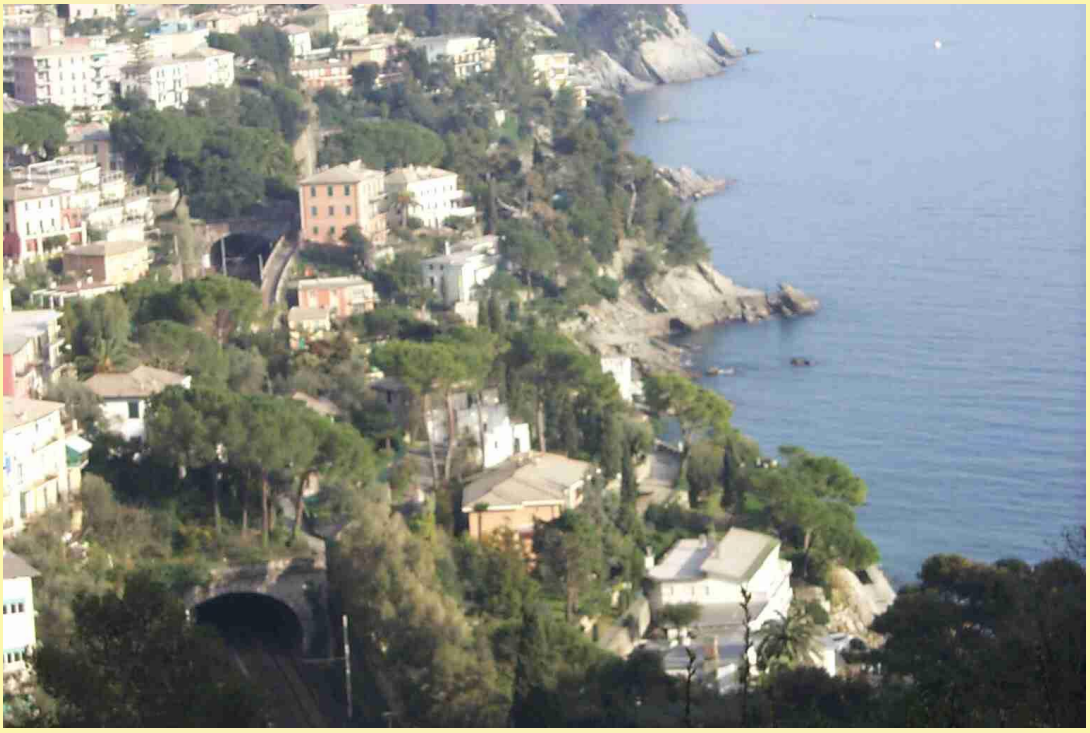
Provincia di Genova

AMBITO REGIONALE DI BACINO 15

PIANO DI BACINO STRALCIO SUL RISCHIO IDROGEOLOGICO

(ai sensi dell'art. 1, comma1, del D.L. 180/1998 convertito in L. 267/1998)

ALLEGATO ID-3
Verifiche idrauliche – Settore C
Fosso Magistrato



Approvato con D.C.P. n. 67 del 12.12.2002
Modificato con D.C.P. n. 24 del 21.03.2007,
e con D.G.P. n. 75 del 30.07.2013

Elaborato	Verificato	Regolarità tecnica	Data	Ed.	Rev.
Ufficio Pianificazione territoriale	Arch. Andrea Pasetti	Arch. Andrea Pasetti	30 luglio 2013	1	1

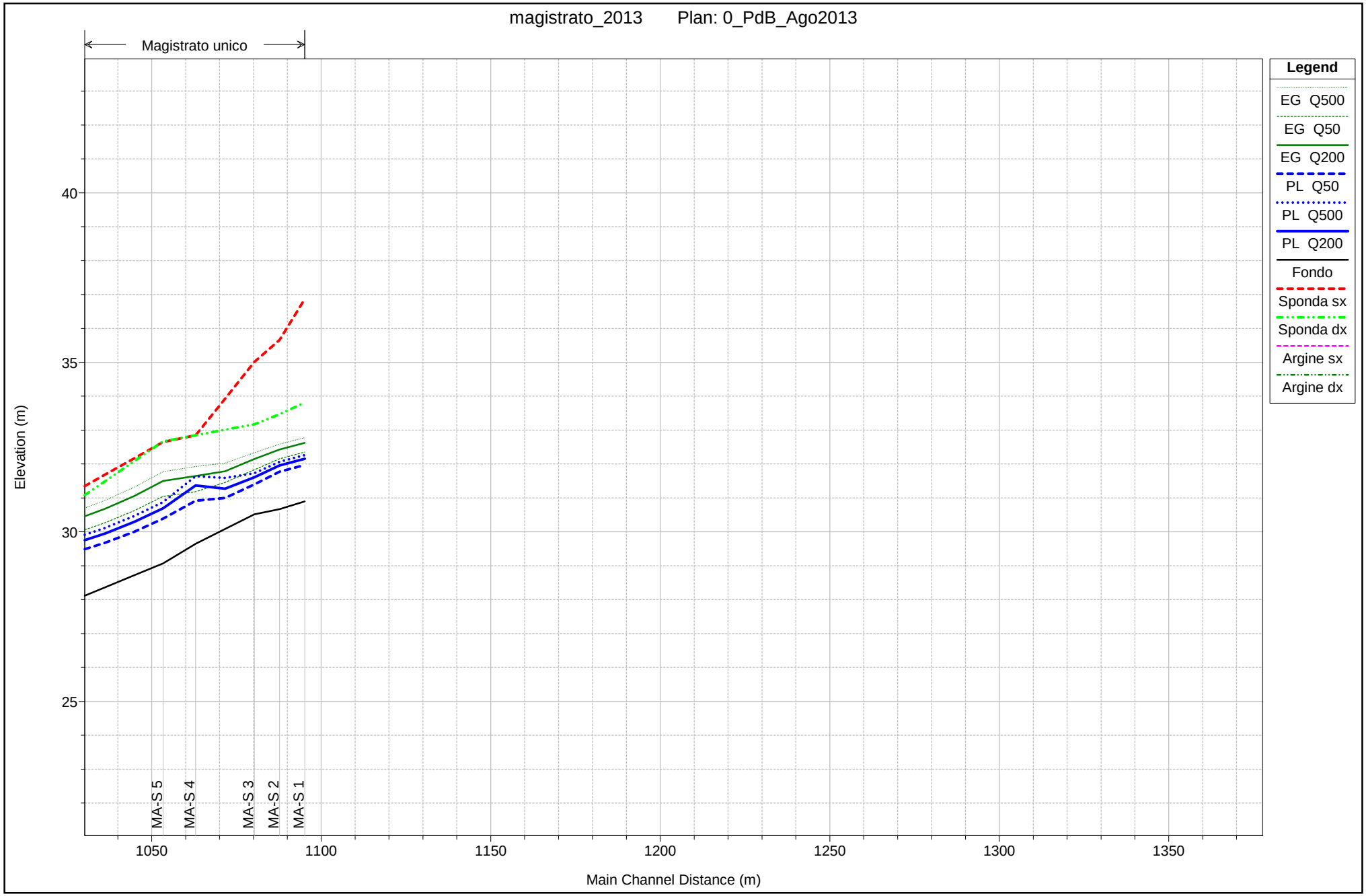
PROVINCIA DI GENOVA - Direzione Pianificazione Generale e di Bacino
Largo F. Cattanei, 3 16147 – Genova Quarto - Telefono 010/5499.1 - fax 010/5499.861
Sistema di gestione della qualità ISO 9001:2008

Fosso Magistrato

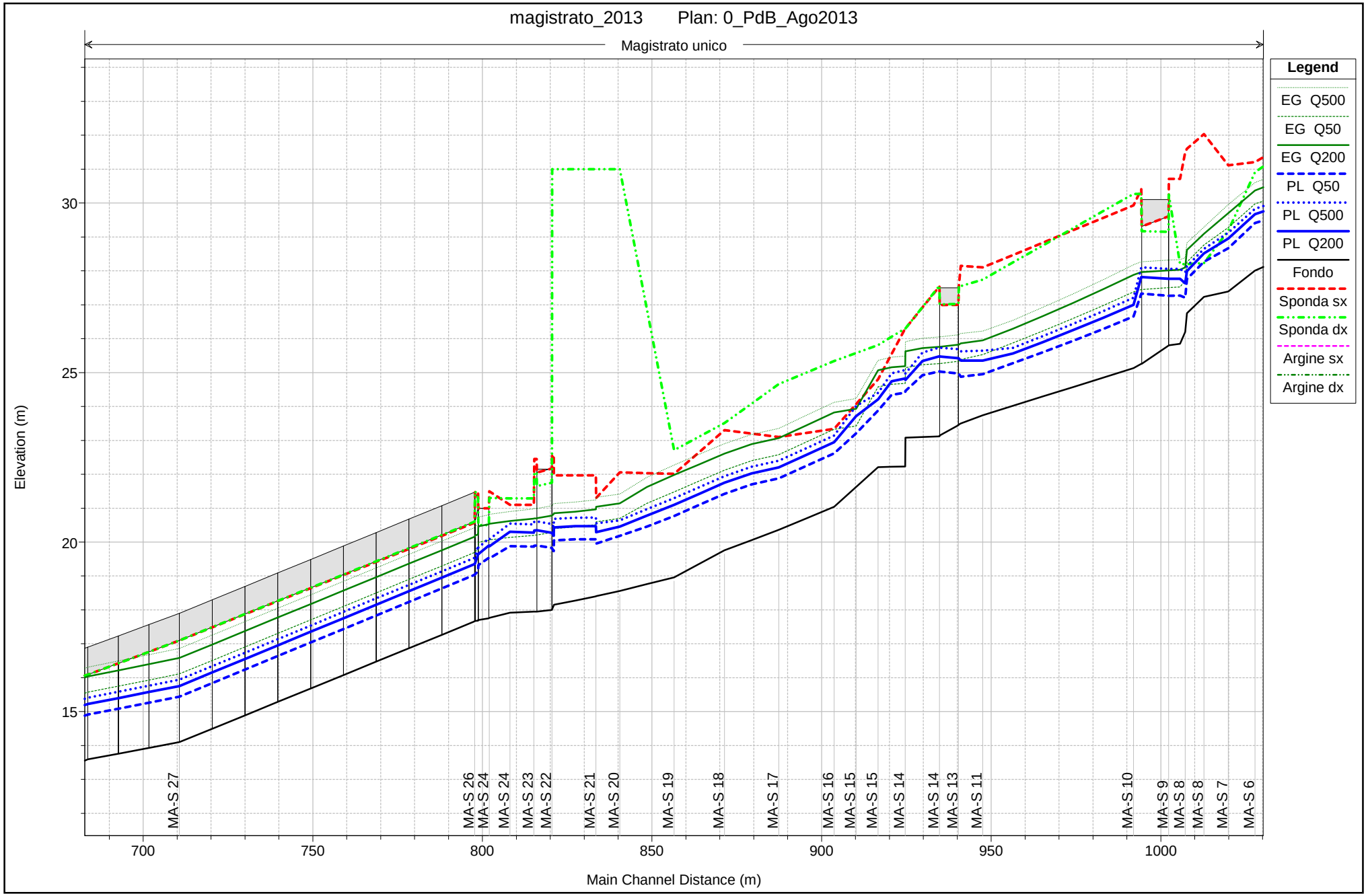
loc. Santa Margherita

dalla sezione MA-S1 alla MA-S57

- Profili di corrente
- Sezioni idrauliche
- Tabelle dei risultati



1 cm Horiz. = 15 m 1 cm Vert. = 1.5 m



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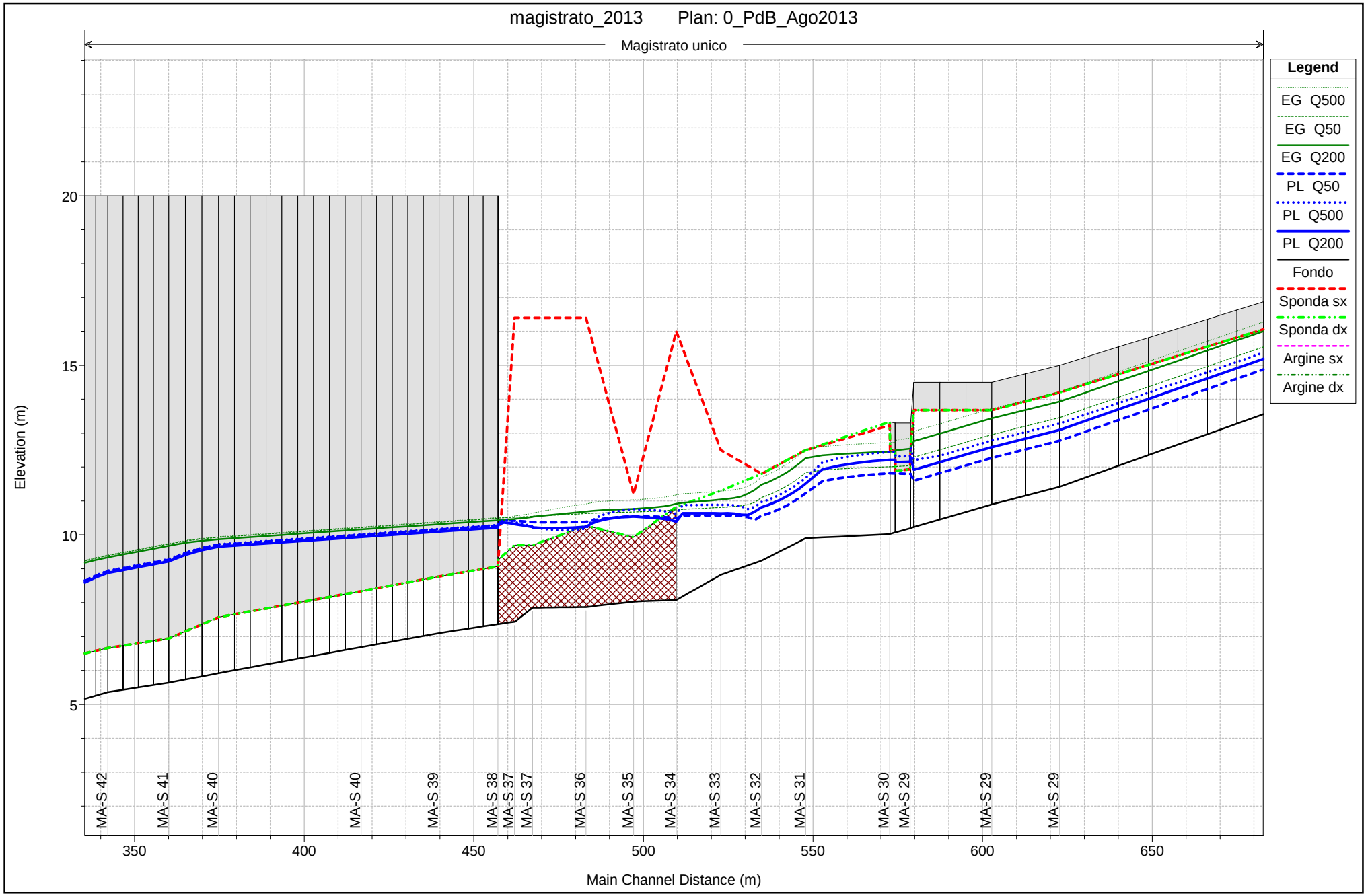

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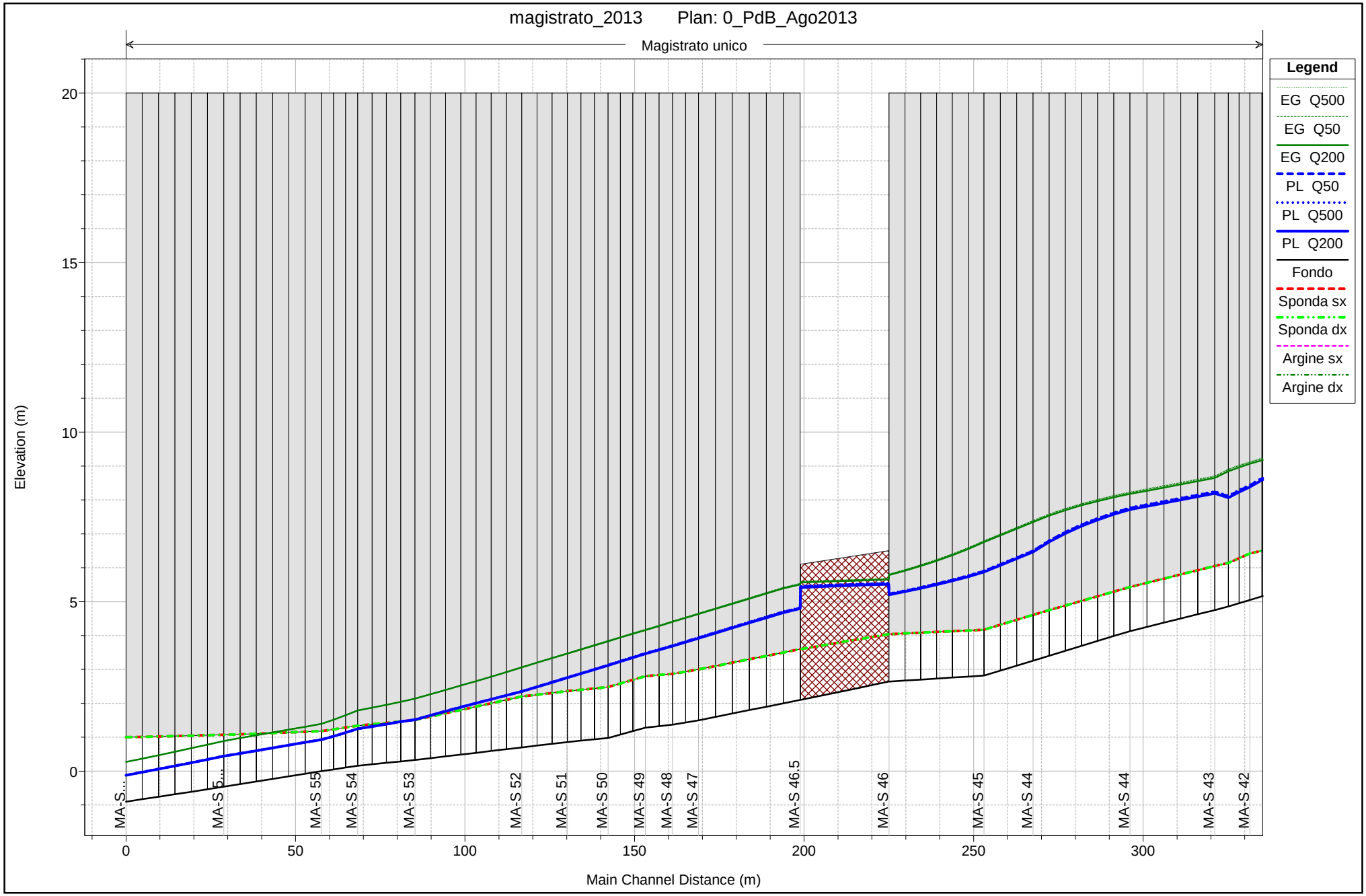

1 cm Horiz. = 15 m 1 cm Vert. = 1.5 m

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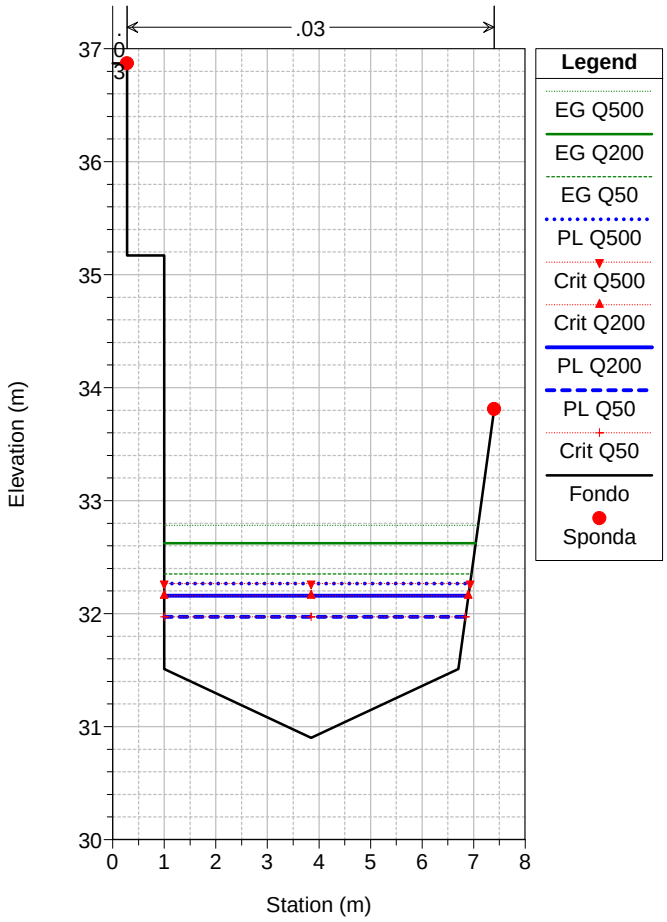

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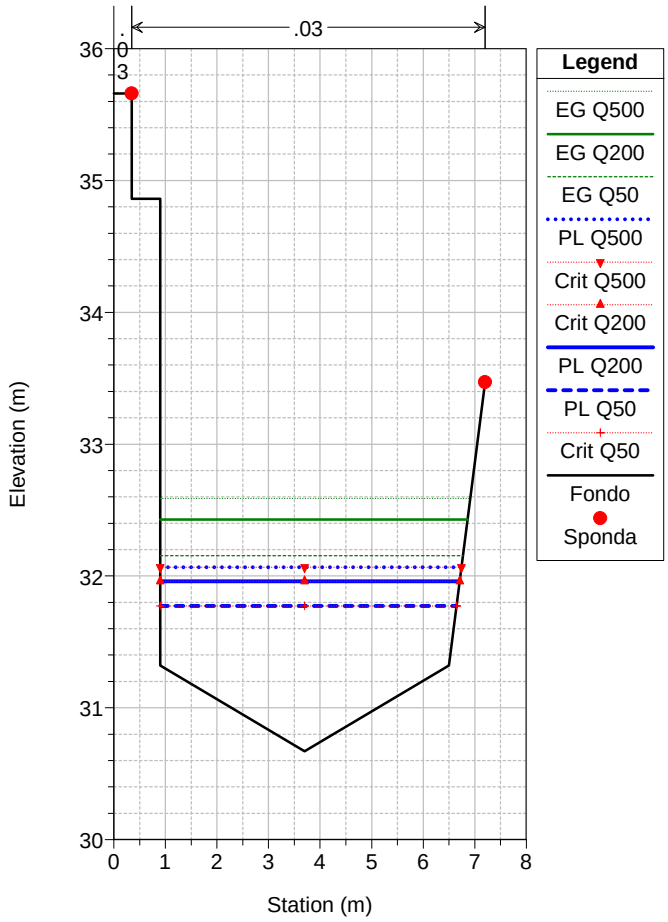

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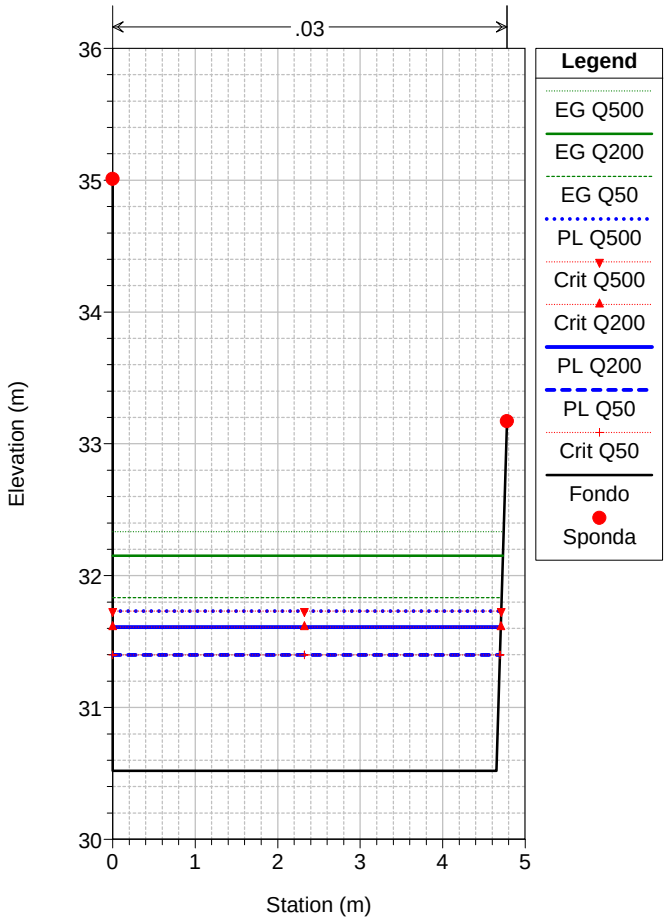
MA-S 3



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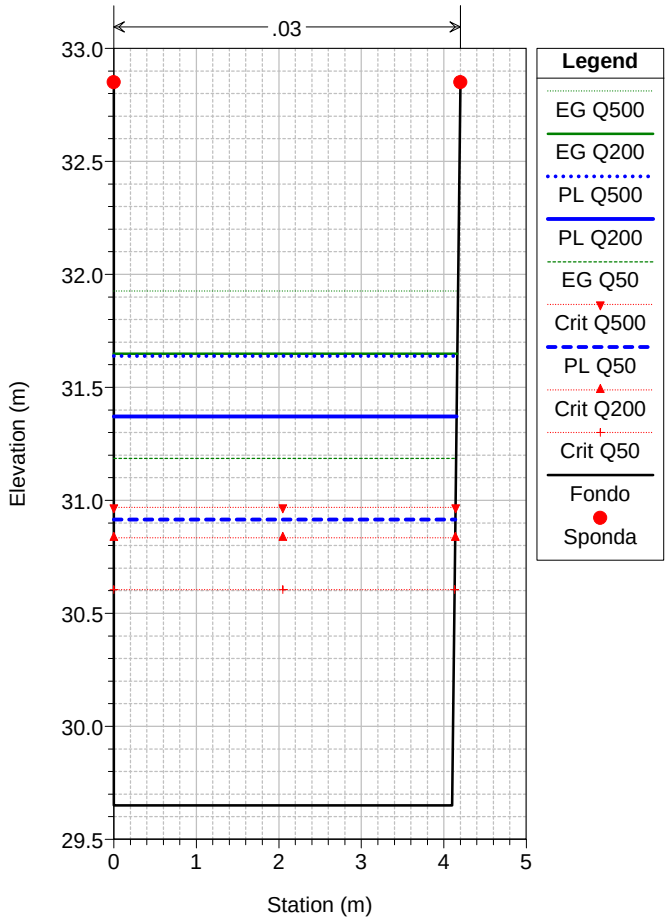

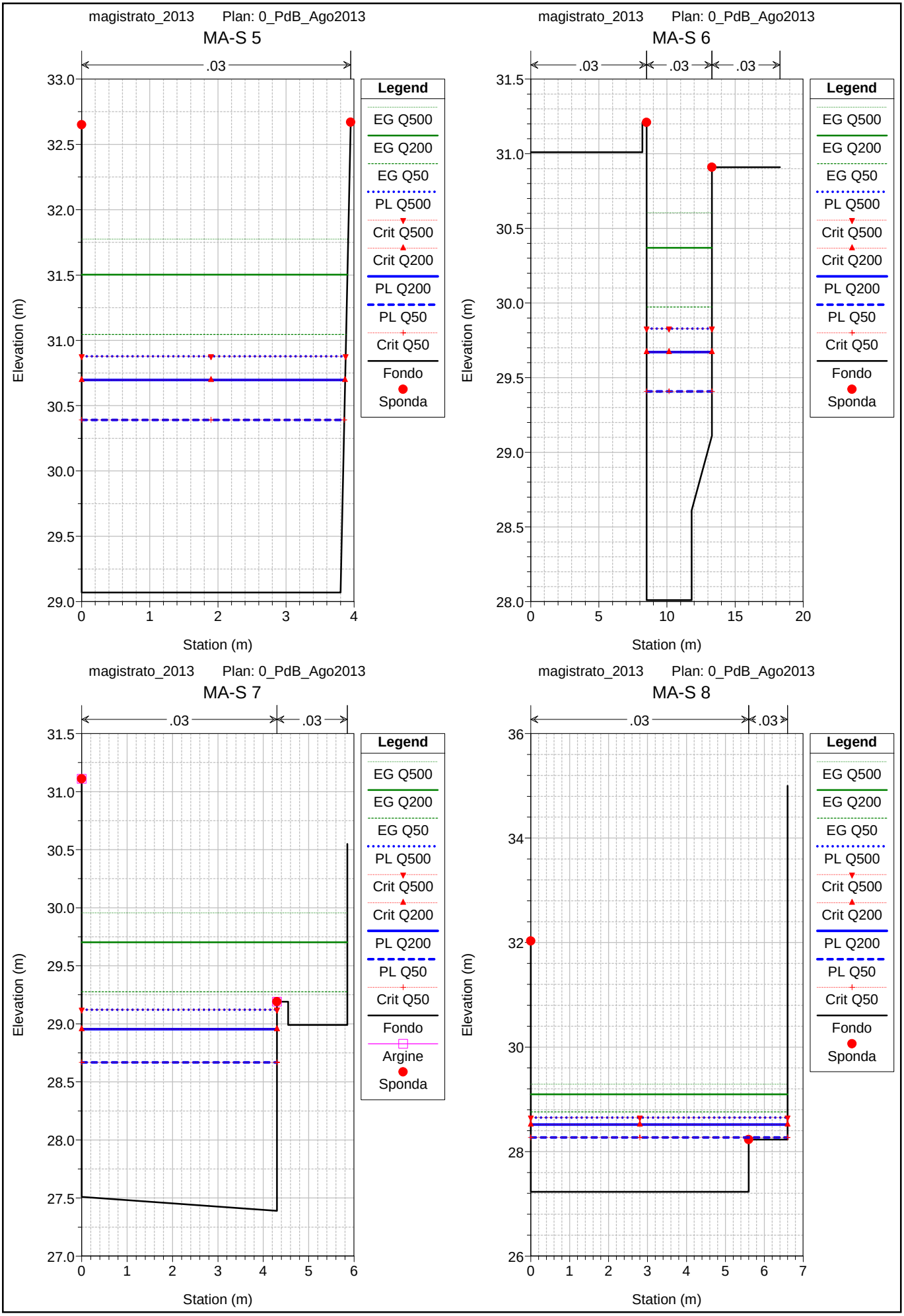
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MA-S 5
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Elevation (m)
Station (m)
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Crit Q500
Crit Q200
PL Q200
PL Q50
Crit Q50
Fondo
Sponda
magistrato_2013 Plan: 0_PdB_Ago2013
MA-S 6
.03
.03
.03
Elevation (m)
Station (m)
Legend
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EG Q200
EG Q50
PL Q500
Crit Q500
Crit Q200
PL Q200
PL Q50
Crit Q50
Fondo
Sponda
magistrato_2013 Plan: 0_PdB_Ago2013
MA-S 7
.03
.03
Elevation (m)
Station (m)
Legend
EG Q500
EG Q200
EG Q50
PL Q500
Crit Q500
Crit Q200
PL Q200
PL Q50
Crit Q50
Fondo
Argine
Sponda
magistrato_2013 Plan: 0_PdB_Ago2013
MA-S 8
.03
.03
Elevation (m)
Station (m)
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EG Q50
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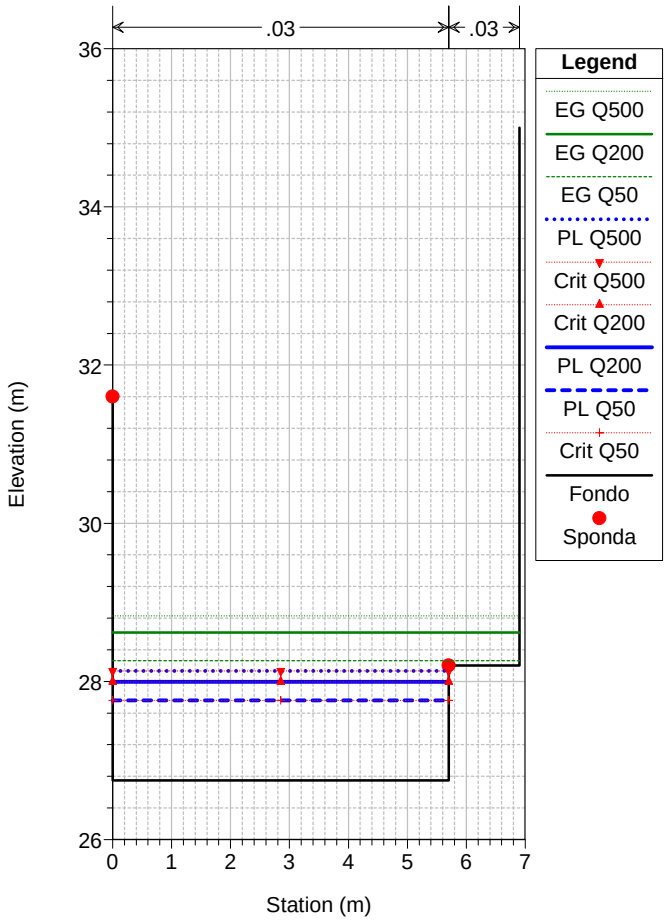
PL Q50
Crit Q50
Fondo
Sponda

magistrato_2013 Plan: 0_PdB_Ago2013

MA-S 8



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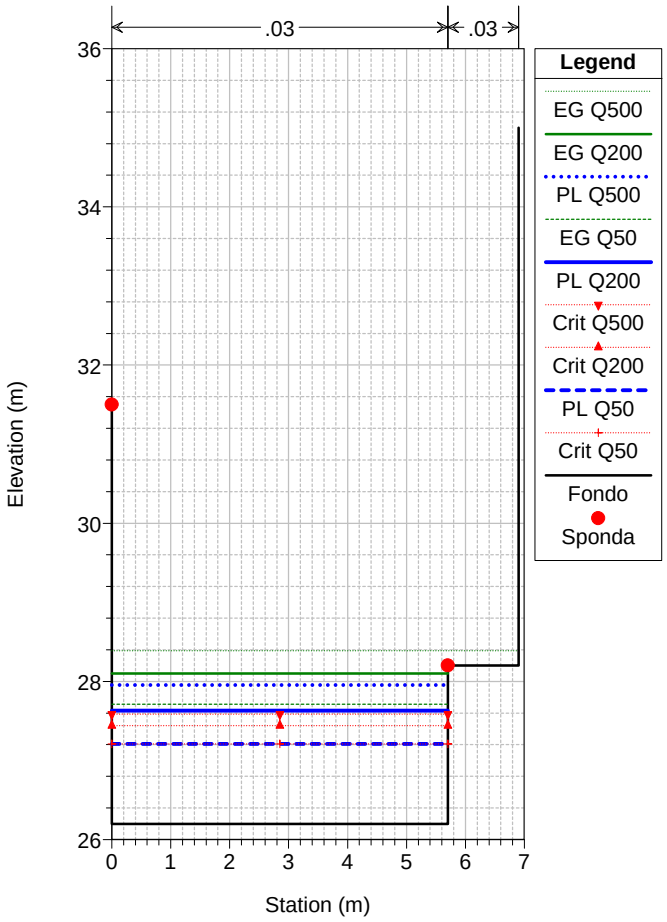
MA-S 8



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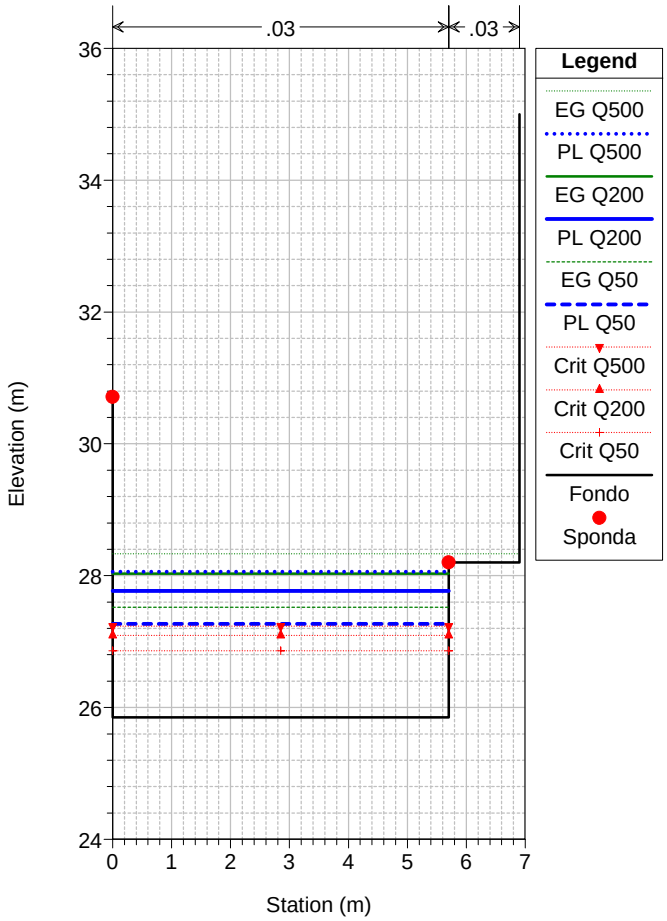
MA-S 9



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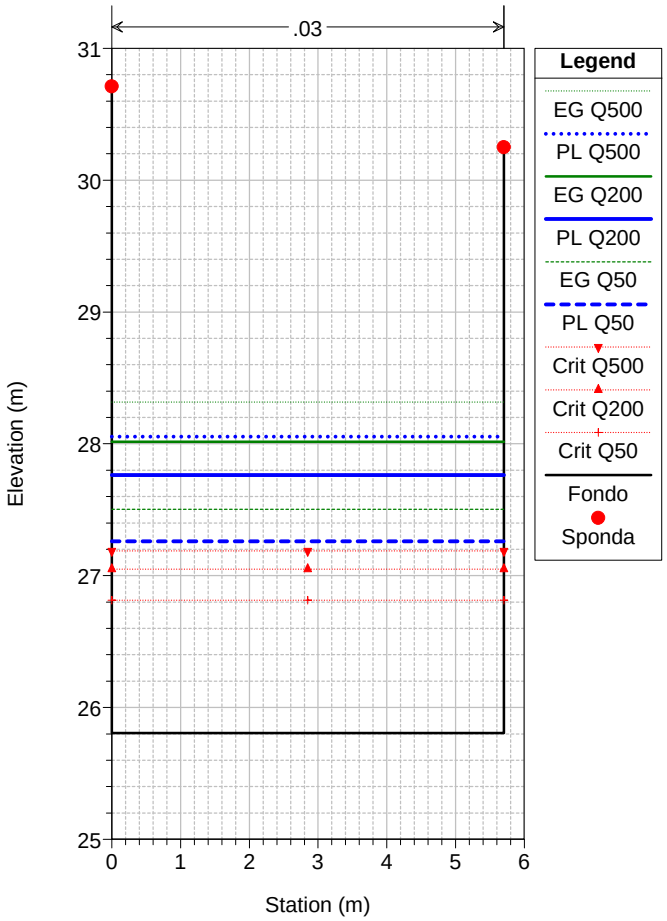

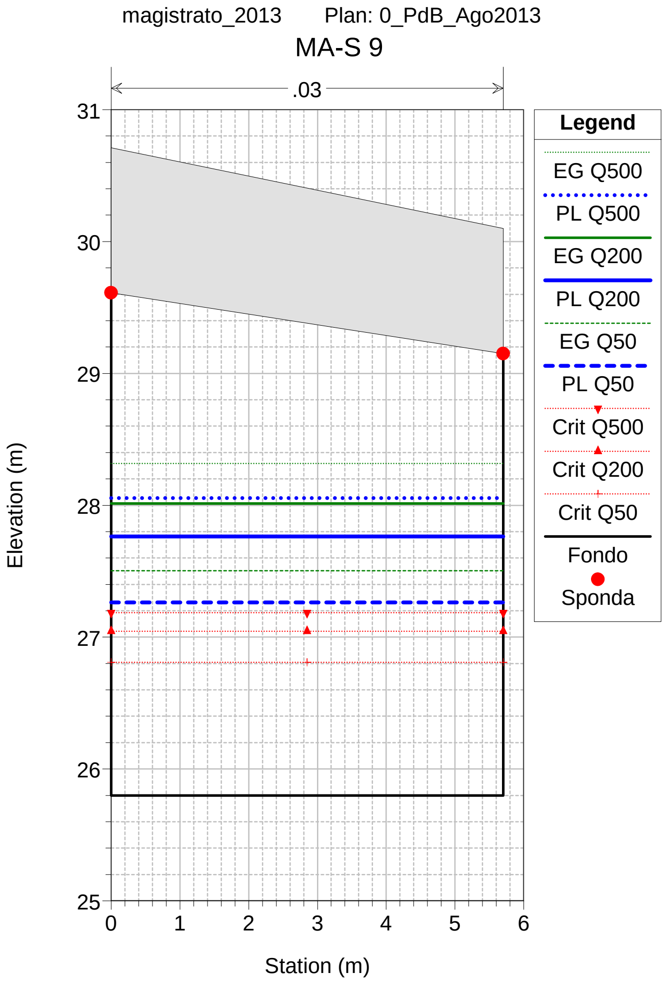
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MA-S 9
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Elevation (m)
Station (m)
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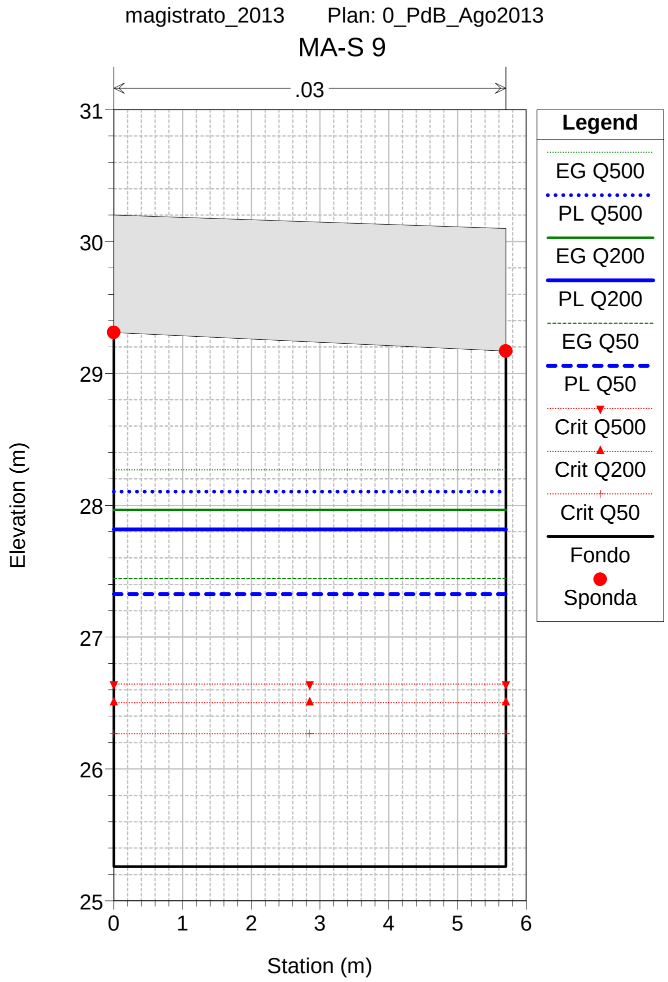
PL Q200
EG Q50
PL Q50
Crit Q500
Crit Q200
Crit Q50
Fondo
Sponda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MA-S 9
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Elevation (m)
Station (m)
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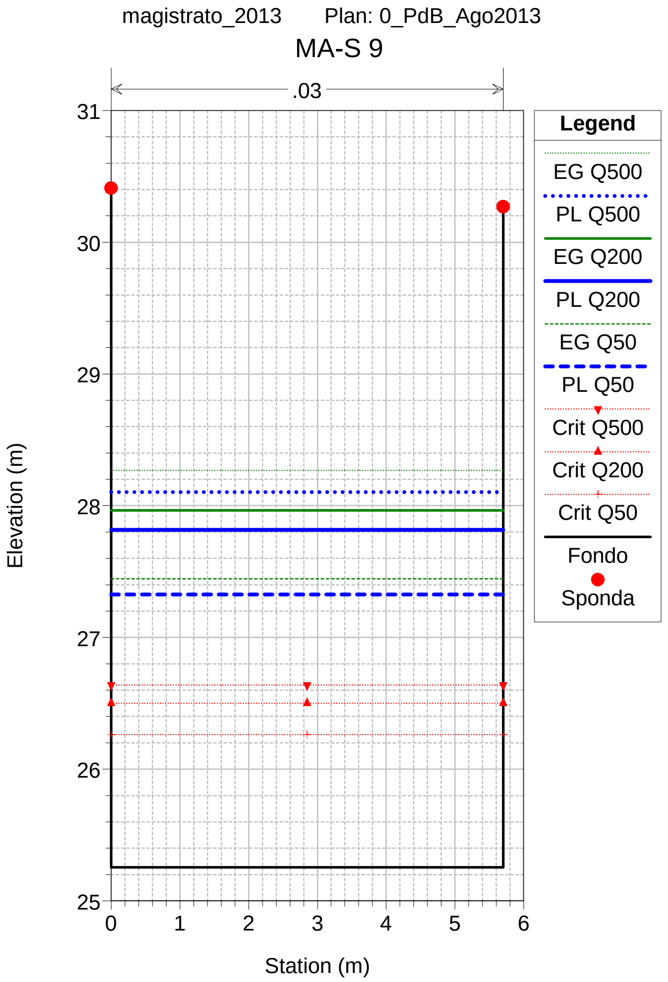
PL Q500
EG Q200
PL Q200
EG Q50
PL Q50
Crit Q500
Crit Q200
Crit Q50
Fondo
Sponda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MA-S 9
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Elevation (m)
Station (m)
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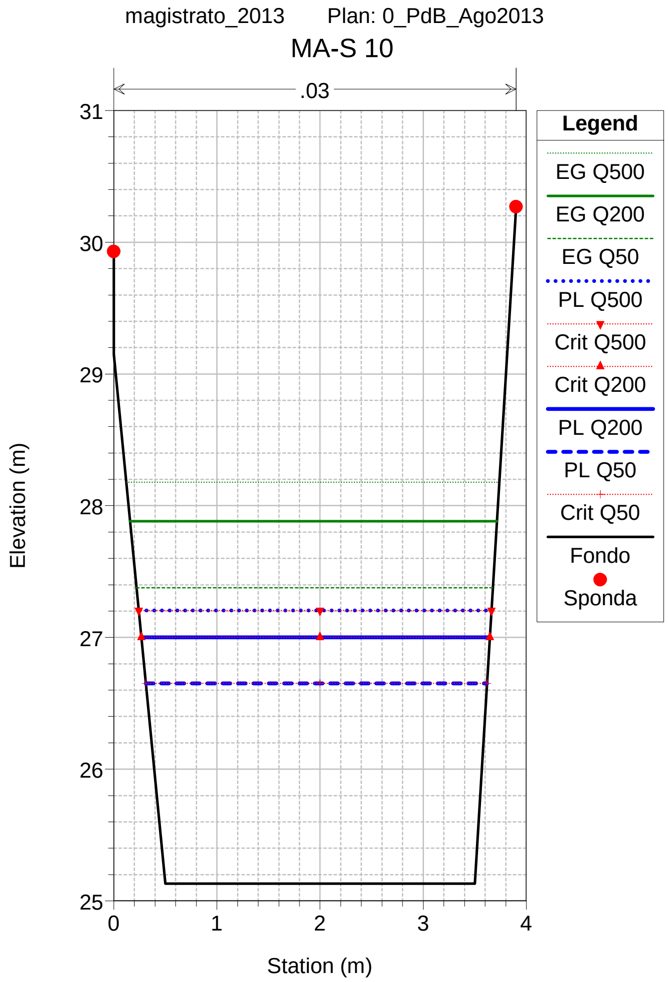
PL Q200
EG Q50
PL Q50
Crit Q500
Crit Q200
Crit Q50
Fondo
Sponda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MA-S 10
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Elevation (m)
Station (m)
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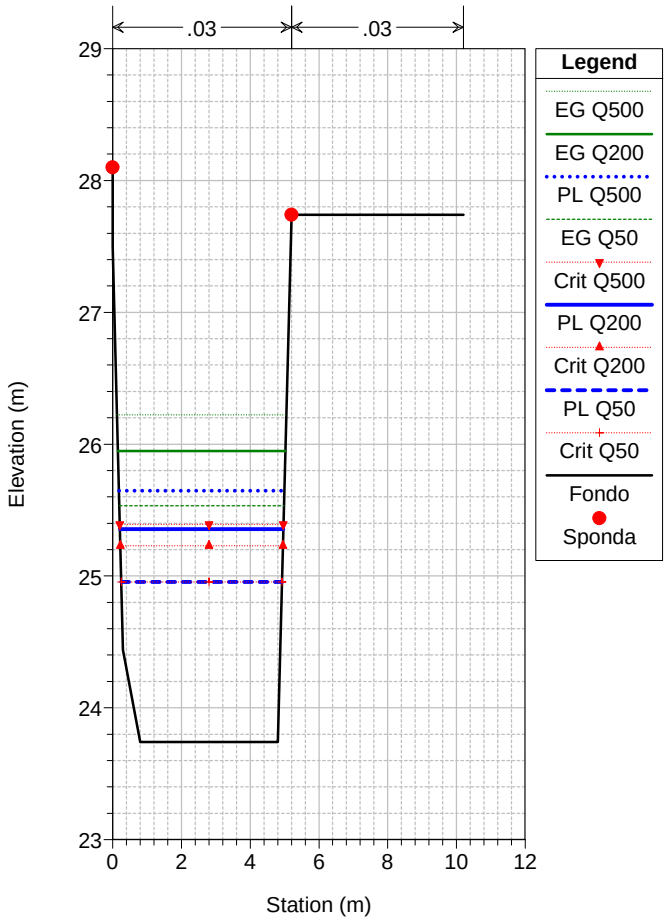
EG Q200
EG Q50
PL Q500
Crit Q500
Crit Q200
PL Q200
PL Q50
Crit Q50
Fondo
Sponda

magistrato_2013 Plan: 0_PdB_Ago2013

MA-S 11



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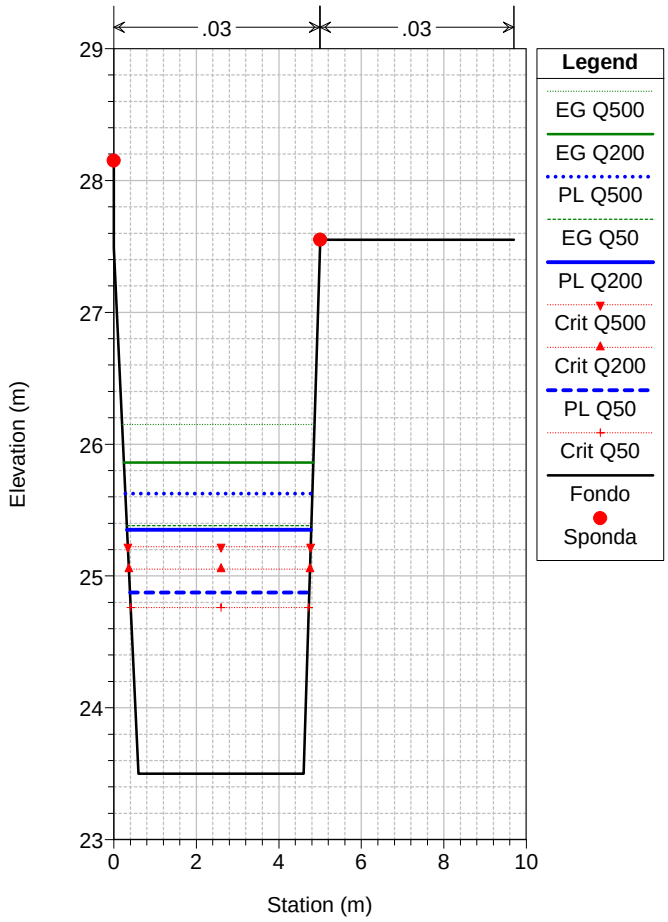
MA-S 12



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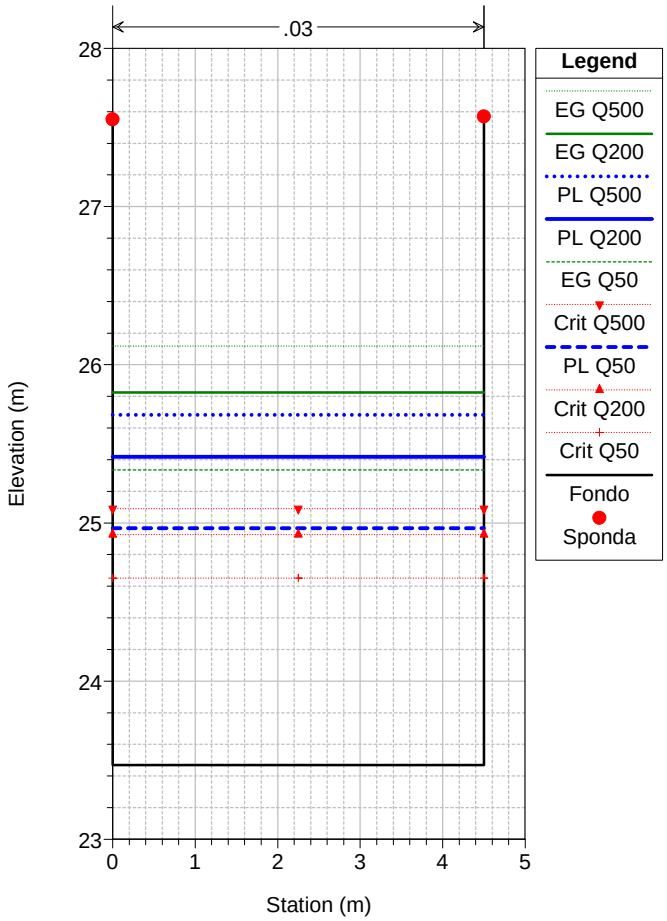

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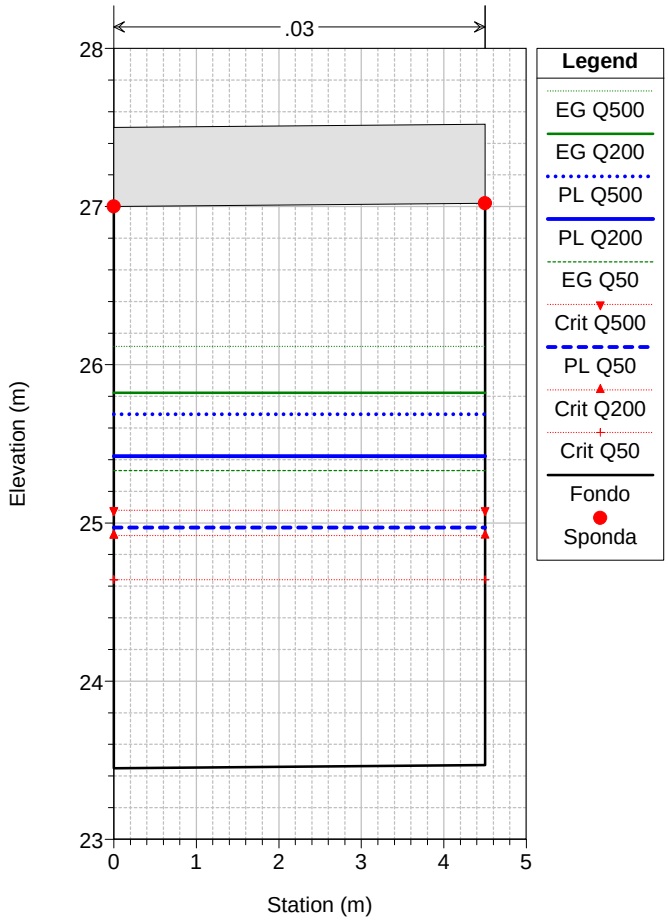
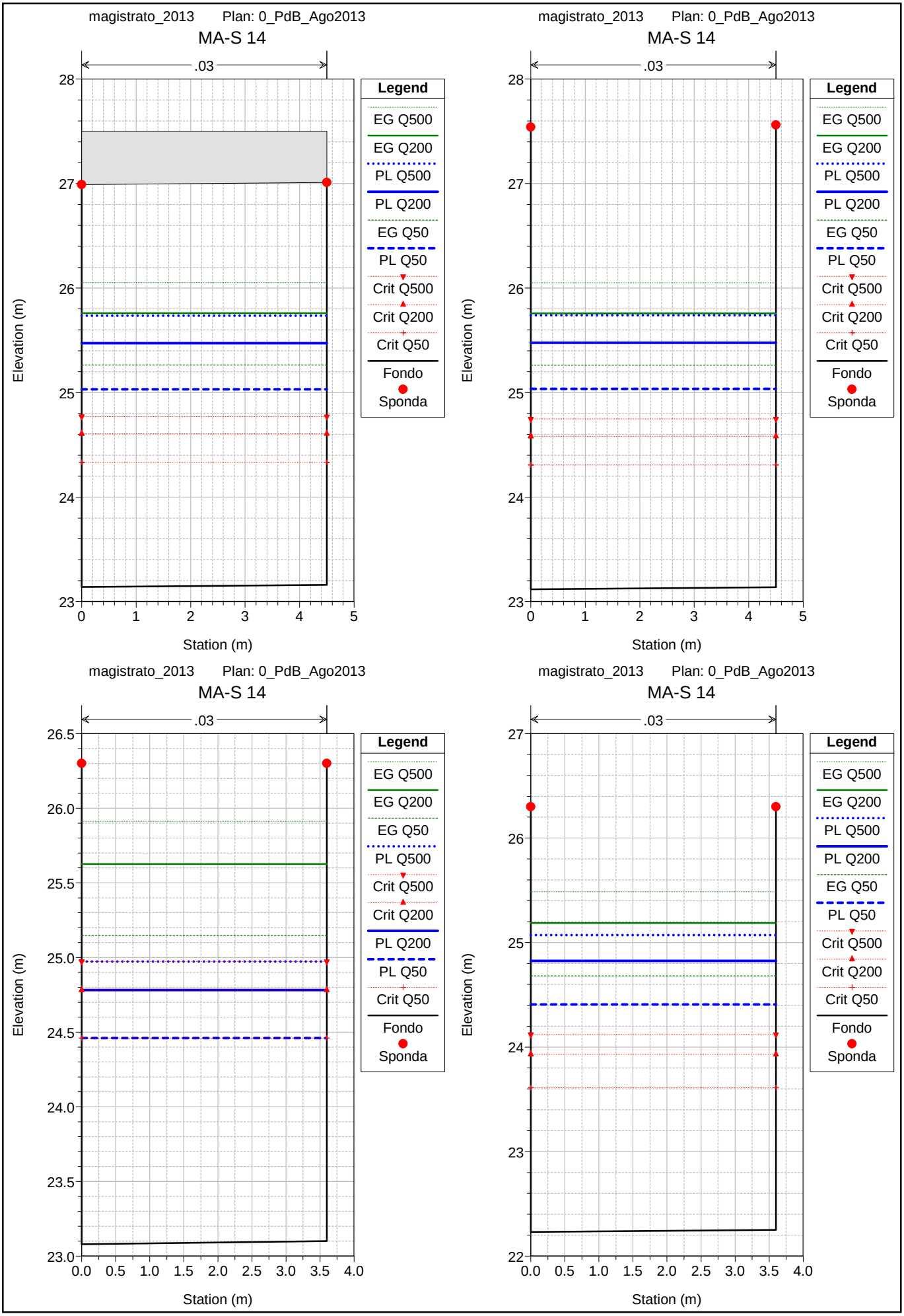
MA-S 13

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MA-S 14
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Legend
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EG Q200
PL Q500
PL Q200
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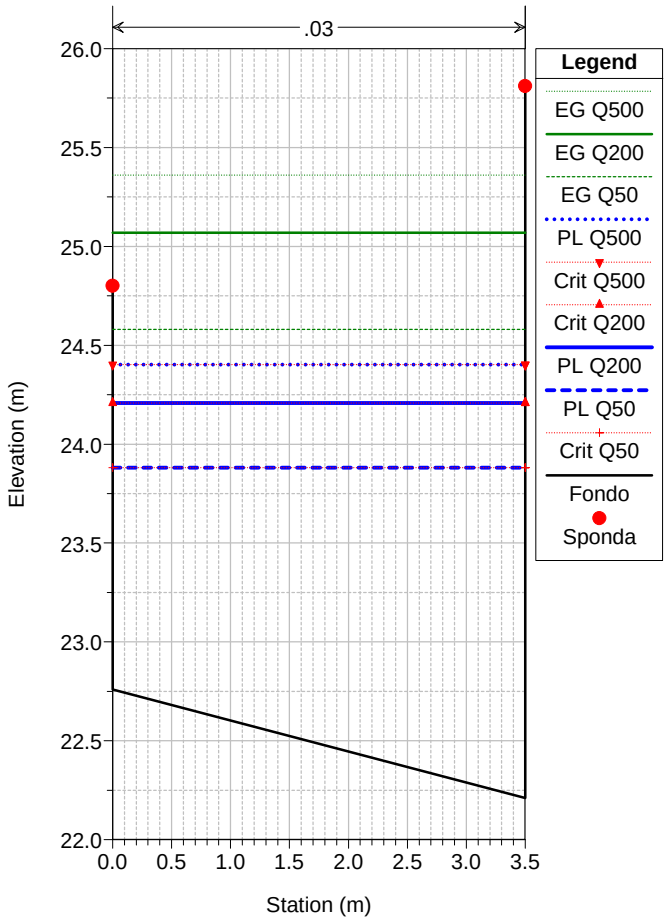
PL Q50
Crit Q500
Crit Q200
Crit Q50
Fondo
Sponda
Elevation (m)
Station (m)
magistrato_2013 Plan: 0_PdB_Ago2013
MA-S 14
.03
Legend
EG Q500
EG Q200
PL Q500
PL Q200
EG Q50
PL Q50
Crit Q500
Crit Q200
Crit Q50
Fondo
Sponda
Elevation (m)
Station (m)
magistrato_2013 Plan: 0_PdB_Ago2013
MA-S 14
.03
Legend
EG Q500
EG Q200
EG Q50
PL Q500
Crit Q500
Crit Q200
PL Q200
PL Q50
Crit Q50
Fondo
Sponda
Elevation (m)
Station (m)
magistrato_2013 Plan: 0_PdB_Ago2013
MA-S 14
.03
Legend
EG Q500
EG Q200
PL Q500
PL Q200
EG Q50
PL Q50
Crit Q500
Crit Q200
Crit Q50
Fondo
Sponda
Elevation (m)
Station (m)

magistrato_2013 Plan: 0_PdB_Ago2013

MA-S 15



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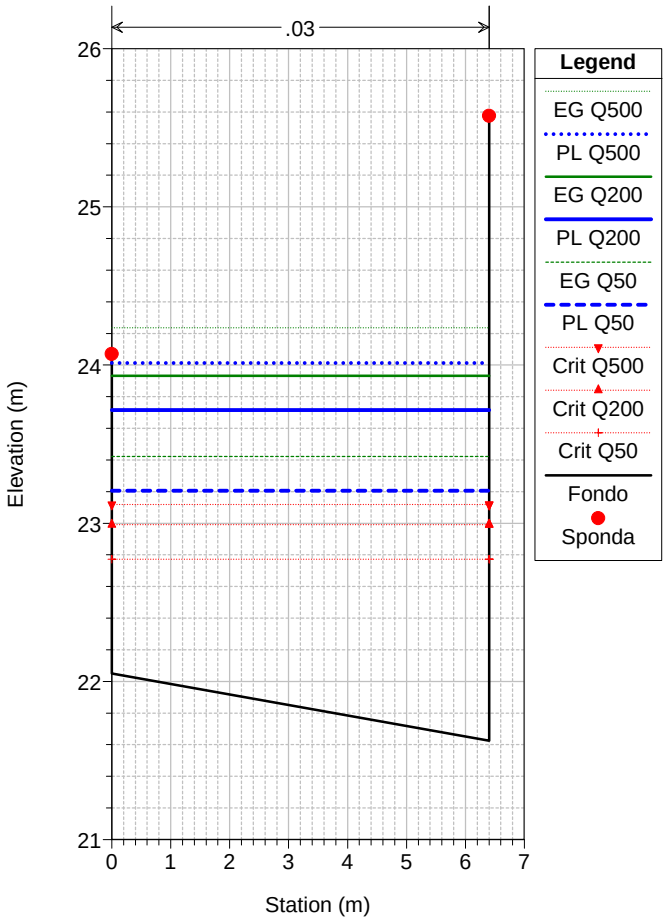
MA-S 15



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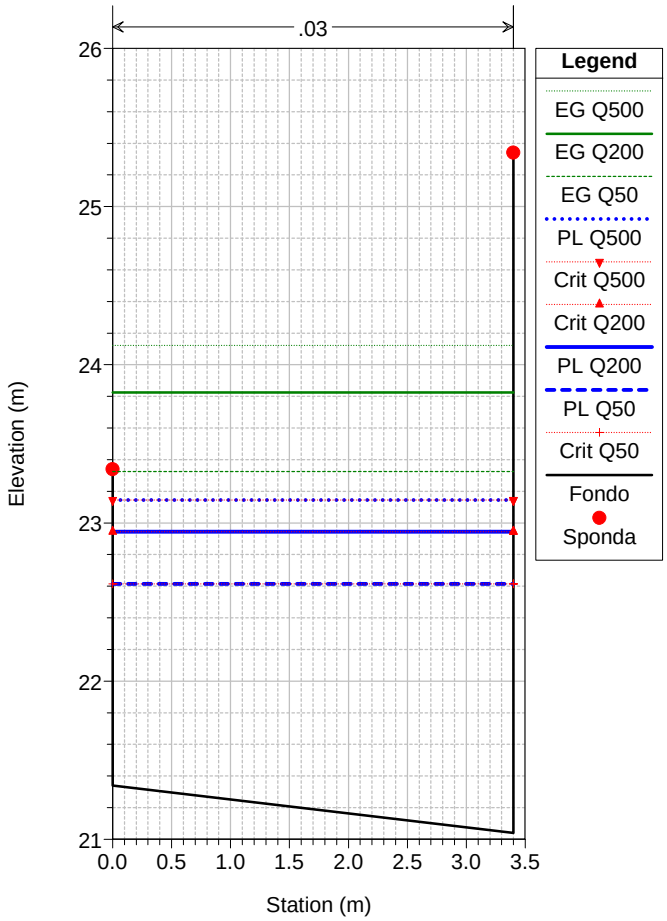
MA-S 16



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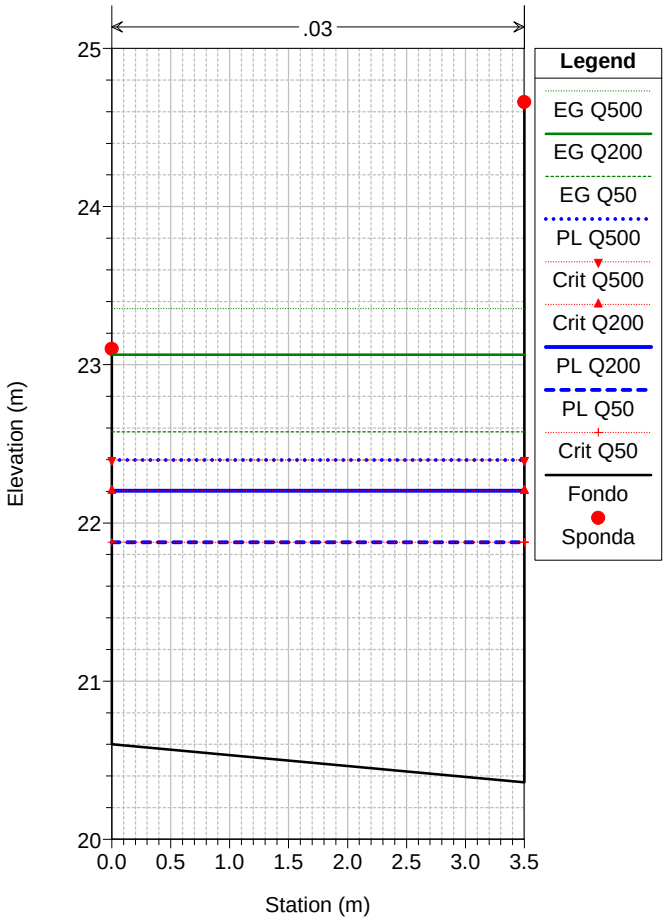
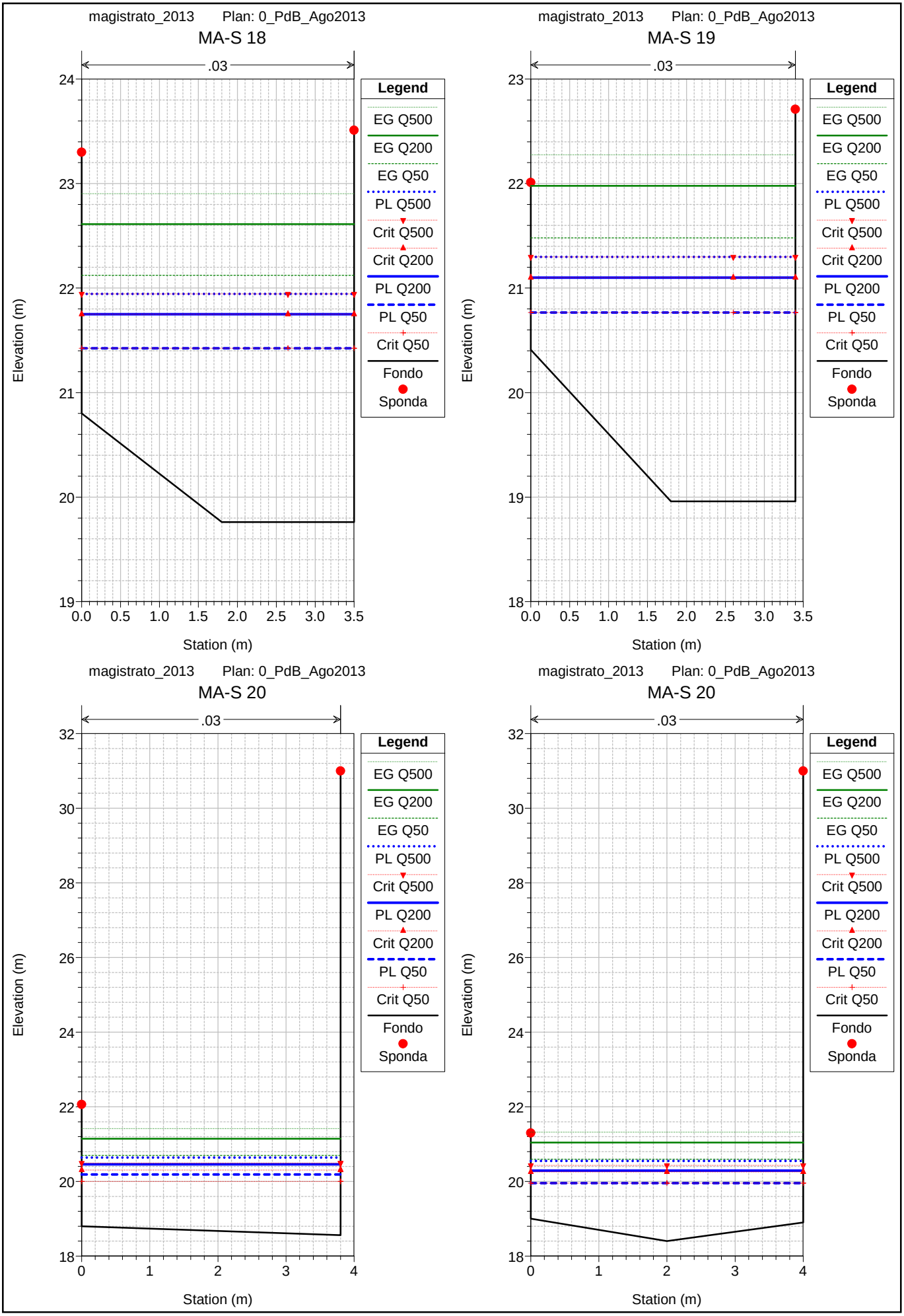
MA-S 17

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Crit Q200
PL Q200
PL Q50
Crit Q50
Fondo
Sponda
Elevation (m)
Station (m)
magistrato_2013 Plan: 0_PdB_Ago2013
MA-S 19
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EG Q50
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Crit Q200
PL Q200
PL Q50
Crit Q50
Fondo
Sponda
Elevation (m)
Station (m)
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MA-S 20
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PL Q200
Crit Q200
PL Q50
Crit Q50
Fondo
Sponda
Elevation (m)
Station (m)
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EG Q200
EG Q50
PL Q500
Crit Q500
PL Q200
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Fondo
Sponda
Elevation (m)
Station (m)

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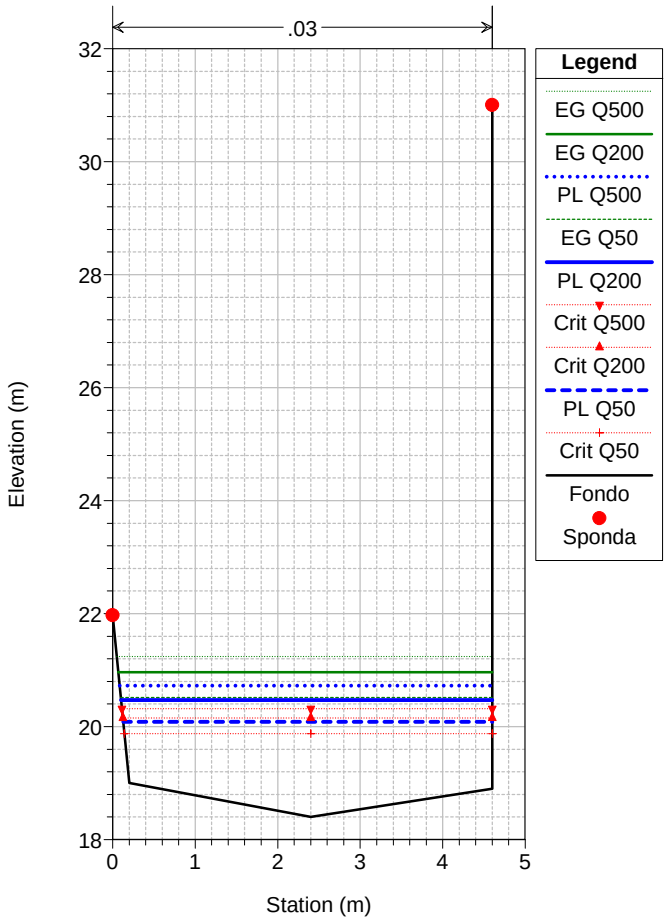
MA-S 21



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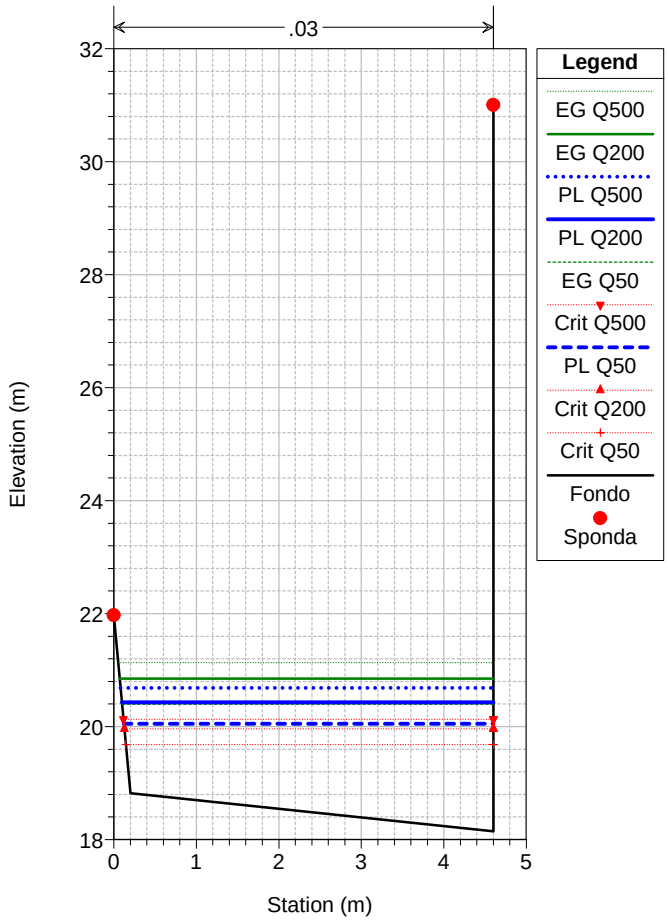

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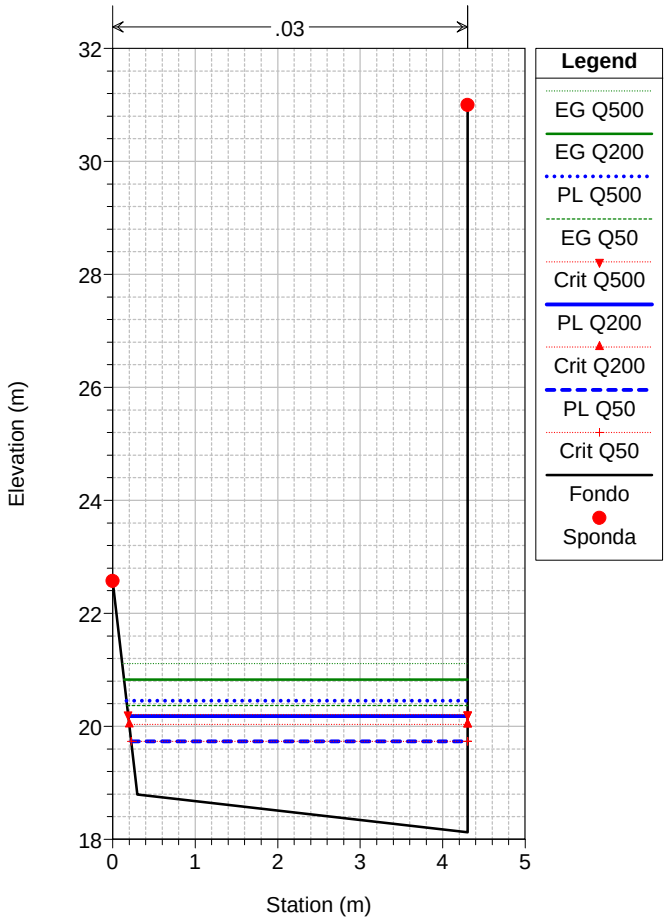
MA-S 21



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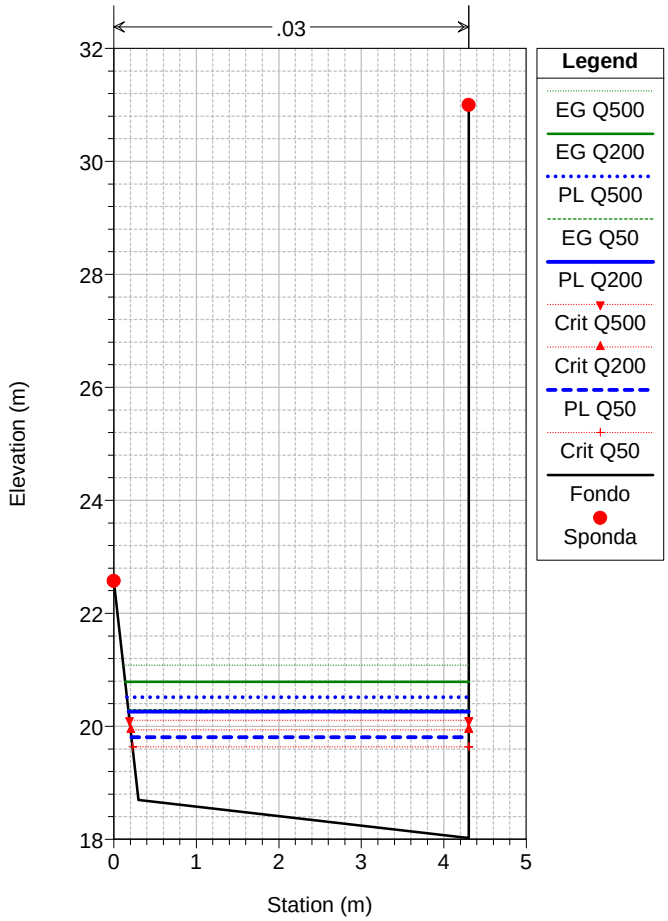
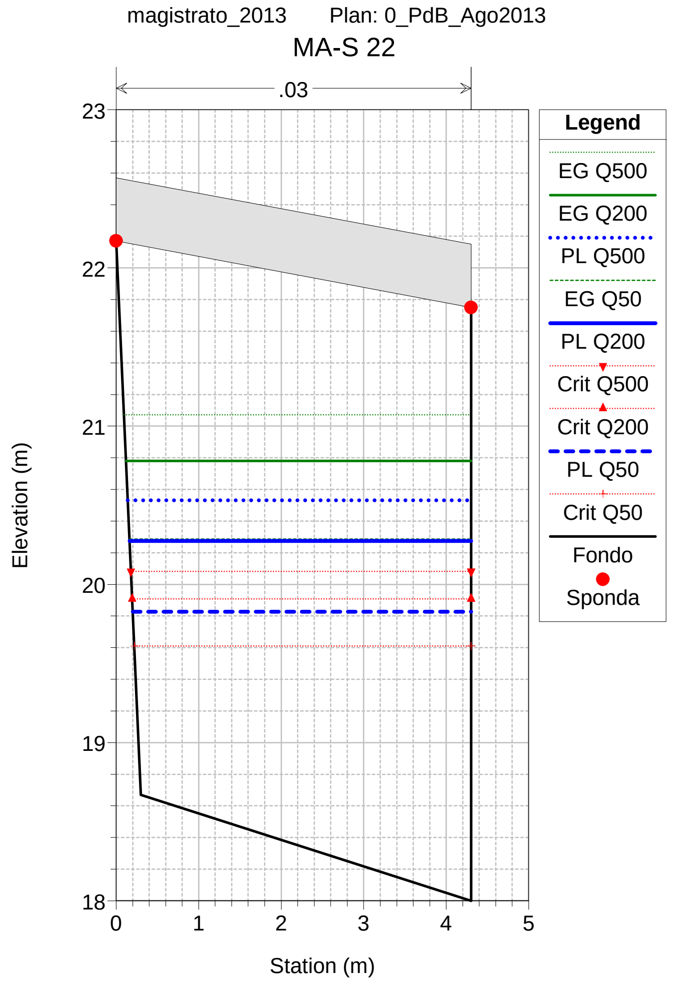
MA-S 21

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MA-S 22
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Elevation (m)
Station (m)
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EG Q50
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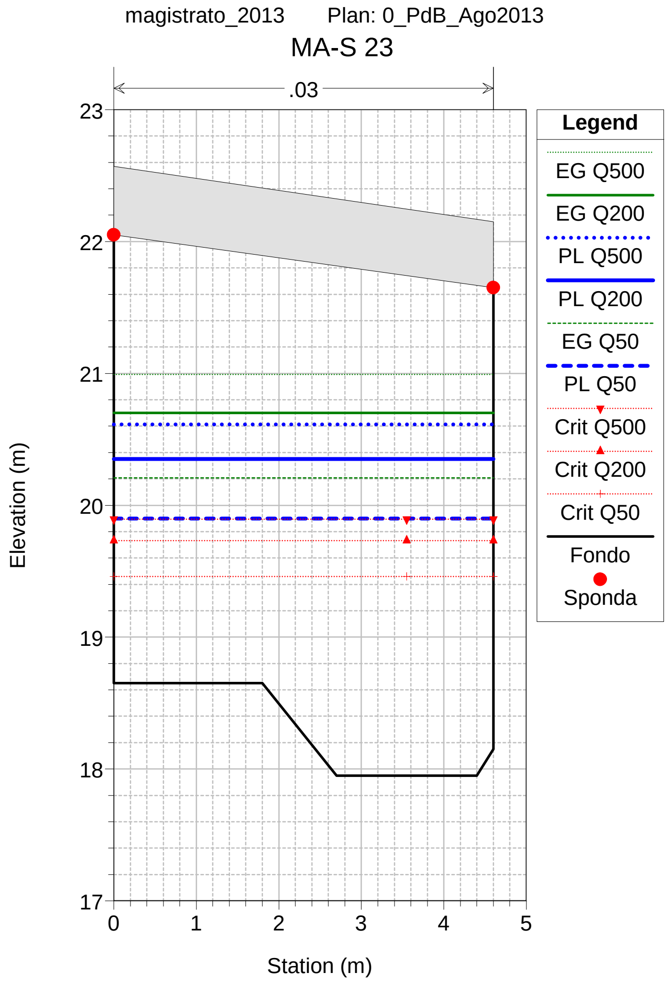
Crit Q500
Crit Q200
PL Q50
Crit Q50
Fondo
Sponda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MA-S 23
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Elevation (m)
Station (m)
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PL Q200
EG Q50
PL Q50
Crit Q500
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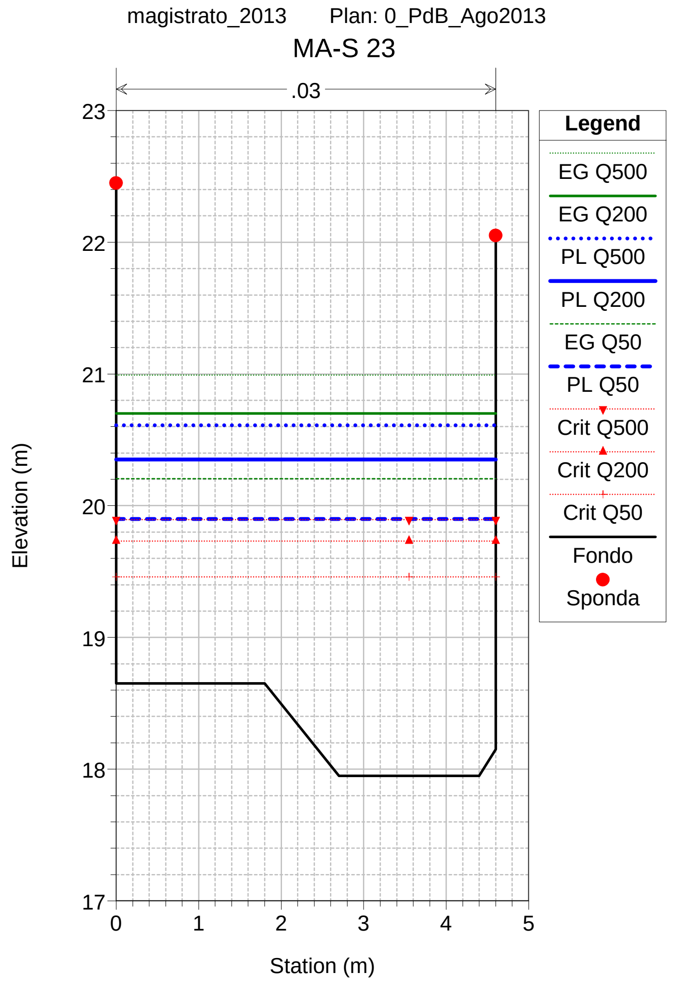
Sponda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MA-S 23
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Elevation (m)
Station (m)
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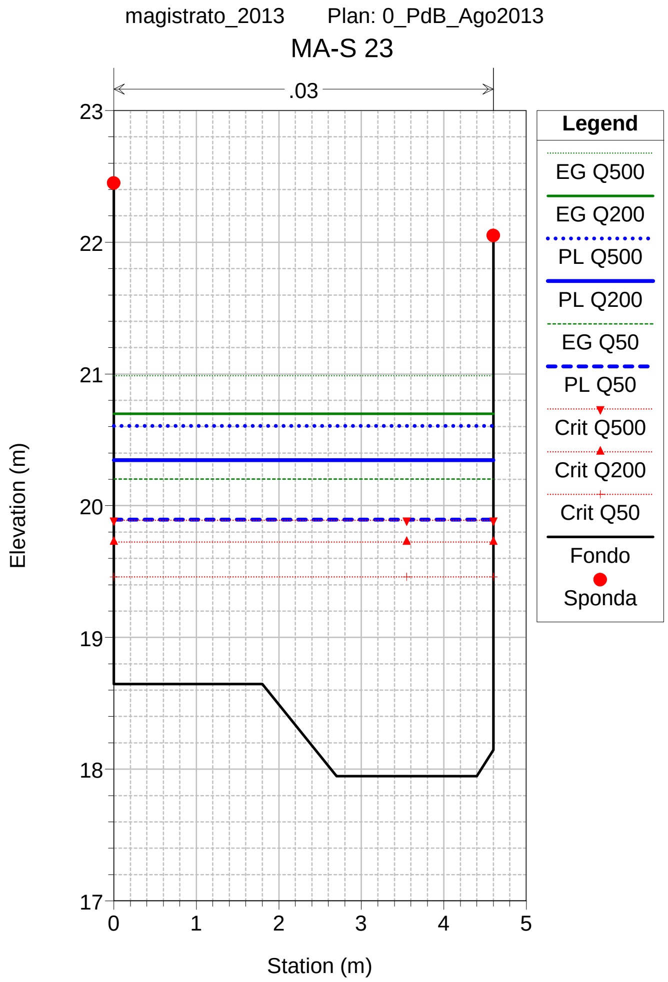
EG Q50
PL Q50
Crit Q500
Crit Q200
Crit Q50
Fondo
Sponda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MA-S 23
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Elevation (m)
Station (m)
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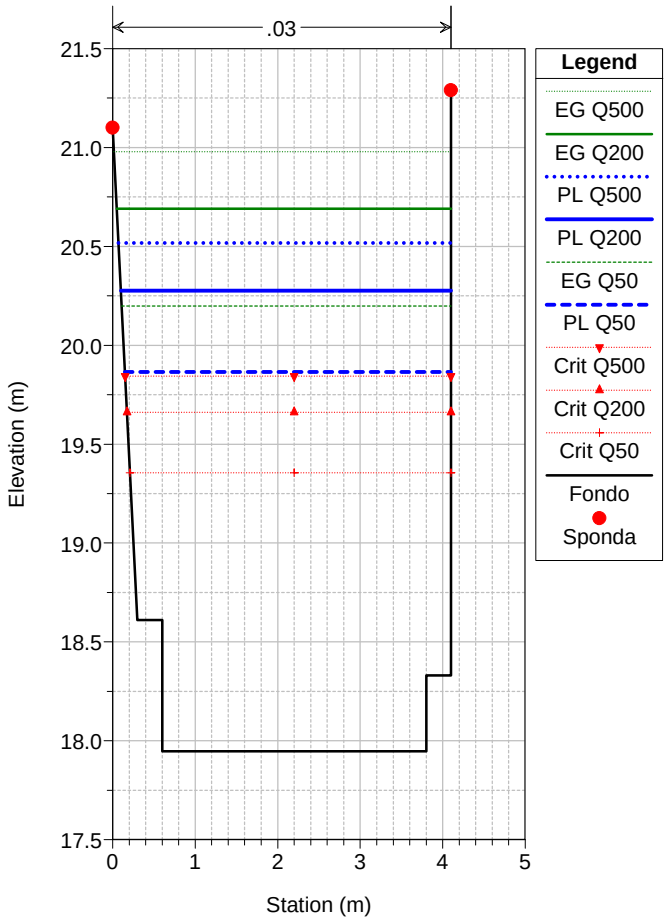
EG Q50
PL Q50
Crit Q500
Crit Q200
Crit Q50
Fondo
Sponda

magistrato_2013 Plan: 0_PdB_Ago2013

MA-S 23



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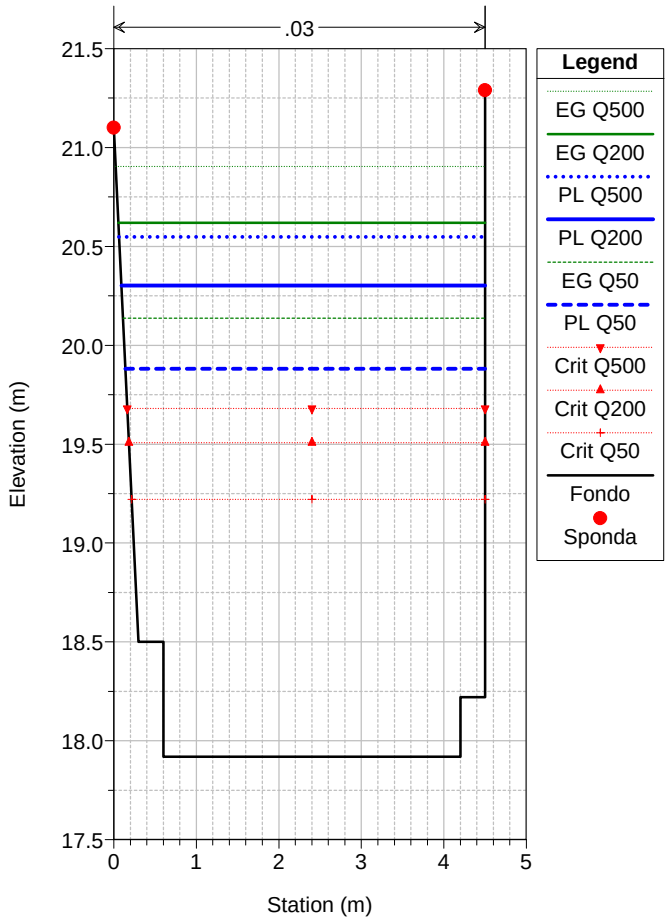
MA-S 24



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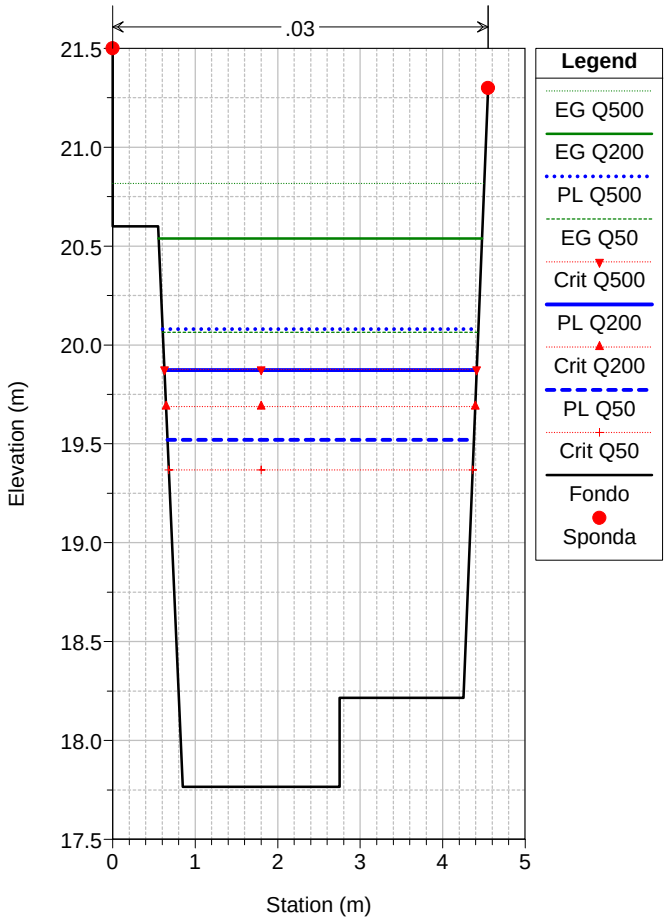
MA-S 24



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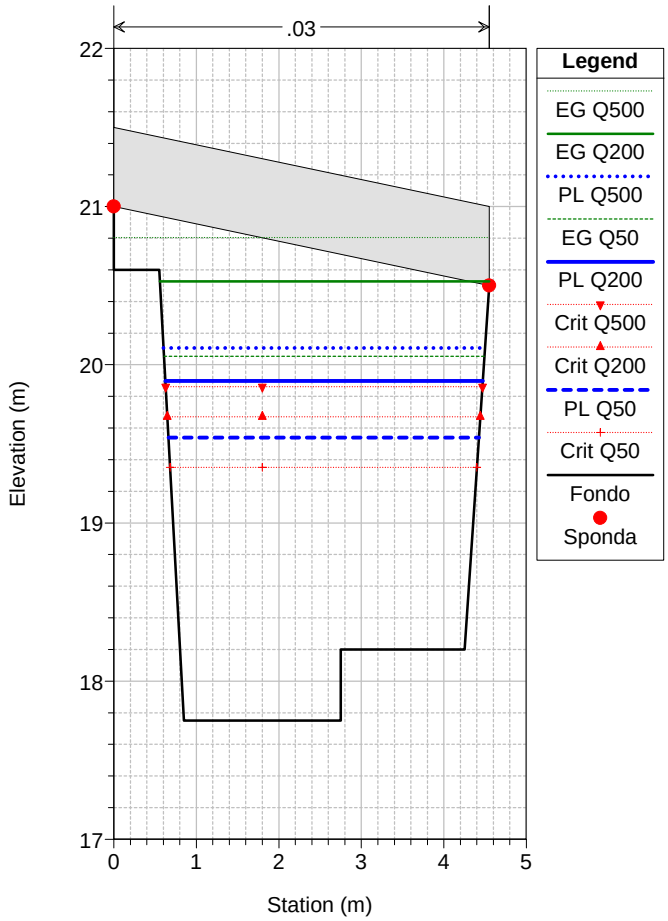
MA-S 25



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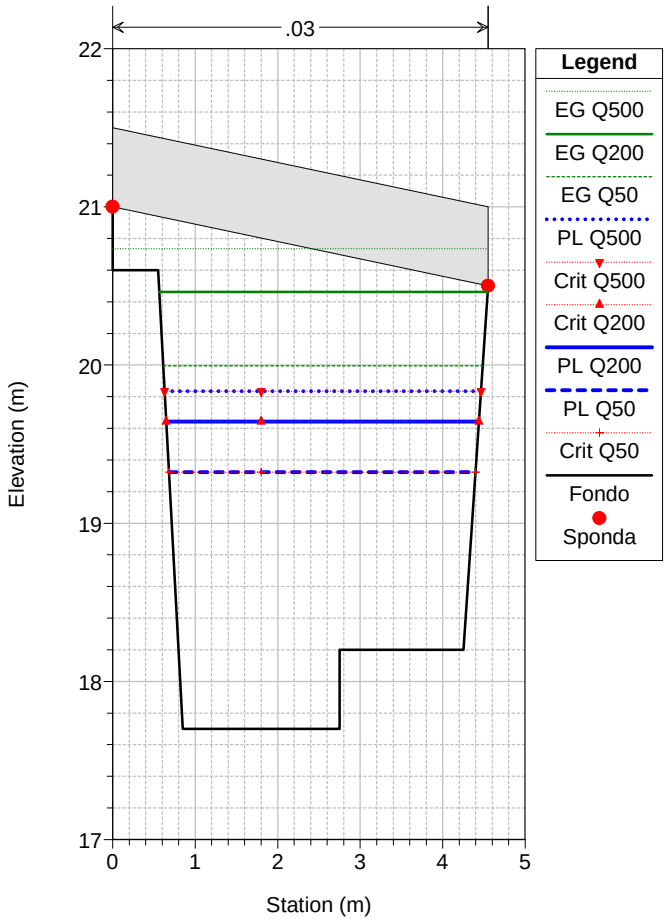

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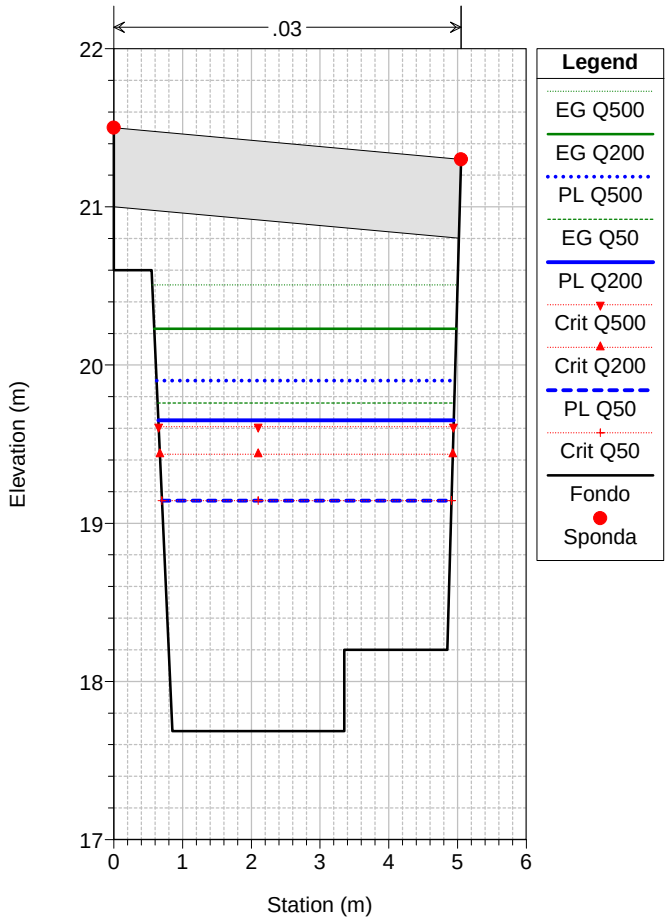
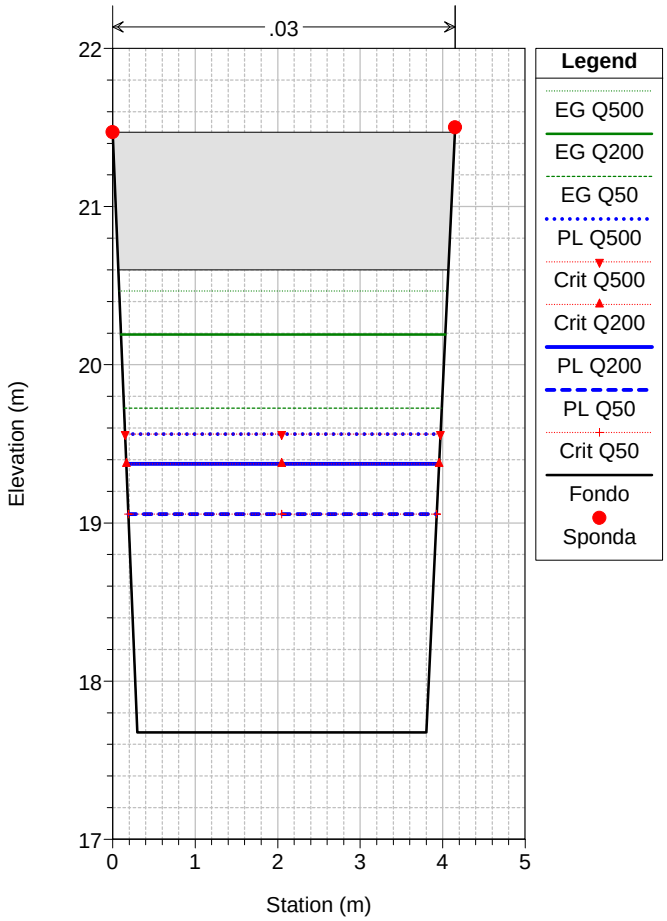
MA-S 25



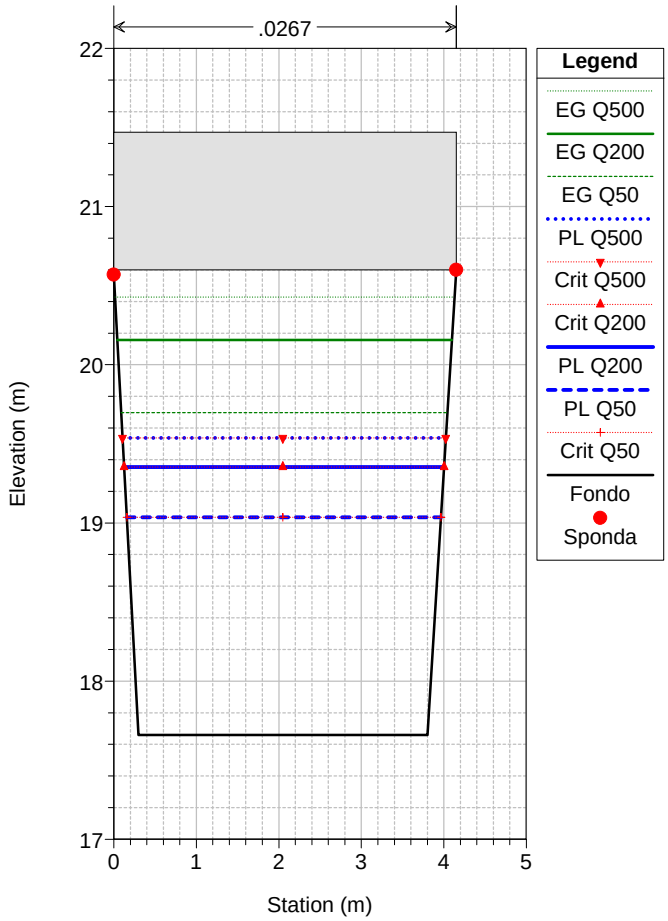
magistrato_2013 Plan: 0_PdB_Ago2013

MA-S 25



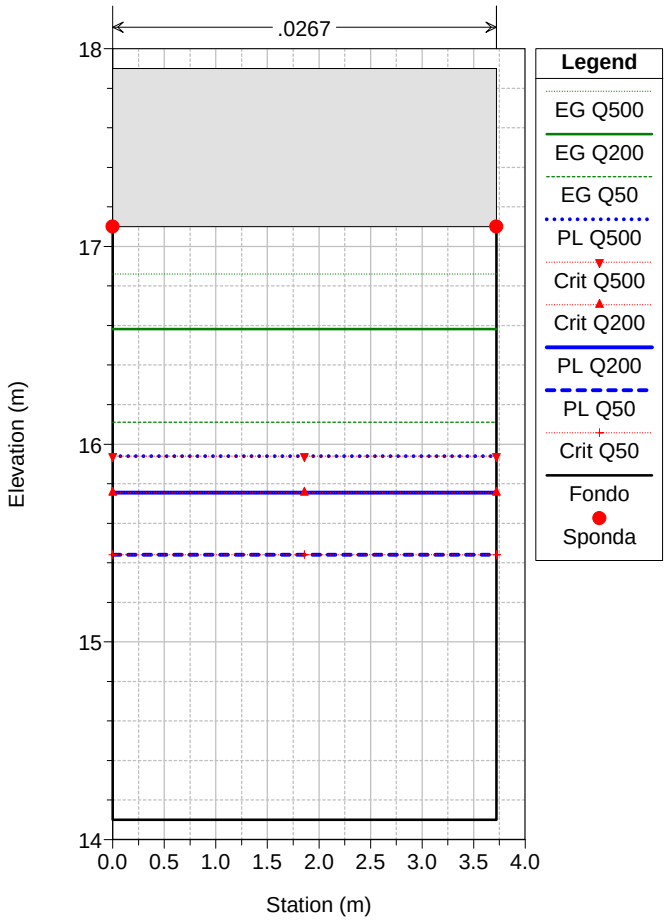
magistrato_2013 Plan: 0_PdB_Ago2013

MA-S 26



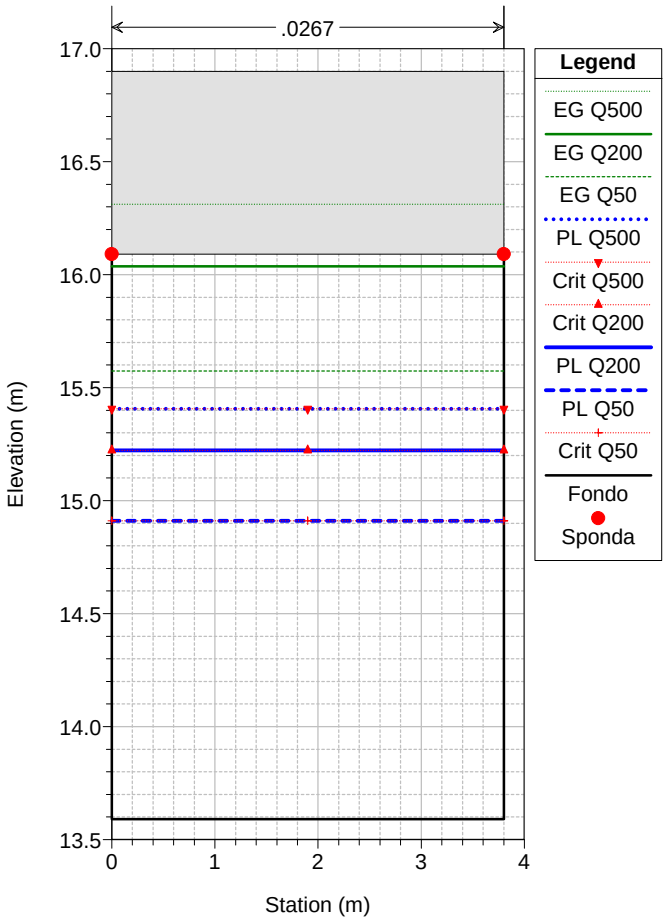
magistrato_2013 Plan: 0_PdB_Ago2013

MA-S 27



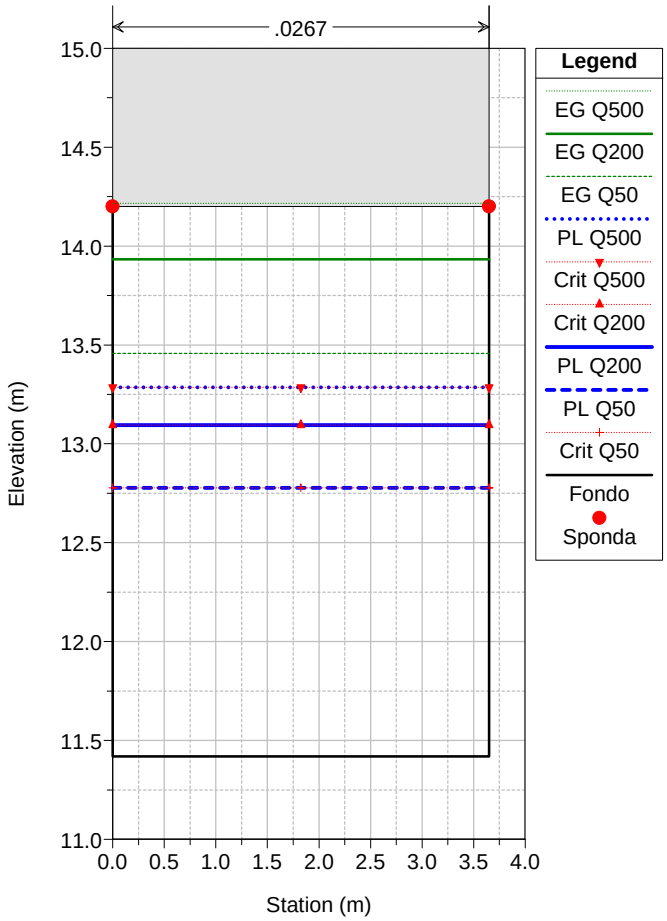
magistrato_2013 Plan: 0_PdB_Ago2013

MA-S 28



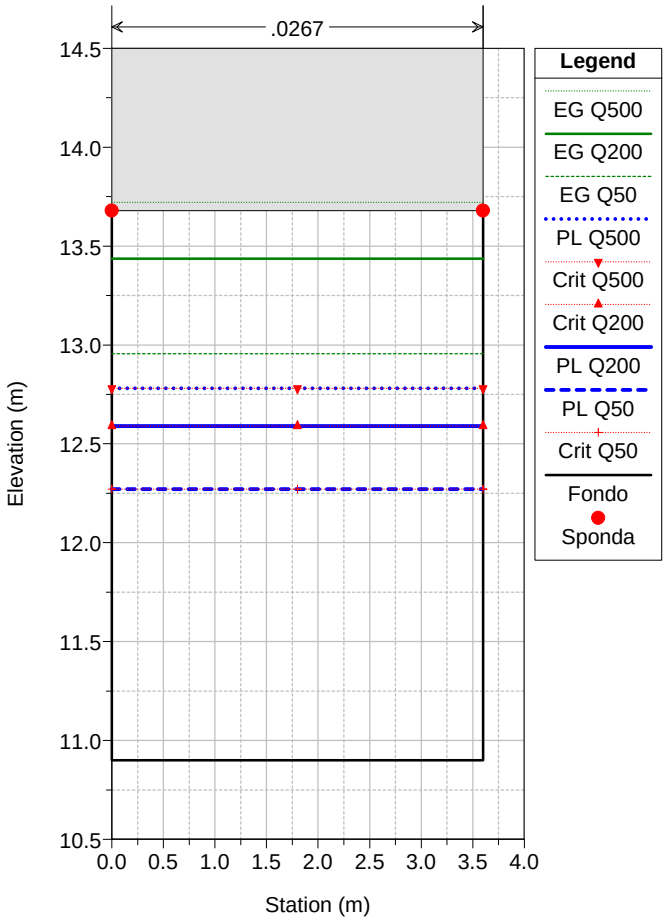
magistrato_2013 Plan: 0_PdB_Ago2013

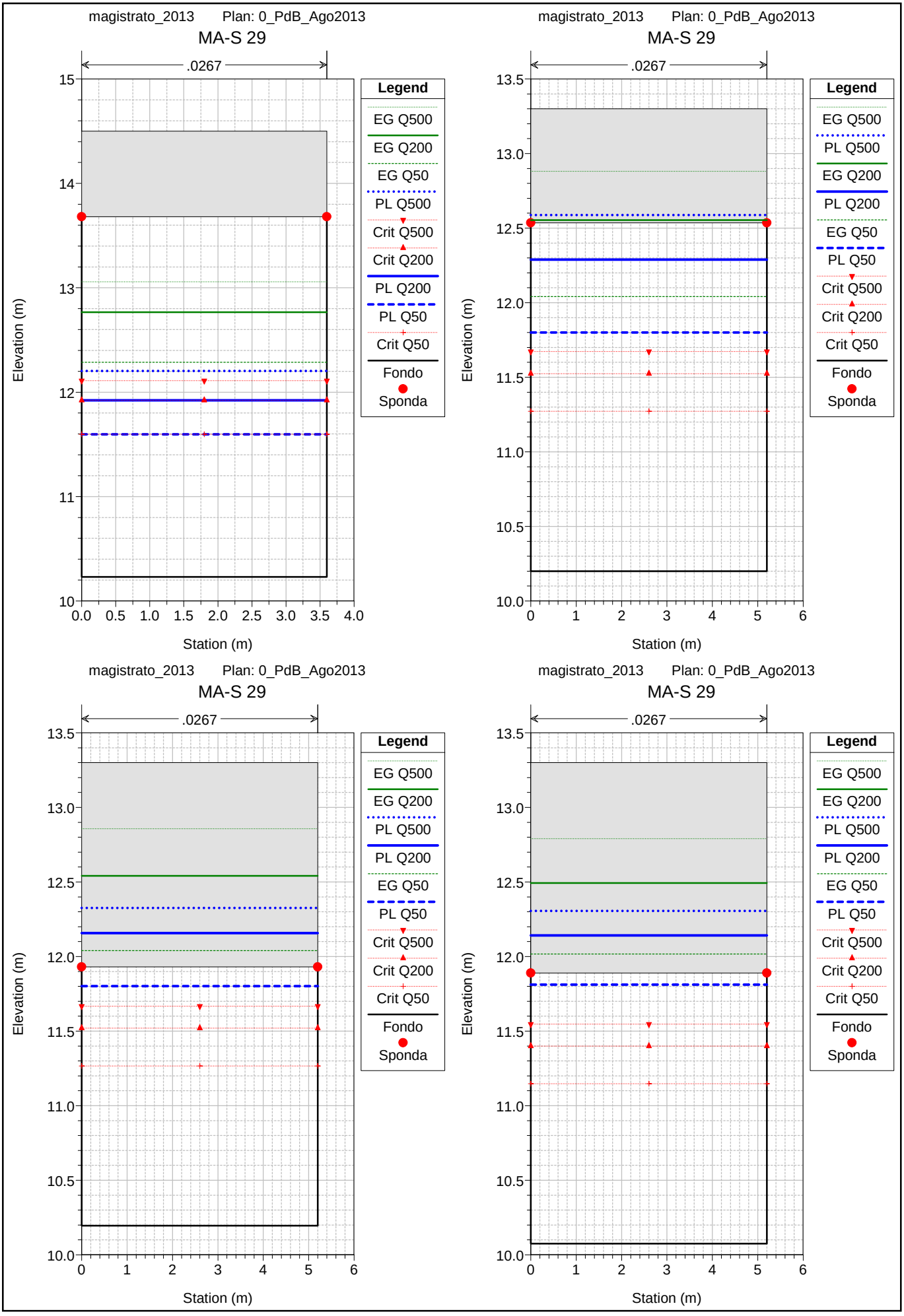
MA-S 29



magistrato_2013 Plan: 0_PdB_Ago2013

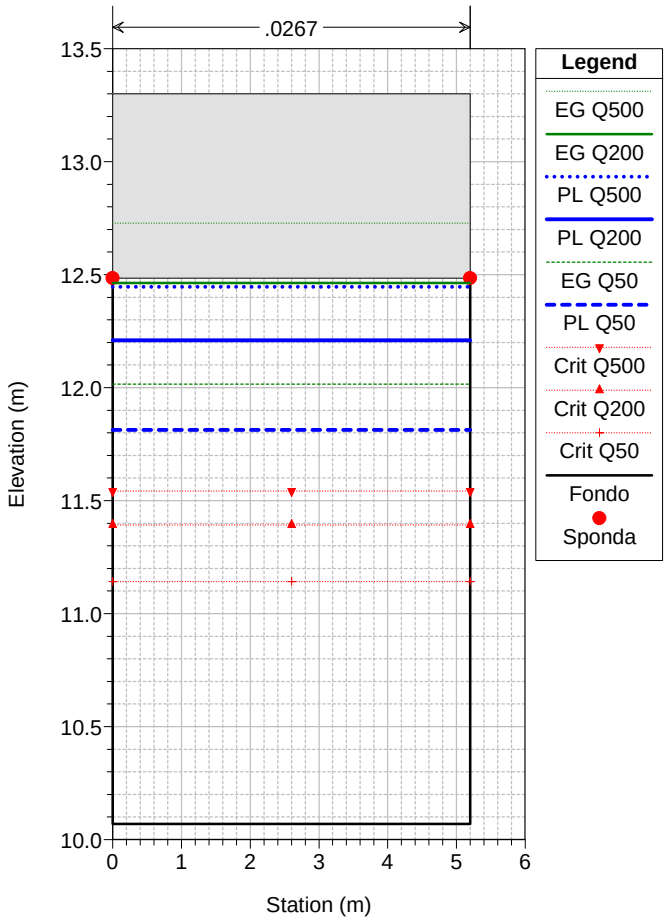
MA-S 29




magistrato_2013 Plan: 0_PdB_Ago2013
MA-S 29
.0267
Elevation (m)
Station (m)
Legend
EG Q500
EG Q200
EG Q50
PL Q500
Crit Q500
Crit Q200
PL Q200
PL Q50
Crit Q50
Fondo
Sponda
magistrato_2013 Plan: 0_PdB_Ago2013
MA-S 29
.0267
Elevation (m)
Station (m)
Legend
EG Q500
PL Q500
EG Q200
PL Q200
EG Q50
PL Q50
Crit Q500
Crit Q200
Crit Q50
Fondo
Sponda
magistrato_2013 Plan: 0_PdB_Ago2013
MA-S 29
.0267
Elevation (m)
Station (m)
Legend
EG Q500
EG Q200
PL Q500
PL Q200
EG Q50
PL Q50
Crit Q500
Crit Q200
Crit Q50
Fondo
Sponda
magistrato_2013 Plan: 0_PdB_Ago2013
MA-S 29
.0267
Elevation (m)
Station (m)
Legend
EG Q500
EG Q200
PL Q500
PL Q200
EG Q50
PL Q50
Crit Q500
Crit Q200
Crit Q50
Fondo
Sponda

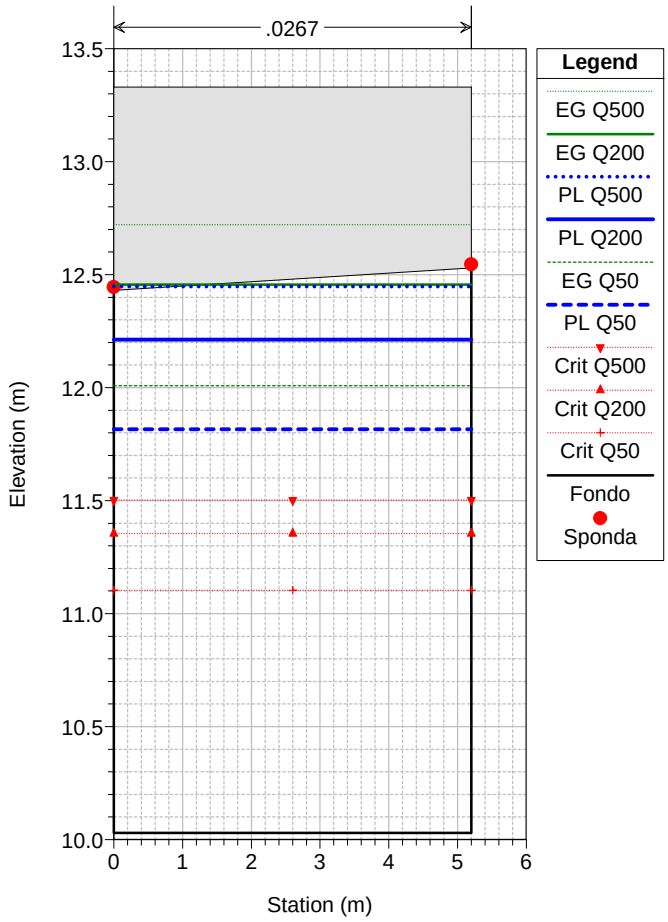
magistrato_2013 Plan: 0_PdB_Ago2013

MA-S 29



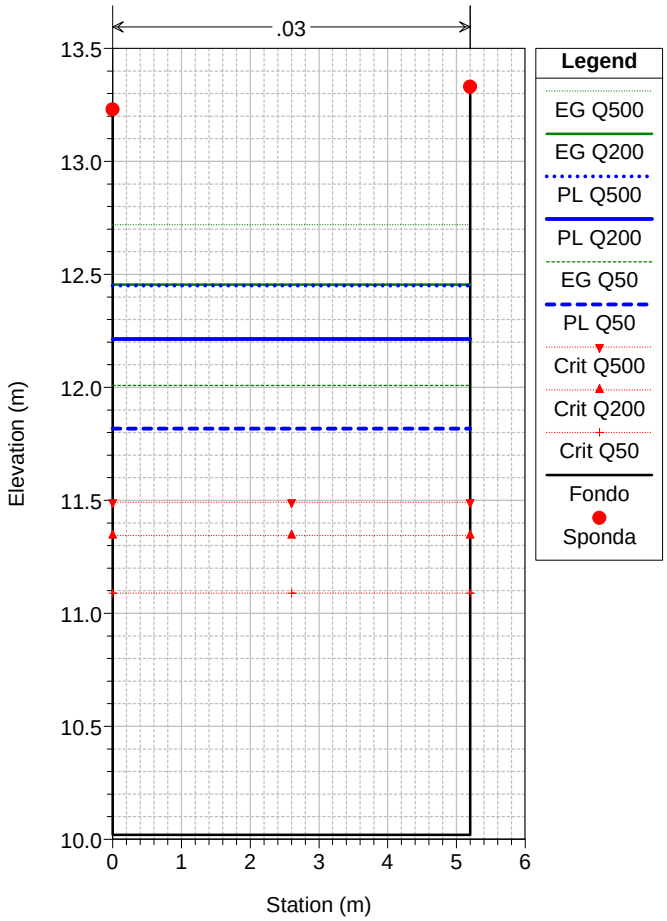
magistrato_2013 Plan: 0_PdB_Ago2013

MA-S 30



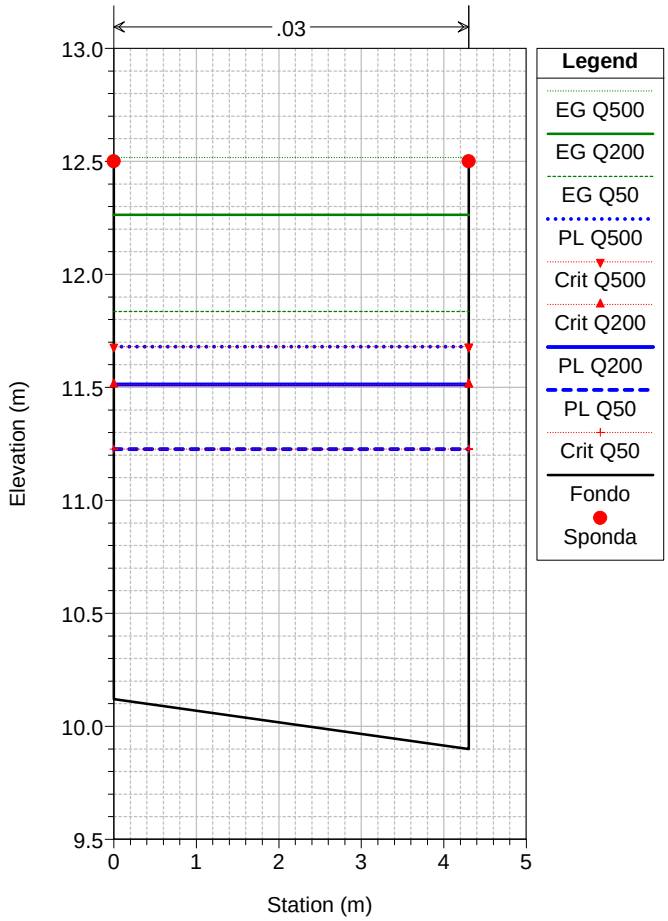
magistrato_2013 Plan: 0_PdB_Ago2013

MA-S 30



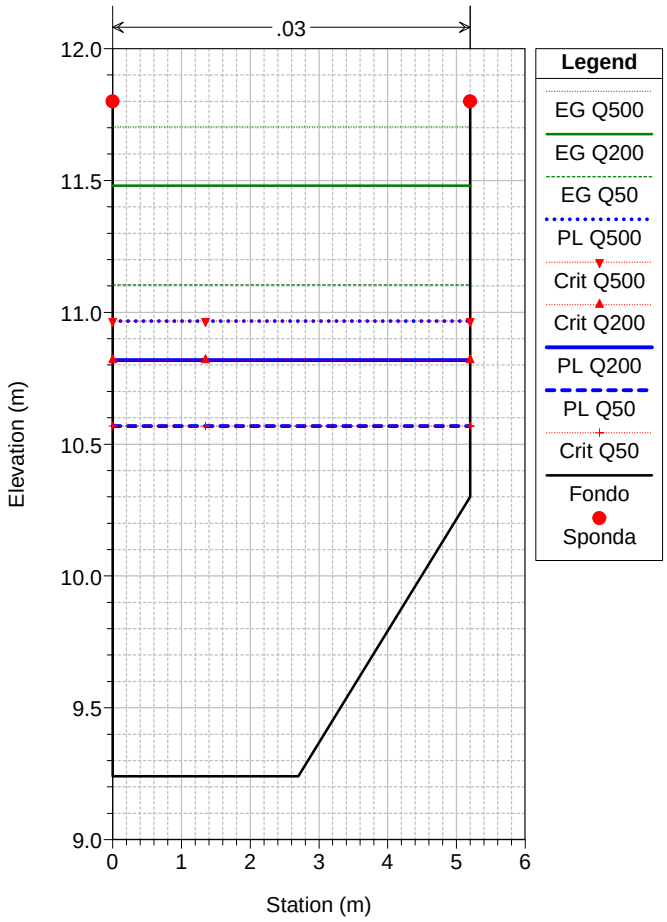
magistrato_2013 Plan: 0_PdB_Ago2013

MA-S 31



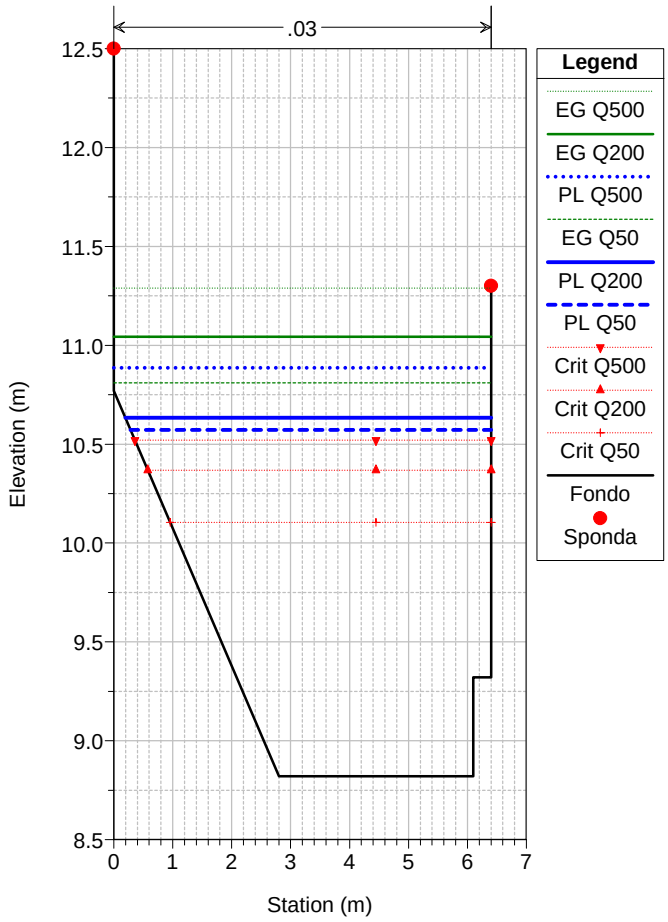
magistrato_2013 Plan: 0_PdB_Ago2013

MA-S 32



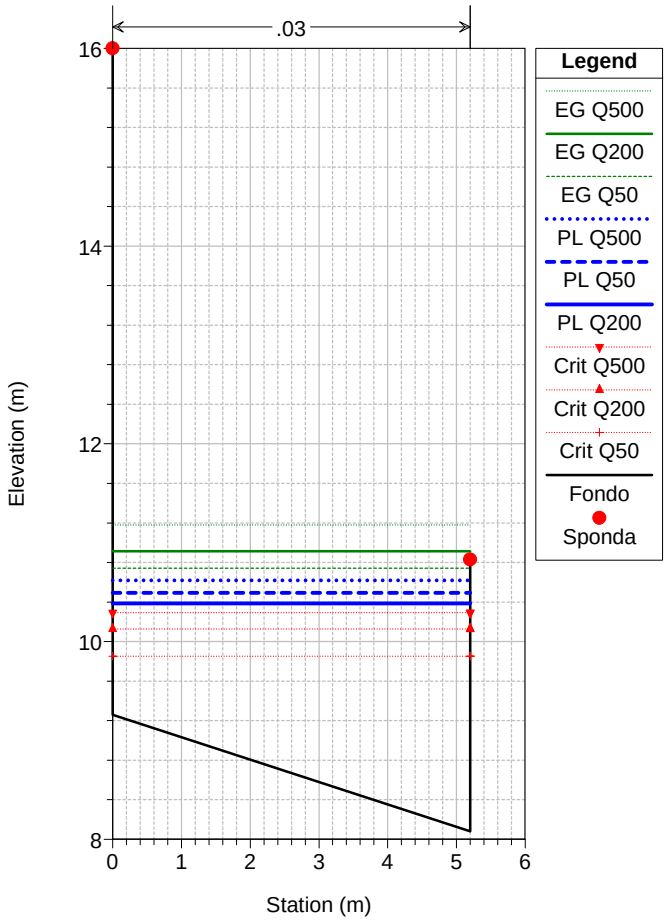
magistrato_2013 Plan: 0_PdB_Ago2013

MA-S 33



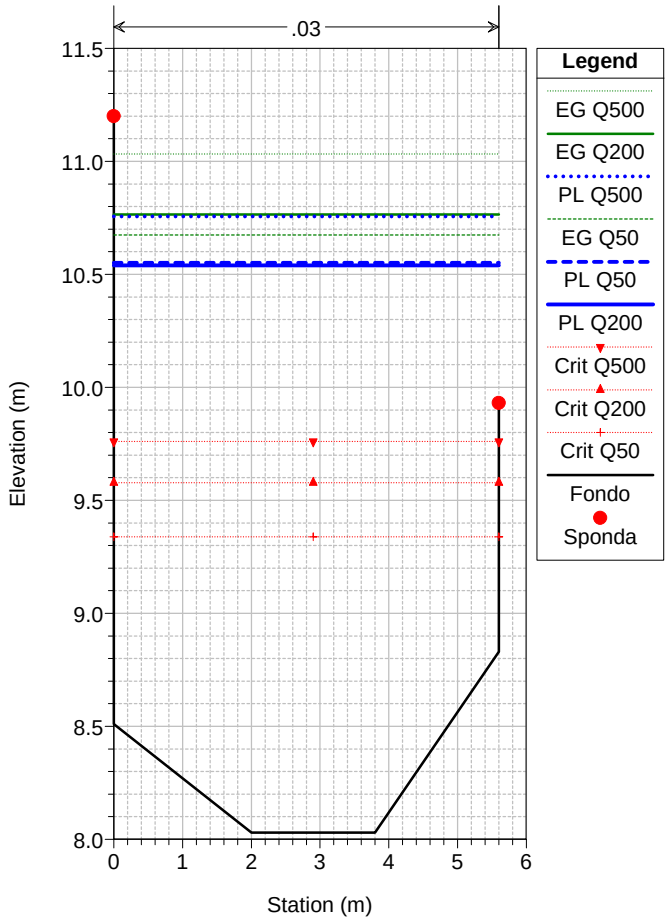
magistrato_2013 Plan: 0_PdB_Ago2013

MA-S 34



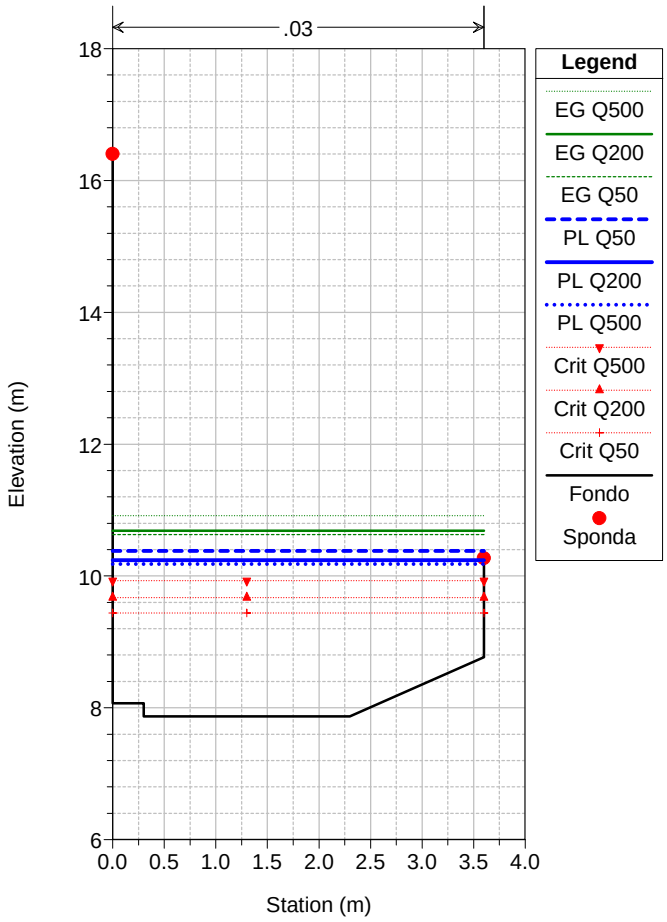
magistrato_2013 Plan: 0_PdB_Ago2013

MA-S 35



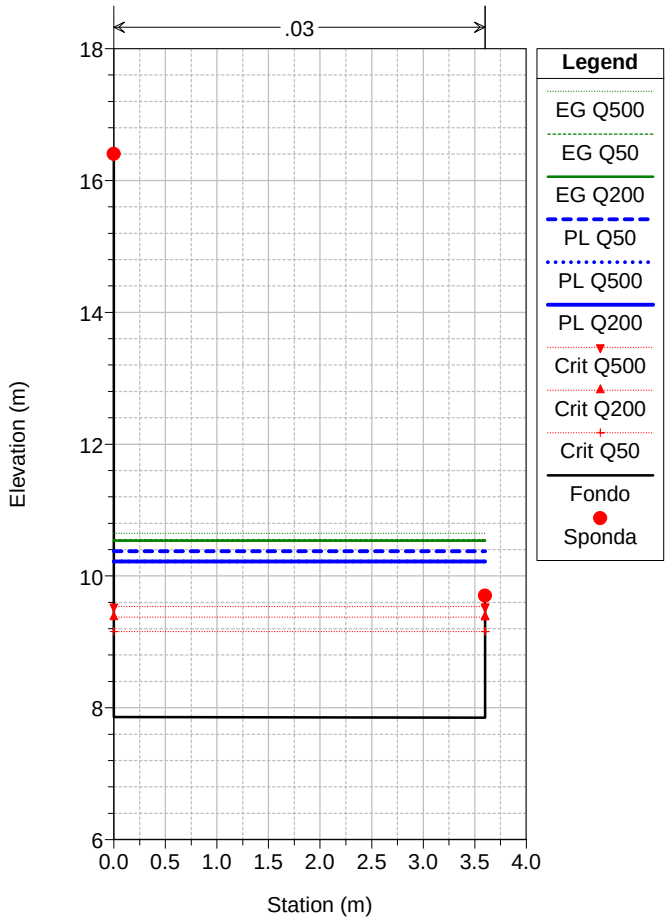
magistrato_2013 Plan: 0_PdB_Ago2013

MA-S 36



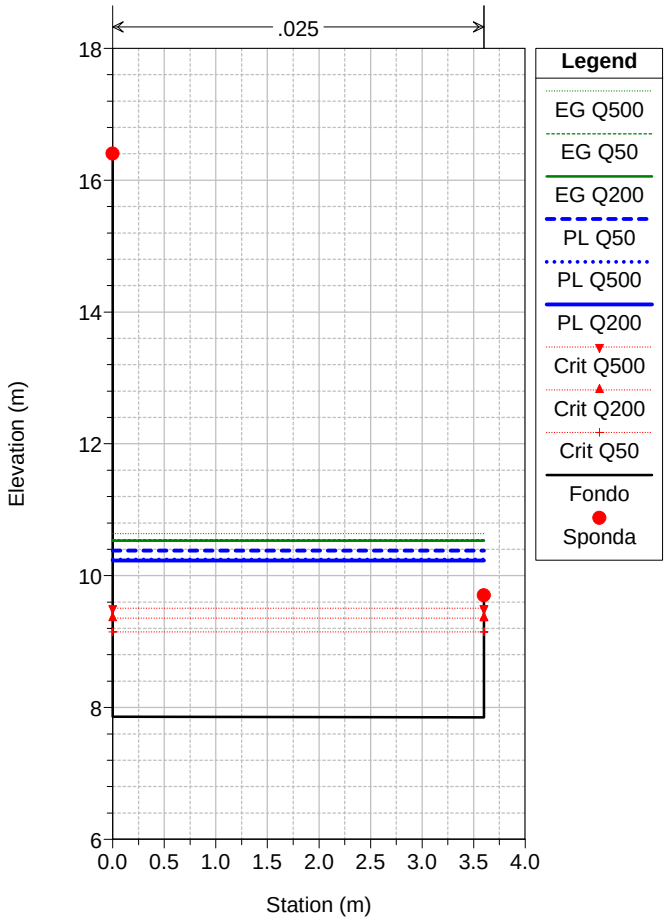
magistrato_2013 Plan: 0_PdB_Ago2013

MA-S 36



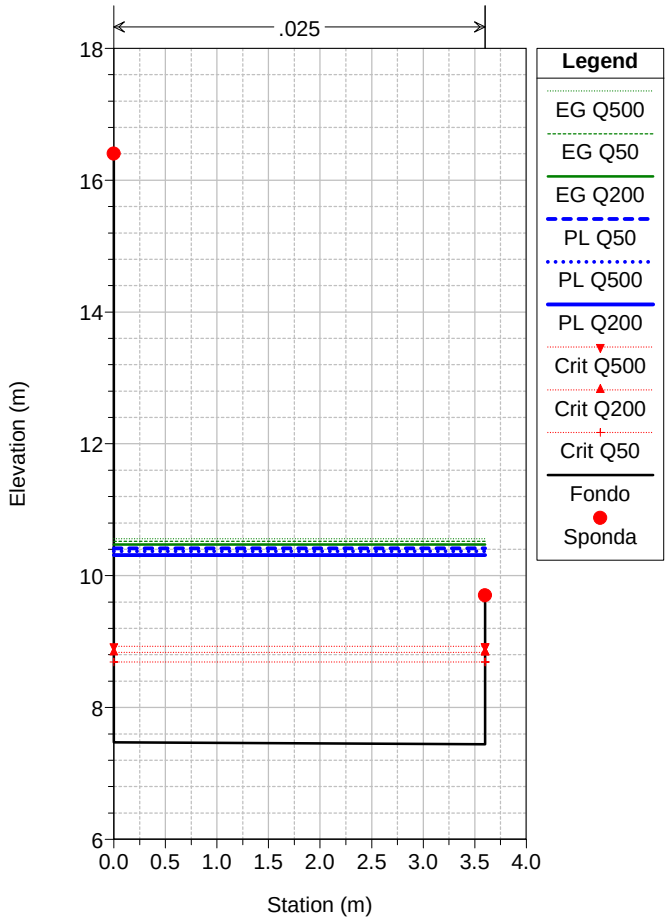
magistrato_2013 Plan: 0_PdB_Ago2013

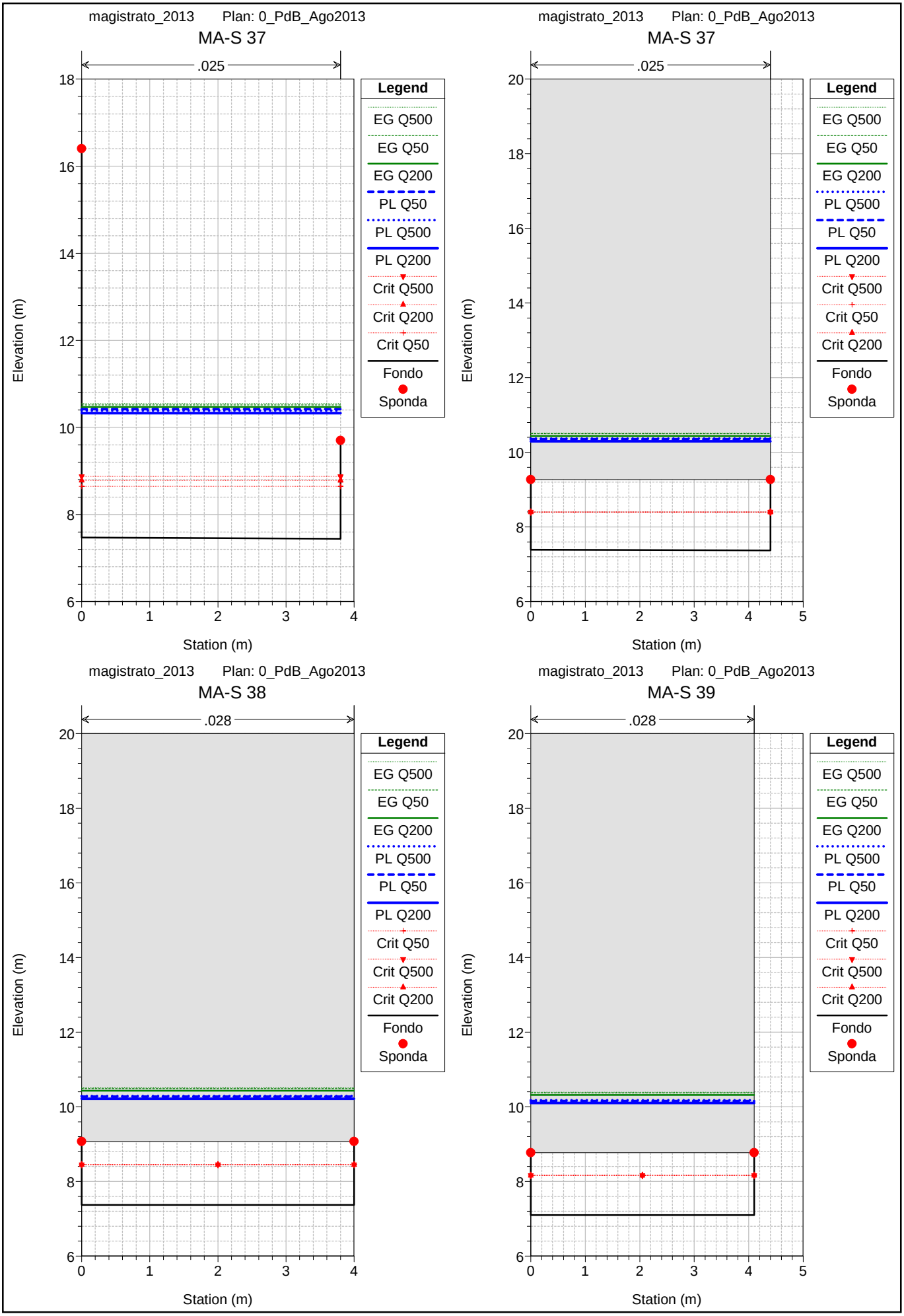
MA-S 37

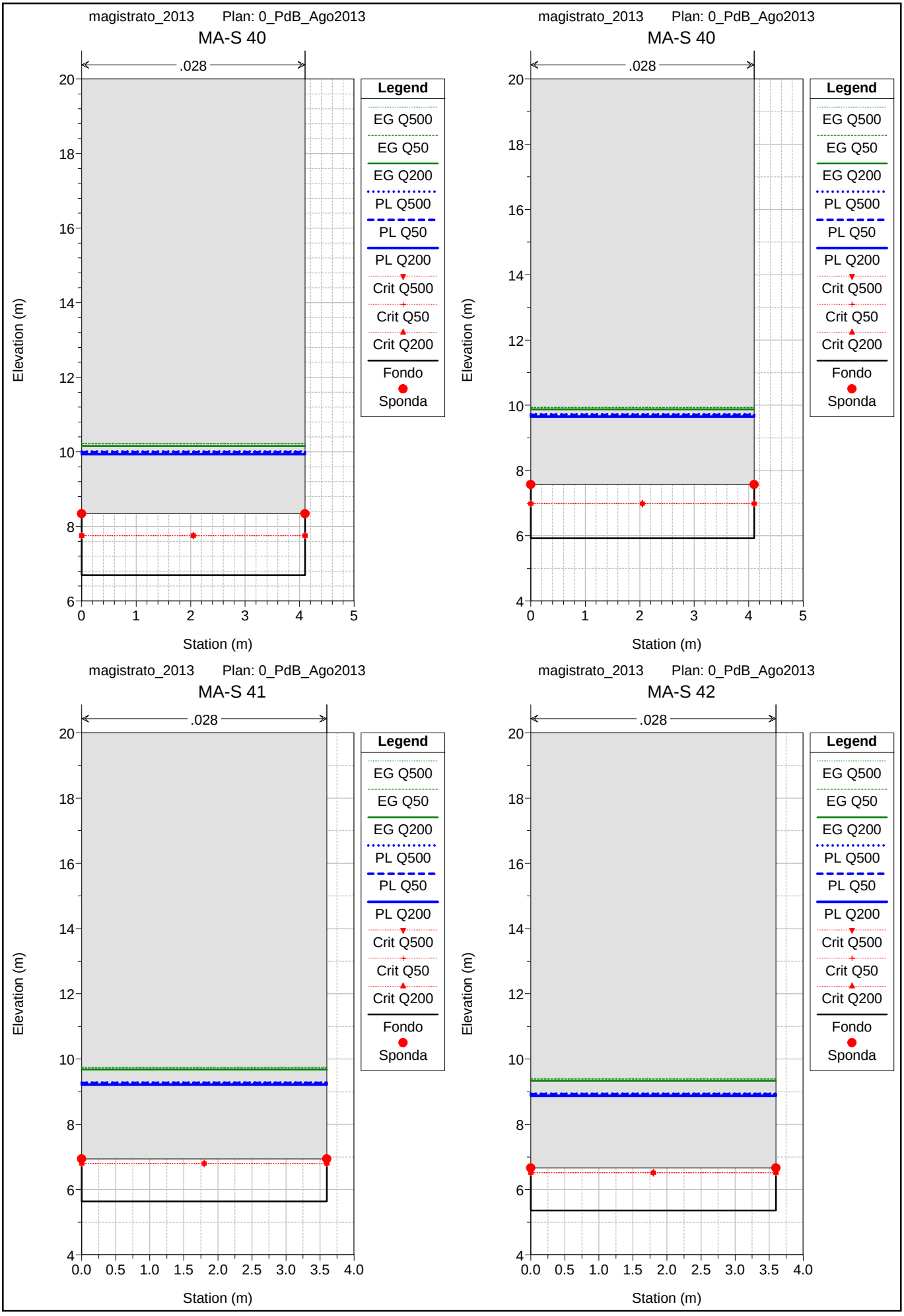


magistrato_2013 Plan: 0_PdB_Ago2013

MA-S 37

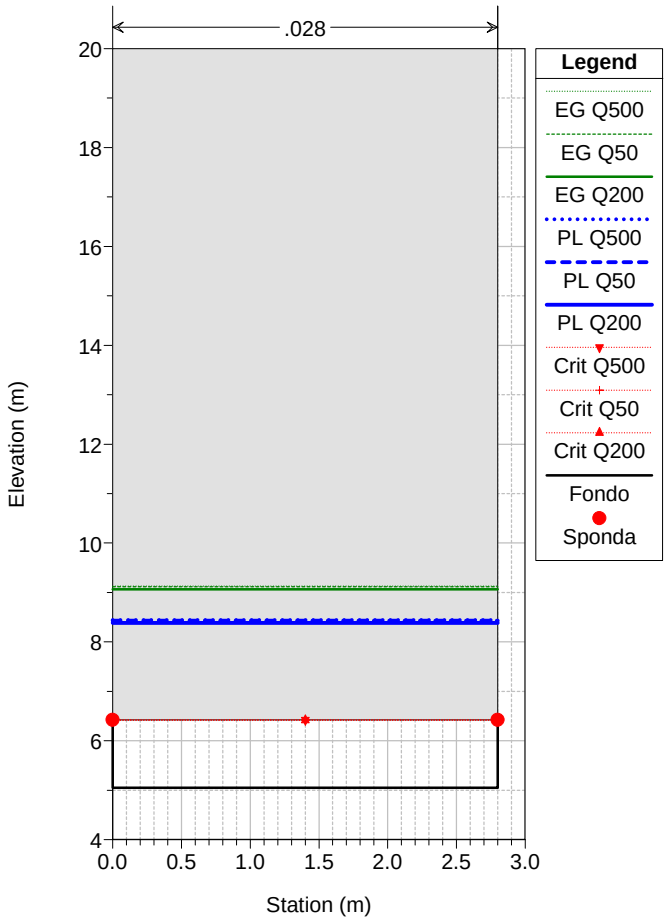



magistrato_2013 Plan: 0_PdB_Ago2013
MA-S 37
.025
Elevation (m)
Station (m)
Legend
EG Q500
EG Q50
EG Q200
PL Q50
PL Q500
PL Q200
Crit Q500
Crit Q200
Crit Q50
Fondo
Sponda
magistrato_2013 Plan: 0_PdB_Ago2013
MA-S 37
.025
Elevation (m)
Station (m)
Legend
EG Q500
EG Q50
EG Q200
PL Q500
PL Q50
PL Q200
Crit Q500
Crit Q50
Crit Q200
Fondo
Sponda
magistrato_2013 Plan: 0_PdB_Ago2013
MA-S 38
.028
Elevation (m)
Station (m)
Legend
EG Q500
EG Q50
EG Q200
PL Q500
PL Q50
PL Q200
Crit Q50
Crit Q500
Crit Q200
Fondo
Sponda
magistrato_2013 Plan: 0_PdB_Ago2013
MA-S 39
.028
Elevation (m)
Station (m)
Legend
EG Q500
EG Q50
EG Q200
PL Q500
PL Q50
PL Q200
Crit Q50
Crit Q500
Crit Q200
Fondo
Sponda


magistrato_2013 Plan: 0_PdB_Ago2013
MA-S 40
.028
Elevation (m)
Station (m)
Legend
EG Q500
EG Q50
EG Q200
PL Q500
PL Q50
PL Q200
Crit Q500
Crit Q50
Crit Q200
Fondo
Sponda
magistrato_2013 Plan: 0_PdB_Ago2013
MA-S 40
.028
Elevation (m)
Station (m)
Legend
EG Q500
EG Q50
EG Q200
PL Q500
PL Q50
PL Q200
Crit Q500
Crit Q50
Crit Q200
Fondo
Sponda
magistrato_2013 Plan: 0_PdB_Ago2013
MA-S 41
.028
Elevation (m)
Station (m)
Legend
EG Q500
EG Q50
EG Q200
PL Q500
PL Q50
PL Q200
Crit Q500
Crit Q50
Crit Q200
Fondo
Sponda
magistrato_2013 Plan: 0_PdB_Ago2013
MA-S 42
.028
Elevation (m)
Station (m)
Legend
EG Q500
EG Q50
EG Q200
PL Q500
PL Q50
PL Q200
Crit Q500
Crit Q50
Crit Q200
Fondo
Sponda

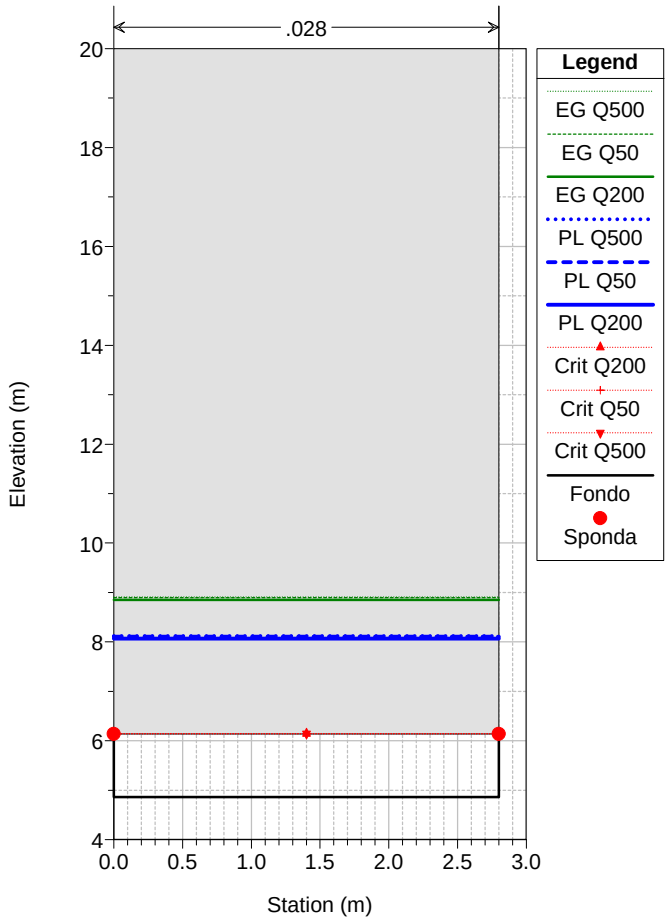
magistrato_2013 Plan: 0_PdB_Ago2013

MA-S 42



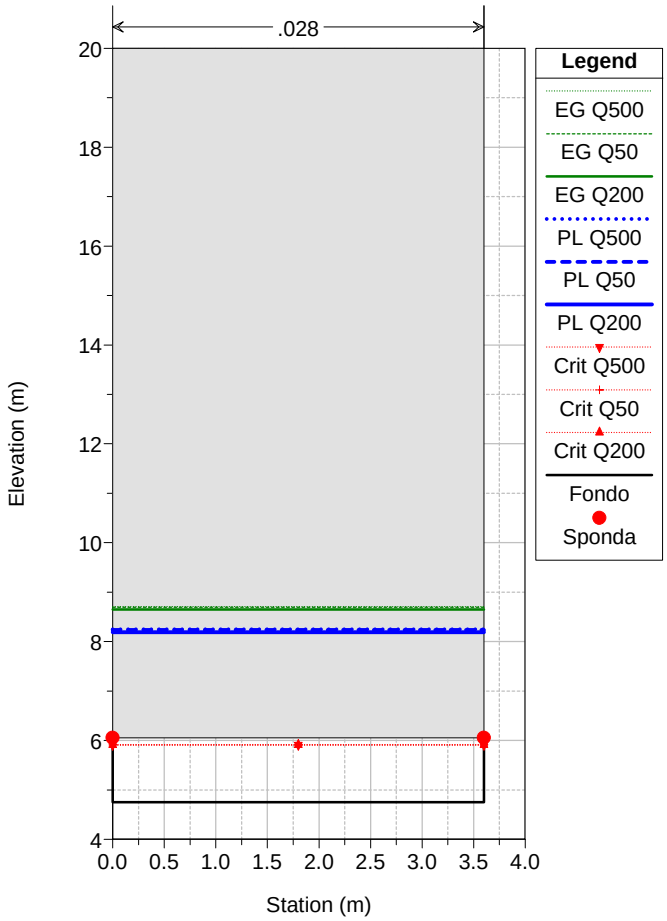
magistrato_2013 Plan: 0_PdB_Ago2013

MA-S 42



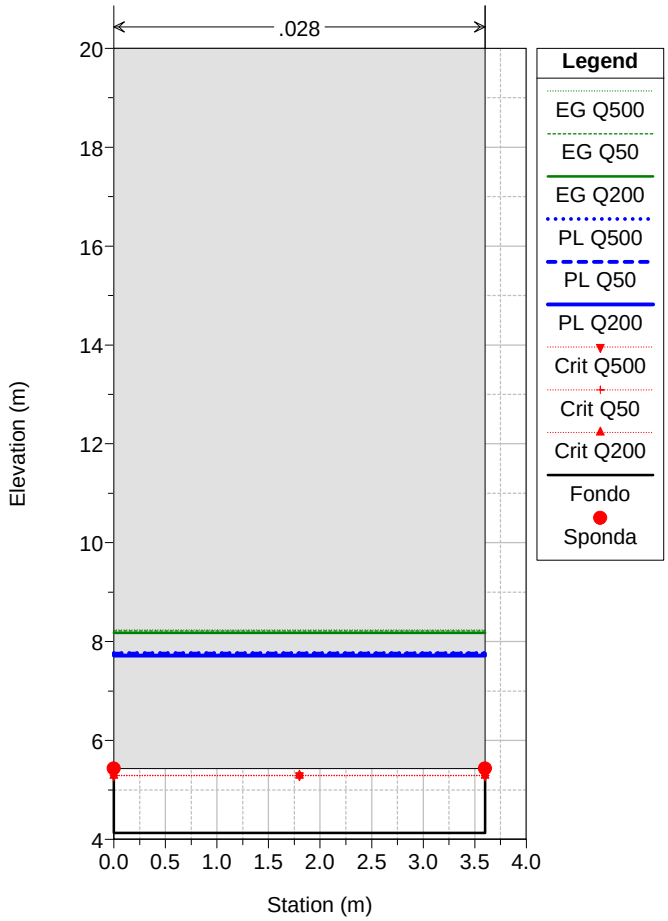
magistrato_2013 Plan: 0_PdB_Ago2013

MA-S 43



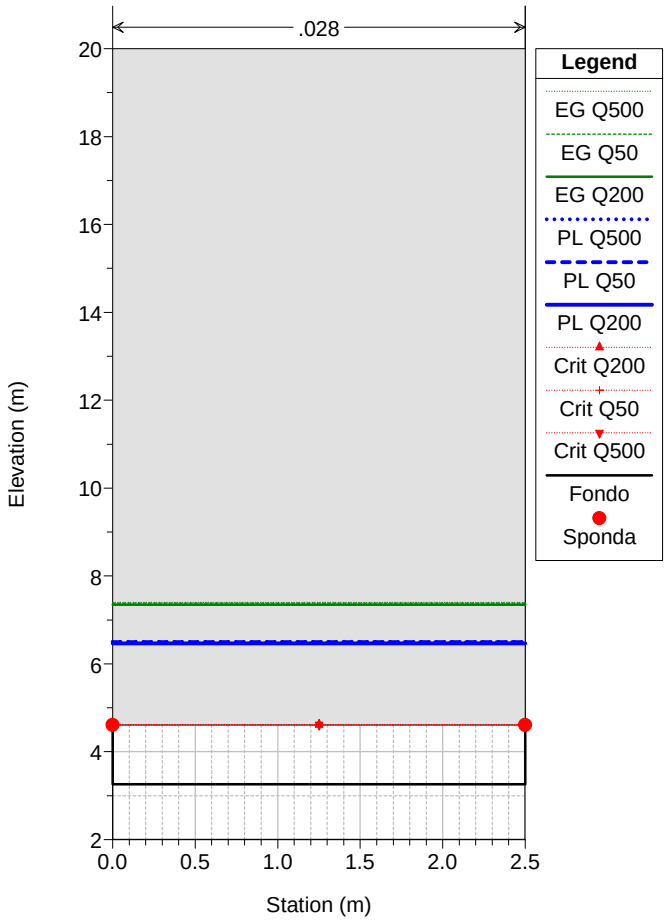
magistrato_2013 Plan: 0_PdB_Ago2013

MA-S 44



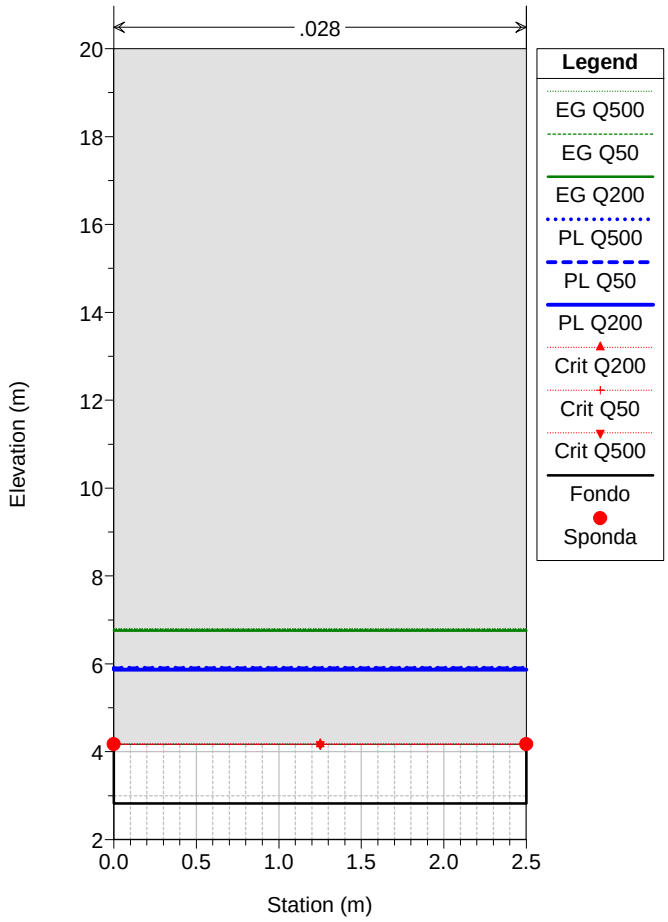
magistrato_2013 Plan: 0_PdB_Ago2013

MA-S 44



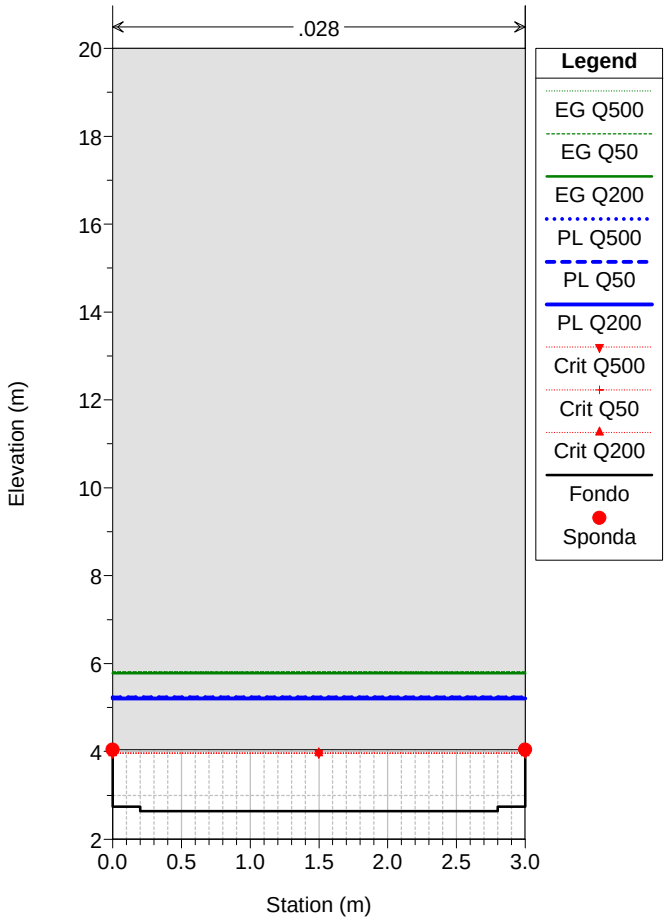
magistrato_2013 Plan: 0_PdB_Ago2013

MA-S 45



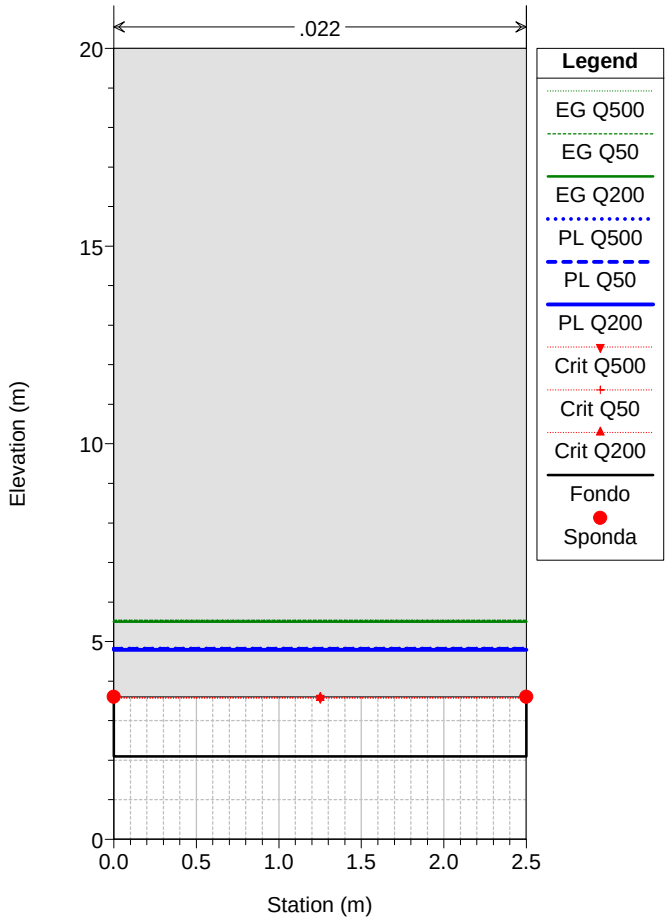
magistrato_2013 Plan: 0_PdB_Ago2013

MA-S 46



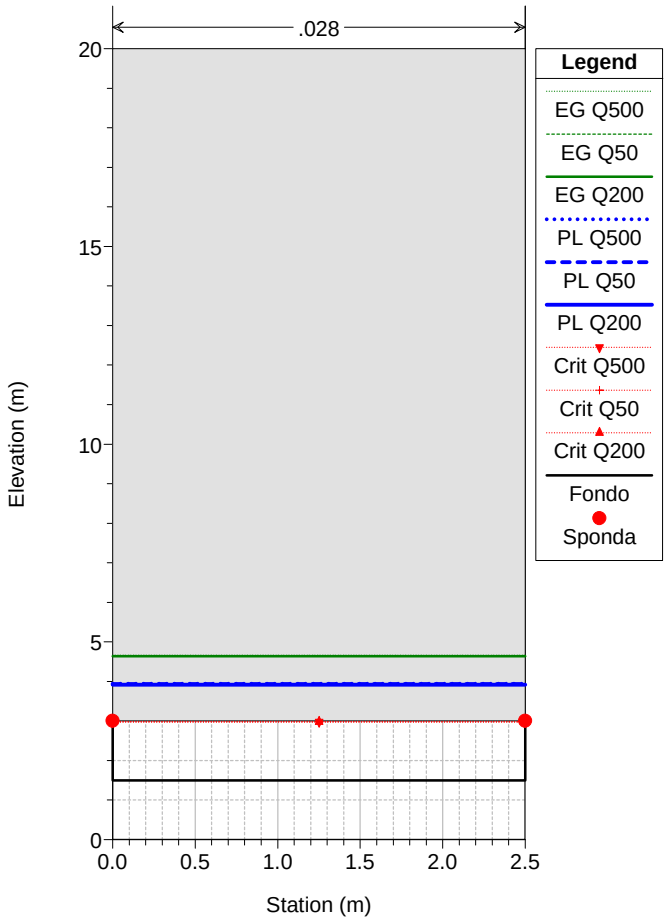
magistrato_2013 Plan: 0_PdB_Ago2013

MA-S 46.5



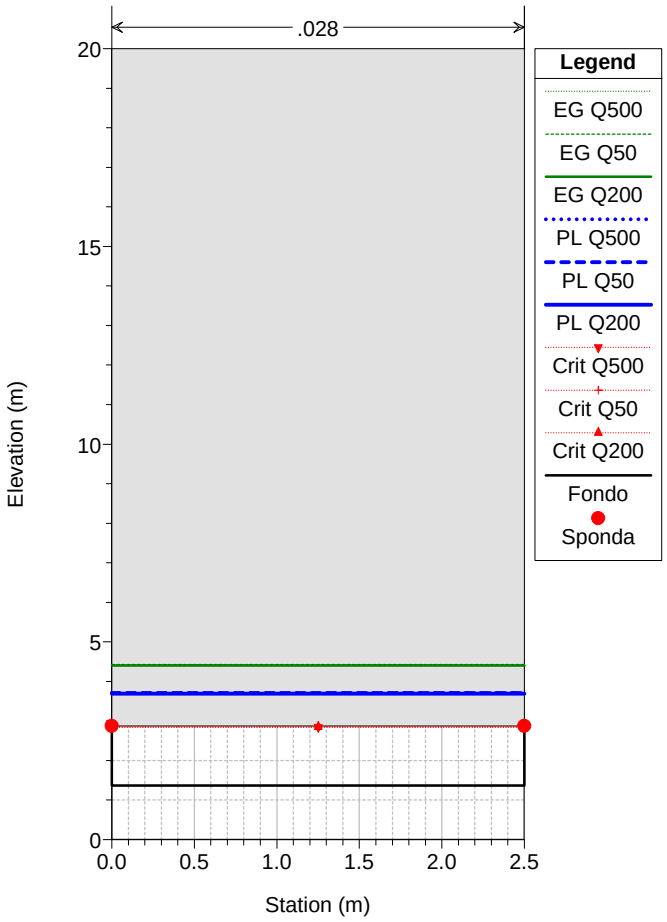
magistrato_2013 Plan: 0_PdB_Ago2013

MA-S 47



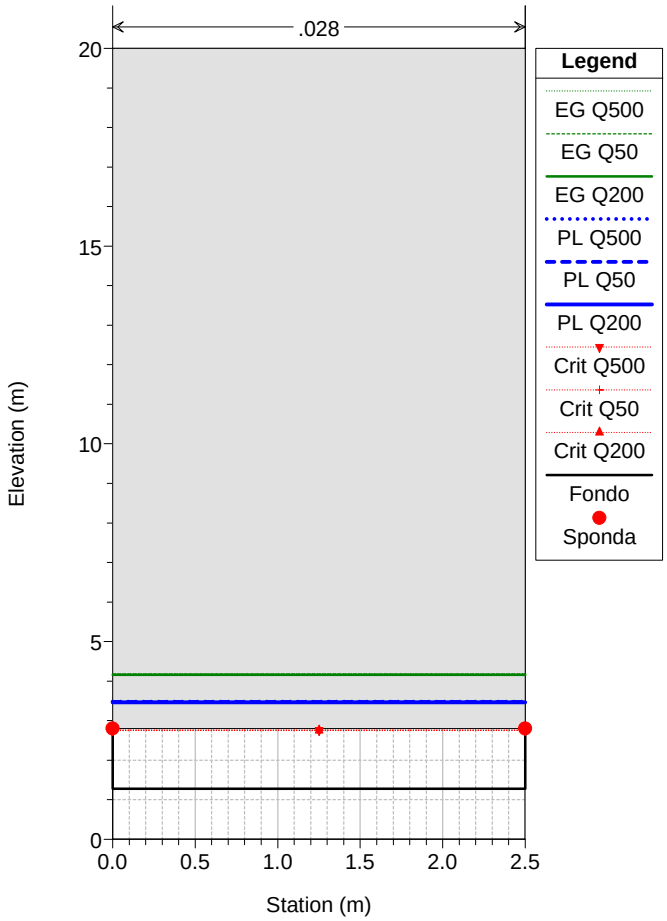
magistrato_2013 Plan: 0_PdB_Ago2013

MA-S 48



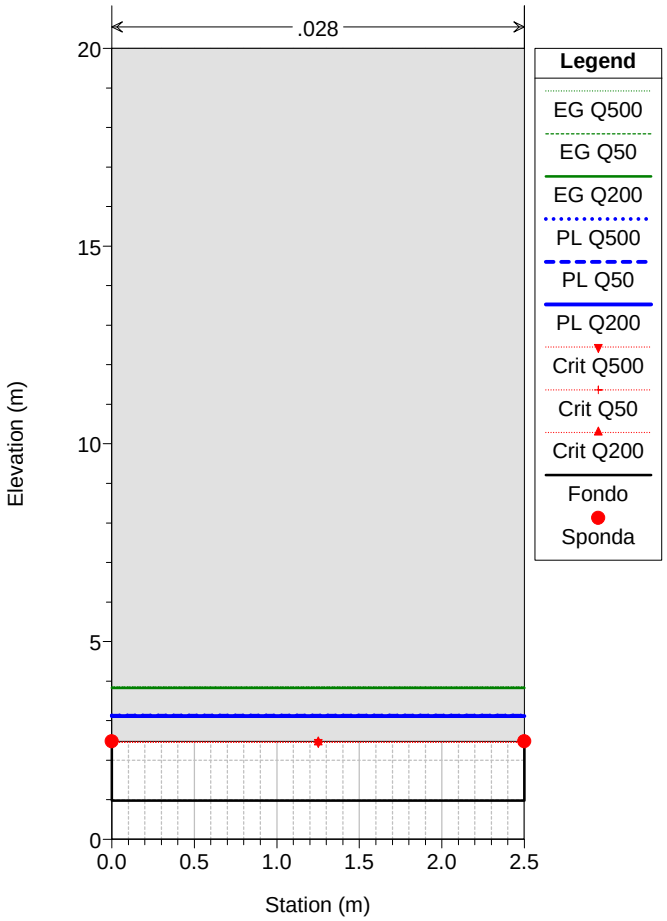
magistrato_2013 Plan: 0_PdB_Ago2013

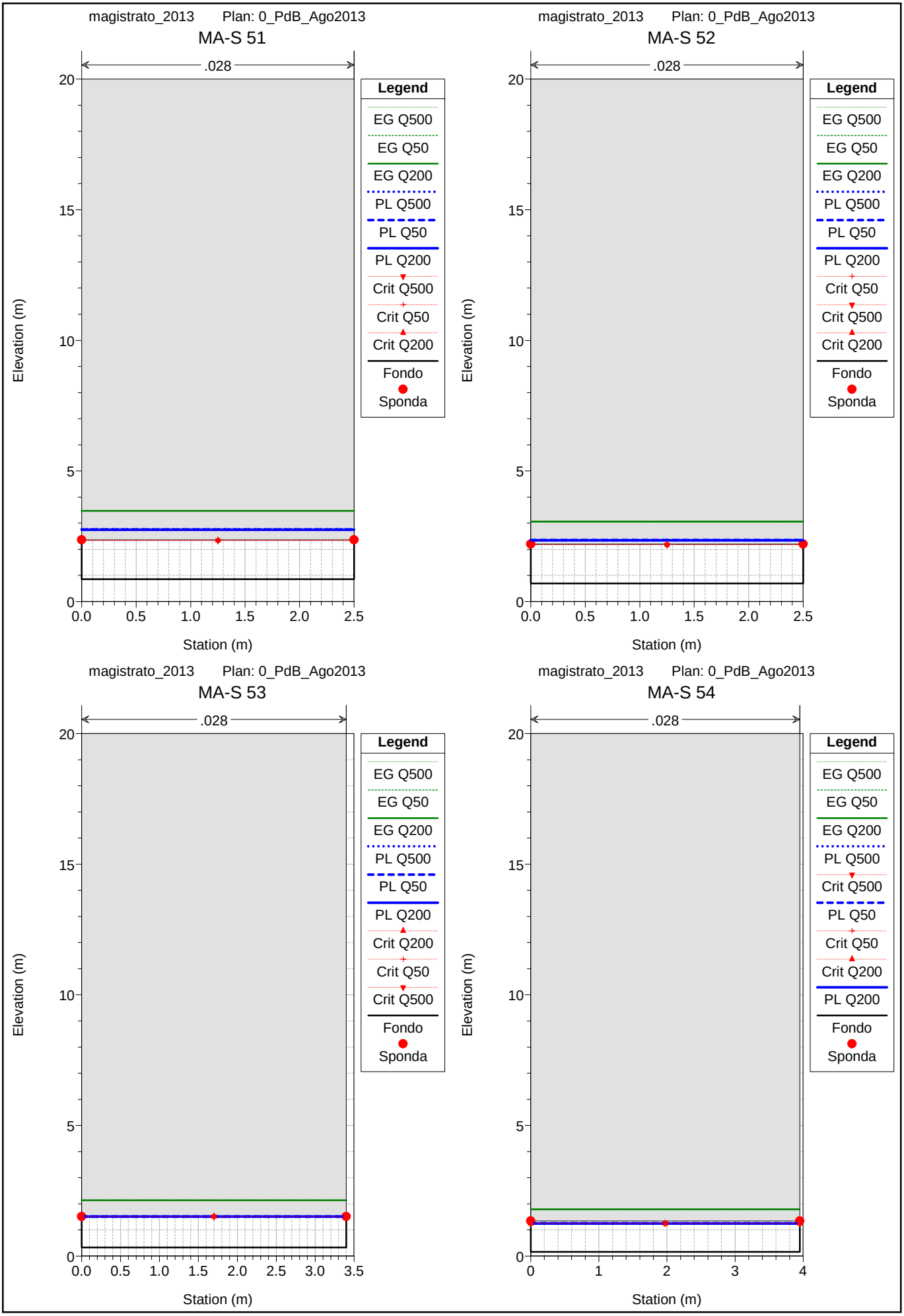
MA-S 49



magistrato_2013 Plan: 0_PdB_Ago2013

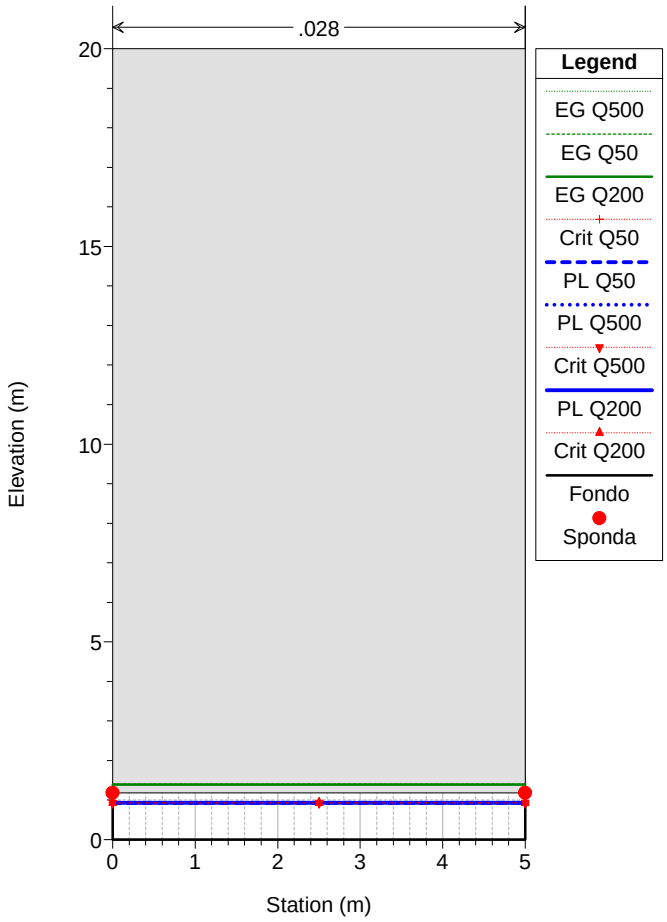
MA-S 50




magistrato_2013 Plan: 0_PdB_Ago2013
MA-S 51
.028
Legend
EG Q500
EG Q50
EG Q200
PL Q500
PL Q50
PL Q200
Crit Q500
Crit Q50
Crit Q200
Fondo
Sponda
Elevation (m)
Station (m)
magistrato_2013 Plan: 0_PdB_Ago2013
MA-S 52
.028
Legend
EG Q500
EG Q50
EG Q200
PL Q500
PL Q50
PL Q200
Crit Q50
Crit Q500
Crit Q200
Fondo
Sponda
Elevation (m)
Station (m)
magistrato_2013 Plan: 0_PdB_Ago2013
MA-S 53
.028
Legend
EG Q500
EG Q50
EG Q200
PL Q500
PL Q50
PL Q200
Crit Q200
Crit Q50
Crit Q500
Fondo
Sponda
Elevation (m)
Station (m)
magistrato_2013 Plan: 0_PdB_Ago2013
MA-S 54
.028
Legend
EG Q500
EG Q50
EG Q200
PL Q500
Crit Q500
PL Q50
Crit Q50
Crit Q200
PL Q200
Fondo
Sponda
Elevation (m)
Station (m)

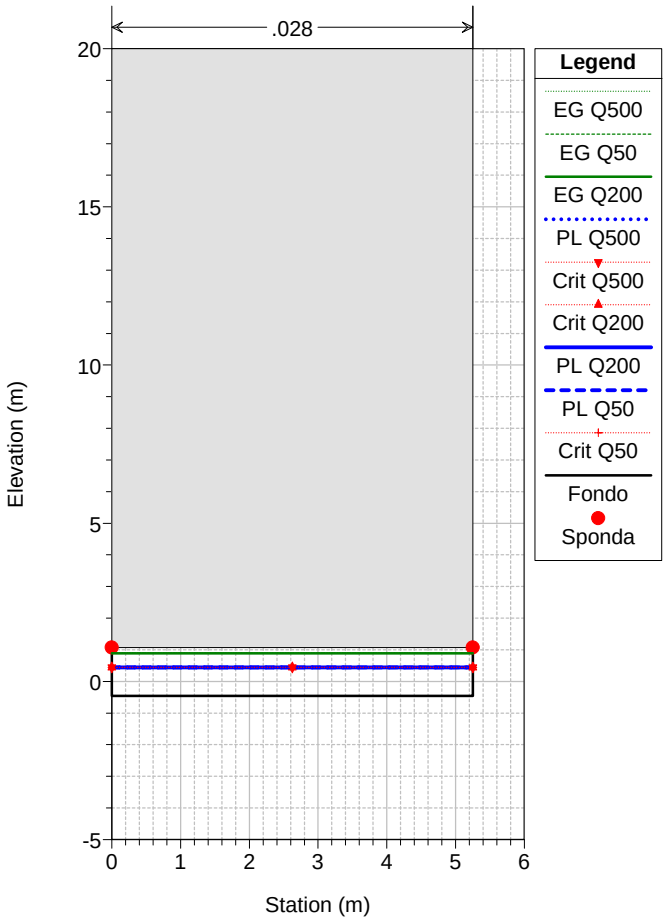
magistrato_2013 Plan: 0_PdB_Ago2013

MA-S 55



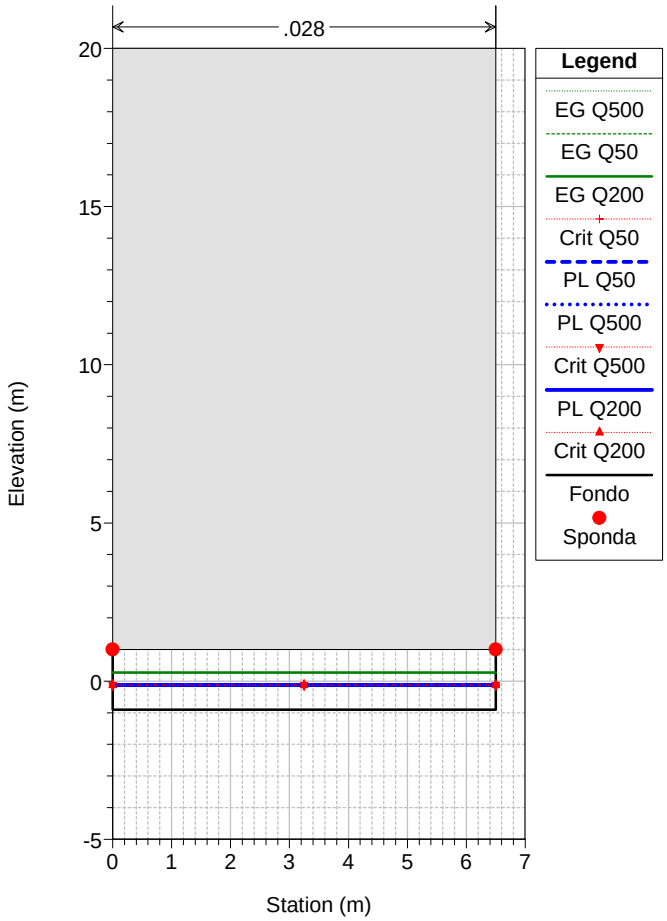
magistrato_2013 Plan: 0_PdB_Ago2013

MA-S 56



magistrato_2013 Plan: 0_PdB_Ago2013

MA-S 57



HEC-RAS Plan: 0_PdB2013 River: Magistrato Reach: unico

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	LOB Elev	L. Freeboard	ROB Elev	R. Freeboard	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)	(m)	(m/m)	(m/s)	(m2)	(m)	
unico	100 MA-S 1	Q50	12.00	30.90	31.97	36.87	4.90	33.81	1.84	31.97	32.35	0.011836	2.72	4.41	5.84	1.00
unico	100 MA-S 1	Q200	16.60	30.90	32.16	36.87	4.71	33.81	1.65	32.16	32.62	0.011676	3.02	5.50	5.90	1.00
unico	100 MA-S 1	Q500	19.50	30.90	32.26	36.87	4.61	33.81	1.55	32.26	32.78	0.011660	3.18	6.13	5.93	1.00
unico	99 MA-S 2	Q50	12.00	30.67	31.77	35.66	3.89	33.47	1.70	31.77	32.15	0.011791	2.74	4.39	5.75	1.00
unico	99 MA-S 2	Q200	16.60	30.67	31.96	35.66	3.70	33.47	1.51	31.96	32.43	0.011679	3.04	5.47	5.81	1.00
unico	99 MA-S 2	Q500	19.50	30.67	32.07	35.66	3.59	33.47	1.40	32.07	32.59	0.011721	3.20	6.09	5.84	1.00
unico	98 MA-S 3	Q50	12.00	30.52	31.40	35.01	3.61	33.17	1.77	31.40	31.83	0.013947	2.92	4.10	4.69	1.00
unico	98 MA-S 3	Q200	16.60	30.52	31.61	35.01	3.40	33.17	1.56	31.61	32.15	0.014115	3.26	5.10	4.70	1.00
unico	98 MA-S 3	Q500	19.50	30.52	31.73	35.01	3.28	33.17	1.44	31.73	32.33	0.014277	3.44	5.67	4.71	1.00
unico	97 MA-S 4	Q50	12.00	29.65	30.91	32.85	1.94	32.85	1.94	30.60	31.19	0.006582	2.30	5.21	4.14	0.66
unico	97 MA-S 4	Q200	16.60	29.65	31.37	32.85	1.48	32.85	1.48	30.83	31.65	0.005329	2.34	7.10	4.15	0.57
unico	97 MA-S 4	Q500	19.50	29.65	31.64	32.85	1.21	32.85	1.21	30.97	31.93	0.004953	2.37	8.22	4.16	0.54
unico	96 MA-S 5	Q50	18.10	29.07	30.39	32.65	2.26	32.67	2.28	30.39	31.04	0.015956	3.58	5.05	3.85	1.00
unico	96 MA-S 5	Q200	24.80	29.07	30.70	32.65	1.95	32.67	1.97	30.70	31.50	0.016771	3.98	6.24	3.87	1.00
unico	96 MA-S 5	Q500	29.10	29.07	30.88	32.65	1.77	32.67	1.79	30.88	31.77	0.017295	4.19	6.94	3.88	1.00
unico	95 MA-S 6	Q50	18.10	28.01	29.41	31.21	1.80	30.91	1.50	29.41	29.97	0.014456	3.33	5.44	4.80	1.00
unico	95 MA-S 6	Q200	24.80	28.01	29.67	31.21	1.54	30.91	1.24	29.67	30.37	0.014868	3.70	6.70	4.80	1.00
unico	95 MA-S 6	Q500	29.10	28.01	29.83	31.21	1.38	30.91	1.08	29.83	30.60	0.015100	3.90	7.46	4.80	1.00
unico	94 MA-S 7	Q50	18.10	27.39	28.67	31.11	2.44	29.19	0.52	28.67	29.28	0.015061	3.46	5.23	4.30	1.00
unico	94 MA-S 7	Q200	24.80	27.39	28.95	31.11	2.16	29.19	0.24	28.95	29.70	0.015591	3.84	6.47	4.30	1.00
unico	94 MA-S 7	Q500	29.10	27.39	29.12	31.11	1.99	29.19	0.07	29.12	29.96	0.015994	4.05	7.19	4.30	1.00
unico	93 MA-S 8	Q50	18.10	27.23	28.27	32.03	3.76	28.23	-0.04	28.27	28.76	0.012513	3.11	5.85	6.60	0.97
unico	93 MA-S 8	Q200	24.80	27.23	28.52	32.03	3.51	28.23	-0.29	28.52	29.09	0.011669	3.39	7.49	6.60	0.95
unico	93 MA-S 8	Q500	29.10	27.23	28.65	32.03	3.38	28.23	-0.42	28.65	29.29	0.011661	3.58	8.37	6.60	0.96
unico	92.5 MA-S 8	Q50	18.10	26.75	27.76	31.60	3.84	28.20	0.44	27.76	28.26	0.013195	3.15	5.75	5.70	1.00
unico	92.5 MA-S 8	Q200	24.80	26.75	27.99	31.60	3.61	28.20	0.21	27.99	28.62	0.013340	3.50	7.09	5.70	1.00
unico	92.5 MA-S 8	Q500	29.10	26.75	28.13	31.60	3.47	28.20	0.07	28.13	28.83	0.013448	3.69	7.89	5.70	1.00
unico	92.4 MA-S 8	Q50	18.10	26.20	27.21	31.50	4.29	28.20	0.99	27.21	27.71	0.013228	3.15	5.75	5.70	1.00
unico	92.4 MA-S 8	Q200	24.80	26.20	27.63	31.50	3.87	28.20	0.57	27.44	28.10	0.008887	3.04	8.15	5.70	0.81
unico	92.4 MA-S 8	Q500	29.10	26.20	27.96	31.50	3.54	28.20	0.24	27.59	28.39	0.006805	2.91	10.01	5.70	0.70
unico	92 MA-S 9	Q50	18.10	25.85	27.27	30.71	3.44	28.20	0.93	26.86	27.52	0.004860	2.24	8.08	5.70	0.60
unico	92 MA-S 9	Q200	24.80	25.85	27.77	30.71	2.94	28.20	0.43	27.09	28.03	0.003858	2.27	10.93	5.70	0.52
unico	92 MA-S 9	Q500	29.10	25.85	28.06	30.71	2.65	28.20	0.14	27.24	28.33	0.003588	2.31	12.60	5.70	0.50
unico	91 MA-S 9	Q50	18.10	25.80	27.26	30.71	3.45	30.25	2.99	26.81	27.50	0.004492	2.18	8.30	5.70	0.58
unico	91 MA-S 9	Q200	24.80	25.80	27.76	30.71	2.95	30.25	2.49	27.05	28.01	0.003641	2.22	11.16	5.70	0.51
unico	91 MA-S 9	Q500	29.10	25.80	28.06	30.71	2.66	30.25	2.19	27.19	28.32	0.003414	2.27	12.83	5.70	0.48
unico	90.9 MA-S 9	Q50	18.10	25.80	27.26	29.61	2.35	29.15	1.89	26.81	27.50	0.004442	2.17	8.33	5.70	0.57

HEC-RAS Plan: 0_PdB2013 River: Magistrato Reach: unico (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	LOB Elev	L. Freeboard	ROB Elev	R. Freeboard	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)	(m)	(m/m)	(m/s)	(m2)	(m)	
unico	90.9 MA-S 9	Q200	24.80	25.80	27.76	29.61	1.85	29.15	1.39	27.05	28.01	0.003613	2.22	11.19	5.70	0.50
unico	90.9 MA-S 9	Q500	29.10	25.80	28.06	29.61	1.55	29.15	1.09	27.19	28.32	0.003392	2.26	12.86	5.70	0.48
unico	90.1 MA-S 9	Q50	18.10	25.26	27.33	29.31	1.98	29.17	1.84	26.27	27.45	0.001672	1.54	11.77	5.70	0.34
unico	90.1 MA-S 9	Q200	24.80	25.26	27.82	29.31	1.49	29.17	1.35	26.50	27.96	0.001751	1.70	14.57	5.70	0.34
unico	90.1 MA-S 9	Q500	29.10	25.26	28.10	29.31	1.21	29.17	1.07	26.64	28.27	0.001811	1.79	16.21	5.70	0.34
unico	90 MA-S 9	Q50	18.10	25.26	27.33	30.41	3.08	30.27	2.94	26.26	27.45	0.001661	1.53	11.80	5.70	0.34
unico	90 MA-S 9	Q200	24.80	25.26	27.82	30.41	2.59	30.27	2.45	26.50	27.96	0.001742	1.70	14.60	5.70	0.34
unico	90 MA-S 9	Q500	29.10	25.26	28.10	30.41	2.31	30.27	2.17	26.64	28.27	0.001802	1.79	16.24	5.70	0.34
unico	89 MA-S 10	Q50	18.10	25.13	26.65	29.93	3.28	30.27	3.62	26.65	27.38	0.017465	3.77	4.80	3.31	1.00
unico	89 MA-S 10	Q200	24.80	25.13	27.00	29.93	2.93	30.27	3.27	27.00	27.88	0.018385	4.16	5.96	3.38	1.00
unico	89 MA-S 10	Q500	29.10	25.13	27.20	29.93	2.73	30.27	3.07	27.20	28.18	0.018981	4.37	6.66	3.42	1.00
unico	88 MA-S 11	Q50	18.10	23.74	24.96	28.10	3.14	27.74	2.78	24.96	25.53	0.013351	3.36	5.38	4.67	1.00
unico	88 MA-S 11	Q200	24.80	23.74	25.36	28.10	2.74	27.74	2.38	25.23	25.95	0.010745	3.41	7.27	4.75	0.88
unico	88 MA-S 11	Q500	29.10	23.74	25.65	28.10	2.45	27.74	2.09	25.39	26.22	0.009137	3.36	8.66	4.81	0.80
unico	87 MA-S 12	Q50	18.10	23.50	24.87	28.15	3.28	27.55	2.68	24.76	25.38	0.011219	3.16	5.73	4.34	0.88
unico	87 MA-S 12	Q200	24.80	23.50	25.35	28.15	2.80	27.55	2.20	25.05	25.86	0.008893	3.17	7.82	4.46	0.76
unico	87 MA-S 12	Q500	29.10	23.50	25.63	28.15	2.52	27.55	1.92	25.22	26.15	0.008230	3.21	9.06	4.53	0.72
unico	86.1 MA-S 12	Q50	18.10	23.47	24.97	27.55	2.58	27.57	2.60	24.65	25.33	0.007497	2.69	6.73	4.50	0.70
unico	86.1 MA-S 12	Q200	24.80	23.47	25.42	27.55	2.13	27.57	2.15	24.93	25.83	0.006809	2.83	8.76	4.50	0.65
unico	86.1 MA-S 12	Q500	29.10	23.47	25.68	27.55	1.87	27.57	1.89	25.09	26.12	0.006633	2.92	9.96	4.50	0.63
unico	86 MA-S 13	Q50	18.10	23.45	24.97	27.00	2.03	27.02	2.05	24.64	25.33	0.007305	2.66	6.80	4.50	0.69
unico	86 MA-S 13	Q200	24.80	23.45	25.42	27.00	1.58	27.02	1.60	24.92	25.82	0.006678	2.81	8.83	4.50	0.64
unico	86 MA-S 13	Q500	29.10	23.45	25.69	27.00	1.31	27.02	1.33	25.08	26.12	0.006526	2.90	10.02	4.50	0.62
unico	85 MA-S 14	Q50	18.10	23.14	25.03	26.99	1.96	27.01	1.98	24.33	25.26	0.003985	2.14	8.46	4.50	0.50
unico	85 MA-S 14	Q200	24.80	23.14	25.47	26.99	1.52	27.01	1.54	24.61	25.76	0.004239	2.37	10.45	4.50	0.50
unico	85 MA-S 14	Q500	29.10	23.14	25.74	26.99	1.25	27.01	1.27	24.77	26.05	0.004399	2.50	11.64	4.50	0.50
unico	84.9 MA-S 14	Q50	18.10	23.12	25.04	27.54	2.50	27.56	2.52	24.31	25.26	0.003832	2.11	8.59	4.50	0.49
unico	84.9 MA-S 14	Q200	24.80	23.12	25.48	27.54	2.06	27.56	2.08	24.58	25.76	0.004110	2.34	10.58	4.50	0.49
unico	84.9 MA-S 14	Q500	29.10	23.12	25.74	27.54	1.80	27.56	1.82	24.75	26.05	0.004280	2.47	11.76	4.50	0.49
unico	84.5 MA-S 14	Q50	18.10	23.08	24.46	26.30	1.84	26.30	1.84	24.46	25.15	0.016928	3.67	4.93	3.60	1.00
unico	84.5 MA-S 14	Q200	24.80	23.08	24.78	26.30	1.52	26.30	1.52	24.78	25.63	0.017913	4.07	6.09	3.60	1.00
unico	84.5 MA-S 14	Q500	29.10	23.08	24.97	26.30	1.33	26.30	1.33	24.97	25.91	0.018537	4.29	6.78	3.60	1.00
unico	84.4 MA-S 14	Q50	18.10	22.23	24.41	26.30	1.89	26.30	1.89	23.61	24.68	0.004955	2.32	7.80	3.60	0.50
unico	84.4 MA-S 14	Q200	24.80	22.23	24.83	26.30	1.47	26.30	1.47	23.93	25.19	0.005902	2.66	9.31	3.60	0.53
unico	84.4 MA-S 14	Q500	29.10	22.23	25.07	26.30	1.23	26.30	1.23	24.12	25.49	0.006450	2.85	10.20	3.60	0.54
unico	84 MA-S 15	Q50	18.10	22.21	23.88	24.80	0.92	25.81	1.93	23.88	24.58	0.017448	3.70	4.89	3.50	1.00
unico	84 MA-S 15	Q200	24.80	22.21	24.21	24.80	0.59	25.81	1.60	24.21	25.07	0.018541	4.11	6.03	3.50	1.00

HEC-RAS Plan: 0_PdB2013 River: Magistrato Reach: unico (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	LOB Elev	L. Freeboard	ROB Elev	R. Freeboard	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)	(m)	(m/m)	(m/s)	(m2)	(m)	
unico	84 MA-S 15	Q500	29.10	22.21	24.40	24.80	0.40	25.81	1.41	24.40	25.36	0.019199	4.34	6.71	3.50	1.00
unico	83.5 MA-S 15	Q50	18.10	21.62	23.21	24.07	0.86	25.57	2.37	22.77	23.42	0.004084	2.07	8.75	6.40	0.56
unico	83.5 MA-S 15	Q200	24.80	21.62	23.71	24.07	0.36	25.57	1.86	22.99	23.93	0.003071	2.06	12.01	6.40	0.48
unico	83.5 MA-S 15	Q500	29.10	21.62	24.01	24.07	0.06	25.57	1.56	23.12	24.23	0.002793	2.09	13.92	6.40	0.45
unico	83 MA-S 16	Q50	18.10	21.04	22.61	23.34	0.73	25.34	2.72	22.61	23.33	0.017690	3.74	4.84	3.40	1.00
unico	83 MA-S 16	Q200	24.80	21.04	22.95	23.34	0.39	25.34	2.39	22.95	23.82	0.018943	4.16	5.97	3.40	1.00
unico	83 MA-S 16	Q500	29.10	21.04	23.14	23.34	0.20	25.34	2.20	23.14	24.12	0.019648	4.38	6.64	3.40	1.00
unico	82 MA-S 17	Q50	18.10	20.36	21.88	23.10	1.22	24.66	2.78	21.88	22.58	0.017291	3.70	4.89	3.50	1.00
unico	82 MA-S 17	Q200	24.80	20.36	22.20	23.10	0.90	24.66	2.46	22.20	23.06	0.018377	4.11	6.03	3.50	1.00
unico	82 MA-S 17	Q500	29.10	20.36	22.40	23.10	0.70	24.66	2.26	22.40	23.36	0.019052	4.33	6.71	3.50	1.00
unico	81 MA-S 18	Q50	18.10	19.76	21.42	23.30	1.88	23.51	2.09	21.42	22.12	0.016437	3.70	4.89	3.50	1.00
unico	81 MA-S 18	Q200	24.80	19.76	21.75	23.30	1.55	23.51	1.76	21.75	22.61	0.017609	4.11	6.03	3.50	1.00
unico	81 MA-S 18	Q500	29.10	19.76	21.94	23.30	1.36	23.51	1.57	21.94	22.90	0.018274	4.34	6.71	3.50	1.00
unico	80 MA-S 19	Q50	18.10	18.96	20.77	22.01	1.24	22.71	1.94	20.77	21.48	0.017117	3.75	4.83	3.40	1.00
unico	80 MA-S 19	Q200	24.80	18.96	21.10	22.01	0.91	22.71	1.61	21.10	21.98	0.018248	4.15	5.97	3.40	1.00
unico	80 MA-S 19	Q500	29.10	18.96	21.30	22.01	0.71	22.71	1.41	21.30	22.28	0.018998	4.38	6.64	3.40	1.00
unico	79 MA-S 20	Q50	18.10	18.56	20.19	22.06	1.87	31.00	10.81	20.00	20.70	0.011373	3.16	5.72	3.80	0.82
unico	79 MA-S 20	Q200	24.80	18.56	20.46	22.06	1.60	31.00	10.54	20.31	21.14	0.013562	3.67	6.76	3.80	0.88
unico	79 MA-S 20	Q500	29.10	18.56	20.64	22.06	1.42	31.00	10.36	20.49	21.42	0.014463	3.91	7.44	3.80	0.89
unico	78.1 MA-S 20	Q50	18.10	18.40	19.96	21.30	1.34	31.00	11.04	19.96	20.59	0.014441	3.54	5.11	4.00	1.00
unico	78.1 MA-S 20	Q200	24.80	18.40	20.29	21.30	1.01	31.00	10.71	20.26	21.04	0.014320	3.84	6.45	4.00	0.97
unico	78.1 MA-S 20	Q500	29.10	18.40	20.55	21.30	0.75	31.00	10.45	20.43	21.32	0.013222	3.88	7.49	4.00	0.91
unico	78 MA-S 21	Q50	18.10	18.40	20.08	21.97	1.89	31.00	10.92	19.87	20.51	0.008499	2.90	6.24	4.47	0.78
unico	78 MA-S 21	Q200	24.80	18.40	20.47	21.97	1.50	31.00	10.53	20.15	20.96	0.008125	3.11	7.98	4.50	0.75
unico	78 MA-S 21	Q500	29.10	18.40	20.72	21.97	1.25	31.00	10.28	20.32	21.24	0.007813	3.19	9.12	4.52	0.72
unico	77.3 MA-S 21	Q50	18.10	18.15	20.05	21.97	1.92	31.00	10.95	19.68	20.40	0.006893	2.61	6.94	4.48	0.67
unico	77.3 MA-S 21	Q200	24.80	18.15	20.43	21.97	1.54	31.00	10.57	19.96	20.85	0.007045	2.87	8.66	4.50	0.66
unico	77.3 MA-S 21	Q500	29.10	18.15	20.68	21.97	1.29	31.00	10.32	20.13	21.13	0.006961	2.97	9.79	4.52	0.64
unico	77.2 MA-S 21	Q50	18.10	18.12	19.73	22.57	2.84	31.00	11.27	19.73	20.37	0.015681	3.53	5.13	4.07	1.00
unico	77.2 MA-S 21	Q200	24.80	18.12	20.18	22.57	2.39	31.00	10.82	20.03	20.83	0.012611	3.56	6.96	4.11	0.87
unico	77.2 MA-S 21	Q500	29.10	18.12	20.45	22.57	2.12	31.00	10.55	20.21	21.11	0.011615	3.60	8.08	4.13	0.82
unico	77.1 MA-S 21	Q50	18.10	18.02	19.81	22.57	2.76	31.00	11.19	19.64	20.30	0.010908	3.10	5.84	4.09	0.83
unico	77.1 MA-S 21	Q200	24.80	18.02	20.26	22.57	2.31	31.00	10.74	19.93	20.79	0.009642	3.23	7.69	4.12	0.75
unico	77.1 MA-S 21	Q500	29.10	18.02	20.52	22.57	2.05	31.00	10.48	20.11	21.08	0.009368	3.32	8.76	4.14	0.73
unico	77 MA-S 22	Q50	18.10	18.00	19.83	22.17	2.34	21.75	1.92	19.61	20.29	0.009982	3.00	6.03	4.10	0.79
unico	77 MA-S 22	Q200	24.80	18.00	20.27	22.17	1.90	21.75	1.48	19.91	20.78	0.009059	3.15	7.87	4.14	0.73
unico	77 MA-S 22	Q500	29.10	18.00	20.53	22.17	1.64	21.75	1.22	20.08	21.07	0.008872	3.26	8.93	4.16	0.71

HEC-RAS Plan: 0_PdB2013 River: Magistrato Reach: unico (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	LOB Elev	L. Freeboard	ROB Elev	R. Freeboard	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)	(m)	(m/m)	(m/s)	(m2)	(m)	
unico	76 MA-S 23	Q50	18.10	17.95	19.90	22.05	2.15	21.65	1.75	19.46	20.21	0.005966	2.45	7.37	4.60	0.62
unico	76 MA-S 23	Q200	24.80	17.95	20.35	22.05	1.70	21.65	1.30	19.73	20.70	0.005661	2.62	9.45	4.60	0.58
unico	76 MA-S 23	Q500	29.10	17.95	20.61	22.05	1.44	21.65	1.04	19.89	20.99	0.005646	2.73	10.65	4.60	0.57
unico	75.9 MA-S 23	Q50	18.10	17.95	19.90	22.45	2.55	22.05	2.15	19.46	20.21	0.005975	2.46	7.37	4.60	0.62
unico	75.9 MA-S 23	Q200	24.80	17.95	20.35	22.45	2.10	22.05	1.70	19.73	20.70	0.005667	2.63	9.44	4.60	0.58
unico	75.9 MA-S 23	Q500	29.10	17.95	20.61	22.45	1.84	22.05	1.44	19.89	20.99	0.005651	2.73	10.65	4.60	0.57
unico	75.8 MA-S 23	Q50	18.10	17.95	19.89	22.45	2.56	22.05	2.16	19.46	20.20	0.005992	2.46	7.36	4.60	0.62
unico	75.8 MA-S 23	Q200	24.80	17.95	20.35	22.45	2.10	22.05	1.70	19.73	20.70	0.005678	2.63	9.44	4.60	0.59
unico	75.8 MA-S 23	Q500	29.10	17.95	20.61	22.45	1.84	22.05	1.44	19.89	20.99	0.005660	2.73	10.64	4.60	0.57
unico	75.7 MA-S 23	Q50	18.10	17.95	19.86	21.10	1.24	21.29	1.43	19.35	20.20	0.006550	2.56	7.07	3.95	0.61
unico	75.7 MA-S 23	Q200	24.80	17.95	20.28	21.10	0.82	21.29	1.01	19.66	20.69	0.007040	2.85	8.71	4.00	0.62
unico	75.7 MA-S 23	Q500	29.10	17.95	20.52	21.10	0.58	21.29	0.77	19.84	20.98	0.007346	3.01	9.67	4.03	0.62
unico	75 MA-S 24	Q50	18.10	17.92	19.88	21.10	1.22	21.29	1.41	19.22	20.14	0.004547	2.24	8.08	4.36	0.52
unico	75 MA-S 24	Q200	24.80	17.92	20.30	21.10	0.80	21.29	0.99	19.51	20.62	0.004909	2.50	9.93	4.41	0.53
unico	75 MA-S 24	Q500	29.10	17.92	20.55	21.10	0.55	21.29	0.74	19.68	20.90	0.005131	2.64	11.02	4.44	0.53
unico	74.1 MA-S 24	Q50	18.10	17.76	19.52	21.50	1.98	21.30	1.78	19.37	20.06	0.012945	3.27	5.54	3.71	0.85
unico	74.1 MA-S 24	Q200	24.80	17.76	19.87	21.50	1.63	21.30	1.43	19.69	20.54	0.013545	3.61	6.86	3.78	0.86
unico	74.1 MA-S 24	Q500	29.10	17.76	20.08	21.50	1.42	21.30	1.22	19.88	20.82	0.013954	3.81	7.65	3.83	0.86
unico	74 MA-S 25	Q50	18.10	17.75	19.54	21.00	1.46	20.50	0.96	19.35	20.05	0.011973	3.18	5.69	3.76	0.82
unico	74 MA-S 25	Q200	24.80	17.75	19.90	21.00	1.10	20.50	0.60	19.67	20.53	0.012534	3.51	7.06	3.85	0.83
unico	74 MA-S 25	Q500	29.10	17.75	20.11	21.00	0.89	20.50	0.39	19.86	20.80	0.012896	3.70	7.87	3.90	0.83
unico	73 MA-S 25	Q50	18.10	17.70	19.32	21.00	1.68	20.50	1.18	19.32	19.99	0.017486	3.63	4.98	3.71	1.00
unico	73 MA-S 25	Q200	24.80	17.70	19.64	21.00	1.36	20.50	0.86	19.64	20.46	0.018094	4.01	6.18	3.79	1.00
unico	73 MA-S 25	Q500	29.10	17.70	19.83	21.00	1.17	20.50	0.67	19.83	20.74	0.018353	4.21	6.92	3.83	1.00
unico	72.9 MA-S 25	Q50	18.10	17.69	19.14	21.00	1.86	20.80	1.66	19.14	19.76	0.016029	3.48	5.19	4.21	1.00
unico	72.9 MA-S 25	Q200	24.80	17.69	19.65	21.00	1.35	20.80	1.15	19.44	20.23	0.011346	3.37	7.35	4.30	0.82
unico	72.9 MA-S 25	Q500	29.10	17.69	19.90	21.00	1.10	20.80	0.90	19.61	20.51	0.010719	3.45	8.44	4.34	0.79
unico	72.1 MA-S 25	Q50	18.10	17.68	19.06	20.60	1.54	20.60	1.54	19.06	19.72	0.015990	3.62	5.00	3.74	1.00
unico	72.1 MA-S 25	Q200	24.80	17.68	19.37	20.60	1.23	20.60	1.23	19.37	20.19	0.016743	4.01	6.19	3.79	1.00
unico	72.1 MA-S 25	Q500	29.10	17.68	19.56	20.60	1.04	20.60	1.04	19.56	20.47	0.017144	4.21	6.91	3.82	1.00
unico	72 MA-S 26	Q50	18.10	17.66	19.04	20.60	1.56	20.60	1.56	19.04	19.70	0.012413	3.60	5.03	3.81	1.00
unico	72 MA-S 26	Q200	24.80	17.66	19.35	20.60	1.25	20.60	1.25	19.35	20.16	0.012867	3.97	6.24	3.88	1.00
unico	72 MA-S 26	Q500	29.10	17.66	19.54	20.60	1.06	20.60	1.06	19.54	20.43	0.013197	4.18	6.97	3.92	1.00
unico	71 MA-S 27	Q50	18.10	14.10	15.44	17.10	1.66	17.10	1.66	15.44	16.11	0.013081	3.63	4.99	3.72	1.00
unico	71 MA-S 27	Q200	24.80	14.10	15.75	17.10	1.35	17.10	1.35	15.75	16.58	0.013830	4.03	6.15	3.72	1.00
unico	71 MA-S 27	Q500	29.10	14.10	15.94	17.10	1.16	17.10	1.16	15.94	16.86	0.014304	4.25	6.84	3.72	1.00

HEC-RAS Plan: 0_PdB2013 River: Magistrato Reach: unico (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	LOB Elev	L. Freeboard	ROB Elev	R. Freeboard	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)	(m)	(m/m)	(m/s)	(m2)	(m)	
unico	70 MA-S 28	Q50	18.10	13.59	14.91	16.09	1.18	16.09	1.18	14.91	15.57	0.012922	3.61	5.02	3.80	1.00
unico	70 MA-S 28	Q200	24.80	13.59	15.22	16.09	0.87	16.09	0.87	15.22	16.04	0.013562	4.00	6.20	3.80	1.00
unico	70 MA-S 28	Q500	29.10	13.59	15.41	16.09	0.68	16.09	0.68	15.41	16.31	0.013988	4.22	6.90	3.80	1.00
unico	69 MA-S 29	Q50	18.10	11.42	12.78	14.20	1.42	14.20	1.42	12.78	13.46	0.013274	3.65	4.96	3.65	1.00
unico	69 MA-S 29	Q200	24.80	11.42	13.10	14.20	1.10	14.20	1.10	13.10	13.93	0.014041	4.06	6.12	3.65	1.00
unico	69 MA-S 29	Q500	29.10	11.42	13.29	14.20	0.91	14.20	0.91	13.29	14.22	0.014507	4.27	6.81	3.65	1.00
unico	68 MA-S 29	Q50	18.10	10.90	12.27	13.68	1.41	13.68	1.41	12.27	12.96	0.013394	3.67	4.94	3.60	1.00
unico	68 MA-S 29	Q200	24.80	10.90	12.59	13.68	1.09	13.68	1.09	12.59	13.44	0.014229	4.08	6.08	3.60	1.00
unico	68 MA-S 29	Q500	29.10	10.90	12.78	13.68	0.90	13.68	0.90	12.78	13.72	0.014704	4.30	6.77	3.60	1.00
unico	67.5 MA-S 29	Q50	18.10	10.23	11.60	13.68	2.08	13.68	2.08	11.60	12.29	0.013524	3.68	4.92	3.60	1.01
unico	67.5 MA-S 29	Q200	24.80	10.23	11.92	13.68	1.76	13.68	1.76	11.92	12.77	0.014176	4.07	6.09	3.60	1.00
unico	67.5 MA-S 29	Q500	29.10	10.23	12.20	13.68	1.48	13.68	1.48	12.11	13.06	0.012979	4.10	7.10	3.60	0.93
unico	67.4 MA-S 29	Q50	18.10	10.20	11.80	12.53	0.73	12.53	0.73	11.27	12.04	0.003417	2.18	8.32	5.20	0.55
unico	67.4 MA-S 29	Q200	24.80	10.20	12.29	12.53	0.25	12.53	0.25	11.52	12.55	0.003056	2.28	10.86	5.20	0.50
unico	67.4 MA-S 29	Q500	29.10	10.20	12.59	12.53	-0.05	12.53	-0.05	11.67	12.88	0.005464	2.40	12.14		0.50
unico	67.3 MA-S 29	Q50	18.10	10.19	11.80	11.93	0.13	11.93	0.13	11.27	12.04	0.003381	2.17	8.35	5.20	0.55
unico	67.3 MA-S 29	Q200	24.80	10.19	12.16	11.93	-0.23	11.93	-0.23	11.52	12.54	0.009559	2.75	9.02		0.63
unico	67.3 MA-S 29	Q500	29.10	10.19	12.33	11.93	-0.40	11.93	-0.40	11.67	12.86	0.013162	3.23	9.02		0.71
unico	67.2 MA-S 29	Q50	18.10	10.07	11.81	11.89	0.08	11.89	0.08	11.15	12.02	0.002711	2.00	9.03	5.20	0.49
unico	67.2 MA-S 29	Q200	24.80	10.07	12.14	11.89	-0.25	11.89	-0.25	11.40	12.49	0.008350	2.63	9.44		0.58
unico	67.2 MA-S 29	Q500	29.10	10.07	12.31	11.89	-0.42	11.89	-0.42	11.55	12.79	0.011497	3.08	9.44		0.66
unico	67.1 MA-S 29	Q50	18.10	10.07	11.81	12.48	0.67	12.48	0.67	11.14	12.02	0.002688	2.00	9.06	5.20	0.48
unico	67.1 MA-S 29	Q200	24.80	10.07	12.21	12.48	0.28	12.48	0.28	11.39	12.46	0.002860	2.23	11.13	5.20	0.49
unico	67.1 MA-S 29	Q500	29.10	10.07	12.45	12.48	0.04	12.48	0.04	11.54	12.73	0.002964	2.36	12.36	5.20	0.49
unico	67 MA-S 30	Q50	18.10	10.03	11.82	12.43	0.61	12.53	0.71	11.10	12.01	0.002512	1.95	9.28	5.20	0.47
unico	67 MA-S 30	Q200	24.80	10.03	12.21	12.43	0.22	12.53	0.32	11.35	12.46	0.002710	2.19	11.35	5.20	0.47
unico	67 MA-S 30	Q500	29.10	10.03	12.45	12.43	-0.02	12.53	0.08	11.50	12.72	0.003184	2.32	12.56	4.27	0.48
unico	66.9 MA-S 30	Q50	18.10	10.02	11.82	13.23	1.41	13.33	1.51	11.09	12.01	0.003114	1.94	9.34	5.20	0.46
unico	66.9 MA-S 30	Q200	24.80	10.02	12.21	13.23	1.02	13.33	1.12	11.34	12.45	0.003373	2.17	11.41	5.20	0.47
unico	66.9 MA-S 30	Q500	29.10	10.02	12.45	13.23	0.78	13.33	0.88	11.49	12.72	0.003523	2.30	12.63	5.20	0.47
unico	66 MA-S 31	Q50	18.10	9.90	11.23	12.50	1.27	12.50	1.27	11.23	11.84	0.015073	3.46	5.23	4.30	1.00
unico	66 MA-S 31	Q200	24.80	9.90	11.51	12.50	0.99	12.50	0.99	11.51	12.26	0.015623	3.84	6.46	4.30	1.00
unico	66 MA-S 31	Q500	29.10	9.90	11.68	12.50	0.82	12.50	0.82	11.68	12.52	0.016053	4.05	7.18	4.30	1.00
unico	65 MA-S 32	Q50	18.10	9.24	10.57	11.80	1.23	11.80	1.23	10.57	11.10	0.012825	3.24	5.58	5.20	1.00
unico	65 MA-S 32	Q200	24.80	9.24	10.82	11.80	0.98	11.80	0.98	10.82	11.48	0.013139	3.60	6.88	5.20	1.00
unico	65 MA-S 32	Q500	29.10	9.24	10.97	11.80	0.83	11.80	0.83	10.97	11.70	0.013351	3.80	7.66	5.20	1.00
unico	64 MA-S 33	Q50	18.10	8.82	10.57	12.50	1.93	11.30	0.73	10.10	10.81	0.004256	2.16	8.36	6.12	0.59

HEC-RAS Plan: 0_PdB2013 River: Magistrato Reach: unico (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	LOB Elev	L. Freeboard	ROB Elev	R. Freeboard	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)	(m)	(m/m)	(m/s)	(m2)	(m)	
unico	64 MA-S 33	Q200	24.80	8.82	10.63	12.50	1.87	11.30	0.67	10.37	11.04	0.007078	2.84	8.74	6.20	0.76
unico	64 MA-S 33	Q500	29.10	8.82	10.89	12.50	1.61	11.30	0.41	10.52	11.29	0.006097	2.81	10.34	6.40	0.71
unico	63 MA-S 34	Q50	20.90	8.08	10.49	16.00	5.51	10.83	0.34	9.85	10.74	0.004070	2.20	9.48	5.20	0.52
unico	63 MA-S 34	Q200	28.70	8.08	10.39	16.00	5.61	10.83	0.44	10.13	10.91	0.009068	3.21	8.93	5.20	0.78
unico	63 MA-S 34	Q500	33.60	8.08	10.62	16.00	5.38	10.83	0.21	10.29	11.18	0.008740	3.32	10.13	5.20	0.76
unico	62.9		Lat Struct													
unico	62 MA-S 35	Q50	20.10	8.03	10.55	11.20	0.65	9.93	-0.62	9.34	10.67	0.001464	1.56	12.92	5.60	0.33
unico	62 MA-S 35	Q200	27.00	8.03	10.54	11.20	0.66	9.93	-0.61	9.58	10.76	0.002677	2.10	12.85	5.60	0.44
unico	62 MA-S 35	Q500	32.73	8.03	10.76	11.20	0.44	9.93	-0.83	9.76	11.03	0.003089	2.33	14.07	5.60	0.47
unico	61 MA-S 36	Q50	18.51	7.87	10.38	16.40	6.02	10.27	-0.11	9.44	10.63	0.004105	2.20	8.39	3.60	0.46
unico	61 MA-S 36	Q200	23.37	7.87	10.24	16.40	6.16	10.27	0.03	9.67	10.69	0.007701	2.97	7.88	3.60	0.64
unico	61 MA-S 36	Q500	29.08	7.87	10.18	16.40	6.22	10.27	0.09	9.93	10.91	0.012746	3.79	7.68	3.60	0.83
unico	60.1 MA-S 36	Q50	16.72	7.85	10.38	16.40	6.02	9.70	-0.68	9.16	10.55	0.002864	1.84	9.07	3.60	0.37
unico	60.1 MA-S 36	Q200	21.19	7.85	10.22	16.40	6.18	9.70	-0.52	9.38	10.53	0.005421	2.49	8.51	3.60	0.52
unico	60.1 MA-S 36	Q500	24.58	7.85	10.22	16.40	6.18	9.70	-0.52	9.54	10.65	0.007268	2.88	8.52	3.60	0.60
unico	60 MA-S 37	Q50	16.53	7.85	10.38	16.40	6.02	9.70	-0.68	9.15	10.55	0.001938	1.82	9.08	3.60	0.37
unico	60 MA-S 37	Q200	20.77	7.85	10.23	16.40	6.17	9.70	-0.53	9.36	10.53	0.003581	2.43	8.54	3.60	0.50
unico	60 MA-S 37	Q500	23.91	7.85	10.24	16.40	6.16	9.70	-0.54	9.51	10.64	0.004673	2.78	8.60	3.60	0.57
unico	59.9 MA-S 37	Q50	15.49	7.44	10.41	16.40	5.99	9.70	-0.71	8.69	10.52	0.001139	1.45	10.65	3.60	0.27
unico	59.9 MA-S 37	Q200	18.30	7.44	10.31	16.40	6.09	9.70	-0.61	8.83	10.47	0.001733	1.78	10.29	3.60	0.34
unico	59.9 MA-S 37	Q500	20.22	7.44	10.37	16.40	6.03	9.70	-0.67	8.93	10.56	0.002013	1.93	10.49	3.60	0.36
unico	59.8 MA-S 37	Q50	15.47	7.44	10.42	16.40	5.98	9.70	-0.72	8.65	10.52	0.000969	1.37	11.27	3.80	0.25
unico	59.8 MA-S 37	Q200	18.25	7.44	10.33	16.40	6.07	9.70	-0.63	8.78	10.47	0.001463	1.67	10.91	3.80	0.32
unico	59.8 MA-S 37	Q500	20.14	7.44	10.38	16.40	6.02	9.70	-0.68	8.88	10.55	0.001693	1.81	11.13	3.80	0.34
unico	59.1 MA-S 37	Q50	14.10	7.37	10.35	9.27	-1.08	9.27	-1.08	8.39	10.50	0.003122	1.70	8.32		0.31
unico	59.1 MA-S 37	Q200	14.08	7.37	10.29	9.27	-1.02	9.27	-1.02	8.39	10.44	0.003113	1.69	8.32		0.32
unico	59.1 MA-S 37	Q500	14.16	7.37	10.37	9.27	-1.10	9.27	-1.10	8.40	10.52	0.003147	1.70	8.32		0.31
unico	59 MA-S 38	Q50	14.09	7.37	10.27	9.07	-1.20	9.07	-1.20	8.45	10.49	0.006710	2.07	6.80		0.39
unico	59 MA-S 38	Q200	14.05	7.37	10.21	9.07	-1.14	9.07	-1.14	8.45	10.43	0.006666	2.07	6.80		0.39
unico	59 MA-S 38	Q500	14.11	7.37	10.29	9.07	-1.22	9.07	-1.22	8.45	10.51	0.006724	2.08	6.80		0.39
unico	58 MA-S 39	Q50	14.09	7.10	10.16	8.77	-1.39	8.77	-1.39	8.17	10.37	0.006663	2.06	6.85		0.38
unico	58 MA-S 39	Q200	14.05	7.10	10.10	8.77	-1.33	8.77	-1.33	8.16	10.31	0.006621	2.05	6.85		0.38
unico	58 MA-S 39	Q500	14.11	7.10	10.17	8.77	-1.40	8.77	-1.40	8.17	10.39	0.006678	2.06	6.85		0.38
unico	57 MA-S 40	Q50	14.09	6.69	9.99	8.34	-1.65	8.34	-1.65	7.75	10.21	0.006906	2.08	6.76		0.37
unico	57 MA-S 40	Q200	14.05	6.69	9.94	8.34	-1.60	8.34	-1.60	7.75	10.16	0.006861	2.08	6.76		0.37
unico	57 MA-S 40	Q500	14.11	6.69	10.01	8.34	-1.67	8.34	-1.67	7.75	10.23	0.006921	2.09	6.76		0.37

HEC-RAS Plan: 0_PdB2013 River: Magistrato Reach: unico (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	LOB Elev	L. Freeboard	ROB Elev	R. Freeboard	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)	(m)	(m/m)	(m/s)	(m2)	(m)	
unico	56.5 MA-S 40	Q50	14.09	5.92	9.70	7.57	-2.13	7.57	-2.13	6.98	9.92	0.006906	2.08	6.76		0.34
unico	56.5 MA-S 40	Q200	14.05	5.92	9.65	7.57	-2.08	7.57	-2.08	6.98	9.87	0.006861	2.08	6.76		0.34
unico	56.5 MA-S 40	Q500	14.11	5.92	9.72	7.57	-2.15	7.57	-2.15	6.98	9.94	0.006921	2.09	6.76		0.34
unico	56 MA-S 41	Q50	14.09	5.64	9.27	6.94	-2.33	6.94	-2.33	6.80	9.73	0.019050	3.01	4.68		0.50
unico	56 MA-S 41	Q200	14.05	5.64	9.22	6.94	-2.28	6.94	-2.28	6.80	9.68	0.018928	3.00	4.68		0.51
unico	56 MA-S 41	Q500	14.11	5.64	9.28	6.94	-2.34	6.94	-2.34	6.80	9.75	0.019092	3.01	4.68		0.50
unico	55 MA-S 42	Q50	14.09	5.36	8.93	6.66	-2.27	6.66	-2.27	6.52	9.39	0.019050	3.01	4.68		0.51
unico	55 MA-S 42	Q200	14.05	5.36	8.88	6.66	-2.22	6.66	-2.22	6.52	9.34	0.018928	3.00	4.68		0.51
unico	55 MA-S 42	Q500	14.11	5.36	8.94	6.66	-2.28	6.66	-2.28	6.52	9.40	0.019092	3.01	4.68		0.51
unico	54.6 MA-S 42	Q50	14.09	5.05	8.43	6.42	-2.01	6.42	-2.01	6.42	9.11	0.029807	3.67	3.84		0.64
unico	54.6 MA-S 42	Q200	14.05	5.05	8.38	6.42	-1.96	6.42	-1.96	6.42	9.07	0.029615	3.66	3.84		0.64
unico	54.6 MA-S 42	Q500	14.11	5.05	8.44	6.42	-2.02	6.42	-2.02	6.42	9.13	0.029872	3.68	3.84		0.64
unico	54.3 MA-S 42	Q50	14.09	4.86	8.11	6.14	-1.97	6.14	-1.97	6.14	8.89	0.036330	3.93	3.58		0.70
unico	54.3 MA-S 42	Q200	14.05	4.86	8.06	6.14	-1.92	6.14	-1.92	6.14	8.85	0.036097	3.92	3.58		0.70
unico	54.3 MA-S 42	Q500	14.11	4.86	8.12	6.14	-1.98	6.14	-1.98	6.14	8.91	0.036409	3.94	3.58		0.70
unico	54 MA-S 43	Q50	14.09	4.75	8.23	6.05	-2.18	6.05	-2.18	5.91	8.69	0.019050	3.01	4.68		0.52
unico	54 MA-S 43	Q200	14.05	4.75	8.19	6.05	-2.14	6.05	-2.14	5.91	8.65	0.018928	3.00	4.68		0.52
unico	54 MA-S 43	Q500	14.11	4.75	8.25	6.05	-2.20	6.05	-2.20	5.91	8.71	0.019092	3.01	4.68		0.51
unico	53 MA-S 44	Q50	14.09	4.13	7.76	5.43	-2.33	5.43	-2.33	5.29	8.22	0.019050	3.01	4.68		0.50
unico	53 MA-S 44	Q200	14.05	4.13	7.72	5.43	-2.29	5.43	-2.29	5.29	8.18	0.018928	3.00	4.68		0.51
unico	53 MA-S 44	Q500	14.11	4.13	7.77	5.43	-2.34	5.43	-2.34	5.29	8.23	0.019092	3.01	4.68		0.50
unico	52.5 MA-S 44	Q50	14.09	3.26	6.49	4.61	-1.88	4.61	-1.88	4.61	7.38	0.041070	4.18	3.37		0.74
unico	52.5 MA-S 44	Q200	14.05	3.26	6.46	4.61	-1.85	4.61	-1.85	4.61	7.34	0.040805	4.16	3.37		0.74
unico	52.5 MA-S 44	Q500	14.11	3.26	6.50	4.61	-1.89	4.61	-1.89	4.61	7.40	0.041158	4.18	3.37		0.74
unico	52 MA-S 45	Q50	14.09	2.82	5.90	4.17	-1.73	4.17	-1.73	4.17	6.79	0.041069	4.18	3.37		0.76
unico	52 MA-S 45	Q200	14.05	2.82	5.87	4.17	-1.70	4.17	-1.70	4.17	6.75	0.040805	4.16	3.37		0.76
unico	52 MA-S 45	Q500	14.11	2.82	5.91	4.17	-1.74	4.17	-1.74	4.17	6.80	0.041158	4.18	3.37		0.76
unico	51 MA-S 46	Q50	14.09	2.64	5.23	4.04	-1.19	4.04	-1.19	3.96	5.81	0.024424	3.39	4.16		0.67
unico	51 MA-S 46	Q200	14.05	2.64	5.20	4.04	-1.16	4.04	-1.16	3.96	5.78	0.024267	3.38	4.16		0.67
unico	51 MA-S 46	Q500	14.11	2.64	5.23	4.04	-1.19	4.04	-1.19	3.96	5.82	0.024477	3.39	4.16		0.67
unico	50.9	Q50	14.09	2.64	5.54	4.04	-1.50	4.04	-1.50	3.96	5.67	0.002948	1.63	8.66	3.00	0.31
unico	50.9	Q200	14.05	2.64	5.51	4.04	-1.47	4.04	-1.47	3.96	5.65	0.002999	1.64	8.58	3.00	0.31
unico	50.9	Q500	14.11	2.64	5.55	4.04	-1.51	4.04	-1.51	3.97	5.68	0.002930	1.62	8.69	3.00	0.30
unico	50.89		Lat Struct													
unico	50.6	Q50	14.09	2.10	5.45	3.60	-1.85	3.60	-1.85	3.58	5.59	0.003504	1.68	8.37	2.50	0.29
unico	50.6	Q200	14.05	2.10	5.42	3.60	-1.82	3.60	-1.82	3.58	5.56	0.003553	1.69	8.30	2.50	0.30
unico	50.6	Q500	14.11	2.10	5.46	3.60	-1.86	3.60	-1.86	3.58	5.60	0.003487	1.68	8.39	2.50	0.29

HEC-RAS Plan: 0_PdB2013 River: Magistrato Reach: unico (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	LOB Elev	L. Freeboard	ROB Elev	R. Freeboard	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)	(m)	(m/m)	(m/s)	(m2)	(m)	
unico	50.5 MA-S 46.5	Q50	14.09	2.10	4.81	3.60	-1.21	3.60	-1.21	3.58	5.53	0.018779	3.76	3.75		0.73
unico	50.5 MA-S 46.5	Q200	14.05	2.10	4.79	3.60	-1.19	3.60	-1.19	3.58	5.51	0.018659	3.75	3.75		0.73
unico	50.5 MA-S 46.5	Q500	14.11	2.10	4.82	3.60	-1.22	3.60	-1.22	3.58	5.54	0.018820	3.76	3.75		0.73
unico	50 MA-S 47	Q50	14.09	1.50	3.94	3.00	-0.94	3.00	-0.94	2.98	4.66	0.030402	3.76	3.75		0.77
unico	50 MA-S 47	Q200	14.05	1.50	3.92	3.00	-0.92	3.00	-0.92	2.98	4.63	0.030206	3.75	3.75		0.77
unico	50 MA-S 47	Q500	14.11	1.50	3.94	3.00	-0.94	3.00	-0.94	2.98	4.66	0.030468	3.76	3.75		0.77
unico	49 MA-S 48	Q50	14.09	1.37	3.70	2.87	-0.83	2.87	-0.83	2.85	4.42	0.030420	3.76	3.75		0.79
unico	49 MA-S 48	Q200	14.05	1.37	3.69	2.87	-0.82	2.87	-0.82	2.85	4.40	0.030224	3.75	3.75		0.79
unico	49 MA-S 48	Q500	14.11	1.37	3.71	2.87	-0.84	2.87	-0.84	2.85	4.43	0.030485	3.76	3.75		0.79
unico	48 MA-S 49	Q50	14.09	1.28	3.48	2.80	-0.68	2.80	-0.68	2.76	4.18	0.029294	3.71	3.80		0.80
unico	48 MA-S 49	Q200	14.05	1.28	3.46	2.80	-0.66	2.80	-0.66	2.76	4.16	0.029105	3.70	3.80		0.80
unico	48 MA-S 49	Q500	14.11	1.28	3.48	2.80	-0.68	2.80	-0.68	2.76	4.18	0.029357	3.71	3.80		0.80
unico	47 MA-S 50	Q50	14.09	0.98	3.13	2.48	-0.65	2.48	-0.65	2.46	3.85	0.030420	3.76	3.75		0.82
unico	47 MA-S 50	Q200	14.05	0.98	3.12	2.48	-0.64	2.48	-0.64	2.46	3.83	0.030224	3.75	3.75		0.82
unico	47 MA-S 50	Q500	14.11	0.98	3.13	2.48	-0.65	2.48	-0.65	2.46	3.85	0.030485	3.76	3.75		0.82
unico	46 MA-S 51	Q50	14.09	0.86	2.76	2.36	-0.40	2.36	-0.40	2.34	3.48	0.030420	3.76	3.75		0.87
unico	46 MA-S 51	Q200	14.05	0.86	2.75	2.36	-0.39	2.36	-0.39	2.34	3.47	0.030224	3.75	3.75		0.87
unico	46 MA-S 51	Q500	14.11	0.86	2.77	2.36	-0.41	2.36	-0.41	2.34	3.49	0.030485	3.76	3.75		0.87
unico	45 MA-S 52	Q50	14.09	0.70	2.35	2.20	-0.15	2.20	-0.15	2.18	3.07	0.030420	3.76	3.75		0.93
unico	45 MA-S 52	Q200	14.05	0.70	2.35	2.20	-0.15	2.20	-0.15	2.18	3.06	0.030224	3.75	3.75		0.93
unico	45 MA-S 52	Q500	14.11	0.70	2.36	2.20	-0.16	2.20	-0.16	2.18	3.08	0.030485	3.76	3.75		0.93
unico	44 MA-S 53	Q50	14.09	0.33	1.52	1.51	-0.01	1.51	-0.01	1.51	2.14	0.029096	3.51	4.01		1.03
unico	44 MA-S 53	Q200	14.05	0.33	1.52	1.51	-0.01	1.51	-0.01	1.51	2.14	0.028909	3.50	4.01		1.03
unico	44 MA-S 53	Q500	14.11	0.33	1.52	1.51	-0.01	1.51	-0.01	1.51	2.15	0.029159	3.52	4.01		1.03
unico	43 MA-S 54	Q50	14.09	0.16	1.25	1.34	0.09	1.34	0.09	1.25	1.80	0.013407	3.27	4.31	3.95	1.00
unico	43 MA-S 54	Q200	14.05	0.16	1.25	1.34	0.09	1.34	0.09	1.25	1.79	0.013395	3.27	4.30	3.95	1.00
unico	43 MA-S 54	Q500	14.11	0.16	1.25	1.34	0.09	1.34	0.09	1.25	1.80	0.013407	3.27	4.31	3.95	1.00
unico	42 MA-S 55	Q50	14.09	0.00	0.93	1.18	0.25	1.18	0.25	0.93	1.40	0.012007	3.02	4.66	5.00	1.00
unico	42 MA-S 55	Q200	14.05	0.00	0.93	1.18	0.25	1.18	0.25	0.93	1.40	0.012026	3.02	4.65	5.00	1.00
unico	42 MA-S 55	Q500	14.11	0.00	0.93	1.18	0.25	1.18	0.25	0.93	1.40	0.012035	3.03	4.66	5.00	1.00
unico	41 MA-S 56	Q50	14.09	-0.46	0.44	1.07	0.63	1.07	0.63	0.44	0.89	0.011846	2.98	4.73	5.25	1.00
unico	41 MA-S 56	Q200	14.05	-0.46	0.44	1.07	0.63	1.07	0.63	0.44	0.89	0.011753	2.97	4.73	5.25	1.00
unico	41 MA-S 56	Q500	14.11	-0.46	0.44	1.07	0.63	1.07	0.63	0.44	0.89	0.011782	2.97	4.74	5.25	1.00
unico	40 MA-S 57	Q50	14.09	-0.90	-0.12	1.00	1.12	1.00	1.12	-0.12	0.27	0.011170	2.77	5.08	6.50	1.00
unico	40 MA-S 57	Q200	14.05	-0.90	-0.12	1.00	1.12	1.00	1.12	-0.12	0.27	0.011156	2.77	5.07	6.50	1.00
unico	40 MA-S 57	Q500	14.11	-0.90	-0.12	1.00	1.12	1.00	1.12	-0.12	0.27	0.011197	2.78	5.08	6.50	1.00