max WS - 30-9-SA
Ground
Levee
Ineff
Bank Sta
Elevation (m)
Station (m)
River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 338
.04
.037
.04
Legend
WS Max WS - elsa tr500 sa
WS Max WS - 200-9-SA
WS Max WS - 100-9-SA
WS Max WS - 30-9-SA
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 337
.037
.04
Legend
WS Max WS - elsa tr500 sa
WS Max WS - 200-9-SA
WS Max WS - 100-9-SA
WS Max WS - 30-9-SA
Ground
Levee
Ineff
Bank Sta
Elevation (m)
Station (m)
River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 336
.037
.04
Legend
WS Max WS - elsa tr500 sa
WS Max WS - 200-9-SA
WS Max WS - 100-9-SA
WS Max WS - 30-9-SA
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 335
.04
.037
.04
Legend
WS Max WS - elsa tr500 sa
WS Max WS - 200-9-SA
WS Max WS - 100-9-SA
WS Max WS - 30-9-SA
Ground
Levee
Ineff
Bank Sta
Elevation (m)
Station (m)
River = FIUME ELSA Reach = POGGIB.-CERTALDO RS = 334
.04
.037
.04
Legend
WS Max WS - elsa tr500 sa
WS Max WS - 200-9-SA
WS Max WS - 100-9-SA
WS Max WS - 30-9-SA
Ground
Levee
Ineff
Bank Sta
Elevation (m)
Station (m)

HEC-RAS River: ELSA Reach: ELSA MONTE Profile: Max WS

Reach	River Sta	Profile	Plan	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)	
ELSA MONTE	398	Max WS	500_6	540.43	109.60	116.73		117.48	0.003829	3.95	147.71	40.88	0.59
ELSA MONTE	398	Max WS	200-6	430.30	109.60	116.14		116.81	0.003897	3.69	124.46	38.94	0.58
ELSA MONTE	398	Max WS	100-6	359.59	109.60	115.75		116.35	0.003805	3.47	109.13	38.27	0.57
ELSA MONTE	398	Max WS	30-6	257.77	109.60	115.13		115.59	0.003428	3.02	86.36	32.38	0.53
ELSA MONTE	397.9	Max WS	500_6	540.41	109.22	117.06	113.64	117.39	0.000958	2.75	232.97	41.67	0.33
ELSA MONTE	397.9	Max WS	200-6	430.35	109.22	116.46	113.19	116.72	0.000838	2.42	208.27	40.35	0.30
ELSA MONTE	397.9	Max WS	100-6	359.62	109.22	116.04	112.87	116.25	0.000744	2.18	191.63	39.44	0.28
ELSA MONTE	397.9	Max WS	30-6	257.78	109.22	115.37	112.36	115.51	0.000585	1.79	165.48	37.95	0.25
ELSA MONTE	397.5			Bridge									
ELSA MONTE	397.1	Max WS	500_6	540.40	109.22	116.83		117.18	0.001082	2.86	223.28	41.16	0.35
ELSA MONTE	397.1	Max WS	200-6	430.33	109.22	116.30		116.57	0.000918	2.49	201.78	40.00	0.32
ELSA MONTE	397.1	Max WS	100-6	359.61	109.22	115.92		116.14	0.000800	2.23	186.86	39.17	0.29
ELSA MONTE	397.1	Max WS	30-6	257.78	109.22	115.29		115.44	0.000614	1.82	162.72	37.79	0.25
ELSA MONTE	396	Max WS	500_6	540.38	109.98	115.96		117.11	0.007019	4.79	115.60	35.62	0.79
ELSA MONTE	396	Max WS	200-6	430.32	109.98	115.47		116.46	0.007193	4.42	98.76	33.65	0.79
ELSA MONTE	396	Max WS	100-6	359.60	109.98	115.14		116.00	0.007236	4.12	87.88	32.32	0.77
ELSA MONTE	396	Max WS	30-6	257.76	109.98	114.61		115.28	0.007122	3.63	71.20	30.17	0.75
ELSA MONTE	395	Max WS	500_6	540.15	107.40	114.01		114.25	0.001290	2.41	270.02	78.80	0.36
ELSA MONTE	395	Max WS	200-6	430.13	107.40	113.42		113.65	0.001432	2.32	223.64	78.80	0.37
ELSA MONTE	395	Max WS	100-6	359.40	107.40	113.02		113.24	0.001548	2.25	191.96	78.17	0.37
ELSA MONTE	395	Max WS	30-6	257.49	107.40	112.31		112.52	0.001914	2.17	138.70	72.46	0.40
ELSA MONTE	394.9	Max WS	500_6	547.16	108.24	113.76	112.18	114.25	0.001576	3.09	177.04	45.49	0.50
ELSA MONTE	394.9	Max WS	200-6	435.33	108.24	113.22	111.79	113.63	0.001560	2.85	152.61	44.17	0.49
ELSA MONTE	394.9	Max WS	100-6	363.62	108.24	112.85	111.52	113.21	0.001526	2.66	136.54	43.29	0.48
ELSA MONTE	394.9	Max WS	30-6	260.21	108.24	112.20	111.10	112.49	0.001555	2.39	109.07	41.73	0.47
ELSA MONTE	394.5			Bridge									
ELSA MONTE	394.1	Max WS	500_6	547.03	108.24	113.32		113.94	0.002252	3.48	157.22	44.43	0.59
ELSA MONTE	394.1	Max WS	200-6	435.24	108.24	112.95		113.44	0.001984	3.09	140.96	43.53	0.55
ELSA MONTE	394.1	Max WS	100-6	363.54	108.24	112.66		113.07	0.001841	2.83	128.37	42.83	0.52
ELSA MONTE	394.1	Max WS	30-6	260.13	108.24	112.08		112.40	0.001804	2.50	103.92	41.43	0.50
ELSA MONTE	393	Max WS	500_6	547.07	106.72	113.35		113.75	0.002523	2.86	208.96	75.42	0.47
ELSA MONTE	393	Max WS	200-6	435.23	106.72	112.91		113.26	0.002552	2.67	175.53	74.94	0.47
ELSA MONTE	393	Max WS	100-6	363.52	106.72	112.57		112.89	0.002615	2.53	150.63	70.98	0.47
ELSA MONTE	393	Max WS	30-6	260.11	106.72	111.93		112.21	0.002977	2.33	111.72	51.01	0.48
ELSA MONTE	392.888*	Max WS	500_6	546.98	106.21	112.98		113.39	0.002622	2.93	204.85	75.02	0.48
ELSA MONTE	392.888*	Max WS	200-6	435.15	106.21	112.53		112.90	0.002656	2.74	171.27	74.33	0.48
ELSA MONTE	392.888*	Max WS	100-6	363.40	106.21	112.18		112.52	0.002739	2.60	146.01	68.76	0.48
ELSA MONTE	392.888*	Max WS	30-6	260.01	106.21	111.47		111.78	0.003380	2.47	105.18	44.41	0.51
ELSA MONTE	392.777*	Max WS	500_6	546.91	105.69	112.59		113.02	0.002742	3.00	200.59	74.87	0.50
ELSA MONTE	392.777*	Max WS	200-6	435.06	105.69	112.14		112.53	0.002782	2.81	166.80	74.00	0.49
ELSA MONTE	392.777*	Max WS	100-6	363.30	105.69	111.77		112.14	0.002883	2.68	141.13	66.24	0.49
ELSA MONTE	392.777*	Max WS	30-6	259.94	105.69	110.92		111.28	0.003805	2.67	97.39	39.90	0.55
ELSA MONTE	392.666*	Max WS	500_6	546.84	105.19	112.18		112.63	0.002876	3.06	196.36	74.97	0.51
ELSA MONTE	392.666*	Max WS	200-6	435.02	105.19	111.71		112.13	0.002952	2.88	161.59	73.61	0.51
ELSA MONTE	392.666*	Max WS	100-6	363.23	105.19	111.34		111.72	0.003079	2.76	135.70	62.67	0.51
ELSA MONTE	392.666*	Max WS	30-6	259.91	105.19	110.35		110.77	0.004530	2.88	90.25	37.49	0.59
ELSA MONTE	392.555*	Max WS	500_6	546.77	104.68	111.76		112.23	0.003003	3.12	192.16	75.10	0.52
ELSA MONTE	392.555*	Max WS	200-6	434.96	104.68	111.27		111.71	0.003144	2.96	156.15	71.28	0.52
ELSA MONTE	392.555*	Max WS	100-6	363.17	104.68	110.86		111.28	0.003354	2.86	129.67	57.76	0.53
ELSA MONTE	392.555*	Max WS	30-6	259.89	104.68	109.86		110.29	0.003255	2.91	89.38	27.84	0.52
ELSA MONTE	392.444*	Max WS	500_6	546.73	104.17	111.31		111.80	0.003136	3.18	188.04	75.55	0.53
ELSA MONTE	392.444*	Max WS	200-6	434.90	104.17	110.80		111.26	0.003316	3.02	150.74	68.66	0.53
ELSA MONTE	392.444*	Max WS	100-6	363.14	104.17	110.35		110.79	0.003717	2.96	123.37	50.75	0.55
ELSA MONTE	392.444*	Max WS	30-6	259.88	104.17	109.43		109.85	0.003128	2.85	91.14	28.30	0.51
ELSA MONTE	392.333*	Max WS	500_6	546.70	103.66	110.84		111.35	0.003363	3.22	183.89	77.47	0.54
ELSA MONTE	392.333*	Max WS	200-6	434.87	103.66	110.32		110.79	0.003419	3.07	146.38	64.40	0.54
ELSA MONTE	392.333*	Max WS	100-6	363.13	103.66	109.82		110.29	0.003787	3.02	120.18	40.09	0.56
ELSA MONTE	392.333*	Max WS	30-6	259.88	103.66	109.04		109.42	0.002919	2.76	94.15	29.04	0.49
ELSA MONTE	392.222*	Max WS	500_6	546.68	103.15	110.37		110.89	0.003252	3.21	183.01	77.84	0.53
ELSA MONTE	392.222*	Max WS	200-6	434.87	103.15	109.84		110.32	0.003508	3.06	144.75	60.42	0.54
ELSA MONTE	392.222*	Max WS	100-6	363.13	103.15	109.37		109.82	0.003132	2.96	122.77	36.02	0.51
ELSA MONTE	392.222*	Max WS	30-6	259.87	103.15	108.67		109.03	0.002908	2.64	98.48	32.49	0.48
ELSA MONTE	392.111*	Max WS	500_6	546.66	102.64	109.99		110.47	0.002803	3.09	189.32	75.90	0.50
ELSA MONTE	392.111*	Max WS	200-6	434.85	102.64	109.42		109.86	0.003108	2.93	150.08	58.56	0.51
ELSA MONTE	392.111*	Max WS	100-6	363.11	102.64	109.01		109.40	0.002973	2.78	130.61	40.52	0.49
ELSA MONTE	392.111*	Max WS	30-6	259.86	102.64	108.34		108.65	0.002606	2.46	105.74	35.75	0.46
ELSA MONTE	392	Max WS	500_6	541.99	102.13	109.70		110.10	0.002236	2.85	203.40	75.55	0.44
ELSA MONTE	392	Max WS	200-6	431.41	102.13	109.11		109.48	0.002372	2.68	162.69	58.67	0.44
ELSA MONTE	392	Max WS	100-6	363.04	102.13	108.72		109.04	0.002330	2.52	143.95	42.30	0.44
ELSA MONTE	392	Max WS	30-6	259.83	102.13	108.07		108.32	0.002061	2.23	116.78	38.20	0.41
ELSA MONTE	391.9	Max WS	500_6	550.62	102.03	109.23	108.18	110.04	0.004717	4.53	147.49	35.13	0.60
ELSA MONTE	391.9	Max WS	200-6	437.86	102.03	108.76	107.69	109.41	0.004242	4.06	131.04	35.13	0.56
ELSA MONTE	391.9	Max WS	100-6	365.65	102.03	108.43	107.41	108.98	0.003897	3.73	119.40	35.13	0.53
ELSA MONTE	391.9	Max WS	30-6	261.63	102.03	107.86	106.92	108.28	0.003398	3.21	99.46	34.68	0.49
ELSA MONTE	391.5			Bridge									
ELSA MONTE	391.1	Max WS	500_6	550.62	102.03	109.06		109.93	0.005352	4.73	141.37	35.13	0.64
ELSA MONTE	391.1	Max WS	200-6	437.86	102.03	108.62		109.33	0.004751	4.22	126.13	35.13	0.59
ELSA MONTE	391.1	Max WS	100-6	365.65	102.03	108.31		108.91	0.004322	3.87	115.29	35.13	0.56

HEC-RAS River: ELSA Reach: ELSA MONTE Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	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)	
ELSA MONTE	391.1	Max WS	30-6	261.63	102.03	107.77		108.21	0.003744	3.32	96.16	34.53	0.51
ELSA MONTE	390	Max WS	500_6	550.62	102.81	108.94		109.53	0.003155	3.64	186.65	75.92	0.55
ELSA MONTE	390	Max WS	200-6	437.85	102.81	108.50		109.04	0.003187	3.41	153.16	75.92	0.54
ELSA MONTE	390	Max WS	100-6	365.64	102.81	108.18		108.70	0.003200	3.24	123.28	50.56	0.53
ELSA MONTE	390	Max WS	30-6	261.61	102.81	107.62		108.02	0.003004	2.82	95.64	46.34	0.50
ELSA MONTE	389	Max WS	500_6	550.61	102.12	108.39	107.65	109.36	0.005945	4.47	140.78	74.65	0.71
ELSA MONTE	389	Max WS	200-6	437.85	102.12	108.12	107.07	108.89	0.005014	3.92	121.13	74.65	0.65
ELSA MONTE	389	Max WS	100-6	365.63	102.12	107.92		108.55	0.004327	3.51	105.86	54.45	0.60
ELSA MONTE	389	Max WS	30-6	261.61	102.12	107.49		107.90	0.003191	2.86	91.44	27.99	0.51
ELSA MONTE	388	Max WS	500_6	550.60	102.27	108.52		109.23	0.003445	3.82	163.60	67.87	0.57
ELSA MONTE	388	Max WS	200-6	437.84	102.27	108.18		108.74	0.002963	3.37	141.25	62.80	0.52
ELSA MONTE	388	Max WS	100-6	365.62	102.27	107.94		108.39	0.002563	3.01	126.88	56.83	0.48
ELSA MONTE	388	Max WS	30-6	261.60	102.27	107.49		107.79	0.001914	2.44	108.11	34.90	0.41
ELSA MONTE	387	Max WS	500_6	550.59	102.16	108.47		108.99	0.003322	3.55	196.02	84.79	0.55
ELSA MONTE	387	Max WS	200-6	437.83	102.16	108.05		108.54	0.003406	3.36	162.49	77.17	0.55
ELSA MONTE	387	Max WS	100-6	365.61	102.16	107.75		108.21	0.003456	3.21	140.16	73.23	0.54
ELSA MONTE	387	Max WS	30-6	261.58	102.16	107.21		107.63	0.003454	2.96	102.17	62.77	0.53
ELSA MONTE	386.988*	Max WS	500_6	550.62	101.88	108.13		108.66	0.003310	3.55	194.03	84.12	0.55
ELSA MONTE	386.988*	Max WS	200-6	437.85	101.88	107.71		108.20	0.003385	3.35	160.59	76.36	0.55
ELSA MONTE	386.988*	Max WS	100-6	365.61	101.88	107.41		107.87	0.003429	3.19	138.39	72.22	0.54
ELSA MONTE	386.988*	Max WS	30-6	261.57	101.88	106.87		107.29	0.003473	2.94	100.82	62.96	0.54
ELSA MONTE	386.977*	Max WS	500_6	550.65	101.61	107.80		108.34	0.003273	3.54	192.77	82.63	0.55
ELSA MONTE	386.977*	Max WS	200-6	437.87	101.61	107.38		107.87	0.003345	3.33	159.33	75.31	0.55
ELSA MONTE	386.977*	Max WS	100-6	365.62	101.61	107.08		107.54	0.003355	3.16	137.60	71.61	0.54
ELSA MONTE	386.977*	Max WS	30-6	261.57	101.61	106.53		106.95	0.003464	2.91	100.12	63.79	0.54
ELSA MONTE	386.966*	Max WS	500_6	550.68	101.33	107.48		108.02	0.003204	3.51	192.36	80.87	0.55
ELSA MONTE	386.966*	Max WS	200-6	428.16	101.33	107.05		107.52	0.003124	3.23	159.08	74.20	0.53
ELSA MONTE	386.966*	Max WS	100-6	365.62	101.33	106.77		107.22	0.003224	3.11	138.23	70.94	0.53
ELSA MONTE	386.966*	Max WS	30-6	261.54	101.33	106.21		106.62	0.003398	2.86	100.61	65.35	0.53
ELSA MONTE	386.955*	Max WS	500_6	550.71	101.05	107.18		107.71	0.003096	3.47	193.01	79.04	0.54
ELSA MONTE	386.955*	Max WS	200-6	425.94	101.05	106.77		107.22	0.002884	3.12	161.99	73.54	0.51
ELSA MONTE	386.955*	Max WS	100-6	365.61	101.05	106.48		106.91	0.003004	3.02	140.90	70.17	0.52
ELSA MONTE	386.955*	Max WS	30-6	261.53	101.05	105.91		106.29	0.003229	2.78	102.54	63.69	0.52
ELSA MONTE	386.944*	Max WS	500_6	550.74	100.78	106.90		107.41	0.002936	3.40	195.12	77.25	0.53
ELSA MONTE	386.944*	Max WS	200-6	427.14	100.78	106.50		106.93	0.002687	3.04	165.53	72.56	0.50
ELSA MONTE	386.944*	Max WS	100-6	365.60	100.78	106.23		106.62	0.002686	2.90	146.25	69.60	0.49
ELSA MONTE	386.944*	Max WS	30-6	261.51	100.78	105.65		106.00	0.002807	2.65	107.41	62.56	0.49
ELSA MONTE	386.933*	Max WS	500_6	550.78	100.50	106.64		107.13	0.002725	3.30	198.93	75.58	0.51
ELSA MONTE	386.933*	Max WS	200-6	423.76	100.50	106.30		106.67	0.002286	2.86	173.83	72.02	0.46
ELSA MONTE	386.933*	Max WS	100-6	365.60	100.50	106.02		106.37	0.002302	2.73	154.42	69.22	0.46
ELSA MONTE	386.933*	Max WS	30-6	203.09	100.50	105.53		105.70	0.001253	1.85	121.83	63.72	0.33
ELSA MONTE	386.922*	Max WS	500_6	550.81	100.22	106.41		106.87	0.002469	3.19	204.60	74.03	0.49
ELSA MONTE	386.922*	Max WS	200-6	425.56	100.22	106.10		106.44	0.002007	2.73	181.91	71.04	0.44
ELSA MONTE	386.922*	Max WS	100-6	365.63	100.22	105.86		106.16	0.001905	2.55	165.15	68.85	0.42
ELSA MONTE	386.922*	Max WS	30-6	197.23	100.22	105.41		105.54	0.000902	1.63	135.54	64.08	0.28
ELSA MONTE	386.911*	Max WS	500_6	550.85	99.94	106.21		106.63	0.002191	3.05	212.00	72.55	0.46
ELSA MONTE	386.911*	Max WS	200-6	419.15	99.94	105.98		106.26	0.001578	2.50	195.31	70.47	0.39
ELSA MONTE	386.911*	Max WS	100-6	365.64	99.94	105.73		105.99	0.001537	2.36	177.96	68.37	0.38
ELSA MONTE	386.911*	Max WS	30-6	198.28	99.94	105.37		105.47	0.000660	1.45	154.10	65.45	0.25
ELSA MONTE	386.9	Max WS	500_6	550.90	99.67	106.04	104.35	106.43	0.001909	2.91	220.98	71.14	0.44
ELSA MONTE	386.9	Max WS	200-6	429.71	99.67	105.79	103.82	106.07	0.001447	2.44	203.66	69.14	0.38
ELSA MONTE	386.9	Max WS	100-6	365.66	99.67	105.62	103.52	105.85	0.001228	2.18	192.06	67.76	0.34
ELSA MONTE	386.9	Max WS	30-6	190.11	99.67	105.28	102.51	105.35	0.000469	1.27	168.94	65.14	0.21
ELSA MONTE	386.5			Bridge									
ELSA MONTE	386.1	Max WS	500_6	509.87	99.67	105.86		106.23	0.001922	2.84	208.13	69.66	0.43
ELSA MONTE	386.1	Max WS	200-6	437.92	99.67	105.30		105.70	0.002435	2.91	170.27	65.29	0.48
ELSA MONTE	386.1	Max WS	100-6	190.85	99.67	105.20		105.29	0.000560	1.38	147.19	50.52	0.23
ELSA MONTE	386.1	Max WS	30-6	190.11	99.67	105.23		105.31	0.000494	1.29	165.69	64.77	0.21
ELSA MONTE	385	Max WS	500_6	506.79	98.95	105.18		105.28	0.000735	1.77	408.66	168.89	0.27
ELSA MONTE	385	Max WS	200-6	437.90	98.95	104.54		104.69	0.001221	2.07	303.97	159.34	0.33
ELSA MONTE	385	Max WS	100-6	365.45	98.95	104.00		104.21	0.001892	2.33	221.08	145.73	0.41
ELSA MONTE	385	Max WS	30-6	261.48	98.95	103.10	102.36	103.54	0.004772	3.01	103.11	114.17	0.61
ELSA MONTE	384.9	Max WS	500_6	508.50	99.00	104.90	103.02	105.26	0.000911	2.68	193.67	48.89	0.40
ELSA MONTE	384.9	Max WS	200-6	437.91	99.00	104.30	102.78	104.66	0.001129	2.71	164.60	47.55	0.44
ELSA MONTE	384.9	Max WS	100-6	365.27	99.00	103.80	102.49	104.14	0.001280	2.64	141.10	46.43	0.46
ELSA MONTE	384.9	Max WS	30-6	261.48	99.00	103.05	101.95	103.36	0.001568	2.47	107.21	44.77	0.49
ELSA MONTE	384.5			Bridge									
ELSA MONTE	384.1	Max WS	500_6	541.42	99.00	103.69		104.51	0.003133	4.04	136.35	46.20	0.71
ELSA MONTE	384.1	Max WS	200-6	437.91	99.00	103.50		104.11	0.002530	3.49	127.61	45.78	0.63
ELSA MONTE	384.1	Max WS	100-6	365.30	99.00	103.14		103.70	0.002723	3.33	111.23	44.97	0.64
ELSA MONTE	384.1	Max WS	30-6	261.49	99.00	102.27		102.92	0.005150	3.57	73.25	39.22	0.83
ELSA MONTE	383	Max WS	500_6	550.76	97.83	103.76		104.30	0.003475	3.51	210.30	130.40	0.53
ELSA MONTE	383	Max WS	200-6	437.91	97.83	103.35		103.96	0.003953	3.53	136.42	58.30	0.56
ELSA MONTE	383	Max WS	100-6	365.31	97.83	102.97		103.54	0.003996	3.34	114.54	57.76	0.56
ELSA MONTE	383	Max WS	30-6	261.49	97.83	102.15		102.64	0.004073	3.08	84.77	26.87	0.55
ELSA MONTE	382.909*	Max WS	500_6	550.65	97.14	103.04		103.61	0.003549	3.53	199.37	126.49	0.54
ELSA MONTE	382.909*	Max WS	200-6	437.89	97.14	102.60		103.19	0.003861	3.45	136.46	60.00	0.56
ELSA MONTE	382.909*	Max WS	100-6	365.21	97.14	102.23		102.76	0.003854	3.24	115.28	49.96	0.55

HEC-RAS River: ELSA Reach: ELSA MONTE Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	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)	
ELSA MONTE	382.909*	Max WS	30-6	261.47	97.14	101.41		101.87	0.003854	3.00	87.07	28.12	0.54
ELSA MONTE	382.818*	Max WS	500_6	550.57	96.45	102.33		102.91	0.003572	3.52	191.33	118.63	0.55
ELSA MONTE	382.818*	Max WS	200-6	437.88	96.45	101.88		102.45	0.003770	3.36	137.18	59.53	0.56
ELSA MONTE	382.818*	Max WS	100-6	365.27	96.45	101.51		102.02	0.003747	3.15	117.80	45.04	0.55
ELSA MONTE	382.818*	Max WS	30-6	261.45	96.45	100.70		101.13	0.003655	2.92	89.48	29.36	0.53
ELSA MONTE	382.727*	Max WS	500_6	550.48	95.75	101.63		102.21	0.003570	3.48	186.24	112.19	0.55
ELSA MONTE	382.727*	Max WS	200-6	437.87	95.75	101.18		101.72	0.003665	3.27	139.34	56.52	0.55
ELSA MONTE	382.727*	Max WS	100-6	364.90	95.75	100.82		101.30	0.003635	3.06	119.06	36.63	0.54
ELSA MONTE	382.727*	Max WS	30-6	261.43	95.75	100.01		100.43	0.003524	2.85	91.89	30.91	0.53
ELSA MONTE	382.636*	Max WS	500_6	550.43	95.06	100.94		101.51	0.003560	3.43	183.36	106.89	0.55
ELSA MONTE	382.636*	Max WS	200-6	437.86	95.06	100.51		101.02	0.003551	3.17	142.65	54.92	0.54
ELSA MONTE	382.636*	Max WS	100-6	364.97	95.06	100.15		100.60	0.003533	2.98	122.43	38.87	0.54
ELSA MONTE	382.636*	Max WS	30-6	261.41	95.06	99.35		99.75	0.003428	2.77	94.27	32.62	0.52
ELSA MONTE	382.545*	Max WS	500_6	550.39	94.36	100.26		100.82	0.003515	3.36	183.18	101.19	0.55
ELSA MONTE	382.545*	Max WS	200-6	437.84	94.36	99.84		100.32	0.003491	3.09	145.76	54.43	0.54
ELSA MONTE	382.545*	Max WS	100-6	364.93	94.36	99.49		99.92	0.003451	2.90	125.67	41.15	0.53
ELSA MONTE	382.545*	Max WS	30-6	261.38	94.36	98.71		99.09	0.003345	2.71	96.58	34.28	0.51
ELSA MONTE	382.454*	Max WS	500_6	550.32	93.67	99.60		100.13	0.003472	3.29	184.84	97.82	0.55
ELSA MONTE	382.454*	Max WS	200-6	437.82	93.67	99.19		99.65	0.003403	3.01	149.73	59.48	0.53
ELSA MONTE	382.454*	Max WS	100-6	364.88	93.67	98.86		99.27	0.003365	2.83	129.02	43.44	0.52
ELSA MONTE	382.454*	Max WS	30-6	261.33	93.67	98.08		98.44	0.003291	2.65	98.60	35.87	0.51
ELSA MONTE	382.363*	Max WS	500_6	550.16	92.97	98.96		99.46	0.003392	3.21	188.85	96.41	0.54
ELSA MONTE	382.363*	Max WS	200-6	437.81	92.97	98.57		99.00	0.003274	2.92	155.29	66.79	0.52
ELSA MONTE	382.363*	Max WS	100-6	364.86	92.97	98.24		98.62	0.003306	2.76	132.23	45.86	0.52
ELSA MONTE	382.363*	Max WS	30-6	261.26	92.97	97.45		97.80	0.003270	2.61	100.18	37.32	0.51
ELSA MONTE	382.272*	Max WS	500_6	549.71	92.28	98.36		98.82	0.003178	3.08	197.45	97.23	0.53
ELSA MONTE	382.272*	Max WS	200-6	437.73	92.28	97.92		98.35	0.003395	2.91	152.45	63.73	0.53
ELSA MONTE	382.272*	Max WS	100-6	364.69	92.28	97.60		97.98	0.003314	2.71	134.42	48.91	0.52
ELSA MONTE	382.272*	Max WS	30-6	261.17	92.28	96.84		97.17	0.003210	2.56	101.88	38.49	0.50
ELSA MONTE	382.181*	Max WS	500_6	548.60	91.58	97.84		98.24	0.002713	2.87	214.85	101.17	0.49
ELSA MONTE	382.181*	Max WS	200-6	437.39	91.58	97.28		97.70	0.003401	2.86	156.69	71.21	0.53
ELSA MONTE	382.181*	Max WS	100-6	363.23	91.58	96.95		97.32	0.003395	2.69	135.21	55.95	0.52
ELSA MONTE	382.181*	Max WS	30-6	261.11	91.58	96.26		96.58	0.002933	2.50	104.60	38.37	0.48
ELSA MONTE	382.090*	Max WS	500_6	547.56	90.89	97.46		97.81	0.001728	2.81	246.52	107.37	0.40
ELSA MONTE	382.090*	Max WS	200-6	436.88	90.89	96.77		97.16	0.002156	2.84	178.80	89.75	0.44
ELSA MONTE	382.090*	Max WS	100-6	363.36	90.89	96.41		96.78	0.002210	2.71	143.28	68.48	0.44
ELSA MONTE	382.090*	Max WS	30-6	260.99	90.89	95.82		96.10	0.002007	2.33	112.48	42.07	0.41
ELSA MONTE	382	Max WS	500_6	547.15	90.19	97.28		97.52	0.001086	2.34	303.58	115.31	0.33
ELSA MONTE	382	Max WS	200-6	436.60	90.19	96.53		96.80	0.001414	2.41	222.02	101.30	0.36
ELSA MONTE	382	Max WS	100-6	364.84	90.19	96.15		96.41	0.001451	2.31	185.33	92.91	0.36
ELSA MONTE	382	Max WS	30-6	260.89	90.19	95.56		95.77	0.001377	2.03	135.65	68.24	0.34
ELSA MONTE	381	Max WS	500_6	546.74	90.42	97.04		97.39	0.001603	2.85	227.19	70.60	0.42
ELSA MONTE	381	Max WS	200-6	436.05	90.42	96.21		96.63	0.002332	3.06	169.18	69.62	0.50
ELSA MONTE	381	Max WS	100-6	364.76	90.42	95.80		96.23	0.002679	3.05	140.19	69.12	0.53
ELSA MONTE	381	Max WS	30-6	260.69	90.42	95.11		95.57	0.003345	3.03	93.28	64.88	0.58
ELSA MONTE	380.9			Lat Struct									
ELSA MONTE	380	Max WS	500_6	416.27	90.50	97.01	94.13	97.23	0.000439	2.34	217.66	41.59	0.30
ELSA MONTE	380	Max WS	200-6	374.44	90.50	96.05	93.96	96.33	0.000656	2.56	177.94	41.59	0.36
ELSA MONTE	380	Max WS	100-6	326.80	90.50	95.60	93.76	95.86	0.000699	2.49	159.28	41.59	0.36
ELSA MONTE	380	Max WS	30-6	248.22	90.50	94.89	93.38	95.12	0.000746	2.31	129.67	41.59	0.36
ELSA MONTE	379.9			Inl Struct									
ELSA MONTE	379	Max WS	500_6	416.26	87.53	96.97		97.11	0.000164	1.72	271.66	34.19	0.18
ELSA MONTE	379	Max WS	200-6	374.44	87.53	96.03		96.17	0.000194	1.73	239.37	34.19	0.19
ELSA MONTE	379	Max WS	100-6	326.79	87.53	95.58		95.71	0.000180	1.61	224.16	34.19	0.18
ELSA MONTE	379	Max WS	30-6	248.20	87.53	94.87		94.96	0.000146	1.36	199.68	34.19	0.16
ELSA MONTE	378.9			Lat Struct									
ELSA MONTE	378	Max WS	500_6	532.42	89.18	96.67		96.97	0.000831	2.44	219.83	40.30	0.32
ELSA MONTE	378	Max WS	200-6	429.82	89.18	95.80		96.07	0.000897	2.31	186.21	36.90	0.33
ELSA MONTE	378	Max WS	100-6	360.05	89.18	95.40		95.63	0.000795	2.10	171.84	36.25	0.31
ELSA MONTE	378	Max WS	30-6	260.54	89.18	94.75		94.91	0.000637	1.75	148.50	35.26	0.27
ELSA MONTE	377.9			Lat Struct									
ELSA MONTE	377	Max WS	500_6	489.02	88.82	96.70		96.90	0.000699	2.19	281.54	82.59	0.30
ELSA MONTE	377	Max WS	200-6	407.41	88.82	95.66		95.95	0.001276	2.57	195.28	82.56	0.39
ELSA MONTE	377	Max WS	100-6	353.92	88.82	95.12		95.47	0.001717	2.73	152.55	74.57	0.44
ELSA MONTE	377	Max WS	30-6	260.24	88.82	94.32		94.71	0.002308	2.78	100.47	60.78	0.50
ELSA MONTE	376	Max WS	500_6	461.52	88.04	96.66		96.86	0.000626	2.23	262.30	66.17	0.28
ELSA MONTE	376	Max WS	200-6	377.83	88.04	95.62		95.88	0.000931	2.43	193.95	66.16	0.33
ELSA MONTE	376	Max WS	100-6	327.79	88.04	95.09		95.38	0.001127	2.50	158.60	65.47	0.35
ELSA MONTE	376	Max WS	30-6	250.86	88.04	94.25		94.57	0.001445	2.51	107.32	53.27	0.39
ELSA MONTE	375	Max WS	500_6	410.52	88.05	96.73		96.86	0.000396	1.83	307.89	89.11	0.22
ELSA MONTE	375	Max WS	200-6	343.58	88.05	95.69		95.87	0.000650	2.10	218.86	79.39	0.28
ELSA MONTE	375	Max WS	100-6	301.14	88.05	95.14		95.36	0.000844	2.24	175.58	78.10	0.31
ELSA MONTE	375	Max WS	30-6	239.96	88.05	94.22		94.53	0.001382	2.52	106.97	62.40	0.39
ELSA MONTE	374	Max WS	500_6	509.40	87.97	96.53		96.77	0.000671	2.36	259.95	59.67	0.30
ELSA MONTE	374	Max WS	200-6	413.80	87.97	95.48		95.75	0.000935	2.47	197.17	59.60	0.34
ELSA MONTE	374	Max WS	100-6	346.28	87.97	94.98		95.24	0.000980	2.37	167.71	57.47	0.34
ELSA MONTE	374	Max WS	30-6	257.89	87.97	94.15		94.40	0.001131	2.25	123.36	47.97	0.36

HEC-RAS River: ELSA Reach: ELSA MONTE Profile: Max WS (Continued)

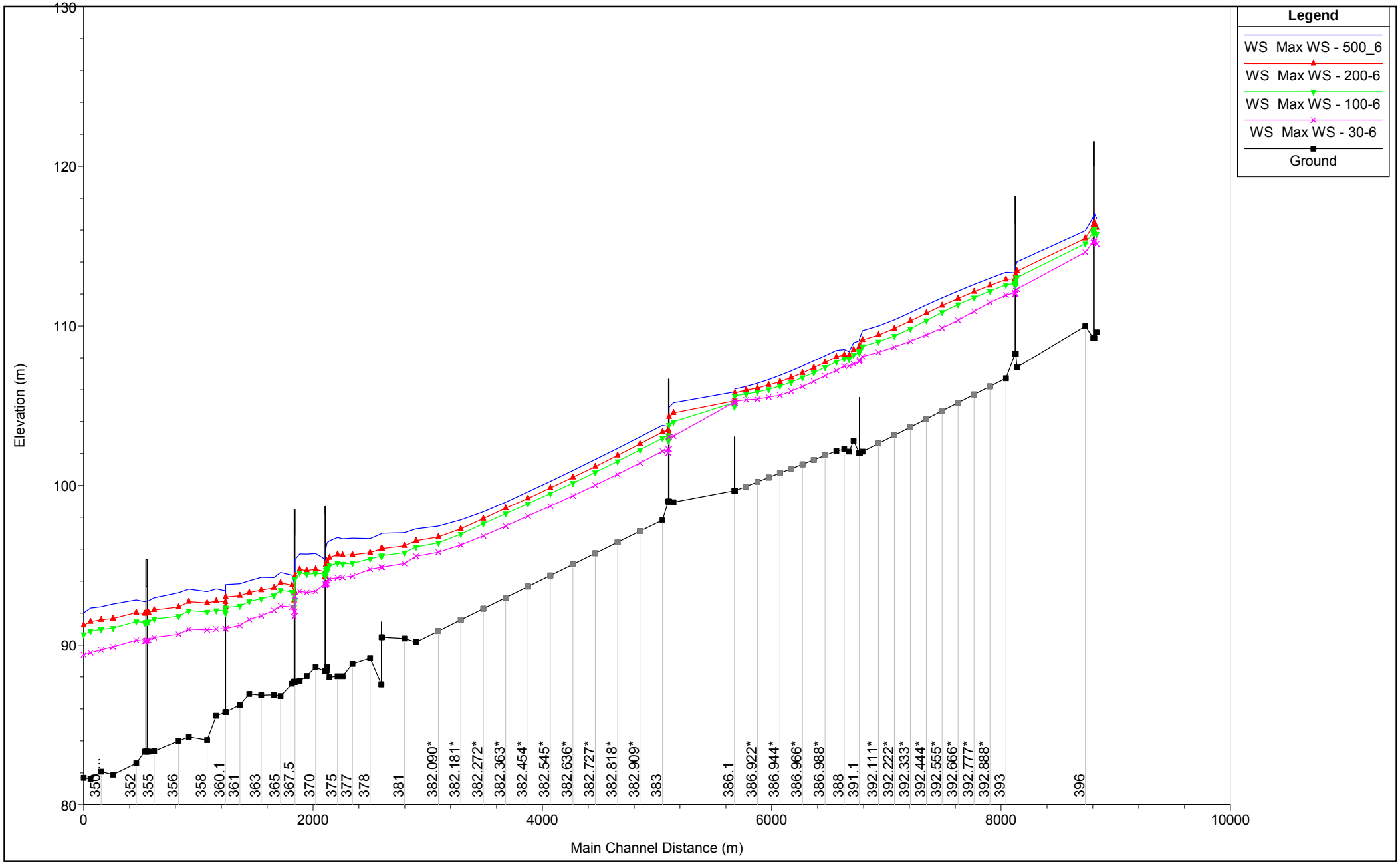
Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
ELSA MONTE	373	Max WS	500_6	546.55	88.61	96.42		96.74	0.001253	2.81	263.72	107.10	0.39
ELSA MONTE	373	Max WS	200-6	435.70	88.61	95.10		95.76	0.002883	3.71	138.16	73.73	0.58
ELSA MONTE	373	Max WS	100-6	359.01	88.61	94.63		95.27	0.003060	3.59	107.53	55.66	0.59
ELSA MONTE	373	Max WS	30-6	260.21	88.61	93.80		94.37	0.003274	3.35	77.69	23.88	0.59
ELSA MONTE	372	Max WS	500_6	546.54	88.41	96.31		96.71	0.001773	2.81	194.58	51.47	0.46
ELSA MONTE	372	Max WS	200-6	435.70	88.41	95.24		95.70	0.002138	2.99	145.81	40.02	0.50
ELSA MONTE	372	Max WS	100-6	358.60	88.41	94.81		95.21	0.001873	2.77	129.52	35.90	0.47
ELSA MONTE	372	Max WS	30-6	260.22	88.41	94.03		94.35	0.001698	2.51	103.47	30.63	0.44
ELSA MONTE	371.9	Max WS	500_6	546.53	88.35	96.01	93.62	96.72	0.001314	3.77	149.57	28.36	0.48
ELSA MONTE	371.9	Max WS	200-6	435.70	88.35	95.04	93.01	95.69	0.001502	3.61	123.00	26.19	0.49
ELSA MONTE	371.9	Max WS	100-6	358.10	88.35	94.70	92.57	95.21	0.001272	3.18	114.22	25.43	0.45
ELSA MONTE	371.9	Max WS	30-6	260.21	88.35	93.96	91.92	94.34	0.001143	2.72	96.22	23.80	0.42
ELSA MONTE	371.5			Bridge									
ELSA MONTE	371.1	Max WS	500_6	546.11	88.35	95.37		96.27	0.001911	4.24	131.91	26.93	0.56
ELSA MONTE	371.1	Max WS	200-6	435.43	88.35	94.59		95.38	0.002018	3.95	111.61	25.20	0.57
ELSA MONTE	371.1	Max WS	100-6	358.10	88.35	94.47		95.04	0.001488	3.34	108.54	24.92	0.48
ELSA MONTE	371.1	Max WS	30-6	260.21	88.35	93.85		94.25	0.001248	2.79	93.58	23.55	0.43
ELSA MONTE	370	Max WS	500_6	546.28	88.61	95.74		96.08	0.001686	2.93	220.11	60.94	0.44
ELSA MONTE	370	Max WS	200-6	435.52	88.61	94.74		95.19	0.002717	3.30	160.37	59.57	0.54
ELSA MONTE	370	Max WS	100-6	357.94	88.61	94.48		94.86	0.002464	3.03	144.69	59.21	0.51
ELSA MONTE	370	Max WS	30-6	260.21	88.61	93.37	93.39	94.09	0.006108	3.95	79.82	57.65	0.77
ELSA MONTE	369.8			Lat Struct									
ELSA MONTE	369	Max WS	500_6	525.17	88.05	95.70		95.99	0.001021	2.40	219.37	46.96	0.35
ELSA MONTE	369	Max WS	200-6	433.49	88.05	94.68		95.00	0.001485	2.52	172.14	45.52	0.41
ELSA MONTE	369	Max WS	100-6	354.28	88.05	94.44		94.69	0.001201	2.19	161.58	45.07	0.37
ELSA MONTE	369	Max WS	30-6	260.21	88.05	93.30		93.58	0.002054	2.34	111.22	43.31	0.47
ELSA MONTE	368	Max WS	500_6	546.27	87.75	95.71		95.92	0.000560	2.01	271.40	46.99	0.27
ELSA MONTE	368	Max WS	200-6	435.51	87.75	94.74		94.93	0.000609	1.93	226.00	45.59	0.28
ELSA MONTE	368	Max WS	100-6	346.92	87.75	94.53		94.66	0.000433	1.60	216.61	44.69	0.23
ELSA MONTE	368	Max WS	30-6	260.20	87.75	93.37		93.50	0.000494	1.55	167.36	40.06	0.24
ELSA MONTE	367.9	Max WS	500_6	546.27	87.70	95.35	93.30	95.90	0.001511	3.26	167.51	38.53	0.50
ELSA MONTE	367.9	Max WS	200-6	435.51	87.70	94.34	92.78	94.91	0.001887	3.34	130.54	34.43	0.55
ELSA MONTE	367.9	Max WS	100-6	361.15	87.70	94.16	92.39	94.59	0.001484	2.91	124.25	33.68	0.48
ELSA MONTE	367.9	Max WS	30-6	260.20	87.70	93.05	91.78	93.48	0.001899	2.91	89.33	29.23	0.53
ELSA MONTE	367.5			Bridge									
ELSA MONTE	367.1	Max WS	500_6	545.93	87.70	93.89		95.03	0.004143	4.73	115.43	32.61	0.80
ELSA MONTE	367.1	Max WS	200-6	435.17	87.70	93.32		94.33	0.004176	4.46	97.46	30.29	0.79
ELSA MONTE	367.1	Max WS	100-6	382.40	87.70	92.91		93.93	0.004655	4.48	85.37	28.74	0.83
ELSA MONTE	367.1	Max WS	30-6	260.20	87.70	92.07		92.95	0.005188	4.16	62.53	25.72	0.85
ELSA MONTE	366	Max WS	500_6	546.02	87.57	94.37		94.88	0.002029	3.15	173.55	41.83	0.49
ELSA MONTE	366	Max WS	200-6	435.25	87.57	93.75		94.19	0.002027	2.93	148.36	39.84	0.49
ELSA MONTE	366	Max WS	100-6	382.46	87.57	93.32		93.75	0.002222	2.91	131.28	38.27	0.50
ELSA MONTE	366	Max WS	30-6	260.20	87.57	92.39		92.75	0.002287	2.66	97.83	33.42	0.50
ELSA MONTE	365.8			Lat Struct									
ELSA MONTE	365	Max WS	500_6	546.12	86.80	94.55		94.72	0.000630	1.81	302.01	72.96	0.28
ELSA MONTE	365	Max WS	200-6	435.29	86.80	93.89		94.04	0.000655	1.71	255.01	69.23	0.28
ELSA MONTE	365	Max WS	100-6	382.94	86.80	93.44		93.59	0.000737	1.71	224.21	66.47	0.30
ELSA MONTE	365	Max WS	30-6	260.20	86.80	92.46		92.59	0.000779	1.60	163.12	55.84	0.30
ELSA MONTE	364.9			Lat Struct									
ELSA MONTE	364	Max WS	500_6	543.29	86.88	94.23		94.66	0.001844	2.92	185.82	46.58	0.47
ELSA MONTE	364	Max WS	200-6	435.19	86.88	93.59		93.98	0.001939	2.78	156.45	44.18	0.47
ELSA MONTE	364	Max WS	100-6	382.98	86.88	93.12		93.52	0.002179	2.81	136.34	41.38	0.49
ELSA MONTE	364	Max WS	30-6	260.19	86.88	92.18		92.51	0.002120	2.56	101.49	34.53	0.48
ELSA MONTE	363	Max WS	500_6	506.09	86.85	94.24		94.56	0.001083	2.64	216.34	57.61	0.37
ELSA MONTE	363	Max WS	200-6	431.03	86.85	93.44		93.80	0.001507	2.78	170.91	51.51	0.43
ELSA MONTE	363	Max WS	100-6	380.97	86.85	92.92		93.31	0.001860	2.88	145.19	47.84	0.47
ELSA MONTE	363	Max WS	30-6	260.19	86.85	91.85		92.26	0.002590	2.88	95.98	43.94	0.53
ELSA MONTE	362	Max WS	500_6	537.77	86.93	94.03		94.38	0.001394	2.64	204.01	49.15	0.41
ELSA MONTE	362	Max WS	200-6	431.00	86.93	93.30		93.63	0.001557	2.55	168.99	46.84	0.43
ELSA MONTE	362	Max WS	100-6	380.88	86.93	92.74		93.10	0.001970	2.66	143.24	44.62	0.47
ELSA MONTE	362	Max WS	30-6	260.18	86.93	91.62		91.99	0.002529	2.68	96.91	35.75	0.52
ELSA MONTE	361.8			Lat Struct									
ELSA MONTE	361	Max WS	500_6	538.54	86.25	93.84		94.25	0.001798	2.84	191.09	57.78	0.46
ELSA MONTE	361	Max WS	200-6	430.94	86.25	93.09		93.49	0.002010	2.79	154.56	44.97	0.48
ELSA MONTE	361	Max WS	100-6	368.23	86.25	92.46		92.89	0.002523	2.90	126.99	41.39	0.53
ELSA MONTE	361	Max WS	30-6	260.15	86.25	91.24		91.74	0.003755	3.13	83.06	32.51	0.63
ELSA MONTE	360.98			Lat Struct									
ELSA MONTE	360.9	Max WS	500_6	533.78	85.80	93.78	90.97	94.07	0.001108	2.37	225.29	52.90	0.37
ELSA MONTE	360.9	Max WS	200-6	430.93	85.80	93.02	90.22	93.29	0.001210	2.31	186.18	48.57	0.38
ELSA MONTE	360.9	Max WS	100-6	367.76	85.80	92.35	89.77	92.64	0.001504	2.38	154.70	45.72	0.41
ELSA MONTE	360.9	Max WS	30-6	260.09	85.80	91.04	89.07	91.37	0.002098	2.56	101.71	34.18	0.47
ELSA MONTE	360.5			Bridge									
ELSA MONTE	360.1	Max WS	500_6	533.59	85.80	93.41		93.75	0.001421	2.60	205.58	50.97	0.41
ELSA MONTE	360.1	Max WS	200-6	430.86	85.80	92.71		93.03	0.001525	2.51	171.57	47.12	0.42

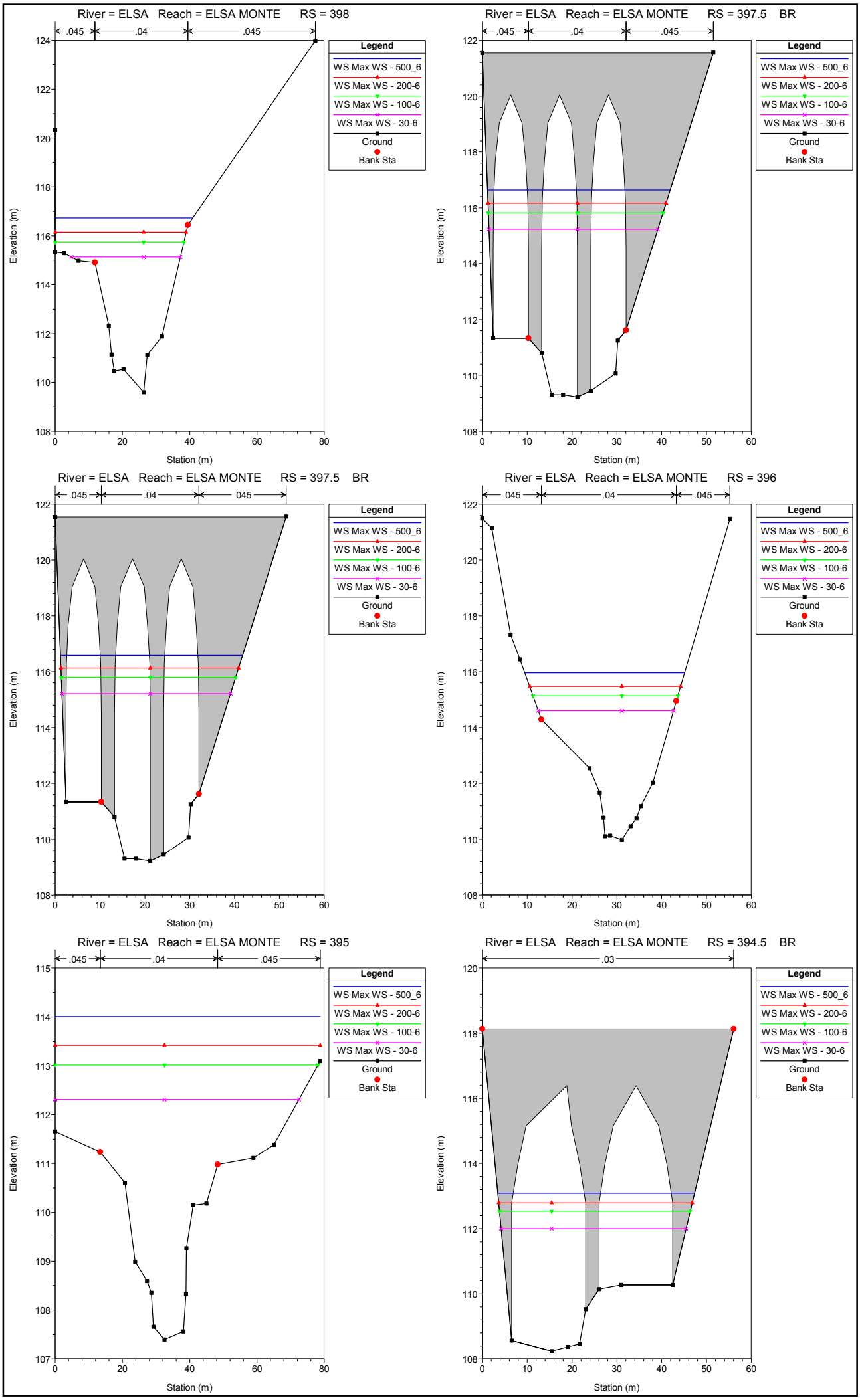
HEC-RAS River: ELSA Reach: ELSA MONTE Profile: Max WS (Continued)

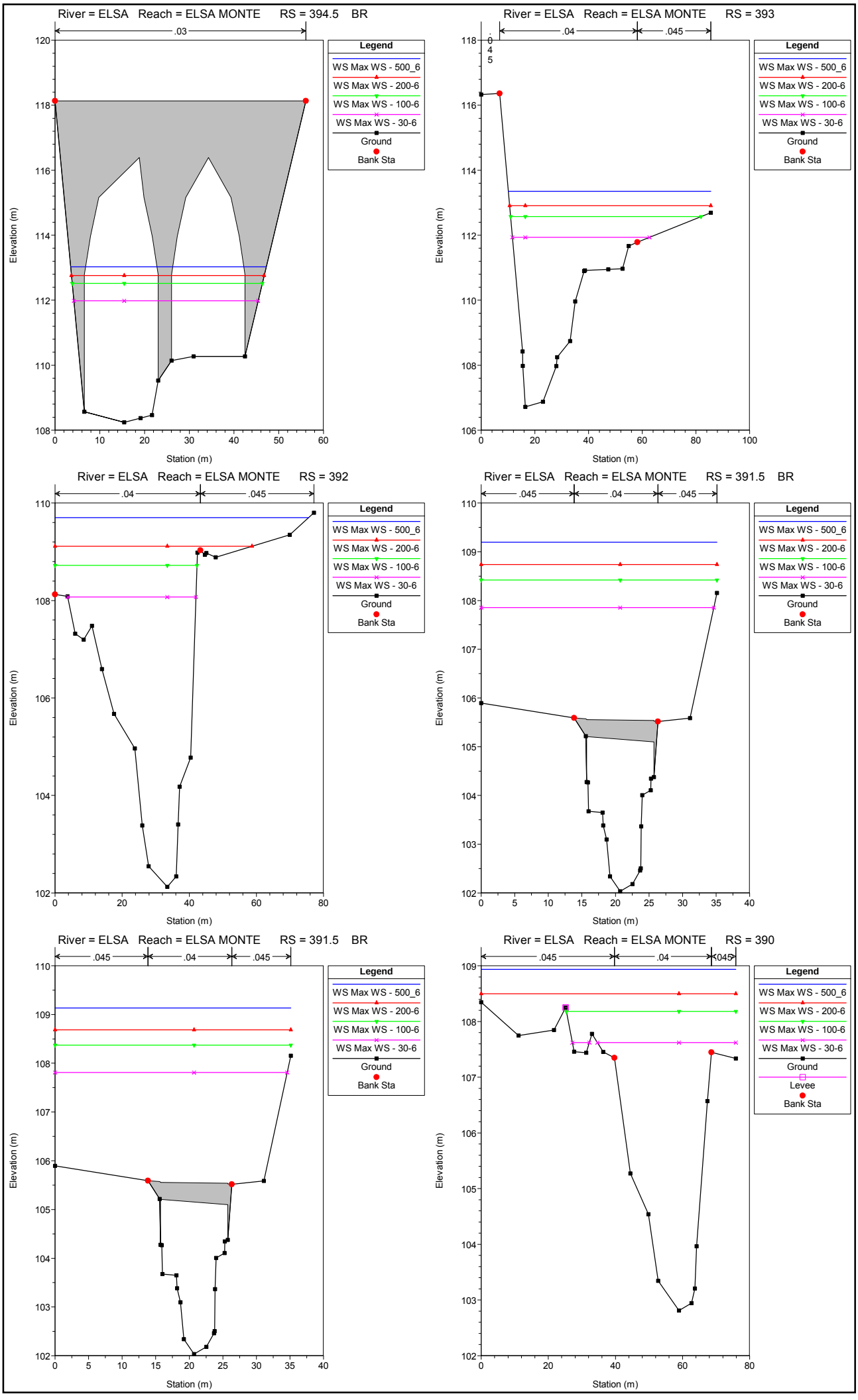
Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
ELSA MONTE	360.1	Max WS	100-6	367.02	85.80	92.17		92.49	0.001748	2.51	146.47	44.80	0.44
ELSA MONTE	360.1	Max WS	30-6	260.09	85.80	91.03		91.37	0.002115	2.57	101.36	34.09	0.48
ELSA MONTE	359.8			Lat Struct									
ELSA MONTE	359	Max WS	500_6	514.91	85.57	93.52		93.68	0.000606	1.83	309.91	91.02	0.28
ELSA MONTE	359	Max WS	200-6	425.72	85.57	92.76		92.94	0.000804	1.90	241.55	89.64	0.31
ELSA MONTE	359	Max WS	100-6	367.03	85.57	92.17		92.37	0.001062	1.99	189.52	81.43	0.35
ELSA MONTE	359	Max WS	30-6	260.07	85.57	91.02		91.23	0.001221	2.06	126.53	39.79	0.37
ELSA MONTE	358.9			Lat Struct									
ELSA MONTE	358	Max WS	500_6	523.61	84.05	93.36		93.62	0.000739	2.27	232.85	43.38	0.30
ELSA MONTE	358	Max WS	200-6	430.58	84.05	92.64		92.87	0.000763	2.14	201.88	43.38	0.30
ELSA MONTE	358	Max WS	100-6	367.69	84.05	92.09		92.30	0.000784	2.05	179.77	39.06	0.30
ELSA MONTE	358	Max WS	30-6	260.03	84.05	90.96		91.15	0.000875	1.90	136.86	37.05	0.32
ELSA MONTE	357	Max WS	500_6	410.74	84.25	93.52		93.55	0.000067	0.77	553.19	102.02	0.10
ELSA MONTE	357	Max WS	200-6	430.55	84.25	92.73		92.77	0.000119	0.94	473.02	98.86	0.13
ELSA MONTE	357	Max WS	100-6	367.70	84.25	92.16		92.20	0.000125	0.90	418.10	95.76	0.13
ELSA MONTE	357	Max WS	30-6	260.04	84.25	91.01		91.04	0.000143	0.83	312.41	83.99	0.13
ELSA MONTE	356.8			Lat Struct									
ELSA MONTE	356	Max WS	500_6	846.16	84.00	93.29		93.43	0.000331	1.73	516.45	93.02	0.22
ELSA MONTE	356	Max WS	200-6	865.82	84.00	92.38		92.60	0.000596	2.10	432.74	92.42	0.29
ELSA MONTE	356	Max WS	100-6	752.71	84.00	91.82		92.03	0.000660	2.06	380.96	89.47	0.30
ELSA MONTE	356	Max WS	30-6	539.49	84.00	90.68		90.87	0.000814	1.97	280.61	86.35	0.32
ELSA MONTE	355	Max WS	500_6	1064.47	83.36	92.96		93.23	0.000702	2.30	462.15	83.11	0.31
ELSA MONTE	355	Max WS	200-6	877.74	83.36	92.21		92.45	0.000738	2.19	400.47	80.96	0.31
ELSA MONTE	355	Max WS	100-6	752.59	83.36	91.65		91.88	0.000782	2.12	355.58	79.36	0.32
ELSA MONTE	355	Max WS	30-6	536.97	83.36	90.49		90.69	0.000880	2.01	267.34	70.71	0.33
ELSA MONTE	354	Max WS	500_6	1062.88	83.34	92.78		93.18	0.001171	2.81	378.03	74.23	0.40
ELSA MONTE	354	Max WS	200-6	873.93	83.34	92.03		92.40	0.001213	2.70	324.15	69.60	0.40
ELSA MONTE	354	Max WS	100-6	751.32	83.34	91.47		91.83	0.001266	2.62	286.31	66.16	0.40
ELSA MONTE	354	Max WS	30-6	532.55	83.34	90.31		90.63	0.001445	2.49	213.72	58.99	0.42
ELSA MONTE	353.9	Max WS	500_6	1062.79	83.34	92.76	89.84	93.17	0.001182	2.82	376.76	74.12	0.40
ELSA MONTE	353.9	Max WS	200-6	867.95	83.34	92.01	89.35	92.38	0.001209	2.69	322.94	69.49	0.40
ELSA MONTE	353.9	Max WS	100-6	751.20	83.34	91.46	89.03	91.81	0.001281	2.64	285.08	66.04	0.40
ELSA MONTE	353.9	Max WS	30-6	532.59	83.34	90.29	88.29	90.61	0.001469	2.51	212.47	58.86	0.42
ELSA MONTE	353.5			Bridge									
ELSA MONTE	353.1	Max WS	500_6	1062.82	83.34	92.74		93.15	0.001198	2.83	374.93	73.97	0.40
ELSA MONTE	353.1	Max WS	200-6	867.73	83.34	91.99		92.36	0.001226	2.70	321.25	69.34	0.40
ELSA MONTE	353.1	Max WS	100-6	750.83	83.34	91.43		91.79	0.001302	2.65	283.35	65.88	0.41
ELSA MONTE	353.1	Max WS	30-6	532.53	83.34	90.26		90.59	0.001506	2.53	210.60	58.66	0.43
ELSA MONTE	353	Max WS	500_6	1062.85	83.34	92.73		93.14	0.001207	2.84	373.97	73.89	0.40
ELSA MONTE	353	Max WS	200-6	867.80	83.34	91.98		92.35	0.001236	2.71	320.32	69.26	0.40
ELSA MONTE	353	Max WS	100-6	750.28	83.34	91.42		91.77	0.001312	2.66	282.41	65.79	0.41
ELSA MONTE	353	Max WS	30-6	532.49	83.34	90.24		90.57	0.001526	2.54	209.62	58.56	0.43
ELSA MONTE	352	Max WS	500_6	1063.12	82.60	92.83		93.07	0.000575	2.20	508.68	93.37	0.28
ELSA MONTE	352	Max WS	200-6	874.23	82.60	92.05		92.29	0.000646	2.16	405.66	74.07	0.29
ELSA MONTE	352	Max WS	100-6	751.33	82.60	91.49		91.70	0.000659	2.06	364.40	72.36	0.29
ELSA MONTE	352	Max WS	30-6	532.73	82.60	90.31		90.49	0.000728	1.89	281.15	68.76	0.30
ELSA MONTE	351	Max WS	500_6	1063.57	81.90	92.58		93.01	0.001058	2.98	386.14	74.09	0.38
ELSA MONTE	351	Max WS	200-6	868.59	81.90	91.67		92.13	0.001327	3.02	287.84	54.80	0.41
ELSA MONTE	351	Max WS	100-6	738.85	81.90	91.07		91.50	0.001365	2.88	256.29	51.70	0.41
ELSA MONTE	351	Max WS	30-6	532.59	81.90	89.89		90.26	0.001567	2.71	196.82	48.98	0.43
ELSA MONTE	350.66	Max WS	500_6	1063.65	82.08	92.40		92.84	0.000963	3.10	397.52	75.57	0.37
ELSA MONTE	350.66	Max WS	200-6	868.78	82.08	91.59		91.99	0.001037	2.96	336.03	74.38	0.38
ELSA MONTE	350.66	Max WS	100-6	738.49	82.08	90.99		91.38	0.001110	2.87	291.93	73.36	0.38
ELSA MONTE	350.66	Max WS	30-6	531.25	82.08	89.69		90.11	0.001571	2.88	198.23	71.16	0.44
ELSA MONTE	350.33	Max WS	500_6	1063.75	81.63	92.32		92.76	0.000994	3.17	404.20	83.78	0.36
ELSA MONTE	350.33	Max WS	200-6	868.90	81.63	91.47		91.90	0.001095	3.08	328.97	72.46	0.37
ELSA MONTE	350.33	Max WS	100-6	738.64	81.63	90.86		91.28	0.001160	2.98	285.47	71.54	0.38
ELSA MONTE	350.33	Max WS	30-6	510.00	81.63	89.52		89.93	0.001462	2.86	190.91	69.52	0.41
ELSA MONTE	350	Max WS	500_6	1063.74	81.70	92.02	89.43	92.66	0.001451	3.61	319.10	57.83	0.44
ELSA MONTE	350	Max WS	200-6	868.94	81.70	91.24	88.82	91.81	0.001507	3.39	273.99	57.83	0.44
ELSA MONTE	350	Max WS	100-6	738.71	81.70	90.67	88.43	91.19	0.001565	3.23	237.50	51.66	0.44
ELSA MONTE	350	Max WS	30-6	510.09	81.70	89.38	87.37	89.83	0.001923	2.98	172.66	46.41	0.47

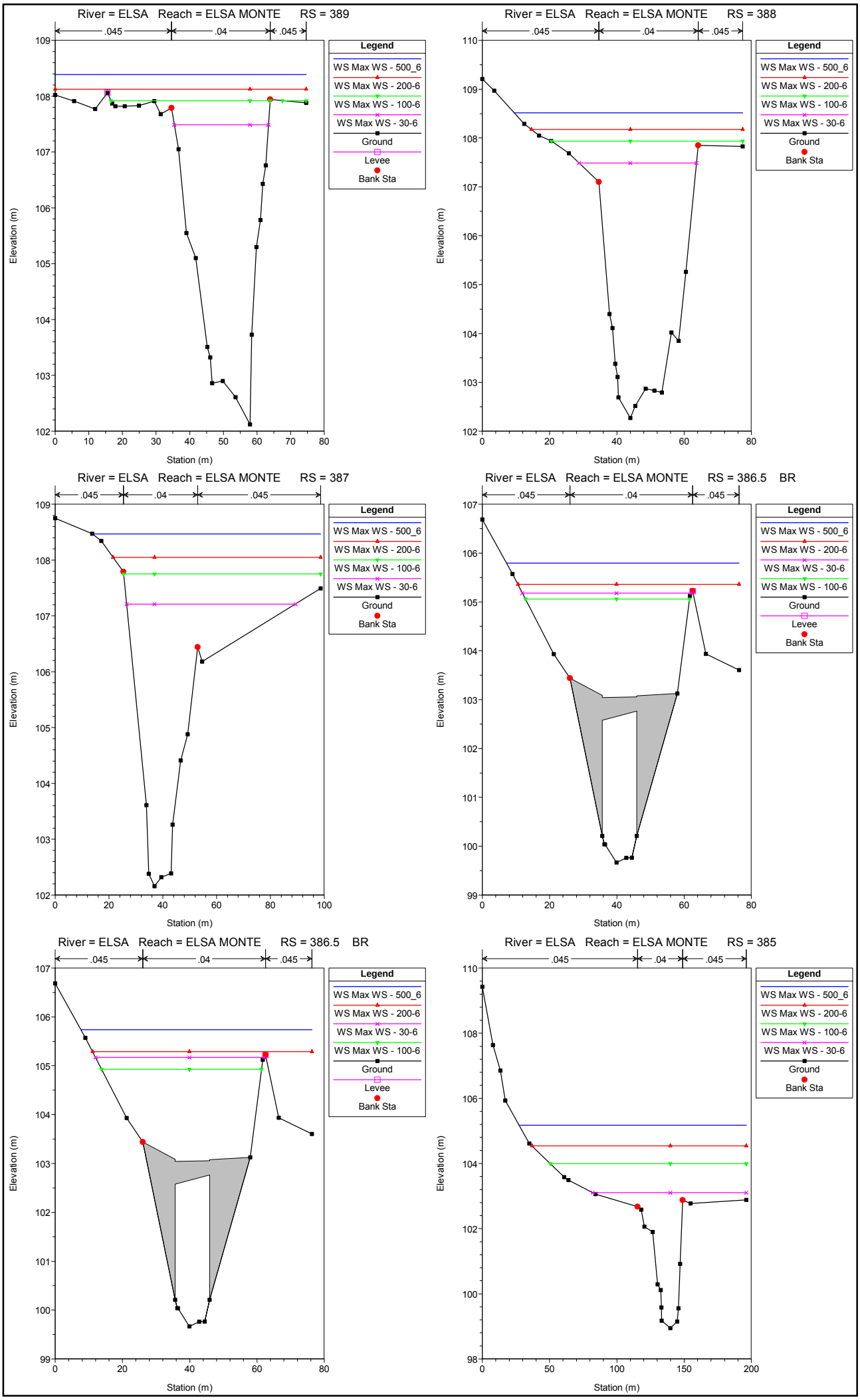
HEC-RAS Profile: Max WS

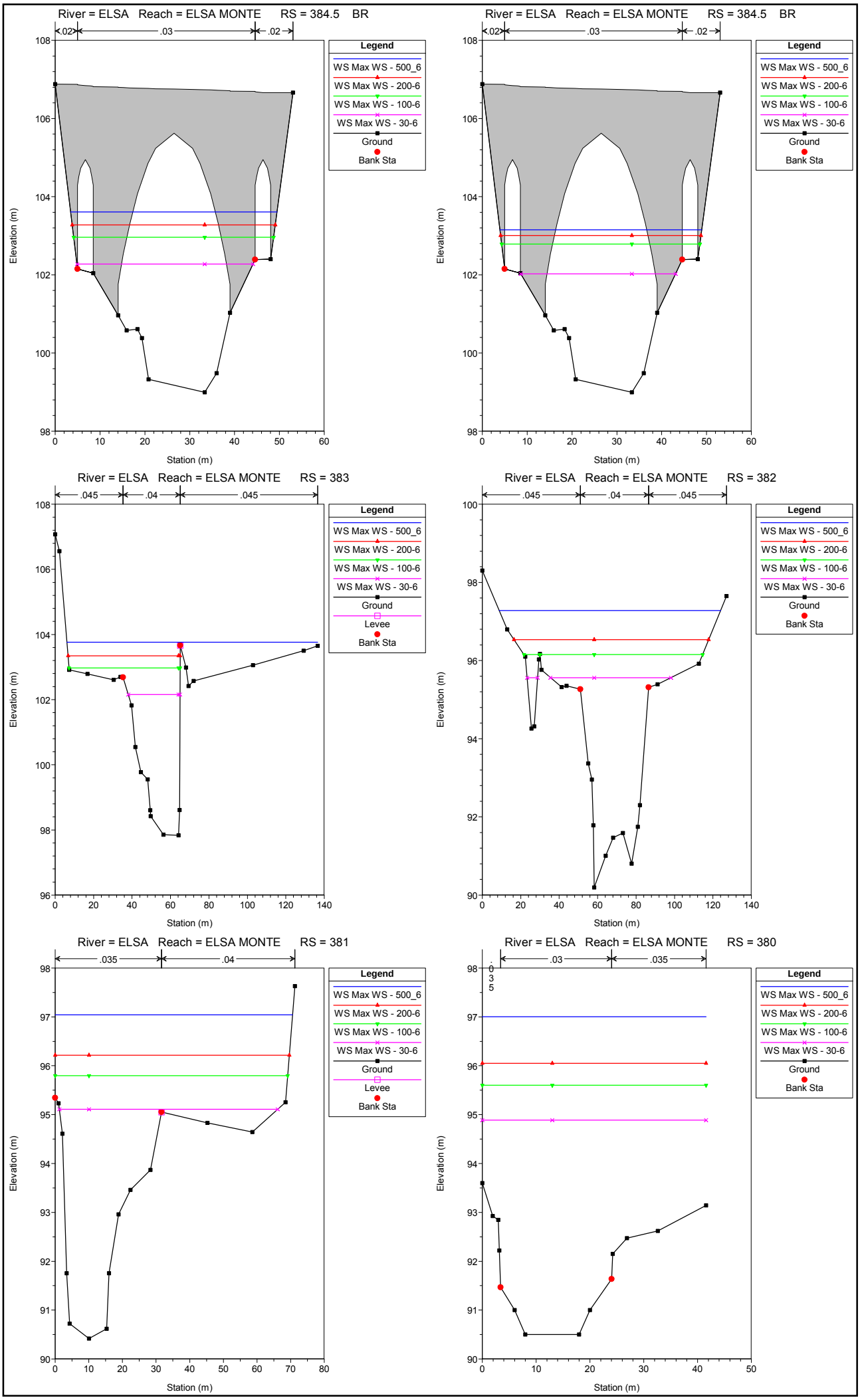
Storage Area	Profile	Plan	W.S. Elev	SA Min El	Net Flux	SA Area	SA Volume
			(m)	(m)	(m3/s)	(1000 m2)	(1000 m3)
AREA SPORTIVA	Max WS	500_6	96.66	89.90	64.60	22.98	64.67
AREA SPORTIVA	Max WS	200-6	95.63	89.90	8.17	22.78	40.99
AREA SPORTIVA	Max WS	100-6	95.03	89.90	120.06	22.61	27.44
AREA SPORTIVA	Max WS	30-6	94.20	89.90	4.08	18.47	8.88
BOCCA D'ELSA	Max WS	500_6	93.26	87.80	3.38	98.11	189.76
BOCCA D'ELSA	Max WS	200-6	92.33	87.80	30.65	76.24	103.75
BOCCA D'ELSA	Max WS	100-6	91.75	87.80	54.34	63.45	63.05
BOCCA D'ELSA	Max WS	30-6	90.61	87.80	9.55	24.23	7.81
DROVE 25	Max WS	500_6	90.12	84.30	12.15	40.14	26.64
DROVE 25	Max WS	200-6	84.30	84.30	0.00	0.09	0.00
DROVE 25	Max WS	100-6	84.30	84.30	0.00	0.09	0.00
DROVE 25	Max WS	30-6	84.30	84.30	0.00	0.09	0.00
FONTINO	Max WS	500_6	93.44	86.90	18.00	82.76	127.62
FONTINO	Max WS	200-6	92.69	86.90	26.71	66.27	69.05
FONTINO	Max WS	100-6	92.11	86.90	12.65	57.11	33.31
FONTINO	Max WS	30-6	86.90	86.90	0.00	0.01	0.00
GORA	Max WS	500_6	95.70	88.40	91.47	18.75	38.73
GORA	Max WS	200-6	94.70	88.40	22.76	15.52	21.25
GORA	Max WS	100-6	94.31	88.40	86.48	14.05	15.38
GORA	Max WS	30-6	93.33	88.40	5.64	7.65	5.22
MOLINO	Max WS	500_6	97.00	90.00	49.32	19.10	44.89
MOLINO	Max WS	200-6	96.10	90.00	8.63	17.02	28.59
MOLINO	Max WS	100-6	95.66	90.00	46.50	14.54	21.51
MOLINO	Max WS	30-6	94.96	90.00	13.09	11.13	12.16
PALAGETTO	Max WS	500_6	93.27	89.80	-0.07	50.96	35.58
PALAGETTO	Max WS	200-6	92.88	89.80	0.23	39.39	17.34
PALAGETTO	Max WS	100-6	92.78	89.80	1.26	39.39	13.23
PALAGETTO	Max WS	30-6	89.80	89.80	0.00	0.00	0.00
POGGIBONSI5	Max WS	500_6	93.93	92.90	4.79	1.00	0.10
POGGIBONSI5	Max WS	200-6	92.90	92.90	0.00	0.00	0.00
POGGIBONSI5	Max WS	100-6	92.90	92.90	0.00	0.00	0.00
POGGIBONSI5	Max WS	30-6	92.90	92.90	0.00	0.00	0.00
POGGIBONSI6	Max WS	500_6	93.44	89.50	0.15	5.14	2.21
POGGIBONSI6	Max WS	200-6	89.50	89.50	0.00	0.00	0.00
POGGIBONSI6	Max WS	100-6	89.50	89.50	0.00	0.00	0.00
POGGIBONSI6	Max WS	30-6	89.50	89.50	0.00	0.00	0.00
POGGIBONSI7	Max WS	500_6	94.18	91.20	2.28	18.21	19.36
POGGIBONSI7	Max WS	200-6	91.20	91.20	0.00	0.04	0.00
POGGIBONSI7	Max WS	100-6	91.20	91.20	0.00	0.04	0.00
POGGIBONSI7	Max WS	30-6	91.20	91.20	0.00	0.04	0.00
DROVE 23	Max WS	500_6	90.12	89.00	0.00	19.53	9.85
DROVE 23	Max WS	200-6	89.00	89.00	0.00	0.44	0.00
DROVE 23	Max WS	100-6	89.00	89.00	0.00	0.44	0.00
DROVE 23	Max WS	30-6	89.00	89.00	0.00	0.44	0.00
DROVE 24	Max WS	500_6	90.12	88.40	0.00	14.94	10.81
DROVE 24	Max WS	200-6	88.40	88.40	0.00	0.04	0.00
DROVE 24	Max WS	100-6	88.40	88.40	0.00	0.04	0.00
DROVE 24	Max WS	30-6	88.40	88.40	0.00	0.04	0.00

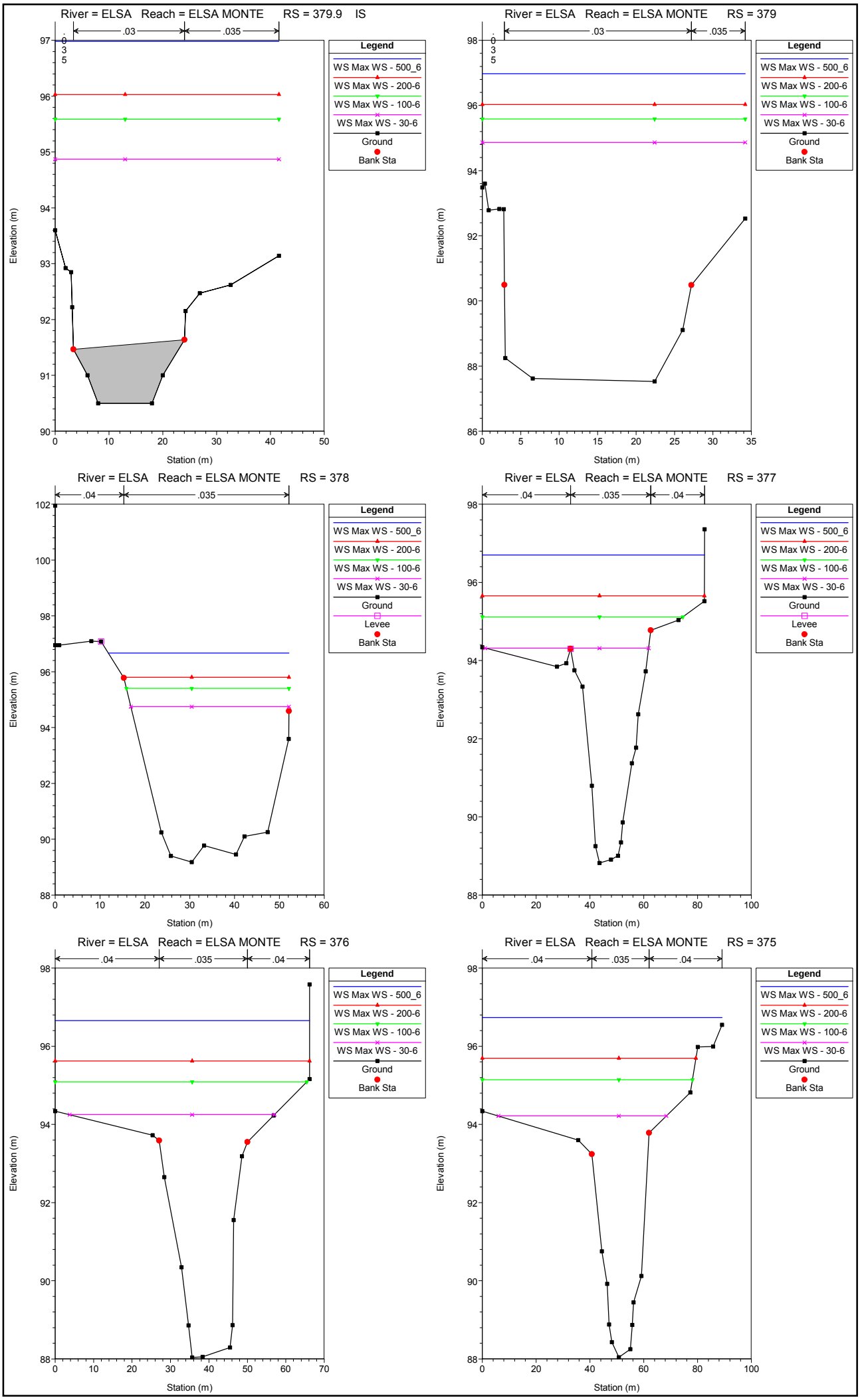

Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Elevation (m)
Main Channel Distance (m)
130
120
110
100
90
80
0
2000
4000
6000
8000
10000
350
352
355
356
358
360.1
361
363
365
367.5
370
375
377
378
381
382.090*
382.181*
382.272*
382.363*
382.454*
382.545*
382.636*
382.727*
382.818*
382.909*
383
386.1
386.922*
386.944*
386.966*
386.988*
388
391.1
392.111*
392.222*
392.333*
392.444*
392.555*
392.666*
392.777*
392.888*
393
396

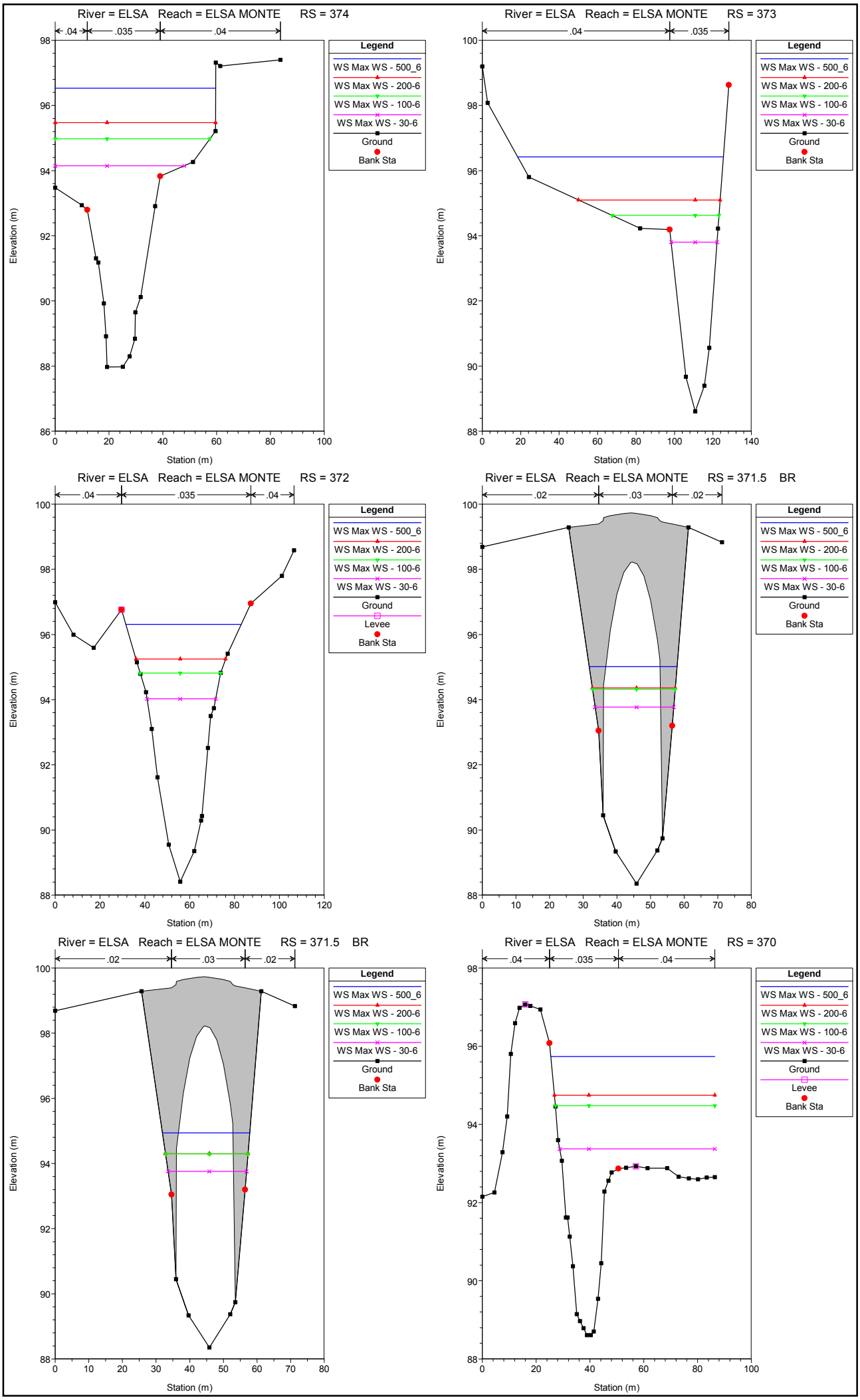

River = ELSA Reach = ELSA MONTE RS = 398
.045
.04
.045
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 397.5 BR
.045
.04
.045
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 397.5 BR
.045
.04
.045
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 396
.045
.04
.045
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 395
.045
.04
.045
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 394.5 BR
.03
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Bank Sta
Elevation (m)
Station (m)

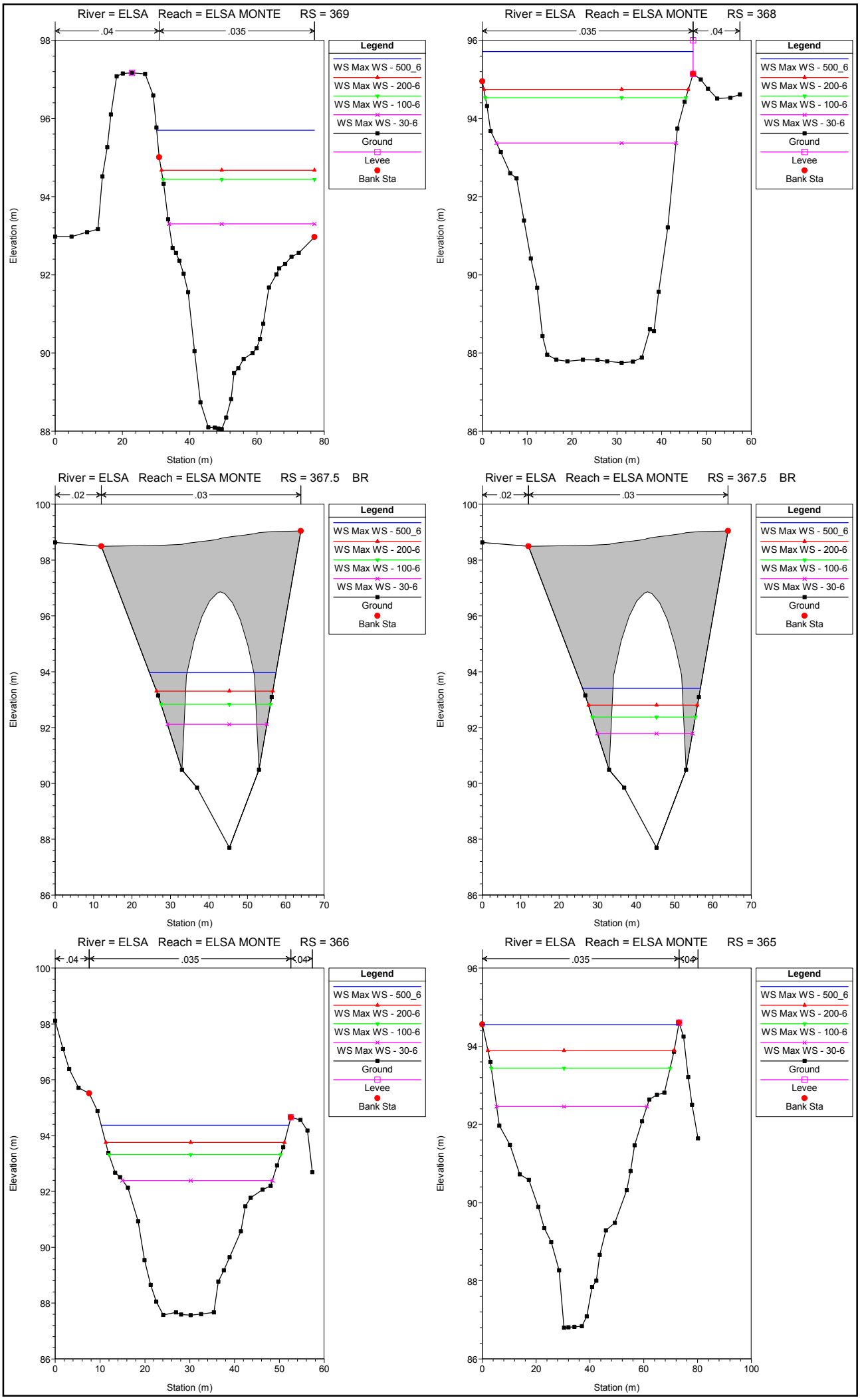

River = ELSA Reach = ELSA MONTE RS = 394.5 BR
.03
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 393
.04
.045
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 392
.04
.045
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 391.5 BR
.045
.04
.045
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 391.5 BR
.045
.04
.045
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 390
.045
.04
.045
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Levee
Bank Sta
Elevation (m)
Station (m)

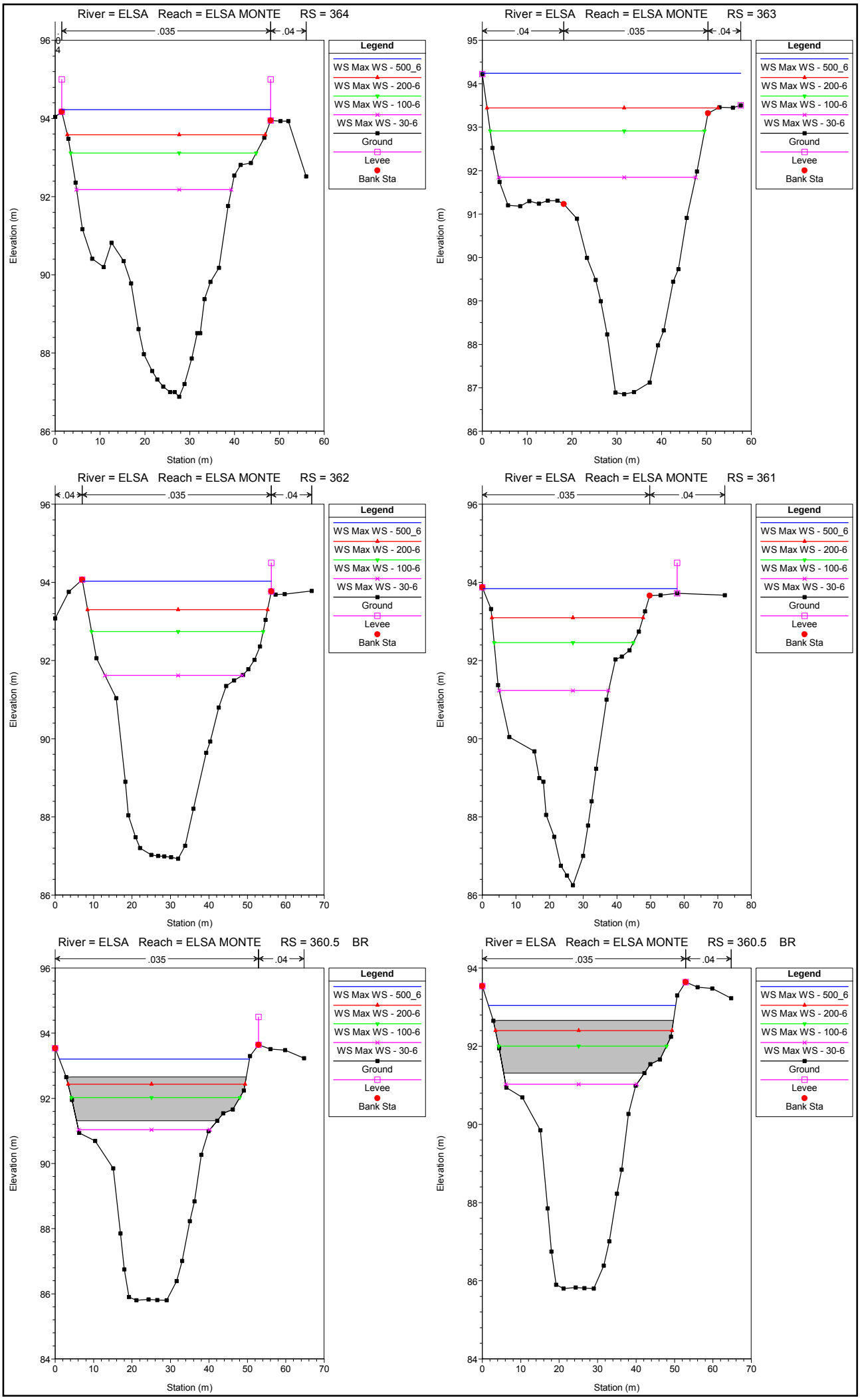

River = ELSA Reach = ELSA MONTE RS = 389
.045
.04
.045
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 388
.045
.04
.045
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 387
.045
.04
.045
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 386.5 BR
.045
.04
.045
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 30-6
WS Max WS - 100-6
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 386.5 BR
.045
.04
.045
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 30-6
WS Max WS - 100-6
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 385
.045
.04
.045
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Bank Sta
Elevation (m)
Station (m)

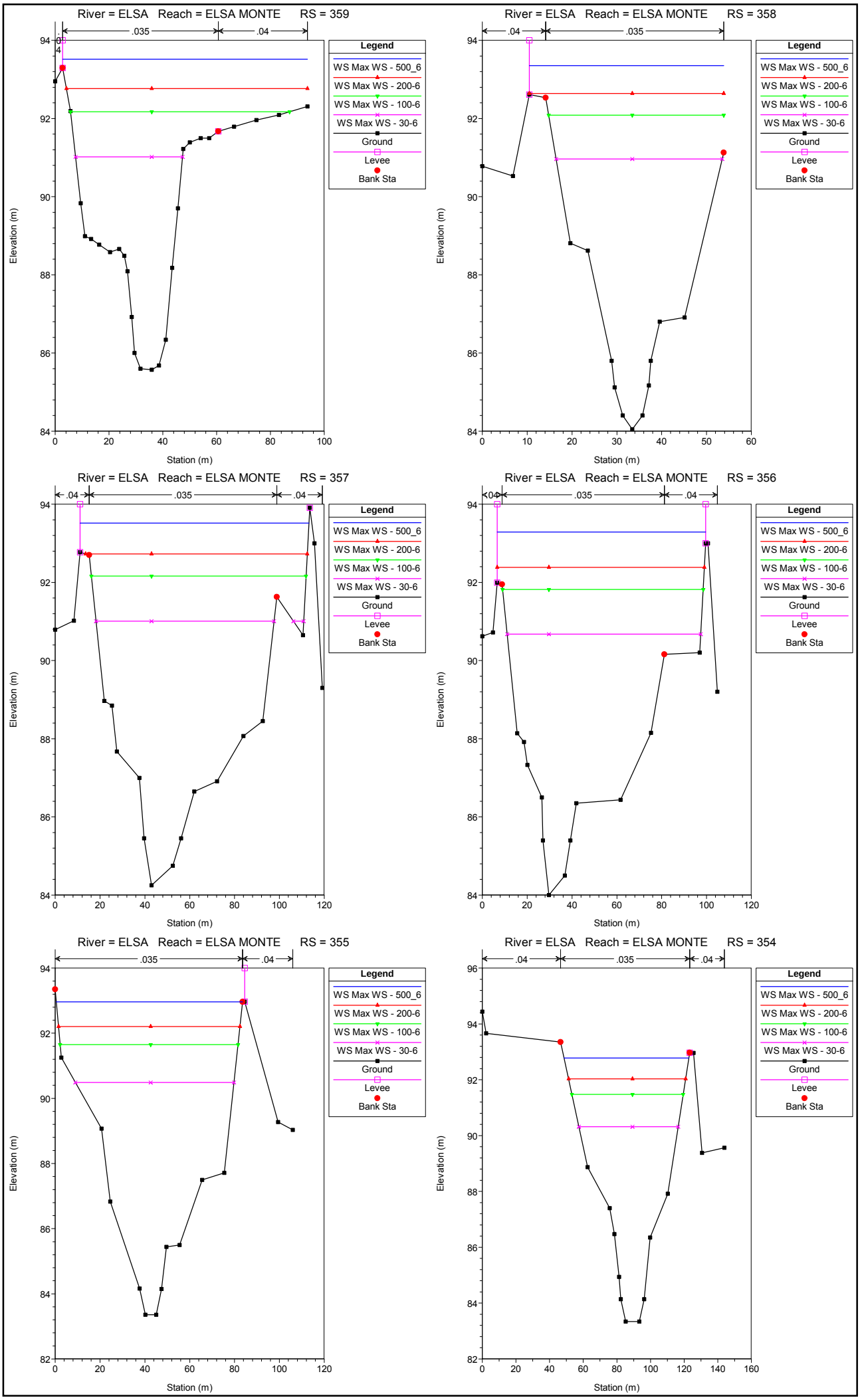

River = ELSA Reach = ELSA MONTE RS = 384.5 BR
.02
.03
.02
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 384.5 BR
.02
.03
.02
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 383
.045
.04
.045
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 382
.045
.04
.045
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 381
.035
.04
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 380
.03
.035
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Bank Sta
Elevation (m)
Station (m)

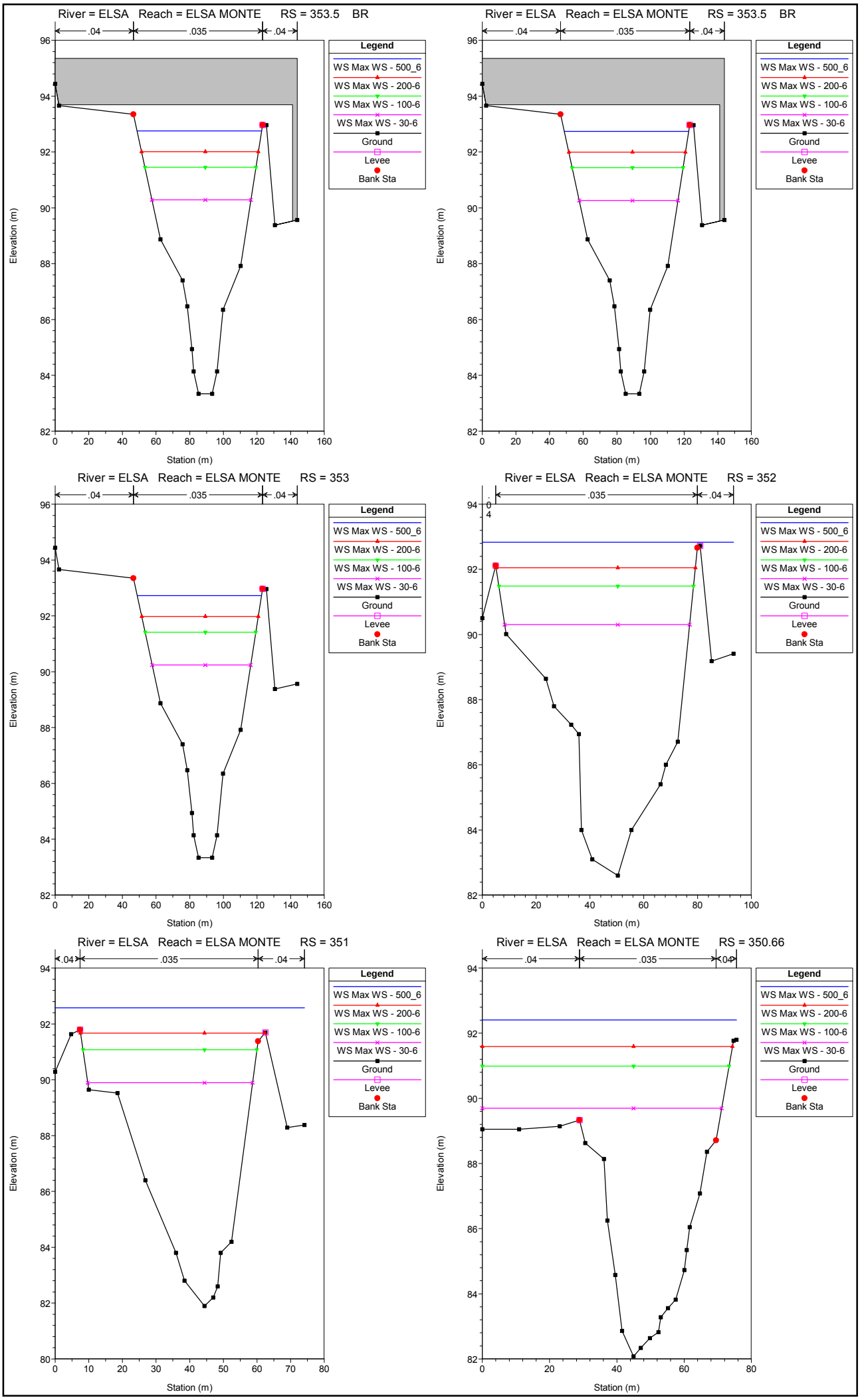

River = ELSA Reach = ELSA MONTE RS = 379.9 IS
.03
.035
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 379
.03
.035
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 378
.04
.035
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 377
.04
.035
.04
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 376
.04
.035
.04
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 375
.04
.035
.04
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Bank Sta
Elevation (m)
Station (m)

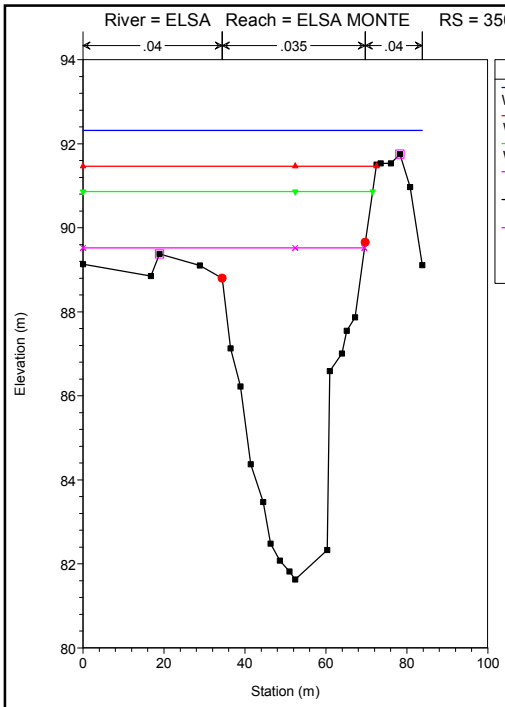

River = ELSA Reach = ELSA MONTE RS = 374
.04
.035
.04
Elevation (m)
Station (m)
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Bank Sta
River = ELSA Reach = ELSA MONTE RS = 373
.04
.035
Elevation (m)
Station (m)
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Bank Sta
River = ELSA Reach = ELSA MONTE RS = 372
.04
.035
.04
Elevation (m)
Station (m)
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Levee
Bank Sta
River = ELSA Reach = ELSA MONTE RS = 371.5 BR
.02
.03
.02
Elevation (m)
Station (m)
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Bank Sta
River = ELSA Reach = ELSA MONTE RS = 371.5 BR
.02
.03
.02
Elevation (m)
Station (m)
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Bank Sta
River = ELSA Reach = ELSA MONTE RS = 370
.04
.035
.04
Elevation (m)
Station (m)
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Levee
Bank Sta

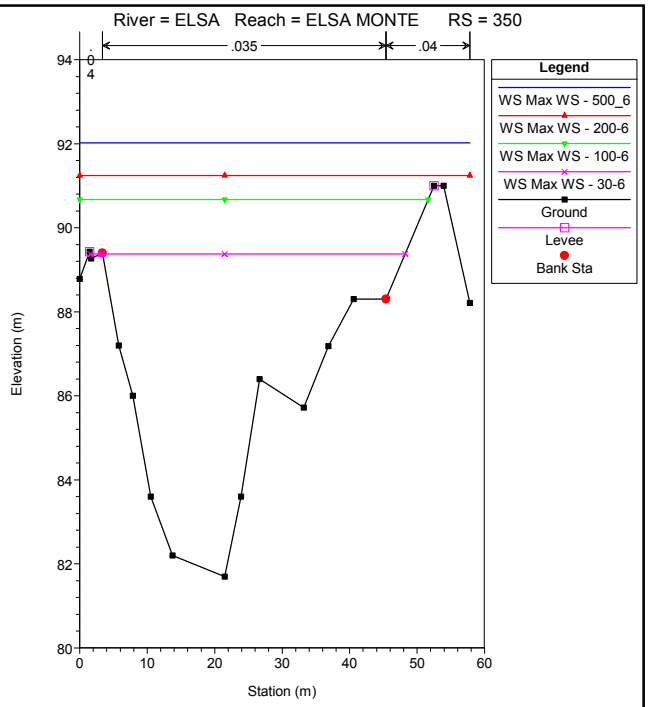

River = ELSA Reach = ELSA MONTE RS = 369
.04
.035
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 368
.035
.04
River = ELSA Reach = ELSA MONTE RS = 367.5 BR
.02
.03
River = ELSA Reach = ELSA MONTE RS = 366
.04
.035
.04
River = ELSA Reach = ELSA MONTE RS = 365
.035
.04


River = ELSA Reach = ELSA MONTE RS = 364
.035
.04
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 363
.04
.035
.04
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 362
.04
.035
.04
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 361
.035
.04
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 360.5 BR
.035
.04
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 360.5 BR
.035
.04
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Levee
Bank Sta
Elevation (m)
Station (m)


River = ELSA Reach = ELSA MONTE RS = 359
.035
.04
Elevation (m)
Station (m)
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Levee
Bank Sta
River = ELSA Reach = ELSA MONTE RS = 358
.04
.035
Elevation (m)
Station (m)
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Levee
Bank Sta
River = ELSA Reach = ELSA MONTE RS = 357
.04
.035
.04
Elevation (m)
Station (m)
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Levee
Bank Sta
River = ELSA Reach = ELSA MONTE RS = 356
.04
.035
.04
Elevation (m)
Station (m)
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Levee
Bank Sta
River = ELSA Reach = ELSA MONTE RS = 355
.035
.04
Elevation (m)
Station (m)
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Levee
Bank Sta
River = ELSA Reach = ELSA MONTE RS = 354
.04
.035
.04
Elevation (m)
Station (m)
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Levee
Bank Sta


River = ELSA Reach = ELSA MONTE RS = 353.5 BR
.04
.035
.04
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 353.5 BR
.04
.035
.04
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 353
.04
.035
.04
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 352
.035
.04
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 351
.04
.035
.04
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = ELSA Reach = ELSA MONTE RS = 350.66
.04
.035
.04
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Levee
Bank Sta
Elevation (m)
Station (m)


River = ELSA Reach = ELSA MONTE RS = 350.33
.04
.035
.04
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Levee
Bank Sta
Elevation (m)
Station (m)


River = ELSA Reach = ELSA MONTE RS = 350
.035
.04
Legend
WS Max WS - 500_6
WS Max WS - 200-6
WS Max WS - 100-6
WS Max WS - 30-6
Ground
Levee
Bank Sta
Elevation (m)
Station (m)

HEC-RAS River: STAGGIA Reach: POGGIBONSI Profile: Max WS

Reach	River Sta	Profile	Plan	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)	
POGGIBONSI	42	Max WS	500_4	396.96	102.70	109.19		109.64	0.002277	3.02	140.10	42.24	0.46
POGGIBONSI	42	Max WS	200-4	314.90	102.70	108.66		109.05	0.002303	2.79	118.08	41.10	0.45
POGGIBONSI	42	Max WS	100-4	260.86	102.70	108.35		108.68	0.002138	2.54	105.44	40.43	0.43
POGGIBONSI	42	Max WS	30-4	183.58	102.70	107.87		108.10	0.001724	2.09	88.87	32.52	0.38
POGGIBONSI	41	Max WS	500_4	397.00	102.50	108.91		109.40	0.002613	3.15	133.27	41.62	0.49
POGGIBONSI	41	Max WS	200-4	314.56	102.50	108.38		108.81	0.002658	2.91	111.63	40.49	0.48
POGGIBONSI	41	Max WS	100-4	260.43	102.50	108.11		108.45	0.002375	2.62	101.68	33.79	0.45
POGGIBONSI	41	Max WS	30-4	183.41	102.50	107.70		107.92	0.001768	2.11	88.24	32.17	0.38
POGGIBONSI	40.9	Max WS	500_4	397.00	102.50	108.89		109.38	0.002654	3.17	132.53	41.59	0.49
POGGIBONSI	40.9	Max WS	200-4	314.52	102.50	108.36		108.79	0.002702	2.93	110.93	40.45	0.48
POGGIBONSI	40.9	Max WS	100-4	260.31	102.50	108.09		108.44	0.002408	2.63	101.20	33.65	0.45
POGGIBONSI	40.9	Max WS	30-4	172.49	102.50	107.70		107.90	0.001565	1.98	88.21	32.17	0.36
POGGIBONSI	40.89			Lat Struct									
POGGIBONSI	40	Max WS	500_4	268.54	102.27	108.48		108.97	0.002661	3.11	88.65	18.78	0.44
POGGIBONSI	40	Max WS	200-4	223.62	102.27	108.42		108.77	0.001920	2.63	87.45	18.78	0.37
POGGIBONSI	40	Max WS	100-4	166.14	102.27	108.26		108.47	0.001172	2.02	84.47	18.78	0.29
POGGIBONSI	40	Max WS	30-4	164.70	102.27	107.44		107.74	0.002063	2.43	69.09	18.78	0.38
POGGIBONSI	39.88			Lat Struct									
POGGIBONSI	39	Max WS	500_4	244.09	102.04	108.86	105.99	109.12	0.001446	2.25	108.56	22.14	0.32
POGGIBONSI	39	Max WS	200-4	223.23	102.04	108.26	105.83	108.54	0.001772	2.34	95.23	22.14	0.36
POGGIBONSI	39	Max WS	100-4	215.76	102.04	107.79	105.77	108.12	0.002341	2.55	84.67	22.14	0.42
POGGIBONSI	39	Max WS	30-4	171.26	102.04	107.00	105.39	107.33	0.002789	2.53	67.62	20.80	0.45
POGGIBONSI	38.5			Bridge									
POGGIBONSI	38	Max WS	500_4	243.90	102.04	108.32		108.65	0.002029	2.53	96.59	22.14	0.39
POGGIBONSI	38	Max WS	200-4	223.10	102.04	107.78		108.13	0.002515	2.64	84.53	22.14	0.43
POGGIBONSI	38	Max WS	100-4	215.49	102.04	107.33		107.76	0.003358	2.89	74.67	21.67	0.50
POGGIBONSI	38	Max WS	30-4	171.26	102.04	106.76		107.14	0.003450	2.73	62.63	20.17	0.50
POGGIBONSI	37.89			Lat Struct									
POGGIBONSI	37.88			Lat Struct									
POGGIBONSI	37	Max WS	500_4	222.83	101.88	108.24		108.37	0.000591	1.66	144.75	40.67	0.25
POGGIBONSI	37	Max WS	200-4	195.81	101.88	107.71		107.85	0.000727	1.72	123.19	40.67	0.28
POGGIBONSI	37	Max WS	100-4	181.54	101.88	107.26		107.43	0.000976	1.85	105.14	40.67	0.32
POGGIBONSI	37	Max WS	30-4	155.17	101.88	106.56		106.78	0.001636	2.09	76.37	40.67	0.40
POGGIBONSI	36.58			Lat Struct									
POGGIBONSI	36	Max WS	500_4	149.88	101.38	108.38		108.41	0.000105	0.80	203.92	49.06	0.12
POGGIBONSI	36	Max WS	200-4	160.36	101.38	107.80		107.85	0.000190	0.99	175.82	49.06	0.15
POGGIBONSI	36	Max WS	100-4	172.25	101.38	107.32		107.39	0.000344	1.23	151.92	49.06	0.20
POGGIBONSI	36	Max WS	30-4	159.92	101.38	106.55		106.66	0.000698	1.51	114.21	48.90	0.28
POGGIBONSI	35.89			Lat Struct									
POGGIBONSI	35.88			Lat Struct									
POGGIBONSI	35	Max WS	500_4	495.15	101.20	107.49	105.21	107.90	0.001492	2.83	174.89	38.76	0.43
POGGIBONSI	35	Max WS	200-4	427.42	101.20	106.95	104.91	107.34	0.001606	2.77	154.14	37.74	0.44
POGGIBONSI	35	Max WS	100-4	373.64	101.20	106.50	104.66	106.88	0.001697	2.72	137.58	36.36	0.45
POGGIBONSI	35	Max WS	30-4	290.55	101.20	105.77	104.24	106.11	0.001860	2.60	111.89	34.12	0.46
POGGIBONSI	34.5			Bridge									
POGGIBONSI	34	Max WS	500_4	495.10	101.20	106.20		106.98	0.003768	3.91	126.77	35.43	0.66
POGGIBONSI	34	Max WS	200-4	427.24	101.20	105.83		106.55	0.003820	3.75	113.90	34.30	0.66
POGGIBONSI	34	Max WS	100-4	371.52	101.20	105.46		106.14	0.004053	3.67	101.35	33.15	0.67
POGGIBONSI	34	Max WS	30-4	290.55	101.20	105.01		105.58	0.003903	3.35	86.78	31.77	0.65
POGGIBONSI	33.89			Lat Struct									
POGGIBONSI	33.88			Lat Struct									
POGGIBONSI	33	Max WS	500_4	494.10	99.13	105.91		106.54	0.002584	3.78	146.22	41.12	0.55
POGGIBONSI	33	Max WS	200-4	427.10	99.13	105.48		106.10	0.002786	3.69	128.97	39.92	0.56
POGGIBONSI	33	Max WS	100-4	368.90	99.13	105.01		105.64	0.003246	3.70	110.62	38.25	0.59
POGGIBONSI	33	Max WS	30-4	290.55	99.13	104.52		105.08	0.003404	3.47	92.33	36.51	0.60
POGGIBONSI	32.8			Lat Struct									
POGGIBONSI	32	Max WS	500_4	532.79	98.56	105.18		105.80	0.002572	3.72	159.12	45.82	0.56
POGGIBONSI	32	Max WS	200-4	457.89	98.56	104.58		105.24	0.003275	3.83	132.15	44.95	0.61
POGGIBONSI	32	Max WS	100-4	376.66	98.56	104.13		104.75	0.003534	3.67	112.78	41.01	0.62
POGGIBONSI	32	Max WS	30-4	290.24	98.56	103.61		104.17	0.003758	3.48	91.90	39.06	0.63
POGGIBONSI	31	Max WS	500_4	575.36	97.74	104.26		105.03	0.002988	4.20	156.79	45.25	0.61
POGGIBONSI	31	Max WS	200-4	470.37	97.74	103.74		104.46	0.003164	4.01	133.79	44.02	0.62
POGGIBONSI	31	Max WS	100-4	366.74	97.74	103.29		103.90	0.003019	3.64	114.32	42.85	0.59
POGGIBONSI	31	Max WS	30-4	286.30	97.74	102.79		103.35	0.003258	3.44	93.23	41.55	0.60
POGGIBONSI	30.88			Lat Struct									
POGGIBONSI	30.8333*	Max WS	500_4	588.30	97.45	103.94		104.75	0.003100	4.27	156.75	45.31	0.63
POGGIBONSI	30.8333*	Max WS	200-4	478.03	97.45	103.43		104.17	0.003209	4.03	134.20	44.01	0.63
POGGIBONSI	30.8333*	Max WS	100-4	386.37	97.45	102.98		103.64	0.003283	3.78	114.73	42.73	0.62
POGGIBONSI	30.8333*	Max WS	30-4	293.04	97.45	102.46		103.04	0.003433	3.49	92.69	41.17	0.62
POGGIBONSI	30.79			Lat Struct									
POGGIBONSI	30.6666*	Max WS	500_4	588.30	97.16	103.70		104.47	0.002882	4.14	160.41	45.51	0.61

HEC-RAS River: STAGGIA Reach: POGGIBONSI Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	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)	
POGGIBONSI	30.6666*	Max WS	200-4	478.00	97.16	103.18		103.88	0.002990	3.90	137.22	44.11	0.60
POGGIBONSI	30.6666*	Max WS	100-4	386.25	97.16	102.73		103.35	0.003052	3.66	117.41	42.71	0.60
POGGIBONSI	30.6666*	Max WS	30-4	293.03	97.16	102.18		102.73	0.003217	3.39	94.67	40.84	0.60
POGGIBONSI	30.5*	Max WS	500_4	588.29	96.87	103.49		104.22	0.002631	3.99	165.37	45.80	0.58
POGGIBONSI	30.5*	Max WS	200-4	477.98	96.87	102.96		103.62	0.002726	3.76	141.51	44.27	0.58
POGGIBONSI	30.5*	Max WS	100-4	386.24	96.87	102.50		103.08	0.002763	3.51	121.42	42.77	0.57
POGGIBONSI	30.5*	Max WS	30-4	293.03	96.87	101.94		102.45	0.002903	3.24	98.16	40.57	0.57
POGGIBONSI	30.48			Lat Struct									
POGGIBONSI	30.3333*	Max WS	500_4	588.29	96.57	103.32		103.99	0.002365	3.82	171.55	46.17	0.55
POGGIBONSI	30.3333*	Max WS	200-4	477.99	96.57	102.78		103.38	0.002436	3.59	147.11	44.51	0.55
POGGIBONSI	30.3333*	Max WS	100-4	386.19	96.57	102.32		102.84	0.002432	3.33	126.93	42.94	0.54
POGGIBONSI	30.3333*	Max WS	30-4	293.02	96.57	101.75		102.20	0.002525	3.05	103.20	40.46	0.53
POGGIBONSI	30.1666*	Max WS	500_4	586.84	96.28	103.17		103.78	0.002074	3.62	179.32	46.62	0.51
POGGIBONSI	30.1666*	Max WS	200-4	476.73	96.28	102.63		103.17	0.002111	3.39	154.40	44.89	0.51
POGGIBONSI	30.1666*	Max WS	100-4	385.18	96.28	102.17		102.63	0.002071	3.12	134.09	43.25	0.50
POGGIBONSI	30.1666*	Max WS	30-4	292.48	96.28	101.59		101.99	0.002111	2.85	109.91	40.48	0.49
POGGIBONSI	30	Max WS	500_4	586.81	95.99	103.05	101.38	103.60	0.001821	3.44	187.81	47.11	0.48
POGGIBONSI	30	Max WS	200-4	476.73	95.99	102.50	100.96	102.99	0.001829	3.20	162.49	45.34	0.47
POGGIBONSI	30	Max WS	100-4	385.18	95.99	102.05	100.57	102.46	0.001757	2.93	142.20	43.66	0.46
POGGIBONSI	30	Max WS	30-4	268.71	95.99	101.47	99.92	101.76	0.001469	2.43	117.80	40.66	0.41
POGGIBONSI	29.5			Bridge									
POGGIBONSI	29	Max WS	500_4	586.77	95.99	102.90		103.49	0.002040	3.57	180.64	46.73	0.51
POGGIBONSI	29	Max WS	200-4	476.73	95.99	102.35		102.88	0.002074	3.33	155.58	44.78	0.50
POGGIBONSI	29	Max WS	100-4	385.18	95.99	101.91		102.35	0.001991	3.05	136.19	43.15	0.48
POGGIBONSI	29	Max WS	30-4	268.71	95.99	101.37		101.67	0.001635	2.51	113.57	40.27	0.43
POGGIBONSI	28.89			Lat Struct									
POGGIBONSI	28.88			Lat Struct									
POGGIBONSI	28.8*	Max WS	500_4	586.95	95.66	102.68		103.30	0.002112	3.68	177.63	46.66	0.52
POGGIBONSI	28.8*	Max WS	200-4	476.78	95.66	102.13		102.69	0.002174	3.46	152.13	44.89	0.52
POGGIBONSI	28.8*	Max WS	100-4	385.16	95.66	101.70		102.17	0.002063	3.16	133.34	43.14	0.49
POGGIBONSI	28.8*	Max WS	30-4	270.60	95.66	101.14		101.48	0.001753	2.64	110.03	40.56	0.44
POGGIBONSI	28.6*	Max WS	500_4	587.12	95.32	102.46		103.11	0.002194	3.79	175.07	46.72	0.53
POGGIBONSI	28.6*	Max WS	200-4	476.83	95.32	101.89		102.48	0.002294	3.59	148.90	45.01	0.53
POGGIBONSI	28.6*	Max WS	100-4	385.18	95.32	101.48		101.98	0.002156	3.27	130.77	43.50	0.51
POGGIBONSI	28.6*	Max WS	30-4	264.91	95.32	101.00		101.33	0.001628	2.63	110.44	41.32	0.43
POGGIBONSI	28.4*	Max WS	500_4	586.94	94.99	102.24		102.91	0.002269	3.90	173.37	46.90	0.54
POGGIBONSI	28.4*	Max WS	200-4	476.64	94.99	101.65		102.27	0.002427	3.72	146.12	45.09	0.55
POGGIBONSI	28.4*	Max WS	100-4	385.03	94.99	101.26		101.78	0.002252	3.39	128.78	43.72	0.52
POGGIBONSI	28.4*	Max WS	30-4	270.93	94.99	100.74		101.12	0.001866	2.83	106.73	41.82	0.46
POGGIBONSI	28.2*	Max WS	500_4	587.11	94.65	102.02		102.70	0.002345	3.98	172.51	47.05	0.55
POGGIBONSI	28.2*	Max WS	200-4	476.69	94.65	101.39		102.05	0.002599	3.86	143.51	45.20	0.56
POGGIBONSI	28.2*	Max WS	100-4	385.03	94.65	101.03		101.58	0.002358	3.49	127.45	43.97	0.53
POGGIBONSI	28.2*	Max WS	30-4	261.63	94.65	100.63		100.97	0.001620	2.72	110.21	42.50	0.43
POGGIBONSI	28	Max WS	500_4	587.26	94.32	101.80	100.73	102.48	0.002407	4.03	172.69	46.57	0.55
POGGIBONSI	28	Max WS	200-4	476.74	94.32	101.12	100.33	101.80	0.002830	4.00	141.06	45.41	0.58
POGGIBONSI	28	Max WS	100-4	384.99	94.32	100.80	99.96	101.36	0.002478	3.58	126.84	44.25	0.54
POGGIBONSI	28	Max WS	30-4	276.04	94.32	100.26	99.40	100.69	0.002219	3.11	103.46	42.25	0.50
POGGIBONSI	27.5			Bridge									
POGGIBONSI	27	Max WS	500_4	587.11	94.24	101.11		102.13	0.004458	4.84	141.56	47.12	0.73
POGGIBONSI	27	Max WS	200-4	476.75	94.24	100.68		101.59	0.004502	4.54	121.58	45.41	0.72
POGGIBONSI	27	Max WS	100-4	385.06	94.24	100.22		101.09	0.004882	4.37	101.09	43.58	0.73
POGGIBONSI	27	Max WS	30-4	292.48	94.24	99.74		100.53	0.005148	4.08	80.57	41.66	0.74
POGGIBONSI	26.89			Lat Struct									
POGGIBONSI	26.88			Lat Struct									
POGGIBONSI	26	Max WS	500_4	571.40	93.74	100.77		101.65	0.003415	4.55	149.36	46.05	0.64
POGGIBONSI	26	Max WS	200-4	475.27	93.74	100.24		101.12	0.003800	4.48	125.40	44.62	0.66
POGGIBONSI	26	Max WS	100-4	376.73	93.74	99.72		100.55	0.004065	4.28	102.44	42.55	0.67
POGGIBONSI	26	Max WS	30-4	287.82	93.74	99.28		99.99	0.003889	3.88	84.02	40.94	0.64
POGGIBONSI	25	Max WS	500_4	576.49	93.32	100.86	100.05	101.64	0.003129	4.27	159.40	50.10	0.61
POGGIBONSI	25	Max WS	200-4	477.31	93.32	100.32	99.70	101.07	0.003410	4.13	133.52	45.55	0.63
POGGIBONSI	25	Max WS	100-4	385.14	93.32	99.77	99.33	100.51	0.003919	4.05	108.89	43.58	0.66
POGGIBONSI	25	Max WS	30-4	293.40	93.32	99.27	98.87	99.94	0.004055	3.75	87.88	41.77	0.66
POGGIBONSI	24.5			Bridge									
POGGIBONSI	24	Max WS	500_4	557.09	93.31	100.79		101.50	0.002639	4.05	160.46	46.77	0.56
POGGIBONSI	24	Max WS	200-4	477.31	93.31	100.40		101.06	0.002663	3.87	142.69	44.55	0.56
POGGIBONSI	24	Max WS	100-4	385.15	93.31	99.89		100.50	0.002763	3.66	120.39	42.51	0.56
POGGIBONSI	24	Max WS	30-4	293.40	93.31	99.35		99.88	0.002771	3.36	98.17	40.48	0.55
POGGIBONSI	23.89			Lat Struct									
POGGIBONSI	23.88			Lat Struct									
POGGIBONSI	23	Max WS	500_4	553.59	93.85	100.66		101.47	0.003022	4.38	155.02	50.45	0.60
POGGIBONSI	23	Max WS	200-4	477.31	93.85	100.26		101.06	0.003196	4.28	135.15	48.51	0.61
POGGIBONSI	23	Max WS	100-4	385.12	93.85	99.74		100.48	0.003295	4.04	112.20	42.67	0.61
POGGIBONSI	23	Max WS	30-4	293.40	93.85	99.20		99.86	0.003378	3.75	89.61	40.16	0.60

HEC-RAS River: STAGGIA Reach: POGGIBONSI Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	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)	
POGGIBONSI	22	Max WS	500_4	555.29	93.78	100.46	99.14	101.08	0.002222	3.61	167.06	46.31	0.53
POGGIBONSI	22	Max WS	200-4	477.32	93.78	99.95	98.83	100.56	0.002521	3.56	144.00	44.34	0.56
POGGIBONSI	22	Max WS	100-4	385.11	93.78	99.40	98.38	99.96	0.002767	3.39	120.20	42.21	0.57
POGGIBONSI	22	Max WS	30-4	293.44	93.78	98.83	97.88	99.33	0.002985	3.15	96.86	40.02	0.57
POGGIBONSI	21.5			Bridge									
POGGIBONSI	21	Max WS	500_4	555.25	93.38	100.33		100.89	0.001870	3.47	176.83	46.04	0.49
POGGIBONSI	21	Max WS	200-4	477.32	93.38	99.95		100.45	0.001867	3.29	159.39	44.82	0.49
POGGIBONSI	21	Max WS	100-4	385.12	93.38	99.45		99.89	0.001863	3.05	137.54	43.24	0.48
POGGIBONSI	21	Max WS	30-4	293.44	93.38	98.92		99.28	0.001813	2.75	114.93	41.54	0.46
POGGIBONSI	20	Max WS	500_4	555.31	93.38	100.18	98.76	100.68	0.001737	3.30	188.99	52.83	0.48
POGGIBONSI	20	Max WS	200-4	477.32	93.38	99.77	98.47	100.24	0.001800	3.17	167.89	51.35	0.48
POGGIBONSI	20	Max WS	100-4	385.12	93.38	99.25	98.01	99.67	0.001908	3.01	141.30	49.43	0.48
POGGIBONSI	20	Max WS	30-4	293.46	93.38	98.68	97.37	99.06	0.002005	2.79	114.08	47.38	0.48
POGGIBONSI	19.95			Bridge									
POGGIBONSI	19.9	Max WS	500_4	555.17	93.38	99.89		100.48	0.002202	3.57	173.91	51.78	0.53
POGGIBONSI	19.9	Max WS	200-4	477.32	93.38	99.55		100.09	0.002194	3.39	156.57	50.54	0.52
POGGIBONSI	19.9	Max WS	100-4	381.66	93.38	99.05		99.54	0.002275	3.18	131.85	48.73	0.52
POGGIBONSI	19.9	Max WS	30-4	293.44	93.38	98.50		98.94	0.002472	2.98	105.55	46.72	0.53
POGGIBONSI	19	Max WS	500_4	554.73	92.80	99.47		100.47	0.003930	4.70	134.17	41.39	0.69
POGGIBONSI	19	Max WS	200-4	476.66	92.80	99.18		100.07	0.003747	4.40	122.29	40.42	0.66
POGGIBONSI	19	Max WS	100-4	381.62	92.80	98.73		99.51	0.003691	4.07	104.39	38.91	0.65
POGGIBONSI	19	Max WS	30-4	293.36	92.80	98.22		98.91	0.003718	3.74	85.21	37.22	0.63
POGGIBONSI	18.88			Lat Struct									
POGGIBONSI	18.82*	Max WS	500_4	554.11	92.70	99.26		100.18	0.003453	4.53	140.64	42.47	0.65
POGGIBONSI	18.82*	Max WS	200-4	476.56	92.70	98.99		99.80	0.003216	4.21	129.35	41.58	0.62
POGGIBONSI	18.82*	Max WS	100-4	381.55	92.70	98.54		99.24	0.003127	3.89	110.97	40.10	0.60
POGGIBONSI	18.82*	Max WS	30-4	293.22	92.70	98.02		98.64	0.003160	3.58	90.49	38.37	0.59
POGGIBONSI	18.64*	Max WS	500_4	552.98	92.60	99.10		99.92	0.002952	4.31	149.22	43.72	0.60
POGGIBONSI	18.64*	Max WS	200-4	476.44	92.60	98.85		99.56	0.002700	3.99	138.36	42.90	0.57
POGGIBONSI	18.64*	Max WS	100-4	381.48	92.60	98.41		99.02	0.002582	3.67	119.51	41.45	0.55
POGGIBONSI	18.64*	Max WS	30-4	288.90	92.60	97.88		98.40	0.002495	3.32	98.20	39.74	0.53
POGGIBONSI	18.46*	Max WS	500_4	552.41	92.50	98.99		99.71	0.002499	4.08	159.43	45.08	0.56
POGGIBONSI	18.46*	Max WS	200-4	476.30	92.50	98.75		99.37	0.002245	3.75	148.94	44.33	0.52
POGGIBONSI	18.46*	Max WS	100-4	381.35	92.50	98.31		98.83	0.002110	3.43	129.58	42.91	0.50
POGGIBONSI	18.46*	Max WS	30-4	289.35	92.50	97.79		98.23	0.002002	3.09	107.59	41.24	0.48
POGGIBONSI	18.28*	Max WS	500_4	551.04	92.40	98.90		99.52	0.002099	3.83	171.00	46.30	0.51
POGGIBONSI	18.28*	Max WS	200-4	476.21	92.40	98.68		99.20	0.001868	3.51	160.68	45.80	0.48
POGGIBONSI	18.28*	Max WS	100-4	381.24	92.40	98.24		98.68	0.001726	3.20	140.82	44.42	0.45
POGGIBONSI	18.28*	Max WS	30-4	289.48	92.40	97.72		98.08	0.001605	2.87	118.15	42.79	0.43
POGGIBONSI	18.208			Lat Struct									
POGGIBONSI	18.19			Lat Struct									
POGGIBONSI	18.18			Lat Struct									
POGGIBONSI	18.1	Max WS	500_4	542.22	92.50	98.85		99.37	0.001795	3.57	182.35	48.31	0.47
POGGIBONSI	18.1	Max WS	200-4	474.72	92.50	98.60		99.07	0.001669	3.34	170.59	48.31	0.45
POGGIBONSI	18.1	Max WS	100-4	380.52	92.50	98.17		98.55	0.001510	3.01	150.26	45.86	0.42
POGGIBONSI	18.1	Max WS	30-4	289.46	92.50	97.65		97.96	0.001397	2.70	126.90	44.30	0.40
POGGIBONSI	18	Max WS	500_4	550.27	92.80	98.74	97.54	99.33	0.002143	3.78	174.38	48.31	0.51
POGGIBONSI	18	Max WS	200-4	480.08	92.80	98.51	97.29	99.02	0.001953	3.51	163.17	47.21	0.48
POGGIBONSI	18	Max WS	100-4	390.41	92.80	98.06	96.94	98.51	0.001902	3.26	142.11	45.58	0.47
POGGIBONSI	18	Max WS	30-4	298.30	92.80	97.54	96.46	97.92	0.001821	2.96	118.98	44.00	0.45
POGGIBONSI	17.5			Inl Struct									
POGGIBONSI	17	Max WS	500_4	537.61	90.50	98.46		98.82	0.000962	2.82	217.36	48.93	0.35
POGGIBONSI	17	Max WS	200-4	479.75	90.50	97.94		98.30	0.001070	2.81	192.31	47.03	0.36
POGGIBONSI	17	Max WS	100-4	389.30	90.50	97.17		97.53	0.001217	2.74	157.21	44.39	0.38
POGGIBONSI	17	Max WS	30-4	297.99	90.50	96.34		96.68	0.001390	2.62	121.81	41.55	0.39
POGGIBONSI	16.9			Lat Struct									
POGGIBONSI	16.88			Lat Struct									
POGGIBONSI	16	Max WS	500_4	467.96	91.18	98.52		98.79	0.000761	2.37	216.89	50.11	0.31
POGGIBONSI	16	Max WS	200-4	473.10	91.18	97.81		98.17	0.001196	2.77	183.09	43.69	0.39
POGGIBONSI	16	Max WS	100-4	388.79	91.18	96.99		97.37	0.001459	2.79	148.14	41.68	0.42
POGGIBONSI	16	Max WS	30-4	297.94	91.18	96.12		96.50	0.001781	2.75	113.08	39.20	0.45
POGGIBONSI	15	Max WS	500_4	514.14	90.58	98.34		98.67	0.000966	2.63	221.63	64.29	0.36
POGGIBONSI	15	Max WS	200-4	472.49	90.58	97.69		98.08	0.001326	2.84	181.79	54.88	0.41
POGGIBONSI	15	Max WS	100-4	388.64	90.58	96.82		97.24	0.001791	2.90	140.28	45.28	0.46
POGGIBONSI	15	Max WS	30-4	297.85	90.58	95.88		96.33	0.002493	2.96	102.05	37.37	0.52
POGGIBONSI	14.89			Lat Struct									
POGGIBONSI	14.88			Lat Struct									
POGGIBONSI	14	Max WS	500_4	473.41	90.68	98.49		98.61	0.000320	1.60	327.76	80.48	0.21
POGGIBONSI	14	Max WS	200-4	485.62	90.68	97.78		97.96	0.000568	1.94	270.27	79.94	0.28
POGGIBONSI	14	Max WS	100-4	393.96	90.68	96.91		97.11	0.000742	1.96	207.40	65.71	0.31
POGGIBONSI	14	Max WS	30-4	297.88	90.68	95.98		96.17	0.000957	1.93	154.62	45.98	0.34
POGGIBONSI	13	Max WS	500_4	532.12	89.78	98.33	94.96	98.52	0.000516	2.20	286.91	56.49	0.26
POGGIBONSI	13	Max WS	200-4	474.36	89.78	97.69	94.72	97.90	0.000605	2.25	251.04	56.49	0.28

HEC-RAS River: STAGGIA Reach: POGGIBONSI Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	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)	
POGGIBONSI	13	Max WS	100-4	388.92	89.78	96.83	94.27	97.05	0.000749	2.28	202.16	56.49	0.30
POGGIBONSI	13	Max WS	30-4	297.89	89.78	95.86	93.81	96.08	0.000936	2.26	152.31	47.00	0.33
POGGIBONSI	12.5			Bridge									
POGGIBONSI	12.4	Max WS	500_4	526.92	89.78	97.14		97.48	0.001090	2.85	219.76	56.49	0.37
POGGIBONSI	12.4	Max WS	200-4	472.10	89.78	96.71		97.06	0.001209	2.86	195.57	56.49	0.38
POGGIBONSI	12.4	Max WS	100-4	388.92	89.78	96.14		96.46	0.001253	2.72	165.67	47.50	0.38
POGGIBONSI	12.4	Max WS	30-4	297.88	89.78	95.40		95.71	0.001437	2.62	130.94	46.19	0.40
POGGIBONSI	12	Max WS	500_4	526.91	89.97	97.13		97.47	0.000928	2.78	215.01	45.37	0.36
POGGIBONSI	12	Max WS	200-4	472.13	89.97	96.71		97.04	0.000985	2.73	195.89	45.37	0.37
POGGIBONSI	12	Max WS	100-4	388.92	89.97	96.15		96.45	0.001002	2.56	170.80	44.81	0.37
POGGIBONSI	12	Max WS	30-4	297.87	89.97	95.43		95.69	0.001080	2.40	138.68	43.61	0.37
POGGIBONSI	11.89			Lat Struct									
POGGIBONSI	11	Max WS	500_4	511.73	89.89	96.84		97.44	0.002038	3.52	152.56	32.29	0.48
POGGIBONSI	11	Max WS	200-4	470.92	89.89	96.35		96.98	0.002368	3.61	136.76	31.89	0.52
POGGIBONSI	11	Max WS	100-4	388.92	89.89	95.83		96.39	0.002330	3.37	120.51	31.10	0.51
POGGIBONSI	11	Max WS	30-4	297.82	89.89	95.15		95.62	0.002386	3.10	99.59	30.05	0.51
POGGIBONSI	10	Max WS	500_4	716.88	89.30	96.67	94.24	97.04	0.001023	2.76	278.15	62.48	0.38
POGGIBONSI	10	Max WS	200-4	652.13	89.30	96.19	94.08	96.57	0.001185	2.80	248.46	62.48	0.40
POGGIBONSI	10	Max WS	100-4	546.09	89.30	95.66	93.76	96.01	0.001243	2.66	216.01	57.13	0.40
POGGIBONSI	10	Max WS	30-4	415.78	89.30	95.00	93.33	95.29	0.001275	2.41	179.17	54.52	0.40
POGGIBONSI	9.5			Bridge									
POGGIBONSI	9.1	Max WS	500_4	716.62	89.30	96.16		96.63	0.001467	3.10	246.39	62.48	0.45
POGGIBONSI	9.1	Max WS	200-4	652.07	89.30	95.85		96.30	0.001543	3.04	226.93	61.20	0.45
POGGIBONSI	9.1	Max WS	100-4	546.08	89.30	95.41		95.81	0.001528	2.83	201.84	56.12	0.44
POGGIBONSI	9.1	Max WS	30-4	415.78	89.30	94.81		95.13	0.001531	2.55	168.78	53.77	0.43
POGGIBONSI	9	Max WS	500_4	716.61	89.90	96.15		96.63	0.001354	3.12	242.23	53.62	0.44
POGGIBONSI	9	Max WS	200-4	652.09	89.90	95.84		96.29	0.001391	3.03	225.71	52.83	0.44
POGGIBONSI	9	Max WS	100-4	546.08	89.90	95.41		95.80	0.001343	2.80	203.35	51.59	0.42
POGGIBONSI	9	Max WS	30-4	415.78	89.90	94.82		95.13	0.001275	2.48	173.37	49.88	0.40
POGGIBONSI	8.89			Lat Struct									
POGGIBONSI	8	Max WS	500_4	716.27	89.30	95.81		96.50	0.002588	3.73	201.91	58.05	0.58
POGGIBONSI	8	Max WS	200-4	652.01	89.30	95.45		96.15	0.002935	3.75	181.50	56.10	0.61
POGGIBONSI	8	Max WS	100-4	546.12	89.30	95.00		95.65	0.003170	3.59	157.00	53.52	0.62
POGGIBONSI	8	Max WS	30-4	415.79	89.30	94.38		94.96	0.003670	3.38	124.91	49.94	0.64
POGGIBONSI	7.49			Lat Struct									
POGGIBONSI	7	Max WS	500_4	734.18	88.20	95.30		95.93	0.001841	3.56	217.84	52.63	0.48
POGGIBONSI	7	Max WS	200-4	650.91	88.20	95.04		95.59	0.001736	3.34	203.85	50.80	0.47
POGGIBONSI	7	Max WS	100-4	546.07	88.20	94.59		95.07	0.001680	3.10	181.94	47.54	0.45
POGGIBONSI	7	Max WS	30-4	415.83	88.20	93.95		94.33	0.001605	2.75	152.71	43.83	0.43
POGGIBONSI	6.99			Lat Struct									
POGGIBONSI	6	Max WS	500_4	726.78	87.45	94.93		95.70	0.002602	3.89	190.04	47.37	0.57
POGGIBONSI	6	Max WS	200-4	650.92	87.45	94.65		95.35	0.002572	3.71	177.09	44.46	0.56
POGGIBONSI	6	Max WS	100-4	546.15	87.45	94.24		94.84	0.002456	3.44	159.32	41.24	0.54
POGGIBONSI	6	Max WS	30-4	415.85	87.45	93.64		94.11	0.002279	3.06	135.95	37.45	0.51
POGGIBONSI	5.89			Lat Struct									
POGGIBONSI	5	Max WS	500_4	725.53	86.80	94.07		95.37	0.005101	5.16	148.11	42.01	0.79
POGGIBONSI	5	Max WS	200-4	650.90	86.80	93.78		95.01	0.005239	4.99	136.31	40.55	0.79
POGGIBONSI	5	Max WS	100-4	546.23	86.80	93.38		94.48	0.005323	4.70	120.58	38.51	0.78
POGGIBONSI	5	Max WS	30-4	415.84	86.80	92.81		93.74	0.005408	4.31	99.30	35.80	0.77
POGGIBONSI	4.89			Lat Struct									
POGGIBONSI	4	Max WS	500_4	660.27	85.89	93.27		94.14	0.002822	4.22	166.55	39.92	0.60
POGGIBONSI	4	Max WS	200-4	586.81	85.89	92.54		93.54	0.003893	4.47	137.58	39.72	0.68
POGGIBONSI	4	Max WS	100-4	495.80	85.89	92.05		92.99	0.004284	4.33	117.97	39.30	0.70
POGGIBONSI	4	Max WS	30-4	405.54	85.89	91.35		92.32	0.005522	4.36	93.68	32.37	0.77
POGGIBONSI	3	Max WS	500_4	718.80	85.50	93.25		93.53	0.000838	2.46	318.76	71.87	0.33
POGGIBONSI	3	Max WS	200-4	587.46	85.50	92.56		92.82	0.000931	2.38	269.07	70.96	0.34
POGGIBONSI	3	Max WS	100-4	469.87	85.50	92.00		92.23	0.000952	2.21	229.45	70.23	0.34
POGGIBONSI	3	Max WS	30-4	362.11	85.50	91.02		91.28	0.001453	2.33	166.04	61.32	0.41
POGGIBONSI	2	Max WS	500_4	690.92	85.30	93.30		93.44	0.000403	1.73	426.32	98.06	0.24
POGGIBONSI	2	Max WS	200-4	584.27	85.30	92.55		92.70	0.000495	1.74	354.05	96.61	0.26
POGGIBONSI	2	Max WS	100-4	466.48	85.30	91.95		92.09	0.000519	1.63	296.39	95.44	0.26
POGGIBONSI	2	Max WS	30-4	362.43	85.30	90.95		91.10	0.000787	1.69	214.53	67.74	0.30
POGGIBONSI	1	Max WS	500_4	691.30	84.70	93.17	89.49	93.36	0.000442	1.93	371.88	70.32	0.25
POGGIBONSI	1	Max WS	200-4	520.86	84.70	92.43	89.00	92.57	0.000399	1.67	320.12	69.56	0.23
POGGIBONSI	1	Max WS	100-4	437.80	84.70	91.85	88.74	91.98	0.000424	1.60	279.95	68.70	0.24
POGGIBONSI	1	Max WS	30-4	310.51	84.70	90.80	88.29	90.91	0.000502	1.47	211.10	60.40	0.25

HEC-RAS Profile: Max WS

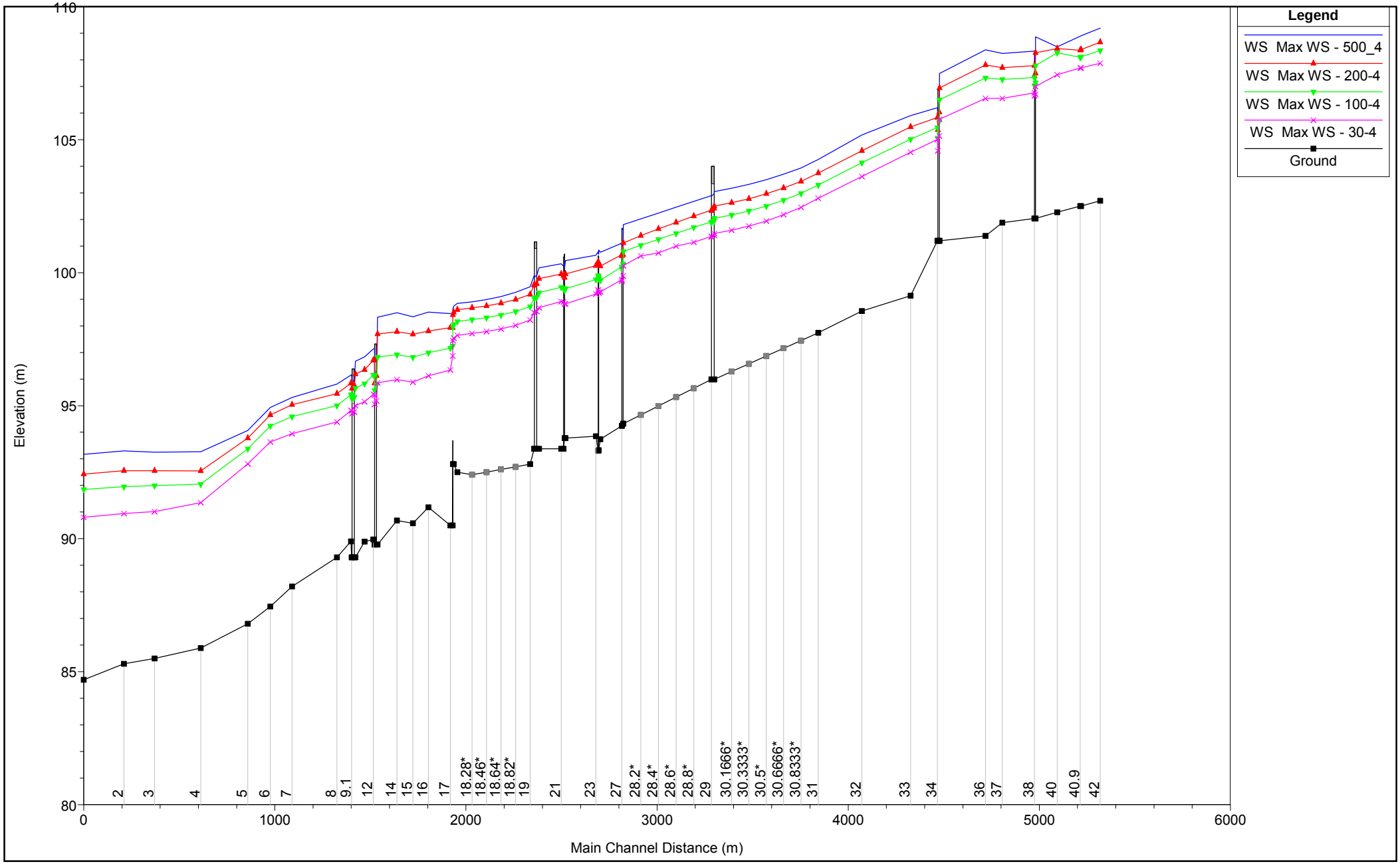
Storage Area	Profile	Plan	W.S. Elev	SA Min El	Net Flux	SA Area	SA Volume
			(m)	(m)	(m3/s)	(1000 m2)	(1000 m3)
ACQUEDOTTO	Max WS	500_4	108.00	104.30	1.11	26.75	70.29
ACQUEDOTTO	Max WS	200-4	107.45	104.30	0.05	26.42	55.70
ACQUEDOTTO	Max WS	100-4	106.97	104.30	6.06	25.43	43.28
ACQUEDOTTO	Max WS	30-4	104.30	104.30	0.00	0.74	0.00
APE SCUOLA 1	Max WS	500_4	102.43	101.60	2.30	35.86	9.85
APE SCUOLA 1	Max WS	200-4	101.60	101.60	0.00	0.06	0.00
APE SCUOLA 1	Max WS	100-4	101.60	101.60	0.00	0.06	0.00
APE SCUOLA 1	Max WS	30-4	101.60	101.60	0.00	0.06	0.00
CARFINI	Max WS	500_4	108.32	104.00	1.84	45.47	40.97
CARFINI	Max WS	200-4	107.77	104.00	1.06	19.67	22.18
CARFINI	Max WS	100-4	107.28	104.00	7.04	14.40	13.99
CARFINI	Max WS	30-4	106.55	104.00	1.42	8.98	5.63
CASE GUCCI	Max WS	500_4	98.39	93.60	304.62	12.72	38.25
CASE GUCCI	Max WS	200-4	97.72	93.60	166.21	12.66	29.74
CASE GUCCI	Max WS	100-4	96.84	93.60	89.35	11.66	18.89
CASE GUCCI	Max WS	30-4	95.89	93.60	0.00	9.88	8.43
CATEROZZOLI	Max WS	500_4	98.42	93.20	109.54	18.69	33.81
CATEROZZOLI	Max WS	200-4	97.73	93.20	28.78	16.53	21.70
CATEROZZOLI	Max WS	100-4	96.84	93.20	-0.79	13.18	7.94
CATEROZZOLI	Max WS	30-4	93.25	93.20	0.00	0.01	0.00
CIMA MORI	Max WS	500_4	98.67	95.30	3.93	37.31	30.10
CIMA MORI	Max WS	200-4	98.03	95.30	1.10	18.80	8.98
CIMA MORI	Max WS	100-4	97.77	95.30	0.44	5.15	4.56
CIMA MORI	Max WS	30-4	97.12	95.30	0.15	2.92	1.92
FI - SI 1	Max WS	500_4	107.59	106.10	0.27	5.33	2.48
FI - SI 1	Max WS	200-4	107.27	106.10	0.18	3.04	1.09
FI - SI 1	Max WS	100-4	106.93	106.10	0.09	1.43	0.33
FI - SI 1	Max WS	30-4	106.10	106.10	0.00	0.01	0.00
FI - SI 2	Max WS	500_4	108.00	108.00	0.00	3.68	0.00
FI - SI 2	Max WS	200-4	108.00	108.00	0.00	3.68	0.00
FI - SI 2	Max WS	100-4	108.00	108.00	0.00	3.68	0.00
FI - SI 2	Max WS	30-4	108.00	108.00	0.00	3.68	0.00
FONTINO	Max WS	500_4	93.27	86.90	15.30	80.89	113.68
FONTINO	Max WS	200-4	92.55	86.90	52.48	66.27	59.56
FONTINO	Max WS	100-4	91.97	86.90	17.27	49.13	26.42
FONTINO	Max WS	30-4	86.90	86.90	0.00	0.01	0.00
IMPIANTISPORTIVI	Max WS	500_4	105.85	103.80	0.70	48.22	70.57
IMPIANTISPORTIVI	Max WS	200-4	105.53	103.80	1.20	44.77	55.47
IMPIANTISPORTIVI	Max WS	100-4	105.19	103.80	3.24	40.84	40.88
IMPIANTISPORTIVI	Max WS	30-4	103.95	103.80	0.29	10.08	1.49
LA MAGIONE	Max WS	500_4	108.28	104.00	46.59	41.76	86.87
LA MAGIONE	Max WS	200-4	107.74	104.00	31.90	39.66	64.84
LA MAGIONE	Max WS	100-4	107.28	104.00	126.88	35.54	47.47
LA MAGIONE	Max WS	30-4	106.56	104.00	18.39	30.52	23.77
LUNGO STAGGIA1	Max WS	500_4	101.09	100.30	0.51	13.02	4.48
LUNGO STAGGIA1	Max WS	200-4	100.63	100.30	-0.03	2.28	0.33
LUNGO STAGGIA1	Max WS	100-4	100.58	100.30	-0.03	2.28	0.22
LUNGO STAGGIA1	Max WS	30-4	100.43	100.30	0.00	0.20	0.03
LUNGO STAGGIA2	Max WS	500_4	98.40	92.60	10.06	100.14	123.82
LUNGO STAGGIA2	Max WS	200-4	96.00	92.60	2.09	22.01	12.02
LUNGO STAGGIA2	Max WS	100-4	95.48	92.60	0.38	13.31	3.33
LUNGO STAGGIA2	Max WS	30-4	94.19	92.60	0.06	0.27	0.24
LUNGO STAGGIA3	Max WS	500_4	100.52	95.60	17.97	44.44	61.88
LUNGO STAGGIA3	Max WS	200-4	95.60	95.60	0.00	0.00	0.00

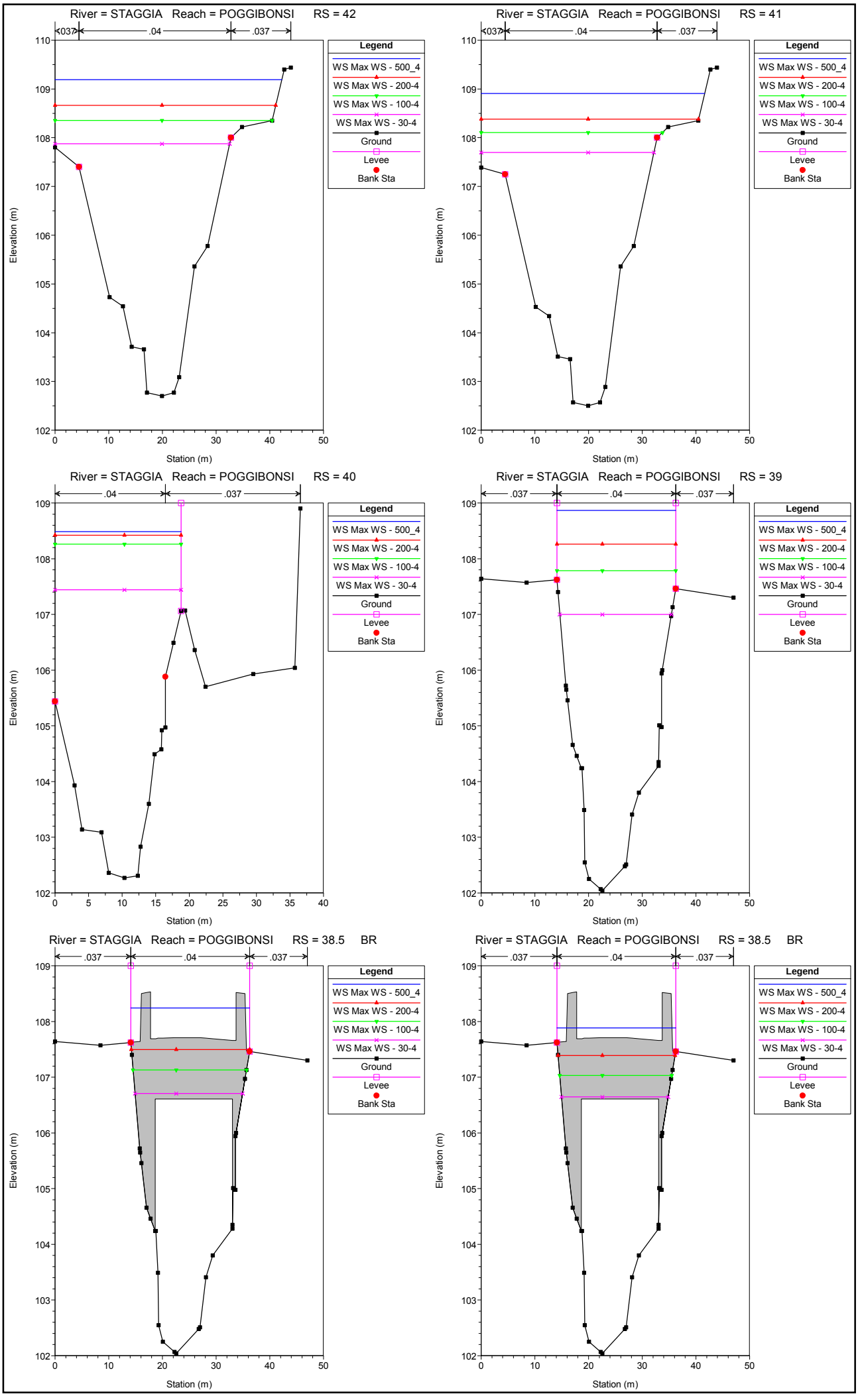
HEC-RAS Profile: Max WS (Continued)

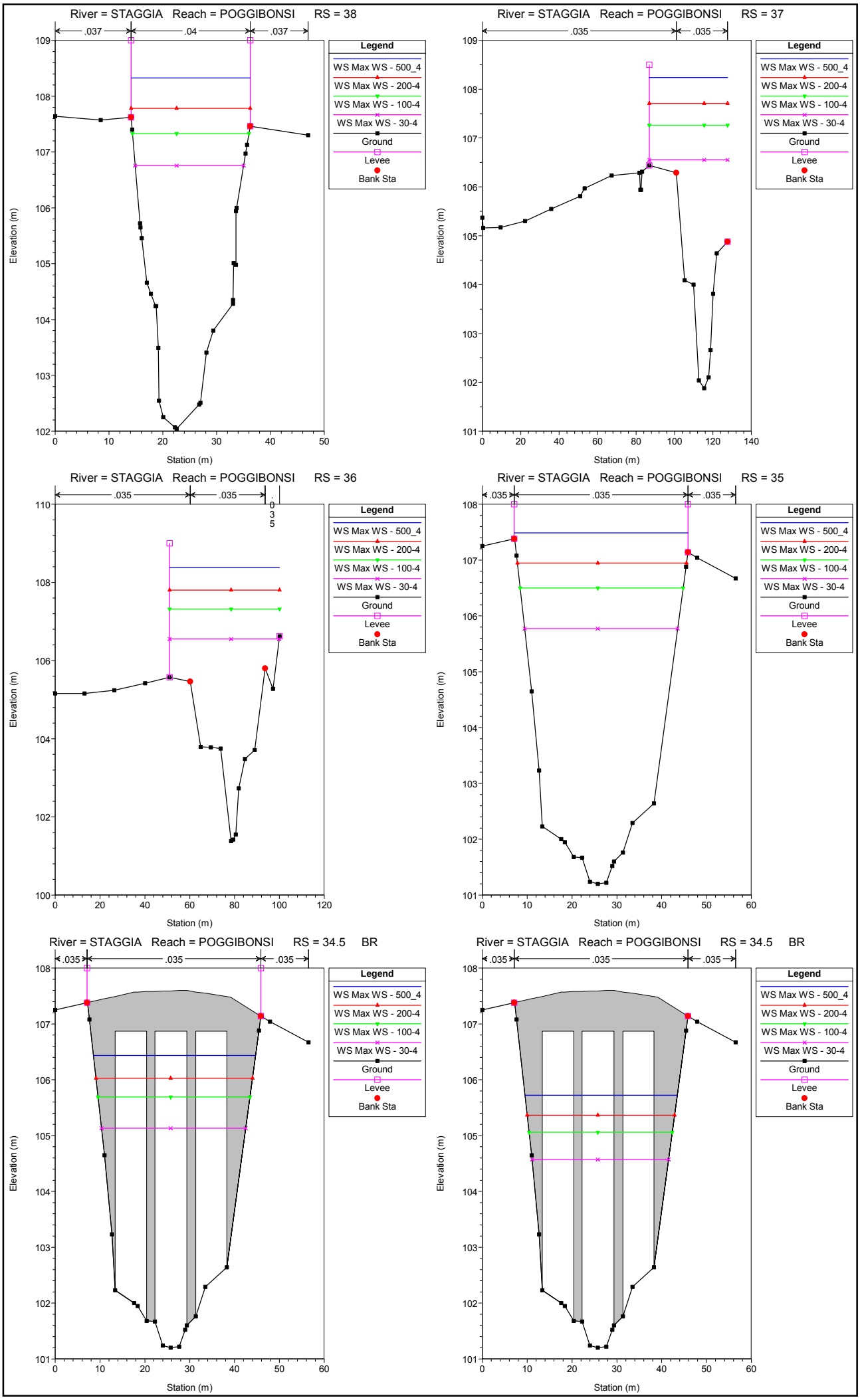
Storage Area	Profile	Plan	W.S. Elev	SA Min El	Net Flux	SA Area	SA Volume
			(m)	(m)	(m3/s)	(1000 m2)	(1000 m3)
LUNGO STAGGIA3	Max WS	100-4	95.60	95.60	0.00	0.00	0.00
LUNGO STAGGIA3	Max WS	30-4	95.60	95.60	0.00	0.00	0.00
ORTI	Max WS	500_4	108.68	106.00	95.61	23.06	38.57
ORTI	Max WS	200-4	108.37	106.00	3.06	22.27	31.80
ORTI	Max WS	100-4	108.14	106.00	2.45	21.43	26.79
ORTI	Max WS	30-4	107.55	106.00	11.78	17.85	15.16
PARCHEGGIO	Max WS	500_4	108.00	104.40	4.69	18.31	35.12
PARCHEGGIO	Max WS	200-4	107.45	104.40	3.83	18.02	25.16
PARCHEGGIO	Max WS	100-4	106.97	104.40	5.85	17.71	16.59
PARCHEGGIO	Max WS	30-4	104.40	104.40	0.00	0.18	0.00
PARCO	Max WS	500_4	108.15	104.20	2.90	19.03	40.32
PARCO	Max WS	200-4	107.58	104.20	1.39	17.94	29.73
PARCO	Max WS	100-4	107.08	104.20	26.85	16.25	20.89
PARCO	Max WS	30-4	106.33	104.20	1.22	13.23	9.50
POGGIBONSI1	Max WS	500_4	98.39	93.10	34.03	63.19	70.11
POGGIBONSI1	Max WS	200-4	96.83	93.10	2.58	10.51	11.62
POGGIBONSI1	Max WS	100-4	93.10	93.10	0.00	0.01	0.00
POGGIBONSI1	Max WS	30-4	93.10	93.10	0.00	0.01	0.00
POGGIBONSI2	Max WS	500_4	96.75	92.00	5.06	33.16	49.49
POGGIBONSI2	Max WS	200-4	95.46	92.00	3.91	28.39	9.53
POGGIBONSI2	Max WS	100-4	94.91	92.00	0.14	5.24	0.96
POGGIBONSI2	Max WS	30-4	92.00	92.00	0.00	0.01	0.00
POGGIBONSI3	Max WS	500_4	95.69	93.20	0.22	20.76	23.23
POGGIBONSI3	Max WS	200-4	94.69	93.20	0.17	13.34	4.44
POGGIBONSI3	Max WS	100-4	94.10	93.20	0.05	1.23	0.31
POGGIBONSI3	Max WS	30-4	93.20	93.20	0.00	0.03	0.00
POGGIBONSI4	Max WS	500_4	95.66	93.90	0.22	15.38	16.61
POGGIBONSI4	Max WS	200-4	94.69	93.90	0.99	9.72	2.71
POGGIBONSI4	Max WS	100-4	94.39	93.90	0.16	2.55	0.58
POGGIBONSI4	Max WS	30-4	93.90	93.90	0.00	0.33	0.00
POGGIBONSI5	Max WS	500_4	95.20	92.90	3.57	12.47	9.15
POGGIBONSI5	Max WS	200-4	94.07	92.90	0.00	1.00	0.24
POGGIBONSI5	Max WS	100-4	92.90	92.90	0.00	0.00	0.00
POGGIBONSI5	Max WS	30-4	92.90	92.90	0.00	0.00	0.00
POGGIBONSI6	Max WS	500_4	94.58	89.50	4.99	23.57	20.87
POGGIBONSI6	Max WS	200-4	93.57	89.50	0.34	5.14	2.88
POGGIBONSI6	Max WS	100-4	89.50	89.50	0.00	0.00	0.00
POGGIBONSI6	Max WS	30-4	89.50	89.50	0.00	0.00	0.00
POGGIBONSI7	Max WS	500_4	95.20	91.20	0.00	25.39	41.59
POGGIBONSI7	Max WS	200-4	92.87	91.20	0.40	5.21	3.41
POGGIBONSI7	Max WS	100-4	91.20	91.20	0.00	0.04	0.00
POGGIBONSI7	Max WS	30-4	91.20	91.20	0.00	0.04	0.00
POGGIBONSI8	Max WS	500_4	96.38	92.70	0.04	16.75	7.38
POGGIBONSI8	Max WS	200-4	92.70	92.70	0.00	0.02	0.00
POGGIBONSI8	Max WS	100-4	92.70	92.70	0.00	0.02	0.00
POGGIBONSI8	Max WS	30-4	92.70	92.70	0.00	0.02	0.00
SALCETO	Max WS	500_4	100.34	98.30	1.09	32.39	19.67
SALCETO	Max WS	200-4	100.20	98.30	0.91	23.34	14.97
SALCETO	Max WS	100-4	100.06	98.30	0.74	23.34	11.69
SALCETO	Max WS	30-4	99.80	98.30	0.48	10.86	6.88
PAPAIANO	Max WS	500_4	100.13	99.80	0.08	0.42	0.13
PAPAIANO	Max WS	200-4	99.80	99.80	0.00	0.36	0.00
PAPAIANO	Max WS	100-4	99.80	99.80	0.00	0.36	0.00
PAPAIANO	Max WS	30-4	99.80	99.80	0.00	0.36	0.00

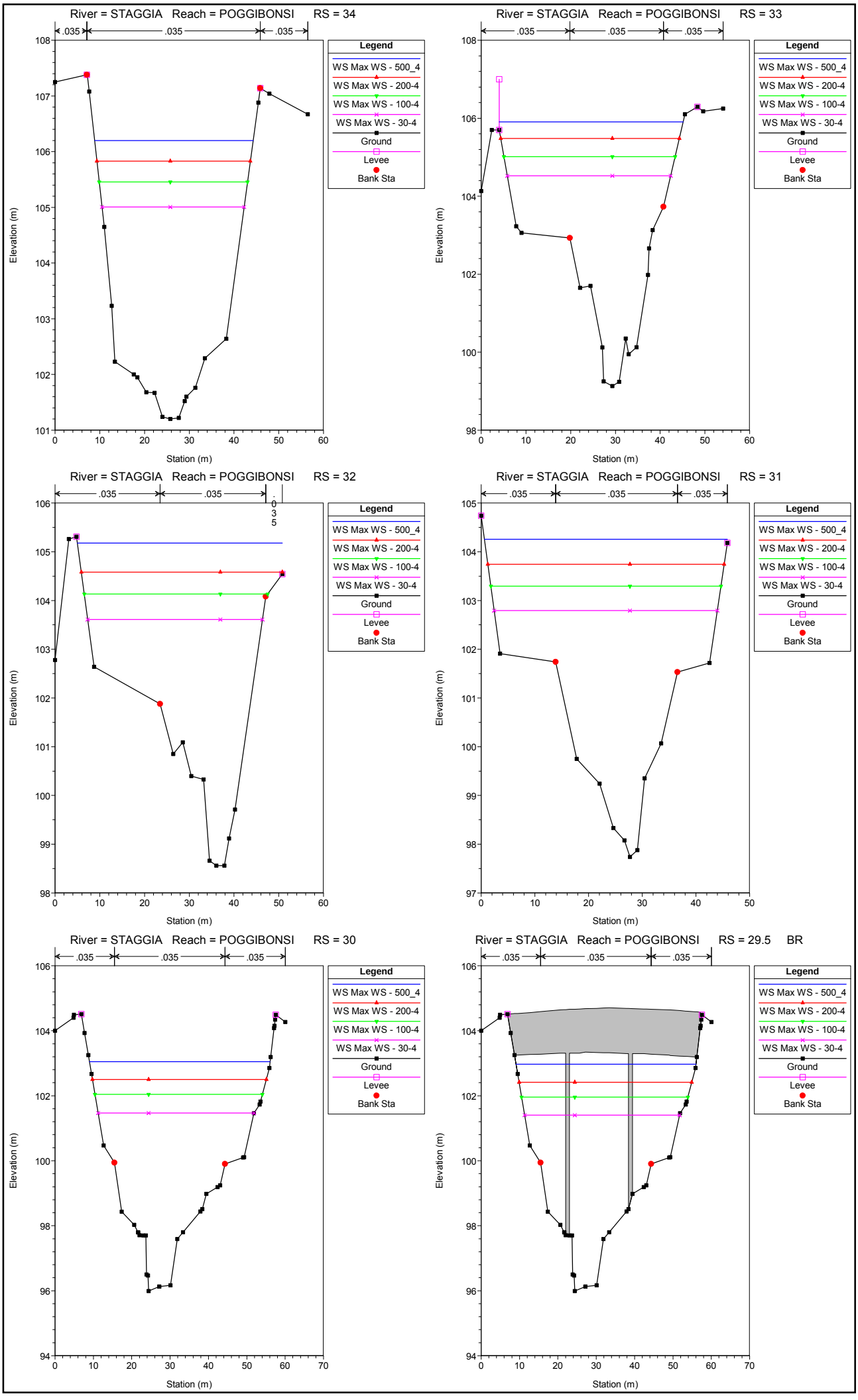
HEC-RAS Profile: Max WS (Continued)

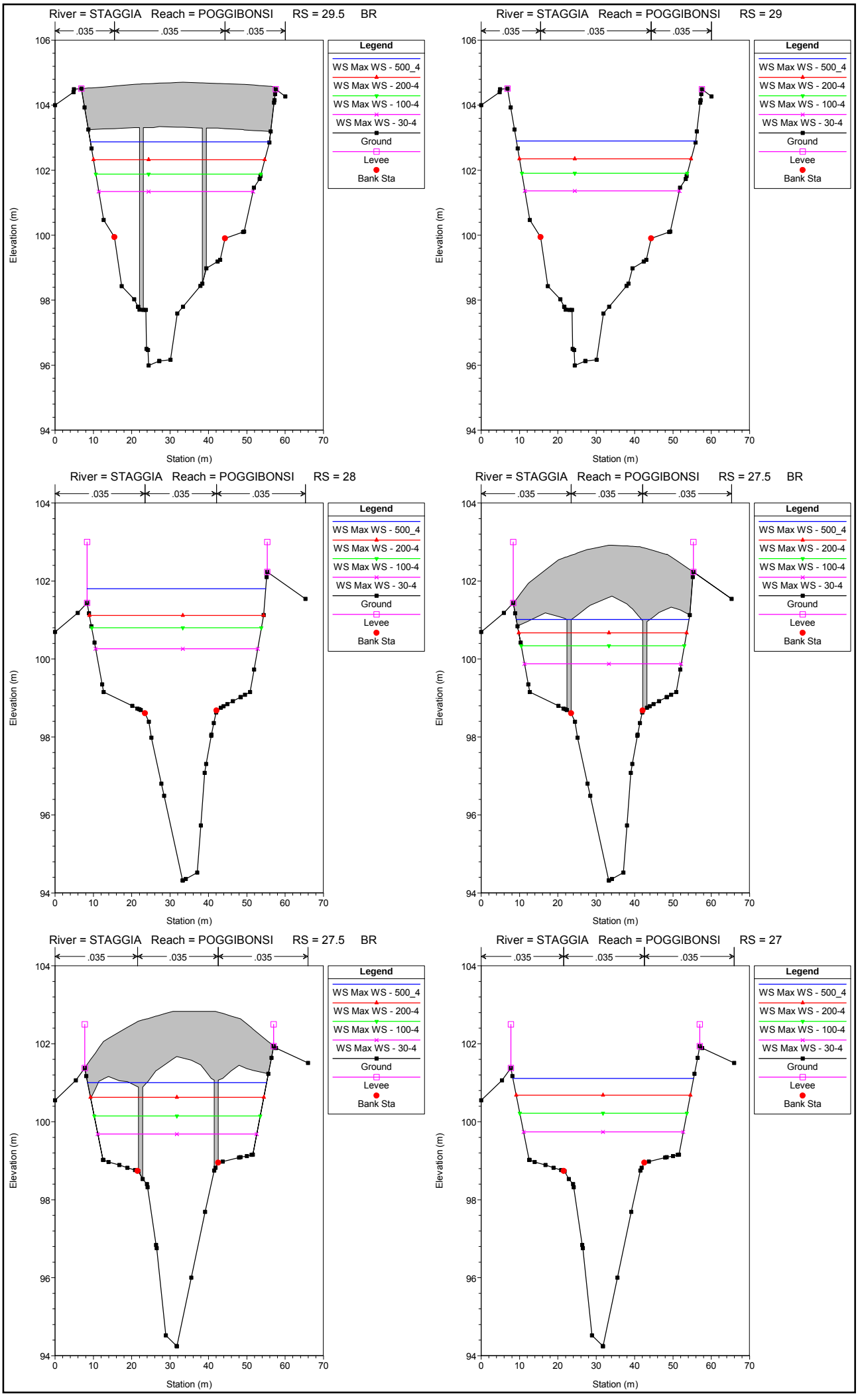
Storage Area	Profile	Plan	W.S. Elev	SA Min El	Net Flux	SA Area	SA Volume
			(m)	(m)	(m3/s)	(1000 m2)	(1000 m3)
ORTI2	Max WS	500_4	105.16	103.00	0.18	6.80	8.05
ORTI2	Max WS	200-4	104.69	103.00	0.20	6.40	4.95
ORTI2	Max WS	100-4	104.55	103.00	0.11	6.40	4.02
ORTI2	Max WS	30-4	103.00	103.00	0.00	0.30	0.00

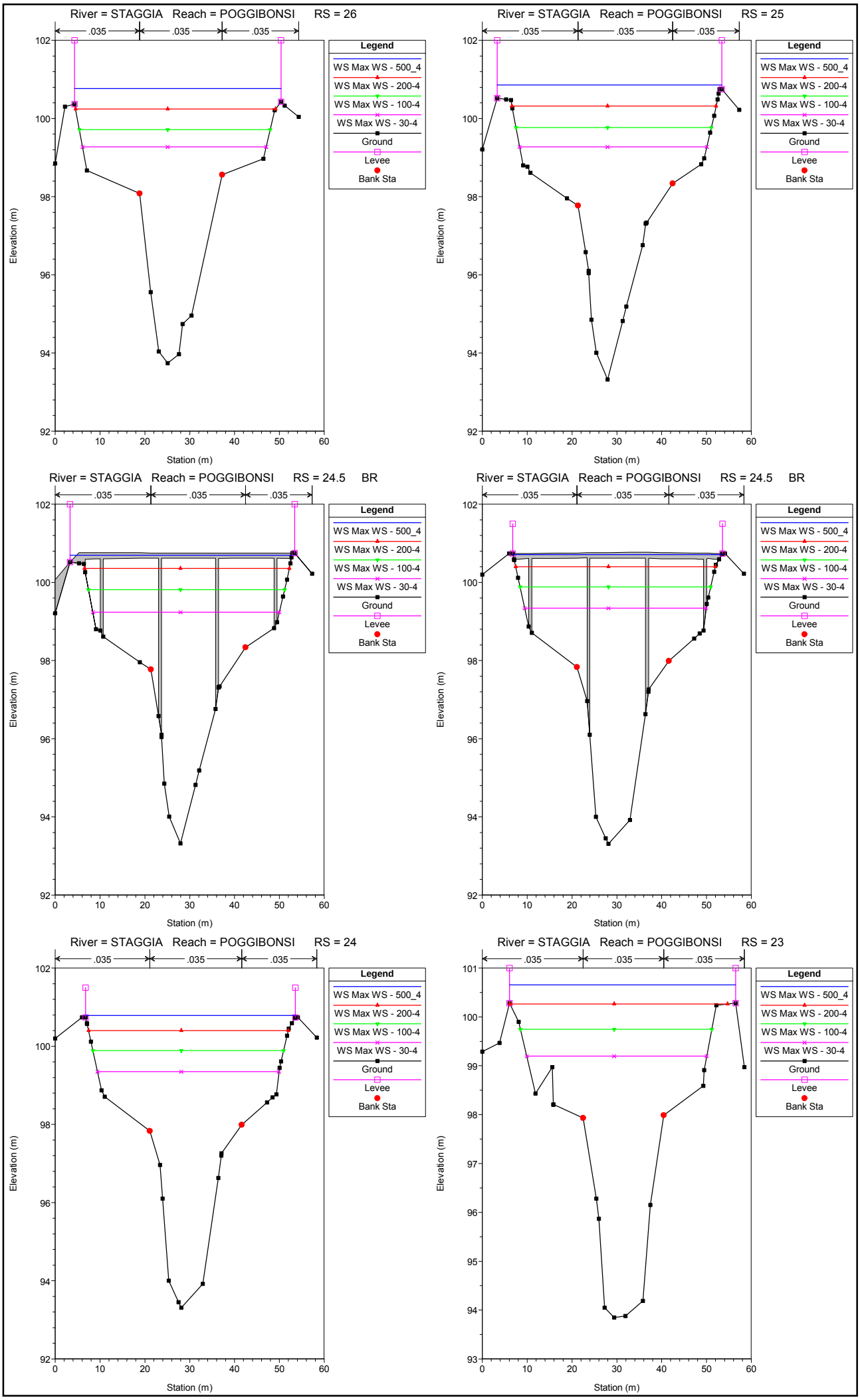

Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Elevation (m)
Main Channel Distance (m)
110
105
100
95
90
85
80
0
1000
2000
3000
4000
5000
6000
2
3
4
5
6
7
8
9.1
12
14
15
16
17
18.28*
18.46*
18.64*
18.82*
19
21
23
27
28.2*
28.4*
28.6*
28.8*
29
30.1666*
30.3333*
30.5*
30.6666*
30.8333*
31
32
33
34
36
37
38
40
40.9
42

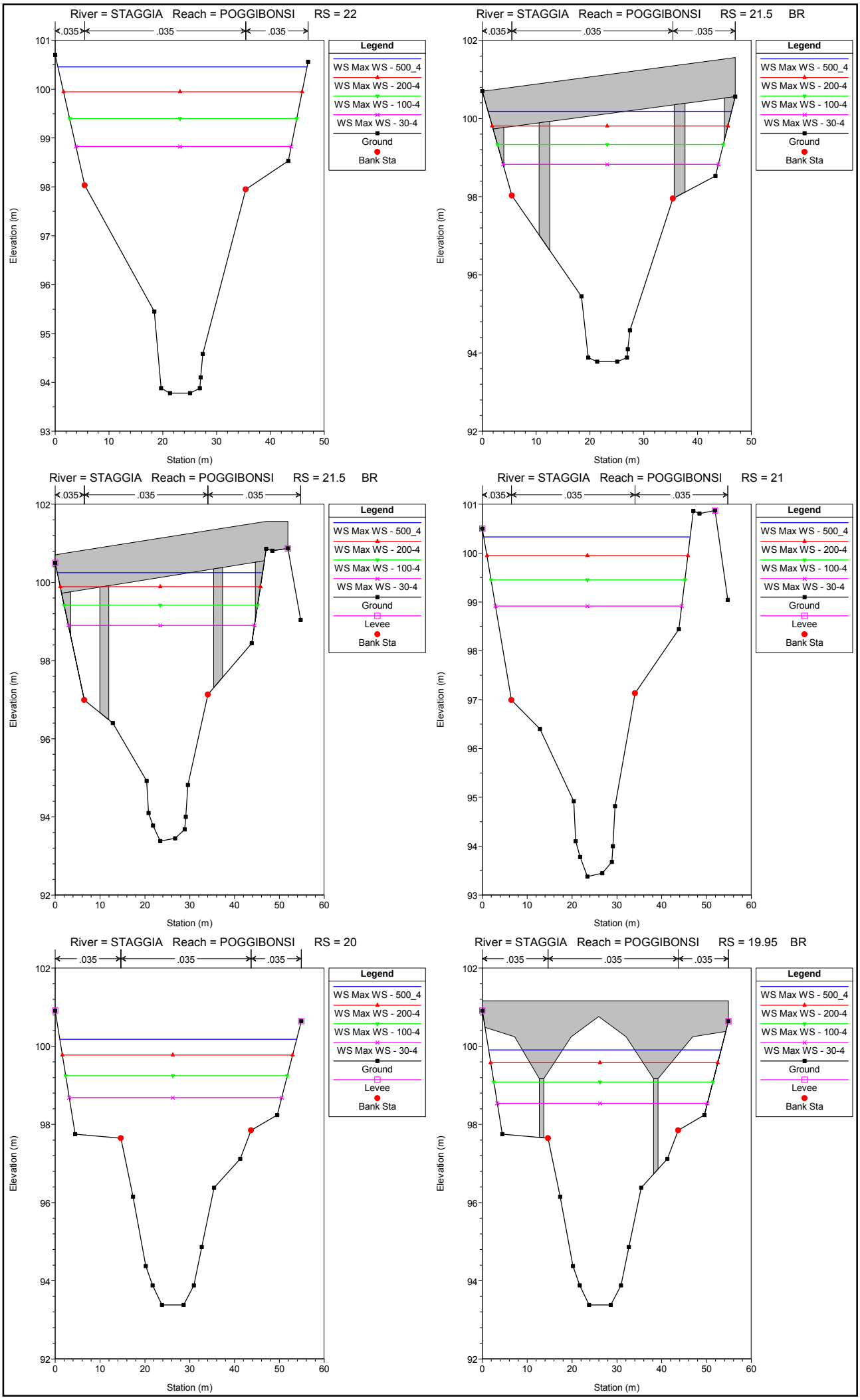

River = STAGGIA Reach = POGGIBONSI RS = 42
.037
.04
.037
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = STAGGIA Reach = POGGIBONSI RS = 41
.037
.04
.037
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = STAGGIA Reach = POGGIBONSI RS = 40
.04
.037
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = STAGGIA Reach = POGGIBONSI RS = 39
.037
.04
.037
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = STAGGIA Reach = POGGIBONSI RS = 38.5 BR
.037
.04
.037
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = STAGGIA Reach = POGGIBONSI RS = 38.5 BR
.037
.04
.037
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)

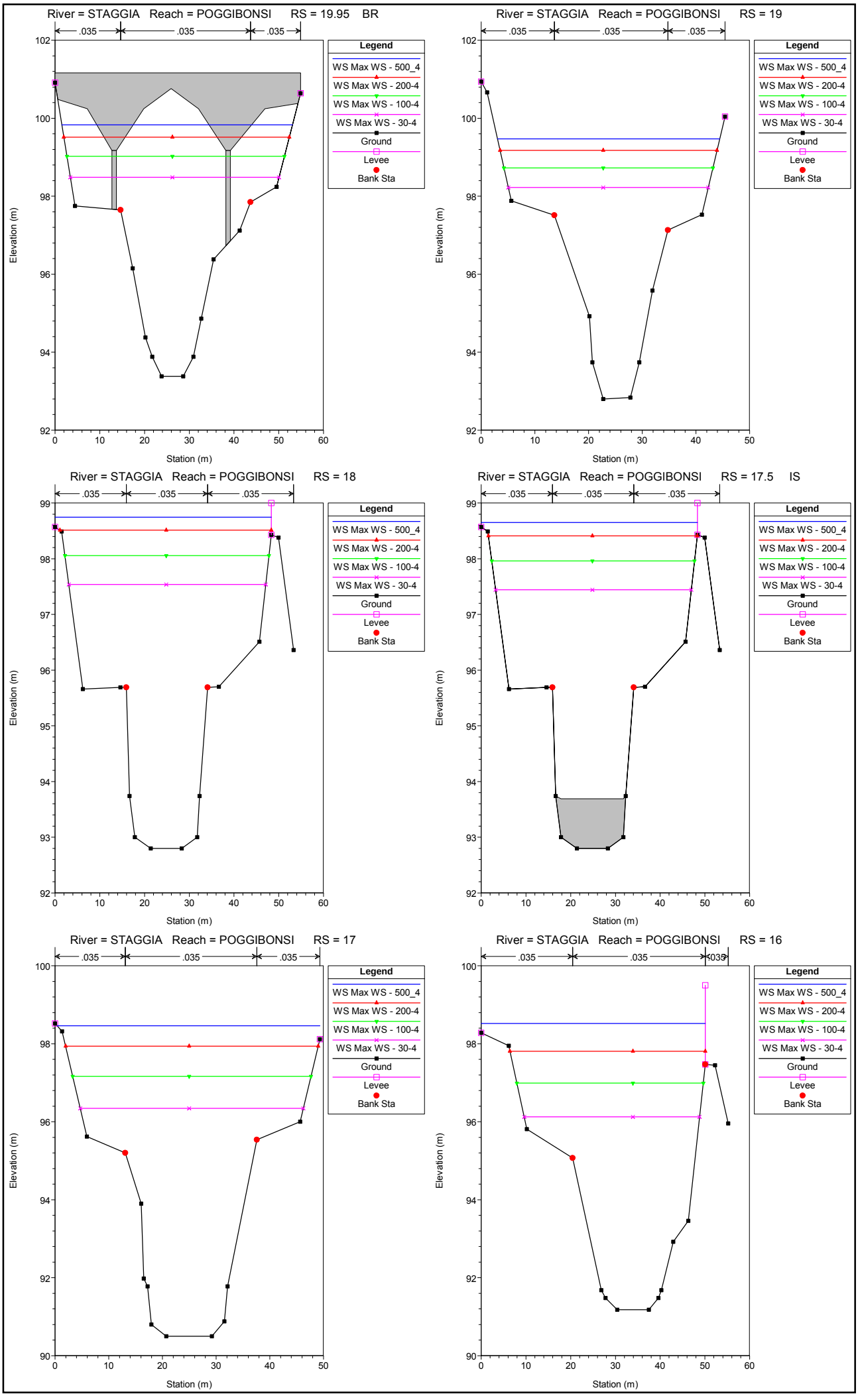

River = STAGGIA Reach = POGGIBONSI RS = 38
.037
.04
.037
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = STAGGIA Reach = POGGIBONSI RS = 37
.035
.035
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = STAGGIA Reach = POGGIBONSI RS = 36
.035
.035
.035
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = STAGGIA Reach = POGGIBONSI RS = 35
.035
.035
.035
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = STAGGIA Reach = POGGIBONSI RS = 34.5 BR
.035
.035
.035
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = STAGGIA Reach = POGGIBONSI RS = 34.5 BR
.035
.035
.035
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)

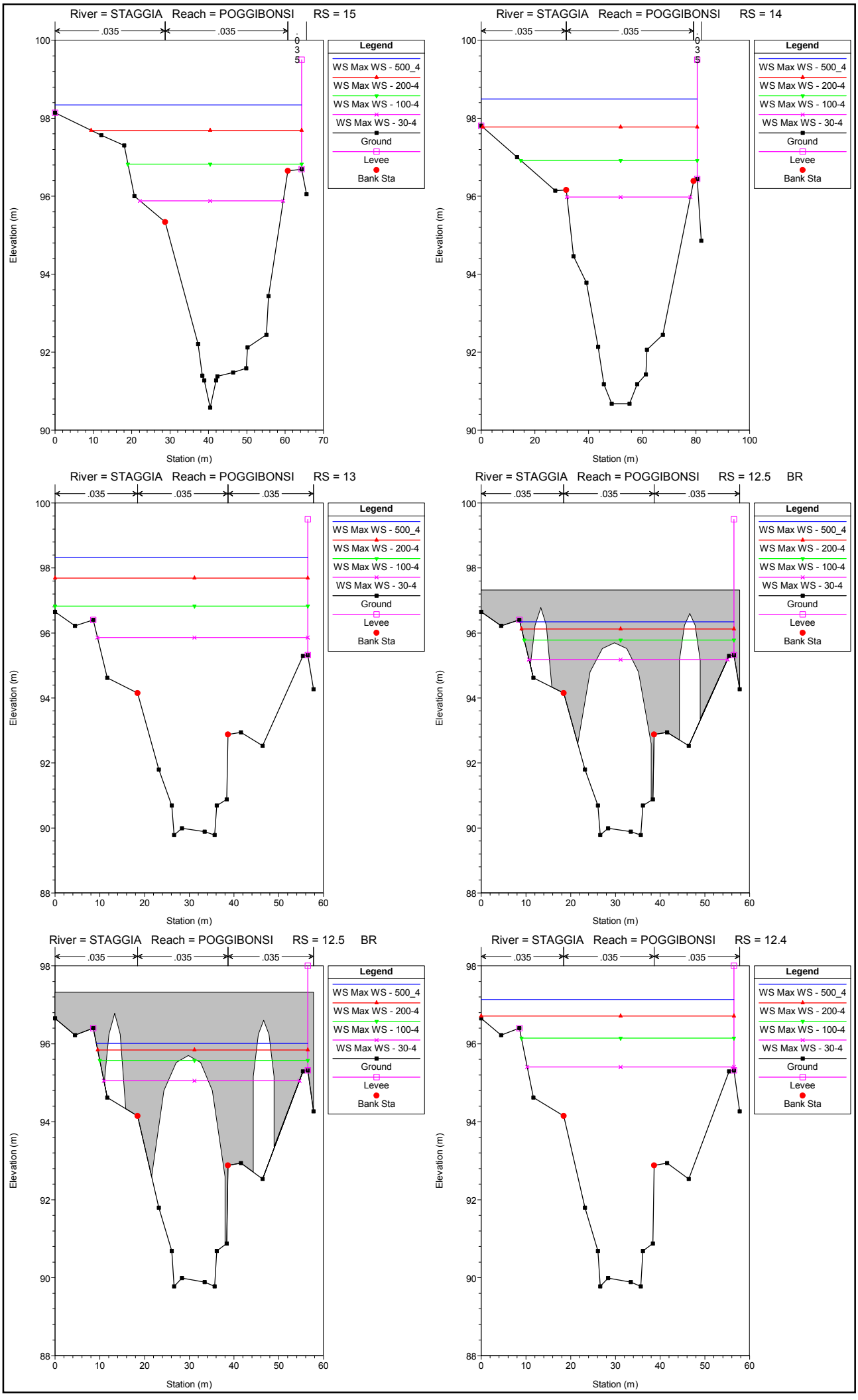

River = STAGGIA Reach = POGGIBONSI RS = 34
River = STAGGIA Reach = POGGIBONSI RS = 33
River = STAGGIA Reach = POGGIBONSI RS = 32
River = STAGGIA Reach = POGGIBONSI RS = 31
River = STAGGIA Reach = POGGIBONSI RS = 30
River = STAGGIA Reach = POGGIBONSI RS = 29.5 BR
.035
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)

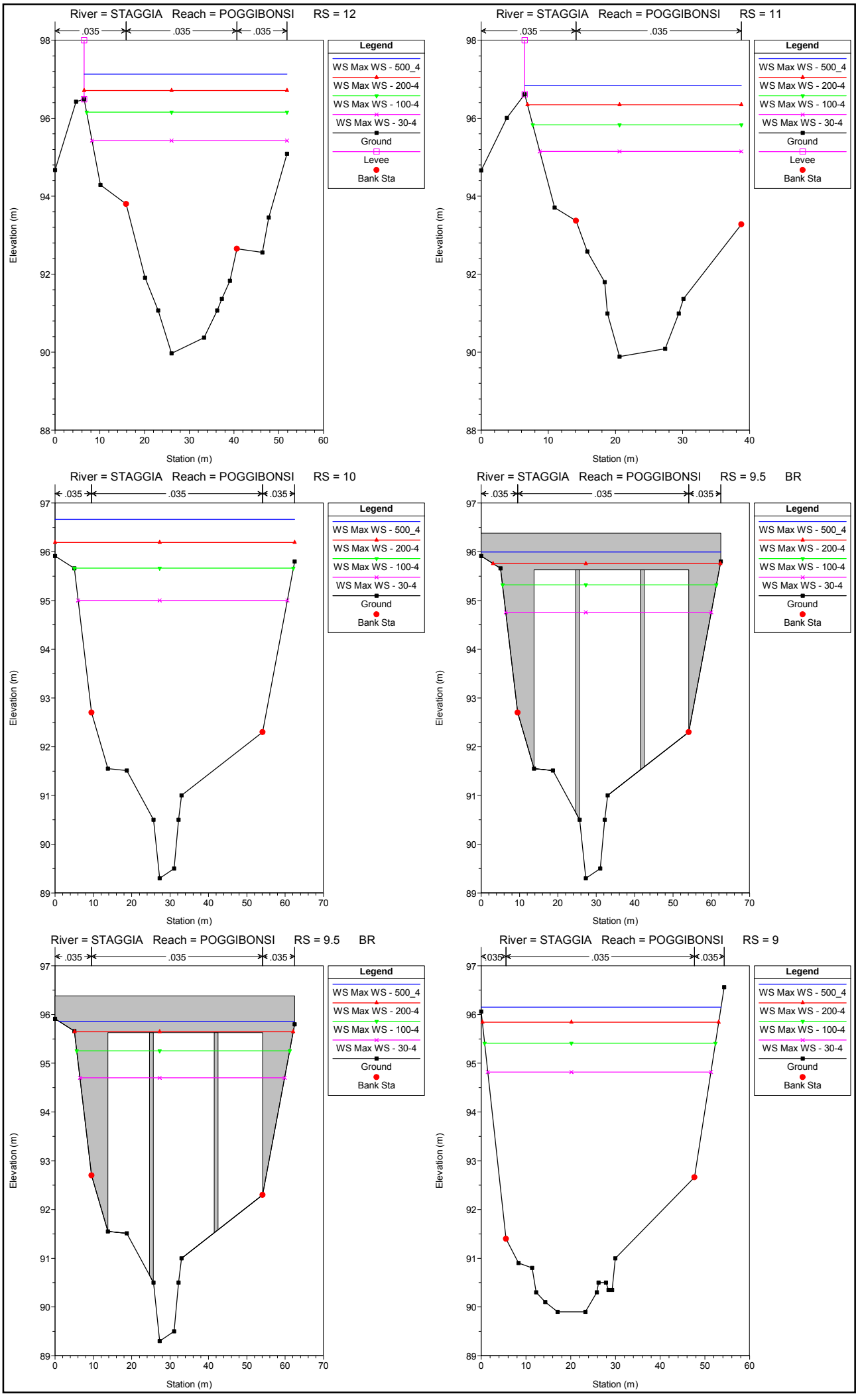

River = STAGGIA Reach = POGGIBONSI RS = 29.5 BR
River = STAGGIA Reach = POGGIBONSI RS = 29
River = STAGGIA Reach = POGGIBONSI RS = 28
River = STAGGIA Reach = POGGIBONSI RS = 27.5 BR
River = STAGGIA Reach = POGGIBONSI RS = 27.5 BR
River = STAGGIA Reach = POGGIBONSI RS = 27
.035
.035
.035
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)

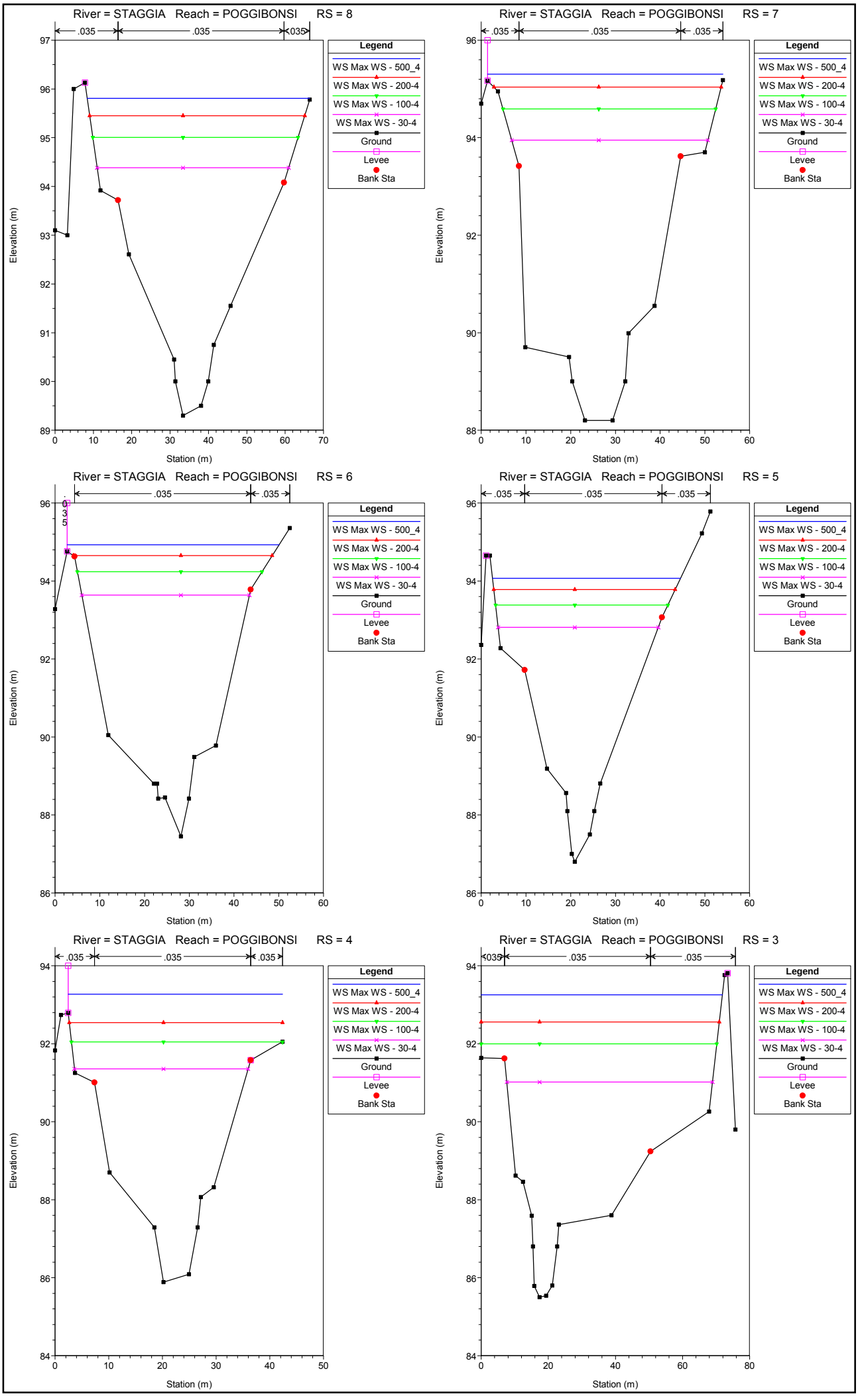

River = STAGGIA Reach = POGGIBONSI RS = 26
River = STAGGIA Reach = POGGIBONSI RS = 25
River = STAGGIA Reach = POGGIBONSI RS = 24.5 BR
River = STAGGIA Reach = POGGIBONSI RS = 24.5 BR
River = STAGGIA Reach = POGGIBONSI RS = 24
River = STAGGIA Reach = POGGIBONSI RS = 23
.035
.035
.035
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)

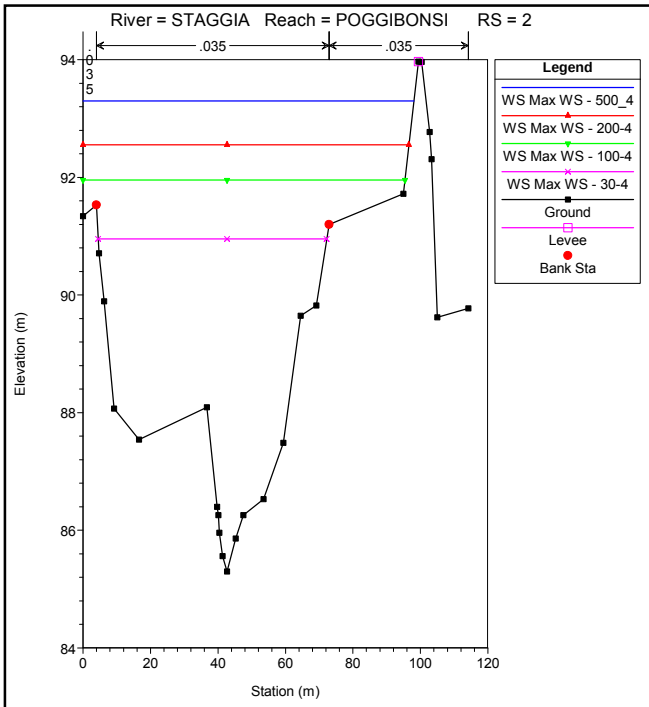

River = STAGGIA Reach = POGGIBONSI RS = 22
.035
.035
.035
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta
Elevation (m)
Station (m)
River = STAGGIA Reach = POGGIBONSI RS = 21.5 BR
.035
.035
.035
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta
Elevation (m)
Station (m)
River = STAGGIA Reach = POGGIBONSI RS = 21.5 BR
.035
.035
.035
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = STAGGIA Reach = POGGIBONSI RS = 21
.035
.035
.035
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = STAGGIA Reach = POGGIBONSI RS = 20
.035
.035
.035
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = STAGGIA Reach = POGGIBONSI RS = 19.95 BR
.035
.035
.035
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)

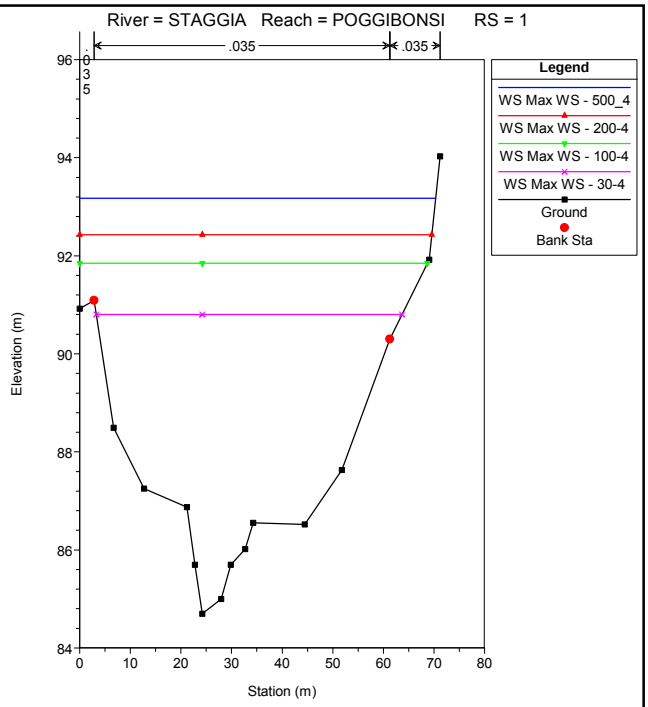

River = STAGGIA Reach = POGGIBONSI RS = 19.95 BR
River = STAGGIA Reach = POGGIBONSI RS = 19
River = STAGGIA Reach = POGGIBONSI RS = 18
River = STAGGIA Reach = POGGIBONSI RS = 17.5 IS
River = STAGGIA Reach = POGGIBONSI RS = 17
River = STAGGIA Reach = POGGIBONSI RS = 16
.035
.035
.035
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)


River = STAGGIA Reach = POGGIBONSI RS = 15
River = STAGGIA Reach = POGGIBONSI RS = 14
River = STAGGIA Reach = POGGIBONSI RS = 13
River = STAGGIA Reach = POGGIBONSI RS = 12.5 BR
River = STAGGIA Reach = POGGIBONSI RS = 12.5 BR
River = STAGGIA Reach = POGGIBONSI RS = 12.4
.035
.035
.035
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)


River = STAGGIA Reach = POGGIBONSI RS = 12
.035
.035
.035
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = STAGGIA Reach = POGGIBONSI RS = 11
.035
.035
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = STAGGIA Reach = POGGIBONSI RS = 10
.035
.035
.035
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta
Elevation (m)
Station (m)
River = STAGGIA Reach = POGGIBONSI RS = 9.5 BR
.035
.035
.035
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta
Elevation (m)
Station (m)
River = STAGGIA Reach = POGGIBONSI RS = 9.5 BR
.035
.035
.035
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta
Elevation (m)
Station (m)
River = STAGGIA Reach = POGGIBONSI RS = 9
035
.035
.035
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta
Elevation (m)
Station (m)


River = STAGGIA Reach = POGGIBONSI RS = 8
.035
.035
.035
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = STAGGIA Reach = POGGIBONSI RS = 7
.035
.035
.035
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = STAGGIA Reach = POGGIBONSI RS = 6
.035
.035
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = STAGGIA Reach = POGGIBONSI RS = 5
.035
.035
.035
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = STAGGIA Reach = POGGIBONSI RS = 4
.035
.035
.035
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = STAGGIA Reach = POGGIBONSI RS = 3
.035
.035
.035
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)


River = STAGGIA Reach = POGGIBONSI RS = 2
.035
.035
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)


River = STAGGIA Reach = POGGIBONSI RS = 1
.035
.035
Legend
WS Max WS - 500_4
WS Max WS - 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta
Elevation (m)
Station (m)

HEC-RAS River: TORRENTE FOCI Reach: VALLE Profile: Max WS

Reach	River Sta	Profile	Plan	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)	
VALLE	27.1	Max WS	500_5	301.34	95.26	100.74		101.07	0.002789	2.68	124.35	50.77	0.51
VALLE	27.1	Max WS	200-5	236.60	95.26	100.36		100.64	0.002924	2.49	105.10	50.77	0.51
VALLE	27.1	Max WS	100-5	195.32	95.26	100.10		100.35	0.003047	2.35	91.80	50.77	0.51
VALLE	27.1	Max WS	30-5	135.85	95.26	99.70		99.90	0.003094	2.08	71.60	48.94	0.50
VALLE	27	Max WS	500_5	301.31	95.26	100.39		101.12	0.007165	3.80	79.22	32.82	0.78
VALLE	27	Max WS	200-5	236.58	95.26	100.08		100.67	0.006832	3.43	69.04	32.82	0.75
VALLE	27	Max WS	100-5	195.32	95.26	99.87		100.37	0.006523	3.14	62.11	32.82	0.73
VALLE	27	Max WS	30-5	135.85	95.26	99.55		99.90	0.005496	2.62	51.85	31.98	0.66
VALLE	26.8			Lat Struct									
VALLE	26	Max WS	500_5	138.87	94.28	100.30		100.51	0.001360	2.06	67.38	16.22	0.32
VALLE	26	Max WS	200-5	107.19	94.28	99.97		100.13	0.001020	1.72	62.18	16.22	0.28
VALLE	26	Max WS	100-5	87.06	94.28	99.75		99.86	0.000802	1.49	58.49	16.22	0.25
VALLE	26	Max WS	30-5	66.65	94.28	99.34		99.42	0.000666	1.28	51.88	16.22	0.23
VALLE	25.9			Lat Struct									
VALLE	25	Max WS	500_5	154.48	93.88	99.70		100.12	0.003098	2.88	53.73	13.87	0.47
VALLE	25	Max WS	200-5	130.34	93.88	99.42		99.77	0.002724	2.61	49.88	13.87	0.44
VALLE	25	Max WS	100-5	116.96	93.88	99.18		99.51	0.002663	2.51	46.60	13.87	0.44
VALLE	25	Max WS	30-5	100.26	93.88	98.74		99.05	0.002953	2.48	40.42	13.87	0.46
VALLE	24	Max WS	500_5	180.70	94.25	98.68		99.99	0.011945	5.09	35.52	10.46	0.88
VALLE	24	Max WS	200-5	152.52	94.25	98.46		99.53	0.010231	4.59	33.24	10.46	0.82
VALLE	24	Max WS	100-5	135.16	94.25	98.32		99.24	0.009068	4.25	31.83	10.46	0.78
VALLE	24	Max WS	30-5	107.68	94.25	98.23		98.85	0.006249	3.48	30.90	10.46	0.65
VALLE	23	Max WS	500_5	188.84	94.25	98.97	98.28	99.64	0.006024	3.63	52.05	18.70	0.69
VALLE	23	Max WS	200-5	158.14	94.25	98.77	98.00	99.32	0.005249	3.28	48.25	18.33	0.64
VALLE	23	Max WS	100-5	139.39	94.25	98.61	97.84	99.09	0.004880	3.07	45.33	18.04	0.62
VALLE	23	Max WS	30-5	109.91	94.25	98.43	97.53	98.78	0.003731	2.60	42.20	17.72	0.54
VALLE	22.5			Bridge									
VALLE	22	Max WS	500_5	188.85	94.25	99.21		99.56	0.002776	2.65	71.28	22.37	0.47
VALLE	22	Max WS	200-5	158.15	94.25	98.96		99.26	0.002471	2.40	65.89	22.28	0.45
VALLE	22	Max WS	100-5	139.64	94.25	98.78		99.04	0.002341	2.26	61.81	22.21	0.43
VALLE	22	Max WS	30-5	109.91	94.25	98.55		98.74	0.001889	1.94	56.70	22.12	0.39
VALLE	21.9			Lat Struct									
VALLE	21.8			Lat Struct									
VALLE	21.5	Max WS	500_5	145.16	94.22	99.05		99.50	0.003813	2.98	48.76	15.47	0.54
VALLE	21.5	Max WS	200-5	121.21	94.22	98.84		99.20	0.003272	2.67	45.43	15.47	0.50
VALLE	21.5	Max WS	100-5	108.55	94.22	98.63		98.97	0.003260	2.57	42.21	15.47	0.50
VALLE	21.5	Max WS	30-5	98.44	94.22	98.15		98.56	0.004779	2.83	34.79	15.47	0.60
VALLE	21	Max WS	500_5	164.83	94.12	99.02	97.05	99.21	0.001254	1.91	86.09	28.33	0.35
VALLE	21	Max WS	200-5	142.84	94.12	98.77	96.85	98.93	0.001187	1.81	78.99	27.22	0.34
VALLE	21	Max WS	100-5	130.79	94.12	98.53	96.73	98.70	0.001243	1.80	72.73	26.20	0.34
VALLE	21	Max WS	30-5	108.75	94.12	98.10	96.50	98.26	0.001332	1.76	61.88	24.40	0.35
VALLE	20.5			Bridge									
VALLE	20	Max WS	500_5	164.79	94.12	98.94		99.14	0.001348	1.97	83.79	27.98	0.36
VALLE	20	Max WS	200-5	142.84	94.12	98.70		98.88	0.001260	1.85	77.26	26.94	0.35
VALLE	20	Max WS	100-5	130.72	94.12	98.48		98.65	0.001309	1.83	71.31	25.96	0.35
VALLE	20	Max WS	30-5	108.75	94.12	98.07		98.23	0.001388	1.78	60.99	24.27	0.36
VALLE	19.9			Lat Struct									
VALLE	19.8			Lat Struct									
VALLE	19	Max WS	500_5	151.95	93.42	98.18		98.49	0.004013	2.45	62.13	33.03	0.57
VALLE	19	Max WS	200-5	141.43	93.42	97.79		98.21	0.007398	2.88	49.11	33.03	0.75
VALLE	19	Max WS	100-5	130.69	93.42	97.53		98.05	0.009518	3.18	41.09	28.76	0.85
VALLE	19	Max WS	30-5	107.50	93.42	97.24		97.74	0.006213	3.12	34.40	17.13	0.70
VALLE	18	Max WS	500_5	75.32	92.63	98.51		98.53	0.000116	0.61	123.70	36.33	0.11
VALLE	18	Max WS	200-5	117.68	92.63	97.98		98.04	0.000483	1.13	104.26	36.33	0.21
VALLE	18	Max WS	100-5	127.97	92.63	97.62		97.72	0.000875	1.41	91.05	36.33	0.28
VALLE	18	Max WS	30-5	107.54	92.63	97.29		97.38	0.000907	1.36	79.28	34.63	0.29
VALLE	17	Max WS	500_5	166.28	92.80	97.56		97.77	0.001713	2.23	93.50	57.43	0.40
VALLE	17	Max WS	200-5	138.63	92.80	97.30		97.51	0.001736	2.14	79.32	54.38	0.40
VALLE	17	Max WS	100-5	119.20	92.80	97.10		97.30	0.001772	2.07	68.38	51.45	0.40
VALLE	17	Max WS	30-5	102.31	92.80	96.83		97.04	0.001999	2.07	55.47	45.96	0.42
VALLE	16.9			Lat Struct									
VALLE	16	Max WS	500_5	204.85	91.77	96.12		97.02	0.008157	4.21	48.63	18.48	0.83
VALLE	16	Max WS	200-5	178.57	91.77	96.04		96.77	0.006574	3.78	47.26	17.93	0.74
VALLE	16	Max WS	100-5	159.85	91.77	96.00		96.60	0.005454	3.44	46.46	17.61	0.68
VALLE	16	Max WS	30-5	138.88	91.77	95.93		96.41	0.004368	3.07	45.23	17.18	0.60
VALLE	15	Max WS	500_5	194.52	91.61	96.27		96.58	0.002034	2.54	84.52	39.32	0.45
VALLE	15	Max WS	200-5	171.79	91.61	96.17		96.44	0.001791	2.34	80.62	38.43	0.42
VALLE	15	Max WS	100-5	155.25	91.61	96.09		96.32	0.001612	2.18	77.61	37.73	0.40
VALLE	15	Max WS	30-5	136.60	91.61	95.98		96.18	0.001438	2.01	73.43	36.73	0.37
VALLE	14	Max WS	500_5	174.13	91.47	95.86		96.47	0.005179	3.45	50.53	18.57	0.67
VALLE	14	Max WS	200-5	156.21	91.47	95.82		96.32	0.004377	3.14	49.69	18.53	0.61
VALLE	14	Max WS	100-5	143.51	91.47	95.77		96.21	0.003908	2.94	48.76	18.49	0.58

HEC-RAS River: TORRENTE FOCI Reach: VALLE Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	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)	
VALLE	14	Max WS	30-5	130.60	91.47	95.65		96.05	0.003697	2.80	46.62	18.40	0.56
VALLE	13	Max WS	500_5	168.77	91.54	95.73		96.11	0.006311	2.72	62.00	41.82	0.71
VALLE	13	Max WS	200-5	153.51	91.54	95.62		95.99	0.006191	2.67	57.58	39.48	0.70
VALLE	13	Max WS	100-5	142.23	91.54	95.54		95.89	0.005929	2.62	54.24	36.80	0.69
VALLE	13	Max WS	30-5	130.04	91.54	95.39		95.75	0.005680	2.65	49.16	31.68	0.68
VALLE	12.8			Lat Struct									
VALLE	12.5	Max WS	500_5	139.39	90.68	95.58		95.69	0.000774	1.57	103.17	45.38	0.27
VALLE	12.5	Max WS	200-5	137.70	90.68	95.42		95.55	0.000925	1.66	95.95	45.38	0.29
VALLE	12.5	Max WS	100-5	134.20	90.68	95.30		95.44	0.001026	1.70	90.63	45.38	0.31
VALLE	12.5	Max WS	30-5	128.49	90.68	95.15		95.29	0.001166	1.76	83.60	45.38	0.33
VALLE	12	Max WS	500_5	96.17	90.21	95.63		95.66	0.000216	0.76	126.26	43.64	0.14
VALLE	12	Max WS	200-5	96.23	90.21	95.47		95.50	0.000258	0.81	119.36	43.64	0.16
VALLE	12	Max WS	100-5	96.49	90.21	95.35		95.38	0.000300	0.85	113.98	43.64	0.17
VALLE	12	Max WS	30-5	107.83	90.21	95.15		95.20	0.000484	1.02	105.26	43.64	0.21
VALLE	11	Max WS	500_5	125.44	89.72	94.81		95.06	0.003525	2.20	56.97	31.88	0.53
VALLE	11	Max WS	200-5	121.89	89.72	94.62		94.91	0.004783	2.40	50.88	31.88	0.61
VALLE	11	Max WS	100-5	119.23	89.72	94.48		94.81	0.003946	2.54	46.86	22.52	0.56
VALLE	11	Max WS	30-5	118.36	89.72	94.18		94.60	0.004311	2.87	41.27	17.25	0.59
VALLE	10	Max WS	500_5	192.90	89.17	94.40		94.56	0.001036	1.84	117.89	56.98	0.32
VALLE	10	Max WS	200-5	194.39	89.17	94.06		94.29	0.001591	2.15	98.53	56.41	0.40
VALLE	10	Max WS	100-5	181.30	89.17	93.95		94.17	0.001588	2.10	92.34	56.21	0.39
VALLE	10	Max WS	30-5	149.94	89.17	93.81		93.98	0.001299	1.85	84.32	55.95	0.35
VALLE	9.9			Lat Struct									
VALLE	9	Max WS	500_5	146.96	88.98	94.41		94.48	0.000628	1.37	131.90	67.83	0.25
VALLE	9	Max WS	200-5	124.77	88.98	94.14		94.22	0.000660	1.35	113.82	67.04	0.25
VALLE	9	Max WS	100-5	137.20	88.98	93.92		94.05	0.001084	1.68	99.46	66.05	0.32
VALLE	9	Max WS	30-5	142.06	88.98	93.51		93.75	0.002191	2.24	72.47	64.73	0.44
VALLE	8	Max WS	500_5	94.14	88.23	94.36		94.40	0.000296	0.81	115.67	45.90	0.16
VALLE	8	Max WS	200-5	130.78	88.23	93.86		93.96	0.001166	1.41	92.59	45.90	0.32
VALLE	8	Max WS	100-5	144.08	88.23	93.51		93.68	0.002130	1.86	77.52	40.06	0.43
VALLE	8	Max WS	30-5	143.01	88.23	92.90		93.23	0.003100	2.53	56.60	23.78	0.52
VALLE	7.9			Lat Struct									
VALLE	7.8			Lat Struct									
VALLE	7.1	Max WS	500_5	283.52	86.69	93.00		93.36	0.001788	2.65	106.90	24.37	0.40
VALLE	7.1	Max WS	200-5	245.32	86.69	92.39		92.75	0.002086	2.67	92.05	24.37	0.44
VALLE	7.1	Max WS	100-5	214.40	86.69	92.07		92.40	0.002076	2.54	84.27	24.37	0.44
VALLE	7.1	Max WS	30-5	157.82	86.69	91.65		91.88	0.001670	2.14	73.86	24.25	0.39
VALLE	7.05			Culvert									
VALLE	7	Max WS	500_5	276.33	86.69	92.58		93.00	0.002284	2.86	96.72	24.37	0.46
VALLE	7	Max WS	200-5	243.23	86.69	91.94		92.40	0.003012	3.00	80.99	24.37	0.53
VALLE	7	Max WS	100-5	214.38	86.69	91.65		92.08	0.003058	2.89	74.06	24.27	0.53
VALLE	7	Max WS	30-5	157.82	86.69	91.38		91.66	0.002159	2.34	67.46	23.65	0.44
VALLE	6.9			Lat Struct									
VALLE	6.8			Lat Struct									
VALLE	6	Max WS	500_5	234.93	85.86	92.04		92.11	0.000567	1.16	212.35	109.92	0.23
VALLE	6	Max WS	200-5	174.39	85.86	91.36		91.44	0.000876	1.20	145.47	76.25	0.28
VALLE	6	Max WS	100-5	122.78	85.86	91.18		91.22	0.000554	0.93	131.51	71.15	0.22
VALLE	6	Max WS	30-5	152.88	85.86	90.56		90.70	0.002003	1.66	92.22	55.26	0.41
VALLE	5.9			Lat Struct									
VALLE	5.8			Lat Struct									
VALLE	5	Max WS	500_5	16.07	84.01	92.10		92.10	0.000003	0.11	148.25	40.25	0.02
VALLE	5	Max WS	200-5	48.54	84.01	91.36		91.37	0.000056	0.41	119.66	36.56	0.07
VALLE	5	Max WS	100-5	127.75	84.01	90.74		90.83	0.000706	1.31	97.57	34.92	0.25
VALLE	5	Max WS	30-5	35.60	84.01	90.28		90.29	0.000091	0.43	81.85	33.27	0.09
VALLE	4.1	Max WS	500_5	282.54	83.70	91.57	88.17	91.80	0.001268	2.13	132.74	35.24	0.35
VALLE	4.1	Max WS	200-5	254.44	83.70	90.72	87.96	90.99	0.001266	2.31	110.09	24.88	0.35
VALLE	4.1	Max WS	100-5	215.59	83.70	90.22	87.64	90.46	0.001252	2.20	97.91	23.75	0.35
VALLE	4.1	Max WS	30-5	39.44	83.70	90.27	85.35	90.28	0.000040	0.40	99.14	23.87	0.06
VALLE	4.05			Bridge									
VALLE	4	Max WS	500_5	282.41	83.70	91.52		91.75	0.001045	2.15	131.18	28.81	0.32
VALLE	4	Max WS	200-5	254.39	83.70	90.71		90.98	0.001275	2.32	109.77	24.85	0.35
VALLE	4	Max WS	100-5	215.57	83.70	90.21		90.45	0.001262	2.21	97.63	23.72	0.35
VALLE	4	Max WS	30-5	39.44	83.70	90.27		90.28	0.000040	0.40	99.14	23.87	0.06
VALLE	3.9			Lat Struct									
VALLE	3	Max WS	500_5	292.90	82.89	91.44		91.64	0.001081	1.98	148.26	38.19	0.32
VALLE	3	Max WS	200-5	257.32	82.89	90.63		90.86	0.001401	2.15	119.86	33.16	0.36
VALLE	3	Max WS	100-5	27.63	82.89	90.17		90.17	0.000024	0.26	104.69	32.37	0.05
VALLE	3	Max WS	30-5	35.03	82.89	90.27		90.27	0.000035	0.32	107.99	32.54	0.06
VALLE	2.8			Lat Struct									

HEC-RAS River: TORRENTE FOCI Reach: VALLE Profile: Max WS (Continued)

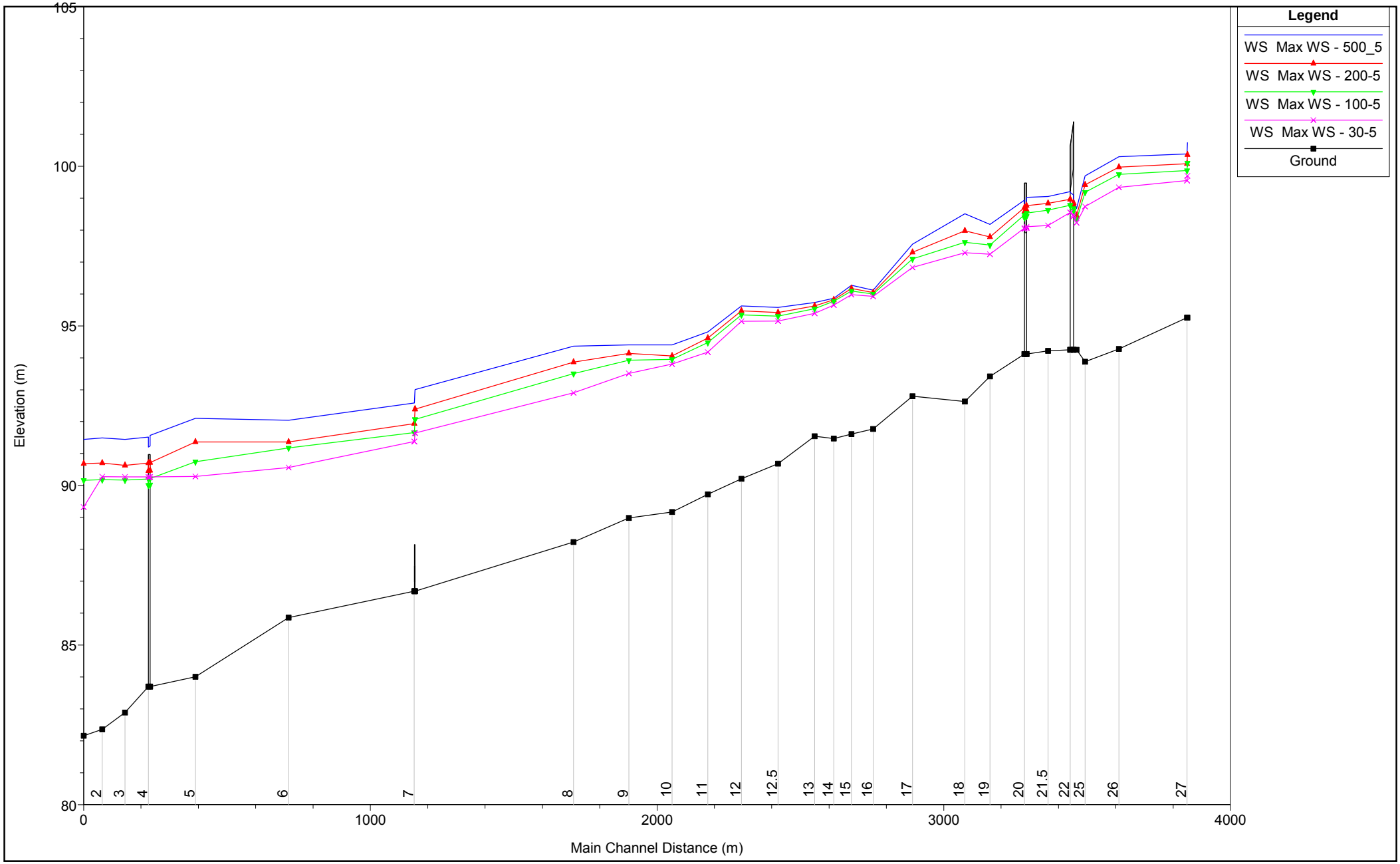
Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
VALLE	2	Max WS	500_5	313.25	82.36	91.49		91.56	0.000280	1.15	271.28	59.15	0.17
VALLE	2	Max WS	200-5	262.78	82.36	90.71		90.77	0.000357	1.17	224.95	59.15	0.19
VALLE	2	Max WS	100-5	218.72	82.36	90.18		90.25	0.000396	1.13	193.99	59.15	0.20
VALLE	2	Max WS	30-5	2.94	82.36	90.27		90.27	0.000000	0.01	199.38	59.15	0.00
VALLE	1	Max WS	500_5	328.06	82.16	91.44	87.38	91.51	0.000260	1.24	296.96	65.84	0.17
VALLE	1	Max WS	200-5	258.22	82.16	90.68	86.71	90.74	0.000268	1.19	247.58	63.65	0.17
VALLE	1	Max WS	100-5	215.10	82.16	90.16	86.33	90.22	0.000281	1.15	214.68	62.86	0.17
VALLE	1	Max WS	30-5	148.71	82.16	89.32	85.69	89.37	0.000285	1.07	162.54	60.76	0.17

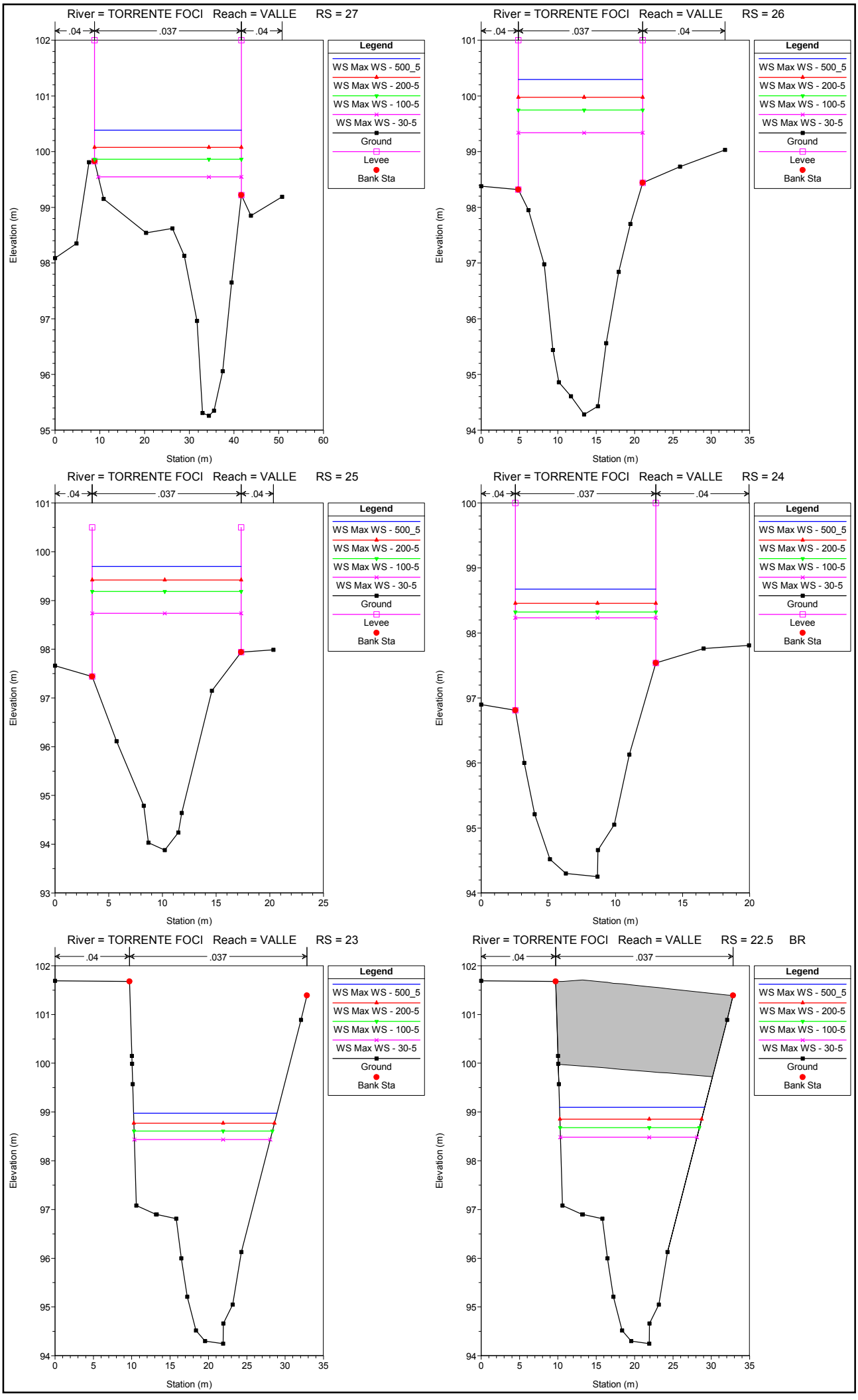
HEC-RAS Profile: Max WS

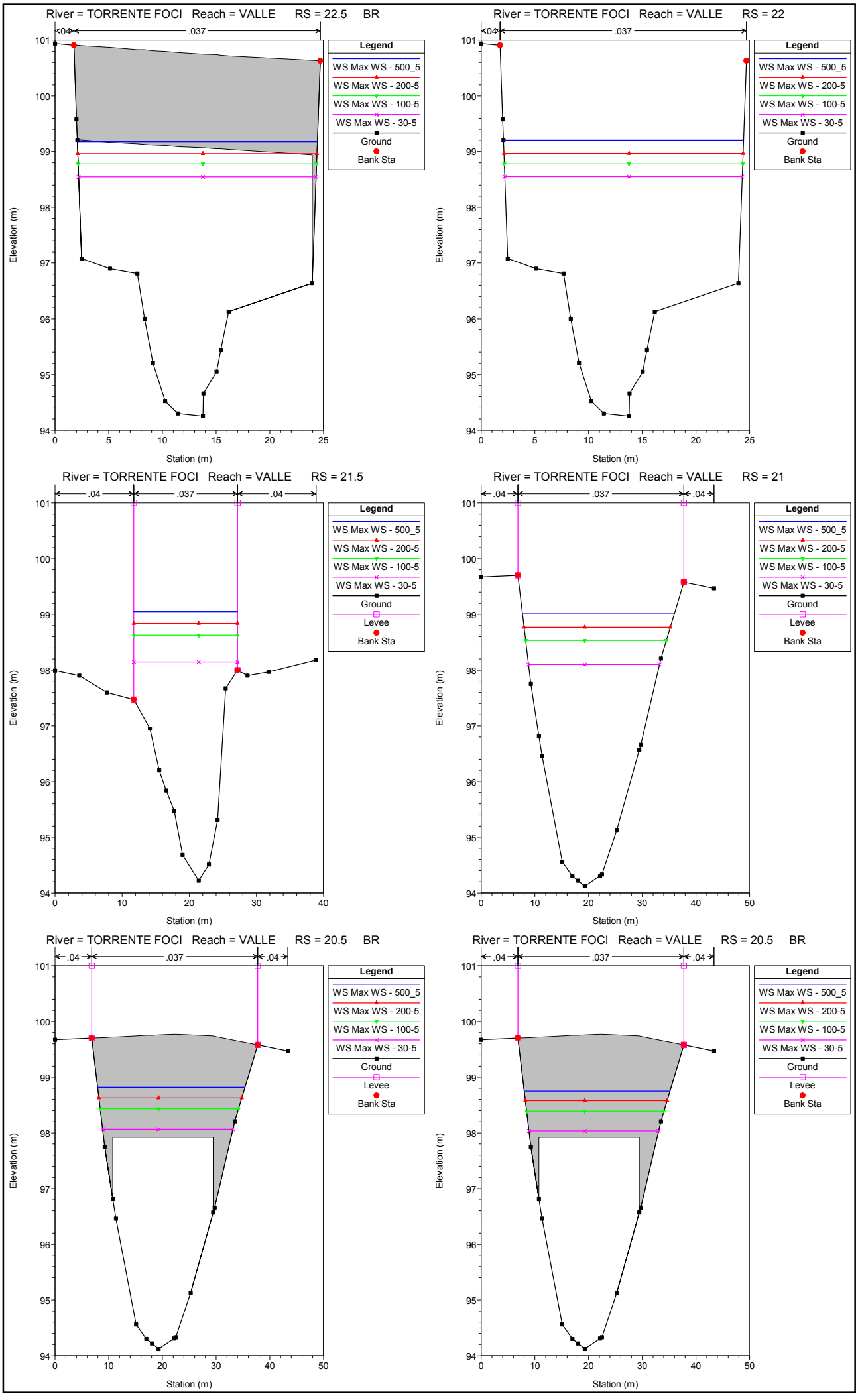
Storage Area	Profile	Plan	W.S. Elev	SA Min El	Net Flux	SA Area	SA Volume
			(m)	(m)	(m3/s)	(1000 m2)	(1000 m3)
FOCI 1	Max WS	500_5	91.50	89.10	0.68	56.11	39.85
FOCI 1	Max WS	200-5	89.10	89.10	0.00	0.00	0.00
FOCI 1	Max WS	100-5	89.10	89.10	0.00	0.00	0.00
FOCI 1	Max WS	30-5	89.10	89.10	0.00	0.00	0.00
FOCI 10	Max WS	500_5	94.22	89.40	1.81	33.83	25.62
FOCI 10	Max WS	200-5	93.46	89.40	0.18	17.50	7.88
FOCI 10	Max WS	100-5	93.10	89.40	0.01	10.45	3.11
FOCI 10	Max WS	30-5	90.10	89.40	0.00	0.01	0.00
FOCI 11	Max WS	500_5	94.37	88.40	12.82	64.05	70.81
FOCI 11	Max WS	200-5	94.00	88.40	10.10	61.16	47.60
FOCI 11	Max WS	100-5	93.72	88.40	3.59	55.34	31.58
FOCI 11	Max WS	30-5	93.29	88.40	0.80	22.04	12.65
FOCI 12	Max WS	500_5	95.59	89.60	5.39	50.52	38.56
FOCI 12	Max WS	200-5	95.41	89.60	5.74	50.52	29.88
FOCI 12	Max WS	100-5	95.29	89.60	3.09	36.26	25.01
FOCI 12	Max WS	30-5	95.02	89.60	2.37	24.09	16.25
FOCI 13	Max WS	500_5	98.06	93.70	60.60	65.17	104.86
FOCI 13	Max WS	200-5	97.63	93.70	41.09	64.26	77.25
FOCI 13	Max WS	100-5	97.33	93.70	21.92	62.85	58.15
FOCI 13	Max WS	30-5	96.56	93.70	1.80	38.44	13.06
FOCI 14	Max WS	500_5	98.34	94.90	2.97	30.99	29.40
FOCI 14	Max WS	200-5	97.88	94.90	1.16	29.56	15.37
FOCI 14	Max WS	100-5	97.57	94.90	3.91	25.76	7.12
FOCI 14	Max WS	30-5	95.50	94.90	0.00	0.00	0.00
FOCI 15	Max WS	500_5	99.04	96.00	0.60	11.71	12.27
FOCI 15	Max WS	200-5	98.82	96.00	0.09	11.70	9.63
FOCI 15	Max WS	100-5	98.60	96.00	0.33	10.71	7.18
FOCI 15	Max WS	30-5	98.14	96.00	0.11	8.00	2.96
FOCI 16	Max WS	500_5	99.08	96.00	1.02	11.20	12.48
FOCI 16	Max WS	200-5	98.85	96.00	0.16	10.66	9.97
FOCI 16	Max WS	100-5	98.64	96.00	0.37	9.98	7.78
FOCI 16	Max WS	30-5	98.26	96.00	0.08	9.06	4.12
FOCI 17	Max WS	500_5	99.11	96.00	0.30	53.43	41.40
FOCI 17	Max WS	200-5	98.90	96.00	0.07	46.02	30.50
FOCI 17	Max WS	100-5	98.73	96.00	0.24	46.02	22.66
FOCI 17	Max WS	30-5	98.44	96.00	0.31	31.60	13.35
FOCI 18	Max WS	500_5	100.16	96.00	2.01	40.14	59.89
FOCI 18	Max WS	200-5	99.84	96.00	1.02	28.13	47.83
FOCI 18	Max WS	100-5	99.60	96.00	0.04	28.13	41.10
FOCI 18	Max WS	30-5	99.15	96.00	0.54	23.94	29.61
FOCI 2	Max WS	500_5	91.50	86.70	1.58	54.61	96.76
FOCI 2	Max WS	200-5	90.68	86.70	2.33	47.86	55.13
FOCI 2	Max WS	100-5	90.16	86.70	8.69	39.41	32.38
FOCI 2	Max WS	30-5	89.99	86.70	7.12	34.17	25.95
FOCI 3	Max WS	500_5	91.47	82.70	1.01	57.37	106.03
FOCI 3	Max WS	200-5	90.69	82.70	1.16	50.08	64.38
FOCI 3	Max WS	100-5	90.17	82.70	1.67	42.01	39.84
FOCI 3	Max WS	30-5	89.33	82.70	32.43	23.40	12.18
FOCI 4	Max WS	500_5	91.96	89.20	18.70	56.14	44.62
FOCI 4	Max WS	200-5	91.24	89.20	5.35	28.84	14.87
FOCI 4	Max WS	100-5	90.61	89.20	13.10	10.64	5.82
FOCI 4	Max WS	30-5	90.28	89.20	6.14	6.26	3.09

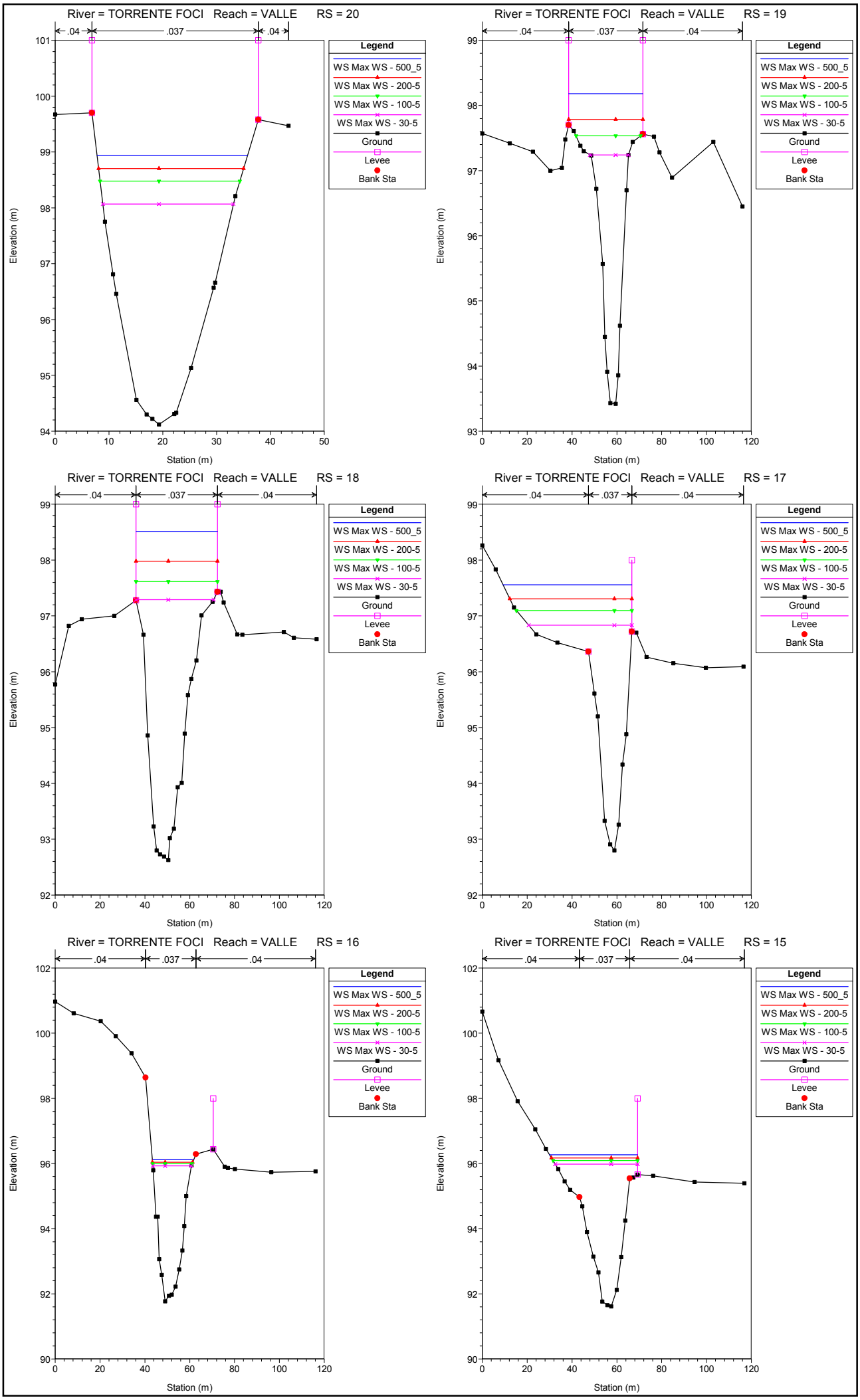
HEC-RAS Profile: Max WS (Continued)

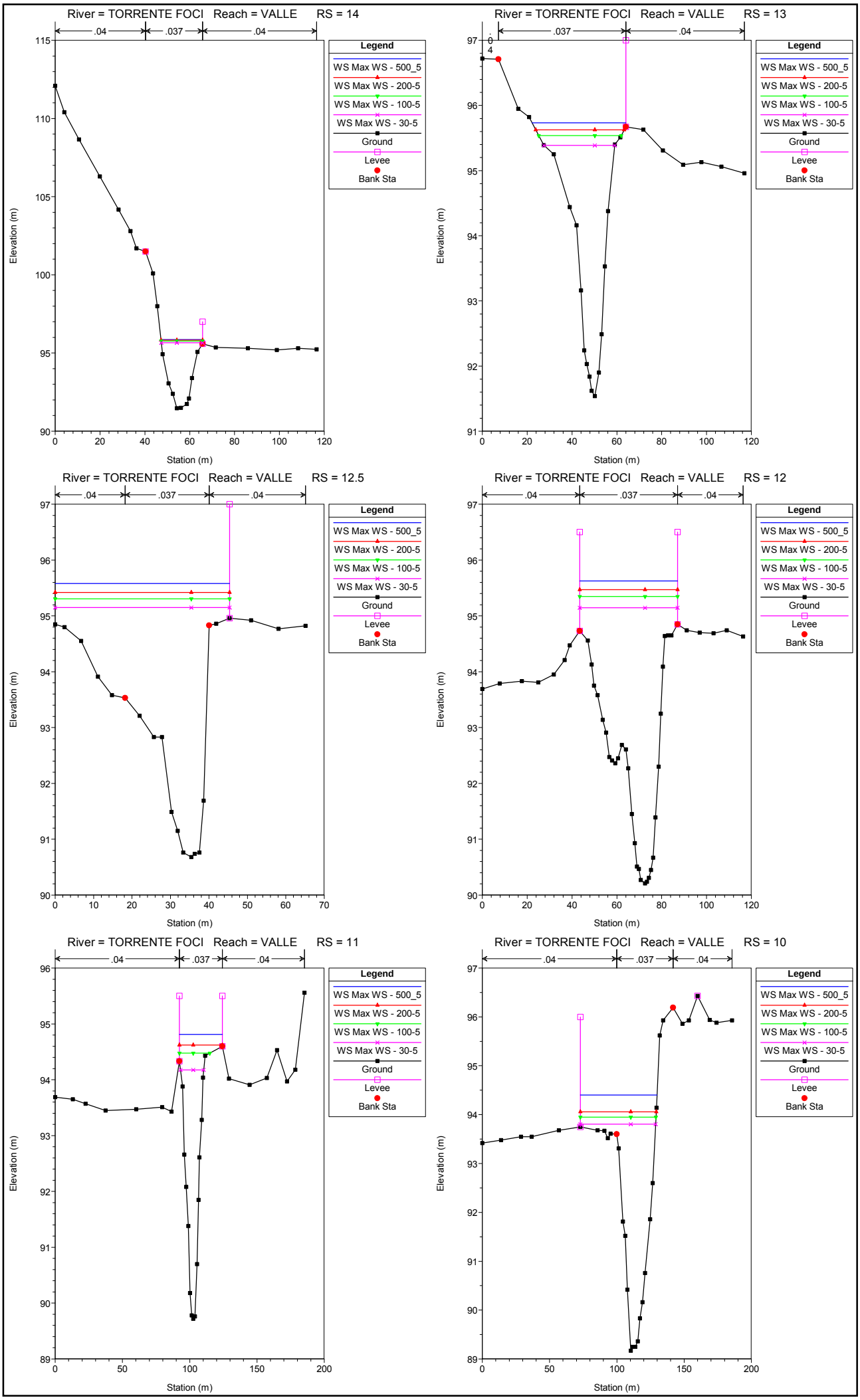
Storage Area	Profile	Plan	W.S. Elev	SA Min El	Net Flux	SA Area	SA Volume
			(m)	(m)	(m3/s)	(1000 m2)	(1000 m3)
FOCI 5	Max WS	500_5	91.88	85.60	18.03	8.08	8.75
FOCI 5	Max WS	200-5	91.07	85.60	33.35	3.13	3.92
FOCI 5	Max WS	100-5	90.50	85.60	17.72	1.85	2.51
FOCI 5	Max WS	30-5	90.28	85.60	7.19	1.65	2.10
FOCI 6	Max WS	500_5	92.33	90.00	38.37	36.18	32.04
FOCI 6	Max WS	200-5	91.67	90.00	9.06	18.43	13.67
FOCI 6	Max WS	100-5	91.37	90.00	87.22	17.28	8.42
FOCI 6	Max WS	30-5	90.96	90.00	42.10	12.38	2.45
FOCI 7	Max WS	500_5	92.09	84.00	69.49	23.94	49.56
FOCI 7	Max WS	200-5	91.41	84.00	7.17	23.54	33.37
FOCI 7	Max WS	100-5	90.97	84.00	223.96	23.12	23.14
FOCI 7	Max WS	30-5	90.30	84.00	39.36	20.37	8.84
FOCI 8	Max WS	500_5	93.61	88.40	32.55	62.18	59.27
FOCI 8	Max WS	200-5	92.83	88.40	1.77	28.62	30.99
FOCI 8	Max WS	100-5	92.31	88.40	0.93	18.22	18.55
FOCI 8	Max WS	30-5	91.78	88.40	2.67	11.17	10.49
FOCI 9	Max WS	500_5	93.50	87.40	69.02	25.41	43.62
FOCI 9	Max WS	200-5	92.95	87.40	18.09	23.59	29.75
FOCI 9	Max WS	100-5	92.62	87.40	2.15	22.45	22.06
FOCI 9	Max WS	30-5	92.12	87.40	4.92	19.46	11.76

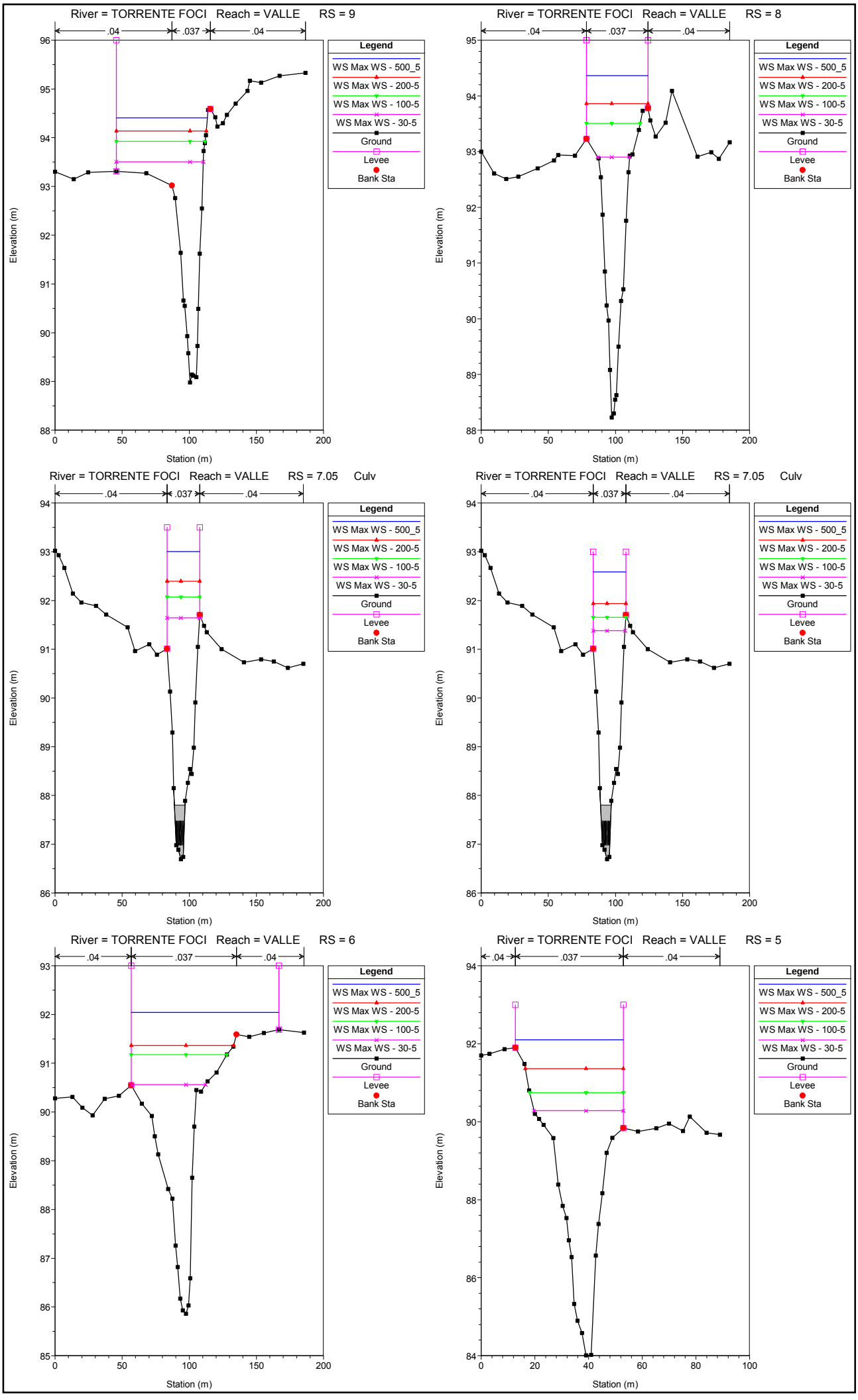

Legend
WS Max WS - 500_5
WS Max WS - 200-5
WS Max WS - 100-5
WS Max WS - 30-5
Ground
Elevation (m)
105
100
95
90
85
80
0
1000
2000
3000
4000
Main Channel Distance (m)
2
3
4
5
6
7
8
9
10
11
12
12.5
13
14
15
16
17
18
19
20
21.5
22
25
26
27

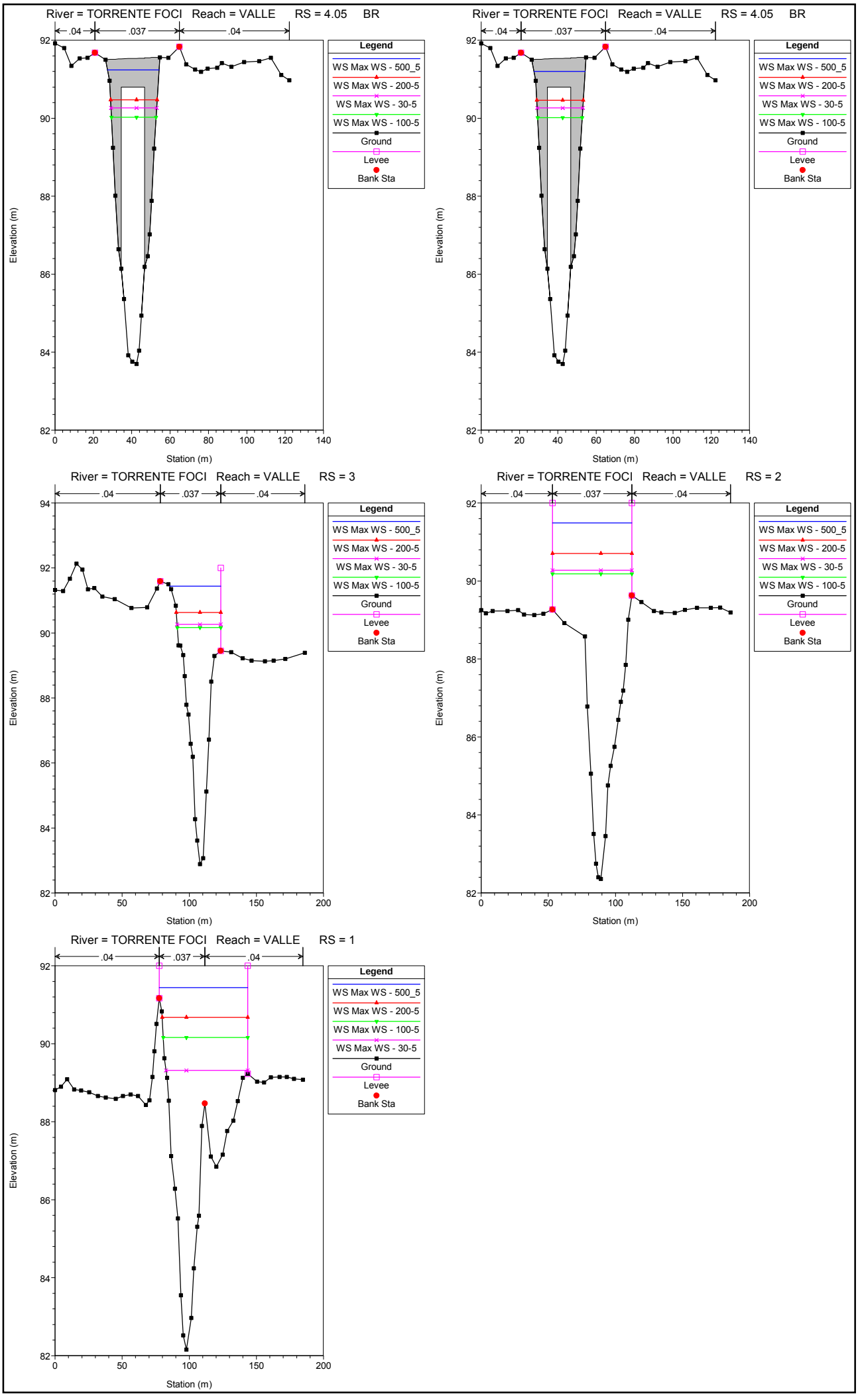

River = TORRENTE FOCI Reach = VALLE RS = 27
.04
.037
.04
Legend
WS Max WS - 500_5
WS Max WS - 200-5
WS Max WS - 100-5
WS Max WS - 30-5
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = TORRENTE FOCI Reach = VALLE RS = 26
.04
.037
.04
Legend
WS Max WS - 500_5
WS Max WS - 200-5
WS Max WS - 100-5
WS Max WS - 30-5
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = TORRENTE FOCI Reach = VALLE RS = 25
.04
.037
.04
Legend
WS Max WS - 500_5
WS Max WS - 200-5
WS Max WS - 100-5
WS Max WS - 30-5
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = TORRENTE FOCI Reach = VALLE RS = 24
.04
.037
.04
Legend
WS Max WS - 500_5
WS Max WS - 200-5
WS Max WS - 100-5
WS Max WS - 30-5
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = TORRENTE FOCI Reach = VALLE RS = 23
.04
.037
Legend
WS Max WS - 500_5
WS Max WS - 200-5
WS Max WS - 100-5
WS Max WS - 30-5
Ground
Bank Sta
Elevation (m)
Station (m)
River = TORRENTE FOCI Reach = VALLE RS = 22.5 BR
.04
.037
Legend
WS Max WS - 500_5
WS Max WS - 200-5
WS Max WS - 100-5
WS Max WS - 30-5
Ground
Bank Sta
Elevation (m)
Station (m)


River = TORRENTE FOCI Reach = VALLE RS = 22.5 BR
.04
.037
Legend
WS Max WS - 500_5
WS Max WS - 200-5
WS Max WS - 100-5
WS Max WS - 30-5
Ground
Bank Sta
Elevation (m)
Station (m)
River = TORRENTE FOCI Reach = VALLE RS = 22
.04
.037
Legend
WS Max WS - 500_5
WS Max WS - 200-5
WS Max WS - 100-5
WS Max WS - 30-5
Ground
Bank Sta
Elevation (m)
Station (m)
River = TORRENTE FOCI Reach = VALLE RS = 21.5
.04
.037
.04
Legend
WS Max WS - 500_5
WS Max WS - 200-5
WS Max WS - 100-5
WS Max WS - 30-5
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = TORRENTE FOCI Reach = VALLE RS = 21
.04
.037
.04
Legend
WS Max WS - 500_5
WS Max WS - 200-5
WS Max WS - 100-5
WS Max WS - 30-5
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = TORRENTE FOCI Reach = VALLE RS = 20.5 BR
.04
.037
.04
Legend
WS Max WS - 500_5
WS Max WS - 200-5
WS Max WS - 100-5
WS Max WS - 30-5
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = TORRENTE FOCI Reach = VALLE RS = 20.5 BR
.04
.037
.04
Legend
WS Max WS - 500_5
WS Max WS - 200-5
WS Max WS - 100-5
WS Max WS - 30-5
Ground
Levee
Bank Sta
Elevation (m)
Station (m)


River = TORRENTE FOCI Reach = VALLE RS = 20
.04
.037
.04
Elevation (m)
Station (m)
Legend
WS Max WS - 500_5
WS Max WS - 200-5
WS Max WS - 100-5
WS Max WS - 30-5
Ground
Levee
Bank Sta
River = TORRENTE FOCI Reach = VALLE RS = 19
River = TORRENTE FOCI Reach = VALLE RS = 18
River = TORRENTE FOCI Reach = VALLE RS = 17
River = TORRENTE FOCI Reach = VALLE RS = 16
River = TORRENTE FOCI Reach = VALLE RS = 15


River = TORRENTE FOCI Reach = VALLE RS = 14
.04
.037
.04
Elevation (m)
Station (m)
Legend
WS Max WS - 500_5
WS Max WS - 200-5
WS Max WS - 100-5
WS Max WS - 30-5
Ground
Levee
Bank Sta
River = TORRENTE FOCI Reach = VALLE RS = 13
.037
.04
Elevation (m)
Station (m)
Legend
WS Max WS - 500_5
WS Max WS - 200-5
WS Max WS - 100-5
WS Max WS - 30-5
Ground
Levee
Bank Sta
River = TORRENTE FOCI Reach = VALLE RS = 12.5
.04
.037
.04
Elevation (m)
Station (m)
Legend
WS Max WS - 500_5
WS Max WS - 200-5
WS Max WS - 100-5
WS Max WS - 30-5
Ground
Levee
Bank Sta
River = TORRENTE FOCI Reach = VALLE RS = 12
.04
.037
.04
Elevation (m)
Station (m)
Legend
WS Max WS - 500_5
WS Max WS - 200-5
WS Max WS - 100-5
WS Max WS - 30-5
Ground
Levee
Bank Sta
River = TORRENTE FOCI Reach = VALLE RS = 11
.04
.037
.04
Elevation (m)
Station (m)
Legend
WS Max WS - 500_5
WS Max WS - 200-5
WS Max WS - 100-5
WS Max WS - 30-5
Ground
Levee
Bank Sta
River = TORRENTE FOCI Reach = VALLE RS = 10
.04
.037
.04
Elevation (m)
Station (m)
Legend
WS Max WS - 500_5
WS Max WS - 200-5
WS Max WS - 100-5
WS Max WS - 30-5
Ground
Levee
Bank Sta


River = TORRENTE FOCI Reach = VALLE RS = 9
.04
.037
.04
Legend
WS Max WS - 500_5
WS Max WS - 200-5
WS Max WS - 100-5
WS Max WS - 30-5
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = TORRENTE FOCI Reach = VALLE RS = 8
River = TORRENTE FOCI Reach = VALLE RS = 7.05 Culv
River = TORRENTE FOCI Reach = VALLE RS = 6
River = TORRENTE FOCI Reach = VALLE RS = 5


River = TORRENTE FOCI Reach = VALLE RS = 4.05 BR
.04
.037
.04
Legend
WS Max WS - 500_5
WS Max WS - 200-5
WS Max WS - 30-5
WS Max WS - 100-5
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = TORRENTE FOCI Reach = VALLE RS = 4.05 BR
River = TORRENTE FOCI Reach = VALLE RS = 3
River = TORRENTE FOCI Reach = VALLE RS = 2
River = TORRENTE FOCI Reach = VALLE RS = 1

HEC-RAS Profile: Max WS

Reach	River Sta	Profile	Plan	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)	
TATTERA	16	Max WS	500_4	138.29	117.93	120.13		120.51	0.007827	2.72	50.90	36.10	0.73
TATTERA	16	Max WS	DROVE 200-4	113.43	117.93	119.98		120.30	0.007465	2.49	45.59	35.69	0.70
TATTERA	16	Max WS	100-4	97.24	117.93	119.87		120.15	0.007269	2.33	41.74	35.40	0.68
TATTERA	16	Max WS	30-4	72.75	117.93	119.69		119.91	0.006931	2.06	35.33	34.91	0.65
TATTERA	15	Max WS	500_4	138.19	117.54	119.78		120.16	0.009220	2.71	50.95	41.52	0.78
TATTERA	15	Max WS	DROVE 200-4	113.28	117.54	119.61		119.95	0.009521	2.57	44.08	39.93	0.78
TATTERA	15	Max WS	100-4	97.22	117.54	119.50		119.81	0.009712	2.46	39.54	38.83	0.78
TATTERA	15	Max WS	30-4	72.67	117.54	119.31		119.57	0.009754	2.23	32.55	37.08	0.76
TATTERA	14	Max WS	500_4	137.95	117.10	119.47		119.84	0.007658	2.69	51.19	36.16	0.72
TATTERA	14	Max WS	DROVE 200-4	113.27	117.10	119.34		119.64	0.007125	2.45	46.22	35.72	0.69
TATTERA	14	Max WS	100-4	97.20	117.10	119.23		119.50	0.006841	2.29	42.50	35.39	0.67
TATTERA	14	Max WS	30-4	72.44	117.10	119.09		119.28	0.005651	1.93	37.51	34.94	0.60
TATTERA	13	Max WS	500_4	137.89	116.23	118.92	118.92	119.36	0.016902	2.94	46.84	52.93	1.00
TATTERA	13	Max WS	DROVE 200-4	113.27	116.23	118.78	118.77	119.19	0.017310	2.84	39.90	48.36	1.00
TATTERA	13	Max WS	100-4	95.83	116.23	118.67	118.66	119.06	0.017513	2.75	34.90	44.79	0.99
TATTERA	13	Max WS	30-4	72.69	116.23	118.54		118.86	0.015786	2.48	29.30	40.42	0.93
TATTERA	12.9	Max WS	500_4	138.61	116.35	118.84		119.00	0.005077	1.82	76.20	72.10	0.56
TATTERA	12.9	Max WS	DROVE 200-4	105.98	116.35	118.69		118.82	0.004194	1.60	66.17	65.70	0.51
TATTERA	12.9	Max WS	100-4	85.36	116.35	118.60		118.70	0.003678	1.42	60.14	64.93	0.47
TATTERA	12.9	Max WS	30-4	72.24	116.35	118.57		118.65	0.002912	1.24	58.26	64.69	0.42
TATTERA	12.5			Culvert									
TATTERA	12.1	Max WS	500_4	138.61	116.35	118.50		118.84	0.013745	2.57	53.87	64.12	0.90
TATTERA	12.1	Max WS	DROVE 200-4	110.85	116.35	118.46		118.70	0.010382	2.17	51.12	63.76	0.77
TATTERA	12.1	Max WS	100-4	96.07	116.35	118.33		118.58	0.013560	2.24	42.95	62.58	0.86
TATTERA	12.1	Max WS	30-4	72.62	116.35	118.16		118.41	0.015063	2.18	33.36	54.64	0.89
TATTERA	11.9	Max WS	500_4	138.38	114.91	117.84		118.03	0.004764	1.93	71.78	60.16	0.56
TATTERA	11.9	Max WS	DROVE 200-4	106.01	114.91	117.81		117.93	0.003059	1.52	69.84	60.16	0.45
TATTERA	11.9	Max WS	100-4	93.58	114.91	117.76		117.86	0.002706	1.40	66.71	59.02	0.42
TATTERA	11.9	Max WS	30-4	68.76	114.91	117.54		117.62	0.002453	1.26	54.77	53.15	0.39
TATTERA	11.5			Culvert									
TATTERA	11.1	Max WS	500_4	138.36	114.91	117.48		117.85	0.011641	2.68	51.60	51.55	0.86
TATTERA	11.1	Max WS	DROVE 200-4	120.37	114.91	117.36		117.72	0.012268	2.64	45.55	48.37	0.87
TATTERA	11.1	Max WS	100-4	97.21	114.91	117.24		117.54	0.011370	2.44	39.91	45.19	0.83
TATTERA	11.1	Max WS	30-4	73.69	114.91	117.05		117.33	0.011844	2.31	31.89	40.26	0.83
TATTERA	10	Max WS	500_4	138.20	110.17	113.19	113.14	113.75	0.014263	3.34	41.40	34.14	0.97
TATTERA	10	Max WS	DROVE 200-4	113.49	110.17	113.04		113.53	0.012582	3.09	36.75	30.93	0.90
TATTERA	10	Max WS	100-4	92.50	110.17	112.88		113.31	0.011331	2.89	32.00	27.41	0.85
TATTERA	10	Max WS	30-4	74.96	110.17	112.64		113.06	0.011746	2.89	25.94	22.73	0.86
TATTERA	9	Max WS	500_4	138.10	108.80	111.02		111.49	0.013003	3.03	45.63	40.68	0.91
TATTERA	9	Max WS	DROVE 200-4	111.83	108.80	110.93		111.29	0.010707	2.66	41.98	39.17	0.82
TATTERA	9	Max WS	100-4	84.30	108.80	110.84		111.08	0.008007	2.20	38.33	38.36	0.70
TATTERA	9	Max WS	30-4	60.68	108.80	110.68		110.86	0.007190	1.88	32.23	37.62	0.65
TATTERA	8	Max WS	500_4	137.93	107.28	110.09		110.33	0.005989	2.15	64.59	60.59	0.63
TATTERA	8	Max WS	DROVE 200-4	93.07	107.28	109.99		110.12	0.003634	1.59	58.76	56.46	0.48
TATTERA	8	Max WS	100-4	78.30	107.28	109.87		109.99	0.003404	1.49	52.45	49.74	0.46
TATTERA	8	Max WS	30-4	61.88	107.28	109.73		109.82	0.003258	1.37	45.33	47.58	0.45
TATTERA	7.9	Max WS	500_4	137.83	106.13	109.71		109.85	0.002226	1.78	87.05	63.56	0.40
TATTERA	7.9	Max WS	DROVE 200-4	114.62	106.13	109.57		109.69	0.002081	1.65	78.50	63.33	0.38
TATTERA	7.9	Max WS	100-4	96.98	106.13	109.43		109.54	0.002116	1.58	69.35	63.09	0.38
TATTERA	7.9	Max WS	30-4	68.32	106.13	109.27		109.35	0.001609	1.30	59.14	62.82	0.33
TATTERA	7.5			Culvert									
TATTERA	7.1	Max WS	500_4	137.83	106.13	109.11	109.12	109.57	0.010182	3.06	49.40	62.56	0.81
TATTERA	7.1	Max WS	DROVE 200-4	127.55	106.13	108.92	109.00	109.50	0.015096	3.39	38.55	45.79	0.97
TATTERA	7.1	Max WS	100-4	106.05	106.13	108.81	108.75	109.30	0.014165	3.10	34.25	34.06	0.93
TATTERA	7.1	Max WS	30-4	92.52	106.13	108.59	108.62	109.15	0.018983	3.32	27.83	27.32	1.05
TATTERA	6.9	Max WS	500_4	138.02	105.40	109.01	108.10	109.09	0.001415	1.27	109.52	70.47	0.32
TATTERA	6.9	Max WS	DROVE 200-4	113.85	105.40	108.78	107.95	108.85	0.001635	1.22	93.25	69.95	0.34
TATTERA	6.9	Max WS	100-4	98.95	105.40	108.67	107.85	108.74	0.001649	1.16	85.44	69.70	0.33
TATTERA	6.9	Max WS	30-4	81.35	105.40	108.52	107.70	108.58	0.001700	1.08	75.21	69.37	0.33
TATTERA	6.5			Bridge									
TATTERA	6.1	Max WS	500_4	137.92	105.40	108.75		108.86	0.002594	1.52	91.08	69.88	0.42
TATTERA	6.1	Max WS	DROVE 200-4	113.85	105.40	108.38		108.53	0.005168	1.74	65.52	68.16	0.56
TATTERA	6.1	Max WS	100-4	96.96	105.40	108.16		108.34	0.007515	1.90	51.03	61.23	0.66
TATTERA	6.1	Max WS	30-4	80.50	105.40	107.86		108.12	0.011451	2.26	35.57	44.73	0.81
TATTERA	5	Max WS	500_4	136.66	104.52	108.16		108.77	0.008006	3.46	39.44	17.68	0.74
TATTERA	5	Max WS	DROVE 200-4	113.33	104.52	107.76		108.38	0.009534	3.49	32.46	16.68	0.80
TATTERA	5	Max WS	100-4	96.94	104.52	107.55		108.12	0.009715	3.35	28.98	16.29	0.80
TATTERA	5	Max WS	30-4	84.67	104.52	107.25		107.87	0.012153	3.48	24.35	15.34	0.88
TATTERA	4.9			Lat Struct									
TATTERA	4	Max WS	500_4	129.89	103.89	108.17		108.31	0.001421	1.67	77.81	29.98	0.33
TATTERA	4	Max WS	DROVE 200-4	110.94	103.89	107.62		107.78	0.002014	1.79	61.88	28.25	0.39
TATTERA	4	Max WS	100-4	96.91	103.89	107.35		107.51	0.002240	1.78	54.34	27.14	0.40
TATTERA	4	Max WS	30-4	77.57	103.89	106.97		107.13	0.002594	1.75	44.38	25.61	0.42
TATTERA	3.9	Max WS	500_4	136.48	102.52	107.74	106.62	108.22	0.005334	3.06	44.55	14.31	0.55
TATTERA	3.9	Max WS	DROVE 200-4	110.85	102.52	107.26	106.32	107.70	0.005686	2.94	37.75	13.84	0.57
TATTERA	3.9	Max WS	100-4	96.91	102.52	107.01	106.14	107.42	0.005724	2.82	34.36	13.60	0.57
TATTERA	3.9	Max WS	30-4	77.56	102.52	106.69	105.89	107.03	0.005478	2.59	29.98	13.28	0.55
TATTERA	3.5			Bridge									
TATTERA	3.1	Max WS	500_4	136.56	102.52	107.02		107.82	0.011295	3.97	34.43	13.61	0.80

HEC-RAS Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	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)	
TATTERA	3.1	Max WS	DROVE 200-4	110.86	102.52	106.77		107.42	0.009993	3.56	31.15	13.37	0.74
TATTERA	3.1	Max WS	100-4	96.90	102.52	106.58		107.17	0.009850	3.39	28.58	13.18	0.73
TATTERA	3.1	Max WS	30-4	76.26	102.52	106.17		106.72	0.011328	3.28	23.24	12.78	0.78
TATTERA	2.9			Lat Struct									
TATTERA	2.8			Lat Struct									
TATTERA	2	Max WS	500_4	135.63	102.56	106.99		107.05	0.000431	1.08	125.93	40.41	0.19
TATTERA	2	Max WS	DROVE 200-4	110.73	102.56	106.73		106.78	0.000371	0.96	115.57	39.51	0.18
TATTERA	2	Max WS	100-4	96.89	102.56	106.51		106.55	0.000358	0.91	106.99	38.75	0.17
TATTERA	2	Max WS	30-4	75.43	102.56	106.01		106.05	0.000403	0.86	87.89	37.76	0.18
TATTERA	1.1	Max WS	500_4	131.29	102.12	106.96		107.04	0.000488	1.22	106.77	30.00	0.20
TATTERA	1.1	Max WS	DROVE 200-4	109.97	102.12	106.70		106.76	0.000432	1.10	98.99	30.00	0.19
TATTERA	1.1	Max WS	100-4	96.89	102.12	106.48		106.54	0.000414	1.04	92.45	30.00	0.19
TATTERA	1.1	Max WS	30-4	75.15	102.12	105.99		106.03	0.000417	0.97	77.76	29.16	0.18
TATTERA	1	Max WS	500_4	131.26	102.12	106.96		107.04	0.000488	1.22	106.76	30.00	0.20
TATTERA	1	Max WS	DROVE 200-4	109.96	102.12	106.70		106.76	0.000432	1.10	98.98	30.00	0.19
TATTERA	1	Max WS	100-4	96.89	102.12	106.48		106.54	0.000414	1.04	92.44	30.00	0.19
TATTERA	1	Max WS	30-4	75.15	102.12	105.99		106.03	0.000417	0.97	77.75	29.16	0.18
CINCIANO	15	Max WS	500_4	131.11	106.71	110.09		111.01	0.012555	4.24	30.92	14.45	0.93
CINCIANO	15	Max WS	DROVE 200-4	104.62	106.71	109.72	109.64	110.57	0.013391	4.07	25.71	13.53	0.94
CINCIANO	15	Max WS	100-4	87.82	106.71	109.48	109.41	110.26	0.013660	3.89	22.55	12.94	0.94
CINCIANO	15	Max WS	30-4	63.59	106.71	109.09	109.03	109.75	0.014467	3.61	17.62	11.96	0.95
CINCIANO	14	Max WS	500_4	129.95	105.91	109.85		110.02	0.002598	1.79	72.46	40.50	0.43
CINCIANO	14	Max WS	DROVE 200-4	103.85	105.91	109.22		109.46	0.006100	2.18	47.69	37.90	0.62
CINCIANO	14	Max WS	100-4	87.76	105.91	108.83		109.15	0.008371	2.52	34.86	27.66	0.72
CINCIANO	14	Max WS	30-4	63.55	105.91	108.28		108.66	0.009301	2.71	23.47	17.62	0.75
CINCIANO	13.9			Lat Struct									
CINCIANO	13	Max WS	500_4	130.03	104.67	109.60		109.80	0.001764	1.95	66.65	22.63	0.36
CINCIANO	13	Max WS	DROVE 200-4	103.91	104.67	108.81		109.04	0.002633	2.10	49.48	21.02	0.44
CINCIANO	13	Max WS	100-4	86.52	104.67	108.31		108.56	0.003615	2.21	39.22	20.07	0.50
CINCIANO	13	Max WS	30-4	63.50	104.67	107.59		107.90	0.005799	2.45	25.88	16.15	0.62
CINCIANO	12.9	Max WS	500_4	130.03	104.66	109.70	107.67	109.77	0.000637	1.12	115.95	46.99	0.23
CINCIANO	12.9	Max WS	DROVE 200-4	103.90	104.66	108.91	107.43	109.00	0.001219	1.30	79.66	42.59	0.30
CINCIANO	12.9	Max WS	100-4	86.52	104.66	108.41	107.25	108.51	0.001807	1.45	59.58	36.39	0.36
CINCIANO	12.9	Max WS	30-4	63.50	104.66	107.66	106.91	107.82	0.003627	1.77	35.85	27.30	0.49
CINCIANO	12.5			Bridge									
CINCIANO	12.1	Max WS	500_4	130.03	104.66	109.22		109.32	0.001265	1.40	93.15	46.29	0.31
CINCIANO	12.1	Max WS	DROVE 200-4	103.90	104.66	108.60		108.72	0.001926	1.55	66.90	38.77	0.38
CINCIANO	12.1	Max WS	100-4	86.52	104.66	108.19		108.33	0.002554	1.66	52.18	33.82	0.43
CINCIANO	12.1	Max WS	30-4	63.50	104.66	107.59		107.77	0.004190	1.87	33.88	26.41	0.53
CINCIANO	11	Max WS	500_4	130.03	104.43	109.15		109.31	0.002190	1.78	73.10	36.35	0.40
CINCIANO	11	Max WS	DROVE 200-4	103.90	104.43	108.52		108.71	0.002991	1.97	52.71	28.05	0.46
CINCIANO	11	Max WS	100-4	86.52	104.43	108.11		108.32	0.003277	2.04	42.47	22.76	0.48
CINCIANO	11	Max WS	30-4	63.50	104.43	107.55		107.75	0.002880	2.00	31.68	15.33	0.44
CINCIANO	10.9	Max WS	500_4	130.03	104.21	108.70	107.60	109.32	0.006431	3.48	37.34	10.61	0.59
CINCIANO	10.9	Max WS	DROVE 200-4	103.90	104.21	108.13	107.23	108.69	0.006657	3.31	31.41	10.38	0.61
CINCIANO	10.9	Max WS	100-4	86.52	104.21	107.80	106.97	108.29	0.006384	3.09	27.99	10.27	0.60
CINCIANO	10.9	Max WS	30-4	63.50	104.21	107.33	106.60	107.71	0.005887	2.74	23.18	10.11	0.58
CINCIANO	10.5			Bridge									
CINCIANO	10.1	Max WS	500_4	130.03	104.21	107.82		108.90	0.014173	4.62	28.16	10.27	0.89
CINCIANO	10.1	Max WS	DROVE 200-4	103.88	104.21	107.61		108.42	0.011280	3.99	26.05	10.21	0.80
CINCIANO	10.1	Max WS	100-4	86.44	104.21	107.50		108.11	0.008886	3.47	24.90	10.17	0.71
CINCIANO	10.1	Max WS	30-4	60.75	104.21	107.10		107.53	0.007255	2.90	20.91	10.04	0.64
CINCIANO	10.09			Lat Struct									
CINCIANO	9	Max WS	500_4	130.03	104.21	108.20		108.66	0.005324	3.00	43.36	18.01	0.62
CINCIANO	9	Max WS	DROVE 200-4	103.90	104.21	107.98		108.33	0.004587	2.64	39.41	17.82	0.57
CINCIANO	9	Max WS	100-4	86.50	104.21	107.77		108.07	0.004306	2.42	35.79	17.64	0.54
CINCIANO	9	Max WS	30-4	63.48	104.21	107.28		107.53	0.003562	2.25	28.26	13.23	0.49
CINCIANO	8	Max WS	500_4	111.56	103.05	108.14		108.38	0.002896	2.18	51.24	20.99	0.44
CINCIANO	8	Max WS	DROVE 200-4	96.02	103.05	107.77		108.02	0.003289	2.19	43.84	19.73	0.47
CINCIANO	8	Max WS	100-4	83.96	103.05	107.47		107.72	0.003702	2.20	38.09	18.69	0.49
CINCIANO	8	Max WS	30-4	59.85	103.05	106.87		107.11	0.004699	2.18	27.39	16.58	0.54
CINCIANO	7.9	Max WS	500_4	111.56	103.59	108.25	106.44	108.36	0.000985	1.50	76.01	29.73	0.29
CINCIANO	7.9	Max WS	DROVE 200-4	96.02	103.59	107.89	106.28	108.00	0.001108	1.49	65.55	28.05	0.30
CINCIANO	7.9	Max WS	100-4	83.97	103.59	107.59	106.07	107.70	0.001236	1.49	57.40	26.68	0.31
CINCIANO	7.9	Max WS	30-4	59.45	103.59	106.98	105.69	107.08	0.001524	1.43	42.03	23.86	0.33
CINCIANO	7.5			Bridge									
CINCIANO	7.1	Max WS	500_4	111.56	103.59	108.02		108.16	0.001275	1.64	69.37	28.67	0.32
CINCIANO	7.1	Max WS	DROVE 200-4	96.02	103.59	107.73		107.86	0.001345	1.60	61.22	27.33	0.33
CINCIANO	7.1	Max WS	100-4	83.96	103.59	107.48		107.60	0.001429	1.56	54.56	26.18	0.33
CINCIANO	7.1	Max WS	30-4	59.45	103.59	106.95		107.06	0.001597	1.45	41.36	23.73	0.34
CINCIANO	6.9	Max WS	500_4	111.56	103.68	107.95	106.47	108.15	0.001900	1.97	56.62	19.57	0.37
CINCIANO	6.9	Max WS	DROVE 200-4	96.02	103.68	107.67	106.31	107.85	0.001901	1.88	51.18	19.34	0.37
CINCIANO	6.9	Max WS	100-4	83.95	103.68	107.43	106.14	107.60	0.001932	1.80	46.55	19.14	0.37
CINCIANO	6.9	Max WS	30-4	59.24	103.68	106.92	105.68	107.05	0.001947	1.61	36.90	18.73	0.37
CINCIANO	6.5			Bridge									
CINCIANO	6.1	Max WS	500_4	111.55	103.68	107.70		107.94	0.002487	2.16	51.72	19.37	0.42
CINCIANO	6.1	Max WS	DROVE 200-4	96.01	103.68	107.50		107.71	0.002315	2.00	47.93	19.20	0.40
CINCIANO	6.1	Max WS	100-4	83.94	103.68	107.32		107.50	0.002214	1.89	44.49	19.06	0.39

HEC-RAS Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	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)	
CINCIANO	6.1	Max WS	30-4	59.24	103.68	106.89		107.02	0.002060	1.64	36.22	18.70	0.38
CINCIANO	6.09			Lat Struct									
CINCIANO	6.08			Lat Struct									
CINCIANO	5	Max WS	500_4	111.18	103.29	107.49		107.94	0.005067	2.96	37.61	14.71	0.59
CINCIANO	5	Max WS	DROVE 200-4	95.90	103.29	107.33		107.71	0.004593	2.73	35.17	14.71	0.56
CINCIANO	5	Max WS	100-4	83.89	103.29	107.17		107.50	0.004303	2.55	32.86	14.71	0.55
CINCIANO	5	Max WS	30-4	59.15	103.29	106.78		107.02	0.003529	2.17	27.29	13.61	0.49
CINCIANO	4	Max WS	500_4	97.36	102.83	107.53		107.83	0.003552	2.44	39.95	13.80	0.46
CINCIANO	4	Max WS	DROVE 200-4	86.85	102.83	107.30		107.58	0.003612	2.36	36.76	13.80	0.46
CINCIANO	4	Max WS	100-4	79.31	102.83	107.07		107.35	0.003933	2.36	33.60	13.80	0.48
CINCIANO	4	Max WS	30-4	59.19	102.83	106.59		106.84	0.004077	2.19	27.09	13.35	0.49
CINCIANO	3.9	Max WS	500_4	99.25	102.98	107.39	106.24	107.76	0.004734	2.69	36.89	15.34	0.55
CINCIANO	3.9	Max WS	DROVE 200-4	89.84	102.98	107.12	106.07	107.50	0.005278	2.73	32.85	14.50	0.58
CINCIANO	3.9	Max WS	100-4	71.58	102.98	106.89	105.73	107.19	0.004353	2.41	29.68	13.63	0.52
CINCIANO	3.9	Max WS	30-4	58.88	102.98	106.48	105.47	106.78	0.004613	2.41	24.47	11.58	0.53
CINCIANO	3.5			Bridge									
CINCIANO	3.1	Max WS	500_4	98.97	102.98	106.69		107.37	0.010653	3.67	26.95	12.83	0.81
CINCIANO	3.1	Max WS	DROVE 200-4	89.82	102.98	106.44		107.16	0.011166	3.74	23.99	11.31	0.82
CINCIANO	3.1	Max WS	100-4	81.62	102.98	106.24		106.95	0.011480	3.75	21.77	10.34	0.83
CINCIANO	3.1	Max WS	30-4	63.39	102.98	105.81		106.47	0.012281	3.61	17.57	9.37	0.84
CINCIANO	3.09			Lat Struct									
CINCIANO	3.08			Lat Struct									
CINCIANO	2	Max WS	500_4	98.93	102.49	106.96		107.06	0.000812	1.38	71.64	23.53	0.25
CINCIANO	2	Max WS	DROVE 200-4	89.79	102.49	106.71		106.80	0.000879	1.37	65.75	23.53	0.26
CINCIANO	2	Max WS	100-4	81.61	102.49	106.49		106.59	0.000937	1.34	60.71	23.53	0.27
CINCIANO	2	Max WS	30-4	63.38	102.49	106.01		106.10	0.001091	1.28	49.37	23.29	0.28
CINCIANO	1	Max WS	500_4	94.24	102.05	106.95		107.03	0.000560	1.20	78.28	24.24	0.21
CINCIANO	1	Max WS	DROVE 200-4	89.25	102.05	106.68		106.76	0.000663	1.24	71.74	24.24	0.23
CINCIANO	1	Max WS	100-4	81.61	102.05	106.46		106.54	0.000709	1.23	66.44	24.24	0.24
CINCIANO	1	Max WS	30-4	63.34	102.05	105.97		106.04	0.000776	1.16	54.74	23.46	0.24
CINCIANO	0.6	Max WS	500_4	83.97	102.03	106.96		107.02	0.000409	0.94	82.98	26.32	0.17
CINCIANO	0.6	Max WS	DROVE 200-4	85.31	102.03	106.67		106.74	0.000568	1.05	75.31	26.32	0.20
CINCIANO	0.6	Max WS	100-4	80.94	102.03	106.44		106.51	0.000664	1.08	69.20	26.32	0.22
CINCIANO	0.6	Max WS	30-4	63.23	102.03	105.95		106.01	0.000623	1.10	57.16	22.53	0.21
CINCIANO	0.5	Max WS	500_4	83.94	102.03	106.96		107.02	0.000409	0.94	82.97	26.32	0.17
CINCIANO	0.5	Max WS	DROVE 200-4	85.30	102.03	106.67		106.74	0.000568	1.05	75.30	26.32	0.20
CINCIANO	0.5	Max WS	100-4	80.94	102.03	106.44		106.51	0.000664	1.08	69.19	26.32	0.22
CINCIANO	0.5	Max WS	30-4	63.23	102.03	105.95		106.01	0.000623	1.10	57.14	22.53	0.21
VALLE	17.5	Max WS	500_4	216.62	101.77	106.19		106.91	0.007386	3.76	57.57	21.65	0.74
VALLE	17.5	Max WS	DROVE 200-4	194.71	101.77	105.88		106.62	0.008260	3.82	50.99	20.57	0.77
VALLE	17.5	Max WS	100-4	177.82	101.77	105.63		106.39	0.009293	3.87	45.91	20.01	0.82
VALLE	17.5	Max WS	30-4	138.18	101.77	105.26		105.90	0.008361	3.56	38.78	17.68	0.77
VALLE	17.49	Max WS	500_4	216.60	101.77	106.18		106.91	0.007487	3.78	57.28	21.60	0.74
VALLE	17.49	Max WS	DROVE 200-4	194.69	101.77	105.86		106.61	0.008421	3.85	50.63	20.51	0.78
VALLE	17.49	Max WS	100-4	177.83	101.77	105.61		106.39	0.009553	3.91	45.48	19.96	0.83
VALLE	17.49	Max WS	30-4	138.18	101.77	105.24		105.90	0.008560	3.59	38.46	17.63	0.78
VALLE	17.489			Lat Struct									
VALLE	17.488			Lat Struct									
VALLE	17.48			Lat Struct									
VALLE	17	Max WS	500_4	233.92	100.53	104.93		105.62	0.007439	3.73	64.54	29.18	0.75
VALLE	17	Max WS	DROVE 200-4	202.88	100.53	104.67		105.34	0.008205	3.66	56.85	29.18	0.78
VALLE	17	Max WS	100-4	177.38	100.53	104.47		105.10	0.008680	3.56	50.95	29.18	0.80
VALLE	17	Max WS	30-4	138.21	100.53	104.17		104.72	0.008872	3.27	42.60	26.65	0.79
VALLE	16.9			Lat Struct									
VALLE	16	Max WS	500_4	201.68	99.47	104.49		104.95	0.004250	3.02	66.68	21.21	0.54
VALLE	16	Max WS	DROVE 200-4	177.22	99.47	104.28		104.69	0.004042	2.85	62.24	21.21	0.53
VALLE	16	Max WS	100-4	152.68	99.47	104.10		104.45	0.003618	2.61	58.52	21.21	0.50
VALLE	16	Max WS	30-4	127.91	99.47	103.82		104.12	0.003543	2.44	52.49	21.21	0.49
VALLE	15.9			Lat Struct									
VALLE	15	Max WS	500_4	205.24	98.80	104.18		104.67	0.004097	3.08	66.53	20.43	0.55
VALLE	15	Max WS	DROVE 200-4	189.77	98.80	103.86		104.37	0.004760	3.16	60.06	20.43	0.59
VALLE	15	Max WS	100-4	176.67	98.80	103.59		104.12	0.005572	3.25	54.38	20.43	0.64
VALLE	15	Max WS	30-4	150.79	98.80	103.29		103.78	0.005737	3.12	48.27	20.04	0.64
VALLE	14	Max WS	500_4	212.58	98.44	103.69		104.31	0.005265	3.47	61.19	18.81	0.61
VALLE	14	Max WS	DROVE 200-4	193.31	98.44	103.22		103.92	0.006797	3.69	52.41	18.43	0.70
VALLE	14	Max WS	100-4	175.07	98.44	102.93		103.64	0.007520	3.72	47.12	17.91	0.73
VALLE	14	Max WS	30-4	150.77	98.44	102.51		103.25	0.009245	3.81	39.60	17.35	0.80
VALLE	13.8			Lat Struct									
VALLE	13	Max WS	500_4	263.97	97.60	102.29		103.12	0.009282	4.06	65.05	27.08	0.84
VALLE	13	Max WS	DROVE 200-4	220.14	97.60	102.12		102.79	0.008011	3.63	60.58	26.83	0.77
VALLE	13	Max WS	100-4	192.58	97.60	102.00		102.58	0.007180	3.35	57.52	26.65	0.73
VALLE	13	Max WS	30-4	146.19	97.60	101.78		102.19	0.005585	2.83	51.57	25.56	0.64
VALLE	12.9			Lat Struct									
VALLE	12.8			Lat Struct									

HEC-RAS Profile: Max WS (Continued)

Reach	River Sta	Profile	Plan	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)	
VALLE	12	Max WS	500_4	228.42	96.99	101.72		102.11	0.004535	2.89	83.64	40.33	0.57
VALLE	12	Max WS	DROVE 200-4	197.61	96.99	101.54		101.89	0.004462	2.75	76.58	40.12	0.56
VALLE	12	Max WS	100-4	176.90	96.99	101.40		101.73	0.004574	2.69	70.71	39.95	0.56
VALLE	12	Max WS	30-4	140.44	96.99	101.10		101.41	0.005042	2.59	58.89	39.60	0.58
VALLE	11.9			Lat Struct									
VALLE	11	Max WS	500_4	252.84	96.19	101.01		101.54	0.006126	3.31	81.26	41.86	0.67
VALLE	11	Max WS	DROVE 200-4	221.47	96.19	100.84		101.33	0.006148	3.17	74.13	41.49	0.66
VALLE	11	Max WS	100-4	197.96	96.19	100.69		101.15	0.006360	3.09	67.75	41.15	0.67
VALLE	11	Max WS	30-4	155.32	96.19	100.33		100.79	0.007553	3.02	53.33	40.38	0.71
VALLE	10.9			Lat Struct									
VALLE	10	Max WS	500_4	251.91	95.83	100.46		101.14	0.007527	4.00	72.42	40.80	0.74
VALLE	10	Max WS	DROVE 200-4	221.25	95.83	100.26		100.94	0.008067	3.95	64.57	40.60	0.76
VALLE	10	Max WS	100-4	197.91	95.83	100.08	100.12	100.79	0.008888	4.00	57.33	39.17	0.79
VALLE	10	Max WS	30-4	155.17	95.83	99.79	99.88	100.49	0.009484	3.89	45.86	38.48	0.81
VALLE	9	Max WS	500_4	252.43	95.07	100.06		100.19	0.001058	1.68	165.80	78.00	0.31
VALLE	9	Max WS	DROVE 200-4	246.15	95.07	99.86		100.01	0.001323	1.80	150.58	78.00	0.34
VALLE	9	Max WS	100-4	210.71	95.07	99.59		99.74	0.001453	1.77	129.71	74.96	0.35
VALLE	9	Max WS	30-4	156.61	95.07	99.00		99.16	0.002163	1.84	90.45	59.49	0.41
VALLE	8	Max WS	500_4	266.40	93.00	99.67		100.02	0.002177	2.68	106.95	33.69	0.38
VALLE	8	Max WS	DROVE 200-4	245.25	93.00	99.55		99.87	0.002034	2.56	102.87	33.60	0.37
VALLE	8	Max WS	100-4	210.69	93.00	99.32		99.59	0.001811	2.35	95.14	33.43	0.34
VALLE	8	Max WS	30-4	156.57	93.00	98.77		98.98	0.001554	2.04	77.81	26.38	0.32
VALLE	7.9			Lat Struct									
VALLE	7	Max WS	500_4	271.43	92.80	97.59	97.22	98.50	0.008649	4.22	64.97	32.83	0.82
VALLE	7	Max WS	DROVE 200-4	234.81	92.80	97.12		98.11	0.011033	4.41	53.22	22.47	0.92
VALLE	7	Max WS	100-4	207.01	92.80	96.89		97.83	0.011113	4.29	48.30	21.44	0.91
VALLE	7	Max WS	30-4	156.41	92.80	96.52		97.28	0.010141	3.86	40.55	19.70	0.86
VALLE	6.8			Lat Struct									
VALLE	6	Max WS	500_4	172.16	92.00	97.37		97.54	0.001165	1.83	94.31	25.23	0.30
VALLE	6	Max WS	DROVE 200-4	178.65	92.00	96.90		97.14	0.001877	2.16	82.52	25.23	0.38
VALLE	6	Max WS	100-4	184.81	92.00	96.41		96.77	0.003291	2.63	70.20	25.23	0.50
VALLE	6	Max WS	30-4	152.37	92.00	96.03		96.35	0.003529	2.52	60.56	25.23	0.52
VALLE	5	Max WS	500_4	127.08	91.50	97.41		97.53	0.000781	1.61	83.94	23.48	0.24
VALLE	5	Max WS	DROVE 200-4	143.98	91.50	96.87		97.09	0.001595	2.15	71.27	23.48	0.35
VALLE	5	Max WS	100-4	156.58	91.50	96.22		96.65	0.003665	2.96	55.94	23.48	0.52
VALLE	5	Max WS	30-4	142.35	91.50	95.39		96.10	0.008156	3.75	38.40	18.04	0.76
VALLE	4.1	Max WS	500_4	246.48	91.00	97.20	94.26	97.31	0.000602	1.57	164.73	40.33	0.23
VALLE	4.1	Max WS	DROVE 200-4	225.15	91.00	96.72	94.12	96.85	0.000730	1.62	145.56	40.33	0.25
VALLE	4.1	Max WS	100-4	204.66	91.00	96.15	93.98	96.30	0.001007	1.75	122.66	40.33	0.29
VALLE	4.1	Max WS	30-4	154.89	91.00	95.37	93.61	95.52	0.001370	1.77	91.01	40.03	0.33
VALLE	4.05			Bridge									
VALLE	4	Max WS	500_4	226.80	91.00	96.64		96.78	0.000792	1.67	142.35	40.33	0.26
VALLE	4	Max WS	DROVE 200-4	225.15	91.00	96.19		96.37	0.001174	1.90	124.23	40.33	0.31
VALLE	4	Max WS	100-4	202.50	91.00	95.67		95.88	0.001635	2.05	103.27	40.33	0.37
VALLE	4	Max WS	30-4	151.48	91.00	95.05		95.25	0.001975	1.98	78.40	39.31	0.39
VALLE	3	Max WS	500_4	226.79	91.10	96.62		96.78	0.001062	1.74	129.98	38.44	0.30
VALLE	3	Max WS	DROVE 200-4	225.13	91.10	96.16		96.36	0.001612	2.00	112.46	37.45	0.37
VALLE	3	Max WS	100-4	202.50	91.10	95.63		95.87	0.002276	2.18	93.00	35.55	0.43
VALLE	3	Max WS	30-4	151.48	91.10	95.01		95.23	0.002759	2.11	71.67	33.25	0.46
VALLE	2.9			Lat Struct									
VALLE	2	Max WS	500_4	218.03	90.55	96.58		96.74	0.000742	1.86	130.29	34.84	0.27
VALLE	2	Max WS	DROVE 200-4	222.62	90.55	96.08		96.30	0.001172	2.17	112.95	34.84	0.33
VALLE	2	Max WS	100-4	202.54	90.55	95.53		95.77	0.001574	2.29	95.16	30.66	0.38
VALLE	2	Max WS	30-4	151.50	90.55	94.91		95.12	0.001670	2.09	76.86	29.02	0.38
VALLE	1.1	Max WS	500_4	208.04	89.30	96.67		96.70	0.000123	0.76	278.34	62.48	0.11
VALLE	1.1	Max WS	DROVE 200-4	219.66	89.30	96.19		96.23	0.000195	0.89	248.37	62.48	0.14
VALLE	1.1	Max WS	100-4	202.55	89.30	95.64		95.69	0.000258	0.94	214.77	57.01	0.16
VALLE	1.1	Max WS	30-4	151.46	89.30	95.00		95.04	0.000248	0.85	179.08	54.51	0.15
VALLE	1	Max WS	500_4	208.04	89.30	96.67	92.57	96.70	0.000123	0.76	278.34	62.48	0.11
VALLE	1	Max WS	DROVE 200-4	219.66	89.30	96.19	92.62	96.23	0.000195	0.89	248.35	62.48	0.14
VALLE	1	Max WS	100-4	202.55	89.30	95.64	92.54	95.69	0.000258	0.94	214.76	57.01	0.16
VALLE	1	Max WS	30-4	151.46	89.30	95.00	92.29	95.04	0.000248	0.85	179.07	54.51	0.15

HEC-RAS Profile: Max WS

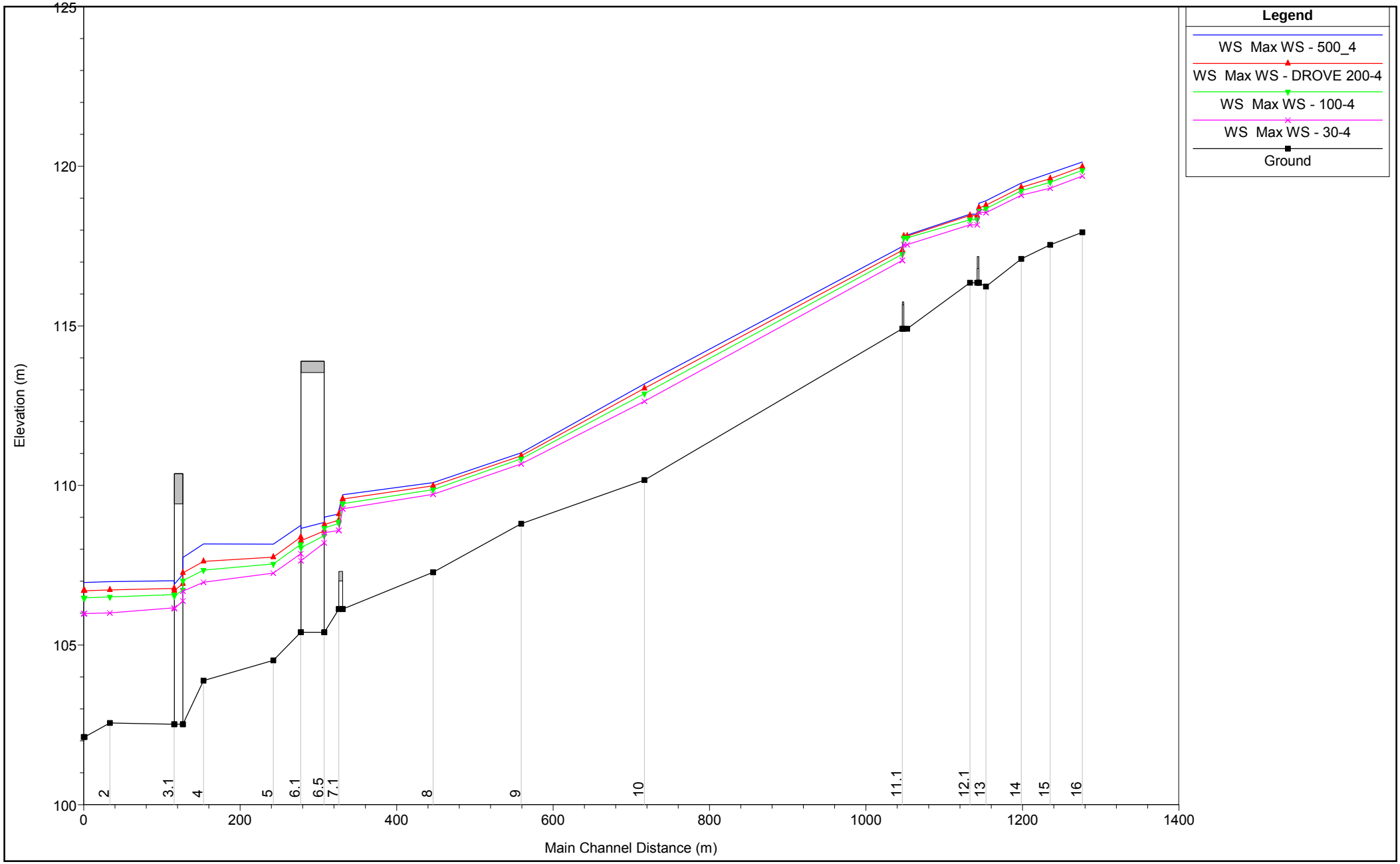
Storage Area	Profile	Plan	W.S. Elev	SA Min El	Net Flux	SA Area	SA Volume
			(m)	(m)	(m3/s)	(1000 m2)	(1000 m3)
DROVE 1	Max WS	500_4	108.13	103.40	11.30	18.75	12.84
DROVE 1	Max WS	DROVE 200-4	107.60	103.40	1.88	11.62	4.26
DROVE 1	Max WS	100-4	104.06	103.40	0.01	0.01	0.01
DROVE 1	Max WS	30-4	103.40	103.40	0.00	0.01	0.00
DROVE 10	Max WS	500_4	104.69	100.00	22.65	6.88	8.02
DROVE 10	Max WS	DROVE 200-4	104.46	100.00	8.25	6.88	6.43
DROVE 10	Max WS	100-4	104.27	100.00	4.47	6.10	5.20
DROVE 10	Max WS	30-4	103.95	100.00	1.93	4.70	3.49
DROVE 11	Max WS	500_4	103.89	99.90	12.74	18.89	29.53
DROVE 11	Max WS	DROVE 200-4	103.61	99.90	2.04	18.83	24.29
DROVE 11	Max WS	100-4	103.51	99.90	0.28	18.83	22.41
DROVE 11	Max WS	30-4	103.19	99.90	2.35	17.73	16.55
DROVE 12	Max WS	500_4	101.43	98.90	1.47	6.14	5.27
DROVE 12	Max WS	DROVE 200-4	100.99	98.90	0.41	4.64	2.87
DROVE 12	Max WS	100-4	100.68	98.90	0.23	3.58	1.59
DROVE 12	Max WS	30-4	100.37	98.90	-0.05	2.16	0.65
DROVE 13	Max WS	500_4	101.50	101.50	0.00	0.02	0.00
DROVE 13	Max WS	DROVE 200-4	101.50	101.50	0.00	0.02	0.00
DROVE 13	Max WS	100-4	101.50	101.50	0.00	0.02	0.00
DROVE 13	Max WS	30-4	101.50	101.50	0.00	0.02	0.00
DROVE 14	Max WS	500_4	100.34	97.90	5.21	47.95	46.85
DROVE 14	Max WS	DROVE 200-4	100.07	97.90	7.14	46.39	34.09
DROVE 14	Max WS	100-4	99.83	97.90	5.82	42.91	23.19
DROVE 14	Max WS	30-4	99.45	97.90	1.43	30.80	8.78
DROVE 15	Max WS	500_4	101.99	97.00	25.91	22.35	23.20
DROVE 15	Max WS	DROVE 200-4	101.82	97.00	11.18	22.35	19.57
DROVE 15	Max WS	100-4	101.69	97.00	11.09	21.78	16.63
DROVE 15	Max WS	30-4	101.42	97.00	10.86	21.78	10.76
DROVE 16	Max WS	500_4	98.91	98.90	0.00	0.02	0.00
DROVE 16	Max WS	DROVE 200-4	98.90	98.90	0.00	0.02	0.00
DROVE 16	Max WS	100-4	98.90	98.90	0.00	0.02	0.00
DROVE 16	Max WS	30-4	98.90	98.90	0.00	0.02	0.00
DROVE 17	Max WS	500_4	97.38	94.00	7.68	89.01	89.70
DROVE 17	Max WS	DROVE 200-4	96.89	94.00	4.99	71.84	48.72
DROVE 17	Max WS	100-4	96.57	94.00	3.04	51.92	26.25
DROVE 17	Max WS	30-4	95.73	94.00	0.66	9.05	1.70
DROVE 18	Max WS	500_4	97.38	93.60	2.09	12.42	25.39
DROVE 18	Max WS	DROVE 200-4	96.85	93.60	2.61	11.66	19.02
DROVE 18	Max WS	100-4	96.22	93.60	4.88	10.77	11.89
DROVE 18	Max WS	30-4	95.39	93.60	3.73	6.72	3.90
DROVE 19	Max WS	500_4	97.35	94.70	-0.13	11.11	12.50
DROVE 19	Max WS	DROVE 200-4	96.89	94.70	0.50	10.39	7.35
DROVE 19	Max WS	100-4	96.57	94.70	0.09	6.43	4.17
DROVE 19	Max WS	30-4	95.71	94.70	0.14	2.52	0.50
DROVE 2	Max WS	500_4	107.50	106.06	1.23	3.14	2.36
DROVE 2	Max WS	DROVE 200-4	107.30	106.06	0.88	2.96	1.74
DROVE 2	Max WS	100-4	107.10	106.06	0.28	2.96	1.15
DROVE 2	Max WS	30-4	106.37	106.06	0.33	0.14	0.02
DROVE 20	Max WS	500_4	96.54	94.60	3.56	7.56	3.89
DROVE 20	Max WS	DROVE 200-4	96.14	94.60	0.17	5.05	1.24
DROVE 20	Max WS	100-4	95.74	94.60	0.13	1.40	0.18
DROVE 20	Max WS	30-4	94.60	94.60	0.00	0.00	0.00
DROVE 21	Max WS	500_4	96.52	92.90	4.30	42.07	34.56
DROVE 21	Max WS	DROVE 200-4	95.75	92.90	2.76	32.04	5.50

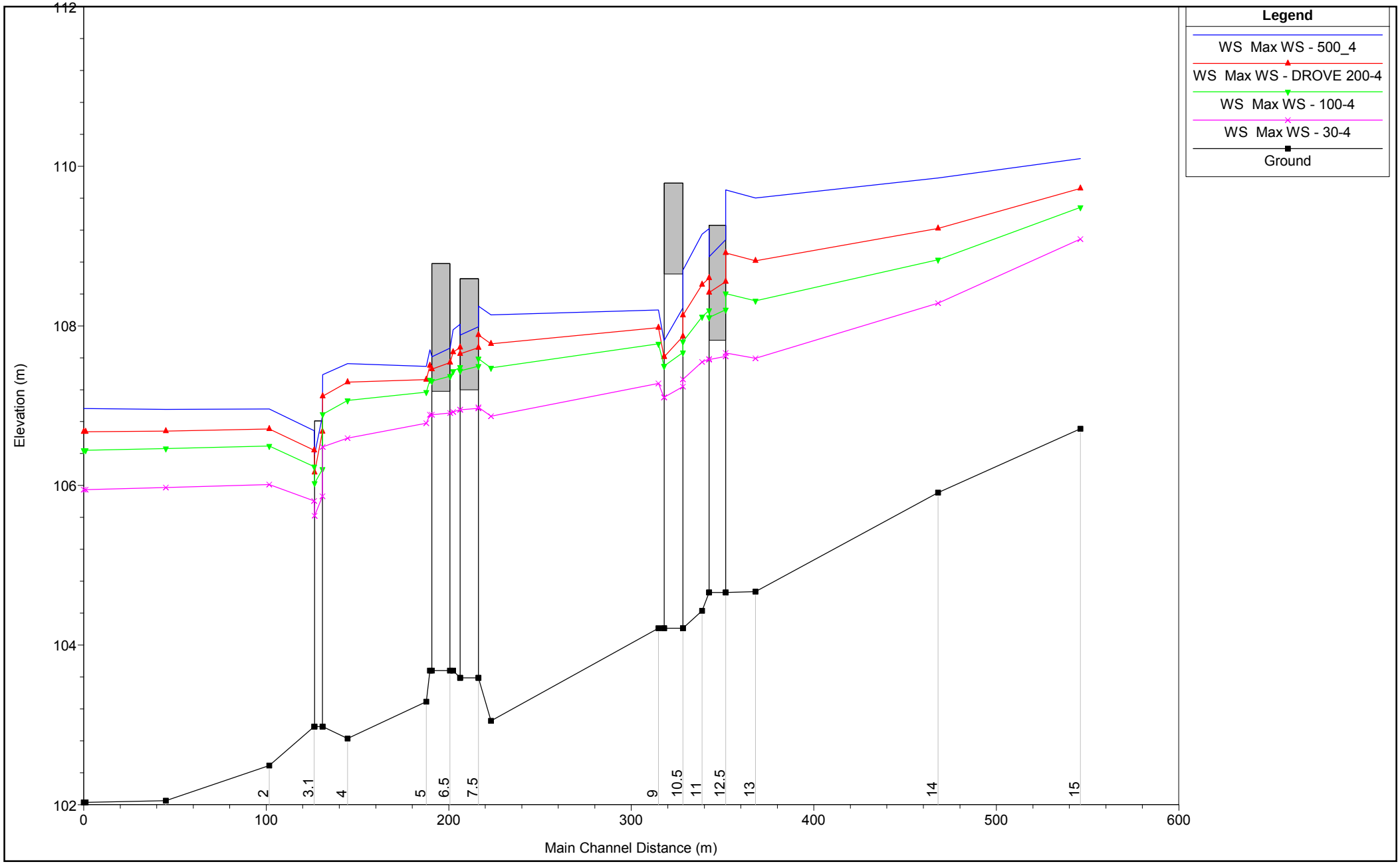
HEC-RAS Profile: Max WS (Continued)

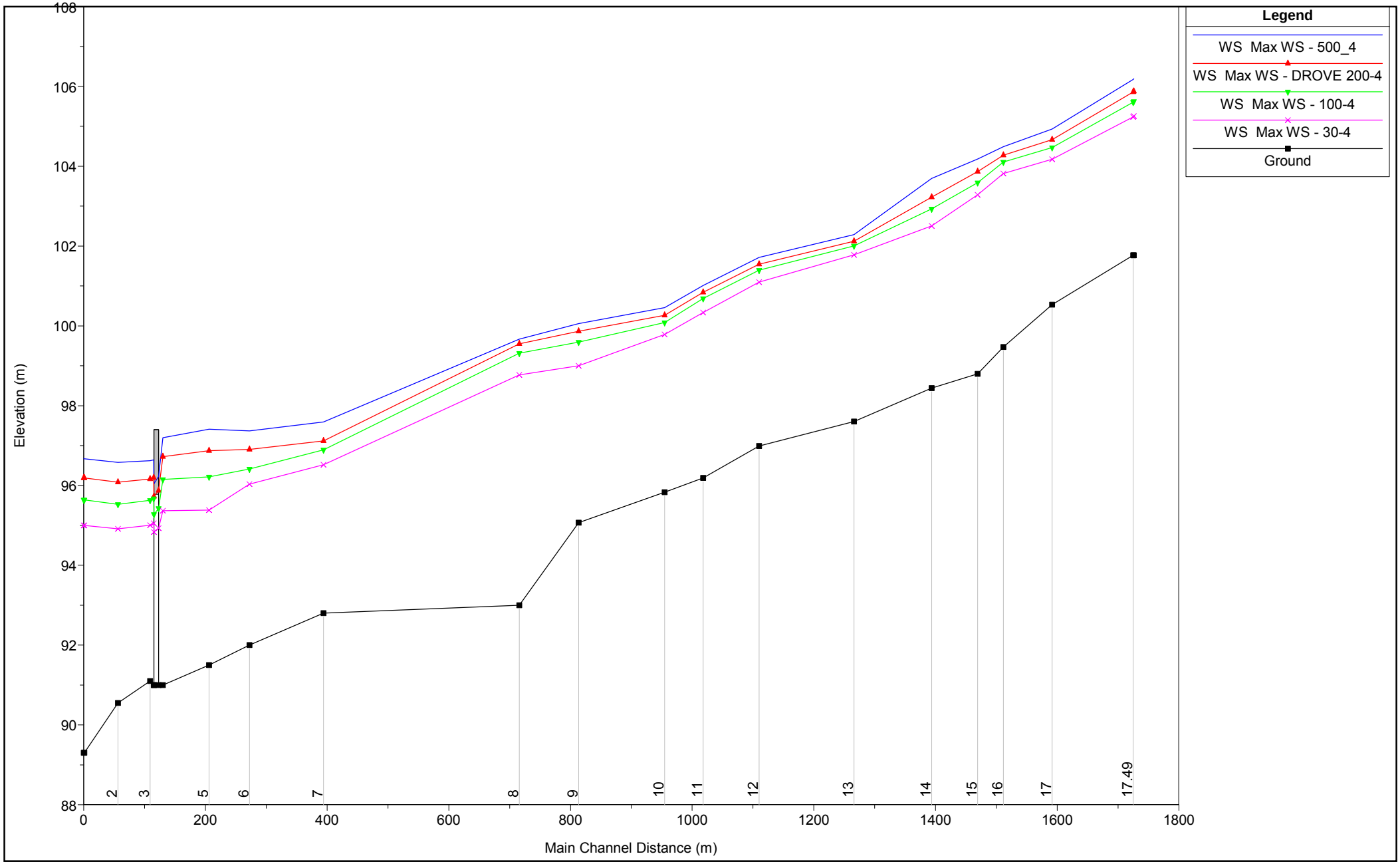
Storage Area	Profile	Plan	W.S. Elev	SA Min El	Net Flux	SA Area	SA Volume
			(m)	(m)	(m3/s)	(1000 m2)	(1000 m3)
DROVE 21	Max WS	100-4	95.31	92.90	0.58	1.38	1.43
DROVE 21	Max WS	30-4	92.90	92.90	0.00	0.30	0.00
DROVE 22	Max WS	500_4	95.37	90.50	0.03	36.50	36.90
DROVE 22	Max WS	DROVE 200-4	94.22	90.50	-0.46	11.85	11.47
DROVE 22	Max WS	100-4	91.23	90.50	0.03	0.44	0.07
DROVE 22	Max WS	30-4	90.50	90.50	0.00	0.05	0.00
DROVE 23	Max WS	500_4	93.03	89.00	30.67	41.79	94.57
DROVE 23	Max WS	DROVE 200-4	90.27	89.00	15.43	19.53	12.71
DROVE 23	Max WS	100-4	89.00	89.00	0.00	0.44	0.00
DROVE 23	Max WS	30-4	89.00	89.00	0.00	0.44	0.00
DROVE 24	Max WS	500_4	93.03	88.40	-3.70	28.34	79.02
DROVE 24	Max WS	DROVE 200-4	90.27	88.40	0.00	14.93	12.99
DROVE 24	Max WS	100-4	88.40	88.40	0.00	0.04	0.00
DROVE 24	Max WS	30-4	88.40	88.40	0.00	0.04	0.00
DROVE 25	Max WS	500_4	93.03	84.30	-1.23	43.88	151.26
DROVE 25	Max WS	DROVE 200-4	90.27	84.30	0.00	40.14	32.50
DROVE 25	Max WS	100-4	84.30	84.30	0.00	0.09	0.00
DROVE 25	Max WS	30-4	84.30	84.30	0.00	0.09	0.00
DROVE 26	Max WS	500_4	104.93	102.30	-0.03	2.91	4.12
DROVE 26	Max WS	DROVE 200-4	104.81	102.30	0.11	2.91	3.77
DROVE 26	Max WS	100-4	102.30	102.30	0.00	0.02	0.00
DROVE 26	Max WS	30-4	102.30	102.30	0.00	0.02	0.00
DROVE 27	Max WS	500_4	102.70	100.00	0.18	3.52	1.01
DROVE 27	Max WS	DROVE 200-4	100.32	100.00	0.01	0.01	0.00
DROVE 27	Max WS	100-4	100.00	100.00	0.00	0.01	0.00
DROVE 27	Max WS	30-4	100.00	100.00	0.00	0.01	0.00
DROVE 3	Max WS	500_4	105.77	101.90	9.52	4.30	3.31
DROVE 3	Max WS	DROVE 200-4	105.49	101.90	3.40	3.80	2.13
DROVE 3	Max WS	100-4	104.92	101.90	0.34	0.88	0.78
DROVE 3	Max WS	30-4	101.90	101.90	0.00	0.00	0.00
DROVE 4	Max WS	500_4	103.91	99.30	27.40	24.23	10.93
DROVE 4	Max WS	DROVE 200-4	103.53	99.30	8.12	16.48	3.89
DROVE 4	Max WS	100-4	103.24	99.30	1.97	5.12	2.07
DROVE 4	Max WS	30-4	102.73	99.30	0.69	1.37	0.95
DROVE 5	Max WS	500_4	106.69	103.00	1.42	15.36	20.88
DROVE 5	Max WS	DROVE 200-4	106.34	103.00	1.34	14.99	15.56
DROVE 5	Max WS	100-4	105.86	103.00	2.50	11.83	8.62
DROVE 5	Max WS	30-4	103.00	103.00	0.00	0.01	0.00
DROVE 6	Max WS	500_4	107.31	105.40	0.55	5.76	4.89
DROVE 6	Max WS	DROVE 200-4	106.75	105.40	0.24	2.65	1.81
DROVE 6	Max WS	100-4	106.33	105.40	0.17	2.65	0.69
DROVE 6	Max WS	30-4	105.40	105.40	0.00	0.03	0.00
DROVE 7	Max WS	500_4	109.65	107.10	15.14	7.63	11.22
DROVE 7	Max WS	DROVE 200-4	108.89	107.10	5.11	7.29	5.50
DROVE 7	Max WS	100-4	108.31	107.10	1.18	6.38	1.52
DROVE 7	Max WS	30-4	107.10	107.10	0.00	0.00	0.00
DROVE 8	Max WS	500_4	106.66	103.50	0.65	8.45	4.83
DROVE 8	Max WS	DROVE 200-4	106.16	103.50	0.18	3.20	1.63
DROVE 8	Max WS	100-4	105.72	103.50	0.27	1.12	0.60
DROVE 8	Max WS	30-4	103.50	103.50	0.00	0.01	0.00
DROVE 9	Max WS	500_4	105.48	103.20	-0.13	4.77	3.92
DROVE 9	Max WS	DROVE 200-4	105.26	103.20	0.09	3.37	2.93
DROVE 9	Max WS	100-4	104.30	103.20	0.19	1.46	0.55
DROVE 9	Max WS	30-4	103.20	103.20	0.00	0.05	0.00

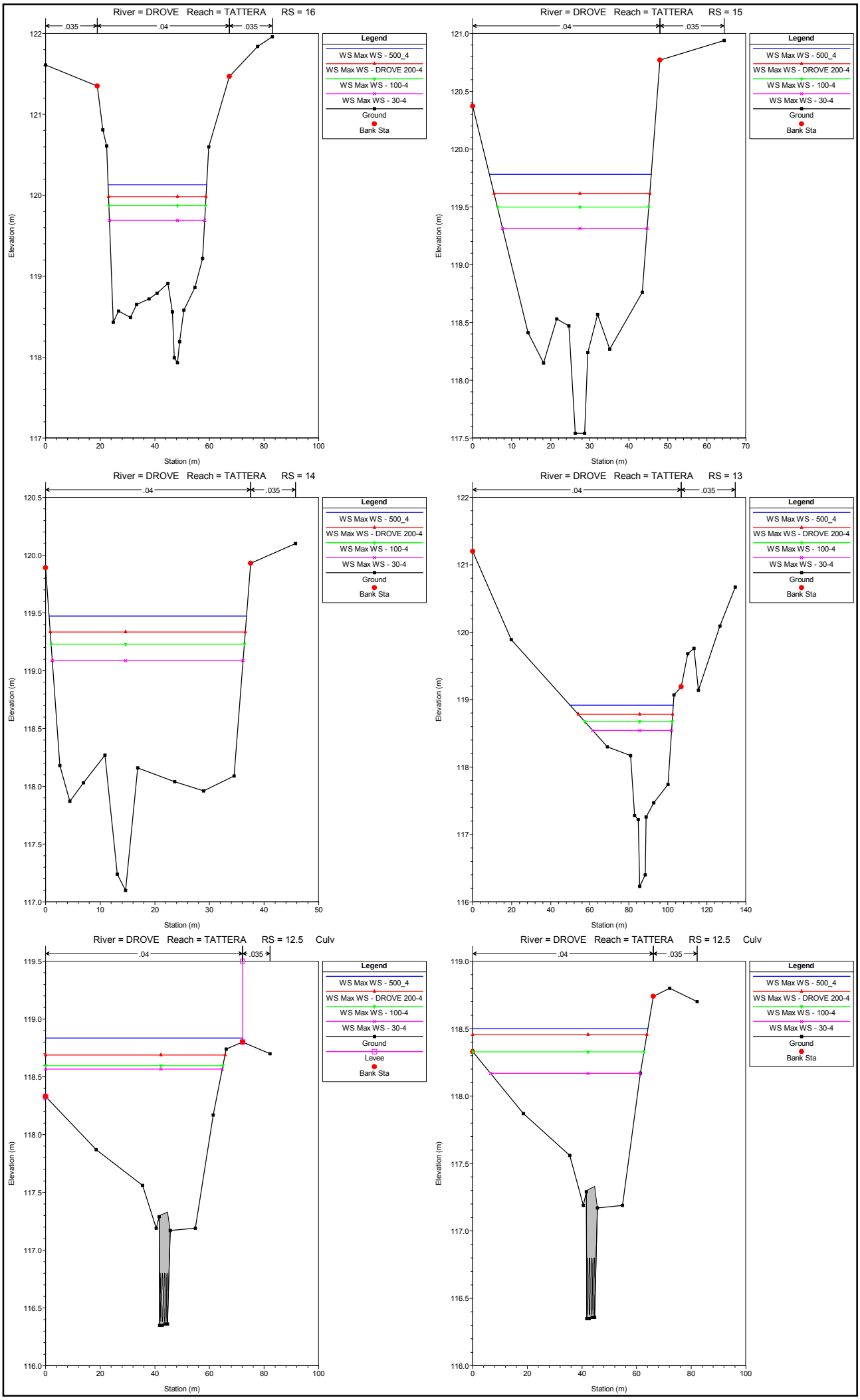
HEC-RAS Profile: Max WS (Continued)

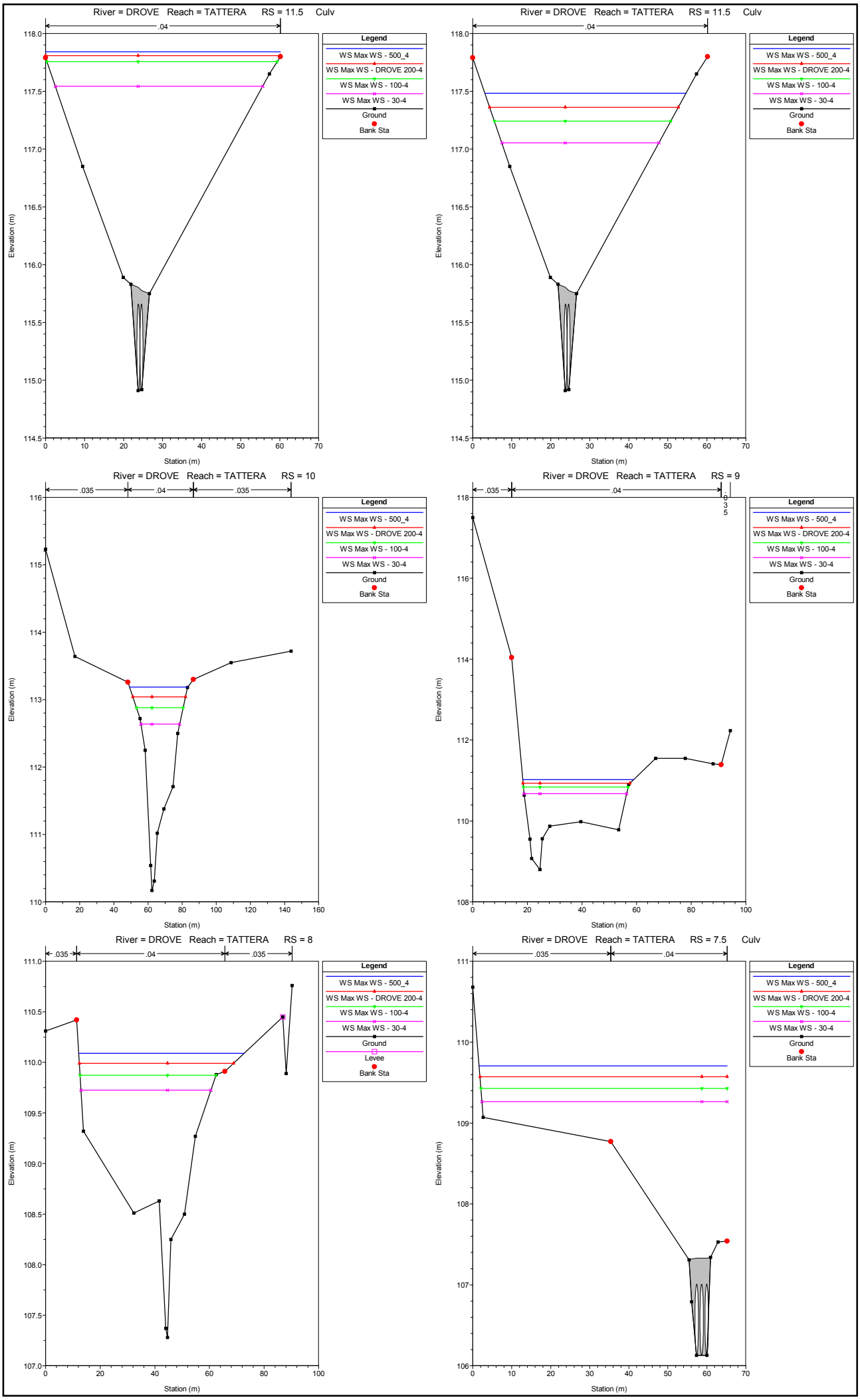
Storage Area	Profile	Plan	W.S. Elev	SA Min El	Net Flux	SA Area	SA Volume
			(m)	(m)	(m3/s)	(1000 m2)	(1000 m3)
DROVE 28	Max WS	500_4	91.79	90.90	0.54	10.14	4.23
DROVE 28	Max WS	DROVE 200-4	90.90	90.90	0.00	0.12	0.00
DROVE 28	Max WS	100-4	90.90	90.90	0.00	0.12	0.00
DROVE 28	Max WS	30-4	90.90	90.90	0.00	0.12	0.00
DROVE 29	Max WS	500_4	89.41	86.90	25.81	70.57	61.81
DROVE 29	Max WS	DROVE 200-4	86.90	86.90	0.00	0.01	0.00
DROVE 29	Max WS	100-4	86.90	86.90	0.00	0.01	0.00
DROVE 29	Max WS	30-4	86.90	86.90	0.00	0.01	0.00
DROVE 30	Max WS	500_4	89.41	82.80	2.23	83.73	124.38
DROVE 30	Max WS	DROVE 200-4	82.80	82.80	0.00	0.00	0.00
DROVE 30	Max WS	100-4	82.80	82.80	0.00	0.00	0.00
DROVE 30	Max WS	30-4	82.80	82.80	0.00	0.00	0.00
DROVE 31	Max WS	500_4	89.37	82.50	12.99	148.19	109.31
DROVE 31	Max WS	DROVE 200-4	82.50	82.50	0.00	0.00	0.00
DROVE 31	Max WS	100-4	82.50	82.50	0.00	0.00	0.00
DROVE 31	Max WS	30-4	82.50	82.50	0.00	0.00	0.00

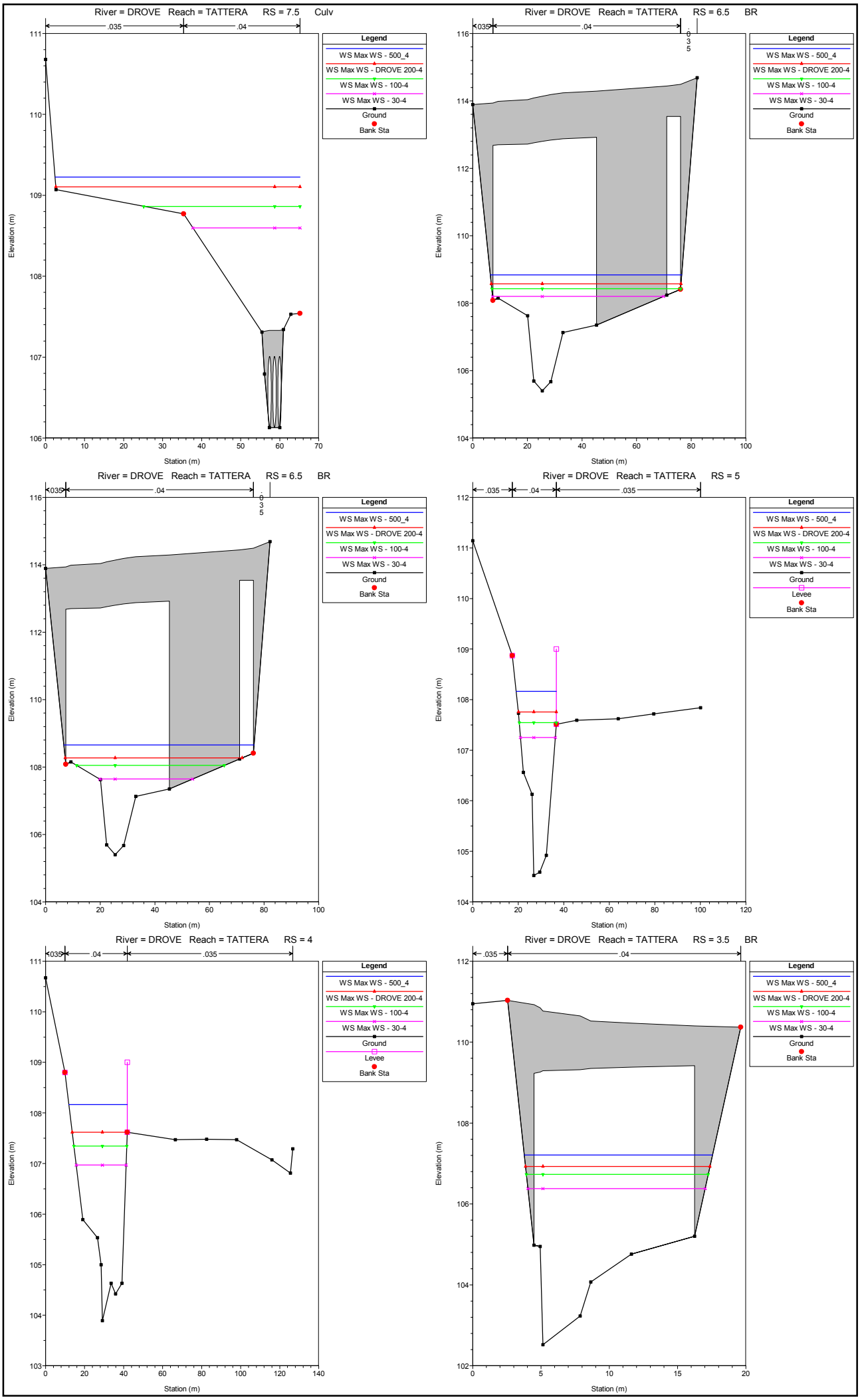

Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Elevation (m)
Main Channel Distance (m)
125
120
115
110
105
100
0
200
400
600
800
1000
1200
1400
2
3.1
4
5
6.1
6.5
7.1
8
9
10
11.1
12.1
13
14
15
16

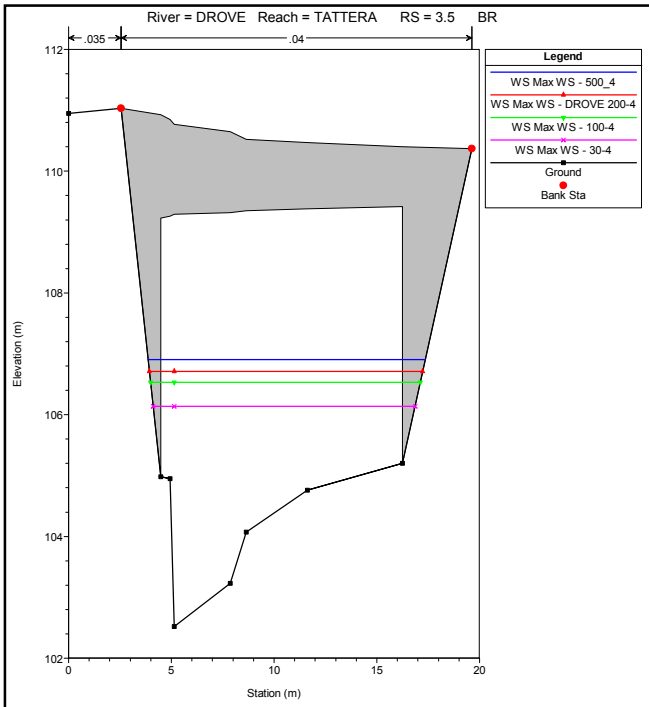

Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Elevation (m)
Main Channel Distance (m)
112
110
108
106
104
102
0
100
200
300
400
500
600
2
3.1
4
5
6.5
7.5
9
10.5
11
12.5
13
14
15

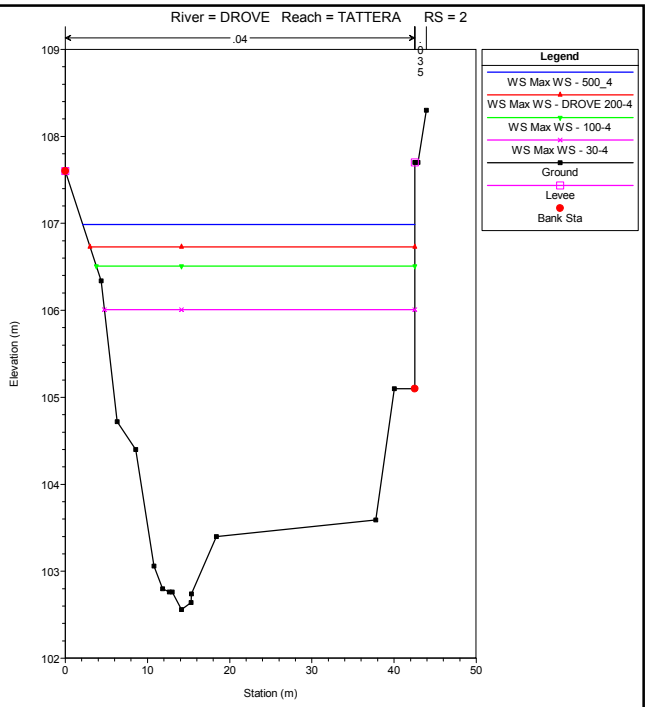

Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Elevation (m)
Main Channel Distance (m)
108
106
104
102
100
98
96
94
92
90
88
0
200
400
600
800
1000
1200
1400
1600
1800
2
3
5
6
7
8
9
10
11
12
13
14
15
16
17
17.49

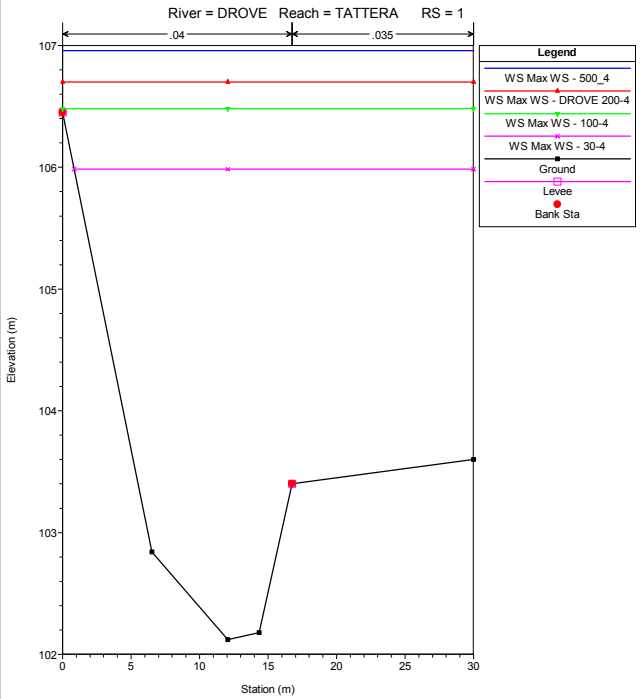

River = DROVE Reach = TATTERA RS = 16
.035
.04
.035
Elevation (m)
Station (m)
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta
River = DROVE Reach = TATTERA RS = 15
.04
.035
Elevation (m)
Station (m)
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta
River = DROVE Reach = TATTERA RS = 14
.04
.035
Elevation (m)
Station (m)
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta
River = DROVE Reach = TATTERA RS = 13
.04
.035
Elevation (m)
Station (m)
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta
River = DROVE Reach = TATTERA RS = 12.5 Culv
.04
.035
Elevation (m)
Station (m)
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
River = DROVE Reach = TATTERA RS = 12.5 Culv
.04
.035
Elevation (m)
Station (m)
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta

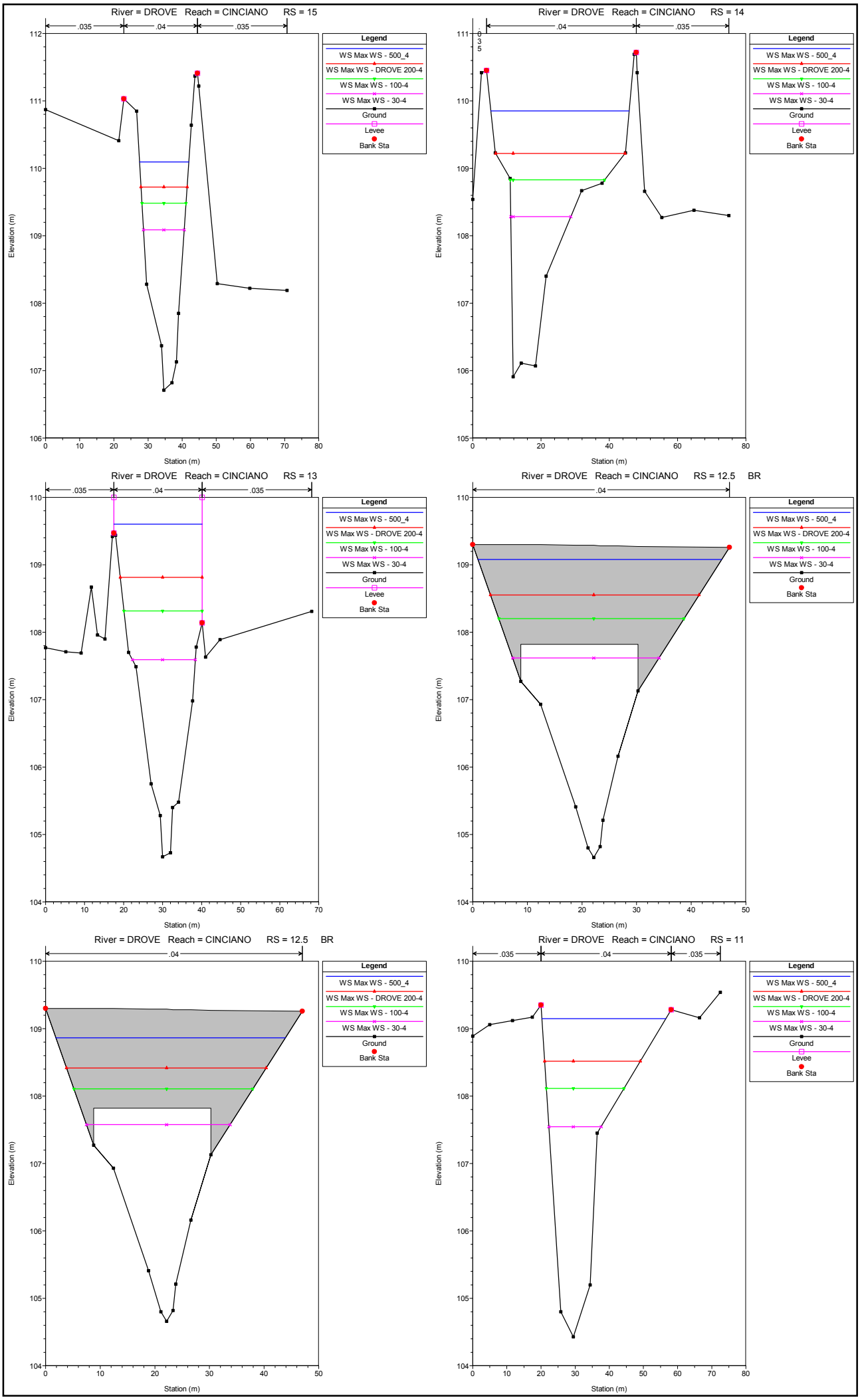

River = DROVE Reach = TATTERA RS = 11.5 Culv
.04
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta
Elevation (m)
Station (m)
River = DROVE Reach = TATTERA RS = 11.5 Culv
.04
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta
Elevation (m)
Station (m)
River = DROVE Reach = TATTERA RS = 10
.035
.04
.035
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta
Elevation (m)
Station (m)
River = DROVE Reach = TATTERA RS = 9
.035
.04
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta
Elevation (m)
Station (m)
River = DROVE Reach = TATTERA RS = 8
.035
.04
.035
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = DROVE Reach = TATTERA RS = 7.5 Culv
.035
.04
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta
Elevation (m)
Station (m)

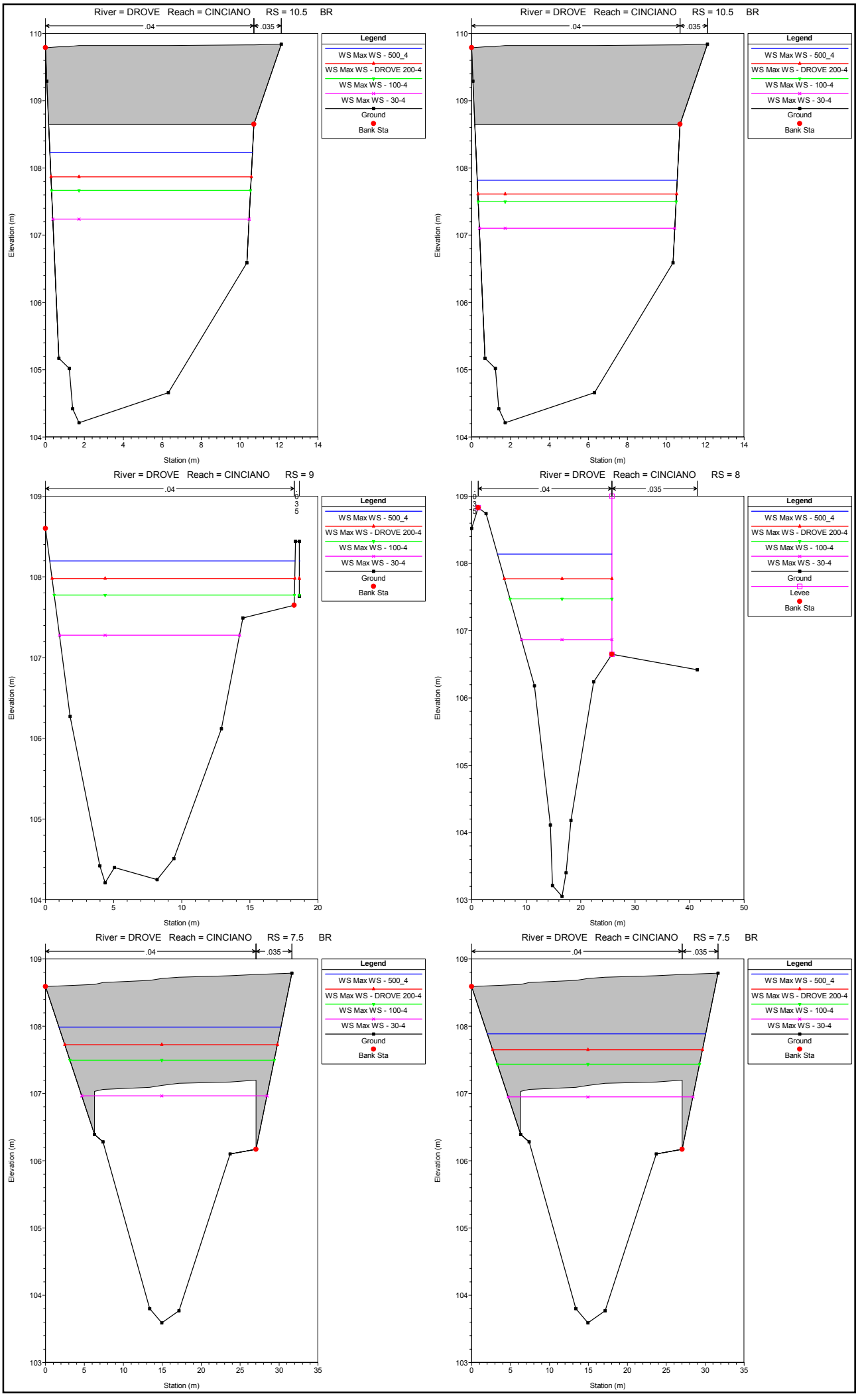

River = DROVE Reach = TATTERA RS = 7.5 Culv
.035
.04
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta
Elevation (m)
Station (m)
River = DROVE Reach = TATTERA RS = 6.5 BR
.035
.04
0.035
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta
Elevation (m)
Station (m)
River = DROVE Reach = TATTERA RS = 6.5 BR
.035
.04
0.035
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta
Elevation (m)
Station (m)
River = DROVE Reach = TATTERA RS = 5
.035
.04
.035
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = DROVE Reach = TATTERA RS = 4
.035
.04
.035
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = DROVE Reach = TATTERA RS = 3.5 BR
.035
.04
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta
Elevation (m)
Station (m)

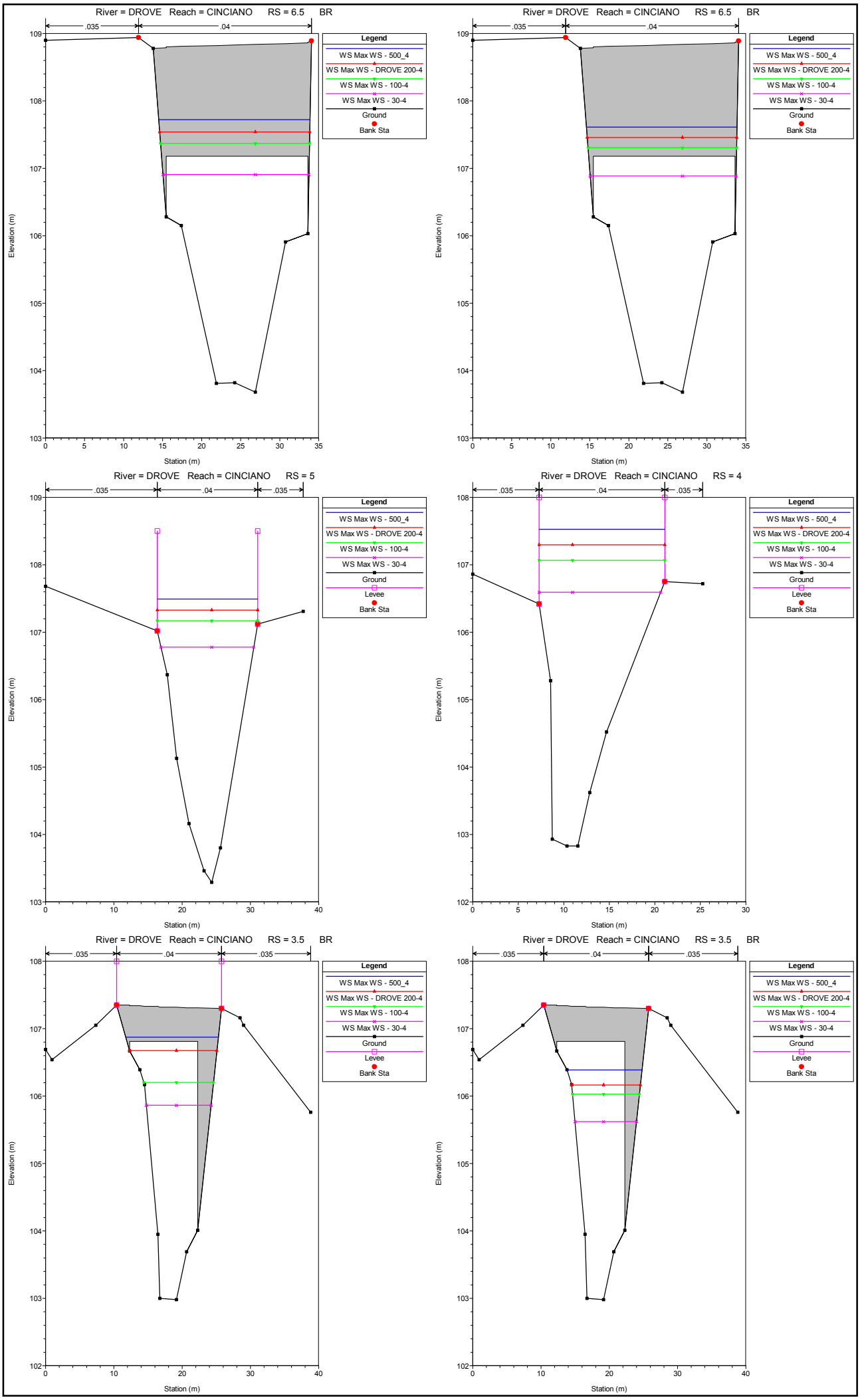

River = DROVE Reach = TATTERA RS = 3.5 BR
.035
.04
Elevation (m)
Station (m)
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta

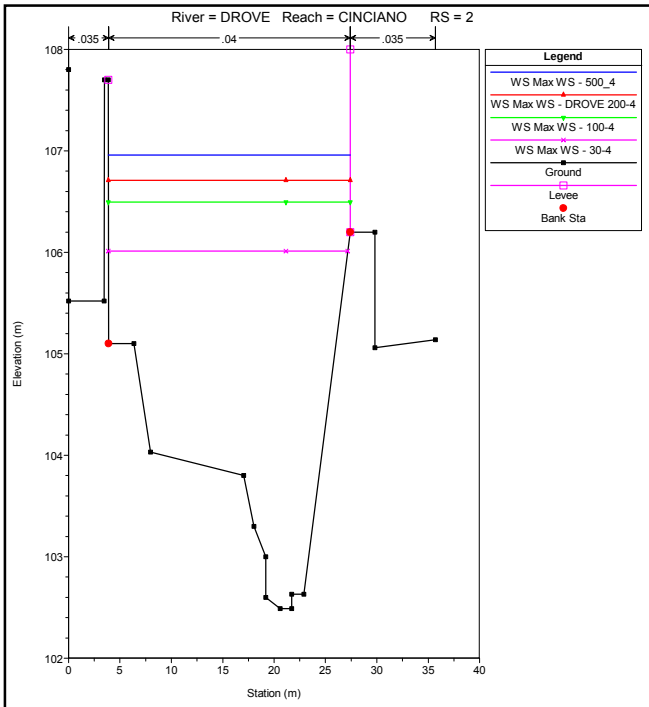

River = DROVE Reach = TATTERA RS = 2
.04
Elevation (m)
Station (m)
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta

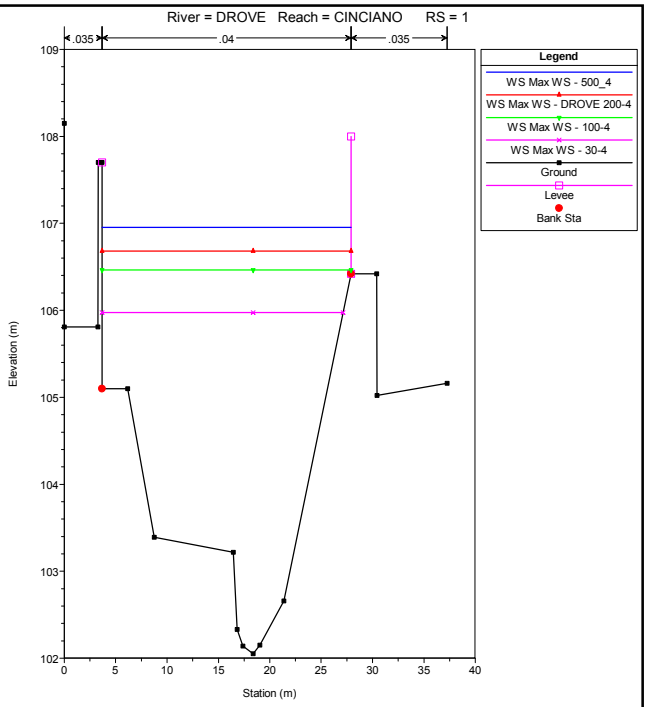

River = DROVE Reach = TATTERA RS = 1
.04
.035
Elevation (m)
Station (m)
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta

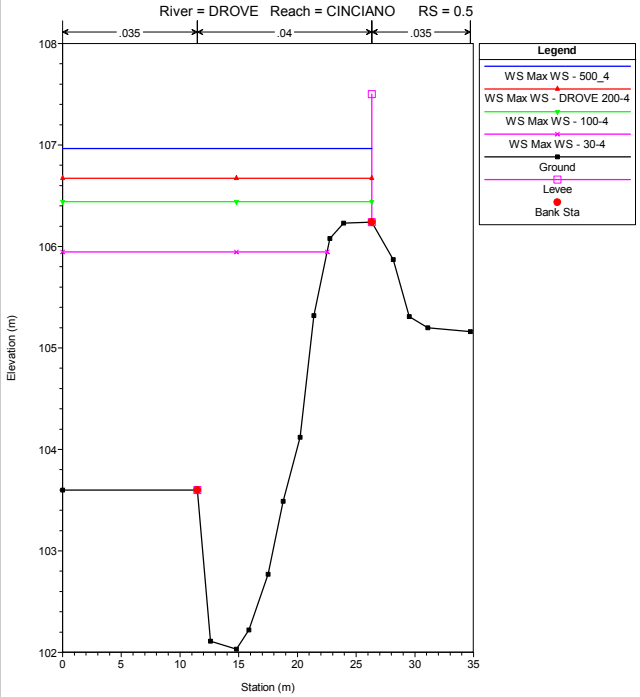

River = DROVE Reach = CINCIANO RS = 15
.035
.04
.035
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = DROVE Reach = CINCIANO RS = 14
.04
.035
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = DROVE Reach = CINCIANO RS = 13
.035
.04
.035
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = DROVE Reach = CINCIANO RS = 12.5 BR
.04
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta
Elevation (m)
Station (m)
River = DROVE Reach = CINCIANO RS = 12.5 BR
.04
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta
Elevation (m)
Station (m)
River = DROVE Reach = CINCIANO RS = 11
.035
.04
.035
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)

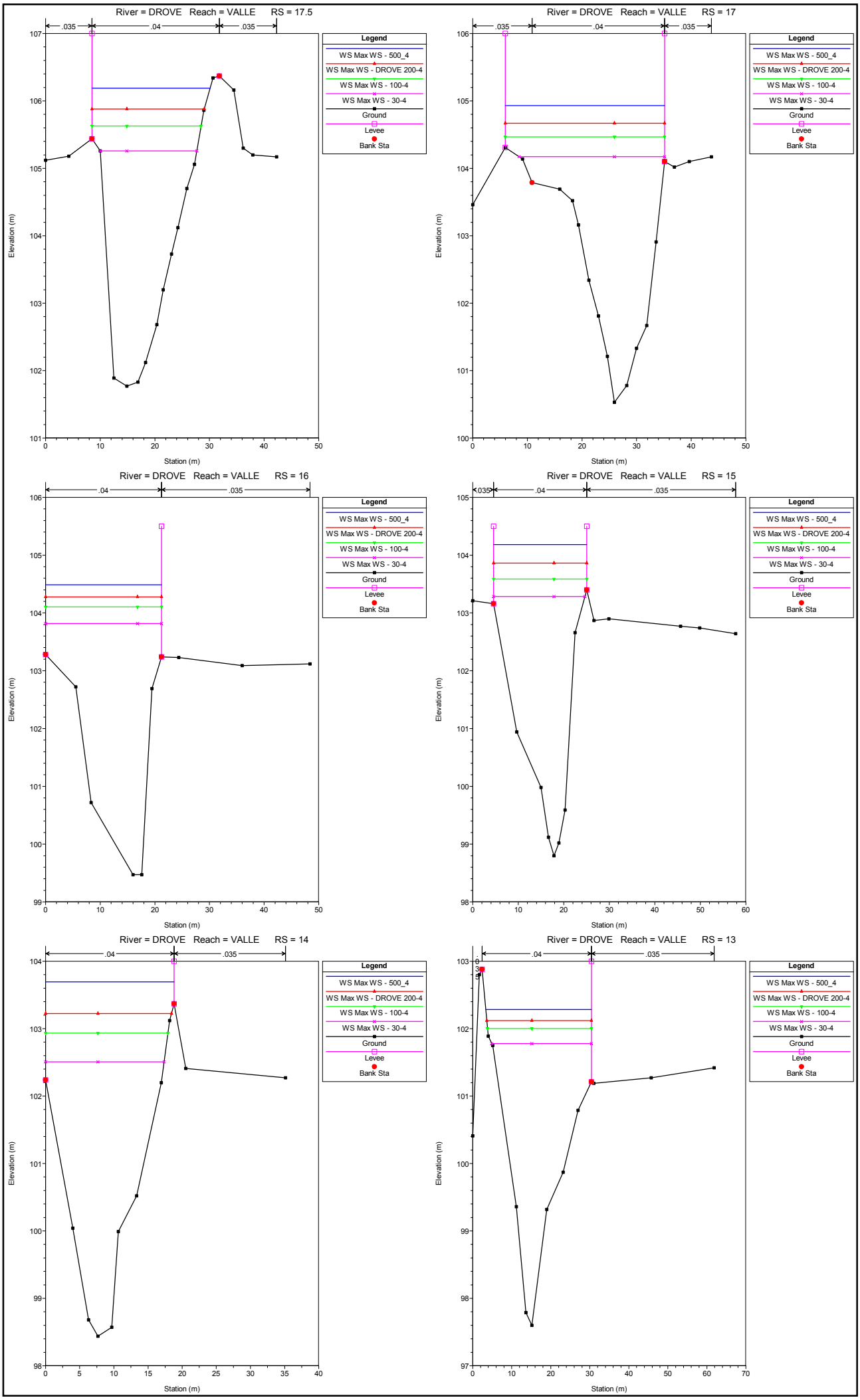

River = DROVE Reach = CINCIANO RS = 10.5 BR
.04
.035
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta
Elevation (m)
Station (m)
River = DROVE Reach = CINCIANO RS = 10.5 BR
.04
.035
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta
Elevation (m)
Station (m)
River = DROVE Reach = CINCIANO RS = 9
.04
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta
Elevation (m)
Station (m)
River = DROVE Reach = CINCIANO RS = 8
.04
.035
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = DROVE Reach = CINCIANO RS = 7.5 BR
.04
.035
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta
Elevation (m)
Station (m)
River = DROVE Reach = CINCIANO RS = 7.5 BR
.04
.035
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta
Elevation (m)
Station (m)

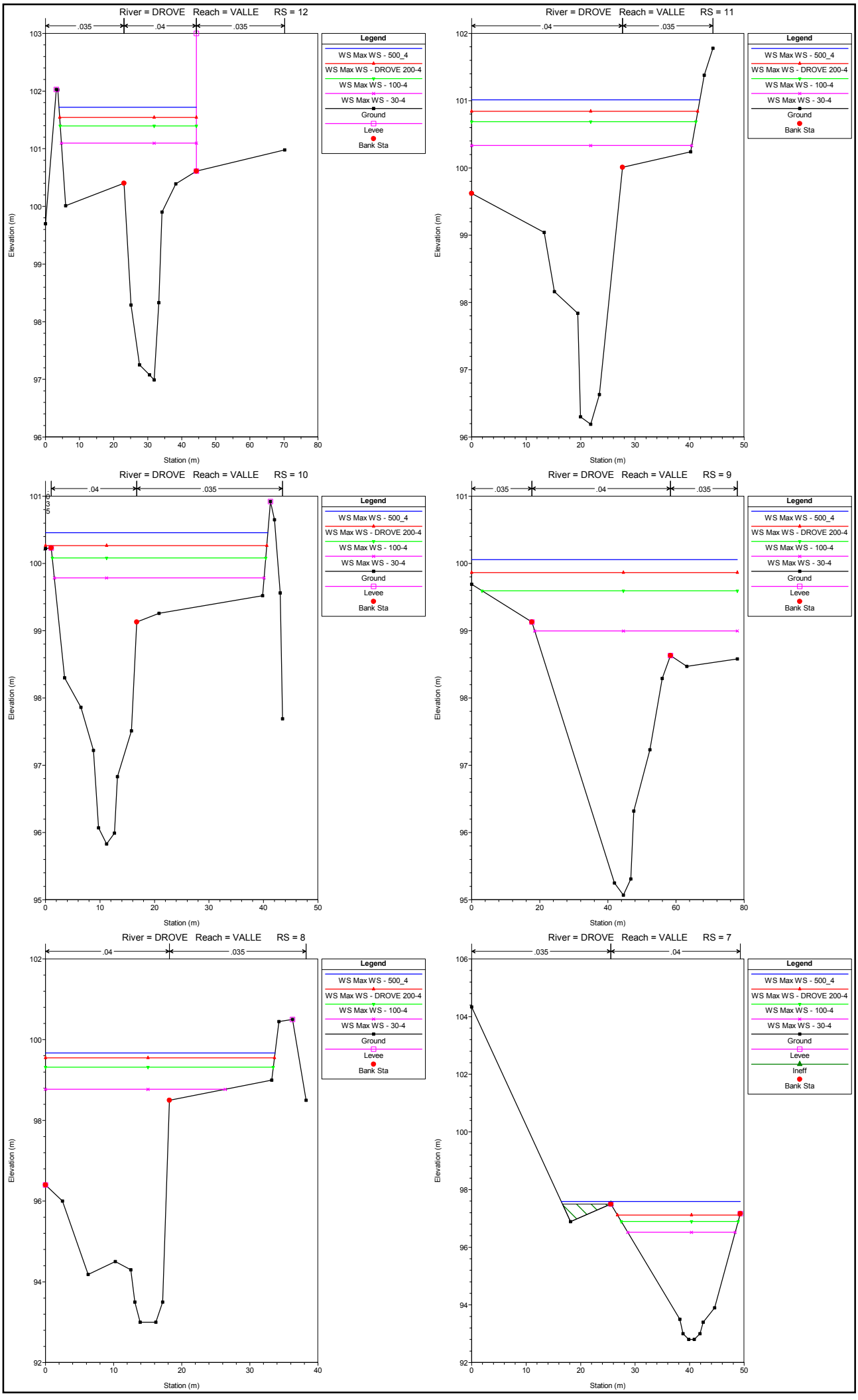

River = DROVE Reach = CINCIANO RS = 6.5 BR
.035
.04
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta
Elevation (m)
Station (m)
River = DROVE Reach = CINCIANO RS = 6.5 BR
.035
.04
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta
Elevation (m)
Station (m)
River = DROVE Reach = CINCIANO RS = 5
.035
.04
.035
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = DROVE Reach = CINCIANO RS = 4
.035
.04
.035
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = DROVE Reach = CINCIANO RS = 3.5 BR
.035
.04
.035
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = DROVE Reach = CINCIANO RS = 3.5 BR
.035
.04
.035
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)

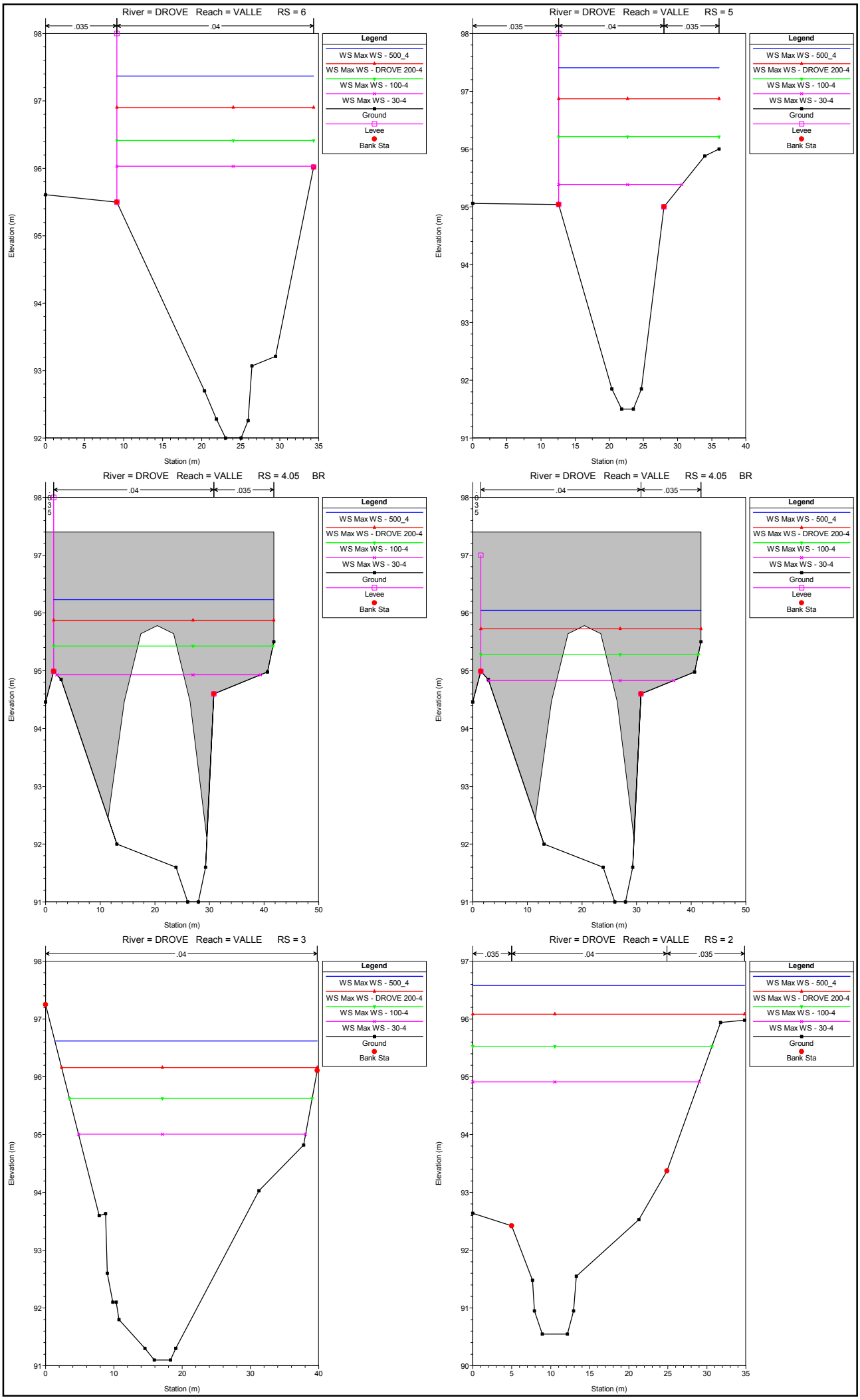

River = DROVE Reach = CINCIANO RS = 2
.035
.04
.035
Elevation (m)
Station (m)
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta

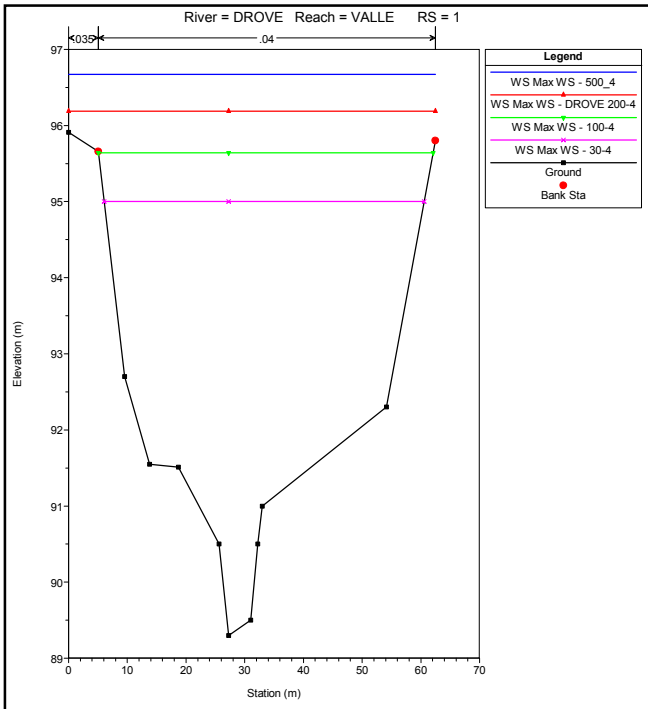

River = DROVE Reach = CINCIANO RS = 1
.035
.04
.035
Elevation (m)
Station (m)
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta


River = DROVE Reach = CINCIANO RS = 0.5
.035
.04
.035
Elevation (m)
Station (m)
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta


River = DROVE Reach = VALLE RS = 17.5
River = DROVE Reach = VALLE RS = 17
River = DROVE Reach = VALLE RS = 16
River = DROVE Reach = VALLE RS = 15
River = DROVE Reach = VALLE RS = 14
River = DROVE Reach = VALLE RS = 13
.035
.04
.035
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)


River = DROVE Reach = VALLE RS = 12
.035
.04
.035
Elevation (m)
Station (m)
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
River = DROVE Reach = VALLE RS = 11
.04
.035
Elevation (m)
Station (m)
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta
River = DROVE Reach = VALLE RS = 10
.04
.035
Elevation (m)
Station (m)
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
River = DROVE Reach = VALLE RS = 9
.035
.04
.035
Elevation (m)
Station (m)
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
River = DROVE Reach = VALLE RS = 8
.04
.035
Elevation (m)
Station (m)
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
River = DROVE Reach = VALLE RS = 7
.035
.04
Elevation (m)
Station (m)
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Ineff
Bank Sta


River = DROVE Reach = VALLE RS = 6
.035
.04
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = DROVE Reach = VALLE RS = 5
.035
.04
.035
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = DROVE Reach = VALLE RS = 4.05 BR
.04
.035
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = DROVE Reach = VALLE RS = 4.05 BR
.04
.035
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = DROVE Reach = VALLE RS = 3
.04
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta
Elevation (m)
Station (m)
River = DROVE Reach = VALLE RS = 2
.035
.04
.035
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta
Elevation (m)
Station (m)


River = DROVE Reach = VALLE RS = 1
.035
.04
Legend
WS Max WS - 500_4
WS Max WS - DROVE 200-4
WS Max WS - 100-4
WS Max WS - 30-4
Ground
Bank Sta
Elevation (m)
Station (m)
97
96
95
94
93
92
91
90
89
0
10
20
30
40
50
60
70

HEC-RAS River: BACCHERETO Reach: VALLE Profile: Max WS

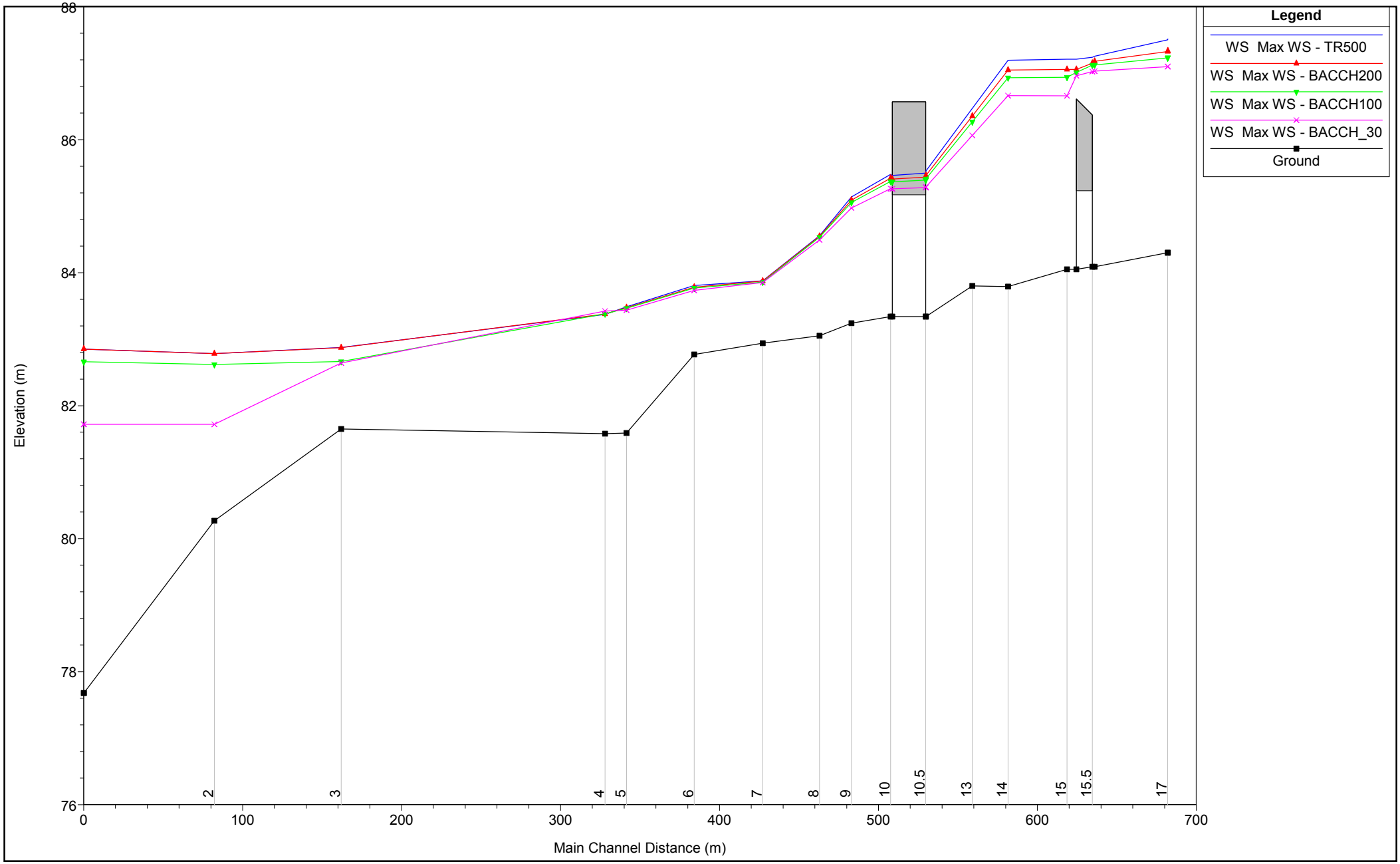
Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
VALLE	17.1	Max WS	TR500	62.01	84.30	87.51		88.05	0.011124	3.25	19.06	9.27	0.72
VALLE	17.1	Max WS	BACCH200	51.58	84.30	87.33		87.78	0.010077	2.96	17.40	9.27	0.69
VALLE	17.1	Max WS	BACCH100	44.97	84.30	87.23		87.61	0.009009	2.73	16.47	9.27	0.65
VALLE	17.1	Max WS	BACCH_30	34.62	84.30	87.10		87.36	0.006743	2.27	15.24	9.27	0.57
VALLE	17	Max WS	TR500	62.01	84.30	87.50		88.05	0.011320	3.27	18.95	9.27	0.73
VALLE	17	Max WS	BACCH200	51.58	84.30	87.32		87.78	0.010238	2.98	17.31	9.27	0.70
VALLE	17	Max WS	BACCH100	44.97	84.30	87.23		87.61	0.009125	2.74	16.40	9.27	0.66
VALLE	17	Max WS	BACCH_30	34.62	84.30	87.10		87.36	0.006796	2.28	15.20	9.27	0.57
VALLE	16.9			Lat Struct									
VALLE	16.8			Lat Struct									
VALLE	16	Max WS	TR500	9.41	84.09	87.25	85.33	87.27	0.000241	0.48	19.45	10.39	0.11
VALLE	16	Max WS	BACCH200	10.88	84.09	87.18	85.42	87.19	0.000366	0.58	18.63	10.39	0.14
VALLE	16	Max WS	BACCH100	11.30	84.09	87.12	85.44	87.14	0.000433	0.62	18.08	10.39	0.15
VALLE	16	Max WS	BACCH_30	10.48	84.09	87.03	85.39	87.05	0.000438	0.61	17.13	10.39	0.15
VALLE	15.5			Bridge									
VALLE	15	Max WS	TR500	9.40	84.05	87.21		87.22	0.000230	0.45	21.03	12.62	0.11
VALLE	15	Max WS	BACCH200	10.87	84.05	87.06		87.07	0.000413	0.57	19.09	12.62	0.15
VALLE	15	Max WS	BACCH100	11.27	84.05	86.94		86.96	0.000572	0.64	17.59	12.62	0.17
VALLE	15	Max WS	BACCH_30	10.34	84.05	86.66		86.69	0.000968	0.74	14.07	12.62	0.22
VALLE	14.9			Lat Struct									
VALLE	14.8			Lat Struct									
VALLE	14	Max WS	TR500	7.28	83.79	87.19		87.20	0.000075	0.30	24.16	9.27	0.06
VALLE	14	Max WS	BACCH200	6.46	83.79	87.05		87.05	0.000070	0.28	22.79	9.27	0.06
VALLE	14	Max WS	BACCH100	5.94	83.79	86.93		86.94	0.000068	0.27	21.72	9.27	0.06
VALLE	14	Max WS	BACCH_30	5.20	83.79	86.66		86.67	0.000074	0.27	19.23	9.27	0.06
VALLE	13	Max WS	TR500	41.99	83.80	86.47	87.00	87.76	0.037807	5.03	8.34	3.54	1.05
VALLE	13	Max WS	BACCH200	38.85	83.80	86.36	87.00	87.57	0.036702	4.89	7.94	3.54	1.04
VALLE	13	Max WS	BACCH100	36.48	83.80	86.27	86.33	87.43	0.035815	4.78	7.63	3.54	1.04
VALLE	13	Max WS	BACCH_30	31.09	83.80	86.06	86.10	87.09	0.033685	4.50	6.91	3.54	1.03
VALLE	11	Max WS	TR500	41.99	83.34	85.53	84.14	85.58	0.000354	0.99	43.88	21.00	0.21
VALLE	11	Max WS	BACCH200	38.85	83.34	85.46	84.10	85.51	0.000337	0.94	42.45	21.00	0.21
VALLE	11	Max WS	BACCH100	36.39	83.34	85.41	84.06	85.45	0.000321	0.91	41.36	21.00	0.20
VALLE	11	Max WS	BACCH_30	30.81	83.34	85.29	83.98	85.32	0.000283	0.82	38.80	21.00	0.19
VALLE	10.5			Bridge									
VALLE	10	Max WS	TR500	41.99	83.34	85.48		85.53	0.000383	1.01	42.80	21.00	0.22
VALLE	10	Max WS	BACCH200	38.85	83.34	85.42		85.47	0.000360	0.96	41.57	21.00	0.21
VALLE	10	Max WS	BACCH100	36.39	83.34	85.37		85.42	0.000341	0.92	40.61	21.00	0.21
VALLE	10	Max WS	BACCH_30	30.81	83.34	85.26		85.30	0.000294	0.83	38.33	21.00	0.19
VALLE	9.9			Lat Struct									
VALLE	9.8			Lat Struct									
VALLE	9	Max WS	TR500	22.03	83.24	85.14		85.40	0.008400	2.26	9.73	7.74	0.64
VALLE	9	Max WS	BACCH200	20.68	83.24	85.09		85.34	0.008346	2.21	9.35	7.74	0.64
VALLE	9	Max WS	BACCH100	19.63	83.24	85.06		85.29	0.008194	2.16	9.09	7.74	0.64
VALLE	9	Max WS	BACCH_30	17.26	83.24	84.97		85.19	0.007951	2.05	8.43	7.74	0.63
VALLE	8	Max WS	TR500	11.32	83.05	84.56	84.57	85.19	0.032292	3.52	3.22	2.59	1.01
VALLE	8	Max WS	BACCH200	10.21	83.05	84.55		85.07	0.026950	3.21	3.19	2.59	0.92
VALLE	8	Max WS	BACCH100	10.01	83.05	84.53		85.05	0.026495	3.17	3.16	2.59	0.92
VALLE	8	Max WS	BACCH_30	9.15	83.05	84.49		84.95	0.024262	3.00	3.05	2.59	0.88
VALLE	7	Max WS	TR500	3.33	82.94	83.88		84.00	0.008408	1.54	2.16	2.73	0.55
VALLE	7	Max WS	BACCH200	3.69	82.94	83.87		84.02	0.010424	1.72	2.15	2.73	0.62
VALLE	7	Max WS	BACCH100	3.98	82.94	83.86		84.04	0.012811	1.89	2.11	2.73	0.69
VALLE	7	Max WS	BACCH_30	4.02	82.94	83.85		84.04	0.013304	1.92	2.09	2.73	0.70
VALLE	6	Max WS	TR500	2.08	82.77	83.81		83.82	0.001021	0.58	3.59	4.66	0.21
VALLE	6	Max WS	BACCH200	2.20	82.77	83.78		83.80	0.001262	0.63	3.48	4.66	0.23
VALLE	6	Max WS	BACCH100	2.25	82.77	83.77		83.79	0.001376	0.66	3.42	4.66	0.24
VALLE	6	Max WS	BACCH_30	2.54	82.77	83.73		83.76	0.002061	0.78	3.25	4.66	0.30
VALLE	5	Max WS	TR500	6.46	81.59	83.49		83.59	0.004299	1.42	4.54	3.15	0.38
VALLE	5	Max WS	BACCH200	6.11	81.59	83.47		83.57	0.003948	1.36	4.49	3.15	0.36
VALLE	5	Max WS	BACCH100	6.00	81.59	83.46		83.56	0.003882	1.35	4.46	3.15	0.36
VALLE	5	Max WS	BACCH_30	5.89	81.59	83.44		83.53	0.003947	1.35	4.37	3.15	0.37
VALLE	4	Max WS	TR500	4.53	81.58	83.37		83.43	0.004160	1.03	4.41	7.17	0.42
VALLE	4	Max WS	BACCH200	4.16	81.58	83.38		83.42	0.003432	0.94	4.44	7.17	0.38
VALLE	4	Max WS	BACCH100	3.30	81.58	83.38		83.41	0.002115	0.74	4.47	7.17	0.30
VALLE	4	Max WS	BACCH_30	0.98	81.58	83.42		83.42	0.000152	0.21	4.77	7.17	0.08
VALLE	3.9			Lat Struct									
VALLE	3.8			Lat Struct									
VALLE	3	Max WS	TR500	-3.60	81.65	82.87		82.91	0.001507	-0.79	4.54	4.53	0.25
VALLE	3	Max WS	BACCH200	-3.57	81.65	82.87		82.91	0.001485	-0.79	4.53	4.53	0.25
VALLE	3	Max WS	BACCH100	-1.39	81.65	82.67		82.67	0.000448	-0.39	3.59	4.53	0.14
VALLE	3	Max WS	BACCH_30	-2.21	81.65	82.64		82.66	0.001233	-0.63	3.48	4.53	0.23
VALLE	2	Max WS	TR500	-11.90	80.27	82.78		82.83	0.001344	-0.97	12.29	9.12	0.27

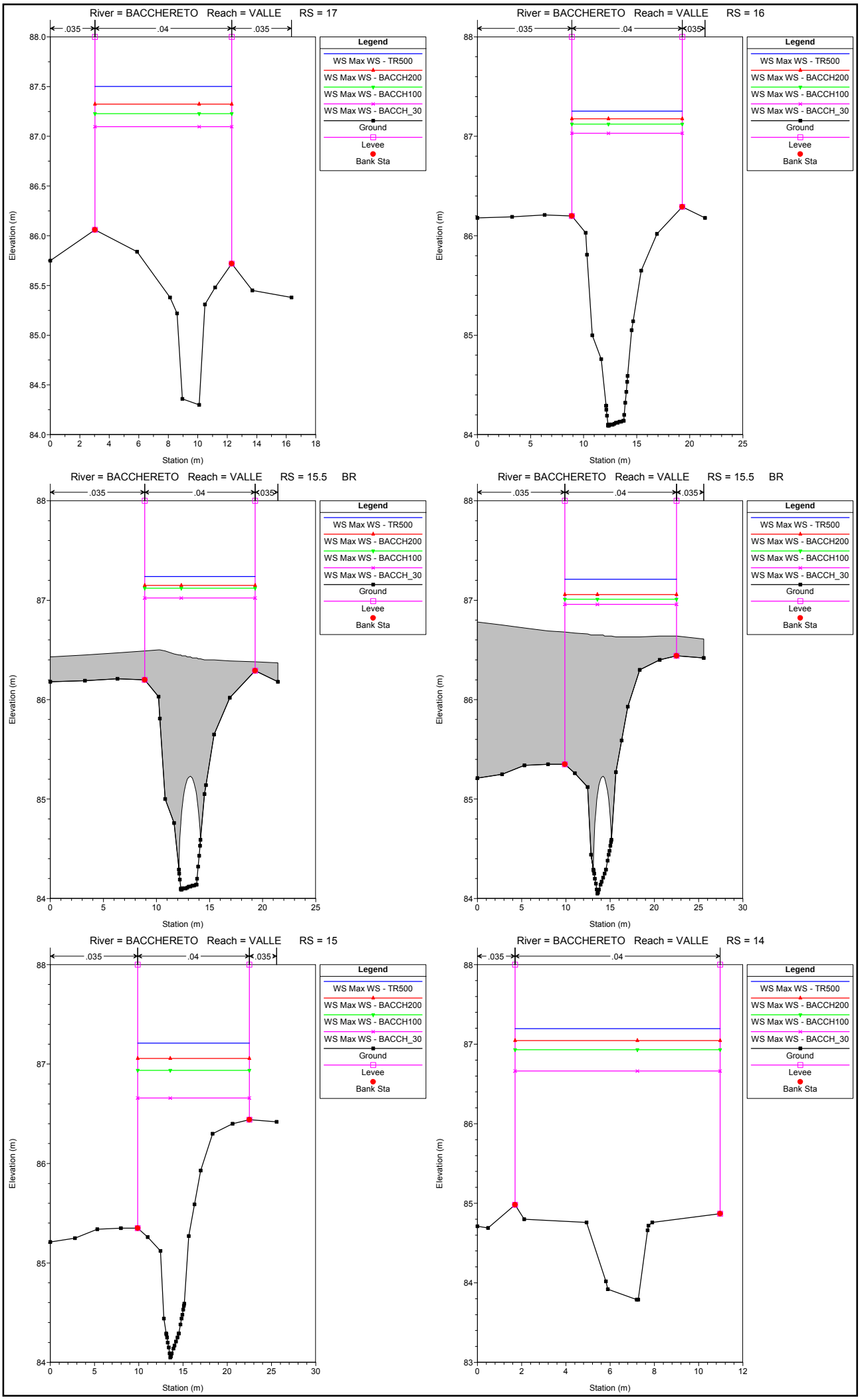
HEC-RAS River: BACCHERETO Reach: VALLE Profile: Max WS (Continued)

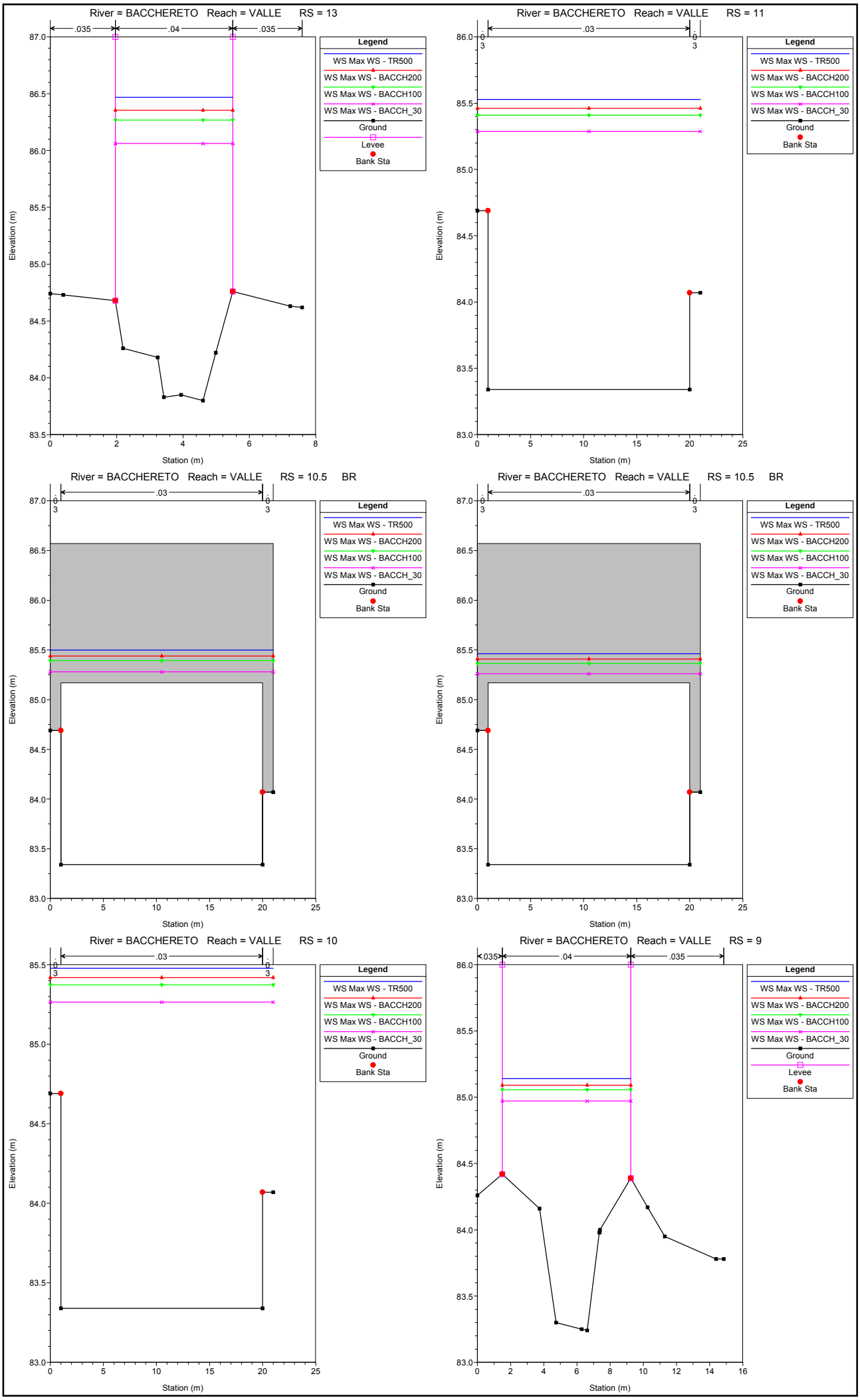
Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
VALLE	2	Max WS	BACCH200	-12.08	80.27	82.78		82.83	0.001384	-0.98	12.29	9.12	0.27
VALLE	2	Max WS	BACCH100	-7.60	80.27	82.62		82.64	0.000796	-0.70	10.82	8.92	0.20
VALLE	2	Max WS	BACCH_30	0.17	80.27	81.72		81.72	0.000006	0.04	3.71	5.20	0.02
VALLE	1.9			Lat Struct									
VALLE	1	Max WS	TR500	-9.63	77.68	82.85		82.85	0.000039	-0.26	37.52	13.44	0.05
VALLE	1	Max WS	BACCH200	-11.03	77.68	82.85		82.85	0.000051	-0.29	37.52	13.44	0.06
VALLE	1	Max WS	BACCH100	-7.96	77.68	82.66		82.66	0.000031	-0.23	35.03	12.74	0.04
VALLE	1	Max WS	BACCH_30	0.26	77.68	81.72		81.72	0.000000	0.01	24.27	10.41	0.00
VALLE	0.9	Max WS	TR500	-11.52	77.68	82.85	79.03	82.85	0.000055	-0.31	37.52	13.44	0.06
VALLE	0.9	Max WS	BACCH200	-25.67	77.68	82.85	79.64	82.87	0.000275	-0.68	37.52	13.44	0.13
VALLE	0.9	Max WS	BACCH100	-8.45	77.68	82.66	78.85	82.66	0.000035	-0.24	35.03	12.74	0.05
VALLE	0.9	Max WS	BACCH_30	0.26	77.68	81.72	77.89	81.72	0.000000	0.01	24.27	10.41	0.00

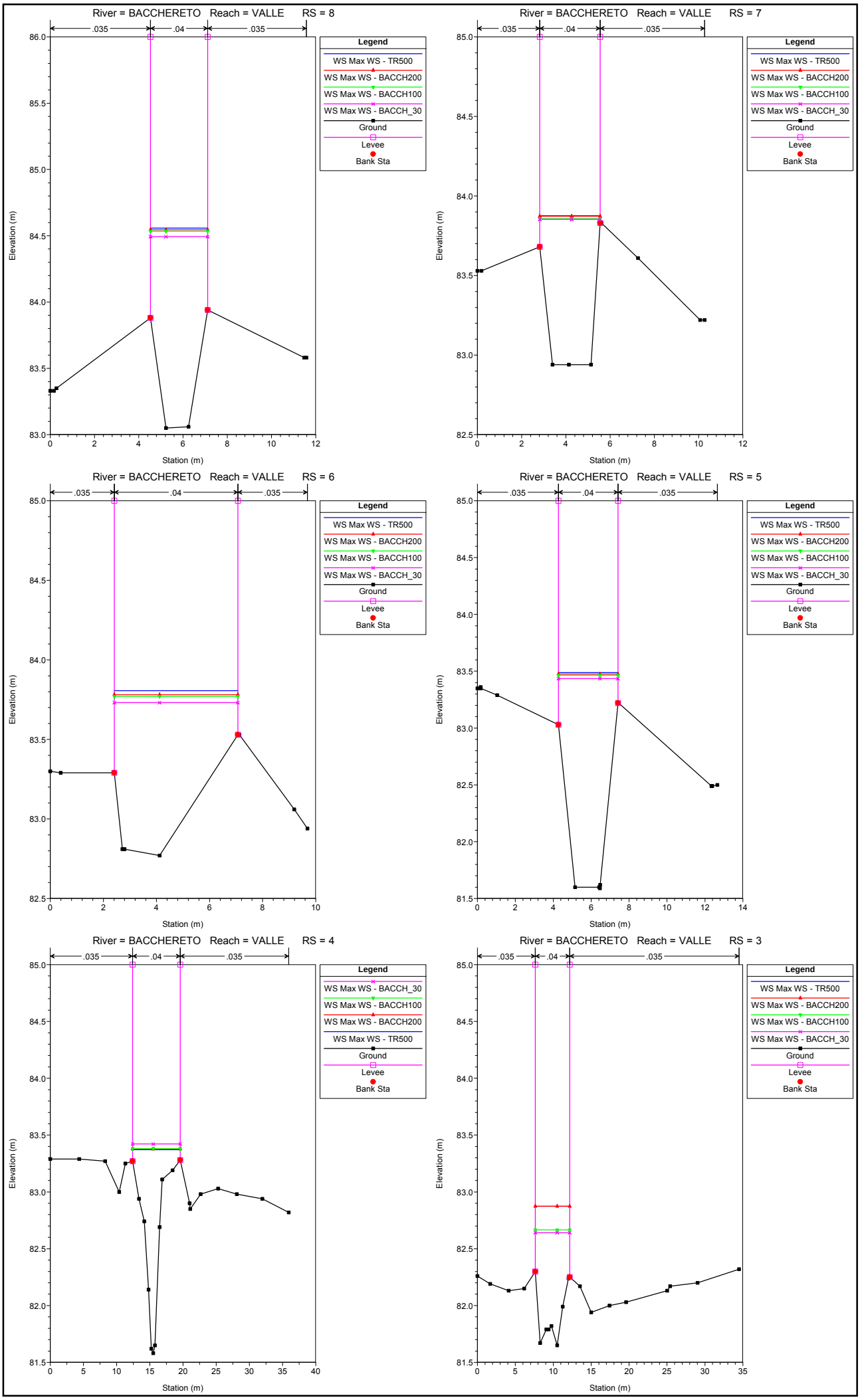
HEC-RAS Profile: Max WS

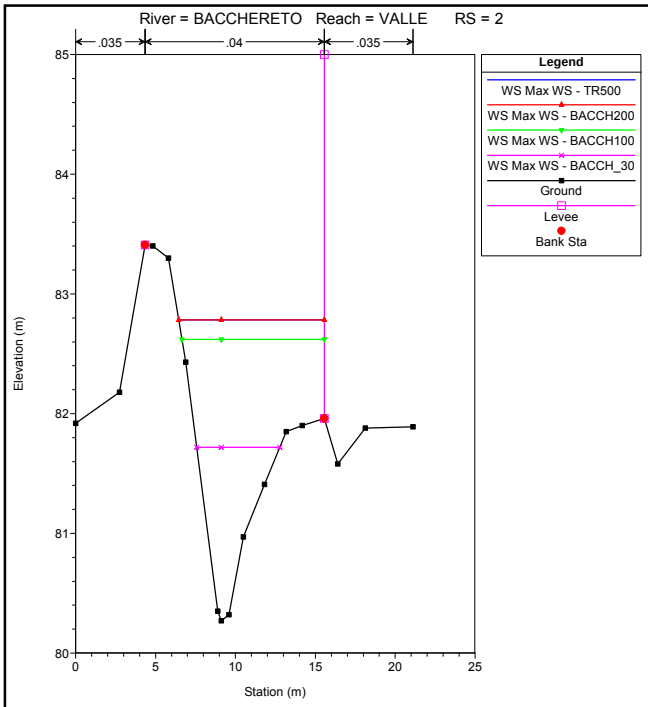
Storage Area	Profile	Plan	W.S. Elev	SA Min El	Net Flux	SA Area	SA Volume
			(m)	(m)	(m3/s)	(1000 m2)	(1000 m3)
CUSONA VALLE	Max WS	TR500	81.17	75.20	28.17	275.19	296.47
CUSONA VALLE	Max WS	BACCH200	81.07	75.20	25.15	275.19	267.37
CUSONA VALLE	Max WS	BACCH100	80.79	75.20	23.52	215.42	198.71
CUSONA VALLE	Max WS	BACCH_30	80.43	75.20	18.62	187.76	124.50
D1	Max WS	TR500	87.32	84.20	5.07	18.85	20.61
D1	Max WS	BACCH200	87.21	84.20	4.36	18.35	18.59
D1	Max WS	BACCH100	87.15	84.20	2.10	18.35	17.45
D1	Max WS	BACCH_30	87.05	84.20	0.32	18.35	15.62
D2	Max WS	TR500	87.20	84.00	5.88	7.22	11.68
D2	Max WS	BACCH200	87.05	84.00	3.05	7.22	10.58
D2	Max WS	BACCH100	86.93	84.00	0.20	6.76	9.77
D2	Max WS	BACCH_30	86.65	84.00	3.89	6.28	7.88
D3	Max WS	TR500	83.97	82.60	0.03	7.51	3.26
D3	Max WS	BACCH200	83.94	82.60	0.34	7.51	3.04
D3	Max WS	BACCH100	83.92	82.60	0.30	7.51	2.91
D3	Max WS	BACCH_30	83.87	82.60	0.62	7.51	2.51
D4	Max WS	TR500	82.76	81.60	31.20	7.40	2.73
D4	Max WS	BACCH200	82.76	81.60	30.63	7.40	2.75
D4	Max WS	BACCH100	82.72	81.60	3.22	7.40	2.43
D4	Max WS	BACCH_30	82.71	81.60	3.23	7.40	2.32
D5	Max WS	TR500	82.79	79.50	11.34	21.30	12.41
D5	Max WS	BACCH200	82.79	79.50	10.96	21.30	12.46
D5	Max WS	BACCH100	82.63	79.50	9.00	21.30	9.07
D5	Max WS	BACCH_30	82.33	79.50	0.29	13.03	4.06
S2	Max WS	TR500	85.96	82.60	19.34	18.40	26.69
S2	Max WS	BACCH200	85.27	82.60	12.06	15.34	15.11
S2	Max WS	BACCH100	84.89	82.60	7.74	11.13	10.10
S2	Max WS	BACCH_30	84.23	82.60	2.95	6.74	3.60
S2_b	Max WS	TR500	85.96	81.90	0.00	22.04	32.51
S2_b	Max WS	BACCH200	85.27	81.90	0.00	18.35	18.64
S2_b	Max WS	BACCH100	84.89	81.90	0.25	12.61	12.59
S2_b	Max WS	BACCH_30	84.23	81.90	0.00	9.45	5.27
S3	Max WS	TR500	82.98	81.00	1.41	37.80	26.85
S3	Max WS	BACCH200	82.93	81.00	2.02	37.80	24.91
S3	Max WS	BACCH100	82.89	81.00	2.13	37.80	23.62
S3	Max WS	BACCH_30	82.80	81.00	2.75	31.01	20.13
S3_b	Max WS	TR500	82.46	80.30	0.40	22.17	14.85
S3_b	Max WS	BACCH200	82.43	80.30	0.40	22.17	14.12
S3_b	Max WS	BACCH100	82.40	80.30	0.40	22.17	13.64
S3_b	Max WS	BACCH_30	82.34	80.30	0.62	22.17	12.14
S4	Max WS	TR500	82.23	80.80	29.92	80.94	41.59
S4	Max WS	BACCH200	82.20	80.80	30.58	67.79	38.77
S4	Max WS	BACCH100	82.18	80.80	15.98	67.79	37.47
S4	Max WS	BACCH_30	82.12	80.80	9.00	67.79	33.29
S5	Max WS	TR500	81.07	80.00	0.18	2.56	0.26
S5	Max WS	BACCH200	80.00	80.00	0.00	0.01	0.00
S5	Max WS	BACCH100	80.00	80.00	0.00	0.01	0.00
S5	Max WS	BACCH_30	80.00	80.00	0.00	0.01	0.00

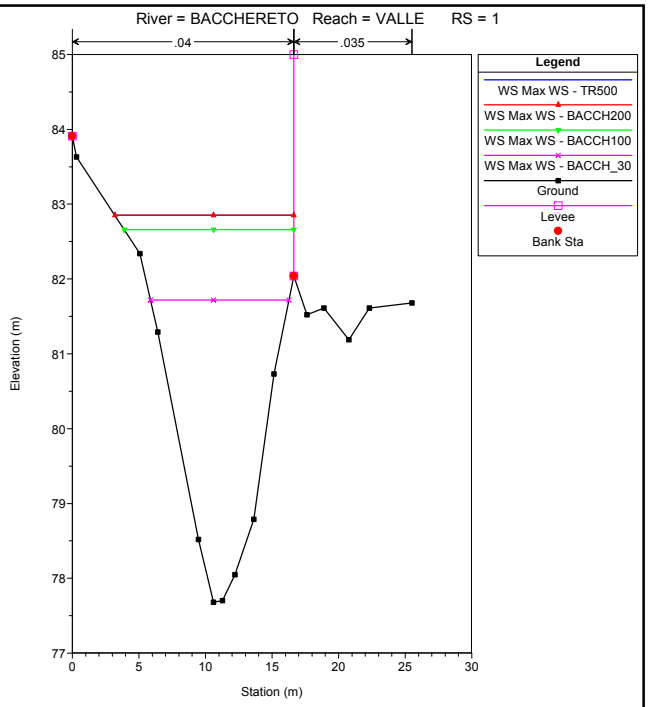

Legend
WS Max WS - TR500
WS Max WS - BACCH200
WS Max WS - BACCH100
WS Max WS - BACCH_30
Ground
Elevation (m)
Main Channel Distance (m)
88
86
84
82
80
78
76
0
100
200
300
400
500
600
700
2
3
4
5
6
7
8
9
10
10.5
13
14
15
15.5
17


River = BACCHERETO Reach = VALLE RS = 17
.035
.04
.035
Elevation (m)
Station (m)
Legend
WS Max WS - TR500
WS Max WS - BACCH200
WS Max WS - BACCH100
WS Max WS - BACCH_30
Ground
Levee
Bank Sta
River = BACCHERETO Reach = VALLE RS = 16
.035
.04
.035
Elevation (m)
Station (m)
Legend
WS Max WS - TR500
WS Max WS - BACCH200
WS Max WS - BACCH100
WS Max WS - BACCH_30
Ground
Levee
Bank Sta
River = BACCHERETO Reach = VALLE RS = 15.5 BR
.035
.04
.035
Elevation (m)
Station (m)
Legend
WS Max WS - TR500
WS Max WS - BACCH200
WS Max WS - BACCH100
WS Max WS - BACCH_30
Ground
Levee
Bank Sta
River = BACCHERETO Reach = VALLE RS = 15.5 BR
.035
.04
.035
Elevation (m)
Station (m)
Legend
WS Max WS - TR500
WS Max WS - BACCH200
WS Max WS - BACCH100
WS Max WS - BACCH_30
Ground
Levee
Bank Sta
River = BACCHERETO Reach = VALLE RS = 15
.035
.04
.035
Elevation (m)
Station (m)
Legend
WS Max WS - TR500
WS Max WS - BACCH200
WS Max WS - BACCH100
WS Max WS - BACCH_30
Ground
Levee
Bank Sta
River = BACCHERETO Reach = VALLE RS = 14
.035
.04
Elevation (m)
Station (m)
Legend
WS Max WS - TR500
WS Max WS - BACCH200
WS Max WS - BACCH100
WS Max WS - BACCH_30
Ground
Levee
Bank Sta


River = BACCHERETO Reach = VALLE RS = 13
.035
.04
.035
Legend
WS Max WS - TR500
WS Max WS - BACCH200
WS Max WS - BACCH100
WS Max WS - BACCH_30
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = BACCHERETO Reach = VALLE RS = 11
.03
Legend
WS Max WS - TR500
WS Max WS - BACCH200
WS Max WS - BACCH100
WS Max WS - BACCH_30
Ground
Bank Sta
Elevation (m)
Station (m)
River = BACCHERETO Reach = VALLE RS = 10.5 BR
.03
Legend
WS Max WS - TR500
WS Max WS - BACCH200
WS Max WS - BACCH100
WS Max WS - BACCH_30
Ground
Bank Sta
Elevation (m)
Station (m)
River = BACCHERETO Reach = VALLE RS = 10.5 BR
.03
Legend
WS Max WS - TR500
WS Max WS - BACCH200
WS Max WS - BACCH100
WS Max WS - BACCH_30
Ground
Bank Sta
Elevation (m)
Station (m)
River = BACCHERETO Reach = VALLE RS = 10
.03
Legend
WS Max WS - TR500
WS Max WS - BACCH200
WS Max WS - BACCH100
WS Max WS - BACCH_30
Ground
Bank Sta
Elevation (m)
Station (m)
River = BACCHERETO Reach = VALLE RS = 9
.035
.04
.035
Legend
WS Max WS - TR500
WS Max WS - BACCH200
WS Max WS - BACCH100
WS Max WS - BACCH_30
Ground
Levee
Bank Sta
Elevation (m)
Station (m)


River = BACCHERETO Reach = VALLE RS = 8
.035
.04
.035
Legend
WS Max WS - TR500
WS Max WS - BACCH200
WS Max WS - BACCH100
WS Max WS - BACCH_30
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = BACCHERETO Reach = VALLE RS = 7
River = BACCHERETO Reach = VALLE RS = 6
River = BACCHERETO Reach = VALLE RS = 5
River = BACCHERETO Reach = VALLE RS = 4
River = BACCHERETO Reach = VALLE RS = 3


River = BACCHERETO Reach = VALLE RS = 2
.035
.04
.035
Legend
WS Max WS - TR500
WS Max WS - BACCH200
WS Max WS - BACCH100
WS Max WS - BACCH_30
Ground
Levee
Bank Sta
Elevation (m)
Station (m)

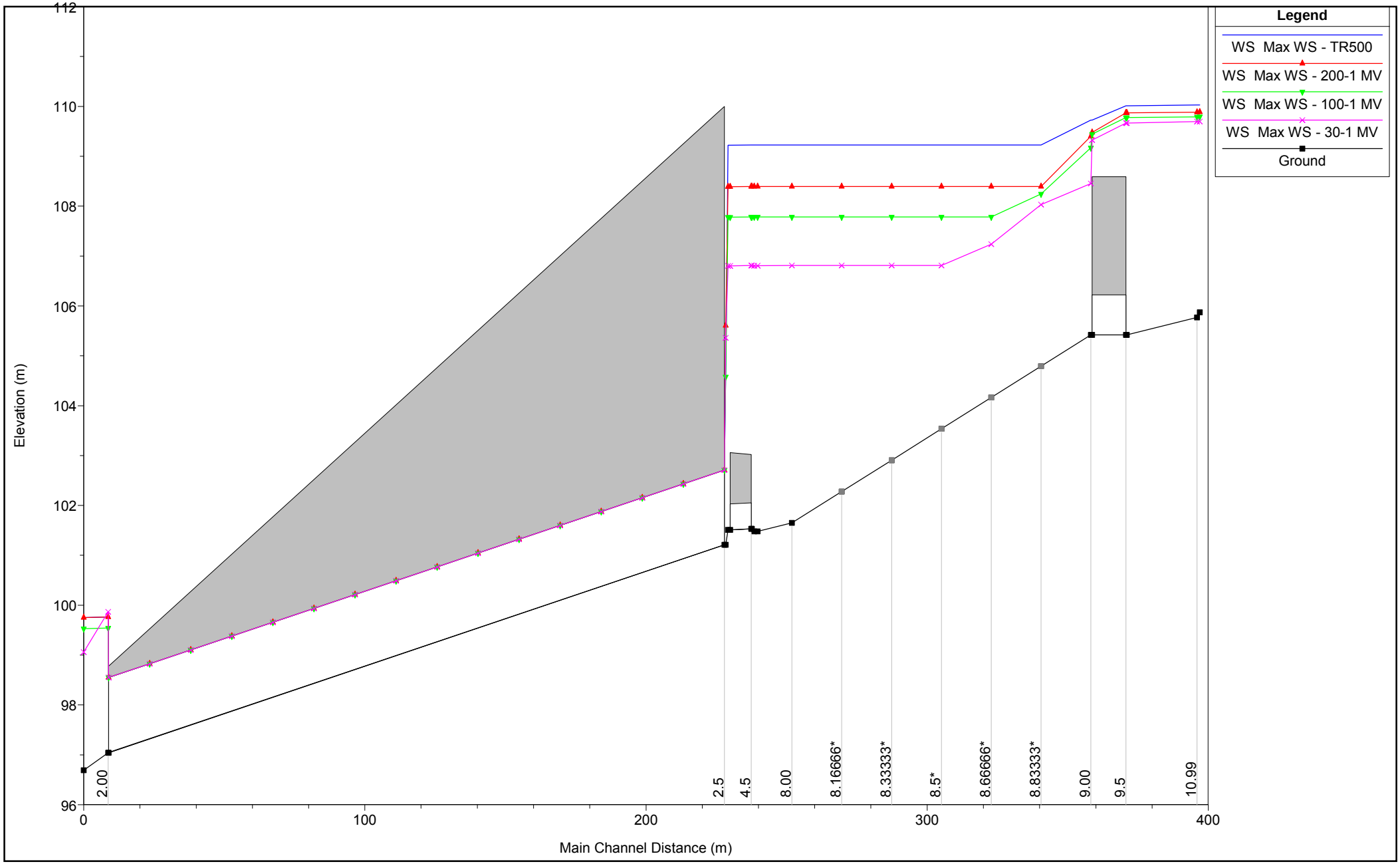

River = BACCHERETO Reach = VALLE RS = 1
.04
.035
Legend
WS Max WS - TR500
WS Max WS - BACCH200
WS Max WS - BACCH100
WS Max WS - BACCH_30
Ground
Levee
Bank Sta
Elevation (m)
Station (m)

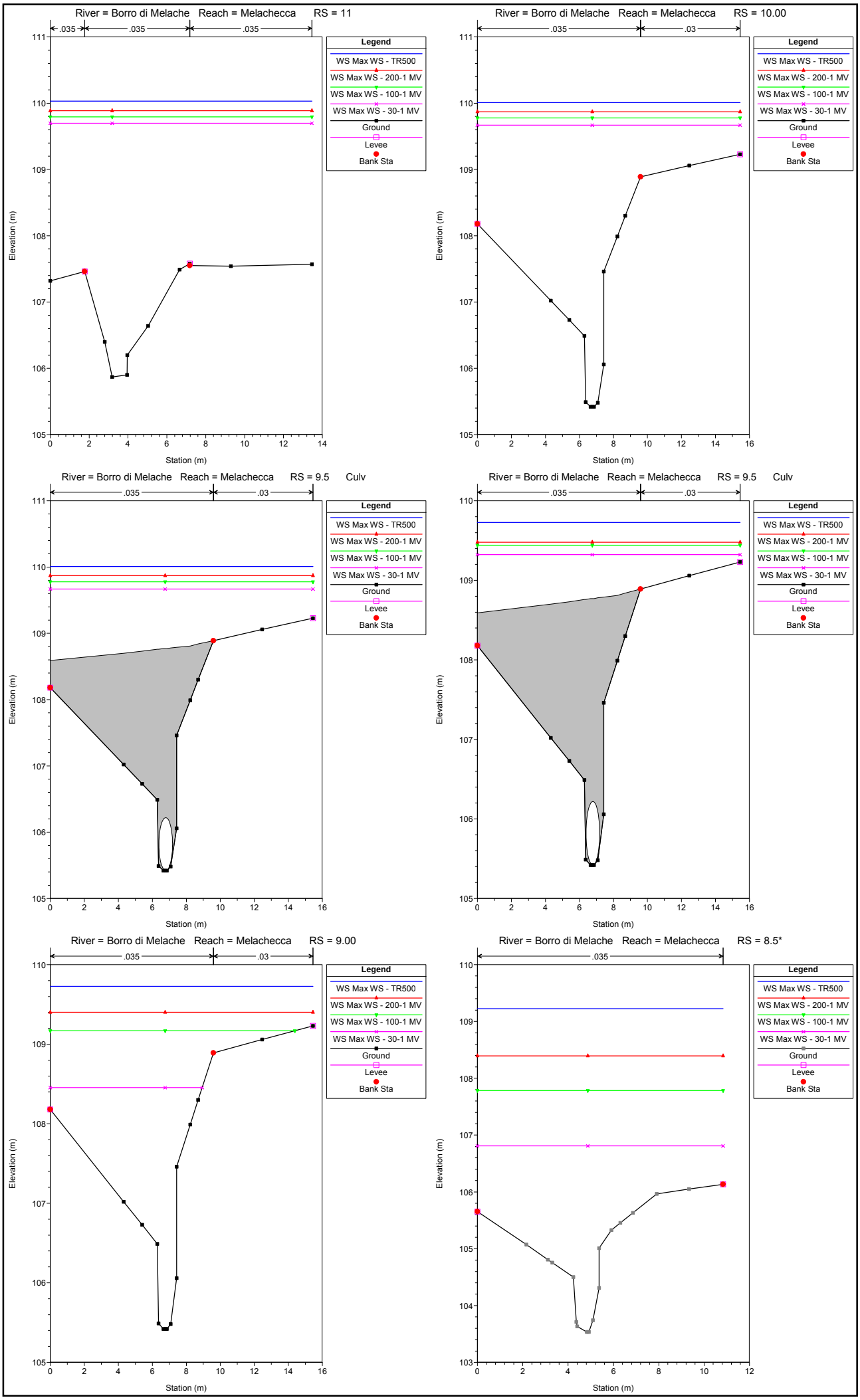
HEC-RAS River: Borro di Melache Reach: Melachecca Profile: Max WS

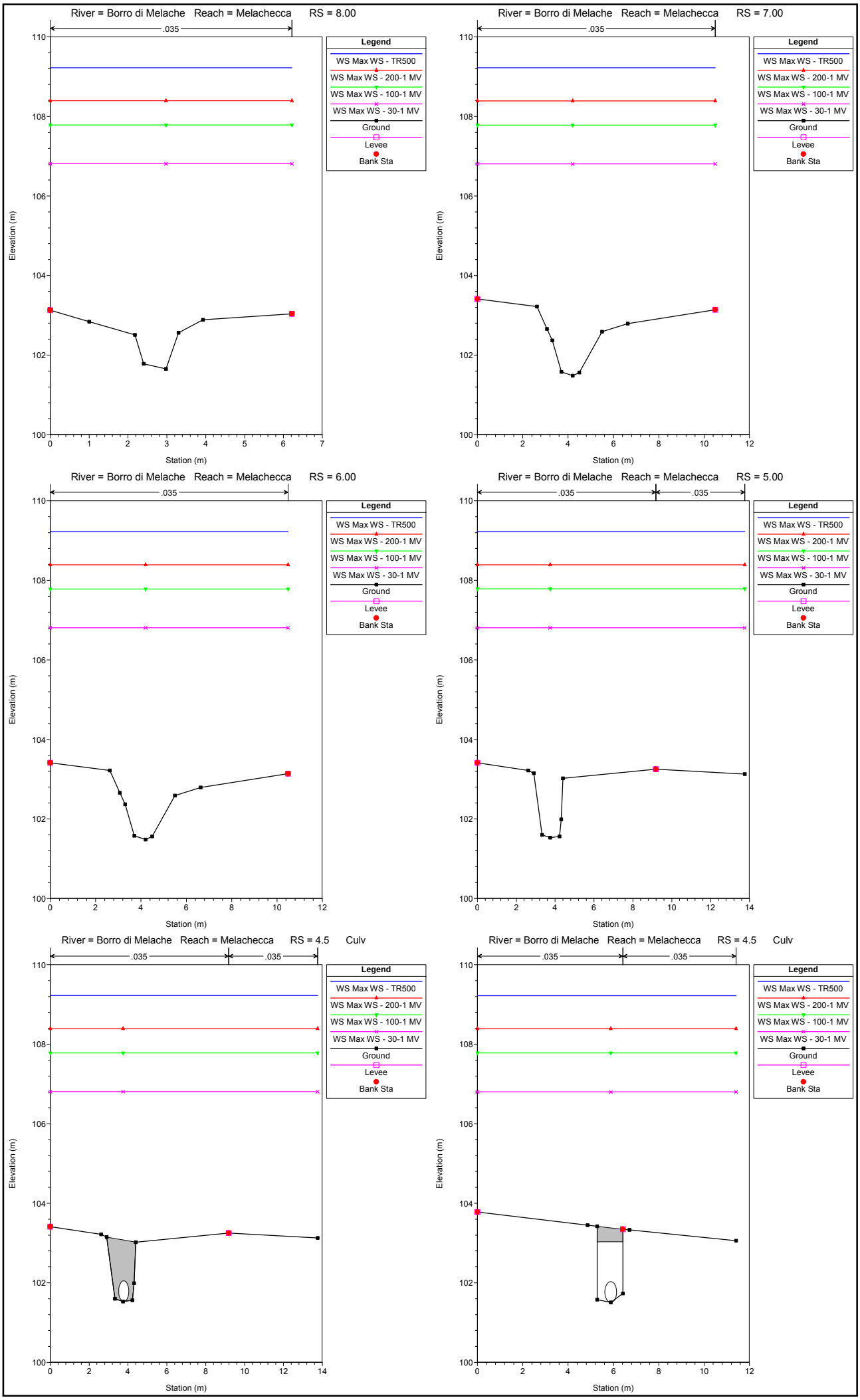
Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Melachecca	11	Max WS	TR500	31.33	105.87	110.03		110.07	0.000313	0.97	38.14	13.46	0.17
Melachecca	11	Max WS	200-1 MV	25.72	105.87	109.89		109.91	0.000247	0.84	36.19	13.46	0.15
Melachecca	11	Max WS	100-1 MV	20.79	105.87	109.79		109.81	0.000180	0.70	34.93	13.46	0.13
Melachecca	11	Max WS	30-1 MV	18.15	105.87	109.70		109.71	0.000154	0.63	33.65	13.46	0.12
Melachecca	10.99	Max WS	TR500	31.27	105.77	110.03		110.06	0.000316	0.96	38.14	13.46	0.17
Melachecca	10.99	Max WS	200-1 MV	25.69	105.77	109.88		109.91	0.000250	0.83	36.21	13.46	0.15
Melachecca	10.99	Max WS	100-1 MV	20.74	105.77	109.79		109.81	0.000181	0.69	34.97	13.46	0.13
Melachecca	10.99	Max WS	30-1 MV	18.06	105.77	109.70		109.71	0.000154	0.63	33.69	13.46	0.12
Melachecca	10.9			Lat Struct									
Melachecca	10.8			Lat Struct									
Melachecca	10.00	Max WS	TR500	29.26	105.42	110.01		110.06	0.000559	0.98	31.39	15.45	0.19
Melachecca	10.00	Max WS	200-1 MV	24.59	105.42	109.87		109.91	0.000485	0.89	29.23	15.45	0.18
Melachecca	10.00	Max WS	100-1 MV	22.56	105.42	109.78		109.81	0.000471	0.86	27.82	15.45	0.17
Melachecca	10.00	Max WS	30-1 MV	16.58	105.42	109.67		109.69	0.000305	0.67	26.11	15.45	0.14
Melachecca	9.5			Culvert									
Melachecca	9.00	Max WS	TR500	28.76	105.42	109.73		109.79	0.000831	1.13	27.03	15.45	0.23
Melachecca	9.00	Max WS	200-1 MV	24.09	105.42	109.40		109.47	0.001027	1.15	21.99	15.45	0.26
Melachecca	9.00	Max WS	100-1 MV	21.83	105.42	109.17		109.24	0.001303	1.22	18.45	14.39	0.28
Melachecca	9.00	Max WS	30-1 MV	16.39	105.42	108.45		108.57	0.003130	1.48	11.06	8.93	0.42
Melachecca	8.98			Lat Struct									
Melachecca	8.9			Lat Struct									
Melachecca	8.83333*	Max WS	TR500	7.54	104.79	109.23		109.23	0.000043	0.27	29.74	13.91	0.05
Melachecca	8.83333*	Max WS	200-1 MV	7.70	104.79	108.39		108.40	0.000178	0.45	18.17	13.91	0.11
Melachecca	8.83333*	Max WS	100-1 MV	20.02	104.79	108.24		108.33	0.001654	1.30	16.07	13.91	0.32
Melachecca	8.83333*	Max WS	30-1 MV	16.83	104.79	108.03		108.11	0.001848	1.27	13.37	10.97	0.33
Melachecca	8.79			Lat Struct									
Melachecca	8.66666*	Max WS	TR500	7.73	104.16	109.23		109.23	0.000022	0.22	37.45	12.37	0.04
Melachecca	8.66666*	Max WS	200-1 MV	8.31	104.16	108.39		108.40	0.000064	0.32	27.15	12.37	0.06
Melachecca	8.66666*	Max WS	100-1 MV	8.12	104.16	107.78		107.79	0.000157	0.44	19.61	12.37	0.10
Melachecca	8.66666*	Max WS	30-1 MV	15.67	104.16	107.24		107.32	0.001903	1.27	12.82	12.37	0.34
Melachecca	8.5*	Max WS	TR500	7.73	103.54	109.23		109.23	0.000015	0.18	42.39	10.84	0.03
Melachecca	8.5*	Max WS	200-1 MV	8.28	103.54	108.39		108.40	0.000033	0.25	33.38	10.84	0.05
Melachecca	8.5*	Max WS	100-1 MV	8.24	103.54	107.79		107.79	0.000062	0.31	26.78	10.84	0.06
Melachecca	8.5*	Max WS	30-1 MV	7.96	103.54	106.81		106.82	0.000264	0.49	16.22	10.84	0.13
Melachecca	8.33333*	Max WS	TR500	6.75	102.91	109.23		109.23	0.000010	0.15	44.56	9.30	0.02
Melachecca	8.33333*	Max WS	200-1 MV	7.32	102.91	108.39		108.40	0.000019	0.20	36.83	9.30	0.03
Melachecca	8.33333*	Max WS	100-1 MV	7.32	102.91	107.78		107.79	0.000030	0.23	31.16	9.30	0.04
Melachecca	8.33333*	Max WS	30-1 MV	7.54	102.91	106.81		106.82	0.000084	0.34	22.11	9.30	0.07
Melachecca	8.16666*	Max WS	TR500	5.20	102.28	109.23		109.23	0.000006	0.12	43.96	7.76	0.02
Melachecca	8.16666*	Max WS	200-1 MV	5.45	102.28	108.39		108.40	0.000010	0.15	37.51	7.76	0.02
Melachecca	8.16666*	Max WS	100-1 MV	5.73	102.28	107.79		107.79	0.000015	0.17	32.79	7.76	0.03
Melachecca	8.16666*	Max WS	30-1 MV	6.22	102.28	106.81		106.81	0.000037	0.25	25.23	7.76	0.04
Melachecca	8.00	Max WS	TR500	5.23	101.65	109.22		109.23	0.000008	0.13	40.59	6.22	0.02
Melachecca	8.00	Max WS	200-1 MV	5.29	101.65	108.39		108.39	0.000011	0.15	35.42	6.22	0.02
Melachecca	8.00	Max WS	100-1 MV	5.37	101.65	107.78		107.79	0.000015	0.17	31.63	6.22	0.02
Melachecca	8.00	Max WS	30-1 MV	5.08	101.65	106.81		106.81	0.000024	0.20	25.57	6.22	0.03
Melachecca	7.00	Max WS	TR500	7.05	101.48	109.22		109.22	0.000003	0.10	67.59	10.49	0.01
Melachecca	7.00	Max WS	200-1 MV	7.05	101.48	108.39		108.39	0.000005	0.12	58.86	10.49	0.02
Melachecca	7.00	Max WS	100-1 MV	7.05	101.48	107.78		107.78	0.000006	0.13	52.47	10.49	0.02
Melachecca	7.00	Max WS	30-1 MV	7.04	101.48	106.81		106.81	0.000012	0.17	42.24	10.49	0.03
Melachecca	6.00	Max WS	TR500	7.05	101.48	109.22		109.22	0.000003	0.10	67.59	10.49	0.01
Melachecca	6.00	Max WS	200-1 MV	7.05	101.48	108.39		108.39	0.000005	0.12	58.86	10.49	0.02
Melachecca	6.00	Max WS	100-1 MV	7.05	101.48	107.78		107.78	0.000006	0.13	52.47	10.49	0.02
Melachecca	6.00	Max WS	30-1 MV	7.04	101.48	106.81		106.81	0.000012	0.17	42.24	10.49	0.03
Melachecca	5.00	Max WS	TR500	7.05	101.53	109.22		109.22	0.000002	0.09	84.96	13.76	0.01
Melachecca	5.00	Max WS	200-1 MV	7.05	101.53	108.39		108.39	0.000003	0.10	73.52	13.76	0.01
Melachecca	5.00	Max WS	100-1 MV	7.05	101.53	107.78		107.78	0.000004	0.11	65.14	13.76	0.02
Melachecca	5.00	Max WS	30-1 MV	7.04	101.53	106.81		106.81	0.000008	0.14	51.72	13.76	0.02
Melachecca	4.5			Culvert									
Melachecca	4.00	Max WS	TR500	7.05	101.51	109.22		109.22	0.000004	0.10	68.41	11.41	0.01
Melachecca	4.00	Max WS	200-1 MV	7.05	101.51	108.39		108.39	0.000007	0.12	58.93	11.41	0.02
Melachecca	4.00	Max WS	100-1 MV	7.05	101.51	107.78		107.78	0.000009	0.13	51.96	11.41	0.02
Melachecca	4.00	Max WS	30-1 MV	7.04	101.51	106.80		106.80	0.000019	0.17	40.82	11.41	0.03
Melachecca	3.00	Max WS	TR500	7.05	101.21	104.58		104.61	0.000741	0.66	10.81	11.43	0.19
Melachecca	3.00	Max WS	200-1 MV	7.55	101.21	105.61		105.61	0.000082	0.31	22.52	11.43	0.07
Melachecca	3.00	Max WS	100-1 MV	7.05	101.21	104.58		104.60	0.000752	0.67	10.76	11.43	0.19
Melachecca	3.00	Max WS	30-1 MV	7.43	101.21	105.36		105.37	0.000121	0.36	19.66	11.43	0.08
Melachecca	2.5			Culvert									
Melachecca	2.00	Max WS	TR500	7.05	97.04	99.76		99.78	0.000165	0.51	14.20	11.97	0.14
Melachecca	2.00	Max WS	200-1 MV	7.04	97.04	99.76		99.78	0.000165	0.51	14.20	11.97	0.14
Melachecca	2.00	Max WS	100-1 MV	7.03	97.04	99.54		99.56	0.000310	0.62	11.57	11.97	0.19
Melachecca	2.00	Max WS	30-1 MV	7.43	97.04	99.87		99.88	0.000142	0.50	15.44	11.97	0.13
Melachecca	1.00	Max WS	TR500	7.04	96.69	99.75	97.85	99.76	0.000207	0.46	15.94	10.33	0.12
Melachecca	1.00	Max WS	200-1 MV	7.04	96.69	99.75	97.85	99.76	0.000207	0.46	15.94	10.33	0.12
Melachecca	1.00	Max WS	100-1 MV	7.03	96.69	99.53	97.85	99.54	0.000330	0.54	13.67	10.33	0.15
Melachecca	1.00	Max WS	30-1 MV	0.03	96.69	99.06	96.74	99.06	0.000000	0.00	8.81	10.33	0.00

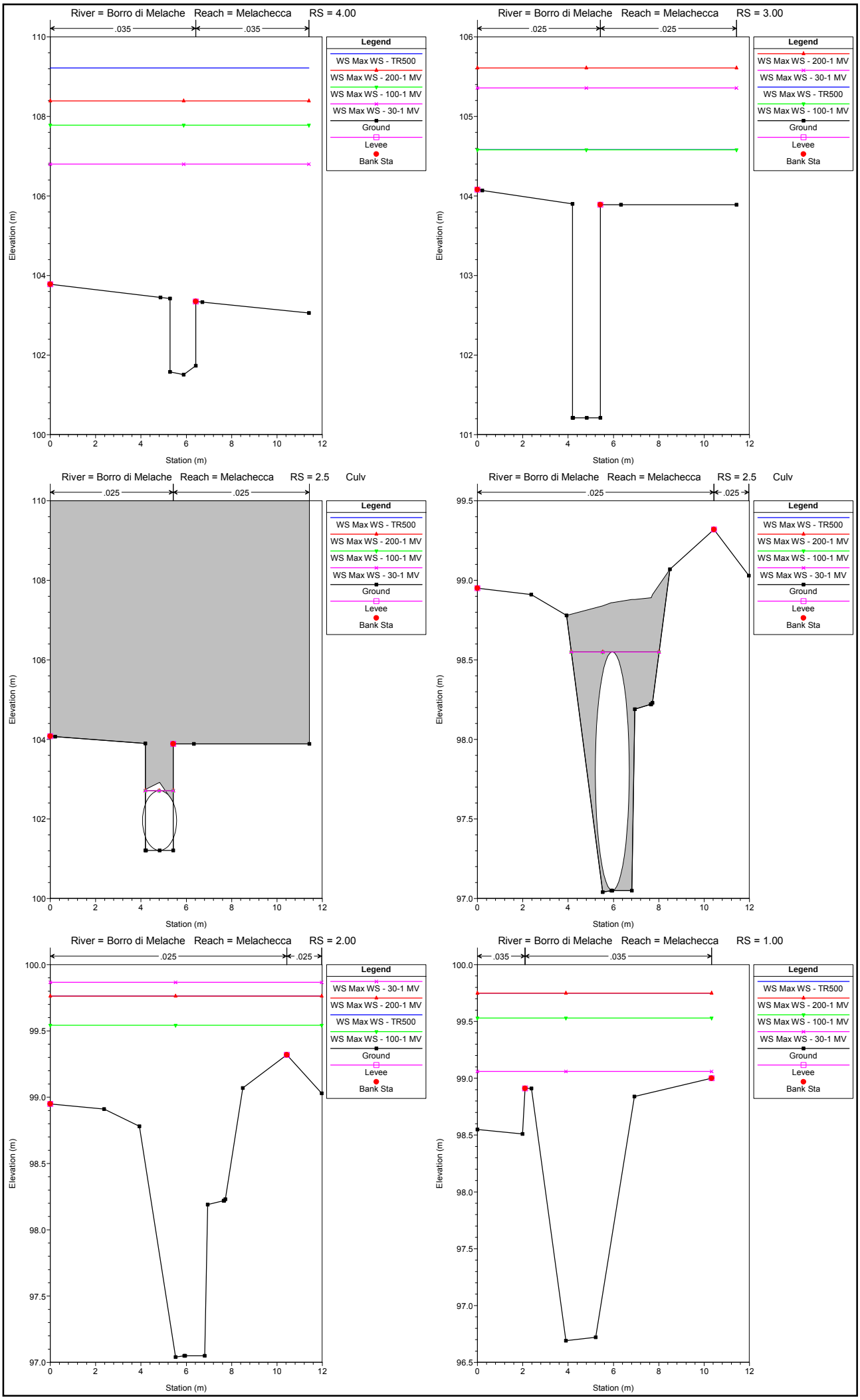
HEC-RAS Profile: Max WS

Storage Area	Profile	Plan	W.S. Elev	SA Min El	Net Flux	SA Area	SA Volume
			(m)	(m)	(m3/s)	(1000 m2)	(1000 m3)
D1	Max WS	TR500	109.97	107.60	15.37	2.50	2.80
D1	Max WS	200-1 MV	109.85	107.60	11.08	2.50	2.51
D1	Max WS	100-1 MV	109.77	107.60	7.73	2.03	2.32
D1	Max WS	30-1 MV	109.62	107.60	13.98	2.03	2.01
D2	Max WS	TR500	109.22	107.80	7.64	1.46	0.80
D2	Max WS	200-1 MV	108.82	107.80	1.75	0.78	0.37
D2	Max WS	100-1 MV	108.72	107.80	0.30	0.78	0.29
D2	Max WS	30-1 MV	108.54	107.80	0.10	0.46	0.17
D3	Max WS	TR500	109.22	103.00	35.43	7.98	28.31
D3	Max WS	200-1 MV	108.39	103.00	42.72	7.59	21.85
D3	Max WS	100-1 MV	107.78	103.00	3.91	7.16	17.42
D3	Max WS	30-1 MV	106.80	103.00	40.72	6.04	10.86
S1	Max WS	TR500	109.97	107.50	23.59	1.40	1.38
S1	Max WS	200-1 MV	109.85	107.50	16.34	1.40	1.21
S1	Max WS	100-1 MV	109.77	107.50	12.24	1.00	1.11
S1	Max WS	30-1 MV	109.62	107.50	21.04	1.00	0.96
S2	Max WS	TR500	109.22	103.00	56.86	3.10	8.91
S2	Max WS	200-1 MV	108.39	103.00	57.81	2.68	6.55
S2	Max WS	100-1 MV	107.78	103.00	20.45	2.37	5.04
S2	Max WS	30-1 MV	106.80	103.00	58.06	1.75	2.98


Legend
WS Max WS - TR500
WS Max WS - 200-1 MV
WS Max WS - 100-1 MV
WS Max WS - 30-1 MV
Ground
Elevation (m)
Main Channel Distance (m)
112
110
108
106
104
102
100
98
96
0
100
200
300
400
2.00
2.5
4.5
8.00
8.16666*
8.33333*
8.5*
8.66666*
8.83333*
9.00
9.5
10.99


River = Borro di Melache Reach = Melachecca RS = 11
.035
.035
.035
Legend
WS Max WS - TR500
WS Max WS - 200-1 MV
WS Max WS - 100-1 MV
WS Max WS - 30-1 MV
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = Borro di Melache Reach = Melachecca RS = 10.00
.035
.03
Legend
WS Max WS - TR500
WS Max WS - 200-1 MV
WS Max WS - 100-1 MV
WS Max WS - 30-1 MV
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = Borro di Melache Reach = Melachecca RS = 9.5 Culv
.035
.03
Legend
WS Max WS - TR500
WS Max WS - 200-1 MV
WS Max WS - 100-1 MV
WS Max WS - 30-1 MV
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = Borro di Melache Reach = Melachecca RS = 9.5 Culv
.035
.03
Legend
WS Max WS - TR500
WS Max WS - 200-1 MV
WS Max WS - 100-1 MV
WS Max WS - 30-1 MV
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = Borro di Melache Reach = Melachecca RS = 9.00
.035
.03
Legend
WS Max WS - TR500
WS Max WS - 200-1 MV
WS Max WS - 100-1 MV
WS Max WS - 30-1 MV
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = Borro di Melache Reach = Melachecca RS = 8.5*
.035
Legend
WS Max WS - TR500
WS Max WS - 200-1 MV
WS Max WS - 100-1 MV
WS Max WS - 30-1 MV
Ground
Levee
Bank Sta
Elevation (m)
Station (m)


River = Borro di Melache Reach = Melachecca RS = 8.00
.035
Legend
WS Max WS - TR500
WS Max WS - 200-1 MV
WS Max WS - 100-1 MV
WS Max WS - 30-1 MV
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = Borro di Melache Reach = Melachecca RS = 7.00
.035
Legend
WS Max WS - TR500
WS Max WS - 200-1 MV
WS Max WS - 100-1 MV
WS Max WS - 30-1 MV
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = Borro di Melache Reach = Melachecca RS = 6.00
.035
Legend
WS Max WS - TR500
WS Max WS - 200-1 MV
WS Max WS - 100-1 MV
WS Max WS - 30-1 MV
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = Borro di Melache Reach = Melachecca RS = 5.00
.035
.035
Legend
WS Max WS - TR500
WS Max WS - 200-1 MV
WS Max WS - 100-1 MV
WS Max WS - 30-1 MV
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = Borro di Melache Reach = Melachecca RS = 4.5 Culv
.035
.035
Legend
WS Max WS - TR500
WS Max WS - 200-1 MV
WS Max WS - 100-1 MV
WS Max WS - 30-1 MV
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = Borro di Melache Reach = Melachecca RS = 4.5 Culv
.035
.035
Legend
WS Max WS - TR500
WS Max WS - 200-1 MV
WS Max WS - 100-1 MV
WS Max WS - 30-1 MV
Ground
Levee
Bank Sta
Elevation (m)
Station (m)


River = Borro di Melache Reach = Melachecca RS = 4.00
.035
.035
Legend
WS Max WS - TR500
WS Max WS - 200-1 MV
WS Max WS - 100-1 MV
WS Max WS - 30-1 MV
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = Borro di Melache Reach = Melachecca RS = 3.00
.025
.025
Legend
WS Max WS - 200-1 MV
WS Max WS - 30-1 MV
WS Max WS - TR500
WS Max WS - 100-1 MV
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = Borro di Melache Reach = Melachecca RS = 2.5 Culv
.025
.025
Legend
WS Max WS - TR500
WS Max WS - 200-1 MV
WS Max WS - 100-1 MV
WS Max WS - 30-1 MV
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = Borro di Melache Reach = Melachecca RS = 2.5 Culv
.025
.025
Legend
WS Max WS - TR500
WS Max WS - 200-1 MV
WS Max WS - 100-1 MV
WS Max WS - 30-1 MV
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = Borro di Melache Reach = Melachecca RS = 2.00
.025
.025
Legend
WS Max WS - 30-1 MV
WS Max WS - 200-1 MV
WS Max WS - TR500
WS Max WS - 100-1 MV
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = Borro di Melache Reach = Melachecca RS = 1.00
.035
.035
Legend
WS Max WS - TR500
WS Max WS - 200-1 MV
WS Max WS - 100-1 MV
WS Max WS - 30-1 MV
Ground
Levee
Bank Sta
Elevation (m)
Station (m)

HEC-RAS River: Borro di Papaian Reach: Papaiano Profile: Max WS

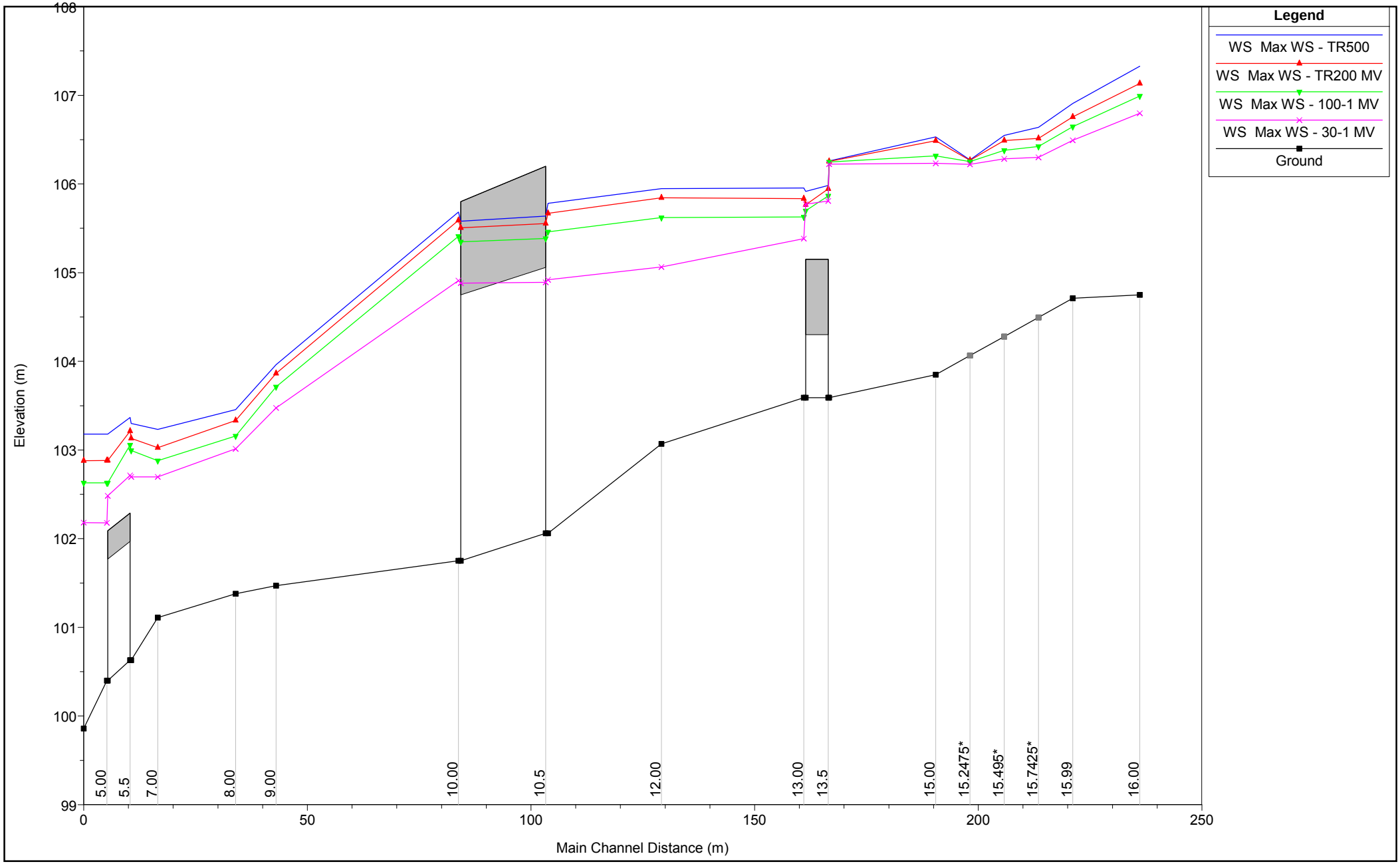
Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Papaiano	16.00	Max WS	TR500	43.86	104.75	107.33		107.75	0.007735	2.91	15.44	8.69	0.62
Papaiano	16.00	Max WS	TR200 MV	36.52	104.75	107.13		107.50	0.007654	2.73	13.75	8.69	0.60
Papaiano	16.00	Max WS	100-1 MV	31.52	104.75	106.99		107.32	0.007597	2.60	12.53	8.69	0.59
Papaiano	16.00	Max WS	30-1 MV	24.95	104.75	106.80		107.07	0.007452	2.40	10.84	8.69	0.58
Papaiano	15.99	Max WS	TR500	43.85	104.71	106.91	106.92	107.62	0.017592	3.83	11.85	8.69	0.89
Papaiano	15.99	Max WS	TR200 MV	36.52	104.71	106.76	106.77	107.38	0.017581	3.62	10.53	8.69	0.88
Papaiano	15.99	Max WS	100-1 MV	31.52	104.71	106.65	106.65	107.21	0.017610	3.46	9.57	8.69	0.87
Papaiano	15.99	Max WS	30-1 MV	24.94	104.71	106.49	106.50	106.97	0.017610	3.24	8.24	8.69	0.85
Papaiano	15.8			Lat Struct									
Papaiano	15.7425*	Max WS	TR500	37.47	104.49	106.64	106.60	107.20	0.015118	3.43	11.43	9.28	0.81
Papaiano	15.7425*	Max WS	TR200 MV	31.66	104.49	106.51	106.48	107.01	0.015048	3.26	10.28	9.28	0.80
Papaiano	15.7425*	Max WS	100-1 MV	27.68	104.49	106.42	106.38	106.87	0.015057	3.15	9.43	9.28	0.79
Papaiano	15.7425*	Max WS	30-1 MV	22.37	104.49	106.30		106.68	0.014756	2.95	8.28	9.28	0.77
Papaiano	15.495*	Max WS	TR500	30.58	104.28	106.55		106.86	0.007856	2.54	12.59	9.86	0.58
Papaiano	15.495*	Max WS	TR200 MV	25.02	104.28	106.49		106.72	0.006110	2.19	12.00	9.86	0.51
Papaiano	15.495*	Max WS	100-1 MV	23.04	104.28	106.38		106.61	0.006981	2.25	10.91	9.86	0.54
Papaiano	15.495*	Max WS	30-1 MV	18.93	104.28	106.28		106.47	0.006228	2.05	9.98	9.86	0.50
Papaiano	15.2475*	Max WS	TR500	21.65	104.07	106.27		106.45	0.005085	1.96	11.80	10.45	0.45
Papaiano	15.2475*	Max WS	TR200 MV	21.14	104.07	106.27		106.43	0.004895	1.92	11.76	10.45	0.45
Papaiano	15.2475*	Max WS	100-1 MV	18.61	104.07	106.25		106.39	0.003942	1.72	11.62	10.45	0.40
Papaiano	15.2475*	Max WS	30-1 MV	15.20	104.07	106.22		106.32	0.002875	1.45	11.29	10.45	0.34
Papaiano	15.00	Max WS	TR500	14.80	103.85	106.53		106.57	0.000826	0.90	16.77	11.03	0.19
Papaiano	15.00	Max WS	TR200 MV	14.52	103.85	106.49		106.53	0.000872	0.91	16.29	11.03	0.19
Papaiano	15.00	Max WS	100-1 MV	17.03	103.85	106.32		106.39	0.001771	1.23	14.39	11.03	0.27
Papaiano	15.00	Max WS	30-1 MV	14.59	103.85	106.23		106.29	0.001603	1.14	13.47	11.03	0.25
Papaiano	14.00	Max WS	TR500	21.09	103.59	106.26	105.69	106.32	0.001665	1.00	19.88	17.51	0.21
Papaiano	14.00	Max WS	TR200 MV	20.57	103.59	106.26	105.68	106.31	0.001601	0.98	19.81	17.51	0.20
Papaiano	14.00	Max WS	100-1 MV	16.74	103.59	106.25	105.62	106.29	0.001083	0.80	19.68	17.51	0.17
Papaiano	14.00	Max WS	30-1 MV	11.62	103.59	106.22	105.53	106.24	0.000561	0.57	19.24	17.51	0.12
Papaiano	13.5			Bridge									
Papaiano	13.00	Max WS	TR500	25.94	103.59	105.96		106.12	0.006839	1.85	14.56	17.51	0.41
Papaiano	13.00	Max WS	TR200 MV	17.90	103.59	105.84		105.94	0.005350	1.57	12.45	17.51	0.36
Papaiano	13.00	Max WS	100-1 MV	11.00	103.59	105.63		105.72	0.005771	1.51	8.83	17.51	0.37
Papaiano	13.00	Max WS	30-1 MV	11.63	103.59	105.38	105.53	105.82	0.032412	3.23	4.62	15.38	0.85
Papaiano	12.9			Lat Struct									
Papaiano	12.8			Lat Struct									
Papaiano	12.4			Lat Struct									
Papaiano	12.00	Max WS	TR500	11.66	103.07	105.95		105.96	0.000276	0.58	21.31	12.50	0.13
Papaiano	12.00	Max WS	TR200 MV	4.57	103.07	105.84		105.85	0.000051	0.24	20.03	12.50	0.05
Papaiano	12.00	Max WS	100-1 MV	2.26	103.07	105.62		105.62	0.000019	0.14	17.25	12.50	0.03
Papaiano	12.00	Max WS	30-1 MV	5.33	103.07	105.07		105.08	0.000371	0.51	10.85	9.91	0.14
Papaiano	11.00	Max WS	TR500	19.83	102.06	105.78	103.63	105.88	0.000835	1.38	14.34	4.11	0.24
Papaiano	11.00	Max WS	TR200 MV	18.24	102.06	105.67	103.56	105.76	0.000767	1.31	13.87	4.11	0.23
Papaiano	11.00	Max WS	100-1 MV	16.06	102.06	105.46	103.45	105.54	0.000698	1.23	13.01	4.11	0.22
Papaiano	11.00	Max WS	30-1 MV	12.64	102.06	104.92	103.28	104.99	0.000696	1.17	10.79	4.11	0.23
Papaiano	10.5			Bridge									
Papaiano	10.00	Max WS	TR500	19.83	101.75	105.68		105.76	0.000564	1.20	16.55	4.41	0.20
Papaiano	10.00	Max WS	TR200 MV	18.24	101.75	105.59		105.66	0.000507	1.13	16.14	4.41	0.19
Papaiano	10.00	Max WS	100-1 MV	16.06	101.75	105.41		105.47	0.000446	1.05	15.34	4.41	0.18
Papaiano	10.00	Max WS	30-1 MV	12.64	101.75	104.91		104.96	0.000408	0.96	13.14	4.41	0.18
Papaiano	9.9			Lat Struct									
Papaiano	9.00	Max WS	TR500	17.76	101.47	103.96		104.74	0.017720	4.29	4.77	2.24	0.89
Papaiano	9.00	Max WS	TR200 MV	17.06	101.47	103.86		104.65	0.018358	4.32	4.55	2.24	0.92
Papaiano	9.00	Max WS	100-1 MV	15.78	101.47	103.71	103.61	104.50	0.019005	4.31	4.21	2.24	0.95
Papaiano	9.00	Max WS	30-1 MV	12.76	101.47	103.48		104.15	0.017433	3.98	3.68	2.24	0.93
Papaiano	8.00	Max WS	TR500	16.79	101.38	103.45	103.34	104.24	0.009404	4.47	5.18	3.03	1.01
Papaiano	8.00	Max WS	TR200 MV	16.43	101.38	103.33	103.32	104.20	0.011132	4.66	4.81	3.03	1.09
Papaiano	8.00	Max WS	100-1 MV	15.78	101.38	103.16	103.28	104.14	0.014373	4.96	4.27	3.03	1.21
Papaiano	8.00	Max WS	30-1 MV	12.56	101.38	103.01	103.05	103.77	0.012320	4.34	3.84	3.03	1.11
Papaiano	7.00	Max WS	TR500	18.93	101.11	103.23		103.51	0.003576	2.65	9.22	7.34	0.60
Papaiano	7.00	Max WS	TR200 MV	17.53	101.11	103.03		103.37	0.004927	2.89	7.71	7.34	0.69
Papaiano	7.00	Max WS	100-1 MV	15.78	101.11	102.88		103.26	0.005878	2.97	6.63	7.34	0.75
Papaiano	7.00	Max WS	30-1 MV	11.30	101.11	102.70		102.99	0.005096	2.56	5.31	6.89	0.68
Papaiano	6.00	Max WS	TR500	18.10	100.63	103.30	102.47	103.46	0.001365	1.90	11.46	7.69	0.40
Papaiano	6.00	Max WS	TR200 MV	17.23	100.63	103.13	102.35	103.32	0.001674	2.00	10.19	7.44	0.44
Papaiano	6.00	Max WS	100-1 MV	15.78	100.63	102.99	102.25	103.18	0.001834	2.00	9.17	7.23	0.45
Papaiano	6.00	Max WS	30-1 MV	12.50	100.63	102.70	102.04	102.88	0.002175	1.96	7.10	6.76	0.48
Papaiano	5.5			Bridge									
Papaiano	5.00	Max WS	TR500	2.80	100.40	103.18		103.18	0.000013	0.18	20.28	15.68	0.04
Papaiano	5.00	Max WS	TR200 MV	2.93	100.40	102.88		102.88	0.000029	0.24	15.59	15.68	0.06
Papaiano	5.00	Max WS	100-1 MV	3.04	100.40	102.63		102.63	0.000062	0.32	11.65	15.68	0.08
Papaiano	5.00	Max WS	30-1 MV	3.05	100.40	102.18		102.19	0.000247	0.52	5.89	5.49	0.16

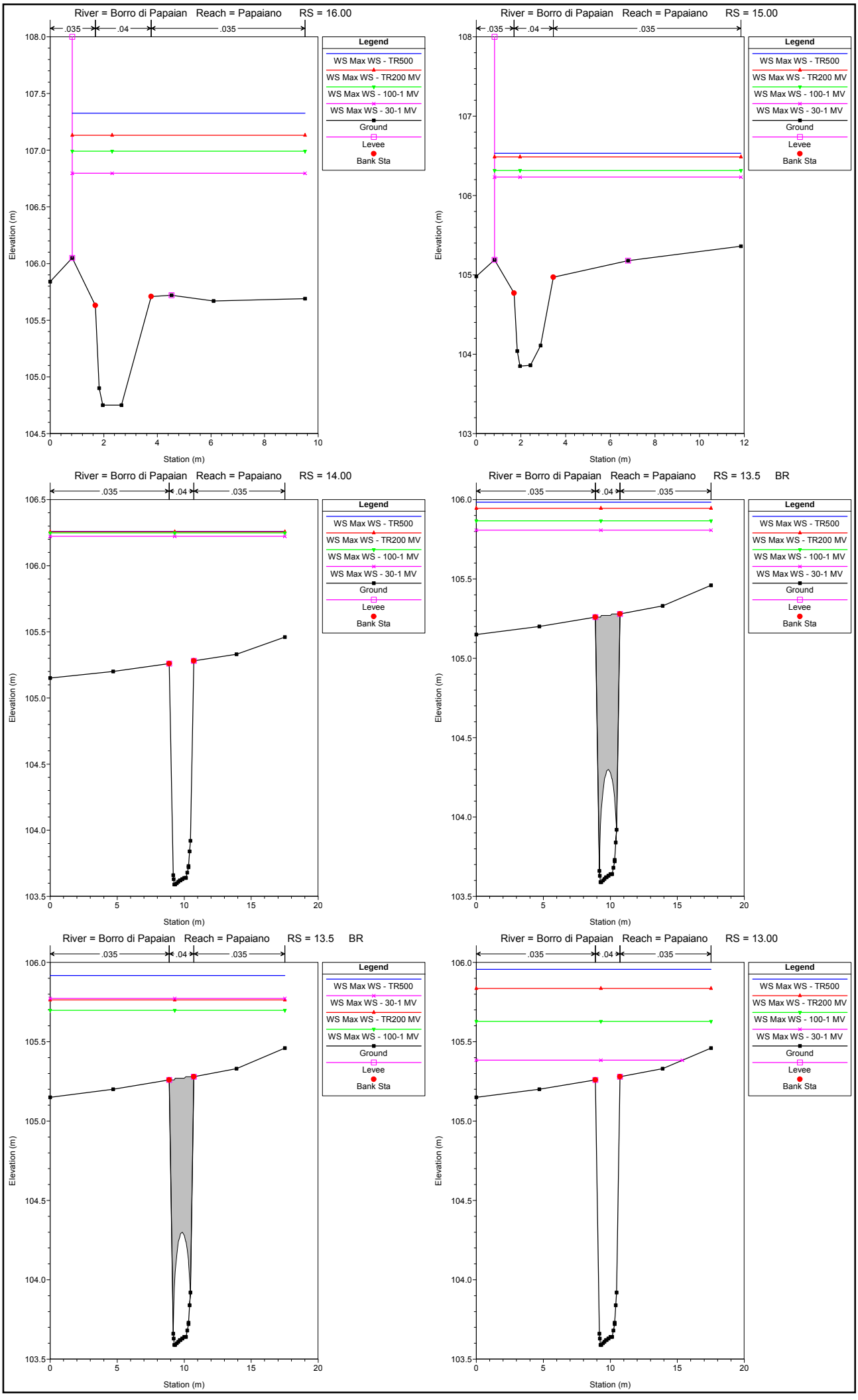
HEC-RAS River: Borro di Papaian Reach: Papaiano Profile: Max WS (Continued)

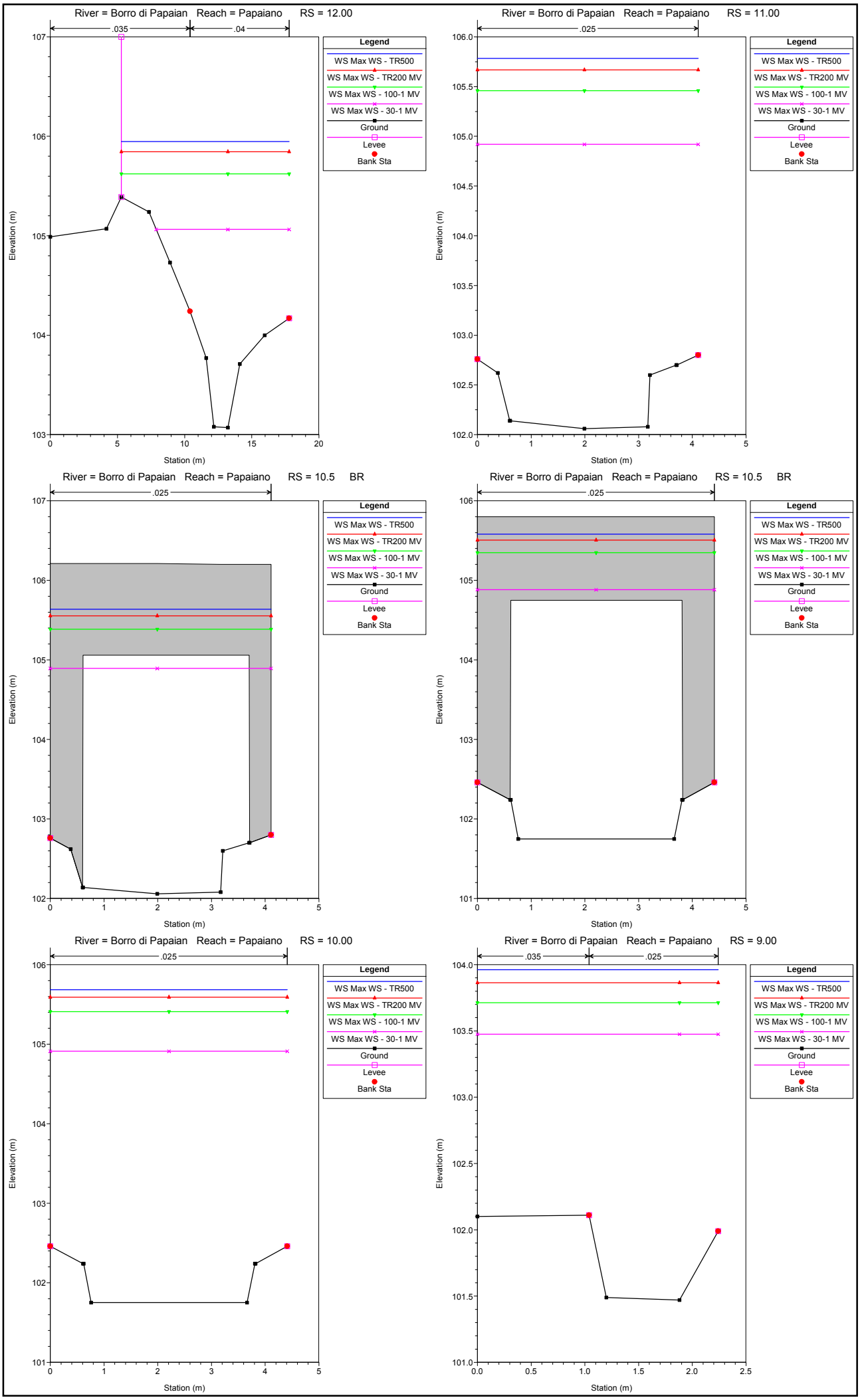
Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Papaiano	4.00	Max WS	TR500	3.04	99.86	103.18	100.38	103.18	0.000008	0.13	25.60	8.83	0.02
Papaiano	4.00	Max WS	TR200 MV	3.05	99.86	102.88	100.38	102.88	0.000011	0.14	22.95	8.83	0.03
Papaiano	4.00	Max WS	100-1 MV	3.06	99.86	102.63	100.39	102.63	0.000015	0.16	20.74	8.83	0.03
Papaiano	4.00	Max WS	30-1 MV	2.88	99.86	102.18	100.37	102.18	0.000024	0.18	16.77	8.83	0.04

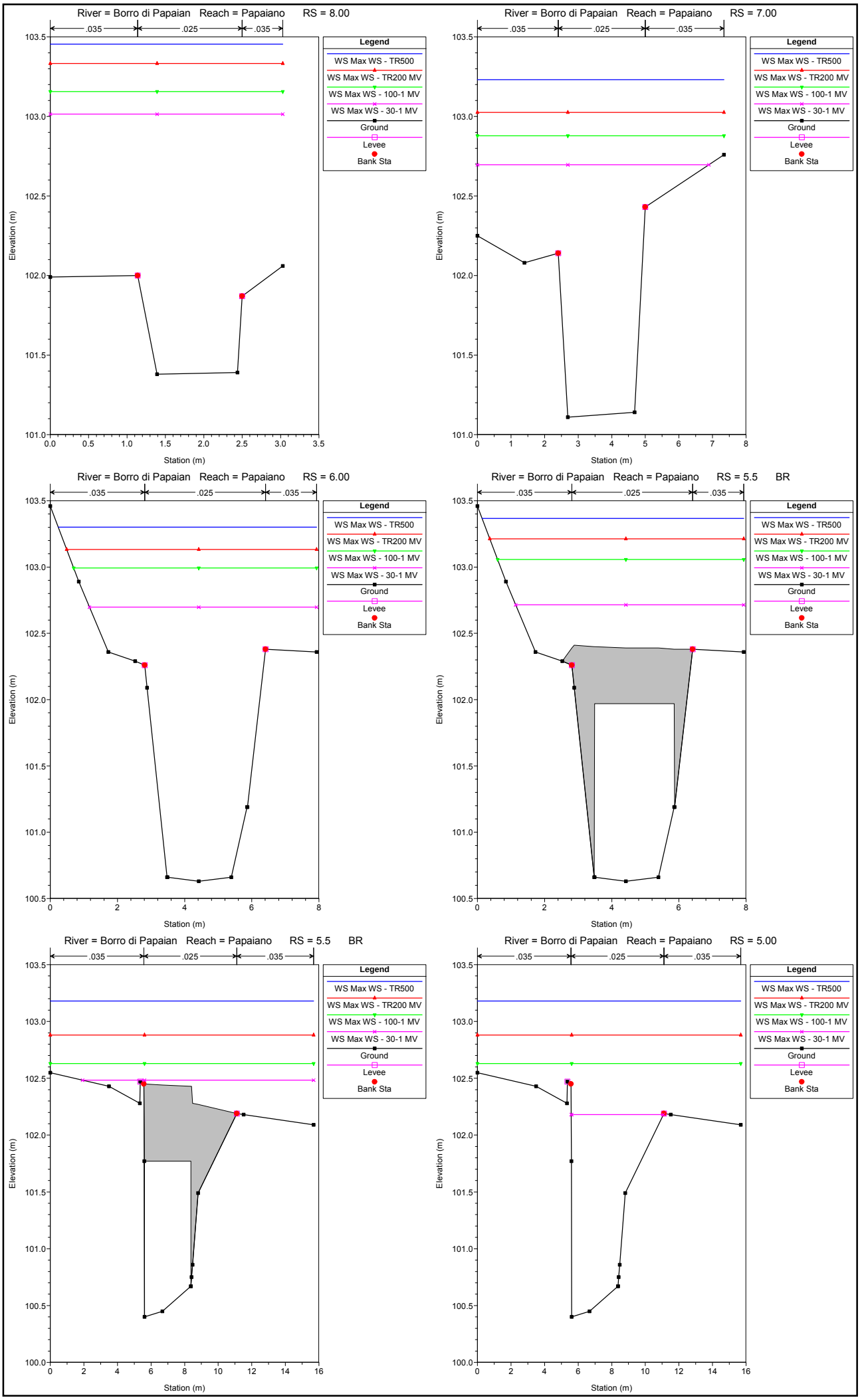
HEC-RAS Profile: Max WS

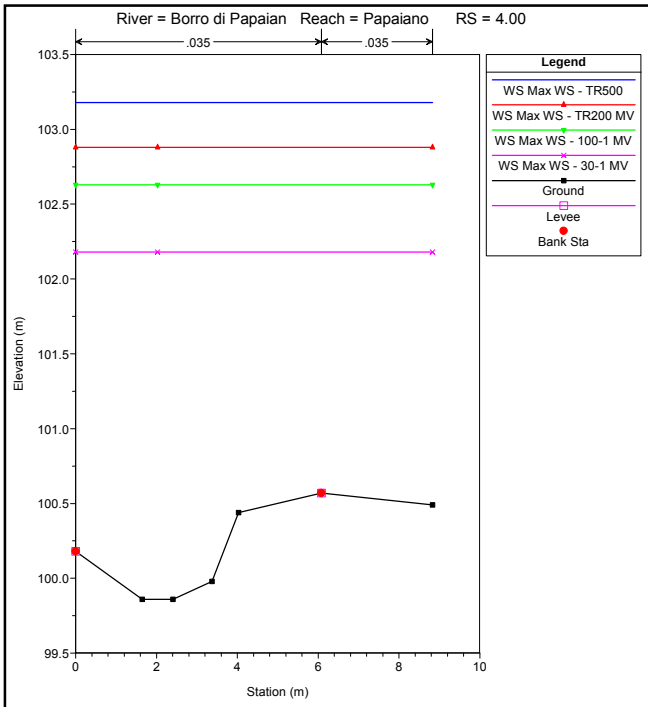
Storage Area	Profile	Plan	W.S. Elev	SA Min El	Net Flux	SA Area	SA Volume
			(m)	(m)	(m3/s)	(1000 m2)	(1000 m3)
D2	Max WS	TR500	105.86	101.90	10.33	14.33	31.71
D2	Max WS	TR200 MV	105.76	101.90	4.71	14.33	30.31
D2	Max WS	100-1 MV	105.55	101.90	1.51	13.43	27.40
D2	Max WS	30-1 MV	104.99	101.90	5.08	11.64	20.14
D3	Max WS	TR500	103.14	99.70	19.42	27.20	42.31
D3	Max WS	TR200 MV	102.66	99.70	9.84	26.85	29.33
D3	Max WS	100-1 MV	102.43	99.70	3.67	26.43	23.10
D3	Max WS	30-1 MV	102.18	99.70	3.02	25.93	16.69
D4	Max WS	TR500	99.57	98.30	2.95	5.94	4.47
D4	Max WS	TR200 MV	99.15	98.30	1.82	4.77	2.17
D4	Max WS	100-1 MV	98.62	98.30	0.41	1.55	0.35
D4	Max WS	30-1 MV	98.30	98.30	0.00	0.05	0.00
S1	Max WS	TR500	106.34	105.00	36.91	4.23	2.22
S1	Max WS	TR200 MV	106.32	105.00	31.89	4.23	2.15
S1	Max WS	100-1 MV	106.28	105.00	5.12	4.23	1.98
S1	Max WS	30-1 MV	106.22	105.00	2.83	4.23	1.74
S2	Max WS	TR500	105.92	105.00	0.96	1.58	0.24
S2	Max WS	TR200 MV	105.80	105.00	1.87	0.48	0.16
S2	Max WS	100-1 MV	105.67	105.00	0.02	0.48	0.10
S2	Max WS	30-1 MV	105.64	105.00	0.00	0.48	0.09


Legend
WS Max WS - TR500
WS Max WS - TR200 MV
WS Max WS - 100-1 MV
WS Max WS - 30-1 MV
Ground
Elevation (m)
Main Channel Distance (m)
108
107
106
105
104
103
102
101
100
99
0
50
100
150
200
250
5.00
5.5
7.00
8.00
9.00
10.00
10.5
12.00
13.00
13.5
15.00
15.2475*
15.495*
15.7425*
15.99
16.00


River = Borro di Papaian Reach = Papaiano RS = 16.00
.035
.04
.035
Legend
WS Max WS - TR500
WS Max WS - TR200 MV
WS Max WS - 100-1 MV
WS Max WS - 30-1 MV
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = Borro di Papaian Reach = Papaiano RS = 15.00
.035
.04
.035
Legend
WS Max WS - TR500
WS Max WS - TR200 MV
WS Max WS - 100-1 MV
WS Max WS - 30-1 MV
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = Borro di Papaian Reach = Papaiano RS = 14.00
.035
.04
.035
Legend
WS Max WS - TR500
WS Max WS - TR200 MV
WS Max WS - 100-1 MV
WS Max WS - 30-1 MV
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = Borro di Papaian Reach = Papaiano RS = 13.5 BR
.035
.04
.035
Legend
WS Max WS - TR500
WS Max WS - TR200 MV
WS Max WS - 100-1 MV
WS Max WS - 30-1 MV
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = Borro di Papaian Reach = Papaiano RS = 13.5 BR
.035
.04
.035
Legend
WS Max WS - TR500
WS Max WS - 30-1 MV
WS Max WS - TR200 MV
WS Max WS - 100-1 MV
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = Borro di Papaian Reach = Papaiano RS = 13.00
.035
.04
.035
Legend
WS Max WS - TR500
WS Max WS - TR200 MV
WS Max WS - 100-1 MV
WS Max WS - 30-1 MV
Ground
Levee
Bank Sta
Elevation (m)
Station (m)


River = Borro di Papaian Reach = Papaiano RS = 12.00
.035
.04
Elevation (m)
Station (m)
Legend
WS Max WS - TR500
WS Max WS - TR200 MV
WS Max WS - 100-1 MV
WS Max WS - 30-1 MV
Ground
Levee
Bank Sta
River = Borro di Papaian Reach = Papaiano RS = 11.00
.025
Elevation (m)
Station (m)
Legend
WS Max WS - TR500
WS Max WS - TR200 MV
WS Max WS - 100-1 MV
WS Max WS - 30-1 MV
Ground
Levee
Bank Sta
River = Borro di Papaian Reach = Papaiano RS = 10.5 BR
.025
Elevation (m)
Station (m)
Legend
WS Max WS - TR500
WS Max WS - TR200 MV
WS Max WS - 100-1 MV
WS Max WS - 30-1 MV
Ground
Levee
Bank Sta
River = Borro di Papaian Reach = Papaiano RS = 10.5 BR
.025
Elevation (m)
Station (m)
Legend
WS Max WS - TR500
WS Max WS - TR200 MV
WS Max WS - 100-1 MV
WS Max WS - 30-1 MV
Ground
Levee
Bank Sta
River = Borro di Papaian Reach = Papaiano RS = 10.00
.025
Elevation (m)
Station (m)
Legend
WS Max WS - TR500
WS Max WS - TR200 MV
WS Max WS - 100-1 MV
WS Max WS - 30-1 MV
Ground
Levee
Bank Sta
River = Borro di Papaian Reach = Papaiano RS = 9.00
.035
.025
Elevation (m)
Station (m)
Legend
WS Max WS - TR500
WS Max WS - TR200 MV
WS Max WS - 100-1 MV
WS Max WS - 30-1 MV
Ground
Levee
Bank Sta


River = Borro di Papaian Reach = Papaiano RS = 8.00
River = Borro di Papaian Reach = Papaiano RS = 7.00
River = Borro di Papaian Reach = Papaiano RS = 6.00
River = Borro di Papaian Reach = Papaiano RS = 5.5 BR
River = Borro di Papaian Reach = Papaiano RS = 5.5 BR
River = Borro di Papaian Reach = Papaiano RS = 5.00
.035
.025
.035
Legend
WS Max WS - TR500
WS Max WS - TR200 MV
WS Max WS - 100-1 MV
WS Max WS - 30-1 MV
Ground
Levee
Bank Sta
Elevation (m)
Station (m)

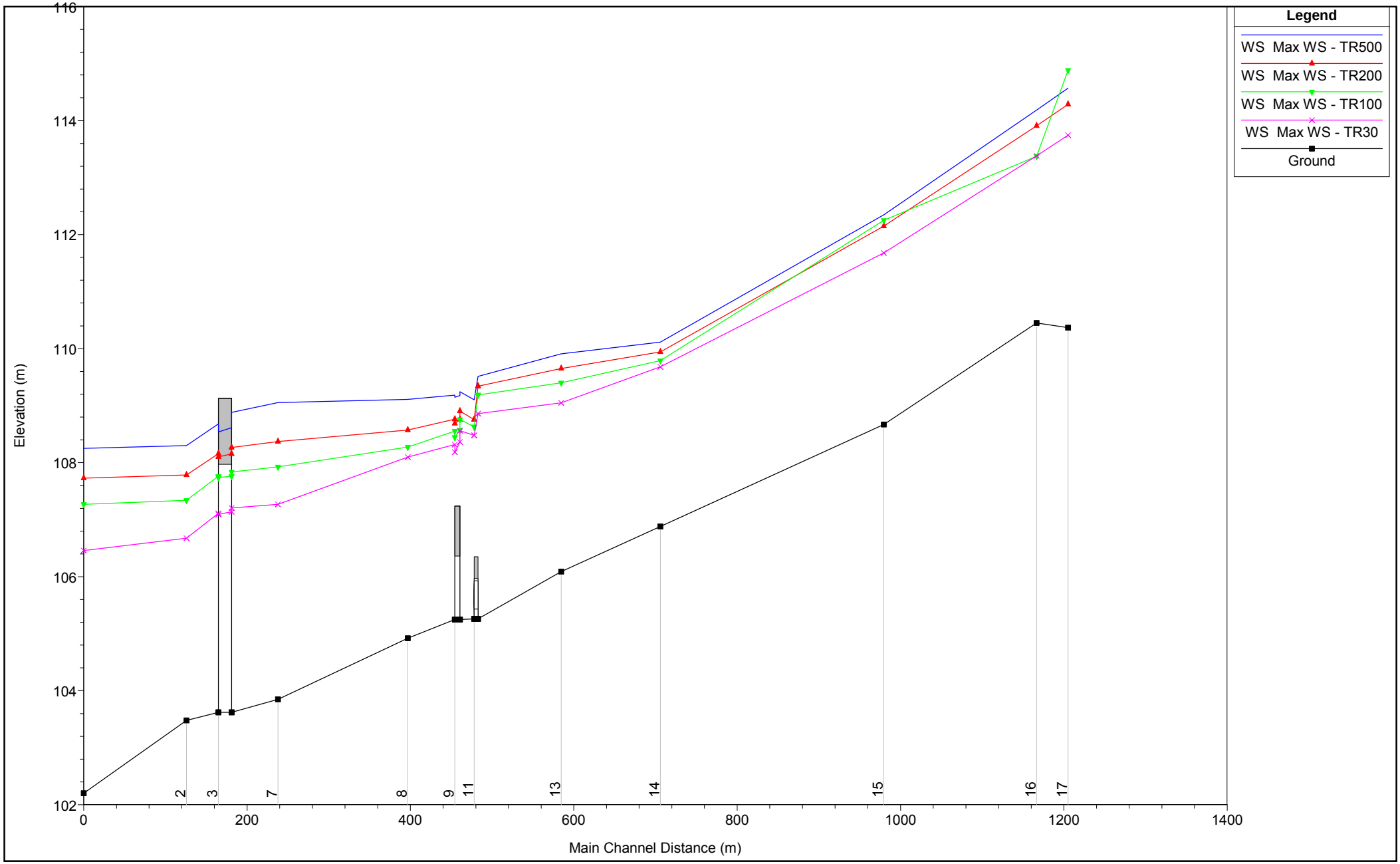

River = Borro di Papaian Reach = Papaiano RS = 4.00
.035
.035
Legend
WS Max WS - TR500
WS Max WS - TR200 MV
WS Max WS - 100-1 MV
WS Max WS - 30-1 MV
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
103.5
103.0
102.5
102.0
101.5
101.0
100.5
100.0
99.5
0
2
4
6
8
10

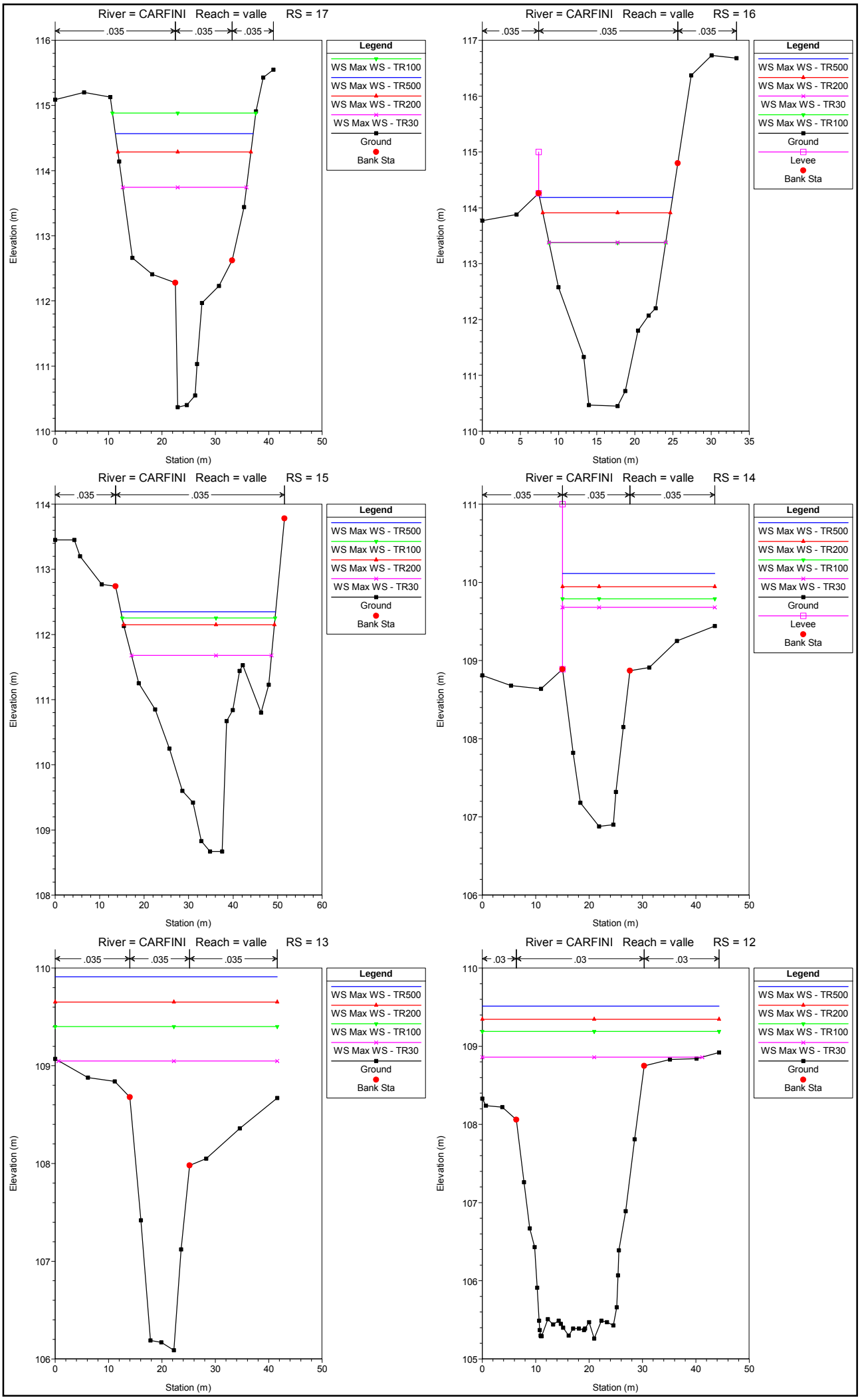
HEC-RAS River: CARFINI Reach: valle Profile: Max WS

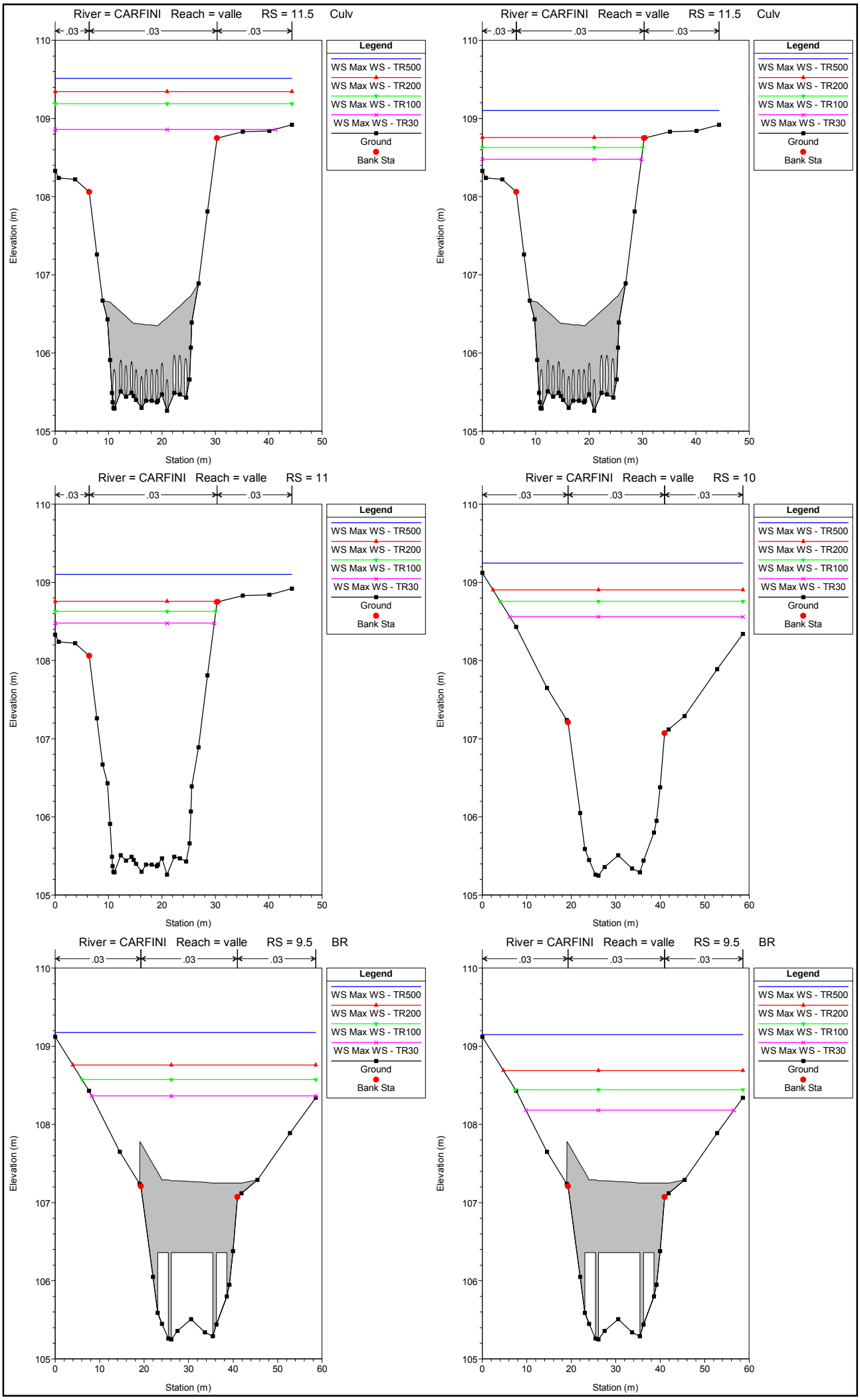
Reach	River Sta	Profile	Plan	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
				(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
valle	17	Max WS	TR500	221.29	110.37	114.57		115.40	0.006941	4.40	56.89	25.82	0.81
valle	17	Max WS	TR200	183.12	110.37	114.29		115.03	0.007050	4.15	49.73	24.91	0.80
valle	17	Max WS	TR100	158.02	110.37	114.88		115.21	0.002376	2.75	65.23	26.85	0.48
valle	17	Max WS	TR30	120.65	110.37	113.75		114.34	0.007456	3.69	36.73	23.18	0.79
valle	16	Max WS	TR500	221.29	110.45	114.19	114.37	115.64	0.013041	5.35	41.39	17.46	1.11
valle	16	Max WS	TR200	183.11	110.45	113.91	114.04	115.18	0.012526	4.99	36.68	16.73	1.08
valle	16	Max WS	TR100	158.02	110.45	113.37	113.79	114.98	0.019814	5.62	28.12	15.30	1.32
valle	16	Max WS	TR30	120.64	110.45	113.38	113.39	114.31	0.011392	4.27	28.25	15.32	1.00
valle	15	Max WS	TR500	221.27	108.67	112.35		112.94	0.006669	3.40	65.11	34.78	0.79
valle	15	Max WS	TR200	183.10	108.67	112.15		112.65	0.006359	3.14	58.33	33.90	0.76
valle	15	Max WS	TR100	157.88	108.67	112.25		112.58	0.003969	2.55	61.81	34.36	0.61
valle	15	Max WS	TR30	120.55	108.67	111.68		112.08	0.006925	2.81	42.91	31.47	0.77
valle	14.9			Lat Struct									
valle	14.8			Lat Struct									
valle	14	Max WS	TR500	165.79	106.88	110.11		110.81	0.006657	3.98	48.43	28.53	0.78
valle	14	Max WS	TR200	146.98	106.88	109.94	109.93	110.63	0.006956	3.93	43.62	28.53	0.80
valle	14	Max WS	TR100	71.39	106.88	109.79		109.99	0.002170	2.12	39.23	28.53	0.44
valle	14	Max WS	TR30	106.86	106.88	109.68		110.22	0.005988	3.42	36.13	28.53	0.74
valle	13.8			Lat Struct									
valle	13	Max WS	TR500	126.59	106.09	109.91		110.08	0.001481	2.15	74.83	41.61	0.39
valle	13	Max WS	TR200	117.64	106.09	109.65		109.86	0.001990	2.35	64.10	41.61	0.45
valle	13	Max WS	TR100	123.83	106.09	109.40		109.75	0.003579	2.96	53.69	41.61	0.59
valle	13	Max WS	TR30	104.69	106.09	109.05	109.01	109.53	0.005577	3.34	39.05	40.96	0.72
valle	12.8			Lat Struct									
valle	12	Max WS	TR500	199.10	105.26	109.51		109.75	0.000976	2.23	99.51	44.33	0.39
valle	12	Max WS	TR200	171.21	105.26	109.34		109.55	0.000888	2.06	91.93	44.33	0.37
valle	12	Max WS	TR100	153.87	105.26	109.19		109.38	0.000871	1.97	85.13	44.33	0.36
valle	12	Max WS	TR30	120.06	105.26	108.86		109.02	0.000820	1.78	70.62	41.18	0.34
valle	11.5			Culvert									
valle	11	Max WS	TR500	192.96	105.26	109.10		109.43	0.001538	2.57	81.20	44.33	0.47
valle	11	Max WS	TR200	170.03	105.26	108.76		109.10	0.001891	2.63	66.97	30.68	0.52
valle	11	Max WS	TR100	153.84	105.26	108.63		108.95	0.001817	2.51	63.14	30.10	0.50
valle	11	Max WS	TR30	120.06	105.26	108.48		108.70	0.001346	2.09	58.67	29.81	0.43
valle	10	Max WS	TR500	194.22	105.25	109.25	107.83	109.40	0.000622	1.89	125.59	58.55	0.32
valle	10	Max WS	TR200	170.84	105.25	108.90	107.64	109.07	0.000762	1.96	105.77	56.17	0.35
valle	10	Max WS	TR100	153.84	105.25	108.76	107.49	108.92	0.000760	1.90	97.69	54.57	0.35
valle	10	Max WS	TR30	120.06	105.25	108.56	107.16	108.68	0.000622	1.64	87.13	52.40	0.31
valle	9.5			Bridge									
valle	9	Max WS	TR500	193.66	105.25	109.19		109.34	0.000670	1.94	122.04	58.55	0.33
valle	9	Max WS	TR200	168.79	105.25	108.76		108.95	0.000908	2.07	97.97	54.63	0.38
valle	9	Max WS	TR100	153.41	105.25	108.55		108.75	0.001026	2.10	86.77	52.33	0.40
valle	9	Max WS	TR30	118.44	105.25	108.32		108.48	0.000888	1.85	74.82	49.72	0.36
valle	8.9			Lat Struct									
valle	8.8			Lat Struct									
valle	8	Max WS	TR500	175.67	104.92	109.11		109.31	0.001416	2.32	91.72	36.84	0.40
valle	8	Max WS	TR200	163.43	104.92	108.57		108.87	0.002579	2.79	71.91	36.53	0.52
valle	8	Max WS	TR100	152.34	104.92	108.27		108.64	0.003655	3.09	61.13	36.08	0.61
valle	8	Max WS	TR30	118.00	104.92	108.10		108.38	0.003043	2.70	54.76	35.78	0.55
valle	7	Max WS	TR500	152.57	103.85	109.06		109.18	0.000697	1.66	103.36	35.50	0.28
valle	7	Max WS	TR200	150.16	103.85	108.37		108.57	0.001514	2.11	79.09	34.74	0.40
valle	7	Max WS	TR100	139.42	103.85	107.93		108.19	0.002491	2.42	63.80	34.01	0.50
valle	7	Max WS	TR30	114.68	103.85	107.27		107.68	0.005651	2.97	41.94	30.49	0.71
valle	6.9			Lat Struct									
valle	6	Max WS	TR500	211.57	103.62	108.88	107.06	109.05	0.000639	2.04	121.30	39.79	0.32
valle	6	Max WS	TR200	176.06	103.62	108.27	106.86	108.45	0.000820	2.08	97.66	36.79	0.36
valle	6	Max WS	TR100	155.94	103.62	107.84	106.74	108.04	0.001065	2.17	82.30	35.19	0.40
valle	6	Max WS	TR30	119.94	103.62	107.21	106.50	107.43	0.001584	2.27	60.59	33.52	0.46
valle	4.5			Bridge									
valle	3	Max WS	TR500	211.46	103.62	108.68		108.87	0.000775	2.18	113.36	38.97	0.35
valle	3	Max WS	TR200	176.01	103.62	108.16		108.35	0.000923	2.16	93.67	36.17	0.37
valle	3	Max WS	TR100	155.86	103.62	107.76		107.98	0.001172	2.24	79.70	34.99	0.41
valle	3	Max WS	TR30	119.94	103.62	107.11		107.36	0.001853	2.39	57.51	33.28	0.50
valle	2	Max WS	TR500	210.16	103.48	108.30		108.70	0.001655	3.04	79.04	25.76	0.51
valle	2	Max WS	TR200	175.03	103.48	107.78		108.19	0.002012	3.03	65.77	25.76	0.54
valle	2	Max WS	TR100	154.05	103.48	107.34		107.80	0.002778	3.21	54.33	25.76	0.62
valle	2	Max WS	TR30	119.94	103.48	106.68		107.29	0.005117	3.62	37.21	25.76	0.81
valle	1	Max WS	TR500	209.59	102.20	108.25	106.09	108.42	0.000614	1.92	122.78	41.77	0.30
valle	1	Max WS	TR200	174.54	102.20	107.73	105.83	107.91	0.000720	1.93	101.06	41.77	0.32
valle	1	Max WS	TR100	153.53	102.20	107.27	105.66	107.48	0.000942	2.05	81.84	41.77	0.36
valle	1	Max WS	TR30	118.98	102.20	106.46	105.34	106.70	0.001501	2.19	55.45	26.84	0.44

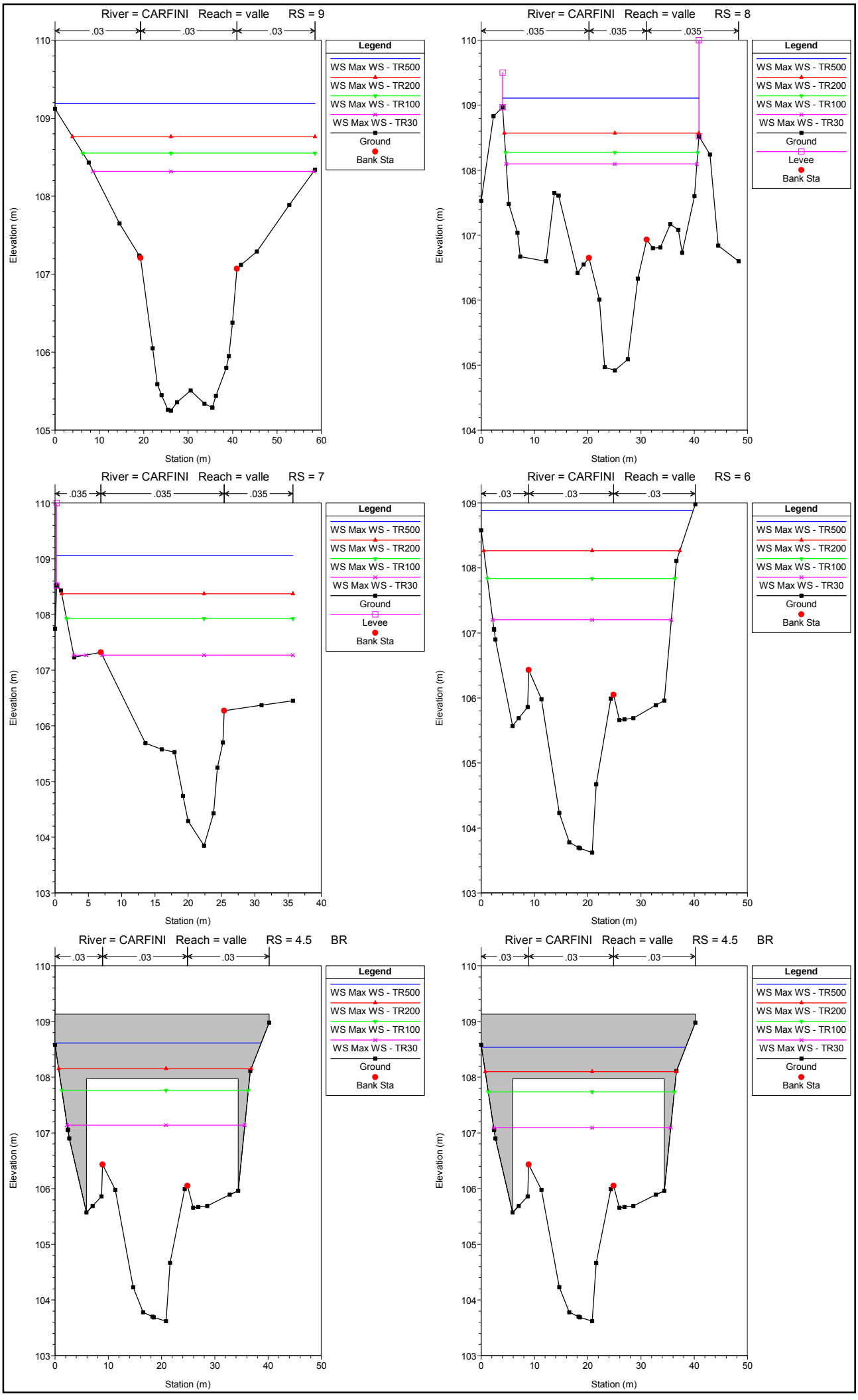
HEC-RAS Profile: Max WS

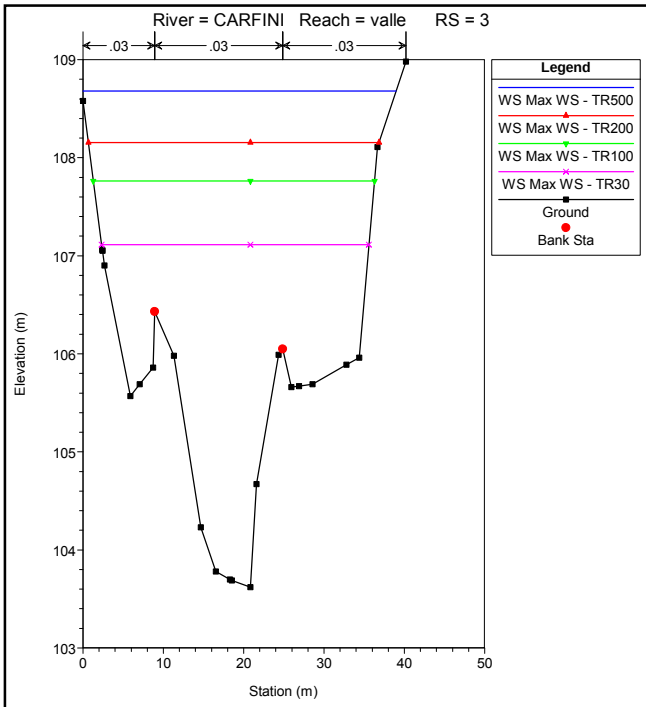
Storage Area	Profile	Plan	W.S. Elev	SA Min El	Net Flux	SA Area	SA Volume
			(m)	(m)	(m3/s)	(1000 m2)	(1000 m3)
CARFINI 1	Max WS	TR500	109.95	108.00	0.60	17.11	15.09
CARFINI 1	Max WS	TR200	109.72	108.00	0.45	13.62	11.40
CARFINI 1	Max WS	TR100	109.42	108.00	7.89	10.61	7.52
CARFINI 1	Max WS	TR30	109.17	108.00	0.09	7.86	5.00
CARFINI 2	Max WS	TR500	110.68	108.10	0.47	13.86	12.59
CARFINI 2	Max WS	TR200	110.41	108.10	0.75	13.86	8.87
CARFINI 2	Max WS	TR100	110.15	108.10	5.75	11.59	5.77
CARFINI 2	Max WS	TR30	109.95	108.10	0.23	7.24	4.17
CARFINI 3a	Max WS	TR500	110.01	108.10	5.26	2.79	2.58
CARFINI 3a	Max WS	TR200	109.80	108.10	10.57	2.12	1.98
CARFINI 3a	Max WS	TR100	109.54	108.10	34.44	2.12	1.44
CARFINI 3a	Max WS	TR30	109.37	108.10	0.70	1.74	1.13
CARFINI 3b	Max WS	TR500	109.71	107.40	3.30	4.30	5.00
CARFINI 3b	Max WS	TR200	109.50	107.40	7.16	3.82	4.07
CARFINI 3b	Max WS	TR100	109.30	107.40	0.75	3.82	3.31
CARFINI 3b	Max WS	TR30	108.96	107.40	0.40	3.33	2.13
CARFINI 4	Max WS	TR500	109.07	106.10	14.35	14.06	24.09
CARFINI 4	Max WS	TR200	108.42	106.10	13.82	13.42	15.18
CARFINI 4	Max WS	TR100	108.02	106.10	0.48	12.98	9.92
CARFINI 4	Max WS	TR30	107.49	106.10	19.77	8.91	4.38
CARFINI 5	Max WS	TR500	108.97	107.20	0.67	18.67	15.46
CARFINI 5	Max WS	TR200	108.31	107.20	0.39	14.21	5.14
CARFINI 5	Max WS	TR100	107.88	107.20	0.09	3.72	0.95
CARFINI 5	Max WS	TR30	107.20	107.20	0.00	0.04	0.00
CARFINI 6	Max WS	TR500	108.97	105.60	9.92	20.89	39.92
CARFINI 6	Max WS	TR200	108.31	105.60	8.87	20.79	26.24
CARFINI 6	Max WS	TR100	107.88	105.60	1.22	17.17	17.69
CARFINI 6	Max WS	TR30	107.23	105.60	0.48	11.82	8.30
CARFINI 7	Max WS	TR500	108.97	105.80	12.20	3.01	5.59
CARFINI 7	Max WS	TR200	108.32	105.80	10.95	2.92	3.65
CARFINI 7	Max WS	TR100	107.89	105.80	1.42	2.58	2.44
CARFINI 7	Max WS	TR30	107.24	105.80	4.89	1.67	1.05

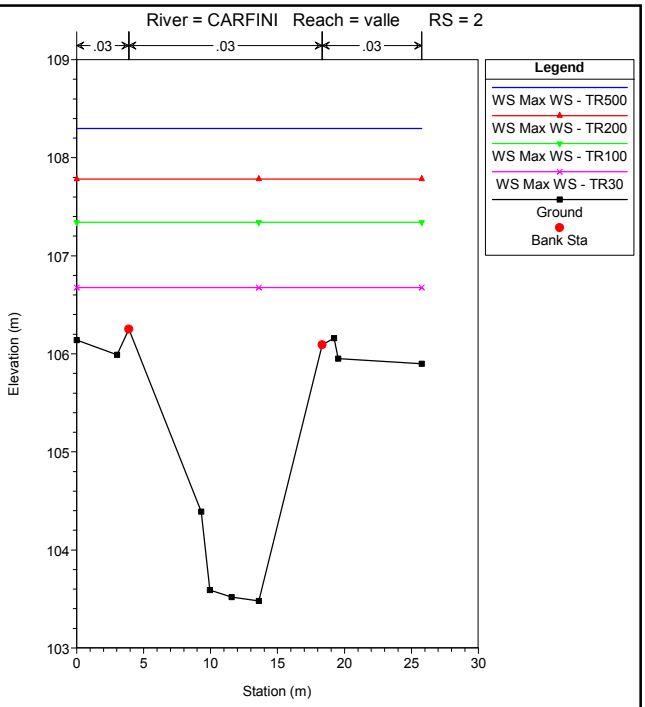

Legend
WS Max WS - TR500
WS Max WS - TR200
WS Max WS - TR100
WS Max WS - TR30
Ground
Elevation (m)
Main Channel Distance (m)
116
114
112
110
108
106
104
102
0
200
400
600
800
1000
1200
1400
2
3
7
8
9
11
13
14
15
16
17

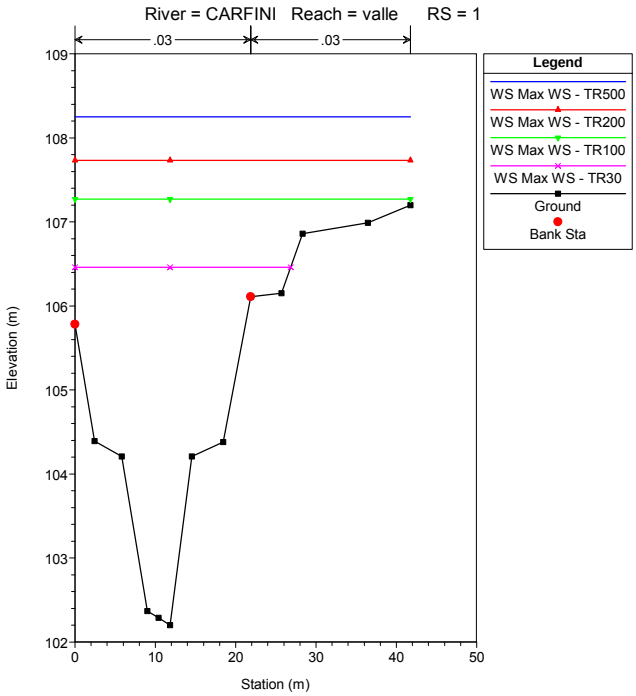

River = CARFINI Reach = valle RS = 17
.035
.035
.035
Legend
WS Max WS - TR100
WS Max WS - TR500
WS Max WS - TR200
WS Max WS - TR30
Ground
Bank Sta
Elevation (m)
Station (m)
River = CARFINI Reach = valle RS = 16
.035
.035
.035
Legend
WS Max WS - TR500
WS Max WS - TR200
WS Max WS - TR30
WS Max WS - TR100
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = CARFINI Reach = valle RS = 15
.035
.035
Legend
WS Max WS - TR500
WS Max WS - TR100
WS Max WS - TR200
WS Max WS - TR30
Ground
Bank Sta
Elevation (m)
Station (m)
River = CARFINI Reach = valle RS = 14
.035
.035
.035
Legend
WS Max WS - TR500
WS Max WS - TR200
WS Max WS - TR100
WS Max WS - TR30
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = CARFINI Reach = valle RS = 13
.035
.035
.035
Legend
WS Max WS - TR500
WS Max WS - TR200
WS Max WS - TR100
WS Max WS - TR30
Ground
Bank Sta
Elevation (m)
Station (m)
River = CARFINI Reach = valle RS = 12
.03
.03
.03
Legend
WS Max WS - TR500
WS Max WS - TR200
WS Max WS - TR100
WS Max WS - TR30
Ground
Bank Sta
Elevation (m)
Station (m)


River = CARFINI Reach = valle RS = 11.5 Culv
River = CARFINI Reach = valle RS = 11.5 Culv
River = CARFINI Reach = valle RS = 11
River = CARFINI Reach = valle RS = 10
River = CARFINI Reach = valle RS = 9.5 BR
River = CARFINI Reach = valle RS = 9.5 BR
.03
.03
.03
Legend
WS Max WS - TR500
WS Max WS - TR200
WS Max WS - TR100
WS Max WS - TR30
Ground
Bank Sta
Elevation (m)
Station (m)
105
106
107
108
109
110
0
10
20
30
40
50
60


River = CARFINI Reach = valle RS = 9
.03
.03
.03
Legend
WS Max WS - TR500
WS Max WS - TR200
WS Max WS - TR100
WS Max WS - TR30
Ground
Bank Sta
Elevation (m)
Station (m)
River = CARFINI Reach = valle RS = 8
.035
.035
.035
Legend
WS Max WS - TR500
WS Max WS - TR200
WS Max WS - TR100
WS Max WS - TR30
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = CARFINI Reach = valle RS = 7
.035
.035
.035
Legend
WS Max WS - TR500
WS Max WS - TR200
WS Max WS - TR100
WS Max WS - TR30
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
River = CARFINI Reach = valle RS = 6
.03
.03
.03
Legend
WS Max WS - TR500
WS Max WS - TR200
WS Max WS - TR100
WS Max WS - TR30
Ground
Bank Sta
Elevation (m)
Station (m)
River = CARFINI Reach = valle RS = 4.5 BR
.03
.03
.03
Legend
WS Max WS - TR500
WS Max WS - TR200
WS Max WS - TR100
WS Max WS - TR30
Ground
Bank Sta
Elevation (m)
Station (m)
River = CARFINI Reach = valle RS = 4.5 BR
.03
.03
.03
Legend
WS Max WS - TR500
WS Max WS - TR200
WS Max WS - TR100
WS Max WS - TR30
Ground
Bank Sta
Elevation (m)
Station (m)


River = CARFINI Reach = valle RS = 3
.03
.03
.03
Legend
WS Max WS - TR500
WS Max WS - TR200
WS Max WS - TR100
WS Max WS - TR30
Ground
Bank Sta
Elevation (m)
Station (m)


River = CARFINI Reach = valle RS = 2
.03
.03
.03
Legend
WS Max WS - TR500
WS Max WS - TR200
WS Max WS - TR100
WS Max WS - TR30
Ground
Bank Sta
Elevation (m)
Station (m)


River = CARFINI Reach = valle RS = 1
.03
.03
Legend
WS Max WS - TR500
WS Max WS - TR200
WS Max WS - TR100
WS Max WS - TR30
Ground
Bank Sta
Elevation (m)
Station (m)