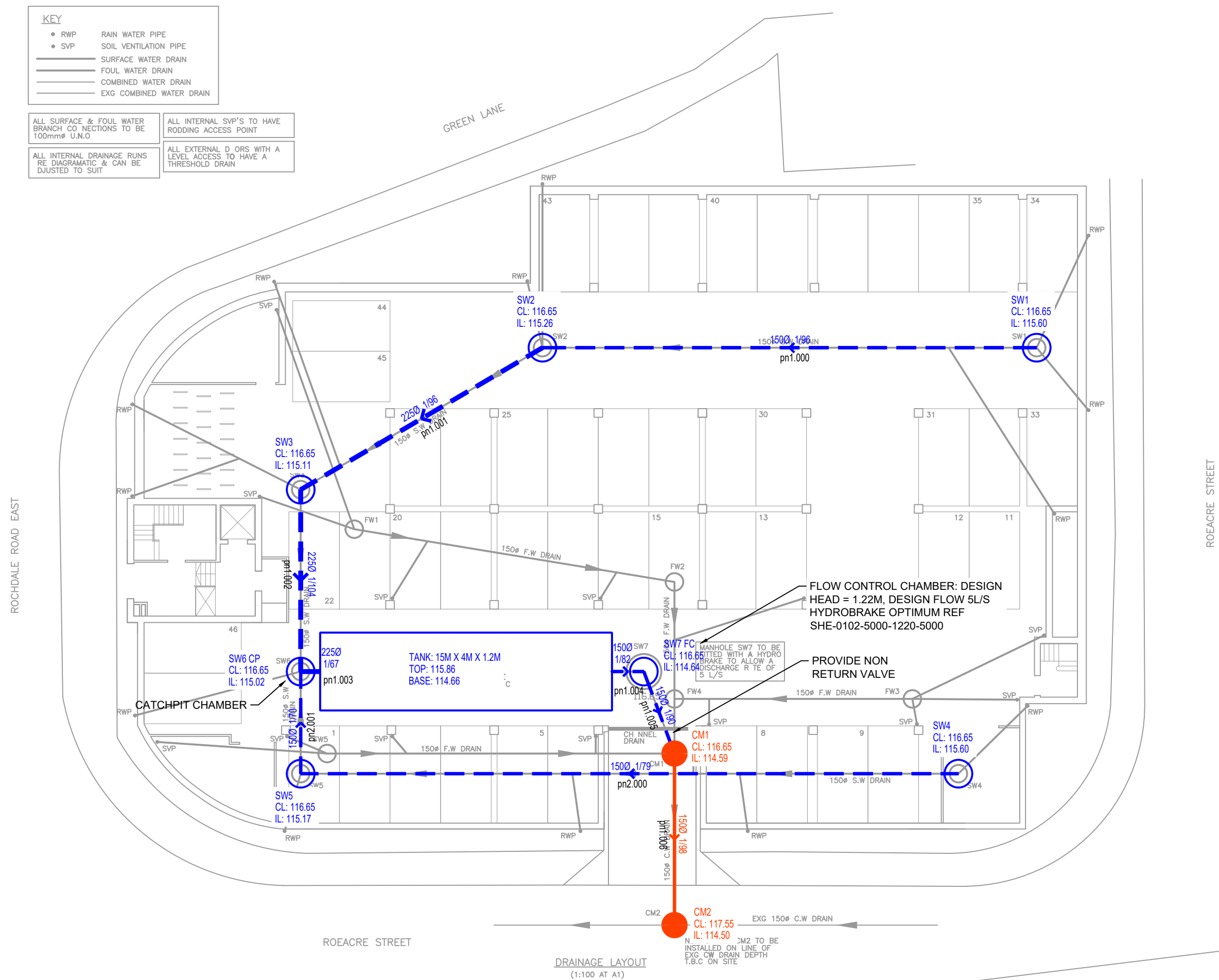
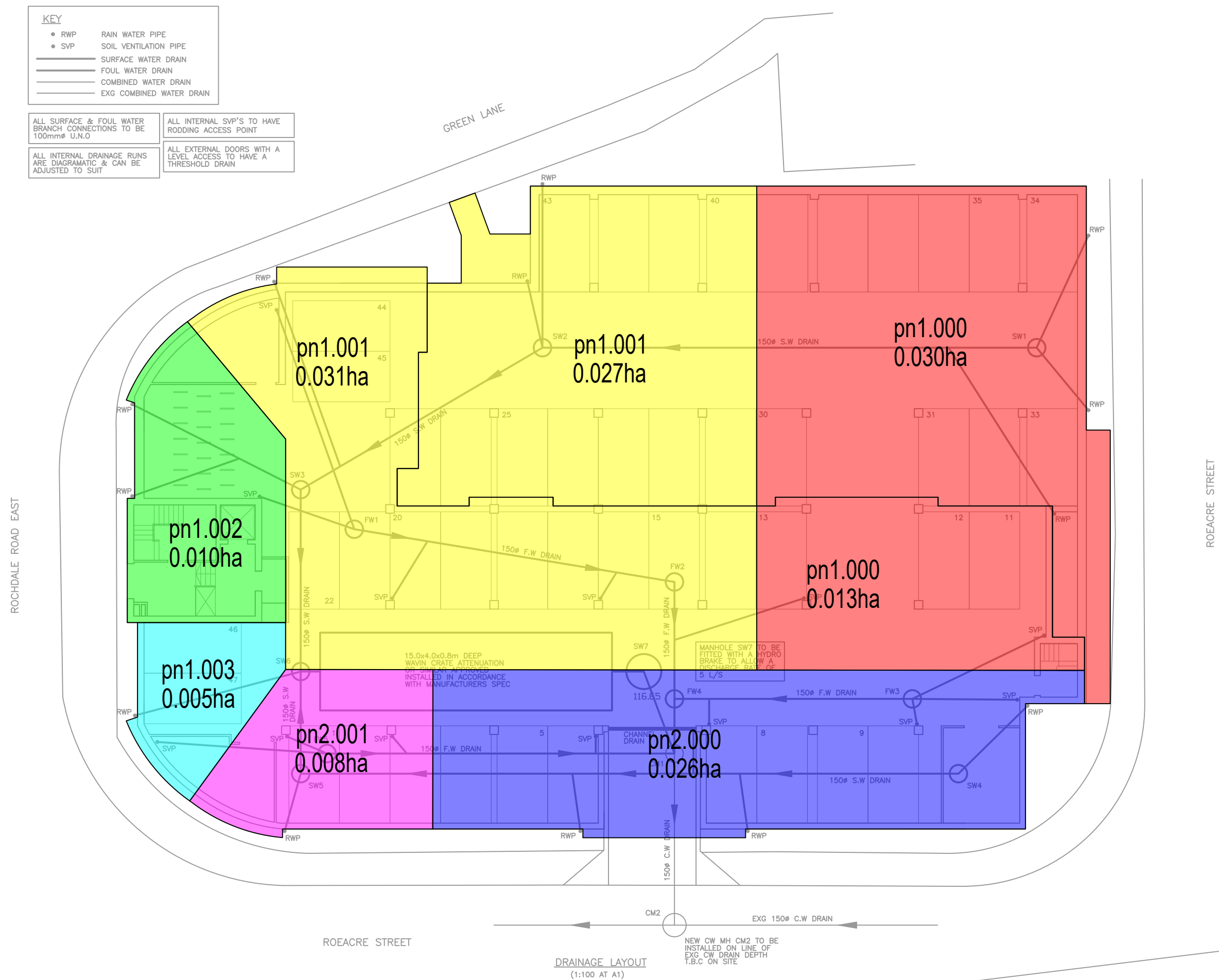






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Summary of Results for 100 year Return Period (+45%)

Half Drain Time : 115 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m³)	Status
15 min Summer	115.181	0.521	0.0	5.0	5.0	29.7	O K
30 min Summer	115.364	0.704	0.0	5.0	5.0	40.1	O K
60 min Summer	115.530	0.870	0.0	5.0	5.0	49.6	O K
120 min Summer	115.613	0.953	0.0	5.0	5.0	54.3	O K
180 min Summer	115.617	0.957	0.0	5.0	5.0	54.6	O K
240 min Summer	115.600	0.940	0.0	5.0	5.0	53.6	O K
360 min Summer	115.555	0.895	0.0	5.0	5.0	51.0	O K
480 min Summer	115.498	0.838	0.0	5.0	5.0	47.8	O K
600 min Summer	115.433	0.773	0.0	5.0	5.0	44.1	O K
720 min Summer	115.352	0.692	0.0	5.0	5.0	39.5	O K
960 min Summer	115.208	0.548	0.0	5.0	5.0	31.2	O K
1440 min Summer	115.001	0.341	0.0	5.0	5.0	19.4	O K
2160 min Summer	114.840	0.180	0.0	4.7	4.7	10.3	O K
2880 min Summer	114.773	0.113	0.0	4.3	4.3	6.4	O K
4320 min Summer	114.737	0.077	0.0	3.3	3.3	4.4	O K
5760 min Summer	114.721	0.061	0.0	2.7	2.7	3.5	O K
7200 min Summer	114.713	0.053	0.0	2.3	2.3	3.0	O K
8640 min Summer	114.707	0.047	0.0	2.0	2.0	2.7	O K
10080 min Summer	114.702	0.042	0.0	1.8	1.8	2.4	O K
15 min Winter	115.250	0.590	0.0	5.0	5.0	33.6	O K
30 min Winter	115.464	0.804	0.0	5.0	5.0	45.8	O K
60 min Winter	115.657	0.997	0.0	5.0	5.0	56.8	O K
120 min Winter	115.766	1.106	0.0	5.0	5.0	63.0	O K
180 min Winter	115.765	1.105	0.0	5.0	5.0	63.0	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
15 min Summer	119.380	0.0	33.9	18
30 min Summer	83.359	0.0	47.3	33
60 min Summer	55.699	0.0	63.2	62
120 min Summer	35.829	0.0	81.4	106
180 min Summer	27.144	0.0	92.5	138
240 min Summer	22.135	0.0	100.6	172
360 min Summer	16.612	0.0	113.2	242
480 min Summer	13.522	0.0	122.8	312
600 min Summer	11.513	0.0	130.8	382
720 min Summer	10.088	0.0	137.5	446
960 min Summer	8.179	0.0	148.6	566
1440 min Summer	6.069	0.0	165.4	794
2160 min Summer	4.488	0.0	183.5	1128
2880 min Summer	3.617	0.0	197.2	1472
4320 min Summer	2.671	0.0	218.4	2200
5760 min Summer	2.155	0.0	235.0	2920
7200 min Summer	1.826	0.0	248.9	3648
8640 min Summer	1.596	0.0	261.0	4352
10080 min Summer	1.425	0.0	271.8	5088
15 min Winter	119.380	0.0	37.9	19
30 min Winter	83.359	0.0	53.0	33
60 min Winter	55.699	0.0	70.8	60
120 min Winter	35.829	0.0	91.1	114
180 min Winter	27.144	0.0	103.6	144

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Summary of Results for 100 year Return Period (+45%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m³)	Status
240 min Winter	115.739	1.079	0.0	5.0	5.0	61.5	O K
360 min Winter	115.663	1.003	0.0	5.0	5.0	57.2	O K
480 min Winter	115.571	0.911	0.0	5.0	5.0	51.9	O K
600 min Winter	115.467	0.807	0.0	5.0	5.0	46.0	O K
720 min Winter	115.333	0.673	0.0	5.0	5.0	38.3	O K
960 min Winter	115.113	0.453	0.0	5.0	5.0	25.8	O K
1440 min Winter	114.867	0.207	0.0	4.8	4.8	11.8	O K
2160 min Winter	114.757	0.097	0.0	4.0	4.0	5.5	O K
2880 min Winter	114.735	0.075	0.0	3.2	3.2	4.3	O K
4320 min Winter	114.715	0.055	0.0	2.4	2.4	3.1	O K
5760 min Winter	114.706	0.046	0.0	1.9	1.9	2.6	O K
7200 min Winter	114.699	0.039	0.0	1.6	1.6	2.2	O K
8640 min Winter	114.695	0.035	0.0	1.4	1.4	2.0	O K
10080 min Winter	114.691	0.031	0.0	1.3	1.3	1.8	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
240 min Winter	22.135	0.0	112.7	184
360 min Winter	16.612	0.0	126.8	262
480 min Winter	13.522	0.0	137.6	338
600 min Winter	11.513	0.0	146.4	414
720 min Winter	10.088	0.0	154.0	478
960 min Winter	8.179	0.0	166.5	590
1440 min Winter	6.069	0.0	185.3	800
2160 min Winter	4.488	0.0	205.5	1104
2880 min Winter	3.617	0.0	220.8	1468
4320 min Winter	2.671	0.0	244.6	2192
5760 min Winter	2.155	0.0	263.2	2912
7200 min Winter	1.826	0.0	278.8	3672
8640 min Winter	1.596	0.0	292.3	4360
10080 min Winter	1.425	0.0	304.3	4992

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Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	19.000	Shortest Storm (mins)	15
Ratio R	0.280	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+45

Time Area Diagram

Total Area (ha) 0.151

Time (mins) Area			Time (mins) Area		
From:	To:	(ha)	From:	To:	(ha)
0	4	0.123	4	8	0.029

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Model Details

Storage is Online Cover Level (m) 116.650

Cellular Storage Structure

Invert Level (m) 114.660 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.00000

Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)
0.000	60.0	0.0	1.200	60.0	0.0	1.210	0.0	0.0

Hydro-Brake® Optimum Outflow Control

Unit Reference MD-SHE-0102-5000-1220-5000
Design Head (m) 1.220
Design Flow (l/s) 5.0
Flush-Flo™ Calculated
Objective Minimise upstream storage
Application Surface
Sump Available Yes
Diameter (mm) 102
Invert Level (m) 114.640
Minimum Outlet Pipe Diameter (mm) 150
Suggested Manhole Diameter (mm) 1200

Control Points	Head (m)	Flow (l/s)	Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	1.220	5.0	Kick-Flo®	0.757	4.0
Flush-Flo™	0.361	5.0	Mean Flow over Head Range	-	4.4

The hydrological calculations have been based on the Head/Discharge relationship for the Hydro-Brake® Optimum as specified. Should another type of control device other than a Hydro-Brake Optimum® be utilised then these storage routing calculations will be invalidated

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	3.4	0.800	4.1	2.000	6.3	4.000	8.7	7.000	11.4
0.200	4.7	1.000	4.6	2.200	6.6	4.500	9.2	7.500	11.8
0.300	5.0	1.200	5.0	2.400	6.9	5.000	9.7	8.000	12.1
0.400	5.0	1.400	5.3	2.600	7.1	5.500	10.1	8.500	12.5
0.500	4.9	1.600	5.7	3.000	7.6	6.000	10.6	9.000	12.8
0.600	4.7	1.800	6.0	3.500	8.2	6.500	11.0	9.500	13.2

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STORM SEWER DESIGN by the Modified Rational Method

Design Criteria for Surface Network 1

Pipe Sizes STANDARD Manhole Sizes STANDARD

FSR Rainfall Model - England and Wales

Return Period (years)	1	PIMP (%)	100
M5-60 (mm)	19.000	Add Flow / Climate Change (%)	0
Ratio R	0.280	Minimum Backdrop Height (m)	0.200
Maximum Rainfall (mm/hr)	50	Maximum Backdrop Height (m)	1.500
Maximum Time of Concentration (mins)	30	Min Design Depth for Optimisation (m)	1.200
Foul Sewage (l/s/ha)	0.000	Min Vel for Auto Design only (m/s)	1.00
Volumetric Runoff Coeff.	0.750	Min Slope for Optimisation (1:X)	500

Designed with Level Soffits

Time Area Diagram for Surface Network 1

Time (mins)	Area (ha)	Time (mins)	Area (ha)
0-4	0.126	4-8	0.026

Total Area Contributing (ha) = 0.151

Total Pipe Volume (m³) = 2.388

Network Design Table for Surface Network 1

- Indicates pipe length does not match coordinates

« - Indicates pipe capacity < flow

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
1.000	25.402	0.265	95.9	0.044	4.00	0.0	0.600	o	150	Pipe/Conduit	
1.001	14.410	0.150	96.1	0.058	0.00	0.0	0.600	o	225	Pipe/Conduit	
1.002	9.349	0.090	103.9	0.010	0.00	0.0	0.600	o	225	Pipe/Conduit	
2.000	33.806	0.430	78.6	0.026	4.00	0.0	0.600	o	150	Pipe/Conduit	
2.001	5.248	0.075	70.0	0.008	0.00	0.0	0.600	o	150	Pipe/Conduit	
1.003	1.000#	0.015	66.7	0.005	0.00	0.0	0.600	o	225	Pipe/Conduit	
1.004	1.637	0.020	81.9	0.000	0.00	0.0	0.600	o	150	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
1.000	45.54	4.41	115.600	0.044	0.0	0.0	0.0	1.03	18.1	5.4
1.001	44.88	4.59	115.260	0.102	0.0	0.0	0.0	1.33	53.0	12.4
1.002	44.45	4.71	115.110	0.112	0.0	0.0	0.0	1.28	51.0	13.5
2.000	45.23	4.50	115.600	0.026	0.0	0.0	0.0	1.13	20.1	3.2
2.001	44.96	4.57	115.170	0.034	0.0	0.0	0.0	1.20	21.3	4.2
1.003	44.41	4.72	115.020	0.151	0.0	0.0	0.0	1.60	63.8	18.2
1.004	44.32	4.75	114.660	0.151	0.0	0.0	0.0	1.11	19.6	18.2

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Network Design Table for Surface Network 1

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
1.005	4.498	0.050	90.0	0.000	0.00	0.0	0.600	o	150	Pipe/Conduit	
1.006	8.818	0.090	98.0	0.000	0.00	0.0	0.600	o	150	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
1.005	44.08	4.82	114.640	0.151	0.0	0.0	0.0	1.06	18.7	18.2
1.006	43.59	4.96	114.590	0.151	0.0	0.0	0.0	1.02	17.9«	18.2

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PIPELINE SCHEDULES for Surface Network 1

Upstream Manhole

- Indicates pipe length does not match coordinates

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
1.000	o	150	SW1	116.650	115.600	0.900	Open Manhole	1350
1.001	o	225	SW2	116.650	115.260	1.165	Open Manhole	1350
1.002	o	225	SW3	116.650	115.110	1.315	Open Manhole	1350
2.000	o	150	SW4	116.650	115.600	0.900	Open Manhole	1350
2.001	o	150	SW5	116.650	115.170	1.330	Open Manhole	1350
1.003	o	225	SW6 CP	116.650	115.020	1.405	Open Manhole	1350
1.004	o	150	TANK	116.650	114.660	1.840	Open Manhole	100
1.005	o	150	SW7 FC	116.650	114.640	1.860	Open Manhole	1200
1.006	o	150	CM1	116.650	114.590	1.910	Open Manhole	1200

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
1.000	25.402	95.9	SW2	116.650	115.335	1.165	Open Manhole	1350
1.001	14.410	96.1	SW3	116.650	115.110	1.315	Open Manhole	1350
1.002	9.349	103.9	SW6 CP	116.650	115.020	1.405	Open Manhole	1350
2.000	33.806	78.6	SW5	116.650	115.170	1.330	Open Manhole	1350
2.001	5.248	70.0	SW6 CP	116.650	115.095	1.405	Open Manhole	1350
1.003	1.000#	66.7	TANK	116.650	115.005	1.420	Open Manhole	100
1.004	1.637	81.9	SW7 FC	116.650	114.640	1.860	Open Manhole	1200
1.005	4.498	90.0	CM1	116.650	114.590	1.910	Open Manhole	1200
1.006	8.818	98.0	CM2	117.550	114.500	2.900	Open Manhole	1200

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Area Summary for Surface Network 1

Pipe Number	PIMP Type	PIMP Name	PIMP (%)	Gross Area (ha)	Imp. Area (ha)	Pipe Total (ha)
1.000	User	-	100	0.030	0.030	0.030
	User	-	100	0.013	0.013	0.044
1.001	User	-	100	0.027	0.027	0.027
	User	-	100	0.031	0.031	0.058
1.002	User	-	100	0.010	0.010	0.010
2.000	User	-	100	0.026	0.026	0.026
2.001	User	-	100	0.008	0.008	0.008
1.003	User	-	100	0.005	0.005	0.005
1.004	-	-	100	0.000	0.000	0.000
1.005	-	-	100	0.000	0.000	0.000
1.006	-	-	100	0.000	0.000	0.000
				Total	Total	Total
				0.151	0.151	0.151

Free Flowing Outfall Details for Surface Network 1

Outfall Pipe Number	Outfall Name	C. Level (m)	I. Level (m)	Min I. Level (m)	D,L (mm)	W (mm)
1.006	CM2	117.550	114.500	0.000	1200	0

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Online Controls for Surface Network 1

Hydro-Brake® Optimum Manhole: SW7 FC, DS/PN: 1.005, Volume (m³): 2.3

Unit Reference	MD-SHE-0102-5000-1220-5000
Design Head (m)	1.220
Design Flow (l/s)	5.0
Flush-Flo™	Calculated
Objective	Minimise upstream storage
Application	Surface
Sump Available	Yes
Diameter (mm)	102
Invert Level (m)	114.640
Minimum Outlet Pipe Diameter (mm)	150
Suggested Manhole Diameter (mm)	1200

Control Points	Head (m)	Flow (l/s)	Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	1.220	5.0	Kick-Flo®	0.757	4.0
Flush-Flo™	0.361	5.0	Mean Flow over Head Range	-	4.4

The hydrological calculations have been based on the Head/Discharge relationship for the Hydro-Brake® Optimum as specified. Should another type of control device other than a Hydro-Brake Optimum® be utilised then these storage routing calculations will be invalidated

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	3.4	0.800	4.1	2.000	6.3	4.000	8.7	7.000	11.4
0.200	4.7	1.000	4.6	2.200	6.6	4.500	9.2	7.500	11.8
0.300	5.0	1.200	5.0	2.400	6.9	5.000	9.7	8.000	12.1
0.400	5.0	1.400	5.3	2.600	7.1	5.500	10.1	8.500	12.5
0.500	4.9	1.600	5.7	3.000	7.6	6.000	10.6	9.000	12.8
0.600	4.7	1.800	6.0	3.500	8.2	6.500	11.0	9.500	13.2

Storage Structures for Surface Network 1

Cellular Storage Manhole: TANK, DS/PN: 1.004

Invert Level (m) 114.660 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.00000

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	60.0	0.0	1.200	60.0	0.0	1.210	0.0	0.0

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1 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Surface Network 1

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 0.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

 Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 19.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.280 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
 Analysis Timestep 2.5 Second Increment (Extended)
 DTS Status ON
 DVD Status OFF
 Inertia Status OFF

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 1, 30, 100
 Climate Change (%) 40, 40, 45

PN	US/MH Name	Duration (mins)	First (X) Surcharge	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Half Drain Time (mins)	Pipe Flow (l/s)	Status
1.000	SW1	15	30/15 Summer	115.670	-0.080	0.000	0.45		7.7	OK
1.001	SW2	15	30/15 Summer	115.351	-0.134	0.000	0.34		15.8	OK
1.002	SW3	15	30/15 Summer	115.211	-0.124	0.000	0.41		17.1	OK
2.000	SW4	15	100/15 Summer	115.649	-0.101	0.000	0.23		4.5	OK
2.001	SW5	15	30/15 Summer	115.230	-0.090	0.000	0.33		5.6	OK
1.003	SW6 CP	15	30/15 Summer	115.172	-0.073	0.000	0.79		23.7	OK
1.004	TANK	60	1/15 Winter	114.872	0.062	0.000	0.46	35	4.9	SURCHARGED
1.005	SW7 FC	60	1/15 Summer	114.877	0.087	0.000	0.34		4.8	SURCHARGED
1.006	CM1	60		114.646	-0.094	0.000	0.30		4.8	OK

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30 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Surface Network 1

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 0.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 19.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.280 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
 Analysis Timestep 2.5 Second Increment (Extended)
 DTS Status ON
 DVD Status OFF
 Inertia Status OFF

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 1, 30, 100
 Climate Change (%) 40, 40, 45

PN	US/MH Name	Duration (mins)	First (X) Surcharge	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Half Drain Time (mins)	Pipe Flow (l/s)	Status
1.000	SW1	15	30/15 Summer	115.861	0.111	0.000	0.99		17.0	SURCHARGED
1.001	SW2	15	30/15 Summer	115.596	0.111	0.000	0.84		39.1	SURCHARGED
1.002	SW3	15	30/15 Summer	115.485	0.150	0.000	1.02		43.0	SURCHARGED
2.000	SW4	15	100/15 Summer	115.682	-0.068	0.000	0.57		11.0	OK
2.001	SW5	15	30/15 Summer	115.436	0.116	0.000	0.79		13.5	SURCHARGED
1.003	SW6 CP	15	30/15 Summer	115.389	0.144	0.000	1.95		58.2	SURCHARGED
1.004	TANK	120	1/15 Winter	115.341	0.531	0.000	0.50	93	5.4	SURCHARGED
1.005	SW7 FC	120	1/15 Summer	115.347	0.557	0.000	0.36		5.0	SURCHARGED
1.006	CM1	360		114.648	-0.092	0.000	0.32		5.0	OK

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100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Surface Network 1

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 0.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

 Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
 Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 19.000 Cv (Summer) 0.750
 Region England and Wales Ratio R 0.280 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
 Analysis Timestep 2.5 Second Increment (Extended)
 DTS Status ON
 DVD Status OFF
 Inertia Status OFF

Profile(s) Summer and Winter
 Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 1, 30, 100
 Climate Change (%) 40, 40, 45

PN	US/MH Name	Duration (mins)	First (X) Surcharge	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Half Drain Time (mins)	Pipe Flow (l/s)	Status
1.000	SW1	15	30/15 Summer	116.253	0.503	0.000	1.24		21.4	SURCHARGED
1.001	SW2	15	30/15 Summer	115.845	0.360	0.000	1.09		50.5	SURCHARGED
1.002	SW3	120	30/15 Summer	115.672	0.337	0.000	0.54		22.7	SURCHARGED
2.000	SW4	15	100/15 Summer	115.767	0.017	0.000	0.71		13.6	SURCHARGED
2.001	SW5	120	30/15 Summer	115.669	0.349	0.000	0.41		7.0	SURCHARGED
1.003	SW6 CP	120	30/15 Summer	115.667	0.422	0.000	1.00		29.9	SURCHARGED
1.004	TANK	120	1/15 Winter	115.666	0.856	0.000	0.51	130	5.5	SURCHARGED
1.005	SW7 FC	120	1/15 Summer	115.665	0.875	0.000	0.36		5.0	SURCHARGED
1.006	CM1	240		114.648	-0.092	0.000	0.32		5.0	OK