

Kirksaunders Associates Ltd							Page 1	
Templegate House 115-123 High Street Orpington Kent BR6 0LG			SALT BOX BOGNOR REGIS UNIT 2 TANK 1 in 100 +40&cc					
Date 23/06/2019 15:46 File UNIT 2 TANK.SRCX			Designed by DO Checked by					
Micro Drainage			Source Control 2018.1					
Summary of Results for 100 year Return Period (+40%)								
Half Drain Time : 2543 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	1.133	0.283	0.0	3.8	3.8	322.3	O K	
30 min Summer	1.229	0.379	0.0	3.8	3.8	432.4	O K	
60 min Summer	1.334	0.484	0.0	3.8	3.8	551.9	O K	
120 min Summer	1.443	0.593	0.0	3.8	3.8	675.9	O K	
180 min Summer	1.504	0.654	0.0	3.8	3.8	746.0	O K	
240 min Summer	1.545	0.695	0.0	3.8	3.8	791.8	O K	
360 min Summer	1.598	0.748	0.0	3.8	3.8	853.2	O K	
480 min Summer	1.635	0.785	0.0	3.9	3.9	894.4	O K	
600 min Summer	1.660	0.810	0.0	3.9	3.9	922.9	O K	
720 min Summer	1.677	0.827	0.0	4.0	4.0	943.1	O K	
960 min Summer	1.699	0.849	0.0	4.0	4.0	967.4	O K	
1440 min Summer	1.709	0.859	0.0	4.0	4.0	979.6	O K	
2160 min Summer	1.691	0.841	0.0	4.0	4.0	958.3	O K	
2880 min Summer	1.668	0.818	0.0	3.9	3.9	932.1	O K	
4320 min Summer	1.622	0.772	0.0	3.8	3.8	879.9	O K	
5760 min Summer	1.579	0.729	0.0	3.8	3.8	830.5	O K	
7200 min Summer	1.537	0.687	0.0	3.8	3.8	783.1	O K	
8640 min Summer	1.498	0.648	0.0	3.8	3.8	738.8	O K	
10080 min Summer	1.461	0.611	0.0	3.8	3.8	696.3	O K	
15 min Winter	1.167	0.317	0.0	3.8	3.8	361.5	O K	
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)				
15 min Summer	124.633	0.0	303.5	27				
30 min Summer	83.789	0.0	320.3	41				
60 min Summer	53.779	0.0	564.1	72				
120 min Summer	33.337	0.0	609.3	130				
180 min Summer	24.832	0.0	604.3	190				
240 min Summer	20.006	0.0	600.9	250				
360 min Summer	14.706	0.0	598.3	368				
480 min Summer	11.818	0.0	598.5	488				
600 min Summer	9.966	0.0	600.0	606				
720 min Summer	8.665	0.0	602.7	726				
960 min Summer	6.943	0.0	610.7	964				
1440 min Summer	5.071	0.0	618.1	1442				
2160 min Summer	3.696	0.0	1216.1	1936				
2880 min Summer	2.949	0.0	1186.8	2308				
4320 min Summer	2.142	0.0	1116.3	3076				
5760 min Summer	1.705	0.0	1717.8	3920				
7200 min Summer	1.427	0.0	1797.5	4760				
8640 min Summer	1.235	0.0	1867.1	5552				
10080 min Summer	1.093	0.0	1921.0	6448				
15 min Winter	124.633	0.0	316.8	27				
©1982-2018 Innovyze								

Kirksaunders Associates Ltd							Page 2
Templegate House 115-123 High Street Orpington Kent BR6 0LG			SALT BOX BOGNOR REGIS UNIT 2 TANK 1 in 100 +40&cc				
Date 23/06/2019 15:46 File UNIT 2 TANK.SRCX			Designed by DO Checked by				
Micro Drainage			Source Control 2018.1				
Summary of Results for 100 year Return Period (+40%)							
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
30 min Winter	1.276	0.426	0.0	3.8	3.8	485.3	O K
60 min Winter	1.394	0.544	0.0	3.8	3.8	619.7	O K
120 min Winter	1.516	0.666	0.0	3.8	3.8	759.6	O K
180 min Winter	1.586	0.736	0.0	3.8	3.8	839.5	O K
240 min Winter	1.633	0.783	0.0	3.9	3.9	892.2	O K
360 min Winter	1.696	0.846	0.0	4.0	4.0	963.9	O K
480 min Winter	1.738	0.888	0.0	4.1	4.1	1012.8	O K
600 min Winter	1.769	0.919	0.0	4.1	4.1	1047.5	O K
720 min Winter	1.791	0.941	0.0	4.2	4.2	1072.8	O K
960 min Winter	1.820	0.970	0.0	4.2	4.2	1105.6	O K
1440 min Winter	1.841	0.991	0.0	4.3	4.3	1130.2	O K
2160 min Winter	1.832	0.982	0.0	4.3	4.3	1119.1	O K
2880 min Winter	1.801	0.951	0.0	4.2	4.2	1084.1	O K
4320 min Winter	1.744	0.894	0.0	4.1	4.1	1019.1	O K
5760 min Winter	1.683	0.833	0.0	4.0	4.0	950.0	O K
7200 min Winter	1.623	0.773	0.0	3.8	3.8	881.0	O K
8640 min Winter	1.565	0.715	0.0	3.8	3.8	815.2	O K
10080 min Winter	1.509	0.659	0.0	3.8	3.8	751.2	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)			
30 min Winter	83.789	0.0	316.9	41			
60 min Winter	53.779	0.0	602.9	70			
120 min Winter	33.337	0.0	605.7	128			
180 min Winter	24.832	0.0	602.3	188			
240 min Winter	20.006	0.0	602.4	246			
360 min Winter	14.706	0.0	606.5	362			
480 min Winter	11.818	0.0	613.8	480			
600 min Winter	9.966	0.0	623.6	596			
720 min Winter	8.665	0.0	632.4	714			
960 min Winter	6.943	0.0	643.2	944			
1440 min Winter	5.071	0.0	648.6	1400			
2160 min Winter	3.696	0.0	1244.6	2056			
2880 min Winter	2.949	0.0	1225.7	2624			
4320 min Winter	2.142	0.0	1186.2	3288			
5760 min Winter	1.705	0.0	1923.6	4216			
7200 min Winter	1.427	0.0	2013.3	5128			
8640 min Winter	1.235	0.0	2090.6	6056			
10080 min Winter	1.093	0.0	2042.5	6960			
©1982-2018 Innovyze							

Kirksaunders Associates Ltd		Page 3
Templegate House 115-123 High Street Orpington Kent BR6 0LG	SALT BOX BOGNOR REGIS UNIT 2 TANK 1 in 100 +40&cc	
Date 23/06/2019 15:46 File UNIT 2 TANK.SRCX	Designed by DO Checked by	
Micro Drainage Source Control 2018.1		

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	0.350	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 1.400

Time (mins)	Area	Time (mins)	Area	Time (mins)	Area
From: To:	(ha)	From: To:	(ha)	From: To:	(ha)
0 4	0.466	4 8	0.467	8 12	0.467

©1982-2018 Innovyze

Kirksaunders Associates Ltd		Page 4
Templegate House 115-123 High Street Orpington Kent BR6 0LG	SALT BOX BOGNOR REGIS UNIT 2 TANK 1 in 100 +40&cc	
Date 23/06/2019 15:46 File UNIT 2 TANK.SRCX	Designed by DO Checked by	
Micro Drainage Source Control 2018.1		

Model Details

Storage is Online Cover Level (m) 2.600

Cellular Storage Structure

Invert Level (m) 0.850 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)
0.000	1200.0	1200.0	1.100	0.0	1348.0
1.000	1200.0	1348.0			

Hydro-Brake® Optimum Outflow Control

Unit Reference MD-SHE-0095-3800-0800-3800
Design Head (m) 0.800
Design Flow (l/s) 3.8
Flush-Flo™ Calculated
Objective Minimise upstream storage
Application Surface
Sump Available Yes
Diameter (mm) 95
Invert Level (m) 0.800
Minimum Outlet Pipe Diameter (mm) 150
Suggested Manhole Diameter (mm) 1200

Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	0.800	3.8
Flush-Flo™	0.239	3.8
Kick-Flo®	0.525	3.1
Mean Flow over Head Range	-	3.3

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)
0.100	3.1	1.200	4.6	3.000	7.0	7.000	10.5
0.200	3.8	1.400	4.9	3.500	7.6	7.500	10.9
0.300	3.8	1.600	5.2	4.000	8.0	8.000	11.2
0.400	3.6	1.800	5.5	4.500	8.5	8.500	11.5
0.500	3.3	2.000	5.8	5.000	8.9	9.000	11.8
0.600	3.3	2.200	6.1	5.500	9.4	9.500	12.2
0.800	3.8	2.400	6.3	6.000	9.8		
1.000	4.2	2.600	6.6	6.500	10.1		

©1982-2018 Innovyze

Kirksaunders Associates Ltd							Page 1
Templegate House 115-123 High Street Orpington Kent BR6 0LG			SALT BOX BOGNOR REGIS UNIT 2 TANK 1-30+30%CC				
Date 20/06/2019 14:33 File UNIT 2 TANK.SRCX			Designed by DO Checked by				
Micro Drainage			Source Control 2018.1				
Summary of Results for 30 year Return Period (+30%)							
Half Drain Time : 1756 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	1.052	0.202	0.0	3.8	3.8	230.2	O K
30 min Summer	1.118	0.268	0.0	3.8	3.8	305.4	O K
60 min Summer	1.189	0.339	0.0	3.8	3.8	386.1	O K
120 min Summer	1.263	0.413	0.0	3.8	3.8	470.4	O K
180 min Summer	1.305	0.455	0.0	3.8	3.8	519.2	O K
240 min Summer	1.334	0.484	0.0	3.8	3.8	552.3	O K
360 min Summer	1.373	0.523	0.0	3.8	3.8	596.4	O K
480 min Summer	1.398	0.548	0.0	3.8	3.8	624.8	O K
600 min Summer	1.415	0.565	0.0	3.8	3.8	643.9	O K
720 min Summer	1.426	0.576	0.0	3.8	3.8	656.8	O K
960 min Summer	1.438	0.588	0.0	3.8	3.8	670.9	O K
1440 min Summer	1.440	0.590	0.0	3.8	3.8	672.5	O K
2160 min Summer	1.424	0.574	0.0	3.8	3.8	654.9	O K
2880 min Summer	1.407	0.557	0.0	3.8	3.8	634.8	O K
4320 min Summer	1.370	0.520	0.0	3.8	3.8	593.1	O K
5760 min Summer	1.331	0.481	0.0	3.8	3.8	548.5	O K
7200 min Summer	1.287	0.437	0.0	3.8	3.8	498.6	O K
8640 min Summer	1.247	0.397	0.0	3.8	3.8	453.0	O K
10080 min Summer	1.211	0.361	0.0	3.8	3.8	411.0	O K
15 min Winter	1.077	0.227	0.0	3.8	3.8	258.4	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)			
15 min Summer	89.487	0.0	234.3	26			
30 min Summer	59.577	0.0	296.0	41			
60 min Summer	38.009	0.0	398.5	70			
120 min Summer	23.546	0.0	493.9	130			
180 min Summer	17.594	0.0	553.6	190			
240 min Summer	14.237	0.0	587.3	250			
360 min Summer	10.537	0.0	605.3	368			
480 min Summer	8.507	0.0	600.8	486			
600 min Summer	7.201	0.0	594.5	606			
720 min Summer	6.281	0.0	588.3	726			
960 min Summer	5.060	0.0	577.0	964			
1440 min Summer	3.726	0.0	557.3	1440			
2160 min Summer	2.740	0.0	1035.0	1800			
2880 min Summer	2.201	0.0	1097.4	2172			
4320 min Summer	1.614	0.0	1036.5	2988			
5760 min Summer	1.295	0.0	1304.9	3856			
7200 min Summer	1.091	0.0	1373.9	4616			
8640 min Summer	0.948	0.0	1433.6	5368			
10080 min Summer	0.843	0.0	1486.3	6152			
15 min Winter	89.487	0.0	262.5	26			
©1982-2018 Innovyze							

Kirksaunders Associates Ltd							Page 2
Templegate House 115-123 High Street Orpington Kent BR6 0LG			SALT BOX BOGNOR REGIS UNIT 2 TANK 1-30+30%CC				
Date 20/06/2019 14:33 File UNIT 2 TANK.SRCX			Designed by DO Checked by				
Micro Drainage			Source Control 2018.1				
Summary of Results for 30 year Return Period (+30%)							
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
30 min Winter	1.151	0.301	0.0	3.8	3.8	342.9	O K
60 min Winter	1.231	0.381	0.0	3.8	3.8	434.1	O K
120 min Winter	1.315	0.465	0.0	3.8	3.8	530.3	O K
180 min Winter	1.365	0.515	0.0	3.8	3.8	586.5	O K
240 min Winter	1.398	0.548	0.0	3.8	3.8	624.5	O K
360 min Winter	1.443	0.593	0.0	3.8	3.8	675.7	O K
480 min Winter	1.473	0.623	0.0	3.8	3.8	709.7	O K
600 min Winter	1.493	0.643	0.0	3.8	3.8	733.3	O K
720 min Winter	1.508	0.658	0.0	3.8	3.8	750.0	O K
960 min Winter	1.526	0.676	0.0	3.8	3.8	770.2	O K
1440 min Winter	1.535	0.685	0.0	3.8	3.8	780.9	O K
2160 min Winter	1.519	0.669	0.0	3.8	3.8	763.2	O K
2880 min Winter	1.496	0.646	0.0	3.8	3.8	736.3	O K
4320 min Winter	1.446	0.596	0.0	3.8	3.8	679.9	O K
5760 min Winter	1.391	0.541	0.0	3.8	3.8	617.0	O K
7200 min Winter	1.330	0.480	0.0	3.8	3.8	547.7	O K
8640 min Winter	1.262	0.412	0.0	3.8	3.8	469.2	O K
10080 min Winter	1.202	0.352	0.0	3.8	3.8	401.5	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)			
30 min Winter	59.577	0.0	312.0	41			
60 min Winter	38.009	0.0	446.4	70			
120 min Winter	23.546	0.0	553.2	128			
180 min Winter	17.594	0.0	597.8	186			
240 min Winter	14.237	0.0	607.4	246			
360 min Winter	10.537	0.0	601.6	362			
480 min Winter	8.507	0.0	594.8	478			
600 min Winter	7.201	0.0	589.2	596			
720 min Winter	6.281	0.0	584.6	710			
960 min Winter	5.060	0.0	577.2	940			
1440 min Winter	3.726	0.0	566.5	1388			
2160 min Winter	2.740	0.0	1148.1	2016			
2880 min Winter	2.201	0.0	1146.8	2284			
4320 min Winter	1.614	0.0	1065.4	3208			
5760 min Winter	1.295	0.0	1461.0	4152			
7200 min Winter	1.091	0.0	1538.5	5056			
8640 min Winter	0.948	0.0	1605.3	5800			
10080 min Winter	0.843	0.0	1664.5	6560			
©1982-2018 Innovyze							

Kirksaunders Associates Ltd		Page 3
Templegate House 115-123 High Street Orpington Kent BR6 0LG	SALT BOX BOGNOR REGIS UNIT 2 TANK 1-30+30%CC	
Date 20/06/2019 14:33 File UNIT 2 TANK.SRCX	Designed by DO Checked by	
Micro Drainage Source Control 2018.1		

Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	30	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	19.000	Shortest Storm (mins)	15
Ratio R	0.350	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+30

Time Area Diagram

Total Area (ha) 1.400

Time (mins)	Area	Time (mins)	Area	Time (mins)	Area
From: To:	(ha)	From: To:	(ha)	From: To:	(ha)
0 4	0.466	4 8	0.467	8 12	0.467

©1982-2018 Innovyze

Kirksaunders Associates Ltd		Page 4
Templegate House 115-123 High Street Orpington Kent BR6 0LG	SALT BOX BOGNOR REGIS UNIT 2 TANK 1-30+30%CC	
Date 20/06/2019 14:33 File UNIT 2 TANK.SRCX	Designed by DO Checked by	
Micro Drainage Source Control 2018.1		

Model Details

Storage is Online Cover Level (m) 2.600

Cellular Storage Structure

Invert Level (m) 0.850 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)
0.000	1200.0	1200.0	1.100	0.0	1348.0
1.000	1200.0	1348.0			

Hydro-Brake® Optimum Outflow Control

Unit Reference MD-SHE-0095-3800-0800-3800
Design Head (m) 0.800
Design Flow (l/s) 3.8
Flush-Flo™ Calculated
Objective Minimise upstream storage
Application Surface
Sump Available Yes
Diameter (mm) 95
Invert Level (m) 0.800
Minimum Outlet Pipe Diameter (mm) 150
Suggested Manhole Diameter (mm) 1200

Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	0.800	3.8
Flush-Flo™	0.239	3.8
Kick-Flo®	0.525	3.1
Mean Flow over Head Range	-	3.3

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)
0.100	3.1	1.200	4.6	3.000	7.0	7.000	10.5
0.200	3.8	1.400	4.9	3.500	7.6	7.500	10.9
0.300	3.8	1.600	5.2	4.000	8.0	8.000	11.2
0.400	3.6	1.800	5.5	4.500	8.5	8.500	11.5
0.500	3.3	2.000	5.8	5.000	8.9	9.000	11.8
0.600	3.3	2.200	6.1	5.500	9.4	9.500	12.2
0.800	3.8	2.400	6.3	6.000	9.8		
1.000	4.2	2.600	6.6	6.500	10.1		

©1982-2018 Innovyze

Kirksaunders Associates Ltd										Page 1	
Templegate House 115-123 High Street Orpington Kent BR6 0LG					SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2,1IN30						
Date 24/06/2019 15:29					Designed by DO						
File UNIT 2 STORM NETWORK-WI...					Checked by						
Micro Drainage					Network 2018.1						
Existing Network Details for Existing											
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
E1.000	3.000	0.005	600.0	0.024	5.00	0.0	0.600	CA	350	CastSlot	
E1.001	3.000	0.014	214.3	0.024	0.00	0.0	0.600	CA	350	CastSlot	
E1.002	3.000	0.014	214.3	0.024	0.00	0.0	0.600	CA	350	CastSlot	
E1.003	3.000	0.014	214.3	0.024	0.00	0.0	0.600	CA	350	CastSlot	
E1.004	3.000	0.014	214.3	0.024	0.00	0.0	0.600	CA	350	CastSlot	
E1.005	22.255	0.103	216.1	0.000	0.00	0.0	0.600	o	350	Pipe/Conduit	
E2.000	3.000	0.014	214.3	0.032	5.00	0.0	0.600	CA	350	CastSlot	
E2.001	3.000	0.013	230.8	0.032	0.00	0.0	0.600	CA	350	CastSlot	
E2.002	3.000	0.014	214.3	0.032	0.00	0.0	0.600	CA	350	CastSlot	
E2.003	10.484	0.048	218.4	0.000	5.00	0.0	0.600	o	350	Pipe/Conduit	
E3.000	3.000	0.011	272.7	0.020	5.00	0.0	0.600	CA	350	CastSlot	
E3.001	3.000	0.011	272.7	0.020	0.00	0.0	0.600	CA	350	CastSlot	
E3.002	3.000	0.005	600.0	0.020	0.00	0.0	0.600	CA	350	CastSlot	
E3.003	3.000	0.011	272.7	0.020	0.00	0.0	0.600	CA	350	CastSlot	
E3.004	3.000	0.011	272.7	0.020	0.00	0.0	0.600	CA	350	CastSlot	
E3.005	3.000	0.011	272.7	0.020	0.00	0.0	0.600	CA	350	CastSlot	
E3.006	0.500	0.002	250.0	0.020	0.00	0.0	0.600	CA	350	CastSlot	
E3.007	0.500	0.002	250.0	0.020	0.00	0.0	0.600	CA	350	CastSlot	
E3.008	0.500	0.002	250.0	0.020	0.00	0.0	0.600	CA	350	CastSlot	
E3.009	3.000	0.011	272.7	0.020	0.00	0.0	0.600	CA	350	CastSlot	
Network Results Table											
PN	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Vel (m/s)	Cap (l/s)						
E1.000	1.595	0.024	0.0	0.73	79.9						
E1.001	1.567	0.048	0.0	0.86	94.0						
E1.002	1.539	0.072	0.0	0.86	94.0						
E1.003	1.511	0.096	0.0	0.86	94.0						
E1.004	1.483	0.120	0.0	0.86	94.0						
E1.005	1.455	0.120	0.0	1.18	113.1						
E2.000	1.540	0.032	0.0	0.86	94.0						
E2.001	1.512	0.064	0.0	0.84	92.6						
E2.002	1.457	0.096	0.0	0.86	94.0						
E2.003	1.400	0.096	0.0	1.17	112.5						
E3.000	2.050	0.020	0.0	0.82	89.7						
E3.001	2.007	0.040	0.0	0.82	89.7						
E3.002	1.963	0.060	0.0	0.73	79.9						
E3.003	1.898	0.080	0.0	0.82	89.7						
E3.004	1.833	0.100	0.0	0.82	89.7						
E3.005	1.790	0.120	0.0	0.82	89.7						
E3.006	1.746	0.140	0.0	0.83	90.9						
E3.007	1.703	0.160	0.0	0.83	90.9						
E3.008	1.660	0.180	0.0	0.83	90.9						
E3.009	1.616	0.200	0.0	0.82	89.7						
©1982-2018 Innovyze											

Kirksaunders Associates Ltd										Page 2	
Templegate House 115-123 High Street Orpington Kent BR6 0LG					SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2,1IN30						
Date 24/06/2019 15:29					Designed by DO						
File UNIT 2 STORM NETWORK-WI...					Checked by						
Micro Drainage					Network 2018.1						
Existing Network Details for Existing											
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
E3.010	3.000	0.011	272.7	0.020	0.00	0.0	0.600	CA	350	CastSlot	
E3.011	36.296	0.168	216.0	0.000	5.00	0.0	0.600	o	350	Pipe/Conduit	
E1.006	69.297	0.238	291.2	0.209	5.00	0.0	0.600	o	350	Pipe/Conduit	
E4.000	3.000	0.013	230.8	0.050	5.00	0.0	0.600	CA	350	CastSlot	
E4.001	3.000	0.013	230.8	0.050	0.00	0.0	0.600	CA	350	CastSlot	
E4.002	3.000	0.013	230.8	0.050	0.00	0.0	0.600	CA	350	CastSlot	
E4.003	3.000	0.013	230.8	0.050	0.00	0.0	0.600	CA	350	CastSlot	
E4.004	3.000	0.014	214.3	0.050	0.00	0.0	0.600	CA	350	CastSlot	
E4.005	3.000	0.013	230.8	0.050	0.00	0.0	0.600	CA	350	CastSlot	
E4.006	18.039	0.081	222.7	0.000	0.00	0.0	0.600	o	350	Pipe/Conduit	
E5.000	3.000	0.011	272.7	0.016	5.00	0.0	0.600	CA	350	CastSlot	
E5.001	3.000	0.008	375.0	0.016	0.00	0.0	0.600	CA	350	CastSlot	
E5.002	10.897	0.020	544.9	0.000	0.00	0.0	0.600	o	350	Pipe/Conduit	
E5.003	18.209	0.095	191.7	0.000	0.00	0.0	0.600	o	350	Pipe/Conduit	
E6.000	3.000	0.014	214.3	0.012	5.00	0.0	0.600	CA	350	CastSlot	
E6.001	3.000	0.014	214.3	0.012	0.00	0.0	0.600	CA	350	CastSlot	
E6.002	11.735	0.051	230.1	0.000	0.00	0.0	0.600	o	350	Pipe/Conduit	
Network Results Table											
PN	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Vel (m/s)	Cap (l/s)						
E3.010	1.573	0.220	0.0	0.82	89.7						
E3.011	1.520	0.220	0.0	1.18	113.1						
E1.006	1.352	0.645	0.0	1.01	97.3						
E4.000	1.515	0.050	0.0	0.84	92.6						
E4.001	1.448	0.100	0.0	0.84	92.6						
E4.002	1.394	0.150	0.0	0.84	92.6						
E4.003	1.354	0.200	0.0	0.84	92.6						
E4.004	1.314	0.250	0.0	0.86	94.0						
E4.005	1.260	0.300	0.0	0.84	92.6						
E4.006	1.195	0.300	0.0	1.16	111.4						
E5.000	1.670	0.016	0.0	0.82	89.7						
E5.001	1.648	0.032	0.0	0.78	85.1						
E5.002	1.620	0.032	0.0	1.03	98.9						
E5.003	1.600	0.032	0.0	1.25	120.2						
E6.000	1.225	0.012	0.0	0.86	94.0						
E6.001	1.198	0.024	0.0	0.86	94.0						
E6.002	1.165	0.024	0.0	1.14	109.6						
©1982-2018 Innovyze											

Kirksaunders Associates Ltd										Page 3	
Templegate House 115-123 High Street Orpington Kent BR6 0LG					SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2,1IN30						
Date 24/06/2019 15:29					Designed by DO						
File UNIT 2 STORM NETWORK-WI...					Checked by						
Micro Drainage					Network 2018.1						
Existing Network Details for Existing											
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	
E7.000	3.000	0.018	166.7	0.000	5.00	0.0	0.600	CA	350	CastSlot	
E7.001	2.502	0.015	166.8	0.010	0.00	0.0	0.600	CA	350	CastSlot	
E7.002	8.660	0.031	279.4	0.000	0.00	0.0	0.600	o	350	Pipe/Conduit	
E1.007	10.607	0.054	196.4	0.000	0.00	0.0	0.600	o	350	Pipe/Conduit	
E1.008	0.500	0.002	280.0	0.000	0.00	0.0	0.600	o	350	Pipe/Conduit	
E1.009	9.983	0.002	4991.5	0.000	0.00	0.0	0.600	_	-2	Pipe/Conduit	
E1.010	0.500	0.002	250.0	0.000	0.00	0.0	0.600	o	350	Pipe/Conduit	
E1.011	31.186	0.110	283.5	0.000	0.00	0.0	0.600	o	350	Pipe/Conduit	
E8.000	84.537	0.490	172.5	0.163	5.00	0.0	0.600	o	300	Pipe/Conduit	
E1.012	17.860	0.385	46.4	0.000	0.00	0.0	0.600	o	375	Pipe/Conduit	
E9.000	26.931	0.190	141.7	0.000	5.00	0.0	0.600	o	300	Pipe/Conduit	
E10.000	3.000	0.014	214.3	0.053	5.00	0.0	0.600	CA	350	CastSlot	
E10.001	3.000	0.014	214.3	0.053	0.00	0.0	0.600	CA	350	CastSlot	
E10.002	3.000	0.014	214.3	0.053	0.00	0.0	0.600	CA	350	CastSlot	
E10.003	5.761	0.040	144.0	0.000	0.00	0.0	0.600	o	350	Pipe/Conduit	
E11.000	3.000	0.010	300.0	0.007	5.00	0.0	0.600	CA	350	CastSlot	
Network Results Table											
PN	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Vel (m/s)	Cap (l/s)						
E7.000	1.196	0.000	0.0	0.90	99.1						
E7.001	1.160	0.010	0.0	0.90	99.0						
E7.002	1.145	0.010	0.0	1.03	99.4						
E1.007	1.114	1.011	0.0	1.23	118.7						
E1.008	1.060	1.011	0.0	1.03	99.2						
E1.009	1.058	1.011	0.0	0.97	9747.5						
E1.010	1.056	1.011	0.0	1.09	105.1						
E1.011	1.055	1.011	0.0	1.02	98.6						
E8.000	1.435	0.163	0.0	1.19	84.4						
E1.012	0.945	1.174	0.0	2.67	294.5						
E9.000	1.000	0.000	0.0	1.32	93.2						
E10.000	1.710	0.053	0.0	0.86	94.0						
E10.001	0.878	0.106	0.0	0.86	94.0						
E10.002	0.864	0.159	0.0	0.86	94.0						
E10.003	0.850	0.159	0.0	1.44	138.8						
E11.000	0.870	0.007	0.0	0.81	88.2						
©1982-2018 Innovyze											

Kirksaunders Associates Ltd										Page 4	
Templegate House 115-123 High Street Orpington Kent BR6 0LG					SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2,1IN30						
Date 24/06/2019 15:29					Designed by DO						
File UNIT 2 STORM NETWORK-WI...					Checked by						
Micro Drainage					Network 2018.1						
<u>Existing Network Details for Existing</u>											
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	
E11.001	3.000	0.010	300.0	0.016	0.00	0.0	0.600	CA	350	CastSlot	
E11.002	3.871	0.040	96.8	0.016	0.00	0.0	0.600	o	300	Pipe/Conduit	
E9.001	15.325	0.075	204.3	0.000	0.00	0.0	0.600	o	350	Pipe/Conduit	
E9.002	14.207	0.175	81.2	0.000	0.00	0.0	0.600	o	350	Pipe/Conduit	
E12.000	82.793	0.550	150.5	0.191	5.00	0.0	0.600	o	350	Pipe/Conduit	
E12.001	16.538	0.860	19.2	0.000	0.00	0.0	0.600	o	350	Pipe/Conduit	
E12.002	21.457	0.540	39.7	0.000	0.00	0.0	0.600	o	350	Pipe/Conduit	
E1.013	1.013	0.007	144.7	0.000	0.00	0.0	0.600	o	350	Pipe/Conduit	
E1.014	10.139	0.003	3379.7	0.000	0.00	0.0	0.600	_	-1	Pipe/Conduit	
E1.015	2.289	0.025	91.6	0.000	0.00	0.0	0.600	o	375	Pipe/Conduit	
E1.016	36.423	0.225	161.9	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
E13.000	66.974	0.015	4464.9	0.054	5.00	0.0	0.600	_	-1	Pipe/Conduit	
E13.001	56.157	0.010	5615.7	0.000	0.00	0.0	0.600	_	-1	Pipe/Conduit	
E13.002	26.376	0.010	2637.6	0.000	0.00	0.0	0.600	_	-3	Pipe/Conduit	
E1.017	68.866	0.010	6886.6	0.000	0.00	0.0	0.600	_	-3	Pipe/Conduit	
E1.018	7.486	0.040	187.2	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
<u>Network Results Table</u>											
PN	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Vel (m/s)	Cap (l/s)						
E11.001	0.860	0.023	0.0	0.81	88.2						
E11.002	0.850	0.039	0.0	1.60	113.0						
E9.001	0.810	0.198	0.0	1.21	116.4						
E9.002	0.735	0.198	0.0	1.93	185.3						
E12.000	2.510	0.191	0.0	1.41	135.8						
E12.001	1.960	0.191	0.0	3.97	382.1						
E12.002	1.100	0.191	0.0	2.76	265.4						
E1.013	0.560	1.563	0.0	1.44	138.5						
E1.014	0.553	1.563	0.0	1.07	10302.8						
E1.015	0.550	1.563	0.0	1.89	209.2						
E1.016	0.525	1.563	0.0	1.02	40.8						
E13.000	0.335	0.054	0.0	0.93	8948.8						
E13.001	0.320	0.054	0.0	0.83	7967.2						
E13.002	0.310	0.054	0.0	0.82	1157.2						
E1.017	0.300	1.617	0.0	0.50	710.1						
E1.018	0.290	1.617	0.0	0.95	37.9						
©1982-2018 Innovyze											

Kirksaunders Associates Ltd				Page 5																																	
Templegate House 115-123 High Street Orpington Kent BR6 0LG		SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2,1IN30																																			
Date 24/06/2019 15:29		Designed by DO																																			
File UNIT 2 STORM NETWORK-WI...		Checked by																																			
Micro Drainage		Network 2018.1																																			
Conduit Sections for Existing NOTE: Diameters less than 66 refer to section numbers of hydraulic conduits. These conduits are marked by the symbols:- [] box culvert, \ / open channel, oo dual pipe, ooo triple pipe, O egg. Section numbers < 0 are taken from user conduit table <table><tr><th>Section Number</th><th>Conduit Type</th><th>Major Dimn. (mm)</th><th>Minor Dimn. (mm)</th><th>Side Slope (Deg)</th><th>Corner Splay (mm)</th><th>4*Hyd Radius (m)</th><th>XSect Area (m²)</th></tr><tr><td>-1</td><td> _ </td><td>12000</td><td>800</td><td>90.0</td><td></td><td>2.824</td><td>9.600</td></tr><tr><td>-2</td><td> _ </td><td>10000</td><td>1000</td><td>90.0</td><td></td><td>3.333</td><td>10.000</td></tr><tr><td>-3</td><td> _ </td><td>1000</td><td>1415</td><td>90.0</td><td></td><td>1.478</td><td>1.415</td></tr></table>						Section Number	Conduit Type	Major Dimn. (mm)	Minor Dimn. (mm)	Side Slope (Deg)	Corner Splay (mm)	4*Hyd Radius (m)	XSect Area (m²)	-1	_	12000	800	90.0		2.824	9.600	-2	_	10000	1000	90.0		3.333	10.000	-3	_	1000	1415	90.0		1.478	1.415
Section Number	Conduit Type	Major Dimn. (mm)	Minor Dimn. (mm)	Side Slope (Deg)	Corner Splay (mm)	4*Hyd Radius (m)	XSect Area (m²)																														
-1	_	12000	800	90.0		2.824	9.600																														
-2	_	10000	1000	90.0		3.333	10.000																														
-3	_	1000	1415	90.0		1.478	1.415																														
©1982-2018 Innovyze																																					

Kirksaunders Associates Ltd		Page 6
Templegate House 115-123 High Street Orpington Kent BR6 0LG	SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2,1IN30	
Date 24/06/2019 15:29	Designed by DO	
File UNIT 2 STORM NETWORK-WI...	Checked by	
Micro Drainage		Network 2018.1

Manhole Schedules for Existing

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam., L*W (mm)	PN	Pipe Out Invert Level (m)	Diameter (mm)	PN	Pipes In Invert Level (m)	Diameter (mm)	Backdrop (mm)
E1	2.380	0.785	Open Manhole	1200	E1.000	1.595	350				
E1-2	2.380	0.813	Open Manhole	1200	E1.001	1.567	350	E1.000	1.590	350	23
E1-4	2.380	0.841	Open Manhole	1200	E1.002	1.539	350	E1.001	1.553	350	14
E1-6	2.380	0.869	Open Manhole	1200	E1.003	1.511	350	E1.002	1.525	350	14
E1-8	2.380	0.897	Open Manhole	1200	E1.004	1.483	350	E1.003	1.497	350	14
E2	2.380	0.925	Open Manhole	1200	E1.005	1.455	350	E1.004	1.469	350	260
E3	2.270	0.730	Open Manhole	1200	E2.000	1.540	350				
E3-2	2.270	0.758	Open Manhole	1200	E2.001	1.512	350	E2.000	1.526	350	14
E3-6	2.270	0.813	Open Manhole	1200	E2.002	1.457	350	E2.001	1.499	350	42
E3	2.270	0.870	Open Manhole	1200	E2.003	1.400	350	E2.002	1.443	350	289
E5	2.530	0.480	Open Manhole	1200	E3.000	2.050	350				
E5-4	2.530	0.523	Open Manhole	1200	E3.001	2.007	350	E3.000	2.039	350	32
E5-8	2.530	0.567	Open Manhole	1200	E3.002	1.963	350	E3.001	1.996	350	33
E5-14	2.530	0.632	Open Manhole	1200	E3.003	1.898	350	E3.002	1.958	350	60
E5-20	2.530	0.697	Open Manhole	1200	E3.004	1.833	350	E3.003	1.887	350	54
E5-24	2.530	0.740	Open Manhole	1200	E3.005	1.790	350	E3.004	1.822	350	32
E5-28	2.530	0.784	Open Manhole	1200	E3.006	1.746	350	E3.005	1.779	350	33
E5-32	2.530	0.827	Open Manhole	1200	E3.007	1.703	350	E3.006	1.744	350	41
E5-36	2.530	0.870	Open Manhole	1200	E3.008	1.660	350	E3.007	1.701	350	41
E5-40	2.530	0.914	Open Manhole	1200	E3.009	1.616	350	E3.008	1.658	350	42
E5-44	2.530	0.957	Open Manhole	1200	E3.010	1.573	350	E3.009	1.605	350	32
E4	2.530	1.010	Open Manhole	1200	E3.011	1.520	350	E3.010	1.562	350	288
ES1	2.560	1.208	Open Manhole	1200	E1.006	1.352	350	E1.005	1.352	350	
								E2.003	1.352	350	
								E3.011	1.352	350	
E8	2.385	0.870	Open Manhole	1200	E4.000	1.515	350				
E8-5	2.385	0.937	Open Manhole	1200	E4.001	1.448	350	E4.000	1.502	350	54
E8-9	2.385	0.991	Open Manhole	1200	E4.002	1.394	350	E4.001	1.435	350	41
E8-12	2.385	1.031	Open Manhole	1200	E4.003	1.354	350	E4.002	1.381	350	27
E8-15	2.385	1.071	Open Manhole	1200	E4.004	1.314	350	E4.003	1.341	350	27
E8-19	2.385	1.125	Open Manhole	1200	E4.005	1.260	350	E4.004	1.300	350	40
E9	2.385	1.190	Open Manhole	1200	E4.006	1.195	350	E4.005	1.247	350	298
E10	2.525	0.855	Open Manhole	1200	E5.000	1.670	350				
E10-2	2.525	0.877	Open Manhole	1200	E5.001	1.648	350	E5.000	1.659	350	11
E11	2.525	0.905	Open Manhole	1200	E5.002	1.620	350	E5.001	1.640	350	266
ES2A	2.420	0.820	Open Manhole	1200	E5.003	1.600	350	E5.002	1.600	350	
E13	2.300	1.075	Open Manhole	1200	E6.000	1.225	350				
E13-2	2.300	1.102	Open Manhole	1200	E6.001	1.198	350	E6.000	1.211	350	13

Kirksaunders Associates Ltd								Page 7	
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2,1IN30					
Date 24/06/2019 15:29				Designed by DO					
File UNIT 2 STORM NETWORK-WI...				Checked by					
Micro Drainage				Network 2018.1					
Manhole Schedules for Existing									
MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam., L*W (mm)	PN	Pipe Out Invert Level (m)	Diameter (mm)	PN	Pipes In Invert Level (m)
E14	2.300	1.135	Open Manhole	1200	E6.002	1.165	350	E6.001	1.184
E15	2.270	1.074	Open Manhole	1200	E7.000	1.196	350		
E15-2	2.270	1.110	Open Manhole	1200	E7.001	1.160	350	E7.000	1.178
E16	2.270	1.125	Open Manhole	1200	E7.002	1.145	350	E7.001	1.145
ES2	2.560	1.446	Open Manhole	1200	E1.007	1.114	350	E1.006	1.114
								E4.006	1.114
								E5.003	1.505
								E6.002	1.114
								E7.002	1.114
ETANK 2	2.700	1.640	Open Manhole	1200	E1.008	1.060	350	E1.007	1.060
E122	2.675	1.617	Open Manhole	1200	E1.009	1.058	-2	E1.008	1.058
E123	2.663	1.607	Open Manhole	1200	E1.010	1.056	350	E1.009	1.056
ES3	2.650	1.596	Open Manhole	1200	E1.011	1.055	350	E1.010	1.054
ES5	2.285	0.850	Open Manhole	1200	E8.000	1.435	300		
ES4	3.300	2.355	Open Manhole	1200	E1.012	0.945	375	E1.011	0.945
								E8.000	0.945
ES5A	1.850	0.850	Open Manhole	1200	E9.000	1.000	300		
E23	2.600	0.890	Open Manhole	1200	E10.000	1.710	350		
E23-4	2.600	1.722	Open Manhole	1200	E10.001	0.878	350	E10.000	1.696
E23-9	2.600	1.736	Open Manhole	1200	E10.002	0.864	350	E10.001	0.864
E24	2.600	1.750	Open Manhole	1200	E10.003	0.850	350	E10.002	0.850
E25	2.605	1.735	Open Manhole	1200	E11.000	0.870	350		
E25-3	2.605	1.745	Open Manhole	1200	E11.001	0.860	350	E11.000	0.860
E26	2.605	1.755	Open Manhole	1200	E11.002	0.850	300	E11.001	0.850
ES5B	1.950	1.140	Open Manhole	1200	E9.001	0.810	350	E9.000	0.810
								E10.003	0.810
								E11.002	0.810
ES6	2.135	1.400	Open Manhole	1200	E9.002	0.735	350	E9.001	0.735
ES7	3.310	0.800	Open Manhole	1200	E12.000	2.510	350		
ES8	3.350	1.390	Open Manhole	1200	E12.001	1.960	350	E12.000	1.960
ES9	1.980	0.880	Open Manhole	1200	E12.002	1.100	350	E12.001	1.100
ETANK 1	2.865	2.305	Open Manhole	1200	E1.013	0.560	350	E1.012	0.560
								E9.002	0.560
								E12.002	0.560
E157	2.925	2.372	Open Manhole	1200	E1.014	0.553	-1	E1.013	0.553
E158	2.955	2.405	Open Manhole	1200	E1.015	0.550	375	E1.014	0.550
ES10	2.070	1.545	Open Manhole	1200	E1.016	0.525	225	E1.015	0.525
ESWMS11B	2.925	2.590	Open Manhole	1200	E13.000	0.335	-1		
©1982-2018 Innovyze									

Kirksaunders Associates Ltd							Page 8			
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2,1IN30						
Date 24/06/2019 15:29				Designed by DO						
File UNIT 2 STORM NETWORK-WI...				Checked by						
Micro Drainage				Network 2018.1						
<u>Manhole Schedules for Existing</u>										
MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam., L*W (mm)	PN	Pipe Out Invert Level (m)	Diameter (mm)	PN	Pipes In Invert Level (m)	Diameter (mm)
ESWMH S12	2.288	1.968	Open Manhole	1200	E13.001	0.320	-1	E13.000	0.320	-1
ESWMHS13	1.650	1.340	Open Manhole	1200	E13.002	0.310	-3	E13.001	0.310	-3
ESWMH14	2.243	1.943	Open Manhole	1200	E1.017	0.300	-3	E1.016	0.300	-3
								E13.002	0.300	-3
ESWMH15	1.871	1.581	Open Manhole	1200	E1.018	0.290	225	E1.017	0.290	225
EOUTFALL	1.500	1.250	Open Manhole	1200		OUTFALL		E1.018	0.250	225
©1982-2018 Innovyze										

Kirksaunders Associates Ltd								Page 9	
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2,1IN30					
Date 24/06/2019 15:29				Designed by DO					
File UNIT 2 STORM NETWORK-WI...				Checked by					
Micro Drainage				Network 2018.1					
PIPELINE SCHEDULES for Existing									
Upstream Manhole									
PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)	
E1.000	CA	350	E1	2.380	1.595	0.189	Open Manhole		1200
E1.001	CA	350	E1-2	2.380	1.567	0.217	Open Manhole		1200
E1.002	CA	350	E1-4	2.380	1.539	0.245	Open Manhole		1200
E1.003	CA	350	E1-6	2.380	1.511	0.273	Open Manhole		1200
E1.004	CA	350	E1-8	2.380	1.483	0.301	Open Manhole		1200
E1.005	o	350	E2	2.380	1.455	0.575	Open Manhole		1200
E2.000	CA	350	E3	2.270	1.540	0.134	Open Manhole		1200
E2.001	CA	350	E3-2	2.270	1.512	0.162	Open Manhole		1200
E2.002	CA	350	E3-6	2.270	1.457	0.217	Open Manhole		1200
E2.003	o	350	E3	2.270	1.400	0.520	Open Manhole		1200
E3.000	CA	350	E5	2.530	2.050	-0.116	Open Manhole		1200
E3.001	CA	350	E5-4	2.530	2.007	-0.073	Open Manhole		1200
E3.002	CA	350	E5-8	2.530	1.963	-0.029	Open Manhole		1200
E3.003	CA	350	E5-14	2.530	1.898	0.036	Open Manhole		1200
E3.004	CA	350	E5-20	2.530	1.833	0.101	Open Manhole		1200
E3.005	CA	350	E5-24	2.530	1.790	0.144	Open Manhole		1200
E3.006	CA	350	E5-28	2.530	1.746	0.188	Open Manhole		1200
E3.007	CA	350	E5-32	2.530	1.703	0.231	Open Manhole		1200
E3.008	CA	350	E5-36	2.530	1.660	0.274	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)	
E1.000	3.000	600.0	E1-2	2.380	1.590	0.194	Open Manhole		1200
E1.001	3.000	214.3	E1-4	2.380	1.553	0.231	Open Manhole		1200
E1.002	3.000	214.3	E1-6	2.380	1.525	0.259	Open Manhole		1200
E1.003	3.000	214.3	E1-8	2.380	1.497	0.287	Open Manhole		1200
E1.004	3.000	214.3	E2	2.380	1.469	0.315	Open Manhole		1200
E1.005	22.255	216.1	ES1	2.560	1.352	0.858	Open Manhole		1200
E2.000	3.000	214.3	E3-2	2.270	1.526	0.148	Open Manhole		1200
E2.001	3.000	230.8	E3-6	2.270	1.499	0.175	Open Manhole		1200
E2.002	3.000	214.3	E3	2.270	1.443	0.231	Open Manhole		1200
E2.003	10.484	218.4	ES1	2.560	1.352	0.858	Open Manhole		1200
E3.000	3.000	272.7	E5-4	2.530	2.039	-0.105	Open Manhole		1200
E3.001	3.000	272.7	E5-8	2.530	1.996	-0.062	Open Manhole		1200
E3.002	3.000	600.0	E5-14	2.530	1.958	-0.024	Open Manhole		1200
E3.003	3.000	272.7	E5-20	2.530	1.887	0.047	Open Manhole		1200
E3.004	3.000	272.7	E5-24	2.530	1.822	0.112	Open Manhole		1200
E3.005	3.000	272.7	E5-28	2.530	1.779	0.155	Open Manhole		1200
E3.006	0.500	250.0	E5-32	2.530	1.744	0.190	Open Manhole		1200
E3.007	0.500	250.0	E5-36	2.530	1.701	0.233	Open Manhole		1200
E3.008	0.500	250.0	E5-40	2.530	1.658	0.276	Open Manhole		1200
©1982-2018 Innovyze									

Kirksaunders Associates Ltd		Page 10
Templegate House 115-123 High Street Orpington Kent BR6 0LG	SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2, 1IN30	
Date 24/06/2019 15:29	Designed by DO	
File UNIT 2 STORM NETWORK-WI...	Checked by	
Micro Drainage		Network 2018.1

PIPELINE SCHEDULES for Existing

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
E3.009	CA	350	E5-40	2.530	1.616	0.318	Open Manhole	1200
E3.010	CA	350	E5-44	2.530	1.573	0.361	Open Manhole	1200
E3.011	o	350	E4	2.530	1.520	0.660	Open Manhole	1200
E1.006	o	350	ES1	2.560	1.352	0.858	Open Manhole	1200
E4.000	CA	350	E8	2.385	1.515	0.274	Open Manhole	1200
E4.001	CA	350	E8-5	2.385	1.448	0.341	Open Manhole	1200
E4.002	CA	350	E8-9	2.385	1.394	0.395	Open Manhole	1200
E4.003	CA	350	E8-12	2.385	1.354	0.435	Open Manhole	1200
E4.004	CA	350	E8-15	2.385	1.314	0.475	Open Manhole	1200
E4.005	CA	350	E8-19	2.385	1.260	0.529	Open Manhole	1200
E4.006	o	350	E9	2.385	1.195	0.840	Open Manhole	1200
E5.000	CA	350	E10	2.525	1.670	0.259	Open Manhole	1200
E5.001	CA	350	E10-2	2.525	1.648	0.281	Open Manhole	1200
E5.002	o	350	E11	2.525	1.620	0.555	Open Manhole	1200
E5.003	o	350	ES2A	2.420	1.600	0.470	Open Manhole	1200
E6.000	CA	350	E13	2.300	1.225	0.479	Open Manhole	1200
E6.001	CA	350	E13-2	2.300	1.198	0.506	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)
E3.009	3.000	272.7	E5-44	2.530	1.605	0.329	Open Manhole	1200
E3.010	3.000	272.7	E4	2.530	1.562	0.372	Open Manhole	1200
E3.011	36.296	216.0	ES1	2.560	1.352	0.858	Open Manhole	1200
E1.006	69.297	291.2	ES2	2.560	1.114	1.096	Open Manhole	1200
E4.000	3.000	230.8	E8-5	2.385	1.502	0.287	Open Manhole	1200
E4.001	3.000	230.8	E8-9	2.385	1.435	0.354	Open Manhole	1200
E4.002	3.000	230.8	E8-12	2.385	1.381	0.408	Open Manhole	1200
E4.003	3.000	230.8	E8-15	2.385	1.341	0.448	Open Manhole	1200
E4.004	3.000	214.3	E8-19	2.385	1.300	0.489	Open Manhole	1200
E4.005	3.000	230.8	E9	2.385	1.247	0.542	Open Manhole	1200
E4.006	18.039	222.7	ES2	2.560	1.114	1.096	Open Manhole	1200
E5.000	3.000	272.7	E10-2	2.525	1.659	0.270	Open Manhole	1200
E5.001	3.000	375.0	E11	2.525	1.640	0.289	Open Manhole	1200
E5.002	10.897	544.9	ES2A	2.420	1.600	0.470	Open Manhole	1200
E5.003	18.209	191.7	ES2	2.560	1.505	0.705	Open Manhole	1200
E6.000	3.000	214.3	E13-2	2.300	1.211	0.493	Open Manhole	1200
E6.001	3.000	214.3	E14	2.300	1.184	0.520	Open Manhole	1200

Kirksaunders Associates Ltd								Page 11	
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2,1IN30					
Date 24/06/2019 15:29				Designed by DO					
File UNIT 2 STORM NETWORK-WI...				Checked by					
Micro Drainage				Network 2018.1					
PIPELINE SCHEDULES for Existing									
Upstream Manhole									
PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)	
E6.002	o	350	E14	2.300	1.165	0.785	Open Manhole		1200
E7.000	CA	350	E15	2.270	1.196	0.478	Open Manhole		1200
E7.001	CA	350	E15-2	2.270	1.160	0.514	Open Manhole		1200
E7.002	o	350	E16	2.270	1.145	0.775	Open Manhole		1200
E1.007	o	350	ES2	2.560	1.114	1.096	Open Manhole		1200
E1.008	o	350	ETANK 2	2.700	1.060	1.290	Open Manhole		1200
E1.009	_	-2	E122	2.675	1.058	0.617	Open Manhole		1200
E1.010	o	350	E123	2.663	1.056	1.257	Open Manhole		1200
E1.011	o	350	ES3	2.650	1.055	1.245	Open Manhole		1200
E8.000	o	300	ES5	2.285	1.435	0.550	Open Manhole		1200
E1.012	o	375	ES4	3.300	0.945	1.980	Open Manhole		1200
E9.000	o	300	ES5A	1.850	1.000	0.550	Open Manhole		1200
E10.000	CA	350	E23	2.600	1.710	0.294	Open Manhole		1200
E10.001	CA	350	E23-4	2.600	0.878	1.126	Open Manhole		1200
E10.002	CA	350	E23-9	2.600	0.864	1.140	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)	
E6.002	11.735	230.1	ES2	2.560	1.114	1.096	Open Manhole		1200
E7.000	3.000	166.7	E15-2	2.270	1.178	0.496	Open Manhole		1200
E7.001	2.502	166.8	E16	2.270	1.145	0.529	Open Manhole		1200
E7.002	8.660	279.4	ES2	2.560	1.114	1.096	Open Manhole		1200
E1.007	10.607	196.4	ETANK 2	2.700	1.060	1.290	Open Manhole		1200
E1.008	0.500	280.0	E122	2.675	1.058	1.267	Open Manhole		1200
E1.009	9.983	4991.5	E123	2.663	1.056	0.607	Open Manhole		1200
E1.010	0.500	250.0	ES3	2.650	1.054	1.246	Open Manhole		1200
E1.011	31.186	283.5	ES4	3.300	0.945	2.005	Open Manhole		1200
E8.000	84.537	172.5	ES4	3.300	0.945	2.055	Open Manhole		1200
E1.012	17.860	46.4	ETANK 1	2.865	0.560	1.930	Open Manhole		1200
E9.000	26.931	141.7	ES5B	1.950	0.810	0.840	Open Manhole		1200
E10.000	3.000	214.3	E23-4	2.600	1.696	0.308	Open Manhole		1200
E10.001	3.000	214.3	E23-9	2.600	0.864	1.140	Open Manhole		1200
E10.002	3.000	214.3	E24	2.600	0.850	1.154	Open Manhole		1200
©1982-2018 Innovyze									

Kirksaunders Associates Ltd								Page 12
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2,1IN30				
Date 24/06/2019 15:29				Designed by DO				
File UNIT 2 STORM NETWORK-WI...				Checked by				
Micro Drainage				Network 2018.1				
PIPELINE SCHEDULES for Existing								
Upstream Manhole								
PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
E10.003	o	350	E24	2.600	0.850	1.400	Open Manhole	1200
E11.000	CA	350	E25	2.605	0.870	1.139	Open Manhole	1200
E11.001	CA	350	E25-3	2.605	0.860	1.149	Open Manhole	1200
E11.002	o	300	E26	2.605	0.850	1.455	Open Manhole	1200
E9.001	o	350	ES5B	1.950	0.810	0.790	Open Manhole	1200
E9.002	o	350	ES6	2.135	0.735	1.050	Open Manhole	1200
E12.000	o	350	ES7	3.310	2.510	0.450	Open Manhole	1200
E12.001	o	350	ES8	3.350	1.960	1.040	Open Manhole	1200
E12.002	o	350	ES9	1.980	1.100	0.530	Open Manhole	1200
E1.013	o	350	ETANK 1	2.865	0.560	1.955	Open Manhole	1200
E1.014	_	-1	E157	2.925	0.553	1.572	Open Manhole	1200
E1.015	o	375	E158	2.955	0.550	2.030	Open Manhole	1200
E1.016	o	225	ES10	2.070	0.525	1.320	Open Manhole	1200
E13.000	_	-1	ESWMHS11B	2.925	0.335	1.790	Open Manhole	1200
E13.001	_	-1	ESWMH S12	2.288	0.320	1.168	Open Manhole	1200
E13.002	_	-3	ESWMHS13	1.650	0.310	-0.075	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)
E10.003	5.761	144.0	ES5B	1.950	0.810	0.790	Open Manhole	1200
E11.000	3.000	300.0	E25-3	2.605	0.860	1.149	Open Manhole	1200
E11.001	3.000	300.0	E26	2.605	0.850	1.159	Open Manhole	1200
E11.002	3.871	96.8	ES5B	1.950	0.810	0.840	Open Manhole	1200
E9.001	15.325	204.3	ES6	2.135	0.735	1.050	Open Manhole	1200
E9.002	14.207	81.2	ETANK 1	2.865	0.560	1.955	Open Manhole	1200
E12.000	82.793	150.5	ES8	3.350	1.960	1.040	Open Manhole	1200
E12.001	16.538	19.2	ES9	1.980	1.100	0.530	Open Manhole	1200
E12.002	21.457	39.7	ETANK 1	2.865	0.560	1.955	Open Manhole	1200
E1.013	1.013	144.7	E157	2.925	0.553	2.022	Open Manhole	1200
E1.014	10.139	3379.7	E158	2.955	0.550	1.605	Open Manhole	1200
E1.015	2.289	91.6	ES10	2.070	0.525	1.170	Open Manhole	1200
E1.016	36.423	161.9	ESWMH14	2.243	0.300	1.718	Open Manhole	1200
E13.000	66.974	4464.9	ESWMH S12	2.288	0.320	1.168	Open Manhole	1200
E13.001	56.157	5615.7	ESWMHS13	1.650	0.310	0.540	Open Manhole	1200
E13.002	26.376	2637.6	ESWMH14	2.243	0.300	0.528	Open Manhole	1200
©1982-2018 Innovyze								

Kirksaunders Associates Ltd				Page 13				
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2,1IN30				
Date 24/06/2019 15:29				Designed by DO				
File UNIT 2 STORM NETWORK-WI...				Checked by				
Micro Drainage				Network 2018.1				
<u>PIPELINE SCHEDULES for Existing</u>								
<u>Upstream Manhole</u>								
PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
E1.017	_	-3	ESWMH14	2.243	0.300	0.528	Open Manhole	1200
E1.018	o	225	ESWMH15	1.871	0.290	1.356	Open Manhole	1200
<u>Downstream Manhole</u>								
PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
E1.017	68.866	6886.6	ESWMH15	1.871	0.290	0.166	Open Manhole	1200
E1.018	7.486	187.2	EOUTFALL	1.500	0.250	1.025	Open Manhole	1200
©1982-2018 Innovyze								

Kirksaunders Associates Ltd					Page 14	
Templegate House 115-123 High Street Orpington Kent BR6 0LG			SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2,1IN30			
Date 24/06/2019 15:29 File UNIT 2 STORM NETWORK-WI...			Designed by DO Checked by			
Micro Drainage			Network 2018.1			
Area Summary for Existing						
Pipe Number	PIMP Type	PIMP Name	PIMP (%)	Gross Area (ha)	Imp. Area (ha)	Pipe Total (ha)
1.000	-	-	100	0.024	0.024	0.024
1.001	-	-	100	0.024	0.024	0.024
1.002	-	-	100	0.024	0.024	0.024
1.003	-	-	100	0.024	0.024	0.024
1.004	-	-	100	0.024	0.024	0.024
1.005	-	-	100	0.000	0.000	0.000
2.000	-	-	100	0.032	0.032	0.032
2.001	-	-	100	0.032	0.032	0.032
2.002	-	-	100	0.032	0.032	0.032
2.003	-	-	100	0.000	0.000	0.000
3.000	-	-	100	0.020	0.020	0.020
3.001	-	-	100	0.020	0.020	0.020
3.002	-	-	100	0.020	0.020	0.020
3.003	-	-	100	0.020	0.020	0.020
3.004	-	-	100	0.020	0.020	0.020
3.005	-	-	100	0.020	0.020	0.020
3.006	-	-	100	0.020	0.020	0.020
3.007	-	-	100	0.020	0.020	0.020
3.008	-	-	100	0.020	0.020	0.020
3.009	-	-	100	0.020	0.020	0.020
3.010	-	-	100	0.020	0.020	0.020
3.011	-	-	100	0.000	0.000	0.000
1.006	-	-	100	0.209	0.209	0.209
4.000	-	-	100	0.050	0.050	0.050
4.001	-	-	100	0.050	0.050	0.050
4.002	-	-	100	0.050	0.050	0.050
4.003	-	-	100	0.050	0.050	0.050
4.004	-	-	100	0.050	0.050	0.050
4.005	-	-	100	0.050	0.050	0.050
4.006	-	-	100	0.000	0.000	0.000
5.000	-	-	100	0.016	0.016	0.016
5.001	-	-	100	0.016	0.016	0.016
5.002	-	-	100	0.000	0.000	0.000
5.003	-	-	100	0.000	0.000	0.000
6.000	-	-	100	0.012	0.012	0.012
6.001	-	-	100	0.012	0.012	0.012
6.002	-	-	100	0.000	0.000	0.000
7.000	-	-	100	0.000	0.000	0.000
7.001	-	-	100	0.010	0.010	0.010
7.002	-	-	100	0.000	0.000	0.000
1.007	-	-	100	0.000	0.000	0.000
1.008	-	-	100	0.000	0.000	0.000
1.009	-	-	100	0.000	0.000	0.000
1.010	-	-	100	0.000	0.000	0.000
1.011	-	-	100	0.000	0.000	0.000
8.000	-	-	100	0.163	0.163	0.163
1.012	-	-	100	0.000	0.000	0.000
9.000	-	-	100	0.000	0.000	0.000
10.000	-	-	100	0.053	0.053	0.053
10.001	-	-	100	0.053	0.053	0.053
10.002	-	-	100	0.053	0.053	0.053
©1982-2018 Innovyze						

Kirksaunders Associates Ltd					Page 15						
Templegate House 115-123 High Street Orpington Kent BR6 0LG			SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2,1IN30								
Date 24/06/2019 15:29			Designed by DO								
File UNIT 2 STORM NETWORK-WI...			Checked by								
Micro Drainage			Network 2018.1								
<u>Area Summary for Existing</u>											
Pipe Number	PIMP Type	PIMP Name	PIMP (%)	Gross Area (ha)	Imp. Area (ha)	Pipe Total (ha)					
10.003	-	-	100	0.000	0.000	0.000					
11.000	-	-	100	0.007	0.007	0.007					
11.001	-	-	100	0.016	0.016	0.016					
11.002	-	-	100	0.016	0.016	0.016					
9.001	-	-	100	0.000	0.000	0.000					
9.002	-	-	100	0.000	0.000	0.000					
12.000	-	-	100	0.191	0.191	0.191					
12.001	-	-	100	0.000	0.000	0.000					
12.002	-	-	100	0.000	0.000	0.000					
1.013	-	-	100	0.000	0.000	0.000					
1.014	-	-	100	0.000	0.000	0.000					
1.015	-	-	100	0.000	0.000	0.000					
1.016	-	-	100	0.000	0.000	0.000					
13.000	-	-	100	0.054	0.054	0.054					
13.001	-	-	100	0.000	0.000	0.000					
13.002	-	-	100	0.000	0.000	0.000					
1.017	-	-	100	0.000	0.000	0.000					
1.018	-	-	100	0.000	0.000	0.000					
				Total	Total	Total					
				1.617	1.617	1.617					
<u>Surcharged Outfall Details for Existing</u>											
Outfall Pipe Number	Outfall Name	C. Level (m)	I. Level (m)	Min I. Level (m)	D,L (mm)	W (mm)					
E1.018	EOUTFALL	1.500	0.250	0.000	1200	0					
Datum (m) 0.000 Offset (mins) 0											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
1	1.600	16	1.600	31	1.600	46	1.600	61	1.600	76	1.600
2	1.600	17	1.600	32	1.600	47	1.600	62	1.600	77	1.600
3	1.600	18	1.600	33	1.600	48	1.600	63	1.600	78	1.600
4	1.600	19	1.600	34	1.600	49	1.600	64	1.600	79	1.600
5	1.600	20	1.600	35	1.600	50	1.600	65	1.600	80	1.600
6	1.600	21	1.600	36	1.600	51	1.600	66	1.600	81	1.600
7	1.600	22	1.600	37	1.600	52	1.600	67	1.600	82	1.600
8	1.600	23	1.600	38	1.600	53	1.600	68	1.600	83	1.600
9	1.600	24	1.600	39	1.600	54	1.600	69	1.600	84	1.600
10	1.600	25	1.600	40	1.600	55	1.600	70	1.600	85	1.600
11	1.600	26	1.600	41	1.600	56	1.600	71	1.600	86	1.600
12	1.600	27	1.600	42	1.600	57	1.600	72	1.600	87	1.600
13	1.600	28	1.600	43	1.600	58	1.600	73	1.600	88	1.600
14	1.600	29	1.600	44	1.600	59	1.600	74	1.600	89	1.600
15	1.600	30	1.600	45	1.600	60	1.600	75	1.600	90	1.600
©1982-2018 Innovyze											

Kirksaunders Associates Ltd										Page 16	
Templegate House 115-123 High Street Orpington Kent BR6 0LG					SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2,1IN30						
Date 24/06/2019 15:29					Designed by DO						
File UNIT 2 STORM NETWORK-WI...					Checked by						
Micro Drainage					Network 2018.1						
Surcharged Outfall Details for Existing											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
91	1.600	141	1.600	191	1.600	241	1.600	291	1.600	341	1.600
92	1.600	142	1.600	192	1.600	242	1.600	292	1.600	342	1.600
93	1.600	143	1.600	193	1.600	243	1.600	293	1.600	343	1.600
94	1.600	144	1.600	194	1.600	244	1.600	294	1.600	344	1.600
95	1.600	145	1.600	195	1.600	245	1.600	295	1.600	345	1.600
96	1.600	146	1.600	196	1.600	246	1.600	296	1.600	346	1.600
97	1.600	147	1.600	197	1.600	247	1.600	297	1.600	347	1.600
98	1.600	148	1.600	198	1.600	248	1.600	298	1.600	348	1.600
99	1.600	149	1.600	199	1.600	249	1.600	299	1.600	349	1.600
100	1.600	150	1.600	200	1.600	250	1.600	300	1.600	350	1.600
101	1.600	151	1.600	201	1.600	251	1.600	301	1.600	351	1.600
102	1.600	152	1.600	202	1.600	252	1.600	302	1.600	352	1.600
103	1.600	153	1.600	203	1.600	253	1.600	303	1.600	353	1.600
104	1.600	154	1.600	204	1.600	254	1.600	304	1.600	354	1.600
105	1.600	155	1.600	205	1.600	255	1.600	305	1.600	355	1.600
106	1.600	156	1.600	206	1.600	256	1.600	306	1.600	356	1.600
107	1.600	157	1.600	207	1.600	257	1.600	307	1.600	357	1.600
108	1.600	158	1.600	208	1.600	258	1.600	308	1.600	358	1.600
109	1.600	159	1.600	209	1.600	259	1.600	309	1.600	359	1.600
110	1.600	160	1.600	210	1.600	260	1.600	310	1.600	360	1.600
111	1.600	161	1.600	211	1.600	261	1.600	311	1.600	361	1.600
112	1.600	162	1.600	212	1.600	262	1.600	312	1.600	362	1.600
113	1.600	163	1.600	213	1.600	263	1.600	313	1.600	363	1.600
114	1.600	164	1.600	214	1.600	264	1.600	314	1.600	364	1.600
115	1.600	165	1.600	215	1.600	265	1.600	315	1.600	365	1.600
116	1.600	166	1.600	216	1.600	266	1.600	316	1.600	366	1.600
117	1.600	167	1.600	217	1.600	267	1.600	317	1.600	367	1.600
118	1.600	168	1.600	218	1.600	268	1.600	318	1.600	368	1.600
119	1.600	169	1.600	219	1.600	269	1.600	319	1.600	369	1.600
120	1.600	170	1.600	220	1.600	270	1.600	320	1.600	370	1.600
121	1.600	171	1.600	221	1.600	271	1.600	321	1.600	371	1.600
122	1.600	172	1.600	222	1.600	272	1.600	322	1.600	372	1.600
123	1.600	173	1.600	223	1.600	273	1.600	323	1.600	373	1.600
124	1.600	174	1.600	224	1.600	274	1.600	324	1.600	374	1.600
125	1.600	175	1.600	225	1.600	275	1.600	325	1.600	375	1.600
126	1.600	176	1.600	226	1.600	276	1.600	326	1.600	376	1.600
127	1.600	177	1.600	227	1.600	277	1.600	327	1.600	377	1.600
128	1.600	178	1.600	228	1.600	278	1.600	328	1.600	378	1.600
129	1.600	179	1.600	229	1.600	279	1.600	329	1.600	379	1.600
130	1.600	180	1.600	230	1.600	280	1.600	330	1.600	380	1.600
131	1.600	181	1.600	231	1.600	281	1.600	331	1.600	381	1.600
132	1.600	182	1.600	232	1.600	282	1.600	332	1.600	382	1.600
133	1.600	183	1.600	233	1.600	283	1.600	333	1.600	383	1.600
134	1.600	184	1.600	234	1.600	284	1.600	334	1.600	384	1.600
135	1.600	185	1.600	235	1.600	285	1.600	335	1.600	385	1.600
136	1.600	186	1.600	236	1.600	286	1.600	336	1.600	386	1.600
137	1.600	187	1.600	237	1.600	287	1.600	337	1.600	387	1.600
138	1.600	188	1.600	238	1.600	288	1.600	338	1.600	388	1.600
139	1.600	189	1.600	239	1.600	289	1.600	339	1.600	389	1.600
140	1.600	190	1.600	240	1.600	290	1.600	340	1.600	390	1.600
©1982-2018 Innovyze											

Kirksaunders Associates Ltd										Page 17	
Templegate House 115-123 High Street Orpington Kent BR6 0LG					SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2,1IN30						
Date 24/06/2019 15:29					Designed by DO						
File UNIT 2 STORM NETWORK-WI...					Checked by						
Micro Drainage					Network 2018.1						
Surcharged Outfall Details for Existing											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
391	1.600	441	1.600	491	1.600	541	1.600	591	1.600	641	1.600
392	1.600	442	1.600	492	1.600	542	1.600	592	1.600	642	1.600
393	1.600	443	1.600	493	1.600	543	1.600	593	1.600	643	1.600
394	1.600	444	1.600	494	1.600	544	1.600	594	1.600	644	1.600
395	1.600	445	1.600	495	1.600	545	1.600	595	1.600	645	1.600
396	1.600	446	1.600	496	1.600	546	1.600	596	1.600	646	1.600
397	1.600	447	1.600	497	1.600	547	1.600	597	1.600	647	1.600
398	1.600	448	1.600	498	1.600	548	1.600	598	1.600	648	1.600
399	1.600	449	1.600	499	1.600	549	1.600	599	1.600	649	1.600
400	1.600	450	1.600	500	1.600	550	1.600	600	1.600	650	1.600
401	1.600	451	1.600	501	1.600	551	1.600	601	1.600	651	1.600
402	1.600	452	1.600	502	1.600	552	1.600	602	1.600	652	1.600
403	1.600	453	1.600	503	1.600	553	1.600	603	1.600	653	1.600
404	1.600	454	1.600	504	1.600	554	1.600	604	1.600	654	1.600
405	1.600	455	1.600	505	1.600	555	1.600	605	1.600	655	1.600
406	1.600	456	1.600	506	1.600	556	1.600	606	1.600	656	1.600
407	1.600	457	1.600	507	1.600	557	1.600	607	1.600	657	1.600
408	1.600	458	1.600	508	1.600	558	1.600	608	1.600	658	1.600
409	1.600	459	1.600	509	1.600	559	1.600	609	1.600	659	1.600
410	1.600	460	1.600	510	1.600	560	1.600	610	1.600	660	1.600
411	1.600	461	1.600	511	1.600	561	1.600	611	1.600	661	1.600
412	1.600	462	1.600	512	1.600	562	1.600	612	1.600	662	1.600
413	1.600	463	1.600	513	1.600	563	1.600	613	1.600	663	1.600
414	1.600	464	1.600	514	1.600	564	1.600	614	1.600	664	1.600
415	1.600	465	1.600	515	1.600	565	1.600	615	1.600	665	1.600
416	1.600	466	1.600	516	1.600	566	1.600	616	1.600	666	1.600
417	1.600	467	1.600	517	1.600	567	1.600	617	1.600	667	1.600
418	1.600	468	1.600	518	1.600	568	1.600	618	1.600	668	1.600
419	1.600	469	1.600	519	1.600	569	1.600	619	1.600	669	1.600
420	1.600	470	1.600	520	1.600	570	1.600	620	1.600	670	1.600
421	1.600	471	1.600	521	1.600	571	1.600	621	1.600	671	1.600
422	1.600	472	1.600	522	1.600	572	1.600	622	1.600	672	1.600
423	1.600	473	1.600	523	1.600	573	1.600	623	1.600	673	1.600
424	1.600	474	1.600	524	1.600	574	1.600	624	1.600	674	1.600
425	1.600	475	1.600	525	1.600	575	1.600	625	1.600	675	1.600
426	1.600	476	1.600	526	1.600	576	1.600	626	1.600	676	1.600
427	1.600	477	1.600	527	1.600	577	1.600	627	1.600	677	1.600
428	1.600	478	1.600	528	1.600	578	1.600	628	1.600	678	1.600
429	1.600	479	1.600	529	1.600	579	1.600	629	1.600	679	1.600
430	1.600	480	1.600	530	1.600	580	1.600	630	1.600	680	1.600
431	1.600	481	1.600	531	1.600	581	1.600	631	1.600	681	1.600
432	1.600	482	1.600	532	1.600	582	1.600	632	1.600	682	1.600
433	1.600	483	1.600	533	1.600	583	1.600	633	1.600	683	1.600
434	1.600	484	1.600	534	1.600	584	1.600	634	1.600	684	1.600
435	1.600	485	1.600	535	1.600	585	1.600	635	1.600	685	1.600
436	1.600	486	1.600	536	1.600	586	1.600	636	1.600	686	1.600
437	1.600	487	1.600	537	1.600	587	1.600	637	1.600	687	1.600
438	1.600	488	1.600	538	1.600	588	1.600	638	1.600	688	1.600
439	1.600	489	1.600	539	1.600	589	1.600	639	1.600	689	1.600
440	1.600	490	1.600	540	1.600	590	1.600	640	1.600	690	1.600
©1982-2018 Innovyze											

Kirksaunders Associates Ltd										Page 18	
Templegate House 115-123 High Street Orpington Kent BR6 0LG					SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2,1IN30						
Date 24/06/2019 15:29					Designed by DO						
File UNIT 2 STORM NETWORK-WI...					Checked by						
Micro Drainage					Network 2018.1						
Surcharged Outfall Details for Existing											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
691	1.600	741	1.600	791	1.600	841	1.600	891	1.600	941	1.600
692	1.600	742	1.600	792	1.600	842	1.600	892	1.600	942	1.600
693	1.600	743	1.600	793	1.600	843	1.600	893	1.600	943	1.600
694	1.600	744	1.600	794	1.600	844	1.600	894	1.600	944	1.600
695	1.600	745	1.600	795	1.600	845	1.600	895	1.600	945	1.600
696	1.600	746	1.600	796	1.600	846	1.600	896	1.600	946	1.600
697	1.600	747	1.600	797	1.600	847	1.600	897	1.600	947	1.600
698	1.600	748	1.600	798	1.600	848	1.600	898	1.600	948	1.600
699	1.600	749	1.600	799	1.600	849	1.600	899	1.600	949	1.600
700	1.600	750	1.600	800	1.600	850	1.600	900	1.600	950	1.600
701	1.600	751	1.600	801	1.600	851	1.600	901	1.600	951	1.600
702	1.600	752	1.600	802	1.600	852	1.600	902	1.600	952	1.600
703	1.600	753	1.600	803	1.600	853	1.600	903	1.600	953	1.600
704	1.600	754	1.600	804	1.600	854	1.600	904	1.600	954	1.600
705	1.600	755	1.600	805	1.600	855	1.600	905	1.600	955	1.600
706	1.600	756	1.600	806	1.600	856	1.600	906	1.600	956	1.600
707	1.600	757	1.600	807	1.600	857	1.600	907	1.600	957	1.600
708	1.600	758	1.600	808	1.600	858	1.600	908	1.600	958	1.600
709	1.600	759	1.600	809	1.600	859	1.600	909	1.600	959	1.600
710	1.600	760	1.600	810	1.600	860	1.600	910	1.600	960	1.600
711	1.600	761	1.600	811	1.600	861	1.600	911	1.600	961	1.600
712	1.600	762	1.600	812	1.600	862	1.600	912	1.600	962	1.600
713	1.600	763	1.600	813	1.600	863	1.600	913	1.600	963	1.600
714	1.600	764	1.600	814	1.600	864	1.600	914	1.600	964	1.600
715	1.600	765	1.600	815	1.600	865	1.600	915	1.600	965	1.600
716	1.600	766	1.600	816	1.600	866	1.600	916	1.600	966	1.600
717	1.600	767	1.600	817	1.600	867	1.600	917	1.600	967	1.600
718	1.600	768	1.600	818	1.600	868	1.600	918	1.600	968	1.600
719	1.600	769	1.600	819	1.600	869	1.600	919	1.600	969	1.600
720	1.600	770	1.600	820	1.600	870	1.600	920	1.600	970	1.600
721	1.600	771	1.600	821	1.600	871	1.600	921	1.600	971	1.600
722	1.600	772	1.600	822	1.600	872	1.600	922	1.600	972	1.600
723	1.600	773	1.600	823	1.600	873	1.600	923	1.600	973	1.600
724	1.600	774	1.600	824	1.600	874	1.600	924	1.600	974	1.600
725	1.600	775	1.600	825	1.600	875	1.600	925	1.600	975	1.600
726	1.600	776	1.600	826	1.600	876	1.600	926	1.600	976	1.600
727	1.600	777	1.600	827	1.600	877	1.600	927	1.600	977	1.600
728	1.600	778	1.600	828	1.600	878	1.600	928	1.600	978	1.600
729	1.600	779	1.600	829	1.600	879	1.600	929	1.600	979	1.600
730	1.600	780	1.600	830	1.600	880	1.600	930	1.600	980	1.600
731	1.600	781	1.600	831	1.600	881	1.600	931	1.600	981	1.600
732	1.600	782	1.600	832	1.600	882	1.600	932	1.600	982	1.600
733	1.600	783	1.600	833	1.600	883	1.600	933	1.600	983	1.600
734	1.600	784	1.600	834	1.600	884	1.600	934	1.600	984	1.600
735	1.600	785	1.600	835	1.600	885	1.600	935	1.600	985	1.600
736	1.600	786	1.600	836	1.600	886	1.600	936	1.600	986	1.600
737	1.600	787	1.600	837	1.600	887	1.600	937	1.600	987	1.600
738	1.600	788	1.600	838	1.600	888	1.600	938	1.600	988	1.600
739	1.600	789	1.600	839	1.600	889	1.600	939	1.600	989	1.600
740	1.600	790	1.600	840	1.600	890	1.600	940	1.600	990	1.600
©1982-2018 Innovyze											

Kirksaunders Associates Ltd							Page 19		
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2,1IN30					
Date 24/06/2019 15:29				Designed by DO					
File UNIT 2 STORM NETWORK-WI...				Checked by					
Micro Drainage				Network 2018.1					
Surcharged Outfall Details for Existing									
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
991	1.600	1041	1.600	1091	1.600	1141	1.600	1191	1.600
992	1.600	1042	1.600	1092	1.600	1142	1.600	1192	1.600
993	1.600	1043	1.600	1093	1.600	1143	1.600	1193	1.600
994	1.600	1044	1.600	1094	1.600	1144	1.600	1194	1.600
995	1.600	1045	1.600	1095	1.600	1145	1.600	1195	1.600
996	1.600	1046	1.600	1096	1.600	1146	1.600	1196	1.600
997	1.600	1047	1.600	1097	1.600	1147	1.600	1197	1.600
998	1.600	1048	1.600	1098	1.600	1148	1.600	1198	1.600
999	1.600	1049	1.600	1099	1.600	1149	1.600	1199	1.600
1000	1.600	1050	1.600	1100	1.600	1150	1.600	1200	1.600
1001	1.600	1051	1.600	1101	1.600	1151	1.600	1201	1.600
1002	1.600	1052	1.600	1102	1.600	1152	1.600	1202	1.600
1003	1.600	1053	1.600	1103	1.600	1153	1.600	1203	1.600
1004	1.600	1054	1.600	1104	1.600	1154	1.600	1204	1.600
1005	1.600	1055	1.600	1105	1.600	1155	1.600	1205	1.600
1006	1.600	1056	1.600	1106	1.600	1156	1.600	1206	1.600
1007	1.600	1057	1.600	1107	1.600	1157	1.600	1207	1.600
1008	1.600	1058	1.600	1108	1.600	1158	1.600	1208	1.600
1009	1.600	1059	1.600	1109	1.600	1159	1.600	1209	1.600
1010	1.600	1060	1.600	1110	1.600	1160	1.600	1210	1.600
1011	1.600	1061	1.600	1111	1.600	1161	1.600	1211	1.600
1012	1.600	1062	1.600	1112	1.600	1162	1.600	1212	1.600
1013	1.600	1063	1.600	1113	1.600	1163	1.600	1213	1.600
1014	1.600	1064	1.600	1114	1.600	1164	1.600	1214	1.600
1015	1.600	1065	1.600	1115	1.600	1165	1.600	1215	1.600
1016	1.600	1066	1.600	1116	1.600	1166	1.600	1216	1.600
1017	1.600	1067	1.600	1117	1.600	1167	1.600	1217	1.600
1018	1.600	1068	1.600	1118	1.600	1168	1.600	1218	1.600
1019	1.600	1069	1.600	1119	1.600	1169	1.600	1219	1.600
1020	1.600	1070	1.600	1120	1.600	1170	1.600	1220	1.600
1021	1.600	1071	1.600	1121	1.600	1171	1.600	1221	1.600
1022	1.600	1072	1.600	1122	1.600	1172	1.600	1222	1.600
1023	1.600	1073	1.600	1123	1.600	1173	1.600	1223	1.600
1024	1.600	1074	1.600	1124	1.600	1174	1.600	1224	1.600
1025	1.600	1075	1.600	1125	1.600	1175	1.600	1225	1.600
1026	1.600	1076	1.600	1126	1.600	1176	1.600	1226	1.600
1027	1.600	1077	1.600	1127	1.600	1177	1.600	1227	1.600
1028	1.600	1078	1.600	1128	1.600	1178	1.600	1228	1.600
1029	1.600	1079	1.600	1129	1.600	1179	1.600	1229	1.600
1030	1.600	1080	1.600	1130	1.600	1180	1.600	1230	1.600
1031	1.600	1081	1.600	1131	1.600	1181	1.600	1231	1.600
1032	1.600	1082	1.600	1132	1.600	1182	1.600	1232	1.600
1033	1.600	1083	1.600	1133	1.600	1183	1.600	1233	1.600
1034	1.600	1084	1.600	1134	1.600	1184	1.600	1234	1.600
1035	1.600	1085	1.600	1135	1.600	1185	1.600	1235	1.600
1036	1.600	1086	1.600	1136	1.600	1186	1.600	1236	1.600
1037	1.600	1087	1.600	1137	1.600	1187	1.600	1237	1.600
1038	1.600	1088	1.600	1138	1.600	1188	1.600	1238	1.600
1039	1.600	1089	1.600	1139	1.600	1189	1.600	1239	1.600
1040	1.600	1090	1.600	1140	1.600	1190	1.600	1240	1.600
©1982-2018 Innovyze									

Kirksaunders Associates Ltd								Page 20			
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2,1IN30							
Date 24/06/2019 15:29				Designed by DO							
File UNIT 2 STORM NETWORK-WI...				Checked by							
Micro Drainage				Network 2018.1							
Surcharged Outfall Details for Existing											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
1291	1.600	1341	1.600	1391	1.600	1441	1.600	1491	1.600	1541	1.600
1292	1.600	1342	1.600	1392	1.600	1442	1.600	1492	1.600	1542	1.600
1293	1.600	1343	1.600	1393	1.600	1443	1.600	1493	1.600	1543	1.600
1294	1.600	1344	1.600	1394	1.600	1444	1.600	1494	1.600	1544	1.600
1295	1.600	1345	1.600	1395	1.600	1445	1.600	1495	1.600	1545	1.600
1296	1.600	1346	1.600	1396	1.600	1446	1.600	1496	1.600	1546	1.600
1297	1.600	1347	1.600	1397	1.600	1447	1.600	1497	1.600	1547	1.600
1298	1.600	1348	1.600	1398	1.600	1448	1.600	1498	1.600	1548	1.600
1299	1.600	1349	1.600	1399	1.600	1449	1.600	1499	1.600	1549	1.600
1300	1.600	1350	1.600	1400	1.600	1450	1.600	1500	1.600	1550	1.600
1301	1.600	1351	1.600	1401	1.600	1451	1.600	1501	1.600	1551	1.600
1302	1.600	1352	1.600	1402	1.600	1452	1.600	1502	1.600	1552	1.600
1303	1.600	1353	1.600	1403	1.600	1453	1.600	1503	1.600	1553	1.600
1304	1.600	1354	1.600	1404	1.600	1454	1.600	1504	1.600	1554	1.600
1305	1.600	1355	1.600	1405	1.600	1455	1.600	1505	1.600	1555	1.600
1306	1.600	1356	1.600	1406	1.600	1456	1.600	1506	1.600	1556	1.600
1307	1.600	1357	1.600	1407	1.600	1457	1.600	1507	1.600	1557	1.600
1308	1.600	1358	1.600	1408	1.600	1458	1.600	1508	1.600	1558	1.600
1309	1.600	1359	1.600	1409	1.600	1459	1.600	1509	1.600	1559	1.600
1310	1.600	1360	1.600	1410	1.600	1460	1.600	1510	1.600	1560	1.600
1311	1.600	1361	1.600	1411	1.600	1461	1.600	1511	1.600	1561	1.600
1312	1.600	1362	1.600	1412	1.600	1462	1.600	1512	1.600	1562	1.600
1313	1.600	1363	1.600	1413	1.600	1463	1.600	1513	1.600	1563	1.600
1314	1.600	1364	1.600	1414	1.600	1464	1.600	1514	1.600	1564	1.600
1315	1.600	1365	1.600	1415	1.600	1465	1.600	1515	1.600	1565	1.600
1316	1.600	1366	1.600	1416	1.600	1466	1.600	1516	1.600	1566	1.600
1317	1.600	1367	1.600	1417	1.600	1467	1.600	1517	1.600	1567	1.600
1318	1.600	1368	1.600	1418	1.600	1468	1.600	1518	1.600	1568	1.600
1319	1.600	1369	1.600	1419	1.600	1469	1.600	1519	1.600	1569	1.600
1320	1.600	1370	1.600	1420	1.600	1470	1.600	1520	1.600	1570	1.600
1321	1.600	1371	1.600	1421	1.600	1471	1.600	1521	1.600	1571	1.600
1322	1.600	1372	1.600	1422	1.600	1472	1.600	1522	1.600	1572	1.600
1323	1.600	1373	1.600	1423	1.600	1473	1.600	1523	1.600	1573	1.600
1324	1.600	1374	1.600	1424	1.600	1474	1.600	1524	1.600	1574	1.600
1325	1.600	1375	1.600	1425	1.600	1475	1.600	1525	1.600	1575	1.600
1326	1.600	1376	1.600	1426	1.600	1476	1.600	1526	1.600	1576	1.600
1327	1.600	1377	1.600	1427	1.600	1477	1.600	1527	1.600	1577	1.600
1328	1.600	1378	1.600	1428	1.600	1478	1.600	1528	1.600	1578	1.600
1329	1.600	1379	1.600	1429	1.600	1479	1.600	1529	1.600	1579	1.600
1330	1.600	1380	1.600	1430	1.600	1480	1.600	1530	1.600	1580	1.600
1331	1.600	1381	1.600	1431	1.600	1481	1.600	1531	1.600	1581	1.600
1332	1.600	1382	1.600	1432	1.600	1482	1.600	1532	1.600	1582	1.600
1333	1.600	1383	1.600	1433	1.600	1483	1.600	1533	1.600	1583	1.600
1334	1.600	1384	1.600	1434	1.600	1484	1.600	1534	1.600	1584	1.600
1335	1.600	1385	1.600	1435	1.600	1485	1.600	1535	1.600	1585	1.600
1336	1.600	1386	1.600	1436	1.600	1486	1.600	1536	1.600	1586	1.600
1337	1.600	1387	1.600	1437	1.600	1487	1.600	1537	1.600	1587	1.600
1338	1.600	1388	1.600	1438	1.600	1488	1.600	1538	1.600	1588	1.600
1339	1.600	1389	1.600	1439	1.600	1489	1.600	1539	1.600	1589	1.600
1340	1.600	1390	1.600	1440	1.600	1490	1.600	1540	1.600	1590	1.600
©1982-2018 Innovyze											

Kirksaunders Associates Ltd										Page 21	
Templegate House 115-123 High Street Orpington Kent BR6 0LG					SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2,1IN30						
Date 24/06/2019 15:29					Designed by DO						
File UNIT 2 STORM NETWORK-WI...					Checked by						
Micro Drainage					Network 2018.1						
Surcharged Outfall Details for Existing											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
1591	1.600	1641	1.600	1691	1.600	1741	1.600	1791	1.600	1841	1.600
1592	1.600	1642	1.600	1692	1.600	1742	1.600	1792	1.600	1842	1.600
1593	1.600	1643	1.600	1693	1.600	1743	1.600	1793	1.600	1843	1.600
1594	1.600	1644	1.600	1694	1.600	1744	1.600	1794	1.600	1844	1.600
1595	1.600	1645	1.600	1695	1.600	1745	1.600	1795	1.600	1845	1.600
1596	1.600	1646	1.600	1696	1.600	1746	1.600	1796	1.600	1846	1.600
1597	1.600	1647	1.600	1697	1.600	1747	1.600	1797	1.600	1847	1.600
1598	1.600	1648	1.600	1698	1.600	1748	1.600	1798	1.600	1848	1.600
1599	1.600	1649	1.600	1699	1.600	1749	1.600	1799	1.600	1849	1.600
1600	1.600	1650	1.600	1700	1.600	1750	1.600	1800	1.600	1850	1.600
1601	1.600	1651	1.600	1701	1.600	1751	1.600	1801	1.600	1851	1.600
1602	1.600	1652	1.600	1702	1.600	1752	1.600	1802	1.600	1852	1.600
1603	1.600	1653	1.600	1703	1.600	1753	1.600	1803	1.600	1853	1.600
1604	1.600	1654	1.600	1704	1.600	1754	1.600	1804	1.600	1854	1.600
1605	1.600	1655	1.600	1705	1.600	1755	1.600	1805	1.600	1855	1.600
1606	1.600	1656	1.600	1706	1.600	1756	1.600	1806	1.600	1856	1.600
1607	1.600	1657	1.600	1707	1.600	1757	1.600	1807	1.600	1857	1.600
1608	1.600	1658	1.600	1708	1.600	1758	1.600	1808	1.600	1858	1.600
1609	1.600	1659	1.600	1709	1.600	1759	1.600	1809	1.600	1859	1.600
1610	1.600	1660	1.600	1710	1.600	1760	1.600	1810	1.600	1860	1.600
1611	1.600	1661	1.600	1711	1.600	1761	1.600	1811	1.600	1861	1.600
1612	1.600	1662	1.600	1712	1.600	1762	1.600	1812	1.600	1862	1.600
1613	1.600	1663	1.600	1713	1.600	1763	1.600	1813	1.600	1863	1.600
1614	1.600	1664	1.600	1714	1.600	1764	1.600	1814	1.600	1864	1.600
1615	1.600	1665	1.600	1715	1.600	1765	1.600	1815	1.600	1865	1.600
1616	1.600	1666	1.600	1716	1.600	1766	1.600	1816	1.600	1866	1.600
1617	1.600	1667	1.600	1717	1.600	1767	1.600	1817	1.600	1867	1.600
1618	1.600	1668	1.600	1718	1.600	1768	1.600	1818	1.600	1868	1.600
1619	1.600	1669	1.600	1719	1.600	1769	1.600	1819	1.600	1869	1.600
1620	1.600	1670	1.600	1720	1.600	1770	1.600	1820	1.600	1870	1.600
1621	1.600	1671	1.600	1721	1.600	1771	1.600	1821	1.600	1871	1.600
1622	1.600	1672	1.600	1722	1.600	1772	1.600	1822	1.600	1872	1.600
1623	1.600	1673	1.600	1723	1.600	1773	1.600	1823	1.600	1873	1.600
1624	1.600	1674	1.600	1724	1.600	1774	1.600	1824	1.600	1874	1.600
1625	1.600	1675	1.600	1725	1.600	1775	1.600	1825	1.600	1875	1.600
1626	1.600	1676	1.600	1726	1.600	1776	1.600	1826	1.600	1876	1.600
1627	1.600	1677	1.600	1727	1.600	1777	1.600	1827	1.600	1877	1.600
1628	1.600	1678	1.600	1728	1.600	1778	1.600	1828	1.600	1878	1.600
1629	1.600	1679	1.600	1729	1.600	1779	1.600	1829	1.600	1879	1.600
1630	1.600	1680	1.600	1730	1.600	1780	1.600	1830	1.600	1880	1.600
1631	1.600	1681	1.600	1731	1.600	1781	1.600	1831	1.600	1881	1.600
1632	1.600	1682	1.600	1732	1.600	1782	1.600	1832	1.600	1882	1.600
1633	1.600	1683	1.600	1733	1.600	1783	1.600	1833	1.600	1883	1.600
1634	1.600	1684	1.600	1734	1.600	1784	1.600	1834	1.600	1884	1.600
1635	1.600	1685	1.600	1735	1.600	1785	1.600	1835	1.600	1885	1.600
1636	1.600	1686	1.600	1736	1.600	1786	1.600	1836	1.600	1886	1.600
1637	1.600	1687	1.600	1737	1.600	1787	1.600	1837	1.600	1887	1.600
1638	1.600	1688	1.600	1738	1.600	1788	1.600	1838	1.600	1888	1.600
1639	1.600	1689	1.600	1739	1.600	1789	1.600	1839	1.600	1889	1.600
1640	1.600	1690	1.600	1740	1.600	1790	1.600	1840	1.600	1890	1.600
©1982-2018 Innovyze											

Kirksaunders Associates Ltd										Page 22	
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2,1IN30							
Date 24/06/2019 15:29				Designed by DO							
File UNIT 2 STORM NETWORK-WI...				Checked by							
Micro Drainage				Network 2018.1							
Surcharged Outfall Details for Existing											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
1891	1.600	1941	1.600	1991	1.600	2041	1.600	2091	1.600	2141	1.600
1892	1.600	1942	1.600	1992	1.600	2042	1.600	2092	1.600	2142	1.600
1893	1.600	1943	1.600	1993	1.600	2043	1.600	2093	1.600	2143	1.600
1894	1.600	1944	1.600	1994	1.600	2044	1.600	2094	1.600	2144	1.600
1895	1.600	1945	1.600	1995	1.600	2045	1.600	2095	1.600	2145	1.600
1896	1.600	1946	1.600	1996	1.600	2046	1.600	2096	1.600	2146	1.600
1897	1.600	1947	1.600	1997	1.600	2047	1.600	2097	1.600	2147	1.600
1898	1.600	1948	1.600	1998	1.600	2048	1.600	2098	1.600	2148	1.600
1899	1.600	1949	1.600	1999	1.600	2049	1.600	2099	1.600	2149	1.600
1900	1.600	1950	1.600	2000	1.600	2050	1.600	2100	1.600	2150	1.600
1901	1.600	1951	1.600	2001	1.600	2051	1.600	2101	1.600	2151	1.600
1902	1.600	1952	1.600	2002	1.600	2052	1.600	2102	1.600	2152	1.600
1903	1.600	1953	1.600	2003	1.600	2053	1.600	2103	1.600	2153	1.600
1904	1.600	1954	1.600	2004	1.600	2054	1.600	2104	1.600	2154	1.600
1905	1.600	1955	1.600	2005	1.600	2055	1.600	2105	1.600	2155	1.600
1906	1.600	1956	1.600	2006	1.600	2056	1.600	2106	1.600	2156	1.600
1907	1.600	1957	1.600	2007	1.600	2057	1.600	2107	1.600	2157	1.600
1908	1.600	1958	1.600	2008	1.600	2058	1.600	2108	1.600	2158	1.600
1909	1.600	1959	1.600	2009	1.600	2059	1.600	2109	1.600	2159	1.600
1910	1.600	1960	1.600	2010	1.600	2060	1.600	2110	1.600	2160	1.600
1911	1.600	1961	1.600	2011	1.600	2061	1.600	2111	1.600	2161	1.600
1912	1.600	1962	1.600	2012	1.600	2062	1.600	2112	1.600	2162	1.600
1913	1.600	1963	1.600	2013	1.600	2063	1.600	2113	1.600	2163	1.600
1914	1.600	1964	1.600	2014	1.600	2064	1.600	2114	1.600	2164	1.600
1915	1.600	1965	1.600	2015	1.600	2065	1.600	2115	1.600	2165	1.600
1916	1.600	1966	1.600	2016	1.600	2066	1.600	2116	1.600	2166	1.600
1917	1.600	1967	1.600	2017	1.600	2067	1.600	2117	1.600	2167	1.600
1918	1.600	1968	1.600	2018	1.600	2068	1.600	2118	1.600	2168	1.600
1919	1.600	1969	1.600	2019	1.600	2069	1.600	2119	1.600	2169	1.600
1920	1.600	1970	1.600	2020	1.600	2070	1.600	2120	1.600	2170	1.600
1921	1.600	1971	1.600	2021	1.600	2071	1.600	2121	1.600	2171	1.600
1922	1.600	1972	1.600	2022	1.600	2072	1.600	2122	1.600	2172	1.600
1923	1.600	1973	1.600	2023	1.600	2073	1.600	2123	1.600	2173	1.600
1924	1.600	1974	1.600	2024	1.600	2074	1.600	2124	1.600	2174	1.600
1925	1.600	1975	1.600	2025	1.600	2075	1.600	2125	1.600	2175	1.600
1926	1.600	1976	1.600	2026	1.600	2076	1.600	2126	1.600	2176	1.600
1927	1.600	1977	1.600	2027	1.600	2077	1.600	2127	1.600	2177	1.600
1928	1.600	1978	1.600	2028	1.600	2078	1.600	2128	1.600	2178	1.600
1929	1.600	1979	1.600	2029	1.600	2079	1.600	2129	1.600	2179	1.600
1930	1.600	1980	1.600	2030	1.600	2080	1.600	2130	1.600	2180	1.600
1931	1.600	1981	1.600	2031	1.600	2081	1.600	2131	1.600	2181	1.600
1932	1.600	1982	1.600	2032	1.600	2082	1.600	2132	1.600	2182	1.600
1933	1.600	1983	1.600	2033	1.600	2083	1.600	2133	1.600	2183	1.600
1934	1.600	1984	1.600	2034	1.600	2084	1.600	2134	1.600	2184	1.600
1935	1.600	1985	1.600	2035	1.600	2085	1.600	2135	1.600	2185	1.600
1936	1.600	1986	1.600	2036	1.600	2086	1.600	2136	1.600	2186	1.600
1937	1.600	1987	1.600	2037	1.600	2087	1.600	2137	1.600	2187	1.600
1938	1.600	1988	1.600	2038	1.600	2088	1.600	2138	1.600	2188	1.600
1939	1.600	1989	1.600	2039	1.600	2089	1.600	2139	1.600	2189	1.600
1940	1.600	1990	1.600	2040	1.600	2090	1.600	2140	1.600	2190	1.600
©1982-2018 Innovyze											

Kirksaunders Associates Ltd										Page 23	
Templegate House 115-123 High Street Orpington Kent BR6 0LG					SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2,1IN30						
Date 24/06/2019 15:29					Designed by DO						
File UNIT 2 STORM NETWORK-WI...					Checked by						
Micro Drainage					Network 2018.1						
Surcharged Outfall Details for Existing											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
2191	1.600	2241	1.600	2291	1.600	2341	1.600	2391	1.600	2441	1.600
2192	1.600	2242	1.600	2292	1.600	2342	1.600	2392	1.600	2442	1.600
2193	1.600	2243	1.600	2293	1.600	2343	1.600	2393	1.600	2443	1.600
2194	1.600	2244	1.600	2294	1.600	2344	1.600	2394	1.600	2444	1.600
2195	1.600	2245	1.600	2295	1.600	2345	1.600	2395	1.600	2445	1.600
2196	1.600	2246	1.600	2296	1.600	2346	1.600	2396	1.600	2446	1.600
2197	1.600	2247	1.600	2297	1.600	2347	1.600	2397	1.600	2447	1.600
2198	1.600	2248	1.600	2298	1.600	2348	1.600	2398	1.600	2448	1.600
2199	1.600	2249	1.600	2299	1.600	2349	1.600	2399	1.600	2449	1.600
2200	1.600	2250	1.600	2300	1.600	2350	1.600	2400	1.600	2450	1.600
2201	1.600	2251	1.600	2301	1.600	2351	1.600	2401	1.600	2451	1.600
2202	1.600	2252	1.600	2302	1.600	2352	1.600	2402	1.600	2452	1.600
2203	1.600	2253	1.600	2303	1.600	2353	1.600	2403	1.600	2453	1.600
2204	1.600	2254	1.600	2304	1.600	2354	1.600	2404	1.600	2454	1.600
2205	1.600	2255	1.600	2305	1.600	2355	1.600	2405	1.600	2455	1.600
2206	1.600	2256	1.600	2306	1.600	2356	1.600	2406	1.600	2456	1.600
2207	1.600	2257	1.600	2307	1.600	2357	1.600	2407	1.600	2457	1.600
2208	1.600	2258	1.600	2308	1.600	2358	1.600	2408	1.600	2458	1.600
2209	1.600	2259	1.600	2309	1.600	2359	1.600	2409	1.600	2459	1.600
2210	1.600	2260	1.600	2310	1.600	2360	1.600	2410	1.600	2460	1.600
2211	1.600	2261	1.600	2311	1.600	2361	1.600	2411	1.600	2461	1.600
2212	1.600	2262	1.600	2312	1.600	2362	1.600	2412	1.600	2462	1.600
2213	1.600	2263	1.600	2313	1.600	2363	1.600	2413	1.600	2463	1.600
2214	1.600	2264	1.600	2314	1.600	2364	1.600	2414	1.600	2464	1.600
2215	1.600	2265	1.600	2315	1.600	2365	1.600	2415	1.600	2465	1.600
2216	1.600	2266	1.600	2316	1.600	2366	1.600	2416	1.600	2466	1.600
2217	1.600	2267	1.600	2317	1.600	2367	1.600	2417	1.600	2467	1.600
2218	1.600	2268	1.600	2318	1.600	2368	1.600	2418	1.600	2468	1.600
2219	1.600	2269	1.600	2319	1.600	2369	1.600	2419	1.600	2469	1.600
2220	1.600	2270	1.600	2320	1.600	2370	1.600	2420	1.600	2470	1.600
2221	1.600	2271	1.600	2321	1.600	2371	1.600	2421	1.600	2471	1.600
2222	1.600	2272	1.600	2322	1.600	2372	1.600	2422	1.600	2472	1.600
2223	1.600	2273	1.600	2323	1.600	2373	1.600	2423	1.600	2473	1.600
2224	1.600	2274	1.600	2324	1.600	2374	1.600	2424	1.600	2474	1.600
2225	1.600	2275	1.600	2325	1.600	2375	1.600	2425	1.600	2475	1.600
2226	1.600	2276	1.600	2326	1.600	2376	1.600	2426	1.600	2476	1.600
2227	1.600	2277	1.600	2327	1.600	2377	1.600	2427	1.600	2477	1.600
2228	1.600	2278	1.600	2328	1.600	2378	1.600	2428	1.600	2478	1.600
2229	1.600	2279	1.600	2329	1.600	2379	1.600	2429	1.600	2479	1.600
2230	1.600	2280	1.600	2330	1.600	2380	1.600	2430	1.600	2480	1.600
2231	1.600	2281	1.600	2331	1.600	2381	1.600	2431	1.600	2481	1.600
2232	1.600	2282	1.600	2332	1.600	2382	1.600	2432	1.600	2482	1.600
2233	1.600	2283	1.600	2333	1.600	2383	1.600	2433	1.600	2483	1.600
2234	1.600	2284	1.600	2334	1.600	2384	1.600	2434	1.600	2484	1.600
2235	1.600	2285	1.600	2335	1.600	2385	1.600	2435	1.600	2485	1.600
2236	1.600	2286	1.600	2336	1.600	2386	1.600	2436	1.600	2486	1.600
2237	1.600	2287	1.600	2337	1.600	2387	1.600	2437	1.600	2487	1.600
2238	1.600	2288	1.600	2338	1.600	2388	1.600	2438	1.600	2488	1.600
2239	1.600	2289	1.600	2339	1.600	2389	1.600	2439	1.600	2489	1.600
2240	1.600	2290	1.600	2340	1.600	2390	1.600	2440	1.600	2490	1.600
©1982-2018 Innovyze											

Kirksaunders Associates Ltd										Page 24	
Templegate House 115-123 High Street Orpington Kent BR6 0LG					SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2,1IN30						
Date 24/06/2019 15:29					Designed by DO						
File UNIT 2 STORM NETWORK-WI...					Checked by						
Micro Drainage					Network 2018.1						
Surcharged Outfall Details for Existing											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
2491	1.600	2541	1.600	2591	1.600	2641	1.600	2691	1.600	2741	1.600
2492	1.600	2542	1.600	2592	1.600	2642	1.600	2692	1.600	2742	1.600
2493	1.600	2543	1.600	2593	1.600	2643	1.600	2693	1.600	2743	1.600
2494	1.600	2544	1.600	2594	1.600	2644	1.600	2694	1.600	2744	1.600
2495	1.600	2545	1.600	2595	1.600	2645	1.600	2695	1.600	2745	1.600
2496	1.600	2546	1.600	2596	1.600	2646	1.600	2696	1.600	2746	1.600
2497	1.600	2547	1.600	2597	1.600	2647	1.600	2697	1.600	2747	1.600
2498	1.600	2548	1.600	2598	1.600	2648	1.600	2698	1.600	2748	1.600
2499	1.600	2549	1.600	2599	1.600	2649	1.600	2699	1.600	2749	1.600
2500	1.600	2550	1.600	2600	1.600	2650	1.600	2700	1.600	2750	1.600
2501	1.600	2551	1.600	2601	1.600	2651	1.600	2701	1.600	2751	1.600
2502	1.600	2552	1.600	2602	1.600	2652	1.600	2702	1.600	2752	1.600
2503	1.600	2553	1.600	2603	1.600	2653	1.600	2703	1.600	2753	1.600
2504	1.600	2554	1.600	2604	1.600	2654	1.600	2704	1.600	2754	1.600
2505	1.600	2555	1.600	2605	1.600	2655	1.600	2705	1.600	2755	1.600
2506	1.600	2556	1.600	2606	1.600	2656	1.600	2706	1.600	2756	1.600
2507	1.600	2557	1.600	2607	1.600	2657	1.600	2707	1.600	2757	1.600
2508	1.600	2558	1.600	2608	1.600	2658	1.600	2708	1.600	2758	1.600
2509	1.600	2559	1.600	2609	1.600	2659	1.600	2709	1.600	2759	1.600
2510	1.600	2560	1.600	2610	1.600	2660	1.600	2710	1.600	2760	1.600
2511	1.600	2561	1.600	2611	1.600	2661	1.600	2711	1.600	2761	1.600
2512	1.600	2562	1.600	2612	1.600	2662	1.600	2712	1.600	2762	1.600
2513	1.600	2563	1.600	2613	1.600	2663	1.600	2713	1.600	2763	1.600
2514	1.600	2564	1.600	2614	1.600	2664	1.600	2714	1.600	2764	1.600
2515	1.600	2565	1.600	2615	1.600	2665	1.600	2715	1.600	2765	1.600
2516	1.600	2566	1.600	2616	1.600	2666	1.600	2716	1.600	2766	1.600
2517	1.600	2567	1.600	2617	1.600	2667	1.600	2717	1.600	2767	1.600
2518	1.600	2568	1.600	2618	1.600	2668	1.600	2718	1.600	2768	1.600
2519	1.600	2569	1.600	2619	1.600	2669	1.600	2719	1.600	2769	1.600
2520	1.600	2570	1.600	2620	1.600	2670	1.600	2720	1.600	2770	1.600
2521	1.600	2571	1.600	2621	1.600	2671	1.600	2721	1.600	2771	1.600
2522	1.600	2572	1.600	2622	1.600	2672	1.600	2722	1.600	2772	1.600
2523	1.600	2573	1.600	2623	1.600	2673	1.600	2723	1.600	2773	1.600
2524	1.600	2574	1.600	2624	1.600	2674	1.600	2724	1.600	2774	1.600
2525	1.600	2575	1.600	2625	1.600	2675	1.600	2725	1.600	2775	1.600
2526	1.600	2576	1.600	2626	1.600	2676	1.600	2726	1.600	2776	1.600
2527	1.600	2577	1.600	2627	1.600	2677	1.600	2727	1.600	2777	1.600
2528	1.600	2578	1.600	2628	1.600	2678	1.600	2728	1.600	2778	1.600
2529	1.600	2579	1.600	2629	1.600	2679	1.600	2729	1.600	2779	1.600
2530	1.600	2580	1.600	2630	1.600	2680	1.600	2730	1.600	2780	1.600
2531	1.600	2581	1.600	2631	1.600	2681	1.600	2731	1.600	2781	1.600
2532	1.600	2582	1.600	2632	1.600	2682	1.600	2732	1.600	2782	1.600
2533	1.600	2583	1.600	2633	1.600	2683	1.600	2733	1.600	2783	1.600
2534	1.600	2584	1.600	2634	1.600	2684	1.600	2734	1.600	2784	1.600
2535	1.600	2585	1.600	2635	1.600	2685	1.600	2735	1.600	2785	1.600
2536	1.600	2586	1.600	2636	1.600	2686	1.600	2736	1.600	2786	1.600
2537	1.600	2587	1.600	2637	1.600	2687	1.600	2737	1.600	2787	1.600
2538	1.600	2588	1.600	2638	1.600	2688	1.600	2738	1.600	2788	1.600
2539	1.600	2589	1.600	2639	1.600	2689	1.600	2739	1.600	2789	1.600
2540	1.600	2590	1.600	2640	1.600	2690	1.600	2740	1.600	2790	1.600
©1982-2018 Innovyze											

Kirksaunders Associates Ltd		Page 25
Templegate House 115-123 High Street Orpington Kent BR6 0LG	SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2,1IN30	
Date 24/06/2019 15:29	Designed by DO	
File UNIT 2 STORM NETWORK-WI...	Checked by	
Micro Drainage		Network 2018.1

Surcharged Outfall Details for Existing

Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
2791	1.600	2806	1.600	2821	1.600	2836	1.600	2851	1.600	2866	1.600
2792	1.600	2807	1.600	2822	1.600	2837	1.600	2852	1.600	2867	1.600
2793	1.600	2808	1.600	2823	1.600	2838	1.600	2853	1.600	2868	1.600
2794	1.600	2809	1.600	2824	1.600	2839	1.600	2854	1.600	2869	1.600
2795	1.600	2810	1.600	2825	1.600	2840	1.600	2855	1.600	2870	1.600
2796	1.600	2811	1.600	2826	1.600	2841	1.600	2856	1.600	2871	1.600
2797	1.600	2812	1.600	2827	1.600	2842	1.600	2857	1.600	2872	1.600
2798	1.600	2813	1.600	2828	1.600	2843	1.600	2858	1.600	2873	1.600
2799	1.600	2814	1.600	2829	1.600	2844	1.600	2859	1.600	2874	1.600
2800	1.600	2815	1.600	2830	1.600	2845	1.600	2860	1.600	2875	1.600
2801	1.600	2816	1.600	2831	1.600	2846	1.600	2861	1.600	2876	1.600
2802	1.600	2817	1.600	2832	1.600	2847	1.600	2862	1.600	2877	1.600
2803	1.600	2818	1.600	2833	1.600	2848	1.600	2863	1.600	2878	1.600
2804	1.600	2819	1.600	2834	1.600	2849	1.600	2864	1.600	2879	1.600
2805	1.600	2820	1.600	2835	1.600	2850	1.600	2865	1.600	2880	1.600

Simulation Criteria for Existing

Volumetric Runoff Coeff	0.750	Additional Flow - % of Total Flow	0.000
Areal Reduction Factor	1.000	MADD Factor * 10m³/ha Storage	2.000
Hot Start (mins)	0	Inlet Coefficient	0.800
Hot Start Level (mm)	0	Flow per Person per Day (l/per/day)	0.000
Manhole Headloss Coeff (Global)	0.500	Run Time (mins)	60
Foul Sewage per hectare (l/s)	0.000	Output Interval (mins)	1
Number of Input Hydrographs 0			
Number of Online Controls 2		Number of Storage Structures 6	
Number of Offline Controls 0		Number of Time/Area Diagrams 0	
		Number of Real Time Controls 0	

Synthetic Rainfall Details

Rainfall Model	FSR	Profile Type	Summer
Return Period (years)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	19.000	Storm Duration (mins)	30
Ratio R	0.350		

©1982-2018 Innovyze

Kirksaunders Associates Ltd		Page 26
Templegate House 115-123 High Street Orpington Kent BR6 0LG	SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2, 1IN30	
Date 24/06/2019 15:29	Designed by DO	
File UNIT 2 STORM NETWORK-WI...	Checked by	
Micro Drainage	Network 2018.1	

Online Controls for Existing

Hydro-Brake® Optimum Manhole: ES10, DS/PN: E1.016, Volume (m³): 1.9

Unit Reference	MD-SHE-0092-3800-1000-3800
Design Head (m)	1.000
Design Flow (l/s)	3.8
Flush-Flo™	Calculated
Objective	Minimise upstream storage
Application	Surface
Sump Available	Yes
Diameter (mm)	92
Invert Level (m)	0.525
Minimum Outlet Pipe Diameter (mm)	150
Suggested Manhole Diameter (mm)	1200

Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	1.000	3.8
Flush-Flo™	0.298	3.8
Kick-Flo®	0.632	3.1
Mean Flow over Head Range	-	3.3

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)
0.100	2.9	1.200	4.1	3.000	6.3	7.000	9.5
0.200	3.7	1.400	4.4	3.500	6.8	7.500	9.8
0.300	3.8	1.600	4.7	4.000	7.3	8.000	10.1
0.400	3.7	1.800	5.0	4.500	7.7	8.500	10.4
0.500	3.6	2.000	5.2	5.000	8.1	9.000	10.7
0.600	3.3	2.200	5.5	5.500	8.4	9.500	10.9
0.800	3.4	2.400	5.7	6.000	8.8		
1.000	3.8	2.600	5.9	6.500	9.1		

Orifice Manhole: ESWMH15, DS/PN: E1.018, Volume (m³): 97.5

Diameter (m) 0.050 Discharge Coefficient 0.600 Invert Level (m) 0.290

©1982-2018 Innovyze

Kirksaunders Associates Ltd		Page 27
Templegate House 115-123 High Street Orpington Kent BR6 0LG	SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2, 1IN30	
Date 24/06/2019 15:29	Designed by DO	
File UNIT 2 STORM NETWORK-WI...	Checked by	
Micro Drainage		Network 2018.1

Storage Structures for Existing

Cellular Storage Manhole: ETANK 2, DS/PN: E1.008

Invert Level (m) 0.950 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)
0.000	1050.0	1050.0	0.900	0.0	1209.2
0.800	1050.0	1209.2			

Cellular Storage Manhole: ETANK 1, DS/PN: E1.013

Invert Level (m) 1.115 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)
0.000	368.0	368.0	1.100	0.0	446.0
1.000	368.0	446.0			

Infiltration Trench Manhole: ESWMHS11B, DS/PN: E13.000

Infiltration Coefficient Base (m/hr) 0.00310 Trench Width (m) 0.5
 Infiltration Coefficient Side (m/hr) 0.00310 Trench Length (m) 122.0
 Safety Factor 2.0 Slope (1:X) 0.0
 Porosity 0.30 Cap Volume Depth (m) 1.450
 Invert Level (m) 0.380 Cap Infiltration Depth (m) 1.150

Infiltration Trench Manhole: ESWMH S12, DS/PN: E13.001

Infiltration Coefficient Base (m/hr) 0.00000 Trench Width (m) 0.2
 Infiltration Coefficient Side (m/hr) 0.00000 Trench Length (m) 90.5
 Safety Factor 2.0 Slope (1:X) 0.0
 Porosity 0.30 Cap Volume Depth (m) 1.415
 Invert Level (m) 0.320 Cap Infiltration Depth (m) 1.115

Infiltration Trench Manhole: ESWMHS13, DS/PN: E13.002

Infiltration Coefficient Base (m/hr) 0.00000 Trench Width (m) 0.5
 Infiltration Coefficient Side (m/hr) 0.00000 Trench Length (m) 26.5
 Safety Factor 2.0 Slope (1:X) 0.0
 Porosity 0.30 Cap Volume Depth (m) 1.450
 Invert Level (m) 0.310 Cap Infiltration Depth (m) 1.150

©1982-2018 Innovyze

Kirksaunders Associates Ltd		Page 28																				
Templegate House 115-123 High Street Orpington Kent BR6 0LG	SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2,1IN30																					
Date 24/06/2019 15:29	Designed by DO																					
File UNIT 2 STORM NETWORK-WI...	Checked by																					
Micro Drainage		Network 2018.1																				
<u>Infiltration Trench Manhole: ESWMH14, DS/PN: E1.017</u> <table> <tr> <td>Infiltration Coefficient Base (m/hr)</td> <td>0.00000</td> <td>Trench Width (m)</td> <td>0.5</td> </tr> <tr> <td>Infiltration Coefficient Side (m/hr)</td> <td>0.00000</td> <td>Trench Length (m)</td> <td>68.0</td> </tr> <tr> <td>Safety Factor</td> <td>2.0</td> <td>Slope (1:X)</td> <td>6835.0</td> </tr> <tr> <td>Porosity</td> <td>0.30</td> <td>Cap Volume Depth (m)</td> <td>1.300</td> </tr> <tr> <td>Invert Level (m)</td> <td>0.300</td> <td>Cap Infiltration Depth (m)</td> <td>1.150</td> </tr> </table>			Infiltration Coefficient Base (m/hr)	0.00000	Trench Width (m)	0.5	Infiltration Coefficient Side (m/hr)	0.00000	Trench Length (m)	68.0	Safety Factor	2.0	Slope (1:X)	6835.0	Porosity	0.30	Cap Volume Depth (m)	1.300	Invert Level (m)	0.300	Cap Infiltration Depth (m)	1.150
Infiltration Coefficient Base (m/hr)	0.00000	Trench Width (m)	0.5																			
Infiltration Coefficient Side (m/hr)	0.00000	Trench Length (m)	68.0																			
Safety Factor	2.0	Slope (1:X)	6835.0																			
Porosity	0.30	Cap Volume Depth (m)	1.300																			
Invert Level (m)	0.300	Cap Infiltration Depth (m)	1.150																			
©1982-2018 Innovyze																						

Kirksaunders Associates Ltd							Page 29	
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2,1IN30				
Date 24/06/2019 15:29				Designed by DO				
File UNIT 2 STORM NETWORK-WI...				Checked by				
Micro Drainage				Network 2018.1				
<u>Summary of Critical Results by Maximum Level (Rank 1) for Existing</u>								
<u>Simulation Criteria</u>								
Areal Reduction Factor		1.000	Additional Flow - % of Total Flow		0.000			
Hot Start (mins)		0	MADD Factor * 10m³/ha Storage		2.000			
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 Storage Structures		6			
Number of Online Controls		2	Number of Time/Area Diagrams		0			
Number of Offline Controls		0	Number of Real Time Controls		0			
<u>Synthetic Rainfall Details</u>								
Rainfall Model		FSR	Ratio R		0.350			
Region England and Wales Cv (Summer)		0.750						
M5-60 (mm)		19.000	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, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080						
Return Period(s) (years)		1, 2, 30						
Climate Change (%)		0, 0, 0						

Kirksaunders Associates Ltd		Page 30
Templegate House 115-123 High Street Orpington Kent BR6 0LG	SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2,1IN30	
Date 24/06/2019 15:29 File UNIT 2 STORM NETWORK-WI...	Designed by DO Checked by	
Micro Drainage	Network 2018.1	

Summary of Critical Results by Maximum Level (Rank 1) for Existing

PN	US/MH Name	Surcharged Flooded		Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status	Level Exceeded
		Depth (m)	Volume (m³)					
E1.000	E1	-0.092	0.000	0.05		5.1	FLOOD RISK	
E1.001	E1-2	-0.065	0.000	0.11		10.5	FLOOD RISK	
E1.002	E1-4	-0.038	0.000	0.17		15.6	FLOOD RISK	
E1.003	E1-6	-0.012	0.000	0.23		20.8	FLOOD RISK	
E1.004	E1-8	0.014	0.000	0.28		26.1	FLOOD RISK	
E1.005	E2	0.286	0.000	0.25		24.6	FLOOD RISK	
E2.000	E3	-0.044	0.000	0.07		6.5	FLOOD RISK	
E2.001	E3-2	-0.017	0.000	0.15		13.8	FLOOD RISK	
E2.002	E3-6	0.037	0.000	0.22		20.0	FLOOD RISK	
E2.003	E3	0.337	0.000	0.21		18.0	FLOOD RISK	
E3.000	E5	-0.353	0.000	0.05		4.8	FLOOD RISK	
E3.001	E5-4	-0.310	0.000	0.10		8.9	FLOOD RISK	
E3.002	E5-8	-0.268	0.000	0.15		13.7	FLOOD RISK	
E3.003	E5-14	-0.204	0.000	0.19		17.6	FLOOD RISK	
E3.004	E5-20	-0.142	0.000	0.23		21.2	FLOOD RISK	
E3.005	E5-24	-0.102	0.000	0.27		25.2	FLOOD RISK	
E3.006	E5-28	-0.062	0.000	0.28		29.3	FLOOD RISK	
E3.007	E5-32	-0.020	0.000	0.31		33.5	FLOOD RISK	

Kirksaunders Associates Ltd						Page 31		
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2,1IN30				
Date 24/06/2019 15:29				Designed by DO				
File UNIT 2 STORM NETWORK-WI...				Checked by				
Micro Drainage				Network 2018.1				
<u>Summary of Critical Results by Maximum Level (Rank 1) for Existing</u>								
PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.
E3.008	E5-36	15 Summer	30	+0%				
E3.009	E5-40	15 Winter	30	+0%				
E3.010	E5-44	15 Winter	30	+0%				
E3.011	E4	15 Winter	30	+0%	30/15 Summer			
E1.006	ES1	15 Winter	30	+0%	30/15 Summer			
E4.000	E8	15 Winter	30	+0%				
E4.001	E8-5	15 Winter	30	+0%				
E4.002	E8-9	15 Winter	30	+0%				
E4.003	E8-12	15 Winter	30	+0%				
E4.004	E8-15	15 Winter	30	+0%				
E4.005	E8-19	15 Winter	30	+0%				
E4.006	E9	15 Winter	30	+0%	30/15 Summer			
E5.000	E10	15 Winter	30	+0%				
E5.001	E10-2	15 Winter	30	+0%				
E5.002	E11	15 Winter	30	+0%				
E5.003	ES2A	15 Winter	30	+0%				
E6.000	E13	15 Winter	30	+0%				
E6.001	E13-2	15 Winter	30	+0%				
E6.002	E14	15 Winter	30	+0%	30/15 Summer			
E7.000	E15	15 Winter	30	+0%				
E7.001	E15-2	15 Winter	30	+0%				
E7.002	E16	15 Winter	30	+0%	30/15 Summer			
E1.007	ES2	15 Winter	30	+0%	2/15 Summer			
E1.008	ETANK 2	1440 Winter	30	+0%				
E1.009	E122	1440 Winter	30	+0%				
E1.010	E123	1440 Winter	30	+0%				
E1.011	ES3	1440 Winter	30	+0%				
E8.000	ES5	15 Winter	30	+0%				
E1.012	ES4	1440 Winter	30	+0%	30/360 Winter			
E9.000	ES5A	1440 Winter	30	+0%	30/360 Winter			
E10.000	E23	15 Winter	30	+0%				
E10.001	E23-4	1440 Winter	30	+0%				
E10.002	E23-9	1440 Winter	30	+0%				
E10.003	E24	1440 Winter	30	+0%	30/60 Winter			
E11.000	E25	1440 Winter	30	+0%				
E11.001	E25-3	1440 Winter	30	+0%				
E11.002	E26	1440 Winter	30	+0%	2/480 Winter			
E9.001	ES5B	1440 Winter	30	+0%	2/720 Winter			
E9.002	ES6	1440 Winter	30	+0%	1/360 Winter			
E12.000	ES7	15 Winter	30	+0%				
E12.001	ES8	15 Winter	30	+0%				
E12.002	ES9	1440 Winter	30	+0%				
E1.013	ETANK 1	1440 Winter	30	+0%	1/30 Winter			
E1.014	E157	1440 Winter	30	+0%	30/600 Winter			
E1.015	E158	1440 Winter	30	+0%	1/30 Winter			
E1.016	ES10	1440 Winter	30	+0%	1/15 Summer			
E13.000	ESWMHS11B	1440 Winter	30	+0%				
E13.001	ESWMH S12	1440 Winter	30	+0%				
E13.002	ESWMHS13	1440 Winter	30	+0%				
©1982-2018 Innovyze								

Kirksaunders Associates Ltd							Page 32		
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2,1IN30					
Date 24/06/2019 15:29 File UNIT 2 STORM NETWORK-WI...				Designed by DO Checked by					
Micro Drainage				Network 2018.1					
Summary of Critical Results by Maximum Level (Rank 1) for Existing									
PN	US/MH Name	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status	Level Exceeded
E3.008	E5-36	2.256	0.000	0.000	0.32		34.4	FLOOD RISK	
E3.009	E5-40	2.130	-0.082	0.000	0.44		40.3	OK	
E3.010	E5-44	2.124	-0.045	0.000	0.46		42.8	OK	
E3.011	E4	2.118	0.248	0.000	0.42		42.7	SURCHARGED	
E1.006	ES1	2.080	0.378	0.000	1.21		111.4	SURCHARGED	
E4.000	E8	1.889	-0.222	0.000	0.15		13.9	OK	
E4.001	E8-5	1.887	-0.157	0.000	0.28		26.2	OK	
E4.002	E8-9	1.883	-0.107	0.000	0.42		38.6	OK	
E4.003	E8-12	1.876	-0.074	0.000	0.55		51.1	OK	
E4.004	E8-15	1.867	-0.043	0.000	0.69		63.7	OK	
E4.005	E8-19	1.856	0.000	0.000	0.83		76.3	OK	
E4.006	E9	1.762	0.217	0.000	0.82		76.2	SURCHARGED	
E5.000	E10	1.771	-0.495	0.000	0.05		4.9	OK	
E5.001	E10-2	1.767	-0.477	0.000	0.11		10.0	OK	
E5.002	E11	1.739	-0.231	0.000	0.25		10.0	OK	
E5.003	ES2A	1.717	-0.233	0.000	0.10		9.6	OK	
E6.000	E13	1.716	-0.105	0.000	0.03		2.4	OK	
E6.001	E13-2	1.716	-0.078	0.000	0.05		4.5	OK	
E6.002	E14	1.715	0.200	0.000	0.06		5.4	SURCHARGED	
E7.000	E15	1.714	-0.078	0.000	0.01		1.0	OK	
E7.001	E15-2	1.714	-0.042	0.000	0.03		2.7	OK	
E7.002	E16	1.714	0.219	0.000	0.05		3.8	SURCHARGED	
E1.007	ES2	1.713	0.249	0.000	2.14		193.1	SURCHARGED	
E1.008	ETANK 2	1.379	-0.031	0.000	0.11		8.9	OK	
E1.009	E122	1.379	-0.679	0.000	0.00		8.9	OK	
E1.010	E123	1.379	-0.027	0.000	0.10		8.4	OK	
E1.011	ES3	1.379	-0.026	0.000	0.09		8.4	OK	
E8.000	ES5	1.607	-0.128	0.000	0.58		47.1	OK	
E1.012	ES4	1.377	0.057	0.000	0.04		9.8	SURCHARGED	
E9.000	ES5A	1.376	0.076	0.000	0.00		0.0	SURCHARGED	
E10.000	E23	1.842	-0.464	0.000	0.18		16.3	OK	
E10.001	E23-4	1.376	-0.098	0.000	0.02		1.8	OK	
E10.002	E23-9	1.376	-0.084	0.000	0.03		2.6	OK	
E10.003	E24	1.376	0.176	0.000	0.03		2.6	SURCHARGED	
E11.000	E25	1.376	-0.090	0.000	0.00		0.1	OK	
E11.001	E25-3	1.376	-0.080	0.000	0.00		0.4	OK	
E11.002	E26	1.376	0.226	0.000	0.01		0.6	SURCHARGED	
E9.001	ES5B	1.376	0.216	0.000	0.03		3.1	SURCHARGED	
E9.002	ES6	1.376	0.291	0.000	0.02		3.1	SURCHARGED	
E12.000	ES7	2.676	-0.184	0.000	0.43		56.2	OK	
E12.001	ES8	2.059	-0.251	0.000	0.18		55.9	OK	
E12.002	ES9	1.375	-0.075	0.000	0.01		3.2	OK	
E1.013	ETANK 1	1.376	0.466	0.000	0.16		12.8	SURCHARGED	
E1.014	E157	1.383	0.030	0.000	0.00		12.7	SURCHARGED	
E1.015	E158	1.383	0.458	0.000	0.08		8.1	SURCHARGED	
E1.016	ES10	1.571	0.821	0.000	0.10		3.8	SURCHARGED	
E13.000	ESWMHS11B	0.772	-0.363	0.000	0.00		2.0	OK	
E13.001	ESWMH S12	0.772	-0.348	0.000	0.00		24.5	OK	
©1982-2018 Innovyze									

Kirksaunders Associates Ltd							Page 33		
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2,1IN30					
Date 24/06/2019 15:29				Designed by DO					
File UNIT 2 STORM NETWORK-WI...				Checked by					
Micro Drainage				Network 2018.1					
<u>Summary of Critical Results by Maximum Level (Rank 1) for Existing</u>									
PN	US/MH Name	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status	Level Exceeded
E13.002	ESWMHS13	0.772	-0.953	0.000	0.02		16.4	OK	
©1982-2018 Innovyze									

Kirksaunders Associates Ltd		Page 34
Templegate House 115-123 High Street Orpington Kent BR6 0LG	SALT BOX BOGNOR REGIS UNIT 2 1IN1, 1IN2, 1IN30	
Date 24/06/2019 15:29	Designed by DO	
File UNIT 2 STORM NETWORK-WI...	Checked by	
Micro Drainage		Network 2018.1

Summary of Critical Results by Maximum Level (Rank 1) for Existing

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.
E1.017	ESWMH14	1440 Winter	30	+0%				
E1.018	ESWMH15	1440 Winter	30	+0%	1/480 Winter			

PN	US/MH Name	Water	Surcharged	Flooded			Pipe	Status	Level Exceeded
		Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Flow (l/s)		
E1.017	ESWMH14	0.772	-0.943	0.000	0.01		16.3	OK	
E1.018	ESWMH15	0.772	0.257	0.000	0.00		0.0	SURCHARGED	

Kirksaunders Associates Ltd										Page 1	
Templegate House 115-123 High Street Orpington Kent BR6 0LG					SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC						
Date 24/06/2019 14:31					Designed by DO						
File UNIT 2 STORM NETWORK-WI...					Checked by						
Micro Drainage					Network 2018.1						
Existing Network Details for Existing											
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	
E1.000	3.000	0.005	600.0	0.024	5.00	0.0	0.600	CA	350	CastSlot	
E1.001	3.000	0.014	214.3	0.024	0.00	0.0	0.600	CA	350	CastSlot	
E1.002	3.000	0.014	214.3	0.024	0.00	0.0	0.600	CA	350	CastSlot	
E1.003	3.000	0.014	214.3	0.024	0.00	0.0	0.600	CA	350	CastSlot	
E1.004	3.000	0.014	214.3	0.024	0.00	0.0	0.600	CA	350	CastSlot	
E1.005	22.255	0.103	216.1	0.000	0.00	0.0	0.600	o	350	Pipe/Conduit	
E2.000	3.000	0.014	214.3	0.032	5.00	0.0	0.600	CA	350	CastSlot	
E2.001	3.000	0.013	230.8	0.032	0.00	0.0	0.600	CA	350	CastSlot	
E2.002	3.000	0.014	214.3	0.032	0.00	0.0	0.600	CA	350	CastSlot	
E2.003	10.484	0.048	218.4	0.000	5.00	0.0	0.600	o	350	Pipe/Conduit	
E3.000	3.000	0.011	272.7	0.020	5.00	0.0	0.600	CA	350	CastSlot	
E3.001	3.000	0.011	272.7	0.020	0.00	0.0	0.600	CA	350	CastSlot	
E3.002	3.000	0.005	600.0	0.020	0.00	0.0	0.600	CA	350	CastSlot	
E3.003	3.000	0.011	272.7	0.020	0.00	0.0	0.600	CA	350	CastSlot	
E3.004	3.000	0.011	272.7	0.020	0.00	0.0	0.600	CA	350	CastSlot	
E3.005	3.000	0.011	272.7	0.020	0.00	0.0	0.600	CA	350	CastSlot	
E3.006	0.500	0.002	250.0	0.020	0.00	0.0	0.600	CA	350	CastSlot	
E3.007	0.500	0.002	250.0	0.020	0.00	0.0	0.600	CA	350	CastSlot	
E3.008	0.500	0.002	250.0	0.020	0.00	0.0	0.600	CA	350	CastSlot	
E3.009	3.000	0.011	272.7	0.020	0.00	0.0	0.600	CA	350	CastSlot	
Network Results Table											
PN	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Vel (m/s)	Cap (l/s)						
E1.000	1.595	0.024	0.0	0.73	79.9						
E1.001	1.567	0.048	0.0	0.86	94.0						
E1.002	1.539	0.072	0.0	0.86	94.0						
E1.003	1.511	0.096	0.0	0.86	94.0						
E1.004	1.483	0.120	0.0	0.86	94.0						
E1.005	1.455	0.120	0.0	1.18	113.1						
E2.000	1.540	0.032	0.0	0.86	94.0						
E2.001	1.512	0.064	0.0	0.84	92.6						
E2.002	1.457	0.096	0.0	0.86	94.0						
E2.003	1.400	0.096	0.0	1.17	112.5						
E3.000	2.050	0.020	0.0	0.82	89.7						
E3.001	2.007	0.040	0.0	0.82	89.7						
E3.002	1.963	0.060	0.0	0.73	79.9						
E3.003	1.898	0.080	0.0	0.82	89.7						
E3.004	1.833	0.100	0.0	0.82	89.7						
E3.005	1.790	0.120	0.0	0.82	89.7						
E3.006	1.746	0.140	0.0	0.83	90.9						
E3.007	1.703	0.160	0.0	0.83	90.9						
E3.008	1.660	0.180	0.0	0.83	90.9						
E3.009	1.616	0.200	0.0	0.82	89.7						
©1982-2018 Innovyze											

Kirksaunders Associates Ltd										Page 2	
Templegate House 115-123 High Street Orpington Kent BR6 0LG					SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC						
Date 24/06/2019 14:31 File UNIT 2 STORM NETWORK-WI...					Designed by DO Checked by						
Micro Drainage					Network 2018.1						
Existing Network Details for Existing											
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	
E3.010	3.000	0.011	272.7	0.020	0.00	0.0	0.600	CA	350	CastSlot	
E3.011	36.296	0.168	216.0	0.000	5.00	0.0	0.600	o	350	Pipe/Conduit	
E1.006	69.297	0.238	291.2	0.209	5.00	0.0	0.600	o	350	Pipe/Conduit	
E4.000	3.000	0.013	230.8	0.050	5.00	0.0	0.600	CA	350	CastSlot	
E4.001	3.000	0.013	230.8	0.050	0.00	0.0	0.600	CA	350	CastSlot	
E4.002	3.000	0.013	230.8	0.050	0.00	0.0	0.600	CA	350	CastSlot	
E4.003	3.000	0.013	230.8	0.050	0.00	0.0	0.600	CA	350	CastSlot	
E4.004	3.000	0.014	214.3	0.050	0.00	0.0	0.600	CA	350	CastSlot	
E4.005	3.000	0.013	230.8	0.050	0.00	0.0	0.600	CA	350	CastSlot	
E4.006	18.039	0.081	222.7	0.000	0.00	0.0	0.600	o	350	Pipe/Conduit	
E5.000	3.000	0.011	272.7	0.016	5.00	0.0	0.600	CA	350	CastSlot	
E5.001	3.000	0.008	375.0	0.016	0.00	0.0	0.600	CA	350	CastSlot	
E5.002	10.897	0.020	544.9	0.000	0.00	0.0	0.600	o	350	Pipe/Conduit	
E5.003	18.209	0.095	191.7	0.000	0.00	0.0	0.600	o	350	Pipe/Conduit	
E6.000	3.000	0.014	214.3	0.012	5.00	0.0	0.600	CA	350	CastSlot	
E6.001	3.000	0.014	214.3	0.012	0.00	0.0	0.600	CA	350	CastSlot	
E6.002	11.735	0.051	230.1	0.000	0.00	0.0	0.600	o	350	Pipe/Conduit	
Network Results Table											
PN	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Vel (m/s)	Cap (l/s)						
E3.010	1.573	0.220	0.0	0.82	89.7						
E3.011	1.520	0.220	0.0	1.18	113.1						
E1.006	1.352	0.645	0.0	1.01	97.3						
E4.000	1.515	0.050	0.0	0.84	92.6						
E4.001	1.448	0.100	0.0	0.84	92.6						
E4.002	1.394	0.150	0.0	0.84	92.6						
E4.003	1.354	0.200	0.0	0.84	92.6						
E4.004	1.314	0.250	0.0	0.86	94.0						
E4.005	1.260	0.300	0.0	0.84	92.6						
E4.006	1.195	0.300	0.0	1.16	111.4						
E5.000	1.670	0.016	0.0	0.82	89.7						
E5.001	1.648	0.032	0.0	0.78	85.1						
E5.002	1.620	0.032	0.0	1.03	98.9						
E5.003	1.600	0.032	0.0	1.25	120.2						
E6.000	1.225	0.012	0.0	0.86	94.0						
E6.001	1.198	0.024	0.0	0.86	94.0						
E6.002	1.165	0.024	0.0	1.14	109.6						
©1982-2018 Innovyze											

Kirksaunders Associates Ltd										Page 3	
Templegate House 115-123 High Street Orpington Kent BR6 0LG					SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC						
Date 24/06/2019 14:31					Designed by DO						
File UNIT 2 STORM NETWORK-WI...					Checked by						
Micro Drainage					Network 2018.1						
Existing Network Details for Existing											
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	
E7.000	3.000	0.018	166.7	0.000	5.00	0.0	0.600	CA	350	CastSlot	
E7.001	2.502	0.015	166.8	0.010	0.00	0.0	0.600	CA	350	CastSlot	
E7.002	8.660	0.031	279.4	0.000	0.00	0.0	0.600	o	350	Pipe/Conduit	
E1.007	10.607	0.054	196.4	0.000	0.00	0.0	0.600	o	350	Pipe/Conduit	
E1.008	0.500	0.002	280.0	0.000	0.00	0.0	0.600	o	350	Pipe/Conduit	
E1.009	9.983	0.002	4991.5	0.000	0.00	0.0	0.600	_	-2	Pipe/Conduit	
E1.010	0.500	0.002	250.0	0.000	0.00	0.0	0.600	o	350	Pipe/Conduit	
E1.011	31.186	0.110	283.5	0.000	0.00	0.0	0.600	o	350	Pipe/Conduit	
E8.000	84.537	0.490	172.5	0.163	5.00	0.0	0.600	o	300	Pipe/Conduit	
E1.012	17.860	0.385	46.4	0.000	0.00	0.0	0.600	o	375	Pipe/Conduit	
E9.000	26.931	0.190	141.7	0.000	5.00	0.0	0.600	o	300	Pipe/Conduit	
E10.000	3.000	0.014	214.3	0.053	5.00	0.0	0.600	CA	350	CastSlot	
E10.001	3.000	0.014	214.3	0.053	0.00	0.0	0.600	CA	350	CastSlot	
E10.002	3.000	0.014	214.3	0.053	0.00	0.0	0.600	CA	350	CastSlot	
E10.003	5.761	0.040	144.0	0.000	0.00	0.0	0.600	o	350	Pipe/Conduit	
E11.000	3.000	0.010	300.0	0.007	5.00	0.0	0.600	CA	350	CastSlot	
Network Results Table											
PN	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Vel (m/s)	Cap (l/s)						
E7.000	1.196	0.000	0.0	0.90	99.1						
E7.001	1.160	0.010	0.0	0.90	99.0						
E7.002	1.145	0.010	0.0	1.03	99.4						
E1.007	1.114	1.011	0.0	1.23	118.7						
E1.008	1.060	1.011	0.0	1.03	99.2						
E1.009	1.058	1.011	0.0	0.97	9747.5						
E1.010	1.056	1.011	0.0	1.09	105.1						
E1.011	1.055	1.011	0.0	1.02	98.6						
E8.000	1.435	0.163	0.0	1.19	84.4						
E1.012	0.945	1.174	0.0	2.67	294.5						
E9.000	1.000	0.000	0.0	1.32	93.2						
E10.000	1.710	0.053	0.0	0.86	94.0						
E10.001	0.878	0.106	0.0	0.86	94.0						
E10.002	0.864	0.159	0.0	0.86	94.0						
E10.003	0.850	0.159	0.0	1.44	138.8						
E11.000	0.870	0.007	0.0	0.81	88.2						
©1982-2018 Innovyze											

Kirksaunders Associates Ltd										Page 4	
Templegate House 115-123 High Street Orpington Kent BR6 0LG					SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC						
Date 24/06/2019 14:31					Designed by DO						
File UNIT 2 STORM NETWORK-WI...					Checked by						
Micro Drainage					Network 2018.1						
Existing Network Details for Existing											
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	
E11.001	3.000	0.010	300.0	0.016	0.00	0.0	0.600	CA	350	CastSlot	
E11.002	3.871	0.040	96.8	0.016	0.00	0.0	0.600	o	300	Pipe/Conduit	
E9.001	15.325	0.075	204.3	0.000	0.00	0.0	0.600	o	350	Pipe/Conduit	
E9.002	14.207	0.175	81.2	0.000	0.00	0.0	0.600	o	350	Pipe/Conduit	
E12.000	82.793	0.550	150.5	0.191	5.00	0.0	0.600	o	350	Pipe/Conduit	
E12.001	16.538	0.860	19.2	0.000	0.00	0.0	0.600	o	350	Pipe/Conduit	
E12.002	21.457	0.540	39.7	0.000	0.00	0.0	0.600	o	350	Pipe/Conduit	
E1.013	1.013	0.007	144.7	0.000	0.00	0.0	0.600	o	350	Pipe/Conduit	
E1.014	10.139	0.003	3379.7	0.000	0.00	0.0	0.600	_	-1	Pipe/Conduit	
E1.015	2.289	0.025	91.6	0.000	0.00	0.0	0.600	o	375	Pipe/Conduit	
E1.016	36.423	0.225	161.9	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
E13.000	66.974	0.015	4464.9	0.054	5.00	0.0	0.600	_	-1	Pipe/Conduit	
E13.001	56.157	0.010	5615.7	0.000	0.00	0.0	0.600	_	-1	Pipe/Conduit	
E13.002	26.376	0.010	2637.6	0.000	0.00	0.0	0.600	_	-3	Pipe/Conduit	
E1.017	68.866	0.010	6886.6	0.000	0.00	0.0	0.600	_	-3	Pipe/Conduit	
E1.018	7.486	0.040	187.2	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
Network Results Table											
PN	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Vel (m/s)	Cap (l/s)						
E11.001	0.860	0.023	0.0	0.81	88.2						
E11.002	0.850	0.039	0.0	1.60	113.0						
E9.001	0.810	0.198	0.0	1.21	116.4						
E9.002	0.735	0.198	0.0	1.93	185.3						
E12.000	2.510	0.191	0.0	1.41	135.8						
E12.001	1.960	0.191	0.0	3.97	382.1						
E12.002	1.100	0.191	0.0	2.76	265.4						
E1.013	0.560	1.563	0.0	1.44	138.5						
E1.014	0.553	1.563	0.0	1.07	10302.8						
E1.015	0.550	1.563	0.0	1.89	209.2						
E1.016	0.525	1.563	0.0	1.02	40.8						
E13.000	0.335	0.054	0.0	0.93	8948.8						
E13.001	0.320	0.054	0.0	0.83	7967.2						
E13.002	0.310	0.054	0.0	0.82	1157.2						
E1.017	0.300	1.617	0.0	0.50	710.1						
E1.018	0.290	1.617	0.0	0.95	37.9						
©1982-2018 Innovyze											

Kirksaunders Associates Ltd		Page 5
Templegate House 115-123 High Street Orpington Kent BR6 0LG	SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC	
Date 24/06/2019 14:31 File UNIT 2 STORM NETWORK-WI...	Designed by DO Checked by	
Micro Drainage Network 2018.1		

Conduit Sections for Existing

NOTE: Diameters less than 66 refer to section numbers of hydraulic conduits. These conduits are marked by the symbols:- [] box culvert, \ / open channel, oo dual pipe, ooo triple pipe, O egg.

Section numbers < 0 are taken from user conduit table

Section Number	Conduit Type	Major Dimn. (mm)	Minor Dimn. (mm)	Side Slope (Deg)	Corner Splay (mm)	4*Hyd Radius (m)	XSect Area (m ²)
-1	_	12000	800	90.0		2.824	9.600
-2	_	10000	1000	90.0		3.333	10.000
-3	_	1000	1415	90.0		1.478	1.415

©1982-2018 Innovyze

Kirksaunders Associates Ltd								Page 6			
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC							
Date 24/06/2019 14:31				Designed by DO							
File UNIT 2 STORM NETWORK-WI...				Checked by							
Micro Drainage				Network 2018.1							
Manhole Schedules for Existing											
MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam., L*W (mm)	PN	Pipe Out Invert Level (m)	Diameter (mm)	PN	Pipes In Invert Level (m)	Diameter (mm)	Backdrop (mm)
E1	2.380	0.785	Open Manhole	1200	E1.000	1.595	350				
E1-2	2.380	0.813	Open Manhole	1200	E1.001	1.567	350	E1.000	1.590	350	23
E1-4	2.380	0.841	Open Manhole	1200	E1.002	1.539	350	E1.001	1.553	350	14
E1-6	2.380	0.869	Open Manhole	1200	E1.003	1.511	350	E1.002	1.525	350	14
E1-8	2.380	0.897	Open Manhole	1200	E1.004	1.483	350	E1.003	1.497	350	14
E2	2.380	0.925	Open Manhole	1200	E1.005	1.455	350	E1.004	1.469	350	260
E3	2.270	0.730	Open Manhole	1200	E2.000	1.540	350				
E3-2	2.270	0.758	Open Manhole	1200	E2.001	1.512	350	E2.000	1.526	350	14
E3-6	2.270	0.813	Open Manhole	1200	E2.002	1.457	350	E2.001	1.499	350	42
E3	2.270	0.870	Open Manhole	1200	E2.003	1.400	350	E2.002	1.443	350	289
E5	2.530	0.480	Open Manhole	1200	E3.000	2.050	350				
E5-4	2.530	0.523	Open Manhole	1200	E3.001	2.007	350	E3.000	2.039	350	32
E5-8	2.530	0.567	Open Manhole	1200	E3.002	1.963	350	E3.001	1.996	350	33
E5-14	2.530	0.632	Open Manhole	1200	E3.003	1.898	350	E3.002	1.958	350	60
E5-20	2.530	0.697	Open Manhole	1200	E3.004	1.833	350	E3.003	1.887	350	54
E5-24	2.530	0.740	Open Manhole	1200	E3.005	1.790	350	E3.004	1.822	350	32
E5-28	2.530	0.784	Open Manhole	1200	E3.006	1.746	350	E3.005	1.779	350	33
E5-32	2.530	0.827	Open Manhole	1200	E3.007	1.703	350	E3.006	1.744	350	41
E5-36	2.530	0.870	Open Manhole	1200	E3.008	1.660	350	E3.007	1.701	350	41
E5-40	2.530	0.914	Open Manhole	1200	E3.009	1.616	350	E3.008	1.658	350	42
E5-44	2.530	0.957	Open Manhole	1200	E3.010	1.573	350	E3.009	1.605	350	32
E4	2.530	1.010	Open Manhole	1200	E3.011	1.520	350	E3.010	1.562	350	288
ES1	2.560	1.208	Open Manhole	1200	E1.006	1.352	350	E1.005	1.352	350	
								E2.003	1.352	350	
								E3.011	1.352	350	
E8	2.385	0.870	Open Manhole	1200	E4.000	1.515	350				
E8-5	2.385	0.937	Open Manhole	1200	E4.001	1.448	350	E4.000	1.502	350	54
E8-9	2.385	0.991	Open Manhole	1200	E4.002	1.394	350	E4.001	1.435	350	41
E8-12	2.385	1.031	Open Manhole	1200	E4.003	1.354	350	E4.002	1.381	350	27
E8-15	2.385	1.071	Open Manhole	1200	E4.004	1.314	350	E4.003	1.341	350	27
E8-19	2.385	1.125	Open Manhole	1200	E4.005	1.260	350	E4.004	1.300	350	40
E9	2.385	1.190	Open Manhole	1200	E4.006	1.195	350	E4.005	1.247	350	298
E10	2.525	0.855	Open Manhole	1200	E5.000	1.670	350				
E10-2	2.525	0.877	Open Manhole	1200	E5.001	1.648	350	E5.000	1.659	350	11
E11	2.525	0.905	Open Manhole	1200	E5.002	1.620	350	E5.001	1.640	350	266
ES2A	2.420	0.820	Open Manhole	1200	E5.003	1.600	350	E5.002	1.600	350	
E13	2.300	1.075	Open Manhole	1200	E6.000	1.225	350				
E13-2	2.300	1.102	Open Manhole	1200	E6.001	1.198	350	E6.000	1.211	350	13
©1982-2018 Innovyze											

Kirksaunders Associates Ltd								Page 7	
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC					
Date 24/06/2019 14:31 File UNIT 2 STORM NETWORK-WI...				Designed by DO Checked by					
Micro Drainage				Network 2018.1					
Manhole Schedules for Existing									
MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam., L*W (mm)	PN	Pipe Out Invert Level (m)	Diameter (mm)	PN	Pipes In Invert Level (m)
E14	2.300	1.135	Open Manhole	1200	E6.002	1.165	350	E6.001	1.184
E15	2.270	1.074	Open Manhole	1200	E7.000	1.196	350		
E15-2	2.270	1.110	Open Manhole	1200	E7.001	1.160	350	E7.000	1.178
E16	2.270	1.125	Open Manhole	1200	E7.002	1.145	350	E7.001	1.145
ES2	2.560	1.446	Open Manhole	1200	E1.007	1.114	350	E1.006	1.114
								E4.006	1.114
								E5.003	1.505
								E6.002	1.114
								E7.002	1.114
ETANK 2	2.700	1.640	Open Manhole	1200	E1.008	1.060	350	E1.007	1.060
E122	2.675	1.617	Open Manhole	1200	E1.009	1.058	-2	E1.008	1.058
E123	2.663	1.607	Open Manhole	1200	E1.010	1.056	350	E1.009	1.056
ES3	2.650	1.596	Open Manhole	1200	E1.011	1.055	350	E1.010	1.054
ES5	2.285	0.850	Open Manhole	1200	E8.000	1.435	300		
ES4	3.300	2.355	Open Manhole	1200	E1.012	0.945	375	E1.011	0.945
								E8.000	0.945
ES5A	1.850	0.850	Open Manhole	1200	E9.000	1.000	300		
E23	2.600	0.890	Open Manhole	1200	E10.000	1.710	350		
E23-4	2.600	1.722	Open Manhole	1200	E10.001	0.878	350	E10.000	1.696
E23-9	2.600	1.736	Open Manhole	1200	E10.002	0.864	350	E10.001	0.864
E24	2.600	1.750	Open Manhole	1200	E10.003	0.850	350	E10.002	0.850
E25	2.605	1.735	Open Manhole	1200	E11.000	0.870	350		
E25-3	2.605	1.745	Open Manhole	1200	E11.001	0.860	350	E11.000	0.860
E26	2.605	1.755	Open Manhole	1200	E11.002	0.850	300	E11.001	0.850
ES5B	1.950	1.140	Open Manhole	1200	E9.001	0.810	350	E9.000	0.810
								E10.003	0.810
								E11.002	0.810
ES6	2.135	1.400	Open Manhole	1200	E9.002	0.735	350	E9.001	0.735
ES7	3.310	0.800	Open Manhole	1200	E12.000	2.510	350		
ES8	3.350	1.390	Open Manhole	1200	E12.001	1.960	350	E12.000	1.960
ES9	1.980	0.880	Open Manhole	1200	E12.002	1.100	350	E12.001	1.100
ETANK 1	2.865	2.305	Open Manhole	1200	E1.013	0.560	350	E1.012	0.560
								E9.002	0.560
								E12.002	0.560
E157	2.925	2.372	Open Manhole	1200	E1.014	0.553	-1	E1.013	0.553
E158	2.955	2.405	Open Manhole	1200	E1.015	0.550	375	E1.014	0.550
ES10	2.070	1.545	Open Manhole	1200	E1.016	0.525	225	E1.015	0.525
ESWMS11B	2.925	2.590	Open Manhole	1200	E13.000	0.335	-1		
©1982-2018 Innovyze									

Kirksaunders Associates Ltd							Page 8				
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC							
Date 24/06/2019 14:31 File UNIT 2 STORM NETWORK-WI...				Designed by DO Checked by							
Micro Drainage							Network 2018.1				
<u>Manhole Schedules for Existing</u>											
MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam., L*W (mm)	PN	Pipe Out Invert Level (m)	Diameter (mm)	PN	Pipes In Invert Level (m)	Diameter (mm)	
ESWMH S12	2.288	1.968	Open Manhole	1200	E13.001	0.320	-1	E13.000	0.320	-1	
ESWMHS13	1.650	1.340	Open Manhole	1200	E13.002	0.310	-3	E13.001	0.310	-3	
ESWMH14	2.243	1.943	Open Manhole	1200	E1.017	0.300	-3	E1.016	0.300	-3	
								E13.002	0.300	-3	
ESWMH15	1.871	1.581	Open Manhole	1200	E1.018	0.290	225	E1.017	0.290	225	
EOUTFALL	1.500	1.250	Open Manhole	1200		OUTFALL		E1.018	0.250	225	
©1982-2018 Innovyze											

Kirksaunders Associates Ltd								Page 9	
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC					
Date 24/06/2019 14:31				Designed by DO					
File UNIT 2 STORM NETWORK-WI...				Checked by					
Micro Drainage				Network 2018.1					
PIPELINE SCHEDULES for Existing									
Upstream Manhole									
PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)	
E1.000	CA	350	E1	2.380	1.595	0.189	Open Manhole		1200
E1.001	CA	350	E1-2	2.380	1.567	0.217	Open Manhole		1200
E1.002	CA	350	E1-4	2.380	1.539	0.245	Open Manhole		1200
E1.003	CA	350	E1-6	2.380	1.511	0.273	Open Manhole		1200
E1.004	CA	350	E1-8	2.380	1.483	0.301	Open Manhole		1200
E1.005	o	350	E2	2.380	1.455	0.575	Open Manhole		1200
E2.000	CA	350	E3	2.270	1.540	0.134	Open Manhole		1200
E2.001	CA	350	E3-2	2.270	1.512	0.162	Open Manhole		1200
E2.002	CA	350	E3-6	2.270	1.457	0.217	Open Manhole		1200
E2.003	o	350	E3	2.270	1.400	0.520	Open Manhole		1200
E3.000	CA	350	E5	2.530	2.050	-0.116	Open Manhole		1200
E3.001	CA	350	E5-4	2.530	2.007	-0.073	Open Manhole		1200
E3.002	CA	350	E5-8	2.530	1.963	-0.029	Open Manhole		1200
E3.003	CA	350	E5-14	2.530	1.898	0.036	Open Manhole		1200
E3.004	CA	350	E5-20	2.530	1.833	0.101	Open Manhole		1200
E3.005	CA	350	E5-24	2.530	1.790	0.144	Open Manhole		1200
E3.006	CA	350	E5-28	2.530	1.746	0.188	Open Manhole		1200
E3.007	CA	350	E5-32	2.530	1.703	0.231	Open Manhole		1200
E3.008	CA	350	E5-36	2.530	1.660	0.274	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)	
E1.000	3.000	600.0	E1-2	2.380	1.590	0.194	Open Manhole		1200
E1.001	3.000	214.3	E1-4	2.380	1.553	0.231	Open Manhole		1200
E1.002	3.000	214.3	E1-6	2.380	1.525	0.259	Open Manhole		1200
E1.003	3.000	214.3	E1-8	2.380	1.497	0.287	Open Manhole		1200
E1.004	3.000	214.3	E2	2.380	1.469	0.315	Open Manhole		1200
E1.005	22.255	216.1	ES1	2.560	1.352	0.858	Open Manhole		1200
E2.000	3.000	214.3	E3-2	2.270	1.526	0.148	Open Manhole		1200
E2.001	3.000	230.8	E3-6	2.270	1.499	0.175	Open Manhole		1200
E2.002	3.000	214.3	E3	2.270	1.443	0.231	Open Manhole		1200
E2.003	10.484	218.4	ES1	2.560	1.352	0.858	Open Manhole		1200
E3.000	3.000	272.7	E5-4	2.530	2.039	-0.105	Open Manhole		1200
E3.001	3.000	272.7	E5-8	2.530	1.996	-0.062	Open Manhole		1200
E3.002	3.000	600.0	E5-14	2.530	1.958	-0.024	Open Manhole		1200
E3.003	3.000	272.7	E5-20	2.530	1.887	0.047	Open Manhole		1200
E3.004	3.000	272.7	E5-24	2.530	1.822	0.112	Open Manhole		1200
E3.005	3.000	272.7	E5-28	2.530	1.779	0.155	Open Manhole		1200
E3.006	0.500	250.0	E5-32	2.530	1.744	0.190	Open Manhole		1200
E3.007	0.500	250.0	E5-36	2.530	1.701	0.233	Open Manhole		1200
E3.008	0.500	250.0	E5-40	2.530	1.658	0.276	Open Manhole		1200
©1982-2018 Innovyze									

Kirksaunders Associates Ltd								Page 10	
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC					
Date 24/06/2019 14:31 File UNIT 2 STORM NETWORK-WI...				Designed by DO Checked by					
Micro Drainage				Network 2018.1					
PIPELINE SCHEDULES for Existing									
Upstream Manhole									
PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)	
E3.009	CA	350	E5-40	2.530	1.616	0.318	Open Manhole		1200
E3.010	CA	350	E5-44	2.530	1.573	0.361	Open Manhole		1200
E3.011	o	350	E4	2.530	1.520	0.660	Open Manhole		1200
E1.006	o	350	ES1	2.560	1.352	0.858	Open Manhole		1200
E4.000	CA	350	E8	2.385	1.515	0.274	Open Manhole		1200
E4.001	CA	350	E8-5	2.385	1.448	0.341	Open Manhole		1200
E4.002	CA	350	E8-9	2.385	1.394	0.395	Open Manhole		1200
E4.003	CA	350	E8-12	2.385	1.354	0.435	Open Manhole		1200
E4.004	CA	350	E8-15	2.385	1.314	0.475	Open Manhole		1200
E4.005	CA	350	E8-19	2.385	1.260	0.529	Open Manhole		1200
E4.006	o	350	E9	2.385	1.195	0.840	Open Manhole		1200
E5.000	CA	350	E10	2.525	1.670	0.259	Open Manhole		1200
E5.001	CA	350	E10-2	2.525	1.648	0.281	Open Manhole		1200
E5.002	o	350	E11	2.525	1.620	0.555	Open Manhole		1200
E5.003	o	350	ES2A	2.420	1.600	0.470	Open Manhole		1200
E6.000	CA	350	E13	2.300	1.225	0.479	Open Manhole		1200
E6.001	CA	350	E13-2	2.300	1.198	0.506	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)	
E3.009	3.000	272.7	E5-44	2.530	1.605	0.329	Open Manhole		1200
E3.010	3.000	272.7	E4	2.530	1.562	0.372	Open Manhole		1200
E3.011	36.296	216.0	ES1	2.560	1.352	0.858	Open Manhole		1200
E1.006	69.297	291.2	ES2	2.560	1.114	1.096	Open Manhole		1200
E4.000	3.000	230.8	E8-5	2.385	1.502	0.287	Open Manhole		1200
E4.001	3.000	230.8	E8-9	2.385	1.435	0.354	Open Manhole		1200
E4.002	3.000	230.8	E8-12	2.385	1.381	0.408	Open Manhole		1200
E4.003	3.000	230.8	E8-15	2.385	1.341	0.448	Open Manhole		1200
E4.004	3.000	214.3	E8-19	2.385	1.300	0.489	Open Manhole		1200
E4.005	3.000	230.8	E9	2.385	1.247	0.542	Open Manhole		1200
E4.006	18.039	222.7	ES2	2.560	1.114	1.096	Open Manhole		1200
E5.000	3.000	272.7	E10-2	2.525	1.659	0.270	Open Manhole		1200
E5.001	3.000	375.0	E11	2.525	1.640	0.289	Open Manhole		1200
E5.002	10.897	544.9	ES2A	2.420	1.600	0.470	Open Manhole		1200
E5.003	18.209	191.7	ES2	2.560	1.505	0.705	Open Manhole		1200
E6.000	3.000	214.3	E13-2	2.300	1.211	0.493	Open Manhole		1200
E6.001	3.000	214.3	E14	2.300	1.184	0.520	Open Manhole		1200
©1982-2018 Innovyze									

Kirksaunders Associates Ltd								Page 11	
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC					
Date 24/06/2019 14:31				Designed by DO					
File UNIT 2 STORM NETWORK-WI...				Checked by					
Micro Drainage				Network 2018.1					
PIPELINE SCHEDULES for Existing									
Upstream Manhole									
PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)	
E6.002	o	350	E14	2.300	1.165	0.785	Open Manhole		1200
E7.000	CA	350	E15	2.270	1.196	0.478	Open Manhole		1200
E7.001	CA	350	E15-2	2.270	1.160	0.514	Open Manhole		1200
E7.002	o	350	E16	2.270	1.145	0.775	Open Manhole		1200
E1.007	o	350	ES2	2.560	1.114	1.096	Open Manhole		1200
E1.008	o	350	ETANK 2	2.700	1.060	1.290	Open Manhole		1200
E1.009	_	-2	E122	2.675	1.058	0.617	Open Manhole		1200
E1.010	o	350	E123	2.663	1.056	1.257	Open Manhole		1200
E1.011	o	350	ES3	2.650	1.055	1.245	Open Manhole		1200
E8.000	o	300	ES5	2.285	1.435	0.550	Open Manhole		1200
E1.012	o	375	ES4	3.300	0.945	1.980	Open Manhole		1200
E9.000	o	300	ES5A	1.850	1.000	0.550	Open Manhole		1200
E10.000	CA	350	E23	2.600	1.710	0.294	Open Manhole		1200
E10.001	CA	350	E23-4	2.600	0.878	1.126	Open Manhole		1200
E10.002	CA	350	E23-9	2.600	0.864	1.140	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)	
E6.002	11.735	230.1	ES2	2.560	1.114	1.096	Open Manhole		1200
E7.000	3.000	166.7	E15-2	2.270	1.178	0.496	Open Manhole		1200
E7.001	2.502	166.8	E16	2.270	1.145	0.529	Open Manhole		1200
E7.002	8.660	279.4	ES2	2.560	1.114	1.096	Open Manhole		1200
E1.007	10.607	196.4	ETANK 2	2.700	1.060	1.290	Open Manhole		1200
E1.008	0.500	280.0	E122	2.675	1.058	1.267	Open Manhole		1200
E1.009	9.983	4991.5	E123	2.663	1.056	0.607	Open Manhole		1200
E1.010	0.500	250.0	ES3	2.650	1.054	1.246	Open Manhole		1200
E1.011	31.186	283.5	ES4	3.300	0.945	2.005	Open Manhole		1200
E8.000	84.537	172.5	ES4	3.300	0.945	2.055	Open Manhole		1200
E1.012	17.860	46.4	ETANK 1	2.865	0.560	1.930	Open Manhole		1200
E9.000	26.931	141.7	ES5B	1.950	0.810	0.840	Open Manhole		1200
E10.000	3.000	214.3	E23-4	2.600	1.696	0.308	Open Manhole		1200
E10.001	3.000	214.3	E23-9	2.600	0.864	1.140	Open Manhole		1200
E10.002	3.000	214.3	E24	2.600	0.850	1.154	Open Manhole		1200
©1982-2018 Innovyze									

Kirksaunders Associates Ltd								Page 12
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC				
Date 24/06/2019 14:31				Designed by DO				
File UNIT 2 STORM NETWORK-WI...				Checked by				
Micro Drainage				Network 2018.1				
PIPELINE SCHEDULES for Existing								
Upstream Manhole								
PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
E10.003	o	350	E24	2.600	0.850	1.400	Open Manhole	1200
E11.000	CA	350	E25	2.605	0.870	1.139	Open Manhole	1200
E11.001	CA	350	E25-3	2.605	0.860	1.149	Open Manhole	1200
E11.002	o	300	E26	2.605	0.850	1.455	Open Manhole	1200
E9.001	o	350	ES5B	1.950	0.810	0.790	Open Manhole	1200
E9.002	o	350	ES6	2.135	0.735	1.050	Open Manhole	1200
E12.000	o	350	ES7	3.310	2.510	0.450	Open Manhole	1200
E12.001	o	350	ES8	3.350	1.960	1.040	Open Manhole	1200
E12.002	o	350	ES9	1.980	1.100	0.530	Open Manhole	1200
E1.013	o	350	ETANK 1	2.865	0.560	1.955	Open Manhole	1200
E1.014	_	-1	E157	2.925	0.553	1.572	Open Manhole	1200
E1.015	o	375	E158	2.955	0.550	2.030	Open Manhole	1200
E1.016	o	225	ES10	2.070	0.525	1.320	Open Manhole	1200
E13.000	_	-1	ESWMHS11B	2.925	0.335	1.790	Open Manhole	1200
E13.001	_	-1	ESWMH S12	2.288	0.320	1.168	Open Manhole	1200
E13.002	_	-3	ESWMHS13	1.650	0.310	-0.075	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)
E10.003	5.761	144.0	ES5B	1.950	0.810	0.790	Open Manhole	1200
E11.000	3.000	300.0	E25-3	2.605	0.860	1.149	Open Manhole	1200
E11.001	3.000	300.0	E26	2.605	0.850	1.159	Open Manhole	1200
E11.002	3.871	96.8	ES5B	1.950	0.810	0.840	Open Manhole	1200
E9.001	15.325	204.3	ES6	2.135	0.735	1.050	Open Manhole	1200
E9.002	14.207	81.2	ETANK 1	2.865	0.560	1.955	Open Manhole	1200
E12.000	82.793	150.5	ES8	3.350	1.960	1.040	Open Manhole	1200
E12.001	16.538	19.2	ES9	1.980	1.100	0.530	Open Manhole	1200
E12.002	21.457	39.7	ETANK 1	2.865	0.560	1.955	Open Manhole	1200
E1.013	1.013	144.7	E157	2.925	0.553	2.022	Open Manhole	1200
E1.014	10.139	3379.7	E158	2.955	0.550	1.605	Open Manhole	1200
E1.015	2.289	91.6	ES10	2.070	0.525	1.170	Open Manhole	1200
E1.016	36.423	161.9	ESWMH14	2.243	0.300	1.718	Open Manhole	1200
E13.000	66.974	4464.9	ESWMH S12	2.288	0.320	1.168	Open Manhole	1200
E13.001	56.157	5615.7	ESWMHS13	1.650	0.310	0.540	Open Manhole	1200
E13.002	26.376	2637.6	ESWMH14	2.243	0.300	0.528	Open Manhole	1200
©1982-2018 Innovye								

Kirksaunders Associates Ltd				Page 13				
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC				
Date 24/06/2019 14:31				Designed by DO				
File UNIT 2 STORM NETWORK-WI...				Checked by				
Micro Drainage				Network 2018.1				
<u>PIPELINE SCHEDULES for Existing</u>								
<u>Upstream Manhole</u>								
PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
E1.017	_	-3	ESWMH14	2.243	0.300	0.528	Open Manhole	1200
E1.018	o	225	ESWMH15	1.871	0.290	1.356	Open Manhole	1200
<u>Downstream Manhole</u>								
PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
E1.017	68.866	6886.6	ESWMH15	1.871	0.290	0.166	Open Manhole	1200
E1.018	7.486	187.2	EOUTFALL	1.500	0.250	1.025	Open Manhole	1200
©1982-2018 Innovyze								

Kirksaunders Associates Ltd					Page 14	
Templegate House 115-123 High Street Orpington Kent BR6 0LG			SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC			
Date 24/06/2019 14:31			Designed by DO			
File UNIT 2 STORM NETWORK-WI...			Checked by			
Micro Drainage			Network 2018.1			
Area Summary for Existing						
Pipe Number	PIMP Type	PIMP Name	PIMP (%)	Gross Area (ha)	Imp. Area (ha)	Pipe Total (ha)
1.000	-	-	100	0.024	0.024	0.024
1.001	-	-	100	0.024	0.024	0.024
1.002	-	-	100	0.024	0.024	0.024
1.003	-	-	100	0.024	0.024	0.024
1.004	-	-	100	0.024	0.024	0.024
1.005	-	-	100	0.000	0.000	0.000
2.000	-	-	100	0.032	0.032	0.032
2.001	-	-	100	0.032	0.032	0.032
2.002	-	-	100	0.032	0.032	0.032
2.003	-	-	100	0.000	0.000	0.000
3.000	-	-	100	0.020	0.020	0.020
3.001	-	-	100	0.020	0.020	0.020
3.002	-	-	100	0.020	0.020	0.020
3.003	-	-	100	0.020	0.020	0.020
3.004	-	-	100	0.020	0.020	0.020
3.005	-	-	100	0.020	0.020	0.020
3.006	-	-	100	0.020	0.020	0.020
3.007	-	-	100	0.020	0.020	0.020
3.008	-	-	100	0.020	0.020	0.020
3.009	-	-	100	0.020	0.020	0.020
3.010	-	-	100	0.020	0.020	0.020
3.011	-	-	100	0.000	0.000	0.000
1.006	-	-	100	0.209	0.209	0.209
4.000	-	-	100	0.050	0.050	0.050
4.001	-	-	100	0.050	0.050	0.050
4.002	-	-	100	0.050	0.050	0.050
4.003	-	-	100	0.050	0.050	0.050
4.004	-	-	100	0.050	0.050	0.050
4.005	-	-	100	0.050	0.050	0.050
4.006	-	-	100	0.000	0.000	0.000
5.000	-	-	100	0.016	0.016	0.016
5.001	-	-	100	0.016	0.016	0.016
5.002	-	-	100	0.000	0.000	0.000
5.003	-	-	100	0.000	0.000	0.000
6.000	-	-	100	0.012	0.012	0.012
6.001	-	-	100	0.012	0.012	0.012
6.002	-	-	100	0.000	0.000	0.000
7.000	-	-	100	0.000	0.000	0.000
7.001	-	-	100	0.010	0.010	0.010
7.002	-	-	100	0.000	0.000	0.000
1.007	-	-	100	0.000	0.000	0.000
1.008	-	-	100	0.000	0.000	0.000
1.009	-	-	100	0.000	0.000	0.000
1.010	-	-	100	0.000	0.000	0.000
1.011	-	-	100	0.000	0.000	0.000
8.000	-	-	100	0.163	0.163	0.163
1.012	-	-	100	0.000	0.000	0.000
9.000	-	-	100	0.000	0.000	0.000
10.000	-	-	100	0.053	0.053	0.053
10.001	-	-	100	0.053	0.053	0.053
10.002	-	-	100	0.053	0.053	0.053
©1982-2018 Innovyze						

Kirksaunders Associates Ltd						Page 15																																																																																																																																																																																																																																																																																																																																																																		
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC																																																																																																																																																																																																																																																																																																																																																																				
Date 24/06/2019 14:31				Designed by DO																																																																																																																																																																																																																																																																																																																																																																				
File UNIT 2 STORM NETWORK-WI...				Checked by																																																																																																																																																																																																																																																																																																																																																																				
Micro Drainage				Network 2018.1																																																																																																																																																																																																																																																																																																																																																																				
Area Summary for Existing <table><thead><tr><th>Pipe Number</th><th>PIMP Type</th><th>PIMP Name</th><th>PIMP (%)</th><th>Gross Area (ha)</th><th>Imp. Area (ha)</th><th>Pipe Total (ha)</th></tr></thead><tbody><tr><td>10.003</td><td>-</td><td>-</td><td>100</td><td>0.000</td><td>0.000</td><td>0.000</td></tr><tr><td>11.000</td><td>-</td><td>-</td><td>100</td><td>0.007</td><td>0.007</td><td>0.007</td></tr><tr><td>11.001</td><td>-</td><td>-</td><td>100</td><td>0.016</td><td>0.016</td><td>0.016</td></tr><tr><td>11.002</td><td>-</td><td>-</td><td>100</td><td>0.016</td><td>0.016</td><td>0.016</td></tr><tr><td>9.001</td><td>-</td><td>-</td><td>100</td><td>0.000</td><td>0.000</td><td>0.000</td></tr><tr><td>9.002</td><td>-</td><td>-</td><td>100</td><td>0.000</td><td>0.000</td><td>0.000</td></tr><tr><td>12.000</td><td>-</td><td>-</td><td>100</td><td>0.191</td><td>0.191</td><td>0.191</td></tr><tr><td>12.001</td><td>-</td><td>-</td><td>100</td><td>0.000</td><td>0.000</td><td>0.000</td></tr><tr><td>12.002</td><td>-</td><td>-</td><td>100</td><td>0.000</td><td>0.000</td><td>0.000</td></tr><tr><td>1.013</td><td>-</td><td>-</td><td>100</td><td>0.000</td><td>0.000</td><td>0.000</td></tr><tr><td>1.014</td><td>-</td><td>-</td><td>100</td><td>0.000</td><td>0.000</td><td>0.000</td></tr><tr><td>1.015</td><td>-</td><td>-</td><td>100</td><td>0.000</td><td>0.000</td><td>0.000</td></tr><tr><td>1.016</td><td>-</td><td>-</td><td>100</td><td>0.000</td><td>0.000</td><td>0.000</td></tr><tr><td>13.000</td><td>-</td><td>-</td><td>100</td><td>0.054</td><td>0.054</td><td>0.054</td></tr><tr><td>13.001</td><td>-</td><td>-</td><td>100</td><td>0.000</td><td>0.000</td><td>0.000</td></tr><tr><td>13.002</td><td>-</td><td>-</td><td>100</td><td>0.000</td><td>0.000</td><td>0.000</td></tr><tr><td>1.017</td><td>-</td><td>-</td><td>100</td><td>0.000</td><td>0.000</td><td>0.000</td></tr><tr><td>1.018</td><td>-</td><td>-</td><td>100</td><td>0.000</td><td>0.000</td><td>0.000</td></tr><tr><td colspan="4"></td><td>Total</td><td>Total</td><td>Total</td></tr><tr><td colspan="4"></td><td>1.617</td><td>1.617</td><td>1.617</td></tr></tbody></table> Surcharged Outfall Details for Existing <table><thead><tr><th>Outfall Pipe Number</th><th>Outfall Name</th><th>C. Level (m)</th><th>I. Level (m)</th><th>Min I. Level (m)</th><th>D,L (mm)</th><th>W (mm)</th></tr></thead><tbody><tr><td>E1.018</td><td>EOUTFALL</td><td>1.500</td><td>0.250</td><td>0.000</td><td>1200</td><td>0</td></tr></tbody></table> Datum (m) 0.000 Offset (mins) 0 <table><thead><tr><th>Time (mins)</th><th>Depth (m)</th><th>Time (mins)</th><th>Depth (m)</th><th>Time (mins)</th><th>Depth (m)</th><th>Time (mins)</th><th>Depth (m)</th><th>Time (mins)</th><th>Depth (m)</th><th>Time (mins)</th><th>Depth (m)</th></tr></thead><tbody><tr><td>1</td><td>1.600</td><td>16</td><td>1.600</td><td>31</td><td>1.600</td><td>46</td><td>1.600</td><td>61</td><td>1.600</td><td>76</td><td>1.600</td></tr><tr><td>2</td><td>1.600</td><td>17</td><td>1.600</td><td>32</td><td>1.600</td><td>47</td><td>1.600</td><td>62</td><td>1.600</td><td>77</td><td>1.600</td></tr><tr><td>3</td><td>1.600</td><td>18</td><td>1.600</td><td>33</td><td>1.600</td><td>48</td><td>1.600</td><td>63</td><td>1.600</td><td>78</td><td>1.600</td></tr><tr><td>4</td><td>1.600</td><td>19</td><td>1.600</td><td>34</td><td>1.600</td><td>49</td><td>1.600</td><td>64</td><td>1.600</td><td>79</td><td>1.600</td></tr><tr><td>5</td><td>1.600</td><td>20</td><td>1.600</td><td>35</td><td>1.600</td><td>50</td><td>1.600</td><td>65</td><td>1.600</td><td>80</td><td>1.600</td></tr><tr><td>6</td><td>1.600</td><td>21</td><td>1.600</td><td>36</td><td>1.600</td><td>51</td><td>1.600</td><td>66</td><td>1.600</td><td>81</td><td>1.600</td></tr><tr><td>7</td><td>1.600</td><td>22</td><td>1.600</td><td>37</td><td>1.600</td><td>52</td><td>1.600</td><td>67</td><td>1.600</td><td>82</td><td>1.600</td></tr><tr><td>8</td><td>1.600</td><td>23</td><td>1.600</td><td>38</td><td>1.600</td><td>53</td><td>1.600</td><td>68</td><td>1.600</td><td>83</td><td>1.600</td></tr><tr><td>9</td><td>1.600</td><td>24</td><td>1.600</td><td>39</td><td>1.600</td><td>54</td><td>1.600</td><td>69</td><td>1.600</td><td>84</td><td>1.600</td></tr><tr><td>10</td><td>1.600</td><td>25</td><td>1.600</td><td>40</td><td>1.600</td><td>55</td><td>1.600</td><td>70</td><td>1.600</td><td>85</td><td>1.600</td></tr><tr><td>11</td><td>1.600</td><td>26</td><td>1.600</td><td>41</td><td>1.600</td><td>56</td><td>1.600</td><td>71</td><td>1.600</td><td>86</td><td>1.600</td></tr><tr><td>12</td><td>1.600</td><td>27</td><td>1.600</td><td>42</td><td>1.600</td><td>57</td><td>1.600</td><td>72</td><td>1.600</td><td>87</td><td>1.600</td></tr><tr><td>13</td><td>1.600</td><td>28</td><td>1.600</td><td>43</td><td>1.600</td><td>58</td><td>1.600</td><td>73</td><td>1.600</td><td>88</td><td>1.600</td></tr><tr><td>14</td><td>1.600</td><td>29</td><td>1.600</td><td>44</td><td>1.600</td><td>59</td><td>1.600</td><td>74</td><td>1.600</td><td>89</td><td>1.600</td></tr><tr><td>15</td><td>1.600</td><td>30</td><td>1.600</td><td>45</td><td>1.600</td><td>60</td><td>1.600</td><td>75</td><td>1.600</td><td>90</td><td>1.600</td></tr></tbody></table>								Pipe Number	PIMP Type	PIMP Name	PIMP (%)	Gross Area (ha)	Imp. Area (ha)	Pipe Total (ha)	10.003	-	-	100	0.000	0.000	0.000	11.000	-	-	100	0.007	0.007	0.007	11.001	-	-	100	0.016	0.016	0.016	11.002	-	-	100	0.016	0.016	0.016	9.001	-	-	100	0.000	0.000	0.000	9.002	-	-	100	0.000	0.000	0.000	12.000	-	-	100	0.191	0.191	0.191	12.001	-	-	100	0.000	0.000	0.000	12.002	-	-	100	0.000	0.000	0.000	1.013	-	-	100	0.000	0.000	0.000	1.014	-	-	100	0.000	0.000	0.000	1.015	-	-	100	0.000	0.000	0.000	1.016	-	-	100	0.000	0.000	0.000	13.000	-	-	100	0.054	0.054	0.054	13.001	-	-	100	0.000	0.000	0.000	13.002	-	-	100	0.000	0.000	0.000	1.017	-	-	100	0.000	0.000	0.000	1.018	-	-	100	0.000	0.000	0.000					Total	Total	Total					1.617	1.617	1.617	Outfall Pipe Number	Outfall Name	C. Level (m)	I. Level (m)	Min I. Level (m)	D,L (mm)	W (mm)	E1.018	EOUTFALL	1.500	0.250	0.000	1200	0	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	1	1.600	16	1.600	31	1.600	46	1.600	61	1.600	76	1.600	2	1.600	17	1.600	32	1.600	47	1.600	62	1.600	77	1.600	3	1.600	18	1.600	33	1.600	48	1.600	63	1.600	78	1.600	4	1.600	19	1.600	34	1.600	49	1.600	64	1.600	79	1.600	5	1.600	20	1.600	35	1.600	50	1.600	65	1.600	80	1.600	6	1.600	21	1.600	36	1.600	51	1.600	66	1.600	81	1.600	7	1.600	22	1.600	37	1.600	52	1.600	67	1.600	82	1.600	8	1.600	23	1.600	38	1.600	53	1.600	68	1.600	83	1.600	9	1.600	24	1.600	39	1.600	54	1.600	69	1.600	84	1.600	10	1.600	25	1.600	40	1.600	55	1.600	70	1.600	85	1.600	11	1.600	26	1.600	41	1.600	56	1.600	71	1.600	86	1.600	12	1.600	27	1.600	42	1.600	57	1.600	72	1.600	87	1.600	13	1.600	28	1.600	43	1.600	58	1.600	73	1.600	88	1.600	14	1.600	29	1.600	44	1.600	59	1.600	74	1.600	89	1.600	15	1.600	30	1.600	45	1.600	60	1.600	75	1.600	90	1.600
Pipe Number	PIMP Type	PIMP Name	PIMP (%)	Gross Area (ha)	Imp. Area (ha)	Pipe Total (ha)																																																																																																																																																																																																																																																																																																																																																																		
10.003	-	-	100	0.000	0.000	0.000																																																																																																																																																																																																																																																																																																																																																																		
11.000	-	-	100	0.007	0.007	0.007																																																																																																																																																																																																																																																																																																																																																																		
11.001	-	-	100	0.016	0.016	0.016																																																																																																																																																																																																																																																																																																																																																																		
11.002	-	-	100	0.016	0.016	0.016																																																																																																																																																																																																																																																																																																																																																																		
9.001	-	-	100	0.000	0.000	0.000																																																																																																																																																																																																																																																																																																																																																																		
9.002	-	-	100	0.000	0.000	0.000																																																																																																																																																																																																																																																																																																																																																																		
12.000	-	-	100	0.191	0.191	0.191																																																																																																																																																																																																																																																																																																																																																																		
12.001	-	-	100	0.000	0.000	0.000																																																																																																																																																																																																																																																																																																																																																																		
12.002	-	-	100	0.000	0.000	0.000																																																																																																																																																																																																																																																																																																																																																																		
1.013	-	-	100	0.000	0.000	0.000																																																																																																																																																																																																																																																																																																																																																																		
1.014	-	-	100	0.000	0.000	0.000																																																																																																																																																																																																																																																																																																																																																																		
1.015	-	-	100	0.000	0.000	0.000																																																																																																																																																																																																																																																																																																																																																																		
1.016	-	-	100	0.000	0.000	0.000																																																																																																																																																																																																																																																																																																																																																																		
13.000	-	-	100	0.054	0.054	0.054																																																																																																																																																																																																																																																																																																																																																																		
13.001	-	-	100	0.000	0.000	0.000																																																																																																																																																																																																																																																																																																																																																																		
13.002	-	-	100	0.000	0.000	0.000																																																																																																																																																																																																																																																																																																																																																																		
1.017	-	-	100	0.000	0.000	0.000																																																																																																																																																																																																																																																																																																																																																																		
1.018	-	-	100	0.000	0.000	0.000																																																																																																																																																																																																																																																																																																																																																																		
				Total	Total	Total																																																																																																																																																																																																																																																																																																																																																																		
				1.617	1.617	1.617																																																																																																																																																																																																																																																																																																																																																																		
Outfall Pipe Number	Outfall Name	C. Level (m)	I. Level (m)	Min I. Level (m)	D,L (mm)	W (mm)																																																																																																																																																																																																																																																																																																																																																																		
E1.018	EOUTFALL	1.500	0.250	0.000	1200	0																																																																																																																																																																																																																																																																																																																																																																		
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)																																																																																																																																																																																																																																																																																																																																																													
1	1.600	16	1.600	31	1.600	46	1.600	61	1.600	76	1.600																																																																																																																																																																																																																																																																																																																																																													
2	1.600	17	1.600	32	1.600	47	1.600	62	1.600	77	1.600																																																																																																																																																																																																																																																																																																																																																													
3	1.600	18	1.600	33	1.600	48	1.600	63	1.600	78	1.600																																																																																																																																																																																																																																																																																																																																																													
4	1.600	19	1.600	34	1.600	49	1.600	64	1.600	79	1.600																																																																																																																																																																																																																																																																																																																																																													
5	1.600	20	1.600	35	1.600	50	1.600	65	1.600	80	1.600																																																																																																																																																																																																																																																																																																																																																													
6	1.600	21	1.600	36	1.600	51	1.600	66	1.600	81	1.600																																																																																																																																																																																																																																																																																																																																																													
7	1.600	22	1.600	37	1.600	52	1.600	67	1.600	82	1.600																																																																																																																																																																																																																																																																																																																																																													
8	1.600	23	1.600	38	1.600	53	1.600	68	1.600	83	1.600																																																																																																																																																																																																																																																																																																																																																													
9	1.600	24	1.600	39	1.600	54	1.600	69	1.600	84	1.600																																																																																																																																																																																																																																																																																																																																																													
10	1.600	25	1.600	40	1.600	55	1.600	70	1.600	85	1.600																																																																																																																																																																																																																																																																																																																																																													
11	1.600	26	1.600	41	1.600	56	1.600	71	1.600	86	1.600																																																																																																																																																																																																																																																																																																																																																													
12	1.600	27	1.600	42	1.600	57	1.600	72	1.600	87	1.600																																																																																																																																																																																																																																																																																																																																																													
13	1.600	28	1.600	43	1.600	58	1.600	73	1.600	88	1.600																																																																																																																																																																																																																																																																																																																																																													
14	1.600	29	1.600	44	1.600	59	1.600	74	1.600	89	1.600																																																																																																																																																																																																																																																																																																																																																													
15	1.600	30	1.600	45	1.600	60	1.600	75	1.600	90	1.600																																																																																																																																																																																																																																																																																																																																																													
©1982-2018 Innovyze																																																																																																																																																																																																																																																																																																																																																																								

Kirksaunders Associates Ltd						Page 16					
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC							
Date 24/06/2019 14:31				Designed by DO							
File UNIT 2 STORM NETWORK-WI...				Checked by							
Micro Drainage				Network 2018.1							
Surcharged Outfall Details for Existing											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
91	1.600	141	1.600	191	1.600	241	1.600	291	1.600	341	1.600
92	1.600	142	1.600	192	1.600	242	1.600	292	1.600	342	1.600
93	1.600	143	1.600	193	1.600	243	1.600	293	1.600	343	1.600
94	1.600	144	1.600	194	1.600	244	1.600	294	1.600	344	1.600
95	1.600	145	1.600	195	1.600	245	1.600	295	1.600	345	1.600
96	1.600	146	1.600	196	1.600	246	1.600	296	1.600	346	1.600
97	1.600	147	1.600	197	1.600	247	1.600	297	1.600	347	1.600
98	1.600	148	1.600	198	1.600	248	1.600	298	1.600	348	1.600
99	1.600	149	1.600	199	1.600	249	1.600	299	1.600	349	1.600
100	1.600	150	1.600	200	1.600	250	1.600	300	1.600	350	1.600
101	1.600	151	1.600	201	1.600	251	1.600	301	1.600	351	1.600
102	1.600	152	1.600	202	1.600	252	1.600	302	1.600	352	1.600
103	1.600	153	1.600	203	1.600	253	1.600	303	1.600	353	1.600
104	1.600	154	1.600	204	1.600	254	1.600	304	1.600	354	1.600
105	1.600	155	1.600	205	1.600	255	1.600	305	1.600	355	1.600
106	1.600	156	1.600	206	1.600	256	1.600	306	1.600	356	1.600
107	1.600	157	1.600	207	1.600	257	1.600	307	1.600	357	1.600
108	1.600	158	1.600	208	1.600	258	1.600	308	1.600	358	1.600
109	1.600	159	1.600	209	1.600	259	1.600	309	1.600	359	1.600
110	1.600	160	1.600	210	1.600	260	1.600	310	1.600	360	1.600
111	1.600	161	1.600	211	1.600	261	1.600	311	1.600	361	1.600
112	1.600	162	1.600	212	1.600	262	1.600	312	1.600	362	1.600
113	1.600	163	1.600	213	1.600	263	1.600	313	1.600	363	1.600
114	1.600	164	1.600	214	1.600	264	1.600	314	1.600	364	1.600
115	1.600	165	1.600	215	1.600	265	1.600	315	1.600	365	1.600
116	1.600	166	1.600	216	1.600	266	1.600	316	1.600	366	1.600
117	1.600	167	1.600	217	1.600	267	1.600	317	1.600	367	1.600
118	1.600	168	1.600	218	1.600	268	1.600	318	1.600	368	1.600
119	1.600	169	1.600	219	1.600	269	1.600	319	1.600	369	1.600
120	1.600	170	1.600	220	1.600	270	1.600	320	1.600	370	1.600
121	1.600	171	1.600	221	1.600	271	1.600	321	1.600	371	1.600
122	1.600	172	1.600	222	1.600	272	1.600	322	1.600	372	1.600
123	1.600	173	1.600	223	1.600	273	1.600	323	1.600	373	1.600
124	1.600	174	1.600	224	1.600	274	1.600	324	1.600	374	1.600
125	1.600	175	1.600	225	1.600	275	1.600	325	1.600	375	1.600
126	1.600	176	1.600	226	1.600	276	1.600	326	1.600	376	1.600
127	1.600	177	1.600	227	1.600	277	1.600	327	1.600	377	1.600
128	1.600	178	1.600	228	1.600	278	1.600	328	1.600	378	1.600
129	1.600	179	1.600	229	1.600	279	1.600	329	1.600	379	1.600
130	1.600	180	1.600	230	1.600	280	1.600	330	1.600	380	1.600
131	1.600	181	1.600	231	1.600	281	1.600	331	1.600	381	1.600
132	1.600	182	1.600	232	1.600	282	1.600	332	1.600	382	1.600
133	1.600	183	1.600	233	1.600	283	1.600	333	1.600	383	1.600
134	1.600	184	1.600	234	1.600	284	1.600	334	1.600	384	1.600
135	1.600	185	1.600	235	1.600	285	1.600	335	1.600	385	1.600
136	1.600	186	1.600	236	1.600	286	1.600	336	1.600	386	1.600
137	1.600	187	1.600	237	1.600	287	1.600	337	1.600	387	1.600
138	1.600	188	1.600	238	1.600	288	1.600	338	1.600	388	1.600
139	1.600	189	1.600	239	1.600	289	1.600	339	1.600	389	1.600
140	1.600	190	1.600	240	1.600	290	1.600	340	1.600	390	1.600
©1982-2018 Innovyze											

Kirksaunders Associates Ltd						Page 17					
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC							
Date 24/06/2019 14:31				Designed by DO							
File UNIT 2 STORM NETWORK-WI...				Checked by							
Micro Drainage				Network 2018.1							
Surcharged Outfall Details for Existing											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
391	1.600	441	1.600	491	1.600	541	1.600	591	1.600	641	1.600
392	1.600	442	1.600	492	1.600	542	1.600	592	1.600	642	1.600
393	1.600	443	1.600	493	1.600	543	1.600	593	1.600	643	1.600
394	1.600	444	1.600	494	1.600	544	1.600	594	1.600	644	1.600
395	1.600	445	1.600	495	1.600	545	1.600	595	1.600	645	1.600
396	1.600	446	1.600	496	1.600	546	1.600	596	1.600	646	1.600
397	1.600	447	1.600	497	1.600	547	1.600	597	1.600	647	1.600
398	1.600	448	1.600	498	1.600	548	1.600	598	1.600	648	1.600
399	1.600	449	1.600	499	1.600	549	1.600	599	1.600	649	1.600
400	1.600	450	1.600	500	1.600	550	1.600	600	1.600	650	1.600
401	1.600	451	1.600	501	1.600	551	1.600	601	1.600	651	1.600
402	1.600	452	1.600	502	1.600	552	1.600	602	1.600	652	1.600
403	1.600	453	1.600	503	1.600	553	1.600	603	1.600	653	1.600
404	1.600	454	1.600	504	1.600	554	1.600	604	1.600	654	1.600
405	1.600	455	1.600	505	1.600	555	1.600	605	1.600	655	1.600
406	1.600	456	1.600	506	1.600	556	1.600	606	1.600	656	1.600
407	1.600	457	1.600	507	1.600	557	1.600	607	1.600	657	1.600
408	1.600	458	1.600	508	1.600	558	1.600	608	1.600	658	1.600
409	1.600	459	1.600	509	1.600	559	1.600	609	1.600	659	1.600
410	1.600	460	1.600	510	1.600	560	1.600	610	1.600	660	1.600
411	1.600	461	1.600	511	1.600	561	1.600	611	1.600	661	1.600
412	1.600	462	1.600	512	1.600	562	1.600	612	1.600	662	1.600
413	1.600	463	1.600	513	1.600	563	1.600	613	1.600	663	1.600
414	1.600	464	1.600	514	1.600	564	1.600	614	1.600	664	1.600
415	1.600	465	1.600	515	1.600	565	1.600	615	1.600	665	1.600
416	1.600	466	1.600	516	1.600	566	1.600	616	1.600	666	1.600
417	1.600	467	1.600	517	1.600	567	1.600	617	1.600	667	1.600
418	1.600	468	1.600	518	1.600	568	1.600	618	1.600	668	1.600
419	1.600	469	1.600	519	1.600	569	1.600	619	1.600	669	1.600
420	1.600	470	1.600	520	1.600	570	1.600	620	1.600	670	1.600
421	1.600	471	1.600	521	1.600	571	1.600	621	1.600	671	1.600
422	1.600	472	1.600	522	1.600	572	1.600	622	1.600	672	1.600
423	1.600	473	1.600	523	1.600	573	1.600	623	1.600	673	1.600
424	1.600	474	1.600	524	1.600	574	1.600	624	1.600	674	1.600
425	1.600	475	1.600	525	1.600	575	1.600	625	1.600	675	1.600
426	1.600	476	1.600	526	1.600	576	1.600	626	1.600	676	1.600
427	1.600	477	1.600	527	1.600	577	1.600	627	1.600	677	1.600
428	1.600	478	1.600	528	1.600	578	1.600	628	1.600	678	1.600
429	1.600	479	1.600	529	1.600	579	1.600	629	1.600	679	1.600
430	1.600	480	1.600	530	1.600	580	1.600	630	1.600	680	1.600
431	1.600	481	1.600	531	1.600	581	1.600	631	1.600	681	1.600
432	1.600	482	1.600	532	1.600	582	1.600	632	1.600	682	1.600
433	1.600	483	1.600	533	1.600	583	1.600	633	1.600	683	1.600
434	1.600	484	1.600	534	1.600	584	1.600	634	1.600	684	1.600
435	1.600	485	1.600	535	1.600	585	1.600	635	1.600	685	1.600
436	1.600	486	1.600	536	1.600	586	1.600	636	1.600	686	1.600
437	1.600	487	1.600	537	1.600	587	1.600	637	1.600	687	1.600
438	1.600	488	1.600	538	1.600	588	1.600	638	1.600	688	1.600
439	1.600	489	1.600	539	1.600	589	1.600	639	1.600	689	1.600
440	1.600	490	1.600	540	1.600	590	1.600	640	1.600	690	1.600
©1982-2018 Innovyze											

Kirksaunders Associates Ltd										Page 18	
Templegate House 115-123 High Street Orpington Kent BR6 0LG					SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC						
Date 24/06/2019 14:31					Designed by DO						
File UNIT 2 STORM NETWORK-WI...					Checked by						
Micro Drainage					Network 2018.1						
Surcharged Outfall Details for Existing											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
691	1.600	741	1.600	791	1.600	841	1.600	891	1.600	941	1.600
692	1.600	742	1.600	792	1.600	842	1.600	892	1.600	942	1.600
693	1.600	743	1.600	793	1.600	843	1.600	893	1.600	943	1.600
694	1.600	744	1.600	794	1.600	844	1.600	894	1.600	944	1.600
695	1.600	745	1.600	795	1.600	845	1.600	895	1.600	945	1.600
696	1.600	746	1.600	796	1.600	846	1.600	896	1.600	946	1.600
697	1.600	747	1.600	797	1.600	847	1.600	897	1.600	947	1.600
698	1.600	748	1.600	798	1.600	848	1.600	898	1.600	948	1.600
699	1.600	749	1.600	799	1.600	849	1.600	899	1.600	949	1.600
700	1.600	750	1.600	800	1.600	850	1.600	900	1.600	950	1.600
701	1.600	751	1.600	801	1.600	851	1.600	901	1.600	951	1.600
702	1.600	752	1.600	802	1.600	852	1.600	902	1.600	952	1.600
703	1.600	753	1.600	803	1.600	853	1.600	903	1.600	953	1.600
704	1.600	754	1.600	804	1.600	854	1.600	904	1.600	954	1.600
705	1.600	755	1.600	805	1.600	855	1.600	905	1.600	955	1.600
706	1.600	756	1.600	806	1.600	856	1.600	906	1.600	956	1.600
707	1.600	757	1.600	807	1.600	857	1.600	907	1.600	957	1.600
708	1.600	758	1.600	808	1.600	858	1.600	908	1.600	958	1.600
709	1.600	759	1.600	809	1.600	859	1.600	909	1.600	959	1.600
710	1.600	760	1.600	810	1.600	860	1.600	910	1.600	960	1.600
711	1.600	761	1.600	811	1.600	861	1.600	911	1.600	961	1.600
712	1.600	762	1.600	812	1.600	862	1.600	912	1.600	962	1.600
713	1.600	763	1.600	813	1.600	863	1.600	913	1.600	963	1.600
714	1.600	764	1.600	814	1.600	864	1.600	914	1.600	964	1.600
715	1.600	765	1.600	815	1.600	865	1.600	915	1.600	965	1.600
716	1.600	766	1.600	816	1.600	866	1.600	916	1.600	966	1.600
717	1.600	767	1.600	817	1.600	867	1.600	917	1.600	967	1.600
718	1.600	768	1.600	818	1.600	868	1.600	918	1.600	968	1.600
719	1.600	769	1.600	819	1.600	869	1.600	919	1.600	969	1.600
720	1.600	770	1.600	820	1.600	870	1.600	920	1.600	970	1.600
721	1.600	771	1.600	821	1.600	871	1.600	921	1.600	971	1.600
722	1.600	772	1.600	822	1.600	872	1.600	922	1.600	972	1.600
723	1.600	773	1.600	823	1.600	873	1.600	923	1.600	973	1.600
724	1.600	774	1.600	824	1.600	874	1.600	924	1.600	974	1.600
725	1.600	775	1.600	825	1.600	875	1.600	925	1.600	975	1.600
726	1.600	776	1.600	826	1.600	876	1.600	926	1.600	976	1.600
727	1.600	777	1.600	827	1.600	877	1.600	927	1.600	977	1.600
728	1.600	778	1.600	828	1.600	878	1.600	928	1.600	978	1.600
729	1.600	779	1.600	829	1.600	879	1.600	929	1.600	979	1.600
730	1.600	780	1.600	830	1.600	880	1.600	930	1.600	980	1.600
731	1.600	781	1.600	831	1.600	881	1.600	931	1.600	981	1.600
732	1.600	782	1.600	832	1.600	882	1.600	932	1.600	982	1.600
733	1.600	783	1.600	833	1.600	883	1.600	933	1.600	983	1.600
734	1.600	784	1.600	834	1.600	884	1.600	934	1.600	984	1.600
735	1.600	785	1.600	835	1.600	885	1.600	935	1.600	985	1.600
736	1.600	786	1.600	836	1.600	886	1.600	936	1.600	986	1.600
737	1.600	787	1.600	837	1.600	887	1.600	937	1.600	987	1.600
738	1.600	788	1.600	838	1.600	888	1.600	938	1.600	988	1.600
739	1.600	789	1.600	839	1.600	889	1.600	939	1.600	989	1.600
740	1.600	790	1.600	840	1.600	890	1.600	940	1.600	990	1.600
©1982-2018 Innovyze											

Kirksaunders Associates Ltd								Page 19			
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC							
Date 24/06/2019 14:31				Designed by DO							
File UNIT 2 STORM NETWORK-WI...				Checked by							
Micro Drainage				Network 2018.1							
Surcharged Outfall Details for Existing											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
991	1.600	1041	1.600	1091	1.600	1141	1.600	1191	1.600	1241	1.600
992	1.600	1042	1.600	1092	1.600	1142	1.600	1192	1.600	1242	1.600
993	1.600	1043	1.600	1093	1.600	1143	1.600	1193	1.600	1243	1.600
994	1.600	1044	1.600	1094	1.600	1144	1.600	1194	1.600	1244	1.600
995	1.600	1045	1.600	1095	1.600	1145	1.600	1195	1.600	1245	1.600
996	1.600	1046	1.600	1096	1.600	1146	1.600	1196	1.600	1246	1.600
997	1.600	1047	1.600	1097	1.600	1147	1.600	1197	1.600	1247	1.600
998	1.600	1048	1.600	1098	1.600	1148	1.600	1198	1.600	1248	1.600
999	1.600	1049	1.600	1099	1.600	1149	1.600	1199	1.600	1249	1.600
1000	1.600	1050	1.600	1100	1.600	1150	1.600	1200	1.600	1250	1.600
1001	1.600	1051	1.600	1101	1.600	1151	1.600	1201	1.600	1251	1.600
1002	1.600	1052	1.600	1102	1.600	1152	1.600	1202	1.600	1252	1.600
1003	1.600	1053	1.600	1103	1.600	1153	1.600	1203	1.600	1253	1.600
1004	1.600	1054	1.600	1104	1.600	1154	1.600	1204	1.600	1254	1.600
1005	1.600	1055	1.600	1105	1.600	1155	1.600	1205	1.600	1255	1.600
1006	1.600	1056	1.600	1106	1.600	1156	1.600	1206	1.600	1256	1.600
1007	1.600	1057	1.600	1107	1.600	1157	1.600	1207	1.600	1257	1.600
1008	1.600	1058	1.600	1108	1.600	1158	1.600	1208	1.600	1258	1.600
1009	1.600	1059	1.600	1109	1.600	1159	1.600	1209	1.600	1259	1.600
1010	1.600	1060	1.600	1110	1.600	1160	1.600	1210	1.600	1260	1.600
1011	1.600	1061	1.600	1111	1.600	1161	1.600	1211	1.600	1261	1.600
1012	1.600	1062	1.600	1112	1.600	1162	1.600	1212	1.600	1262	1.600
1013	1.600	1063	1.600	1113	1.600	1163	1.600	1213	1.600	1263	1.600
1014	1.600	1064	1.600	1114	1.600	1164	1.600	1214	1.600	1264	1.600
1015	1.600	1065	1.600	1115	1.600	1165	1.600	1215	1.600	1265	1.600
1016	1.600	1066	1.600	1116	1.600	1166	1.600	1216	1.600	1266	1.600
1017	1.600	1067	1.600	1117	1.600	1167	1.600	1217	1.600	1267	1.600
1018	1.600	1068	1.600	1118	1.600	1168	1.600	1218	1.600	1268	1.600
1019	1.600	1069	1.600	1119	1.600	1169	1.600	1219	1.600	1269	1.600
1020	1.600	1070	1.600	1120	1.600	1170	1.600	1220	1.600	1270	1.600
1021	1.600	1071	1.600	1121	1.600	1171	1.600	1221	1.600	1271	1.600
1022	1.600	1072	1.600	1122	1.600	1172	1.600	1222	1.600	1272	1.600
1023	1.600	1073	1.600	1123	1.600	1173	1.600	1223	1.600	1273	1.600
1024	1.600	1074	1.600	1124	1.600	1174	1.600	1224	1.600	1274	1.600
1025	1.600	1075	1.600	1125	1.600	1175	1.600	1225	1.600	1275	1.600
1026	1.600	1076	1.600	1126	1.600	1176	1.600	1226	1.600	1276	1.600
1027	1.600	1077	1.600	1127	1.600	1177	1.600	1227	1.600	1277	1.600
1028	1.600	1078	1.600	1128	1.600	1178	1.600	1228	1.600	1278	1.600
1029	1.600	1079	1.600	1129	1.600	1179	1.600	1229	1.600	1279	1.600
1030	1.600	1080	1.600	1130	1.600	1180	1.600	1230	1.600	1280	1.600
1031	1.600	1081	1.600	1131	1.600	1181	1.600	1231	1.600	1281	1.600
1032	1.600	1082	1.600	1132	1.600	1182	1.600	1232	1.600	1282	1.600
1033	1.600	1083	1.600	1133	1.600	1183	1.600	1233	1.600	1283	1.600
1034	1.600	1084	1.600	1134	1.600	1184	1.600	1234	1.600	1284	1.600
1035	1.600	1085	1.600	1135	1.600	1185	1.600	1235	1.600	1285	1.600
1036	1.600	1086	1.600	1136	1.600	1186	1.600	1236	1.600	1286	1.600
1037	1.600	1087	1.600	1137	1.600	1187	1.600	1237	1.600	1287	1.600
1038	1.600	1088	1.600	1138	1.600	1188	1.600	1238	1.600	1288	1.600
1039	1.600	1089	1.600	1139	1.600	1189	1.600	1239	1.600	1289	1.600
1040	1.600	1090	1.600	1140	1.600	1190	1.600	1240	1.600	1290	1.600
©1982-2018 Innovyze											

Kirksaunders Associates Ltd								Page 20			
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC							
Date 24/06/2019 14:31				Designed by DO							
File UNIT 2 STORM NETWORK-WI...				Checked by							
Micro Drainage				Network 2018.1							
Surcharged Outfall Details for Existing											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
1291	1.600	1341	1.600	1391	1.600	1441	1.600	1491	1.600	1541	1.600
1292	1.600	1342	1.600	1392	1.600	1442	1.600	1492	1.600	1542	1.600
1293	1.600	1343	1.600	1393	1.600	1443	1.600	1493	1.600	1543	1.600
1294	1.600	1344	1.600	1394	1.600	1444	1.600	1494	1.600	1544	1.600
1295	1.600	1345	1.600	1395	1.600	1445	1.600	1495	1.600	1545	1.600
1296	1.600	1346	1.600	1396	1.600	1446	1.600	1496	1.600	1546	1.600
1297	1.600	1347	1.600	1397	1.600	1447	1.600	1497	1.600	1547	1.600
1298	1.600	1348	1.600	1398	1.600	1448	1.600	1498	1.600	1548	1.600
1299	1.600	1349	1.600	1399	1.600	1449	1.600	1499	1.600	1549	1.600
1300	1.600	1350	1.600	1400	1.600	1450	1.600	1500	1.600	1550	1.600
1301	1.600	1351	1.600	1401	1.600	1451	1.600	1501	1.600	1551	1.600
1302	1.600	1352	1.600	1402	1.600	1452	1.600	1502	1.600	1552	1.600
1303	1.600	1353	1.600	1403	1.600	1453	1.600	1503	1.600	1553	1.600
1304	1.600	1354	1.600	1404	1.600	1454	1.600	1504	1.600	1554	1.600
1305	1.600	1355	1.600	1405	1.600	1455	1.600	1505	1.600	1555	1.600
1306	1.600	1356	1.600	1406	1.600	1456	1.600	1506	1.600	1556	1.600
1307	1.600	1357	1.600	1407	1.600	1457	1.600	1507	1.600	1557	1.600
1308	1.600	1358	1.600	1408	1.600	1458	1.600	1508	1.600	1558	1.600
1309	1.600	1359	1.600	1409	1.600	1459	1.600	1509	1.600	1559	1.600
1310	1.600	1360	1.600	1410	1.600	1460	1.600	1510	1.600	1560	1.600
1311	1.600	1361	1.600	1411	1.600	1461	1.600	1511	1.600	1561	1.600
1312	1.600	1362	1.600	1412	1.600	1462	1.600	1512	1.600	1562	1.600
1313	1.600	1363	1.600	1413	1.600	1463	1.600	1513	1.600	1563	1.600
1314	1.600	1364	1.600	1414	1.600	1464	1.600	1514	1.600	1564	1.600
1315	1.600	1365	1.600	1415	1.600	1465	1.600	1515	1.600	1565	1.600
1316	1.600	1366	1.600	1416	1.600	1466	1.600	1516	1.600	1566	1.600
1317	1.600	1367	1.600	1417	1.600	1467	1.600	1517	1.600	1567	1.600
1318	1.600	1368	1.600	1418	1.600	1468	1.600	1518	1.600	1568	1.600
1319	1.600	1369	1.600	1419	1.600	1469	1.600	1519	1.600	1569	1.600
1320	1.600	1370	1.600	1420	1.600	1470	1.600	1520	1.600	1570	1.600
1321	1.600	1371	1.600	1421	1.600	1471	1.600	1521	1.600	1571	1.600
1322	1.600	1372	1.600	1422	1.600	1472	1.600	1522	1.600	1572	1.600
1323	1.600	1373	1.600	1423	1.600	1473	1.600	1523	1.600	1573	1.600
1324	1.600	1374	1.600	1424	1.600	1474	1.600	1524	1.600	1574	1.600
1325	1.600	1375	1.600	1425	1.600	1475	1.600	1525	1.600	1575	1.600
1326	1.600	1376	1.600	1426	1.600	1476	1.600	1526	1.600	1576	1.600
1327	1.600	1377	1.600	1427	1.600	1477	1.600	1527	1.600	1577	1.600
1328	1.600	1378	1.600	1428	1.600	1478	1.600	1528	1.600	1578	1.600
1329	1.600	1379	1.600	1429	1.600	1479	1.600	1529	1.600	1579	1.600
1330	1.600	1380	1.600	1430	1.600	1480	1.600	1530	1.600	1580	1.600
1331	1.600	1381	1.600	1431	1.600	1481	1.600	1531	1.600	1581	1.600
1332	1.600	1382	1.600	1432	1.600	1482	1.600	1532	1.600	1582	1.600
1333	1.600	1383	1.600	1433	1.600	1483	1.600	1533	1.600	1583	1.600
1334	1.600	1384	1.600	1434	1.600	1484	1.600	1534	1.600	1584	1.600
1335	1.600	1385	1.600	1435	1.600	1485	1.600	1535	1.600	1585	1.600
1336	1.600	1386	1.600	1436	1.600	1486	1.600	1536	1.600	1586	1.600
1337	1.600	1387	1.600	1437	1.600	1487	1.600	1537	1.600	1587	1.600
1338	1.600	1388	1.600	1438	1.600	1488	1.600	1538	1.600	1588	1.600
1339	1.600	1389	1.600	1439	1.600	1489	1.600	1539	1.600	1589	1.600
1340	1.600	1390	1.600	1440	1.600	1490	1.600	1540	1.600	1590	1.600
©1982-2018 Innovyze											

Kirksaunders Associates Ltd										Page 21	
Templegate House 115-123 High Street Orpington Kent BR6 0LG					SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC						
Date 24/06/2019 14:31					Designed by DO						
File UNIT 2 STORM NETWORK-WI...					Checked by						
Micro Drainage					Network 2018.1						
Surcharged Outfall Details for Existing											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
1591	1.600	1641	1.600	1691	1.600	1741	1.600	1791	1.600	1841	1.600
1592	1.600	1642	1.600	1692	1.600	1742	1.600	1792	1.600	1842	1.600
1593	1.600	1643	1.600	1693	1.600	1743	1.600	1793	1.600	1843	1.600
1594	1.600	1644	1.600	1694	1.600	1744	1.600	1794	1.600	1844	1.600
1595	1.600	1645	1.600	1695	1.600	1745	1.600	1795	1.600	1845	1.600
1596	1.600	1646	1.600	1696	1.600	1746	1.600	1796	1.600	1846	1.600
1597	1.600	1647	1.600	1697	1.600	1747	1.600	1797	1.600	1847	1.600
1598	1.600	1648	1.600	1698	1.600	1748	1.600	1798	1.600	1848	1.600
1599	1.600	1649	1.600	1699	1.600	1749	1.600	1799	1.600	1849	1.600
1600	1.600	1650	1.600	1700	1.600	1750	1.600	1800	1.600	1850	1.600
1601	1.600	1651	1.600	1701	1.600	1751	1.600	1801	1.600	1851	1.600
1602	1.600	1652	1.600	1702	1.600	1752	1.600	1802	1.600	1852	1.600
1603	1.600	1653	1.600	1703	1.600	1753	1.600	1803	1.600	1853	1.600
1604	1.600	1654	1.600	1704	1.600	1754	1.600	1804	1.600	1854	1.600
1605	1.600	1655	1.600	1705	1.600	1755	1.600	1805	1.600	1855	1.600
1606	1.600	1656	1.600	1706	1.600	1756	1.600	1806	1.600	1856	1.600
1607	1.600	1657	1.600	1707	1.600	1757	1.600	1807	1.600	1857	1.600
1608	1.600	1658	1.600	1708	1.600	1758	1.600	1808	1.600	1858	1.600
1609	1.600	1659	1.600	1709	1.600	1759	1.600	1809	1.600	1859	1.600
1610	1.600	1660	1.600	1710	1.600	1760	1.600	1810	1.600	1860	1.600
1611	1.600	1661	1.600	1711	1.600	1761	1.600	1811	1.600	1861	1.600
1612	1.600	1662	1.600	1712	1.600	1762	1.600	1812	1.600	1862	1.600
1613	1.600	1663	1.600	1713	1.600	1763	1.600	1813	1.600	1863	1.600
1614	1.600	1664	1.600	1714	1.600	1764	1.600	1814	1.600	1864	1.600
1615	1.600	1665	1.600	1715	1.600	1765	1.600	1815	1.600	1865	1.600
1616	1.600	1666	1.600	1716	1.600	1766	1.600	1816	1.600	1866	1.600
1617	1.600	1667	1.600	1717	1.600	1767	1.600	1817	1.600	1867	1.600
1618	1.600	1668	1.600	1718	1.600	1768	1.600	1818	1.600	1868	1.600
1619	1.600	1669	1.600	1719	1.600	1769	1.600	1819	1.600	1869	1.600
1620	1.600	1670	1.600	1720	1.600	1770	1.600	1820	1.600	1870	1.600
1621	1.600	1671	1.600	1721	1.600	1771	1.600	1821	1.600	1871	1.600
1622	1.600	1672	1.600	1722	1.600	1772	1.600	1822	1.600	1872	1.600
1623	1.600	1673	1.600	1723	1.600	1773	1.600	1823	1.600	1873	1.600
1624	1.600	1674	1.600	1724	1.600	1774	1.600	1824	1.600	1874	1.600
1625	1.600	1675	1.600	1725	1.600	1775	1.600	1825	1.600	1875	1.600
1626	1.600	1676	1.600	1726	1.600	1776	1.600	1826	1.600	1876	1.600
1627	1.600	1677	1.600	1727	1.600	1777	1.600	1827	1.600	1877	1.600
1628	1.600	1678	1.600	1728	1.600	1778	1.600	1828	1.600	1878	1.600
1629	1.600	1679	1.600	1729	1.600	1779	1.600	1829	1.600	1879	1.600
1630	1.600	1680	1.600	1730	1.600	1780	1.600	1830	1.600	1880	1.600
1631	1.600	1681	1.600	1731	1.600	1781	1.600	1831	1.600	1881	1.600
1632	1.600	1682	1.600	1732	1.600	1782	1.600	1832	1.600	1882	1.600
1633	1.600	1683	1.600	1733	1.600	1783	1.600	1833	1.600	1883	1.600
1634	1.600	1684	1.600	1734	1.600	1784	1.600	1834	1.600	1884	1.600
1635	1.600	1685	1.600	1735	1.600	1785	1.600	1835	1.600	1885	1.600
1636	1.600	1686	1.600	1736	1.600	1786	1.600	1836	1.600	1886	1.600
1637	1.600	1687	1.600	1737	1.600	1787	1.600	1837	1.600	1887	1.600
1638	1.600	1688	1.600	1738	1.600	1788	1.600	1838	1.600	1888	1.600
1639	1.600	1689	1.600	1739	1.600	1789	1.600	1839	1.600	1889	1.600
1640	1.600	1690	1.600	1740	1.600	1790	1.600	1840	1.600	1890	1.600
©1982-2018 Innovyze											

Kirksaunders Associates Ltd								Page 22			
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC							
Date 24/06/2019 14:31				Designed by DO							
File UNIT 2 STORM NETWORK-WI...				Checked by							
Micro Drainage				Network 2018.1							
Surcharged Outfall Details for Existing											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
1891	1.600	1941	1.600	1991	1.600	2041	1.600	2091	1.600	2141	1.600
1892	1.600	1942	1.600	1992	1.600	2042	1.600	2092	1.600	2142	1.600
1893	1.600	1943	1.600	1993	1.600	2043	1.600	2093	1.600	2143	1.600
1894	1.600	1944	1.600	1994	1.600	2044	1.600	2094	1.600	2144	1.600
1895	1.600	1945	1.600	1995	1.600	2045	1.600	2095	1.600	2145	1.600
1896	1.600	1946	1.600	1996	1.600	2046	1.600	2096	1.600	2146	1.600
1897	1.600	1947	1.600	1997	1.600	2047	1.600	2097	1.600	2147	1.600
1898	1.600	1948	1.600	1998	1.600	2048	1.600	2098	1.600	2148	1.600
1899	1.600	1949	1.600	1999	1.600	2049	1.600	2099	1.600	2149	1.600
1900	1.600	1950	1.600	2000	1.600	2050	1.600	2100	1.600	2150	1.600
1901	1.600	1951	1.600	2001	1.600	2051	1.600	2101	1.600	2151	1.600
1902	1.600	1952	1.600	2002	1.600	2052	1.600	2102	1.600	2152	1.600
1903	1.600	1953	1.600	2003	1.600	2053	1.600	2103	1.600	2153	1.600
1904	1.600	1954	1.600	2004	1.600	2054	1.600	2104	1.600	2154	1.600
1905	1.600	1955	1.600	2005	1.600	2055	1.600	2105	1.600	2155	1.600
1906	1.600	1956	1.600	2006	1.600	2056	1.600	2106	1.600	2156	1.600
1907	1.600	1957	1.600	2007	1.600	2057	1.600	2107	1.600	2157	1.600
1908	1.600	1958	1.600	2008	1.600	2058	1.600	2108	1.600	2158	1.600
1909	1.600	1959	1.600	2009	1.600	2059	1.600	2109	1.600	2159	1.600
1910	1.600	1960	1.600	2010	1.600	2060	1.600	2110	1.600	2160	1.600
1911	1.600	1961	1.600	2011	1.600	2061	1.600	2111	1.600	2161	1.600
1912	1.600	1962	1.600	2012	1.600	2062	1.600	2112	1.600	2162	1.600
1913	1.600	1963	1.600	2013	1.600	2063	1.600	2113	1.600	2163	1.600
1914	1.600	1964	1.600	2014	1.600	2064	1.600	2114	1.600	2164	1.600
1915	1.600	1965	1.600	2015	1.600	2065	1.600	2115	1.600	2165	1.600
1916	1.600	1966	1.600	2016	1.600	2066	1.600	2116	1.600	2166	1.600
1917	1.600	1967	1.600	2017	1.600	2067	1.600	2117	1.600	2167	1.600
1918	1.600	1968	1.600	2018	1.600	2068	1.600	2118	1.600	2168	1.600
1919	1.600	1969	1.600	2019	1.600	2069	1.600	2119	1.600	2169	1.600
1920	1.600	1970	1.600	2020	1.600	2070	1.600	2120	1.600	2170	1.600
1921	1.600	1971	1.600	2021	1.600	2071	1.600	2121	1.600	2171	1.600
1922	1.600	1972	1.600	2022	1.600	2072	1.600	2122	1.600	2172	1.600
1923	1.600	1973	1.600	2023	1.600	2073	1.600	2123	1.600	2173	1.600
1924	1.600	1974	1.600	2024	1.600	2074	1.600	2124	1.600	2174	1.600
1925	1.600	1975	1.600	2025	1.600	2075	1.600	2125	1.600	2175	1.600
1926	1.600	1976	1.600	2026	1.600	2076	1.600	2126	1.600	2176	1.600
1927	1.600	1977	1.600	2027	1.600	2077	1.600	2127	1.600	2177	1.600
1928	1.600	1978	1.600	2028	1.600	2078	1.600	2128	1.600	2178	1.600
1929	1.600	1979	1.600	2029	1.600	2079	1.600	2129	1.600	2179	1.600
1930	1.600	1980	1.600	2030	1.600	2080	1.600	2130	1.600	2180	1.600
1931	1.600	1981	1.600	2031	1.600	2081	1.600	2131	1.600	2181	1.600
1932	1.600	1982	1.600	2032	1.600	2082	1.600	2132	1.600	2182	1.600
1933	1.600	1983	1.600	2033	1.600	2083	1.600	2133	1.600	2183	1.600
1934	1.600	1984	1.600	2034	1.600	2084	1.600	2134	1.600	2184	1.600
1935	1.600	1985	1.600	2035	1.600	2085	1.600	2135	1.600	2185	1.600
1936	1.600	1986	1.600	2036	1.600	2086	1.600	2136	1.600	2186	1.600
1937	1.600	1987	1.600	2037	1.600	2087	1.600	2137	1.600	2187	1.600
1938	1.600	1988	1.600	2038	1.600	2088	1.600	2138	1.600	2188	1.600
1939	1.600	1989	1.600	2039	1.600	2089	1.600	2139	1.600	2189	1.600
1940	1.600	1990	1.600	2040	1.600	2090	1.600	2140	1.600	2190	1.600
©1982-2018 Innovyze											

Kirksaunders Associates Ltd										Page 23	
Templegate House 115-123 High Street Orpington Kent BR6 0LG					SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC						
Date 24/06/2019 14:31					Designed by DO						
File UNIT 2 STORM NETWORK-WI...					Checked by						
Micro Drainage					Network 2018.1						
Surcharged Outfall Details for Existing											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
2191	1.600	2241	1.600	2291	1.600	2341	1.600	2391	1.600	2441	1.600
2192	1.600	2242	1.600	2292	1.600	2342	1.600	2392	1.600	2442	1.600
2193	1.600	2243	1.600	2293	1.600	2343	1.600	2393	1.600	2443	1.600
2194	1.600	2244	1.600	2294	1.600	2344	1.600	2394	1.600	2444	1.600
2195	1.600	2245	1.600	2295	1.600	2345	1.600	2395	1.600	2445	1.600
2196	1.600	2246	1.600	2296	1.600	2346	1.600	2396	1.600	2446	1.600
2197	1.600	2247	1.600	2297	1.600	2347	1.600	2397	1.600	2447	1.600
2198	1.600	2248	1.600	2298	1.600	2348	1.600	2398	1.600	2448	1.600
2199	1.600	2249	1.600	2299	1.600	2349	1.600	2399	1.600	2449	1.600
2200	1.600	2250	1.600	2300	1.600	2350	1.600	2400	1.600	2450	1.600
2201	1.600	2251	1.600	2301	1.600	2351	1.600	2401	1.600	2451	1.600
2202	1.600	2252	1.600	2302	1.600	2352	1.600	2402	1.600	2452	1.600
2203	1.600	2253	1.600	2303	1.600	2353	1.600	2403	1.600	2453	1.600
2204	1.600	2254	1.600	2304	1.600	2354	1.600	2404	1.600	2454	1.600
2205	1.600	2255	1.600	2305	1.600	2355	1.600	2405	1.600	2455	1.600
2206	1.600	2256	1.600	2306	1.600	2356	1.600	2406	1.600	2456	1.600
2207	1.600	2257	1.600	2307	1.600	2357	1.600	2407	1.600	2457	1.600
2208	1.600	2258	1.600	2308	1.600	2358	1.600	2408	1.600	2458	1.600
2209	1.600	2259	1.600	2309	1.600	2359	1.600	2409	1.600	2459	1.600
2210	1.600	2260	1.600	2310	1.600	2360	1.600	2410	1.600	2460	1.600
2211	1.600	2261	1.600	2311	1.600	2361	1.600	2411	1.600	2461	1.600
2212	1.600	2262	1.600	2312	1.600	2362	1.600	2412	1.600	2462	1.600
2213	1.600	2263	1.600	2313	1.600	2363	1.600	2413	1.600	2463	1.600
2214	1.600	2264	1.600	2314	1.600	2364	1.600	2414	1.600	2464	1.600
2215	1.600	2265	1.600	2315	1.600	2365	1.600	2415	1.600	2465	1.600
2216	1.600	2266	1.600	2316	1.600	2366	1.600	2416	1.600	2466	1.600
2217	1.600	2267	1.600	2317	1.600	2367	1.600	2417	1.600	2467	1.600
2218	1.600	2268	1.600	2318	1.600	2368	1.600	2418	1.600	2468	1.600
2219	1.600	2269	1.600	2319	1.600	2369	1.600	2419	1.600	2469	1.600
2220	1.600	2270	1.600	2320	1.600	2370	1.600	2420	1.600	2470	1.600
2221	1.600	2271	1.600	2321	1.600	2371	1.600	2421	1.600	2471	1.600
2222	1.600	2272	1.600	2322	1.600	2372	1.600	2422	1.600	2472	1.600
2223	1.600	2273	1.600	2323	1.600	2373	1.600	2423	1.600	2473	1.600
2224	1.600	2274	1.600	2324	1.600	2374	1.600	2424	1.600	2474	1.600
2225	1.600	2275	1.600	2325	1.600	2375	1.600	2425	1.600	2475	1.600
2226	1.600	2276	1.600	2326	1.600	2376	1.600	2426	1.600	2476	1.600
2227	1.600	2277	1.600	2327	1.600	2377	1.600	2427	1.600	2477	1.600
2228	1.600	2278	1.600	2328	1.600	2378	1.600	2428	1.600	2478	1.600
2229	1.600	2279	1.600	2329	1.600	2379	1.600	2429	1.600	2479	1.600
2230	1.600	2280	1.600	2330	1.600	2380	1.600	2430	1.600	2480	1.600
2231	1.600	2281	1.600	2331	1.600	2381	1.600	2431	1.600	2481	1.600
2232	1.600	2282	1.600	2332	1.600	2382	1.600	2432	1.600	2482	1.600
2233	1.600	2283	1.600	2333	1.600	2383	1.600	2433	1.600	2483	1.600
2234	1.600	2284	1.600	2334	1.600	2384	1.600	2434	1.600	2484	1.600
2235	1.600	2285	1.600	2335	1.600	2385	1.600	2435	1.600	2485	1.600
2236	1.600	2286	1.600	2336	1.600	2386	1.600	2436	1.600	2486	1.600
2237	1.600	2287	1.600	2337	1.600	2387	1.600	2437	1.600	2487	1.600
2238	1.600	2288	1.600	2338	1.600	2388	1.600	2438	1.600	2488	1.600
2239	1.600	2289	1.600	2339	1.600	2389	1.600	2439	1.600	2489	1.600
2240	1.600	2290	1.600	2340	1.600	2390	1.600	2440	1.600	2490	1.600
©1982-2018 Innovyze											

Kirksaunders Associates Ltd										Page 24	
Templegate House 115-123 High Street Orpington Kent BR6 0LG					SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC						
Date 24/06/2019 14:31					Designed by DO						
File UNIT 2 STORM NETWORK-WI...					Checked by						
Micro Drainage					Network 2018.1						
Surcharged Outfall Details for Existing											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
2491	1.600	2541	1.600	2591	1.600	2641	1.600	2691	1.600	2741	1.600
2492	1.600	2542	1.600	2592	1.600	2642	1.600	2692	1.600	2742	1.600
2493	1.600	2543	1.600	2593	1.600	2643	1.600	2693	1.600	2743	1.600
2494	1.600	2544	1.600	2594	1.600	2644	1.600	2694	1.600	2744	1.600
2495	1.600	2545	1.600	2595	1.600	2645	1.600	2695	1.600	2745	1.600
2496	1.600	2546	1.600	2596	1.600	2646	1.600	2696	1.600	2746	1.600
2497	1.600	2547	1.600	2597	1.600	2647	1.600	2697	1.600	2747	1.600
2498	1.600	2548	1.600	2598	1.600	2648	1.600	2698	1.600	2748	1.600
2499	1.600	2549	1.600	2599	1.600	2649	1.600	2699	1.600	2749	1.600
2500	1.600	2550	1.600	2600	1.600	2650	1.600	2700	1.600	2750	1.600
2501	1.600	2551	1.600	2601	1.600	2651	1.600	2701	1.600	2751	1.600
2502	1.600	2552	1.600	2602	1.600	2652	1.600	2702	1.600	2752	1.600
2503	1.600	2553	1.600	2603	1.600	2653	1.600	2703	1.600	2753	1.600
2504	1.600	2554	1.600	2604	1.600	2654	1.600	2704	1.600	2754	1.600
2505	1.600	2555	1.600	2605	1.600	2655	1.600	2705	1.600	2755	1.600
2506	1.600	2556	1.600	2606	1.600	2656	1.600	2706	1.600	2756	1.600
2507	1.600	2557	1.600	2607	1.600	2657	1.600	2707	1.600	2757	1.600
2508	1.600	2558	1.600	2608	1.600	2658	1.600	2708	1.600	2758	1.600
2509	1.600	2559	1.600	2609	1.600	2659	1.600	2709	1.600	2759	1.600
2510	1.600	2560	1.600	2610	1.600	2660	1.600	2710	1.600	2760	1.600
2511	1.600	2561	1.600	2611	1.600	2661	1.600	2711	1.600	2761	1.600
2512	1.600	2562	1.600	2612	1.600	2662	1.600	2712	1.600	2762	1.600
2513	1.600	2563	1.600	2613	1.600	2663	1.600	2713	1.600	2763	1.600
2514	1.600	2564	1.600	2614	1.600	2664	1.600	2714	1.600	2764	1.600
2515	1.600	2565	1.600	2615	1.600	2665	1.600	2715	1.600	2765	1.600
2516	1.600	2566	1.600	2616	1.600	2666	1.600	2716	1.600	2766	1.600
2517	1.600	2567	1.600	2617	1.600	2667	1.600	2717	1.600	2767	1.600
2518	1.600	2568	1.600	2618	1.600	2668	1.600	2718	1.600	2768	1.600
2519	1.600	2569	1.600	2619	1.600	2669	1.600	2719	1.600	2769	1.600
2520	1.600	2570	1.600	2620	1.600	2670	1.600	2720	1.600	2770	1.600
2521	1.600	2571	1.600	2621	1.600	2671	1.600	2721	1.600	2771	1.600
2522	1.600	2572	1.600	2622	1.600	2672	1.600	2722	1.600	2772	1.600
2523	1.600	2573	1.600	2623	1.600	2673	1.600	2723	1.600	2773	1.600
2524	1.600	2574	1.600	2624	1.600	2674	1.600	2724	1.600	2774	1.600
2525	1.600	2575	1.600	2625	1.600	2675	1.600	2725	1.600	2775	1.600
2526	1.600	2576	1.600	2626	1.600	2676	1.600	2726	1.600	2776	1.600
2527	1.600	2577	1.600	2627	1.600	2677	1.600	2727	1.600	2777	1.600
2528	1.600	2578	1.600	2628	1.600	2678	1.600	2728	1.600	2778	1.600
2529	1.600	2579	1.600	2629	1.600	2679	1.600	2729	1.600	2779	1.600
2530	1.600	2580	1.600	2630	1.600	2680	1.600	2730	1.600	2780	1.600
2531	1.600	2581	1.600	2631	1.600	2681	1.600	2731	1.600	2781	1.600
2532	1.600	2582	1.600	2632	1.600	2682	1.600	2732	1.600	2782	1.600
2533	1.600	2583	1.600	2633	1.600	2683	1.600	2733	1.600	2783	1.600
2534	1.600	2584	1.600	2634	1.600	2684	1.600	2734	1.600	2784	1.600
2535	1.600	2585	1.600	2635	1.600	2685	1.600	2735	1.600	2785	1.600
2536	1.600	2586	1.600	2636	1.600	2686	1.600	2736	1.600	2786	1.600
2537	1.600	2587	1.600	2637	1.600	2687	1.600	2737	1.600	2787	1.600
2538	1.600	2588	1.600	2638	1.600	2688	1.600	2738	1.600	2788	1.600
2539	1.600	2589	1.600	2639	1.600	2689	1.600	2739	1.600	2789	1.600
2540	1.600	2590	1.600	2640	1.600	2690	1.600	2740	1.600	2790	1.600
©1982-2018 Innovyze											

Kirksaunders Associates Ltd		Page 25
Templegate House 115-123 High Street Orpington Kent BR6 0LG		
SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC		
Date 24/06/2019 14:31 File UNIT 2 STORM NETWORK-WI...		
Designed by DO		
Checked by		
Micro Drainage		Network 2018.1

Surcharged Outfall Details for Existing

Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
2791	1.600	2806	1.600	2821	1.600	2836	1.600	2851	1.600	2866	1.600
2792	1.600	2807	1.600	2822	1.600	2837	1.600	2852	1.600	2867	1.600
2793	1.600	2808	1.600	2823	1.600	2838	1.600	2853	1.600	2868	1.600
2794	1.600	2809	1.600	2824	1.600	2839	1.600	2854	1.600	2869	1.600
2795	1.600	2810	1.600	2825	1.600	2840	1.600	2855	1.600	2870	1.600
2796	1.600	2811	1.600	2826	1.600	2841	1.600	2856	1.600	2871	1.600
2797	1.600	2812	1.600	2827	1.600	2842	1.600	2857	1.600	2872	1.600
2798	1.600	2813	1.600	2828	1.600	2843	1.600	2858	1.600	2873	1.600
2799	1.600	2814	1.600	2829	1.600	2844	1.600	2859	1.600	2874	1.600
2800	1.600	2815	1.600	2830	1.600	2845	1.600	2860	1.600	2875	1.600
2801	1.600	2816	1.600	2831	1.600	2846	1.600	2861	1.600	2876	1.600
2802	1.600	2817	1.600	2832	1.600	2847	1.600	2862	1.600	2877	1.600
2803	1.600	2818	1.600	2833	1.600	2848	1.600	2863	1.600	2878	1.600
2804	1.600	2819	1.600	2834	1.600	2849	1.600	2864	1.600	2879	1.600
2805	1.600	2820	1.600	2835	1.600	2850	1.600	2865	1.600	2880	1.600

Simulation Criteria for Existing

Volumetric Runoff Coeff	0.750	Additional Flow - % of Total Flow	0.000
Areal Reduction Factor	1.000	MADD Factor * 10m ³ /ha Storage	2.000
Hot Start (mins)	0	Inlet Coeffiecient	0.800
Hot Start Level (mm)	0	Flow per Person per Day (l/per/day)	0.000
Manhole Headloss Coeff (Global)	0.500	Run Time (mins)	60
Foul Sewage per hectare (l/s)	0.000	Output Interval (mins)	1
Number of Input Hydrographs	0	Number of Storage Structures	6
Number of Online Controls	2	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Profile Type	Summer
Return Period (years)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	19.000	Storm Duration (mins)	30
Ratio R	0.350		

©1982-2018 Innovyze

Kirksaunders Associates Ltd		Page 26
Templegate House 115-123 High Street Orpington Kent BR6 0LG	SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC	
Date 24/06/2019 14:31	Designed by DO	
File UNIT 2 STORM NETWORK-WI...	Checked by	
Micro Drainage	Network 2018.1	

Online Controls for Existing

Hydro-Brake® Optimum Manhole: ES10, DS/PN: E1.016, Volume (m³): 1.9

Unit Reference	MD-SHE-0092-3800-1000-3800
Design Head (m)	1.000
Design Flow (l/s)	3.8
Flush-Flo™	Calculated
Objective	Minimise upstream storage
Application	Surface
Sump Available	Yes
Diameter (mm)	92
Invert Level (m)	0.525
Minimum Outlet Pipe Diameter (mm)	150
Suggested Manhole Diameter (mm)	1200

Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	1.000	3.8
Flush-Flo™	0.298	3.8
Kick-Flo®	0.632	3.1
Mean Flow over Head Range	-	3.3

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)
0.100	2.9	1.200	4.1	3.000	6.3	7.000	9.5
0.200	3.7	1.400	4.4	3.500	6.8	7.500	9.8
0.300	3.8	1.600	4.7	4.000	7.3	8.000	10.1
0.400	3.7	1.800	5.0	4.500	7.7	8.500	10.4
0.500	3.6	2.000	5.2	5.000	8.1	9.000	10.7
0.600	3.3	2.200	5.5	5.500	8.4	9.500	10.9
0.800	3.4	2.400	5.7	6.000	8.8		
1.000	3.8	2.600	5.9	6.500	9.1		

Orifice Manhole: ESWMH15, DS/PN: E1.018, Volume (m³): 97.5

Diameter (m) 0.050 Discharge Coefficient 0.600 Invert Level (m) 0.290

©1982-2018 Innovyze

Kirksaunders Associates Ltd		Page 27
Templegate House 115-123 High Street Orpington Kent BR6 0LG	SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC	
Date 24/06/2019 14:31 File UNIT 2 STORM NETWORK-WI...	Designed by DO Checked by	
Micro Drainage Network 2018.1		

Storage Structures for Existing

Cellular Storage Manhole: ETANK 2, DS/PN: E1.008

Invert Level (m) 0.950 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)
0.000	1050.0	1050.0	0.900	0.0	1209.2
0.800	1050.0	1209.2			

Cellular Storage Manhole: ETANK 1, DS/PN: E1.013

Invert Level (m) 1.115 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)
0.000	368.0	368.0	1.100	0.0	446.0
1.000	368.0	446.0			

Infiltration Trench Manhole: ESWMHS11B, DS/PN: E13.000

Infiltration Coefficient Base (m/hr) 0.00310 Trench Width (m) 0.5
 Infiltration Coefficient Side (m/hr) 0.00310 Trench Length (m) 122.0
 Safety Factor 2.0 Slope (1:X) 0.0
 Porosity 0.30 Cap Volume Depth (m) 1.450
 Invert Level (m) 0.380 Cap Infiltration Depth (m) 1.150

Infiltration Trench Manhole: ESWMH S12, DS/PN: E13.001

Infiltration Coefficient Base (m/hr) 0.00000 Trench Width (m) 0.2
 Infiltration Coefficient Side (m/hr) 0.00000 Trench Length (m) 90.5
 Safety Factor 2.0 Slope (1:X) 0.0
 Porosity 0.30 Cap Volume Depth (m) 1.415
 Invert Level (m) 0.320 Cap Infiltration Depth (m) 1.115

Infiltration Trench Manhole: ESWMHS13, DS/PN: E13.002

Infiltration Coefficient Base (m/hr) 0.00000 Trench Width (m) 0.5
 Infiltration Coefficient Side (m/hr) 0.00000 Trench Length (m) 26.5
 Safety Factor 2.0 Slope (1:X) 0.0
 Porosity 0.30 Cap Volume Depth (m) 1.450
 Invert Level (m) 0.310 Cap Infiltration Depth (m) 1.150

©1982-2018 Innovyze

Kirksaunders Associates Ltd		Page 28																				
Templegate House 115-123 High Street Orpington Kent BR6 0LG	SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC																					
Date 24/06/2019 14:31	Designed by DO																					
File UNIT 2 STORM NETWORK-WI...	Checked by																					
Micro Drainage		Network 2018.1																				
<u>Infiltration Trench Manhole: ESWMH14, DS/PN: E1.017</u> <table> <tr> <td>Infiltration Coefficient Base (m/hr)</td> <td>0.00000</td> <td>Trench Width (m)</td> <td>0.5</td> </tr> <tr> <td>Infiltration Coefficient Side (m/hr)</td> <td>0.00000</td> <td>Trench Length (m)</td> <td>68.0</td> </tr> <tr> <td>Safety Factor</td> <td>2.0</td> <td>Slope (1:X)</td> <td>6835.0</td> </tr> <tr> <td>Porosity</td> <td>0.30</td> <td>Cap Volume Depth (m)</td> <td>1.300</td> </tr> <tr> <td>Invert Level (m)</td> <td>0.300</td> <td>Cap Infiltration Depth (m)</td> <td>1.150</td> </tr> </table>			Infiltration Coefficient Base (m/hr)	0.00000	Trench Width (m)	0.5	Infiltration Coefficient Side (m/hr)	0.00000	Trench Length (m)	68.0	Safety Factor	2.0	Slope (1:X)	6835.0	Porosity	0.30	Cap Volume Depth (m)	1.300	Invert Level (m)	0.300	Cap Infiltration Depth (m)	1.150
Infiltration Coefficient Base (m/hr)	0.00000	Trench Width (m)	0.5																			
Infiltration Coefficient Side (m/hr)	0.00000	Trench Length (m)	68.0																			
Safety Factor	2.0	Slope (1:X)	6835.0																			
Porosity	0.30	Cap Volume Depth (m)	1.300																			
Invert Level (m)	0.300	Cap Infiltration Depth (m)	1.150																			
©1982-2018 Innovyze																						

Kirksaunders Associates Ltd						Page 29				
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC						
Date 24/06/2019 14:31				Designed by DO						
File UNIT 2 STORM NETWORK-WI...				Checked by						
Micro Drainage				Network 2018.1						
<u>Summary of Critical Results by Maximum Level (Rank 1) for Existing</u>										
<u>Simulation Criteria</u>										
Areal Reduction Factor 1.000				Additional Flow - % of Total Flow 0.000						
Hot Start (mins) 0				MADD Factor * 10m³/ha Storage 2.000						
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 Storage Structures 6						
Number of Online Controls 2				Number of Time/Area Diagrams 0						
Number of Offline Controls 0				Number of Real Time Controls 0						
<u>Synthetic Rainfall Details</u>										
Rainfall Model				FSR		Ratio R 0.350				
Region England and Wales				Cv (Summer) 0.750						
M5-60 (mm)				19.000		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, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080						
Return Period(s) (years)				100						
Climate Change (%)				40						

Kirksaunders Associates Ltd							Page 30		
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC					
Date 24/06/2019 14:31				Designed by DO					
File UNIT 2 STORM NETWORK-WI...				Checked by					
Micro Drainage				Network 2018.1					
Summary of Critical Results by Maximum Level (Rank 1) for Existing									
PN	US/MH Name	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status	Level Exceeded
E1.000	E1	2.383	0.192	2.701	0.38		34.7	FLOOD	5
E1.001	E1-2	2.382	0.219	2.341	0.59		54.9	FLOOD	4
E1.002	E1-4	2.382	0.247	1.898	0.58		53.5	FLOOD	4
E1.003	E1-6	2.381	0.274	1.125	0.58		53.1	FLOOD	4
E1.004	E1-8	2.380	0.301	0.035	0.53		48.6	FLOOD	2
E1.005	E2	2.377	0.572	0.000	0.59		57.8	FLOOD RISK	
E2.000	E3	2.278	0.142	7.547	0.85		78.6	FLOOD	6
E2.001	E3-2	2.278	0.170	8.380	1.04		95.8	FLOOD	6
E2.002	E3-6	2.281	0.228	11.389	1.03		95.4	FLOOD	6
E2.003	E3	2.290	0.540	20.162	1.12		96.0	FLOOD	6
E3.000	E5	2.531	-0.115	1.529	0.31		29.1	FLOOD	4
E3.001	E5-4	2.531	-0.072	1.225	0.40		36.6	FLOOD	4
E3.002	E5-8	2.531	-0.028	0.972	0.48		44.7	FLOOD	4
E3.003	E5-14	2.531	0.037	0.805	0.56		51.8	FLOOD	3
E3.004	E5-20	2.530	0.101	0.555	0.61		56.6	FLOOD	3
E3.005	E5-24	2.530	0.144	0.229	0.65		59.8	FLOOD	1
E3.006	E5-28	2.530	0.188	0.047	0.59		62.4	FLOOD	1
E3.007	E5-32	2.529	0.230	0.000	0.61		65.1	FLOOD RISK	
©1982-2018 Innovyze									

Kirksaunders Associates Ltd						Page 31	
Templegate House 115-123 High Street Orpington Kent BR6 0LG			SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC				
Date 24/06/2019 14:31			Designed by DO				
File UNIT 2 STORM NETWORK-WI...			Checked by				
Micro Drainage			Network 2018.1				
<u>Summary of Critical Results by Maximum Level (Rank 1) for Existing</u>							
PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow
E3.008	E5-36	15 Winter	100	+40%	100/15 Summer		
E3.009	E5-40	15 Winter	100	+40%	100/15 Summer		
E3.010	E5-44	15 Summer	100	+40%	100/15 Summer		
E3.011	E4	15 Summer	100	+40%	100/15 Summer		
E1.006	ES1	15 Winter	100	+40%	100/15 Summer		
E4.000	E8	15 Winter	100	+40%	100/15 Summer		
E4.001	E8-5	15 Winter	100	+40%	100/15 Summer		
E4.002	E8-9	15 Winter	100	+40%	100/15 Summer		
E4.003	E8-12	15 Winter	100	+40%	100/15 Summer		
E4.004	E8-15	15 Winter	100	+40%	100/15 Summer		
E4.005	E8-19	15 Winter	100	+40%	100/15 Summer		
E4.006	E9	15 Winter	100	+40%	100/15 Summer		
E5.000	E10	15 Winter	100	+40%			
E5.001	E10-2	15 Winter	100	+40%			
E5.002	E11	15 Winter	100	+40%	100/15 Summer		
E5.003	ES2A	15 Winter	100	+40%	100/15 Summer		
E6.000	E13	15 Winter	100	+40%	100/15 Summer		
E6.001	E13-2	15 Winter	100	+40%	100/15 Summer		
E6.002	E14	15 Winter	100	+40%	100/15 Summer		
E7.000	E15	15 Winter	100	+40%	100/15 Summer		
E7.001	E15-2	15 Winter	100	+40%	100/15 Summer		
E7.002	E16	15 Winter	100	+40%	100/15 Summer		
E1.007	ES2	15 Winter	100	+40%	100/15 Summer		
E1.008	ETANK 2	2160 Winter	100	+40%	100/120 Summer		
E1.009	E122	2160 Winter	100	+40%			
E1.010	E123	2160 Winter	100	+40%	100/120 Summer		
E1.011	ES3	2160 Winter	100	+40%	100/120 Summer		
E8.000	ES5	2160 Winter	100	+40%	100/15 Summer		
E1.012	ES4	2160 Winter	100	+40%	100/30 Winter		
E9.000	ES5A	2160 Winter	100	+40%	100/15 Summer		
E10.000	E23	15 Winter	100	+40%			
E10.001	E23-4	2160 Winter	100	+40%	100/120 Winter		
E10.002	E23-9	2160 Winter	100	+40%	100/120 Winter		
E10.003	E24	2160 Winter	100	+40%	100/15 Summer		
E11.000	E25	2160 Winter	100	+40%	100/120 Winter		
E11.001	E25-3	2160 Winter	100	+40%	100/120 Winter		
E11.002	E26	2160 Winter	100	+40%	100/15 Summer		
E9.001	ES5B	2160 Winter	100	+40%	100/15 Summer		
E9.002	ES6	2160 Winter	100	+40%	100/15 Summer		
E12.000	ES7	15 Winter	100	+40%			
E12.001	ES8	15 Winter	100	+40%			
E12.002	ES9	2160 Winter	100	+40%	100/120 Winter		
E1.013	ETANK 1	2160 Winter	100	+40%	100/15 Summer		
E1.014	E157	2880 Winter	100	+40%	100/60 Summer		
E1.015	E158	2880 Winter	100	+40%	100/15 Summer		
E1.016	ES10	2160 Winter	100	+40%	100/15 Summer	100/360 Winter	
E13.000	ESWMHS11B	1440 Winter	100	+40%			
E13.001	ESWMH S12	1440 Winter	100	+40%			
E13.002	ESWMHS13	1440 Winter	100	+40%			
©1982-2018 Innovyze							

Kirksaunders Associates Ltd								Page 32	
Templegate House 115-123 High Street Orpington Kent BR6 0LG			SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC						
Date 24/06/2019 14:31 File UNIT 2 STORM NETWORK-WI...			Designed by DO Checked by						
Micro Drainage			Network 2018.1						
Summary of Critical Results by Maximum Level (Rank 1) for Existing									
PN	US/MH Name	Overflow Act.	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status
E3.008	E5-36		2.523	0.267	0.000	0.64		68.0	FLOOD RISK
E3.009	E5-40		2.515	0.303	0.000	0.78		72.0	FLOOD RISK
E3.010	E5-44		2.501	0.332	0.000	0.90		83.5	FLOOD RISK
E3.011	E4		2.484	0.614	0.000	0.79		80.8	FLOOD RISK
E1.006	ES1		2.372	0.670	0.000	1.50		138.3	FLOOD RISK
E4.000	E8		2.362	0.251	0.000	0.26		24.1	FLOOD RISK
E4.001	E8-5		2.359	0.315	0.000	0.49		45.5	FLOOD RISK
E4.002	E8-9		2.352	0.362	0.000	0.73		67.7	FLOOD RISK
E4.003	E8-12		2.341	0.391	0.000	0.98		90.1	FLOOD RISK
E4.004	E8-15		2.321	0.411	0.000	1.22		112.5	FLOOD RISK
E4.005	E8-19		2.290	0.434	0.000	1.46		135.1	FLOOD RISK
E4.006	E9		2.195	0.650	0.000	1.42		132.4	FLOOD RISK
E5.000	E10		2.046	-0.220	0.000	0.08		7.8	OK
E5.001	E10-2		2.045	-0.199	0.000	0.18		16.4	OK
E5.002	E11		2.043	0.073	0.000	0.38		15.2	SURCHARGED
E5.003	ES2A		2.036	0.086	0.000	0.15		15.3	SURCHARGED
E6.000	E13		2.034	0.213	0.000	0.06		5.3	FLOOD RISK
E6.001	E13-2		2.033	0.239	0.000	0.10		9.7	FLOOD RISK
E6.002	E14		2.032	0.517	0.000	0.13		10.7	FLOOD RISK
E7.000	E15		2.028	0.236	0.000	0.01		1.3	FLOOD RISK
E7.001	E15-2		2.028	0.272	0.000	0.05		4.6	FLOOD RISK
E7.002	E16		2.028	0.533	0.000	0.08		6.0	FLOOD RISK
E1.007	ES2		2.027	0.563	0.000	3.01		271.8	SURCHARGED
E1.008	ETANK 2		1.848	0.438	0.000	0.10		8.1	SURCHARGED
E1.009	E122		1.848	-0.210	0.000	0.00		8.0	OK
E1.010	E123		1.848	0.442	0.000	0.09		7.7	SURCHARGED
E1.011	ES3		1.849	0.444	0.000	0.09		7.6	SURCHARGED
E8.000	ES5		1.850	0.115	0.000	0.04		3.5	SURCHARGED
E1.012	ES4		1.852	0.532	0.000	0.04		8.8	SURCHARGED
E9.000	ES5A		1.848	0.548	0.000	0.00		0.1	FLOOD RISK
E10.000	E23		1.898	-0.408	0.000	0.32		29.5	OK
E10.001	E23-4		1.847	0.373	0.000	0.02		2.3	SURCHARGED
E10.002	E23-9		1.847	0.387	0.000	0.04		3.4	SURCHARGED
E10.003	E24		1.847	0.647	0.000	0.04		3.4	SURCHARGED
E11.000	E25		1.847	0.381	0.000	0.00		0.2	SURCHARGED
E11.001	E25-3		1.847	0.391	0.000	0.01		0.6	SURCHARGED
E11.002	E26		1.847	0.697	0.000	0.01		0.9	SURCHARGED
E9.001	ES5B		1.848	0.688	0.000	0.04		4.1	FLOOD RISK
E9.002	ES6		1.850	0.765	0.000	0.03		4.1	FLOOD RISK
E12.000	ES7		2.755	-0.105	0.000	0.78		101.9	OK
E12.001	ES8		2.097	-0.213	0.000	0.32		101.3	OK
E12.002	ES9		1.851	0.401	0.000	0.02		4.1	FLOOD RISK
E1.013	ETANK 1		1.851	0.941	0.000	0.97		76.8	SURCHARGED
E1.014	E157		2.093	0.740	0.000	0.01		61.8	SURCHARGED
E1.015	E158		2.094	1.169	0.000	0.41		39.0	SURCHARGED
E1.016	ES10		2.071	1.321	1.256	0.11		4.1	FLOOD
E13.000	ESWMHS11B		0.829	-0.306	0.000	0.00		2.0	OK
E13.001	ESWMH S12		0.829	-0.291	0.000	0.00		27.8	OK
©1982-2018 Innovyze									

Kirksaunders Associates Ltd								Page 33	
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC					
Date 24/06/2019 14:31				Designed by DO					
File UNIT 2 STORM NETWORK-WI...				Checked by					
Micro Drainage				Network 2018.1					
<u>Summary of Critical Results by Maximum Level (Rank 1) for Existing</u>									
			Water	Surcharged	Flooded			Pipe	
PN	US/MH	Overflow	Level	Depth	Volume	Flow /	Overflow	Flow	Status
	Name	Act.	(m)	(m)	(m³)	Cap.	(l/s)	(l/s)	
E13.002	ESWMHS13		0.829	-0.896	0.000	0.02		13.5	OK

Kirksaunders Associates Ltd		Page 34																								
Templegate House 115-123 High Street Orpington Kent BR6 0LG	SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC																									
Date 24/06/2019 14:31 File UNIT 2 STORM NETWORK-WI...	Designed by DO Checked by																									
Micro Drainage Network 2018.1																										
<u>Summary of Critical Results by Maximum Level (Rank 1) for Existing</u>																										
	<table><thead><tr><th>PN</th><th>US/MH Name</th><th>Level Exceeded</th></tr></thead><tbody><tr><td>E1.013</td><td>ETANK 1</td><td></td></tr><tr><td>E1.014</td><td>E157</td><td></td></tr><tr><td>E1.015</td><td>E158</td><td></td></tr><tr><td>E1.016</td><td>ES10</td><td>18</td></tr><tr><td>E13.000</td><td>ESWMHS11B</td><td></td></tr><tr><td>E13.001</td><td>ESWMH S12</td><td></td></tr><tr><td>E13.002</td><td>ESWMHS13</td><td></td></tr></tbody></table>	PN	US/MH Name	Level Exceeded	E1.013	ETANK 1		E1.014	E157		E1.015	E158		E1.016	ES10	18	E13.000	ESWMHS11B		E13.001	ESWMH S12		E13.002	ESWMHS13		
PN	US/MH Name	Level Exceeded																								
E1.013	ETANK 1																									
E1.014	E157																									
E1.015	E158																									
E1.016	ES10	18																								
E13.000	ESWMHS11B																									
E13.001	ESWMH S12																									
E13.002	ESWMHS13																									
©1982-2018 Innovyze																										

Kirksaunders Associates Ltd						Page 35			
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS UNIT 2 1IN1100+40%CC					
Date 24/06/2019 14:31				Designed by DO					
File UNIT 2 STORM NETWORK-WI...				Checked by					
Micro Drainage				Network 2018.1					
<u>Summary of Critical Results by Maximum Level (Rank 1) for Existing</u>									
PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surge	First (Y) Flood	First (Z) Overflow	Overflow Act.	
E1.017	ESWMH14	1440 Winter	100	+40%					
E1.018	ESWMH15	1440 Winter	100	+40%	100/360 Summer				
PN	US/MH Name	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status	Level Exceeded
E1.017	ESWMH14	0.829	-0.886	0.000	0.01		14.6	OK	
E1.018	ESWMH15	0.829	0.314	0.000	0.00		0.0	SURCHARGED	
©1982-2018 Innovyze									

Kirksaunders Associates Ltd				Page 1																																																																																																																																																																																																																			
Templegate House 115-123 High Street Orpington Kent BR6 0LG		SALT BOX BOGNOR REGIS Unit 2 paving 1in100+40%CC																																																																																																																																																																																																																					
Date 21/06/2019 12:01 File UNIT 2 PERMEABLE PAVING...		Designed by DO Checked by																																																																																																																																																																																																																					
Micro Drainage		Source Control 2018.1																																																																																																																																																																																																																					
Summary of Results for 100 year Return Period (+40%) Half Drain Time : 57 minutes. <table><thead><tr><th>Storm Event</th><th>Max Level (m)</th><th>Max Depth (m)</th><th>Max Infiltration (l/s)</th><th>Max Volume (m³)</th><th>Status</th></tr></thead><tbody><tr><td>15 min Summer</td><td>2.433</td><td>0.193</td><td>1.7</td><td>6.7</td><td>O K</td></tr><tr><td>30 min Summer</td><td>2.465</td><td>0.225</td><td>2.0</td><td>9.1</td><td>O K</td></tr><tr><td>60 min Summer</td><td>2.486</td><td>0.246</td><td>2.2</td><td>10.9</td><td>O K</td></tr><tr><td>120 min Summer</td><td>2.496</td><td>0.256</td><td>2.3</td><td>11.8</td><td>O K</td></tr><tr><td>180 min Summer</td><td>2.495</td><td>0.255</td><td>2.3</td><td>11.7</td><td>O K</td></tr><tr><td>240 min Summer</td><td>2.490</td><td>0.250</td><td>2.2</td><td>11.2</td><td>O K</td></tr><tr><td>360 min Summer</td><td>2.477</td><td>0.237</td><td>2.1</td><td>10.1</td><td>O K</td></tr><tr><td>480 min Summer</td><td>2.464</td><td>0.224</td><td>2.0</td><td>9.1</td><td>O K</td></tr><tr><td>600 min Summer</td><td>2.453</td><td>0.213</td><td>1.9</td><td>8.1</td><td>O K</td></tr><tr><td>720 min Summer</td><td>2.442</td><td>0.202</td><td>1.8</td><td>7.3</td><td>O K</td></tr><tr><td>960 min Summer</td><td>2.423</td><td>0.183</td><td>1.6</td><td>6.0</td><td>O K</td></tr><tr><td>1440 min Summer</td><td>2.395</td><td>0.155</td><td>1.4</td><td>4.3</td><td>O K</td></tr><tr><td>2160 min Summer</td><td>2.365</td><td>0.125</td><td>1.1</td><td>2.8</td><td>O K</td></tr><tr><td>2880 min Summer</td><td>2.345</td><td>0.105</td><td>0.9</td><td>2.0</td><td>O K</td></tr><tr><td>4320 min Summer</td><td>2.321</td><td>0.081</td><td>0.7</td><td>1.2</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>2.305</td><td>0.065</td><td>0.6</td><td>0.8</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>2.295</td><td>0.055</td><td>0.5</td><td>0.5</td><td>O K</td></tr><tr><td>8640 min Summer</td><td>2.289</td><td>0.049</td><td>0.4</td><td>0.4</td><td>O K</td></tr><tr><td>10080 min Summer</td><td>2.286</td><td>0.046</td><td>0.4</td><td>0.4</td><td>O K</td></tr><tr><td>15 min Winter</td><td>2.448</td><td>0.208</td><td>1.8</td><td>7.8</td><td>O K</td></tr></tbody></table> <table><thead><tr><th>Storm Event</th><th>Rain (mm/hr)</th><th>Flooded Volume (m³)</th><th>Time-Peak (mins)</th></tr></thead><tbody><tr><td>15 min Summer</td><td>124.633</td><td>0.0</td><td>23</td></tr><tr><td>30 min Summer</td><td>83.789</td><td>0.0</td><td>34</td></tr><tr><td>60 min Summer</td><td>53.779</td><td>0.0</td><td>54</td></tr><tr><td>120 min Summer</td><td>33.337</td><td>0.0</td><td>88</td></tr><tr><td>180 min Summer</td><td>24.832</td><td>0.0</td><td>122</td></tr><tr><td>240 min Summer</td><td>20.006</td><td>0.0</td><td>156</td></tr><tr><td>360 min Summer</td><td>14.706</td><td>0.0</td><td>222</td></tr><tr><td>480 min Summer</td><td>11.818</td><td>0.0</td><td>286</td></tr><tr><td>600 min Summer</td><td>9.966</td><td>0.0</td><td>350</td></tr><tr><td>720 min Summer</td><td>8.665</td><td>0.0</td><td>412</td></tr><tr><td>960 min Summer</td><td>6.943</td><td>0.0</td><td>534</td></tr><tr><td>1440 min Summer</td><td>5.071</td><td>0.0</td><td>772</td></tr><tr><td>2160 min Summer</td><td>3.696</td><td>0.0</td><td>1132</td></tr><tr><td>2880 min Summer</td><td>2.949</td><td>0.0</td><td>1480</td></tr><tr><td>4320 min Summer</td><td>2.142</td><td>0.0</td><td>2208</td></tr><tr><td>5760 min Summer</td><td>1.705</td><td>0.0</td><td>2936</td></tr><tr><td>7200 min Summer</td><td>1.427</td><td>0.0</td><td>3672</td></tr><tr><td>8640 min Summer</td><td>1.235</td><td>0.0</td><td>4312</td></tr><tr><td>10080 min Summer</td><td>1.093</td><td>0.0</td><td>5056</td></tr><tr><td>15 min Winter</td><td>124.633</td><td>0.0</td><td>23</td></tr></tbody></table>						Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status	15 min Summer	2.433	0.193	1.7	6.7	O K	30 min Summer	2.465	0.225	2.0	9.1	O K	60 min Summer	2.486	0.246	2.2	10.9	O K	120 min Summer	2.496	0.256	2.3	11.8	O K	180 min Summer	2.495	0.255	2.3	11.7	O K	240 min Summer	2.490	0.250	2.2	11.2	O K	360 min Summer	2.477	0.237	2.1	10.1	O K	480 min Summer	2.464	0.224	2.0	9.1	O K	600 min Summer	2.453	0.213	1.9	8.1	O K	720 min Summer	2.442	0.202	1.8	7.3	O K	960 min Summer	2.423	0.183	1.6	6.0	O K	1440 min Summer	2.395	0.155	1.4	4.3	O K	2160 min Summer	2.365	0.125	1.1	2.8	O K	2880 min Summer	2.345	0.105	0.9	2.0	O K	4320 min Summer	2.321	0.081	0.7	1.2	O K	5760 min Summer	2.305	0.065	0.6	0.8	O K	7200 min Summer	2.295	0.055	0.5	0.5	O K	8640 min Summer	2.289	0.049	0.4	0.4	O K	10080 min Summer	2.286	0.046	0.4	0.4	O K	15 min Winter	2.448	0.208	1.8	7.8	O K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	124.633	0.0	23	30 min Summer	83.789	0.0	34	60 min Summer	53.779	0.0	54	120 min Summer	33.337	0.0	88	180 min Summer	24.832	0.0	122	240 min Summer	20.006	0.0	156	360 min Summer	14.706	0.0	222	480 min Summer	11.818	0.0	286	600 min Summer	9.966	0.0	350	720 min Summer	8.665	0.0	412	960 min Summer	6.943	0.0	534	1440 min Summer	5.071	0.0	772	2160 min Summer	3.696	0.0	1132	2880 min Summer	2.949	0.0	1480	4320 min Summer	2.142	0.0	2208	5760 min Summer	1.705	0.0	2936	7200 min Summer	1.427	0.0	3672	8640 min Summer	1.235	0.0	4312	10080 min Summer	1.093	0.0	5056	15 min Winter	124.633	0.0	23
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status																																																																																																																																																																																																																		
15 min Summer	2.433	0.193	1.7	6.7	O K																																																																																																																																																																																																																		
30 min Summer	2.465	0.225	2.0	9.1	O K																																																																																																																																																																																																																		
60 min Summer	2.486	0.246	2.2	10.9	O K																																																																																																																																																																																																																		
120 min Summer	2.496	0.256	2.3	11.8	O K																																																																																																																																																																																																																		
180 min Summer	2.495	0.255	2.3	11.7	O K																																																																																																																																																																																																																		
240 min Summer	2.490	0.250	2.2	11.2	O K																																																																																																																																																																																																																		
360 min Summer	2.477	0.237	2.1	10.1	O K																																																																																																																																																																																																																		
480 min Summer	2.464	0.224	2.0	9.1	O K																																																																																																																																																																																																																		
600 min Summer	2.453	0.213	1.9	8.1	O K																																																																																																																																																																																																																		
720 min Summer	2.442	0.202	1.8	7.3	O K																																																																																																																																																																																																																		
960 min Summer	2.423	0.183	1.6	6.0	O K																																																																																																																																																																																																																		
1440 min Summer	2.395	0.155	1.4	4.3	O K																																																																																																																																																																																																																		
2160 min Summer	2.365	0.125	1.1	2.8	O K																																																																																																																																																																																																																		
2880 min Summer	2.345	0.105	0.9	2.0	O K																																																																																																																																																																																																																		
4320 min Summer	2.321	0.081	0.7	1.2	O K																																																																																																																																																																																																																		
5760 min Summer	2.305	0.065	0.6	0.8	O K																																																																																																																																																																																																																		
7200 min Summer	2.295	0.055	0.5	0.5	O K																																																																																																																																																																																																																		
8640 min Summer	2.289	0.049	0.4	0.4	O K																																																																																																																																																																																																																		
10080 min Summer	2.286	0.046	0.4	0.4	O K																																																																																																																																																																																																																		
15 min Winter	2.448	0.208	1.8	7.8	O K																																																																																																																																																																																																																		
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)																																																																																																																																																																																																																				
15 min Summer	124.633	0.0	23																																																																																																																																																																																																																				
30 min Summer	83.789	0.0	34																																																																																																																																																																																																																				
60 min Summer	53.779	0.0	54																																																																																																																																																																																																																				
120 min Summer	33.337	0.0	88																																																																																																																																																																																																																				
180 min Summer	24.832	0.0	122																																																																																																																																																																																																																				
240 min Summer	20.006	0.0	156																																																																																																																																																																																																																				
360 min Summer	14.706	0.0	222																																																																																																																																																																																																																				
480 min Summer	11.818	0.0	286																																																																																																																																																																																																																				
600 min Summer	9.966	0.0	350																																																																																																																																																																																																																				
720 min Summer	8.665	0.0	412																																																																																																																																																																																																																				
960 min Summer	6.943	0.0	534																																																																																																																																																																																																																				
1440 min Summer	5.071	0.0	772																																																																																																																																																																																																																				
2160 min Summer	3.696	0.0	1132																																																																																																																																																																																																																				
2880 min Summer	2.949	0.0	1480																																																																																																																																																																																																																				
4320 min Summer	2.142	0.0	2208																																																																																																																																																																																																																				
5760 min Summer	1.705	0.0	2936																																																																																																																																																																																																																				
7200 min Summer	1.427	0.0	3672																																																																																																																																																																																																																				
8640 min Summer	1.235	0.0	4312																																																																																																																																																																																																																				
10080 min Summer	1.093	0.0	5056																																																																																																																																																																																																																				
15 min Winter	124.633	0.0	23																																																																																																																																																																																																																				
©1982-2018 Innovyze																																																																																																																																																																																																																							

Kirksaunders Associates Ltd					Page 2
Templegate House 115-123 High Street Orpington Kent BR6 0LG		SALT BOX BOGNOR REGIS Unit 2 paving 1in100+40%CC			
Date 21/06/2019 12:01 File UNIT 2 PERMEABLE PAVING...		Designed by DO Checked by			
Micro Drainage		Source Control 2018.1			
Summary of Results for 100 year Return Period (+40%)					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	2.482	0.242	2.2	10.5	O K
60 min Winter	2.504	0.264	2.3	12.6	Flood Risk
120 min Winter	2.511	0.271	2.4	13.3	Flood Risk
180 min Winter	2.507	0.267	2.4	12.8	Flood Risk
240 min Winter	2.499	0.259	2.3	12.0	O K
360 min Winter	2.480	0.240	2.1	10.3	O K
480 min Winter	2.462	0.222	2.0	8.8	O K
600 min Winter	2.445	0.205	1.8	7.6	O K
720 min Winter	2.431	0.191	1.7	6.6	O K
960 min Winter	2.407	0.167	1.5	5.0	O K
1440 min Winter	2.372	0.132	1.2	3.1	O K
2160 min Winter	2.341	0.101	0.9	1.8	O K
2880 min Winter	2.321	0.081	0.7	1.2	O K
4320 min Winter	2.299	0.059	0.5	0.6	O K
5760 min Winter	2.289	0.049	0.4	0.4	O K
7200 min Winter	2.284	0.044	0.3	0.4	O K
8640 min Winter	2.281	0.041	0.3	0.3	O K
10080 min Winter	2.279	0.039	0.3	0.3	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	83.789	0.0	35		
60 min Winter	53.779	0.0	58		
120 min Winter	33.337	0.0	94		
180 min Winter	24.832	0.0	132		
240 min Winter	20.006	0.0	168		
360 min Winter	14.706	0.0	236		
480 min Winter	11.818	0.0	302		
600 min Winter	9.966	0.0	366		
720 min Winter	8.665	0.0	428		
960 min Winter	6.943	0.0	550		
1440 min Winter	5.071	0.0	786		
2160 min Winter	3.696	0.0	1132		
2880 min Winter	2.949	0.0	1500		
4320 min Winter	2.142	0.0	2208		
5760 min Winter	1.705	0.0	2880		
7200 min Winter	1.427	0.0	3568		
8640 min Winter	1.235	0.0	4360		
10080 min Winter	1.093	0.0	5128		
©1982-2018 Innovyze					

Kirksaunders Associates Ltd		Page 3
Templegate House 115-123 High Street Orpington Kent BR6 0LG	SALT BOX BOGNOR REGIS Unit 2 paving 1in100+40%CC	
Date 21/06/2019 12:01 File UNIT 2 PERMEABLE PAVING...	Designed by DO Checked by	
Micro Drainage Source Control 2018.1		

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	0.350	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.043

Time (mins)	Area	Time (mins)	Area	Time (mins)	Area
From: To:	(ha)	From: To:	(ha)	From: To:	(ha)
0 4	0.014	4 8	0.014	8 12	0.015

©1982-2018 Innovyze

Kirksaunders Associates Ltd		Page 4																								
Templegate House 115-123 High Street Orpington Kent BR6 0LG	SALT BOX BOGNOR REGIS Unit 2 paving 1in100+40%CC																									
Date 21/06/2019 12:01	Designed by DO																									
File UNIT 2 PERMEABLE PAVING...	Checked by																									
Micro Drainage		Source Control 2018.1																								
<u>Model Details</u> Storage is Online Cover Level (m) 2.800 <u>Porous Car Park Structure</u> <table> <tr> <td>Infiltration Coefficient Base (m/hr)</td> <td>0.05330</td> <td>Width (m)</td> <td>12.0</td> </tr> <tr> <td>Membrane Percolation (mm/hr)</td> <td>1000</td> <td>Length (m)</td> <td>36.0</td> </tr> <tr> <td>Max Percolation (l/s)</td> <td>120.0</td> <td>Slope (1:X)</td> <td>100.0</td> </tr> <tr> <td>Safety Factor</td> <td>2.0</td> <td>Depression Storage (mm)</td> <td>5</td> </tr> <tr> <td>Porosity</td> <td>0.30</td> <td>Evaporation (mm/day)</td> <td>3</td> </tr> <tr> <td>Invert Level (m)</td> <td>2.240</td> <td>Cap Volume Depth (m)</td> <td>0.500</td> </tr> </table>			Infiltration Coefficient Base (m/hr)	0.05330	Width (m)	12.0	Membrane Percolation (mm/hr)	1000	Length (m)	36.0	Max Percolation (l/s)	120.0	Slope (1:X)	100.0	Safety Factor	2.0	Depression Storage (mm)	5	Porosity	0.30	Evaporation (mm/day)	3	Invert Level (m)	2.240	Cap Volume Depth (m)	0.500
Infiltration Coefficient Base (m/hr)	0.05330	Width (m)	12.0																							
Membrane Percolation (mm/hr)	1000	Length (m)	36.0																							
Max Percolation (l/s)	120.0	Slope (1:X)	100.0																							
Safety Factor	2.0	Depression Storage (mm)	5																							
Porosity	0.30	Evaporation (mm/day)	3																							
Invert Level (m)	2.240	Cap Volume Depth (m)	0.500																							
©1982-2018 Innovyze																										

Kirksaunders Associates Ltd					Page 1																																																																																																																																																																																																																			
Templegate House 115-123 High Street Orpington Kent BR6 0LG			SALT BOX BOGNOR REGIS Unit 2 paving 1in10+40%CC																																																																																																																																																																																																																					
Date 21/06/2019 12:03 File UNIT 2 PERMEABLE PAVING...			Designed by DO Checked by																																																																																																																																																																																																																					
Micro Drainage			Source Control 2018.1																																																																																																																																																																																																																					
Summary of Results for 10 year Return Period (+40%) Half Drain Time : 43 minutes. <table><thead><tr><th>Storm Event</th><th>Max Level (m)</th><th>Max Depth (m)</th><th>Max Infiltration (l/s)</th><th>Max Volume (m³)</th><th>Status</th></tr></thead><tbody><tr><td>15 min Summer</td><td>2.374</td><td>0.134</td><td>1.2</td><td>3.2</td><td>O K</td></tr><tr><td>30 min Summer</td><td>2.399</td><td>0.159</td><td>1.4</td><td>4.5</td><td>O K</td></tr><tr><td>60 min Summer</td><td>2.414</td><td>0.174</td><td>1.5</td><td>5.4</td><td>O K</td></tr><tr><td>120 min Summer</td><td>2.422</td><td>0.182</td><td>1.6</td><td>5.9</td><td>O K</td></tr><tr><td>180 min Summer</td><td>2.421</td><td>0.181</td><td>1.6</td><td>5.9</td><td>O K</td></tr><tr><td>240 min Summer</td><td>2.418</td><td>0.178</td><td>1.6</td><td>5.7</td><td>O K</td></tr><tr><td>360 min Summer</td><td>2.409</td><td>0.169</td><td>1.5</td><td>5.1</td><td>O K</td></tr><tr><td>480 min Summer</td><td>2.399</td><td>0.159</td><td>1.4</td><td>4.5</td><td>O K</td></tr><tr><td>600 min Summer</td><td>2.389</td><td>0.149</td><td>1.3</td><td>4.0</td><td>O K</td></tr><tr><td>720 min Summer</td><td>2.381</td><td>0.141</td><td>1.3</td><td>3.6</td><td>O K</td></tr><tr><td>960 min Summer</td><td>2.367</td><td>0.127</td><td>1.1</td><td>2.9</td><td>O K</td></tr><tr><td>1440 min Summer</td><td>2.346</td><td>0.106</td><td>0.9</td><td>2.0</td><td>O K</td></tr><tr><td>2160 min Summer</td><td>2.325</td><td>0.085</td><td>0.8</td><td>1.3</td><td>O K</td></tr><tr><td>2880 min Summer</td><td>2.312</td><td>0.072</td><td>0.6</td><td>0.9</td><td>O K</td></tr><tr><td>4320 min Summer</td><td>2.295</td><td>0.055</td><td>0.5</td><td>0.5</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>2.287</td><td>0.047</td><td>0.4</td><td>0.4</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>2.283</td><td>0.043</td><td>0.3</td><td>0.3</td><td>O K</td></tr><tr><td>8640 min Summer</td><td>2.280</td><td>0.040</td><td>0.3</td><td>0.3</td><td>O K</td></tr><tr><td>10080 min Summer</td><td>2.278</td><td>0.038</td><td>0.3</td><td>0.3</td><td>O K</td></tr><tr><td>15 min Winter</td><td>2.387</td><td>0.147</td><td>1.3</td><td>3.9</td><td>O K</td></tr></tbody></table> <table><thead><tr><th>Storm Event</th><th>Rain (mm/hr)</th><th>Flooded Volume (m³)</th><th>Time-Peak (mins)</th></tr></thead><tbody><tr><td>15 min Summer</td><td>76.214</td><td>0.0</td><td>22</td></tr><tr><td>30 min Summer</td><td>50.290</td><td>0.0</td><td>33</td></tr><tr><td>60 min Summer</td><td>31.908</td><td>0.0</td><td>52</td></tr><tr><td>120 min Summer</td><td>19.755</td><td>0.0</td><td>86</td></tr><tr><td>180 min Summer</td><td>14.804</td><td>0.0</td><td>120</td></tr><tr><td>240 min Summer</td><td>12.028</td><td>0.0</td><td>152</td></tr><tr><td>360 min Summer</td><td>8.957</td><td>0.0</td><td>216</td></tr><tr><td>480 min Summer</td><td>7.262</td><td>0.0</td><td>280</td></tr><tr><td>600 min Summer</td><td>6.168</td><td>0.0</td><td>342</td></tr><tr><td>720 min Summer</td><td>5.396</td><td>0.0</td><td>402</td></tr><tr><td>960 min Summer</td><td>4.369</td><td>0.0</td><td>522</td></tr><tr><td>1440 min Summer</td><td>3.241</td><td>0.0</td><td>762</td></tr><tr><td>2160 min Summer</td><td>2.402</td><td>0.0</td><td>1124</td></tr><tr><td>2880 min Summer</td><td>1.942</td><td>0.0</td><td>1476</td></tr><tr><td>4320 min Summer</td><td>1.437</td><td>0.0</td><td>2204</td></tr><tr><td>5760 min Summer</td><td>1.161</td><td>0.0</td><td>2936</td></tr><tr><td>7200 min Summer</td><td>0.983</td><td>0.0</td><td>3584</td></tr><tr><td>8640 min Summer</td><td>0.859</td><td>0.0</td><td>4320</td></tr><tr><td>10080 min Summer</td><td>0.766</td><td>0.0</td><td>5136</td></tr><tr><td>15 min Winter</td><td>76.214</td><td>0.0</td><td>23</td></tr></tbody></table>							Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status	15 min Summer	2.374	0.134	1.2	3.2	O K	30 min Summer	2.399	0.159	1.4	4.5	O K	60 min Summer	2.414	0.174	1.5	5.4	O K	120 min Summer	2.422	0.182	1.6	5.9	O K	180 min Summer	2.421	0.181	1.6	5.9	O K	240 min Summer	2.418	0.178	1.6	5.7	O K	360 min Summer	2.409	0.169	1.5	5.1	O K	480 min Summer	2.399	0.159	1.4	4.5	O K	600 min Summer	2.389	0.149	1.3	4.0	O K	720 min Summer	2.381	0.141	1.3	3.6	O K	960 min Summer	2.367	0.127	1.1	2.9	O K	1440 min Summer	2.346	0.106	0.9	2.0	O K	2160 min Summer	2.325	0.085	0.8	1.3	O K	2880 min Summer	2.312	0.072	0.6	0.9	O K	4320 min Summer	2.295	0.055	0.5	0.5	O K	5760 min Summer	2.287	0.047	0.4	0.4	O K	7200 min Summer	2.283	0.043	0.3	0.3	O K	8640 min Summer	2.280	0.040	0.3	0.3	O K	10080 min Summer	2.278	0.038	0.3	0.3	O K	15 min Winter	2.387	0.147	1.3	3.9	O K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	76.214	0.0	22	30 min Summer	50.290	0.0	33	60 min Summer	31.908	0.0	52	120 min Summer	19.755	0.0	86	180 min Summer	14.804	0.0	120	240 min Summer	12.028	0.0	152	360 min Summer	8.957	0.0	216	480 min Summer	7.262	0.0	280	600 min Summer	6.168	0.0	342	720 min Summer	5.396	0.0	402	960 min Summer	4.369	0.0	522	1440 min Summer	3.241	0.0	762	2160 min Summer	2.402	0.0	1124	2880 min Summer	1.942	0.0	1476	4320 min Summer	1.437	0.0	2204	5760 min Summer	1.161	0.0	2936	7200 min Summer	0.983	0.0	3584	8640 min Summer	0.859	0.0	4320	10080 min Summer	0.766	0.0	5136	15 min Winter	76.214	0.0	23
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status																																																																																																																																																																																																																			
15 min Summer	2.374	0.134	1.2	3.2	O K																																																																																																																																																																																																																			
30 min Summer	2.399	0.159	1.4	4.5	O K																																																																																																																																																																																																																			
60 min Summer	2.414	0.174	1.5	5.4	O K																																																																																																																																																																																																																			
120 min Summer	2.422	0.182	1.6	5.9	O K																																																																																																																																																																																																																			
180 min Summer	2.421	0.181	1.6	5.9	O K																																																																																																																																																																																																																			
240 min Summer	2.418	0.178	1.6	5.7	O K																																																																																																																																																																																																																			
360 min Summer	2.409	0.169	1.5	5.1	O K																																																																																																																																																																																																																			
480 min Summer	2.399	0.159	1.4	4.5	O K																																																																																																																																																																																																																			
600 min Summer	2.389	0.149	1.3	4.0	O K																																																																																																																																																																																																																			
720 min Summer	2.381	0.141	1.3	3.6	O K																																																																																																																																																																																																																			
960 min Summer	2.367	0.127	1.1	2.9	O K																																																																																																																																																																																																																			
1440 min Summer	2.346	0.106	0.9	2.0	O K																																																																																																																																																																																																																			
2160 min Summer	2.325	0.085	0.8	1.3	O K																																																																																																																																																																																																																			
2880 min Summer	2.312	0.072	0.6	0.9	O K																																																																																																																																																																																																																			
4320 min Summer	2.295	0.055	0.5	0.5	O K																																																																																																																																																																																																																			
5760 min Summer	2.287	0.047	0.4	0.4	O K																																																																																																																																																																																																																			
7200 min Summer	2.283	0.043	0.3	0.3	O K																																																																																																																																																																																																																			
8640 min Summer	2.280	0.040	0.3	0.3	O K																																																																																																																																																																																																																			
10080 min Summer	2.278	0.038	0.3	0.3	O K																																																																																																																																																																																																																			
15 min Winter	2.387	0.147	1.3	3.9	O K																																																																																																																																																																																																																			
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)																																																																																																																																																																																																																					
15 min Summer	76.214	0.0	22																																																																																																																																																																																																																					
30 min Summer	50.290	0.0	33																																																																																																																																																																																																																					
60 min Summer	31.908	0.0	52																																																																																																																																																																																																																					
120 min Summer	19.755	0.0	86																																																																																																																																																																																																																					
180 min Summer	14.804	0.0	120																																																																																																																																																																																																																					
240 min Summer	12.028	0.0	152																																																																																																																																																																																																																					
360 min Summer	8.957	0.0	216																																																																																																																																																																																																																					
480 min Summer	7.262	0.0	280																																																																																																																																																																																																																					
600 min Summer	6.168	0.0	342																																																																																																																																																																																																																					
720 min Summer	5.396	0.0	402																																																																																																																																																																																																																					
960 min Summer	4.369	0.0	522																																																																																																																																																																																																																					
1440 min Summer	3.241	0.0	762																																																																																																																																																																																																																					
2160 min Summer	2.402	0.0	1124																																																																																																																																																																																																																					
2880 min Summer	1.942	0.0	1476																																																																																																																																																																																																																					
4320 min Summer	1.437	0.0	2204																																																																																																																																																																																																																					
5760 min Summer	1.161	0.0	2936																																																																																																																																																																																																																					
7200 min Summer	0.983	0.0	3584																																																																																																																																																																																																																					
8640 min Summer	0.859	0.0	4320																																																																																																																																																																																																																					
10080 min Summer	0.766	0.0	5136																																																																																																																																																																																																																					
15 min Winter	76.214	0.0	23																																																																																																																																																																																																																					
©1982-2018 Innovyze																																																																																																																																																																																																																								

Kirksaunders Associates Ltd				Page 2	
Templegate House 115-123 High Street Orpington Kent BR6 0LG		SALT BOX BOGNOR REGIS Unit 2 paving 1in10+40%CC			
Date 21/06/2019 12:03 File UNIT 2 PERMEABLE PAVING...		Designed by DO Checked by			
Micro Drainage		Source Control 2018.1			
Summary of Results for 10 year Return Period (+40%)					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	2.412	0.172	1.5	5.4	O K
60 min Winter	2.427	0.187	1.7	6.3	O K
120 min Winter	2.432	0.192	1.7	6.6	O K
180 min Winter	2.428	0.188	1.7	6.4	O K
240 min Winter	2.421	0.181	1.6	5.9	O K
360 min Winter	2.406	0.166	1.5	5.0	O K
480 min Winter	2.392	0.152	1.4	4.2	O K
600 min Winter	2.380	0.140	1.2	3.5	O K
720 min Winter	2.369	0.129	1.1	3.0	O K
960 min Winter	2.351	0.111	1.0	2.2	O K
1440 min Winter	2.327	0.087	0.8	1.4	O K
2160 min Winter	2.306	0.066	0.6	0.8	O K
2880 min Winter	2.293	0.053	0.5	0.5	O K
4320 min Winter	2.285	0.045	0.4	0.4	O K
5760 min Winter	2.280	0.040	0.3	0.3	O K
7200 min Winter	2.277	0.037	0.2	0.2	O K
8640 min Winter	2.274	0.034	0.2	0.2	O K
10080 min Winter	2.272	0.032	0.2	0.2	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	50.290	0.0	34		
60 min Winter	31.908	0.0	54		
120 min Winter	19.755	0.0	92		
180 min Winter	14.804	0.0	128		
240 min Winter	12.028	0.0	162		
360 min Winter	8.957	0.0	228		
480 min Winter	7.262	0.0	292		
600 min Winter	6.168	0.0	354		
720 min Winter	5.396	0.0	414		
960 min Winter	4.369	0.0	534		
1440 min Winter	3.241	0.0	770		
2160 min Winter	2.402	0.0	1124		
2880 min Winter	1.942	0.0	1476		
4320 min Winter	1.437	0.0	2200		
5760 min Winter	1.161	0.0	2936		
7200 min Winter	0.983	0.0	3672		
8640 min Winter	0.859	0.0	4408		
10080 min Winter	0.766	0.0	5136		
©1982-2018 Innovyze					

Kirksaunders Associates Ltd		Page 3
Templegate House 115-123 High Street Orpington Kent BR6 0LG	SALT BOX BOGNOR REGIS Unit 2 paving 1in10+40%CC	
Date 21/06/2019 12:03 File UNIT 2 PERMEABLE PAVING...	Designed by DO Checked by	
Micro Drainage Source Control 2018.1		

Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	10	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	19.000	Shortest Storm (mins)	15
Ratio R	0.350	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.043

Time (mins)	Area	Time (mins)	Area	Time (mins)	Area
From: To:	(ha)	From: To:	(ha)	From: To:	(ha)
0 4	0.014	4 8	0.014	8 12	0.015

©1982-2018 Innovyze

Kirksaunders Associates Ltd		Page 4																								
Templegate House 115-123 High Street Orpington Kent BR6 0LG	SALT BOX BOGNOR REGIS Unit 2 paving 1in10+40%CC																									
Date 21/06/2019 12:03	Designed by DO																									
File UNIT 2 PERMEABLE PAVING...	Checked by																									
Micro Drainage		Source Control 2018.1																								
<u>Model Details</u> Storage is Online Cover Level (m) 2.800 <u>Porous Car Park Structure</u> <table> <tr> <td>Infiltration Coefficient Base (m/hr)</td> <td>0.05330</td> <td>Width (m)</td> <td>12.0</td> </tr> <tr> <td>Membrane Percolation (mm/hr)</td> <td>1000</td> <td>Length (m)</td> <td>36.0</td> </tr> <tr> <td>Max Percolation (l/s)</td> <td>120.0</td> <td>Slope (1:X)</td> <td>100.0</td> </tr> <tr> <td>Safety Factor</td> <td>2.0</td> <td>Depression Storage (mm)</td> <td>5</td> </tr> <tr> <td>Porosity</td> <td>0.30</td> <td>Evaporation (mm/day)</td> <td>3</td> </tr> <tr> <td>Invert Level (m)</td> <td>2.240</td> <td>Cap Volume Depth (m)</td> <td>0.500</td> </tr> </table>			Infiltration Coefficient Base (m/hr)	0.05330	Width (m)	12.0	Membrane Percolation (mm/hr)	1000	Length (m)	36.0	Max Percolation (l/s)	120.0	Slope (1:X)	100.0	Safety Factor	2.0	Depression Storage (mm)	5	Porosity	0.30	Evaporation (mm/day)	3	Invert Level (m)	2.240	Cap Volume Depth (m)	0.500
Infiltration Coefficient Base (m/hr)	0.05330	Width (m)	12.0																							
Membrane Percolation (mm/hr)	1000	Length (m)	36.0																							
Max Percolation (l/s)	120.0	Slope (1:X)	100.0																							
Safety Factor	2.0	Depression Storage (mm)	5																							
Porosity	0.30	Evaporation (mm/day)	3																							
Invert Level (m)	2.240	Cap Volume Depth (m)	0.500																							
©1982-2018 Innovyze																										

Kirksaunders Associates Ltd										Page 1	
Templegate House 115-123 High Street Orpington Kent BR6 0LG					SALT BOX BOGNOR REGIS PHASE 1 FOUL NETWORK						
Date 18/06/2019 15:49					Designed by DO						
File					Checked by						
Micro Drainage					Network 2018.1						
Existing Network Details for Foul - Main											
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
F1.000	28.322	0.220	128.7	0.000	5.00	2.3	1.500	o	150	Pipe/Conduit	
F1.001	24.664	0.190	129.8	0.000	0.00	0.7	1.500	o	150	Pipe/Conduit	
F1.002	54.697	0.420	130.2	0.000	0.00	0.0	1.500	o	150	Pipe/Conduit	
F2.000	23.088	0.265	87.1	0.000	5.00	0.2	1.500	o	150	Pipe/Conduit	
F1.003	75.601	0.580	130.3	0.000	0.00	0.0	1.500	o	150	Pipe/Conduit	
F1.004	8.376	0.070	119.7	0.000	0.00	0.7	1.500	o	150	Pipe/Conduit	
F3.000	77.953	0.630	123.7	0.000	5.00	0.0	1.500	o	150	Pipe/Conduit	
F3.001	16.438	0.130	126.4	0.000	0.00	0.0	1.500	o	150	Pipe/Conduit	
F3.002	67.065	0.520	129.0	0.000	0.00	1.6	1.500	o	150	Pipe/Conduit	
F1.005	31.227	0.245	127.5	0.000	0.00	0.0	1.500	o	150	Pipe/Conduit	
F1.006	34.186	0.265	129.0	0.000	0.00	0.0	1.500	o	150	Pipe/Conduit	
F1.007	33.942	0.265	128.1	0.000	0.00	2.2	1.500	o	150	Pipe/Conduit	
F1.008	17.144	0.130	131.9	0.000	0.00	0.0	1.500	o	150	Pipe/Conduit	
F1.009	3.111	0.025	124.4	0.000	0.00	0.0	1.500	o	150	Pipe/Conduit	
F1.010	112.550	-1.395	-80.7	0.000	0.00	0.0	1.500	o	150	Pipe/Conduit	
F1.011	55.284	0.425	130.1	0.000	5.00	0.0	1.500	o	150	Pipe/Conduit	
Network Results Table											
PN	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Vel (m/s)	Cap (l/s)						
F1.000	1.560	0.000	2.3	0.77	13.6						
F1.001	1.340	0.000	3.0	0.77	13.6						
F1.002	1.150	0.000	3.0	0.77	13.6						
F2.000	0.995	0.000	0.2	0.94	16.6						
F1.003	0.730	0.000	3.2	0.77	13.5						
F1.004	0.150	0.000	3.9	0.80	14.1						
F3.000	1.360	0.000	0.0	0.79	13.9						
F3.001	0.730	0.000	0.0	0.78	13.8						
F3.002	0.600	0.000	1.6	0.77	13.6						
F1.005	0.080	0.000	5.5	0.78	13.7						
F1.006	-0.165	0.000	5.5	0.77	13.6						
F1.007	-0.430	0.000	7.7	0.77	13.7						
F1.008	-0.695	0.000	7.7	0.76	13.5						
F1.009	-0.825	0.000	7.7	0.78	13.9						
F1.010	-0.850	0.000	7.7	0.00	0.0						
F1.011	0.545	0.000	7.7	0.77	13.6						
©1982-2018 Innovyze											

Kirksaunders Associates Ltd								Page 2	
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS PHASE 1 FOUL NETWORK					
Date 18/06/2019 15:49 File				Designed by DO Checked by					
Micro Drainage				Network 2018.1					
Manhole Schedules for Foul - Main									
MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam., L*W (mm)	PN	Pipe Out Invert Level (m)	Diameter (mm)	PN	Pipes In Invert Level (m)
F1	3.270	1.710	Open Manhole	1200	F1.000	1.560	150		
F2	3.065	1.725	Open Manhole	1200	F1.001	1.340	150	F1.000	1.340
F3	2.980	1.830	Open Manhole	1200	F1.002	1.150	150	F1.001	1.150
F4	2.345	1.350	Open Manhole	1200	F2.000	0.995	150		
F5	2.160	1.430	Open Manhole	1200	F1.003	0.730	150	F1.002	0.730
								F2.000	0.730
F6	2.820	2.670	Open Manhole	1200	F1.004	0.150	150	F1.003	0.150
F7	2.109	0.749	Open Manhole	1200	F3.000	1.360	150		
F8	3.030	2.300	Open Manhole	1200	F3.001	0.730	150	F3.000	0.730
F8A	2.950	2.350	Open Manhole	1200	F3.002	0.600	150	F3.001	0.600
F9	2.890	2.810	Open Manhole	1200	F1.005	0.080	150	F1.004	0.080
								F3.002	0.080
F10	2.630	2.795	Open Manhole	1200	F1.006	-0.165	150	F1.005	-0.165
F11	2.540	2.970	Open Manhole	1200	F1.007	-0.430	150	F1.006	-0.430
F11A	2.270	2.965	Open Manhole	1200	F1.008	-0.695	150	F1.007	-0.695
F12	2.300	3.125	Open Manhole	1200	F1.009	-0.825	150	F1.008	-0.825
F13 PUMP	2.360	3.210	Open Manhole	1200	F1.010	-0.850	150	F1.009	-0.850
F14	2.170	1.625	Open Manhole	1200	F1.011	0.545	150	F1.010	0.545
F	0.000		Open Manhole	0		OUTFALL		F1.011	0.120
©1982-2018 Innovyze									

Kirksaunders Associates Ltd								Page 3	
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS PHASE 1 FOUL NETWORK					
Date 18/06/2019 15:49 File				Designed by DO Checked by					
Micro Drainage				Network 2018.1					
PIPELINE SCHEDULES for Foul - Main									
Upstream Manhole									
PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)	
F1.000	o	150	F1	3.270	1.560	1.560	Open Manhole	1200	
F1.001	o	150	F2	3.065	1.340	1.575	Open Manhole	1200	
F1.002	o	150	F3	2.980	1.150	1.680	Open Manhole	1200	
F2.000	o	150	F4	2.345	0.995	1.200	Open Manhole	1200	
F1.003	o	150	F5	2.160	0.730	1.280	Open Manhole	1200	
F1.004	o	150	F6	2.820	0.150	2.520	Open Manhole	1200	
F3.000	o	150	F7	2.109	1.360	0.599	Open Manhole	1200	
F3.001	o	150	F8	3.030	0.730	2.150	Open Manhole	1200	
F3.002	o	150	F8A	2.950	0.600	2.200	Open Manhole	1200	
F1.005	o	150	F9	2.890	0.080	2.660	Open Manhole	1200	
F1.006	o	150	F10	2.630	-0.165	2.645	Open Manhole	1200	
F1.007	o	150	F11	2.540	-0.430	2.820	Open Manhole	1200	
F1.008	o	150	F11A	2.270	-0.695	2.815	Open Manhole	1200	
F1.009	o	150	F12	2.300	-0.825	2.975	Open Manhole	1200	
F1.010	o	150	F13 PUMP	2.360	-0.850	3.060	Open Manhole	1200	
F1.011	o	150	F14	2.170	0.545	1.475	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)	
F1.000	28.322	128.7	F2	3.065	1.340	1.575	Open Manhole	1200	
F1.001	24.664	129.8	F3	2.980	1.150	1.680	Open Manhole	1200	
F1.002	54.697	130.2	F5	2.160	0.730	1.280	Open Manhole	1200	
F2.000	23.088	87.1	F5	2.160	0.730	1.280	Open Manhole	1200	
F1.003	75.601	130.3	F6	2.820	0.150	2.520	Open Manhole	1200	
F1.004	8.376	119.7	F9	2.890	0.080	2.660	Open Manhole	1200	
F3.000	77.953	123.7	F8	3.030	0.730	2.150	Open Manhole	1200	
F3.001	16.438	126.4	F8A	2.950	0.600	2.200	Open Manhole	1200	
F3.002	67.065	129.0	F9	2.890	0.080	2.660	Open Manhole	1200	
F1.005	31.227	127.5	F10	2.630	-0.165	2.645	Open Manhole	1200	
F1.006	34.186	129.0	F11	2.540	-0.430	2.820	Open Manhole	1200	
F1.007	33.942	128.1	F11A	2.270	-0.695	2.815	Open Manhole	1200	
F1.008	17.144	131.9	F12	2.300	-0.825	2.975	Open Manhole	1200	
F1.009	3.111	124.4	F13 PUMP	2.360	-0.850	3.060	Open Manhole	1200	
F1.010	112.550	-80.7	F14	2.170	0.545	1.475	Open Manhole	1200	
F1.011	55.284	130.1	F	0.000	0.120		Open Manhole	0	
©1982-2018 Innovyze									

Kirksaunders Associates Ltd										Page 1	
Templegate House 115-123 High Street Orpington Kent BR6 0LG					SALT BOX BOGNOR REGIS RD 1 in 100+40%CC						
Date 18/06/2019 15:32					Designed by DO						
File ACCES ROAD STORM NETWORK...					Checked by						
Micro Drainage					Network 2018.1						
<u>Existing Network Details for Existing</u>											
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
E1.000	74.847	0.375	199.6	0.133	5.00	0.0	0.600	o	300	Pipe/Conduit	
E1.001	65.937	0.330	199.8	0.094	0.00	0.0	0.600	o	300	Pipe/Conduit	
E2.000	34.218	0.215	159.2	0.010	5.00	0.0	0.600	o	225	Pipe/Conduit	
E1.002	89.879	0.310	289.9	0.134	0.00	0.0	0.600	o	375	Pipe/Conduit	
E3.000	28.602	0.350	81.7	0.041	5.00	0.0	0.600	o	300	Pipe/Conduit	
E1.003	61.232	0.220	278.3	0.123	0.00	0.0	0.600	o	375	Pipe/Conduit	
E1.004	0.995	0.004	248.8	0.108	0.00	0.0	0.600	o	375	Pipe/Conduit	
E1.005	2.211	0.007	315.9	0.108	0.00	0.0	0.600	o	375	Pipe/Conduit	
E1.006	99.369	0.049	2027.9	0.000	0.00	0.0	0.600	[]	-1	Pipe/Conduit	
E1.007	5.021	0.018	278.9	0.000	0.00	0.0	0.600	o	375	Pipe/Conduit	
E1.008	15.115	0.062	243.8	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
E1.009	8.557	0.085	100.7	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
E1.010	6.368	0.055	115.8	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
<u>Network Results Table</u>											
PN	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Vel (m/s)	Cap (l/s)						
E1.000	1.905	0.133	0.0	1.11	78.4						
E1.001	1.530	0.227	0.0	1.11	78.4						
E2.000	1.415	0.010	0.0	1.03	41.1						
E1.002	1.200	0.371	0.0	1.06	117.0						
E3.000	1.240	0.041	0.0	1.74	123.0						
E1.003	0.890	0.535	0.0	1.08	119.4						
E1.004	0.670	0.643	0.0	1.14	126.4						
E1.005	0.666	0.751	0.0	1.01	112.0						
E1.006	0.659	0.751	0.0	1.01	5031.0						
E1.007	0.610	0.751	0.0	1.08	119.3						
E1.008	0.592	0.751	0.0	0.83	33.1						
E1.009	0.530	0.751	0.0	1.30	51.8						
E1.010	0.445	0.751	0.0	1.21	48.3						
©1982-2018 Innovyze											

Kirksaunders Associates Ltd		Page 2
Templegate House 115-123 High Street Orpington Kent BR6 0LG	SALT BOX BOGNOR REGIS RD 1 in 100+40%CC	
Date 18/06/2019 15:32	Designed by DO	
File ACCES ROAD STORM NETWORK...	Checked by	
Micro Drainage		Network 2018.1

Conduit Sections for Existing

NOTE: Diameters less than 66 refer to section numbers of hydraulic conduits. These conduits are marked by the symbols:- [] box culvert, \ / open channel, oo dual pipe, ooo triple pipe, O egg.

Section numbers < 0 are taken from user conduit table

Section Number	Conduit Type	Major Dimn. (mm)	Minor Dimn. (mm)	Side Slope (Deg)	Corner Splay (mm)	4*Hyd Radius (m)	XSect Area (m ²)
-1	[]	5000	1000	90.0		1.667	5.000

©1982-2018 Innovyze

Kirksaunders Associates Ltd								Page 3	
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS RD 1 in 100+40%CC					
Date 18/06/2019 15:32 File ACCES ROAD STORM NETWORK...				Designed by DO Checked by					
Micro Drainage				Network 2018.1					
Manhole Schedules for Existing									
MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam., L*W (mm)	PN	Pipe Out Invert Level (m)	Diameter (mm)	PN	Pipes In Invert Level (m)
ESWMH1	2.880	0.975	Open Manhole	1200	E1.000	1.905	300		
ESWMH2	2.880	1.350	Open Manhole	1200	E1.001	1.530	300	E1.000	1.530
ESWMH3	2.650	1.235	Open Manhole	1200	E2.000	1.415	225		
ESWMH4	2.400	1.200	Open Manhole	1200	E1.002	1.200	375	E1.001	1.200
								E2.000	1.200
ESWMH5	2.640	1.400	Open Manhole	1200	E3.000	1.240	300		
ESWMH6	2.880	1.990	Open Manhole	1200	E1.003	0.890	375	E1.002	0.890
								E3.000	0.890
ESWMH6A	2.860	2.190	Open Manhole	1200	E1.004	0.670	375	E1.003	0.670
ETANK	3.000	2.334	Open Manhole	1200	E1.005	0.666	375	E1.004	0.666
EDummy1	2.800	2.141	Open Manhole	1200	E1.006	0.659	-1	E1.005	0.659
EDummy 2	2.540	1.930	Open Manhole	1200	E1.007	0.610	375	E1.006	0.610
ESWMH7	2.080	1.488	Open Manhole	1200	E1.008	0.592	225	E1.007	0.592
ESWMH8	2.000	1.470	Open Manhole	1200	E1.009	0.530	225	E1.008	0.530
E13	2.400	1.955	Open Manhole	1200	E1.010	0.445	225	E1.009	0.445
EDITCH	2.800	2.410	Open Manhole	1200		OUTFALL		E1.010	0.390
©1982-2018 Innovyze									

Kirksaunders Associates Ltd								Page 4	
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS RD 1 in 100+40%CC					
Date 18/06/2019 15:32				Designed by DO					
File ACCES ROAD STORM NETWORK...				Checked by					
Micro Drainage				Network 2018.1					
PIPELINE SCHEDULES for Existing									
Upstream Manhole									
PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)	
E1.000	o	300	ESWMH1	2.880	1.905	0.675	Open Manhole		1200
E1.001	o	300	ESWMH2	2.880	1.530	1.050	Open Manhole		1200
E2.000	o	225	ESWMH3	2.650	1.415	1.010	Open Manhole		1200
E1.002	o	375	ESWMH4	2.400	1.200	0.825	Open Manhole		1200
E3.000	o	300	ESWMH5	2.640	1.240	1.100	Open Manhole		1200
E1.003	o	375	ESWMH6	2.880	0.890	1.615	Open Manhole		1200
E1.004	o	375	ESWMH6A	2.860	0.670	1.815	Open Manhole		1200
E1.005	o	375	ETANK	3.000	0.666	1.959	Open Manhole		1200
E1.006	[]	-1	EDummy1	2.800	0.659	1.141	Open Manhole		1200
E1.007	o	375	EDummy 2	2.540	0.610	1.555	Open Manhole		1200
E1.008	o	225	ESWMH7	2.080	0.592	1.263	Open Manhole		1200
E1.009	o	225	ESWMH8	2.000	0.530	1.245	Open Manhole		1200
E1.010	o	225	E13	2.400	0.445	1.730	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)	
E1.000	74.847	199.6	ESWMH2	2.880	1.530	1.050	Open Manhole		1200
E1.001	65.937	199.8	ESWMH4	2.400	1.200	0.900	Open Manhole		1200
E2.000	34.218	159.2	ESWMH4	2.400	1.200	0.975	Open Manhole		1200
E1.002	89.879	289.9	ESWMH6	2.880	0.890	1.615	Open Manhole		1200
E3.000	28.602	81.7	ESWMH6	2.880	0.890	1.690	Open Manhole		1200
E1.003	61.232	278.3	ESWMH6A	2.860	0.670	1.815	Open Manhole		1200
E1.004	0.995	248.8	ETANK	3.000	0.666	1.959	Open Manhole		1200
E1.005	2.211	315.9	EDummy1	2.800	0.659	1.766	Open Manhole		1200
E1.006	99.369	2027.9	EDummy 2	2.540	0.610	0.930	Open Manhole		1200
E1.007	5.021	278.9	ESWMH7	2.080	0.592	1.113	Open Manhole		1200
E1.008	15.115	243.8	ESWMH8	2.000	0.530	1.245	Open Manhole		1200
E1.009	8.557	100.7	E13	2.400	0.445	1.730	Open Manhole		1200
E1.010	6.368	115.8	EDITCH	2.800	0.390	2.185	Open Manhole		1200
©1982-2018 Innovyze									

Kirksaunders Associates Ltd				Page 5							
Templegate House 115-123 High Street Orpington Kent BR6 0LG			SALT BOX BOGNOR REGIS RD 1 in 100+40%CC								
Date 18/06/2019 15:32 File ACCES ROAD STORM NETWOR...			Designed by DO Checked by								
Micro Drainage			Network 2018.1								
Area Summary for Existing											
Pipe Number	PIMP Type	PIMP Name	PIMP (%)	Gross Area (ha)	Imp. Area (ha)	Pipe Total (ha)					
1.000	-	-	100	0.133	0.133	0.133					
1.001	-	-	100	0.094	0.094	0.094					
2.000	-	-	100	0.010	0.010	0.010					
1.002	-	-	100	0.134	0.134	0.134					
3.000	-	-	100	0.041	0.041	0.041					
1.003	-	-	100	0.123	0.123	0.123					
1.004	-	-	100	0.108	0.108	0.108					
1.005	-	-	100	0.108	0.108	0.108					
1.006	-	-	100	0.000	0.000	0.000					
1.007	-	-	100	0.000	0.000	0.000					
1.008	-	-	100	0.000	0.000	0.000					
1.009	-	-	100	0.000	0.000	0.000					
1.010	-	-	100	0.000	0.000	0.000					
				Total	Total	Total					
				0.751	0.751	0.751					
Surcharged Outfall Details for Existing											
Outfall Pipe Number	Outfall Name	C. Level (m)	I. Level (m)	Min I. Level (m)	D,L (mm)	W (mm)					
E1.010	EDITCH	2.800	0.390	0.000	1200	0					
Datum (m) 0.390 Offset (mins) 0											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
1	1.460	21	1.460	41	1.460	61	1.460	81	1.460	101	1.460
2	1.460	22	1.460	42	1.460	62	1.460	82	1.460	102	1.460
3	1.460	23	1.460	43	1.460	63	1.460	83	1.460	103	1.460
4	1.460	24	1.460	44	1.460	64	1.460	84	1.460	104	1.460
5	1.460	25	1.460	45	1.460	65	1.460	85	1.460	105	1.460
6	1.460	26	1.460	46	1.460	66	1.460	86	1.460	106	1.460
7	1.460	27	1.460	47	1.460	67	1.460	87	1.460	107	1.460
8	1.460	28	1.460	48	1.460	68	1.460	88	1.460	108	1.460
9	1.460	29	1.460	49	1.460	69	1.460	89	1.460	109	1.460
10	1.460	30	1.460	50	1.460	70	1.460	90	1.460	110	1.460
11	1.460	31	1.460	51	1.460	71	1.460	91	1.460	111	1.460
12	1.460	32	1.460	52	1.460	72	1.460	92	1.460	112	1.460
13	1.460	33	1.460	53	1.460	73	1.460	93	1.460	113	1.460
14	1.460	34	1.460	54	1.460	74	1.460	94	1.460	114	1.460
15	1.460	35	1.460	55	1.460	75	1.460	95	1.460	115	1.460
16	1.460	36	1.460	56	1.460	76	1.460	96	1.460	116	1.460
17	1.460	37	1.460	57	1.460	77	1.460	97	1.460	117	1.460
18	1.460	38	1.460	58	1.460	78	1.460	98	1.460	118	1.460
19	1.460	39	1.460	59	1.460	79	1.460	99	1.460	119	1.460
20	1.460	40	1.460	60	1.460	80	1.460	100	1.460	120	1.460
©1982-2018 Innovyze											

Kirksaunders Associates Ltd										Page 6	
Templegate House 115-123 High Street Orpington Kent BR6 0LG					SALT BOX BOGNOR REGIS RD 1 in 100+40%CC						
Date 18/06/2019 15:32 File ACCES ROAD STORM NETWOR...					Designed by DO Checked by						
Micro Drainage					Network 2018.1						
Surcharged Outfall Details for Existing											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
121	1.460	171	1.460	221	1.460	271	1.460	321	1.460	371	1.460
122	1.460	172	1.460	222	1.460	272	1.460	322	1.460	372	1.460
123	1.460	173	1.460	223	1.460	273	1.460	323	1.460	373	1.460
124	1.460	174	1.460	224	1.460	274	1.460	324	1.460	374	1.460
125	1.460	175	1.460	225	1.460	275	1.460	325	1.460	375	1.460
126	1.460	176	1.460	226	1.460	276	1.460	326	1.460	376	1.460
127	1.460	177	1.460	227	1.460	277	1.460	327	1.460	377	1.460
128	1.460	178	1.460	228	1.460	278	1.460	328	1.460	378	1.460
129	1.460	179	1.460	229	1.460	279	1.460	329	1.460	379	1.460
130	1.460	180	1.460	230	1.460	280	1.460	330	1.460	380	1.460
131	1.460	181	1.460	231	1.460	281	1.460	331	1.460	381	1.460
132	1.460	182	1.460	232	1.460	282	1.460	332	1.460	382	1.460
133	1.460	183	1.460	233	1.460	283	1.460	333	1.460	383	1.460
134	1.460	184	1.460	234	1.460	284	1.460	334	1.460	384	1.460
135	1.460	185	1.460	235	1.460	285	1.460	335	1.460	385	1.460
136	1.460	186	1.460	236	1.460	286	1.460	336	1.460	386	1.460
137	1.460	187	1.460	237	1.460	287	1.460	337	1.460	387	1.460
138	1.460	188	1.460	238	1.460	288	1.460	338	1.460	388	1.460
139	1.460	189	1.460	239	1.460	289	1.460	339	1.460	389	1.460
140	1.460	190	1.460	240	1.460	290	1.460	340	1.460	390	1.460
141	1.460	191	1.460	241	1.460	291	1.460	341	1.460	391	1.460
142	1.460	192	1.460	242	1.460	292	1.460	342	1.460	392	1.460
143	1.460	193	1.460	243	1.460	293	1.460	343	1.460	393	1.460
144	1.460	194	1.460	244	1.460	294	1.460	344	1.460	394	1.460
145	1.460	195	1.460	245	1.460	295	1.460	345	1.460	395	1.460
146	1.460	196	1.460	246	1.460	296	1.460	346	1.460	396	1.460
147	1.460	197	1.460	247	1.460	297	1.460	347	1.460	397	1.460
148	1.460	198	1.460	248	1.460	298	1.460	348	1.460	398	1.460
149	1.460	199	1.460	249	1.460	299	1.460	349	1.460	399	1.460
150	1.460	200	1.460	250	1.460	300	1.460	350	1.460	400	1.460
151	1.460	201	1.460	251	1.460	301	1.460	351	1.460	401	1.460
152	1.460	202	1.460	252	1.460	302	1.460	352	1.460	402	1.460
153	1.460	203	1.460	253	1.460	303	1.460	353	1.460	403	1.460
154	1.460	204	1.460	254	1.460	304	1.460	354	1.460	404	1.460
155	1.460	205	1.460	255	1.460	305	1.460	355	1.460	405	1.460
156	1.460	206	1.460	256	1.460	306	1.460	356	1.460	406	1.460
157	1.460	207	1.460	257	1.460	307	1.460	357	1.460	407	1.460
158	1.460	208	1.460	258	1.460	308	1.460	358	1.460	408	1.460
159	1.460	209	1.460	259	1.460	309	1.460	359	1.460	409	1.460
160	1.460	210	1.460	260	1.460	310	1.460	360	1.460	410	1.460
161	1.460	211	1.460	261	1.460	311	1.460	361	1.460	411	1.460
162	1.460	212	1.460	262	1.460	312	1.460	362	1.460	412	1.460
163	1.460	213	1.460	263	1.460	313	1.460	363	1.460	413	1.460
164	1.460	214	1.460	264	1.460	314	1.460	364	1.460	414	1.460
165	1.460	215	1.460	265	1.460	315	1.460	365	1.460	415	1.460
166	1.460	216	1.460	266	1.460	316	1.460	366	1.460	416	1.460
167	1.460	217	1.460	267	1.460	317	1.460	367	1.460	417	1.460
168	1.460	218	1.460	268	1.460	318	1.460	368	1.460	418	1.460
169	1.460	219	1.460	269	1.460	319	1.460	369	1.460	419	1.460
170	1.460	220	1.460	270	1.460	320	1.460	370	1.460	420	1.460
©1982-2018 Innovyze											

Kirksaunders Associates Ltd										Page 7	
Templegate House 115-123 High Street Orpington Kent BR6 0LG					SALT BOX BOGNOR REGIS RD 1 in 100+40%CC						
Date 18/06/2019 15:32					Designed by DO						
File ACCES ROAD STORM NETWOR...					Checked by						
Micro Drainage					Network 2018.1						
Surcharged Outfall Details for Existing											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
421	1.460	471	1.460	521	1.460	571	1.460	621	1.460	671	1.460
422	1.460	472	1.460	522	1.460	572	1.460	622	1.460	672	1.460
423	1.460	473	1.460	523	1.460	573	1.460	623	1.460	673	1.460
424	1.460	474	1.460	524	1.460	574	1.460	624	1.460	674	1.460
425	1.460	475	1.460	525	1.460	575	1.460	625	1.460	675	1.460
426	1.460	476	1.460	526	1.460	576	1.460	626	1.460	676	1.460
427	1.460	477	1.460	527	1.460	577	1.460	627	1.460	677	1.460
428	1.460	478	1.460	528	1.460	578	1.460	628	1.460	678	1.460
429	1.460	479	1.460	529	1.460	579	1.460	629	1.460	679	1.460
430	1.460	480	1.460	530	1.460	580	1.460	630	1.460	680	1.460
431	1.460	481	1.460	531	1.460	581	1.460	631	1.460	681	1.460
432	1.460	482	1.460	532	1.460	582	1.460	632	1.460	682	1.460
433	1.460	483	1.460	533	1.460	583	1.460	633	1.460	683	1.460
434	1.460	484	1.460	534	1.460	584	1.460	634	1.460	684	1.460
435	1.460	485	1.460	535	1.460	585	1.460	635	1.460	685	1.460
436	1.460	486	1.460	536	1.460	586	1.460	636	1.460	686	1.460
437	1.460	487	1.460	537	1.460	587	1.460	637	1.460	687	1.460
438	1.460	488	1.460	538	1.460	588	1.460	638	1.460	688	1.460
439	1.460	489	1.460	539	1.460	589	1.460	639	1.460	689	1.460
440	1.460	490	1.460	540	1.460	590	1.460	640	1.460	690	1.460
441	1.460	491	1.460	541	1.460	591	1.460	641	1.460	691	1.460
442	1.460	492	1.460	542	1.460	592	1.460	642	1.460	692	1.460
443	1.460	493	1.460	543	1.460	593	1.460	643	1.460	693	1.460
444	1.460	494	1.460	544	1.460	594	1.460	644	1.460	694	1.460
445	1.460	495	1.460	545	1.460	595	1.460	645	1.460	695	1.460
446	1.460	496	1.460	546	1.460	596	1.460	646	1.460	696	1.460
447	1.460	497	1.460	547	1.460	597	1.460	647	1.460	697	1.460
448	1.460	498	1.460	548	1.460	598	1.460	648	1.460	698	1.460
449	1.460	499	1.460	549	1.460	599	1.460	649	1.460	699	1.460
450	1.460	500	1.460	550	1.460	600	1.460	650	1.460	700	1.460
451	1.460	501	1.460	551	1.460	601	1.460	651	1.460	701	1.460
452	1.460	502	1.460	552	1.460	602	1.460	652	1.460	702	1.460
453	1.460	503	1.460	553	1.460	603	1.460	653	1.460	703	1.460
454	1.460	504	1.460	554	1.460	604	1.460	654	1.460	704	1.460
455	1.460	505	1.460	555	1.460	605	1.460	655	1.460	705	1.460
456	1.460	506	1.460	556	1.460	606	1.460	656	1.460	706	1.460
457	1.460	507	1.460	557	1.460	607	1.460	657	1.460	707	1.460
458	1.460	508	1.460	558	1.460	608	1.460	658	1.460	708	1.460
459	1.460	509	1.460	559	1.460	609	1.460	659	1.460	709	1.460
460	1.460	510	1.460	560	1.460	610	1.460	660	1.460	710	1.460
461	1.460	511	1.460	561	1.460	611	1.460	661	1.460	711	1.460
462	1.460	512	1.460	562	1.460	612	1.460	662	1.460	712	1.460
463	1.460	513	1.460	563	1.460	613	1.460	663	1.460	713	1.460
464	1.460	514	1.460	564	1.460	614	1.460	664	1.460	714	1.460
465	1.460	515	1.460	565	1.460	615	1.460	665	1.460	715	1.460
466	1.460	516	1.460	566	1.460	616	1.460	666	1.460	716	1.460
467	1.460	517	1.460	567	1.460	617	1.460	667	1.460	717	1.460
468	1.460	518	1.460	568	1.460	618	1.460	668	1.460	718	1.460
469	1.460	519	1.460	569	1.460	619	1.460	669	1.460	719	1.460
470	1.460	520	1.460	570	1.460	620	1.460	670	1.460	720	1.460
©1982-2018 Innovyze											

Kirksaunders Associates Ltd										Page 8	
Templegate House 115-123 High Street Orpington Kent BR6 0LG					SALT BOX BOGNOR REGIS RD 1 in 100+40%CC						
Date 18/06/2019 15:32 File ACCES ROAD STORM NETWOR...					Designed by DO Checked by						
Micro Drainage					Network 2018.1						
Surcharged Outfall Details for Existing											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
721	1.460	771	1.460	821	1.460	871	1.460	921	1.460	971	1.460
722	1.460	772	1.460	822	1.460	872	1.460	922	1.460	972	1.460
723	1.460	773	1.460	823	1.460	873	1.460	923	1.460	973	1.460
724	1.460	774	1.460	824	1.460	874	1.460	924	1.460	974	1.460
725	1.460	775	1.460	825	1.460	875	1.460	925	1.460	975	1.460
726	1.460	776	1.460	826	1.460	876	1.460	926	1.460	976	1.460
727	1.460	777	1.460	827	1.460	877	1.460	927	1.460	977	1.460
728	1.460	778	1.460	828	1.460	878	1.460	928	1.460	978	1.460
729	1.460	779	1.460	829	1.460	879	1.460	929	1.460	979	1.460
730	1.460	780	1.460	830	1.460	880	1.460	930	1.460	980	1.460
731	1.460	781	1.460	831	1.460	881	1.460	931	1.460	981	1.460
732	1.460	782	1.460	832	1.460	882	1.460	932	1.460	982	1.460
733	1.460	783	1.460	833	1.460	883	1.460	933	1.460	983	1.460
734	1.460	784	1.460	834	1.460	884	1.460	934	1.460	984	1.460
735	1.460	785	1.460	835	1.460	885	1.460	935	1.460	985	1.460
736	1.460	786	1.460	836	1.460	886	1.460	936	1.460	986	1.460
737	1.460	787	1.460	837	1.460	887	1.460	937	1.460	987	1.460
738	1.460	788	1.460	838	1.460	888	1.460	938	1.460	988	1.460
739	1.460	789	1.460	839	1.460	889	1.460	939	1.460	989	1.460
740	1.460	790	1.460	840	1.460	890	1.460	940	1.460	990	1.460
741	1.460	791	1.460	841	1.460	891	1.460	941	1.460	991	1.460
742	1.460	792	1.460	842	1.460	892	1.460	942	1.460	992	1.460
743	1.460	793	1.460	843	1.460	893	1.460	943	1.460	993	1.460
744	1.460	794	1.460	844	1.460	894	1.460	944	1.460	994	1.460
745	1.460	795	1.460	845	1.460	895	1.460	945	1.460	995	1.460
746	1.460	796	1.460	846	1.460	896	1.460	946	1.460	996	1.460
747	1.460	797	1.460	847	1.460	897	1.460	947	1.460	997	1.460
748	1.460	798	1.460	848	1.460	898	1.460	948	1.460	998	1.460
749	1.460	799	1.460	849	1.460	899	1.460	949	1.460	999	1.460
750	1.460	800	1.460	850	1.460	900	1.460	950	1.460	1000	1.460
751	1.460	801	1.460	851	1.460	901	1.460	951	1.460	1001	1.460
752	1.460	802	1.460	852	1.460	902	1.460	952	1.460	1002	1.460
753	1.460	803	1.460	853	1.460	903	1.460	953	1.460	1003	1.460
754	1.460	804	1.460	854	1.460	904	1.460	954	1.460	1004	1.460
755	1.460	805	1.460	855	1.460	905	1.460	955	1.460	1005	1.460
756	1.460	806	1.460	856	1.460	906	1.460	956	1.460	1006	1.460
757	1.460	807	1.460	857	1.460	907	1.460	957	1.460	1007	1.460
758	1.460	808	1.460	858	1.460	908	1.460	958	1.460	1008	1.460
759	1.460	809	1.460	859	1.460	909	1.460	959	1.460	1009	1.460
760	1.460	810	1.460	860	1.460	910	1.460	960	1.460	1010	1.460
761	1.460	811	1.460	861	1.460	911	1.460	961	1.460	1011	1.460
762	1.460	812	1.460	862	1.460	912	1.460	962	1.460	1012	1.460
763	1.460	813	1.460	863	1.460	913	1.460	963	1.460	1013	1.460
764	1.460	814	1.460	864	1.460	914	1.460	964	1.460	1014	1.460
765	1.460	815	1.460	865	1.460	915	1.460	965	1.460	1015	1.460
766	1.460	816	1.460	866	1.460	916	1.460	966	1.460	1016	1.460
767	1.460	817	1.460	867	1.460	917	1.460	967	1.460	1017	1.460
768	1.460	818	1.460	868	1.460	918	1.460	968	1.460	1018	1.460
769	1.460	819	1.460	869	1.460	919	1.460	969	1.460	1019	1.460
770	1.460	820	1.460	870	1.460	920	1.460	970	1.460	1020	1.460
©1982-2018 Innovyze											

Kirksaunders Associates Ltd										Page 9	
Templegate House 115-123 High Street Orpington Kent BR6 0LG					SALT BOX BOGNOR REGIS RD 1 in 100+40%CC						
Date 18/06/2019 15:32					Designed by DO						
File ACCES ROAD STORM NETWOR...					Checked by						
Micro Drainage					Network 2018.1						
Surcharged Outfall Details for Existing											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
1021	1.460	1071	1.460	1121	1.460	1171	1.460	1221	1.460	1271	1.460
1022	1.460	1072	1.460	1122	1.460	1172	1.460	1222	1.460	1272	1.460
1023	1.460	1073	1.460	1123	1.460	1173	1.460	1223	1.460	1273	1.460
1024	1.460	1074	1.460	1124	1.460	1174	1.460	1224	1.460	1274	1.460
1025	1.460	1075	1.460	1125	1.460	1175	1.460	1225	1.460	1275	1.460
1026	1.460	1076	1.460	1126	1.460	1176	1.460	1226	1.460	1276	1.460
1027	1.460	1077	1.460	1127	1.460	1177	1.460	1227	1.460	1277	1.460
1028	1.460	1078	1.460	1128	1.460	1178	1.460	1228	1.460	1278	1.460
1029	1.460	1079	1.460	1129	1.460	1179	1.460	1229	1.460	1279	1.460
1030	1.460	1080	1.460	1130	1.460	1180	1.460	1230	1.460	1280	1.460
1031	1.460	1081	1.460	1131	1.460	1181	1.460	1231	1.460	1281	1.460
1032	1.460	1082	1.460	1132	1.460	1182	1.460	1232	1.460	1282	1.460
1033	1.460	1083	1.460	1133	1.460	1183	1.460	1233	1.460	1283	1.460
1034	1.460	1084	1.460	1134	1.460	1184	1.460	1234	1.460	1284	1.460
1035	1.460	1085	1.460	1135	1.460	1185	1.460	1235	1.460	1285	1.460
1036	1.460	1086	1.460	1136	1.460	1186	1.460	1236	1.460	1286	1.460
1037	1.460	1087	1.460	1137	1.460	1187	1.460	1237	1.460	1287	1.460
1038	1.460	1088	1.460	1138	1.460	1188	1.460	1238	1.460	1288	1.460
1039	1.460	1089	1.460	1139	1.460	1189	1.460	1239	1.460	1289	1.460
1040	1.460	1090	1.460	1140	1.460	1190	1.460	1240	1.460	1290	1.460
1041	1.460	1091	1.460	1141	1.460	1191	1.460	1241	1.460	1291	1.460
1042	1.460	1092	1.460	1142	1.460	1192	1.460	1242	1.460	1292	1.460
1043	1.460	1093	1.460	1143	1.460	1193	1.460	1243	1.460	1293	1.460
1044	1.460	1094	1.460	1144	1.460	1194	1.460	1244	1.460	1294	1.460
1045	1.460	1095	1.460	1145	1.460	1195	1.460	1245	1.460	1295	1.460
1046	1.460	1096	1.460	1146	1.460	1196	1.460	1246	1.460	1296	1.460
1047	1.460	1097	1.460	1147	1.460	1197	1.460	1247	1.460	1297	1.460
1048	1.460	1098	1.460	1148	1.460	1198	1.460	1248	1.460	1298	1.460
1049	1.460	1099	1.460	1149	1.460	1199	1.460	1249	1.460	1299	1.460
1050	1.460	1100	1.460	1150	1.460	1200	1.460	1250	1.460	1300	1.460
1051	1.460	1101	1.460	1151	1.460	1201	1.460	1251	1.460	1301	1.460
1052	1.460	1102	1.460	1152	1.460	1202	1.460	1252	1.460	1302	1.460
1053	1.460	1103	1.460	1153	1.460	1203	1.460	1253	1.460	1303	1.460
1054	1.460	1104	1.460	1154	1.460	1204	1.460	1254	1.460	1304	1.460
1055	1.460	1105	1.460	1155	1.460	1205	1.460	1255	1.460	1305	1.460
1056	1.460	1106	1.460	1156	1.460	1206	1.460	1256	1.460	1306	1.460
1057	1.460	1107	1.460	1157	1.460	1207	1.460	1257	1.460	1307	1.460
1058	1.460	1108	1.460	1158	1.460	1208	1.460	1258	1.460	1308	1.460
1059	1.460	1109	1.460	1159	1.460	1209	1.460	1259	1.460	1309	1.460
1060	1.460	1110	1.460	1160	1.460	1210	1.460	1260	1.460	1310	1.460
1061	1.460	1111	1.460	1161	1.460	1211	1.460	1261	1.460	1311	1.460
1062	1.460	1112	1.460	1162	1.460	1212	1.460	1262	1.460	1312	1.460
1063	1.460	1113	1.460	1163	1.460	1213	1.460	1263	1.460	1313	1.460
1064	1.460	1114	1.460	1164	1.460	1214	1.460	1264	1.460	1314	1.460
1065	1.460	1115	1.460	1165	1.460	1215	1.460	1265	1.460	1315	1.460
1066	1.460	1116	1.460	1166	1.460	1216	1.460	1266	1.460	1316	1.460
1067	1.460	1117	1.460	1167	1.460	1217	1.460	1267	1.460	1317	1.460
1068	1.460	1118	1.460	1168	1.460	1218	1.460	1268	1.460	1318	1.460
1069	1.460	1119	1.460	1169	1.460	1219	1.460	1269	1.460	1319	1.460
1070	1.460	1120	1.460	1170	1.460	1220	1.460	1270	1.460	1320	1.460
©1982-2018 Innovyze											

Kirksaunders Associates Ltd								Page 10			
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS RD 1 in 100+40%CC							
Date 18/06/2019 15:32				Designed by DO							
File ACCES ROAD STORM NETWOR...				Checked by							
Micro Drainage				Network 2018.1							
Surcharged Outfall Details for Existing											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
1321	1.460	1371	1.460	1421	1.460	1471	1.460	1521	1.460	1571	1.460
1322	1.460	1372	1.460	1422	1.460	1472	1.460	1522	1.460	1572	1.460
1323	1.460	1373	1.460	1423	1.460	1473	1.460	1523	1.460	1573	1.460
1324	1.460	1374	1.460	1424	1.460	1474	1.460	1524	1.460	1574	1.460
1325	1.460	1375	1.460	1425	1.460	1475	1.460	1525	1.460	1575	1.460
1326	1.460	1376	1.460	1426	1.460	1476	1.460	1526	1.460	1576	1.460
1327	1.460	1377	1.460	1427	1.460	1477	1.460	1527	1.460	1577	1.460
1328	1.460	1378	1.460	1428	1.460	1478	1.460	1528	1.460	1578	1.460
1329	1.460	1379	1.460	1429	1.460	1479	1.460	1529	1.460	1579	1.460
1330	1.460	1380	1.460	1430	1.460	1480	1.460	1530	1.460	1580	1.460
1331	1.460	1381	1.460	1431	1.460	1481	1.460	1531	1.460	1581	1.460
1332	1.460	1382	1.460	1432	1.460	1482	1.460	1532	1.460	1582	1.460
1333	1.460	1383	1.460	1433	1.460	1483	1.460	1533	1.460	1583	1.460
1334	1.460	1384	1.460	1434	1.460	1484	1.460	1534	1.460	1584	1.460
1335	1.460	1385	1.460	1435	1.460	1485	1.460	1535	1.460	1585	1.460
1336	1.460	1386	1.460	1436	1.460	1486	1.460	1536	1.460	1586	1.460
1337	1.460	1387	1.460	1437	1.460	1487	1.460	1537	1.460	1587	1.460
1338	1.460	1388	1.460	1438	1.460	1488	1.460	1538	1.460	1588	1.460
1339	1.460	1389	1.460	1439	1.460	1489	1.460	1539	1.460	1589	1.460
1340	1.460	1390	1.460	1440	1.460	1490	1.460	1540	1.460	1590	1.460
1341	1.460	1391	1.460	1441	1.460	1491	1.460	1541	1.460	1591	1.460
1342	1.460	1392	1.460	1442	1.460	1492	1.460	1542	1.460	1592	1.460
1343	1.460	1393	1.460	1443	1.460	1493	1.460	1543	1.460	1593	1.460
1344	1.460	1394	1.460	1444	1.460	1494	1.460	1544	1.460	1594	1.460
1345	1.460	1395	1.460	1445	1.460	1495	1.460	1545	1.460	1595	1.460
1346	1.460	1396	1.460	1446	1.460	1496	1.460	1546	1.460	1596	1.460
1347	1.460	1397	1.460	1447	1.460	1497	1.460	1547	1.460	1597	1.460
1348	1.460	1398	1.460	1448	1.460	1498	1.460	1548	1.460	1598	1.460
1349	1.460	1399	1.460	1449	1.460	1499	1.460	1549	1.460	1599	1.460
1350	1.460	1400	1.460	1450	1.460	1500	1.460	1550	1.460	1600	1.460
1351	1.460	1401	1.460	1451	1.460	1501	1.460	1551	1.460	1601	1.460
1352	1.460	1402	1.460	1452	1.460	1502	1.460	1552	1.460	1602	1.460
1353	1.460	1403	1.460	1453	1.460	1503	1.460	1553	1.460	1603	1.460
1354	1.460	1404	1.460	1454	1.460	1504	1.460	1554	1.460	1604	1.460
1355	1.460	1405	1.460	1455	1.460	1505	1.460	1555	1.460	1605	1.460
1356	1.460	1406	1.460	1456	1.460	1506	1.460	1556	1.460	1606	1.460
1357	1.460	1407	1.460	1457	1.460	1507	1.460	1557	1.460	1607	1.460
1358	1.460	1408	1.460	1458	1.460	1508	1.460	1558	1.460	1608	1.460
1359	1.460	1409	1.460	1459	1.460	1509	1.460	1559	1.460	1609	1.460
1360	1.460	1410	1.460	1460	1.460	1510	1.460	1560	1.460	1610	1.460
1361	1.460	1411	1.460	1461	1.460	1511	1.460	1561	1.460	1611	1.460
1362	1.460	1412	1.460	1462	1.460	1512	1.460	1562	1.460	1612	1.460
1363	1.460	1413	1.460	1463	1.460	1513	1.460	1563	1.460	1613	1.460
1364	1.460	1414	1.460	1464	1.460	1514	1.460	1564	1.460	1614	1.460
1365	1.460	1415	1.460	1465	1.460	1515	1.460	1565	1.460	1615	1.460
1366	1.460	1416	1.460	1466	1.460	1516	1.460	1566	1.460	1616	1.460
1367	1.460	1417	1.460	1467	1.460	1517	1.460	1567	1.460	1617	1.460
1368	1.460	1418	1.460	1468	1.460	1518	1.460	1568	1.460	1618	1.460
1369	1.460	1419	1.460	1469	1.460	1519	1.460	1569	1.460	1619	1.460
1370	1.460	1420	1.460	1470	1.460	1520	1.460	1570	1.460	1620	1.460
©1982-2018 Innovyze											

Kirksaunders Associates Ltd										Page 11	
Templegate House 115-123 High Street Orpington Kent BR6 0LG					SALT BOX BOGNOR REGIS RD 1 in 100+40%CC						
Date 18/06/2019 15:32					Designed by DO						
File ACCES ROAD STORM NETWOR...					Checked by						
Micro Drainage					Network 2018.1						
Surcharged Outfall Details for Existing											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
1621	1.460	1671	1.460	1721	1.460	1771	1.460	1821	1.460	1871	1.460
1622	1.460	1672	1.460	1722	1.460	1772	1.460	1822	1.460	1872	1.460
1623	1.460	1673	1.460	1723	1.460	1773	1.460	1823	1.460	1873	1.460
1624	1.460	1674	1.460	1724	1.460	1774	1.460	1824	1.460	1874	1.460
1625	1.460	1675	1.460	1725	1.460	1775	1.460	1825	1.460	1875	1.460
1626	1.460	1676	1.460	1726	1.460	1776	1.460	1826	1.460	1876	1.460
1627	1.460	1677	1.460	1727	1.460	1777	1.460	1827	1.460	1877	1.460
1628	1.460	1678	1.460	1728	1.460	1778	1.460	1828	1.460	1878	1.460
1629	1.460	1679	1.460	1729	1.460	1779	1.460	1829	1.460	1879	1.460
1630	1.460	1680	1.460	1730	1.460	1780	1.460	1830	1.460	1880	1.460
1631	1.460	1681	1.460	1731	1.460	1781	1.460	1831	1.460	1881	1.460
1632	1.460	1682	1.460	1732	1.460	1782	1.460	1832	1.460	1882	1.460
1633	1.460	1683	1.460	1733	1.460	1783	1.460	1833	1.460	1883	1.460
1634	1.460	1684	1.460	1734	1.460	1784	1.460	1834	1.460	1884	1.460
1635	1.460	1685	1.460	1735	1.460	1785	1.460	1835	1.460	1885	1.460
1636	1.460	1686	1.460	1736	1.460	1786	1.460	1836	1.460	1886	1.460
1637	1.460	1687	1.460	1737	1.460	1787	1.460	1837	1.460	1887	1.460
1638	1.460	1688	1.460	1738	1.460	1788	1.460	1838	1.460	1888	1.460
1639	1.460	1689	1.460	1739	1.460	1789	1.460	1839	1.460	1889	1.460
1640	1.460	1690	1.460	1740	1.460	1790	1.460	1840	1.460	1890	1.460
1641	1.460	1691	1.460	1741	1.460	1791	1.460	1841	1.460	1891	1.460
1642	1.460	1692	1.460	1742	1.460	1792	1.460	1842	1.460	1892	1.460
1643	1.460	1693	1.460	1743	1.460	1793	1.460	1843	1.460	1893	1.460
1644	1.460	1694	1.460	1744	1.460	1794	1.460	1844	1.460	1894	1.460
1645	1.460	1695	1.460	1745	1.460	1795	1.460	1845	1.460	1895	1.460
1646	1.460	1696	1.460	1746	1.460	1796	1.460	1846	1.460	1896	1.460
1647	1.460	1697	1.460	1747	1.460	1797	1.460	1847	1.460	1897	1.460
1648	1.460	1698	1.460	1748	1.460	1798	1.460	1848	1.460	1898	1.460
1649	1.460	1699	1.460	1749	1.460	1799	1.460	1849	1.460	1899	1.460
1650	1.460	1700	1.460	1750	1.460	1800	1.460	1850	1.460	1900	1.460
1651	1.460	1701	1.460	1751	1.460	1801	1.460	1851	1.460	1901	1.460
1652	1.460	1702	1.460	1752	1.460	1802	1.460	1852	1.460	1902	1.460
1653	1.460	1703	1.460	1753	1.460	1803	1.460	1853	1.460	1903	1.460
1654	1.460	1704	1.460	1754	1.460	1804	1.460	1854	1.460	1904	1.460
1655	1.460	1705	1.460	1755	1.460	1805	1.460	1855	1.460	1905	1.460
1656	1.460	1706	1.460	1756	1.460	1806	1.460	1856	1.460	1906	1.460
1657	1.460	1707	1.460	1757	1.460	1807	1.460	1857	1.460	1907	1.460
1658	1.460	1708	1.460	1758	1.460	1808	1.460	1858	1.460	1908	1.460
1659	1.460	1709	1.460	1759	1.460	1809	1.460	1859	1.460	1909	1.460
1660	1.460	1710	1.460	1760	1.460	1810	1.460	1860	1.460	1910	1.460
1661	1.460	1711	1.460	1761	1.460	1811	1.460	1861	1.460	1911	1.460
1662	1.460	1712	1.460	1762	1.460	1812	1.460	1862	1.460	1912	1.460
1663	1.460	1713	1.460	1763	1.460	1813	1.460	1863	1.460	1913	1.460
1664	1.460	1714	1.460	1764	1.460	1814	1.460	1864	1.460	1914	1.460
1665	1.460	1715	1.460	1765	1.460	1815	1.460	1865	1.460	1915	1.460
1666	1.460	1716	1.460	1766	1.460	1816	1.460	1866	1.460	1916	1.460
1667	1.460	1717	1.460	1767	1.460	1817	1.460	1867	1.460	1917	1.460
1668	1.460	1718	1.460	1768	1.460	1818	1.460	1868	1.460	1918	1.460
1669	1.460	1719	1.460	1769	1.460	1819	1.460	1869	1.460	1919	1.460
1670	1.460	1720	1.460	1770	1.460	1820	1.460	1870	1.460	1920	1.460
©1982-2018 Innovyze											

Kirksaunders Associates Ltd						Page 12					
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS RD 1 in 100+40%CC							
Date 18/06/2019 15:32				Designed by DO							
File ACCES ROAD STORM NETWOR...				Checked by							
Micro Drainage				Network 2018.1							
Surcharged Outfall Details for Existing											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
1921	1.460	1971	1.460	2021	1.460	2071	1.460	2121	1.460	2171	1.460
1922	1.460	1972	1.460	2022	1.460	2072	1.460	2122	1.460	2172	1.460
1923	1.460	1973	1.460	2023	1.460	2073	1.460	2123	1.460	2173	1.460
1924	1.460	1974	1.460	2024	1.460	2074	1.460	2124	1.460	2174	1.460
1925	1.460	1975	1.460	2025	1.460	2075	1.460	2125	1.460	2175	1.460
1926	1.460	1976	1.460	2026	1.460	2076	1.460	2126	1.460	2176	1.460
1927	1.460	1977	1.460	2027	1.460	2077	1.460	2127	1.460	2177	1.460
1928	1.460	1978	1.460	2028	1.460	2078	1.460	2128	1.460	2178	1.460
1929	1.460	1979	1.460	2029	1.460	2079	1.460	2129	1.460	2179	1.460
1930	1.460	1980	1.460	2030	1.460	2080	1.460	2130	1.460	2180	1.460
1931	1.460	1981	1.460	2031	1.460	2081	1.460	2131	1.460	2181	1.460
1932	1.460	1982	1.460	2032	1.460	2082	1.460	2132	1.460	2182	1.460
1933	1.460	1983	1.460	2033	1.460	2083	1.460	2133	1.460	2183	1.460
1934	1.460	1984	1.460	2034	1.460	2084	1.460	2134	1.460	2184	1.460
1935	1.460	1985	1.460	2035	1.460	2085	1.460	2135	1.460	2185	1.460
1936	1.460	1986	1.460	2036	1.460	2086	1.460	2136	1.460	2186	1.460
1937	1.460	1987	1.460	2037	1.460	2087	1.460	2137	1.460	2187	1.460
1938	1.460	1988	1.460	2038	1.460	2088	1.460	2138	1.460	2188	1.460
1939	1.460	1989	1.460	2039	1.460	2089	1.460	2139	1.460	2189	1.460
1940	1.460	1990	1.460	2040	1.460	2090	1.460	2140	1.460	2190	1.460
1941	1.460	1991	1.460	2041	1.460	2091	1.460	2141	1.460	2191	1.460
1942	1.460	1992	1.460	2042	1.460	2092	1.460	2142	1.460	2192	1.460
1943	1.460	1993	1.460	2043	1.460	2093	1.460	2143	1.460	2193	1.460
1944	1.460	1994	1.460	2044	1.460	2094	1.460	2144	1.460	2194	1.460
1945	1.460	1995	1.460	2045	1.460	2095	1.460	2145	1.460	2195	1.460
1946	1.460	1996	1.460	2046	1.460	2096	1.460	2146	1.460	2196	1.460
1947	1.460	1997	1.460	2047	1.460	2097	1.460	2147	1.460	2197	1.460
1948	1.460	1998	1.460	2048	1.460	2098	1.460	2148	1.460	2198	1.460
1949	1.460	1999	1.460	2049	1.460	2099	1.460	2149	1.460	2199	1.460
1950	1.460	2000	1.460	2050	1.460	2100	1.460	2150	1.460	2200	1.460
1951	1.460	2001	1.460	2051	1.460	2101	1.460	2151	1.460	2201	1.460
1952	1.460	2002	1.460	2052	1.460	2102	1.460	2152	1.460	2202	1.460
1953	1.460	2003	1.460	2053	1.460	2103	1.460	2153	1.460	2203	1.460
1954	1.460	2004	1.460	2054	1.460	2104	1.460	2154	1.460	2204	1.460
1955	1.460	2005	1.460	2055	1.460	2105	1.460	2155	1.460	2205	1.460
1956	1.460	2006	1.460	2056	1.460	2106	1.460	2156	1.460	2206	1.460
1957	1.460	2007	1.460	2057	1.460	2107	1.460	2157	1.460	2207	1.460
1958	1.460	2008	1.460	2058	1.460	2108	1.460	2158	1.460	2208	1.460
1959	1.460	2009	1.460	2059	1.460	2109	1.460	2159	1.460	2209	1.460
1960	1.460	2010	1.460	2060	1.460	2110	1.460	2160	1.460	2210	1.460
1961	1.460	2011	1.460	2061	1.460	2111	1.460	2161	1.460	2211	1.460
1962	1.460	2012	1.460	2062	1.460	2112	1.460	2162	1.460	2212	1.460
1963	1.460	2013	1.460	2063	1.460	2113	1.460	2163	1.460	2213	1.460
1964	1.460	2014	1.460	2064	1.460	2114	1.460	2164	1.460	2214	1.460
1965	1.460	2015	1.460	2065	1.460	2115	1.460	2165	1.460	2215	1.460
1966	1.460	2016	1.460	2066	1.460	2116	1.460	2166	1.460	2216	1.460
1967	1.460	2017	1.460	2067	1.460	2117	1.460	2167	1.460	2217	1.460
1968	1.460	2018	1.460	2068	1.460	2118	1.460	2168	1.460	2218	1.460
1969	1.460	2019	1.460	2069	1.460	2119	1.460	2169	1.460	2219	1.460
1970	1.460	2020	1.460	2070	1.460	2120	1.460	2170	1.460	2220	1.460
©1982-2018 Innovyze											

Kirksaunders Associates Ltd										Page 13	
Templegate House 115-123 High Street Orpington Kent BR6 0LG					SALT BOX BOGNOR REGIS RD 1 in 100+40%CC						
Date 18/06/2019 15:32					Designed by DO						
File ACCES ROAD STORM NETWOR...					Checked by						
Micro Drainage					Network 2018.1						
Surcharged Outfall Details for Existing											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
2221	1.460	2271	1.460	2321	1.460	2371	1.460	2421	1.460	2471	1.460
2222	1.460	2272	1.460	2322	1.460	2372	1.460	2422	1.460	2472	1.460
2223	1.460	2273	1.460	2323	1.460	2373	1.460	2423	1.460	2473	1.460
2224	1.460	2274	1.460	2324	1.460	2374	1.460	2424	1.460	2474	1.460
2225	1.460	2275	1.460	2325	1.460	2375	1.460	2425	1.460	2475	1.460
2226	1.460	2276	1.460	2326	1.460	2376	1.460	2426	1.460	2476	1.460
2227	1.460	2277	1.460	2327	1.460	2377	1.460	2427	1.460	2477	1.460
2228	1.460	2278	1.460	2328	1.460	2378	1.460	2428	1.460	2478	1.460
2229	1.460	2279	1.460	2329	1.460	2379	1.460	2429	1.460	2479	1.460
2230	1.460	2280	1.460	2330	1.460	2380	1.460	2430	1.460	2480	1.460
2231	1.460	2281	1.460	2331	1.460	2381	1.460	2431	1.460	2481	1.460
2232	1.460	2282	1.460	2332	1.460	2382	1.460	2432	1.460	2482	1.460
2233	1.460	2283	1.460	2333	1.460	2383	1.460	2433	1.460	2483	1.460
2234	1.460	2284	1.460	2334	1.460	2384	1.460	2434	1.460	2484	1.460
2235	1.460	2285	1.460	2335	1.460	2385	1.460	2435	1.460	2485	1.460
2236	1.460	2286	1.460	2336	1.460	2386	1.460	2436	1.460	2486	1.460
2237	1.460	2287	1.460	2337	1.460	2387	1.460	2437	1.460	2487	1.460
2238	1.460	2288	1.460	2338	1.460	2388	1.460	2438	1.460	2488	1.460
2239	1.460	2289	1.460	2339	1.460	2389	1.460	2439	1.460	2489	1.460
2240	1.460	2290	1.460	2340	1.460	2390	1.460	2440	1.460	2490	1.460
2241	1.460	2291	1.460	2341	1.460	2391	1.460	2441	1.460	2491	1.460
2242	1.460	2292	1.460	2342	1.460	2392	1.460	2442	1.460	2492	1.460
2243	1.460	2293	1.460	2343	1.460	2393	1.460	2443	1.460	2493	1.460
2244	1.460	2294	1.460	2344	1.460	2394	1.460	2444	1.460	2494	1.460
2245	1.460	2295	1.460	2345	1.460	2395	1.460	2445	1.460	2495	1.460
2246	1.460	2296	1.460	2346	1.460	2396	1.460	2446	1.460	2496	1.460
2247	1.460	2297	1.460	2347	1.460	2397	1.460	2447	1.460	2497	1.460
2248	1.460	2298	1.460	2348	1.460	2398	1.460	2448	1.460	2498	1.460
2249	1.460	2299	1.460	2349	1.460	2399	1.460	2449	1.460	2499	1.460
2250	1.460	2300	1.460	2350	1.460	2400	1.460	2450	1.460	2500	1.460
2251	1.460	2301	1.460	2351	1.460	2401	1.460	2451	1.460	2501	1.460
2252	1.460	2302	1.460	2352	1.460	2402	1.460	2452	1.460	2502	1.460
2253	1.460	2303	1.460	2353	1.460	2403	1.460	2453	1.460	2503	1.460
2254	1.460	2304	1.460	2354	1.460	2404	1.460	2454	1.460	2504	1.460
2255	1.460	2305	1.460	2355	1.460	2405	1.460	2455	1.460	2505	1.460
2256	1.460	2306	1.460	2356	1.460	2406	1.460	2456	1.460	2506	1.460
2257	1.460	2307	1.460	2357	1.460	2407	1.460	2457	1.460	2507	1.460
2258	1.460	2308	1.460	2358	1.460	2408	1.460	2458	1.460	2508	1.460
2259	1.460	2309	1.460	2359	1.460	2409	1.460	2459	1.460	2509	1.460
2260	1.460	2310	1.460	2360	1.460	2410	1.460	2460	1.460	2510	1.460
2261	1.460	2311	1.460	2361	1.460	2411	1.460	2461	1.460	2511	1.460
2262	1.460	2312	1.460	2362	1.460	2412	1.460	2462	1.460	2512	1.460
2263	1.460	2313	1.460	2363	1.460	2413	1.460	2463	1.460	2513	1.460
2264	1.460	2314	1.460	2364	1.460	2414	1.460	2464	1.460	2514	1.460
2265	1.460	2315	1.460	2365	1.460	2415	1.460	2465	1.460	2515	1.460
2266	1.460	2316	1.460	2366	1.460	2416	1.460	2466	1.460	2516	1.460
2267	1.460	2317	1.460	2367	1.460	2417	1.460	2467	1.460	2517	1.460
2268	1.460	2318	1.460	2368	1.460	2418	1.460	2468	1.460	2518	1.460
2269	1.460	2319	1.460	2369	1.460	2419	1.460	2469	1.460	2519	1.460
2270	1.460	2320	1.460	2370	1.460	2420	1.460	2470	1.460	2520	1.460
©1982-2018 Innovyze											

Kirksaunders Associates Ltd						Page 14					
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS RD 1 in 100+40%CC							
Date 18/06/2019 15:32				Designed by DO							
File ACCES ROAD STORM NETWOR...				Checked by							
Micro Drainage				Network 2018.1							
Surcharged Outfall Details for Existing											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
2521	1.460	2571	1.460	2621	1.460	2671	1.460	2721	1.460	2771	1.460
2522	1.460	2572	1.460	2622	1.460	2672	1.460	2722	1.460	2772	1.460
2523	1.460	2573	1.460	2623	1.460	2673	1.460	2723	1.460	2773	1.460
2524	1.460	2574	1.460	2624	1.460	2674	1.460	2724	1.460	2774	1.460
2525	1.460	2575	1.460	2625	1.460	2675	1.460	2725	1.460	2775	1.460
2526	1.460	2576	1.460	2626	1.460	2676	1.460	2726	1.460	2776	1.460
2527	1.460	2577	1.460	2627	1.460	2677	1.460	2727	1.460	2777	1.460
2528	1.460	2578	1.460	2628	1.460	2678	1.460	2728	1.460	2778	1.460
2529	1.460	2579	1.460	2629	1.460	2679	1.460	2729	1.460	2779	1.460
2530	1.460	2580	1.460	2630	1.460	2680	1.460	2730	1.460	2780	1.460
2531	1.460	2581	1.460	2631	1.460	2681	1.460	2731	1.460	2781	1.460
2532	1.460	2582	1.460	2632	1.460	2682	1.460	2732	1.460	2782	1.460
2533	1.460	2583	1.460	2633	1.460	2683	1.460	2733	1.460	2783	1.460
2534	1.460	2584	1.460	2634	1.460	2684	1.460	2734	1.460	2784	1.460
2535	1.460	2585	1.460	2635	1.460	2685	1.460	2735	1.460	2785	1.460
2536	1.460	2586	1.460	2636	1.460	2686	1.460	2736	1.460	2786	1.460
2537	1.460	2587	1.460	2637	1.460	2687	1.460	2737	1.460	2787	1.460
2538	1.460	2588	1.460	2638	1.460	2688	1.460	2738	1.460	2788	1.460
2539	1.460	2589	1.460	2639	1.460	2689	1.460	2739	1.460	2789	1.460
2540	1.460	2590	1.460	2640	1.460	2690	1.460	2740	1.460	2790	1.460
2541	1.460	2591	1.460	2641	1.460	2691	1.460	2741	1.460	2791	1.460
2542	1.460	2592	1.460	2642	1.460	2692	1.460	2742	1.460	2792	1.460
2543	1.460	2593	1.460	2643	1.460	2693	1.460	2743	1.460	2793	1.460
2544	1.460	2594	1.460	2644	1.460	2694	1.460	2744	1.460	2794	1.460
2545	1.460	2595	1.460	2645	1.460	2695	1.460	2745	1.460	2795	1.460
2546	1.460	2596	1.460	2646	1.460	2696	1.460	2746	1.460	2796	1.460
2547	1.460	2597	1.460	2647	1.460	2697	1.460	2747	1.460	2797	1.460
2548	1.460	2598	1.460	2648	1.460	2698	1.460	2748	1.460	2798	1.460
2549	1.460	2599	1.460	2649	1.460	2699	1.460	2749	1.460	2799	1.460
2550	1.460	2600	1.460	2650	1.460	2700	1.460	2750	1.460	2800	1.460
2551	1.460	2601	1.460	2651	1.460	2701	1.460	2751	1.460	2801	1.460
2552	1.460	2602	1.460	2652	1.460	2702	1.460	2752	1.460	2802	1.460
2553	1.460	2603	1.460	2653	1.460	2703	1.460	2753	1.460	2803	1.460
2554	1.460	2604	1.460	2654	1.460	2704	1.460	2754	1.460	2804	1.460
2555	1.460	2605	1.460	2655	1.460	2705	1.460	2755	1.460	2805	1.460
2556	1.460	2606	1.460	2656	1.460	2706	1.460	2756	1.460	2806	1.460
2557	1.460	2607	1.460	2657	1.460	2707	1.460	2757	1.460	2807	1.460
2558	1.460	2608	1.460	2658	1.460	2708	1.460	2758	1.460	2808	1.460
2559	1.460	2609	1.460	2659	1.460	2709	1.460	2759	1.460	2809	1.460
2560	1.460	2610	1.460	2660	1.460	2710	1.460	2760	1.460	2810	1.460
2561	1.460	2611	1.460	2661	1.460	2711	1.460	2761	1.460	2811	1.460
2562	1.460	2612	1.460	2662	1.460	2712	1.460	2762	1.460	2812	1.460
2563	1.460	2613	1.460	2663	1.460	2713	1.460	2763	1.460	2813	1.460
2564	1.460	2614	1.460	2664	1.460	2714	1.460	2764	1.460	2814	1.460
2565	1.460	2615	1.460	2665	1.460	2715	1.460	2765	1.460	2815	1.460
2566	1.460	2616	1.460	2666	1.460	2716	1.460	2766	1.460	2816	1.460
2567	1.460	2617	1.460	2667	1.460	2717	1.460	2767	1.460	2817	1.460
2568	1.460	2618	1.460	2668	1.460	2718	1.460	2768	1.460	2818	1.460
2569	1.460	2619	1.460	2669	1.460	2719	1.460	2769	1.460	2819	1.460
2570	1.460	2620	1.460	2670	1.460	2720	1.460	2770	1.460	2820	1.460
©1982-2018 Innovyze											

Kirksaunders Associates Ltd		Page 15
Templegate House 115-123 High Street Orpington Kent BR6 0LG		
SALT BOX BOGNOR REGIS RD 1 in 100+40%CC		
Date 18/06/2019 15:32 File ACCES ROAD STORM NETWORK... Designed by DO Checked by		
Micro Drainage		Network 2018.1

Surcharged Outfall Details for Existing

Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
2821	1.460	2831	1.460	2841	1.460	2851	1.460	2861	1.460	2871	1.460
2822	1.460	2832	1.460	2842	1.460	2852	1.460	2862	1.460	2872	1.460
2823	1.460	2833	1.460	2843	1.460	2853	1.460	2863	1.460	2873	1.460
2824	1.460	2834	1.460	2844	1.460	2854	1.460	2864	1.460	2874	1.460
2825	1.460	2835	1.460	2845	1.460	2855	1.460	2865	1.460	2875	1.460
2826	1.460	2836	1.460	2846	1.460	2856	1.460	2866	1.460	2876	1.460
2827	1.460	2837	1.460	2847	1.460	2857	1.460	2867	1.460	2877	1.460
2828	1.460	2838	1.460	2848	1.460	2858	1.460	2868	1.460	2878	1.460
2829	1.460	2839	1.460	2849	1.460	2859	1.460	2869	1.460	2879	1.460
2830	1.460	2840	1.460	2850	1.460	2860	1.460	2870	1.460	2880	1.460

Simulation Criteria for Existing

Volumetric Runoff Coeff	0.750	Additional Flow - % of Total Flow	0.000
Areal Reduction Factor	1.000	MADD Factor * 10m ³ /ha Storage	2.000
Hot Start (mins)	0	Inlet Coeffiecient	0.800
Hot Start Level (mm)	0	Flow per Person per Day (l/per/day)	0.000
Manhole Headloss Coeff (Global)	0.500	Run Time (mins)	60
Foul Sewage per hectare (l/s)	0.000	Output Interval (mins)	1

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

Synthetic Rainfall Details

Rainfall Model	FSR	Profile Type	Summer
Return Period (years)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	19.100	Storm Duration (mins)	30
Ratio R	0.344		

©1982-2018 Innovyze

Kirksaunders Associates Ltd		Page 16
Templegate House 115-123 High Street Orpington Kent BR6 0LG	SALT BOX BOGNOR REGIS RD 1 in 100+40%CC	
Date 18/06/2019 15:32	Designed by DO	
File ACCES ROAD STORM NETWOR...	Checked by	
Micro Drainage	Network 2018.1	

Online Controls for Existing

Hydro-Brake® Optimum Manhole: E13, DS/PN: E1.010, Volume (m³): 2.5

Unit Reference	MD-SHE-0067-2000-1000-2000
Design Head (m)	1.000
Design Flow (l/s)	2.0
Flush-Flo™	Calculated
Objective	Minimise upstream storage
Application	Surface
Sump Available	Yes
Diameter (mm)	67
Invert Level (m)	0.445
Minimum Outlet Pipe Diameter (mm)	100
Suggested Manhole Diameter (mm)	1200

Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	1.000	2.0
Flush-Flo™	0.296	1.9
Kick-Flo®	0.599	1.6
Mean Flow over Head Range	-	1.7

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)
0.100	1.6	1.200	2.2	3.000	3.3	7.000	4.9
0.200	1.9	1.400	2.3	3.500	3.5	7.500	5.1
0.300	1.9	1.600	2.5	4.000	3.8	8.000	5.2
0.400	1.9	1.800	2.6	4.500	4.0	8.500	5.4
0.500	1.8	2.000	2.7	5.000	4.2	9.000	5.5
0.600	1.6	2.200	2.9	5.500	4.4	9.500	5.7
0.800	1.8	2.400	3.0	6.000	4.6		
1.000	2.0	2.600	3.1	6.500	4.7		

©1982-2018 Innovyze

Kirksaunders Associates Ltd		Page 17
Templegate House 115-123 High Street Orpington Kent BR6 0LG	SALT BOX BOGNOR REGIS RD 1 in 100+40%CC	
Date 18/06/2019 15:32	Designed by DO	
File ACCES ROAD STORM NETWOR...	Checked by	
Micro Drainage		Network 2018.1

Storage Structures for Existing

Tank or Pond Manhole: ETANK, DS/PN: E1.005

Invert Level (m) 0.666

Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)
0.000	500.0	0.400	500.0	0.800	500.0
0.200	500.0	0.600	500.0	1.000	500.0

©1982-2018 Innovyze

Kirksaunders Associates Ltd					Page 18				
Templegate House 115-123 High Street Orpington Kent BR6 0LG			SALT BOX BOGNOR REGIS RD 1 in 100+40%CC						
Date 18/06/2019 15:32			Designed by DO						
File ACCES ROAD STORM NETWOR...			Checked by						
Micro Drainage					Network 2018.1				
<u>Summary of Critical Results by Maximum Level (Rank 1) for Existing</u>									
<u>Simulation Criteria</u>									
Areal Reduction Factor		1.000	Additional Flow - % of Total Flow		0.000				
Hot Start (mins)		0	MADD Factor * 10m³/ha Storage		2.000				
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 Storage Structures		1				
Number of Online Controls		1	Number of Time/Area Diagrams		0				
Number of Offline Controls		0	Number of Real Time Controls		0				
<u>Synthetic Rainfall Details</u>									
Rainfall Model		FSR	Ratio R		0.342				
Region England and Wales Cv (Summer)		0.750							
M5-60 (mm)		19.500	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, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080							
Return Period(s) (years)		100							
Climate Change (%)		40							
PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surchage	First (Y) Flood	First (Z) Overflow	Overflow Act.	
E1.000	ESWMH1	15 Winter	100	+40%	100/15 Summer				
E1.001	ESWMH2	15 Winter	100	+40%	100/15 Summer				
E2.000	ESWMH3	15 Winter	100	+40%	100/15 Summer				
E1.002	ESWMH4	15 Winter	100	+40%	100/15 Summer				
E3.000	ESWMH5	15 Winter	100	+40%	100/15 Summer				
E1.003	ESWMH6	15 Winter	100	+40%	100/15 Summer				
E1.004	ESWMH6A	2880 Winter	100	+40%	100/15 Summer				
E1.005	ETANK	2880 Winter	100	+40%	100/60 Winter				
E1.006	EDummy1	2880 Winter	100	+40%					
E1.007	EDummy 2	2880 Winter	100	+40%	100/60 Summer				
E1.008	ESWMH7	2880 Winter	100	+40%	100/15 Summer				
E1.009	ESWMH8	2880 Winter	100	+40%	100/15 Summer				
E1.010	E13	2880 Winter	100	+40%	100/15 Summer				
©1982-2018 Innovyze									

Kirksaunders Associates Ltd							Page 19		
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS RD 1 in 100+40%CC					
Date 18/06/2019 15:32				Designed by DO					
File ACCES ROAD STORM NETWOR...				Checked by					
Micro Drainage				Network 2018.1					
<u>Summary of Critical Results by Maximum Level (Rank 1) for Existing</u>									
PN	US/MH Name	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status	Level Exceeded
E1.000	ESWMH1	2.879	0.674	0.000	0.77		58.0	FLOOD RISK	
E1.001	ESWMH2	2.803	0.973	0.000	1.08		80.6	FLOOD RISK	
E2.000	ESWMH3	2.394	0.754	0.000	0.16		6.3	FLOOD RISK	
E1.002	ESWMH4	2.394	0.819	0.000	1.12		125.8	FLOOD RISK	
E3.000	ESWMH5	1.985	0.445	0.000	0.17		19.1	SURCHARGED	
E1.003	ESWMH6	1.964	0.699	0.000	1.61		180.1	SURCHARGED	
E1.004	ESWMH6A	1.586	0.541	0.000	0.12		11.1	SURCHARGED	
E1.005	ETANK	1.586	0.545	0.000	0.09		7.8	SURCHARGED	
E1.006	EDummy1	1.587	-0.072	0.000	0.00		6.7	OK	
E1.007	EDummy 2	1.587	0.602	0.000	0.15		11.3	SURCHARGED	
E1.008	ESWMH7	1.614	0.797	0.000	0.27		8.0	SURCHARGED	
E1.009	ESWMH8	1.691	0.936	0.000	0.13		5.2	SURCHARGED	
E1.010	E13	1.715	1.045	0.000	0.07		2.2	SURCHARGED	
©1982-2018 Innovyze									

Kirksaunders Associates Ltd										Page 1																																																																																																																																																																																																																																															
Templegate House 115-123 High Street Orpington Kent BR6 0LG					SALT BOX BOGNOR REGIS RD 1IN1, 1IN2, 1 IN30																																																																																																																																																																																																																																																				
Date 18/06/2019 15:38					Designed by DO																																																																																																																																																																																																																																																				
File ACCES ROAD STORM NETWOR...					Checked by																																																																																																																																																																																																																																																				
Micro Drainage					Network 2018.1																																																																																																																																																																																																																																																				
Existing Network Details for Existing <table><tr><th>PN</th><th>Length (m)</th><th>Fall (m)</th><th>Slope (1:X)</th><th>I.Area (ha)</th><th>T.E. (mins)</th><th>Base Flow (l/s)</th><th>k (mm)</th><th>HYD SECT</th><th>DIA (mm)</th><th>Section Type</th></tr><tr><td>E1.000</td><td>74.847</td><td>0.375</td><td>199.6</td><td>0.133</td><td>5.00</td><td>0.0</td><td>0.600</td><td>o</td><td>300</td><td>Pipe/Conduit</td></tr><tr><td>E1.001</td><td>65.937</td><td>0.330</td><td>199.8</td><td>0.094</td><td>0.00</td><td>0.0</td><td>0.600</td><td>o</td><td>300</td><td>Pipe/Conduit</td></tr><tr><td>E2.000</td><td>34.218</td><td>0.215</td><td>159.2</td><td>0.010</td><td>5.00</td><td>0.0</td><td>0.600</td><td>o</td><td>225</td><td>Pipe/Conduit</td></tr><tr><td>E1.002</td><td>89.879</td><td>0.310</td><td>289.9</td><td>0.134</td><td>0.00</td><td>0.0</td><td>0.600</td><td>o</td><td>375</td><td>Pipe/Conduit</td></tr><tr><td>E3.000</td><td>28.602</td><td>0.350</td><td>81.7</td><td>0.041</td><td>5.00</td><td>0.0</td><td>0.600</td><td>o</td><td>300</td><td>Pipe/Conduit</td></tr><tr><td>E1.003</td><td>61.232</td><td>0.220</td><td>278.3</td><td>0.123</td><td>0.00</td><td>0.0</td><td>0.600</td><td>o</td><td>375</td><td>Pipe/Conduit</td></tr><tr><td>E1.004</td><td>0.995</td><td>0.004</td><td>248.8</td><td>0.108</td><td>0.00</td><td>0.0</td><td>0.600</td><td>o</td><td>375</td><td>Pipe/Conduit</td></tr><tr><td>E1.005</td><td>2.211</td><td>0.007</td><td>315.9</td><td>0.108</td><td>0.00</td><td>0.0</td><td>0.600</td><td>o</td><td>375</td><td>Pipe/Conduit</td></tr><tr><td>E1.006</td><td>99.369</td><td>0.049</td><td>2027.9</td><td>0.000</td><td>0.00</td><td>0.0</td><td>0.600</td><td>[]</td><td>-1</td><td>Pipe/Conduit</td></tr><tr><td>E1.007</td><td>5.021</td><td>0.018</td><td>278.9</td><td>0.000</td><td>0.00</td><td>0.0</td><td>0.600</td><td>o</td><td>375</td><td>Pipe/Conduit</td></tr><tr><td>E1.008</td><td>15.115</td><td>0.062</td><td>243.8</td><td>0.000</td><td>0.00</td><td>0.0</td><td>0.600</td><td>o</td><td>225</td><td>Pipe/Conduit</td></tr><tr><td>E1.009</td><td>8.557</td><td>0.085</td><td>100.7</td><td>0.000</td><td>0.00</td><td>0.0</td><td>0.600</td><td>o</td><td>225</td><td>Pipe/Conduit</td></tr><tr><td>E1.010</td><td>6.368</td><td>0.055</td><td>115.8</td><td>0.000</td><td>0.00</td><td>0.0</td><td>0.600</td><td>o</td><td>225</td><td>Pipe/Conduit</td></tr></table> Network Results Table <table><tr><th>PN</th><th>US/IL (m)</th><th>Σ I.Area (ha)</th><th>Σ Base Flow (l/s)</th><th>Vel (m/s)</th><th>Cap (l/s)</th></tr><tr><td>E1.000</td><td>1.905</td><td>0.133</td><td>0.0</td><td>1.11</td><td>78.4</td></tr><tr><td>E1.001</td><td>1.530</td><td>0.227</td><td>0.0</td><td>1.11</td><td>78.4</td></tr><tr><td>E2.000</td><td>1.415</td><td>0.010</td><td>0.0</td><td>1.03</td><td>41.1</td></tr><tr><td>E1.002</td><td>1.200</td><td>0.371</td><td>0.0</td><td>1.06</td><td>117.0</td></tr><tr><td>E3.000</td><td>1.240</td><td>0.041</td><td>0.0</td><td>1.74</td><td>123.0</td></tr><tr><td>E1.003</td><td>0.890</td><td>0.535</td><td>0.0</td><td>1.08</td><td>119.4</td></tr><tr><td>E1.004</td><td>0.670</td><td>0.643</td><td>0.0</td><td>1.14</td><td>126.4</td></tr><tr><td>E1.005</td><td>0.666</td><td>0.751</td><td>0.0</td><td>1.01</td><td>112.0</td></tr><tr><td>E1.006</td><td>0.659</td><td>0.751</td><td>0.0</td><td>1.01</td><td>5031.0</td></tr><tr><td>E1.007</td><td>0.610</td><td>0.751</td><td>0.0</td><td>1.08</td><td>119.3</td></tr><tr><td>E1.008</td><td>0.592</td><td>0.751</td><td>0.0</td><td>0.83</td><td>33.1</td></tr><tr><td>E1.009</td><td>0.530</td><td>0.751</td><td>0.0</td><td>1.30</td><td>51.8</td></tr><tr><td>E1.010</td><td>0.445</td><td>0.751</td><td>0.0</td><td>1.21</td><td>48.3</td></tr></table>												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	E1.000	74.847	0.375	199.6	0.133	5.00	0.0	0.600	o	300	Pipe/Conduit	E1.001	65.937	0.330	199.8	0.094	0.00	0.0	0.600	o	300	Pipe/Conduit	E2.000	34.218	0.215	159.2	0.010	5.00	0.0	0.600	o	225	Pipe/Conduit	E1.002	89.879	0.310	289.9	0.134	0.00	0.0	0.600	o	375	Pipe/Conduit	E3.000	28.602	0.350	81.7	0.041	5.00	0.0	0.600	o	300	Pipe/Conduit	E1.003	61.232	0.220	278.3	0.123	0.00	0.0	0.600	o	375	Pipe/Conduit	E1.004	0.995	0.004	248.8	0.108	0.00	0.0	0.600	o	375	Pipe/Conduit	E1.005	2.211	0.007	315.9	0.108	0.00	0.0	0.600	o	375	Pipe/Conduit	E1.006	99.369	0.049	2027.9	0.000	0.00	0.0	0.600	[]	-1	Pipe/Conduit	E1.007	5.021	0.018	278.9	0.000	0.00	0.0	0.600	o	375	Pipe/Conduit	E1.008	15.115	0.062	243.8	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	E1.009	8.557	0.085	100.7	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	E1.010	6.368	0.055	115.8	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	PN	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Vel (m/s)	Cap (l/s)	E1.000	1.905	0.133	0.0	1.11	78.4	E1.001	1.530	0.227	0.0	1.11	78.4	E2.000	1.415	0.010	0.0	1.03	41.1	E1.002	1.200	0.371	0.0	1.06	117.0	E3.000	1.240	0.041	0.0	1.74	123.0	E1.003	0.890	0.535	0.0	1.08	119.4	E1.004	0.670	0.643	0.0	1.14	126.4	E1.005	0.666	0.751	0.0	1.01	112.0	E1.006	0.659	0.751	0.0	1.01	5031.0	E1.007	0.610	0.751	0.0	1.08	119.3	E1.008	0.592	0.751	0.0	0.83	33.1	E1.009	0.530	0.751	0.0	1.30	51.8	E1.010	0.445	0.751	0.0	1.21	48.3
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																																																																																																																																																																																																																																															
E1.000	74.847	0.375	199.6	0.133	5.00	0.0	0.600	o	300	Pipe/Conduit																																																																																																																																																																																																																																															
E1.001	65.937	0.330	199.8	0.094	0.00	0.0	0.600	o	300	Pipe/Conduit																																																																																																																																																																																																																																															
E2.000	34.218	0.215	159.2	0.010	5.00	0.0	0.600	o	225	Pipe/Conduit																																																																																																																																																																																																																																															
E1.002	89.879	0.310	289.9	0.134	0.00	0.0	0.600	o	375	Pipe/Conduit																																																																																																																																																																																																																																															
E3.000	28.602	0.350	81.7	0.041	5.00	0.0	0.600	o	300	Pipe/Conduit																																																																																																																																																																																																																																															
E1.003	61.232	0.220	278.3	0.123	0.00	0.0	0.600	o	375	Pipe/Conduit																																																																																																																																																																																																																																															
E1.004	0.995	0.004	248.8	0.108	0.00	0.0	0.600	o	375	Pipe/Conduit																																																																																																																																																																																																																																															
E1.005	2.211	0.007	315.9	0.108	0.00	0.0	0.600	o	375	Pipe/Conduit																																																																																																																																																																																																																																															
E1.006	99.369	0.049	2027.9	0.000	0.00	0.0	0.600	[]	-1	Pipe/Conduit																																																																																																																																																																																																																																															
E1.007	5.021	0.018	278.9	0.000	0.00	0.0	0.600	o	375	Pipe/Conduit																																																																																																																																																																																																																																															
E1.008	15.115	0.062	243.8	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit																																																																																																																																																																																																																																															
E1.009	8.557	0.085	100.7	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit																																																																																																																																																																																																																																															
E1.010	6.368	0.055	115.8	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit																																																																																																																																																																																																																																															
PN	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Vel (m/s)	Cap (l/s)																																																																																																																																																																																																																																																				
E1.000	1.905	0.133	0.0	1.11	78.4																																																																																																																																																																																																																																																				
E1.001	1.530	0.227	0.0	1.11	78.4																																																																																																																																																																																																																																																				
E2.000	1.415	0.010	0.0	1.03	41.1																																																																																																																																																																																																																																																				
E1.002	1.200	0.371	0.0	1.06	117.0																																																																																																																																																																																																																																																				
E3.000	1.240	0.041	0.0	1.74	123.0																																																																																																																																																																																																																																																				
E1.003	0.890	0.535	0.0	1.08	119.4																																																																																																																																																																																																																																																				
E1.004	0.670	0.643	0.0	1.14	126.4																																																																																																																																																																																																																																																				
E1.005	0.666	0.751	0.0	1.01	112.0																																																																																																																																																																																																																																																				
E1.006	0.659	0.751	0.0	1.01	5031.0																																																																																																																																																																																																																																																				
E1.007	0.610	0.751	0.0	1.08	119.3																																																																																																																																																																																																																																																				
E1.008	0.592	0.751	0.0	0.83	33.1																																																																																																																																																																																																																																																				
E1.009	0.530	0.751	0.0	1.30	51.8																																																																																																																																																																																																																																																				
E1.010	0.445	0.751	0.0	1.21	48.3																																																																																																																																																																																																																																																				
©1982-2018 Innovyze																																																																																																																																																																																																																																																									

Kirksaunders Associates Ltd		Page 2
Templegate House 115-123 High Street Orpington Kent BR6 0LG	SALT BOX BOGNOR REGIS RD 1IN1, 1IN2, 1 IN30	
Date 18/06/2019 15:38	Designed by DO	
File ACCES ROAD STORM NETWORK...	Checked by	
Micro Drainage		Network 2018.1

Conduit Sections for Existing

NOTE: Diameters less than 66 refer to section numbers of hydraulic conduits. These conduits are marked by the symbols:- [] box culvert, \ / open channel, oo dual pipe, ooo triple pipe, O egg.

Section numbers < 0 are taken from user conduit table

Section Number	Conduit Type	Major Dimn. (mm)	Minor Dimn. (mm)	Side Slope (Deg)	Corner Splay (mm)	4*Hyd Radius (m)	XSect Area (m ²)
-1	[]	5000	1000	90.0		1.667	5.000

©1982-2018 Innovyze

Kirksaunders Associates Ltd								Page 3	
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS RD 1IN1, 1IN2, 1 IN30					
Date 18/06/2019 15:38 File ACCES ROAD STORM NETWOR...				Designed by DO Checked by					
Micro Drainage				Network 2018.1					
Manhole Schedules for Existing									
MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam., L*W (mm)	PN	Pipe Out Invert Level (m)	Diameter (mm)	PN	Pipes In Invert Level (m)
ESWMH1	2.880	0.975	Open Manhole	1200	E1.000	1.905	300		
ESWMH2	2.880	1.350	Open Manhole	1200	E1.001	1.530	300	E1.000	1.530
ESWMH3	2.650	1.235	Open Manhole	1200	E2.000	1.415	225		
ESWMH4	2.400	1.200	Open Manhole	1200	E1.002	1.200	375	E1.001	1.200
								E2.000	1.200
ESWMH5	2.640	1.400	Open Manhole	1200	E3.000	1.240	300		
ESWMH6	2.880	1.990	Open Manhole	1200	E1.003	0.890	375	E1.002	0.890
								E3.000	0.890
ESWMH6A	2.860	2.190	Open Manhole	1200	E1.004	0.670	375	E1.003	0.670
ETANK	3.000	2.334	Open Manhole	1200	E1.005	0.666	375	E1.004	0.666
EDummy1	2.800	2.141	Open Manhole	1200	E1.006	0.659	-1	E1.005	0.659
EDummy 2	2.540	1.930	Open Manhole	1200	E1.007	0.610	375	E1.006	0.610
ESWMH7	2.080	1.488	Open Manhole	1200	E1.008	0.592	225	E1.007	0.592
ESWMH8	2.000	1.470	Open Manhole	1200	E1.009	0.530	225	E1.008	0.530
E13	2.400	1.955	Open Manhole	1200	E1.010	0.445	225	E1.009	0.445
EDITCH	2.800	2.410	Open Manhole	1200		OUTFALL		E1.010	0.390
©1982-2018 Innovyze									

Kirksaunders Associates Ltd								Page 4	
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS RD 1IN1, 1IN2, 1 IN30					
Date 18/06/2019 15:38				Designed by DO					
File ACCES ROAD STORM NETWORK...				Checked by					
Micro Drainage				Network 2018.1					
PIPELINE SCHEDULES for Existing									
Upstream Manhole									
PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)	
E1.000	o	300	ESWMH1	2.880	1.905	0.675	Open Manhole		1200
E1.001	o	300	ESWMH2	2.880	1.530	1.050	Open Manhole		1200
E2.000	o	225	ESWMH3	2.650	1.415	1.010	Open Manhole		1200
E1.002	o	375	ESWMH4	2.400	1.200	0.825	Open Manhole		1200
E3.000	o	300	ESWMH5	2.640	1.240	1.100	Open Manhole		1200
E1.003	o	375	ESWMH6	2.880	0.890	1.615	Open Manhole		1200
E1.004	o	375	ESWMH6A	2.860	0.670	1.815	Open Manhole		1200
E1.005	o	375	ETANK	3.000	0.666	1.959	Open Manhole		1200
E1.006	[]	-1	EDummy1	2.800	0.659	1.141	Open Manhole		1200
E1.007	o	375	EDummy 2	2.540	0.610	1.555	Open Manhole		1200
E1.008	o	225	ESWMH7	2.080	0.592	1.263	Open Manhole		1200
E1.009	o	225	ESWMH8	2.000	0.530	1.245	Open Manhole		1200
E1.010	o	225	E13	2.400	0.445	1.730	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)	
E1.000	74.847	199.6	ESWMH2	2.880	1.530	1.050	Open Manhole		1200
E1.001	65.937	199.8	ESWMH4	2.400	1.200	0.900	Open Manhole		1200
E2.000	34.218	159.2	ESWMH4	2.400	1.200	0.975	Open Manhole		1200
E1.002	89.879	289.9	ESWMH6	2.880	0.890	1.615	Open Manhole		1200
E3.000	28.602	81.7	ESWMH6	2.880	0.890	1.690	Open Manhole		1200
E1.003	61.232	278.3	ESWMH6A	2.860	0.670	1.815	Open Manhole		1200
E1.004	0.995	248.8	ETANK	3.000	0.666	1.959	Open Manhole		1200
E1.005	2.211	315.9	EDummy1	2.800	0.659	1.766	Open Manhole		1200
E1.006	99.369	2027.9	EDummy 2	2.540	0.610	0.930	Open Manhole		1200
E1.007	5.021	278.9	ESWMH7	2.080	0.592	1.113	Open Manhole		1200
E1.008	15.115	243.8	ESWMH8	2.000	0.530	1.245	Open Manhole		1200
E1.009	8.557	100.7	E13	2.400	0.445	1.730	Open Manhole		1200
E1.010	6.368	115.8	EDITCH	2.800	0.390	2.185	Open Manhole		1200
©1982-2018 Innovyze									

Kirksaunders Associates Ltd				Page 5																																																																																																																																																																																																																																																																																																																																																																																												
Templegate House 115-123 High Street Orpington Kent BR6 0LG			SALT BOX BOGNOR REGIS RD 1IN1, 1IN2, 1 IN30																																																																																																																																																																																																																																																																																																																																																																																													
Date 18/06/2019 15:38			Designed by DO																																																																																																																																																																																																																																																																																																																																																																																													
File ACCES ROAD STORM NETWOR...			Checked by																																																																																																																																																																																																																																																																																																																																																																																													
Micro Drainage			Network 2018.1																																																																																																																																																																																																																																																																																																																																																																																													
Area Summary for Existing <table><thead><tr><th>Pipe Number</th><th>PIMP Type</th><th>PIMP Name</th><th>PIMP (%)</th><th>Gross Area (ha)</th><th>Imp. Area (ha)</th><th>Pipe Total (ha)</th></tr></thead><tbody><tr><td>1.000</td><td>-</td><td>-</td><td>100</td><td>0.133</td><td>0.133</td><td>0.133</td></tr><tr><td>1.001</td><td>-</td><td>-</td><td>100</td><td>0.094</td><td>0.094</td><td>0.094</td></tr><tr><td>2.000</td><td>-</td><td>-</td><td>100</td><td>0.010</td><td>0.010</td><td>0.010</td></tr><tr><td>1.002</td><td>-</td><td>-</td><td>100</td><td>0.134</td><td>0.134</td><td>0.134</td></tr><tr><td>3.000</td><td>-</td><td>-</td><td>100</td><td>0.041</td><td>0.041</td><td>0.041</td></tr><tr><td>1.003</td><td>-</td><td>-</td><td>100</td><td>0.123</td><td>0.123</td><td>0.123</td></tr><tr><td>1.004</td><td>-</td><td>-</td><td>100</td><td>0.108</td><td>0.108</td><td>0.108</td></tr><tr><td>1.005</td><td>-</td><td>-</td><td>100</td><td>0.108</td><td>0.108</td><td>0.108</td></tr><tr><td>1.006</td><td>-</td><td>-</td><td>100</td><td>0.000</td><td>0.000</td><td>0.000</td></tr><tr><td>1.007</td><td>-</td><td>-</td><td>100</td><td>0.000</td><td>0.000</td><td>0.000</td></tr><tr><td>1.008</td><td>-</td><td>-</td><td>100</td><td>0.000</td><td>0.000</td><td>0.000</td></tr><tr><td>1.009</td><td>-</td><td>-</td><td>100</td><td>0.000</td><td>0.000</td><td>0.000</td></tr><tr><td>1.010</td><td>-</td><td>-</td><td>100</td><td>0.000</td><td>0.000</td><td>0.000</td></tr><tr><td colspan="4"></td><td>Total</td><td>Total</td><td>Total</td></tr><tr><td colspan="4"></td><td>0.751</td><td>0.751</td><td>0.751</td></tr></tbody></table> Surcharged Outfall Details for Existing <table><thead><tr><th>Outfall Pipe Number</th><th>Outfall Name</th><th>C. Level (m)</th><th>I. Level (m)</th><th>Min I. Level (m)</th><th>D,L (mm)</th><th>W (mm)</th></tr></thead><tbody><tr><td>E1.010</td><td>EDITCH</td><td>2.800</td><td>0.390</td><td>0.000</td><td>1200</td><td>0</td></tr></tbody></table> Datum (m) 0.390 Offset (mins) 0 <table><thead><tr><th>Time (mins)</th><th>Depth (m)</th><th>Time (mins)</th><th>Depth (m)</th><th>Time (mins)</th><th>Depth (m)</th><th>Time (mins)</th><th>Depth (m)</th><th>Time (mins)</th><th>Depth (m)</th><th>Time (mins)</th><th>Depth (m)</th></tr></thead><tbody><tr><td>1</td><td>1.460</td><td>21</td><td>1.460</td><td>41</td><td>1.460</td><td>61</td><td>1.460</td><td>81</td><td>1.460</td><td>101</td><td>1.460</td></tr><tr><td>2</td><td>1.460</td><td>22</td><td>1.460</td><td>42</td><td>1.460</td><td>62</td><td>1.460</td><td>82</td><td>1.460</td><td>102</td><td>1.460</td></tr><tr><td>3</td><td>1.460</td><td>23</td><td>1.460</td><td>43</td><td>1.460</td><td>63</td><td>1.460</td><td>83</td><td>1.460</td><td>103</td><td>1.460</td></tr><tr><td>4</td><td>1.460</td><td>24</td><td>1.460</td><td>44</td><td>1.460</td><td>64</td><td>1.460</td><td>84</td><td>1.460</td><td>104</td><td>1.460</td></tr><tr><td>5</td><td>1.460</td><td>25</td><td>1.460</td><td>45</td><td>1.460</td><td>65</td><td>1.460</td><td>85</td><td>1.460</td><td>105</td><td>1.460</td></tr><tr><td>6</td><td>1.460</td><td>26</td><td>1.460</td><td>46</td><td>1.460</td><td>66</td><td>1.460</td><td>86</td><td>1.460</td><td>106</td><td>1.460</td></tr><tr><td>7</td><td>1.460</td><td>27</td><td>1.460</td><td>47</td><td>1.460</td><td>67</td><td>1.460</td><td>87</td><td>1.460</td><td>107</td><td>1.460</td></tr><tr><td>8</td><td>1.460</td><td>28</td><td>1.460</td><td>48</td><td>1.460</td><td>68</td><td>1.460</td><td>88</td><td>1.460</td><td>108</td><td>1.460</td></tr><tr><td>9</td><td>1.460</td><td>29</td><td>1.460</td><td>49</td><td>1.460</td><td>69</td><td>1.460</td><td>89</td><td>1.460</td><td>109</td><td>1.460</td></tr><tr><td>10</td><td>1.460</td><td>30</td><td>1.460</td><td>50</td><td>1.460</td><td>70</td><td>1.460</td><td>90</td><td>1.460</td><td>110</td><td>1.460</td></tr><tr><td>11</td><td>1.460</td><td>31</td><td>1.460</td><td>51</td><td>1.460</td><td>71</td><td>1.460</td><td>91</td><td>1.460</td><td>111</td><td>1.460</td></tr><tr><td>12</td><td>1.460</td><td>32</td><td>1.460</td><td>52</td><td>1.460</td><td>72</td><td>1.460</td><td>92</td><td>1.460</td><td>112</td><td>1.460</td></tr><tr><td>13</td><td>1.460</td><td>33</td><td>1.460</td><td>53</td><td>1.460</td><td>73</td><td>1.460</td><td>93</td><td>1.460</td><td>113</td><td>1.460</td></tr><tr><td>14</td><td>1.460</td><td>34</td><td>1.460</td><td>54</td><td>1.460</td><td>74</td><td>1.460</td><td>94</td><td>1.460</td><td>114</td><td>1.460</td></tr><tr><td>15</td><td>1.460</td><td>35</td><td>1.460</td><td>55</td><td>1.460</td><td>75</td><td>1.460</td><td>95</td><td>1.460</td><td>115</td><td>1.460</td></tr><tr><td>16</td><td>1.460</td><td>36</td><td>1.460</td><td>56</td><td>1.460</td><td>76</td><td>1.460</td><td>96</td><td>1.460</td><td>116</td><td>1.460</td></tr><tr><td>17</td><td>1.460</td><td>37</td><td>1.460</td><td>57</td><td>1.460</td><td>77</td><td>1.460</td><td>97</td><td>1.460</td><td>117</td><td>1.460</td></tr><tr><td>18</td><td>1.460</td><td>38</td><td>1.460</td><td>58</td><td>1.460</td><td>78</td><td>1.460</td><td>98</td><td>1.460</td><td>118</td><td>1.460</td></tr><tr><td>19</td><td>1.460</td><td>39</td><td>1.460</td><td>59</td><td>1.460</td><td>79</td><td>1.460</td><td>99</td><td>1.460</td><td>119</td><td>1.460</td></tr><tr><td>20</td><td>1.460</td><td>40</td><td>1.460</td><td>60</td><td>1.460</td><td>80</td><td>1.460</td><td>100</td><td>1.460</td><td>120</td><td>1.460</td></tr></tbody></table> ©1982-2018 Innovyze							Pipe Number	PIMP Type	PIMP Name	PIMP (%)	Gross Area (ha)	Imp. Area (ha)	Pipe Total (ha)	1.000	-	-	100	0.133	0.133	0.133	1.001	-	-	100	0.094	0.094	0.094	2.000	-	-	100	0.010	0.010	0.010	1.002	-	-	100	0.134	0.134	0.134	3.000	-	-	100	0.041	0.041	0.041	1.003	-	-	100	0.123	0.123	0.123	1.004	-	-	100	0.108	0.108	0.108	1.005	-	-	100	0.108	0.108	0.108	1.006	-	-	100	0.000	0.000	0.000	1.007	-	-	100	0.000	0.000	0.000	1.008	-	-	100	0.000	0.000	0.000	1.009	-	-	100	0.000	0.000	0.000	1.010	-	-	100	0.000	0.000	0.000					Total	Total	Total					0.751	0.751	0.751	Outfall Pipe Number	Outfall Name	C. Level (m)	I. Level (m)	Min I. Level (m)	D,L (mm)	W (mm)	E1.010	EDITCH	2.800	0.390	0.000	1200	0	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	1	1.460	21	1.460	41	1.460	61	1.460	81	1.460	101	1.460	2	1.460	22	1.460	42	1.460	62	1.460	82	1.460	102	1.460	3	1.460	23	1.460	43	1.460	63	1.460	83	1.460	103	1.460	4	1.460	24	1.460	44	1.460	64	1.460	84	1.460	104	1.460	5	1.460	25	1.460	45	1.460	65	1.460	85	1.460	105	1.460	6	1.460	26	1.460	46	1.460	66	1.460	86	1.460	106	1.460	7	1.460	27	1.460	47	1.460	67	1.460	87	1.460	107	1.460	8	1.460	28	1.460	48	1.460	68	1.460	88	1.460	108	1.460	9	1.460	29	1.460	49	1.460	69	1.460	89	1.460	109	1.460	10	1.460	30	1.460	50	1.460	70	1.460	90	1.460	110	1.460	11	1.460	31	1.460	51	1.460	71	1.460	91	1.460	111	1.460	12	1.460	32	1.460	52	1.460	72	1.460	92	1.460	112	1.460	13	1.460	33	1.460	53	1.460	73	1.460	93	1.460	113	1.460	14	1.460	34	1.460	54	1.460	74	1.460	94	1.460	114	1.460	15	1.460	35	1.460	55	1.460	75	1.460	95	1.460	115	1.460	16	1.460	36	1.460	56	1.460	76	1.460	96	1.460	116	1.460	17	1.460	37	1.460	57	1.460	77	1.460	97	1.460	117	1.460	18	1.460	38	1.460	58	1.460	78	1.460	98	1.460	118	1.460	19	1.460	39	1.460	59	1.460	79	1.460	99	1.460	119	1.460	20	1.460	40	1.460	60	1.460	80	1.460	100	1.460	120	1.460
Pipe Number	PIMP Type	PIMP Name	PIMP (%)	Gross Area (ha)	Imp. Area (ha)	Pipe Total (ha)																																																																																																																																																																																																																																																																																																																																																																																										
1.000	-	-	100	0.133	0.133	0.133																																																																																																																																																																																																																																																																																																																																																																																										
1.001	-	-	100	0.094	0.094	0.094																																																																																																																																																																																																																																																																																																																																																																																										
2.000	-	-	100	0.010	0.010	0.010																																																																																																																																																																																																																																																																																																																																																																																										
1.002	-	-	100	0.134	0.134	0.134																																																																																																																																																																																																																																																																																																																																																																																										
3.000	-	-	100	0.041	0.041	0.041																																																																																																																																																																																																																																																																																																																																																																																										
1.003	-	-	100	0.123	0.123	0.123																																																																																																																																																																																																																																																																																																																																																																																										
1.004	-	-	100	0.108	0.108	0.108																																																																																																																																																																																																																																																																																																																																																																																										
1.005	-	-	100	0.108	0.108	0.108																																																																																																																																																																																																																																																																																																																																																																																										
1.006	-	-	100	0.000	0.000	0.000																																																																																																																																																																																																																																																																																																																																																																																										
1.007	-	-	100	0.000	0.000	0.000																																																																																																																																																																																																																																																																																																																																																																																										
1.008	-	-	100	0.000	0.000	0.000																																																																																																																																																																																																																																																																																																																																																																																										
1.009	-	-	100	0.000	0.000	0.000																																																																																																																																																																																																																																																																																																																																																																																										
1.010	-	-	100	0.000	0.000	0.000																																																																																																																																																																																																																																																																																																																																																																																										
				Total	Total	Total																																																																																																																																																																																																																																																																																																																																																																																										
				0.751	0.751	0.751																																																																																																																																																																																																																																																																																																																																																																																										
Outfall Pipe Number	Outfall Name	C. Level (m)	I. Level (m)	Min I. Level (m)	D,L (mm)	W (mm)																																																																																																																																																																																																																																																																																																																																																																																										
E1.010	EDITCH	2.800	0.390	0.000	1200	0																																																																																																																																																																																																																																																																																																																																																																																										
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)																																																																																																																																																																																																																																																																																																																																																																																					
1	1.460	21	1.460	41	1.460	61	1.460	81	1.460	101	1.460																																																																																																																																																																																																																																																																																																																																																																																					
2	1.460	22	1.460	42	1.460	62	1.460	82	1.460	102	1.460																																																																																																																																																																																																																																																																																																																																																																																					
3	1.460	23	1.460	43	1.460	63	1.460	83	1.460	103	1.460																																																																																																																																																																																																																																																																																																																																																																																					
4	1.460	24	1.460	44	1.460	64	1.460	84	1.460	104	1.460																																																																																																																																																																																																																																																																																																																																																																																					
5	1.460	25	1.460	45	1.460	65	1.460	85	1.460	105	1.460																																																																																																																																																																																																																																																																																																																																																																																					
6	1.460	26	1.460	46	1.460	66	1.460	86	1.460	106	1.460																																																																																																																																																																																																																																																																																																																																																																																					
7	1.460	27	1.460	47	1.460	67	1.460	87	1.460	107	1.460																																																																																																																																																																																																																																																																																																																																																																																					
8	1.460	28	1.460	48	1.460	68	1.460	88	1.460	108	1.460																																																																																																																																																																																																																																																																																																																																																																																					
9	1.460	29	1.460	49	1.460	69	1.460	89	1.460	109	1.460																																																																																																																																																																																																																																																																																																																																																																																					
10	1.460	30	1.460	50	1.460	70	1.460	90	1.460	110	1.460																																																																																																																																																																																																																																																																																																																																																																																					
11	1.460	31	1.460	51	1.460	71	1.460	91	1.460	111	1.460																																																																																																																																																																																																																																																																																																																																																																																					
12	1.460	32	1.460	52	1.460	72	1.460	92	1.460	112	1.460																																																																																																																																																																																																																																																																																																																																																																																					
13	1.460	33	1.460	53	1.460	73	1.460	93	1.460	113	1.460																																																																																																																																																																																																																																																																																																																																																																																					
14	1.460	34	1.460	54	1.460	74	1.460	94	1.460	114	1.460																																																																																																																																																																																																																																																																																																																																																																																					
15	1.460	35	1.460	55	1.460	75	1.460	95	1.460	115	1.460																																																																																																																																																																																																																																																																																																																																																																																					
16	1.460	36	1.460	56	1.460	76	1.460	96	1.460	116	1.460																																																																																																																																																																																																																																																																																																																																																																																					
17	1.460	37	1.460	57	1.460	77	1.460	97	1.460	117	1.460																																																																																																																																																																																																																																																																																																																																																																																					
18	1.460	38	1.460	58	1.460	78	1.460	98	1.460	118	1.460																																																																																																																																																																																																																																																																																																																																																																																					
19	1.460	39	1.460	59	1.460	79	1.460	99	1.460	119	1.460																																																																																																																																																																																																																																																																																																																																																																																					
20	1.460	40	1.460	60	1.460	80	1.460	100	1.460	120	1.460																																																																																																																																																																																																																																																																																																																																																																																					

Kirksaunders Associates Ltd							Page 6		
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS RD 1IN1, 1IN2, 1 IN30					
Date 18/06/2019 15:38 File ACCES ROAD STORM NETWOR...				Designed by DO Checked by					
Micro Drainage				Network 2018.1					
Surcharged Outfall Details for Existing									
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
121	1.460	171	1.460	221	1.460	271	1.460	321	1.460
122	1.460	172	1.460	222	1.460	272	1.460	322	1.460
123	1.460	173	1.460	223	1.460	273	1.460	323	1.460
124	1.460	174	1.460	224	1.460	274	1.460	324	1.460
125	1.460	175	1.460	225	1.460	275	1.460	325	1.460
126	1.460	176	1.460	226	1.460	276	1.460	326	1.460
127	1.460	177	1.460	227	1.460	277	1.460	327	1.460
128	1.460	178	1.460	228	1.460	278	1.460	328	1.460
129	1.460	179	1.460	229	1.460	279	1.460	329	1.460
130	1.460	180	1.460	230	1.460	280	1.460	330	1.460
131	1.460	181	1.460	231	1.460	281	1.460	331	1.460
132	1.460	182	1.460	232	1.460	282	1.460	332	1.460
133	1.460	183	1.460	233	1.460	283	1.460	333	1.460
134	1.460	184	1.460	234	1.460	284	1.460	334	1.460
135	1.460	185	1.460	235	1.460	285	1.460	335	1.460
136	1.460	186	1.460	236	1.460	286	1.460	336	1.460
137	1.460	187	1.460	237	1.460	287	1.460	337	1.460
138	1.460	188	1.460	238	1.460	288	1.460	338	1.460
139	1.460	189	1.460	239	1.460	289	1.460	339	1.460
140	1.460	190	1.460	240	1.460	290	1.460	340	1.460
141	1.460	191	1.460	241	1.460	291	1.460	341	1.460
142	1.460	192	1.460	242	1.460	292	1.460	342	1.460
143	1.460	193	1.460	243	1.460	293	1.460	343	1.460
144	1.460	194	1.460	244	1.460	294	1.460	344	1.460
145	1.460	195	1.460	245	1.460	295	1.460	345	1.460
146	1.460	196	1.460	246	1.460	296	1.460	346	1.460
147	1.460	197	1.460	247	1.460	297	1.460	347	1.460
148	1.460	198	1.460	248	1.460	298	1.460	348	1.460
149	1.460	199	1.460	249	1.460	299	1.460	349	1.460
150	1.460	200	1.460	250	1.460	300	1.460	350	1.460
151	1.460	201	1.460	251	1.460	301	1.460	351	1.460
152	1.460	202	1.460	252	1.460	302	1.460	352	1.460
153	1.460	203	1.460	253	1.460	303	1.460	353	1.460
154	1.460	204	1.460	254	1.460	304	1.460	354	1.460
155	1.460	205	1.460	255	1.460	305	1.460	355	1.460
156	1.460	206	1.460	256	1.460	306	1.460	356	1.460
157	1.460	207	1.460	257	1.460	307	1.460	357	1.460
158	1.460	208	1.460	258	1.460	308	1.460	358	1.460
159	1.460	209	1.460	259	1.460	309	1.460	359	1.460
160	1.460	210	1.460	260	1.460	310	1.460	360	1.460
161	1.460	211	1.460	261	1.460	311	1.460	361	1.460
162	1.460	212	1.460	262	1.460	312	1.460	362	1.460
163	1.460	213	1.460	263	1.460	313	1.460	363	1.460
164	1.460	214	1.460	264	1.460	314	1.460	364	1.460
165	1.460	215	1.460	265	1.460	315	1.460	365	1.460
166	1.460	216	1.460	266	1.460	316	1.460	366	1.460
167	1.460	217	1.460	267	1.460	317	1.460	367	1.460
168	1.460	218	1.460	268	1.460	318	1.460	368	1.460
169	1.460	219	1.460	269	1.460	319	1.460	369	1.460
170	1.460	220	1.460	270	1.460	320	1.460	420	1.460
©1982-2018 Innovyze									

Kirksaunders Associates Ltd										Page 7	
Templegate House 115-123 High Street Orpington Kent BR6 0LG					SALT BOX BOGNOR REGIS RD 1IN1, 1IN2, 1 IN30						
Date 18/06/2019 15:38					Designed by DO						
File ACCES ROAD STORM NETWOR...					Checked by						
Micro Drainage					Network 2018.1						
Surcharged Outfall Details for Existing											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
421	1.460	471	1.460	521	1.460	571	1.460	621	1.460	671	1.460
422	1.460	472	1.460	522	1.460	572	1.460	622	1.460	672	1.460
423	1.460	473	1.460	523	1.460	573	1.460	623	1.460	673	1.460
424	1.460	474	1.460	524	1.460	574	1.460	624	1.460	674	1.460
425	1.460	475	1.460	525	1.460	575	1.460	625	1.460	675	1.460
426	1.460	476	1.460	526	1.460	576	1.460	626	1.460	676	1.460
427	1.460	477	1.460	527	1.460	577	1.460	627	1.460	677	1.460
428	1.460	478	1.460	528	1.460	578	1.460	628	1.460	678	1.460
429	1.460	479	1.460	529	1.460	579	1.460	629	1.460	679	1.460
430	1.460	480	1.460	530	1.460	580	1.460	630	1.460	680	1.460
431	1.460	481	1.460	531	1.460	581	1.460	631	1.460	681	1.460
432	1.460	482	1.460	532	1.460	582	1.460	632	1.460	682	1.460
433	1.460	483	1.460	533	1.460	583	1.460	633	1.460	683	1.460
434	1.460	484	1.460	534	1.460	584	1.460	634	1.460	684	1.460
435	1.460	485	1.460	535	1.460	585	1.460	635	1.460	685	1.460
436	1.460	486	1.460	536	1.460	586	1.460	636	1.460	686	1.460
437	1.460	487	1.460	537	1.460	587	1.460	637	1.460	687	1.460
438	1.460	488	1.460	538	1.460	588	1.460	638	1.460	688	1.460
439	1.460	489	1.460	539	1.460	589	1.460	639	1.460	689	1.460
440	1.460	490	1.460	540	1.460	590	1.460	640	1.460	690	1.460
441	1.460	491	1.460	541	1.460	591	1.460	641	1.460	691	1.460
442	1.460	492	1.460	542	1.460	592	1.460	642	1.460	692	1.460
443	1.460	493	1.460	543	1.460	593	1.460	643	1.460	693	1.460
444	1.460	494	1.460	544	1.460	594	1.460	644	1.460	694	1.460
445	1.460	495	1.460	545	1.460	595	1.460	645	1.460	695	1.460
446	1.460	496	1.460	546	1.460	596	1.460	646	1.460	696	1.460
447	1.460	497	1.460	547	1.460	597	1.460	647	1.460	697	1.460
448	1.460	498	1.460	548	1.460	598	1.460	648	1.460	698	1.460
449	1.460	499	1.460	549	1.460	599	1.460	649	1.460	699	1.460
450	1.460	500	1.460	550	1.460	600	1.460	650	1.460	700	1.460
451	1.460	501	1.460	551	1.460	601	1.460	651	1.460	701	1.460
452	1.460	502	1.460	552	1.460	602	1.460	652	1.460	702	1.460
453	1.460	503	1.460	553	1.460	603	1.460	653	1.460	703	1.460
454	1.460	504	1.460	554	1.460	604	1.460	654	1.460	704	1.460
455	1.460	505	1.460	555	1.460	605	1.460	655	1.460	705	1.460
456	1.460	506	1.460	556	1.460	606	1.460	656	1.460	706	1.460
457	1.460	507	1.460	557	1.460	607	1.460	657	1.460	707	1.460
458	1.460	508	1.460	558	1.460	608	1.460	658	1.460	708	1.460
459	1.460	509	1.460	559	1.460	609	1.460	659	1.460	709	1.460
460	1.460	510	1.460	560	1.460	610	1.460	660	1.460	710	1.460
461	1.460	511	1.460	561	1.460	611	1.460	661	1.460	711	1.460
462	1.460	512	1.460	562	1.460	612	1.460	662	1.460	712	1.460
463	1.460	513	1.460	563	1.460	613	1.460	663	1.460	713	1.460
464	1.460	514	1.460	564	1.460	614	1.460	664	1.460	714	1.460
465	1.460	515	1.460	565	1.460	615	1.460	665	1.460	715	1.460
466	1.460	516	1.460	566	1.460	616	1.460	666	1.460	716	1.460
467	1.460	517	1.460	567	1.460	617	1.460	667	1.460	717	1.460
468	1.460	518	1.460	568	1.460	618	1.460	668	1.460	718	1.460
469	1.460	519	1.460	569	1.460	619	1.460	669	1.460	719	1.460
470	1.460	520	1.460	570	1.460	620	1.460	670	1.460	720	1.460
©1982-2018 Innovyze											

Kirksaunders Associates Ltd										Page 8	
Templegate House 115-123 High Street Orpington Kent BR6 0LG					SALT BOX BOGNOR REGIS RD 1IN1, 1IN2, 1 IN30						
Date 18/06/2019 15:38					Designed by DO						
File ACCES ROAD STORM NETWOR...					Checked by						
Micro Drainage					Network 2018.1						
Surcharged Outfall Details for Existing											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
721	1.460	771	1.460	821	1.460	871	1.460	921	1.460	971	1.460
722	1.460	772	1.460	822	1.460	872	1.460	922	1.460	972	1.460
723	1.460	773	1.460	823	1.460	873	1.460	923	1.460	973	1.460
724	1.460	774	1.460	824	1.460	874	1.460	924	1.460	974	1.460
725	1.460	775	1.460	825	1.460	875	1.460	925	1.460	975	1.460
726	1.460	776	1.460	826	1.460	876	1.460	926	1.460	976	1.460
727	1.460	777	1.460	827	1.460	877	1.460	927	1.460	977	1.460
728	1.460	778	1.460	828	1.460	878	1.460	928	1.460	978	1.460
729	1.460	779	1.460	829	1.460	879	1.460	929	1.460	979	1.460
730	1.460	780	1.460	830	1.460	880	1.460	930	1.460	980	1.460
731	1.460	781	1.460	831	1.460	881	1.460	931	1.460	981	1.460
732	1.460	782	1.460	832	1.460	882	1.460	932	1.460	982	1.460
733	1.460	783	1.460	833	1.460	883	1.460	933	1.460	983	1.460
734	1.460	784	1.460	834	1.460	884	1.460	934	1.460	984	1.460
735	1.460	785	1.460	835	1.460	885	1.460	935	1.460	985	1.460
736	1.460	786	1.460	836	1.460	886	1.460	936	1.460	986	1.460
737	1.460	787	1.460	837	1.460	887	1.460	937	1.460	987	1.460
738	1.460	788	1.460	838	1.460	888	1.460	938	1.460	988	1.460
739	1.460	789	1.460	839	1.460	889	1.460	939	1.460	989	1.460
740	1.460	790	1.460	840	1.460	890	1.460	940	1.460	990	1.460
741	1.460	791	1.460	841	1.460	891	1.460	941	1.460	991	1.460
742	1.460	792	1.460	842	1.460	892	1.460	942	1.460	992	1.460
743	1.460	793	1.460	843	1.460	893	1.460	943	1.460	993	1.460
744	1.460	794	1.460	844	1.460	894	1.460	944	1.460	994	1.460
745	1.460	795	1.460	845	1.460	895	1.460	945	1.460	995	1.460
746	1.460	796	1.460	846	1.460	896	1.460	946	1.460	996	1.460
747	1.460	797	1.460	847	1.460	897	1.460	947	1.460	997	1.460
748	1.460	798	1.460	848	1.460	898	1.460	948	1.460	998	1.460
749	1.460	799	1.460	849	1.460	899	1.460	949	1.460	999	1.460
750	1.460	800	1.460	850	1.460	900	1.460	950	1.460	1000	1.460
751	1.460	801	1.460	851	1.460	901	1.460	951	1.460	1001	1.460
752	1.460	802	1.460	852	1.460	902	1.460	952	1.460	1002	1.460
753	1.460	803	1.460	853	1.460	903	1.460	953	1.460	1003	1.460
754	1.460	804	1.460	854	1.460	904	1.460	954	1.460	1004	1.460
755	1.460	805	1.460	855	1.460	905	1.460	955	1.460	1005	1.460
756	1.460	806	1.460	856	1.460	906	1.460	956	1.460	1006	1.460
757	1.460	807	1.460	857	1.460	907	1.460	957	1.460	1007	1.460
758	1.460	808	1.460	858	1.460	908	1.460	958	1.460	1008	1.460
759	1.460	809	1.460	859	1.460	909	1.460	959	1.460	1009	1.460
760	1.460	810	1.460	860	1.460	910	1.460	960	1.460	1010	1.460
761	1.460	811	1.460	861	1.460	911	1.460	961	1.460	1011	1.460
762	1.460	812	1.460	862	1.460	912	1.460	962	1.460	1012	1.460
763	1.460	813	1.460	863	1.460	913	1.460	963	1.460	1013	1.460
764	1.460	814	1.460	864	1.460	914	1.460	964	1.460	1014	1.460
765	1.460	815	1.460	865	1.460	915	1.460	965	1.460	1015	1.460
766	1.460	816	1.460	866	1.460	916	1.460	966	1.460	1016	1.460
767	1.460	817	1.460	867	1.460	917	1.460	967	1.460	1017	1.460
768	1.460	818	1.460	868	1.460	918	1.460	968	1.460	1018	1.460
769	1.460	819	1.460	869	1.460	919	1.460	969	1.460	1019	1.460
770	1.460	820	1.460	870	1.460	920	1.460	970	1.460	1020	1.460
©1982-2018 Innovyze											

Kirksaunders Associates Ltd								Page 9			
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS RD 1IN1, 1IN2, 1 IN30							
Date 18/06/2019 15:38				Designed by DO							
File ACCES ROAD STORM NETWOR...				Checked by							
Micro Drainage				Network 2018.1							
Surcharged Outfall Details for Existing											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
1021	1.460	1071	1.460	1121	1.460	1171	1.460	1221	1.460	1271	1.460
1022	1.460	1072	1.460	1122	1.460	1172	1.460	1222	1.460	1272	1.460
1023	1.460	1073	1.460	1123	1.460	1173	1.460	1223	1.460	1273	1.460
1024	1.460	1074	1.460	1124	1.460	1174	1.460	1224	1.460	1274	1.460
1025	1.460	1075	1.460	1125	1.460	1175	1.460	1225	1.460	1275	1.460
1026	1.460	1076	1.460	1126	1.460	1176	1.460	1226	1.460	1276	1.460
1027	1.460	1077	1.460	1127	1.460	1177	1.460	1227	1.460	1277	1.460
1028	1.460	1078	1.460	1128	1.460	1178	1.460	1228	1.460	1278	1.460
1029	1.460	1079	1.460	1129	1.460	1179	1.460	1229	1.460	1279	1.460
1030	1.460	1080	1.460	1130	1.460	1180	1.460	1230	1.460	1280	1.460
1031	1.460	1081	1.460	1131	1.460	1181	1.460	1231	1.460	1281	1.460
1032	1.460	1082	1.460	1132	1.460	1182	1.460	1232	1.460	1282	1.460
1033	1.460	1083	1.460	1133	1.460	1183	1.460	1233	1.460	1283	1.460
1034	1.460	1084	1.460	1134	1.460	1184	1.460	1234	1.460	1284	1.460
1035	1.460	1085	1.460	1135	1.460	1185	1.460	1235	1.460	1285	1.460
1036	1.460	1086	1.460	1136	1.460	1186	1.460	1236	1.460	1286	1.460
1037	1.460	1087	1.460	1137	1.460	1187	1.460	1237	1.460	1287	1.460
1038	1.460	1088	1.460	1138	1.460	1188	1.460	1238	1.460	1288	1.460
1039	1.460	1089	1.460	1139	1.460	1189	1.460	1239	1.460	1289	1.460
1040	1.460	1090	1.460	1140	1.460	1190	1.460	1240	1.460	1290	1.460
1041	1.460	1091	1.460	1141	1.460	1191	1.460	1241	1.460	1291	1.460
1042	1.460	1092	1.460	1142	1.460	1192	1.460	1242	1.460	1292	1.460
1043	1.460	1093	1.460	1143	1.460	1193	1.460	1243	1.460	1293	1.460
1044	1.460	1094	1.460	1144	1.460	1194	1.460	1244	1.460	1294	1.460
1045	1.460	1095	1.460	1145	1.460	1195	1.460	1245	1.460	1295	1.460
1046	1.460	1096	1.460	1146	1.460	1196	1.460	1246	1.460	1296	1.460
1047	1.460	1097	1.460	1147	1.460	1197	1.460	1247	1.460	1297	1.460
1048	1.460	1098	1.460	1148	1.460	1198	1.460	1248	1.460	1298	1.460
1049	1.460	1099	1.460	1149	1.460	1199	1.460	1249	1.460	1299	1.460
1050	1.460	1100	1.460	1150	1.460	1200	1.460	1250	1.460	1300	1.460
1051	1.460	1101	1.460	1151	1.460	1201	1.460	1251	1.460	1301	1.460
1052	1.460	1102	1.460	1152	1.460	1202	1.460	1252	1.460	1302	1.460
1053	1.460	1103	1.460	1153	1.460	1203	1.460	1253	1.460	1303	1.460
1054	1.460	1104	1.460	1154	1.460	1204	1.460	1254	1.460	1304	1.460
1055	1.460	1105	1.460	1155	1.460	1205	1.460	1255	1.460	1305	1.460
1056	1.460	1106	1.460	1156	1.460	1206	1.460	1256	1.460	1306	1.460
1057	1.460	1107	1.460	1157	1.460	1207	1.460	1257	1.460	1307	1.460
1058	1.460	1108	1.460	1158	1.460	1208	1.460	1258	1.460	1308	1.460
1059	1.460	1109	1.460	1159	1.460	1209	1.460	1259	1.460	1309	1.460
1060	1.460	1110	1.460	1160	1.460	1210	1.460	1260	1.460	1310	1.460
1061	1.460	1111	1.460	1161	1.460	1211	1.460	1261	1.460	1311	1.460
1062	1.460	1112	1.460	1162	1.460	1212	1.460	1262	1.460	1312	1.460
1063	1.460	1113	1.460	1163	1.460	1213	1.460	1263	1.460	1313	1.460
1064	1.460	1114	1.460	1164	1.460	1214	1.460	1264	1.460	1314	1.460
1065	1.460	1115	1.460	1165	1.460	1215	1.460	1265	1.460	1315	1.460
1066	1.460	1116	1.460	1166	1.460	1216	1.460	1266	1.460	1316	1.460
1067	1.460	1117	1.460	1167	1.460	1217	1.460	1267	1.460	1317	1.460
1068	1.460	1118	1.460	1168	1.460	1218	1.460	1268	1.460	1318	1.460
1069	1.460	1119	1.460	1169	1.460	1219	1.460	1269	1.460	1319	1.460
1070	1.460	1120	1.460	1170	1.460	1220	1.460	1270	1.460	1320	1.460
©1982-2018 Innovyze											

Kirksaunders Associates Ltd								Page 10			
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS RD 1IN1, 1IN2, 1 IN30							
Date 18/06/2019 15:38				Designed by DO							
File ACCES ROAD STORM NETWOR...				Checked by							
Micro Drainage				Network 2018.1							
Surcharged Outfall Details for Existing											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
1321	1.460	1371	1.460	1421	1.460	1471	1.460	1521	1.460	1571	1.460
1322	1.460	1372	1.460	1422	1.460	1472	1.460	1522	1.460	1572	1.460
1323	1.460	1373	1.460	1423	1.460	1473	1.460	1523	1.460	1573	1.460
1324	1.460	1374	1.460	1424	1.460	1474	1.460	1524	1.460	1574	1.460
1325	1.460	1375	1.460	1425	1.460	1475	1.460	1525	1.460	1575	1.460
1326	1.460	1376	1.460	1426	1.460	1476	1.460	1526	1.460	1576	1.460
1327	1.460	1377	1.460	1427	1.460	1477	1.460	1527	1.460	1577	1.460
1328	1.460	1378	1.460	1428	1.460	1478	1.460	1528	1.460	1578	1.460
1329	1.460	1379	1.460	1429	1.460	1479	1.460	1529	1.460	1579	1.460
1330	1.460	1380	1.460	1430	1.460	1480	1.460	1530	1.460	1580	1.460
1331	1.460	1381	1.460	1431	1.460	1481	1.460	1531	1.460	1581	1.460
1332	1.460	1382	1.460	1432	1.460	1482	1.460	1532	1.460	1582	1.460
1333	1.460	1383	1.460	1433	1.460	1483	1.460	1533	1.460	1583	1.460
1334	1.460	1384	1.460	1434	1.460	1484	1.460	1534	1.460	1584	1.460
1335	1.460	1385	1.460	1435	1.460	1485	1.460	1535	1.460	1585	1.460
1336	1.460	1386	1.460	1436	1.460	1486	1.460	1536	1.460	1586	1.460
1337	1.460	1387	1.460	1437	1.460	1487	1.460	1537	1.460	1587	1.460
1338	1.460	1388	1.460	1438	1.460	1488	1.460	1538	1.460	1588	1.460
1339	1.460	1389	1.460	1439	1.460	1489	1.460	1539	1.460	1589	1.460
1340	1.460	1390	1.460	1440	1.460	1490	1.460	1540	1.460	1590	1.460
1341	1.460	1391	1.460	1441	1.460	1491	1.460	1541	1.460	1591	1.460
1342	1.460	1392	1.460	1442	1.460	1492	1.460	1542	1.460	1592	1.460
1343	1.460	1393	1.460	1443	1.460	1493	1.460	1543	1.460	1593	1.460
1344	1.460	1394	1.460	1444	1.460	1494	1.460	1544	1.460	1594	1.460
1345	1.460	1395	1.460	1445	1.460	1495	1.460	1545	1.460	1595	1.460
1346	1.460	1396	1.460	1446	1.460	1496	1.460	1546	1.460	1596	1.460
1347	1.460	1397	1.460	1447	1.460	1497	1.460	1547	1.460	1597	1.460
1348	1.460	1398	1.460	1448	1.460	1498	1.460	1548	1.460	1598	1.460
1349	1.460	1399	1.460	1449	1.460	1499	1.460	1549	1.460	1599	1.460
1350	1.460	1400	1.460	1450	1.460	1500	1.460	1550	1.460	1600	1.460
1351	1.460	1401	1.460	1451	1.460	1501	1.460	1551	1.460	1601	1.460
1352	1.460	1402	1.460	1452	1.460	1502	1.460	1552	1.460	1602	1.460
1353	1.460	1403	1.460	1453	1.460	1503	1.460	1553	1.460	1603	1.460
1354	1.460	1404	1.460	1454	1.460	1504	1.460	1554	1.460	1604	1.460
1355	1.460	1405	1.460	1455	1.460	1505	1.460	1555	1.460	1605	1.460
1356	1.460	1406	1.460	1456	1.460	1506	1.460	1556	1.460	1606	1.460
1357	1.460	1407	1.460	1457	1.460	1507	1.460	1557	1.460	1607	1.460
1358	1.460	1408	1.460	1458	1.460	1508	1.460	1558	1.460	1608	1.460
1359	1.460	1409	1.460	1459	1.460	1509	1.460	1559	1.460	1609	1.460
1360	1.460	1410	1.460	1460	1.460	1510	1.460	1560	1.460	1610	1.460
1361	1.460	1411	1.460	1461	1.460	1511	1.460	1561	1.460	1611	1.460
1362	1.460	1412	1.460	1462	1.460	1512	1.460	1562	1.460	1612	1.460
1363	1.460	1413	1.460	1463	1.460	1513	1.460	1563	1.460	1613	1.460
1364	1.460	1414	1.460	1464	1.460	1514	1.460	1564	1.460	1614	1.460
1365	1.460	1415	1.460	1465	1.460	1515	1.460	1565	1.460	1615	1.460
1366	1.460	1416	1.460	1466	1.460	1516	1.460	1566	1.460	1616	1.460
1367	1.460	1417	1.460	1467	1.460	1517	1.460	1567	1.460	1617	1.460
1368	1.460	1418	1.460	1468	1.460	1518	1.460	1568	1.460	1618	1.460
1369	1.460	1419	1.460	1469	1.460	1519	1.460	1569	1.460	1619	1.460
1370	1.460	1420	1.460	1470	1.460	1520	1.460	1570	1.460	1620	1.460
©1982-2018 Innovyze											

Kirksaunders Associates Ltd						Page 11			
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS RD 1IN1, 1IN2, 1 IN30					
Date 18/06/2019 15:38				Designed by DO					
File ACCES ROAD STORM NETWOR...				Checked by					
Micro Drainage				Network 2018.1					
Surcharged Outfall Details for Existing									
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
1621	1.460	1671	1.460	1721	1.460	1771	1.460	1821	1.460
1622	1.460	1672	1.460	1722	1.460	1772	1.460	1822	1.460
1623	1.460	1673	1.460	1723	1.460	1773	1.460	1823	1.460
1624	1.460	1674	1.460	1724	1.460	1774	1.460	1824	1.460
1625	1.460	1675	1.460	1725	1.460	1775	1.460	1825	1.460
1626	1.460	1676	1.460	1726	1.460	1776	1.460	1826	1.460
1627	1.460	1677	1.460	1727	1.460	1777	1.460	1827	1.460
1628	1.460	1678	1.460	1728	1.460	1778	1.460	1828	1.460
1629	1.460	1679	1.460	1729	1.460	1779	1.460	1829	1.460
1630	1.460	1680	1.460	1730	1.460	1780	1.460	1830	1.460
1631	1.460	1681	1.460	1731	1.460	1781	1.460	1831	1.460
1632	1.460	1682	1.460	1732	1.460	1782	1.460	1832	1.460
1633	1.460	1683	1.460	1733	1.460	1783	1.460	1833	1.460
1634	1.460	1684	1.460	1734	1.460	1784	1.460	1834	1.460
1635	1.460	1685	1.460	1735	1.460	1785	1.460	1835	1.460
1636	1.460	1686	1.460	1736	1.460	1786	1.460	1836	1.460
1637	1.460	1687	1.460	1737	1.460	1787	1.460	1837	1.460
1638	1.460	1688	1.460	1738	1.460	1788	1.460	1838	1.460
1639	1.460	1689	1.460	1739	1.460	1789	1.460	1839	1.460
1640	1.460	1690	1.460	1740	1.460	1790	1.460	1840	1.460
1641	1.460	1691	1.460	1741	1.460	1791	1.460	1841	1.460
1642	1.460	1692	1.460	1742	1.460	1792	1.460	1842	1.460
1643	1.460	1693	1.460	1743	1.460	1793	1.460	1843	1.460
1644	1.460	1694	1.460	1744	1.460	1794	1.460	1844	1.460
1645	1.460	1695	1.460	1745	1.460	1795	1.460	1845	1.460
1646	1.460	1696	1.460	1746	1.460	1796	1.460	1846	1.460
1647	1.460	1697	1.460	1747	1.460	1797	1.460	1847	1.460
1648	1.460	1698	1.460	1748	1.460	1798	1.460	1848	1.460
1649	1.460	1699	1.460	1749	1.460	1799	1.460	1849	1.460
1650	1.460	1700	1.460	1750	1.460	1800	1.460	1850	1.460
1651	1.460	1701	1.460	1751	1.460	1801	1.460	1851	1.460
1652	1.460	1702	1.460	1752	1.460	1802	1.460	1852	1.460
1653	1.460	1703	1.460	1753	1.460	1803	1.460	1853	1.460
1654	1.460	1704	1.460	1754	1.460	1804	1.460	1854	1.460
1655	1.460	1705	1.460	1755	1.460	1805	1.460	1855	1.460
1656	1.460	1706	1.460	1756	1.460	1806	1.460	1856	1.460
1657	1.460	1707	1.460	1757	1.460	1807	1.460	1857	1.460
1658	1.460	1708	1.460	1758	1.460	1808	1.460	1858	1.460
1659	1.460	1709	1.460	1759	1.460	1809	1.460	1859	1.460
1660	1.460	1710	1.460	1760	1.460	1810	1.460	1860	1.460
1661	1.460	1711	1.460	1761	1.460	1811	1.460	1861	1.460
1662	1.460	1712	1.460	1762	1.460	1812	1.460	1862	1.460
1663	1.460	1713	1.460	1763	1.460	1813	1.460	1863	1.460
1664	1.460	1714	1.460	1764	1.460	1814	1.460	1864	1.460
1665	1.460	1715	1.460	1765	1.460	1815	1.460	1865	1.460
1666	1.460	1716	1.460	1766	1.460	1816	1.460	1866	1.460
1667	1.460	1717	1.460	1767	1.460	1817	1.460	1867	1.460
1668	1.460	1718	1.460	1768	1.460	1818	1.460	1868	1.460
1669	1.460	1719	1.460	1769	1.460	1819	1.460	1869	1.460
1670	1.460	1720	1.460	1770	1.460	1820	1.460	1870	1.460
©1982-2018 Innovyze									

Kirksaunders Associates Ltd										Page 12	
Templegate House 115-123 High Street Orpington Kent BR6 0LG					SALT BOX BOGNOR REGIS RD 1IN1, 1IN2, 1 IN30						
Date 18/06/2019 15:38					Designed by DO						
File ACCES ROAD STORM NETWOR...					Checked by						
Micro Drainage					Network 2018.1						
Surcharged Outfall Details for Existing											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
1921	1.460	1971	1.460	2021	1.460	2071	1.460	2121	1.460	2171	1.460
1922	1.460	1972	1.460	2022	1.460	2072	1.460	2122	1.460	2172	1.460
1923	1.460	1973	1.460	2023	1.460	2073	1.460	2123	1.460	2173	1.460
1924	1.460	1974	1.460	2024	1.460	2074	1.460	2124	1.460	2174	1.460
1925	1.460	1975	1.460	2025	1.460	2075	1.460	2125	1.460	2175	1.460
1926	1.460	1976	1.460	2026	1.460	2076	1.460	2126	1.460	2176	1.460
1927	1.460	1977	1.460	2027	1.460	2077	1.460	2127	1.460	2177	1.460
1928	1.460	1978	1.460	2028	1.460	2078	1.460	2128	1.460	2178	1.460
1929	1.460	1979	1.460	2029	1.460	2079	1.460	2129	1.460	2179	1.460
1930	1.460	1980	1.460	2030	1.460	2080	1.460	2130	1.460	2180	1.460
1931	1.460	1981	1.460	2031	1.460	2081	1.460	2131	1.460	2181	1.460
1932	1.460	1982	1.460	2032	1.460	2082	1.460	2132	1.460	2182	1.460
1933	1.460	1983	1.460	2033	1.460	2083	1.460	2133	1.460	2183	1.460
1934	1.460	1984	1.460	2034	1.460	2084	1.460	2134	1.460	2184	1.460
1935	1.460	1985	1.460	2035	1.460	2085	1.460	2135	1.460	2185	1.460
1936	1.460	1986	1.460	2036	1.460	2086	1.460	2136	1.460	2186	1.460
1937	1.460	1987	1.460	2037	1.460	2087	1.460	2137	1.460	2187	1.460
1938	1.460	1988	1.460	2038	1.460	2088	1.460	2138	1.460	2188	1.460
1939	1.460	1989	1.460	2039	1.460	2089	1.460	2139	1.460	2189	1.460
1940	1.460	1990	1.460	2040	1.460	2090	1.460	2140	1.460	2190	1.460
1941	1.460	1991	1.460	2041	1.460	2091	1.460	2141	1.460	2191	1.460
1942	1.460	1992	1.460	2042	1.460	2092	1.460	2142	1.460	2192	1.460
1943	1.460	1993	1.460	2043	1.460	2093	1.460	2143	1.460	2193	1.460
1944	1.460	1994	1.460	2044	1.460	2094	1.460	2144	1.460	2194	1.460
1945	1.460	1995	1.460	2045	1.460	2095	1.460	2145	1.460	2195	1.460
1946	1.460	1996	1.460	2046	1.460	2096	1.460	2146	1.460	2196	1.460
1947	1.460	1997	1.460	2047	1.460	2097	1.460	2147	1.460	2197	1.460
1948	1.460	1998	1.460	2048	1.460	2098	1.460	2148	1.460	2198	1.460
1949	1.460	1999	1.460	2049	1.460	2099	1.460	2149	1.460	2199	1.460
1950	1.460	2000	1.460	2050	1.460	2100	1.460	2150	1.460	2200	1.460
1951	1.460	2001	1.460	2051	1.460	2101	1.460	2151	1.460	2201	1.460
1952	1.460	2002	1.460	2052	1.460	2102	1.460	2152	1.460	2202	1.460
1953	1.460	2003	1.460	2053	1.460	2103	1.460	2153	1.460	2203	1.460
1954	1.460	2004	1.460	2054	1.460	2104	1.460	2154	1.460	2204	1.460
1955	1.460	2005	1.460	2055	1.460	2105	1.460	2155	1.460	2205	1.460
1956	1.460	2006	1.460	2056	1.460	2106	1.460	2156	1.460	2206	1.460
1957	1.460	2007	1.460	2057	1.460	2107	1.460	2157	1.460	2207	1.460
1958	1.460	2008	1.460	2058	1.460	2108	1.460	2158	1.460	2208	1.460
1959	1.460	2009	1.460	2059	1.460	2109	1.460	2159	1.460	2209	1.460
1960	1.460	2010	1.460	2060	1.460	2110	1.460	2160	1.460	2210	1.460
1961	1.460	2011	1.460	2061	1.460	2111	1.460	2161	1.460	2211	1.460
1962	1.460	2012	1.460	2062	1.460	2112	1.460	2162	1.460	2212	1.460
1963	1.460	2013	1.460	2063	1.460	2113	1.460	2163	1.460	2213	1.460
1964	1.460	2014	1.460	2064	1.460	2114	1.460	2164	1.460	2214	1.460
1965	1.460	2015	1.460	2065	1.460	2115	1.460	2165	1.460	2215	1.460
1966	1.460	2016	1.460	2066	1.460	2116	1.460	2166	1.460	2216	1.460
1967	1.460	2017	1.460	2067	1.460	2117	1.460	2167	1.460	2217	1.460
1968	1.460	2018	1.460	2068	1.460	2118	1.460	2168	1.460	2218	1.460
1969	1.460	2019	1.460	2069	1.460	2119	1.460	2169	1.460	2219	1.460
1970	1.460	2020	1.460	2070	1.460	2120	1.460	2170	1.460	2220	1.460
©1982-2018 Innovyze											

Kirksaunders Associates Ltd								Page 13			
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS RD 1IN1, 1IN2, 1 IN30							
Date 18/06/2019 15:38 File ACCES ROAD STORM NETWOR...				Designed by DO Checked by							
Micro Drainage				Network 2018.1							
Surcharged Outfall Details for Existing											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
2221	1.460	2271	1.460	2321	1.460	2371	1.460	2421	1.460	2471	1.460
2222	1.460	2272	1.460	2322	1.460	2372	1.460	2422	1.460	2472	1.460
2223	1.460	2273	1.460	2323	1.460	2373	1.460	2423	1.460	2473	1.460
2224	1.460	2274	1.460	2324	1.460	2374	1.460	2424	1.460	2474	1.460
2225	1.460	2275	1.460	2325	1.460	2375	1.460	2425	1.460	2475	1.460
2226	1.460	2276	1.460	2326	1.460	2376	1.460	2426	1.460	2476	1.460
2227	1.460	2277	1.460	2327	1.460	2377	1.460	2427	1.460	2477	1.460
2228	1.460	2278	1.460	2328	1.460	2378	1.460	2428	1.460	2478	1.460
2229	1.460	2279	1.460	2329	1.460	2379	1.460	2429	1.460	2479	1.460
2230	1.460	2280	1.460	2330	1.460	2380	1.460	2430	1.460	2480	1.460
2231	1.460	2281	1.460	2331	1.460	2381	1.460	2431	1.460	2481	1.460
2232	1.460	2282	1.460	2332	1.460	2382	1.460	2432	1.460	2482	1.460
2233	1.460	2283	1.460	2333	1.460	2383	1.460	2433	1.460	2483	1.460
2234	1.460	2284	1.460	2334	1.460	2384	1.460	2434	1.460	2484	1.460
2235	1.460	2285	1.460	2335	1.460	2385	1.460	2435	1.460	2485	1.460
2236	1.460	2286	1.460	2336	1.460	2386	1.460	2436	1.460	2486	1.460
2237	1.460	2287	1.460	2337	1.460	2387	1.460	2437	1.460	2487	1.460
2238	1.460	2288	1.460	2338	1.460	2388	1.460	2438	1.460	2488	1.460
2239	1.460	2289	1.460	2339	1.460	2389	1.460	2439	1.460	2489	1.460
2240	1.460	2290	1.460	2340	1.460	2390	1.460	2440	1.460	2490	1.460
2241	1.460	2291	1.460	2341	1.460	2391	1.460	2441	1.460	2491	1.460
2242	1.460	2292	1.460	2342	1.460	2392	1.460	2442	1.460	2492	1.460
2243	1.460	2293	1.460	2343	1.460	2393	1.460	2443	1.460	2493	1.460
2244	1.460	2294	1.460	2344	1.460	2394	1.460	2444	1.460	2494	1.460
2245	1.460	2295	1.460	2345	1.460	2395	1.460	2445	1.460	2495	1.460
2246	1.460	2296	1.460	2346	1.460	2396	1.460	2446	1.460	2496	1.460
2247	1.460	2297	1.460	2347	1.460	2397	1.460	2447	1.460	2497	1.460
2248	1.460	2298	1.460	2348	1.460	2398	1.460	2448	1.460	2498	1.460
2249	1.460	2299	1.460	2349	1.460	2399	1.460	2449	1.460	2499	1.460
2250	1.460	2300	1.460	2350	1.460	2400	1.460	2450	1.460	2500	1.460
2251	1.460	2301	1.460	2351	1.460	2401	1.460	2451	1.460	2501	1.460
2252	1.460	2302	1.460	2352	1.460	2402	1.460	2452	1.460	2502	1.460
2253	1.460	2303	1.460	2353	1.460	2403	1.460	2453	1.460	2503	1.460
2254	1.460	2304	1.460	2354	1.460	2404	1.460	2454	1.460	2504	1.460
2255	1.460	2305	1.460	2355	1.460	2405	1.460	2455	1.460	2505	1.460
2256	1.460	2306	1.460	2356	1.460	2406	1.460	2456	1.460	2506	1.460
2257	1.460	2307	1.460	2357	1.460	2407	1.460	2457	1.460	2507	1.460
2258	1.460	2308	1.460	2358	1.460	2408	1.460	2458	1.460	2508	1.460
2259	1.460	2309	1.460	2359	1.460	2409	1.460	2459	1.460	2509	1.460
2260	1.460	2310	1.460	2360	1.460	2410	1.460	2460	1.460	2510	1.460
2261	1.460	2311	1.460	2361	1.460	2411	1.460	2461	1.460	2511	1.460
2262	1.460	2312	1.460	2362	1.460	2412	1.460	2462	1.460	2512	1.460
2263	1.460	2313	1.460	2363	1.460	2413	1.460	2463	1.460	2513	1.460
2264	1.460	2314	1.460	2364	1.460	2414	1.460	2464	1.460	2514	1.460
2265	1.460	2315	1.460	2365	1.460	2415	1.460	2465	1.460	2515	1.460
2266	1.460	2316	1.460	2366	1.460	2416	1.460	2466	1.460	2516	1.460
2267	1.460	2317	1.460	2367	1.460	2417	1.460	2467	1.460	2517	1.460
2268	1.460	2318	1.460	2368	1.460	2418	1.460	2468	1.460	2518	1.460
2269	1.460	2319	1.460	2369	1.460	2419	1.460	2469	1.460	2519	1.460
2270	1.460	2320	1.460	2370	1.460	2420	1.460	2470	1.460	2520	1.460
©1982-2018 Innovyze											

Kirksaunders Associates Ltd						Page 14					
Templegate House 115-123 High Street Orpington Kent BR6 0LG			SALT BOX BOGNOR REGIS RD 1IN1, 1IN2, 1 IN30								
Date 18/06/2019 15:38 File ACCES ROAD STORM NETWOR...			Designed by DO Checked by								
Micro Drainage			Network 2018.1								
Surcharged Outfall Details for Existing											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
2521	1.460	2571	1.460	2621	1.460	2671	1.460	2721	1.460	2771	1.460
2522	1.460	2572	1.460	2622	1.460	2672	1.460	2722	1.460	2772	1.460
2523	1.460	2573	1.460	2623	1.460	2673	1.460	2723	1.460	2773	1.460
2524	1.460	2574	1.460	2624	1.460	2674	1.460	2724	1.460	2774	1.460
2525	1.460	2575	1.460	2625	1.460	2675	1.460	2725	1.460	2775	1.460
2526	1.460	2576	1.460	2626	1.460	2676	1.460	2726	1.460	2776	1.460
2527	1.460	2577	1.460	2627	1.460	2677	1.460	2727	1.460	2777	1.460
2528	1.460	2578	1.460	2628	1.460	2678	1.460	2728	1.460	2778	1.460
2529	1.460	2579	1.460	2629	1.460	2679	1.460	2729	1.460	2779	1.460
2530	1.460	2580	1.460	2630	1.460	2680	1.460	2730	1.460	2780	1.460
2531	1.460	2581	1.460	2631	1.460	2681	1.460	2731	1.460	2781	1.460
2532	1.460	2582	1.460	2632	1.460	2682	1.460	2732	1.460	2782	1.460
2533	1.460	2583	1.460	2633	1.460	2683	1.460	2733	1.460	2783	1.460
2534	1.460	2584	1.460	2634	1.460	2684	1.460	2734	1.460	2784	1.460
2535	1.460	2585	1.460	2635	1.460	2685	1.460	2735	1.460	2785	1.460
2536	1.460	2586	1.460	2636	1.460	2686	1.460	2736	1.460	2786	1.460
2537	1.460	2587	1.460	2637	1.460	2687	1.460	2737	1.460	2787	1.460
2538	1.460	2588	1.460	2638	1.460	2688	1.460	2738	1.460	2788	1.460
2539	1.460	2589	1.460	2639	1.460	2689	1.460	2739	1.460	2789	1.460
2540	1.460	2590	1.460	2640	1.460	2690	1.460	2740	1.460	2790	1.460
2541	1.460	2591	1.460	2641	1.460	2691	1.460	2741	1.460	2791	1.460
2542	1.460	2592	1.460	2642	1.460	2692	1.460	2742	1.460	2792	1.460
2543	1.460	2593	1.460	2643	1.460	2693	1.460	2743	1.460	2793	1.460
2544	1.460	2594	1.460	2644	1.460	2694	1.460	2744	1.460	2794	1.460
2545	1.460	2595	1.460	2645	1.460	2695	1.460	2745	1.460	2795	1.460
2546	1.460	2596	1.460	2646	1.460	2696	1.460	2746	1.460	2796	1.460
2547	1.460	2597	1.460	2647	1.460	2697	1.460	2747	1.460	2797	1.460
2548	1.460	2598	1.460	2648	1.460	2698	1.460	2748	1.460	2798	1.460
2549	1.460	2599	1.460	2649	1.460	2699	1.460	2749	1.460	2799	1.460
2550	1.460	2600	1.460	2650	1.460	2700	1.460	2750	1.460	2800	1.460
2551	1.460	2601	1.460	2651	1.460	2701	1.460	2751	1.460	2801	1.460
2552	1.460	2602	1.460	2652	1.460	2702	1.460	2752	1.460	2802	1.460
2553	1.460	2603	1.460	2653	1.460	2703	1.460	2753	1.460	2803	1.460
2554	1.460	2604	1.460	2654	1.460	2704	1.460	2754	1.460	2804	1.460
2555	1.460	2605	1.460	2655	1.460	2705	1.460	2755	1.460	2805	1.460
2556	1.460	2606	1.460	2656	1.460	2706	1.460	2756	1.460	2806	1.460
2557	1.460	2607	1.460	2657	1.460	2707	1.460	2757	1.460	2807	1.460
2558	1.460	2608	1.460	2658	1.460	2708	1.460	2758	1.460	2808	1.460
2559	1.460	2609	1.460	2659	1.460	2709	1.460	2759	1.460	2809	1.460
2560	1.460	2610	1.460	2660	1.460	2710	1.460	2760	1.460	2810	1.460
2561	1.460	2611	1.460	2661	1.460	2711	1.460	2761	1.460	2811	1.460
2562	1.460	2612	1.460	2662	1.460	2712	1.460	2762	1.460	2812	1.460
2563	1.460	2613	1.460	2663	1.460	2713	1.460	2763	1.460	2813	1.460
2564	1.460	2614	1.460	2664	1.460	2714	1.460	2764	1.460	2814	1.460
2565	1.460	2615	1.460	2665	1.460	2715	1.460	2765	1.460	2815	1.460
2566	1.460	2616	1.460	2666	1.460	2716	1.460	2766	1.460	2816	1.460
2567	1.460	2617	1.460	2667	1.460	2717	1.460	2767	1.460	2817	1.460
2568	1.460	2618	1.460	2668	1.460	2718	1.460	2768	1.460	2818	1.460
2569	1.460	2619	1.460	2669	1.460	2719	1.460	2769	1.460	2819	1.460
2570	1.460	2620	1.460	2670	1.460	2720	1.460	2770	1.460	2820	1.460
©1982-2018 Innovyze											

Kirksaunders Associates Ltd		Page 15
Templegate House 115-123 High Street Orpington Kent BR6 0LG		
SALT BOX BOGNOR REGIS RD 1IN1, 1IN2, 1 IN30		
Date 18/06/2019 15:38 File ACCES ROAD STORM NETWORK...		
Micro Drainage		Network 2018.1

Surcharged Outfall Details for Existing

Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
2821	1.460	2831	1.460	2841	1.460	2851	1.460	2861	1.460	2871	1.460
2822	1.460	2832	1.460	2842	1.460	2852	1.460	2862	1.460	2872	1.460
2823	1.460	2833	1.460	2843	1.460	2853	1.460	2863	1.460	2873	1.460
2824	1.460	2834	1.460	2844	1.460	2854	1.460	2864	1.460	2874	1.460
2825	1.460	2835	1.460	2845	1.460	2855	1.460	2865	1.460	2875	1.460
2826	1.460	2836	1.460	2846	1.460	2856	1.460	2866	1.460	2876	1.460
2827	1.460	2837	1.460	2847	1.460	2857	1.460	2867	1.460	2877	1.460
2828	1.460	2838	1.460	2848	1.460	2858	1.460	2868	1.460	2878	1.460
2829	1.460	2839	1.460	2849	1.460	2859	1.460	2869	1.460	2879	1.460
2830	1.460	2840	1.460	2850	1.460	2860	1.460	2870	1.460	2880	1.460

Simulation Criteria for Existing

Volumetric Runoff Coeff	0.750	Additional Flow - % of Total Flow	0.000
Areal Reduction Factor	1.000	MADD Factor * 10m ³ /ha Storage	2.000
Hot Start (mins)	0	Inlet Coefficient	0.800
Hot Start Level (mm)	0	Flow per Person per Day (l/per/day)	0.000
Manhole Headloss Coeff (Global)	0.500	Run Time (mins)	60
Foul Sewage per hectare (l/s)	0.000	Output Interval (mins)	1
Number of Input Hydrographs	0	Number of Storage Structures	1
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Profile Type	Summer
Return Period (years)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	19.100	Storm Duration (mins)	30
Ratio R	0.344		

©1982-2018 Innovyze

Kirksaunders Associates Ltd		Page 16
Templegate House 115-123 High Street Orpington Kent BR6 0LG	SALT BOX BOGNOR REGIS RD 1IN1, 1IN2, 1 IN30	
Date 18/06/2019 15:38	Designed by DO	
File ACCES ROAD STORM NETWOR...	Checked by	
Micro Drainage	Network 2018.1	

Online Controls for Existing

Hydro-Brake® Optimum Manhole: E13, DS/PN: E1.010, Volume (m³): 2.5

Unit Reference	MD-SHE-0067-2000-1000-2000
Design Head (m)	1.000
Design Flow (l/s)	2.0
Flush-Flo™	Calculated
Objective	Minimise upstream storage
Application	Surface
Sump Available	Yes
Diameter (mm)	67
Invert Level (m)	0.445
Minimum Outlet Pipe Diameter (mm)	100
Suggested Manhole Diameter (mm)	1200

Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	1.000	2.0
Flush-Flo™	0.296	1.9
Kick-Flo®	0.599	1.6
Mean Flow over Head Range	-	1.7

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)
0.100	1.6	1.200	2.2	3.000	3.3	7.000	4.9
0.200	1.9	1.400	2.3	3.500	3.5	7.500	5.1
0.300	1.9	1.600	2.5	4.000	3.8	8.000	5.2
0.400	1.9	1.800	2.6	4.500	4.0	8.500	5.4
0.500	1.8	2.000	2.7	5.000	4.2	9.000	5.5
0.600	1.6	2.200	2.9	5.500	4.4	9.500	5.7
0.800	1.8	2.400	3.0	6.000	4.6		
1.000	2.0	2.600	3.1	6.500	4.7		

©1982-2018 Innovyze

Kirksaunders Associates Ltd		Page 17																		
Templegate House 115-123 High Street Orpington Kent BR6 0LG	SALT BOX BOGNOR REGIS RD 1IN1, 1IN2, 1 IN30																			
Date 18/06/2019 15:38	Designed by DO																			
File ACCES ROAD STORM NETWOR...	Checked by																			
Micro Drainage	Network 2018.1																			
Storage Structures for Existing Tank or Pond Manhole: ETANK, DS/PN: E1.005 Invert Level (m) 0.666 <table><thead><tr><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th></tr></thead><tbody><tr><td>0.000</td><td>500.0</td><td>0.400</td><td>500.0</td><td>0.800</td><td>500.0</td></tr><tr><td>0.200</td><td>500.0</td><td>0.600</td><td>500.0</td><td>1.000</td><td>500.0</td></tr></tbody></table>			Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	0.000	500.0	0.400	500.0	0.800	500.0	0.200	500.0	0.600	500.0	1.000	500.0
Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)															
0.000	500.0	0.400	500.0	0.800	500.0															
0.200	500.0	0.600	500.0	1.000	500.0															
©1982-2018 Innovyze																				

Kirksaunders Associates Ltd		Page 18
Templegate House 115-123 High Street Orpington Kent BR6 0LG	SALT BOX BOGNOR REGIS RD 1IN1, 1IN2, 1 IN30	
Date 18/06/2019 15:38	Designed by DO	
File ACCES ROAD STORM NETWORK...	Checked by	
Micro Drainage		Network 2018.1

Summary of Critical Results by Maximum Level (Rank 1) for Existing

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m ³ /ha Storage	2.000
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 Storage Structures	1
Number of Online Controls	1	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.342
Region England and Wales Cv (Summer)	0.750		
M5-60 (mm)	19.500	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, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080
Return Period(s) (years)	1, 2, 30
Climate Change (%)	0, 0, 0

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surchage	First (Y) Flood	First (Z) Overflow	Overflow Act.
E1.000	ESWMH1	15 Winter	30	+0%				
E1.001	ESWMH2	15 Winter	30	+0%				
E2.000	ESWMH3	15 Winter	30	+0%				
E1.002	ESWMH4	15 Winter	30	+0%				
E3.000	ESWMH5	15 Winter	30	+0%				
E1.003	ESWMH6	15 Winter	30	+0%	30/15 Summer			
E1.004	ESWMH6A	2880 Winter	30	+0%	30/15 Summer			
E1.005	ETANK	2880 Winter	30	+0%	30/600 Winter			
E1.006	EDummy1	2880 Winter	30	+0%				
E1.007	EDummy 2	2880 Winter	30	+0%	2/2880 Winter			
E1.008	ESWMH7	2880 Winter	30	+0%	1/180 Summer			
E1.009	ESWMH8	2880 Winter	30	+0%	1/60 Summer			
E1.010	E13	2880 Winter	30	+0%	1/15 Summer			

©1982-2018 Innovyze

Kirksaunders Associates Ltd							Page 19		
Templegate House 115-123 High Street Orpington Kent BR6 0LG				SALT BOX BOGNOR REGIS RD 1IN1, 1IN2, 1 IN30					
Date 18/06/2019 15:38				Designed by DO					
File ACCES ROAD STORM NETWOR...				Checked by					
Micro Drainage				Network 2018.1					
<u>Summary of Critical Results by Maximum Level (Rank 1) for Existing</u>									
PN	US/MH Name	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status	Level Exceeded
E1.000	ESWMH1	2.066	-0.139	0.000	0.52		39.5	OK	
E1.001	ESWMH2	1.753	-0.077	0.000	0.86		64.2	OK	
E2.000	ESWMH3	1.514	-0.126	0.000	0.07		2.8	OK	
E1.002	ESWMH4	1.509	-0.066	0.000	0.80		89.0	OK	
E3.000	ESWMH5	1.338	-0.202	0.000	0.12		12.8	OK	
E1.003	ESWMH6	1.329	0.064	0.000	0.96		107.7	SURCHARGED	
E1.004	ESWMH6A	1.208	0.163	0.000	0.07		6.5	SURCHARGED	
E1.005	ETANK	1.208	0.167	0.000	0.06		4.9	SURCHARGED	
E1.006	EDummy1	1.209	-0.450	0.000	0.00		6.0	OK	
E1.007	EDummy 2	1.209	0.224	0.000	0.17		12.7	SURCHARGED	
E1.008	ESWMH7	1.235	0.418	0.000	0.29		8.6	SURCHARGED	
E1.009	ESWMH8	1.313	0.558	0.000	0.13		5.4	SURCHARGED	
E1.010	E13	1.337	0.667	0.000	0.06		1.9	SURCHARGED	
©1982-2018 Innovyze									

Kirksaunders Associates Ltd					Page 1	
Templegate House 115-123 High Street Orpington Kent BR6 0LG			SALT BOX BOGNOR REGIS RD TANK 1 IN 100+40%CC			
Date 14/06/2019 12:37 File Access Road Tank.srcx			Designed by DO Checked by			
Micro Drainage			Source Control 2018.1			
Summary of Results for 100 year Return Period (+40%)						
Storm Event	Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Volume (m³)	Status	
15 min Summer	1.038	0.383	1.9	191.4	O K	
30 min Summer	1.169	0.514	1.9	257.0	O K	
60 min Summer	1.311	0.656	1.9	328.1	O K	
120 min Summer	1.459	0.804	1.9	401.9	O K	
180 min Summer	1.543	0.888	2.0	444.0	O K	
240 min Summer	1.598	0.943	2.0	471.7	O K	
360 min Summer	1.673	1.018	2.1	509.2	O K	
480 min Summer	1.724	1.069	2.1	534.7	O K	
600 min Summer	1.760	1.105	2.1	552.6	O K	
720 min Summer	1.786	1.131	2.2	565.7	O K	
960 min Summer	1.819	1.164	2.2	582.1	O K	
1440 min Summer	1.841	1.186	2.2	593.0	O K	
2160 min Summer	1.822	1.167	2.2	583.3	O K	
2880 min Summer	1.790	1.135	2.2	567.5	O K	
4320 min Summer	1.728	1.073	2.1	536.7	O K	
5760 min Summer	1.674	1.019	2.1	509.4	O K	
7200 min Summer	1.623	0.968	2.0	484.1	O K	
8640 min Summer	1.577	0.922	2.0	460.9	O K	
10080 min Summer	1.533	0.878	1.9	438.9	O K	
15 min Winter	1.085	0.430	1.9	214.8	O K	
30 min Winter	1.232	0.577	1.9	288.4	O K	
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)		
15 min Summer	124.633	0.0	164.3	27		
30 min Summer	83.789	0.0	161.2	42		
60 min Summer	53.779	0.0	312.1	72		
120 min Summer	33.337	0.0	309.2	130		
180 min Summer	24.832	0.0	308.2	190		
240 min Summer	20.006	0.0	309.0	250		
360 min Summer	14.706	0.0	313.2	368		
480 min Summer	11.818	0.0	320.1	488		
600 min Summer	9.966	0.0	326.7	608		
720 min Summer	8.665	0.0	331.6	726		
960 min Summer	6.943	0.0	337.9	966		
1440 min Summer	5.071	0.0	342.3	1442		
2160 min Summer	3.696	0.0	648.9	2060		
2880 min Summer	2.949	0.0	642.9	2396		
4320 min Summer	2.142	0.0	626.9	3160		
5760 min Summer	1.705	0.0	1019.5	3984		
7200 min Summer	1.427	0.0	1066.9	4832		
8640 min Summer	1.235	0.0	1106.7	5624		
10080 min Summer	1.093	0.0	1051.7	6464		
15 min Winter	124.633	0.0	165.2	27		
30 min Winter	83.789	0.0	154.6	41		
©1982-2018 Innovyze						

Kirksaunders Associates Ltd				Page 2	
Templegate House 115-123 High Street Orpington Kent BR6 0LG		SALT BOX BOGNOR REGIS RD TANK 1 IN 100+40%CC			
Date 14/06/2019 12:37		Designed by DO			
File Access Road Tank.srcx		Checked by			
Micro Drainage		Source Control 2018.1			
<u>Summary of Results for 100 year Return Period (+40%)</u>					
Storm Event	Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Volume (m³)	Status
60 min Winter	1.392	0.737	1.9	368.2	O K
120 min Winter	1.559	0.904	2.0	451.8	O K
180 min Winter	1.654	0.999	2.1	499.7	O K
240 min Winter	1.718	1.063	2.1	531.6	O K
360 min Winter	1.805	1.150	2.2	575.2	O K
480 min Winter	1.866	1.211	2.2	605.3	O K
600 min Winter	1.909	1.254	2.3	627.1	O K
720 min Winter	1.942	1.287	2.3	643.3	O K
960 min Winter	1.985	1.330	2.3	664.9	O K
1440 min Winter	2.022	1.367	2.3	683.6	O K
2160 min Winter	2.020	1.365	2.3	682.3	O K
2880 min Winter	1.986	1.331	2.3	665.3	O K
4320 min Winter	1.909	1.254	2.3	627.1	O K
5760 min Winter	1.835	1.180	2.2	589.8	O K
7200 min Winter	1.761	1.106	2.1	553.1	O K
8640 min Winter	1.693	1.038	2.1	518.7	O K
10080 min Winter	1.626	0.971	2.0	485.7	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)	
60 min Winter	53.779	0.0	311.4	70	
120 min Winter	33.337	0.0	308.8	128	
180 min Winter	24.832	0.0	311.4	188	
240 min Winter	20.006	0.0	316.0	246	
360 min Winter	14.706	0.0	328.4	364	
480 min Winter	11.818	0.0	337.7	480	
600 min Winter	9.966	0.0	344.3	598	
720 min Winter	8.665	0.0	349.0	714	
960 min Winter	6.943	0.0	354.8	946	
1440 min Winter	5.071	0.0	357.6	1402	
2160 min Winter	3.696	0.0	673.9	2064	
2880 min Winter	2.949	0.0	678.1	2684	
4320 min Winter	2.142	0.0	662.4	3336	
5760 min Winter	1.705	0.0	1142.1	4272	
7200 min Winter	1.427	0.0	1195.3	5192	
8640 min Winter	1.235	0.0	1169.5	6136	
10080 min Winter	1.093	0.0	1110.9	6976	
©1982-2018 Innovyze					

Kirksaunders Associates Ltd		Page 3
Templegate House 115-123 High Street Orpington Kent BR6 0LG	SALT BOX BOGNOR REGIS RD TANK 1 IN 100+40%CC	
Date 14/06/2019 12:37 File Access Road Tank.srcx	Designed by DO Checked by	
Micro Drainage Source Control 2018.1		

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	0.350	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.831

Time (mins)	Area	Time (mins)	Area	Time (mins)	Area
From: To:	(ha)	From: To:	(ha)	From: To:	(ha)
0 4	0.277	4 8	0.277	8 12	0.277

©1982-2018 Innovyze

Kirksaunders Associates Ltd		Page 4
Templegate House 115-123 High Street Orpington Kent BR6 0LG	SALT BOX BOGNOR REGIS RD TANK 1 IN 100+40%CC	
Date 14/06/2019 12:37 File Access Road Tank.srcx	Designed by DO Checked by	
Micro Drainage Source Control 2018.1		

Model Details

Storage is Online Cover Level (m) 2.500

Tank or Pond Structure

Invert Level (m) 0.655

Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)
0.000	500.0	0.400	500.0	0.800	500.0
0.200	500.0	0.600	500.0	1.000	500.0

Hydro-Brake® Optimum Outflow Control

Unit Reference	MD-SHE-0067-2000-1000-2000
Design Head (m)	1.000
Design Flow (l/s)	2.0
Flush-Flo™	Calculated
Objective	Minimise upstream storage
Application	Surface
Sump Available	Yes
Diameter (mm)	67
Invert Level (m)	0.592
Minimum Outlet Pipe Diameter (mm)	100
Suggested Manhole Diameter (mm)	1200

Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	1.000	2.0
Flush-Flo™	0.296	1.9
Kick-Flo®	0.599	1.6
Mean Flow over Head Range	-	1.7

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)
0.100	1.6	1.200	2.2	3.000	3.3	7.000	4.9
0.200	1.9	1.400	2.3	3.500	3.5	7.500	5.1
0.300	1.9	1.600	2.5	4.000	3.8	8.000	5.2
0.400	1.9	1.800	2.6	4.500	4.0	8.500	5.4
0.500	1.8	2.000	2.7	5.000	4.2	9.000	5.5
0.600	1.6	2.200	2.9	5.500	4.4	9.500	5.7
0.800	1.8	2.400	3.0	6.000	4.6		
1.000	2.0	2.600	3.1	6.500	4.7		

©1982-2018 Innovyze

Kirksaunders Associates Ltd					Page 1	
Templegate House 115-123 High Street Orpington Kent BR6 0LG			SALT BOX BOGNOR REGIS RD TANK 1 IN 30+30%CC			
Date 14/06/2019 12:38 File Access Road Tank.srcx			Designed by DO Checked by			
Micro Drainage			Source Control 2018.1			
Summary of Results for 30 year Return Period (+30%)						
	Storm Event		Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Volume (m³) Status
	15 min Summer		0.928	0.273	1.9	136.7 O K
	30 min Summer		1.018	0.363	1.9	181.4 O K
	60 min Summer		1.114	0.459	1.9	229.6 O K
	120 min Summer		1.216	0.561	1.9	280.4 O K
	180 min Summer		1.275	0.620	1.9	310.0 O K
	240 min Summer		1.315	0.660	1.9	329.8 O K
	360 min Summer		1.368	0.713	1.9	356.4 O K
	480 min Summer		1.403	0.748	1.9	373.9 O K
	600 min Summer		1.427	0.772	1.9	385.9 O K
	720 min Summer		1.444	0.789	1.9	394.3 O K
	960 min Summer		1.463	0.808	1.9	404.0 O K
	1440 min Summer		1.470	0.815	1.9	407.3 O K
	2160 min Summer		1.449	0.794	1.9	397.0 O K
	2880 min Summer		1.426	0.771	1.9	385.4 O K
	4320 min Summer		1.382	0.727	1.9	363.6 O K
	5760 min Summer		1.341	0.686	1.9	342.9 O K
	7200 min Summer		1.299	0.644	1.9	322.2 O K
	8640 min Summer		1.258	0.603	1.9	301.7 O K
	10080 min Summer		1.216	0.561	1.9	280.3 O K
	15 min Winter		0.962	0.307	1.9	153.4 O K
	30 min Winter		1.062	0.407	1.9	203.7 O K

Kirksaunders Associates Ltd					Page 2
Templegate House 115-123 High Street Orpington Kent BR6 0LG		SALT BOX BOGNOR REGIS RD TANK 1 IN 30+30%CC			
Date 14/06/2019 12:38 File Access Road Tank.srcx		Designed by DO Checked by			
Micro Drainage		Source Control 2018.1			
Summary of Results for 30 year Return Period (+30%)					
Storm Event	Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Volume (m³)	Status
60 min Winter	1.171	0.516	1.9	258.2	O K
120 min Winter	1.287	0.632	1.9	315.9	O K
180 min Winter	1.354	0.699	1.9	349.5	O K
240 min Winter	1.400	0.745	1.9	372.4	O K
360 min Winter	1.462	0.807	1.9	403.7	O K
480 min Winter	1.504	0.849	1.9	424.7	O K
600 min Winter	1.534	0.879	1.9	439.6	O K
720 min Winter	1.556	0.901	2.0	450.4	O K
960 min Winter	1.583	0.928	2.0	464.1	O K
1440 min Winter	1.602	0.947	2.0	473.5	O K
2160 min Winter	1.588	0.933	2.0	466.6	O K
2880 min Winter	1.557	0.902	2.0	450.8	O K
4320 min Winter	1.499	0.844	1.9	421.9	O K
5760 min Winter	1.437	0.782	1.9	391.0	O K
7200 min Winter	1.375	0.720	1.9	360.1	O K
8640 min Winter	1.313	0.658	1.9	328.9	O K
10080 min Winter	1.248	0.593	1.9	296.5	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)	
60 min Winter	38.009	0.0	265.1	70	
120 min Winter	23.546	0.0	311.7	128	
180 min Winter	17.594	0.0	311.0	186	
240 min Winter	14.237	0.0	308.9	246	
360 min Winter	10.537	0.0	305.9	362	
480 min Winter	8.507	0.0	304.4	480	
600 min Winter	7.201	0.0	304.0	596	
720 min Winter	6.281	0.0	304.2	712	
960 min Winter	5.060	0.0	306.6	942	
1440 min Winter	3.726	0.0	312.3	1394	
2160 min Winter	2.740	0.0	621.8	2036	
2880 min Winter	2.201	0.0	608.8	2348	
4320 min Winter	1.614	0.0	575.5	3252	
5760 min Winter	1.295	0.0	867.6	4208	
7200 min Winter	1.091	0.0	913.3	5120	
8640 min Winter	0.948	0.0	953.4	6048	
10080 min Winter	0.843	0.0	988.4	6960	
©1982-2018 Innovyze					

Kirksaunders Associates Ltd		Page 3
Templegate House 115-123 High Street Orpington Kent BR6 0LG	SALT BOX BOGNOR REGIS RD TANK 1 IN 30+30%CC	
Date 14/06/2019 12:38 File Access Road Tank.srcx	Designed by DO Checked by	
Micro Drainage Source Control 2018.1		

Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	30	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	19.000	Shortest Storm (mins)	15
Ratio R	0.350	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+30

Time Area Diagram

Total Area (ha) 0.831

Time (mins)	Area	Time (mins)	Area	Time (mins)	Area
From: To:	(ha)	From: To:	(ha)	From: To:	(ha)
0 4	0.277	4 8	0.277	8 12	0.277

©1982-2018 Innovyze

Kirksaunders Associates Ltd		Page 4
Templegate House 115-123 High Street Orpington Kent BR6 0LG	SALT BOX BOGNOR REGIS RD TANK 1 IN 30+30%CC	
Date 14/06/2019 12:38 File Access Road Tank.srcx	Designed by DO Checked by	
Micro Drainage Source Control 2018.1		

Model Details

Storage is Online Cover Level (m) 2.500

Tank or Pond Structure

Invert Level (m) 0.655

Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)
0.000	500.0	0.400	500.0	0.800	500.0
0.200	500.0	0.600	500.0	1.000	500.0

Hydro-Brake® Optimum Outflow Control

Unit Reference	MD-SHE-0067-2000-1000-2000
Design Head (m)	1.000
Design Flow (l/s)	2.0
Flush-Flo™	Calculated
Objective	Minimise upstream storage
Application	Surface
Sump Available	Yes
Diameter (mm)	67
Invert Level (m)	0.592
Minimum Outlet Pipe Diameter (mm)	100
Suggested Manhole Diameter (mm)	1200

Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	1.000	2.0
Flush-Flo™	0.296	1.9
Kick-Flo®	0.599	1.6
Mean Flow over Head Range	-	1.7

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)
0.100	1.6	1.200	2.2	3.000	3.3	7.000	4.9
0.200	1.9	1.400	2.3	3.500	3.5	7.500	5.1
0.300	1.9	1.600	2.5	4.000	3.8	8.000	5.2
0.400	1.9	1.800	2.6	4.500	4.0	8.500	5.4
0.500	1.8	2.000	2.7	5.000	4.2	9.000	5.5
0.600	1.6	2.200	2.9	5.500	4.4	9.500	5.7
0.800	1.8	2.400	3.0	6.000	4.6		
1.000	2.0	2.600	3.1	6.500	4.7		

©1982-2018 Innovyze

Application Form			Suggested dry weather flow rates			No	DWF	(6 DWF + 10 %)	Cut off - 0.93		
			Litres per day				L/S	L/S			
A1	Shops	1	General Housing	600	per property		0.000	0.00	L/S		
	Net tradable area						0.000	0.00	0.00		
A2	Financial and professional services	2	School	80	per pupil		0.000	0.00			
A3	Restaurants and cafes	3	Assembly Hall	10	per seat		0.000	0.00			
A4	Drinking Establishments	4	Cinema	10	per seat		0.000	0.00			
A5	Hot food takeaways	5	Theatre	10	per seat		0.000	0.00			
B1(a)	Office (other than A2)	6	Sports Hall	50	per person		0.000	0.00			
B1(b)	Research and Development	7	Hotel	550	per room		0.000	0.00			
B1(c)	Light industrial	8	Guest House	200	per room		0.000	0.00			
B2	General industrial	9	Motel	300	per room		0.000	0.00			
B8	Storage or distribution	10	Holiday apartments	150	per person		0.000	0.00			
C1	Hotels and halls of residence	11	Leisure park	220	per person		0.000	0.00			
C2	Residential institutions	12	Caravan park standard	250	per space		0.000	0.00			
D1	Non-residential institutions	13	Caravan park serviced	450	per space		0.000	0.00			
D2	Assembly and Leisure	14	Camping Site standard	200	per space		0.000	0.00			
Other		15	Camping Site serviced	350	per space		0.000	0.00			
	Nursing Care Homes	16	Public house	150	per seat		0.000	0.00			
		17	Restaurant	270	per seat		0.000	0.00			
			Drive in restaurant (Unit 5)	380	per seat	25	0.110	0.73			
		18	Drive in restaurant (Unit 4)	380	per seat	72	0.317	2.09			
		19	Hospital	750	per bed		0.000	0.00	Total Foul	0	Hectares
		20	Nursing Home	375	per bed		0.000	0.00	7.89	0	
		21	Offices	750	per 100 m ²		0.000	0.00	FOUL	SURFACE	
		22	Shopping centre (Unit 8)	400	per 100 m ²	1858	0.086	0.57			
		23	Warehouse (Unit 6)	150	per 100 m ²	588	0.010	0.07			
		24	Warehouse (Unit 7)	150	per 100 m ²	588	0.010	0.07			
		25	Warehouse (Unit 3)	150	per 100 m ²	1865	0.032	0.21			
		26	Warehouse (Unit 2)	150	per 100 m ²	3213	0.056	0.37			
		27	Warehouse (Unit 1)	150	per 100 m ²	14582	0.253	1.67			
		28	Commercial premises (Unit 9 Car Showroom)	300	per 100 m ²	1970	0.068	0.45			
		29	Vehicle Wash (Unit 2)					1.67			
		30	Manufacturing unit	550	per 100 m ²		0.000	0.00			

3sq mtrs = 1 seat
Student rooms/2 = General Housing