

Comune di Soliera



Provincia di Modena

**PROGETTO PRELIMINARE DEGLI INTERVENTI DI
RIEQUILIBRIO IDRAULICO RETE FOGNARIA PRINCIPALE
DELLA ZONA OVEST DEL CAPOLUOGO E RELATIVO RETICOLO
IDROGRAFICO SUPERFICIALE DI RECAPITO (SCOLO GAMBISA)
IN RELAZIONE ALLO STATO DI FATTO E ALLE PREVISTE
ESPANSIONI URBANISTICHE**

-E2a-

Report numerici allegati alla Relazione tecnica

SINERGIA S.R.L.
-Servizi all'ingegneria-

Ing. Andrea Artusi
Ing. Yos Zorzi

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REPORT NUMERICI DELLE SIMULAZIONI EFFETTUATE

F1) Simulazione STATO DI FATTO - Ietogramma rettangolare con $Tr = 2$ anni e durata 45 minuti; c.p.c. PTCP

DATI GENERALI -----

Numero dei nodi	78
Numero dei rami	80
Numero delle pompe	0
Numero degli scaricatori	0
Sommario delle piogge	
Pioggia totale (mm)	21.0000

CONTROLLO DI CONTINUITA' PER IL DEFLUSSO SUPERFICIALE -----

	Metri cubi	Millimetri sul bacino
Precipitazione totale (Pioggia + Neve)	20525.203125	21.000
Infiltrazione totale	9754.380859	9.980
Evaporazione totale	949.273926	0.971
Deflusso superficiale	3752.153564	3.839
Volume trattenuto negli accumuli superficiali	6069.626465	6.210
Infiltrazione per l'area permeabile	9754.380859	17.500
Infiltrazione + Evaporazione + Deflusso superficiale + Accumuli superficiali	20525.433594	21.000
Precipitazione totale + Accumulo iniziale	20525.203125	21.000

Errore -0.001 % (*)

(*) L'errore nella continuità è così calcolato:
 (Precipitazione - Infiltrazione - Evaporazione -
 - Deflusso superficiale - Accumuli superficiali) /
 / Precipitazione

CONTROLLO DI CONTINUITA' NELLA RETE -----

	Metri cubi	Millimetri sul bacino
Accumulo iniziale	0.000000	0.000
Accumulo finale	0.000000	0.000
Deflusso superficiale	3752.153564	3.839
Apporto ipodermico da falda	0.000000	0.000
Perdite di evaporazione nei canali	0.000000	0.000
Uscita canali/condotte/pozzetti	3752.153564	3.839
Accumulo iniziale + Ingresso	3752.153564	3.839
Accumulo finale + Uscita	3752.153564	3.839

Errore -0.000 % (*)

(*) L'errore nella continuità è così calcolato:
 (Accumulo finale + Uscita + Evaporazione - Deflusso superficiale -
 - Apporto ipodermico da falda - Accumulo iniziale) /
 / (Accumulo finale + Uscita + Evaporazione)

SOMMARIO DELLE STATISTICHE DEI SOTTOBACINI -----

		Area permeabile	Area impermeabile (*)	Area totale sottobacino									
Sotto- bacino	Nodo di Ingresso	Area (ha)	% imper.	Pioggia totale (mm)	Altezza simulata (mm)	Perdite (mm)	Deflusso totale (mm)	Altezza massimo (m3/s)	Deflusso (mm)	Altezza massimo (m3/s)	Deflusso massimo (mm)	Deflusso massimo (m3/s)	Deflusso unitario (mm/h)
1	1	1.28	75.00	21.000	0.000	21.000	0.00	9.014	0.04	6.760	0.04	10.480	
10	3	1.01	75.00	21.000	0.000	21.000	0.00	8.732	0.02	6.549	0.02	7.478	
11	10	0.72	75.00	21.000	0.000	21.000	0.00	8.854	0.02	6.640	0.02	8.599	
12	9	2.91	75.00	21.000	0.000	21.000	0.00	8.752	0.06	6.564	0.06	7.647	

13	11	2.29	75.00	21.000	0.000	21.000	0.00	8.841	0.05	6.631	0.05	8.470
14	12	4.71	40.00	21.000	0.000	21.000	0.00	9.041	0.08	3.617	0.08	5.797
15	13	6.34	40.00	21.000	0.000	21.000	0.00	9.001	0.10	3.600	0.10	5.499
16	15	1.17	60.00	21.000	0.000	21.000	0.00	8.877	0.02	5.326	0.02	7.073
18	17	0.80	60.00	21.000	0.000	21.000	0.00	9.201	0.02	5.521	0.02	10.896
19	18	0.31	60.00	21.000	0.000	21.000	0.00	9.082	0.01	5.449	0.01	9.178
2	2	1.88	75.00	21.000	0.000	21.000	0.00	8.803	0.04	6.602	0.04	8.103
20	16	1.84	60.00	21.000	0.000	21.000	0.00	8.831	0.03	5.299	0.03	6.697
21	20	2.76	60.00	21.000	0.000	21.000	0.00	8.728	0.05	5.237	0.05	5.952
22	21	1.32	60.00	21.000	0.000	21.000	0.00	8.727	0.02	5.236	0.02	5.952
23	19	0.61	60.00	21.000	0.000	21.000	0.00	9.206	0.02	5.524	0.02	10.981
24	22	0.24	60.00	21.000	0.000	21.000	0.00	9.205	0.01	5.523	0.01	10.950
26	25	0.74	60.00	21.000	0.000	21.000	0.00	8.858	0.01	5.315	0.01	6.918
27	26	1.09	60.00	21.000	0.000	21.000	0.00	8.767	0.02	5.260	0.02	6.218
28	27	0.12	60.00	21.000	0.000	21.000	0.00	9.351	0.00	5.610	0.00	13.739
29	24	0.41	60.00	21.000	0.000	21.000	0.00	9.056	0.01	5.434	0.01	8.870
3	2	0.17	75.00	21.000	0.000	21.000	0.00	9.021	0.00	6.765	0.00	10.575
30	28	0.12	60.00	21.000	0.000	21.000	0.00	9.277	0.00	5.566	0.00	12.251
31	30	2.67	30.00	21.000	0.000	21.000	0.00	8.997	0.03	2.699	0.03	4.101
32	31	1.22	60.00	21.000	0.000	21.000	0.00	8.741	0.02	5.245	0.02	6.042
33	32	1.01	60.00	21.000	0.000	21.000	0.00	8.898	0.02	5.339	0.02	7.258
34	33	0.39	60.00	21.000	0.000	21.000	0.00	9.062	0.01	5.437	0.01	8.940
35	34	0.30	60.00	21.000	0.000	21.000	0.00	9.283	0.01	5.570	0.01	12.368
36	29	1.15	60.00	21.000	0.000	21.000	0.00	8.838	0.02	5.303	0.02	6.755
37	36	0.52	60.00	21.000	0.000	21.000	0.00	8.932	0.01	5.359	0.01	7.564
38	38	0.52	60.00	21.000	0.000	21.000	0.00	8.933	0.01	5.360	0.01	7.571
39	40	0.57	60.00	21.000	0.000	21.000	0.00	9.060	0.01	5.436	0.01	8.919
4	5	0.80	75.00	21.000	0.000	21.000	0.00	8.898	0.02	6.673	0.02	9.063
40	42	0.46	60.00	21.000	0.000	21.000	0.00	9.172	0.01	5.503	0.01	10.430
41	43	0.15	60.00	21.000	0.000	21.000	0.00	9.276	0.00	5.566	0.00	12.231
42	37	0.24	60.00	21.000	0.000	21.000	0.00	9.243	0.01	5.546	0.01	11.615
43	39	0.22	60.00	21.000	0.000	21.000	0.00	9.182	0.01	5.509	0.01	10.592
44	41	0.37	60.00	21.000	0.000	21.000	0.00	9.062	0.01	5.437	0.01	8.932
45	35	0.32	60.00	21.000	0.000	21.000	0.00	9.100	0.01	5.460	0.01	9.409
46	45	0.44	60.00	21.000	0.000	21.000	0.00	8.927	0.01	5.356	0.01	7.512
47	47	0.26	60.00	21.000	0.000	21.000	0.00	9.340	0.01	5.604	0.01	13.514
48	46	1.11	60.00	21.000	0.000	21.000	0.00	9.019	0.03	5.411	0.03	8.438
49	48	0.48	60.00	21.000	0.000	21.000	0.00	9.028	0.01	5.417	0.01	8.541
5	4	0.76	75.00	21.000	0.000	21.000	0.00	8.826	0.02	6.619	0.02	8.322
50	49	0.42	60.00	21.000	0.000	21.000	0.00	9.198	0.01	5.519	0.01	10.842
51	44	9.37	5.00	21.000	0.000	21.000	0.00	9.505	0.04	0.475	0.04	1.377
52	51	0.47	60.00	21.000	0.000	21.000	0.00	9.064	0.01	5.438	0.01	8.960
53	52	0.13	60.00	21.000	0.000	21.000	0.00	9.263	0.00	5.558	0.00	11.974
54	49	0.29	60.00	21.000	0.000	21.000	0.00	9.155	0.01	5.493	0.01	10.174
55	53	4.79	30.00	21.000	0.000	21.000	0.00	8.866	0.05	2.660	0.05	3.491
56	54	3.14	60.00	21.000	0.000	21.000	0.00	8.467	0.04	5.080	0.04	4.609
57	50	0.44	60.00	21.000	0.000	21.000	0.00	8.746	0.01	5.247	0.01	6.074
58	56	0.47	60.00	21.000	0.000	21.000	0.00	9.204	0.01	5.522	0.01	10.943
59	58	0.40	60.00	21.000	0.000	21.000	0.00	9.241	0.01	5.545	0.01	11.583
6	6	0.30	60.00	21.000	0.000	21.000	0.00	9.105	0.01	5.463	0.01	9.478
60	57	0.63	60.00	21.000	0.000	21.000	0.00	9.250	0.02	5.550	0.02	11.735
61	60	0.36	60.00	21.000	0.000	21.000	0.00	9.195	0.01	5.517	0.01	10.794
62	59	0.70	60.00	21.000	0.000	21.000	0.00	9.223	0.02	5.534	0.02	11.262
63	55	0.88	60.00	21.000	0.000	21.000	0.00	8.728	0.01	5.237	0.01	5.953
65	62	9.33	5.00	21.000	0.000	21.000	0.00	9.491	0.04	0.475	0.04	1.364
66	64	0.44	60.00	21.000	0.000	21.000	0.00	9.205	0.01	5.523	0.01	10.966
67	65	0.36	60.00	21.000	0.000	21.000	0.00	9.161	0.01	5.497	0.01	10.270
68	66	0.45	60.00	21.000	0.000	21.000	0.00	9.005	0.01	5.403	0.01	8.293
69	67	0.13	60.00	21.000	0.000	21.000	0.00	9.254	0.00	5.552	0.00	11.812
7	4	2.32	75.00	21.000	0.000	21.000	0.00	8.773	0.05	6.580	0.05	7.831
70	68	0.76	60.00	21.000	0.000	21.000	0.00	9.308	0.03	5.585	0.03	12.862
71	69	0.69	60.00	21.000	0.000	21.000	0.00	9.140	0.02	5.484	0.02	9.959
72	70	0.74	60.00	21.000	0.000	21.000	0.00	9.209	0.02	5.525	0.02	11.024
73	71	1.11	60.00	21.000	0.000	21.000	0.00	9.078	0.03	5.447	0.03	9.138
74	63	7.98	5.00	21.000	0.000	21.000	0.00	9.450	0.03	0.473	0.03	1.313
77	75	0.23	60.00	21.000	0.000	21.000	0.00	9.137	0.01	5.482	0.01	9.923
78	76	0.61	60.00	21.000	0.000	21.000	0.00	9.129	0.02	5.477	0.02	9.805
79	77	0.21	60.00	21.000	0.000	21.000	0.00	9.214	0.01	5.529	0.01	11.116
8	7	2.10	75.00	21.000	0.000	21.000	0.00	8.840	0.05	6.630	0.05	8.459
80	78	0.25	60.00	21.000	0.000	21.000	0.00	9.202	0.01	5.521	0.01	10.909
81	79	0.19	60.00	21.000	0.000	21.000	0.00	9.242	0.01	5.545	0.01	11.600
9	8	0.27	75.00	21.000	0.000	21.000	0.00	8.827	0.01	6.620	0.01	8.334

(*) Le statistiche sull'area impermeabile aggregano aree con e senza gli accumuli superficiali.

TABELLA DEI MATERIALI -----

Nome	Area Tipo	Diametro (m2)	Altezza int. (m)	Larghez. (m)	Pendenze (b/h)	Coeff.di Manning	Spessore (mm)	Lunghezza (m)	
CLS DN 1000	Circolare	0.785	1.000	*****	*****	*****	0.014	0.000	528.96
CLS DN 1200	Circolare	1.131	1.200	*****	*****	*****	0.012	0.000	138.24
CLS DN 300	Circolare	0.071	0.300	*****	*****	*****	0.012	0.000	206.66
CLS DN 400	Circolare	0.126	0.400	*****	*****	*****	0.014	0.000	1757.21
CLS DN 500	Circolare	0.196	0.500	*****	*****	*****	0.014	0.000	1403.83
CLS DN 600	Circolare	0.283	0.600	*****	*****	*****	0.014	0.000	1065.45
CLS DN 800	Circolare	0.503	0.800	*****	*****	*****	0.012	0.000	654.91
PVC DN 200	Circolare	0.028	0.190	*****	*****	*****	0.012	0.000	347.71
PVC DN 250	Circolare	0.045	0.240	*****	*****	*****	0.012	0.000	666.23
PVC DN 315	Circolare	0.071	0.300	*****	*****	*****	0.012	0.000	518.47
PVC DN 400	Circolare	0.113	0.380	*****	*****	*****	0.012	0.000	78.88
TERRA ST 3.00..	Trapezoidale	2.168	*****	1.150	1.000	0.77-0.77	0.030	0.000	163.38
TERRA ST 4.00..	Trapezoidale	2.671	*****	1.150	1.000	1.15-1.15	0.030	0.000	319.94

7849.88

RIASSUNTO PER CONDOTTO -----

Gruppo	Lunghezza	Numero
CLS DN 1000	528.96	4
CLS DN 1200	138.24	2
CLS DN 300	206.66	4
CLS DN 400	1757.21	20
CLS DN 500	1403.83	14
CLS DN 600	1065.45	9
CLS DN 800	654.91	9
PVC DN 200	347.71	4
PVC DN 250	666.23	7
PVC DN 315	518.47	4
PVC DN 400	78.88	1
TERRA ST 3.00 x 1...	163.38	1
TERRA ST 4.00 x 1...	319.94	1
	7849.88	80

DATI DEI NODI -----

Nodo	Quota terreno (m slm)	Quota cielo (m slm)	Quota fondo (m slm)	Portata esterna (m3/s)	Livello iniziale (m)	Rami collegati
1	28.50	27.54	27.35	0.00	0.00	1
10	28.00	27.61	27.01	0.00	0.00	10,11
11	27.80	27.18	26.58	0.00	0.00	12,13
12	27.51	26.90	26.30	0.00	0.00	13,14
13	27.48	26.66	26.06	0.00	0.00	14,15
14	27.44	26.60	25.80	0.00	0.00	15,16,17
15	27.53	26.60	26.10	0.00	0.00	16
16	27.42	26.59	25.75	0.00	0.00	17,19,20
17	27.60	26.80	26.50	0.00	0.00	18
18	27.68	26.77	26.39	0.00	0.00	18,19
19	27.20	26.40	25.60	0.00	0.00	20,22,23
2	28.56	27.49	27.30	0.00	0.00	1,2,3
20	26.98	26.83	26.43	0.00	0.00	21
21	26.82	26.69	26.29	0.00	0.00	21,22
22	27.16	26.36	25.56	0.00	0.00	23,24,26
23	27.12	26.38	25.54	0.00	0.00	24,25,28
24	27.12	26.34	25.54	0.00	0.00	25,27,29
25	27.16	26.46	26.06	0.00	0.00	26
26	26.82	26.10	25.70	0.00	0.00	27
27	27.20	26.42	25.92	0.00	0.00	28
28	27.08	26.22	25.42	0.00	0.00	29,30,32
29	26.80	26.16	25.36	0.00	0.00	30,34,36
3	28.25	27.74	27.14	0.00	0.00	10,5,6
30	26.80	26.42	26.12	0.00	0.00	31
31	27.07	26.33	26.03	0.00	0.00	31,32
32	26.94	26.34	26.10	0.00	0.00	33
33	26.62	26.03	25.68	0.00	0.00	33,34,35
34	26.60	25.97	25.73	0.00	0.00	35
35	26.60	25.95	25.15	0.00	0.00	36,44,45
36	26.80	26.24	26.00	0.00	0.00	37
37	26.51	26.09	25.66	0.00	0.00	37,41,42
38	26.66	26.19	25.95	0.00	0.00	38

39	26.44	25.87	25.43	0.00	0.00	38,42,43
4	28.23	27.70	27.20	0.00	0.00	3,4,5,7
40	26.53	26.09	25.85	0.00	0.00	39
41	26.39	25.72	25.32	0.00	0.00	39,40,43,44
42	26.30	25.76	25.52	0.00	0.00	40
43	26.60	26.09	25.69	0.00	0.00	41
44	26.40	25.60	24.60	0.00	0.00	49,51,77
45	26.47	25.91	25.67	0.00	0.00	46
46	26.66	25.79	25.39	0.00	0.00	46,47,48
47	26.83	26.10	25.70	0.00	0.00	47
48	26.13	25.56	25.16	0.00	0.00	48,49,50
49	26.13	25.62	25.24	0.00	0.00	50,54
5	28.08	27.65	27.25	0.00	0.00	4
50	25.90	25.52	24.49	0.00	0.00	51,56,57,81
51	26.20	25.75	25.35	0.00	0.00	52
52	26.12	25.70	25.30	0.00	0.00	52,53,54
53	26.60	25.92	25.42	0.00	0.00	55
54	26.50	25.87	25.37	0.00	0.00	55,56,78
55	25.94	25.44	24.44	0.00	0.00	57,59,63
56	26.70	25.74	25.34	0.00	0.00	58
57	26.63	25.87	25.57	0.00	0.00	60
58	26.63	25.30	24.77	0.00	0.00	59,61,79
59	26.66	25.70	25.40	0.00	0.00	62
6	28.36	27.70	27.20	0.00	0.00	2,6
60	26.64	25.51	24.99	0.00	0.00	58,61,80
61	25.97	25.23	24.02	0.00	0.00	63,64
62	25.91	25.16	23.96	0.00	0.00	64,65,69
63	25.50	24.93	23.73	0.00	0.00	65,74
64	26.20	25.21	24.71	0.00	0.00	66
65	26.18	25.11	24.61	0.00	0.00	66,67,70
66	26.18	25.18	24.58	0.00	0.00	67,68,71
67	26.18	25.17	24.49	0.00	0.00	68,69,72,73
68	26.20	25.21	24.71	0.00	0.00	70
69	26.19	25.25	24.75	0.00	0.00	71
7	28.20	27.58	27.08	0.00	0.00	7,8
70	26.19	25.17	24.77	0.00	0.00	72
71	26.15	25.31	24.91	0.00	0.00	73
72	24.72	24.72	23.57	0.00	0.00	74,75
73	24.40	24.40	23.25	0.00	0.00	75
75	26.55	25.67	24.67	0.00	0.00	45,77
76	26.64	26.03	25.84	0.00	0.00	78
77	26.63	25.52	25.10	0.00	0.00	60,79
78	26.70	25.66	25.26	0.00	0.00	62,80
79	26.16	25.78	25.28	0.00	0.00	53,81
8	28.13	27.55	26.95	0.00	0.00	8,9
9	28.12	27.51	26.91	0.00	0.00	11,12,9

DATI DEGLI ELEMENTI LINEARI -----

Elemento	Nodo iniziale	Nodo finale	Materiale	Lunghezza (m)	Valvola anti-rifl.
1	1	2	PVC DN 200	76.83	nessuno
10	3	10	CLS DN 600	147.48	nessuno
11	10	9	CLS DN 600	114.27	nessuno
12	9	11	CLS DN 600	141.78	nessuno
13	11	12	CLS DN 600	117.59	nessuno
14	12	13	CLS DN 600	133.25	nessuno
15	13	14	CLS DN 600	149.14	nessuno
16	15	14	CLS DN 500	135.47	nessuno
17	14	16	CLS DN 800	49.77	nessuno
18	17	18	PVC DN 315	52.48	nessuno
19	18	16	PVC DN 400	78.88	nessuno
2	2	6	PVC DN 200	127.68	nessuno
20	16	19	CLS DN 800	150.26	nessuno
21	20	21	CLS DN 400	186.03	nessuno
22	21	19	CLS DN 400	186.05	nessuno
23	19	22	CLS DN 800	51.45	nessuno
24	22	23	CLS DN 800	51.83	nessuno
25	23	24	CLS DN 800	5.86	nessuno
26	25	22	CLS DN 400	141.33	nessuno
27	26	24	CLS DN 400	172.17	nessuno
28	27	23	CLS DN 500	26.48	nessuno
29	24	28	CLS DN 800	85.06	nessuno
3	2	4	PVC DN 200	75.37	nessuno
30	28	29	CLS DN 800	38.25	nessuno
31	30	31	PVC DN 315	201.22	nessuno

32	31	28	PVC DN 315	181.16	nessuno
33	32	33	PVC DN 250	128.85	nessuno
34	33	29	PVC DN 315	83.61	nessuno
35	34	33	PVC DN 250	37.21	nessuno
36	29	35	CLS DN 800	147.85	nessuno
37	36	37	PVC DN 250	118.72	nessuno
38	38	39	PVC DN 250	118.51	nessuno
39	40	41	PVC DN 250	84.04	nessuno
4	5	4	CLS DN 400	103.28	nessuno
40	42	41	PVC DN 250	58.51	nessuno
41	43	37	CLS DN 400	38.43	nessuno
42	37	39	CLS DN 400	44.40	nessuno
43	39	41	CLS DN 400	56.34	nessuno
44	41	35	CLS DN 400	83.77	nessuno
45	35	75	CLS DN 800	74.57	nessuno
46	45	46	PVC DN 250	120.39	nessuno
47	47	46	CLS DN 400	28.07	nessuno
48	46	48	CLS DN 400	94.76	nessuno
49	48	44	CLS DN 400	92.32	nessuno
5	4	3	CLS DN 400	121.55	nessuno
50	49	48	CLS DN 300	53.15	nessuno
51	44	50	CLS DN 1000	97.56	nessuno
52	51	52	CLS DN 400	83.20	nessuno
53	52	79	CLS DN 400	40.83	nessuno
54	49	52	CLS DN 300	62.13	nessuno
55	53	54	CLS DN 500	277.76	nessuno
56	54	50	CLS DN 500	283.20	nessuno
57	50	55	CLS DN 1000	179.48	nessuno
58	56	60	CLS DN 400	51.91	nessuno
59	58	55	CLS DN 500	44.73	nessuno
6	6	3	CLS DN 500	73.34	nessuno
60	57	77	CLS DN 300	43.17	nessuno
61	60	58	CLS DN 500	53.75	nessuno
62	59	78	CLS DN 300	48.20	nessuno
63	55	61	CLS DN 1000	185.98	nessuno
64	61	62	CLS DN 1200	25.43	nessuno
65	62	63	CLS DN 1200	112.81	nessuno
66	64	65	CLS DN 500	51.64	nessuno
67	65	66	CLS DN 500	60.75	nessuno
68	66	67	CLS DN 600	98.30	nessuno
69	67	62	CLS DN 600	42.41	nessuno
7	4	7	CLS DN 500	135.86	nessuno
70	68	65	CLS DN 500	33.04	nessuno
71	69	66	CLS DN 500	65.37	nessuno
72	70	67	CLS DN 400	50.94	nessuno
73	71	67	CLS DN 400	79.65	nessuno
74	63	72	TERRA ST 3.00..	163.38	nessuno
75	72	73	TERRA ST 4.00..	319.94	nessuno
77	75	44	CLS DN 1000	65.94	nessuno
78	76	54	PVC DN 200	67.82	nessuno
79	77	58	CLS DN 400	49.86	nessuno
8	7	8	CLS DN 500	117.89	nessuno
80	78	60	CLS DN 400	52.32	nessuno
81	79	50	CLS DN 500	44.56	nessuno
9	8	9	CLS DN 600	121.22	nessuno

SOMMARIO DELLE STATISTICHE DEI NODI -----

Nodo	Quota Quota Quota %				Dist. tra Durata Durata		Sovracc. terreno e del della			
	(m slm)	(m slm)	(m slm)	variaz.	Massima quota	alla max.	livello	sovracc.	esondaz.	(min)
1	28.50	27.54	27.46	0.1178	28.50	0:42	0.96	0.00	59.97	17.57*
10	28.00	27.61	27.10	0.0116	27.50	1:02	0.00	0.50	0.00	0.00
11	27.80	27.18	26.71	0.0344	27.80	0:50	0.62	0.00	23.33	0.10*
12	27.51	26.90	26.45	0.0517	27.51	0:48	0.61	0.00	31.03	0.13*
13	27.48	26.66	26.22	0.0472	27.18	0:48	0.52	0.30	30.83	0.00
14	27.44	26.60	25.94	0.0106	26.40	0:59	0.00	1.04	0.00	0.00
15	27.53	26.60	26.15	0.0087	26.40	0:58	0.00	1.13	0.00	0.00
16	27.42	26.59	25.90	0.0104	26.37	0:59	0.00	1.05	0.00	0.00
17	27.60	26.80	26.52	0.0072	26.65	0:50	0.00	0.95	0.00	0.00
18	27.68	26.77	26.41	0.0063	26.55	0:51	0.00	1.13	0.00	0.00
19	27.20	26.40	25.77	0.0118	26.27	0:59	0.00	0.93	0.00	0.00
2	28.56	27.49	27.40	0.0999	28.37	0:50	0.88	0.19	58.90	0.00
20	26.98	26.83	26.49	0.0095	26.70	0:52	0.00	0.28	0.00	0.00
21	26.82	26.69	26.35	0.0083	26.52	0:54	0.00	0.30	0.00	0.00

22	27.16	26.36	25.74	0.0116	26.22	0:59	0.00	0.94	0.00	0.00
23	27.12	26.38	25.70	0.0104	26.16	1:00	0.00	0.96	0.00	0.00
24	27.12	26.34	25.69	0.0108	26.15	1:00	0.00	0.97	0.00	0.00
25	27.16	26.46	26.09	0.0061	26.23	0:57	0.00	0.93	0.00	0.00
26	26.82	26.10	25.77	0.0176	26.16	0:58	0.06	0.66	19.90	0.00
27	27.20	26.42	25.94	0.0075	26.16	0:59	0.00	1.04	0.00	0.00
28	27.08	26.22	25.58	0.0113	26.05	0:59	0.00	1.03	0.00	0.00
29	26.80	26.16	25.53	0.0114	26.01	0:59	0.00	0.79	0.00	0.00
3	28.25	27.74	27.22	0.0092	27.53	1:02	0.00	0.72	0.00	0.00
30	26.80	26.42	26.17	0.0127	26.38	0:52	0.00	0.42	0.00	0.00
31	27.07	26.33	26.08	0.0116	26.27	0:57	0.00	0.80	0.00	0.00
32	26.94	26.34	26.13	0.0096	26.26	0:48	0.00	0.68	0.00	0.00
33	26.62	26.03	25.73	0.0153	26.05	0:56	0.02	0.57	9.60	0.00
34	26.60	25.97	25.76	0.0215	26.05	0:55	0.08	0.55	22.93	0.00
35	26.60	25.95	25.28	0.0086	25.63	0:58	0.00	0.97	0.00	0.00
36	26.80	26.24	26.03	0.0084	26.14	0:51	0.00	0.66	0.00	0.00
37	26.51	26.09	25.68	0.0036	25.77	0:50	0.00	0.74	0.00	0.00
38	26.66	26.19	25.97	0.0066	26.06	0:51	0.00	0.60	0.00	0.00
39	26.44	25.87	25.47	0.0096	25.69	0:52	0.00	0.75	0.00	0.00
4	28.23	27.70	27.27	0.0104	27.56	1:02	0.00	0.67	0.00	0.00
40	26.53	26.09	25.86	0.0054	25.94	0:50	0.00	0.59	0.00	0.00
41	26.39	25.72	25.40	0.0139	25.67	0:52	0.00	0.72	0.00	0.00
42	26.30	25.76	25.54	0.0125	25.69	0:52	0.00	0.61	0.00	0.00
43	26.60	26.09	25.70	0.0032	25.78	0:50	0.00	0.82	0.00	0.00
44	26.40	25.60	24.81	0.0125	25.48	1:02	0.00	0.92	0.00	0.00
45	26.47	25.91	25.69	0.0055	25.76	0:51	0.00	0.71	0.00	0.00
46	26.66	25.79	25.42	0.0066	25.57	0:51	0.00	1.09	0.00	0.00
47	26.83	26.10	25.71	0.0022	25.76	0:50	0.00	1.07	0.00	0.00
48	26.13	25.56	25.23	0.0122	25.49	1:02	0.00	0.64	0.00	0.00
49	26.13	25.62	25.27	0.0100	25.49	1:03	0.00	0.64	0.00	0.00
5	28.08	27.65	27.30	0.0113	27.56	1:01	0.00	0.52	0.00	0.00
50	25.90	25.52	24.75	0.0127	25.42	1:02	0.00	0.48	0.00	0.00
51	26.20	25.75	25.37	0.0051	25.49	0:53	0.00	0.71	0.00	0.00
52	26.12	25.70	25.33	0.0063	25.47	0:53	0.00	0.65	0.00	0.00
53	26.60	25.92	25.49	0.0087	25.72	0:53	0.00	0.88	0.00	0.00
54	26.50	25.87	25.45	0.0077	25.64	0:55	0.00	0.86	0.00	0.00
55	25.94	25.44	24.67	0.0110	25.23	1:03	0.00	0.71	0.00	0.00
56	26.70	25.74	25.35	0.0029	25.42	0:50	0.00	1.28	0.00	0.00
57	26.63	25.87	25.58	0.0046	25.66	0:50	0.00	0.97	0.00	0.00
58	26.63	25.30	24.84	0.0129	25.23	1:03	0.00	1.40	0.00	0.00
59	26.66	25.70	25.42	0.0061	25.53	0:50	0.00	1.13	0.00	0.00
6	28.36	27.70	27.25	0.0095	27.53	1:02	0.00	0.83	0.00	0.00
60	26.64	25.51	25.02	0.0071	25.23	1:03	0.00	1.41	0.00	0.00
61	25.97	25.23	24.17	0.0068	24.60	1:05	0.00	1.37	0.00	0.00
62	25.91	25.16	24.13	0.0074	24.59	1:05	0.00	1.32	0.00	0.00
63	25.50	24.93	23.95	0.0095	24.54	1:06	0.00	0.96	0.00	0.00
64	26.20	25.21	24.73	0.0048	24.88	0:51	0.00	1.32	0.00	0.00
65	26.18	25.11	24.65	0.0078	24.88	0:52	0.00	1.30	0.00	0.00
66	26.18	25.18	24.62	0.0067	24.86	0:52	0.00	1.32	0.00	0.00
67	26.18	25.17	24.55	0.0069	24.82	0:52	0.00	1.36	0.00	0.00
68	26.20	25.21	24.73	0.0050	24.88	0:51	0.00	1.32	0.00	0.00
69	26.19	25.25	24.77	0.0034	24.87	0:53	0.00	1.32	0.00	0.00
7	28.20	27.58	27.17	0.0133	27.54	1:01	0.00	0.66	0.00	0.00
70	26.19	25.17	24.80	0.0068	24.96	0:50	0.00	1.23	0.00	0.00
71	26.15	25.31	24.94	0.0065	25.09	0:50	0.00	1.06	0.00	0.00
72	24.72	24.72	23.83	0.0097	24.37	1:10	0.00	0.35	0.00	0.00
73	24.40	24.40	23.33	0.0043	23.59	1:10	0.00	0.81	0.00	0.00
75	26.55	25.67	24.87	0.0121	25.52	1:02	0.00	1.03	0.00	0.00
76	26.64	26.03	25.86	0.0111	25.99	0:50	0.00	0.65	0.00	0.00
77	26.63	25.52	25.12	0.0059	25.23	1:04	0.00	1.40	0.00	0.00
78	26.70	25.66	25.28	0.0058	25.42	0:50	0.00	1.28	0.00	0.00
79	26.16	25.78	25.30	0.0044	25.42	1:01	0.00	0.74	0.00	0.00
8	28.13	27.55	27.06	0.0130	27.49	1:01	0.00	0.64	0.00	0.00
9	28.12	27.51	27.02	0.0135	27.47	1:01	0.00	0.65	0.00	0.00

Nodo con la maggiore variazione media percentuale: '1' pari a 0.118 % (**)

(*) Attenzione: c'è un ingresso di portata alla rete in un nodo in cui è possibile un'esonazione.

Se l'ingresso è contemporaneo all'esonazione, l'acqua non entrerà in rete e verrà considerata solamente nel controllo di continuità.

(**) La variazione media nei nodi è così definita:

$$100.0 (Y(n+1) - Y(n)) / Yfull$$

SOMMARIO DELLE STATISTICHE DEGLI ELEMENTI LINEARI -----

Portata di moto uniforme	Velocità di moto uniforme	Portata Altezze max di condotto	Velocità max di calcolo	Rapporto tra Q moto e Q max	Raggio idraulico massimo	Sezione trasvers. della Q massima	Durata riempim. normale za ramo
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Elemento	(m3/s)	(m/s)	(m)	(m3/s)	al tempo (m/s)	al tempo uniforme (m)	(m2)	massimo (min)	(m/m)				
1	0.0079	0.28	0.190	0.022	0:42	0.79	0:43	2.85	0.0577	0.0284	1.00	360.1	0.00065
10	0.1690	0.60	0.600	0.087	0:52	0.55	0:50	0.51	0.1772	0.2190	0.77	403.6	0.00088
11	0.1690	0.60	0.600	0.090	1:08	0.46	0:50	0.53	0.1810	0.2607	0.92	397.9	0.00088
12	0.2765	0.98	0.600	0.226	1:14	0.98	0:48	0.82	0.1769	0.2793	0.99	443.9	0.00235
13	0.2765	0.98	0.600	0.241	1:14	0.91	0:47	0.87	0.1789	0.2827	1.00	434.7	0.00235
14	0.2399	0.85	0.600	0.267	0:50	0.94	0:50	1.11	0.1820	0.2827	1.00	423.7	0.00177
15	0.2399	0.85	0.600	0.359	0:50	1.32	0:50	1.50	0.1824	0.2824	1.00	334.8	0.00177
16	0.1358	0.69	0.500	0.015	0:58	0.48	0:24	0.11	0.1379	0.1583	0.81	112.6	0.00150
17	0.4541	0.90	0.800	0.347	0:53	0.93	0:51	0.76	0.2416	0.4082	0.81	299.7	0.00101
18	0.0480	0.68	0.300	0.024	0:50	0.64	0:50	0.49	0.0765	0.0370	0.52	463.3	0.00210
19	0.0940	0.83	0.380	0.030	0:50	0.76	0:50	0.32	0.0779	0.0393	0.35	26.7	0.00228
2	0.0087	0.31	0.190	0.026	0:50	0.93	0:50	3.04	0.0576	0.0284	1.00	0.0	0.00078
20	0.4526	0.90	0.800	0.387	0:54	0.97	0:52	0.86	0.2427	0.4309	0.86	381.8	0.00100
21	0.0531	0.42	0.400	0.041	0:52	0.52	0:51	0.78	0.1120	0.0810	0.64	364.2	0.00075
22	0.0930	0.74	0.400	0.058	0:54	0.91	0:43	0.63	0.1142	0.0995	0.79	65.3	0.00231
23	0.3994	0.79	0.800	0.444	0:55	1.04	0:52	1.11	0.2434	0.4442	0.88	184.0	0.00078
24	0.2667	0.53	0.800	0.451	0:58	1.10	0:53	1.69	0.2427	0.4278	0.85	0.0	0.00035
25	0.2666	0.53	0.800	0.453	0:58	1.13	0:52	1.70	0.2422	0.4121	0.82	3.8	0.00035
26	0.1016	0.81	0.400	0.013	0:51	0.41	0:25	0.13	0.0940	0.0875	0.70	189.8	0.00276
27	0.0590	0.47	0.400	0.016	0:53	0.25	0:21	0.27	0.1109	0.1257	1.00	350.5	0.00093
28	0.1358	0.69	0.500	0.004	0:45	0.32	0:44	0.03	0.1269	0.1018	0.52	8.9	0.00150
29	0.5448	1.08	0.800	0.470	0:59	1.14	0:53	0.86	0.2426	0.4195	0.83	376.9	0.00145
3	0.0113	0.40	0.190	0.033	0:50	1.18	0:50	2.96	0.0576	0.0284	1.00	380.6	0.00133
30	0.5448	1.08	0.800	0.507	0:59	1.18	0:58	0.93	0.2433	0.4311	0.86	300.7	0.00145
31	0.0222	0.31	0.300	0.026	0:52	0.44	0:51	1.19	0.0913	0.0618	0.87	390.5	0.00045
32	0.0467	0.66	0.300	0.041	0:51	0.73	0:46	0.88	0.0897	0.0658	0.93	48.3	0.00199
33	0.0283	0.63	0.240	0.025	0:48	0.88	0:48	0.88	0.0702	0.0366	0.81	46.6	0.00241
34	0.0601	0.85	0.300	0.033	0:53	0.66	0:25	0.55	0.0831	0.0707	1.00	312.8	0.00330
35	0.0221	0.49	0.240	0.011	0:49	0.29	0:42	0.49	0.0711	0.0452	1.00	392.4	0.00147
36	0.5448	1.08	0.800	0.542	0:59	1.44	0:59	0.99	0.2333	0.3763	0.75	21.8	0.00145
37	0.0205	0.45	0.240	0.010	0:51	0.49	0:51	0.49	0.0559	0.0203	0.45	0.0	0.00126
38	0.0300	0.66	0.240	0.010	0:51	0.61	0:50	0.34	0.0510	0.0168	0.37	0.0	0.00270
39	0.0459	1.01	0.240	0.014	0:50	0.48	0:13	0.30	0.0545	0.0304	0.67	466.1	0.00631
4	0.0425	0.34	0.400	0.017	0:51	0.17	0:50	0.39	0.1207	0.1125	0.89	343.4	0.00048
40	0.0338	0.75	0.240	0.012	0:50	0.42	0:14	0.36	0.0657	0.0398	0.88	424.7	0.00342
41	0.0540	0.43	0.400	0.005	0:50	0.20	0:50	0.09	0.0569	0.0235	0.19	418.1	0.00078
42	0.1392	1.11	0.400	0.021	0:50	0.40	0:47	0.15	0.0880	0.0563	0.45	467.3	0.00518
43	0.0855	0.68	0.400	0.035	0:52	0.35	0:52	0.41	0.1178	0.1019	0.81	393.1	0.00195
44	0.0423	0.34	0.400	0.065	0:52	0.75	0:52	1.55	0.1216	0.1091	0.87	0.0	0.00048
45	0.8744	1.74	0.800	0.598	0:58	1.70	0:49	0.68	0.2333	0.3762	0.75	59.2	0.00373
46	0.0279	0.62	0.240	0.009	0:51	0.32	0:50	0.31	0.0611	0.0265	0.58	474.5	0.00233
47	0.2032	1.62	0.400	0.010	0:50	0.44	0:11	0.05	0.0651	0.0336	0.27	468.6	0.01104
48	0.0953	0.76	0.400	0.041	0:51	0.51	0:50	0.43	0.1079	0.0812	0.65	464.7	0.00243
49	0.0569	0.45	0.400	0.058	0:52	0.73	0:51	1.03	0.1214	0.1181	0.94	0.0	0.00087
5	0.0430	0.34	0.400	0.044	0:53	0.42	0:51	1.02	0.1217	0.1217	0.97	357.9	0.00049
50	0.0406	0.57	0.300	0.011	0:46	0.37	0:15	0.27	0.0879	0.0667	0.94	388.6	0.00150
51	0.7387	0.94	1.000	0.622	0:59	0.86	0:55	0.84	0.3039	0.7460	0.95	266.8	0.00110
52	0.0459	0.37	0.400	0.010	0:50	0.26	0:43	0.22	0.0828	0.0444	0.35	402.3	0.00056
53	0.0459	0.37	0.400	0.020	0:53	0.53	0:53	0.43	0.0811	0.0427	0.34	12.8	0.00056
54	0.0173	0.24	0.300	0.012	1:03	-0.68	0:15	0.71	0.0791	0.0395	0.56	0.0	0.00027
55	0.0470	0.24	0.500	0.038	0:53	0.33	0:52	0.81	0.1358	0.1174	0.60	302.0	0.00018
56	0.1428	0.73	0.500	0.083	0:55	0.74	0:48	0.58	0.1419	0.1517	0.77	67.4	0.00166
57	0.3716	0.47	1.000	0.710	1:02	1.00	1:00	1.91	0.3016	0.7116	0.91	66.9	0.00028
58	0.1588	1.26	0.400	0.014	0:50	0.42	0:50	0.09	0.0715	0.0442	0.35	468.0	0.00674
59	0.1387	0.71	0.500	0.081	0:43	1.05	0:43	0.58	0.1506	0.1929	0.98	27.9	0.00157
6	0.1003	0.51	0.500	0.032	0:50	0.32	0:43	0.32	0.1482	0.1500	0.76	347.0	0.00082
60	0.0943	1.33	0.300	0.020	0:50	1.06	0:50	0.21	0.0533	0.0191	0.27	0.6	0.00811
61	0.2243	1.14	0.500	0.051	0:50	0.56	0:47	0.23	0.1348	0.1420	0.72	429.3	0.00409
62	0.0565	0.80	0.300	0.021	0:50	0.65	0:50	0.38	0.0720	0.0329	0.47	466.5	0.00290
63	0.7481	0.95	1.000	0.748	1:03	1.42	1:03	1.00	0.2807	0.5276	0.67	0.0	0.00113
64	2.0515	1.81	1.200	0.747	1:03	1.35	0:57	0.36	0.3013	0.5721	0.51	371.8	0.00236
65	1.8889	1.67	1.200	0.815	1:02	1.22	0:54	0.43	0.3292	0.7022	0.62	277.7	0.00200
66	0.1568	0.80	0.500	0.011	0:50	0.18	0:11	0.07	0.1116	0.0822	0.42	431.7	0.00200
67	0.0779	0.40	0.500	0.041	0:50	0.39	0:50	0.53	0.1318	0.1098	0.56	365.7	0.00049
68	0.1725	0.61	0.600	0.061	0:52	0.44	0:55	0.36	0.1503	0.1431	0.51	419.0	0.00092
69	0.1238	0.44	0.600	0.109	0:52	0.89	0:52	0.88	0.1384	0.1232	0.44	0.0	0.00047
7	0.1042	0.53	0.500	0.062	0:51	0.46	0:46	0.60	0.1488	0.1705	0.87	424.3	0.00088
70	0.1929	0.98	0.500	0.026	0:50	0.40	0:13	0.13	0.1125	0.0831	0.42	436.1	0.00303
71	0.1788	0.91	0.500	0.018	0:50	0.36	0:16	0.10	0.1008	0.0732	0.37	454.9	0.00260
72	0.0383	0.30	0.400	0.022	0:50	0.53	0:50	0.57	0.0787	0.0414	0.33	0.0	0.00039
73	0.0811	0.65	0.400	0.027	0:50	0.63	0:50	0.33	0.0801	0.0423	0.34	0.0	0.00176
74	1.5447	0.71	1.150	0.801	1:04	0.66	0:52	0.52	0.4284	1.2941	0.60	278.5	0.00100
75	1.9868	0.74	1.150	0.773	1:10	0.77	1:10	0.39	0.3401	1.0067	0.38	0.0	0.00100
77	0.7387	0.94	1.000	0.596	0:59	0.85	0:56	0.81	0.3040	0.7212	0.92	307.5	0.00110
78	0.0196	0.69	0.190	0.016	0:50	0.78	0:50	0.81	0.0549	0.0201	0.71	0.0	0.00398

79	0.1225	0.97	0.400	0.026	0:50	0.75	0:47	0.21	0.0977	0.0737	0.59	44.7	0.00401
8	0.1164	0.59	0.500	0.100	0:51	0.61	0:50	0.86	0.1514	0.1928	0.98	389.4	0.00110
80	0.1035	0.82	0.400	0.028	0:50	0.77	0:58	0.27	0.0758	0.0381	0.30	18.6	0.00287
81	0.2678	1.36	0.500	0.024	0:52	0.71	0:46	0.09	0.1161	0.1055	0.54	50.0	0.00583
9	0.1036	0.37	0.600	0.092	0:50	0.46	0:50	0.88	0.1825	0.2726	0.96	156.4	0.00033

Ramo con la maggiore variazione media percentuale: 'I' pari a 0.057 % (*)

(*) La variazione media nei rami è così definita:

$$100.0 (Q(n+1) - Q(n)) / Qfull$$

F2) Simulazione STATO DI FATTO - Ietogramma rettangolare con $T_r = 5$ anni e durata 45 minuti; c.p.c. PTCP

DATI GENERALI -----

Numero dei nodi	78
Numero dei rami	80
Numero delle pompe	0
Numero degli scaricatori	0
Sommaro delle piogge	
Pioggia totale (mm)	30.0000

CONTROLLO DI CONTINUITA' PER IL DEFLUSSO SUPERFICIALE -----

	Metri cubi	Millimetri sul bacino
Precipitazione totale (Pioggia + Neve)	29321.720703	30.000
Infiltrazione totale	9754.380859	9.980
Evaporazione totale	949.964966	0.972
Deflusso superficiale	7515.891602	7.690
Volume trattenuto negli accumuli superficiali	11101.705078	11.359
Infiltrazione per l'area permeabile	9754.380859	17.500
Infiltrazione + Evaporazione + Deflusso superficiale + Accumuli superficiali	29321.943359	30.000
Precipitazione totale + Accumulo iniziale	29321.720703	30.000

Errore -0.001 % (*)

(*) L'errore nella continuità è così calcolato:
 (Precipitazione - Infiltrazione - Evaporazione -
 - Deflusso superficiale - Accumuli superficiali) /
 / Precipitazione

CONTROLLO DI CONTINUITA' NELLA RETE -----

	Metri cubi	Millimetri sul bacino
Accumulo iniziale	0.000000	0.000
Accumulo finale	0.000000	0.000
Deflusso superficiale	7515.891602	7.690
Apporto ipodermico da falda	0.000000	0.000
Perdite di evaporazione nei canali	0.000000	0.000
Uscita canali/condotte/pozzetti	7515.891602	7.690
Accumulo iniziale + Ingresso	7515.891602	7.690
Accumulo finale + Uscita	7515.891602	7.690

Errore 0.000 % (*)

(*) L'errore nella continuità è così calcolato:
 (Accumulo finale + Uscita + Evaporazione - Deflusso superficiale -
 - Apporto ipodermico da falda - Accumulo iniziale) /
 / (Accumulo finale + Uscita + Evaporazione)

SOMMARIO DELLE STATISTICHE DEI SOTTOBACINI -----

		Area permeabile		Area imperm.(*)		Area totale sottobacino						
Sotto- bacino	Nodo di Ingresso	Pioggia Altezza		Perdite simulata	Deflusso totali	Deflusso						
		totale	%			Altezza massimo	Deflusso massimo	Altezza massimo	Deflusso massimo	Altezza massimo	Deflusso massimo	unitario
		Area	%	(mm)	(mm)	(m3/s)	(mm)	(m3/s)	(mm)	(m3/s)	(mm/h)	
1	1	1.28	75.00	30.000	0.000	30.000	0.00	17.986	0.08	13.490	0.08	23.582
10	3	1.01	75.00	30.000	0.000	30.000	0.00	17.675	0.05	13.256	0.05	18.006
11	10	0.72	75.00	30.000	0.000	30.000	0.00	17.811	0.04	13.358	0.04	20.280
12	9	2.91	75.00	30.000	0.000	30.000	0.00	17.698	0.15	13.273	0.15	18.360
13	11	2.29	75.00	30.000	0.000	30.000	0.00	17.797	0.13	13.348	0.13	20.028
14	12	4.71	40.00	30.000	0.000	30.000	0.00	18.016	0.17	7.206	0.17	12.892
15	13	6.34	40.00	30.000	0.000	30.000	0.00	17.972	0.22	7.189	0.22	12.434
16	15	1.17	60.00	30.000	0.000	30.000	0.00	17.837	0.05	10.702	0.05	16.594
18	17	0.80	60.00	30.000	0.000	30.000	0.00	18.187	0.05	10.912	0.05	21.940
19	18	0.31	60.00	30.000	0.000	30.000	0.00	18.059	0.02	10.836	0.02	20.019
2	2	1.88	75.00	30.000	0.000	30.000	0.00	17.755	0.10	13.316	0.10	19.298
20	16	1.84	60.00	30.000	0.000	30.000	0.00	17.786	0.08	10.671	0.08	15.867
21	20	2.76	60.00	30.000	0.000	30.000	0.00	17.670	0.11	10.602	0.11	14.340
22	21	1.32	60.00	30.000	0.000	30.000	0.00	17.670	0.05	10.602	0.05	14.339
23	19	0.61	60.00	30.000	0.000	30.000	0.00	18.193	0.04	10.916	0.04	22.015
24	22	0.24	60.00	30.000	0.000	30.000	0.00	18.191	0.01	10.914	0.01	21.987
26	25	0.74	60.00	30.000	0.000	30.000	0.00	17.816	0.03	10.690	0.03	16.299
27	26	1.09	60.00	30.000	0.000	30.000	0.00	17.714	0.04	10.628	0.04	14.896
28	27	0.12	60.00	30.000	0.000	30.000	0.00	18.344	0.01	11.007	0.01	23.646
29	24	0.41	60.00	30.000	0.000	30.000	0.00	18.032	0.02	10.819	0.02	19.593
3	2	0.17	75.00	30.000	0.000	30.000	0.00	17.994	0.01	13.495	0.01	23.730
30	28	0.12	60.00	30.000	0.000	30.000	0.00	18.268	0.01	10.961	0.01	22.950
31	30	2.67	30.00	30.000	0.000	30.000	0.00	17.967	0.07	5.390	0.07	9.288
32	31	1.22	60.00	30.000	0.000	30.000	0.00	17.685	0.05	10.611	0.05	14.530
33	32	1.01	60.00	30.000	0.000	30.000	0.00	17.860	0.05	10.716	0.05	16.940
34	33	0.39	60.00	30.000	0.000	30.000	0.00	18.039	0.02	10.823	0.02	19.692
35	34	0.30	60.00	30.000	0.000	30.000	0.00	18.274	0.02	10.964	0.02	23.019
36	29	1.15	60.00	30.000	0.000	30.000	0.00	17.794	0.05	10.676	0.05	15.981
37	36	0.52	60.00	30.000	0.000	30.000	0.00	17.897	0.03	10.738	0.03	17.497
38	38	0.52	60.00	30.000	0.000	30.000	0.00	17.898	0.03	10.739	0.03	17.508
39	40	0.57	60.00	30.000	0.000	30.000	0.00	18.037	0.03	10.822	0.03	19.662
4	5	0.80	75.00	30.000	0.000	30.000	0.00	17.859	0.05	13.394	0.05	21.158
40	42	0.46	60.00	30.000	0.000	30.000	0.00	18.156	0.03	10.894	0.03	21.494
41	43	0.15	60.00	30.000	0.000	30.000	0.00	18.267	0.01	10.960	0.01	22.938
42	37	0.24	60.00	30.000	0.000	30.000	0.00	18.232	0.01	10.939	0.01	22.525
43	39	0.22	60.00	30.000	0.000	30.000	0.00	18.167	0.01	10.900	0.01	21.655
44	41	0.37	60.00	30.000	0.000	30.000	0.00	18.038	0.02	10.823	0.02	19.681
45	35	0.32	60.00	30.000	0.000	30.000	0.00	18.079	0.02	10.847	0.02	20.324
46	45	0.44	60.00	30.000	0.000	30.000	0.00	17.891	0.02	10.735	0.02	17.403
47	47	0.26	60.00	30.000	0.000	30.000	0.00	18.333	0.02	11.000	0.02	23.564
48	46	1.11	60.00	30.000	0.000	30.000	0.00	17.991	0.06	10.795	0.06	18.949
49	48	0.48	60.00	30.000	0.000	30.000	0.00	18.001	0.03	10.801	0.03	19.108
5	4	0.76	75.00	30.000	0.000	30.000	0.00	17.780	0.04	13.335	0.04	19.735
50	49	0.42	60.00	30.000	0.000	30.000	0.00	18.184	0.03	10.910	0.03	21.890
51	44	9.37	5.00	30.000	0.000	30.000	0.00	18.502	0.05	0.925	0.05	2.010
52	51	0.47	60.00	30.000	0.000	30.000	0.00	18.040	0.03	10.824	0.03	19.720
53	52	0.13	60.00	30.000	0.000	30.000	0.00	18.252	0.01	10.951	0.01	22.775
54	49	0.29	60.00	30.000	0.000	30.000	0.00	18.138	0.02	10.883	0.02	21.227
55	53	4.79	30.00	30.000	0.000	30.000	0.00	17.825	0.11	5.347	0.11	8.210
56	54	3.14	60.00	30.000	0.000	30.000	0.00	17.354	0.10	10.412	0.10	11.360
57	50	0.44	60.00	30.000	0.000	30.000	0.00	17.691	0.02	10.614	0.02	14.598
58	56	0.47	60.00	30.000	0.000	30.000	0.00	18.190	0.03	10.914	0.03	21.981
59	58	0.40	60.00	30.000	0.000	30.000	0.00	18.230	0.02	10.938	0.02	22.502
6	6	0.30	60.00	30.000	0.000	30.000	0.00	18.084	0.02	10.851	0.02	20.411
60	57	0.63	60.00	30.000	0.000	30.000	0.00	18.239	0.04	10.943	0.04	22.612
61	60	0.36	60.00	30.000	0.000	30.000	0.00	18.181	0.02	10.908	0.02	21.846
62	59	0.70	60.00	30.000	0.000	30.000	0.00	18.210	0.04	10.926	0.04	22.252
63	55	0.88	60.00	30.000	0.000	30.000	0.00	17.670	0.03	10.602	0.03	14.342
65	62	9.33	5.00	30.000	0.000	30.000	0.00	18.489	0.05	0.924	0.05	2.010
66	64	0.44	60.00	30.000	0.000	30.000	0.00	18.192	0.03	10.915	0.03	22.001
67	65	0.36	60.00	30.000	0.000	30.000	0.00	18.145	0.02	10.887	0.02	21.329
68	66	0.45	60.00	30.000	0.000	30.000	0.00	17.977	0.02	10.786	0.02	18.722
69	67	0.13	60.00	30.000	0.000	30.000	0.00	18.243	0.01	10.946	0.01	22.666
7	4	2.32	75.00	30.000	0.000	30.000	0.00	17.722	0.12	13.291	0.12	18.743
70	68	0.76	60.00	30.000	0.000	30.000	0.00	18.300	0.05	10.980	0.05	23.282
71	69	0.69	60.00	30.000	0.000	30.000	0.00	18.122	0.04	10.873	0.04	20.989
72	70	0.74	60.00	30.000	0.000	30.000	0.00	18.195	0.05	10.917	0.05	22.052
73	71	1.11	60.00	30.000	0.000	30.000	0.00	18.056	0.06	10.834	0.06	19.965
74	63	7.98	5.00	30.000	0.000	30.000	0.00	18.447	0.04	0.922	0.04	2.006

77	75	0.23	60.00	30.000	0.000	30.000	0.00	18.119	0.01	10.872	0.01	20.947
78	76	0.61	60.00	30.000	0.000	30.000	0.00	18.110	0.03	10.866	0.03	20.810
79	77	0.21	60.00	30.000	0.000	30.000	0.00	18.201	0.01	10.921	0.01	22.131
8	7	2.10	75.00	30.000	0.000	30.000	0.00	17.796	0.12	13.347	0.12	20.006
80	78	0.25	60.00	30.000	0.000	30.000	0.00	18.188	0.02	10.913	0.02	21.951
81	79	0.19	60.00	30.000	0.000	30.000	0.00	18.231	0.01	10.938	0.01	22.514
9	8	0.27	75.00	30.000	0.000	30.000	0.00	17.782	0.01	13.336	0.01	19.759

(*) Le statistiche sull'area impermeabile aggregano aree con e senza gli accumuli superficiali.

TABELLA DEI MATERIALI -----

Nome	Area Tipo	Diametro (m2)	Altezza int. (m)	Larghez. (m)	Pendenze (b/h)	Coeff.di Manning (mm)	Spessore (m)	Lunghezza
CLS DN 1000	Circolare	0.785	1.000	*****	*****	*****	0.014	0.000 528.96
CLS DN 1200	Circolare	1.131	1.200	*****	*****	*****	0.012	0.000 138.24
CLS DN 300	Circolare	0.071	0.300	*****	*****	*****	0.012	0.000 206.66
CLS DN 400	Circolare	0.126	0.400	*****	*****	*****	0.014	0.000 1757.21
CLS DN 500	Circolare	0.196	0.500	*****	*****	*****	0.014	0.000 1403.83
CLS DN 600	Circolare	0.283	0.600	*****	*****	*****	0.014	0.000 1065.45
CLS DN 800	Circolare	0.503	0.800	*****	*****	*****	0.012	0.000 654.91
PVC DN 200	Circolare	0.028	0.190	*****	*****	*****	0.012	0.000 347.71
PVC DN 250	Circolare	0.045	0.240	*****	*****	*****	0.012	0.000 666.23
PVC DN 315	Circolare	0.071	0.300	*****	*****	*****	0.012	0.000 518.47
PVC DN 400	Circolare	0.113	0.380	*****	*****	*****	0.012	0.000 78.88
TERRA ST 3.00..	Trapezoidale	2.168	*****	1.150	1.000	0.77-0.77	0.030	0.000 163.38
TERRA ST 4.00..	Trapezoidale	2.671	*****	1.150	1.000	1.15-1.15	0.030	0.000 319.94

7849.88

RIASSUNTO PER CONDOTTO -----

Gruppo	Lunghezza	Numero
CLS DN 1000	528.96	4
CLS DN 1200	138.24	2
CLS DN 300	206.66	4
CLS DN 400	1757.21	20
CLS DN 500	1403.83	14
CLS DN 600	1065.45	9
CLS DN 800	654.91	9
PVC DN 200	347.71	4
PVC DN 250	666.23	7
PVC DN 315	518.47	4
PVC DN 400	78.88	1
TERRA ST 3.00 x 1...	163.38	1
TERRA ST 4.00 x 1...	319.94	1
-----	7849.88	80

DATI DEI NODI -----

Nodo	Quota terreno (m slm)	Quota cielo (m slm)	Quota fondo (m slm)	Portata esterna (m3/s)	Livello iniziale (m)	Rami collegati
1	28.50	27.54	27.35	0.00	0.00	1
10	28.00	27.61	27.01	0.00	0.00	10,11
11	27.80	27.18	26.58	0.00	0.00	12,13
12	27.51	26.90	26.30	0.00	0.00	13,14
13	27.48	26.66	26.06	0.00	0.00	14,15
14	27.44	26.60	25.80	0.00	0.00	15,16,17
15	27.53	26.60	26.10	0.00	0.00	16
16	27.42	26.59	25.75	0.00	0.00	17,19,20
17	27.60	26.80	26.50	0.00	0.00	18
18	27.68	26.77	26.39	0.00	0.00	18,19
19	27.20	26.40	25.60	0.00	0.00	20,22,23
2	28.56	27.49	27.30	0.00	0.00	1,2,3
20	26.98	26.83	26.43	0.00	0.00	21
21	26.82	26.69	26.29	0.00	0.00	21,22
22	27.16	26.36	25.56	0.00	0.00	23,24,26
23	27.12	26.38	25.54	0.00	0.00	24,25,28
24	27.12	26.34	25.54	0.00	0.00	25,27,29
25	27.16	26.46	26.06	0.00	0.00	26
26	26.82	26.10	25.70	0.00	0.00	27
27	27.20	26.42	25.92	0.00	0.00	28

28	27.08	26.22	25.42	0.00	0.00	29,30,32
29	26.80	26.16	25.36	0.00	0.00	30,34,36
3	28.25	27.74	27.14	0.00	0.00	10,5,6
30	26.80	26.42	26.12	0.00	0.00	31
31	27.07	26.33	26.03	0.00	0.00	31,32
32	26.94	26.34	26.10	0.00	0.00	33
33	26.62	26.03	25.68	0.00	0.00	33,34,35
34	26.60	25.97	25.73	0.00	0.00	35
35	26.60	25.95	25.15	0.00	0.00	36,44,45
36	26.80	26.24	26.00	0.00	0.00	37
37	26.51	26.09	25.66	0.00	0.00	37,41,42
38	26.66	26.19	25.95	0.00	0.00	38
39	26.44	25.87	25.43	0.00	0.00	38,42,43
4	28.23	27.70	27.20	0.00	0.00	3,4,5,7
40	26.53	26.09	25.85	0.00	0.00	39
41	26.39	25.72	25.32	0.00	0.00	39,40,43,44
42	26.30	25.76	25.52	0.00	0.00	40
43	26.60	26.09	25.69	0.00	0.00	41
44	26.40	25.60	24.60	0.00	0.00	49,51,77
45	26.47	25.91	25.67	0.00	0.00	46
46	26.66	25.79	25.39	0.00	0.00	46,47,48
47	26.83	26.10	25.70	0.00	0.00	47
48	26.13	25.56	25.16	0.00	0.00	48,49,50
49	26.13	25.62	25.24	0.00	0.00	50,54
5	28.08	27.65	27.25	0.00	0.00	4
50	25.90	25.52	24.49	0.00	0.00	51,56,57,81
51	26.20	25.75	25.35	0.00	0.00	52
52	26.12	25.70	25.30	0.00	0.00	52,53,54
53	26.60	25.92	25.42	0.00	0.00	55
54	26.50	25.87	25.37	0.00	0.00	55,56,78
55	25.94	25.44	24.44	0.00	0.00	57,59,63
56	26.70	25.74	25.34	0.00	0.00	58
57	26.63	25.87	25.57	0.00	0.00	60
58	26.63	25.30	24.77	0.00	0.00	59,61,79
59	26.66	25.70	25.40	0.00	0.00	62
6	28.36	27.70	27.20	0.00	0.00	2,6
60	26.64	25.51	24.99	0.00	0.00	58,61,80
61	25.97	25.23	24.02	0.00	0.00	63,64
62	25.91	25.16	23.96	0.00	0.00	64,65,69
63	25.50	24.93	23.73	0.00	0.00	65,74
64	26.20	25.21	24.71	0.00	0.00	66
65	26.18	25.11	24.61	0.00	0.00	66,67,70
66	26.18	25.18	24.58	0.00	0.00	67,68,71
67	26.18	25.17	24.49	0.00	0.00	68,69,72,73
68	26.20	25.21	24.71	0.00	0.00	70
69	26.19	25.25	24.75	0.00	0.00	71
7	28.20	27.58	27.08	0.00	0.00	7,8
70	26.19	25.17	24.77	0.00	0.00	72
71	26.15	25.31	24.91	0.00	0.00	73
72	24.72	24.72	23.57	0.00	0.00	74,75
73	24.40	24.40	23.25	0.00	0.00	75
75	26.55	25.67	24.67	0.00	0.00	45,77
76	26.64	26.03	25.84	0.00	0.00	78
77	26.63	25.52	25.10	0.00	0.00	60,79
78	26.70	25.66	25.26	0.00	0.00	62,80
79	26.16	25.78	25.28	0.00	0.00	53,81
8	28.13	27.55	26.95	0.00	0.00	8,9
9	28.12	27.51	26.91	0.00	0.00	11,12,9

DATI DEGLI ELEMENTI LINEARI -----

Elemento	Nodo		Materiale	Lunghezza Valvola	
	iniziale	finale		(m)	anti-rifl.
1	1	2	PVC DN 200	76.83	nessuno
10	3	10	CLS DN 600	147.48	nessuno
11	10	9	CLS DN 600	114.27	nessuno
12	9	11	CLS DN 600	141.78	nessuno
13	11	12	CLS DN 600	117.59	nessuno
14	12	13	CLS DN 600	133.25	nessuno
15	13	14	CLS DN 600	149.14	nessuno
16	15	14	CLS DN 500	135.47	nessuno
17	14	16	CLS DN 800	49.77	nessuno
18	17	18	PVC DN 315	52.48	nessuno
19	18	16	PVC DN 400	78.88	nessuno
2	2	6	PVC DN 200	127.68	nessuno
20	16	19	CLS DN 800	150.26	nessuno

21	20	21	CLS DN 400	186.03	nessuno
22	21	19	CLS DN 400	186.05	nessuno
23	19	22	CLS DN 800	51.45	nessuno
24	22	23	CLS DN 800	51.83	nessuno
25	23	24	CLS DN 800	5.86	nessuno
26	25	22	CLS DN 400	141.33	nessuno
27	26	24	CLS DN 400	172.17	nessuno
28	27	23	CLS DN 500	26.48	nessuno
29	24	28	CLS DN 800	85.06	nessuno
3	2	4	PVC DN 200	75.37	nessuno
30	28	29	CLS DN 800	38.25	nessuno
31	30	31	PVC DN 315	201.22	nessuno
32	31	28	PVC DN 315	181.16	nessuno
33	32	33	PVC DN 250	128.85	nessuno
34	33	29	PVC DN 315	83.61	nessuno
35	34	33	PVC DN 250	37.21	nessuno
36	29	35	CLS DN 800	147.85	nessuno
37	36	37	PVC DN 250	118.72	nessuno
38	38	39	PVC DN 250	118.51	nessuno
39	40	41	PVC DN 250	84.04	nessuno
4	5	4	CLS DN 400	103.28	nessuno
40	42	41	PVC DN 250	58.51	nessuno
41	43	37	CLS DN 400	38.43	nessuno
42	37	39	CLS DN 400	44.40	nessuno
43	39	41	CLS DN 400	56.34	nessuno
44	41	35	CLS DN 400	83.77	nessuno
45	35	75	CLS DN 800	74.57	nessuno
46	45	46	PVC DN 250	120.39	nessuno
47	47	46	CLS DN 400	28.07	nessuno
48	46	48	CLS DN 400	94.76	nessuno
49	48	44	CLS DN 400	92.32	nessuno
5	4	3	CLS DN 400	121.55	nessuno
50	49	48	CLS DN 300	53.15	nessuno
51	44	50	CLS DN 1000	97.56	nessuno
52	51	52	CLS DN 400	83.20	nessuno
53	52	79	CLS DN 400	40.83	nessuno
54	49	52	CLS DN 300	62.13	nessuno
55	53	54	CLS DN 500	277.76	nessuno
56	54	50	CLS DN 500	283.20	nessuno
57	50	55	CLS DN 1000	179.48	nessuno
58	56	60	CLS DN 400	51.91	nessuno
59	58	55	CLS DN 500	44.73	nessuno
6	6	3	CLS DN 500	73.34	nessuno
60	57	77	CLS DN 300	43.17	nessuno
61	60	58	CLS DN 500	53.75	nessuno
62	59	78	CLS DN 300	48.20	nessuno
63	55	61	CLS DN 1000	185.98	nessuno
64	61	62	CLS DN 1200	25.43	nessuno
65	62	63	CLS DN 1200	112.81	nessuno
66	64	65	CLS DN 500	51.64	nessuno
67	65	66	CLS DN 500	60.75	nessuno
68	66	67	CLS DN 600	98.30	nessuno
69	67	62	CLS DN 600	42.41	nessuno
7	4	7	CLS DN 500	135.86	nessuno
70	68	65	CLS DN 500	33.04	nessuno
71	69	66	CLS DN 500	65.37	nessuno
72	70	67	CLS DN 400	50.94	nessuno
73	71	67	CLS DN 400	79.65	nessuno
74	63	72	TERRA ST 3.00..	163.38	nessuno
75	72	73	TERRA ST 4.00..	319.94	nessuno
77	75	44	CLS DN 1000	65.94	nessuno
78	76	54	PVC DN 200	67.82	nessuno
79	77	58	CLS DN 400	49.86	nessuno
8	7	8	CLS DN 500	117.89	nessuno
80	78	60	CLS DN 400	52.32	nessuno
81	79	50	CLS DN 500	44.56	nessuno
9	8	9	CLS DN 600	121.22	nessuno

SOMMARIO DELLE STATISTICHE DEI NODI -----

Nodo	Quota		Quota % variaz.	Massima quota media	Dist. tra Durata		Durata		Sovracc. terreno e del della	
	(m slm)	(m slm)			alla max.	al tempo	terreno (m)	sovracc. (m)	esondaz. (min)	(min)
1	28.50	27.54	0.1502	28.50	0:29	0.96	0.00	83.73	47.97*	
10	28.00	27.61	0.0324	28.00	0:40	0.39	0.00	40.50	33.43*	

11	27.80	27.18	26.79	0.0726	27.80	0:37	0.62	0.00	55.87	18.97*
12	27.51	26.90	26.53	0.0629	27.51	0:36	0.61	0.00	62.27	34.03*
13	27.48	26.66	26.30	0.0831	27.48	0:42	0.82	0.00	60.60	6.90*
14	27.44	26.60	26.01	0.0503	27.27	0:42	0.67	0.17	29.30	0.00
15	27.53	26.60	26.20	0.0825	27.53	0:42	0.93	0.00	29.23	0.10*
16	27.42	26.59	25.97	0.0528	27.42	0:42	0.83	0.00	28.23	0.03*
17	27.60	26.80	26.54	0.0944	27.60	0:43	0.80	0.00	18.73	0.10*
18	27.68	26.77	26.44	0.0981	27.67	0:43	0.90	0.01	19.80	0.00
19	27.20	26.40	25.84	0.0549	27.17	0:44	0.77	0.03	32.73	0.00
2	28.56	27.49	27.49	0.1483	28.56	0:39	1.07	0.00	84.30	24.27*
20	26.98	26.83	26.53	0.0246	26.98	0:42	0.15	0.00	27.53	21.50*
21	26.82	26.69	26.39	0.0191	26.82	0:42	0.13	0.00	28.80	24.80*
22	27.16	26.36	25.81	0.0549	27.16	0:42	0.80	0.00	30.67	0.03*
23	27.12	26.38	25.76	0.0409	27.12	0:44	0.74	0.00	24.90	0.23*
24	27.12	26.34	25.76	0.0348	27.10	0:44	0.76	0.02	26.40	0.00
25	27.16	26.46	26.13	0.0865	27.16	0:43	0.70	0.00	25.57	0.47*
26	26.82	26.10	25.83	0.0811	26.82	0:44	0.72	0.00	52.40	9.33*
27	27.20	26.42	25.99	0.0467	27.20	0:44	0.78	0.00	23.37	0.27*
28	27.08	26.22	25.64	0.0381	26.88	0:44	0.66	0.20	27.37	0.00
29	26.80	26.16	25.60	0.0394	26.80	0:43	0.64	0.00	27.00	0.03*
3	28.25	27.74	27.28	0.0358	28.25	0:40	0.51	0.00	37.07	0.30*
30	26.80	26.42	26.21	0.0663	26.80	0:36	0.38	0.00	36.93	27.83*
31	27.07	26.33	26.13	0.1293	27.07	0:38	0.74	0.00	38.33	0.07*
32	26.94	26.34	26.17	0.0837	26.94	0:39	0.60	0.00	30.00	15.10*
33	26.62	26.03	25.78	0.0728	26.62	0:43	0.59	0.00	45.53	10.80*
34	26.60	25.97	25.81	0.1224	26.60	0:43	0.63	0.00	54.37	15.83*
35	26.60	25.95	25.34	0.0342	26.60	0:43	0.65	0.00	24.17	0.07*
36	26.80	26.24	26.05	0.0542	26.80	0:44	0.56	0.00	18.07	0.23*
37	26.51	26.09	25.72	0.0394	26.51	0:43	0.42	0.00	21.70	0.17*
38	26.66	26.19	26.00	0.0478	26.66	0:44	0.47	0.00	19.07	1.50*
39	26.44	25.87	25.53	0.0636	26.44	0:43	0.57	0.00	34.73	10.27*
4	28.23	27.70	27.34	0.0442	28.23	0:40	0.53	0.00	39.60	0.47*
40	26.53	26.09	25.89	0.0697	26.53	0:43	0.44	0.00	22.17	9.20*
41	26.39	25.72	25.45	0.0770	26.39	0:41	0.67	0.00	47.67	10.10*
42	26.30	25.76	25.59	0.1081	26.30	0:43	0.54	0.00	45.60	16.30*
43	26.60	26.09	25.74	0.0634	26.60	0:43	0.51	0.00	21.80	0.10*
44	26.40	25.60	24.89	0.0370	26.20	0:42	0.60	0.20	37.83	0.00
45	26.47	25.91	25.71	0.0565	26.47	0:44	0.56	0.00	18.63	4.43*
46	26.66	25.79	25.46	0.0692	26.66	0:44	0.87	0.00	22.77	0.03*
47	26.83	26.10	25.73	0.0503	26.83	0:44	0.73	0.00	12.43	0.07*
48	26.13	25.56	25.28	0.0785	26.13	0:44	0.57	0.00	43.67	9.50*
49	26.13	25.62	25.32	0.0644	26.13	0:44	0.51	0.00	34.07	2.37*
5	28.08	27.65	27.36	0.0305	28.08	0:40	0.43	0.00	41.80	34.57*
50	25.90	25.52	24.83	0.0307	25.90	0:42	0.38	0.00	37.30	10.73*
51	26.20	25.75	25.41	0.0324	26.20	0:44	0.45	0.00	18.20	0.40*
52	26.12	25.70	25.37	0.0504	26.08	0:44	0.38	0.04	20.47	0.00
53	26.60	25.92	25.55	0.0345	26.60	0:44	0.68	0.00	23.03	12.03*
54	26.50	25.87	25.51	0.0337	26.50	0:44	0.63	0.00	23.53	9.83*
55	25.94	25.44	24.73	0.0164	25.57	0:46	0.13	0.37	16.73	0.00
56	26.70	25.74	25.36	0.0442	26.36	0:45	0.62	0.34	1.23	0.00
57	26.63	25.87	25.59	0.0109	25.78	0:50	0.00	0.85	0.00	0.00
58	26.63	25.30	24.89	0.0516	25.77	0:46	0.47	0.86	35.57	0.00
59	26.66	25.70	25.43	0.1259	26.66	0:46	0.96	0.00	6.07	0.07*
6	28.36	27.70	27.32	0.0381	28.36	0:40	0.66	0.00	37.90	0.70*
60	26.64	25.51	25.05	0.0576	25.88	0:46	0.37	0.76	13.87	0.00
61	25.97	25.23	24.22	0.0106	24.90	0:52	0.00	1.07	0.00	0.00
62	25.91	25.16	24.18	0.0110	24.89	0:52	0.00	1.02	0.00	0.00
63	25.50	24.93	24.01	0.0125	24.79	0:53	0.00	0.71	0.00	0.00
64	26.20	25.21	24.74	0.0111	25.10	0:50	0.00	1.10	0.00	0.00
65	26.18	25.11	24.66	0.0140	25.09	0:50	0.00	1.09	0.00	0.00
66	26.18	25.18	24.64	0.0116	25.06	0:50	0.00	1.12	0.00	0.00
67	26.18	25.17	24.57	0.0107	25.00	0:50	0.00	1.18	0.00	0.00
68	26.20	25.21	24.74	0.0112	25.10	0:50	0.00	1.10	0.00	0.00
69	26.19	25.25	24.78	0.0091	25.07	0:51	0.00	1.12	0.00	0.00
7	28.20	27.58	27.24	0.0668	28.20	0:39	0.62	0.00	44.83	10.00*
70	26.19	25.17	24.81	0.0095	25.03	0:50	0.00	1.16	0.00	0.00
71	26.15	25.31	24.95	0.0101	25.19	0:50	0.00	0.96	0.00	0.00
72	24.72	24.72	23.88	0.0124	24.59	0:56	0.00	0.13	0.00	0.00
73	24.40	24.40	23.36	0.0059	23.73	0:56	0.00	0.68	0.00	0.00
75	26.55	25.67	24.95	0.0415	26.52	0:42	0.85	0.03	36.20	0.00
76	26.64	26.03	25.89	0.0672	26.64	0:44	0.61	0.00	28.00	12.80*
77	26.63	25.52	25.15	0.0634	26.22	0:44	0.70	0.41	12.87	0.00
78	26.70	25.66	25.30	0.0930	26.35	0:46	0.69	0.35	6.23	0.00
79	26.16	25.78	25.33	0.0312	26.10	0:44	0.32	0.06	16.23	0.00
8	28.13	27.55	27.14	0.0639	28.13	0:39	0.58	0.00	43.40	0.07*
9	28.12	27.51	27.10	0.0684	28.12	0:39	0.61	0.00	44.77	0.03*

Nodo con la maggiore variazione media percentuale: '1' pari a 0.150 % (**)

(*) Attenzione: c'è un ingresso di portata alla rete in un nodo in cui è possibile un'esondazione.

Se l'ingresso è contemporaneo all'esondazione, l'acqua non entrerà in rete e verrà considerata solamente nel controllo di continuità.

(**) La variazione media nei nodi è così definita:

$$100.0 (Y(n+1) - Y(n)) / Yfull$$

SOMMARIO DELLE STATISTICHE DEGLI ELEMENTI LINEARI -----

Elemento	Portata di moto uniforme (m3/s)	Velocità di moto uniforme (m/s)	Portata Altezze max di calcolo (m)	Velocità max di calcolo (m/s)	Velocità al tempo (m/s)	Rapporto tra Qmax e Q moto uniforme	Raggio tra Qmax e Q moto uniforme (m)	Sezione idraulica (m2)	Sezione trasvers. massima (m2)	Durata riempim. (min)	Grado di della Q Pendente normale za ramo (m/m)	
1	0.0079	0.28	0.190	0.023	0:29	0.80	0:29	2.88	0.0574	0.0284	1.00	342.4 0.00065
10	0.1690	0.60	0.600	0.148	0:50	0.58	0:38	0.87	0.1798	0.2827	1.00	378.6 0.00088
11	0.1690	0.60	0.600	0.110	1:24	0.46	0:37	0.65	0.1811	0.2827	1.00	372.0 0.00088
12	0.2765	0.98	0.600	0.233	1:33	0.99	0:36	0.84	0.1776	0.2827	1.00	411.8 0.00235
13	0.2765	0.98	0.600	0.283	0:45	1.00	0:45	1.02	0.1793	0.2827	1.00	404.0 0.00235
14	0.2399	0.85	0.600	0.298	1:13	1.05	1:13	1.24	0.1821	0.2827	1.00	394.7 0.00177
15	0.2399	0.85	0.600	0.415	0:40	1.47	0:40	1.73	0.1823	0.2827	1.00	337.7 0.00177
16	0.1358	0.69	0.500	0.054	0:50	0.41	0:22	0.39	0.1401	0.1964	1.00	107.3 0.00150
17	0.4541	0.90	0.800	0.426	0:41	0.96	0:40	0.94	0.2433	0.5027	1.00	277.6 0.00101
18	0.0480	0.68	0.300	0.048	0:50	0.79	0:42	1.01	0.0902	0.0707	1.00	432.0 0.00210
19	0.0940	0.83	0.380	0.065	0:50	1.09	0:40	0.70	0.1071	0.1134	1.00	28.1 0.00228
2	0.0087	0.31	0.190	0.028	0:40	1.00	0:40	3.26	0.0577	0.0284	1.00	0.0 0.00078
20	0.4526	0.90	0.800	0.519	0:43	1.03	0:43	1.15	0.2433	0.5027	1.00	364.0 0.00100
21	0.0531	0.42	0.400	0.080	0:42	0.65	0:42	1.51	0.1210	0.1257	1.00	346.6 0.00075
22	0.0930	0.74	0.400	0.075	0:42	0.98	0:34	0.81	0.1173	0.1257	1.00	48.4 0.00231
23	0.3994	0.79	0.800	0.622	0:44	1.24	0:44	1.56	0.2434	0.5027	1.00	161.9 0.00078
24	0.2667	0.53	0.800	0.662	0:44	1.32	0:44	2.48	0.2430	0.5027	1.00	0.0 0.00035
25	0.2666	0.53	0.800	0.802	0:44	1.61	0:44	3.01	0.2434	0.5027	1.00	3.0 0.00035
26	0.1016	0.81	0.400	0.033	0:50	0.45	0:22	0.33	0.1108	0.1257	1.00	182.9 0.00276
27	0.0590	0.47	0.400	0.037	0:53	0.30	0:53	0.63	0.1114	0.1257	1.00	329.0 0.00093
28	0.1358	0.69	0.500	-0.109	0:44	-0.56	0:44	-0.80	0.1520	0.1964	1.00	8.3 0.00150
29	0.5448	1.08	0.800	0.579	0:44	1.16	0:41	1.06	0.2433	0.5027	1.00	354.0 0.00145
3	0.0113	0.40	0.190	0.035	0:37	1.25	0:37	3.13	0.0575	0.0284	1.00	362.2 0.00133
30	0.5448	1.08	0.800	0.627	0:43	1.26	0:43	1.15	0.2434	0.5027	1.00	277.6 0.00145
31	0.0222	0.31	0.300	0.042	0:38	0.59	0:38	1.88	0.0906	0.0707	1.00	384.1 0.00045
32	0.0467	0.66	0.300	0.064	0:38	0.91	0:38	1.37	0.0911	0.0707	1.00	43.2 0.00199
33	0.0283	0.63	0.240	0.035	0:42	0.95	0:36	1.24	0.0726	0.0452	1.00	37.0 0.00241
34	0.0601	0.85	0.300	0.069	0:43	0.98	0:43	1.15	0.0831	0.0707	1.00	310.3 0.00330
35	0.0221	0.49	0.240	0.017	0:43	0.38	0:43	0.78	0.0710	0.0452	1.00	361.1 0.00147
36	0.5448	1.08	0.800	0.744	0:43	1.57	0:43	1.37	0.2424	0.5027	1.00	0.0 0.00145
37	0.0205	0.45	0.240	0.025	0:50	0.59	0:43	1.22	0.0730	0.0452	1.00	3.9 0.00126
38	0.0300	0.66	0.240	0.025	0:50	0.67	0:38	0.83	0.0676	0.0452	1.00	19.1 0.00270
39	0.0459	1.01	0.240	0.026	0:44	0.64	0:41	0.57	0.0665	0.0452	1.00	431.4 0.00631
4	0.0425	0.34	0.400	-0.073	0:50	-0.58	0:50	-1.71	0.1210	0.1257	1.00	320.7 0.00048
40	0.0338	0.75	0.240	0.023	0:43	0.52	0:43	0.69	0.0665	0.0452	1.00	394.8 0.00342
41	0.0540	0.43	0.400	0.017	0:43	0.22	0:39	0.31	0.1216	0.1257	1.00	394.6 0.00078
42	0.1392	1.11	0.400	0.049	0:50	0.42	0:35	0.35	0.1108	0.1257	1.00	422.2 0.00518
43	0.0855	0.68	0.400	0.058	0:54	0.46	0:54	0.68	0.1179	0.1257	1.00	369.9 0.00195
44	0.0423	0.34	0.400	0.104	0:43	0.95	0:41	2.47	0.1215	0.1257	1.00	0.0 0.00048
45	0.8744	1.74	0.800	0.773	0:44	1.79	0:40	0.88	0.2391	0.5027	1.00	39.5 0.00373
46	0.0279	0.62	0.240	0.020	0:50	0.44	0:50	0.71	0.0665	0.0452	1.00	444.7 0.00233
47	0.2032	1.62	0.400	0.019	0:44	0.49	0:10	0.09	0.1108	0.1257	1.00	443.5 0.01104
48	0.0953	0.76	0.400	0.093	0:50	0.74	0:50	0.98	0.1133	0.1257	1.00	412.5 0.00243
49	0.0569	0.45	0.400	0.147	0:41	1.17	0:41	2.58	0.1198	0.1257	1.00	2.6 0.00087
5	0.0430	0.34	0.400	0.114	0:40	0.91	0:40	2.66	0.1215	0.1257	1.00	338.1 0.00049
50	0.0406	0.57	0.300	-0.028	0:44	0.41	0:14	-0.69	0.0879	0.0707	1.00	369.6 0.00150
51	0.7387	0.94	1.000	0.904	0:44	1.15	0:44	1.22	0.3040	0.7854	1.00	244.0 0.00110
52	0.0459	0.37	0.400	-0.045	0:44	-0.36	0:44	-0.98	0.1208	0.1257	1.00	382.1 0.00056
53	0.0459	0.37	0.400	0.081	0:50	0.79	0:43	1.77	0.1217	0.1257	1.00	11.0 0.00056
54	0.0173	0.24	0.300	0.065	0:44	0.91	0:44	3.73	0.0911	0.0707	1.00	0.0 0.00027
55	0.0470	0.24	0.500	0.071	0:56	0.39	0:43	1.52	0.1520	0.1964	1.00	266.7 0.00018
56	0.1428	0.73	0.500	0.163	0:56	0.83	0:56	1.14	0.1476	0.1964	1.00	44.6 0.00166
57	0.3716	0.47	1.000	1.052	0:44	1.34	0:44	2.83	0.3016	0.7854	1.00	41.7 0.00028
58	0.1588	1.26	0.400	0.038	0:46	0.48	0:40	0.24	0.1109	0.1257	1.00	448.2 0.00674
59	0.1387	0.71	0.500	0.184	0:50	0.99	0:37	1.32	0.1518	0.1964	1.00	28.1 0.00157
6	0.1003	0.51	0.500	-0.173	0:40	-0.88	0:40	-1.73	0.1510	0.1964	1.00	324.3 0.00082
60	0.0943	1.33	0.300	0.042	0:45	1.24	0:43	0.44	0.0817	0.0612	0.87	39.8 0.00811
61	0.2243	1.14	0.500	0.110	0:46	0.66	0:38	0.49	0.1386	0.1964	1.00	397.3 0.00409
62	0.0565	0.80	0.300	0.049	0:46	0.81	0:44	0.86	0.0876	0.0707	1.00	451.9 0.00290
63	0.7481	0.95	1.000	1.200	0:46	1.75	0:44	1.60	0.2908	0.6925	0.88	0.0 0.00113
64	2.0515	1.81	1.200	1.196	0:46	1.61	0:44	0.58	0.3620	0.9170	0.81	341.6 0.00236
65	1.8889	1.67	1.200	1.476	0:50	1.60	0:45	0.78	0.3630	0.9966	0.88	273.3 0.00200
66	0.1568	0.80	0.500	0.026	0:51	0.21	0:10	0.16	0.1485	0.1776	0.90	413.3 0.00200

67	0.0779	0.40	0.500	0.090	0:50	0.47	0:50	1.16	0.1521	0.1939	0.99	358.3	0.00049
68	0.1725	0.61	0.600	0.146	0:50	0.59	0:51	0.85	0.1823	0.2489	0.88	406.0	0.00092
69	0.1238	0.44	0.600	0.255	0:50	1.22	0:50	2.06	0.1737	0.2084	0.74	0.0	0.00047
7	0.1042	0.53	0.500	0.074	0:39	0.47	0:34	0.71	0.1502	0.1964	1.00	394.1	0.00088
70	0.1929	0.98	0.500	0.047	0:50	0.45	0:12	0.25	0.1488	0.1782	0.91	413.5	0.00303
71	0.1788	0.91	0.500	0.038	0:50	0.40	0:14	0.21	0.1425	0.1620	0.83	433.0	0.00260
72	0.0383	0.30	0.400	0.045	0:50	0.69	0:50	1.17	0.1002	0.0653	0.52	0.0	0.00039
73	0.0811	0.65	0.400	0.060	0:50	0.82	0:50	0.74	0.1064	0.0736	0.59	0.0	0.00176
74	1.5447	0.71	1.150	1.467	0:51	0.87	0:46	0.95	0.5151	1.8623	0.86	258.9	0.00100
75	1.9868	0.74	1.150	1.361	0:56	0.92	0:56	0.68	0.4197	1.4757	0.55	0.0	0.00100
77	0.7387	0.94	1.000	0.785	0:44	1.00	0:44	1.06	0.3040	0.7854	1.00	274.0	0.00110
78	0.0196	0.69	0.190	0.031	0:44	1.08	0:44	1.57	0.0564	0.0284	1.00	23.8	0.00398
79	0.1225	0.97	0.400	0.053	0:45	0.90	0:32	0.44	0.1108	0.1257	1.00	42.2	0.00401
8	0.1164	0.59	0.500	0.119	0:53	0.66	0:37	1.02	0.1520	0.1964	1.00	367.2	0.00110
80	0.1035	0.82	0.400	0.070	0:46	0.86	0:42	0.68	0.1128	0.1257	1.00	29.3	0.00287
81	0.2678	1.36	0.500	0.093	0:50	0.86	0:36	0.35	0.1404	0.1964	1.00	42.4	0.00583
9	0.1036	0.37	0.600	0.131	0:53	0.48	0:37	1.26	0.1825	0.2827	1.00	146.2	0.00033

Ramo con la maggiore variazione media percentuale: '25' pari a 0.113 % (*)

(*) La variazione media nei rami è così definita:

$$100.0 (Q(n+1) - Q(n)) / Q_{full}$$

F3) Simulazione STATO DI FATTO - Ietogramma rettangolare con $T_r = 10$ anni e durata 45 minuti; c.p.c. PTCP

DATI GENERALI -----

Numero dei nodi	78
Numero dei rami	80
Numero delle pompe	0
Numero degli scaricatori	0
Sommaro delle piogge	
Pioggia totale (mm)	42.7500

CONTROLLO DI CONTINUITA' PER IL DEFLUSSO SUPERFICIALE -----

	Metri cubi	Millimetri sul bacino
Precipitazione totale (Pioggia + Neve)	41783.449219	42.750
Infiltrazione totale	9754.380859	9.980
Evaporazione totale	950.531311	0.973
Deflusso superficiale	14552.665039	14.889
Volume trattenuto negli accumuli superficiali	16525.205078	16.907
Infiltrazione per l'area permeabile	9754.380859	17.500
Infiltrazione + Evaporazione + Deflusso superficiale + Accumuli superficiali	41782.781250	42.749
Precipitazione totale + Accumulo iniziale	41783.449219	42.750

Errore 0.002 % (*)

(*) L'errore nella continuità è così calcolato:
 (Precipitazione - Infiltrazione - Evaporazione -
 - Deflusso superficiale - Accumuli superficiali) /
 / Precipitazione

CONTROLLO DI CONTINUITA' NELLA RETE -----

	Metri cubi	Millimetri sul bacino
Accumulo iniziale	0.000000	0.000
Accumulo finale	0.000000	0.000
Deflusso superficiale	14552.665039	14.889
Apporto ipodermico da falda	0.000000	0.000
Perdite di evaporazione nei canali	0.000000	0.000
Uscita canali/condotte/pozzetti	14552.665039	14.889
Accumulo iniziale + Ingresso	14552.665039	14.889
Accumulo finale + Uscita	14552.665039	14.889

Errore 0.000 % (*)

(*) L'errore nella continuità è così calcolato:
 (Accumulo finale + Uscita + Evaporazione - Deflusso superficiale -
 - Apporto ipodermico da falda - Accumulo iniziale) /
 / (Accumulo finale + Uscita + Evaporazione)

SOMMARIO DELLE STATISTICHE DEI SOTTOBACINI -----

		Area permeabile		Area imperm.(*)		Area totale sottobacino						
Sotto- bacino	Nodo di Ingresso	Area (ha)	% imper.(mm)	Pioggia Altezza		Deflusso						
				totale	Perdite simulata	deflusso totali	Altezza massimo	Deflusso deflusso	Altezza massimo	Deflusso deflusso	massimo massimo	unitario
				(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm/h)	
1	1	1.28	75.00	42.750	5.558	37.192	0.01	30.724	0.14	24.433	0.15	42.369
10	3	1.01	75.00	42.750	4.375	38.375	0.00	30.400	0.09	23.894	0.10	34.919
11	10	0.72	75.00	42.750	4.846	37.904	0.00	30.543	0.07	24.119	0.08	38.151
12	9	2.91	75.00	42.750	4.448	38.302	0.01	30.425	0.27	23.931	0.28	35.441
13	11	2.29	75.00	42.750	4.794	37.956	0.01	30.528	0.23	24.095	0.24	37.807
14	12	4.71	40.00	42.750	2.969	39.781	0.02	30.755	0.28	14.084	0.30	23.195
15	13	6.34	40.00	42.750	2.778	39.972	0.03	30.710	0.37	13.951	0.39	22.603
16	15	1.17	60.00	42.750	3.662	39.088	0.01	30.570	0.09	19.807	0.10	31.115
18	17	0.80	60.00	42.750	5.403	37.347	0.01	30.931	0.07	20.719	0.08	38.059
19	18	0.31	60.00	42.750	4.663	38.087	0.00	30.800	0.03	20.345	0.03	35.515
2	2	1.88	75.00	42.750	4.642	38.108	0.01	30.485	0.18	24.024	0.19	36.791
20	16	1.84	60.00	42.750	3.473	39.277	0.01	30.517	0.14	19.700	0.15	30.109
21	20	2.76	60.00	42.750	3.094	39.656	0.01	30.395	0.20	19.474	0.21	27.891
22	21	1.32	60.00	42.750	3.094	39.656	0.00	30.395	0.10	19.474	0.10	27.890
23	19	0.61	60.00	42.750	5.437	37.313	0.01	30.936	0.06	20.737	0.06	38.173
24	22	0.24	60.00	42.750	5.424	37.326	0.00	30.934	0.02	20.730	0.02	38.130
26	25	0.74	60.00	42.750	3.585	39.165	0.00	30.549	0.06	19.763	0.06	30.710
27	26	1.09	60.00	42.750	3.230	39.520	0.00	30.442	0.08	19.557	0.09	28.717
28	27	0.12	60.00	42.750	6.533	36.217	0.00	31.091	0.01	21.268	0.01	41.984
29	24	0.41	60.00	42.750	4.524	38.226	0.00	30.772	0.04	20.273	0.04	34.983
3	2	0.17	75.00	42.750	5.592	37.158	0.00	30.732	0.02	24.447	0.02	42.547
30	28	0.12	60.00	42.750	5.946	36.804	0.00	31.013	0.01	20.986	0.01	39.843
31	30	2.67	30.00	42.750	2.072	40.678	0.01	30.705	0.11	10.662	0.12	16.919
32	31	1.22	60.00	42.750	3.140	39.610	0.00	30.411	0.09	19.503	0.09	28.176
33	32	1.01	60.00	42.750	3.754	38.996	0.01	30.594	0.08	19.858	0.09	31.582
34	33	0.39	60.00	42.750	4.556	38.194	0.00	30.778	0.03	20.289	0.04	35.107
35	34	0.30	60.00	42.750	5.992	36.758	0.00	31.019	0.03	21.009	0.03	39.999
36	29	1.15	60.00	42.750	3.503	39.247	0.01	30.525	0.09	19.716	0.10	30.270
37	36	0.52	60.00	42.750	3.905	38.845	0.00	30.633	0.04	19.942	0.05	32.319
38	38	0.52	60.00	42.750	3.908	38.842	0.00	30.634	0.04	19.943	0.05	32.335
39	40	0.57	60.00	42.750	4.546	38.204	0.00	30.776	0.05	20.284	0.06	35.069
4	5	0.80	75.00	42.750	5.031	37.719	0.01	30.593	0.08	24.203	0.09	39.325
40	42	0.46	60.00	42.750	5.209	37.541	0.00	30.899	0.04	20.623	0.05	37.422
41	43	0.15	60.00	42.750	5.939	36.811	0.00	31.012	0.01	20.982	0.02	39.817
42	37	0.24	60.00	42.750	5.694	37.056	0.00	30.976	0.02	20.863	0.03	39.008
43	39	0.22	60.00	42.750	5.276	37.474	0.00	30.910	0.02	20.657	0.02	37.646
44	41	0.37	60.00	42.750	4.552	38.198	0.00	30.778	0.03	20.287	0.04	35.093
45	35	0.32	60.00	42.750	4.767	37.983	0.00	30.820	0.03	20.399	0.03	35.896
46	45	0.44	60.00	42.750	3.879	38.871	0.00	30.626	0.04	19.927	0.04	32.196
47	47	0.26	60.00	42.750	6.443	36.307	0.01	31.079	0.02	21.225	0.03	41.630
48	46	1.11	60.00	42.750	4.323	38.427	0.01	30.730	0.10	20.167	0.10	34.178
49	48	0.48	60.00	42.750	4.372	38.378	0.00	30.740	0.04	20.193	0.05	34.378
5	4	0.76	75.00	42.750	4.733	38.017	0.00	30.511	0.07	24.067	0.08	37.403
50	49	0.42	60.00	42.750	5.380	37.370	0.00	30.927	0.04	20.708	0.04	37.986
51	44	9.37	5.00	42.750	2.720	40.030	0.07	31.251	0.07	4.147	0.14	5.477
52	51	0.47	60.00	42.750	4.565	38.185	0.00	30.780	0.04	20.294	0.05	35.141
53	52	0.13	60.00	42.750	5.837	36.913	0.00	30.997	0.01	20.933	0.01	39.477
54	49	0.29	60.00	42.750	5.100	37.650	0.00	30.880	0.03	20.568	0.03	37.060
55	53	4.79	30.00	42.750	1.643	41.107	0.01	30.558	0.19	10.317	0.20	15.474
56	54	3.14	60.00	42.750	2.398	40.352	0.01	30.051	0.19	18.990	0.20	23.120
57	50	0.44	60.00	42.750	3.156	39.594	0.00	30.417	0.03	19.513	0.03	28.276
58	56	0.47	60.00	42.750	5.422	37.328	0.01	30.934	0.04	20.729	0.05	38.122
59	58	0.40	60.00	42.750	5.681	37.069	0.01	30.974	0.04	20.857	0.04	38.966
6	6	0.30	60.00	42.750	4.798	37.952	0.00	30.825	0.03	20.414	0.03	36.007
60	57	0.63	60.00	42.750	5.742	37.008	0.01	30.983	0.06	20.887	0.07	39.165
61	60	0.36	60.00	42.750	5.360	37.390	0.00	30.924	0.03	20.698	0.04	37.921
62	59	0.70	60.00	42.750	5.552	37.198	0.01	30.954	0.06	20.793	0.07	38.544
63	55	0.88	60.00	42.750	3.094	39.656	0.00	30.395	0.06	19.475	0.07	27.893
65	62	9.33	5.00	42.750	2.485	40.265	0.06	31.236	0.07	3.922	0.13	5.134
66	64	0.44	60.00	42.750	5.431	37.319	0.01	30.935	0.04	20.734	0.05	38.152
67	65	0.36	60.00	42.750	5.141	37.609	0.00	30.887	0.03	20.589	0.04	37.197
68	66	0.45	60.00	42.750	4.255	38.495	0.00	30.715	0.04	20.131	0.04	33.893
69	67	0.13	60.00	42.750	5.773	36.977	0.00	30.988	0.01	20.902	0.01	39.265
7	4	2.32	75.00	42.750	4.527	38.223	0.01	30.450	0.22	23.969	0.23	35.998
70	68	0.76	60.00	42.750	6.186	36.564	0.01	31.046	0.07	21.102	0.09	40.675
71	69	0.69	60.00	42.750	5.008	37.742	0.01	30.864	0.06	20.522	0.07	36.746
72	70	0.74	60.00	42.750	5.455	37.295	0.01	30.939	0.07	20.746	0.08	38.230
73	71	1.11	60.00	42.750	4.645	38.105	0.01	30.796	0.10	20.336	0.11	35.447
74	63	7.98	5.00	42.750	1.936	40.814	0.03	31.194	0.06	3.399	0.10	4.446

77	75	0.23	60.00	42.750	4.992	37.758	0.00	30.861	0.02	20.514	0.02	36.692
78	76	0.61	60.00	42.750	4.941	37.809	0.01	30.852	0.06	20.488	0.06	36.514
79	77	0.21	60.00	42.750	5.493	37.257	0.00	30.945	0.02	20.764	0.02	38.352
8	7	2.10	75.00	42.750	4.789	37.961	0.01	30.527	0.21	24.093	0.22	37.777
80	78	0.25	60.00	42.750	5.408	37.342	0.00	30.932	0.02	20.722	0.03	38.077
81	79	0.19	60.00	42.750	5.688	37.062	0.00	30.975	0.02	20.860	0.02	38.987
9	8	0.27	75.00	42.750	4.738	38.012	0.00	30.513	0.03	24.069	0.03	37.437

(*) Le statistiche sull'area impermeabile aggregano aree con e senza gli accumuli superficiali.

TABELLA DEI MATERIALI -----

Nome	Area Tipo	Diametro (m2)	Altezza int. (m)	Larghez. (m)	Pendenze (b/h)	Coeff.di Manning (mm)	Spessore (m)	Lunghezza
CLS DN 1000	Circolare	0.785	1.000	*****	*****	*****	0.014	0.000 528.96
CLS DN 1200	Circolare	1.131	1.200	*****	*****	*****	0.012	0.000 138.24
CLS DN 300	Circolare	0.071	0.300	*****	*****	*****	0.012	0.000 206.66
CLS DN 400	Circolare	0.126	0.400	*****	*****	*****	0.014	0.000 1757.21
CLS DN 500	Circolare	0.196	0.500	*****	*****	*****	0.014	0.000 1403.83
CLS DN 600	Circolare	0.283	0.600	*****	*****	*****	0.014	0.000 1065.45
CLS DN 800	Circolare	0.503	0.800	*****	*****	*****	0.012	0.000 654.91
PVC DN 200	Circolare	0.028	0.190	*****	*****	*****	0.012	0.000 347.71
PVC DN 250	Circolare	0.045	0.240	*****	*****	*****	0.012	0.000 666.23
PVC DN 315	Circolare	0.071	0.300	*****	*****	*****	0.012	0.000 518.47
PVC DN 400	Circolare	0.113	0.380	*****	*****	*****	0.012	0.000 78.88
TERRA ST 3.00..	Trapezoidale	2.168	*****	1.150	1.000	0.77-0.77	0.030	0.000 163.38
TERRA ST 4.00..	Trapezoidale	2.671	*****	1.150	1.000	1.15-1.15	0.030	0.000 319.94

7849.88

RIASSUNTO PER CONDOTTO -----

Gruppo	Lunghezza	Numero
CLS DN 1000	528.96	4
CLS DN 1200	138.24	2
CLS DN 300	206.66	4
CLS DN 400	1757.21	20
CLS DN 500	1403.83	14
CLS DN 600	1065.45	9
CLS DN 800	654.91	9
PVC DN 200	347.71	4
PVC DN 250	666.23	7
PVC DN 315	518.47	4
PVC DN 400	78.88	1
TERRA ST 3.00 x 1...	163.38	1
TERRA ST 4.00 x 1...	319.94	1
-----	7849.88	80

DATI DEI NODI -----

Nodo	Quota terreno (m slm)	Quota cielo (m slm)	Quota fondo (m slm)	Portata esterna (m3/s)	Livello iniziale (m)	Rami collegati
1	28.50	27.54	27.35	0.00	0.00	1
10	28.00	27.61	27.01	0.00	0.00	10,11
11	27.80	27.18	26.58	0.00	0.00	12,13
12	27.51	26.90	26.30	0.00	0.00	13,14
13	27.48	26.66	26.06	0.00	0.00	14,15
14	27.44	26.60	25.80	0.00	0.00	15,16,17
15	27.53	26.60	26.10	0.00	0.00	16
16	27.42	26.59	25.75	0.00	0.00	17,19,20
17	27.60	26.80	26.50	0.00	0.00	18
18	27.68	26.77	26.39	0.00	0.00	18,19
19	27.20	26.40	25.60	0.00	0.00	20,22,23
2	28.56	27.49	27.30	0.00	0.00	1,2,3
20	26.98	26.83	26.43	0.00	0.00	21
21	26.82	26.69	26.29	0.00	0.00	21,22
22	27.16	26.36	25.56	0.00	0.00	23,24,26
23	27.12	26.38	25.54	0.00	0.00	24,25,28
24	27.12	26.34	25.54	0.00	0.00	25,27,29
25	27.16	26.46	26.06	0.00	0.00	26
26	26.82	26.10	25.70	0.00	0.00	27
27	27.20	26.42	25.92	0.00	0.00	28

28	27.08	26.22	25.42	0.00	0.00	29,30,32
29	26.80	26.16	25.36	0.00	0.00	30,34,36
3	28.25	27.74	27.14	0.00	0.00	10,5,6
30	26.80	26.42	26.12	0.00	0.00	31
31	27.07	26.33	26.03	0.00	0.00	31,32
32	26.94	26.34	26.10	0.00	0.00	33
33	26.62	26.03	25.68	0.00	0.00	33,34,35
34	26.60	25.97	25.73	0.00	0.00	35
35	26.60	25.95	25.15	0.00	0.00	36,44,45
36	26.80	26.24	26.00	0.00	0.00	37
37	26.51	26.09	25.66	0.00	0.00	37,41,42
38	26.66	26.19	25.95	0.00	0.00	38
39	26.44	25.87	25.43	0.00	0.00	38,42,43
4	28.23	27.70	27.20	0.00	0.00	3,4,5,7
40	26.53	26.09	25.85	0.00	0.00	39
41	26.39	25.72	25.32	0.00	0.00	39,40,43,44
42	26.30	25.76	25.52	0.00	0.00	40
43	26.60	26.09	25.69	0.00	0.00	41
44	26.40	25.60	24.60	0.00	0.00	49,51,77
45	26.47	25.91	25.67	0.00	0.00	46
46	26.66	25.79	25.39	0.00	0.00	46,47,48
47	26.83	26.10	25.70	0.00	0.00	47
48	26.13	25.56	25.16	0.00	0.00	48,49,50
49	26.13	25.62	25.24	0.00	0.00	50,54
5	28.08	27.65	27.25	0.00	0.00	4
50	25.90	25.52	24.49	0.00	0.00	51,56,57,81
51	26.20	25.75	25.35	0.00	0.00	52
52	26.12	25.70	25.30	0.00	0.00	52,53,54
53	26.60	25.92	25.42	0.00	0.00	55
54	26.50	25.87	25.37	0.00	0.00	55,56,78
55	25.94	25.44	24.44	0.00	0.00	57,59,63
56	26.70	25.74	25.34	0.00	0.00	58
57	26.63	25.87	25.57	0.00	0.00	60
58	26.63	25.30	24.77	0.00	0.00	59,61,79
59	26.66	25.70	25.40	0.00	0.00	62
6	28.36	27.70	27.20	0.00	0.00	2,6
60	26.64	25.51	24.99	0.00	0.00	58,61,80
61	25.97	25.23	24.02	0.00	0.00	63,64
62	25.91	25.16	23.96	0.00	0.00	64,65,69
63	25.50	24.93	23.73	0.00	0.00	65,74
64	26.20	25.21	24.71	0.00	0.00	66
65	26.18	25.11	24.61	0.00	0.00	66,67,70
66	26.18	25.18	24.58	0.00	0.00	67,68,71
67	26.18	25.17	24.49	0.00	0.00	68,69,72,73
68	26.20	25.21	24.71	0.00	0.00	70
69	26.19	25.25	24.75	0.00	0.00	71
7	28.20	27.58	27.08	0.00	0.00	7,8
70	26.19	25.17	24.77	0.00	0.00	72
71	26.15	25.31	24.91	0.00	0.00	73
72	24.72	24.72	23.57	0.00	0.00	74,75
73	24.40	24.40	23.25	0.00	0.00	75
75	26.55	25.67	24.67	0.00	0.00	45,77
76	26.64	26.03	25.84	0.00	0.00	78
77	26.63	25.52	25.10	0.00	0.00	60,79
78	26.70	25.66	25.26	0.00	0.00	62,80
79	26.16	25.78	25.28	0.00	0.00	53,81
8	28.13	27.55	26.95	0.00	0.00	8,9
9	28.12	27.51	26.91	0.00	0.00	11,12,9

DATI DEGLI ELEMENTI LINEARI -----

Elemento	Nodo		Materiale	Lunghezza Valvola	
	iniziale	finale		(m)	anti-rifl.
1	1	2	PVC DN 200	76.83	nessuno
10	3	10	CLS DN 600	147.48	nessuno
11	10	9	CLS DN 600	114.27	nessuno
12	9	11	CLS DN 600	141.78	nessuno
13	11	12	CLS DN 600	117.59	nessuno
14	12	13	CLS DN 600	133.25	nessuno
15	13	14	CLS DN 600	149.14	nessuno
16	15	14	CLS DN 500	135.47	nessuno
17	14	16	CLS DN 800	49.77	nessuno
18	17	18	PVC DN 315	52.48	nessuno
19	18	16	PVC DN 400	78.88	nessuno
2	2	6	PVC DN 200	127.68	nessuno
20	16	19	CLS DN 800	150.26	nessuno

21	20	21	CLS DN 400	186.03	nessuno
22	21	19	CLS DN 400	186.05	nessuno
23	19	22	CLS DN 800	51.45	nessuno
24	22	23	CLS DN 800	51.83	nessuno
25	23	24	CLS DN 800	5.86	nessuno
26	25	22	CLS DN 400	141.33	nessuno
27	26	24	CLS DN 400	172.17	nessuno
28	27	23	CLS DN 500	26.48	nessuno
29	24	28	CLS DN 800	85.06	nessuno
3	2	4	PVC DN 200	75.37	nessuno
30	28	29	CLS DN 800	38.25	nessuno
31	30	31	PVC DN 315	201.22	nessuno
32	31	28	PVC DN 315	181.16	nessuno
33	32	33	PVC DN 250	128.85	nessuno
34	33	29	PVC DN 315	83.61	nessuno
35	34	33	PVC DN 250	37.21	nessuno
36	29	35	CLS DN 800	147.85	nessuno
37	36	37	PVC DN 250	118.72	nessuno
38	38	39	PVC DN 250	118.51	nessuno
39	40	41	PVC DN 250	84.04	nessuno
4	5	4	CLS DN 400	103.28	nessuno
40	42	41	PVC DN 250	58.51	nessuno
41	43	37	CLS DN 400	38.43	nessuno
42	37	39	CLS DN 400	44.40	nessuno
43	39	41	CLS DN 400	56.34	nessuno
44	41	35	CLS DN 400	83.77	nessuno
45	35	75	CLS DN 800	74.57	nessuno
46	45	46	PVC DN 250	120.39	nessuno
47	47	46	CLS DN 400	28.07	nessuno
48	46	48	CLS DN 400	94.76	nessuno
49	48	44	CLS DN 400	92.32	nessuno
5	4	3	CLS DN 400	121.55	nessuno
50	49	48	CLS DN 300	53.15	nessuno
51	44	50	CLS DN 1000	97.56	nessuno
52	51	52	CLS DN 400	83.20	nessuno
53	52	79	CLS DN 400	40.83	nessuno
54	49	52	CLS DN 300	62.13	nessuno
55	53	54	CLS DN 500	277.76	nessuno
56	54	50	CLS DN 500	283.20	nessuno
57	50	55	CLS DN 1000	179.48	nessuno
58	56	60	CLS DN 400	51.91	nessuno
59	58	55	CLS DN 500	44.73	nessuno
6	6	3	CLS DN 500	73.34	nessuno
60	57	77	CLS DN 300	43.17	nessuno
61	60	58	CLS DN 500	53.75	nessuno
62	59	78	CLS DN 300	48.20	nessuno
63	55	61	CLS DN 1000	185.98	nessuno
64	61	62	CLS DN 1200	25.43	nessuno
65	62	63	CLS DN 1200	112.81	nessuno
66	64	65	CLS DN 500	51.64	nessuno
67	65	66	CLS DN 500	60.75	nessuno
68	66	67	CLS DN 600	98.30	nessuno
69	67	62	CLS DN 600	42.41	nessuno
7	4	7	CLS DN 500	135.86	nessuno
70	68	65	CLS DN 500	33.04	nessuno
71	69	66	CLS DN 500	65.37	nessuno
72	70	67	CLS DN 400	50.94	nessuno
73	71	67	CLS DN 400	79.65	nessuno
74	63	72	TERRA ST 3.00..	163.38	nessuno
75	72	73	TERRA ST 4.00..	319.94	nessuno
77	75	44	CLS DN 1000	65.94	nessuno
78	76	54	PVC DN 200	67.82	nessuno
79	77	58	CLS DN 400	49.86	nessuno
8	7	8	CLS DN 500	117.89	nessuno
80	78	60	CLS DN 400	52.32	nessuno
81	79	50	CLS DN 500	44.56	nessuno
9	8	9	CLS DN 600	121.22	nessuno

SOMMARIO DELLE STATISTICHE DEI NODI -----

Nodo	Quota		Quota % variaz.	Massima quota media	Dist. tra Durata		Durata		Sovracc. terreno e del della	
	(m slm)	(m slm)			(m slm)	alla max.	al tempo	quota (m)	max (m)	sovracc.
1	28.50	27.54	0.1630	28.50	0:15	0.96	0.00	100.43	68.83*	
10	28.00	27.61	0.0237	28.00	0:30	0.39	0.00	63.40	56.17*	

11	27.80	27.18	26.84	0.0565	27.80	0:28	0.62	0.00	79.07	40.00*
12	27.51	26.90	26.58	0.0541	27.51	0:27	0.61	0.00	86.00	57.73*
13	27.48	26.66	26.37	0.0712	27.48	0:27	0.82	0.00	85.60	25.43*
14	27.44	26.60	26.08	0.0528	27.44	0:32	0.84	0.00	53.67	0.03*
15	27.53	26.60	26.26	0.0942	27.53	0:32	0.93	0.00	53.77	0.10*
16	27.42	26.59	26.03	0.0482	27.31	0:49	0.72	0.11	52.43	0.00
17	27.60	26.80	26.59	0.0963	27.60	0:32	0.80	0.00	41.77	13.03*
18	27.68	26.77	26.49	0.0831	27.68	0:32	0.91	0.00	43.13	0.03*
19	27.20	26.40	25.90	0.0441	27.19	0:33	0.79	0.01	56.87	0.00
2	28.56	27.49	27.54	0.1732	28.56	0:15	1.07	0.00	101.73	47.13*
20	26.98	26.83	26.55	0.0202	26.98	0:30	0.15	0.00	53.33	47.30*
21	26.82	26.69	26.41	0.0191	26.82	0:31	0.13	0.00	53.87	49.63*
22	27.16	26.36	25.87	0.0446	27.16	0:33	0.80	0.00	55.00	0.07*
23	27.12	26.38	25.82	0.0431	27.12	0:33	0.74	0.00	49.60	0.40*
24	27.12	26.34	25.82	0.0341	27.10	0:34	0.76	0.02	50.83	0.00
25	27.16	26.46	26.17	0.0768	27.16	0:33	0.70	0.00	49.50	4.50*
26	26.82	26.10	25.89	0.1161	26.82	0:29	0.72	0.00	76.80	29.27*
27	27.20	26.42	26.03	0.0712	27.20	0:32	0.78	0.00	47.80	0.40*
28	27.08	26.22	25.70	0.0346	26.90	0:34	0.68	0.18	51.93	0.00
29	26.80	26.16	25.66	0.0364	26.80	0:33	0.64	0.00	51.33	0.10*
3	28.25	27.74	27.33	0.0319	28.25	0:31	0.51	0.00	59.57	0.50*
30	26.80	26.42	26.24	0.0525	26.80	0:26	0.38	0.00	62.27	51.63*
31	27.07	26.33	26.18	0.1586	27.07	0:28	0.74	0.00	63.93	8.10*
32	26.94	26.34	26.21	0.0828	26.94	0:28	0.60	0.00	53.87	37.20*
33	26.62	26.03	25.83	0.0810	26.62	0:28	0.59	0.00	69.50	29.87*
34	26.60	25.97	25.86	0.1344	26.60	0:28	0.63	0.00	77.70	38.33*
35	26.60	25.95	25.40	0.0303	26.60	0:33	0.65	0.00	49.00	0.10*
36	26.80	26.24	26.09	0.0576	26.80	0:32	0.56	0.00	42.27	19.87*
37	26.51	26.09	25.76	0.0463	26.51	0:32	0.42	0.00	47.33	0.03*
38	26.66	26.19	26.03	0.0432	26.66	0:32	0.47	0.00	43.97	25.80*
39	26.44	25.87	25.58	0.0606	26.44	0:32	0.57	0.00	61.53	28.90*
4	28.23	27.70	27.39	0.0428	28.23	0:30	0.53	0.00	62.57	27.87*
40	26.53	26.09	25.92	0.0755	26.53	0:31	0.44	0.00	47.70	27.40*
41	26.39	25.72	25.51	0.0791	26.39	0:33	0.67	0.00	73.70	28.37*
42	26.30	25.76	25.63	0.1277	26.30	0:32	0.54	0.00	71.87	39.67*
43	26.60	26.09	25.78	0.0478	26.60	0:32	0.51	0.00	47.40	0.03*
44	26.40	25.60	24.96	0.0393	26.37	0:33	0.77	0.03	64.77	0.00
45	26.47	25.91	25.75	0.0794	26.47	0:32	0.56	0.00	44.57	25.10*
46	26.66	25.79	25.51	0.0854	26.66	0:33	0.87	0.00	49.13	0.03*
47	26.83	26.10	25.76	0.0620	26.83	0:33	0.73	0.00	33.93	0.03*
48	26.13	25.56	25.33	0.1023	26.13	0:32	0.57	0.00	72.57	27.77*
49	26.13	25.62	25.36	0.0707	26.13	0:33	0.51	0.00	62.43	20.33*
5	28.08	27.65	27.40	0.0431	28.08	0:30	0.43	0.00	64.97	57.37*
50	25.90	25.52	24.90	0.0297	25.90	0:33	0.38	0.00	64.27	34.43*
51	26.20	25.75	25.44	0.0374	26.20	0:34	0.45	0.00	44.87	0.53*
52	26.12	25.70	25.40	0.0466	26.12	0:33	0.42	0.00	46.10	0.13*
53	26.60	25.92	25.61	0.0540	26.60	0:33	0.68	0.00	50.10	35.53*
54	26.50	25.87	25.57	0.0344	26.50	0:33	0.63	0.00	50.37	36.80*
55	25.94	25.44	24.79	0.0343	25.94	0:47	0.50	0.00	44.37	0.10*
56	26.70	25.74	25.39	0.1205	26.70	0:34	0.96	0.00	19.90	0.10*
57	26.63	25.87	25.61	0.1412	26.63	0:35	0.76	0.00	17.63	0.10*
58	26.63	25.30	24.94	0.0982	26.34	0:47	1.04	0.29	62.43	0.00
59	26.66	25.70	25.46	0.1742	26.66	0:34	0.96	0.00	23.13	0.40*
6	28.36	27.70	27.36	0.0414	28.36	0:31	0.66	0.00	60.53	0.70*
60	26.64	25.51	25.10	0.1054	26.51	0:47	1.00	0.13	39.33	0.00
61	25.97	25.23	24.28	0.0227	25.63	0:47	0.40	0.34	0.27	0.00
62	25.91	25.16	24.24	0.0220	25.52	0:47	0.36	0.39	0.77	0.00
63	25.50	24.93	24.08	0.0232	25.13	0:47	0.19	0.37	5.57	0.00
64	26.20	25.21	24.78	0.0838	26.18	0:47	0.97	0.02	19.43	0.00
65	26.18	25.11	24.70	0.0835	26.17	0:47	1.06	0.01	24.60	0.00
66	26.18	25.18	24.67	0.0597	26.05	0:47	0.87	0.13	18.83	0.00
67	26.18	25.17	24.60	0.0443	25.83	0:47	0.66	0.35	11.00	0.00
68	26.20	25.21	24.77	0.0833	26.19	0:47	0.98	0.01	19.80	0.00
69	26.19	25.25	24.81	0.0714	26.09	0:47	0.84	0.10	16.90	0.00
7	28.20	27.58	27.29	0.0691	28.20	0:30	0.62	0.00	67.53	33.27*
70	26.19	25.17	24.83	0.1083	25.93	0:47	0.76	0.26	13.17	0.00
71	26.15	25.31	24.97	0.0826	26.08	0:47	0.77	0.07	11.33	0.00
72	24.72	24.72	23.94	0.0140	24.72	0:46	0.00	0.00	5.10	5.10*
73	24.40	24.40	23.39	0.0072	23.82	0:46	0.00	0.58	0.00	0.00
75	26.55	25.67	25.02	0.0393	26.55	0:33	0.88	0.00	62.53	0.03*
76	26.64	26.03	25.93	0.0735	26.64	0:31	0.61	0.00	52.90	35.63*
77	26.63	25.52	25.18	0.1369	26.56	0:34	1.04	0.07	38.23	0.00
78	26.70	25.66	25.33	0.1375	26.59	0:47	0.93	0.11	23.37	0.00
79	26.16	25.78	25.37	0.0361	26.16	0:33	0.38	0.00	42.03	0.13*
8	28.13	27.55	27.19	0.0473	28.13	0:30	0.58	0.00	66.30	0.27*
9	28.12	27.51	27.15	0.0558	28.12	0:29	0.61	0.00	67.60	0.10*

Nodo con la maggiore variazione media percentuale: '59' pari a 0.174 % (**)

(*) Attenzione: c'è un ingresso di portata alla rete in un nodo in cui è possibile un'esondazione.

Se l'ingresso è contemporaneo all'esondazione, l'acqua non entrerà in rete e verrà considerata solamente nel controllo di continuità.

(**) La variazione media nei nodi è così definita:

$$100.0 \cdot (Y(n+1) - Y(n)) / Y_{full}$$

SOMMARIO DELLE STATISTICHE DEGLI ELEMENTI LINEARI -----

Elemento	Portata di moto uniforme (m3/s)	Velocità uniforme (m/s)	Portata condotta (m)	Altezza max di calcolo (m3/s)	Velocità max di calcolo al tempo (m/s)	Velocità max di calcolo al tempo (m/s)	Rapporto tra Q moto uniforme e Q moto massimo	Raggio idraulico (m)	Sezione trasvers. massima (m2)	Durata riempim. normale (min)	Grado di pendenza della Q (m/m)	
1	0.0079	0.28	0.190	0.023	0:21	0.83	0:21	2.97	0.0573	0.0284	1.00	330.9 0.00065
10	0.1690	0.60	0.600	0.189	0:50	0.67	0:50	1.12	0.1798	0.2827	1.00	360.8 0.00088
11	0.1690	0.60	0.600	-0.185	0:30	-0.67	0:30	-1.09	0.1811	0.2827	1.00	353.8 0.00088
12	0.2765	0.98	0.600	0.252	0:50	1.00	0:27	0.91	0.1770	0.2827	1.00	388.5 0.00235
13	0.2765	0.98	0.600	0.283	0:35	1.00	0:35	1.02	0.1787	0.2827	1.00	380.8 0.00235
14	0.2399	0.85	0.600	0.297	1:26	1.05	1:27	1.24	0.1819	0.2827	1.00	371.8 0.00177
15	0.2399	0.85	0.600	0.439	0:30	1.57	0:29	1.83	0.1824	0.2827	1.00	331.6 0.00177
16	0.1358	0.69	0.500	0.100	0:50	0.57	0:18	0.74	0.1386	0.1964	1.00	99.2 0.00150
17	0.4541	0.90	0.800	0.478	0:32	1.00	0:29	1.05	0.2433	0.5027	1.00	265.3 0.00101
18	0.0480	0.68	0.300	0.068	0:39	0.96	0:39	1.41	0.0913	0.0707	1.00	407.8 0.00210
19	0.0940	0.83	0.380	0.091	0:39	1.22	0:31	0.97	0.1117	0.1134	1.00	28.4 0.00228
2	0.0087	0.31	0.190	0.029	0:28	1.01	0:28	3.31	0.0578	0.0284	1.00	0.0 0.00078
20	0.4526	0.90	0.800	0.569	0:33	1.13	0:33	1.26	0.2434	0.5027	1.00	335.2 0.00100
21	0.0531	0.42	0.400	0.089	0:31	0.73	0:31	1.68	0.1211	0.1257	1.00	330.7 0.00075
22	0.0930	0.74	0.400	0.095	0:32	1.06	0:27	1.03	0.1199	0.1257	1.00	46.7 0.00231
23	0.3994	0.79	0.800	0.683	0:33	1.36	0:33	1.71	0.2434	0.5027	1.00	152.0 0.00078
24	0.2667	0.53	0.800	0.729	0:33	1.45	0:33	2.73	0.2430	0.5027	1.00	0.0 0.00035
25	0.2666	0.53	0.800	0.854	0:33	1.71	0:33	3.20	0.2434	0.5027	1.00	2.3 0.00035
26	0.1016	0.81	0.400	0.059	0:50	0.57	0:18	0.58	0.1108	0.1257	1.00	169.8 0.00276
27	0.0590	0.47	0.400	-0.053	0:50	-0.42	0:50	-0.89	0.1109	0.1257	1.00	309.8 0.00093
28	0.1358	0.69	0.500	-0.129	0:33	-0.66	0:33	-0.95	0.1516	0.1964	1.00	8.5 0.00150
29	0.5448	1.08	0.800	0.592	0:34	1.21	0:32	1.09	0.2432	0.5027	1.00	333.7 0.00145
3	0.0113	0.40	0.190	0.036	0:28	1.27	0:28	3.19	0.0574	0.0284	1.00	348.8 0.00133
30	0.5448	1.08	0.800	0.650	0:32	1.31	0:33	1.19	0.2434	0.5027	1.00	258.0 0.00145
31	0.0222	0.31	0.300	0.047	0:28	0.67	0:28	2.12	0.0905	0.0707	1.00	328.7 0.00045
32	0.0467	0.66	0.300	0.070	0:28	1.06	0:28	1.50	0.0869	0.0707	1.00	42.1 0.00199
33	0.0283	0.63	0.240	0.038	0:30	0.84	0:30	1.33	0.0720	0.0452	1.00	38.1 0.00241
34	0.0601	0.85	0.300	0.077	0:30	1.10	0:30	1.29	0.0843	0.0707	1.00	299.1 0.00330
35	0.0221	0.49	0.240	0.023	0:32	0.50	0:32	1.03	0.0716	0.0452	1.00	339.6 0.00147
36	0.5448	1.08	0.800	0.755	0:33	1.62	0:33	1.39	0.2430	0.5027	1.00	0.0 0.00145
37	0.0205	0.45	0.240	0.037	0:32	0.88	0:32	1.82	0.0715	0.0452	1.00	4.4 0.00126
38	0.0300	0.66	0.240	0.025	0:36	0.84	0:27	0.83	0.0681	0.0452	1.00	20.5 0.00270
39	0.0459	1.01	0.240	0.033	0:31	0.74	0:32	0.72	0.0665	0.0452	1.00	406.1 0.00631
4	0.0425	0.34	0.400	-0.074	0:36	-0.59	0:37	-1.73	0.1210	0.1257	1.00	308.6 0.00048
40	0.0338	0.75	0.240	0.030	0:32	0.66	0:32	0.88	0.0665	0.0452	1.00	371.6 0.00342
41	0.0540	0.43	0.400	0.022	0:32	0.23	0:28	0.40	0.1213	0.1257	1.00	376.1 0.00078
42	0.1392	1.11	0.400	0.070	0:50	0.56	0:50	0.51	0.1108	0.1257	1.00	396.5 0.00518
43	0.0855	0.68	0.400	0.093	0:33	0.74	0:33	1.09	0.1177	0.1257	1.00	350.5 0.00195
44	0.0423	0.34	0.400	0.162	0:31	1.30	0:31	3.83	0.1215	0.1257	1.00	0.0 0.00048
45	0.8744	1.74	0.800	0.823	0:33	1.86	0:30	0.94	0.2415	0.5027	1.00	40.4 0.00373
46	0.0279	0.62	0.240	0.021	0:58	0.47	0:58	0.76	0.0665	0.0452	1.00	418.1 0.00233
47	0.2032	1.62	0.400	0.030	0:50	0.55	0:09	0.15	0.1108	0.1257	1.00	417.3 0.01104
48	0.0953	0.76	0.400	0.124	0:50	0.98	0:50	1.30	0.1134	0.1257	1.00	385.7 0.00243
49	0.0569	0.45	0.400	0.124	0:32	1.14	0:32	2.17	0.1197	0.1257	1.00	2.4 0.00087
5	0.0430	0.34	0.400	0.135	0:30	1.07	0:30	3.14	0.1213	0.1257	1.00	320.0 0.00049
50	0.0406	0.57	0.300	-0.029	0:33	0.46	0:13	-0.72	0.0880	0.0707	1.00	349.0 0.00150
51	0.7387	0.94	1.000	0.967	0:50	1.23	0:50	1.31	0.3040	0.7854	1.00	230.3 0.00110
52	0.0459	0.37	0.400	-0.050	0:33	-0.40	0:34	-1.09	0.1207	0.1257	1.00	362.7 0.00056
53	0.0459	0.37	0.400	0.105	0:33	0.96	0:33	2.28	0.1217	0.1257	1.00	8.9 0.00056
54	0.0173	0.24	0.300	0.079	0:33	1.12	0:33	4.56	0.0912	0.0707	1.00	0.7 0.00027
55	0.0470	0.24	0.500	0.111	0:33	0.58	0:33	2.36	0.1520	0.1964	1.00	245.6 0.00018
56	0.1428	0.73	0.500	0.164	1:10	0.85	0:30	1.15	0.1508	0.1964	1.00	42.6 0.00166
57	0.3716	0.47	1.000	1.159	0:34	1.48	0:34	3.12	0.3016	0.7854	1.00	30.8 0.00028
58	0.1588	1.26	0.400	0.049	0:50	0.52	0:30	0.31	0.1109	0.1257	1.00	423.5 0.00674
59	0.1387	0.71	0.500	0.319	0:50	1.63	0:50	2.30	0.1503	0.1964	1.00	28.6 0.00157
6	0.1003	0.51	0.500	-0.149	0:31	-0.77	0:31	-1.48	0.1510	0.1964	1.00	310.8 0.00082
60	0.0943	1.33	0.300	0.068	0:50	1.34	0:33	0.72	0.0837	0.0707	1.00	51.0 0.00811
61	0.2243	1.14	0.500	0.187	0:50	0.95	0:50	0.83	0.1409	0.1964	1.00	367.8 0.00409
62	0.0565	0.80	0.300	0.074	0:50	1.05	0:50	1.31	0.0910	0.0707	1.00	390.9 0.00290
63	0.7481	0.95	1.000	1.658	0:46	2.15	0:46	2.22	0.2911	0.7854	1.00	0.0 0.00113
64	2.0515	1.81	1.200	1.325	0:47	1.71	0:34	0.65	0.3648	1.1310	1.00	318.0 0.00236
65	1.8889	1.67	1.200	1.906	0:47	1.72	0:35	1.01	0.3633	1.1310	1.00	255.6 0.00200
66	0.1568	0.80	0.500	0.046	0:50	0.24	0:50	0.30	0.1484	0.1964	1.00	392.7 0.00200

67	0.0779	0.40	0.500	0.169	0:50	0.86	0:50	2.17	0.1521	0.1964	1.00	335.6	0.00049
68	0.1725	0.61	0.600	0.281	0:50	0.99	0:50	1.63	0.1822	0.2827	1.00	383.9	0.00092
69	0.1238	0.44	0.600	0.516	0:44	1.82	0:44	4.16	0.1819	0.2827	1.00	0.1	0.00047
7	0.1042	0.53	0.500	0.084	0:29	0.50	0:26	0.80	0.1507	0.1964	1.00	373.4	0.00088
70	0.1929	0.98	0.500	0.085	0:50	0.50	0:11	0.44	0.1489	0.1964	1.00	392.7	0.00303
71	0.1788	0.91	0.500	0.070	0:50	0.45	0:13	0.39	0.1425	0.1964	1.00	411.3	0.00260
72	0.0383	0.30	0.400	0.078	0:50	0.78	0:40	2.04	0.1217	0.1257	1.00	0.1	0.00039
73	0.0811	0.65	0.400	0.129	0:36	1.24	0:36	1.60	0.1215	0.1257	1.00	0.8	0.00176
74	1.5447	0.71	1.150	1.991	0:47	0.97	0:36	1.29	0.5556	2.1683	1.00	238.5	0.00100
75	1.9868	0.74	1.150	1.881	0:46	1.05	0:45	0.95	0.4683	1.8044	0.68	0.0	0.00100
77	0.7387	0.94	1.000	0.786	0:34	1.00	0:34	1.06	0.3040	0.7854	1.00	254.4	0.00110
78	0.0196	0.69	0.190	0.036	0:32	1.30	0:32	1.84	0.0564	0.0284	1.00	27.5	0.00398
79	0.1225	0.97	0.400	0.090	0:50	0.73	0:24	0.74	0.1108	0.1257	1.00	43.5	0.00401
8	0.1164	0.59	0.500	0.151	0:30	0.77	0:30	1.30	0.1521	0.1964	1.00	346.0	0.00110
80	0.1035	0.82	0.400	0.100	0:50	0.94	0:33	0.97	0.1168	0.1257	1.00	29.2	0.00287
81	0.2678	1.36	0.500	0.117	0:50	1.01	0:29	0.44	0.1386	0.1964	1.00	41.5	0.00583
9	0.1036	0.37	0.600	0.145	0:30	0.51	0:30	1.40	0.1825	0.2827	1.00	142.3	0.00033

Ramo con la maggiore variazione media percentuale: '25' pari a 0.118 % (*)

(*) La variazione media nei rami è così definita:

$$100.0 (Q(n+1) - Q(n)) / Q_{full}$$

F4) Simulazione STATO DI FATTO - Ietogramma Chicago con $Tr = 10$ anni e durata 240 minuti; c.p.c. Aimag

DATI GENERALI -----

Numero dei nodi	78
Numero dei rami	80
Numero delle pompe	0
Numero degli scaricatori	0
Sommaro delle piogge	
Pioggia totale (mm)	69.4167

CONTROLLO DI CONTINUITA' PER IL DEFLUSSO SUPERFICIALE -----

	Metri cubi	Millimetri sul bacino
Precipitazione totale (Pioggia + Neve)	67847.203125	69.417
Infiltrazione totale	9772.708008	9.999
Evaporazione totale	964.744995	0.987
Deflusso superficiale	35638.992188	36.463
Volume trattenuto negli accumuli superficiali	21470.410156	21.967
Infiltrazione per l'area permeabile	9772.708008	17.533
Infiltrazione + Evaporazione + Deflusso superficiale + Accumuli superficiali	67846.851563	69.416
Precipitazione totale + Accumulo iniziale	67847.203125	69.417

Errore 0.001 % (*)

(*) L'errore nella continuità è così calcolato:
 (Precipitazione - Infiltrazione - Evaporazione -
 - Deflusso superficiale - Accumuli superficiali) /
 / Precipitazione

CONTROLLO DI CONTINUITA' NELLA RETE -----

	Metri cubi	Millimetri sul bacino
Accumulo iniziale	0.000000	0.000
Accumulo finale	0.000000	0.000
Deflusso superficiale	35638.992188	36.463
Apporto ipodermico da falda	0.000000	0.000
Perdite di evaporazione nei canali	0.000000	0.000
Uscita canali/condotte/pozzetti	35638.992188	36.463
Accumulo iniziale + Ingresso	35638.992188	36.463
Accumulo finale + Uscita	35638.992188	36.463

Errore 0.000 % (*)

(*) L'errore nella continuità è così calcolato:
 (Accumulo finale + Uscita + Evaporazione - Deflusso superficiale -
 - Apporto ipodermico da falda - Accumulo iniziale) /
 / (Accumulo finale + Uscita + Evaporazione)

SOMMARIO DELLE STATISTICHE DEI SOTTOBACINI -----

		Area permeabile		Area imperm.(*)		Area totale sottobacino						
Sotto- bacino	Nodo di Ingresso	Pioggia Altezza		Deflusso		Deflusso		Deflusso massimo		unitario		
		totale	%	simulata	deflusso	Altezza	deflusso	Altezza	deflusso			
		(ha)	(mm)	(mm)	(mm)	(m3/s)	(mm)	(m3/s)	(mm)	(m3/s)	(mm/h)	
1	1	1.28	75.00	69.417	26.123	43.294	0.01	57.051	0.21	49.319	0.22	62.459
10	3	1.01	75.00	69.417	24.435	44.981	0.01	56.632	0.12	48.583	0.13	46.718
11	10	0.72	75.00	69.417	25.179	44.237	0.01	56.836	0.10	48.922	0.11	53.206
12	9	2.91	75.00	69.417	24.558	44.859	0.02	56.668	0.36	48.640	0.38	47.726
13	11	2.29	75.00	69.417	25.102	44.315	0.02	56.817	0.31	48.888	0.33	52.486
14	12	4.71	40.00	69.417	21.448	47.968	0.06	57.083	0.42	35.702	0.48	36.836
15	13	6.34	40.00	69.417	20.922	48.495	0.07	57.036	0.54	35.367	0.61	34.992
16	15	1.17	60.00	69.417	23.089	46.327	0.01	56.871	0.13	43.359	0.14	44.625
18	17	0.80	60.00	69.417	25.933	43.484	0.01	57.245	0.13	44.720	0.15	66.156
19	18	0.31	60.00	69.417	24.903	44.514	0.00	57.126	0.04	44.237	0.05	56.298
2	2	1.88	75.00	69.417	24.870	44.547	0.01	56.755	0.25	48.784	0.26	50.405
20	16	1.84	60.00	69.417	22.679	46.737	0.02	56.801	0.20	43.152	0.21	42.490
21	20	2.76	60.00	69.417	21.772	47.644	0.02	56.623	0.27	42.683	0.29	38.012
22	21	1.32	60.00	69.417	21.772	47.645	0.01	56.623	0.13	42.683	0.14	38.009
23	19	0.61	60.00	69.417	25.976	43.441	0.01	57.250	0.10	44.740	0.11	66.595
24	22	0.24	60.00	69.417	25.960	43.457	0.00	57.248	0.04	44.733	0.04	66.432
26	25	0.74	60.00	69.417	22.924	46.493	0.01	56.844	0.08	43.276	0.09	43.759
27	26	1.09	60.00	69.417	22.111	47.305	0.01	56.693	0.11	42.860	0.12	39.638
28	27	0.12	60.00	69.417	27.135	42.281	0.00	57.387	0.02	45.286	0.03	81.828
29	24	0.41	60.00	69.417	24.682	44.735	0.01	57.099	0.06	44.132	0.06	54.357
3	2	0.17	75.00	69.417	26.162	43.254	0.00	57.059	0.03	49.335	0.03	63.053
30	28	0.12	60.00	69.417	26.560	42.856	0.00	57.318	0.02	45.015	0.02	73.948
31	30	2.67	30.00	69.417	18.521	50.896	0.03	57.031	0.17	30.074	0.20	26.784
32	31	1.22	60.00	69.417	21.889	47.527	0.01	56.648	0.12	42.744	0.13	38.568
33	32	1.01	60.00	69.417	23.280	46.137	0.01	56.902	0.12	43.453	0.13	45.640
34	33	0.39	60.00	69.417	24.733	44.683	0.00	57.106	0.05	44.157	0.06	54.804
35	34	0.30	60.00	69.417	26.609	42.808	0.01	57.324	0.06	45.038	0.06	74.606
36	29	1.15	60.00	69.417	22.745	46.672	0.01	56.813	0.13	43.185	0.14	42.827
37	36	0.52	60.00	69.417	23.581	45.835	0.01	56.950	0.06	43.602	0.07	47.267
38	38	0.52	60.00	69.417	23.588	45.829	0.01	56.950	0.06	43.605	0.07	47.302
39	40	0.57	60.00	69.417	24.718	44.699	0.01	57.104	0.08	44.149	0.09	54.668
4	5	0.80	75.00	69.417	25.443	43.973	0.01	56.901	0.12	49.037	0.12	55.706
40	42	0.46	60.00	69.417	25.684	43.733	0.01	57.216	0.07	44.603	0.08	63.674
41	43	0.15	60.00	69.417	26.552	42.865	0.00	57.317	0.03	45.011	0.03	73.836
42	37	0.24	60.00	69.417	26.282	43.135	0.00	57.285	0.04	44.884	0.05	70.222
43	39	0.22	60.00	69.417	25.773	43.644	0.00	57.226	0.04	44.645	0.04	64.551
44	41	0.37	60.00	69.417	24.728	44.689	0.00	57.105	0.05	44.154	0.06	54.754
45	35	0.32	60.00	69.417	25.062	44.355	0.00	57.145	0.05	44.311	0.05	57.724
46	45	0.44	60.00	69.417	23.531	45.886	0.00	56.942	0.05	43.577	0.06	46.994
47	47	0.26	60.00	69.417	27.054	42.363	0.01	57.377	0.05	45.248	0.06	80.702
48	46	1.11	60.00	69.417	24.348	45.069	0.01	57.057	0.14	43.973	0.16	51.560
49	48	0.48	60.00	69.417	24.430	44.986	0.01	57.068	0.06	44.013	0.07	52.237
5	4	0.76	75.00	69.417	25.010	44.407	0.01	56.793	0.10	48.847	0.11	51.650
50	49	0.42	60.00	69.417	25.905	43.512	0.01	57.241	0.07	44.707	0.08	65.871
51	44	9.37	5.00	69.417	20.753	48.664	0.16	57.529	0.22	22.592	0.38	14.598
52	51	0.47	60.00	69.417	24.748	44.669	0.01	57.107	0.07	44.164	0.07	54.929
53	52	0.13	60.00	69.417	26.442	42.975	0.00	57.304	0.02	44.959	0.03	72.354
54	49	0.29	60.00	69.417	25.539	43.878	0.00	57.199	0.05	44.535	0.05	62.252
55	53	4.79	30.00	69.417	16.518	52.899	0.04	56.855	0.27	28.619	0.31	23.344
56	54	3.14	60.00	69.417	19.737	49.679	0.02	56.103	0.24	41.557	0.26	29.816
57	50	0.44	60.00	69.417	21.930	47.486	0.00	56.657	0.04	42.766	0.05	38.765
58	56	0.47	60.00	69.417	25.957	43.460	0.01	57.247	0.08	44.731	0.09	66.398
59	58	0.40	60.00	69.417	26.267	43.150	0.01	57.283	0.07	44.877	0.08	70.028
6	6	0.30	60.00	69.417	25.107	44.309	0.00	57.150	0.04	44.333	0.05	58.146
60	57	0.63	60.00	69.417	26.336	43.081	0.01	57.291	0.11	44.909	0.12	70.944
61	60	0.36	60.00	69.417	25.880	43.537	0.01	57.238	0.06	44.695	0.06	65.617
62	59	0.70	60.00	69.417	26.115	43.302	0.01	57.266	0.12	44.805	0.13	68.064
63	55	0.88	60.00	69.417	21.773	47.643	0.01	56.624	0.08	42.683	0.09	38.017
65	62	9.33	5.00	69.417	20.027	49.390	0.15	57.517	0.21	21.901	0.36	13.856
66	64	0.44	60.00	69.417	25.968	43.448	0.01	57.249	0.07	44.737	0.08	66.517
67	65	0.36	60.00	69.417	25.594	43.823	0.01	57.205	0.06	44.561	0.06	62.792
68	66	0.45	60.00	69.417	24.229	45.187	0.01	57.041	0.06	43.917	0.06	50.808
69	67	0.13	60.00	69.417	26.370	43.046	0.00	57.295	0.02	44.925	0.03	71.403
7	4	2.32	75.00	69.417	24.687	44.730	0.02	56.705	0.29	48.700	0.31	48.821
70	68	0.76	60.00	69.417	26.807	42.609	0.01	57.347	0.15	45.131	0.16	77.287
71	69	0.69	60.00	69.417	25.411	44.005	0.01	57.185	0.11	44.475	0.12	61.020
72	70	0.74	60.00	69.417	25.998	43.419	0.01	57.252	0.12	44.750	0.14	66.817
73	71	1.11	60.00	69.417	24.875	44.541	0.01	57.123	0.16	44.224	0.17	56.049
74	63	7.98	5.00	69.417	17.941	51.476	0.10	57.479	0.16	19.918	0.26	11.945

77	75	0.23	60.00	69.417	25.389	44.027	0.00	57.182	0.04	44.465	0.04	60.808
78	76	0.61	60.00	69.417	25.317	44.100	0.01	57.174	0.09	44.431	0.10	60.114
79	77	0.21	60.00	69.417	26.044	43.373	0.00	57.257	0.04	44.772	0.04	67.286
8	7	2.10	75.00	69.417	25.095	44.322	0.02	56.815	0.29	48.885	0.30	52.422
80	78	0.25	60.00	69.417	25.939	43.477	0.00	57.245	0.04	44.723	0.05	66.223
81	79	0.19	60.00	69.417	26.274	43.142	0.00	57.284	0.03	44.880	0.04	70.127
9	8	0.27	75.00	69.417	25.017	44.399	0.00	56.795	0.04	48.850	0.04	51.719

(*) Le statistiche sull'area impermeabile aggregano aree con e senza gli accumuli superficiali.

TABELLA DEI MATERIALI -----

Nome	Area Tipo	Diametro (m2)	Altezza int. (m)	Larghez. (m)	Pendenze (m)	Coeff.di (b/h)	Spessore Manning (mm)	Lunghezza (m)	
CLS DN 1000	Circolare	0.785	1.000	*****	*****	*****	0.014	0.000	528.96
CLS DN 1200	Circolare	1.131	1.200	*****	*****	*****	0.012	0.000	138.24
CLS DN 300	Circolare	0.071	0.300	*****	*****	*****	0.012	0.000	206.66
CLS DN 400	Circolare	0.126	0.400	*****	*****	*****	0.014	0.000	1757.21
CLS DN 500	Circolare	0.196	0.500	*****	*****	*****	0.014	0.000	1403.83
CLS DN 600	Circolare	0.283	0.600	*****	*****	*****	0.014	0.000	1065.45
CLS DN 800	Circolare	0.503	0.800	*****	*****	*****	0.012	0.000	654.91
PVC DN 200	Circolare	0.028	0.190	*****	*****	*****	0.012	0.000	347.71
PVC DN 250	Circolare	0.045	0.240	*****	*****	*****	0.012	0.000	666.23
PVC DN 315	Circolare	0.071	0.300	*****	*****	*****	0.012	0.000	518.47
PVC DN 400	Circolare	0.113	0.380	*****	*****	*****	0.012	0.000	78.88
TERRA ST 3.00..	Trapezoidale	2.168	*****	1.150	1.000	0.77-0.77	0.030	0.000	163.38
TERRA ST 4.00..	Trapezoidale	2.671	*****	1.150	1.000	1.15-1.15	0.030	0.000	319.94

7849.88

RIASSUNTO PER CONDOTTO -----

Gruppo	Lunghezza	Numero
CLS DN 1000	528.96	4
CLS DN 1200	138.24	2
CLS DN 300	206.66	4
CLS DN 400	1757.21	20
CLS DN 500	1403.83	14
CLS DN 600	1065.45	9
CLS DN 800	654.91	9
PVC DN 200	347.71	4
PVC DN 250	666.23	7
PVC DN 315	518.47	4
PVC DN 400	78.88	1
TERRA ST 3.00 x 1...	163.38	1
TERRA ST 4.00 x 1...	319.94	1
-----	7849.88	80

DATI DEI NODI -----

Nodo	Quota terreno (m slm)	Quota cielo (m slm)	Quota fondo (m slm)	Portata esterna (m3/s)	Livello iniziale (m)	Rami collegati
1	28.50	27.54	27.35	0.00	0.00	1
10	28.00	27.61	27.01	0.00	0.00	10,11
11	27.80	27.18	26.58	0.00	0.00	12,13
12	27.51	26.90	26.30	0.00	0.00	13,14
13	27.48	26.66	26.06	0.00	0.00	14,15
14	27.44	26.60	25.80	0.00	0.00	15,16,17
15	27.53	26.60	26.10	0.00	0.00	16
16	27.42	26.59	25.75	0.00	0.00	17,19,20
17	27.60	26.80	26.50	0.00	0.00	18
18	27.68	26.77	26.39	0.00	0.00	18,19
19	27.20	26.40	25.60	0.00	0.00	20,22,23
2	28.56	27.49	27.30	0.00	0.00	1,2,3
20	26.98	26.83	26.43	0.00	0.00	21
21	26.82	26.69	26.29	0.00	0.00	21,22
22	27.16	26.36	25.56	0.00	0.00	23,24,26
23	27.12	26.38	25.54	0.00	0.00	24,25,28
24	27.12	26.34	25.54	0.00	0.00	25,27,29
25	27.16	26.46	26.06	0.00	0.00	26
26	26.82	26.10	25.70	0.00	0.00	27
27	27.20	26.42	25.92	0.00	0.00	28

28	27.08	26.22	25.42	0.00	0.00	29,30,32
29	26.80	26.16	25.36	0.00	0.00	30,34,36
3	28.25	27.74	27.14	0.00	0.00	10,5,6
30	26.80	26.42	26.12	0.00	0.00	31
31	27.07	26.33	26.03	0.00	0.00	31,32
32	26.94	26.34	26.10	0.00	0.00	33
33	26.62	26.03	25.68	0.00	0.00	33,34,35
34	26.60	25.97	25.73	0.00	0.00	35
35	26.60	25.95	25.15	0.00	0.00	36,44,45
36	26.80	26.24	26.00	0.00	0.00	37
37	26.51	26.09	25.66	0.00	0.00	37,41,42
38	26.66	26.19	25.95	0.00	0.00	38
39	26.44	25.87	25.43	0.00	0.00	38,42,43
4	28.23	27.70	27.20	0.00	0.00	3,4,5,7
40	26.53	26.09	25.85	0.00	0.00	39
41	26.39	25.72	25.32	0.00	0.00	39,40,43,44
42	26.30	25.76	25.52	0.00	0.00	40
43	26.60	26.09	25.69	0.00	0.00	41
44	26.40	25.60	24.60	0.00	0.00	49,51,77
45	26.47	25.91	25.67	0.00	0.00	46
46	26.66	25.79	25.39	0.00	0.00	46,47,48
47	26.83	26.10	25.70	0.00	0.00	47
48	26.13	25.56	25.16	0.00	0.00	48,49,50
49	26.13	25.62	25.24	0.00	0.00	50,54
5	28.08	27.65	27.25	0.00	0.00	4
50	25.90	25.52	24.49	0.00	0.00	51,56,57,81
51	26.20	25.75	25.35	0.00	0.00	52
52	26.12	25.70	25.30	0.00	0.00	52,53,54
53	26.60	25.92	25.42	0.00	0.00	55
54	26.50	25.87	25.37	0.00	0.00	55,56,78
55	25.94	25.44	24.44	0.00	0.00	57,59,63
56	26.70	25.74	25.34	0.00	0.00	58
57	26.63	25.87	25.57	0.00	0.00	60
58	26.63	25.30	24.77	0.00	0.00	59,61,79
59	26.66	25.70	25.40	0.00	0.00	62
6	28.36	27.70	27.20	0.00	0.00	2,6
60	26.64	25.51	24.99	0.00	0.00	58,61,80
61	25.97	25.23	24.02	0.00	0.00	63,64
62	25.91	25.16	23.96	0.00	0.00	64,65,69
63	25.50	24.93	23.73	0.00	0.00	65,74
64	26.20	25.21	24.71	0.00	0.00	66
65	26.18	25.11	24.61	0.00	0.00	66,67,70
66	26.18	25.18	24.58	0.00	0.00	67,68,71
67	26.18	25.17	24.49	0.00	0.00	68,69,72,73
68	26.20	25.21	24.71	0.00	0.00	70
69	26.19	25.25	24.75	0.00	0.00	71
7	28.20	27.58	27.08	0.00	0.00	7,8
70	26.19	25.17	24.77	0.00	0.00	72
71	26.15	25.31	24.91	0.00	0.00	73
72	24.72	24.72	23.57	0.00	0.00	74,75
73	24.40	24.40	23.25	0.00	0.00	75
75	26.55	25.67	24.67	0.00	0.00	45,77
76	26.64	26.03	25.84	0.00	0.00	78
77	26.63	25.52	25.10	0.00	0.00	60,79
78	26.70	25.66	25.26	0.00	0.00	62,80
79	26.16	25.78	25.28	0.00	0.00	53,81
8	28.13	27.55	26.95	0.00	0.00	8,9
9	28.12	27.51	26.91	0.00	0.00	11,12,9

DATI DEGLI ELEMENTI LINEARI -----

Elemento	Nodo		Materiale	Lunghezza Valvola	
	iniziale	finale		(m)	anti-rifl.
1	1	2	PVC DN 200	76.83	nessuno
10	3	10	CLS DN 600	147.48	nessuno
11	10	9	CLS DN 600	114.27	nessuno
12	9	11	CLS DN 600	141.78	nessuno
13	11	12	CLS DN 600	117.59	nessuno
14	12	13	CLS DN 600	133.25	nessuno
15	13	14	CLS DN 600	149.14	nessuno
16	15	14	CLS DN 500	135.47	nessuno
17	14	16	CLS DN 800	49.77	nessuno
18	17	18	PVC DN 315	52.48	nessuno
19	18	16	PVC DN 400	78.88	nessuno
2	2	6	PVC DN 200	127.68	nessuno
20	16	19	CLS DN 800	150.26	nessuno

21	20	21	CLS DN 400	186.03	nessuno
22	21	19	CLS DN 400	186.05	nessuno
23	19	22	CLS DN 800	51.45	nessuno
24	22	23	CLS DN 800	51.83	nessuno
25	23	24	CLS DN 800	5.86	nessuno
26	25	22	CLS DN 400	141.33	nessuno
27	26	24	CLS DN 400	172.17	nessuno
28	27	23	CLS DN 500	26.48	nessuno
29	24	28	CLS DN 800	85.06	nessuno
3	2	4	PVC DN 200	75.37	nessuno
30	28	29	CLS DN 800	38.25	nessuno
31	30	31	PVC DN 315	201.22	nessuno
32	31	28	PVC DN 315	181.16	nessuno
33	32	33	PVC DN 250	128.85	nessuno
34	33	29	PVC DN 315	83.61	nessuno
35	34	33	PVC DN 250	37.21	nessuno
36	29	35	CLS DN 800	147.85	nessuno
37	36	37	PVC DN 250	118.72	nessuno
38	38	39	PVC DN 250	118.51	nessuno
39	40	41	PVC DN 250	84.04	nessuno
4	5	4	CLS DN 400	103.28	nessuno
40	42	41	PVC DN 250	58.51	nessuno
41	43	37	CLS DN 400	38.43	nessuno
42	37	39	CLS DN 400	44.40	nessuno
43	39	41	CLS DN 400	56.34	nessuno
44	41	35	CLS DN 400	83.77	nessuno
45	35	75	CLS DN 800	74.57	nessuno
46	45	46	PVC DN 250	120.39	nessuno
47	47	46	CLS DN 400	28.07	nessuno
48	46	48	CLS DN 400	94.76	nessuno
49	48	44	CLS DN 400	92.32	nessuno
5	4	3	CLS DN 400	121.55	nessuno
50	49	48	CLS DN 300	53.15	nessuno
51	44	50	CLS DN 1000	97.56	nessuno
52	51	52	CLS DN 400	83.20	nessuno
53	52	79	CLS DN 400	40.83	nessuno
54	49	52	CLS DN 300	62.13	nessuno
55	53	54	CLS DN 500	277.76	nessuno
56	54	50	CLS DN 500	283.20	nessuno
57	50	55	CLS DN 1000	179.48	nessuno
58	56	60	CLS DN 400	51.91	nessuno
59	58	55	CLS DN 500	44.73	nessuno
6	6	3	CLS DN 500	73.34	nessuno
60	57	77	CLS DN 300	43.17	nessuno
61	60	58	CLS DN 500	53.75	nessuno
62	59	78	CLS DN 300	48.20	nessuno
63	55	61	CLS DN 1000	185.98	nessuno
64	61	62	CLS DN 1200	25.43	nessuno
65	62	63	CLS DN 1200	112.81	nessuno
66	64	65	CLS DN 500	51.64	nessuno
67	65	66	CLS DN 500	60.75	nessuno
68	66	67	CLS DN 600	98.30	nessuno
69	67	62	CLS DN 600	42.41	nessuno
7	4	7	CLS DN 500	135.86	nessuno
70	68	65	CLS DN 500	33.04	nessuno
71	69	66	CLS DN 500	65.37	nessuno
72	70	67	CLS DN 400	50.94	nessuno
73	71	67	CLS DN 400	79.65	nessuno
74	63	72	TERRA ST 3.00..	163.38	nessuno
75	72	73	TERRA ST 4.00..	319.94	nessuno
77	75	44	CLS DN 1000	65.94	nessuno
78	76	54	PVC DN 200	67.82	nessuno
79	77	58	CLS DN 400	49.86	nessuno
8	7	8	CLS DN 500	117.89	nessuno
80	78	60	CLS DN 400	52.32	nessuno
81	79	50	CLS DN 500	44.56	nessuno
9	8	9	CLS DN 600	121.22	nessuno

SOMMARIO DELLE STATISTICHE DEI NODI -----

Nodo	Quota		Quota % variaz.	Massima quota media	Dist. tra Durata		Durata		Sovracc. terreno e del della	
	(m slm)	(m slm)			al tempo	quota	(m)	(m)	(min)	(min)
1	28.50	27.54	27.84	0.1555	28.50	1:05	0.96	0.00	209.97	182.70*
10	28.00	27.61	27.45	0.0234	28.00	1:11	0.39	0.00	183.37	151.63*

11	27.80	27.18	27.13	0.0393	27.80	1:10	0.62	0.00	200.87	78.00*
12	27.51	26.90	26.88	0.0381	27.51	1:09	0.61	0.00	209.30	180.27*
13	27.48	26.66	26.70	0.0545	27.48	1:09	0.82	0.00	210.70	42.10*
14	27.44	26.60	26.37	0.0413	27.44	1:12	0.84	0.00	180.33	0.13*
15	27.53	26.60	26.49	0.0593	27.53	1:12	0.93	0.00	180.30	9.63*
16	27.42	26.59	26.33	0.0401	27.40	1:13	0.81	0.02	179.67	0.00
17	27.60	26.80	26.72	0.0931	27.60	1:11	0.80	0.00	151.73	18.17*
18	27.68	26.77	26.64	0.0838	27.68	1:12	0.91	0.00	157.27	0.07*
19	27.20	26.40	26.21	0.0465	27.20	1:13	0.80	0.00	184.07	2.03*
2	28.56	27.49	27.82	0.1567	28.56	1:07	1.07	0.00	211.53	99.17*
20	26.98	26.83	26.69	0.0195	26.98	1:10	0.15	0.00	177.27	120.23*
21	26.82	26.69	26.54	0.0187	26.82	1:11	0.13	0.00	178.90	166.67*
22	27.16	26.36	26.17	0.0508	27.16	1:13	0.80	0.00	183.17	0.50*
23	27.12	26.38	26.11	0.0391	27.12	1:13	0.74	0.00	178.33	0.20*
24	27.12	26.34	26.11	0.0318	27.12	1:13	0.78	0.00	179.83	0.20*
25	27.16	26.46	26.36	0.0448	27.16	1:12	0.70	0.00	177.57	15.23*
26	26.82	26.10	26.15	0.0761	26.82	1:11	0.72	0.00	202.77	56.67*
27	27.20	26.42	26.24	0.0712	27.20	1:12	0.78	0.00	176.47	0.40*
28	27.08	26.22	26.00	0.0342	26.92	1:13	0.70	0.16	181.40	0.00
29	26.80	26.16	25.95	0.0392	26.80	1:12	0.64	0.00	181.50	1.80*
3	28.25	27.74	27.55	0.0286	28.25	1:12	0.51	0.00	179.00	0.80*
30	26.80	26.42	26.45	0.0317	26.80	1:09	0.38	0.00	197.37	182.37*
31	27.07	26.33	26.40	0.0958	27.07	1:10	0.74	0.00	194.20	20.90*
32	26.94	26.34	26.39	0.0816	26.94	1:09	0.60	0.00	180.93	76.53*
33	26.62	26.03	26.06	0.0652	26.62	1:09	0.59	0.00	197.43	64.67*
34	26.60	25.97	26.08	0.0964	26.60	1:09	0.63	0.00	204.73	115.23*
35	26.60	25.95	25.68	0.0373	26.60	1:13	0.65	0.00	179.73	0.47*
36	26.80	26.24	26.20	0.2676	26.80	1:10	0.56	0.00	151.47	29.53*
37	26.51	26.09	25.94	0.0842	26.51	1:10	0.42	0.00	177.33	11.13*
38	26.66	26.19	26.15	0.1115	26.66	1:10	0.47	0.00	162.43	38.63*
39	26.44	25.87	25.82	0.0963	26.44	1:09	0.57	0.00	193.13	56.03*
4	28.23	27.70	27.61	0.0312	28.23	1:10	0.53	0.00	182.57	41.33*
40	26.53	26.09	26.06	0.1062	26.53	1:09	0.44	0.00	178.03	46.57*
41	26.39	25.72	25.77	0.1095	26.39	1:13	0.67	0.00	203.27	58.30*
42	26.30	25.76	25.83	0.1522	26.30	1:08	0.54	0.00	201.27	132.67*
43	26.60	26.09	25.95	0.0842	26.60	1:10	0.51	0.00	177.33	0.37*
44	26.40	25.60	25.35	0.0525	26.40	1:12	0.80	0.00	196.87	0.03*
45	26.47	25.91	25.89	0.0521	26.47	1:10	0.56	0.00	175.30	38.67*
46	26.66	25.79	25.72	0.0840	26.66	1:09	0.87	0.00	181.47	9.20*
47	26.83	26.10	25.88	0.0480	26.83	1:10	0.73	0.00	101.87	0.13*
48	26.13	25.56	25.57	0.0937	26.13	1:10	0.57	0.00	204.53	60.33*
49	26.13	25.62	25.58	0.0798	26.13	1:09	0.51	0.00	196.57	24.97*
5	28.08	27.65	27.60	0.0409	28.08	1:10	0.43	0.00	185.17	156.33*
50	25.90	25.52	25.26	0.0340	25.90	1:12	0.38	0.00	197.47	124.83*
51	26.20	25.75	25.60	0.1108	26.20	1:11	0.45	0.00	176.80	2.53*
52	26.12	25.70	25.58	0.0906	26.12	1:13	0.42	0.00	179.80	0.60*
53	26.60	25.92	25.93	0.0575	26.60	1:11	0.68	0.00	182.93	105.80*
54	26.50	25.87	25.85	0.0535	26.50	1:12	0.63	0.00	181.40	90.47*
55	25.94	25.44	25.07	0.1007	25.94	1:13	0.50	0.00	173.60	0.10*
56	26.70	25.74	25.46	0.1803	26.70	1:10	0.96	0.00	27.77	0.23*
57	26.63	25.87	25.64	0.1289	26.63	1:10	0.76	0.00	21.73	8.63*
58	26.63	25.30	25.17	0.1809	26.47	1:15	1.17	0.16	198.23	0.00
59	26.66	25.70	25.53	0.0972	26.66	1:10	0.96	0.00	43.90	12.50*
6	28.36	27.70	27.57	0.0370	28.36	1:12	0.66	0.00	180.27	0.53*
60	26.64	25.51	25.27	0.1793	26.64	1:15	1.13	0.00	146.73	0.00
61	25.97	25.23	24.53	0.0447	25.97	1:15	0.74	0.00	2.20	0.03*
62	25.91	25.16	24.51	0.0413	25.79	1:15	0.63	0.12	7.10	0.00
63	25.50	24.93	24.39	0.0340	25.50	1:15	0.57	0.00	11.90	0.03*
64	26.20	25.21	24.87	0.0949	26.20	1:10	0.99	0.00	28.77	4.37*
65	26.18	25.11	24.82	0.0963	26.18	1:11	1.07	0.00	40.13	8.20*
66	26.18	25.18	24.80	0.0820	26.18	1:11	1.00	0.00	27.83	0.07*
67	26.18	25.17	24.74	0.0644	26.08	1:15	0.91	0.10	22.07	0.00
68	26.20	25.21	24.87	0.0930	26.20	1:11	0.99	0.00	29.13	10.23*
69	26.19	25.25	24.88	0.0762	26.19	1:11	0.94	0.00	23.70	0.50*
7	28.20	27.58	27.54	0.0392	28.20	1:10	0.62	0.00	188.03	53.23*
70	26.19	25.17	24.90	0.1279	26.19	1:11	1.02	0.00	25.17	0.13*
71	26.15	25.31	25.03	0.0908	26.15	1:11	0.84	0.00	21.90	5.70*
72	24.72	24.72	24.22	0.0131	24.72	1:20	0.00	0.00	6.57	6.53*
73	24.40	24.40	23.54	0.0071	23.84	1:20	0.00	0.56	0.00	0.00
75	26.55	25.67	25.40	0.0473	26.55	1:13	0.88	0.00	195.50	0.10*
76	26.64	26.03	26.11	0.1328	26.64	1:08	0.61	0.00	180.20	96.77*
77	26.63	25.52	25.33	0.2280	26.54	1:15	1.02	0.09	138.60	0.00
78	26.70	25.66	25.43	0.1392	26.68	1:15	1.02	0.02	43.63	0.00
79	26.16	25.78	25.54	0.0507	26.16	1:13	0.38	0.00	167.73	0.17*
8	28.13	27.55	27.44	0.0300	28.13	1:11	0.58	0.00	186.90	15.10*
9	28.12	27.51	27.40	0.0401	28.12	1:11	0.61	0.00	188.33	0.43*

Nodo con la maggiore variazione media percentuale: '36' pari a 0.268 % (**)

(*) Attenzione: c'è un ingresso di portata alla rete in un nodo in cui è possibile un'esondazione.

Se l'ingresso è contemporaneo all'esondazione, l'acqua non entrerà in rete e verrà considerata solamente nel controllo di continuità.

(**) La variazione media nei nodi è così definita:

$$100.0 (Y(n+1) - Y(n)) / Yfull$$

SOMMARIO DELLE STATISTICHE DEGLI ELEMENTI LINEARI -----

Elemento	Portata di moto uniforme	Velocità di moto uniforme	Portata Altezza condotto	Portata max di calcolo	Velocità max di calcolo	Velocità al tempo	Rapporto tra Qmax uniforme	Raggio idrostatico	Sezione massima	Durata riempim. massimo	Grado di pendenza	Q Penden- normale za ramo
	(m3/s)	(m/s)	(m)	(m3/s)	(m/s)	(m/s)		(m)	(m2)	(min)		(m/m)
1	0.0079	0.28	0.190	0.023	1:06	0.80	1:06	2.88	0.0576	0.0284	1.00	172.8 0.00065
10	0.1690	0.60	0.600	0.211	1:20	0.87	1:11	1.25	0.1807	0.2827	1.00	196.3 0.00088
11	0.1690	0.60	0.600	-0.318	1:11	-1.13	1:11	-1.88	0.1809	0.2827	1.00	238.3 0.00088
12	0.2765	0.98	0.600	0.267	1:20	0.94	1:20	0.96	0.1748	0.2827	1.00	266.3 0.00235
13	0.2765	0.98	0.600	0.283	1:16	1.00	1:16	1.02	0.1759	0.2827	1.00	257.8 0.00235
14	0.2399	0.85	0.600	0.266	4:10	0.94	4:10	1.11	0.1811	0.2827	1.00	249.7 0.00177
15	0.2399	0.85	0.600	0.511	1:10	1.83	1:10	2.13	0.1824	0.2827	1.00	183.8 0.00177
16	0.1358	0.69	0.500	0.119	1:22	0.61	1:22	0.88	0.1386	0.1964	1.00	115.2 0.00150
17	0.4541	0.90	0.800	0.466	1:10	1.15	1:10	1.03	0.2434	0.5027	1.00	123.5 0.00101
18	0.0480	0.68	0.300	0.116	1:12	1.64	1:12	2.42	0.0889	0.0707	1.00	266.0 0.00210
19	0.0940	0.83	0.380	0.148	1:12	1.37	1:12	1.57	0.1125	0.1134	1.00	26.8 0.00228
2	0.0087	0.31	0.190	0.031	1:07	1.09	1:07	3.56	0.0578	0.0284	1.00	0.0 0.00078
20	0.4526	0.90	0.800	0.669	1:12	1.33	1:12	1.48	0.2428	0.5027	1.00	189.2 0.00100
21	0.0531	0.42	0.400	0.091	1:11	0.77	1:10	1.71	0.1203	0.1257	1.00	163.4 0.00075
22	0.0930	0.74	0.400	0.115	1:11	0.92	1:11	1.24	0.1212	0.1257	1.00	45.2 0.00231
23	0.3994	0.79	0.800	0.821	1:12	1.63	1:12	2.06	0.2434	0.5027	1.00	21.3 0.00078
24	0.2667	0.53	0.800	0.896	1:12	1.78	1:13	3.36	0.2430	0.5027	1.00	0.0 0.00035
25	0.2666	0.53	0.800	0.946	1:12	1.91	1:12	3.55	0.2434	0.5027	1.00	14.0 0.00035
26	0.1016	0.81	0.400	0.061	1:28	0.48	1:28	0.60	0.1108	0.1257	1.00	181.8 0.00276
27	0.0590	0.47	0.400	0.083	1:12	0.66	1:13	1.40	0.1117	0.1257	1.00	157.7 0.00093
28	0.1358	0.69	0.500	-0.118	1:12	0.85	1:11	-0.87	0.1515	0.1964	1.00	8.9 0.00150
29	0.5448	1.08	0.800	0.758	1:13	1.51	1:13	1.39	0.2433	0.5027	1.00	175.3 0.00145
3	0.0113	0.40	0.190	0.038	1:07	1.34	1:07	3.37	0.0573	0.0284	1.00	199.1 0.00133
30	0.5448	1.08	0.800	0.834	1:13	1.66	1:13	1.53	0.2434	0.5027	1.00	114.3 0.00145
31	0.0222	0.31	0.300	0.057	1:10	0.83	1:09	2.59	0.0910	0.0707	1.00	2.3 0.00045
32	0.0467	0.66	0.300	0.081	1:10	1.20	1:10	1.73	0.0873	0.0707	1.00	29.7 0.00199
33	0.0283	0.63	0.240	0.044	1:09	1.01	1:09	1.56	0.0700	0.0452	1.00	37.1 0.00241
34	0.0601	0.85	0.300	0.099	1:10	1.40	1:10	1.65	0.0893	0.0707	1.00	182.8 0.00330
35	0.0221	0.49	0.240	0.036	1:09	0.79	1:09	1.61	0.0730	0.0452	1.00	211.0 0.00147
36	0.5448	1.08	0.800	0.989	1:13	1.98	1:13	1.81	0.2433	0.5027	1.00	0.0 0.00145
37	0.0205	0.45	0.240	0.037	1:10	0.88	1:10	1.80	0.0681	0.0452	1.00	6.8 0.00126
38	0.0300	0.66	0.240	0.035	1:10	0.77	1:10	1.16	0.0719	0.0452	1.00	20.7 0.00270
39	0.0459	1.01	0.240	0.045	1:10	1.00	1:10	0.99	0.0665	0.0452	1.00	263.8 0.00631
4	0.0425	0.34	0.400	-0.074	1:16	-0.59	1:16	-1.73	0.1214	0.1257	1.00	178.9 0.00048
40	0.0338	0.75	0.240	0.048	1:09	1.07	1:09	1.43	0.0665	0.0452	1.00	236.0 0.00342
41	0.0540	0.43	0.400	-0.107	1:10	-0.86	1:10	-1.99	0.1213	0.1257	1.00	248.4 0.00078
42	0.1392	1.11	0.400	0.077	1:15	0.66	1:09	0.55	0.1109	0.1257	1.00	256.9 0.00518
43	0.0855	0.68	0.400	0.108	1:12	0.86	1:12	1.26	0.1168	0.1257	1.00	220.8 0.00195
44	0.0423	0.34	0.400	0.192	1:12	1.53	1:12	4.55	0.1214	0.1257	1.00	0.0 0.00048
45	0.8744	1.74	0.800	0.814	1:13	1.81	1:13	0.93	0.2409	0.5027	1.00	43.1 0.00373
46	0.0279	0.62	0.240	-0.023	1:15	-0.51	1:15	-0.82	0.0665	0.0452	1.00	282.1 0.00233
47	0.2032	1.62	0.400	0.051	1:15	0.63	1:08	0.25	0.1108	0.1257	1.00	273.6 0.01104
48	0.0953	0.76	0.400	0.145	1:14	1.15	1:14	1.52	0.1191	0.1257	1.00	240.9 0.00243
49	0.0569	0.45	0.400	0.166	1:12	1.40	1:12	2.92	0.1195	0.1257	1.00	3.1 0.00087
5	0.0430	0.34	0.400	0.153	1:11	1.23	1:11	3.57	0.1210	0.1257	1.00	172.6 0.00049
50	0.0406	0.57	0.300	0.030	1:08	0.48	1:08	0.74	0.0896	0.0707	1.00	205.5 0.00150
51	0.7387	0.94	1.000	1.019	1:13	1.30	1:13	1.38	0.3040	0.7854	1.00	43.9 0.00110
52	0.0459	0.37	0.400	0.065	1:15	0.52	1:15	1.42	0.1207	0.1257	1.00	187.0 0.00056
53	0.0459	0.37	0.400	0.153	1:13	1.36	1:11	3.34	0.1217	0.1257	1.00	28.3 0.00056
54	0.0173	0.24	0.300	0.095	1:10	1.34	1:10	5.46	0.0911	0.0707	1.00	0.0 0.00027
55	0.0470	0.24	0.500	0.198	1:12	1.02	1:12	4.22	0.1521	0.1964	1.00	0.0 0.00018
56	0.1428	0.73	0.500	0.209	1:12	1.19	1:11	1.46	0.1521	0.1964	1.00	36.8 0.00166
57	0.3716	0.47	1.000	1.039	1:13	1.33	1:13	2.80	0.3031	0.7854	1.00	15.1 0.00028
58	0.1588	1.26	0.400	0.079	1:14	0.68	1:09	0.50	0.1108	0.1257	1.00	277.0 0.00674
59	0.1387	0.71	0.500	0.444	1:12	2.26	1:12	3.20	0.1503	0.1964	1.00	37.2 0.00157
6	0.1003	0.51	0.500	0.061	1:15	0.48	1:08	0.60	0.1510	0.1964	1.00	176.5 0.00082
60	0.0943	1.33	0.300	0.103	1:12	1.51	1:10	1.09	0.0910	0.0707	1.00	167.2 0.00811
61	0.2243	1.14	0.500	0.248	1:12	1.26	1:12	1.11	0.1408	0.1964	1.00	233.2 0.00409
62	0.0565	0.80	0.300	0.096	1:10	1.36	1:10	1.70	0.0912	0.0707	1.00	289.0 0.00290
63	0.7481	0.95	1.000	1.674	1:15	2.17	1:15	2.24	0.2915	0.7854	1.00	0.0 0.00113
64	2.0515	1.81	1.200	1.532	1:13	1.63	1:13	0.75	0.3648	1.1310	1.00	180.7 0.00236
65	1.8889	1.67	1.200	2.109	1:15	1.93	1:13	1.12	0.3649	1.1310	1.00	155.4 0.00200
66	0.1568	0.80	0.500	0.069	1:16	0.35	1:16	0.44	0.1484	0.1964	1.00	257.9 0.00200

67	0.0779	0.40	0.500	0.241	1:11	1.23	1:11	3.09	0.1520	0.1964	1.00	162.8	0.00049
68	0.1725	0.61	0.600	0.366	1:14	1.30	1:14	2.12	0.1815	0.2827	1.00	251.4	0.00092
69	0.1238	0.44	0.600	0.683	1:14	2.42	1:14	5.52	0.1825	0.2827	1.00	0.3	0.00047
7	0.1042	0.53	0.500	0.112	1:10	0.59	1:10	1.07	0.1516	0.1964	1.00	259.3	0.00088
70	0.1929	0.98	0.500	0.135	1:10	0.78	1:09	0.70	0.1488	0.1964	1.00	253.1	0.00303
71	0.1788	0.91	0.500	0.108	1:14	0.55	1:14	0.60	0.1422	0.1964	1.00	264.7	0.00260
72	0.0383	0.30	0.400	0.127	1:15	1.01	1:15	3.31	0.1217	0.1257	1.00	0.0	0.00039
73	0.0811	0.65	0.400	0.157	1:11	1.28	1:11	1.94	0.1210	0.1257	1.00	84.8	0.00176
74	1.5447	0.71	1.150	2.219	1:15	1.29	1:15	1.44	0.5556	2.1683	1.00	29.5	0.00100
75	1.9868	0.74	1.150	2.027	1:20	1.11	1:20	1.02	0.4740	1.8336	0.69	0.0	0.00100
77	0.7387	0.94	1.000	0.816	1:13	1.04	1:13	1.11	0.3041	0.7854	1.00	106.4	0.00110
78	0.0196	0.69	0.190	0.036	1:09	1.30	1:09	1.84	0.0566	0.0284	1.00	35.8	0.00398
79	0.1225	0.97	0.400	0.134	1:12	1.16	1:08	1.10	0.1177	0.1257	1.00	35.1	0.00401
8	0.1164	0.59	0.500	0.277	1:10	1.42	1:10	2.38	0.1492	0.1964	1.00	204.5	0.00110
80	0.1035	0.82	0.400	0.129	1:10	1.13	1:10	1.24	0.1181	0.1257	1.00	29.1	0.00287
81	0.2678	1.36	0.500	0.175	1:12	1.46	1:12	0.65	0.1447	0.1964	1.00	38.7	0.00583
9	0.1036	0.37	0.600	0.141	1:11	0.50	1:11	1.36	0.1824	0.2827	1.00	34.2	0.00033

Ramo con la maggiore variazione media percentuale: '25' pari a 0.133 % (*)

(*) La variazione media nei rami è così definita:

$$100.0 (Q(n+1) - Q(n)) / Q_{full}$$

P1) Simulazione STATO DI PROGETTO - Ietogramma Chicago con Tr = 10 anni e durata 240 minuti; c.p.c. Aimag

Marte DEFLUX 2007 - DESIGNER EDITION	
Codice	Modulo SWMM 4.40 : Runoff + Extran
	Copyright (C) 2000-2009 DEK s.r.l.
Nome	Prel-SP_T10ChiAimag
Descrizione	<nessuna descrizione>
Data di creazione	15/04/2011 - 19.48.50
Sottorete	Intera rete
Database	2011-03_Soliera_ZonaW-SP

DATI GENERALI	
Numero dei nodi	103
Numero dei rami	106
Numero delle pompe	0
Numero degli scaricatori	0
Sommario delle piogge	
Pioggia totale (mm)	69.4167

CONTROLLO DI CONTINUITA' PER IL DEFLUSSO SUPERFICIALE		
	Volume (m3)	Livello (mm) sul bacino
Precipitazione totale (Pioggia + Neve)	67842.367188	69.417
Infiltrazione totale	20256.726563	20.727
Evaporazione totale	2541.940674	2.601
Deflusso superficiale	39878.296875	40.804
Volume trattenuto negli accumuli superficiali	5164.040527	5.284
Infiltrazione per l'area permeabile	20256.726563	44.567
Infiltrazione + Evaporazione +		
Deflusso superficiale +		
Accumuli superficiali	67841.007813	69.415
Precipitazione totale + Accumulo iniziale	67842.367188	69.417

Errore 0.002 % (*)
(*) L'errore nella continuità è così calcolato: (Precipitazione - Infiltrazione - Evaporazione - - Deflusso superficiale - Accumuli superficiali) / / Precipitazione

CONTROLLO DI CONTINUITA' NELLA RETE	
	Volume (m3)
Volume iniziale nella rete	0.091062
Ingresso nella rete	39878.028465
Uscita dalla rete	29964.137490
Volume finale nella rete	9979.761719

Errore continuità -0.165 %

SOMMARIO DELLE STATISTICHE DEI SOTTOBACINI					

Sotto-bacino afferente al ramo	Nodo di Ingresso	Area (ha)	% imper.	Pioggia totale simulata (mm)	Area permeabile			Area impermeabile (*)		Area totale sottobacino		
					Altezza totale deflusso (mm)	Perdite totali (mm)	Deflusso massimo (m3/s)	Altezza deflusso (mm)	Deflusso massimo (m3/s)	Altezza deflusso (mm)	Deflusso massimo (m3/s)	Deflusso massimo unitario (mm/h)
1	1	1.28	75.00	69.417	26.123	43.294	0.01	57.058	0.21	49.324	0.22	62.459
10	3	1.01	75.00	69.417	24.436	44.981	0.01	56.761	0.12	48.680	0.13	46.718
100	97	1.28	60.00	69.417	25.558	43.859	0.02	57.201	0.20	44.544	0.22	62.440
11	10	0.72	75.00	69.417	25.179	44.237	0.01	56.892	0.10	48.964	0.11	53.206
12	9	2.91	75.00	69.417	24.558	44.859	0.02	56.783	0.36	48.727	0.38	47.726
13	11	2.29	75.00	69.417	25.101	44.315	0.02	56.878	0.31	48.934	0.33	52.486
14	12	4.71	40.00	69.417	21.448	47.968	0.06	57.086	0.42	35.703	0.48	36.836
15	13	6.34	40.00	69.417	20.921	48.495	0.07	57.045	0.54	35.371	0.61	34.992
16	15	1.17	60.00	69.417	23.089	46.328	0.01	56.916	0.13	43.385	0.14	44.625
18	17	0.80	60.00	69.417	25.933	43.484	0.01	57.245	0.13	44.720	0.15	66.156
19	18	0.31	60.00	69.417	24.903	44.513	0.00	57.127	0.04	44.237	0.05	56.298
2	2	1.88	75.00	69.417	24.870	44.547	0.01	56.837	0.25	48.845	0.26	50.405
20	16	1.84	60.00	69.417	22.679	46.737	0.02	56.868	0.20	43.192	0.21	42.490
21	20	2.76	60.00	69.417	21.772	47.645	0.02	56.756	0.27	42.763	0.29	38.012
22	21	1.32	60.00	69.417	21.772	47.645	0.01	56.756	0.13	42.762	0.14	38.009
23	19	0.61	60.00	69.417	25.976	43.441	0.01	57.250	0.10	44.740	0.11	66.595
24	22	0.24	60.00	69.417	25.960	43.457	0.00	57.248	0.04	44.733	0.04	66.432
26	25	0.74	60.00	69.417	22.924	46.493	0.01	56.897	0.08	43.308	0.09	43.759
27	26	1.09	60.00	69.417	22.111	47.305	0.01	56.798	0.11	42.924	0.12	39.638
28	27	0.12	60.00	69.417	27.136	42.281	0.00	57.387	0.02	45.287	0.03	81.828
29	24	0.41	60.00	69.417	24.682	44.735	0.01	57.101	0.06	44.134	0.06	54.357
3	2	0.17	75.00	69.417	26.162	43.254	0.00	57.065	0.03	49.340	0.03	63.053
30	28	0.12	60.00	69.417	26.560	42.856	0.00	57.318	0.02	45.015	0.02	73.948
31	30	2.67	30.00	69.417	18.589	50.828	0.03	57.041	0.17	30.124	0.20	26.784
32	31	1.22	60.00	69.417	21.889	47.527	0.01	56.771	0.12	42.818	0.13	38.568
33	32	1.01	60.00	69.417	23.280	46.137	0.01	56.939	0.12	43.475	0.13	45.640
34	33	0.39	60.00	69.417	24.733	44.683	0.00	57.107	0.05	44.158	0.06	54.804
35	34	0.30	60.00	69.417	26.609	42.808	0.01	57.324	0.06	45.038	0.06	74.606
36	29	1.15	60.00	69.417	22.745	46.672	0.01	56.875	0.13	43.223	0.14	42.827
37	36	0.52	60.00	69.417	23.581	45.835	0.01	56.975	0.06	43.617	0.07	47.267
38	38	0.52	60.00	69.417	23.588	45.829	0.01	56.975	0.06	43.620	0.07	47.302
39	40	0.57	60.00	69.417	24.718	44.699	0.01	57.105	0.08	44.150	0.09	54.668
4	5	0.80	75.00	69.417	25.444	43.973	0.01	56.938	0.12	49.064	0.12	55.706
40	42	0.46	60.00	69.417	25.684	43.733	0.01	57.216	0.07	44.603	0.08	63.674
41	43	0.15	60.00	69.417	26.552	42.865	0.00	57.317	0.03	45.011	0.03	73.836
42	37	0.24	60.00	69.417	26.282	43.135	0.00	57.285	0.04	44.884	0.05	70.222
43	39	0.22	60.00	69.417	25.773	43.644	0.00	57.226	0.04	44.645	0.04	64.551
44	41	0.37	60.00	69.417	24.728	44.689	0.00	57.107	0.05	44.155	0.06	54.754
46	45	0.44	60.00	69.417	23.531	45.886	0.00	56.969	0.05	43.594	0.06	46.994
47	47	0.26	60.00	69.417	27.054	42.363	0.01	57.377	0.05	45.248	0.06	80.702
48	46	1.11	60.00	69.417	24.348	45.069	0.01	57.063	0.14	43.977	0.16	51.560
49	48	0.48	60.00	69.417	24.430	44.987	0.01	57.073	0.06	44.016	0.07	52.237
5	4	0.76	75.00	69.417	25.010	44.407	0.01	56.862	0.10	48.899	0.11	51.650
50	49	0.42	60.00	69.417	25.905	43.512	0.01	57.241	0.07	44.707	0.08	65.871
51	44	0.64	60.00	69.417	24.254	45.163	0.01	57.052	0.08	43.933	0.09	50.942
52	51	0.47	60.00	69.417	24.748	44.669	0.01	57.109	0.07	44.165	0.07	54.929
53	52	0.13	60.00	69.417	26.442	42.975	0.00	57.304	0.02	44.959	0.03	72.354
54	49	0.29	60.00	69.417	25.539	43.878	0.00	57.199	0.05	44.535	0.05	62.252
55	53	4.79	30.00	69.417	16.759	52.658	0.04	56.905	0.27	28.802	0.31	23.344
56	54	3.14	60.00	69.417	19.750	49.667	0.02	56.489	0.24	41.793	0.26	29.816
57	50	0.44	60.00	69.417	21.930	47.486	0.00	56.776	0.04	42.838	0.05	38.765
58	56	0.47	60.00	69.417	25.957	43.460	0.01	57.247	0.08	44.731	0.09	66.398
59	58	0.40	60.00	69.417	26.267	43.150	0.01	57.283	0.07	44.877	0.08	70.028
6	6	0.30	60.00	69.417	25.107	44.310	0.00	57.150	0.04	44.333	0.05	58.146

60	57	0.63	60.00	69.417	26.336	43.081	0.01	57.291	0.11	44.909	0.12	70.944
61	60	0.36	60.00	69.417	25.880	43.537	0.01	57.238	0.06	44.695	0.06	65.617
62	59	0.70	60.00	69.417	26.115	43.302	0.01	57.266	0.12	44.805	0.13	68.064
63	55	0.88	60.00	69.417	21.773	47.644	0.01	56.757	0.08	42.763	0.09	38.017
65	62	0.21	60.00	69.417	23.763	45.653	0.00	56.996	0.03	43.703	0.03	48.254
66	64	0.44	60.00	69.417	25.968	43.448	0.01	57.249	0.07	44.737	0.08	66.517
67	65	0.36	60.00	69.417	25.594	43.823	0.01	57.205	0.06	44.561	0.06	62.792
68	66	0.45	60.00	69.417	24.229	45.187	0.01	57.050	0.06	43.922	0.06	50.808
69	67	0.13	60.00	69.417	26.370	43.046	0.00	57.295	0.02	44.925	0.03	71.403
7	4	2.32	75.00	69.417	24.687	44.729	0.02	56.806	0.29	48.776	0.31	48.821
70	68	0.76	60.00	69.417	26.807	42.609	0.01	57.347	0.15	45.131	0.16	77.287
71	69	0.69	60.00	69.417	25.411	44.005	0.01	57.185	0.11	44.475	0.12	61.020
72	70	0.74	60.00	69.417	25.998	43.419	0.01	57.252	0.12	44.750	0.14	66.817
73	71	1.11	60.00	69.417	24.875	44.541	0.01	57.123	0.16	44.224	0.17	56.049
74	63	7.98	5.00	69.417	18.050	51.367	0.10	57.479	0.16	20.021	0.26	11.945
77	75	0.23	60.00	69.417	25.389	44.027	0.00	57.182	0.04	44.465	0.04	60.808
78	76	0.61	60.00	69.417	25.317	44.100	0.01	57.174	0.09	44.431	0.10	60.114
79	77	0.21	60.00	69.417	26.044	43.373	0.00	57.257	0.04	44.772	0.04	67.286
8	7	2.10	75.00	69.417	25.095	44.322	0.02	56.877	0.29	48.931	0.30	52.422
80	78	0.25	60.00	69.417	25.939	43.477	0.00	57.245	0.04	44.723	0.05	66.223
81	79	0.19	60.00	69.417	26.274	43.142	0.00	57.284	0.03	44.880	0.04	70.127
83	80	1.40	60.00	69.417	26.038	43.379	0.02	57.257	0.24	44.769	0.26	67.226
84	81	3.11	60.00	69.417	25.282	44.134	0.04	57.170	0.47	44.415	0.51	59.787
86	83	1.84	60.00	69.417	26.254	43.163	0.03	57.282	0.32	44.871	0.35	69.860
87	84	1.14	60.00	69.417	25.828	43.589	0.02	57.232	0.19	44.671	0.21	65.097
89	86	0.32	60.00	69.417	25.062	44.355	0.00	57.145	0.05	44.311	0.05	57.724
9	8	0.27	75.00	69.417	25.017	44.399	0.00	56.863	0.04	48.902	0.04	51.719
92	89	1.40	60.00	69.417	26.038	43.379	0.02	57.257	0.24	44.769	0.26	67.226
93	90	1.38	60.00	69.417	26.065	43.351	0.02	57.260	0.23	44.782	0.26	67.506
94	91	1.43	60.00	69.417	26.872	42.545	0.03	57.355	0.28	45.162	0.31	78.167
97	94	1.87	60.00	69.417	26.212	43.205	0.03	57.277	0.33	44.851	0.36	69.304
98	95	1.83	60.00	69.417	26.255	43.162	0.03	57.282	0.32	44.871	0.35	69.872
99	96	1.14	60.00	69.417	25.828	43.589	0.02	57.232	0.19	44.671	0.21	65.097

(*) Le statistiche sull'area impermeabile aggregano aree con e senza gli accumuli superficiali.

TABELLA DEI MATERIALI												
Nome	Tipo	Area (m2)	Diametro int. (m)	Altezza (m)	Larghezza (m)	Pendenza (o/v)	n Manning	n Manning sinistra	n Manning destra	Spessore (mm)	Numero rami	Lunghezza totale (m)
CLS DN 1000	Circolare	0.785	1.000	*****	*****	*****	0.0140	*****	*****	0.000	4	528.96
CLS DN 1200	Circolare	1.131	1.200	*****	*****	*****	0.0140	*****	*****	0.000	2	138.24
CLS DN 300	Circolare	0.071	0.300	*****	*****	*****	0.0140	*****	*****	0.000	4	206.66
CLS DN 400	Circolare	0.126	0.400	*****	*****	*****	0.0140	*****	*****	0.000	20	1757.21
CLS DN 500	Circolare	0.196	0.500	*****	*****	*****	0.0140	*****	*****	0.000	14	1403.83
CLS DN 600	Circolare	0.283	0.600	*****	*****	*****	0.0140	*****	*****	0.000	10	1088.84
CLS DN 800	Circolare	0.503	0.800	*****	*****	*****	0.0140	*****	*****	0.000	9	637.20
CLS SCAT 10.00 x 1.00	Rettangolare	10.000	*****	1.000	10.000	*****	0.0140	*****	*****	0.000	1	19.04
CLS SCAT 2.50 x 1.25	Rettangolare	3.125	*****	1.250	2.500	*****	0.0140	*****	*****	0.000	15	725.27
CLS SCAT 3.00 x 1.00	Rettangolare	3.000	*****	1.000	3.000	*****	0.0140	*****	*****	0.000	2	338.81
PVC DN 200	Circolare	0.028	0.190	*****	*****	*****	0.0120	*****	*****	0.000	4	347.71
PVC DN 250	Circolare	0.045	0.240	*****	*****	*****	0.0120	*****	*****	0.000	7	666.23
PVC DN 315	Circolare	0.071	0.300	*****	*****	*****	0.0120	*****	*****	0.000	6	550.48
PVC DN 400	Circolare	0.113	0.380	*****	*****	*****	0.0120	*****	*****	0.000	1	78.88
TERRA ST 4.00 x 1.00 x 1.15	Trapezoidale	2.869	*****	1.150	1.000	1.30-1.30	0.0300	*****	*****	0.000	2	370.66
TERRA ST 4.00 x 1.00 x 1.40	Trapezoidale	3.497	*****	1.400	1.000	1.07-1.07	0.0300	*****	*****	0.000	4	84.83
TERRA ST 6.00 x	Trapezoidale	5.169	*****	1.150	3.000	1.30-	0.0300	*****	*****	0.000	1	163.38

3.00 x 1.15	e				1.30						106	9106.22
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DATI DEI NODI						
Nodo	Quota terreno (m slm)	Quota cielo (m slm)	Quota fondo (m slm)	Portata esterna (m3/s)	Livello iniziale (m)	Rami collegati
1	28.50	27.54	27.35	0.00	0.00	1
10	28.00	27.61	27.01	0.00	0.00	10,11
100	25.06	24.95	23.55	0.00	0.00	104
101	25.12	24.91	23.51	0.00	0.00	104,105
102	25.40	25.02	21.70	0.00	0.00	105,106
103	25.05	24.91	21.69	0.00	0.00	106,107
104	25.07	25.06	23.66	0.00	0.00	107
11	27.80	27.18	26.58	0.00	0.00	12,13
12	27.51	26.90	26.30	0.00	0.00	13,14
13	27.48	26.66	26.06	0.00	0.00	14,15
14	27.44	26.60	25.80	0.00	0.00	15,16,17
15	27.53	26.60	26.10	0.00	0.00	16
16	27.42	26.59	25.75	0.00	0.00	17,19,20
17	27.60	26.80	26.50	0.00	0.00	18
18	27.68	26.77	26.39	0.00	0.00	18,19
19	27.20	26.40	25.60	0.00	0.00	20,22,23
2	28.56	27.49	27.30	0.00	0.00	1,2,3
20	26.98	26.83	26.43	0.00	0.00	21
21	26.82	26.69	26.29	0.00	0.00	21,22
22	27.16	26.36	25.56	0.00	0.00	23,24,26
23	27.12	26.38	25.54	0.00	0.00	24,25,28
24	27.12	26.34	25.54	0.00	0.00	25,27,29
25	27.16	26.46	26.06	0.00	0.00	26
26	26.82	26.10	25.70	0.00	0.00	27
27	27.20	26.42	25.92	0.00	0.00	28
28	27.08	26.22	25.42	0.00	0.00	29,30,32
29	26.80	26.16	25.36	0.00	0.00	30,34,36
3	28.25	27.74	27.14	0.00	0.00	10,5,6
30	26.80	26.42	26.12	0.00	0.00	31
31	27.07	26.33	26.03	0.00	0.00	31,32
32	26.94	26.34	26.10	0.00	0.00	33
33	26.62	26.03	25.68	0.00	0.00	33,34,35
34	26.60	25.97	25.73	0.00	0.00	35
35	26.60	25.99	24.74	0.00	0.00	36,44,45,82
36	26.80	26.24	26.00	0.00	0.00	37
37	26.51	26.09	25.66	0.00	0.00	37,41,42
38	26.66	26.19	25.95	0.00	0.00	38
39	26.44	25.87	25.43	0.00	0.00	38,42,43
4	28.23	27.70	27.20	0.00	0.00	3,4,5,7
40	26.53	26.09	25.85	0.00	0.00	39
41	26.39	25.72	25.32	0.00	0.00	39,40,43,44
42	26.30	25.76	25.52	0.00	0.00	40
43	26.60	26.09	25.69	0.00	0.00	41
44	26.40	25.60	24.60	0.00	0.00	49,51,77
45	26.47	25.91	25.67	0.00	0.00	46
46	26.66	25.79	25.39	0.00	0.00	46,47,48
47	26.83	26.10	25.70	0.00	0.00	47
48	26.13	25.56	25.16	0.00	0.00	48,49,50
49	26.13	25.62	25.24	0.00	0.00	50,54
5	28.08	27.65	27.25	0.00	0.00	4
50	25.90	25.52	24.49	0.00	0.00	51,56,57,81
51	26.20	25.75	25.35	0.00	0.00	52

52	26.12	25.70	25.30	0.00	0.00	52,53,54
53	26.60	25.92	25.42	0.00	0.00	55
54	26.50	25.87	25.37	0.00	0.00	55,56,78
55	25.94	25.44	24.44	0.00	0.00	57,59,63
56	26.70	25.74	25.34	0.00	0.00	58
57	26.63	25.87	25.57	0.00	0.00	60
58	26.63	25.30	24.77	0.00	0.00	59,61,79
59	26.66	25.70	25.40	0.00	0.00	62
6	28.36	27.70	27.20	0.00	0.00	2,6
60	26.64	25.51	24.99	0.00	0.00	58,61,80
61	25.97	25.23	24.02	0.00	0.00	63,64
62	25.91	25.16	23.96	0.00	0.00	64,65,69
63	25.50	25.24	23.73	0.00	0.00	65,74,88
64	26.20	25.21	24.71	0.00	0.00	66
65	26.18	25.11	24.61	0.00	0.00	66,67,70
66	26.18	25.18	24.58	0.00	0.00	67,68,71
67	26.18	25.17	24.49	0.00	0.00	68,69,72,73
68	26.20	25.21	24.71	0.00	0.00	70
69	26.19	25.25	24.75	0.00	0.00	71
7	28.20	27.58	27.08	0.00	0.00	7,8
70	26.19	25.17	24.77	0.00	0.00	72
71	26.15	25.31	24.91	0.00	0.00	73
72	25.11	25.10	23.50	0.00	0.00	108,74,75
73	24.35	24.33	23.18	0.00	0.00	102,103,90
75	26.55	25.67	24.67	0.00	0.00	77,89
76	26.64	26.03	25.84	0.00	0.00	78
77	26.63	25.52	25.10	0.00	0.00	60,79
78	26.70	25.66	25.26	0.00	0.00	62,80
79	26.16	25.78	25.28	0.00	0.00	53,81
8	28.13	27.55	26.95	0.00	0.00	8,9
80	26.80	25.98	24.73	0.00	0.00	82,83
81	26.60	25.83	24.59	0.00	0.00	84,93
82	26.10	25.74	24.49	0.00	0.00	85,94
83	26.10	25.60	24.35	0.00	0.00	86,96
84	26.10	25.46	24.21	0.00	0.00	87,98
85	26.10	25.29	24.04	0.00	0.00	100,88
86	26.61	25.92	25.12	0.00	0.00	45,89
87	25.05	24.63	23.48	0.00	0.00	75,90
88	25.01	25.01	23.53	0.00	0.00	101,108
89	26.73	25.93	24.68	0.00	0.00	83,92
9	28.12	27.51	26.91	0.00	0.00	11,12,9
90	26.67	25.88	24.63	0.00	0.00	92,93
91	26.26	25.77	24.52	0.00	0.00	84,94
92	26.10	25.69	24.44	0.00	0.00	85,95
93	26.10	25.64	24.39	0.00	0.00	95,96
94	26.10	25.55	24.30	0.00	0.00	86,97
95	26.10	25.51	24.26	0.00	0.00	97,98
96	26.10	25.41	24.16	0.00	0.00	87,99
97	26.10	25.35	24.10	0.00	0.00	100,99
98	24.60	24.30	23.30	0.00	0.00	101,102
99	24.30	24.26	23.11	0.00	0.00	103

DATI DEGLI ELEMENTI LINEARI					
Elemento	Nodo iniziale	Nodo finale	Materiale	Lunghezza (m)	Valvola anti-rifl.
1	1	2	PVC DN 200	76.83	no
10	3	10	CLS DN 600	147.48	no
100	97	85	CLS SCAT 2.50 x 1.25	61.65	no
101	88	98	CLS SCAT 3.00 x 1.00	308.81	no

102	98	73	PVC DN 315	14.29	si
103	73	99	TERRA ST 4.00 x 1.00 x 1.15	74.10	no
104	100	101	TERRA ST 4.00 x 1.00 x 1.40	21.71	no
105	101	102	TERRA ST 4.00 x 1.00 x 1.40	26.08	no
106	102	103	TERRA ST 4.00 x 1.00 x 1.40	15.00	no
107	103	104	TERRA ST 4.00 x 1.00 x 1.40	22.04	no
108	72	88	CLS SCAT 10.00 x 1.00	19.04	no
11	10	9	CLS DN 600	114.27	no
12	9	11	CLS DN 600	141.78	no
13	11	12	CLS DN 600	117.59	no
14	12	13	CLS DN 600	133.25	no
15	13	14	CLS DN 600	149.14	no
16	15	14	CLS DN 500	135.47	no
17	14	16	CLS DN 800	49.77	no
18	17	18	PVC DN 315	52.48	no
19	18	16	PVC DN 400	78.88	no
2	2	6	PVC DN 200	127.68	no
20	16	19	CLS DN 800	150.26	no
21	20	21	CLS DN 400	186.03	no
22	21	19	CLS DN 400	186.05	no
23	19	22	CLS DN 800	51.45	no
24	22	23	CLS DN 800	51.83	no
25	23	24	CLS DN 800	5.86	no
26	25	22	CLS DN 400	141.33	no
27	26	24	CLS DN 400	172.17	no
28	27	23	CLS DN 500	26.48	no
29	24	28	CLS DN 800	85.06	no
3	2	4	PVC DN 200	75.37	no
30	28	29	CLS DN 800	38.25	no
31	30	31	PVC DN 315	201.22	no
32	31	28	PVC DN 315	181.16	no
33	32	33	PVC DN 250	128.85	no
34	33	29	PVC DN 315	83.61	no
35	34	33	PVC DN 250	37.21	no
36	29	35	CLS DN 800	147.85	no
37	36	37	PVC DN 250	118.72	no
38	38	39	PVC DN 250	118.51	no
39	40	41	PVC DN 250	84.04	no
4	5	4	CLS DN 400	103.28	no
40	42	41	PVC DN 250	58.51	no
41	43	37	CLS DN 400	38.43	no
42	37	39	CLS DN 400	44.40	no
43	39	41	CLS DN 400	56.34	no
44	41	35	CLS DN 400	83.77	no
45	35	86	PVC DN 315	17.71	no
46	45	46	PVC DN 250	120.39	no
47	47	46	CLS DN 400	28.08	no
48	46	48	CLS DN 400	94.76	no
49	48	44	CLS DN 400	92.32	no
5	4	3	CLS DN 400	121.55	no
50	49	48	CLS DN 300	53.15	no
51	44	50	CLS DN 1000	97.56	no
52	51	52	CLS DN 400	83.20	no
53	52	79	CLS DN 400	40.83	no
54	49	52	CLS DN 300	62.13	no
55	53	54	CLS DN 500	277.76	no
56	54	50	CLS DN 500	283.20	no
57	50	55	CLS DN 1000	179.48	no
58	56	60	CLS DN 400	51.91	no
59	58	55	CLS DN 500	44.73	no

6	6	3	CLS DN 500	73.34	no
60	57	77	CLS DN 300	43.17	no
61	60	58	CLS DN 500	53.75	no
62	59	78	CLS DN 300	48.20	no
63	55	61	CLS DN 1000	185.98	no
64	61	62	CLS DN 1200	25.43	no
65	62	63	CLS DN 1200	112.81	no
66	64	65	CLS DN 500	51.64	no
67	65	66	CLS DN 500	60.75	no
68	66	67	CLS DN 600	98.30	no
69	67	62	CLS DN 600	42.41	no
7	4	7	CLS DN 500	135.86	no
70	68	65	CLS DN 500	33.04	no
71	69	66	CLS DN 500	65.37	no
72	70	67	CLS DN 400	50.94	no
73	71	67	CLS DN 400	79.65	no
74	63	72	TERRA ST 6.00 x 3.00 x 1.15	163.38	no
75	72	87	CLS DN 600	23.38	no
77	75	44	CLS DN 1000	65.94	no
78	76	54	PVC DN 200	67.82	no
79	77	58	CLS DN 400	49.86	no
8	7	8	CLS DN 500	117.89	no
80	78	60	CLS DN 400	52.32	no
81	79	50	CLS DN 500	44.56	no
82	35	80	CLS SCAT 2.50 x 1.25	10.00	no
83	80	89	CLS SCAT 2.50 x 1.25	50.00	no
84	81	91	CLS SCAT 2.50 x 1.25	65.00	no
85	82	92	CLS SCAT 2.50 x 1.25	50.00	no
86	83	94	CLS SCAT 2.50 x 1.25	45.02	no
87	84	96	CLS SCAT 2.50 x 1.25	55.00	no
88	85	63	CLS SCAT 2.50 x 1.25	45.50	no
89	86	75	CLS DN 800	56.86	no
9	8	9	CLS DN 600	121.22	no
90	87	73	TERRA ST 4.00 x 1.00 x 1.15	296.56	no
92	89	90	CLS SCAT 2.50 x 1.25	50.00	no
93	90	81	CLS SCAT 2.50 x 1.25	49.36	no
94	91	82	CLS SCAT 3.00 x 1.00	30.00	no
95	92	93	CLS SCAT 2.50 x 1.25	50.00	no
96	93	83	CLS SCAT 2.50 x 1.25	47.76	no
97	94	95	CLS SCAT 2.50 x 1.25	45.98	no
98	95	84	CLS SCAT 2.50 x 1.25	45.00	no
99	96	97	CLS SCAT 2.50 x 1.25	55.00	no

SOMMARIO STATISTICHE DEI NODI											
Nodo	Quota terreno (m slm)	Quota cielo (m slm)	Quota media (m slm)	% variaz. media	Massima quota		Sovracc. alla max. quota (m)	Dist. tra terreno e livello max (m)	Durata del sovracc. (min)	Durata della esondaz. (min)	*
					(m slm)	al tempo					
1	28.50	27.54	27.52	0.0493	28.50	1:05	0.96	0.00	211.27	182.70	*
10	28.00	27.61	27.16	0.0080	28.00	1:11	0.39	0.00	184.33	151.63	*
100	25.06	24.95	23.55	0.0000	23.55	0:00	0.00	1.51	0.00	0.00	
101	25.12	24.91	23.51	0.0000	23.51	0:00	0.00	1.61	0.00	0.00	
102	25.40	25.02	21.70	0.0000	21.70	0:00	0.00	3.70	0.00	0.00	
103	25.05	24.91	21.68	0.0000	21.68	0:00	0.00	3.37	0.00	0.00	
104	25.07	25.06	23.66	0.0000	23.66	0:00	0.00	1.41	0.00	0.00	
11	27.80	27.18	26.77	0.0125	27.80	1:10	0.62	0.00	203.73	77.97	*
12	27.51	26.90	26.50	0.0125	27.51	1:09	0.61	0.00	212.03	180.60	*
13	27.48	26.66	26.28	0.0181	27.48	1:09	0.82	0.00	214.53	41.60	*
14	27.44	26.60	26.00	0.0191	27.43	1:12	0.83	0.01	183.47	0.00	

15	27.53	26.60	26.23	0.0188	27.53	1:11	0.93	0.00	183.20	11.33	*
16	27.42	26.59	25.95	0.0203	27.42	1:11	0.83	0.00	181.63	0.10	*
17	27.60	26.80	26.57	0.0277	27.60	1:11	0.80	0.00	125.67	18.53	*
18	27.68	26.77	26.47	0.0299	27.68	1:11	0.91	0.00	135.70	0.03	*
19	27.20	26.40	25.81	0.0196	27.20	1:11	0.80	0.00	185.57	0.33	*
2	28.56	27.49	27.48	0.0529	28.56	1:07	1.07	0.00	212.40	99.17	*
20	26.98	26.83	26.52	0.0067	26.98	1:10	0.15	0.00	169.67	120.23	*
21	26.82	26.69	26.38	0.0065	26.82	1:11	0.13	0.00	177.40	149.77	*
22	27.16	26.36	25.76	0.0175	27.16	1:11	0.80	0.00	183.03	0.03	*
23	27.12	26.38	25.73	0.0127	27.12	1:12	0.74	0.00	170.57	0.03	*
24	27.12	26.34	25.72	0.0124	27.12	1:12	0.78	0.00	177.27	0.07	*
25	27.16	26.46	26.15	0.0134	27.16	1:12	0.70	0.00	172.90	12.57	*
26	26.82	26.10	25.84	0.0195	26.82	1:11	0.72	0.00	215.23	35.33	*
27	27.20	26.42	26.01	0.0194	27.20	1:12	0.78	0.00	148.57	0.03	*
28	27.08	26.22	25.60	0.0156	27.08	1:12	0.86	0.00	174.77	0.03	*
29	26.80	26.16	25.55	0.0094	26.80	1:12	0.64	0.00	159.43	0.17	*
3	28.25	27.74	27.28	0.0099	28.25	1:12	0.51	0.00	179.90	0.40	*
30	26.80	26.42	26.23	0.0110	26.80	1:09	0.38	0.00	199.27	179.57	*
31	27.07	26.33	26.15	0.0346	27.07	1:10	0.74	0.00	195.93	17.73	*
32	26.94	26.34	26.18	0.0170	26.94	1:09	0.60	0.00	152.77	65.00	*
33	26.62	26.03	25.79	0.0156	26.62	1:09	0.59	0.00	203.63	19.07	*
34	26.60	25.97	25.83	0.0214	26.60	1:09	0.63	0.00	217.37	48.10	*
35	26.60	25.99	24.81	0.0024	25.36	1:21	0.00	1.24	0.00	0.00	*
36	26.80	26.24	26.05	0.0211	26.80	1:10	0.56	0.00	46.27	27.23	*
37	26.51	26.09	25.70	0.0146	26.51	1:10	0.42	0.00	44.50	11.13	*
38	26.66	26.19	25.99	0.0145	26.66	1:10	0.47	0.00	49.23	31.07	*
39	26.44	25.87	25.50	0.0200	26.44	1:09	0.57	0.00	63.83	19.20	*
4	28.23	27.70	27.34	0.0107	28.23	1:10	0.53	0.00	183.43	41.33	*
40	26.53	26.09	25.88	0.0137	26.53	1:09	0.44	0.00	49.87	29.43	*
41	26.39	25.72	25.41	0.0194	26.31	1:15	0.59	0.08	89.70	0.00	*
42	26.30	25.76	25.57	0.0279	26.30	1:08	0.54	0.00	84.87	34.07	*
43	26.60	26.09	25.73	0.0111	26.60	1:10	0.51	0.00	44.53	0.37	*
44	26.40	25.60	24.69	0.0075	25.73	1:19	0.14	0.67	1.03	0.00	*
45	26.47	25.91	25.71	0.0273	26.47	1:10	0.56	0.00	48.90	26.80	*
46	26.66	25.79	25.45	0.0302	26.66	1:09	0.87	0.00	50.93	9.17	*
47	26.83	26.10	25.72	0.0167	26.83	1:10	0.73	0.00	29.83	0.13	*
48	26.13	25.56	25.24	0.0292	26.13	1:09	0.57	0.00	71.50	16.43	*
49	26.13	25.62	25.29	0.0264	26.13	1:09	0.51	0.00	69.40	15.43	*
5	28.08	27.65	27.37	0.0137	28.08	1:10	0.43	0.00	186.20	156.33	*
50	25.90	25.52	24.62	0.0071	25.66	1:19	0.14	0.24	6.67	0.00	*
51	26.20	25.75	25.38	0.0143	26.20	1:11	0.45	0.00	20.27	0.17	*
52	26.12	25.70	25.34	0.0116	25.92	1:11	0.21	0.20	23.20	0.00	*
53	26.60	25.92	25.57	0.2901	26.60	1:11	0.68	0.00	144.07	68.53	*
54	26.50	25.87	25.51	0.0630	26.50	1:12	0.63	0.00	120.70	55.37	*
55	25.94	25.44	24.57	0.0049	25.45	1:21	0.01	0.49	3.03	0.00	*
56	26.70	25.74	25.36	0.0217	26.70	1:10	0.96	0.00	16.27	0.13	*
57	26.63	25.87	25.59	0.0289	26.63	1:10	0.76	0.00	16.40	8.20	*
58	26.63	25.30	24.83	0.0190	26.03	1:20	0.73	0.60	36.17	0.00	*
59	26.66	25.70	25.43	0.0320	26.66	1:10	0.96	0.00	25.00	11.70	*
6	28.36	27.70	27.32	0.0122	28.36	1:12	0.66	0.00	180.97	0.70	*
60	26.64	25.51	25.03	0.0261	26.45	1:10	0.94	0.19	23.97	0.00	*
61	25.97	25.23	24.12	0.0048	25.19	1:24	0.00	0.78	0.00	0.00	*
62	25.91	25.16	24.07	0.0049	25.17	1:25	0.01	0.74	0.50	0.00	*
63	25.50	25.24	23.88	0.0051	24.98	1:25	0.00	0.52	0.00	0.00	*
64	26.20	25.21	24.76	0.0368	26.20	1:10	0.99	0.00	27.67	4.27	*
65	26.18	25.11	24.67	0.0363	26.18	1:11	1.07	0.00	33.90	5.07	*
66	26.18	25.18	24.64	0.0251	26.18	1:11	1.00	0.00	26.93	0.03	*
67	26.18	25.17	24.56	0.0140	25.61	1:15	0.44	0.57	22.80	0.00	*
68	26.20	25.21	24.75	0.0360	26.20	1:11	0.99	0.00	28.00	9.40	*
69	26.19	25.25	24.79	0.0213	26.19	1:11	0.94	0.00	24.00	0.37	*

7	28.20	27.58	27.24	0.0132	28.20	1:10	0.62	0.00	189.07	53.23	*
70	26.19	25.17	24.81	0.0351	26.19	1:11	1.02	0.00	25.20	0.03	*
71	26.15	25.31	24.95	0.0350	26.15	1:11	0.84	0.00	22.60	0.23	*
72	25.11	25.10	23.71	0.0318	24.96	1:26	0.00	0.15	0.00	0.00	
73	24.35	24.33	23.51	0.0024	23.86	1:36	0.00	0.49	0.00	0.00	
75	26.55	25.67	24.74	0.0051	25.61	1:20	0.00	0.94	0.00	0.00	
76	26.64	26.03	25.90	0.1867	26.64	1:08	0.61	0.00	107.50	70.13	*
77	26.63	25.52	25.13	0.0234	26.27	1:10	0.75	0.36	21.97	0.00	
78	26.70	25.66	25.30	0.0230	26.40	1:15	0.74	0.30	20.10	0.00	
79	26.16	25.78	25.30	0.0041	25.67	1:21	0.00	0.49	0.00	0.00	
8	28.13	27.55	27.12	0.0102	28.13	1:11	0.58	0.00	188.13	15.00	*
80	26.80	25.98	24.81	0.0024	25.35	1:21	0.00	1.45	0.00	0.00	
81	26.60	25.83	24.66	0.0028	25.30	1:21	0.00	1.30	0.00	0.00	
82	26.10	25.74	24.57	0.0029	25.25	1:21	0.00	0.85	0.00	0.00	
83	26.10	25.60	24.43	0.0033	25.16	1:21	0.00	0.94	0.00	0.00	
84	26.10	25.46	24.30	0.0039	25.09	1:24	0.00	1.01	0.00	0.00	
85	26.10	25.29	24.13	0.0047	25.00	1:25	0.00	1.10	0.00	0.00	
86	26.61	25.92	25.14	0.0034	25.62	1:21	0.00	0.99	0.00	0.00	
87	25.05	24.63	23.63	0.0035	24.24	1:32	0.00	0.81	0.00	0.00	
88	25.01	25.01	23.82	0.0351	25.01	1:23	0.00	0.00	0.60	0.60	*
89	26.73	25.93	24.76	0.0025	25.34	1:21	0.00	1.40	0.00	0.00	
9	28.12	27.51	27.08	0.0141	28.12	1:11	0.61	0.00	189.50	0.37	*
90	26.67	25.88	24.71	0.0026	25.32	1:21	0.00	1.35	0.00	0.00	
91	26.26	25.77	24.60	0.0029	25.26	1:21	0.00	1.00	0.00	0.00	
92	26.10	25.69	24.52	0.0031	25.22	1:21	0.00	0.88	0.00	0.00	
93	26.10	25.64	24.48	0.0032	25.19	1:21	0.00	0.91	0.00	0.00	
94	26.10	25.55	24.39	0.0035	25.14	1:21	0.00	0.96	0.00	0.00	
95	26.10	25.51	24.34	0.0036	25.11	1:25	0.00	0.99	0.00	0.00	
96	26.10	25.41	24.25	0.0040	25.06	1:26	0.00	1.04	0.00	0.00	
97	26.10	25.35	24.19	0.0041	25.03	1:26	0.00	1.07	0.00	0.00	
98	24.60	24.30	23.75	0.0019	23.89	5:09	0.00	0.71	0.00	0.00	
99	24.30	24.26	23.25	0.0014	23.47	1:36	0.00	0.83	0.00	0.00	

Nodo con la maggiore variazione media percentuale: '53' pari a 0.290 % (**)

(*) Attenzione: c'è un ingresso di portata alla rete in un nodo in cui è possibile un'esondazione. Se l'ingresso è contemporaneo all'esondazione, l'acqua non entrerà in rete e verrà considerata solamente nel controllo di continuità.

(**) La variazione media nei nodi è così definita:
 $100.0 \cdot (Y(n+1) - Y(n)) / Y_{full}$

SOMMARIO STATISTICHE DEGLI ELEMENTI LINEARI

Elemento	Portata di moto uniforme (m3/s)	Velocità di moto uniforme (m/s)	Altezza condotto (m)	Portata max di calcolo		Velocità max di calcolo		Rapporto tra Qmax e Q moto uniforme	Raggio idraulico massimo (m)	Sezione trasvers. massima (m2)	Area normaliz. massima	Durata della Q normale (min)	Pendenza ramo (m/m)
				(m3/s)	al tempo	(m/s)	al tempo						
1	0.0079	0.28	0.190	0.023	1:06	0.80	1:06	2.88	0.0576	0.0284	1.00	1132.8	0.00065
10	0.1690	0.60	0.600	0.211	1:20	0.87	1:11	1.25	0.1808	0.2827	1.00	1154.7	0.00088
100	3.9377	1.26	1.250	3.494	1:22	1.74	1:22	0.89	0.5371	2.3544	0.75	1103.6	0.00100
101	3.0517	1.02	1.000	3.283	1:52	6.89	1:12	1.08	0.4103	1.9522	0.65	10.7	0.00075
102	0.0331	0.47	0.300	0.154	6:58	2.20	7:04	4.65	0.0831	0.0707	1.00	0.4	0.00100
103	2.1545	0.75	1.150	0.904	1:36	1.00	1:36	0.42	0.3209	0.9082	0.32	0.0	0.00100
104	3.8912	1.11	1.400	0.000	0:00	0.00	0:00	0.00	0.0000	0.0000	0.00	0.0	0.00184
105	5.8868	1.68	1.400	0.000	0:00	0.00	0:00	0.00	0.0000	0.0000	0.00	0.0	0.00422
106	2.8664	0.82	1.400	0.000	0:00	0.00	0:00	0.00	0.0000	0.0000	0.00	0.0	0.00100
107	7.4767	2.14	1.400	0.000	0:00	0.00	0:00	0.00	0.0000	0.0000	0.00	0.0	0.00680
108	29.8590	2.99	1.000	12.263	1:24	1.95	1:49	0.41	0.6850	8.2271	0.82	12.0	0.00500
11	0.1690	0.60	0.600	-0.320	1:11	-1.13	1:11	-1.89	0.1808	0.2827	1.00	1197.7	0.00088
12	0.2765	0.98	0.600	0.267	1:20	0.94	1:20	0.96	0.1737	0.2827	1.00	1223.9	0.00235

13	0.2765	0.98	0.600	0.283	1:16	1.00	1:16	1.02	0.1754	0.2827	1.00	1215.4	0.00235
14	0.2399	0.85	0.600	0.264	4:10	0.93	4:10	1.10	0.1806	0.2827	1.00	1207.4	0.00177
15	0.2399	0.85	0.600	0.502	1:10	1.81	1:10	2.09	0.1818	0.2827	1.00	1149.6	0.00177
16	0.1358	0.69	0.500	0.116	1:23	0.59	1:23	0.85	0.1386	0.1964	1.00	121.3	0.00150
17	0.3892	0.77	0.800	0.451	1:10	1.09	1:10	1.16	0.2433	0.5027	1.00	1062.2	0.00101
18	0.0480	0.68	0.300	0.113	1:11	1.60	1:11	2.36	0.0889	0.0707	1.00	1224.0	0.00210
19	0.0940	0.83	0.380	0.147	1:11	1.36	1:11	1.56	0.1125	0.1134	1.00	31.6	0.00228
2	0.0087	0.31	0.190	0.031	1:07	1.09	1:07	3.56	0.0578	0.0284	1.00	496.4	0.00078
20	0.3880	0.77	0.800	0.667	1:11	1.34	1:11	1.72	0.2430	0.5027	1.00	1133.3	0.00100
21	0.0531	0.42	0.400	0.091	1:11	0.77	1:10	1.71	0.1202	0.1257	1.00	1040.7	0.00075
22	0.0930	0.74	0.400	0.109	1:11	0.91	1:11	1.17	0.1215	0.1257	1.00	52.1	0.00231
23	0.3424	0.68	0.800	0.845	1:11	1.70	1:11	2.47	0.2434	0.5027	1.00	955.8	0.00078
24	0.2286	0.45	0.800	0.858	1:12	1.76	1:12	3.75	0.2430	0.5027	1.00	353.6	0.00035
25	0.2285	0.45	0.800	0.860	1:12	1.72	1:12	3.76	0.2434	0.5027	1.00	14.6	0.00035
26	0.1016	0.81	0.400	-0.082	1:12	-0.65	1:12	-0.81	0.1108	0.1257	1.00	181.8	0.00276
27	0.0590	0.47	0.400	0.077	1:12	0.61	1:12	1.30	0.1115	0.1257	1.00	1104.6	0.00093
28	0.1358	0.69	0.500	-0.181	1:12	-0.94	1:12	-1.33	0.1516	0.1964	1.00	9.7	0.00150
29	0.4670	0.93	0.800	0.861	1:12	1.71	1:12	1.84	0.2432	0.5027	1.00	1117.0	0.00145
3	0.0113	0.40	0.190	0.038	1:07	1.34	1:07	3.37	0.0572	0.0284	1.00	1158.4	0.00133
30	0.4670	0.93	0.800	0.985	1:12	1.98	1:12	2.11	0.2434	0.5027	1.00	1028.5	0.00145
31	0.0222	0.31	0.300	0.057	1:10	0.83	1:09	2.59	0.0912	0.0707	1.00	962.3	0.00045
32	0.0467	0.66	0.300	0.090	1:11	1.28	1:11	1.92	0.0873	0.0707	1.00	33.3	0.00199
33	0.0283	0.63	0.240	0.048	1:09	1.06	1:09	1.69	0.0700	0.0452	1.00	49.6	0.00241
34	0.0601	0.85	0.300	0.098	1:09	1.38	1:09	1.63	0.0870	0.0707	1.00	370.1	0.00330
35	0.0221	0.49	0.240	0.035	1:09	0.78	1:09	1.59	0.0730	0.0452	1.00	1160.0	0.00147
36	0.4670	0.93	0.800	0.933	1:12	1.96	1:12	2.00	0.2337	0.4762	0.95	0.0	0.00145
37	0.0205	0.45	0.240	0.037	1:10	0.88	1:10	1.80	0.0727	0.0452	1.00	0.0	0.00126
38	0.0300	0.66	0.240	0.034	1:10	1.00	1:09	1.13	0.0718	0.0452	1.00	30.0	0.00270
39	0.0459	1.01	0.240	0.046	1:10	1.01	1:10	0.99	0.0665	0.0452	1.00	1349.2	0.00631
4	0.0425	0.34	0.400	-0.074	1:16	-0.59	1:16	-1.73	0.1214	0.1257	1.00	1138.9	0.00048
40	0.0338	0.75	0.240	0.048	1:09	1.07	1:09	1.43	0.0665	0.0452	1.00	1228.7	0.00342
41	0.0540	0.43	0.400	-0.109	1:10	-0.88	1:10	-2.02	0.1213	0.1257	1.00	1182.7	0.00078
42	0.1392	1.11	0.400	0.077	1:15	0.66	1:09	0.55	0.1108	0.1257	1.00	1330.6	0.00518
43	0.0855	0.68	0.400	0.101	1:29	0.80	1:29	1.18	0.1181	0.1257	1.00	1210.2	0.00195
44	0.0423	0.34	0.400	0.172	1:15	1.44	1:15	4.07	0.1131	0.1196	0.95	0.0	0.00048
45	0.0398	0.56	0.300	-0.109	1:21	-1.58	1:21	-2.74	0.0871	0.0690	0.98	0.0	0.00145
46	0.0279	0.62	0.240	0.028	1:37	0.61	1:37	0.99	0.0665	0.0452	1.00	1361.5	0.00233
47	0.2032	1.62	0.400	0.052	1:10	0.63	1:08	0.26	0.1108	0.1257	1.00	857.5	0.01104
48	0.0953	0.76	0.400	0.145	1:14	1.15	1:14	1.52	0.1193	0.1257	1.00	1326.5	0.00243
49	0.0569	0.45	0.400	0.197	1:18	1.56	1:18	3.45	0.1163	0.1257	1.00	0.0	0.00087
5	0.0430	0.34	0.400	0.153	1:11	1.23	1:11	3.57	0.1209	0.1257	1.00	1132.5	0.00049
50	0.0348	0.49	0.300	0.027	1:08	0.44	1:08	0.79	0.0900	0.0707	1.00	1162.3	0.00150
51	0.7387	0.94	1.000	0.260	1:15	0.66	1:10	0.35	0.3035	0.7854	1.00	1026.5	0.00110
52	0.0459	0.37	0.400	0.066	1:15	0.53	1:15	1.44	0.1212	0.1257	1.00	1181.5	0.00056
53	0.0459	0.37	0.400	0.149	1:15	1.29	1:11	3.23	0.1109	0.1252	1.00	28.3	0.00056
54	0.0148	0.21	0.300	0.085	1:10	1.20	1:10	5.72	0.0913	0.0707	1.00	0.0	0.00027
55	0.0470	0.24	0.500	0.195	1:12	1.00	1:12	4.15	0.1520	0.1964	1.00	904.9	0.00018
56	0.1428	0.73	0.500	0.233	1:12	1.28	1:12	1.63	0.1451	0.1964	1.00	0.0	0.00166
57	0.3716	0.47	1.000	0.612	1:25	0.78	1:25	1.65	0.3040	0.7854	1.00	963.1	0.00028
58	0.1588	1.26	0.400	0.080	1:15	0.68	1:09	0.50	0.1108	0.1257	1.00	639.2	0.00674
59	0.1387	0.71	0.500	0.453	1:14	2.34	1:14	3.27	0.1519	0.1964	1.00	12.0	0.00157
6	0.1003	0.51	0.500	-0.083	1:12	0.48	1:08	-0.82	0.1509	0.1964	1.00	1136.4	0.00082
60	0.0808	1.14	0.300	0.101	1:12	1.44	1:12	1.25	0.0909	0.0707	1.00	13.7	0.00811
61	0.2243	1.14	0.500	0.255	1:15	1.30	1:15	1.14	0.1413	0.1964	1.00	1375.0	0.00409
62	0.0484	0.68	0.300	0.096	1:10	1.35	1:10	1.97	0.0907	0.0707	1.00	1379.6	0.00290
63	0.7481	0.95	1.000	1.056	1:19	1.62	1:19	1.41	0.2907	0.6530	0.83	0.0	0.00113
64	1.7584	1.55	1.200	1.056	1:19	1.04	1:19	0.60	0.3648	1.1260	1.00	1148.1	0.00236
65	1.6190	1.43	1.200	1.691	1:20	1.77	1:13	1.04	0.3649	1.1310	1.00	933.5	0.00200
66	0.1568	0.80	0.500	0.073	1:11	0.37	1:11	0.47	0.1485	0.1964	1.00	1231.6	0.00200
67	0.0779	0.40	0.500	0.257	1:11	1.31	1:11	3.29	0.1521	0.1964	1.00	799.5	0.00049

68	0.1725	0.61	0.600	0.364	1:20	1.29	1:20	2.11	0.1823	0.2827	1.00	1228.0	0.00092
69	0.1238	0.44	0.600	0.669	1:15	2.41	1:15	5.41	0.1784	0.2827	1.00	0.0	0.00047
7	0.1042	0.53	0.500	0.112	1:10	0.59	1:10	1.07	0.1516	0.1964	1.00	1217.8	0.00088
70	0.1929	0.98	0.500	0.136	1:11	0.78	1:09	0.70	0.1488	0.1964	1.00	1227.6	0.00303
71	0.1788	0.91	0.500	0.108	1:15	0.55	1:15	0.60	0.1425	0.1964	1.00	1292.1	0.00260
72	0.0383	0.30	0.400	0.126	1:15	1.00	1:15	3.30	0.1216	0.1257	1.00	0.0	0.00039
73	0.0811	0.65	0.400	0.164	1:11	1.31	1:11	2.02	0.1213	0.1257	1.00	0.0	0.00176
74	5.4116	1.05	1.150	5.483	1:21	1.20	1:18	1.01	0.7633	5.1693	1.00	1055.0	0.00141
75	0.1803	0.64	0.600	0.995	1:23	3.52	1:23	5.52	0.1810	0.2827	1.00	0.0	0.00100
77	0.7387	0.94	1.000	-0.148	1:14	-0.34	1:14	-0.20	0.3040	0.7759	0.99	1114.6	0.00110
78	0.0196	0.69	0.190	0.038	1:11	1.35	1:11	1.96	0.0566	0.0284	1.00	103.9	0.00398
79	0.1225	0.97	0.400	0.134	1:15	1.07	1:15	1.09	0.1175	0.1257	1.00	80.0	0.00401
8	0.1164	0.59	0.500	0.278	1:10	1.42	1:10	2.38	0.1491	0.1964	1.00	1163.4	0.00110
80	0.1035	0.82	0.400	0.129	1:10	1.13	1:10	1.25	0.1181	0.1257	1.00	8.2	0.00287
81	0.2678	1.36	0.500	0.197	1:15	1.56	1:15	0.74	0.1449	0.1806	0.92	57.5	0.00584
82	3.9374	1.26	1.250	1.167	1:12	1.11	1:12	0.30	0.4119	1.5359	0.49	946.1	0.00100
83	3.9378	1.26	1.250	1.313	1:20	1.09	1:13	0.33	0.4209	1.5871	0.51	1115.9	0.00100
84	3.9377	1.26	1.250	2.065	1:18	1.38	1:14	0.52	0.4586	1.8109	0.58	30.6	0.00100
85	3.8647	1.24	1.250	2.226	1:20	1.37	1:14	0.58	0.4752	1.9167	0.61	1070.5	0.00096
86	3.9377	1.26	1.250	2.469	1:21	1.21	1:15	0.63	0.4961	2.0565	0.66	1115.3	0.00100
87	3.9378	1.26	1.250	3.162	1:20	1.53	1:17	0.80	0.5183	2.2142	0.71	1078.1	0.00100
88	3.9377	1.26	1.250	3.386	1:21	2.04	1:21	0.86	0.5452	2.4176	0.77	0.3	0.00100
89	0.8178	1.63	0.800	-0.112	1:19	0.77	1:11	-0.14	0.2312	0.4032	0.80	133.8	0.00444
9	0.1036	0.37	0.600	0.147	1:11	0.52	1:11	1.42	0.1825	0.2827	1.00	961.7	0.00033
90	2.1674	0.76	1.150	0.917	1:32	0.71	1:23	0.42	0.4130	1.3864	0.48	1224.1	0.00101
92	3.9377	1.26	1.250	1.489	1:18	1.11	1:13	0.38	0.4350	1.6682	0.53	1112.0	0.00100
93	3.9378	1.26	1.250	1.666	1:19	1.15	1:13	0.42	0.4472	1.7411	0.56	1141.2	0.00100
94	3.5239	1.17	1.000	2.255	1:19	1.22	1:14	0.64	0.4989	2.2424	0.75	1053.3	0.00100
95	3.8647	1.24	1.250	2.214	1:21	1.24	1:14	0.57	0.4823	1.9633	0.63	1062.9	0.00096
96	3.8647	1.24	1.250	2.223	1:21	1.13	1:16	0.58	0.4893	2.0103	0.64	1048.8	0.00096
97	3.9377	1.26	1.250	2.723	1:21	1.33	1:15	0.69	0.5011	2.0916	0.67	1120.4	0.00100
98	3.9378	1.26	1.250	2.982	1:21	38.13	0:05	0.76	0.5094	2.1494	0.69	1069.3	0.00100
99	3.9378	1.26	1.250	3.264	1:20	1.59	1:20	0.83	0.5274	2.2808	0.73	1103.4	0.00100

Ramo con la maggiore variazione media percentuale: '75' pari a 0.187 % (*)

(*) La variazione media nei rami è così definita:

$$100.0 (Q(n+1) - Q(n)) / Qfull$$

P2) Simulazione STATO DI PROGETTO - Ietogramma rettangolare con Tr = 50 anni e durata 240 minuti; c.p.c. PTCP

Marte DEFLUX 2007 - DESIGNER EDITION	
Codice	Modulo SWMM 4.40 : Runoff + Extran
	Copyright (C) 2000-2009 DEK s.r.l.
Nome	Prel-SP_rett240
Descrizione	<nessuna descrizione>
Data di creazione	15/04/2011 - 20.02.12
Sottorete	Intera rete
Database	2011-03_Soliera_ZonaW-SP

DATI GENERALI	
Numero dei nodi	103
Numero dei rami	106
Numero delle pompe	0
Numero degli scaricatori	0
Sommario delle piogge	
Pioggia totale (mm)	70.0000

CONTROLLO DI CONTINUITA' PER IL DEFLUSSO SUPERFICIALE		
	Volume (m3)	Livello (mm) sul bacino
Precipitazione totale (Pioggia + Neve)	68412.476563	70.000
Infiltrazione totale	20561.125000	21.038
Evaporazione totale	2521.212646	2.580
Deflusso superficiale	39739.394531	40.662
Volume trattenuto negli accumuli superficiali	5588.517090	5.718
Infiltrazione per l'area permeabile	20561.125000	45.236
Infiltrazione + Evaporazione +		
Deflusso superficiale +		
Accumuli superficiali	68410.250000	69.998
Precipitazione totale + Accumulo iniziale	68412.476563	70.000

Errore 0.003 % (*)
(*) L'errore nella continuità è così calcolato: (Precipitazione - Infiltrazione - Evaporazione - - Deflusso superficiale - Accumuli superficiali) / / Precipitazione

CONTROLLO DI CONTINUITA' NELLA RETE	
	Volume (m3)
Volume iniziale nella rete	0.091062
Ingresso nella rete	39739.122757
Uscita dalla rete	27926.942529
Volume finale nella rete	11443.240234

Errore continuità 0.929 %

SOMMARIO DELLE STATISTICHE DEI SOTTOBACINI						
					Area permeabile	Area impermeabile (*) Area totale sottobacino

Sotto-bacino afferente al ramo	Nodo di Ingresso	Area (ha)	% imper.	Pioggia totale simulata (mm)	Altezza totale deflusso (mm)	Perdite totali (mm)	Deflusso massimo (m3/s)	Altezza deflusso (mm)	Deflusso massimo (m3/s)	Altezza deflusso (mm)	Deflusso massimo (m3/s)	Deflusso massimo unitario (mm/h)
1	1	1.28	75.00	70.000	25.526	44.474	0.01	57.589	0.05	49.574	0.06	16.916
10	3	1.01	75.00	70.000	23.568	46.432	0.01	57.280	0.04	48.852	0.05	16.591
100	97	1.28	60.00	70.000	24.851	45.149	0.02	57.743	0.04	44.586	0.06	16.418
11	10	0.72	75.00	70.000	24.410	45.590	0.01	57.417	0.03	49.166	0.03	16.759
12	9	2.91	75.00	70.000	23.705	46.295	0.03	57.302	0.11	48.902	0.13	16.620
13	11	2.29	75.00	70.000	24.321	45.679	0.02	57.403	0.08	49.133	0.11	16.743
14	12	4.71	40.00	70.000	20.380	49.620	0.08	57.624	0.09	35.278	0.17	13.380
15	13	6.34	40.00	70.000	19.838	50.162	0.11	57.577	0.12	34.934	0.23	13.040
16	15	1.17	60.00	70.000	22.102	47.898	0.02	57.443	0.03	43.306	0.05	15.480
18	17	0.80	60.00	70.000	25.296	44.704	0.01	57.790	0.02	44.793	0.04	16.514
19	18	0.31	60.00	70.000	24.095	45.905	0.00	57.663	0.01	44.236	0.01	16.212
2	2	1.88	75.00	70.000	24.057	45.943	0.02	57.358	0.07	49.033	0.09	16.691
20	16	1.84	60.00	70.000	21.666	48.334	0.02	57.393	0.05	43.102	0.08	15.300
21	20	2.76	60.00	70.000	20.716	49.284	0.03	57.275	0.08	42.651	0.11	14.897
22	21	1.32	60.00	70.000	20.715	49.285	0.02	57.274	0.04	42.651	0.05	14.897
23	19	0.61	60.00	70.000	25.348	44.652	0.01	57.792	0.02	44.815	0.03	16.524
24	22	0.24	60.00	70.000	25.329	44.671	0.00	57.793	0.01	44.808	0.01	16.520
26	25	0.74	60.00	70.000	21.926	48.074	0.01	57.423	0.02	43.224	0.03	15.408
27	26	1.09	60.00	70.000	21.069	48.931	0.01	57.317	0.03	42.818	0.05	15.047
28	27	0.12	60.00	70.000	26.808	43.192	0.00	57.942	0.00	45.488	0.01	16.689
29	24	0.41	60.00	70.000	23.844	46.156	0.01	57.638	0.01	44.121	0.02	16.133
3	2	0.17	75.00	70.000	25.575	44.425	0.00	57.598	0.01	49.592	0.01	16.921
30	28	0.12	60.00	70.000	26.067	43.933	0.00	57.871	0.00	45.149	0.01	16.632
31	30	2.67	30.00	70.000	17.480	52.520	0.04	57.573	0.04	29.508	0.08	10.679
32	31	1.22	60.00	70.000	20.838	49.162	0.01	57.290	0.04	42.709	0.05	14.949
33	32	1.01	60.00	70.000	22.306	47.694	0.01	57.466	0.03	43.402	0.04	15.563
34	33	0.39	60.00	70.000	23.902	46.098	0.01	57.644	0.01	44.147	0.02	16.151
35	34	0.30	60.00	70.000	26.129	43.871	0.01	57.875	0.01	45.177	0.01	16.639
36	29	1.15	60.00	70.000	21.736	48.264	0.02	57.399	0.03	43.134	0.05	15.329
37	36	0.52	60.00	70.000	22.631	47.369	0.01	57.505	0.02	43.555	0.02	15.693
38	38	0.52	60.00	70.000	22.638	47.362	0.01	57.506	0.02	43.559	0.02	15.696
39	40	0.57	60.00	70.000	23.885	46.115	0.01	57.641	0.02	44.139	0.03	16.146
4	5	0.80	75.00	70.000	24.717	45.283	0.01	57.465	0.03	49.278	0.04	16.809
40	42	0.46	60.00	70.000	24.999	45.001	0.01	57.758	0.01	44.654	0.02	16.452
41	43	0.15	60.00	70.000	26.057	43.943	0.00	57.870	0.00	45.145	0.01	16.631
42	37	0.24	60.00	70.000	25.721	44.279	0.00	57.834	0.01	44.989	0.01	16.587
43	39	0.22	60.00	70.000	25.105	44.895	0.00	57.768	0.01	44.703	0.01	16.475
44	41	0.37	60.00	70.000	23.896	46.104	0.01	57.643	0.01	44.144	0.02	16.149
46	45	0.44	60.00	70.000	22.577	47.423	0.01	57.497	0.01	43.529	0.02	15.672
47	47	0.26	60.00	70.000	26.701	43.299	0.00	57.931	0.01	45.439	0.01	16.684
48	46	1.11	60.00	70.000	23.471	46.529	0.02	57.598	0.03	43.947	0.05	16.006
49	48	0.48	60.00	70.000	23.563	46.437	0.01	57.608	0.01	43.990	0.02	16.038
5	4	0.76	75.00	70.000	24.216	45.784	0.01	57.386	0.03	49.093	0.03	16.724
50	49	0.42	60.00	70.000	25.263	44.737	0.01	57.787	0.01	44.777	0.02	16.508
51	44	0.64	60.00	70.000	23.367	46.633	0.01	57.587	0.02	43.899	0.03	15.970
52	51	0.47	60.00	70.000	23.919	46.081	0.01	57.643	0.01	44.153	0.02	16.157
53	52	0.13	60.00	70.000	25.919	44.081	0.00	57.855	0.00	45.080	0.01	16.614
54	49	0.29	60.00	70.000	24.828	45.172	0.00	57.738	0.01	44.574	0.01	16.413
55	53	4.79	30.00	70.000	15.667	54.333	0.06	57.430	0.07	28.196	0.13	9.610
56	54	3.14	60.00	70.000	18.646	51.354	0.03	56.997	0.09	41.656	0.12	14.024
57	50	0.44	60.00	70.000	20.881	49.119	0.01	57.295	0.01	42.729	0.02	14.967
58	56	0.47	60.00	70.000	25.325	44.675	0.01	57.789	0.01	44.803	0.02	16.519
59	58	0.40	60.00	70.000	25.702	44.298	0.01	57.832	0.01	44.980	0.02	16.584
6	6	0.30	60.00	70.000	24.327	45.673	0.00	57.688	0.01	44.344	0.01	16.281
60	57	0.63	60.00	70.000	25.788	44.212	0.01	57.839	0.02	45.019	0.03	16.597

61	60	0.36	60.00	70.000	25.233	44.767	0.01	57.779	0.01	44.761	0.02	16.502
62	59	0.70	60.00	70.000	25.517	44.483	0.01	57.815	0.02	44.896	0.03	16.555
63	55	0.88	60.00	70.000	20.717	49.283	0.01	57.275	0.03	42.652	0.04	14.898
65	62	0.21	60.00	70.000	22.829	47.171	0.00	57.527	0.01	43.648	0.01	15.770
66	64	0.44	60.00	70.000	25.339	44.661	0.01	57.791	0.01	44.810	0.02	16.522
67	65	0.36	60.00	70.000	24.893	45.107	0.01	57.747	0.01	44.606	0.02	16.428
68	66	0.45	60.00	70.000	23.340	46.660	0.01	57.584	0.01	43.886	0.02	15.960
69	67	0.13	60.00	70.000	25.831	44.169	0.00	57.845	0.00	45.039	0.01	16.602
7	4	2.32	75.00	70.000	23.850	46.150	0.02	57.326	0.08	48.957	0.11	16.650
70	68	0.76	60.00	70.000	26.381	43.619	0.01	57.900	0.02	45.293	0.03	16.662
71	69	0.69	60.00	70.000	24.679	45.321	0.01	57.725	0.02	44.506	0.03	16.376
72	70	0.74	60.00	70.000	25.375	44.625	0.01	57.795	0.02	44.827	0.03	16.529
73	71	1.11	60.00	70.000	24.063	45.937	0.02	57.660	0.03	44.221	0.05	16.202
74	63	7.98	5.00	70.000	16.945	53.055	0.15	58.042	0.02	18.999	0.17	7.786
77	75	0.23	60.00	70.000	24.653	45.347	0.00	57.720	0.01	44.494	0.01	16.369
78	76	0.61	60.00	70.000	24.569	45.431	0.01	57.713	0.02	44.455	0.03	16.347
79	77	0.21	60.00	70.000	25.430	44.570	0.00	57.802	0.01	44.853	0.01	16.539
8	7	2.10	75.00	70.000	24.313	45.687	0.02	57.402	0.08	49.130	0.10	16.741
80	78	0.25	60.00	70.000	25.304	44.696	0.00	57.789	0.01	44.795	0.01	16.516
81	79	0.19	60.00	70.000	25.712	44.288	0.00	57.833	0.01	44.985	0.01	16.586
83	80	1.40	60.00	70.000	25.423	44.577	0.02	57.800	0.04	44.849	0.06	16.538
84	81	3.11	60.00	70.000	24.529	45.471	0.05	57.706	0.09	44.435	0.14	16.337
86	83	1.84	60.00	70.000	25.687	44.313	0.03	57.828	0.05	44.971	0.08	16.582
87	84	1.14	60.00	70.000	25.170	44.830	0.02	57.777	0.03	44.734	0.05	16.489
89	86	0.32	60.00	70.000	24.275	45.725	0.01	57.681	0.01	44.319	0.01	16.266
9	8	0.27	75.00	70.000	24.225	45.775	0.00	57.388	0.01	49.097	0.01	16.725
92	89	1.40	60.00	70.000	25.423	44.577	0.02	57.800	0.04	44.849	0.06	16.538
93	90	1.38	60.00	70.000	25.456	44.544	0.02	57.806	0.04	44.866	0.06	16.543
94	91	1.43	60.00	70.000	26.464	43.536	0.02	57.911	0.04	45.332	0.07	16.669
97	94	1.87	60.00	70.000	25.635	44.365	0.03	57.826	0.05	44.950	0.09	16.574
98	95	1.83	60.00	70.000	25.688	44.312	0.03	57.832	0.05	44.974	0.08	16.582
99	96	1.14	60.00	70.000	25.170	44.830	0.02	57.777	0.03	44.734	0.05	16.489

(*) Le statistiche sull'area impermeabile aggregano aree con e senza gli accumuli superficiali.

TABELLA DEI MATERIALI													
Nome	Tipo	Area (m2)	Diametro int. (m)	Altezza (m)	Larghezza (m)	Pendenza (o/v)	n Manning	n Manning sinistra	n Manning destra	Spessore (mm)	Numero rami	Lunghezza totale (m)	
CLS DN 1000	Circolare	0.785	1.000	*****	*****	*****	0.0140	*****	*****	0.000	4	528.96	
CLS DN 1200	Circolare	1.131	1.200	*****	*****	*****	0.0140	*****	*****	0.000	2	138.24	
CLS DN 300	Circolare	0.071	0.300	*****	*****	*****	0.0140	*****	*****	0.000	4	206.66	
CLS DN 400	Circolare	0.126	0.400	*****	*****	*****	0.0140	*****	*****	0.000	20	1757.21	
CLS DN 500	Circolare	0.196	0.500	*****	*****	*****	0.0140	*****	*****	0.000	14	1403.83	
CLS DN 600	Circolare	0.283	0.600	*****	*****	*****	0.0140	*****	*****	0.000	10	1088.84	
CLS DN 800	Circolare	0.503	0.800	*****	*****	*****	0.0140	*****	*****	0.000	9	637.20	
CLS SCAT 10.00 x 1.00	Rettangolare	10.000	*****	1.000	10.000	*****	0.0140	*****	*****	0.000	1	19.04	
CLS SCAT 2.50 x 1.25	Rettangolare	3.125	*****	1.250	2.500	*****	0.0140	*****	*****	0.000	15	725.27	
CLS SCAT 3.00 x 1.00	Rettangolare	3.000	*****	1.000	3.000	*****	0.0140	*****	*****	0.000	2	338.81	
PVC DN 200	Circolare	0.028	0.190	*****	*****	*****	0.0120	*****	*****	0.000	4	347.71	
PVC DN 250	Circolare	0.045	0.240	*****	*****	*****	0.0120	*****	*****	0.000	7	666.23	
PVC DN 315	Circolare	0.071	0.300	*****	*****	*****	0.0120	*****	*****	0.000	6	550.48	
PVC DN 400	Circolare	0.113	0.380	*****	*****	*****	0.0120	*****	*****	0.000	1	78.88	
TERRA ST 4.00 x 1.00 x 1.15	Trapezoidale	2.869	*****	1.150	1.000	1.30-1.30	0.0300	*****	*****	0.000	2	370.66	
TERRA ST 4.00 x 1.00 x 1.40	Trapezoidale	3.497	*****	1.400	1.000	1.07-1.07	0.0300	*****	*****	0.000	4	84.83	
TERRA ST 6.00	Trapezoidale	5.169	*****	1.150	3.000	1.30-	0.0300	*****	*****	0.000	1	163.38	

52	26.12	25.70	25.30	0.00	0.00	52,53,54
53	26.60	25.92	25.42	0.00	0.00	55
54	26.50	25.87	25.37	0.00	0.00	55,56,78
55	25.94	25.44	24.44	0.00	0.00	57,59,63
56	26.70	25.74	25.34	0.00	0.00	58
57	26.63	25.87	25.57	0.00	0.00	60
58	26.63	25.30	24.77	0.00	0.00	59,61,79
59	26.66	25.70	25.40	0.00	0.00	62
6	28.36	27.70	27.20	0.00	0.00	2,6
60	26.64	25.51	24.99	0.00	0.00	58,61,80
61	25.97	25.23	24.02	0.00	0.00	63,64
62	25.91	25.16	23.96	0.00	0.00	64,65,69
63	25.50	25.24	23.73	0.00	0.00	65,74,88
64	26.20	25.21	24.71	0.00	0.00	66
65	26.18	25.11	24.61	0.00	0.00	66,67,70
66	26.18	25.18	24.58	0.00	0.00	67,68,71
67	26.18	25.17	24.49	0.00	0.00	68,69,72,73
68	26.20	25.21	24.71	0.00	0.00	70
69	26.19	25.25	24.75	0.00	0.00	71
7	28.20	27.58	27.08	0.00	0.00	7,8
70	26.19	25.17	24.77	0.00	0.00	72
71	26.15	25.31	24.91	0.00	0.00	73
72	25.11	25.10	23.50	0.00	0.00	108,74,75
73	24.35	24.33	23.18	0.00	0.00	102,103,90
75	26.55	25.67	24.67	0.00	0.00	77,89
76	26.64	26.03	25.84	0.00	0.00	78
77	26.63	25.52	25.10	0.00	0.00	60,79
78	26.70	25.66	25.26	0.00	0.00	62,80
79	26.16	25.78	25.28	0.00	0.00	53,81
8	28.13	27.55	26.95	0.00	0.00	8,9
80	26.80	25.98	24.73	0.00	0.00	82,83
81	26.60	25.83	24.59	0.00	0.00	84,93
82	26.10	25.74	24.49	0.00	0.00	85,94
83	26.10	25.60	24.35	0.00	0.00	86,96
84	26.10	25.46	24.21	0.00	0.00	87,98
85	26.10	25.29	24.04	0.00	0.00	100,88
86	26.61	25.92	25.12	0.00	0.00	45,89
87	25.05	24.63	23.48	0.00	0.00	75,90
88	25.01	25.01	23.53	0.00	0.00	101,108
89	26.73	25.93	24.68	0.00	0.00	83,92
9	28.12	27.51	26.91	0.00	0.00	11,12,9
90	26.67	25.88	24.63	0.00	0.00	92,93
91	26.26	25.77	24.52	0.00	0.00	84,94
92	26.10	25.69	24.44	0.00	0.00	85,95
93	26.10	25.64	24.39	0.00	0.00	95,96
94	26.10	25.55	24.30	0.00	0.00	86,97
95	26.10	25.51	24.26	0.00	0.00	97,98
96	26.10	25.41	24.16	0.00	0.00	87,99
97	26.10	25.35	24.10	0.00	0.00	100,99
98	24.60	24.30	23.30	0.00	0.00	101,102
99	24.30	24.26	23.11	0.00	0.00	103

DATI DEGLI ELEMENTI LINEARI					
Elemento	Nodo iniziale	Nodo finale	Materiale	Lunghezza (m)	Valvola anti-rifl.
1	1	2	PVC DN 200	76.83	no
10	3	10	CLS DN 600	147.48	no
100	97	85	CLS SCAT 2.50 x 1.25	61.65	no
101	88	98	CLS SCAT 3.00 x 1.00	308.81	no

102	98	73	PVC DN 315	14.29	si
103	73	99	TERRA ST 4.00 x 1.00 x 1.15	74.10	no
104	100	101	TERRA ST 4.00 x 1.00 x 1.40	21.71	no
105	101	102	TERRA ST 4.00 x 1.00 x 1.40	26.08	no
106	102	103	TERRA ST 4.00 x 1.00 x 1.40	15.00	no
107	103	104	TERRA ST 4.00 x 1.00 x 1.40	22.04	no
108	72	88	CLS SCAT 10.00 x 1.00	19.04	no
11	10	9	CLS DN 600	114.27	no
12	9	11	CLS DN 600	141.78	no
13	11	12	CLS DN 600	117.59	no
14	12	13	CLS DN 600	133.25	no
15	13	14	CLS DN 600	149.14	no
16	15	14	CLS DN 500	135.47	no
17	14	16	CLS DN 800	49.77	no
18	17	18	PVC DN 315	52.48	no
19	18	16	PVC DN 400	78.88	no
2	2	6	PVC DN 200	127.68	no
20	16	19	CLS DN 800	150.26	no
21	20	21	CLS DN 400	186.03	no
22	21	19	CLS DN 400	186.05	no
23	19	22	CLS DN 800	51.45	no
24	22	23	CLS DN 800	51.83	no
25	23	24	CLS DN 800	5.86	no
26	25	22	CLS DN 400	141.33	no
27	26	24	CLS DN 400	172.17	no
28	27	23	CLS DN 500	26.48	no
29	24	28	CLS DN 800	85.06	no
3	2	4	PVC DN 200	75.37	no
30	28	29	CLS DN 800	38.25	no
31	30	31	PVC DN 315	201.22	no
32	31	28	PVC DN 315	181.16	no
33	32	33	PVC DN 250	128.85	no
34	33	29	PVC DN 315	83.61	no
35	34	33	PVC DN 250	37.21	no
36	29	35	CLS DN 800	147.85	no
37	36	37	PVC DN 250	118.72	no
38	38	39	PVC DN 250	118.51	no
39	40	41	PVC DN 250	84.04	no
4	5	4	CLS DN 400	103.28	no
40	42	41	PVC DN 250	58.51	no
41	43	37	CLS DN 400	38.43	no
42	37	39	CLS DN 400	44.40	no
43	39	41	CLS DN 400	56.34	no
44	41	35	CLS DN 400	83.77	no
45	35	86	PVC DN 315	17.71	no
46	45	46	PVC DN 250	120.39	no
47	47	46	CLS DN 400	28.08	no
48	46	48	CLS DN 400	94.76	no
49	48	44	CLS DN 400	92.32	no
5	4	3	CLS DN 400	121.55	no
50	49	48	CLS DN 300	53.15	no
51	44	50	CLS DN 1000	97.56	no
52	51	52	CLS DN 400	83.20	no
53	52	79	CLS DN 400	40.83	no
54	49	52	CLS DN 300	62.13	no
55	53	54	CLS DN 500	277.76	no
56	54	50	CLS DN 500	283.20	no
57	50	55	CLS DN 1000	179.48	no
58	56	60	CLS DN 400	51.91	no
59	58	55	CLS DN 500	44.73	no

6	6	3	CLS DN 500	73.34	no
60	57	77	CLS DN 300	43.17	no
61	60	58	CLS DN 500	53.75	no
62	59	78	CLS DN 300	48.20	no
63	55	61	CLS DN 1000	185.98	no
64	61	62	CLS DN 1200	25.43	no
65	62	63	CLS DN 1200	112.81	no
66	64	65	CLS DN 500	51.64	no
67	65	66	CLS DN 500	60.75	no
68	66	67	CLS DN 600	98.30	no
69	67	62	CLS DN 600	42.41	no
7	4	7	CLS DN 500	135.86	no
70	68	65	CLS DN 500	33.04	no
71	69	66	CLS DN 500	65.37	no
72	70	67	CLS DN 400	50.94	no
73	71	67	CLS DN 400	79.65	no
74	63	72	TERRA ST 6.00 x 3.00 x 1.15	163.38	no
75	72	87	CLS DN 600	23.38	no
77	75	44	CLS DN 1000	65.94	no
78	76	54	PVC DN 200	67.82	no
79	77	58	CLS DN 400	49.86	no
8	7	8	CLS DN 500	117.89	no
80	78	60	CLS DN 400	52.32	no
81	79	50	CLS DN 500	44.56	no
82	35	80	CLS SCAT 2.50 x 1.25	10.00	no
83	80	89	CLS SCAT 2.50 x 1.25	50.00	no
84	81	91	CLS SCAT 2.50 x 1.25	65.00	no
85	82	92	CLS SCAT 2.50 x 1.25	50.00	no
86	83	94	CLS SCAT 2.50 x 1.25	45.02	no
87	84	96	CLS SCAT 2.50 x 1.25	55.00	no
88	85	63	CLS SCAT 2.50 x 1.25	45.50	no
89	86	75	CLS DN 800	56.86	no
9	8	9	CLS DN 600	121.22	no
90	87	73	TERRA ST 4.00 x 1.00 x 1.15	296.56	no
92	89	90	CLS SCAT 2.50 x 1.25	50.00	no
93	90	81	CLS SCAT 2.50 x 1.25	49.36	no
94	91	82	CLS SCAT 3.00 x 1.00	30.00	no
95	92	93	CLS SCAT 2.50 x 1.25	50.00	no
96	93	83	CLS SCAT 2.50 x 1.25	47.76	no
97	94	95	CLS SCAT 2.50 x 1.25	45.98	no
98	95	84	CLS SCAT 2.50 x 1.25	45.00	no
99	96	97	CLS SCAT 2.50 x 1.25	55.00	no

SOMMARIO STATISTICHE DEI NODI

Nodo	Quota terreno (m slm)	Quota cielo (m slm)	Quota media (m slm)	% variaz. media	Massima quota		Sovracc. alla max. quota (m)	Dist. tra terreno e livello max (m)	Durata del sovracc. (min)	Durata della esondaz. (min)
					(m slm)	al tempo				
1	28.50	27.54	27.54	0.0296	28.50	2:06	0.96	0.00	259.33	206.23*
10	28.00	27.61	27.18	0.0136	28.00	2:21	0.39	0.00	200.60	184.37*
100	25.06	24.95	23.55	0.0000	23.55	0:00	0.00	1.51	0.00	0.00
101	25.12	24.91	23.51	0.0000	23.51	0:00	0.00	1.61	0.00	0.00
102	25.40	25.02	21.70	0.0000	21.70	0:00	0.00	3.70	0.00	0.00
103	25.05	24.91	21.68	0.0000	21.68	0:00	0.00	3.37	0.00	0.00
104	25.07	25.06	23.66	0.0000	23.66	0:00	0.00	1.41	0.00	0.00
11	27.80	27.18	26.79	0.0255	27.80	2:14	0.62	0.00	227.13	150.00*
12	27.51	26.90	26.53	0.0267	27.51	2:12	0.61	0.00	237.57	195.17*

13	27.48	26.66	26.31	0.0335	27.48	4:37	0.82	0.00	241.37	23.83*
14	27.44	26.60	26.02	0.0209	27.15	3:11	0.55	0.29	200.13	0.00
15	27.53	26.60	26.24	0.0400	27.53	2:22	0.93	0.00	199.80	0.07*
16	27.42	26.59	25.98	0.0210	27.14	3:11	0.55	0.28	197.90	0.00
17	27.60	26.80	26.57	0.0424	27.60	2:24	0.80	0.00	159.83	0.03*
18	27.68	26.77	26.47	0.0229	27.16	3:11	0.39	0.52	166.13	0.00
19	27.20	26.40	25.83	0.0207	27.02	3:11	0.62	0.18	203.10	0.00
2	28.56	27.49	27.50	0.0381	28.56	2:21	1.07	0.00	259.00	168.93*
20	26.98	26.83	26.53	0.0068	26.98	2:27	0.15	0.00	185.60	172.73*
21	26.82	26.69	26.39	0.0079	26.82	2:26	0.13	0.00	191.03	180.90*
22	27.16	26.36	25.79	0.0351	26.98	3:11	0.62	0.18	199.77	0.00
23	27.12	26.38	25.75	0.0901	26.93	3:11	0.55	0.19	140.93	0.00
24	27.12	26.34	25.74	0.0158	26.90	3:11	0.56	0.22	144.93	0.00
25	27.16	26.46	26.15	0.0293	27.00	3:11	0.54	0.16	184.90	0.00
26	26.82	26.10	25.85	0.2415	26.82	3:11	0.72	0.00	243.20	0.13*
27	27.20	26.42	26.01	0.0416	27.20	3:11	0.78	0.00	133.70	0.07*
28	27.08	26.22	25.62	0.0143	26.47	3:11	0.25	0.61	142.57	0.00
29	26.80	26.16	25.57	0.0071	26.34	5:00	0.18	0.46	138.10	0.00
3	28.25	27.74	27.29	0.0099	28.25	2:22	0.51	0.00	195.73	0.33*
30	26.80	26.42	26.25	0.0128	26.80	2:20	0.38	0.00	217.97	195.27*
31	27.07	26.33	26.16	0.0302	26.92	2:20	0.59	0.15	215.83	0.00
32	26.94	26.34	26.20	0.0305	26.94	3:32	0.60	0.00	183.33	93.37*
33	26.62	26.03	25.81	0.0180	26.59	5:00	0.56	0.03	227.67	0.00
34	26.60	25.97	25.85	0.0281	26.60	4:01	0.63	0.00	244.03	60.20*
35	26.60	25.99	24.82	0.0017	25.16	5:00	0.00	1.44	0.00	0.00
36	26.80	26.24	26.04	0.0069	26.32	5:00	0.08	0.48	29.33	0.00
37	26.51	26.09	25.70	0.0056	26.14	5:00	0.05	0.37	29.67	0.00
38	26.66	26.19	25.98	0.0074	26.30	5:00	0.11	0.36	42.57	0.00
39	26.44	25.87	25.50	0.0077	26.12	5:00	0.25	0.32	89.23	0.00
4	28.23	27.70	27.36	0.0178	28.23	2:21	0.53	0.00	198.43	0.10*
40	26.53	26.09	25.88	0.0074	26.21	5:00	0.12	0.32	50.03	0.00
41	26.39	25.72	25.42	0.0089	26.04	5:00	0.32	0.35	162.20	0.00
42	26.30	25.76	25.57	0.0124	26.12	5:00	0.36	0.18	154.40	0.00
43	26.60	26.09	25.72	0.0063	26.14	5:00	0.05	0.46	29.97	0.00
44	26.40	25.60	24.70	0.0032	25.24	4:55	0.00	1.16	0.00	0.00
45	26.47	25.91	25.70	0.0114	25.99	4:57	0.08	0.48	18.67	0.00
46	26.66	25.79	25.44	0.0074	25.84	4:58	0.05	0.82	21.13	0.00
47	26.83	26.10	25.71	0.0022	25.84	4:57	0.00	0.99	0.00	0.00
48	26.13	25.56	25.24	0.0201	25.74	4:56	0.18	0.39	95.73	0.00
49	26.13	25.62	25.29	0.0145	25.69	4:56	0.07	0.44	53.80	0.00
5	28.08	27.65	27.38	0.0140	28.08	2:21	0.43	0.00	200.97	185.67*
50	25.90	25.52	24.64	0.0037	25.24	5:00	0.00	0.66	0.00	0.00
51	26.20	25.75	25.39	0.0032	25.61	4:59	0.00	0.59	0.00	0.00
52	26.12	25.70	25.34	0.0036	25.59	5:00	0.00	0.53	0.00	0.00
53	26.60	25.92	25.59	0.2666	26.60	3:10	0.68	0.00	164.27	74.93*
54	26.50	25.87	25.53	0.2362	26.50	3:10	0.63	0.00	155.90	2.97*
55	25.94	25.44	24.58	0.0034	25.14	5:00	0.00	0.80	0.00	0.00
56	26.70	25.74	25.36	0.0012	25.44	5:00	0.00	1.26	0.00	0.00
57	26.63	25.87	25.59	0.0020	25.69	5:00	0.00	0.94	0.00	0.00
58	26.63	25.30	24.83	0.0040	25.20	5:00	0.00	1.43	0.00	0.00
59	26.66	25.70	25.43	0.0029	25.58	5:00	0.00	1.08	0.00	0.00
6	28.36	27.70	27.34	0.0125	28.36	2:22	0.66	0.00	197.03	0.37*
60	26.64	25.51	25.02	0.0023	25.23	5:00	0.00	1.41	0.00	0.00
61	25.97	25.23	24.13	0.0024	24.63	5:00	0.00	1.34	0.00	0.00
62	25.91	25.16	24.08	0.0027	24.62	5:00	0.00	1.29	0.00	0.00
63	25.50	25.24	23.89	0.0025	24.51	5:00	0.00	0.99	0.00	0.00
64	26.20	25.21	24.75	0.0030	25.03	5:00	0.00	1.17	0.00	0.00
65	26.18	25.11	24.67	0.0040	25.03	5:00	0.00	1.15	0.00	0.00

66	26.18	25.18	24.64	0.0034	25.00	5:00	0.00	1.18	0.00	0.00
67	26.18	25.17	24.57	0.0032	24.95	5:00	0.00	1.23	0.00	0.00
68	26.20	25.21	24.75	0.0031	25.03	5:00	0.00	1.17	0.00	0.00
69	26.19	25.25	24.78	0.0025	25.01	5:00	0.00	1.18	0.00	0.00
7	28.20	27.58	27.26	0.0317	28.20	2:20	0.62	0.00	205.03	50.13*
70	26.19	25.17	24.81	0.0028	25.00	5:00	0.00	1.19	0.00	0.00
71	26.15	25.31	24.95	0.0030	25.16	5:00	0.00	0.99	0.00	0.00
72	25.11	25.10	23.72	0.0022	24.26	5:00	0.00	0.85	0.00	0.00
73	24.35	24.33	23.51	0.0018	23.75	5:10	0.00	0.60	0.00	0.00
75	26.55	25.67	24.75	0.0030	25.25	5:00	0.00	1.30	0.00	0.00
76	26.64	26.03	25.92	0.4893	26.64	3:10	0.61	0.00	150.87	88.87*
77	26.63	25.52	25.12	0.0019	25.25	5:00	0.00	1.38	0.00	0.00
78	26.70	25.66	25.29	0.0024	25.46	5:00	0.00	1.24	0.00	0.00
79	26.16	25.78	25.30	0.0017	25.45	4:55	0.00	0.71	0.00	0.00
8	28.13	27.55	27.14	0.0258	28.13	2:22	0.58	0.00	204.93	0.03*
80	26.80	25.98	24.81	0.0016	25.15	5:00	0.00	1.65	0.00	0.00
81	26.60	25.83	24.67	0.0018	25.05	5:00	0.00	1.55	0.00	0.00
82	26.10	25.74	24.58	0.0019	24.98	5:00	0.00	1.12	0.00	0.00
83	26.10	25.60	24.44	0.0020	24.87	5:00	0.00	1.23	0.00	0.00
84	26.10	25.46	24.31	0.0021	24.75	5:00	0.00	1.35	0.00	0.00
85	26.10	25.29	24.14	0.0019	24.54	5:00	0.00	1.56	0.00	0.00
86	26.61	25.92	25.14	0.0009	25.25	4:59	0.00	1.36	0.00	0.00
87	25.05	24.63	23.65	0.0024	24.06	5:01	0.00	0.99	0.00	0.00
88	25.01	25.01	23.83	0.0022	24.16	5:01	0.00	0.85	0.00	0.00
89	26.73	25.93	24.77	0.0017	25.12	5:00	0.00	1.61	0.00	0.00
9	28.12	27.51	27.10	0.0224	28.11	2:22	0.60	0.01	207.33	0.00
90	26.67	25.88	24.72	0.0017	25.08	5:00	0.00	1.58	0.00	0.00
91	26.26	25.77	24.61	0.0018	25.00	5:00	0.00	1.26	0.00	0.00
92	26.10	25.69	24.53	0.0019	24.94	5:00	0.00	1.16	0.00	0.00
93	26.10	25.64	24.48	0.0020	24.90	5:00	0.00	1.20	0.00	0.00
94	26.10	25.55	24.40	0.0020	24.83	5:00	0.00	1.27	0.00	0.00
95	26.10	25.51	24.35	0.0021	24.79	5:00	0.00	1.31	0.00	0.00
96	26.10	25.41	24.25	0.0021	24.69	5:00	0.00	1.41	0.00	0.00
97	26.10	25.35	24.20	0.0020	24.63	5:00	0.00	1.47	0.00	0.00
98	24.60	24.30	23.75	0.0020	23.92	6:37	0.00	0.68	0.00	0.00
99	24.30	24.26	23.25	0.0010	23.40	5:10	0.00	0.90	0.00	0.00

Nodo con la maggiore variazione media percentuale: '76' pari a 0.489 % (**)

(*) Attenzione: c'è un ingresso di portata alla rete in un nodo in cui è possibile un'esondazione. Se l'ingresso è contemporaneo all'esondazione, l'acqua non entrerà in rete e verrà considerata solamente nel controllo di continuità.

(**) La variazione media nei nodi è così definita:
 $100.0 (Y(n+1) - Y(n)) / Yfull$

P3) Simulazione STATO DI PROGETTO - Ietogramma rettangolare con $Tr = 50$ anni e durata 360 minuti; c.p.c. PTCP

Marte DEFLUX 2007 - DESIGNER EDITION	
Codice	Modulo SWMM 4.40 : Runoff + Extran
	Copyright (C) 2000-2009 DEK s.r.l.
Nome	Prel-SP_rett360
Descrizione	<nessuna descrizione>
Data di creazione	15/04/2011 - 20.00.28
Sottorete	Intera rete
Database	2011-03_Soliera_ZonaW-SP

DATI GENERALI	
Numero dei nodi	103
Numero dei rami	106
Numero delle pompe	0
Numero degli scaricatori	0
Sommario delle piogge	
Pioggia totale (mm)	77.4000

CONTROLLO DI CONTINUITA' PER IL DEFLUSSO SUPERFICIALE		
	Volume (m3)	Livello (mm) sul bacino
Precipitazione totale (Pioggia + Neve)	75644.648438	77.400
Infiltrazione totale	21406.136719	21.903
Evaporazione totale	2606.223633	2.667
Deflusso superficiale	45028.507813	46.073
Volume trattenuto negli accumuli superficiali	6598.597656	6.752
Infiltrazione per l'area permeabile	21406.136719	47.095
Infiltrazione + Evaporazione +		
Deflusso superficiale +		
Accumuli superficiali	75639.468750	77.395
Precipitazione totale + Accumulo iniziale	75644.648438	77.400

Errore 0.007 % (*)
(*) L'errore nella continuità è così calcolato: (Precipitazione - Infiltrazione - Evaporazione - - Deflusso superficiale - Accumuli superficiali) / / Precipitazione

CONTROLLO DI CONTINUITA' NELLA RETE	
	Volume (m3)
Volume iniziale nella rete	0.091062
Ingresso nella rete	45028.203388
Uscita dalla rete	30580.463850
Volume finale nella rete	14455.676758

Errore continuità -0.017 %

SOMMARIO DELLE STATISTICHE DEI SOTTOBACINI						
					Area permeabile	Area imperm. (*) Area totale sottobacino

Sotto-bacino afferente al ramo	Nodo di Ingresso	Area (ha)	% imper.	Pioggia totale simulata (mm)	Altezza totale deflusso (mm)	Perdite totali (mm)	Deflusso massimo (m3/s)	Altezza deflusso (mm)	Deflusso massimo (m3/s)	Altezza deflusso (mm)	Deflusso massimo (m3/s)	Deflusso massimo unitario (mm/h)
1	1	1.28	75.00	77.400	28.949	48.451	0.01	64.748	0.03	55.798	0.04	12.362
10	3	1.01	75.00	77.400	27.057	50.343	0.01	64.441	0.03	55.095	0.03	12.280
100	97	1.28	60.00	77.400	28.303	49.097	0.02	64.896	0.03	50.259	0.04	12.026
11	10	0.72	75.00	77.400	27.879	49.521	0.01	64.576	0.02	55.402	0.02	12.328
12	9	2.91	75.00	77.400	27.192	50.208	0.02	64.459	0.08	55.142	0.10	12.289
13	11	2.29	75.00	77.400	27.792	49.608	0.02	64.561	0.06	55.369	0.08	12.324
14	12	4.71	40.00	77.400	23.850	53.550	0.07	64.774	0.07	40.220	0.14	10.604
15	13	6.34	40.00	77.400	23.290	54.110	0.09	64.729	0.09	39.866	0.18	10.415
16	15	1.17	60.00	77.400	25.600	51.800	0.01	64.600	0.02	49.000	0.04	11.711
18	17	0.80	60.00	77.400	28.730	48.670	0.01	64.944	0.02	50.458	0.03	12.046
19	18	0.31	60.00	77.400	27.572	49.828	0.00	64.817	0.01	49.919	0.01	11.973
2	2	1.88	75.00	77.400	27.535	49.865	0.01	64.522	0.05	55.275	0.06	12.310
20	16	1.84	60.00	77.400	25.161	52.239	0.02	64.550	0.04	48.794	0.06	11.632
21	20	2.76	60.00	77.400	24.194	53.206	0.03	64.439	0.06	48.341	0.09	11.437
22	21	1.32	60.00	77.400	24.194	53.206	0.01	64.434	0.03	48.338	0.04	11.437
23	19	0.61	60.00	77.400	28.780	48.620	0.01	64.950	0.01	50.482	0.02	12.048
24	22	0.24	60.00	77.400	28.761	48.639	0.00	64.951	0.01	50.475	0.01	12.047
26	25	0.74	60.00	77.400	25.423	51.977	0.01	64.576	0.02	48.915	0.02	11.680
27	26	1.09	60.00	77.400	24.555	52.845	0.01	64.481	0.02	48.510	0.03	11.513
28	27	0.12	60.00	77.400	30.158	47.242	0.00	65.095	0.00	51.120	0.00	12.072
29	24	0.41	60.00	77.400	27.328	50.072	0.00	64.786	0.01	49.803	0.01	11.950
3	2	0.17	75.00	77.400	28.995	48.405	0.00	64.748	0.00	55.810	0.01	12.363
30	28	0.12	60.00	77.400	29.462	47.938	0.00	65.023	0.00	50.799	0.00	12.066
31	30	2.67	30.00	77.400	20.814	56.586	0.04	64.725	0.03	33.987	0.07	8.968
32	31	1.22	60.00	77.400	24.319	53.081	0.01	64.450	0.03	48.398	0.04	11.463
33	32	1.01	60.00	77.400	25.805	51.595	0.01	64.623	0.02	49.096	0.03	11.746
34	33	0.39	60.00	77.400	27.385	50.015	0.00	64.796	0.01	49.832	0.01	11.955
35	34	0.30	60.00	77.400	29.520	47.880	0.00	65.031	0.01	50.827	0.01	12.067
36	29	1.15	60.00	77.400	25.231	52.169	0.01	64.560	0.02	48.828	0.04	11.645
37	36	0.52	60.00	77.400	26.130	51.270	0.01	64.658	0.01	49.247	0.02	11.797
38	38	0.52	60.00	77.400	26.137	51.263	0.01	64.662	0.01	49.252	0.02	11.798
39	40	0.57	60.00	77.400	27.368	50.032	0.01	64.796	0.01	49.825	0.02	11.953
4	5	0.80	75.00	77.400	28.174	49.226	0.01	64.626	0.02	55.513	0.03	12.340
40	42	0.46	60.00	77.400	28.446	48.954	0.01	64.911	0.01	50.325	0.02	12.034
41	43	0.15	60.00	77.400	29.452	47.948	0.00	65.019	0.00	50.792	0.00	12.066
42	37	0.24	60.00	77.400	29.134	48.266	0.00	64.993	0.01	50.649	0.01	12.059
43	39	0.22	60.00	77.400	28.547	48.853	0.00	64.929	0.00	50.376	0.01	12.038
44	41	0.37	60.00	77.400	27.379	50.021	0.00	64.797	0.01	49.829	0.01	11.954
46	45	0.44	60.00	77.400	26.076	51.324	0.00	64.652	0.01	49.222	0.01	11.789
47	47	0.26	60.00	77.400	30.057	47.343	0.00	65.090	0.01	51.077	0.01	12.072
48	46	1.11	60.00	77.400	26.962	50.438	0.01	64.755	0.02	49.638	0.04	11.910
49	48	0.48	60.00	77.400	27.052	50.348	0.01	64.761	0.01	49.678	0.02	11.920
5	4	0.76	75.00	77.400	27.690	49.710	0.01	64.548	0.02	55.333	0.03	12.318
50	49	0.42	60.00	77.400	28.698	48.702	0.00	64.937	0.01	50.442	0.01	12.045
51	44	0.64	60.00	77.400	26.859	50.541	0.01	64.739	0.01	49.587	0.02	11.898
52	51	0.47	60.00	77.400	27.401	49.999	0.01	64.795	0.01	49.837	0.02	11.957
53	52	0.13	60.00	77.400	29.322	48.078	0.00	65.010	0.00	50.735	0.00	12.063
54	49	0.29	60.00	77.400	28.282	49.118	0.00	64.894	0.01	50.249	0.01	12.025
55	53	4.79	30.00	77.400	18.866	58.534	0.06	64.588	0.05	32.583	0.11	8.161
56	54	3.14	60.00	77.400	22.046	55.354	0.03	64.162	0.07	47.316	0.09	10.940
57	50	0.44	60.00	77.400	24.363	53.037	0.00	64.456	0.01	48.419	0.01	11.473
58	56	0.47	60.00	77.400	28.758	48.642	0.01	64.945	0.01	50.470	0.02	12.047
59	58	0.40	60.00	77.400	29.117	48.283	0.00	64.991	0.01	50.641	0.01	12.059
6	6	0.30	60.00	77.400	27.798	49.602	0.00	64.837	0.01	50.022	0.01	11.991

60	57	0.63	60.00	77.400	29.197	48.203	0.01	64.999	0.01	50.678	0.02	12.061
61	60	0.36	60.00	77.400	28.670	48.730	0.00	64.934	0.01	50.428	0.01	12.044
62	59	0.70	60.00	77.400	28.940	48.460	0.01	64.971	0.01	50.559	0.02	12.054
63	55	0.88	60.00	77.400	24.195	53.205	0.01	64.438	0.02	48.341	0.03	11.437
65	62	0.21	60.00	77.400	26.326	51.074	0.00	64.680	0.00	49.339	0.01	11.827
66	64	0.44	60.00	77.400	28.771	48.629	0.01	64.953	0.01	50.480	0.01	12.048
67	65	0.36	60.00	77.400	28.344	49.056	0.00	64.907	0.01	50.282	0.01	12.028
68	66	0.45	60.00	77.400	26.833	50.567	0.01	64.738	0.01	49.576	0.01	11.894
69	67	0.13	60.00	77.400	29.238	48.162	0.00	65.001	0.00	50.696	0.00	12.062
7	4	2.32	75.00	77.400	27.334	50.066	0.02	64.486	0.06	55.198	0.08	12.298
70	68	0.76	60.00	77.400	29.757	47.643	0.01	65.053	0.02	50.935	0.03	12.070
71	69	0.69	60.00	77.400	28.138	49.262	0.01	64.880	0.01	50.183	0.02	12.016
72	70	0.74	60.00	77.400	28.805	48.595	0.01	64.957	0.02	50.496	0.02	12.049
73	71	1.11	60.00	77.400	27.541	49.859	0.01	64.812	0.02	49.904	0.04	11.970
74	63	7.98	5.00	77.400	20.242	57.158	0.15	65.196	0.01	22.490	0.16	7.245
77	75	0.23	60.00	77.400	28.113	49.287	0.00	64.875	0.00	50.170	0.01	12.015
78	76	0.61	60.00	77.400	28.032	49.368	0.01	64.863	0.01	50.131	0.02	12.008
79	77	0.21	60.00	77.400	28.858	48.542	0.00	64.957	0.00	50.518	0.01	12.051
8	7	2.10	75.00	77.400	27.784	49.616	0.02	64.563	0.06	55.368	0.07	12.323
80	78	0.25	60.00	77.400	28.738	48.662	0.00	64.944	0.01	50.462	0.01	12.046
81	79	0.19	60.00	77.400	29.125	48.275	0.00	64.985	0.00	50.641	0.01	12.059
83	80	1.40	60.00	77.400	28.851	48.549	0.02	64.958	0.03	50.515	0.05	12.051
84	81	3.11	60.00	77.400	27.994	49.406	0.04	64.859	0.07	50.113	0.10	12.006
86	83	1.84	60.00	77.400	29.102	48.298	0.02	64.984	0.04	50.631	0.06	12.058
87	84	1.14	60.00	77.400	28.610	48.790	0.01	64.931	0.02	50.402	0.04	12.041
89	86	0.32	60.00	77.400	27.748	49.652	0.00	64.837	0.01	50.001	0.01	11.987
9	8	0.27	75.00	77.400	27.699	49.701	0.00	64.545	0.01	55.333	0.01	12.319
92	89	1.40	60.00	77.400	28.851	48.549	0.02	64.958	0.03	50.515	0.05	12.051
93	90	1.38	60.00	77.400	28.883	48.517	0.02	64.963	0.03	50.531	0.05	12.052
94	91	1.43	60.00	77.400	29.835	47.565	0.02	65.066	0.03	50.974	0.05	12.070
97	94	1.87	60.00	77.400	29.052	48.348	0.02	64.983	0.04	50.611	0.06	12.057
98	95	1.83	60.00	77.400	29.103	48.297	0.02	64.981	0.04	50.630	0.06	12.058
99	96	1.14	60.00	77.400	28.610	48.790	0.01	64.931	0.02	50.402	0.04	12.041

(*) Le statistiche sull'area impermeabile aggregano aree con e senza gli accumuli superficiali.

TABELLA DEI MATERIALI												
Nome	Tipo	Area (m2)	Diametro int. (m)	Altezza (m)	Larghez. (m)	Pendenza (o/v)	n Manning	n Manning sinistra	n Manning destra	Spessore (mm)	Numero mi	Lunghezza totale (m)
CLS DN 1000	Circolare	0.785	1.000	*****	*****	*****	0.0140	*****	*****	0.000	4	528.96
CLS DN 1200	Circolare	1.131	1.200	*****	*****	*****	0.0140	*****	*****	0.000	2	138.24
CLS DN 300	Circolare	0.071	0.300	*****	*****	*****	0.0140	*****	*****	0.000	4	206.66
CLS DN 400	Circolare	0.126	0.400	*****	*****	*****	0.0140	*****	*****	0.000	20	1757.21
CLS DN 500	Circolare	0.196	0.500	*****	*****	*****	0.0140	*****	*****	0.000	14	1403.83
CLS DN 600	Circolare	0.283	0.600	*****	*****	*****	0.0140	*****	*****	0.000	10	1088.84
CLS DN 800	Circolare	0.503	0.800	*****	*****	*****	0.0140	*****	*****	0.000	9	637.20
CLS SCAT 10.00 x 1.00	Rettangolare	10.000	*****	1.000	10.000	*****	0.0140	*****	*****	0.000	1	19.04
CLS SCAT 2.50 x 1.25	Rettangolare	3.125	*****	1.250	2.500	*****	0.0140	*****	*****	0.000	15	725.27
CLS SCAT 3.00 x 1.00	Rettangolare	3.000	*****	1.000	3.000	*****	0.0140	*****	*****	0.000	2	338.81
PVC DN 200	Circolare	0.028	0.190	*****	*****	*****	0.0120	*****	*****	0.000	4	347.71
PVC DN 250	Circolare	0.045	0.240	*****	*****	*****	0.0120	*****	*****	0.000	7	666.23
PVC DN 315	Circolare	0.071	0.300	*****	*****	*****	0.0120	*****	*****	0.000	6	550.48
PVC DN 400	Circolare	0.113	0.380	*****	*****	*****	0.0120	*****	*****	0.000	1	78.88
TERRA ST 4.00 x 1.00 x 1.15	Trapezoidale	2.869	*****	1.150	1.000	1.30-1.30	0.0300	*****	*****	0.000	2	370.66

TERRA ST 4.00 x 1.00 x 1.40	Trapezoidal e	3.497	*****	1.400	1.000	1.07-1.07	0.0300	*****	*****	0.000	4	84.83
TERRA ST 6.00 x 3.00 x 1.15	Trapezoidal e	5.169	*****	1.150	3.000	1.30-1.30	0.0300	*****	*****	0.000	1	163.38
											106	9106.22

DATI DEI NODI						
Nodo	Quota terreno (m slm)	Quota cielo (m slm)	Quota fondo (m slm)	Portata esterna (m3/s)	Livello iniziale (m)	Rami collegati
1	28.50	27.54	27.35	0.00	0.00	1
10	28.00	27.61	27.01	0.00	0.00	10,11
100	25.06	24.95	23.55	0.00	0.00	104
101	25.12	24.91	23.51	0.00	0.00	104,105
102	25.40	25.02	21.70	0.00	0.00	105,106
103	25.05	24.91	21.69	0.00	0.00	106,107
104	25.07	25.06	23.66	0.00	0.00	107
11	27.80	27.18	26.58	0.00	0.00	12,13
12	27.51	26.90	26.30	0.00	0.00	13,14
13	27.48	26.66	26.06	0.00	0.00	14,15
14	27.44	26.60	25.80	0.00	0.00	15,16,17
15	27.53	26.60	26.10	0.00	0.00	16
16	27.42	26.59	25.75	0.00	0.00	17,19,20
17	27.60	26.80	26.50	0.00	0.00	18
18	27.68	26.77	26.39	0.00	0.00	18,19
19	27.20	26.40	25.60	0.00	0.00	20,22,23
2	28.56	27.49	27.30	0.00	0.00	1,2,3
20	26.98	26.83	26.43	0.00	0.00	21
21	26.82	26.69	26.29	0.00	0.00	21,22
22	27.16	26.36	25.56	0.00	0.00	23,24,26
23	27.12	26.38	25.54	0.00	0.00	24,25,28
24	27.12	26.34	25.54	0.00	0.00	25,27,29
25	27.16	26.46	26.06	0.00	0.00	26
26	26.82	26.10	25.70	0.00	0.00	27
27	27.20	26.42	25.92	0.00	0.00	28
28	27.08	26.22	25.42	0.00	0.00	29,30,32
29	26.80	26.16	25.36	0.00	0.00	30,34,36
3	28.25	27.74	27.14	0.00	0.00	10,5,6
30	26.80	26.42	26.12	0.00	0.00	31
31	27.07	26.33	26.03	0.00	0.00	31,32
32	26.94	26.34	26.10	0.00	0.00	33
33	26.62	26.03	25.68	0.00	0.00	33,34,35
34	26.60	25.97	25.73	0.00	0.00	35
35	26.60	25.99	24.74	0.00	0.00	36,44,45,82
36	26.80	26.24	26.00	0.00	0.00	37
37	26.51	26.09	25.66	0.00	0.00	37,41,42
38	26.66	26.19	25.95	0.00	0.00	38
39	26.44	25.87	25.43	0.00	0.00	38,42,43
4	28.23	27.70	27.20	0.00	0.00	3,4,5,7
40	26.53	26.09	25.85	0.00	0.00	39
41	26.39	25.72	25.32	0.00	0.00	39,40,43,44
42	26.30	25.76	25.52	0.00	0.00	40
43	26.60	26.09	25.69	0.00	0.00	41
44	26.40	25.60	24.60	0.00	0.00	49,51,77
45	26.47	25.91	25.67	0.00	0.00	46
46	26.66	25.79	25.39	0.00	0.00	46,47,48
47	26.83	26.10	25.70	0.00	0.00	47
48	26.13	25.56	25.16	0.00	0.00	48,49,50
49	26.13	25.62	25.24	0.00	0.00	50,54
5	28.08	27.65	27.25	0.00	0.00	4

50	25.90	25.52	24.49	0.00	0.00	51,56,57,81
51	26.20	25.75	25.35	0.00	0.00	52
52	26.12	25.70	25.30	0.00	0.00	52,53,54
53	26.60	25.92	25.42	0.00	0.00	55
54	26.50	25.87	25.37	0.00	0.00	55,56,78
55	25.94	25.44	24.44	0.00	0.00	57,59,63
56	26.70	25.74	25.34	0.00	0.00	58
57	26.63	25.87	25.57	0.00	0.00	60
58	26.63	25.30	24.77	0.00	0.00	59,61,79
59	26.66	25.70	25.40	0.00	0.00	62
6	28.36	27.70	27.20	0.00	0.00	2,6
60	26.64	25.51	24.99	0.00	0.00	58,61,80
61	25.97	25.23	24.02	0.00	0.00	63,64
62	25.91	25.16	23.96	0.00	0.00	64,65,69
63	25.50	25.24	23.73	0.00	0.00	65,74,88
64	26.20	25.21	24.71	0.00	0.00	66
65	26.18	25.11	24.61	0.00	0.00	66,67,70
66	26.18	25.18	24.58	0.00	0.00	67,68,71
67	26.18	25.17	24.49	0.00	0.00	68,69,72,73
68	26.20	25.21	24.71	0.00	0.00	70
69	26.19	25.25	24.75	0.00	0.00	71
7	28.20	27.58	27.08	0.00	0.00	7,8
70	26.19	25.17	24.77	0.00	0.00	72
71	26.15	25.31	24.91	0.00	0.00	73
72	25.11	25.10	23.50	0.00	0.00	108,74,75
73	24.35	24.33	23.18	0.00	0.00	102,103,90
75	26.55	25.67	24.67	0.00	0.00	77,89
76	26.64	26.03	25.84	0.00	0.00	78
77	26.63	25.52	25.10	0.00	0.00	60,79
78	26.70	25.66	25.26	0.00	0.00	62,80
79	26.16	25.78	25.28	0.00	0.00	53,81
8	28.13	27.55	26.95	0.00	0.00	8,9
80	26.80	25.98	24.73	0.00	0.00	82,83
81	26.60	25.83	24.59	0.00	0.00	84,93
82	26.10	25.74	24.49	0.00	0.00	85,94
83	26.10	25.60	24.35	0.00	0.00	86,96
84	26.10	25.46	24.21	0.00	0.00	87,98
85	26.10	25.29	24.04	0.00	0.00	100,88
86	26.61	25.92	25.12	0.00	0.00	45,89
87	25.05	24.63	23.48	0.00	0.00	75,90
88	25.01	25.01	23.53	0.00	0.00	101,108
89	26.73	25.93	24.68	0.00	0.00	83,92
9	28.12	27.51	26.91	0.00	0.00	11,12,9
90	26.67	25.88	24.63	0.00	0.00	92,93
91	26.26	25.77	24.52	0.00	0.00	84,94
92	26.10	25.69	24.44	0.00	0.00	85,95
93	26.10	25.64	24.39	0.00	0.00	95,96
94	26.10	25.55	24.30	0.00	0.00	86,97
95	26.10	25.51	24.26	0.00	0.00	97,98
96	26.10	25.41	24.16	0.00	0.00	87,99
97	26.10	25.35	24.10	0.00	0.00	100,99
98	24.60	24.30	23.30	0.00	0.00	101,102
99	24.30	24.26	23.11	0.00	0.00	103

DATI DEGLI ELEMENTI LINEARI					
Elemento	Nodo iniziale	Nodo finale	Materiale	Lunghezza (m)	Valvola anti-rifl.
1	1	2	PVC DN 200	76.83	no
10	3	10	CLS DN 600	147.48	no

100	97	85	CLS SCAT 2.50 x 1.25	61.65	no
101	88	98	CLS SCAT 3.00 x 1.00	308.81	no
102	98	73	PVC DN 315	14.29	si
103	73	99	TERRA ST 4.00 x 1.00 x 1.15	74.10	no
104	100	101	TERRA ST 4.00 x 1.00 x 1.40	21.71	no
105	101	102	TERRA ST 4.00 x 1.00 x 1.40	26.08	no
106	102	103	TERRA ST 4.00 x 1.00 x 1.40	15.00	no
107	103	104	TERRA ST 4.00 x 1.00 x 1.40	22.04	no
108	72	88	CLS SCAT 10.00 x 1.00	19.04	no
11	10	9	CLS DN 600	114.27	no
12	9	11	CLS DN 600	141.78	no
13	11	12	CLS DN 600	117.59	no
14	12	13	CLS DN 600	133.25	no
15	13	14	CLS DN 600	149.14	no
16	15	14	CLS DN 500	135.47	no
17	14	16	CLS DN 800	49.77	no
18	17	18	PVC DN 315	52.48	no
19	18	16	PVC DN 400	78.88	no
2	2	6	PVC DN 200	127.68	no
20	16	19	CLS DN 800	150.26	no
21	20	21	CLS DN 400	186.03	no
22	21	19	CLS DN 400	186.05	no
23	19	22	CLS DN 800	51.45	no
24	22	23	CLS DN 800	51.83	no
25	23	24	CLS DN 800	5.86	no
26	25	22	CLS DN 400	141.33	no
27	26	24	CLS DN 400	172.17	no
28	27	23	CLS DN 500	26.48	no
29	24	28	CLS DN 800	85.06	no
3	2	4	PVC DN 200	75.37	no
30	28	29	CLS DN 800	38.25	no
31	30	31	PVC DN 315	201.22	no
32	31	28	PVC DN 315	181.16	no
33	32	33	PVC DN 250	128.85	no
34	33	29	PVC DN 315	83.61	no
35	34	33	PVC DN 250	37.21	no
36	29	35	CLS DN 800	147.85	no
37	36	37	PVC DN 250	118.72	no
38	38	39	PVC DN 250	118.51	no
39	40	41	PVC DN 250	84.04	no
4	5	4	CLS DN 400	103.28	no
40	42	41	PVC DN 250	58.51	no
41	43	37	CLS DN 400	38.43	no
42	37	39	CLS DN 400	44.40	no
43	39	41	CLS DN 400	56.34	no
44	41	35	CLS DN 400	83.77	no
45	35	86	PVC DN 315	17.71	no
46	45	46	PVC DN 250	120.39	no
47	47	46	CLS DN 400	28.08	no
48	46	48	CLS DN 400	94.76	no
49	48	44	CLS DN 400	92.32	no
5	4	3	CLS DN 400	121.55	no
50	49	48	CLS DN 300	53.15	no
51	44	50	CLS DN 1000	97.56	no
52	51	52	CLS DN 400	83.20	no
53	52	79	CLS DN 400	40.83	no
54	49	52	CLS DN 300	62.13	no
55	53	54	CLS DN 500	277.76	no
56	54	50	CLS DN 500	283.20	no
57	50	55	CLS DN 1000	179.48	no

58	56	60	CLS DN 400	51.91	no
59	58	55	CLS DN 500	44.73	no
6	6	3	CLS DN 500	73.34	no
60	57	77	CLS DN 300	43.17	no
61	60	58	CLS DN 500	53.75	no
62	59	78	CLS DN 300	48.20	no
63	55	61	CLS DN 1000	185.98	no
64	61	62	CLS DN 1200	25.43	no
65	62	63	CLS DN 1200	112.81	no
66	64	65	CLS DN 500	51.64	no
67	65	66	CLS DN 500	60.75	no
68	66	67	CLS DN 600	98.30	no
69	67	62	CLS DN 600	42.41	no
7	4	7	CLS DN 500	135.86	no
70	68	65	CLS DN 500	33.04	no
71	69	66	CLS DN 500	65.37	no
72	70	67	CLS DN 400	50.94	no
73	71	67	CLS DN 400	79.65	no
74	63	72	TERRA ST 6.00 x 3.00 x 1.15	163.38	no
75	72	87	CLS DN 600	23.38	no
77	75	44	CLS DN 1000	65.94	no
78	76	54	PVC DN 200	67.82	no
79	77	58	CLS DN 400	49.86	no
8	7	8	CLS DN 500	117.89	no
80	78	60	CLS DN 400	52.32	no
81	79	50	CLS DN 500	44.56	no
82	35	80	CLS SCAT 2.50 x 1.25	10.00	no
83	80	89	CLS SCAT 2.50 x 1.25	50.00	no
84	81	91	CLS SCAT 2.50 x 1.25	65.00	no
85	82	92	CLS SCAT 2.50 x 1.25	50.00	no
86	83	94	CLS SCAT 2.50 x 1.25	45.02	no
87	84	96	CLS SCAT 2.50 x 1.25	55.00	no
88	85	63	CLS SCAT 2.50 x 1.25	45.50	no
89	86	75	CLS DN 800	56.86	no
9	8	9	CLS DN 600	121.22	no
90	87	73	TERRA ST 4.00 x 1.00 x 1.15	296.56	no
92	89	90	CLS SCAT 2.50 x 1.25	50.00	no
93	90	81	CLS SCAT 2.50 x 1.25	49.36	no
94	91	82	CLS SCAT 3.00 x 1.00	30.00	no
95	92	93	CLS SCAT 2.50 x 1.25	50.00	no
96	93	83	CLS SCAT 2.50 x 1.25	47.76	no
97	94	95	CLS SCAT 2.50 x 1.25	45.98	no
98	95	84	CLS SCAT 2.50 x 1.25	45.00	no
99	96	97	CLS SCAT 2.50 x 1.25	55.00	no

SOMMARIO STATISTICHE DEI NODI											
Nodo	Quota terreno (m slm)	Quota cielo (m slm)	Quota media (m slm)	% variaz. media	Massima quota		Sovracc. alla max. quota (m)	Dist. tra terreno e livello max (m)	Durata del sovracc. (min)	Durata della esondaz. (min)	
					(m slm)	al tempo					
1	28.50	27.54	27.61	0.0480	28.50	2:35	0.96	0.00	337.53	290.07	*
10	28.00	27.61	27.24	0.0110	28.00	2:54	0.39	0.00	280.77	264.10	*
100	25.06	24.95	23.55	0.0000	23.55	0:00	0.00	1.51	0.00	0.00	
101	25.12	24.91	23.51	0.0000	23.51	0:00	0.00	1.61	0.00	0.00	
102	25.40	25.02	21.70	0.0000	21.70	0:00	0.00	3.70	0.00	0.00	
103	25.05	24.91	21.68	0.0000	21.68	0:00	0.00	3.37	0.00	0.00	
104	25.07	25.06	23.66	0.0000	23.66	0:00	0.00	1.41	0.00	0.00	
11	27.80	27.18	26.87	0.0200	27.80	2:44	0.62	0.00	310.50	129.70	*
12	27.51	26.90	26.60	0.0208	27.51	2:54	0.61	0.00	321.00	274.50	*

13	27.48	26.66	26.39	0.0220	27.44	7:00	0.78	0.04	325.50	0.00	
14	27.44	26.60	26.08	0.0105	27.01	7:00	0.41	0.43	278.93	0.00	
15	27.53	26.60	26.28	0.0159	27.02	7:00	0.42	0.51	278.77	0.00	
16	27.42	26.59	26.04	0.0099	26.97	7:00	0.38	0.45	276.67	0.00	
17	27.60	26.80	26.58	0.0088	27.03	7:00	0.23	0.57	238.07	0.00	
18	27.68	26.77	26.49	0.0080	26.99	7:00	0.22	0.69	250.43	0.00	
19	27.20	26.40	25.89	0.0082	26.77	7:00	0.37	0.43	282.47	0.00	
2	28.56	27.49	27.58	0.0473	28.56	2:54	1.07	0.00	338.97	209.33	*
20	26.98	26.83	26.56	0.0112	26.98	3:04	0.15	0.00	261.50	204.27	*
21	26.82	26.69	26.42	0.0089	26.82	3:02	0.13	0.00	267.77	256.87	*
22	27.16	26.36	25.85	0.0077	26.69	7:00	0.33	0.47	278.37	0.00	
23	27.12	26.38	25.81	0.0062	26.59	7:00	0.21	0.53	265.37	0.00	
24	27.12	26.34	25.80	0.0065	26.58	7:00	0.24	0.54	270.13	0.00	
25	27.16	26.46	26.18	0.0149	26.92	2:59	0.46	0.24	265.37	0.00	
26	26.82	26.10	25.90	0.0144	26.64	7:00	0.54	0.18	326.57	0.00	
27	27.20	26.42	26.05	0.0072	26.59	7:00	0.18	0.61	255.03	0.00	
28	27.08	26.22	25.68	0.0060	26.40	7:00	0.18	0.68	267.27	0.00	
29	26.80	26.16	25.62	0.0056	26.30	7:00	0.13	0.50	261.17	0.00	
3	28.25	27.74	27.35	0.0107	28.25	2:55	0.51	0.00	275.57	0.27	*
30	26.80	26.42	26.29	0.0176	26.80	2:55	0.38	0.00	297.40	261.93	*
31	27.07	26.33	26.20	0.0211	26.78	6:59	0.45	0.29	295.70	0.00	
32	26.94	26.34	26.22	0.0196	26.94	6:52	0.60	0.00	258.37	7.93	*
33	26.62	26.03	25.84	0.0126	26.53	7:00	0.50	0.09	310.70	0.00	
34	26.60	25.97	25.88	0.0214	26.54	7:00	0.57	0.06	328.20	0.00	
35	26.60	25.99	24.84	0.0015	25.12	7:00	0.00	1.48	0.00	0.00	
36	26.80	26.24	26.04	0.0039	26.19	7:00	0.00	0.61	0.00	0.00	
37	26.51	26.09	25.69	0.0022	25.86	7:00	0.00	0.65	0.00	0.00	
38	26.66	26.19	25.98	0.0030	26.08	7:00	0.00	0.58	0.00	0.00	
39	26.44	25.87	25.51	0.0046	25.85	7:00	0.00	0.59	0.00	0.00	
4	28.23	27.70	27.41	0.0165	28.23	2:54	0.53	0.00	278.47	0.03	*
40	26.53	26.09	25.87	0.0022	25.96	7:00	0.00	0.57	0.00	0.00	
41	26.39	25.72	25.43	0.0059	25.81	7:00	0.09	0.58	149.30	0.00	
42	26.30	25.76	25.57	0.0067	25.84	7:00	0.08	0.46	138.13	0.00	
43	26.60	26.09	25.72	0.0021	25.86	7:00	0.00	0.74	0.00	0.00	
44	26.40	25.60	24.72	0.0028	25.17	7:00	0.00	1.23	0.00	0.00	
45	26.47	25.91	25.70	0.0024	25.79	7:00	0.00	0.68	0.00	0.00	
46	26.66	25.79	25.44	0.0032	25.66	7:00	0.00	1.00	0.00	0.00	
47	26.83	26.10	25.71	0.0007	25.76	6:58	0.00	1.07	0.00	0.00	
48	26.13	25.56	25.25	0.0048	25.56	7:00	0.00	0.57	0.00	0.00	
49	26.13	25.62	25.30	0.0041	25.56	7:00	0.00	0.57	0.00	0.00	
5	28.08	27.65	27.43	0.0201	28.08	2:54	0.43	0.00	281.17	265.33	*
50	25.90	25.52	24.67	0.0034	25.17	7:00	0.00	0.73	0.00	0.00	
51	26.20	25.75	25.39	0.0024	25.55	7:00	0.00	0.65	0.00	0.00	
52	26.12	25.70	25.35	0.0028	25.53	7:00	0.00	0.59	0.00	0.00	
53	26.60	25.92	25.61	0.4055	26.60	5:05	0.68	0.00	166.57	41.83	*
54	26.50	25.87	25.55	0.1949	26.50	5:14	0.63	0.00	155.67	2.27	*
55	25.94	25.44	24.61	0.0031	25.07	7:00	0.00	0.87	0.00	0.00	
56	26.70	25.74	25.36	0.0010	25.42	7:00	0.00	1.28	0.00	0.00	
57	26.63	25.87	25.59	0.0017	25.67	7:00	0.00	0.96	0.00	0.00	
58	26.63	25.30	24.84	0.0032	25.12	7:00	0.00	1.51	0.00	0.00	
59	26.66	25.70	25.43	0.0023	25.55	7:00	0.00	1.11	0.00	0.00	
6	28.36	27.70	27.39	0.0146	28.36	2:55	0.66	0.00	276.97	0.13	*
60	26.64	25.51	25.03	0.0016	25.16	7:00	0.00	1.48	0.00	0.00	
61	25.97	25.23	24.15	0.0021	24.56	7:00	0.00	1.41	0.00	0.00	
62	25.91	25.16	24.10	0.0023	24.54	7:00	0.00	1.37	0.00	0.00	
63	25.50	25.24	23.93	0.0023	24.45	7:00	0.00	1.05	0.00	0.00	
64	26.20	25.21	24.76	0.0023	24.95	7:00	0.00	1.25	0.00	0.00	
65	26.18	25.11	24.68	0.0032	24.95	7:00	0.00	1.23	0.00	0.00	
66	26.18	25.18	24.65	0.0028	24.93	7:00	0.00	1.25	0.00	0.00	
67	26.18	25.17	24.58	0.0028	24.88	7:00	0.00	1.30	0.00	0.00	

68	26.20	25.21	24.75	0.0023	24.95	7:00	0.00	1.25	0.00	0.00	
69	26.19	25.25	24.78	0.0018	24.93	7:00	0.00	1.26	0.00	0.00	
7	28.20	27.58	27.31	0.0210	28.19	2:55	0.61	0.01	285.40	0.00	
70	26.19	25.17	24.82	0.0024	24.97	7:00	0.00	1.22	0.00	0.00	
71	26.15	25.31	24.96	0.0026	25.12	7:00	0.00	1.03	0.00	0.00	
72	25.11	25.10	23.77	0.0022	24.24	7:00	0.00	0.87	0.00	0.00	
73	24.35	24.33	23.54	0.0018	23.76	7:08	0.00	0.59	0.00	0.00	
75	26.55	25.67	24.77	0.0025	25.17	7:00	0.00	1.38	0.00	0.00	
76	26.64	26.03	25.92	0.3869	26.64	5:14	0.61	0.00	148.97	45.00	*
77	26.63	25.52	25.13	0.0016	25.23	7:00	0.00	1.40	0.00	0.00	
78	26.70	25.66	25.30	0.0020	25.43	7:00	0.00	1.27	0.00	0.00	
79	26.16	25.78	25.31	0.0013	25.42	7:00	0.00	0.74	0.00	0.00	
8	28.13	27.55	27.20	0.0138	28.10	2:55	0.55	0.03	285.70	0.00	
80	26.80	25.98	24.83	0.0015	25.12	7:00	0.00	1.68	0.00	0.00	
81	26.60	25.83	24.69	0.0016	25.00	7:00	0.00	1.60	0.00	0.00	
82	26.10	25.74	24.60	0.0017	24.93	7:00	0.00	1.17	0.00	0.00	
83	26.10	25.60	24.46	0.0018	24.81	7:00	0.00	1.29	0.00	0.00	
84	26.10	25.46	24.33	0.0018	24.69	7:00	0.00	1.41	0.00	0.00	
85	26.10	25.29	24.16	0.0017	24.49	7:00	0.00	1.61	0.00	0.00	
86	26.61	25.92	25.14	0.0004	25.18	7:00	0.00	1.42	0.00	0.00	
87	25.05	24.63	23.69	0.0024	24.05	7:01	0.00	1.00	0.00	0.00	
88	25.01	25.01	23.88	0.0015	24.09	7:02	0.00	0.92	0.00	0.00	
89	26.73	25.93	24.79	0.0015	25.08	7:00	0.00	1.65	0.00	0.00	
9	28.12	27.51	27.16	0.0135	28.01	2:55	0.50	0.11	287.90	0.00	
90	26.67	25.88	24.74	0.0016	25.04	7:00	0.00	1.63	0.00	0.00	
91	26.26	25.77	24.63	0.0016	24.94	7:00	0.00	1.31	0.00	0.00	
92	26.10	25.69	24.55	0.0017	24.89	7:00	0.00	1.21	0.00	0.00	
93	26.10	25.64	24.51	0.0017	24.84	7:00	0.00	1.26	0.00	0.00	
94	26.10	25.55	24.42	0.0018	24.77	7:00	0.00	1.33	0.00	0.00	
95	26.10	25.51	24.38	0.0018	24.73	7:00	0.00	1.37	0.00	0.00	
96	26.10	25.41	24.28	0.0018	24.64	7:00	0.00	1.46	0.00	0.00	
97	26.10	25.35	24.22	0.0018	24.57	7:00	0.00	1.53	0.00	0.00	
98	24.60	24.30	23.78	0.0022	23.99	8:28	0.00	0.61	0.00	0.00	
99	24.30	24.26	23.27	0.0010	23.41	7:07	0.00	0.89	0.00	0.00	

Nodo con la maggiore variazione media percentuale: '53' pari a 0.406 % (**)

(*) Attenzione: c'è un ingresso di portata alla rete in un nodo in cui è possibile un'esondazione. Se l'ingresso è contemporaneo all'esondazione, l'acqua non entrerà in rete e verrà considerata solamente nel controllo di continuità.

(**) La variazione media nei nodi è così definita:
 $100.0 \cdot (Y(n+1) - Y(n)) / Yfull$

SOMMARIO STATISTICHE DEGLI ELEMENTI LINEARI

Elemento	Portata di moto uniforme (m3/s)	Velocità di moto uniforme (m/s)	Altezza condotto (m)	Portata max di calcolo		Velocità max di calcolo		Rapporto tra Qmax e Q moto uniforme	Raggio idraulico massimo (m)	Sezione trasvers. massima (m2)	Area normaliz. massima	Durata della Q normale (min)	Pendenza ramo (m/m)
				(m3/s)	al tempo	(m/s)	al tempo						
1	0.0079	0.28	0.190	0.022	2:35	0.79	2:35	2.82	0.0578	0.0284	1.00	934.7	0.00065
10	0.1690	0.60	0.600	0.115	7:00	0.52	2:38	0.68	0.1792	0.2827	1.00	1010.0	0.00088
100	3.9377	1.26	1.250	1.413	7:00	1.23	7:00	0.36	0.3362	1.1501	0.37	912.9	0.00100
101	3.0517	1.02	1.000	1.718	7:01	35.86	2:27	0.56	0.4242	1.7762	0.59	7.7	0.00075
102	0.0331	0.47	0.300	0.172	10:26	2.43	10:26	5.19	0.0831	0.0707	1.00	0.0	0.00100
103	2.1545	0.75	1.150	0.633	7:07	0.89	7:07	0.29	0.2798	0.7145	0.25	0.0	0.00100
104	3.8912	1.11	1.400	0.000	0:00	0.00	0:00	0.00	0.0000	0.0000	0.00	0.0	0.00184
105	5.8868	1.68	1.400	0.000	0:00	0.00	0:00	0.00	0.0000	0.0000	0.00	0.0	0.00422
106	2.8664	0.82	1.400	0.000	0:00	0.00	0:00	0.00	0.0000	0.0000	0.00	0.0	0.00100
107	7.4767	2.14	1.400	0.000	0:00	0.00	0:00	0.00	0.0000	0.0000	0.00	0.0	0.00680
108	29.8590	2.99	1.000	1.724	7:00	1.29	7:00	0.06	0.1300	1.3346	0.13	0.2	0.00500

11	0.1690	0.60	0.600	0.090	7:19	0.46	2:44	0.53	0.1808	0.2827	1.00	997.0	0.00088
12	0.2765	0.98	0.600	0.223	7:19	0.98	2:39	0.81	0.1757	0.2827	1.00	1062.4	0.00235
13	0.2765	0.98	0.600	0.283	4:54	1.00	4:54	1.02	0.1767	0.2827	1.00	1048.8	0.00235
14	0.2399	0.85	0.600	0.280	2:55	0.99	2:56	1.17	0.1815	0.2827	1.00	1033.5	0.00177
15	0.2399	0.85	0.600	0.358	2:55	1.27	2:56	1.49	0.1825	0.2827	1.00	999.0	0.00177
16	0.1358	0.69	0.500	0.038	7:00	0.41	1:30	0.28	0.1386	0.1964	1.00	164.1	0.00150
17	0.3892	0.77	0.800	0.387	2:56	0.78	2:44	1.00	0.2433	0.5027	1.00	839.3	0.00101
18	0.0480	0.68	0.300	0.027	7:00	0.60	2:54	0.56	0.0877	0.0707	1.00	522.4	0.00210
19	0.0940	0.83	0.380	0.037	7:00	0.69	2:42	0.39	0.1053	0.1134	1.00	42.3	0.00228
2	0.0087	0.31	0.190	0.026	2:54	0.91	2:54	2.97	0.0577	0.0284	1.00	58.7	0.00078
20	0.3880	0.77	0.800	0.442	7:00	0.88	7:00	1.14	0.2431	0.5027	1.00	934.9	0.00100
21	0.0531	0.42	0.400	0.057	3:53	0.49	2:51	1.07	0.1204	0.1257	1.00	945.1	0.00075
22	0.0930	0.74	0.400	0.071	7:20	0.60	2:11	0.76	0.1108	0.1257	1.00	85.4	0.00231
23	0.3424	0.68	0.800	0.493	7:00	0.98	7:00	1.44	0.2434	0.5027	1.00	755.5	0.00078
24	0.2286	0.45	0.800	0.525	7:00	1.04	7:00	2.30	0.2430	0.5027	1.00	156.4	0.00035
25	0.2285	0.45	0.800	0.529	7:00	1.05	7:00	2.31	0.2434	0.5027	1.00	6.8	0.00035
26	0.1016	0.81	0.400	0.024	7:00	0.34	1:30	0.23	0.1108	0.1257	1.00	234.5	0.00276
27	0.0590	0.47	0.400	0.035	7:00	0.28	7:00	0.59	0.1109	0.1257	1.00	895.9	0.00093
28	0.1358	0.69	0.500	0.010	2:59	0.26	2:22	0.07	0.1517	0.1964	1.00	14.9	0.00150
29	0.4670	0.93	0.800	0.577	7:00	1.15	7:00	1.24	0.2432	0.5027	1.00	915.4	0.00145
3	0.0113	0.40	0.190	0.031	2:51	1.10	2:51	2.77	0.0578	0.0284	1.00	704.4	0.00133
30	0.4670	0.93	0.800	0.629	7:00	1.25	7:00	1.35	0.2434	0.5027	1.00	808.1	0.00145
31	0.0222	0.31	0.300	0.033	7:31	0.47	7:31	1.50	0.0912	0.0707	1.00	766.4	0.00045
32	0.0467	0.66	0.300	0.050	7:10	0.70	7:10	1.06	0.0845	0.0707	1.00	58.8	0.00199
33	0.0283	0.63	0.240	0.033	7:00	0.72	7:00	1.15	0.0665	0.0452	1.00	64.1	0.00241
34	0.0601	0.85	0.300	0.055	6:53	0.78	6:53	0.92	0.0831	0.0707	1.00	382.8	0.00330
35	0.0221	0.49	0.240	0.010	6:59	0.22	1:12	0.45	0.0709	0.0452	1.00	974.1	0.00147
36	0.4670	0.93	0.800	0.722	7:00	1.60	7:00	1.55	0.2329	0.4510	0.90	0.0	0.00145
37	0.0205	0.45	0.240	0.017	7:00	0.58	7:00	0.82	0.0658	0.0293	0.65	0.0	0.00126
38	0.0300	0.66	0.240	0.018	4:38	0.81	4:38	0.59	0.0673	0.0340	0.75	149.7	0.00270
39	0.0459	1.01	0.240	0.019	7:00	0.58	6:40	0.41	0.0581	0.0326	0.72	1346.8	0.00631
4	0.0425	0.34	0.400	-0.049	7:00	-0.39	7:00	-1.14	0.1207	0.1257	1.00	923.9	0.00048
40	0.0338	0.75	0.240	0.015	6:59	0.33	6:59	0.45	0.0665	0.0452	1.00	1068.5	0.00342
41	0.0540	0.43	0.400	0.006	7:03	0.17	4:53	0.10	0.0949	0.0571	0.45	442.4	0.00078
42	0.1392	1.11	0.400	0.031	7:02	0.39	2:23	0.22	0.1008	0.0942	0.75	1230.2	0.00518
43	0.0855	0.68	0.400	0.056	7:02	0.44	7:02	0.65	0.1181	0.1257	1.00	1036.2	0.00195
44	0.0423	0.34	0.400	0.100	7:00	0.92	6:59	2.36	0.1127	0.1089	0.87	0.0	0.00048
45	0.0398	0.56	0.300	-0.001	6:59	-0.16	7:00	-0.02	0.0258	0.0062	0.09	0.0	0.00145
46	0.0279	0.62	0.240	0.014	7:00	0.42	7:00	0.51	0.0640	0.0341	0.75	1379.2	0.00233
47	0.2032	1.62	0.400	0.009	6:53	0.34	1:08	0.04	0.0755	0.0496	0.39	1056.6	0.01104
48	0.0953	0.76	0.400	0.059	7:00	0.56	7:02	0.62	0.1129	0.1068	0.85	1222.4	0.00243
49	0.0569	0.45	0.400	0.081	7:00	0.82	7:00	1.42	0.1133	0.0980	0.78	0.0	0.00087
5	0.0430	0.34	0.400	0.077	2:54	0.61	2:54	1.79	0.1216	0.1257	1.00	936.0	0.00049
50	0.0348	0.49	0.300	0.010	2:43	0.26	1:15	0.28	0.0881	0.0707	1.00	947.4	0.00150
51	0.7387	0.94	1.000	0.120	5:29	0.34	1:29	0.16	0.2823	0.5176	0.66	802.1	0.00110
52	0.0459	0.37	0.400	0.016	7:00	0.25	2:29	0.34	0.1038	0.0683	0.54	1025.9	0.00056
53	0.0459	0.37	0.400	0.038	7:00	0.67	7:00	0.82	0.0921	0.0562	0.45	18.6	0.00056
54	0.0148	0.21	0.300	0.018	7:00	-0.48	1:17	1.19	0.0910	0.0591	0.84	0.0	0.00027
55	0.0470	0.24	0.500	0.100	7:02	0.51	7:02	2.12	0.1521	0.1964	1.00	688.2	0.00018
56	0.1428	0.73	0.500	0.207	7:00	1.16	5:33	1.45	0.1454	0.1794	0.91	0.0	0.00166
57	0.3716	0.47	1.000	0.384	7:00	0.70	7:00	1.03	0.2889	0.5459	0.70	719.9	0.00028
58	0.1588	1.26	0.400	0.015	6:59	0.43	6:59	0.10	0.0709	0.0360	0.29	1369.9	0.00674
59	0.1387	0.71	0.500	0.147	4:45	1.28	4:45	1.06	0.1492	0.1516	0.77	16.8	0.00157
6	0.1003	0.51	0.500	0.029	7:00	0.30	2:35	0.29	0.1509	0.1964	1.00	924.9	0.00082
60	0.0808	1.14	0.300	0.021	6:59	0.96	6:59	0.26	0.0578	0.0219	0.31	1.1	0.00811
61	0.2243	1.14	0.500	0.059	6:59	0.60	5:22	0.26	0.1222	0.1035	0.53	1379.3	0.00409
62	0.0484	0.68	0.300	0.023	6:59	0.62	6:59	0.48	0.0769	0.0374	0.53	747.4	0.00290
63	0.7481	0.95	1.000	0.511	7:00	1.24	7:00	0.68	0.2528	0.4108	0.52	0.0	0.00113
64	1.7584	1.55	1.200	0.511	7:00	0.99	6:39	0.29	0.2854	0.5142	0.45	930.6	0.00236
65	1.6190	1.43	1.200	0.673	7:00	1.09	6:43	0.42	0.3122	0.6204	0.55	697.7	0.00200

66	0.1568	0.80	0.500	0.015	6:59	0.15	2:25	0.09	0.1329	0.1155	0.59	1064.2	0.00200
67	0.0779	0.40	0.500	0.052	6:59	0.36	5:38	0.67	0.1468	0.1427	0.73	795.2	0.00049
68	0.1725	0.61	0.600	0.089	6:59	0.49	6:59	0.52	0.1678	0.1816	0.64	1050.2	0.00092
69	0.1238	0.44	0.600	0.155	7:00	1.01	6:59	1.25	0.1546	0.1538	0.54	0.0	0.00047
7	0.1042	0.53	0.500	0.056	2:47	0.44	2:35	0.54	0.1483	0.1964	1.00	1042.1	0.00088
70	0.1929	0.98	0.500	0.025	6:59	0.32	1:11	0.13	0.1337	0.1165	0.59	1063.8	0.00303
71	0.1788	0.91	0.500	0.023	6:59	0.28	1:15	0.13	0.1237	0.1050	0.53	1110.2	0.00260
72	0.0383	0.30	0.400	0.025	6:59	0.55	6:59	0.64	0.0822	0.0447	0.36	0.0	0.00039
73	0.0811	0.65	0.400	0.037	6:59	0.70	7:00	0.45	0.0902	0.0525	0.42	0.0	0.00176
74	5.4116	1.05	1.150	2.244	7:00	0.79	7:00	0.41	0.5307	2.8524	0.55	849.4	0.00141
75	0.1803	0.64	0.600	0.520	7:00	1.86	7:00	2.88	0.1809	0.2801	0.99	0.0	0.00100
77	0.7387	0.94	1.000	0.023	7:10	0.11	1:17	0.03	0.2610	0.4318	0.55	748.6	0.00110
78	0.0196	0.69	0.190	0.021	5:32	0.74	5:32	1.08	0.0548	0.0284	1.00	159.8	0.00398
79	0.1225	0.97	0.400	0.028	6:59	0.68	2:39	0.23	0.0891	0.0528	0.42	279.8	0.00401
8	0.1164	0.59	0.500	0.099	7:00	0.56	2:44	0.85	0.1504	0.1964	1.00	998.7	0.00110
80	0.1035	0.82	0.400	0.031	6:59	0.75	6:59	0.30	0.0797	0.0416	0.33	0.0	0.00287
81	0.2678	1.36	0.500	0.044	7:00	1.00	6:14	0.16	0.0819	0.0463	0.24	53.6	0.00584
82	3.9374	1.26	1.250	0.823	7:00	0.87	7:00	0.21	0.2914	0.9499	0.30	730.3	0.00100
83	3.9378	1.26	1.250	0.869	6:59	0.90	6:59	0.22	0.2960	0.9696	0.31	912.3	0.00100
84	3.9377	1.26	1.250	1.064	6:59	1.01	6:59	0.27	0.3153	1.0542	0.34	22.1	0.00100
85	3.8647	1.24	1.250	1.111	6:59	1.01	6:59	0.29	0.3260	1.1025	0.35	867.3	0.00096
86	3.9377	1.26	1.250	1.172	6:59	1.01	6:59	0.30	0.3388	1.1618	0.37	904.8	0.00100
87	3.9378	1.26	1.250	1.333	7:00	1.11	6:59	0.34	0.3461	1.1964	0.38	943.9	0.00100
88	3.9377	1.26	1.250	1.413	7:00	1.47	7:00	0.36	0.2926	0.9584	0.31	0.0	0.00100
89	0.8178	1.63	0.800	0.010	6:59	0.52	2:49	0.01	0.1016	0.0960	0.19	297.4	0.00444
9	0.1036	0.37	0.600	0.108	7:00	0.44	2:44	1.04	0.1824	0.2827	1.00	760.9	0.00033
90	2.1674	0.76	1.150	0.520	7:01	0.54	5:26	0.24	0.3477	1.0024	0.35	1039.8	0.00101
92	3.9377	1.26	1.250	0.915	6:59	0.91	7:00	0.23	0.3033	1.0012	0.32	908.3	0.00100
93	3.9378	1.26	1.250	0.961	6:59	0.93	6:58	0.24	0.3102	1.0317	0.33	923.9	0.00100
94	3.5239	1.17	1.000	1.111	6:59	0.86	6:59	0.32	0.3352	1.2949	0.43	837.0	0.00100
95	3.8647	1.24	1.250	1.111	7:00	0.99	7:00	0.29	0.3293	1.1177	0.36	866.9	0.00096
96	3.8647	1.24	1.250	1.111	7:00	0.98	7:01	0.29	0.3338	1.1386	0.36	851.2	0.00096
97	3.9377	1.26	1.250	1.234	6:59	1.04	6:59	0.31	0.3429	1.1813	0.38	906.2	0.00100
98	3.9378	1.26	1.250	1.295	6:59	1.09	6:59	0.33	0.3453	1.1930	0.38	876.9	0.00100
99	3.9378	1.26	1.250	1.371	7:00	1.15	7:00	0.35	0.3444	1.1886	0.38	922.1	0.00100

Ramo con la maggiore variazione media percentuale: '55' pari a 0.116 % (*)

(*) La variazione media nei rami è così definita:
 $100.0 (Q(n+1) - Q(n)) / Qfull$

P4) Simulazione STATO DI PROGETTO - Ietogramma rettangolare con $Tr = 50$ anni e durata 480 minuti; c.p.c. PTCP

Marte DEFLUX 2007 - DESIGNER EDITION	
Codice	Modulo SWMM 4.40 : Runoff + Extran
	Copyright (C) 2000-2009 DEK s.r.l.
Nome	Prel-SP_rett480
Descrizione	<nessuna descrizione>
Data di creazione	15/04/2011 - 19.58.31
Sottorete	Intera rete
Database	2011-03_Soliera_ZonaW-SP

DATI GENERALI	
Numero dei nodi	103
Numero dei rami	106
Numero delle pompe	0
Numero degli scaricatori	0
Sommario delle piogge	
Pioggia totale (mm)	83.2000

CONTROLLO DI CONTINUITA' PER IL DEFLUSSO SUPERFICIALE		
	Volume (m3)	Livello (mm) sul bacino
Precipitazione totale (Pioggia + Neve)	81313.109375	83.200
Infiltrazione totale	21665.744141	22.169
Evaporazione totale	2653.124756	2.715
Deflusso superficiale	48782.953125	49.915
Volume trattenuto negli accumuli superficiali	8204.204102	8.395
Infiltrazione per l'area permeabile	21665.744141	47.667
Infiltrazione + Evaporazione +		
Deflusso superficiale +		
Accumuli superficiali	81306.023438	83.193
Precipitazione totale + Accumulo iniziale	81313.109375	83.200

Errore 0.009 % (*)
(*) L'errore nella continuità è così calcolato: (Precipitazione - Infiltrazione - Evaporazione - - Deflusso superficiale - Accumuli superficiali) / / Precipitazione

CONTROLLO DI CONTINUITA' NELLA RETE	
	Volume (m3)
Volume iniziale nella rete	0.091062
Ingresso nella rete	48782.621078
Uscita dalla rete	31981.432910
Volume finale nella rete	16793.382813

Errore continuità 0.016 %

SOMMARIO DELLE STATISTICHE DEI SOTTOBACINI						
					Area permeabile	Area impermeabile (*) Area totale sottobacino

Sotto-bacino afferente al ramo	Nodo di Ingresso	Area (ha)	% imper.	Pioggia totale simulata (mm)	Altezza totale deflusso (mm)	Perdite totali (mm)	Deflusso massimo (m3/s)	Altezza deflusso (mm)	Deflusso massimo (m3/s)	Altezza deflusso (mm)	Deflusso massimo (m3/s)	Deflusso massimo unitario (mm/h)
1	1	1.28	75.00	83.200	30.729	52.471	0.01	70.299	0.03	60.406	0.03	9.851
10	3	1.01	75.00	83.200	28.924	54.276	0.01	70.003	0.02	59.733	0.03	9.826
100	97	1.28	60.00	83.200	30.116	53.084	0.01	70.458	0.02	54.321	0.03	9.542
11	10	0.72	75.00	83.200	29.711	53.489	0.00	70.128	0.02	60.024	0.02	9.842
12	9	2.91	75.00	83.200	29.053	54.147	0.02	70.015	0.06	59.774	0.08	9.829
13	11	2.29	75.00	83.200	29.628	53.572	0.01	70.120	0.05	59.997	0.06	9.841
14	12	4.71	40.00	83.200	25.787	57.413	0.06	70.330	0.05	43.604	0.11	8.692
15	13	6.34	40.00	83.200	25.229	57.971	0.08	70.280	0.07	43.249	0.15	8.586
16	15	1.17	60.00	83.200	27.512	55.688	0.01	70.151	0.02	53.096	0.03	9.422
18	17	0.80	60.00	83.200	30.522	52.678	0.01	70.491	0.01	54.503	0.02	9.548
19	18	0.31	60.00	83.200	29.418	53.782	0.00	70.366	0.01	53.987	0.01	9.526
2	2	1.88	75.00	83.200	29.383	53.817	0.01	70.072	0.04	59.900	0.05	9.837
20	16	1.84	60.00	83.200	27.082	56.118	0.02	70.097	0.03	52.891	0.05	9.385
21	20	2.76	60.00	83.200	26.128	57.072	0.02	69.997	0.05	52.449	0.07	9.287
22	21	1.32	60.00	83.200	26.127	57.073	0.01	69.992	0.02	52.446	0.03	9.287
23	19	0.61	60.00	83.200	30.569	52.631	0.01	70.509	0.01	54.533	0.02	9.548
24	22	0.24	60.00	83.200	30.551	52.649	0.00	70.497	0.00	54.519	0.01	9.548
26	25	0.74	60.00	83.200	27.338	55.862	0.01	70.129	0.01	53.013	0.02	9.407
27	26	1.09	60.00	83.200	26.485	56.715	0.01	70.035	0.02	52.615	0.03	9.326
28	27	0.12	60.00	83.200	31.868	51.332	0.00	70.638	0.00	55.130	0.00	9.552
29	24	0.41	60.00	83.200	29.184	54.016	0.00	70.344	0.01	53.880	0.01	9.518
3	2	0.17	75.00	83.200	30.773	52.427	0.00	70.297	0.00	60.416	0.00	9.852
30	28	0.12	60.00	83.200	31.214	51.986	0.00	70.567	0.00	54.826	0.00	9.552
31	30	2.67	30.00	83.200	22.732	60.468	0.03	70.283	0.02	36.998	0.06	7.640
32	31	1.22	60.00	83.200	26.251	56.949	0.01	70.009	0.02	52.506	0.03	9.301
33	32	1.01	60.00	83.200	27.712	55.488	0.01	70.171	0.02	53.187	0.03	9.437
34	33	0.39	60.00	83.200	29.238	53.962	0.00	70.355	0.01	53.908	0.01	9.519
35	34	0.30	60.00	83.200	31.268	51.932	0.00	70.583	0.01	54.857	0.01	9.552
36	29	1.15	60.00	83.200	27.150	56.050	0.01	70.107	0.02	52.924	0.03	9.391
37	36	0.52	60.00	83.200	28.028	55.172	0.00	70.220	0.01	53.343	0.01	9.459
38	38	0.52	60.00	83.200	28.034	55.166	0.00	70.215	0.01	53.343	0.01	9.460
39	40	0.57	60.00	83.200	29.222	53.978	0.01	70.350	0.01	53.899	0.02	9.519
4	5	0.80	75.00	83.200	29.993	53.207	0.00	70.179	0.02	60.133	0.02	9.846
40	42	0.46	60.00	83.200	30.252	52.948	0.00	70.469	0.01	54.382	0.01	9.544
41	43	0.15	60.00	83.200	31.205	51.995	0.00	70.570	0.00	54.824	0.00	9.552
42	37	0.24	60.00	83.200	30.904	52.296	0.00	70.538	0.00	54.684	0.01	9.550
43	39	0.22	60.00	83.200	30.348	52.852	0.00	70.483	0.00	54.429	0.01	9.546
44	41	0.37	60.00	83.200	29.232	53.968	0.00	70.347	0.01	53.901	0.01	9.519
46	45	0.44	60.00	83.200	27.975	55.225	0.00	70.203	0.01	53.312	0.01	9.456
47	47	0.26	60.00	83.200	31.775	51.425	0.00	70.637	0.00	55.093	0.01	9.552
48	46	1.11	60.00	83.200	28.832	54.368	0.01	70.311	0.02	53.720	0.03	9.503
49	48	0.48	60.00	83.200	28.919	54.281	0.00	70.312	0.01	53.755	0.01	9.507
5	4	0.76	75.00	83.200	29.531	53.669	0.00	70.099	0.02	59.957	0.02	9.839
50	49	0.42	60.00	83.200	30.491	52.709	0.00	70.487	0.01	54.489	0.01	9.547
51	44	0.64	60.00	83.200	28.734	54.466	0.01	70.294	0.01	53.670	0.02	9.499
52	51	0.47	60.00	83.200	29.254	53.946	0.00	70.346	0.01	53.909	0.01	9.520
53	52	0.13	60.00	83.200	31.082	52.118	0.00	70.557	0.00	54.767	0.00	9.551
54	49	0.29	60.00	83.200	30.095	53.105	0.00	70.456	0.00	54.312	0.01	9.542
55	53	4.79	30.00	83.200	20.736	62.464	0.05	70.148	0.04	35.559	0.09	7.062
56	54	3.14	60.00	83.200	23.981	59.219	0.02	69.717	0.05	51.422	0.08	8.998
57	50	0.44	60.00	83.200	26.295	56.905	0.00	70.009	0.01	52.523	0.01	9.306
58	56	0.47	60.00	83.200	30.548	52.652	0.00	70.502	0.01	54.520	0.01	9.548
59	58	0.40	60.00	83.200	30.887	52.313	0.00	70.540	0.01	54.679	0.01	9.550
6	6	0.30	60.00	83.200	29.634	53.566	0.00	70.401	0.01	54.094	0.01	9.532
60	57	0.63	60.00	83.200	30.964	52.236	0.01	70.545	0.01	54.713	0.02	9.551

61	60	0.36	60.00	83.200	30.464	52.736	0.00	70.487	0.01	54.477	0.01	9.547
62	59	0.70	60.00	83.200	30.720	52.480	0.01	70.514	0.01	54.596	0.02	9.549
63	55	0.88	60.00	83.200	26.129	57.071	0.01	69.995	0.01	52.448	0.02	9.287
65	62	0.21	60.00	83.200	28.218	54.982	0.00	70.235	0.00	53.428	0.01	9.471
66	64	0.44	60.00	83.200	30.560	52.640	0.00	70.500	0.01	54.524	0.01	9.548
67	65	0.36	60.00	83.200	30.155	53.045	0.00	70.459	0.01	54.338	0.01	9.543
68	66	0.45	60.00	83.200	28.708	54.492	0.00	70.288	0.01	53.656	0.01	9.498
69	67	0.13	60.00	83.200	31.002	52.198	0.00	70.551	0.00	54.731	0.00	9.551
7	4	2.32	75.00	83.200	29.190	54.010	0.01	70.038	0.05	59.826	0.06	9.832
70	68	0.76	60.00	83.200	31.493	51.707	0.01	70.612	0.01	54.964	0.02	9.552
71	69	0.69	60.00	83.200	29.959	53.241	0.01	70.434	0.01	54.244	0.02	9.539
72	70	0.74	60.00	83.200	30.592	52.608	0.01	70.510	0.01	54.543	0.02	9.548
73	71	1.11	60.00	83.200	29.388	53.812	0.01	70.368	0.02	53.976	0.03	9.525
74	63	7.98	5.00	83.200	22.149	61.051	0.13	70.743	0.01	24.579	0.14	6.444
77	75	0.23	60.00	83.200	29.935	53.265	0.00	70.428	0.00	54.231	0.01	9.539
78	76	0.61	60.00	83.200	29.858	53.342	0.01	70.424	0.01	54.197	0.02	9.537
79	77	0.21	60.00	83.200	30.642	52.558	0.00	70.517	0.00	54.567	0.01	9.549
8	7	2.10	75.00	83.200	29.621	53.579	0.01	70.108	0.04	59.986	0.06	9.841
80	78	0.25	60.00	83.200	30.529	52.671	0.00	70.494	0.00	54.508	0.01	9.548
81	79	0.19	60.00	83.200	30.896	52.304	0.00	70.532	0.00	54.677	0.00	9.550
83	80	1.40	60.00	83.200	30.636	52.564	0.01	70.510	0.02	54.561	0.04	9.549
84	81	3.11	60.00	83.200	29.821	53.379	0.03	70.427	0.05	54.184	0.08	9.537
86	83	1.84	60.00	83.200	30.873	52.327	0.02	70.529	0.03	54.667	0.05	9.550
87	84	1.14	60.00	83.200	30.407	52.793	0.01	70.484	0.02	54.454	0.03	9.546
89	86	0.32	60.00	83.200	29.586	53.614	0.00	70.390	0.01	54.068	0.01	9.531
9	8	0.27	75.00	83.200	29.539	53.661	0.00	70.096	0.01	59.957	0.01	9.839
92	89	1.40	60.00	83.200	30.636	52.564	0.01	70.510	0.02	54.561	0.04	9.549
93	90	1.38	60.00	83.200	30.666	52.534	0.01	70.511	0.02	54.573	0.04	9.549
94	91	1.43	60.00	83.200	31.565	51.635	0.01	70.617	0.02	54.996	0.04	9.552
97	94	1.87	60.00	83.200	30.826	52.374	0.02	70.533	0.03	54.651	0.05	9.550
98	95	1.83	60.00	83.200	30.874	52.326	0.02	70.544	0.03	54.676	0.05	9.550
99	96	1.14	60.00	83.200	30.407	52.793	0.01	70.484	0.02	54.453	0.03	9.546

(*) Le statistiche sull'area impermeabile aggregano aree con e senza gli accumuli superficiali.

TABELLA DEI MATERIALI												
Nome	Tipo	Area (m2)	Diametro int. (m)	Altezza (m)	Larghezza (m)	Pendenze (o/v)	n Manning	n Manning sinistra	n Manning destra	Spessore (mm)	Numero rami	Lunghezza totale (m)
CLS DN 1000	Circolare	0.785	1.000	*****	*****	*****	0.0140	*****	*****	0.000	4	528.96
CLS DN 1200	Circolare	1.131	1.200	*****	*****	*****	0.0140	*****	*****	0.000	2	138.24
CLS DN 300	Circolare	0.071	0.300	*****	*****	*****	0.0140	*****	*****	0.000	4	206.66
CLS DN 400	Circolare	0.126	0.400	*****	*****	*****	0.0140	*****	*****	0.000	20	1757.21
CLS DN 500	Circolare	0.196	0.500	*****	*****	*****	0.0140	*****	*****	0.000	14	1403.83
CLS DN 600	Circolare	0.283	0.600	*****	*****	*****	0.0140	*****	*****	0.000	10	1088.84
CLS DN 800	Circolare	0.503	0.800	*****	*****	*****	0.0140	*****	*****	0.000	9	637.20
CLS SCAT 10.00 x 1.00	Rettangolare	10.000	*****	1.000	10.000	*****	0.0140	*****	*****	0.000	1	19.04
CLS SCAT 2.50 x 1.25	Rettangolare	3.125	*****	1.250	2.500	*****	0.0140	*****	*****	0.000	15	725.27
CLS SCAT 3.00 x 1.00	Rettangolare	3.000	*****	1.000	3.000	*****	0.0140	*****	*****	0.000	2	338.81
PVC DN 200	Circolare	0.028	0.190	*****	*****	*****	0.0120	*****	*****	0.000	4	347.71
PVC DN 250	Circolare	0.045	0.240	*****	*****	*****	0.0120	*****	*****	0.000	7	666.23

PVC DN 315	Circolare	0.071	0.300	*****	*****	****	0.0120	*****	*****	0.000	6	550.48
PVC DN 400	Circolare	0.113	0.380	*****	*****	****	0.0120	*****	*****	0.000	1	78.88
TERRA ST 4.00 x 1.00 x 1.15	Trapezoidale	2.869	*****	1.150	1.000	1.30-1.30	0.0300	*****	*****	0.000	2	370.66
TERRA ST 4.00 x 1.00 x 1.40	Trapezoidale	3.497	*****	1.400	1.000	1.07-1.07	0.0300	*****	*****	0.000	4	84.83
TERRA ST 6.00 x 3.00 x 1.15	Trapezoidale	5.169	*****	1.150	3.000	1.30-1.30	0.0300	*****	*****	0.000	1	163.38
											106	9106.22

DATI DEI NODI						
Nodo	Quota terreno (m slm)	Quota cielo (m slm)	Quota fondo (m slm)	Portata esterna (m3/s)	Livello iniziale (m)	Rami collegati
1	28.50	27.54	27.35	0.00	0.00	1
10	28.00	27.61	27.01	0.00	0.00	10,11
100	25.06	24.95	23.55	0.00	0.00	104
101	25.12	24.91	23.51	0.00	0.00	104,105
102	25.40	25.02	21.70	0.00	0.00	105,106
103	25.05	24.91	21.69	0.00	0.00	106,107
104	25.07	25.06	23.66	0.00	0.00	107
11	27.80	27.18	26.58	0.00	0.00	12,13
12	27.51	26.90	26.30	0.00	0.00	13,14
13	27.48	26.66	26.06	0.00	0.00	14,15
14	27.44	26.60	25.80	0.00	0.00	15,16,17
15	27.53	26.60	26.10	0.00	0.00	16
16	27.42	26.59	25.75	0.00	0.00	17,19,20
17	27.60	26.80	26.50	0.00	0.00	18
18	27.68	26.77	26.39	0.00	0.00	18,19
19	27.20	26.40	25.60	0.00	0.00	20,22,23
2	28.56	27.49	27.30	0.00	0.00	1,2,3
20	26.98	26.83	26.43	0.00	0.00	21
21	26.82	26.69	26.29	0.00	0.00	21,22
22	27.16	26.36	25.56	0.00	0.00	23,24,26
23	27.12	26.38	25.54	0.00	0.00	24,25,28
24	27.12	26.34	25.54	0.00	0.00	25,27,29
25	27.16	26.46	26.06	0.00	0.00	26
26	26.82	26.10	25.70	0.00	0.00	27
27	27.20	26.42	25.92	0.00	0.00	28
28	27.08	26.22	25.42	0.00	0.00	29,30,32
29	26.80	26.16	25.36	0.00	0.00	30,34,36
3	28.25	27.74	27.14	0.00	0.00	10,5,6
30	26.80	26.42	26.12	0.00	0.00	31
31	27.07	26.33	26.03	0.00	0.00	31,32
32	26.94	26.34	26.10	0.00	0.00	33
33	26.62	26.03	25.68	0.00	0.00	33,34,35
34	26.60	25.97	25.73	0.00	0.00	35
35	26.60	25.99	24.74	0.00	0.00	36,44,45,82
36	26.80	26.24	26.00	0.00	0.00	37
37	26.51	26.09	25.66	0.00	0.00	37,41,42
38	26.66	26.19	25.95	0.00	0.00	38
39	26.44	25.87	25.43	0.00	0.00	38,42,43
4	28.23	27.70	27.20	0.00	0.00	3,4,5,7
40	26.53	26.09	25.85	0.00	0.00	39
41	26.39	25.72	25.32	0.00	0.00	39,40,43,44
42	26.30	25.76	25.52	0.00	0.00	40
43	26.60	26.09	25.69	0.00	0.00	41
44	26.40	25.60	24.60	0.00	0.00	49,51,77
45	26.47	25.91	25.67	0.00	0.00	46

46	26.66	25.79	25.39	0.00	0.00	46,47,48
47	26.83	26.10	25.70	0.00	0.00	47
48	26.13	25.56	25.16	0.00	0.00	48,49,50
49	26.13	25.62	25.24	0.00	0.00	50,54
5	28.08	27.65	27.25	0.00	0.00	4
50	25.90	25.52	24.49	0.00	0.00	51,56,57,81
51	26.20	25.75	25.35	0.00	0.00	52
52	26.12	25.70	25.30	0.00	0.00	52,53,54
53	26.60	25.92	25.42	0.00	0.00	55
54	26.50	25.87	25.37	0.00	0.00	55,56,78
55	25.94	25.44	24.44	0.00	0.00	57,59,63
56	26.70	25.74	25.34	0.00	0.00	58
57	26.63	25.87	25.57	0.00	0.00	60
58	26.63	25.30	24.77	0.00	0.00	59,61,79
59	26.66	25.70	25.40	0.00	0.00	62
6	28.36	27.70	27.20	0.00	0.00	2,6
60	26.64	25.51	24.99	0.00	0.00	58,61,80
61	25.97	25.23	24.02	0.00	0.00	63,64
62	25.91	25.16	23.96	0.00	0.00	64,65,69
63	25.50	25.24	23.73	0.00	0.00	65,74,88
64	26.20	25.21	24.71	0.00	0.00	66
65	26.18	25.11	24.61	0.00	0.00	66,67,70
66	26.18	25.18	24.58	0.00	0.00	67,68,71
67	26.18	25.17	24.49	0.00	0.00	68,69,72,73
68	26.20	25.21	24.71	0.00	0.00	70
69	26.19	25.25	24.75	0.00	0.00	71
7	28.20	27.58	27.08	0.00	0.00	7,8
70	26.19	25.17	24.77	0.00	0.00	72
71	26.15	25.31	24.91	0.00	0.00	73
72	25.11	25.10	23.50	0.00	0.00	108,74,75
73	24.35	24.33	23.18	0.00	0.00	102,103,90
75	26.55	25.67	24.67	0.00	0.00	77,89
76	26.64	26.03	25.84	0.00	0.00	78
77	26.63	25.52	25.10	0.00	0.00	60,79
78	26.70	25.66	25.26	0.00	0.00	62,80
79	26.16	25.78	25.28	0.00	0.00	53,81
8	28.13	27.55	26.95	0.00	0.00	8,9
80	26.80	25.98	24.73	0.00	0.00	82,83
81	26.60	25.83	24.59	0.00	0.00	84,93
82	26.10	25.74	24.49	0.00	0.00	85,94
83	26.10	25.60	24.35	0.00	0.00	86,96
84	26.10	25.46	24.21	0.00	0.00	87,98
85	26.10	25.29	24.04	0.00	0.00	100,88
86	26.61	25.92	25.12	0.00	0.00	45,89
87	25.05	24.63	23.48	0.00	0.00	75,90
88	25.01	25.01	23.53	0.00	0.00	101,108
89	26.73	25.93	24.68	0.00	0.00	83,92
9	28.12	27.51	26.91	0.00	0.00	11,12,9
90	26.67	25.88	24.63	0.00	0.00	92,93
91	26.26	25.77	24.52	0.00	0.00	84,94
92	26.10	25.69	24.44	0.00	0.00	85,95
93	26.10	25.64	24.39	0.00	0.00	95,96
94	26.10	25.55	24.30	0.00	0.00	86,97
95	26.10	25.51	24.26	0.00	0.00	97,98
96	26.10	25.41	24.16	0.00	0.00	87,99
97	26.10	25.35	24.10	0.00	0.00	100,99
98	24.60	24.30	23.30	0.00	0.00	101,102
99	24.30	24.26	23.11	0.00	0.00	103

DATI DEGLI ELEMENTI LINEARI

Elemento	Nodo iniziale	Nodo finale	Materiale	Lunghezza (m)	Valvola anti-rifl.
1	1	2	PVC DN 200	76.83	no
10	3	10	CLS DN 600	147.48	no
100	97	85	CLS SCAT 2.50 x 1.25	61.65	no
101	88	98	CLS SCAT 3.00 x 1.00	308.81	no
102	98	73	PVC DN 315	14.29	si
103	73	99	TERRA ST 4.00 x 1.00 x 1.15	74.10	no
104	100	101	TERRA ST 4.00 x 1.00 x 1.40	21.71	no
105	101	102	TERRA ST 4.00 x 1.00 x 1.40	26.08	no
106	102	103	TERRA ST 4.00 x 1.00 x 1.40	15.00	no
107	103	104	TERRA ST 4.00 x 1.00 x 1.40	22.04	no
108	72	88	CLS SCAT 10.00 x 1.00	19.04	no
11	10	9	CLS DN 600	114.27	no
12	9	11	CLS DN 600	141.78	no
13	11	12	CLS DN 600	117.59	no
14	12	13	CLS DN 600	133.25	no
15	13	14	CLS DN 600	149.14	no
16	15	14	CLS DN 500	135.47	no
17	14	16	CLS DN 800	49.77	no
18	17	18	PVC DN 315	52.48	no
19	18	16	PVC DN 400	78.88	no
2	2	6	PVC DN 200	127.68	no
20	16	19	CLS DN 800	150.26	no
21	20	21	CLS DN 400	186.03	no
22	21	19	CLS DN 400	186.05	no
23	19	22	CLS DN 800	51.45	no
24	22	23	CLS DN 800	51.83	no
25	23	24	CLS DN 800	5.86	no
26	25	22	CLS DN 400	141.33	no
27	26	24	CLS DN 400	172.17	no
28	27	23	CLS DN 500	26.48	no
29	24	28	CLS DN 800	85.06	no
3	2	4	PVC DN 200	75.37	no
30	28	29	CLS DN 800	38.25	no
31	30	31	PVC DN 315	201.22	no
32	31	28	PVC DN 315	181.16	no
33	32	33	PVC DN 250	128.85	no
34	33	29	PVC DN 315	83.61	no
35	34	33	PVC DN 250	37.21	no
36	29	35	CLS DN 800	147.85	no
37	36	37	PVC DN 250	118.72	no
38	38	39	PVC DN 250	118.51	no
39	40	41	PVC DN 250	84.04	no
4	5	4	CLS DN 400	103.28	no
40	42	41	PVC DN 250	58.51	no
41	43	37	CLS DN 400	38.43	no
42	37	39	CLS DN 400	44.40	no
43	39	41	CLS DN 400	56.34	no
44	41	35	CLS DN 400	83.77	no
45	35	86	PVC DN 315	17.71	no
46	45	46	PVC DN 250	120.39	no
47	47	46	CLS DN 400	28.08	no
48	46	48	CLS DN 400	94.76	no
49	48	44	CLS DN 400	92.32	no
5	4	3	CLS DN 400	121.55	no
50	49	48	CLS DN 300	53.15	no
51	44	50	CLS DN 1000	97.56	no
52	51	52	CLS DN 400	83.20	no

53	52	79	CLS DN 400	40.83	no
54	49	52	CLS DN 300	62.13	no
55	53	54	CLS DN 500	277.76	no
56	54	50	CLS DN 500	283.20	no
57	50	55	CLS DN 1000	179.48	no
58	56	60	CLS DN 400	51.91	no
59	58	55	CLS DN 500	44.73	no
6	6	3	CLS DN 500	73.34	no
60	57	77	CLS DN 300	43.17	no
61	60	58	CLS DN 500	53.75	no
62	59	78	CLS DN 300	48.20	no
63	55	61	CLS DN 1000	185.98	no
64	61	62	CLS DN 1200	25.43	no
65	62	63	CLS DN 1200	112.81	no
66	64	65	CLS DN 500	51.64	no
67	65	66	CLS DN 500	60.75	no
68	66	67	CLS DN 600	98.30	no
69	67	62	CLS DN 600	42.41	no
7	4	7	CLS DN 500	135.86	no
70	68	65	CLS DN 500	33.04	no
71	69	66	CLS DN 500	65.37	no
72	70	67	CLS DN 400	50.94	no
73	71	67	CLS DN 400	79.65	no
74	63	72	TERRA ST 6.00 x 3.00 x 1.15	163.38	no
75	72	87	CLS DN 600	23.38	no
77	75	44	CLS DN 1000	65.94	no
78	76	54	PVC DN 200	67.82	no
79	77	58	CLS DN 400	49.86	no
8	7	8	CLS DN 500	117.89	no
80	78	60	CLS DN 400	52.32	no
81	79	50	CLS DN 500	44.56	no
82	35	80	CLS SCAT 2.50 x 1.25	10.00	no
83	80	89	CLS SCAT 2.50 x 1.25	50.00	no
84	81	91	CLS SCAT 2.50 x 1.25	65.00	no
85	82	92	CLS SCAT 2.50 x 1.25	50.00	no
86	83	94	CLS SCAT 2.50 x 1.25	45.02	no
87	84	96	CLS SCAT 2.50 x 1.25	55.00	no
88	85	63	CLS SCAT 2.50 x 1.25	45.50	no
89	86	75	CLS DN 800	56.86	no
9	8	9	CLS DN 600	121.22	no
90	87	73	TERRA ST 4.00 x 1.00 x 1.15	296.56	no
92	89	90	CLS SCAT 2.50 x 1.25	50.00	no
93	90	81	CLS SCAT 2.50 x 1.25	49.36	no
94	91	82	CLS SCAT 3.00 x 1.00	30.00	no
95	92	93	CLS SCAT 2.50 x 1.25	50.00	no
96	93	83	CLS SCAT 2.50 x 1.25	47.76	no
97	94	95	CLS SCAT 2.50 x 1.25	45.98	no
98	95	84	CLS SCAT 2.50 x 1.25	45.00	no
99	96	97	CLS SCAT 2.50 x 1.25	55.00	no

SOMMARIO STATISTICHE DEI NODI											
Nodo	Quota terreno (m slm)	Quota cielo (m slm)	Quota media (m slm)	% variaz. media	Massima quota		Sovracc. alla max. quota (m)	Dist. tra terreno e livello max (m)	Durata del sovracc. (min)	Durata della esondaz. (min)	*
					(m slm)	al tempo					
1	28.50	27.54	27.69	0.0482	28.50	3:07	0.96	0.00	429.00	373.60	*
10	28.00	27.61	27.30	0.0114	28.00	3:28	0.39	0.00	360.83	344.43	*
100	25.06	24.95	23.55	0.0000	23.55	0:00	0.00	1.51	0.00	0.00	
101	25.12	24.91	23.51	0.0000	23.51	0:00	0.00	1.61	0.00	0.00	

102	25.40	25.02	21.70	0.0000	21.70	0:00	0.00	3.70	0.00	0.00	
103	25.05	24.91	21.68	0.0000	21.68	0:00	0.00	3.37	0.00	0.00	
104	25.07	25.06	23.66	0.0000	23.66	0:00	0.00	1.41	0.00	0.00	
11	27.80	27.18	26.94	0.0229	27.80	3:12	0.62	0.00	395.23	0.03	*
12	27.51	26.90	26.68	0.0220	27.51	3:12	0.61	0.00	406.20	354.40	*
13	27.48	26.66	26.46	0.0193	27.39	9:00	0.73	0.09	411.17	0.00	
14	27.44	26.60	26.14	0.0075	26.93	9:00	0.33	0.51	357.40	0.00	
15	27.53	26.60	26.31	0.0118	26.94	9:00	0.33	0.59	357.50	0.00	
16	27.42	26.59	26.09	0.0071	26.88	9:00	0.29	0.54	354.37	0.00	
17	27.60	26.80	26.59	0.0069	26.92	9:00	0.12	0.68	212.63	0.00	
18	27.68	26.77	26.51	0.0067	26.90	9:00	0.13	0.78	226.20	0.00	
19	27.20	26.40	25.95	0.0070	26.70	9:00	0.30	0.50	360.07	0.00	
2	28.56	27.49	27.65	0.0582	28.56	3:29	1.07	0.00	430.13	160.47	*
20	26.98	26.83	26.59	0.0067	26.98	6:08	0.15	0.00	324.87	179.07	*
21	26.82	26.69	26.45	0.0066	26.82	4:58	0.13	0.00	334.90	255.40	*
22	27.16	26.36	25.90	0.0068	26.62	9:00	0.26	0.54	355.80	0.00	
23	27.12	26.38	25.86	0.0057	26.53	9:00	0.15	0.59	328.57	0.00	
24	27.12	26.34	25.85	0.0059	26.52	9:00	0.18	0.60	342.00	0.00	
25	27.16	26.46	26.20	0.0070	26.64	9:00	0.18	0.52	331.53	0.00	
26	26.82	26.10	25.94	0.0136	26.56	9:00	0.46	0.26	412.37	0.00	
27	27.20	26.42	26.07	0.0063	26.53	9:00	0.11	0.67	249.57	0.00	
28	27.08	26.22	25.72	0.0056	26.34	9:00	0.13	0.74	334.90	0.00	
29	26.80	26.16	25.67	0.0053	26.25	9:00	0.09	0.55	316.67	0.00	
3	28.25	27.74	27.40	0.0104	28.25	3:29	0.51	0.00	355.77	0.13	*
30	26.80	26.42	26.31	0.0497	26.80	3:32	0.38	0.00	371.03	235.23	*
31	27.07	26.33	26.22	0.0763	26.88	3:37	0.55	0.19	370.47	0.00	
32	26.94	26.34	26.21	0.0117	26.67	9:00	0.33	0.27	298.87	0.00	
33	26.62	26.03	25.86	0.0100	26.40	9:00	0.37	0.22	394.77	0.00	
34	26.60	25.97	25.90	0.0144	26.41	9:00	0.44	0.19	414.30	0.00	
35	26.60	25.99	24.86	0.0014	25.10	9:00	0.00	1.50	0.00	0.00	
36	26.80	26.24	26.05	0.0034	26.17	9:00	0.00	0.63	0.00	0.00	
37	26.51	26.09	25.69	0.0013	25.77	9:00	0.00	0.74	0.00	0.00	
38	26.66	26.19	25.99	0.0027	26.08	7:18	0.00	0.58	0.00	0.00	
39	26.44	25.87	25.51	0.0035	25.75	9:00	0.00	0.69	0.00	0.00	
4	28.23	27.70	27.45	0.0183	28.23	3:27	0.53	0.00	358.77	0.03	*
40	26.53	26.09	25.88	0.0019	25.94	9:00	0.00	0.59	0.00	0.00	
41	26.39	25.72	25.44	0.0049	25.73	9:00	0.01	0.66	85.97	0.00	
42	26.30	25.76	25.57	0.0046	25.75	9:00	0.00	0.55	0.00	0.00	
43	26.60	26.09	25.71	0.0011	25.78	9:00	0.00	0.82	0.00	0.00	
44	26.40	25.60	24.74	0.0027	25.11	9:00	0.00	1.29	0.00	0.00	
45	26.47	25.91	25.70	0.0022	25.78	9:00	0.00	0.69	0.00	0.00	
46	26.66	25.79	25.45	0.0024	25.59	9:00	0.00	1.07	0.00	0.00	
47	26.83	26.10	25.71	0.0006	25.75	8:17	0.00	1.08	0.00	0.00	
48	26.13	25.56	25.27	0.0042	25.51	9:00	0.00	0.62	0.00	0.00	
49	26.13	25.62	25.31	0.0035	25.51	9:00	0.00	0.62	0.00	0.00	
5	28.08	27.65	27.48	0.0232	28.08	3:27	0.43	0.00	361.80	345.63	*
50	25.90	25.52	24.69	0.0035	25.11	9:00	0.00	0.79	0.00	0.00	
51	26.20	25.75	25.40	0.0020	25.51	9:00	0.00	0.69	0.00	0.00	
52	26.12	25.70	25.36	0.0023	25.50	9:00	0.00	0.62	0.00	0.00	
53	26.60	25.92	25.62	0.8889	26.60	7:15	0.68	0.00	157.77	15.10	*
54	26.50	25.87	25.55	0.4475	26.50	7:44	0.63	0.00	141.73	6.23	*
55	25.94	25.44	24.63	0.0028	25.02	9:00	0.00	0.92	0.00	0.00	
56	26.70	25.74	25.36	0.0009	25.42	8:59	0.00	1.28	0.00	0.00	
57	26.63	25.87	25.60	0.0015	25.66	8:59	0.00	0.97	0.00	0.00	
58	26.63	25.30	24.85	0.0027	25.06	9:00	0.00	1.57	0.00	0.00	
59	26.66	25.70	25.44	0.0021	25.53	8:59	0.00	1.13	0.00	0.00	
6	28.36	27.70	27.43	0.0179	28.36	3:29	0.66	0.00	357.00	0.13	*
60	26.64	25.51	25.04	0.0014	25.14	9:00	0.00	1.50	0.00	0.00	
61	25.97	25.23	24.17	0.0019	24.50	9:00	0.00	1.47	0.00	0.00	
62	25.91	25.16	24.12	0.0021	24.48	9:00	0.00	1.43	0.00	0.00	

63	25.50	25.24	23.96	0.0021	24.40	9:00	0.00	1.10	0.00	0.00	
64	26.20	25.21	24.76	0.0018	24.90	9:00	0.00	1.30	0.00	0.00	
65	26.18	25.11	24.69	0.0028	24.90	9:00	0.00	1.28	0.00	0.00	
66	26.18	25.18	24.67	0.0024	24.88	9:00	0.00	1.30	0.00	0.00	
67	26.18	25.17	24.60	0.0025	24.84	9:00	0.00	1.34	0.00	0.00	
68	26.20	25.21	24.76	0.0019	24.90	9:00	0.00	1.30	0.00	0.00	
69	26.19	25.25	24.79	0.0013	24.89	9:00	0.00	1.30	0.00	0.00	
7	28.20	27.58	27.37	0.0267	28.14	3:29	0.56	0.06	366.17	0.00	
70	26.19	25.17	24.82	0.0021	24.95	9:00	0.00	1.24	0.00	0.00	
71	26.15	25.31	24.97	0.0023	25.10	9:00	0.00	1.05	0.00	0.00	
72	25.11	25.10	23.81	0.0021	24.22	9:00	0.00	0.89	0.00	0.00	
73	24.35	24.33	23.56	0.0018	23.76	9:08	0.00	0.59	0.00	0.00	
75	26.55	25.67	24.78	0.0024	25.11	9:00	0.00	1.44	0.00	0.00	
76	26.64	26.03	25.90	1.1636	26.64	7:44	0.61	0.00	136.63	5.00	*
77	26.63	25.52	25.14	0.0014	25.22	8:59	0.00	1.41	0.00	0.00	
78	26.70	25.66	25.30	0.0018	25.41	9:00	0.00	1.29	0.00	0.00	
79	26.16	25.78	25.31	0.0011	25.40	9:00	0.00	0.76	0.00	0.00	
8	28.13	27.55	27.27	0.0212	28.05	3:29	0.50	0.08	365.90	0.00	
80	26.80	25.98	24.85	0.0014	25.09	9:00	0.00	1.71	0.00	0.00	
81	26.60	25.83	24.71	0.0015	24.97	9:00	0.00	1.63	0.00	0.00	
82	26.10	25.74	24.62	0.0016	24.89	9:00	0.00	1.21	0.00	0.00	
83	26.10	25.60	24.48	0.0016	24.77	9:00	0.00	1.33	0.00	0.00	
84	26.10	25.46	24.35	0.0017	24.65	8:59	0.00	1.45	0.00	0.00	
85	26.10	25.29	24.18	0.0016	24.45	9:00	0.00	1.65	0.00	0.00	
86	26.61	25.92	25.14	0.0004	25.18	9:00	0.00	1.43	0.00	0.00	
87	25.05	24.63	23.72	0.0023	24.04	9:01	0.00	1.01	0.00	0.00	
88	25.01	25.01	23.90	0.0019	24.08	9:03	0.00	0.93	0.00	0.00	
89	26.73	25.93	24.80	0.0014	25.05	9:00	0.00	1.68	0.00	0.00	
9	28.12	27.51	27.23	0.0174	27.99	8:59	0.48	0.13	368.47	0.00	
90	26.67	25.88	24.76	0.0015	25.01	9:00	0.00	1.65	0.00	0.00	
91	26.26	25.77	24.64	0.0015	24.91	9:00	0.00	1.35	0.00	0.00	
92	26.10	25.69	24.57	0.0016	24.85	9:00	0.00	1.25	0.00	0.00	
93	26.10	25.64	24.53	0.0016	24.81	9:00	0.00	1.29	0.00	0.00	
94	26.10	25.55	24.44	0.0017	24.73	9:00	0.00	1.37	0.00	0.00	
95	26.10	25.51	24.40	0.0017	24.69	9:00	0.00	1.41	0.00	0.00	
96	26.10	25.41	24.30	0.0017	24.60	9:00	0.00	1.50	0.00	0.00	
97	26.10	25.35	24.24	0.0017	24.54	9:00	0.00	1.56	0.00	0.00	
98	24.60	24.30	23.80	0.0022	24.04	10:23	0.00	0.56	0.00	0.00	
99	24.30	24.26	23.28	0.0010	23.41	9:08	0.00	0.89	0.00	0.00	

Nodo con la maggiore variazione media percentuale: '76' pari a 1.164 % (**)

(*) Attenzione: c'è un ingresso di portata alla rete in un nodo in cui è possibile un'esondazione. Se l'ingresso è contemporaneo all'esondazione, l'acqua non entrerà in rete e verrà considerata solamente nel controllo di continuità.

(**) La variazione media nei nodi è così definita:
 $100.0 \cdot (Y(n+1) - Y(n)) / Y_{full}$

SOMMARIO STATISTICHE DEGLI ELEMENTI LINEARI

Elemento	Portata di moto uniforme (m3/s)	Velocità di moto uniforme (m/s)	Altezza condotto (m)	Portata max di calcolo		Velocità max di calcolo		Rapporto tra Qmax e Q moto uniforme	Raggio idraulico massimo (m)	Sezione trasvers. massima (m2)	Area normaliz. massima	Durata della Q normale (min)	Pendenza ramo (m/m)
				(m3/s)	al tempo	(m/s)	al tempo						
1	0.0079	0.28	0.190	0.022	3:07	0.77	3:07	2.77	0.0578	0.0284	1.00	823.8	0.00065
10	0.1690	0.60	0.600	0.099	9:00	0.51	3:04	0.59	0.1792	0.2827	1.00	917.8	0.00088

100	3.9377	1.26	1.250	1.233	8:59	1.16	8:59	0.31	0.3165	1.0596	0.34	806.9	0.00100
101	3.0517	1.02	1.000	1.417	9:01	32.52	2:50	0.46	0.4367	1.8668	0.62	19.9	0.00075
102	0.0331	0.47	0.300	0.181	12:24	2.56	12:24	5.45	0.0831	0.0707	1.00	0.0	0.00100
103	2.1545	0.75	1.150	0.637	9:08	0.89	9:08	0.30	0.2804	0.7173	0.25	0.0	0.00100
104	3.8912	1.11	1.400	0.000	0:00	0.00	0:00	0.00	0.0000	0.0000	0.00	0.0	0.00184
105	5.8868	1.68	1.400	0.000	0:00	0.00	0:00	0.00	0.0000	0.0000	0.00	0.0	0.00422
106	2.8664	0.82	1.400	0.000	0:00	0.00	0:00	0.00	0.0000	0.0000	0.00	0.0	0.00100
107	7.4767	2.14	1.400	0.000	0:00	0.00	0:00	0.00	0.0000	0.0000	0.00	0.0	0.00680
108	29.8590	2.99	1.000	1.425	9:00	1.20	9:00	0.05	0.1160	1.1873	0.12	813.6	0.00500
11	0.1690	0.60	0.600	0.090	9:13	0.46	3:12	0.53	0.1808	0.2827	1.00	913.7	0.00088
12	0.2765	0.98	0.600	0.222	9:13	0.97	3:06	0.80	0.1753	0.2827	1.00	977.0	0.00235
13	0.2765	0.98	0.600	0.278	9:00	0.98	9:00	1.01	0.1769	0.2827	1.00	961.6	0.00235
14	0.2399	0.85	0.600	0.293	3:30	1.04	3:30	1.22	0.1815	0.2827	1.00	944.8	0.00177
15	0.2399	0.85	0.600	0.361	3:30	1.28	3:30	1.50	0.1825	0.2827	1.00	909.0	0.00177
16	0.1358	0.69	0.500	0.030	9:00	0.39	1:36	0.22	0.1386	0.1964	1.00	181.7	0.00150
17	0.3892	0.77	0.800	0.373	3:31	0.76	3:13	0.96	0.2433	0.5027	1.00	730.9	0.00101
18	0.0480	0.68	0.300	0.021	8:59	0.56	3:28	0.44	0.0849	0.0707	1.00	1006.8	0.00210
19	0.0940	0.83	0.380	0.029	9:00	0.66	3:09	0.31	0.1053	0.1134	1.00	49.8	0.00228
2	0.0087	0.31	0.190	0.025	3:27	0.87	3:27	2.86	0.0578	0.0284	1.00	188.8	0.00078
20	0.3880	0.77	0.800	0.426	9:00	0.85	9:00	1.10	0.2431	0.5027	1.00	834.2	0.00100
21	0.0531	0.42	0.400	0.057	6:11	0.48	3:22	1.07	0.1204	0.1257	1.00	857.2	0.00075
22	0.0930	0.74	0.400	0.070	9:14	0.77	2:39	0.75	0.1108	0.1257	1.00	89.1	0.00231
23	0.3424	0.68	0.800	0.491	9:00	0.98	9:00	1.43	0.2434	0.5027	1.00	641.4	0.00078
24	0.2286	0.45	0.800	0.516	8:59	1.03	9:00	2.26	0.2430	0.5027	1.00	41.7	0.00035
25	0.2285	0.45	0.800	0.519	9:00	1.03	9:00	2.27	0.2434	0.5027	1.00	8.0	0.00035
26	0.1016	0.81	0.400	0.019	9:00	0.39	1:33	0.19	0.1108	0.1257	1.00	255.7	0.00276
27	0.0590	0.47	0.400	0.028	9:00	0.22	9:00	0.48	0.1108	0.1257	1.00	788.7	0.00093
28	0.1358	0.69	0.500	0.005	3:35	0.26	2:47	0.04	0.1517	0.1964	1.00	14.4	0.00150
29	0.4670	0.93	0.800	0.558	9:00	1.11	9:00	1.19	0.2432	0.5027	1.00	812.1	0.00145
3	0.0113	0.40	0.190	0.030	3:21	1.07	3:21	2.68	0.0577	0.0284	1.00	895.7	0.00133
30	0.4670	0.93	0.800	0.610	9:00	1.21	9:00	1.31	0.2434	0.5027	1.00	699.9	0.00145
31	0.0222	0.31	0.300	0.033	9:24	0.47	9:24	1.49	0.0910	0.0707	1.00	679.7	0.00045
32	0.0467	0.66	0.300	0.049	9:23	0.70	9:23	1.06	0.0839	0.0707	1.00	61.1	0.00199
33	0.0283	0.63	0.240	0.026	9:00	0.61	2:59	0.93	0.0665	0.0452	1.00	71.3	0.00241
34	0.0601	0.85	0.300	0.044	9:00	0.63	9:00	0.74	0.0831	0.0707	1.00	407.4	0.00330
35	0.0221	0.49	0.240	0.008	8:57	0.22	2:41	0.35	0.0709	0.0452	1.00	887.3	0.00147
36	0.4670	0.93	0.800	0.684	9:00	1.55	9:00	1.47	0.2328	0.4407	0.88	0.0	0.00145
37	0.0205	0.45	0.240	0.014	8:59	0.54	9:00	0.66	0.0620	0.0252	0.56	0.0	0.00126
38	0.0300	0.66	0.240	0.018	7:18	0.82	7:18	0.60	0.0592	0.0221	0.49	102.8	0.00270
39	0.0459	1.01	0.240	0.015	8:59	0.49	8:59	0.33	0.0554	0.0309	0.68	1366.5	0.00631
4	0.0425	0.34	0.400	-0.033	9:00	-0.26	9:00	-0.77	0.1207	0.1257	1.00	815.0	0.00048
40	0.0338	0.75	0.240	0.012	9:00	0.31	1:14	0.35	0.0665	0.0449	0.99	979.3	0.00342
41	0.0540	0.43	0.400	0.004	8:58	0.16	6:06	0.07	0.0586	0.0247	0.20	938.9	0.00078
42	0.1392	1.11	0.400	0.024	8:59	0.38	2:44	0.17	0.0930	0.0685	0.55	1364.2	0.00518
43	0.0855	0.68	0.400	0.044	9:01	0.38	9:03	0.51	0.1181	0.1170	0.93	943.3	0.00195
44	0.0423	0.34	0.400	0.080	9:00	0.81	9:00	1.89	0.1127	0.0986	0.78	0.0	0.00048
45	0.0398	0.56	0.300	-0.001	8:59	-0.14	8:59	-0.02	0.0227	0.0051	0.07	0.0	0.00145
46	0.0279	0.62	0.240	0.011	9:00	0.38	9:00	0.41	0.0642	0.0298	0.66	1378.9	0.00233
47	0.2032	1.62	0.400	0.007	8:14	0.31	1:09	0.03	0.0656	0.0359	0.29	1370.4	0.01104
48	0.0953	0.76	0.400	0.047	8:59	0.53	8:59	0.50	0.1102	0.0892	0.71	1364.4	0.00243
49	0.0569	0.45	0.400	0.068	8:59	0.77	8:59	1.19	0.1122	0.0877	0.70	0.0	0.00087
5	0.0430	0.34	0.400	0.063	3:28	0.50	3:28	1.46	0.1216	0.1257	1.00	829.1	0.00049
50	0.0348	0.49	0.300	0.009	3:11	0.25	1:17	0.27	0.0880	0.0690	0.98	842.5	0.00150
51	0.7387	0.94	1.000	0.110	9:04	0.32	1:31	0.15	0.2677	0.4579	0.58	698.2	0.00110
52	0.0459	0.37	0.400	0.012	9:00	0.24	2:52	0.27	0.0926	0.0544	0.43	801.6	0.00056
53	0.0459	0.37	0.400	0.026	9:00	0.59	9:00	0.57	0.0820	0.0451	0.36	20.7	0.00056
54	0.0148	0.21	0.300	0.010	9:00	-0.48	1:20	0.71	0.0858	0.0478	0.68	0.0	0.00027
55	0.0470	0.24	0.500	0.093	9:00	0.47	9:00	1.98	0.1521	0.1964	1.00	593.7	0.00018

56	0.1428	0.73	0.500	0.188	8:18	1.17	8:18	1.31	0.1456	0.1774	0.90	0.0	0.00166
57	0.3716	0.47	1.000	0.327	9:00	0.67	9:00	0.88	0.2764	0.4887	0.62	612.2	0.00028
58	0.1588	1.26	0.400	0.012	8:58	0.40	8:58	0.08	0.0645	0.0306	0.24	1368.8	0.00674
59	0.1387	0.71	0.500	0.079	8:21	0.88	6:34	0.57	0.1393	0.1247	0.63	15.4	0.00157
6	0.1003	0.51	0.500	0.038	3:29	0.29	2:55	0.38	0.1509	0.1964	1.00	816.8	0.00082
60	0.0808	1.14	0.300	0.017	8:58	0.90	8:58	0.21	0.0524	0.0185	0.26	1.0	0.00811
61	0.2243	1.14	0.500	0.047	8:59	0.58	6:40	0.21	0.1120	0.0851	0.43	1379.3	0.00409
62	0.0484	0.68	0.300	0.018	8:59	0.57	8:57	0.38	0.0709	0.0319	0.45	1366.4	0.00290
63	0.7481	0.95	1.000	0.428	9:00	1.17	9:00	0.57	0.2384	0.3649	0.46	0.0	0.00113
64	1.7584	1.55	1.200	0.428	9:00	0.96	9:00	0.24	0.2641	0.4446	0.39	854.4	0.00236
65	1.6190	1.43	1.200	0.557	9:00	1.00	9:00	0.34	0.2959	0.5576	0.49	609.8	0.00200
66	0.1568	0.80	0.500	0.012	8:59	0.15	2:47	0.07	0.1193	0.0928	0.47	970.6	0.00200
67	0.0779	0.40	0.500	0.041	8:59	0.34	6:32	0.53	0.1376	0.1207	0.61	798.4	0.00049
68	0.1725	0.61	0.600	0.071	8:59	0.46	8:59	0.41	0.1567	0.1557	0.55	957.3	0.00092
69	0.1238	0.44	0.600	0.123	8:59	0.93	8:59	1.00	0.1440	0.1329	0.47	0.0	0.00047
7	0.1042	0.53	0.500	0.053	3:15	0.43	2:59	0.51	0.1484	0.1964	1.00	952.3	0.00088
70	0.1929	0.98	0.500	0.020	8:57	0.30	1:12	0.10	0.1201	0.0938	0.48	971.3	0.00303
71	0.1788	0.91	0.500	0.018	8:59	0.27	1:17	0.10	0.1093	0.0837	0.43	1139.5	0.00260
72	0.0383	0.30	0.400	0.020	8:58	0.51	8:55	0.51	0.0756	0.0386	0.31	0.0	0.00039
73	0.0811	0.65	0.400	0.029	8:59	0.65	9:00	0.36	0.0828	0.0449	0.36	0.0	0.00176
74	5.4116	1.05	1.150	1.931	9:00	0.71	9:00	0.36	0.5123	2.7021	0.52	742.9	0.00141
75	0.1803	0.64	0.600	0.505	9:00	1.81	9:00	2.80	0.1809	0.2789	0.99	0.0	0.00100
77	0.7387	0.94	1.000	0.023	9:05	0.10	1:18	0.03	0.2421	0.3706	0.47	800.5	0.00110
78	0.0196	0.69	0.190	0.019	8:19	0.70	3:20	0.98	0.0531	0.0284	1.00	249.1	0.00398
79	0.1225	0.97	0.400	0.022	8:57	0.67	4:56	0.18	0.0760	0.0386	0.31	256.4	0.00401
8	0.1164	0.59	0.500	0.087	8:59	0.55	3:13	0.75	0.1500	0.1964	1.00	906.7	0.00110
80	0.1035	0.82	0.400	0.025	8:58	0.70	8:58	0.24	0.0726	0.0353	0.28	0.0	0.00287
81	0.2678	1.36	0.500	0.031	8:59	0.91	8:59	0.12	0.0684	0.0344	0.17	0.3	0.00584
82	3.9374	1.26	1.250	0.765	8:59	0.86	8:59	0.19	0.2768	0.8888	0.28	620.3	0.00100
83	3.9378	1.26	1.250	0.802	8:59	0.89	8:59	0.20	0.2807	0.9050	0.29	807.3	0.00100
84	3.9377	1.26	1.250	0.956	8:59	0.98	8:59	0.24	0.2969	0.9735	0.31	24.3	0.00100
85	3.8647	1.24	1.250	0.994	9:00	0.98	8:59	0.26	0.3068	1.0165	0.33	755.5	0.00096
86	3.9377	1.26	1.250	1.042	9:00	0.98	8:59	0.26	0.3179	1.0660	0.34	800.6	0.00100
87	3.9378	1.26	1.250	1.170	8:59	1.07	8:59	0.30	0.3250	1.0979	0.35	793.3	0.00100
88	3.9377	1.26	1.250	1.233	8:59	1.40	8:59	0.31	0.2741	0.8808	0.28	0.0	0.00100
89	0.8178	1.63	0.800	0.008	8:59	0.45	3:25	0.01	0.0861	0.0716	0.14	376.2	0.00444
9	0.1036	0.37	0.600	0.094	9:00	0.44	3:12	0.91	0.1824	0.2827	1.00	645.1	0.00033
90	2.1674	0.76	1.150	0.505	9:01	0.54	6:25	0.23	0.3462	0.9946	0.35	971.0	0.00101
92	3.9377	1.26	1.250	0.838	8:59	0.90	8:59	0.21	0.2869	0.9309	0.30	803.0	0.00100
93	3.9378	1.26	1.250	0.875	9:00	0.91	8:58	0.22	0.2929	0.9562	0.31	820.8	0.00100
94	3.5239	1.17	1.000	0.994	9:00	0.83	8:59	0.28	0.3146	1.1942	0.40	730.2	0.00100
95	3.8647	1.24	1.250	0.994	9:00	0.97	8:59	0.26	0.3095	1.0286	0.33	755.5	0.00096
96	3.8647	1.24	1.250	0.994	9:00	0.95	9:01	0.26	0.3134	1.0459	0.33	744.9	0.00096
97	3.9377	1.26	1.250	1.091	9:00	1.01	8:59	0.28	0.3218	1.0833	0.35	799.0	0.00100
98	3.9378	1.26	1.250	1.140	8:59	1.04	8:59	0.29	0.3242	1.0941	0.35	761.6	0.00100
99	3.9378	1.26	1.250	1.200	9:00	1.10	8:58	0.30	0.3237	1.0922	0.35	817.5	0.00100

Ramo con la maggiore variazione media percentuale: '55' pari a 0.299 % (*)

(*) La variazione media nei rami è così definita:
 $100.0 (Q(n+1) - Q(n)) / Qfull$

P5) Simulazione STATO DI PROGETTO - Ietogramma rettangolare con $Tr = 50$ anni e durata 720 minuti; c.p.c. PTCP

Marte DEFLUX 2007 - DESIGNER EDITION	
Codice	Modulo SWMM 4.40 : Runoff + Extran
	Copyright (C) 2000-2009 DEK s.r.l.
Nome	Prel-SP_rett720
Descrizione	<nessuna descrizione>
Data di creazione	15/04/2011 - 19.55.40
Sottorete	Intera rete
Database	2011-03_Soliera_ZonaW-SP

DATI GENERALI	
Numero dei nodi	103
Numero dei rami	106
Numero delle pompe	0
Numero degli scaricatori	0
Sommario delle piogge	
Pioggia totale (mm)	91.2000

CONTROLLO DI CONTINUITA' PER IL DEFLUSSO SUPERFICIALE		
	Volume (m3)	Livello (mm) sul bacino
Precipitazione totale (Pioggia + Neve)	89131.679688	91.200
Infiltrazione totale	20756.691406	21.238
Evaporazione totale	2610.884033	2.671
Deflusso superficiale	52794.816406	54.020
Volume trattenuto negli accumuli superficiali	12958.052734	13.259
Infiltrazione per l'area permeabile	20756.691406	45.667
Infiltrazione + Evaporazione +		
Deflusso superficiale +		
Accumuli superficiali	89120.445313	91.189
Precipitazione totale + Accumulo iniziale	89131.679688	91.200

Errore 0.013 % (*)
(*) L'errore nella continuità è così calcolato: (Precipitazione - Infiltrazione - Evaporazione - - Deflusso superficiale - Accumuli superficiali) / / Precipitazione

CONTROLLO DI CONTINUITA' NELLA RETE	
	Volume (m3)
Volume iniziale nella rete	0.091062
Ingresso nella rete	52794.624176
Uscita dalla rete	32085.307022
Volume finale nella rete	20734.382813

Errore continuità -0.047 %

SOMMARIO DELLE STATISTICHE DEI SOTTOBACINI						
					Area permeabile	Area impermeabile (*) Area totale sottobacino

Sotto-bacino afferente al ramo	Nodo di Ingresso	Area (ha)	% imper.	Pioggia totale simulata (mm)	Altezza totale deflusso (mm)	Perdite totali (mm)	Deflusso massimo (m3/s)	Altezza deflusso (mm)	Deflusso massimo (m3/s)	Altezza deflusso (mm)	Deflusso massimo (m3/s)	Deflusso massimo unitario (mm/h)
1	1	1.28	75.00	91.200	30.613	60.587	0.00	77.815	0.02	66.015	0.02	7.031
10	3	1.01	75.00	91.200	28.983	62.217	0.00	77.495	0.02	65.367	0.02	7.026
100	97	1.28	60.00	91.200	30.062	61.138	0.01	77.969	0.02	58.806	0.02	6.728
11	10	0.72	75.00	91.200	29.697	61.503	0.00	77.628	0.01	65.645	0.01	7.029
12	9	2.91	75.00	91.200	29.100	62.100	0.01	77.520	0.05	65.415	0.06	7.026
13	11	2.29	75.00	91.200	29.622	61.578	0.01	77.630	0.04	65.628	0.04	7.029
14	12	4.71	40.00	91.200	26.081	65.119	0.04	77.839	0.04	46.784	0.08	6.197
15	13	6.34	40.00	91.200	25.556	65.644	0.05	77.799	0.05	46.453	0.11	6.157
16	15	1.17	60.00	91.200	27.688	63.512	0.01	77.659	0.01	57.670	0.02	6.699
18	17	0.80	60.00	91.200	30.426	60.774	0.00	78.003	0.01	58.972	0.01	6.728
19	18	0.31	60.00	91.200	29.431	61.769	0.00	77.884	0.00	58.503	0.01	6.726
2	2	1.88	75.00	91.200	29.399	61.801	0.01	77.575	0.03	65.531	0.04	7.028
20	16	1.84	60.00	91.200	27.291	63.909	0.01	77.609	0.02	57.482	0.03	6.689
21	20	2.76	60.00	91.200	26.402	64.798	0.02	77.505	0.03	57.064	0.05	6.657
22	21	1.32	60.00	91.200	26.402	64.798	0.01	77.512	0.02	57.068	0.02	6.656
23	19	0.61	60.00	91.200	30.469	60.731	0.00	78.009	0.01	58.993	0.01	6.728
24	22	0.24	60.00	91.200	30.453	60.747	0.00	78.001	0.00	58.982	0.00	6.728
26	25	0.74	60.00	91.200	27.528	63.672	0.00	77.634	0.01	57.592	0.01	6.695
27	26	1.09	60.00	91.200	26.736	64.464	0.01	77.536	0.01	57.216	0.02	6.670
28	27	0.12	60.00	91.200	31.637	59.563	0.00	78.153	0.00	59.547	0.00	6.729
29	24	0.41	60.00	91.200	29.219	61.981	0.00	77.850	0.01	58.398	0.01	6.724
3	2	0.17	75.00	91.200	30.652	60.548	0.00	77.820	0.00	66.028	0.00	7.031
30	28	0.12	60.00	91.200	31.047	60.153	0.00	78.065	0.00	59.258	0.00	6.728
31	30	2.67	30.00	91.200	23.169	68.031	0.02	77.788	0.02	39.554	0.04	5.638
32	31	1.22	60.00	91.200	26.518	64.682	0.01	77.519	0.02	57.119	0.02	6.661
33	32	1.01	60.00	91.200	27.873	63.327	0.01	77.684	0.01	57.760	0.02	6.704
34	33	0.39	60.00	91.200	29.269	61.931	0.00	77.856	0.00	58.421	0.01	6.725
35	34	0.30	60.00	91.200	31.093	60.107	0.00	78.089	0.00	59.290	0.01	6.728
36	29	1.15	60.00	91.200	27.354	63.846	0.01	77.608	0.01	57.507	0.02	6.691
37	36	0.52	60.00	91.200	28.163	63.037	0.00	77.720	0.01	57.897	0.01	6.710
38	38	0.52	60.00	91.200	28.169	63.031	0.00	77.708	0.01	57.893	0.01	6.710
39	40	0.57	60.00	91.200	29.254	61.946	0.00	77.871	0.01	58.424	0.01	6.725
4	5	0.80	75.00	91.200	29.952	61.248	0.00	77.675	0.01	65.744	0.02	7.030
40	42	0.46	60.00	91.200	30.185	61.015	0.00	77.975	0.01	58.859	0.01	6.728
41	43	0.15	60.00	91.200	31.037	60.163	0.00	78.064	0.00	59.253	0.00	6.728
42	37	0.24	60.00	91.200	30.769	60.431	0.00	78.053	0.00	59.140	0.00	6.728
43	39	0.22	60.00	91.200	30.270	60.930	0.00	77.993	0.00	58.904	0.00	6.728
44	41	0.37	60.00	91.200	29.263	61.937	0.00	77.860	0.00	58.422	0.01	6.725
46	45	0.44	60.00	91.200	28.115	63.085	0.00	77.695	0.01	57.863	0.01	6.709
47	47	0.26	60.00	91.200	31.551	59.649	0.00	78.145	0.00	59.507	0.00	6.729
48	46	1.11	60.00	91.200	28.899	62.301	0.01	77.818	0.01	58.251	0.02	6.721
49	48	0.48	60.00	91.200	28.978	62.222	0.00	77.829	0.01	58.289	0.01	6.722
5	4	0.76	75.00	91.200	29.534	61.666	0.00	77.601	0.01	65.584	0.01	7.028
50	49	0.42	60.00	91.200	30.400	60.800	0.00	77.988	0.01	58.953	0.01	6.728
51	44	0.64	60.00	91.200	28.809	62.391	0.00	77.794	0.01	58.200	0.01	6.720
52	51	0.47	60.00	91.200	29.283	61.917	0.00	77.863	0.01	58.431	0.01	6.725
53	52	0.13	60.00	91.200	30.929	60.271	0.00	78.048	0.00	59.200	0.00	6.728
54	49	0.29	60.00	91.200	30.044	61.156	0.00	77.947	0.00	58.786	0.01	6.728
55	53	4.79	30.00	91.200	21.225	69.975	0.04	77.658	0.03	38.155	0.07	5.331
56	54	3.14	60.00	91.200	24.369	66.831	0.02	77.232	0.04	56.087	0.06	6.542
57	50	0.44	60.00	91.200	26.558	64.642	0.00	77.524	0.01	57.137	0.01	6.663
58	56	0.47	60.00	91.200	30.448	60.752	0.00	78.007	0.01	58.984	0.01	6.728
59	58	0.40	60.00	91.200	30.752	60.448	0.00	78.049	0.00	59.130	0.01	6.728
6	6	0.30	60.00	91.200	29.627	61.573	0.00	77.907	0.00	58.595	0.01	6.727
60	57	0.63	60.00	91.200	30.824	60.376	0.00	78.045	0.01	59.156	0.01	6.728

61	60	0.36	60.00	91.200	30.375	60.825	0.00	77.994	0.00	58.947	0.01	6.728
62	59	0.70	60.00	91.200	30.602	60.598	0.00	78.025	0.01	59.056	0.01	6.728
63	55	0.88	60.00	91.200	26.403	64.797	0.01	77.495	0.01	57.058	0.02	6.657
65	62	0.21	60.00	91.200	28.338	62.862	0.00	77.761	0.00	57.992	0.00	6.714
66	64	0.44	60.00	91.200	30.462	60.738	0.00	78.013	0.01	58.992	0.01	6.728
67	65	0.36	60.00	91.200	30.096	61.104	0.00	77.963	0.00	58.816	0.01	6.728
68	66	0.45	60.00	91.200	28.786	62.414	0.00	77.785	0.01	58.185	0.01	6.720
69	67	0.13	60.00	91.200	30.857	60.343	0.00	78.036	0.00	59.164	0.00	6.728
7	4	2.32	75.00	91.200	29.224	61.976	0.01	77.550	0.04	65.468	0.04	7.027
70	68	0.76	60.00	91.200	31.300	59.900	0.00	78.116	0.01	59.390	0.01	6.729
71	69	0.69	60.00	91.200	29.921	61.279	0.00	77.932	0.01	58.728	0.01	6.728
72	70	0.74	60.00	91.200	30.488	60.712	0.00	78.001	0.01	58.996	0.01	6.728
73	71	1.11	60.00	91.200	29.404	61.796	0.01	77.879	0.01	58.489	0.02	6.725
74	63	7.98	5.00	91.200	22.604	68.596	0.10	78.250	0.01	25.386	0.11	4.847
77	75	0.23	60.00	91.200	29.900	61.300	0.00	77.950	0.00	58.730	0.00	6.728
78	76	0.61	60.00	91.200	29.829	61.371	0.00	77.939	0.01	58.695	0.01	6.728
79	77	0.21	60.00	91.200	30.535	60.665	0.00	78.007	0.00	59.019	0.00	6.728
8	7	2.10	75.00	91.200	29.615	61.585	0.01	77.614	0.03	65.614	0.04	7.029
80	78	0.25	60.00	91.200	30.433	60.767	0.00	77.986	0.00	58.965	0.00	6.728
81	79	0.19	60.00	91.200	30.759	60.441	0.00	78.043	0.00	59.129	0.00	6.728
83	80	1.40	60.00	91.200	30.530	60.670	0.01	77.998	0.02	59.011	0.03	6.728
84	81	3.11	60.00	91.200	29.796	61.404	0.02	77.922	0.04	58.672	0.06	6.728
86	83	1.84	60.00	91.200	30.742	60.458	0.01	78.049	0.02	59.126	0.03	6.728
87	84	1.14	60.00	91.200	30.323	60.877	0.01	77.989	0.01	58.922	0.02	6.728
89	86	0.32	60.00	91.200	29.583	61.617	0.00	77.894	0.00	58.570	0.01	6.726
9	8	0.27	75.00	91.200	29.541	61.659	0.00	77.594	0.00	65.581	0.01	7.028
92	89	1.40	60.00	91.200	30.530	60.670	0.01	77.998	0.02	59.011	0.03	6.728
93	90	1.38	60.00	91.200	30.556	60.644	0.01	78.003	0.02	59.025	0.03	6.728
94	91	1.43	60.00	91.200	31.363	59.837	0.01	78.131	0.02	59.424	0.03	6.729
97	94	1.87	60.00	91.200	30.698	60.502	0.01	78.022	0.02	59.092	0.03	6.728
98	95	1.83	60.00	91.200	30.742	60.458	0.01	78.039	0.02	59.120	0.03	6.728
99	96	1.14	60.00	91.200	30.323	60.877	0.01	77.989	0.01	58.922	0.02	6.728

(*) Le statistiche sull'area impermeabile aggregano aree con e senza gli accumuli superficiali.

TABELLA DEI MATERIALI												
Nome	Tipo	Area (m2)	Diametro int. (m)	Altezza (m)	Larghez. (m)	Pendenze (o/v)	n Mannin g	n Mannin g sinistra	n Mannin g destra	Spessore (mm)	Numero rami	Lunghezza totale (m)
CLS DN 1000	Circolare	0.785	1.000	*****	*****	*****	0.0140	*****	*****	0.000	4	528.96
CLS DN 1200	Circolare	1.131	1.200	*****	*****	*****	0.0140	*****	*****	0.000	2	138.24
CLS DN 300	Circolare	0.071	0.300	*****	*****	*****	0.0140	*****	*****	0.000	4	206.66
CLS DN 400	Circolare	0.126	0.400	*****	*****	*****	0.0140	*****	*****	0.000	20	1757.21
CLS DN 500	Circolare	0.196	0.500	*****	*****	*****	0.0140	*****	*****	0.000	14	1403.83
CLS DN 600	Circolare	0.283	0.600	*****	*****	*****	0.0140	*****	*****	0.000	10	1088.84
CLS DN 800	Circolare	0.503	0.800	*****	*****	*****	0.0140	*****	*****	0.000	9	637.20
CLS SCAT 10.00 x 1.00	Rettangolare	10.000	*****	1.000	10.000	*****	0.0140	*****	*****	0.000	1	19.04
CLS SCAT 2.50 x 1.25	Rettangolare	3.125	*****	1.250	2.500	*****	0.0140	*****	*****	0.000	15	725.27
CLS SCAT 3.00 x 1.00	Rettangolare	3.000	*****	1.000	3.000	*****	0.0140	*****	*****	0.000	2	338.81
PVC DN 200	Circolare	0.028	0.190	*****	*****	*****	0.0120	*****	*****	0.000	4	347.71
PVC DN 250	Circolare	0.045	0.240	*****	*****	*****	0.0120	*****	*****	0.000	7	666.23

PVC DN 315	Circolare	0.071	0.300	*****	*****	****	0.0120	*****	*****	0.000	6	550.48
PVC DN 400	Circolare	0.113	0.380	*****	*****	****	0.0120	*****	*****	0.000	1	78.88
TERRA ST 4.00 x 1.00 x 1.15	Trapezoidale	2.869	*****	1.150	1.000	1.30-1.30	0.0300	*****	*****	0.000	2	370.66
TERRA ST 4.00 x 1.00 x 1.40	Trapezoidale	3.497	*****	1.400	1.000	1.07-1.07	0.0300	*****	*****	0.000	4	84.83
TERRA ST 6.00 x 3.00 x 1.15	Trapezoidale	5.169	*****	1.150	3.000	1.30-1.30	0.0300	*****	*****	0.000	1	163.38
											106	9106.22

DATI DEI NODI						
Nodo	Quota terreno (m slm)	Quota cielo (m slm)	Quota fondo (m slm)	Portata esterna (m3/s)	Livello iniziale (m)	Rami collegati
1	28.50	27.54	27.35	0.00	0.00	1
10	28.00	27.61	27.01	0.00	0.00	10,11
100	25.06	24.95	23.55	0.00	0.00	104
101	25.12	24.91	23.51	0.00	0.00	104,105
102	25.40	25.02	21.70	0.00	0.00	105,106
103	25.05	24.91	21.69	0.00	0.00	106,107
104	25.07	25.06	23.66	0.00	0.00	107
11	27.80	27.18	26.58	0.00	0.00	12,13
12	27.51	26.90	26.30	0.00	0.00	13,14
13	27.48	26.66	26.06	0.00	0.00	14,15
14	27.44	26.60	25.80	0.00	0.00	15,16,17
15	27.53	26.60	26.10	0.00	0.00	16
16	27.42	26.59	25.75	0.00	0.00	17,19,20
17	27.60	26.80	26.50	0.00	0.00	18
18	27.68	26.77	26.39	0.00	0.00	18,19
19	27.20	26.40	25.60	0.00	0.00	20,22,23
2	28.56	27.49	27.30	0.00	0.00	1,2,3
20	26.98	26.83	26.43	0.00	0.00	21
21	26.82	26.69	26.29	0.00	0.00	21,22
22	27.16	26.36	25.56	0.00	0.00	23,24,26
23	27.12	26.38	25.54	0.00	0.00	24,25,28
24	27.12	26.34	25.54	0.00	0.00	25,27,29
25	27.16	26.46	26.06	0.00	0.00	26
26	26.82	26.10	25.70	0.00	0.00	27
27	27.20	26.42	25.92	0.00	0.00	28
28	27.08	26.22	25.42	0.00	0.00	29,30,32
29	26.80	26.16	25.36	0.00	0.00	30,34,36
3	28.25	27.74	27.14	0.00	0.00	10,5,6
30	26.80	26.42	26.12	0.00	0.00	31
31	27.07	26.33	26.03	0.00	0.00	31,32
32	26.94	26.34	26.10	0.00	0.00	33
33	26.62	26.03	25.68	0.00	0.00	33,34,35
34	26.60	25.97	25.73	0.00	0.00	35
35	26.60	25.99	24.74	0.00	0.00	36,44,45,82
36	26.80	26.24	26.00	0.00	0.00	37
37	26.51	26.09	25.66	0.00	0.00	37,41,42
38	26.66	26.19	25.95	0.00	0.00	38
39	26.44	25.87	25.43	0.00	0.00	38,42,43
4	28.23	27.70	27.20	0.00	0.00	3,4,5,7
40	26.53	26.09	25.85	0.00	0.00	39
41	26.39	25.72	25.32	0.00	0.00	39,40,43,44
42	26.30	25.76	25.52	0.00	0.00	40
43	26.60	26.09	25.69	0.00	0.00	41
44	26.40	25.60	24.60	0.00	0.00	49,51,77
45	26.47	25.91	25.67	0.00	0.00	46

46	26.66	25.79	25.39	0.00	0.00	46,47,48
47	26.83	26.10	25.70	0.00	0.00	47
48	26.13	25.56	25.16	0.00	0.00	48,49,50
49	26.13	25.62	25.24	0.00	0.00	50,54
5	28.08	27.65	27.25	0.00	0.00	4
50	25.90	25.52	24.49	0.00	0.00	51,56,57,81
51	26.20	25.75	25.35	0.00	0.00	52
52	26.12	25.70	25.30	0.00	0.00	52,53,54
53	26.60	25.92	25.42	0.00	0.00	55
54	26.50	25.87	25.37	0.00	0.00	55,56,78
55	25.94	25.44	24.44	0.00	0.00	57,59,63
56	26.70	25.74	25.34	0.00	0.00	58
57	26.63	25.87	25.57	0.00	0.00	60
58	26.63	25.30	24.77	0.00	0.00	59,61,79
59	26.66	25.70	25.40	0.00	0.00	62
6	28.36	27.70	27.20	0.00	0.00	2,6
60	26.64	25.51	24.99	0.00	0.00	58,61,80
61	25.97	25.23	24.02	0.00	0.00	63,64
62	25.91	25.16	23.96	0.00	0.00	64,65,69
63	25.50	25.24	23.73	0.00	0.00	65,74,88
64	26.20	25.21	24.71	0.00	0.00	66
65	26.18	25.11	24.61	0.00	0.00	66,67,70
66	26.18	25.18	24.58	0.00	0.00	67,68,71
67	26.18	25.17	24.49	0.00	0.00	68,69,72,73
68	26.20	25.21	24.71	0.00	0.00	70
69	26.19	25.25	24.75	0.00	0.00	71
7	28.20	27.58	27.08	0.00	0.00	7,8
70	26.19	25.17	24.77	0.00	0.00	72
71	26.15	25.31	24.91	0.00	0.00	73
72	25.11	25.10	23.50	0.00	0.00	108,74,75
73	24.35	24.33	23.18	0.00	0.00	102,103,90
75	26.55	25.67	24.67	0.00	0.00	77,89
76	26.64	26.03	25.84	0.00	0.00	78
77	26.63	25.52	25.10	0.00	0.00	60,79
78	26.70	25.66	25.26	0.00	0.00	62,80
79	26.16	25.78	25.28	0.00	0.00	53,81
8	28.13	27.55	26.95	0.00	0.00	8,9
80	26.80	25.98	24.73	0.00	0.00	82,83
81	26.60	25.83	24.59	0.00	0.00	84,93
82	26.10	25.74	24.49	0.00	0.00	85,94
83	26.10	25.60	24.35	0.00	0.00	86,96
84	26.10	25.46	24.21	0.00	0.00	87,98
85	26.10	25.29	24.04	0.00	0.00	100,88
86	26.61	25.92	25.12	0.00	0.00	45,89
87	25.05	24.63	23.48	0.00	0.00	75,90
88	25.01	25.01	23.53	0.00	0.00	101,108
89	26.73	25.93	24.68	0.00	0.00	83,92
9	28.12	27.51	26.91	0.00	0.00	11,12,9
90	26.67	25.88	24.63	0.00	0.00	92,93
91	26.26	25.77	24.52	0.00	0.00	84,94
92	26.10	25.69	24.44	0.00	0.00	85,95
93	26.10	25.64	24.39	0.00	0.00	95,96
94	26.10	25.55	24.30	0.00	0.00	86,97
95	26.10	25.51	24.26	0.00	0.00	97,98
96	26.10	25.41	24.16	0.00	0.00	87,99
97	26.10	25.35	24.10	0.00	0.00	100,99
98	24.60	24.30	23.30	0.00	0.00	101,102
99	24.30	24.26	23.11	0.00	0.00	103

DATI DEGLI ELEMENTI LINEARI

Elemento	Nodo iniziale	Nodo finale	Materiale	Lunghezza (m)	Valvola anti-rifl.
1	1	2	PVC DN 200	76.83	no
10	3	10	CLS DN 600	147.48	no
100	97	85	CLS SCAT 2.50 x 1.25	61.65	no
101	88	98	CLS SCAT 3.00 x 1.00	308.81	no
102	98	73	PVC DN 315	14.29	si
103	73	99	TERRA ST 4.00 x 1.00 x 1.15	74.10	no
104	100	101	TERRA ST 4.00 x 1.00 x 1.40	21.71	no
105	101	102	TERRA ST 4.00 x 1.00 x 1.40	26.08	no
106	102	103	TERRA ST 4.00 x 1.00 x 1.40	15.00	no
107	103	104	TERRA ST 4.00 x 1.00 x 1.40	22.04	no
108	72	88	CLS SCAT 10.00 x 1.00	19.04	no
11	10	9	CLS DN 600	114.27	no
12	9	11	CLS DN 600	141.78	no
13	11	12	CLS DN 600	117.59	no
14	12	13	CLS DN 600	133.25	no
15	13	14	CLS DN 600	149.14	no
16	15	14	CLS DN 500	135.47	no
17	14	16	CLS DN 800	49.77	no
18	17	18	PVC DN 315	52.48	no
19	18	16	PVC DN 400	78.88	no
2	2	6	PVC DN 200	127.68	no
20	16	19	CLS DN 800	150.26	no
21	20	21	CLS DN 400	186.03	no
22	21	19	CLS DN 400	186.05	no
23	19	22	CLS DN 800	51.45	no
24	22	23	CLS DN 800	51.83	no
25	23	24	CLS DN 800	5.86	no
26	25	22	CLS DN 400	141.33	no
27	26	24	CLS DN 400	172.17	no
28	27	23	CLS DN 500	26.48	no
29	24	28	CLS DN 800	85.06	no
3	2	4	PVC DN 200	75.37	no
30	28	29	CLS DN 800	38.25	no
31	30	31	PVC DN 315	201.22	no
32	31	28	PVC DN 315	181.16	no
33	32	33	PVC DN 250	128.85	no
34	33	29	PVC DN 315	83.61	no
35	34	33	PVC DN 250	37.21	no
36	29	35	CLS DN 800	147.85	no
37	36	37	PVC DN 250	118.72	no
38	38	39	PVC DN 250	118.51	no
39	40	41	PVC DN 250	84.04	no
4	5	4	CLS DN 400	103.28	no
40	42	41	PVC DN 250	58.51	no
41	43	37	CLS DN 400	38.43	no
42	37	39	CLS DN 400	44.40	no
43	39	41	CLS DN 400	56.34	no
44	41	35	CLS DN 400	83.77	no
45	35	86	PVC DN 315	17.71	no
46	45	46	PVC DN 250	120.39	no
47	47	46	CLS DN 400	28.08	no
48	46	48	CLS DN 400	94.76	no
49	48	44	CLS DN 400	92.32	no
5	4	3	CLS DN 400	121.55	no
50	49	48	CLS DN 300	53.15	no
51	44	50	CLS DN 1000	97.56	no
52	51	52	CLS DN 400	83.20	no

53	52	79	CLS DN 400	40.83	no
54	49	52	CLS DN 300	62.13	no
55	53	54	CLS DN 500	277.76	no
56	54	50	CLS DN 500	283.20	no
57	50	55	CLS DN 1000	179.48	no
58	56	60	CLS DN 400	51.91	no
59	58	55	CLS DN 500	44.73	no
6	6	3	CLS DN 500	73.34	no
60	57	77	CLS DN 300	43.17	no
61	60	58	CLS DN 500	53.75	no
62	59	78	CLS DN 300	48.20	no
63	55	61	CLS DN 1000	185.98	no
64	61	62	CLS DN 1200	25.43	no
65	62	63	CLS DN 1200	112.81	no
66	64	65	CLS DN 500	51.64	no
67	65	66	CLS DN 500	60.75	no
68	66	67	CLS DN 600	98.30	no
69	67	62	CLS DN 600	42.41	no
7	4	7	CLS DN 500	135.86	no
70	68	65	CLS DN 500	33.04	no
71	69	66	CLS DN 500	65.37	no
72	70	67	CLS DN 400	50.94	no
73	71	67	CLS DN 400	79.65	no
74	63	72	TERRA ST 6.00 x 3.00 x 1.15	163.38	no
75	72	87	CLS DN 600	23.38	no
77	75	44	CLS DN 1000	65.94	no
78	76	54	PVC DN 200	67.82	no
79	77	58	CLS DN 400	49.86	no
8	7	8	CLS DN 500	117.89	no
80	78	60	CLS DN 400	52.32	no
81	79	50	CLS DN 500	44.56	no
82	35	80	CLS SCAT 2.50 x 1.25	10.00	no
83	80	89	CLS SCAT 2.50 x 1.25	50.00	no
84	81	91	CLS SCAT 2.50 x 1.25	65.00	no
85	82	92	CLS SCAT 2.50 x 1.25	50.00	no
86	83	94	CLS SCAT 2.50 x 1.25	45.02	no
87	84	96	CLS SCAT 2.50 x 1.25	55.00	no
88	85	63	CLS SCAT 2.50 x 1.25	45.50	no
89	86	75	CLS DN 800	56.86	no
9	8	9	CLS DN 600	121.22	no
90	87	73	TERRA ST 4.00 x 1.00 x 1.15	296.56	no
92	89	90	CLS SCAT 2.50 x 1.25	50.00	no
93	90	81	CLS SCAT 2.50 x 1.25	49.36	no
94	91	82	CLS SCAT 3.00 x 1.00	30.00	no
95	92	93	CLS SCAT 2.50 x 1.25	50.00	no
96	93	83	CLS SCAT 2.50 x 1.25	47.76	no
97	94	95	CLS SCAT 2.50 x 1.25	45.98	no
98	95	84	CLS SCAT 2.50 x 1.25	45.00	no
99	96	97	CLS SCAT 2.50 x 1.25	55.00	no

SOMMARIO STATISTICHE DEI NODI											
Nodo	Quota terreno (m slm)	Quota cielo (m slm)	Quota media (m slm)	% variaz. media	Massima quota		Sovracc. alla max. quota (m)	Dist. tra terreno e livello max (m)	Durata del sovracc. (min)	Durata della esondaz. (min)	*
					(m slm)	al tempo					
1	28.50	27.54	27.82	0.0426	28.50	5:50	0.96	0.00	616.37	501.87	*
10	28.00	27.61	27.40	0.0099	28.00	6:02	0.39	0.00	498.07	331.03	*
100	25.06	24.95	23.55	0.0000	23.55	0:00	0.00	1.51	0.00	0.00	
101	25.12	24.91	23.51	0.0000	23.51	0:00	0.00	1.61	0.00	0.00	

102	25.40	25.02	21.70	0.0000	21.70	0:00	0.00	3.70	0.00	0.00	
103	25.05	24.91	21.68	0.0000	21.68	0:00	0.00	3.37	0.00	0.00	
104	25.07	25.06	23.66	0.0000	23.66	0:00	0.00	1.41	0.00	0.00	
11	27.80	27.18	27.06	0.0117	27.76	13:59	0.59	0.04	555.00	0.00	
12	27.51	26.90	26.81	0.0120	27.51	7:58	0.61	0.00	573.43	375.03	*
13	27.48	26.66	26.57	0.0124	27.31	14:00	0.65	0.17	578.30	0.00	
14	27.44	26.60	26.22	0.0061	26.81	14:00	0.21	0.63	458.17	0.00	
15	27.53	26.60	26.35	0.0070	26.82	14:00	0.22	0.71	456.73	0.00	
16	27.42	26.59	26.18	0.0058	26.77	13:59	0.18	0.65	360.77	0.00	
17	27.60	26.80	26.58	0.0047	26.79	14:00	0.00	0.81	0.00	0.00	
18	27.68	26.77	26.51	0.0051	26.78	14:00	0.01	0.90	144.00	0.00	
19	27.20	26.40	26.04	0.0061	26.61	14:00	0.21	0.59	467.23	0.00	
2	28.56	27.49	27.77	0.0440	28.52	6:02	1.03	0.04	616.67	0.00	
20	26.98	26.83	26.60	0.0063	26.95	14:00	0.12	0.03	266.00	0.00	
21	26.82	26.69	26.47	0.0066	26.82	10:37	0.13	0.00	288.10	205.47	*
22	27.16	26.36	25.99	0.0058	26.53	13:59	0.17	0.63	365.67	0.00	
23	27.12	26.38	25.94	0.0052	26.44	14:00	0.06	0.68	278.80	0.00	
24	27.12	26.34	25.93	0.0054	26.43	14:00	0.09	0.69	304.60	0.00	
25	27.16	26.46	26.22	0.0058	26.54	14:00	0.08	0.62	282.47	0.00	
26	26.82	26.10	25.99	0.0095	26.45	13:59	0.35	0.37	583.93	0.00	
27	27.20	26.42	26.10	0.0051	26.44	13:59	0.02	0.76	225.80	0.00	
28	27.08	26.22	25.81	0.0052	26.28	13:59	0.06	0.80	288.50	0.00	
29	26.80	26.16	25.76	0.0049	26.19	14:00	0.03	0.61	261.13	0.00	
3	28.25	27.74	27.49	0.0110	28.16	6:02	0.42	0.09	491.80	0.00	
30	26.80	26.42	26.34	0.0111	26.80	10:19	0.38	0.00	363.93	232.07	*
31	27.07	26.33	26.24	0.0106	26.67	14:00	0.34	0.40	374.77	0.00	
32	26.94	26.34	26.19	0.0064	26.40	14:00	0.06	0.54	241.57	0.00	
33	26.62	26.03	25.90	0.0081	26.27	13:59	0.24	0.35	556.57	0.00	
34	26.60	25.97	25.93	0.0112	26.27	13:59	0.30	0.33	585.97	0.00	
35	26.60	25.99	24.89	0.0013	25.07	14:00	0.00	1.53	0.00	0.00	
36	26.80	26.24	26.06	0.0028	26.14	14:00	0.00	0.66	0.00	0.00	
37	26.51	26.09	25.70	0.0011	25.75	13:59	0.00	0.76	0.00	0.00	
38	26.66	26.19	26.00	0.0021	26.06	14:00	0.00	0.60	0.00	0.00	
39	26.44	25.87	25.52	0.0025	25.66	14:00	0.00	0.78	0.00	0.00	
4	28.23	27.70	27.54	0.0119	28.10	6:02	0.40	0.13	495.67	0.00	
40	26.53	26.09	25.88	0.0016	25.93	13:59	0.00	0.60	0.00	0.00	
41	26.39	25.72	25.47	0.0039	25.64	14:00	0.00	0.75	0.00	0.00	
42	26.30	25.76	25.57	0.0028	25.66	14:00	0.00	0.64	0.00	0.00	
43	26.60	26.09	25.72	0.0009	25.76	14:00	0.00	0.84	0.00	0.00	
44	26.40	25.60	24.76	0.0020	25.01	14:00	0.00	1.39	0.00	0.00	
45	26.47	25.91	25.71	0.0018	25.76	14:00	0.00	0.71	0.00	0.00	
46	26.66	25.79	25.46	0.0020	25.55	14:00	0.00	1.11	0.00	0.00	
47	26.83	26.10	25.72	0.0005	25.74	11:43	0.00	1.09	0.00	0.00	
48	26.13	25.56	25.30	0.0035	25.45	14:00	0.00	0.68	0.00	0.00	
49	26.13	25.62	25.33	0.0028	25.46	14:00	0.00	0.67	0.00	0.00	
5	28.08	27.65	27.56	0.0163	28.08	6:02	0.43	0.00	500.93	345.93	*
50	25.90	25.52	24.73	0.0024	25.01	14:00	0.00	0.89	0.00	0.00	
51	26.20	25.75	25.40	0.0015	25.48	14:00	0.00	0.72	0.00	0.00	
52	26.12	25.70	25.37	0.0018	25.45	14:00	0.00	0.67	0.00	0.00	
53	26.60	25.92	25.62	0.0051	25.95	14:00	0.03	0.65	56.97	0.00	
54	26.50	25.87	25.57	0.0045	25.84	14:00	0.00	0.66	0.00	0.00	
55	25.94	25.44	24.67	0.0023	24.93	14:00	0.00	1.01	0.00	0.00	
56	26.70	25.74	25.37	0.0008	25.40	13:12	0.00	1.30	0.00	0.00	
57	26.63	25.87	25.60	0.0012	25.65	12:44	0.00	0.98	0.00	0.00	
58	26.63	25.30	24.87	0.0021	25.00	12:48	0.00	1.63	0.00	0.00	
59	26.66	25.70	25.45	0.0017	25.51	12:58	0.00	1.15	0.00	0.00	
6	28.36	27.70	27.51	0.0136	28.19	6:02	0.49	0.17	493.40	0.00	
60	26.64	25.51	25.05	0.0012	25.12	13:29	0.00	1.52	0.00	0.00	
61	25.97	25.23	24.19	0.0016	24.41	14:00	0.00	1.56	0.00	0.00	
62	25.91	25.16	24.16	0.0018	24.40	14:00	0.00	1.51	0.00	0.00	

63	25.50	25.24	24.02	0.0019	24.34	14:00	0.00	1.16	0.00	0.00
64	26.20	25.21	24.76	0.0013	24.85	14:00	0.00	1.35	0.00	0.00
65	26.18	25.11	24.71	0.0022	24.84	13:59	0.00	1.34	0.00	0.00
66	26.18	25.18	24.68	0.0020	24.82	14:00	0.00	1.36	0.00	0.00
67	26.18	25.17	24.62	0.0021	24.78	13:59	0.00	1.40	0.00	0.00
68	26.20	25.21	24.76	0.0013	24.85	13:59	0.00	1.35	0.00	0.00
69	26.19	25.25	24.79	0.0009	24.84	13:59	0.00	1.35	0.00	0.00
7	28.20	27.58	27.46	0.0130	28.08	6:03	0.50	0.12	507.97	0.00
70	26.19	25.17	24.84	0.0018	24.92	13:13	0.00	1.27	0.00	0.00
71	26.15	25.31	24.98	0.0019	25.07	14:00	0.00	1.08	0.00	0.00
72	25.11	25.10	23.90	0.0020	24.20	14:00	0.00	0.91	0.00	0.00
73	24.35	24.33	23.57	0.0018	23.76	14:07	0.00	0.59	0.00	0.00
75	26.55	25.67	24.79	0.0017	25.01	14:00	0.00	1.54	0.00	0.00
76	26.64	26.03	25.89	0.0031	25.96	14:00	0.00	0.68	0.00	0.00
77	26.63	25.52	25.14	0.0013	25.20	9:23	0.00	1.43	0.00	0.00
78	26.70	25.66	25.32	0.0015	25.38	13:17	0.00	1.32	0.00	0.00
79	26.16	25.78	25.32	0.0009	25.37	13:59	0.00	0.79	0.00	0.00
8	28.13	27.55	27.37	0.0112	28.02	6:03	0.47	0.11	506.17	0.00
80	26.80	25.98	24.88	0.0013	25.06	13:59	0.00	1.74	0.00	0.00
81	26.60	25.83	24.75	0.0013	24.93	14:00	0.00	1.67	0.00	0.00
82	26.10	25.74	24.66	0.0014	24.85	13:59	0.00	1.25	0.00	0.00
83	26.10	25.60	24.52	0.0014	24.72	14:00	0.00	1.38	0.00	0.00
84	26.10	25.46	24.39	0.0015	24.60	13:59	0.00	1.50	0.00	0.00
85	26.10	25.29	24.22	0.0014	24.41	14:00	0.00	1.69	0.00	0.00
86	26.61	25.92	25.14	0.0003	25.17	14:00	0.00	1.44	0.00	0.00
87	25.05	24.63	23.79	0.0023	24.03	14:01	0.00	1.02	0.00	0.00
88	25.01	25.01	23.87	0.0015	24.08	14:04	0.00	0.93	0.00	0.00
89	26.73	25.93	24.84	0.0013	25.02	13:59	0.00	1.71	0.00	0.00
9	28.12	27.51	27.34	0.0109	27.98	6:03	0.47	0.14	509.73	0.00
90	26.67	25.88	24.79	0.0013	24.98	14:00	0.00	1.69	0.00	0.00
91	26.26	25.77	24.68	0.0013	24.87	13:59	0.00	1.39	0.00	0.00
92	26.10	25.69	24.61	0.0014	24.81	14:00	0.00	1.29	0.00	0.00
93	26.10	25.64	24.56	0.0014	24.76	14:00	0.00	1.34	0.00	0.00
94	26.10	25.55	24.48	0.0015	24.68	14:00	0.00	1.42	0.00	0.00
95	26.10	25.51	24.43	0.0015	24.64	14:00	0.00	1.46	0.00	0.00
96	26.10	25.41	24.33	0.0015	24.55	13:59	0.00	1.55	0.00	0.00
97	26.10	25.35	24.28	0.0015	24.49	13:59	0.00	1.61	0.00	0.00
98	24.60	24.30	23.75	0.0022	24.07	15:07	0.00	0.53	0.00	0.00
99	24.30	24.26	23.29	0.0010	23.41	14:07	0.00	0.89	0.00	0.00

Nodo con la maggiore variazione media percentuale: '2' pari a 0.044 % (**)

(*) Attenzione: c'è un ingresso di portata alla rete in un nodo in cui è possibile un'esondazione. Se l'ingresso è contemporaneo all'esondazione, l'acqua non entrerà in rete e verrà considerata solamente nel controllo di continuità.

(**) La variazione media nei nodi è così definita:
 $100.0 \cdot (Y(n+1) - Y(n)) / Y_{full}$

SOMMARIO STATISTICHE DEGLI ELEMENTI LINEARI

Elemento	Portata di moto uniforme (m3/s)	Velocità di moto uniforme (m/s)	Altezza condotto (m)	Portata max di calcolo		Velocità max di calcolo		Rapporto tra Qmax e Q moto uniforme	Raggio idraulico massimo (m)	Sezione trasvers. massima (m2)	Area normaliz. massima	Durata della Q normale (min)	Pendenza ramo (m/m)
				(m3/s)	al tempo	(m/s)	al tempo						
1	0.0079	0.28	0.190	0.020	5:50	0.70	5:50	2.50	0.0578	0.0284	1.00	538.9	0.00065
10	0.1690	0.60	0.600	0.083	14:00	0.49	5:17	0.49	0.1793	0.2827	1.00	674.4	0.00088
100	3.9377	1.26	1.250	1.020	13:59	1.08	13:59	0.26	0.2903	0.9456	0.30	537.7	0.00100
101	3.0517	1.02	1.000	1.030	14:01	0.80	5:54	0.34	0.4536	1.9691	0.66	137.1	0.00075
102	0.0331	0.47	0.300	0.188	17:11	2.65	17:11	5.66	0.0831	0.0707	1.00	0.0	0.00100
103	2.1545	0.75	1.150	0.634	14:07	0.89	14:07	0.29	0.2800	0.7154	0.25	0.0	0.00100

104	3.8912	1.11	1.400	0.000	0:00	0.00	0:00	0.00	0.0000	0.0000	0.00	0.0	0.00184
105	5.8868	1.68	1.400	0.000	0:00	0.00	0:00	0.00	0.0000	0.0000	0.00	0.0	0.00422
106	2.8664	0.82	1.400	0.000	0:00	0.00	0:00	0.00	0.0000	0.0000	0.00	0.0	0.00100
107	7.4767	2.14	1.400	0.000	0:00	0.00	0:00	0.00	0.0000	0.0000	0.00	0.0	0.00680
108	29.8590	2.99	1.000	1.038	14:00	1.06	14:00	0.03	0.0962	0.9813	0.10	565.6	0.00500
11	0.1690	0.60	0.600	0.091	6:03	0.45	5:15	0.54	0.1808	0.2827	1.00	673.8	0.00088
12	0.2765	0.98	0.600	0.222	8:34	0.96	5:01	0.80	0.1743	0.2827	1.00	751.4	0.00235
13	0.2765	0.98	0.600	0.265	13:59	0.94	13:59	0.96	0.1771	0.2827	1.00	728.8	0.00235
14	0.2399	0.85	0.600	0.292	6:03	1.03	6:03	1.22	0.1815	0.2827	1.00	705.1	0.00177
15	0.2399	0.85	0.600	0.345	6:03	1.22	6:03	1.44	0.1825	0.2827	1.00	676.4	0.00177
16	0.1358	0.69	0.500	0.022	14:00	0.28	2:48	0.16	0.1386	0.1964	1.00	214.2	0.00150
17	0.3892	0.77	0.800	0.359	7:58	0.76	6:03	0.92	0.2433	0.5027	1.00	453.6	0.00101
18	0.0480	0.68	0.300	0.015	14:00	0.51	5:41	0.32	0.0851	0.0703	1.00	916.8	0.00210
19	0.0940	0.83	0.380	0.021	14:00	0.61	5:04	0.22	0.1053	0.1134	1.00	92.3	0.00228
2	0.0087	0.31	0.190	0.022	5:50	0.79	5:50	2.57	0.0578	0.0284	1.00	9.5	0.00078
20	0.3880	0.77	0.800	0.405	14:00	0.81	14:00	1.04	0.2430	0.5027	1.00	604.5	0.00100
21	0.0531	0.42	0.400	0.051	14:00	0.47	5:47	0.95	0.1202	0.1257	1.00	620.1	0.00075
22	0.0930	0.74	0.400	0.069	14:03	0.78	4:26	0.74	0.1109	0.1257	1.00	127.6	0.00231
23	0.3424	0.68	0.800	0.481	13:59	0.96	13:59	1.41	0.2434	0.5027	1.00	350.4	0.00078
24	0.2286	0.45	0.800	0.499	14:00	0.99	14:00	2.18	0.2430	0.5027	1.00	0.0	0.00035
25	0.2285	0.45	0.800	0.501	14:00	1.00	14:00	2.19	0.2434	0.5027	1.00	10.4	0.00035
26	0.1016	0.81	0.400	0.014	14:00	0.36	2:39	0.13	0.1109	0.1257	1.00	298.7	0.00276
27	0.0590	0.47	0.400	0.020	14:00	0.18	2:30	0.34	0.1108	0.1257	1.00	513.2	0.00093
28	0.1358	0.69	0.500	0.002	14:00	0.25	4:32	0.02	0.1516	0.1964	1.00	14.8	0.00150
29	0.4670	0.93	0.800	0.529	14:00	1.05	14:00	1.13	0.2432	0.5027	1.00	571.6	0.00145
3	0.0113	0.40	0.190	0.028	5:50	1.00	5:50	2.50	0.0577	0.0284	1.00	646.6	0.00133
30	0.4670	0.93	0.800	0.580	14:00	1.15	14:00	1.24	0.2434	0.5027	1.00	422.2	0.00145
31	0.0222	0.31	0.300	0.032	14:11	0.46	14:11	1.46	0.0912	0.0707	1.00	457.9	0.00045
32	0.0467	0.66	0.300	0.049	14:11	0.76	4:25	1.05	0.0831	0.0707	1.00	73.9	0.00199
33	0.0283	0.63	0.240	0.019	14:00	0.59	4:48	0.66	0.0665	0.0452	1.00	129.1	0.00241
34	0.0601	0.85	0.300	0.031	14:00	0.52	2:35	0.52	0.0831	0.0707	1.00	457.6	0.00330
35	0.0221	0.49	0.240	0.005	13:15	0.24	4:25	0.25	0.0709	0.0452	1.00	645.1	0.00147
36	0.4670	0.93	0.800	0.633	14:00	1.49	14:00	1.36	0.2328	0.4256	0.85	0.0	0.00145
37	0.0205	0.45	0.240	0.010	13:59	0.49	13:59	0.47	0.0552	0.0198	0.44	0.0	0.00126
38	0.0300	0.66	0.240	0.010	13:59	0.60	13:58	0.32	0.0498	0.0161	0.36	0.0	0.00270
39	0.0459	1.01	0.240	0.011	13:59	0.37	13:59	0.23	0.0521	0.0291	0.64	1304.5	0.00631
4	0.0425	0.34	0.400	0.014	6:00	0.15	4:43	0.33	0.1207	0.1257	1.00	536.7	0.00048
40	0.0338	0.75	0.240	0.008	13:59	0.28	2:16	0.25	0.0625	0.0360	0.80	757.2	0.00342
41	0.0540	0.43	0.400	0.003	13:32	0.15	9:22	0.05	0.0494	0.0188	0.15	681.9	0.00078
42	0.1392	1.11	0.400	0.017	13:59	0.37	4:26	0.12	0.0819	0.0485	0.39	1306.9	0.00518
43	0.0855	0.68	0.400	0.030	14:00	0.33	13:58	0.36	0.1150	0.0915	0.73	693.4	0.00195
44	0.0423	0.34	0.400	0.056	13:59	0.70	13:59	1.33	0.1087	0.0801	0.64	0.0	0.00048
45	0.0398	0.56	0.300	0.000	13:58	-0.10	13:58	-0.01	0.0189	0.0039	0.06	0.0	0.00145
46	0.0279	0.62	0.240	0.008	13:59	0.34	14:00	0.29	0.0594	0.0240	0.53	1318.9	0.00233
47	0.2032	1.62	0.400	0.005	11:43	0.28	2:10	0.02	0.0569	0.0278	0.22	1309.1	0.01104
48	0.0953	0.76	0.400	0.033	13:59	0.45	14:00	0.35	0.1035	0.0736	0.59	1302.3	0.00243
49	0.0569	0.45	0.400	0.051	13:59	0.70	13:59	0.90	0.1054	0.0733	0.58	0.0	0.00087
5	0.0430	0.34	0.400	0.043	6:02	0.35	5:21	1.01	0.1215	0.1257	1.00	564.0	0.00049
50	0.0348	0.49	0.300	0.009	9:24	0.22	2:19	0.27	0.0880	0.0627	0.89	588.0	0.00150
51	0.7387	0.94	1.000	0.073	12:56	0.29	2:36	0.10	0.2382	0.3612	0.46	442.6	0.00110
52	0.0459	0.37	0.400	0.009	13:57	0.23	4:52	0.19	0.0766	0.0387	0.31	694.5	0.00056
53	0.0459	0.37	0.400	0.015	13:59	0.48	13:57	0.33	0.0675	0.0321	0.26	24.1	0.00056
54	0.0148	0.21	0.300	0.004	14:00	-0.48	2:24	0.28	0.0730	0.0336	0.48	0.0	0.00027
55	0.0470	0.24	0.500	0.070	14:00	0.36	14:00	1.49	0.1521	0.1944	0.99	310.0	0.00018
56	0.1428	0.73	0.500	0.138	14:00	0.92	14:00	0.96	0.1420	0.1492	0.76	0.0	0.00166
57	0.3716	0.47	1.000	0.237	14:00	0.60	14:00	0.64	0.2508	0.3962	0.50	344.2	0.00028
58	0.1588	1.26	0.400	0.009	13:12	0.36	13:12	0.05	0.0558	0.0240	0.19	1307.3	0.00674
59	0.1387	0.71	0.500	0.059	12:49	0.79	12:48	0.43	0.1167	0.0861	0.44	10.3	0.00157
6	0.1003	0.51	0.500	0.026	6:02	0.27	4:46	0.26	0.1509	0.1964	1.00	544.4	0.00082
60	0.0808	1.14	0.300	0.012	12:44	0.81	12:44	0.15	0.0451	0.0144	0.20	1.0	0.00811

61	0.2243	1.14	0.500	0.033	13:14	0.53	12:53	0.15	0.0970	0.0645	0.33	1319.2	0.00409
62	0.0484	0.68	0.300	0.013	12:58	0.51	12:58	0.27	0.0622	0.0251	0.35	1304.6	0.00290
63	0.7481	0.95	1.000	0.309	14:00	1.05	14:00	0.41	0.2121	0.2930	0.37	0.0	0.00113
64	1.7584	1.55	1.200	0.309	14:00	0.89	14:02	0.18	0.2303	0.3490	0.31	625.0	0.00236
65	1.6190	1.43	1.200	0.400	14:00	0.85	14:00	0.25	0.2703	0.4718	0.42	408.0	0.00200
66	0.1568	0.80	0.500	0.008	13:30	0.14	4:34	0.05	0.0980	0.0656	0.33	723.6	0.00200
67	0.0779	0.40	0.500	0.029	13:58	0.32	9:45	0.37	0.1212	0.0925	0.47	528.7	0.00049
68	0.1725	0.61	0.600	0.050	13:58	0.41	13:58	0.29	0.1390	0.1229	0.43	706.3	0.00092
69	0.1238	0.44	0.600	0.087	13:58	0.82	13:58	0.70	0.1278	0.1062	0.38	0.0	0.00047
7	0.1042	0.53	0.500	0.048	5:20	0.42	4:41	0.46	0.1486	0.1964	1.00	710.9	0.00088
70	0.1929	0.98	0.500	0.014	13:23	0.27	2:14	0.07	0.0991	0.0665	0.34	728.2	0.00303
71	0.1788	0.91	0.500	0.013	13:59	0.24	2:19	0.07	0.0891	0.0598	0.30	1300.2	0.00260
72	0.0383	0.30	0.400	0.014	13:08	0.45	13:08	0.36	0.0663	0.0308	0.25	0.0	0.00039
73	0.0811	0.65	0.400	0.021	13:56	0.58	13:56	0.25	0.0722	0.0353	0.28	0.0	0.00176
74	5.4116	1.05	1.150	1.526	14:00	0.61	14:00	0.28	0.4876	2.5093	0.49	469.7	0.00141
75	0.1803	0.64	0.600	0.488	14:00	1.76	14:00	2.71	0.1810	0.2775	0.98	0.0	0.00100
77	0.7387	0.94	1.000	0.010	14:07	0.09	2:20	0.01	0.2056	0.2746	0.35	576.0	0.00110
78	0.0196	0.69	0.190	0.011	13:59	0.75	5:26	0.57	0.0532	0.0233	0.82	510.2	0.00398
79	0.1225	0.97	0.400	0.016	9:23	0.67	12:59	0.13	0.0580	0.0241	0.19	204.3	0.00401
8	0.1164	0.59	0.500	0.079	8:20	0.52	5:17	0.68	0.1498	0.1964	1.00	658.2	0.00110
80	0.1035	0.82	0.400	0.018	13:18	0.63	13:18	0.17	0.0627	0.0276	0.22	0.0	0.00287
81	0.2678	1.36	0.500	0.019	13:59	0.79	13:57	0.07	0.0547	0.0240	0.12	0.0	0.00584
82	3.9374	1.26	1.250	0.690	13:59	0.85	13:59	0.18	0.2582	0.8135	0.26	339.0	0.00100
83	3.9378	1.26	1.250	0.716	13:59	0.87	13:59	0.18	0.2612	0.8253	0.26	540.2	0.00100
84	3.9377	1.26	1.250	0.825	14:00	0.94	13:58	0.21	0.2732	0.8739	0.28	27.9	0.00100
85	3.8647	1.24	1.250	0.851	13:59	0.93	13:59	0.22	0.2820	0.9105	0.29	472.1	0.00096
86	3.9377	1.26	1.250	0.885	13:59	0.93	13:59	0.22	0.2907	0.9468	0.30	531.3	0.00100
87	3.9378	1.26	1.250	0.975	13:59	1.00	13:59	0.25	0.2971	0.9743	0.31	518.1	0.00100
88	3.9377	1.26	1.250	1.020	13:59	1.30	14:00	0.26	0.2499	0.7832	0.25	0.0	0.00100
89	0.8178	1.63	0.800	0.006	13:56	0.48	8:17	0.01	0.0588	0.0369	0.07	367.8	0.00444
9	0.1036	0.37	0.600	0.085	14:00	0.43	5:15	0.82	0.1824	0.2827	1.00	353.7	0.00033
90	2.1674	0.76	1.150	0.488	14:01	0.53	9:27	0.23	0.3436	0.9811	0.34	766.4	0.00101
92	3.9377	1.26	1.250	0.742	13:59	0.88	14:00	0.19	0.2659	0.8443	0.27	534.3	0.00100
93	3.9378	1.26	1.250	0.767	14:00	0.89	13:58	0.19	0.2705	0.8630	0.28	553.6	0.00100
94	3.5239	1.17	1.000	0.851	13:59	0.80	13:59	0.24	0.2881	1.0698	0.36	452.7	0.00100
95	3.8647	1.24	1.250	0.851	14:00	0.93	14:00	0.22	0.2840	0.9185	0.29	470.2	0.00096
96	3.8647	1.24	1.250	0.851	14:00	0.91	14:01	0.22	0.2870	0.9311	0.30	467.4	0.00096
97	3.9377	1.26	1.250	0.920	13:59	0.96	13:59	0.23	0.2940	0.9611	0.31	533.5	0.00100
98	3.9378	1.26	1.250	0.954	13:59	38.13	2:00	0.24	0.2962	0.9703	0.31	483.9	0.00100
99	3.9378	1.26	1.250	0.996	13:59	1.03	13:59	0.25	0.2963	0.9708	0.31	538.3	0.00100

Ramo con la maggiore variazione media percentuale: '1' pari a 0.023 % (*)

(*) La variazione media nei rami è così definita:
 $100.0 (Q(n+1) - Q(n)) / Qfull$