

To: Bhukya Veeranna

From: Nick Bosanko

Company: Hertfordshire County Council / WSP

SLR Consulting Limited

cc: Naomi Reynard (North Herts Council)
Richard Kelly (Croudace Homes)

Date: 23 May 2025

Project No. 416.065599.00001

RE: Land at Roundwood Back Lane, Graveley, SG1 6GJ
Response to LLFA Consultation Comments on Surface Water Drainage

1.0 Introduction

A Flood Risk Assessment (FRA) was prepared by SLR Consulting in December 2024 to support the full planning application for Land at Roundwood Back Lane, Graveley, SG1 6GJ (planning ref 24/02889/FP). The Flood Risk Management Team of Hertfordshire County Council (otherwise known as the Lead Local Flood Authority (LLFA)) provided comments (dated 25th February 2025) following their review of the planning submission. Their comments concern the surface water drainage strategy, which formed part of the FRA.

On 7 March 2025 SLR Consulting prepared a preliminary response to the LLFA comments. This addressed many of the comments, but some matters remain outstanding. It is the purpose of this note to address the outstanding LLFA comments, which have been extracted below and are addressed in turn.

This note was originally prepared on 2 May 2025. A meeting followed with the LLFA on 8 May 2025. The purpose of the meeting was to discuss the content of this note. The LLFA were largely satisfied with what was set out. However, with respect to LLFA Comment 3, given the impact on the amount of attenuation required and its impact on proposed tree planting etc, the LLFA were willing to reconsider the design standard for subsequent storm events. This could be reduced from the 3.33% AEP flood event plus climate change allowance to the 10% AEP flood event plus climate change allowance. This note has been updated to include these revised design conditions.

It should also be noted that some minor changes to the proposed site layout plan have been made. The surface water drainage strategy has therefore been updated to reflect the revised site layout and the LLFA comments.

2.0 Revised Surface Water Drainage Strategy

The key principles of the surface water drainage strategy, as set out in the FRA, have been retained. However, changes have been made to reflect minor updates to the proposed site layout plan (i.e. shifted plot locations etc), which has impacted a small number of drainage catchment areas. Changes have also been made to reflect the comments from the LLFA.

Table 5-3 of the FRA has been replicated below, with the revised parameters used in the Causeway Flow network model.

Table 1: Network Model Parameters

Parameter	Value	Units
Impermeable area	4.908	ha
Urban creep	10	%
Future impermeable area	5.093	ha
CV value	1.0	-

Pond freeboard (min)	400	mm
Climate change	40	%
Pond average side slope	1 in 3	-
Discharge rate	14.3	l/s

The network model has been used to define a surface water strategy that provides sufficient attenuation storage, which has largely been provided in above ground features. However, four attenuation tanks have been used to supplement the storage requirements, which have been placed under private parking courts. The tanks will only fill with water in the more extreme events and all surface water runoff will drain out of the site via the ponds.

Given the requirements of the LLFA to include a CV value of 1, attenuation requirements have grown significantly. Originally only one tank was required.

Given that half drain times are not achievable, the LLFA have also asked that the surface water drainage strategy is designed to accommodate a subsequent storm event of 3.33% AEP flood event plus climate change allowance. In an attempt to achieve this, additional attenuation storage has been provided. This has meant that in the 1% AEP flood event plus climate change more freeboard in the attenuation ponds than would normally be required is available (i.e. minimum of 400 mm).

The revised surface water calculations are enclosed in Appendix A and the revised Surface Water Drainage Layout is enclosed in Appendix B.

3.0 Response to LLFA Comments

LLFA Comment 1

The LLFA asks for drawings of cross-sections and long sections to ensure the proposed SuDS features are viable at the locations suggested while ensuring the correct slope gradients are being included. As this application is for full detailed planning permission, the LLFA requires cross sections and long sections of the proposed SuDS features to ensure they are acceptable and viable in the locations proposed. Swales and ponds should have a minimum slope gradient of 1 in 3 to ensure the risk of erosions is reduced. **Further information required.**

SLR Response 1

Cross sections of each pond have been prepared, along with a typical section of the swale. These are enclosed in Appendix B. All slopes are 1 in 3.

LLFA Comment 2

While we appreciate that an earlier planning application was approved using the default CV values, all new development is required to use a CV value of 1. **Further information is required.**

SLR Response 2

As noted previously, the Causeway Flow model of the surface water drainage strategy has been updated with a CV value of 1.

The application of a CV value of 1 had a significant impact on attenuation storage as presented on the revised Surface Water Drainage Layout enclosed in Appendix B.



LLFA Comment 3

The applicant has agreed to provide the 50% AEP results and details of the half-drain times. We note that an appraisal of the storage volumes has been carried out. This will need to be provided to evidence the half-drain times and how the storage will accommodate storm events if 24 hours cannot be achieved. **Further information is required.**

SLR Response 3

The 50% AEP results, along with the latest results for the other design storms are enclosed in Appendix A.

Table 2 presents the half drain times of the attenuation basins and tanks, prior to the inclusion of additional storage for subsequent storms. Those that fail the half drain time in 24 hours are highlighted in yellow. However, it is noted that Basin 3 only just fails.

Table 2: Half Drain Times

Attenuation Feature	Storage (m ³ , including freeboard)	Critical Storm (mins)	Half Drain Time (hrs)
Basin 01	364	960	19.5
Basin 02	1469	960	49.5
Basin 03	179	960	24.3
Basin 04	2285	960	45.5
Tank 01	73	30	0.1
Tank 02	349	960	39.8
Tank 03	349	960	39.8
Tank 04	848	960	34.8

Given this result, a consecutive rainfall analysis has been undertaken (see Appendix A). This applied smaller rainfall events (base do their critical storm) 24 hours after the critical 1% AEP flood event plus climate change allowance. In their consultation response the LLFA noted that capacity should made to accommodate a subsequent storm event of 3.33% AEP flood event plus climate change allowance.

This analysis resulted in the introduction of a new tank (Tank 4). The tank is large, and the full plan area and depth available has been utilised. Alternative space to accommodate more tank storage is limited. Unfortunately, the introduction of this tank (and the other tanks introduced to accommodate the higher CV value), do not provide storage to accommodate the consecutive 3.33% AEP flood event plus climate change allowance. However, they do accommodate the 5.9% AEP (i.e. 1 in 17) flood event plus climate change allowance.

Typically, the standard required for a consecutive rainfall analysis is the 10% AEP flood event plus climate change allowance. The 3.33% AEP requirement is onerous, and we urge some pragmatism given the likelihood of this scenario and the engineering works required to accommodate it.

In terms of probability, the likelihood of the 1% AEP event followed by the 3.33% AEP event is 1 in 3,000. Whilst it is accepted that this is a simplification of the probability, it is a very remote likelihood and beyond typical expectations.

We therefore ask the LLFA to consider the 5.9% AEP flood event plus climate change allowance satisfactory for this purpose.



Please also note that the full storage capacity of the swales has not been allowed for. Only the pipe (in the underlying filter drain) has been incorporated into the network model. However, the stone surround and overlying swale will provide additional capacity.

22 May 2025 Update

As previously noted, the LLFA were willing to reconsider the design standard for subsequent storm events. This can be reduced from the 3.33% AEP flood event plus climate change allowance to the 10% AEP flood event plus climate change allowance.

The revised surface water calculations (Appendix A) and the revised Surface Water Drainage Layout (Appendix B) reflect these revised design conditions.

4.0 Closure

This note has been prepared address the outstanding comments from the LLFA regarding the planning application at Land at Roundwood Back Lane, Graveley, SG1 6GJ (planning ref 24/02889/FP). Each of the comments has been considered in turn and we hope that the LLFA are now satisfied and can remove their objection and set out the necessary conditions.

Regards,

SLR Consulting Limited

Nick Bosanko

Nick Bosanko
Technical Director

nick.bosanko@slrconsulting.com



Appendix A

Calculations



Design Settings

Rainfall Methodology	FEH-22	Minimum Velocity (m/s)	1.00
Return Period (years)	100	Connection Type	Level Soffits
Additional Flow (%)	0	Minimum Backdrop Height (m)	0.200
CV	1.000	Preferred Cover Depth (m)	1.200
Time of Entry (mins)	5.00	Include Intermediate Ground	✓
Maximum Time of Concentration (mins)	30.00	Enforce best practice design rules	x
Maximum Rainfall (mm/hr)	50.0		

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
Basin 04			141.900		525130.969	227511.445	1.950
Basin 03		5.00	141.900		525043.772	227537.970	1.800
Basin 02			141.900		525022.899	227537.704	1.950
SW10 (FC)	0.047	5.00	141.900	1800	525040.982	227515.666	2.016
SW11			141.700	1350	525032.098	227509.774	1.959
SW12			142.000	1350	524985.867	227521.328	2.544
EXManhole			141.030	1350	524967.824	227483.879	2.000
SW14	0.058	5.00	142.539	1200	525079.124	227759.059	1.425
SW01	0.047	5.00	143.400	1350	525287.578	227832.870	2.072
SW02	0.073	5.00	143.100	1350	525257.687	227836.268	1.943
SW03	0.169	5.00	142.800	1500	525203.269	227841.879	1.855
SW04	0.081	5.00	142.600	1500	525169.846	227851.911	1.725
SW05	0.073	5.00	142.498	1500	525123.933	227829.436	1.800
SW06	0.047	5.00	142.419	1500	525088.840	227811.196	1.800
SW07	0.028	5.00	142.391	1500	525079.789	227800.812	1.800
SW08	0.073	5.00	142.354	1500	525086.818	227783.866	1.800
Basin 01			142.000		525077.041	227779.627	1.500
1	0.022	5.00	141.900		525060.963	227835.215	1.313
2			141.900		525052.761	227807.569	1.371
3			141.900		525056.374	227783.981	1.419
4			141.900		525029.988	227715.812	1.552
5			141.900		525030.197	227705.655	1.570
6			141.900		525027.475	227693.385	1.593
7			141.900		524999.847	227627.627	1.723
8			141.900		524989.464	227605.204	1.768
9			141.900	1500	524990.526	227594.811	1.787
10			141.900	1500	524986.384	227583.137	1.810
SW09	0.048	5.00	141.900	1500	524999.497	227574.209	1.935
SW15	0.032	5.00	142.600	1350	525092.257	227756.388	1.566
SW16	0.010	5.00	142.750	1350	525098.178	227750.387	1.873
SW17	0.020	5.00	142.500	1350	525097.368	227759.567	1.727
SW83	0.010	5.00	142.950	1350	525123.788	227742.323	1.987
SW19	0.054	5.00	142.600	1350	525084.669	227713.295	1.641
SW20	0.032	5.00	142.400	1350	525079.257	227698.207	1.509
SW21	0.052	5.00	142.273	1350	525053.436	227708.831	1.650
SW22	0.031	5.00	142.240	1350	525041.394	227713.761	1.650
SW18	0.025	5.00	142.603	1200	525093.209	227735.695	1.425
SW23	0.048	5.00	142.465	1200	525071.352	227676.352	1.425
SW24	0.049	5.00	142.273	1200	525041.430	227687.848	1.425
SW25	0.016	5.00	142.228	1200	525034.489	227690.623	1.425
SW26	0.071	5.00	142.450	1350	525056.913	227640.501	1.632
SW27	0.148	5.00	142.200	1350	525044.974	227611.417	1.589

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
SW28	0.032	5.00	142.128	1350	525028.251	227618.076	1.650
SW29	0.059	5.00	142.075	1350	525008.898	227626.229	1.650
SW30	0.016	5.00	141.969	1200	525026.937	227567.941	1.500
SW31			141.944	1200	525022.294	227564.579	1.500
11			143.900		525328.222	227774.816	3.222
12			143.850		525287.257	227741.535	3.268
13			143.750		525266.449	227711.764	3.234
14			143.650		525261.172	227699.708	3.158
SW37	0.157	5.00	143.550	1500	525256.831	227690.094	3.079
16			143.450		525252.437	227680.480	3.000
17			143.000		525223.494	227608.844	2.691
SW38	0.089	5.00	142.950	1500	525222.370	227606.062	2.647
19			143.200		525221.246	227603.280	2.903
20			142.550		525203.129	227558.536	2.341
21			141.900		525180.863	227503.141	1.800
SW32	0.061	5.00	143.600	1350	525312.626	227837.976	2.274
SW33	0.009	5.00	143.500	1350	525300.698	227825.839	2.321
SW34	0.054	5.00	143.650	1350	525313.775	227809.356	2.539
SW35	0.100	5.00	143.850	1350	525329.909	227789.072	2.897
SW36	0.016	5.00	143.900	1350	525335.958	227781.092	2.972
SW41	0.036	5.00	143.250	1200	525249.480	227792.512	1.500
SW42	0.061	5.00	143.400	1350	525242.527	227770.427	1.747
SW43	0.005	5.00	143.400	1350	525240.097	227762.795	1.781
SW44	0.021	5.00	143.550	1350	525257.954	227755.928	2.086
SW45	0.035	5.00	143.600	1350	525269.075	227756.841	2.172
SW46	0.055	5.00	143.800	1350	525283.956	227746.415	2.430
SW47	0.104	5.00	143.400	1200	525226.838	227734.319	1.500
SW48	0.080	5.00	143.500	1350	525216.049	227706.725	1.852
SW39	0.030	5.00	141.939	1800	525163.866	227508.483	1.875
SW40	0.116	5.00	142.000	1800	525133.909	227519.734	2.000
SW49	0.029	5.00	143.200	1350	525213.854	227779.285	2.023
SW50	0.100	5.00	143.000	1350	525181.150	227781.099	1.905
SW51	0.039	5.00	143.000	1350	525160.169	227767.178	1.968
SW52	0.059	5.00	143.000	1350	525164.293	227752.497	2.006
SW53	0.038	5.00	143.000	1500	525150.140	227725.540	2.157
SW54	0.065	5.00	142.900	1500	525140.071	227700.271	2.112
SW55	0.043	5.00	142.900	1500	525132.637	227681.536	2.153
SW56	0.076	5.00	142.850	1500	525120.366	227648.757	2.173
SW57	0.044	5.00	142.850	1500	525150.218	227637.228	2.237
SW58	0.122	5.00	143.050	1500	525178.332	227625.180	2.498
SW59	0.010	5.00	142.950	1500	525170.965	227606.932	2.434
SW60	0.044	5.00	142.800	1500	525164.250	227590.356	2.320
SW61	0.034	5.00	142.700	1500	525159.623	227578.820	2.247
SW62	0.116	5.00	142.500	1500	525178.854	227568.163	2.088
SW63	0.059	5.00	142.500	1500	525200.255	227559.837	2.209
SW64	0.067	5.00	142.750	1200	525107.196	227616.711	1.882
SW65	0.058	5.00	142.500	1350	525097.340	227590.859	1.748
SW66	0.062	5.00	142.100	1350	525081.022	227550.428	1.531
SW67	0.038	5.00	142.100	1200	525081.943	227542.214	1.641
SW68	0.025	5.00	142.100	1350	525103.416	227532.349	1.791
SW69	0.041	5.00	143.100	1350	525262.211	227879.011	1.611
SW70	0.052	5.00	143.050	1350	525260.146	227858.126	1.650

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
SW71	0.040	5.00	142.850	1200	525206.895	227869.286	1.467
SW72	0.028	5.00	142.800	1350	525205.789	227857.477	1.563
SW73	0.055	5.00	142.692	1200	525165.090	227866.503	1.425
SW74	0.066	5.00	142.741	1200	525102.905	227869.228	1.425
SW75	0.119	5.00	142.560	1200	525117.081	227842.508	1.500
SW76	0.069	5.00	142.623	1200	525136.141	227812.707	1.425
SW77	0.050	5.00	142.532	1200	525127.905	227825.474	1.425
SW78	0.039	5.00	142.408	1200	525076.134	227802.274	1.500
SW79	0.051	5.00	142.746	1200	525144.089	227777.739	1.425
SW80	0.005	5.00	142.717	1200	525139.878	227775.392	1.425
SW81	0.021	5.00	142.737	1350	525134.413	227763.281	1.600
SW82	0.028	5.00	142.950	1350	525126.243	227745.692	1.894
SW84	0.062	5.00	143.850	1350	525346.618	227802.549	2.656
SW85	0.033	5.00	143.600	1200	525253.841	227744.609	1.350
SW86	0.046	5.00	143.600	1200	525276.346	227769.003	1.350
SW87	0.122	5.00	143.450	1200	525194.799	227715.269	1.500
SW88	0.016	5.00	143.200	1200	525202.402	227684.831	1.350
SW89	0.042	5.00	143.100	1350	525194.120	227664.291	2.259
SW91	0.086	5.00	143.200	1200	525204.822	227660.193	1.500
SW90	0.089	5.00	143.100	1200	525181.611	227669.468	1.500
SW92	0.174	5.00	142.600	1500	525147.429	227583.671	2.117
SW93	0.034	5.00	142.500	1350	525153.295	227563.122	1.766
SW94	0.050	5.00	142.200	1350	525143.617	227539.291	1.619
SW95	0.047	5.00	142.186	1200	525060.827	227556.250	1.425
SW13			141.250	1350	524980.115	227502.455	1.912
Tank 03		5.00	142.500		525173.743	227561.496	2.050
Tank 01		5.00	142.400		525073.604	227800.920	1.480
Tank 02		5.00	142.800		525179.996	227576.438	2.350
Tank 04		5.00	142.800		525146.892	227591.019	2.300
Tank 05		5.00	142.500		525139.801	227573.931	1.990
SW96			141.900	1500	525034.127	227534.009	1.977

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
1.021	SW10 (FC)	SW11	10.660	0.600	139.884	139.771	0.113	94.3	225	13.43	50.0
1.022	SW11	SW12	47.653	0.600	139.741	139.456	0.285	167.2	225	14.22	50.0
1.023	SW12	SW13	19.730	0.600	139.456	139.338	0.118	167.0	225	14.55	50.0
1.020	SW96	SW10 (FC)	19.582	0.600	139.923	139.884	0.039	500.0	675	13.30	50.0
1.019	Basin 02	SW96	13.343	0.600	139.950	139.923	0.027	500.0	675	13.02	50.0
16.019	Basin 04	SW10 (FC)	11.487	0.600	139.950	139.884	0.066	174.0	675	12.39	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
1.021	1.346	53.5	920.3	1.791	1.704	5.093	0.0	225	1.371
1.022	1.008	40.1	920.3	1.734	2.319	5.093	0.0	225	1.027
1.023	1.009	40.1	920.3	2.319	1.687	5.093	0.0	225	1.027
1.020	1.165	416.9	377.3	1.302	1.341	2.088	0.0	507	1.310
1.019	1.165	416.9	377.3	1.275	1.302	2.088	0.0	507	1.310
16.019	1.983	709.7	534.5	1.275	1.341	2.958	0.0	439	2.167

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
2.000	SW01	SW02	30.084	0.600	141.328	141.232	0.096	313.4	375	5.49	50.0
1.002	SW02	SW03	54.707	0.600	141.157	141.020	0.137	399.3	450	6.61	50.0
1.003	SW03	SW04	34.896	0.600	140.945	140.875	0.070	498.5	525	7.19	50.0
1.004	SW04	SW05	51.119	0.600	140.875	140.773	0.102	501.2	525	8.05	50.0
1.005	SW05	SW06	39.550	0.600	140.698	140.619	0.079	500.6	600	8.66	50.0
1.006	SW06	SW07	13.775	0.600	140.619	140.591	0.028	500.0	600	8.87	50.0
1.007	SW07	SW08	18.346	0.600	140.591	140.554	0.037	500.0	600	9.15	50.0
10.000	1	2	28.837	0.600	140.587	140.529	0.058	497.2	675	5.41	50.0
10.001	2	3	23.863	0.600	140.529	140.481	0.048	497.1	675	5.75	50.0
1.010	3	4	73.097	0.600	140.481	140.348	0.133	550.0	675	10.49	50.0
1.011	4	5	10.159	0.600	140.348	140.330	0.018	550.0	675	10.64	50.0
1.012	5	6	12.568	0.600	140.330	140.307	0.023	546.4	675	10.83	50.0
1.013	6	7	71.326	0.600	140.307	140.177	0.130	548.7	675	11.90	50.0
1.014	7	8	24.710	0.600	140.177	140.132	0.045	549.1	675	12.27	50.0
1.015	8	9	10.447	0.600	140.132	140.113	0.019	550.0	675	12.43	50.0
1.016	9	10	12.387	0.600	140.113	140.090	0.023	550.0	675	12.61	50.0
1.017	10	SW09	15.864	0.600	140.090	139.965	0.125	126.9	675	12.73	50.0
1.018	SW09	Basin 02	7.314	0.600	139.965	139.950	0.015	487.6	675	12.83	50.0
1.008	SW08	Basin 01	10.656	0.600	140.554	140.500	0.054	197.3	600	9.25	50.0
1.009	Basin 01	3	9.600	0.600	140.500	140.481	0.019	500.0	675	9.39	50.0
9.000	SW14	SW15	13.402	0.600	141.114	141.034	0.080	167.5	225	5.22	50.0
9.001	SW15	SW17	6.019	0.600	141.034	140.998	0.036	167.2	225	5.32	50.0
8.005	SW16	SW17	9.216	0.600	140.877	140.848	0.029	313.0	375	6.28	50.0
8.006	SW17	SW08	26.490	0.600	140.773	140.704	0.069	383.9	450	6.70	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
2.000	1.018	112.4	8.5	1.697	1.493	0.047	0.0	69	0.607
1.002	1.011	160.8	38.5	1.493	1.330	0.213	0.0	149	0.835
1.003	0.996	215.6	81.3	1.330	1.200	0.450	0.0	223	0.928
1.004	0.993	215.1	105.9	1.200	1.200	0.586	0.0	260	0.990
1.005	1.081	305.7	174.0	1.200	1.200	0.963	0.0	324	1.114
1.006	1.082	305.9	182.5	1.200	1.200	1.010	0.0	334	1.127
1.007	1.082	305.9	194.6	1.200	1.200	1.077	0.0	348	1.143
10.000	1.168	418.1	4.0	0.638	0.696	0.022	0.0	46	0.379
10.001	1.168	418.1	4.0	0.696	0.744	0.022	0.0	46	0.379
1.010	1.110	397.3	254.2	0.744	0.877	1.407	0.0	393	1.174
1.011	1.110	397.3	254.2	0.877	0.895	1.407	0.0	393	1.174
1.012	1.114	398.6	289.3	0.895	0.918	1.601	0.0	428	1.209
1.013	1.112	397.8	309.7	0.918	1.048	1.714	0.0	450	1.223
1.014	1.111	397.6	365.7	1.048	1.093	2.024	0.0	514	1.252
1.015	1.110	397.3	365.7	1.093	1.112	2.024	0.0	514	1.251
1.016	1.110	397.3	365.7	1.112	1.135	2.024	0.0	514	1.251
1.017	2.325	831.9	365.7	1.135	1.260	2.024	0.0	313	2.253
1.018	1.180	422.2	377.3	1.260	1.275	2.088	0.0	501	1.325
1.008	1.730	489.0	250.3	1.200	0.900	1.385	0.0	304	1.740
1.009	1.165	416.9	250.3	0.825	0.744	1.385	0.0	377	1.215
9.000	1.007	40.0	10.5	1.200	1.341	0.058	0.0	79	0.852
9.001	1.008	40.1	16.3	1.341	1.277	0.090	0.0	100	0.957
8.005	1.019	112.5	22.6	1.498	1.277	0.125	0.0	113	0.801
8.006	1.031	164.0	42.5	1.277	1.200	0.235	0.0	155	0.869

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
8.004	SW83	SW16	26.850	0.600	140.963	140.877	0.086	313.0	375	6.13	50.0
11.001	SW19	SW20	16.029	0.600	140.959	140.891	0.068	235.7	300	5.66	50.0
11.002	SW20	SW21	27.921	0.600	140.891	140.773	0.118	236.6	300	6.11	50.0
11.003	SW21	SW22	13.012	0.600	140.623	140.590	0.033	394.3	450	6.33	50.0
11.004	SW22	5	13.823	0.600	140.590	140.555	0.035	394.9	450	6.55	50.0
11.000	SW18	SW19	23.973	0.600	141.178	141.034	0.144	166.5	225	5.40	50.0
12.000	SW23	SW24	32.054	0.600	141.040	140.848	0.192	167.0	225	5.53	50.0
12.001	SW24	SW25	7.475	0.600	140.848	140.803	0.045	167.0	225	5.65	50.0
12.002	SW25	6	7.538	0.600	140.803	140.757	0.046	163.9	225	5.78	50.0
13.000	SW26	SW27	31.439	0.600	140.818	140.686	0.132	238.0	300	5.52	50.0
13.001	SW27	SW28	18.000	0.600	140.611	140.553	0.058	313.0	375	5.81	50.0
13.002	SW28	SW29	21.000	0.600	140.478	140.425	0.053	400.0	450	6.16	50.0
13.003	SW29	7	9.158	0.600	140.425	140.402	0.023	398.2	450	6.31	50.0
14.000	SW30	SW31	5.732	0.600	140.469	140.444	0.025	229.3	300	5.09	50.0
14.001	SW31	SW09	24.748	0.600	140.444	140.340	0.104	238.0	300	5.50	50.0
24.005	11	12	52.780	0.600	140.678	140.582	0.096	549.8	675	7.17	50.0
24.006	12	13	36.322	0.600	140.582	140.516	0.066	550.3	675	7.71	50.0
24.007	13	14	13.160	0.600	140.516	140.492	0.024	548.3	675	7.91	50.0
24.008	14	SW37	10.549	0.600	140.492	140.471	0.021	502.3	675	8.06	50.0
24.009	SW37	16	10.571	0.600	140.471	140.450	0.021	503.4	675	8.21	50.0
24.010	16	17	77.262	0.600	140.450	140.309	0.141	548.0	675	9.37	50.0
24.011	17	SW38	3.000	0.600	140.309	140.303	0.006	500.1	675	9.41	50.0
24.012	SW38	19	3.000	0.600	140.303	140.297	0.006	500.1	675	9.46	50.0
24.013	19	20	48.273	0.600	140.297	140.209	0.088	548.6	675	10.18	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
8.004	1.019	112.5	20.8	1.612	1.498	0.115	0.0	109	0.784
11.001	1.019	72.1	14.3	1.341	1.209	0.079	0.0	90	0.797
11.002	1.018	71.9	20.1	1.209	1.200	0.111	0.0	108	0.876
11.003	1.017	161.8	29.5	1.200	1.200	0.163	0.0	130	0.781
11.004	1.017	161.7	35.1	1.200	0.895	0.194	0.0	142	0.819
11.000	1.010	40.2	4.5	1.200	1.341	0.025	0.0	51	0.671
12.000	1.009	40.1	8.7	1.200	1.200	0.048	0.0	71	0.808
12.001	1.009	40.1	17.5	1.200	1.200	0.097	0.0	104	0.976
12.002	1.018	40.5	20.4	1.200	0.918	0.113	0.0	113	1.020
13.000	1.015	71.7	12.8	1.332	1.214	0.071	0.0	85	0.771
13.001	1.019	112.5	39.6	1.214	1.200	0.219	0.0	153	0.933
13.002	1.010	160.7	45.4	1.200	1.200	0.251	0.0	163	0.873
13.003	1.012	161.0	56.0	1.200	1.048	0.310	0.0	182	0.923
14.000	1.034	73.1	2.9	1.200	1.200	0.016	0.0	41	0.509
14.001	1.015	71.7	2.9	1.200	1.260	0.016	0.0	41	0.499
24.005	1.110	397.4	54.6	2.547	2.593	0.302	0.0	167	0.788
24.006	1.110	397.2	107.3	2.593	2.559	0.594	0.0	238	0.949
24.007	1.112	397.9	107.3	2.559	2.483	0.594	0.0	238	0.950
24.008	1.162	415.9	107.3	2.483	2.404	0.594	0.0	232	0.981
24.009	1.161	415.5	191.0	2.404	2.325	1.057	0.0	321	1.138
24.010	1.112	398.0	191.0	2.325	2.016	1.057	0.0	329	1.101
24.011	1.165	416.9	191.0	2.016	1.972	1.057	0.0	321	1.141
24.012	1.165	416.9	207.1	1.972	2.228	1.146	0.0	337	1.164
24.013	1.112	397.8	207.1	2.228	1.666	1.146	0.0	346	1.122

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
16.015	20	21	59.702	0.600	140.209	140.100	0.109	547.7	750	11.55	50.0
24.000	SW32	SW33	17.017	0.600	141.326	141.254	0.072	236.3	300	5.28	50.0
24.001	SW33	SW34	21.040	0.600	141.179	141.111	0.068	309.4	375	5.62	50.0
24.002	SW34	SW35	25.918	0.600	141.111	141.028	0.083	312.3	375	6.04	50.0
24.003	SW35	SW36	10.014	0.600	140.953	140.928	0.025	400.5	450	6.21	50.0
24.004	SW36	11	9.962	0.600	140.928	140.903	0.025	398.5	450	6.37	50.0
26.000	SW41	SW42	23.154	0.600	141.750	141.653	0.097	238.0	300	5.38	50.0
26.001	SW42	SW43	8.010	0.600	141.653	141.619	0.034	238.0	300	5.51	50.0
26.002	SW43	SW44	19.132	0.600	141.619	141.539	0.080	238.0	300	5.83	50.0
26.003	SW44	SW45	11.158	0.600	141.464	141.428	0.036	311.5	375	6.01	50.0
26.004	SW45	SW46	18.170	0.600	141.428	141.370	0.058	313.3	375	6.31	50.0
26.005	SW46	12	5.892	0.600	141.374	140.882	0.492	12.0	375	6.32	50.0
29.000	SW47	SW48	29.628	0.600	141.900	141.723	0.177	167.0	300	5.41	50.0
29.001	SW48	SW37	44.043	0.600	141.648	140.771	0.877	50.2	375	5.69	50.0
16.016	21	SW39	17.817	0.600	140.100	140.064	0.036	494.9	750	11.79	50.0
16.017	SW39	SW40	32.000	0.600	140.064	140.000	0.064	500.0	750	12.22	50.0
16.018	SW40	Basin 04	8.795	0.600	140.000	139.950	0.050	175.9	675	12.29	50.0
16.000	SW49	SW50	32.754	0.600	141.177	141.095	0.082	399.4	450	5.54	50.0
16.001	SW50	SW51	25.179	0.600	141.095	141.032	0.063	399.7	450	5.96	50.0
16.002	SW51	SW52	15.249	0.600	141.032	140.994	0.038	401.3	450	6.21	50.0
16.003	SW52	SW53	30.446	0.600	140.994	140.918	0.076	400.6	450	6.71	50.0
16.004	SW53	SW54	27.201	0.600	140.843	140.788	0.055	494.6	525	7.16	50.0
16.005	SW54	SW55	20.156	0.600	140.788	140.747	0.041	491.6	525	7.50	50.0
16.006	SW55	SW56	35.001	0.600	140.747	140.677	0.070	500.0	525	8.08	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
16.015	1.188	525.0	439.3	1.591	1.050	2.431	0.0	528	1.322
24.000	1.018	72.0	11.0	1.974	1.946	0.061	0.0	79	0.741
24.001	1.024	113.1	12.6	1.946	2.164	0.070	0.0	84	0.683
24.002	1.020	112.6	22.4	2.164	2.447	0.124	0.0	113	0.802
24.003	1.009	160.5	51.7	2.447	2.522	0.286	0.0	175	0.904
24.004	1.012	161.0	54.6	2.522	2.547	0.302	0.0	180	0.917
26.000	1.015	71.7	6.5	1.200	1.447	0.036	0.0	61	0.636
26.001	1.015	71.7	17.5	1.447	1.481	0.097	0.0	100	0.841
26.002	1.015	71.7	18.4	1.481	1.711	0.102	0.0	103	0.854
26.003	1.021	112.8	28.2	1.711	1.797	0.156	0.0	127	0.853
26.004	1.018	112.4	42.8	1.797	2.055	0.237	0.0	160	0.951
26.005	5.260	580.9	52.8	2.051	2.593	0.292	0.0	76	3.325
29.000	1.214	85.8	18.8	1.200	1.477	0.104	0.0	95	0.979
29.001	2.562	282.9	55.3	1.477	2.404	0.306	0.0	112	2.004
16.016	1.251	552.6	439.3	1.050	1.125	2.431	0.0	508	1.380
16.017	1.244	549.7	444.7	1.125	1.250	2.461	0.0	515	1.377
16.018	1.973	705.9	534.5	1.325	1.275	2.958	0.0	441	2.158
16.000	1.011	160.8	5.2	1.573	1.455	0.029	0.0	55	0.470
16.001	1.011	160.7	23.3	1.455	1.518	0.129	0.0	115	0.726
16.002	1.008	160.4	30.4	1.518	1.556	0.168	0.0	132	0.783
16.003	1.009	160.5	41.0	1.556	1.632	0.227	0.0	154	0.848
16.004	1.000	216.5	47.9	1.632	1.587	0.265	0.0	167	0.810
16.005	1.003	217.2	59.6	1.587	1.628	0.330	0.0	187	0.861
16.006	0.995	215.3	67.4	1.628	1.648	0.373	0.0	201	0.884

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
16.007	SW56	SW57	32.001	0.600	140.677	140.613	0.064	500.0	525	8.62	50.0
16.008	SW57	SW58	30.587	0.600	140.613	140.552	0.061	500.0	525	9.13	50.0
16.009	SW58	SW59	19.679	0.600	140.552	140.516	0.036	546.6	525	9.48	50.0
16.010	SW59	SW60	17.884	0.600	140.516	140.480	0.036	496.8	525	9.78	50.0
16.011	SW60	SW61	12.429	0.600	140.480	140.453	0.027	460.3	525	9.98	50.0
15.012	SW61	SW62	20.369	0.600	140.453	140.412	0.041	496.8	525	10.32	50.0
16.013	SW62	SW63	22.964	0.600	140.412	140.366	0.046	499.2	600	10.67	50.0
16.014	SW63	20	3.155	0.600	140.291	140.284	0.007	450.7	600	10.72	50.0
31.000	SW64	SW65	27.653	0.600	140.868	140.752	0.116	238.4	300	5.45	50.0
31.001	SW65	SW66	43.600	0.600	140.752	140.569	0.183	238.3	300	6.17	50.0
31.002	SW66	SW67	8.265	0.600	140.569	140.534	0.035	238.0	300	6.31	50.0
30.003	SW67	SW68	23.631	0.600	140.459	140.384	0.075	315.1	375	6.70	50.0
31.004	SW68	SW40	32.999	0.600	140.309	140.225	0.084	392.9	450	7.23	50.0
1.000	SW69	SW70	20.987	0.600	141.489	141.400	0.089	235.8	300	5.34	50.0
1.001	SW70	SW02	21.996	0.600	141.400	141.307	0.093	236.5	300	5.70	50.0
3.000	SW71	SW72	11.861	0.600	141.383	141.312	0.071	167.1	225	5.20	50.0
3.001	SW72	SW03	15.800	0.600	141.237	141.170	0.067	235.8	300	5.45	50.0
4.000	SW73	SW04	15.348	0.600	141.267	141.175	0.092	166.8	225	5.25	50.0
5.000	SW74	SW75	30.248	0.600	141.316	141.135	0.181	167.1	225	5.50	50.0
5.001	SW75	SW05	14.759	0.600	141.060	140.998	0.062	238.0	300	5.74	50.0
6.000	SW76	SW77	15.193	0.600	141.198	141.107	0.091	167.0	225	5.25	50.0
6.001	SW77	SW05	5.610	0.600	141.107	141.073	0.034	165.0	225	5.34	50.0
7.001	SW78	SW07	3.937	0.600	140.908	140.891	0.017	231.6	300	5.11	50.0
8.000	SW79	SW80	4.821	0.600	141.321	141.292	0.029	167.0	225	5.08	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
16.007	0.995	215.3	81.1	1.648	1.712	0.449	0.0	223	0.927
16.008	0.995	215.3	89.1	1.712	1.973	0.493	0.0	235	0.949
16.009	0.951	205.8	153.2	1.973	1.909	0.848	0.0	339	1.038
16.010	0.998	216.0	155.0	1.909	1.795	0.858	0.0	330	1.082
16.011	1.037	224.5	163.0	1.795	1.722	0.902	0.0	333	1.127
15.012	0.998	216.0	200.6	1.722	1.563	1.110	0.0	403	1.126
16.013	1.083	306.2	221.5	1.488	1.534	1.226	0.0	379	1.175
16.014	1.140	322.4	232.2	1.609	1.666	1.285	0.0	378	1.236
31.000	1.014	71.7	12.1	1.582	1.448	0.067	0.0	83	0.759
31.001	1.014	71.7	22.6	1.448	1.231	0.125	0.0	115	0.900
31.002	1.015	71.7	33.8	1.231	1.266	0.187	0.0	145	1.000
30.003	1.015	112.1	49.2	1.266	1.341	0.272	0.0	174	0.984
31.004	1.019	162.1	53.7	1.341	1.325	0.297	0.0	178	0.919
1.000	1.019	72.1	7.4	1.311	1.350	0.041	0.0	65	0.664
1.001	1.018	71.9	16.8	1.350	1.493	0.093	0.0	98	0.834
3.000	1.009	40.1	7.2	1.242	1.263	0.040	0.0	65	0.769
3.001	1.019	72.0	12.3	1.263	1.330	0.068	0.0	83	0.766
4.000	1.009	40.1	9.9	1.200	1.200	0.055	0.0	76	0.839
5.000	1.008	40.1	11.9	1.200	1.200	0.066	0.0	84	0.882
5.001	1.014	71.7	33.4	1.200	1.200	0.185	0.0	144	0.997
6.000	1.009	40.1	12.5	1.200	1.200	0.069	0.0	86	0.891
6.001	1.015	40.4	21.5	1.200	1.200	0.119	0.0	116	1.029
7.001	1.029	72.7	7.0	1.200	1.200	0.039	0.0	63	0.659
8.000	1.009	40.1	9.2	1.200	1.200	0.051	0.0	73	0.823

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
8.001	SW80	SW81	13.287	0.600	141.292	141.212	0.080	167.0	225	5.30	50.0
8.002	SW81	SW82	19.394	0.600	141.137	141.056	0.081	238.0	300	5.62	50.0
8.003	SW82	SW83	4.169	0.600	141.056	141.038	0.018	238.0	300	5.69	50.0
25.000	SW84	SW35	21.467	0.600	141.194	141.103	0.091	235.9	300	5.35	50.0
27.000	SW85	SW44	12.043	0.600	142.250	141.693	0.557	21.6	150	5.09	50.0
28.000	SW86	SW45	14.170	0.600	142.250	141.657	0.593	23.9	150	5.11	50.0
30.000	SW87	SW48	22.903	0.600	141.950	141.723	0.227	100.9	300	5.24	50.0
17.000	SW88	SW89	22.147	0.600	141.850	141.066	0.784	28.2	150	5.19	50.0
17.001	SW89	SW58	42.177	0.600	140.841	140.702	0.139	303.4	375	5.87	50.0
19.000	SW91	SW89	11.460	0.600	141.700	140.916	0.784	14.6	300	5.05	50.0
18.000	SW90	SW89	13.538	0.600	141.600	140.916	0.684	19.8	300	5.06	50.0
19.001	SW92	SW61	14.745	0.600	140.483	140.453	0.030	491.5	525	5.44	50.0
33.000	SW93	SW94	25.721	0.600	140.734	140.581	0.153	168.1	225	5.43	50.0
33.001	SW94	SW40	21.834	0.600	140.581	140.450	0.131	166.7	225	5.79	50.0
32.000	SW95	SW67	25.355	0.600	140.761	140.609	0.152	166.8	225	5.42	50.0
1.024	SW13	EXManhole	22.274	0.600	139.338	139.030	0.308	72.3	225	14.79	50.0
22.000	Tank 03	SW62	8.401	0.600	140.450	140.412	0.038	221.1	525	5.09	50.0
7.000	Tank 01	SW78	2.870	0.600	140.920	140.908	0.012	239.1	300	5.05	50.0
23.000	Tank 02	SW62	8.353	0.600	140.450	140.412	0.038	219.8	525	5.09	50.0
21.000	Tank 04	SW92	7.368	0.600	140.500	140.483	0.017	433.4	525	5.11	50.0
20.000	Tank 05	SW92	12.371	0.600	140.510	140.483	0.027	458.2	525	5.20	50.0
15.000	Basin 03	SW96	10.427	0.600	140.100	139.998	0.102	102.2	600	5.07	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
8.001	1.009	40.1	10.1	1.200	1.300	0.056	0.0	77	0.844
8.002	1.015	71.7	13.9	1.300	1.594	0.077	0.0	89	0.791
8.003	1.015	71.7	19.0	1.594	1.612	0.105	0.0	105	0.861
25.000	1.019	72.0	11.2	2.356	2.447	0.062	0.0	79	0.745
27.000	2.175	38.4	6.0	1.200	1.707	0.033	0.0	40	1.579
28.000	2.068	36.6	8.3	1.200	1.793	0.046	0.0	48	1.675
30.000	1.565	110.6	22.0	1.200	1.477	0.122	0.0	91	1.230
17.000	1.901	33.6	2.9	1.200	1.884	0.016	0.0	30	1.165
17.001	1.035	114.3	42.1	1.884	1.973	0.233	0.0	157	0.958
19.000	4.132	292.1	15.5	1.200	1.884	0.086	0.0	47	2.227
18.000	3.549	250.9	16.1	1.200	1.884	0.089	0.0	51	2.025
19.001	1.003	217.2	31.4	1.592	1.722	0.174	0.0	134	0.723
33.000	1.005	40.0	6.1	1.541	1.394	0.034	0.0	59	0.731
33.001	1.010	40.1	15.2	1.394	1.325	0.084	0.0	95	0.939
32.000	1.009	40.1	8.5	1.200	1.266	0.047	0.0	70	0.803
1.024	1.539	61.2	920.3	1.687	1.775	5.093	0.0	225	1.568
22.000	1.502	325.2	0.0	1.525	1.563	0.000	0.0	0	0.000
7.000	1.012	71.5	0.0	1.180	1.200	0.000	0.0	0	0.000
23.000	1.506	326.1	0.0	1.825	1.563	0.000	0.0	0	0.000
21.000	1.069	231.5	0.0	1.775	1.592	0.000	0.0	0	0.000
20.000	1.040	225.0	0.0	1.465	1.592	0.000	0.0	0	0.000
15.000	2.408	680.9	0.0	1.200	1.302	0.000	0.0	0	0.000

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
1.021	10.660	94.3	225	1 STANDARD	141.900	139.884	1.791	141.700	139.771	1.704
1.022	47.653	167.2	225	1 STANDARD	141.700	139.741	1.734	142.000	139.456	2.319
1.023	19.730	167.0	225	1 STANDARD	142.000	139.456	2.319	141.250	139.338	1.687
1.020	19.582	500.0	675	1 STANDARD	141.900	139.923	1.302	141.900	139.884	1.341
1.019	13.343	500.0	675	1 STANDARD	141.900	139.950	1.275	141.900	139.923	1.302
16.019	11.487	174.0	675	1 STANDARD	141.900	139.950	1.275	141.900	139.884	1.341
2.000	30.084	313.4	375	1 STANDARD	143.400	141.328	1.697	143.100	141.232	1.493
1.002	54.707	399.3	450	1 STANDARD	143.100	141.157	1.493	142.800	141.020	1.330
1.003	34.896	498.5	525	1 STANDARD	142.800	140.945	1.330	142.600	140.875	1.200
1.004	51.119	501.2	525	1 STANDARD	142.600	140.875	1.200	142.498	140.773	1.200
1.005	39.550	500.6	600	1 STANDARD	142.498	140.698	1.200	142.419	140.619	1.200
1.006	13.775	500.0	600	1 STANDARD	142.419	140.619	1.200	142.391	140.591	1.200
1.007	18.346	500.0	600	1 STANDARD	142.391	140.591	1.200	142.354	140.554	1.200
10.000	28.837	497.2	675	1 STANDARD	141.900	140.587	0.638	141.900	140.529	0.696
10.001	23.863	497.1	675	1 STANDARD	141.900	140.529	0.696	141.900	140.481	0.744
1.010	73.097	550.0	675	1 STANDARD	141.900	140.481	0.744	141.900	140.348	0.877
1.011	10.159	550.0	675	1 STANDARD	141.900	140.348	0.877	141.900	140.330	0.895
1.012	12.568	546.4	675	1 STANDARD	141.900	140.330	0.895	141.900	140.307	0.918
1.013	71.326	548.7	675	1 STANDARD	141.900	140.307	0.918	141.900	140.177	1.048
1.014	24.710	549.1	675	1 STANDARD	141.900	140.177	1.048	141.900	140.132	1.093
1.015	10.447	550.0	675	1 STANDARD	141.900	140.132	1.093	141.900	140.113	1.112
1.016	12.387	550.0	675	1 STANDARD	141.900	140.113	1.112	141.900	140.090	1.135
1.017	15.864	126.9	675	1 STANDARD	141.900	140.090	1.135	141.900	139.965	1.260
1.018	7.314	487.6	675	1 STANDARD	141.900	139.965	1.260	141.900	139.950	1.275
1.008	10.656	197.3	600	1 STANDARD	142.354	140.554	1.200	142.000	140.500	0.900

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.021	SW10 (FC)	1800	Manhole	1 STANDARD	SW11	1350	Manhole	1 STANDARD
1.022	SW11	1350	Manhole	1 STANDARD	SW12	1350	Manhole	1 STANDARD
1.023	SW12	1350	Manhole	1 STANDARD	SW13	1350	Manhole	1 STANDARD
1.020	SW96	1500	Manhole	1 STANDARD	SW10 (FC)	1800	Manhole	1 STANDARD
1.019	Basin 02		Junction		SW96	1500	Manhole	1 STANDARD
16.019	Basin 04		Junction		SW10 (FC)	1800	Manhole	1 STANDARD
2.000	SW01	1350	Manhole	1 STANDARD	SW02	1350	Manhole	1 STANDARD
1.002	SW02	1350	Manhole	1 STANDARD	SW03	1500	Manhole	1 STANDARD
1.003	SW03	1500	Manhole	1 STANDARD	SW04	1500	Manhole	1 STANDARD
1.004	SW04	1500	Manhole	1 STANDARD	SW05	1500	Manhole	1 STANDARD
1.005	SW05	1500	Manhole	1 STANDARD	SW06	1500	Manhole	1 STANDARD
1.006	SW06	1500	Manhole	1 STANDARD	SW07	1500	Manhole	1 STANDARD
1.007	SW07	1500	Manhole	1 STANDARD	SW08	1500	Manhole	1 STANDARD
10.000	1		Junction		2		Junction	
10.001	2		Junction		3		Junction	
1.010	3		Junction		4		Junction	
1.011	4		Junction		5		Junction	
1.012	5		Junction		6		Junction	
1.013	6		Junction		7		Junction	
1.014	7		Junction		8		Junction	
1.015	8		Junction		9	1500	Manhole	1 STANDARD
1.016	9	1500	Manhole	1 STANDARD	10	1500	Manhole	1 STANDARD
1.017	10	1500	Manhole	1 STANDARD	SW09	1500	Manhole	1 STANDARD
1.018	SW09	1500	Manhole	1 STANDARD	Basin 02		Junction	
1.008	SW08	1500	Manhole	1 STANDARD	Basin 01		Junction	

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
1.009	9.600	500.0	675	1 STANDARD	142.000	140.500	0.825	141.900	140.481	0.744
9.000	13.402	167.5	225	1 STANDARD	142.539	141.114	1.200	142.600	141.034	1.341
9.001	6.019	167.2	225	1 STANDARD	142.600	141.034	1.341	142.500	140.998	1.277
8.005	9.216	313.0	375	1 STANDARD	142.750	140.877	1.498	142.500	140.848	1.277
8.006	26.490	383.9	450	1 STANDARD	142.500	140.773	1.277	142.354	140.704	1.200
8.004	26.850	313.0	375	1 STANDARD	142.950	140.963	1.612	142.750	140.877	1.498
11.001	16.029	235.7	300	1 STANDARD	142.600	140.959	1.341	142.400	140.891	1.209
11.002	27.921	236.6	300	1 STANDARD	142.400	140.891	1.209	142.273	140.773	1.200
11.003	13.012	394.3	450	1 STANDARD	142.273	140.623	1.200	142.240	140.590	1.200
11.004	13.823	394.9	450	1 STANDARD	142.240	140.590	1.200	141.900	140.555	0.895
11.000	23.973	166.5	225	1 STANDARD	142.603	141.178	1.200	142.600	141.034	1.341
12.000	32.054	167.0	225	1 STANDARD	142.465	141.040	1.200	142.273	140.848	1.200
12.001	7.475	167.0	225	1 STANDARD	142.273	140.848	1.200	142.228	140.803	1.200
12.002	7.538	163.9	225	1 STANDARD	142.228	140.803	1.200	141.900	140.757	0.918
13.000	31.439	238.0	300	1 STANDARD	142.450	140.818	1.332	142.200	140.686	1.214
13.001	18.000	313.0	375	1 STANDARD	142.200	140.611	1.214	142.128	140.553	1.200
13.002	21.000	400.0	450	1 STANDARD	142.128	140.478	1.200	142.075	140.425	1.200
13.003	9.158	398.2	450	1 STANDARD	142.075	140.425	1.200	141.900	140.402	1.048
14.000	5.732	229.3	300	1 STANDARD	141.969	140.469	1.200	141.944	140.444	1.200
14.001	24.748	238.0	300	1 STANDARD	141.944	140.444	1.200	141.900	140.340	1.260
24.005	52.780	549.8	675	1 STANDARD	143.900	140.678	2.547	143.850	140.582	2.593
24.006	36.322	550.3	675	1 STANDARD	143.850	140.582	2.593	143.750	140.516	2.559
24.007	13.160	548.3	675	1 STANDARD	143.750	140.516	2.559	143.650	140.492	2.483
24.008	10.549	502.3	675	1 STANDARD	143.650	140.492	2.483	143.550	140.471	2.404
24.009	10.571	503.4	675	1 STANDARD	143.550	140.471	2.404	143.450	140.450	2.325

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.009	Basin 01		Junction		3		Junction	
9.000	SW14	1200	Manhole	1 STANDARD	SW15	1350	Manhole	1 STANDARD
9.001	SW15	1350	Manhole	1 STANDARD	SW17	1350	Manhole	1 STANDARD
8.005	SW16	1350	Manhole	1 STANDARD	SW17	1350	Manhole	1 STANDARD
8.006	SW17	1350	Manhole	1 STANDARD	SW08	1500	Manhole	1 STANDARD
8.004	SW83	1350	Manhole	1 STANDARD	SW16	1350	Manhole	1 STANDARD
11.001	SW19	1350	Manhole	1 STANDARD	SW20	1350	Manhole	1 STANDARD
11.002	SW20	1350	Manhole	1 STANDARD	SW21	1350	Manhole	1 STANDARD
11.003	SW21	1350	Manhole	1 STANDARD	SW22	1350	Manhole	1 STANDARD
11.004	SW22	1350	Manhole	1 STANDARD	5		Junction	
11.000	SW18	1200	Manhole	1 STANDARD	SW19	1350	Manhole	1 STANDARD
12.000	SW23	1200	Manhole	1 STANDARD	SW24	1200	Manhole	1 STANDARD
12.001	SW24	1200	Manhole	1 STANDARD	SW25	1200	Manhole	1 STANDARD
12.002	SW25	1200	Manhole	1 STANDARD	6		Junction	
13.000	SW26	1350	Manhole	1 STANDARD	SW27	1350	Manhole	1 STANDARD
13.001	SW27	1350	Manhole	1 STANDARD	SW28	1350	Manhole	1 STANDARD
13.002	SW28	1350	Manhole	1 STANDARD	SW29	1350	Manhole	1 STANDARD
13.003	SW29	1350	Manhole	1 STANDARD	7		Junction	
14.000	SW30	1200	Manhole	1 STANDARD	SW31	1200	Manhole	1 STANDARD
14.001	SW31	1200	Manhole	1 STANDARD	SW09	1500	Manhole	1 STANDARD
24.005	11		Junction		12		Junction	
24.006	12		Junction		13		Junction	
24.007	13		Junction		14		Junction	
24.008	14		Junction		SW37	1500	Manhole	1 STANDARD
24.009	SW37	1500	Manhole	1 STANDARD	16		Junction	

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
24.010	77.262	548.0	675	1 STANDARD	143.450	140.450	2.325	143.000	140.309	2.016
24.011	3.000	500.1	675	1 STANDARD	143.000	140.309	2.016	142.950	140.303	1.972
24.012	3.000	500.1	675	1 STANDARD	142.950	140.303	1.972	143.200	140.297	2.228
24.013	48.273	548.6	675	1 STANDARD	143.200	140.297	2.228	142.550	140.209	1.666
16.015	59.702	547.7	750	1 STANDARD	142.550	140.209	1.591	141.900	140.100	1.050
24.000	17.017	236.3	300	1 STANDARD	143.600	141.326	1.974	143.500	141.254	1.946
24.001	21.040	309.4	375	1 STANDARD	143.500	141.179	1.946	143.650	141.111	2.164
24.002	25.918	312.3	375	1 STANDARD	143.650	141.111	2.164	143.850	141.028	2.447
24.003	10.014	400.5	450	1 STANDARD	143.850	140.953	2.447	143.900	140.928	2.522
24.004	9.962	398.5	450	1 STANDARD	143.900	140.928	2.522	143.900	140.903	2.547
26.000	23.154	238.0	300	1 STANDARD	143.250	141.750	1.200	143.400	141.653	1.447
26.001	8.010	238.0	300	1 STANDARD	143.400	141.653	1.447	143.400	141.619	1.481
26.002	19.132	238.0	300	1 STANDARD	143.400	141.619	1.481	143.550	141.539	1.711
26.003	11.158	311.5	375	1 STANDARD	143.550	141.464	1.711	143.600	141.428	1.797
26.004	18.170	313.3	375	1 STANDARD	143.600	141.428	1.797	143.800	141.370	2.055
26.005	5.892	12.0	375	1 STANDARD	143.800	141.374	2.051	143.850	140.882	2.593
29.000	29.628	167.0	300	1 STANDARD	143.400	141.900	1.200	143.500	141.723	1.477
29.001	44.043	50.2	375	1 STANDARD	143.500	141.648	1.477	143.550	140.771	2.404
16.016	17.817	494.9	750	1 STANDARD	141.900	140.100	1.050	141.939	140.064	1.125
16.017	32.000	500.0	750	1 STANDARD	141.939	140.064	1.125	142.000	140.000	1.250
16.018	8.795	175.9	675	1 STANDARD	142.000	140.000	1.325	141.900	139.950	1.275
16.000	32.754	399.4	450	1 STANDARD	143.200	141.177	1.573	143.000	141.095	1.455
16.001	25.179	399.7	450	1 STANDARD	143.000	141.095	1.455	143.000	141.032	1.518
16.002	15.249	401.3	450	1 STANDARD	143.000	141.032	1.518	143.000	140.994	1.556
16.003	30.446	400.6	450	1 STANDARD	143.000	140.994	1.556	143.000	140.918	1.632

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
24.010	16		Junction		17		Junction	
24.011	17		Junction		SW38	1500	Manhole	1 STANDARD
24.012	SW38	1500	Manhole	1 STANDARD	19		Junction	
24.013	19		Junction		20		Junction	
16.015	20		Junction		21		Junction	
24.000	SW32	1350	Manhole	1 STANDARD	SW33	1350	Manhole	1 STANDARD
24.001	SW33	1350	Manhole	1 STANDARD	SW34	1350	Manhole	1 STANDARD
24.002	SW34	1350	Manhole	1 STANDARD	SW35	1350	Manhole	1 STANDARD
24.003	SW35	1350	Manhole	1 STANDARD	SW36	1350	Manhole	1 STANDARD
24.004	SW36	1350	Manhole	1 STANDARD	11		Junction	
26.000	SW41	1200	Manhole	1 STANDARD	SW42	1350	Manhole	1 STANDARD
26.001	SW42	1350	Manhole	1 STANDARD	SW43	1350	Manhole	1 STANDARD
26.002	SW43	1350	Manhole	1 STANDARD	SW44	1350	Manhole	1 STANDARD
26.003	SW44	1350	Manhole	1 STANDARD	SW45	1350	Manhole	1 STANDARD
26.004	SW45	1350	Manhole	1 STANDARD	SW46	1350	Manhole	1 STANDARD
26.005	SW46	1350	Manhole	1 STANDARD	12		Junction	
29.000	SW47	1200	Manhole	1 STANDARD	SW48	1350	Manhole	1 STANDARD
29.001	SW48	1350	Manhole	1 STANDARD	SW37	1500	Manhole	1 STANDARD
16.016	21		Junction		SW39	1800	Manhole	1 STANDARD
16.017	SW39	1800	Manhole	1 STANDARD	SW40	1800	Manhole	1 STANDARD
16.018	SW40	1800	Manhole	1 STANDARD	Basin 04		Junction	
16.000	SW49	1350	Manhole	1 STANDARD	SW50	1350	Manhole	1 STANDARD
16.001	SW50	1350	Manhole	1 STANDARD	SW51	1350	Manhole	1 STANDARD
16.002	SW51	1350	Manhole	1 STANDARD	SW52	1350	Manhole	1 STANDARD
16.003	SW52	1350	Manhole	1 STANDARD	SW53	1500	Manhole	1 STANDARD

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
16.004	27.201	494.6	525	1 STANDARD	143.000	140.843	1.632	142.900	140.788	1.587
16.005	20.156	491.6	525	1 STANDARD	142.900	140.788	1.587	142.900	140.747	1.628
16.006	35.001	500.0	525	1 STANDARD	142.900	140.747	1.628	142.850	140.677	1.648
16.007	32.001	500.0	525	1 STANDARD	142.850	140.677	1.648	142.850	140.613	1.712
16.008	30.587	500.0	525	1 STANDARD	142.850	140.613	1.712	143.050	140.552	1.973
16.009	19.679	546.6	525	1 STANDARD	143.050	140.552	1.973	142.950	140.516	1.909
16.010	17.884	496.8	525	1 STANDARD	142.950	140.516	1.909	142.800	140.480	1.795
16.011	12.429	460.3	525	1 STANDARD	142.800	140.480	1.795	142.700	140.453	1.722
15.012	20.369	496.8	525	1 STANDARD	142.700	140.453	1.722	142.500	140.412	1.563
16.013	22.964	499.2	600	1 STANDARD	142.500	140.412	1.488	142.500	140.366	1.534
16.014	3.155	450.7	600	1 STANDARD	142.500	140.291	1.609	142.550	140.284	1.666
31.000	27.653	238.4	300	1 STANDARD	142.750	140.868	1.582	142.500	140.752	1.448
31.001	43.600	238.3	300	1 STANDARD	142.500	140.752	1.448	142.100	140.569	1.231
31.002	8.265	238.0	300	1 STANDARD	142.100	140.569	1.231	142.100	140.534	1.266
30.003	23.631	315.1	375	1 STANDARD	142.100	140.459	1.266	142.100	140.384	1.341
31.004	32.999	392.9	450	1 STANDARD	142.100	140.309	1.341	142.000	140.225	1.325
1.000	20.987	235.8	300	1 STANDARD	143.100	141.489	1.311	143.050	141.400	1.350
1.001	21.996	236.5	300	1 STANDARD	143.050	141.400	1.350	143.100	141.307	1.493
3.000	11.861	167.1	225	1 STANDARD	142.850	141.383	1.242	142.800	141.312	1.263
3.001	15.800	235.8	300	1 STANDARD	142.800	141.237	1.263	142.800	141.170	1.330
4.000	15.348	166.8	225	1 STANDARD	142.692	141.267	1.200	142.600	141.175	1.200
5.000	30.248	167.1	225	1 STANDARD	142.741	141.316	1.200	142.560	141.135	1.200
5.001	14.759	238.0	300	1 STANDARD	142.560	141.060	1.200	142.498	140.998	1.200
6.000	15.193	167.0	225	1 STANDARD	142.623	141.198	1.200	142.532	141.107	1.200
6.001	5.610	165.0	225	1 STANDARD	142.532	141.107	1.200	142.498	141.073	1.200

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
16.004	SW53	1500	Manhole	1 STANDARD	SW54	1500	Manhole	1 STANDARD
16.005	SW54	1500	Manhole	1 STANDARD	SW55	1500	Manhole	1 STANDARD
16.006	SW55	1500	Manhole	1 STANDARD	SW56	1500	Manhole	1 STANDARD
16.007	SW56	1500	Manhole	1 STANDARD	SW57	1500	Manhole	1 STANDARD
16.008	SW57	1500	Manhole	1 STANDARD	SW58	1500	Manhole	1 STANDARD
16.009	SW58	1500	Manhole	1 STANDARD	SW59	1500	Manhole	1 STANDARD
16.010	SW59	1500	Manhole	1 STANDARD	SW60	1500	Manhole	1 STANDARD
16.011	SW60	1500	Manhole	1 STANDARD	SW61	1500	Manhole	1 STANDARD
15.012	SW61	1500	Manhole	1 STANDARD	SW62	1500	Manhole	1 STANDARD
16.013	SW62	1500	Manhole	1 STANDARD	SW63	1500	Manhole	1 STANDARD
16.014	SW63	1500	Manhole	1 STANDARD	20		Junction	
31.000	SW64	1200	Manhole	1 STANDARD	SW65	1350	Manhole	1 STANDARD
31.001	SW65	1350	Manhole	1 STANDARD	SW66	1350	Manhole	1 STANDARD
31.002	SW66	1350	Manhole	1 STANDARD	SW67	1200	Manhole	1 STANDARD
30.003	SW67	1200	Manhole	1 STANDARD	SW68	1350	Manhole	1 STANDARD
31.004	SW68	1350	Manhole	1 STANDARD	SW40	1800	Manhole	1 STANDARD
1.000	SW69	1350	Manhole	1 STANDARD	SW70	1350	Manhole	1 STANDARD
1.001	SW70	1350	Manhole	1 STANDARD	SW02	1350	Manhole	1 STANDARD
3.000	SW71	1200	Manhole	1 STANDARD	SW72	1350	Manhole	1 STANDARD
3.001	SW72	1350	Manhole	1 STANDARD	SW03	1500	Manhole	1 STANDARD
4.000	SW73	1200	Manhole	1 STANDARD	SW04	1500	Manhole	1 STANDARD
5.000	SW74	1200	Manhole	1 STANDARD	SW75	1200	Manhole	1 STANDARD
5.001	SW75	1200	Manhole	1 STANDARD	SW05	1500	Manhole	1 STANDARD
6.000	SW76	1200	Manhole	1 STANDARD	SW77	1200	Manhole	1 STANDARD
6.001	SW77	1200	Manhole	1 STANDARD	SW05	1500	Manhole	1 STANDARD

Pipeline Schedule

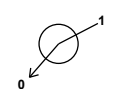
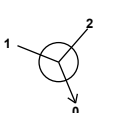
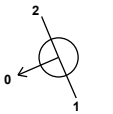
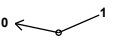
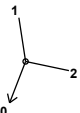
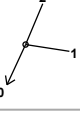
Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
7.001	3.937	231.6	300	1 STANDARD	142.408	140.908	1.200	142.391	140.891	1.200
8.000	4.821	167.0	225	1 STANDARD	142.746	141.321	1.200	142.717	141.292	1.200
8.001	13.287	167.0	225	1 STANDARD	142.717	141.292	1.200	142.737	141.212	1.300
8.002	19.394	238.0	300	1 STANDARD	142.737	141.137	1.300	142.950	141.056	1.594
8.003	4.169	238.0	300	1 STANDARD	142.950	141.056	1.594	142.950	141.038	1.612
25.000	21.467	235.9	300	1 STANDARD	143.850	141.194	2.356	143.850	141.103	2.447
27.000	12.043	21.6	150	1 STANDARD	143.600	142.250	1.200	143.550	141.693	1.707
28.000	14.170	23.9	150	1 STANDARD	143.600	142.250	1.200	143.600	141.657	1.793
30.000	22.903	100.9	300	1 STANDARD	143.450	141.950	1.200	143.500	141.723	1.477
17.000	22.147	28.2	150	1 STANDARD	143.200	141.850	1.200	143.100	141.066	1.884
17.001	42.177	303.4	375	1 STANDARD	143.100	140.841	1.884	143.050	140.702	1.973
19.000	11.460	14.6	300	1 STANDARD	143.200	141.700	1.200	143.100	140.916	1.884
18.000	13.538	19.8	300	1 STANDARD	143.100	141.600	1.200	143.100	140.916	1.884
19.001	14.745	491.5	525	1 STANDARD	142.600	140.483	1.592	142.700	140.453	1.722
33.000	25.721	168.1	225	1 STANDARD	142.500	140.734	1.541	142.200	140.581	1.394
33.001	21.834	166.7	225	1 STANDARD	142.200	140.581	1.394	142.000	140.450	1.325
32.000	25.355	166.8	225	1 STANDARD	142.186	140.761	1.200	142.100	140.609	1.266
1.024	22.274	72.3	225	1 STANDARD	141.250	139.338	1.687	141.030	139.030	1.775
22.000	8.401	221.1	525	1 STANDARD	142.500	140.450	1.525	142.500	140.412	1.563
7.000	2.870	239.1	300	1 STANDARD	142.400	140.920	1.180	142.408	140.908	1.200
23.000	8.353	219.8	525	1 STANDARD	142.800	140.450	1.825	142.500	140.412	1.563
21.000	7.368	433.4	525	1 STANDARD	142.800	140.500	1.775	142.600	140.483	1.592
20.000	12.371	458.2	525	1 STANDARD	142.500	140.510	1.465	142.600	140.483	1.592
15.000	10.427	102.2	600	1 STANDARD	141.900	140.100	1.200	141.900	139.998	1.302

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
7.001	SW78	1200	Manhole	1 STANDARD	SW07	1500	Manhole	1 STANDARD
8.000	SW79	1200	Manhole	1 STANDARD	SW80	1200	Manhole	1 STANDARD
8.001	SW80	1200	Manhole	1 STANDARD	SW81	1350	Manhole	1 STANDARD
8.002	SW81	1350	Manhole	1 STANDARD	SW82	1350	Manhole	1 STANDARD
8.003	SW82	1350	Manhole	1 STANDARD	SW83	1350	Manhole	1 STANDARD
25.000	SW84	1350	Manhole	1 STANDARD	SW35	1350	Manhole	1 STANDARD
27.000	SW85	1200	Manhole	1 STANDARD	SW44	1350	Manhole	1 STANDARD
28.000	SW86	1200	Manhole	1 STANDARD	SW45	1350	Manhole	1 STANDARD
30.000	SW87	1200	Manhole	1 STANDARD	SW48	1350	Manhole	1 STANDARD
17.000	SW88	1200	Manhole	1 STANDARD	SW89	1350	Manhole	1 STANDARD
17.001	SW89	1350	Manhole	1 STANDARD	SW58	1500	Manhole	1 STANDARD
19.000	SW91	1200	Manhole	1 STANDARD	SW89	1350	Manhole	1 STANDARD
18.000	SW90	1200	Manhole	1 STANDARD	SW89	1350	Manhole	1 STANDARD
19.001	SW92	1500	Manhole	1 STANDARD	SW61	1500	Manhole	1 STANDARD
33.000	SW93	1350	Manhole	1 STANDARD	SW94	1350	Manhole	1 STANDARD
33.001	SW94	1350	Manhole	1 STANDARD	SW40	1800	Manhole	1 STANDARD
32.000	SW95	1200	Manhole	1 STANDARD	SW67	1200	Manhole	1 STANDARD
1.024	SW13	1350	Manhole	1 STANDARD	EXManhole	1350	Manhole	1 STANDARD
22.000	Tank 03		Junction		SW62	1500	Manhole	1 STANDARD
7.000	Tank 01		Junction		SW78	1200	Manhole	1 STANDARD
23.000	Tank 02		Junction		SW62	1500	Manhole	1 STANDARD
21.000	Tank 04		Junction		SW92	1500	Manhole	1 STANDARD
20.000	Tank 05		Junction		SW92	1500	Manhole	1 STANDARD
15.000	Basin 03		Junction		SW96	1500	Manhole	1 STANDARD

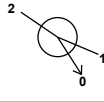
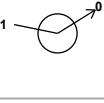
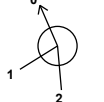
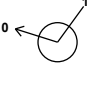
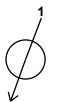
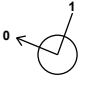
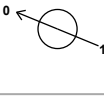
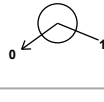
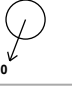
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
Basin 04	525130.969	227511.445	141.900	1.950			1 16.018	139.950	675
							0 16.019	139.950	675
Basin 03	525043.772	227537.970	141.900	1.800			0 15.000	140.100	600
Basin 02	525022.899	227537.704	141.900	1.950			1 1.018	139.950	675
							0 1.019	139.950	675
SW10 (FC)	525040.982	227515.666	141.900	2.016	1800		1 16.019	139.884	675
							2 1.020	139.884	675
							0 1.021	139.884	225
SW11	525032.098	227509.774	141.700	1.959	1350		1 1.021	139.771	225
							0 1.022	139.741	225
SW12	524985.867	227521.328	142.000	2.544	1350		1 1.022	139.456	225
							0 1.023	139.456	225
EXManhole	524967.824	227483.879	141.030	2.000	1350		1 1.024	139.030	225
SW14	525079.124	227759.059	142.539	1.425	1200		0 9.000	141.114	225
SW01	525287.578	227832.870	143.400	2.072	1350		0 2.000	141.328	375
							1 2.000	141.232	375
SW02	525257.687	227836.268	143.100	1.943	1350		2 1.001	141.307	300
							0 1.002	141.157	450
SW03	525203.269	227841.879	142.800	1.855	1500		1 3.001	141.170	300
							2 1.002	141.020	450
							0 1.003	140.945	525
SW04	525169.846	227851.911	142.600	1.725	1500		1 4.000	141.175	225
							2 1.003	140.875	525
							0 1.004	140.875	525
SW05	525123.933	227829.436	142.498	1.800	1500		1 6.001	141.073	225
							2 5.001	140.998	300
							3 1.004	140.773	525
							0 1.005	140.698	600

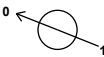
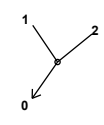
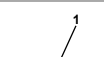
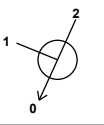
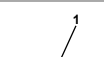
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
SW06	525088.840	227811.196	142.419	1.800	1500		1	1.005	140.619	600
							0	1.006	140.619	600
SW07	525079.789	227800.812	142.391	1.800	1500		1	7.001	140.891	300
							2	1.006	140.591	600
							0	1.007	140.591	600
SW08	525086.818	227783.866	142.354	1.800	1500		1	8.006	140.704	450
							2	1.007	140.554	600
							0	1.008	140.554	600
Basin 01	525077.041	227779.627	142.000	1.500			1	1.008	140.500	600
							0	1.009	140.500	675
1	525060.963	227835.215	141.900	1.313						
							0	10.000	140.587	675
2	525052.761	227807.569	141.900	1.371			1	10.000	140.529	675
							0	10.001	140.529	675
3	525056.374	227783.981	141.900	1.419			1	10.001	140.481	675
							2	1.009	140.481	675
							0	1.010	140.481	675
4	525029.988	227715.812	141.900	1.552			1	1.010	140.348	675
							0	1.011	140.348	675
5	525030.197	227705.655	141.900	1.570			1	11.004	140.555	450
							2	1.011	140.330	675
							0	1.012	140.330	675
6	525027.475	227693.385	141.900	1.593			1	12.002	140.757	225
							2	1.012	140.307	675
							0	1.013	140.307	675
7	524999.847	227627.627	141.900	1.723			1	13.003	140.402	450
							2	1.013	140.177	675
							0	1.014	140.177	675
8	524989.464	227605.204	141.900	1.768			1	1.014	140.132	675
							0	1.015	140.132	675
9	524990.526	227594.811	141.900	1.787	1500		1	1.015	140.113	675
							0	1.016	140.113	675

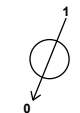
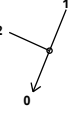
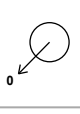
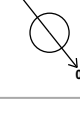
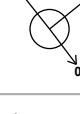
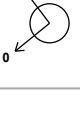
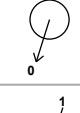
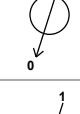
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
10	524986.384	227583.137	141.900	1.810	1500	 1	1.016	140.090	675
						0	1.017	140.090	675
SW09	524999.497	227574.209	141.900	1.935	1500	 1	14.001	140.340	300
						2	1.017	139.965	675
						0	1.018	139.965	675
SW15	525092.257	227756.388	142.600	1.566	1350	 1	9.000	141.034	225
						0	9.001	141.034	225
SW16	525098.178	227750.387	142.750	1.873	1350	 1	8.004	140.877	375
						0	8.005	140.877	375
SW17	525097.368	227759.567	142.500	1.727	1350	 1	9.001	140.998	225
						2	8.005	140.848	375
						0	8.006	140.773	450
SW83	525123.788	227742.323	142.950	1.987	1350	 1	8.003	141.038	300
						0	8.004	140.963	375
SW19	525084.669	227713.295	142.600	1.641	1350	 1	11.000	141.034	225
						0	11.001	140.959	300
SW20	525079.257	227698.207	142.400	1.509	1350	 1	11.001	140.891	300
						0	11.002	140.891	300
SW21	525053.436	227708.831	142.273	1.650	1350	 1	11.002	140.773	300
						0	11.003	140.623	450
SW22	525041.394	227713.761	142.240	1.650	1350	 1	11.003	140.590	450
						0	11.004	140.590	450
SW18	525093.209	227735.695	142.603	1.425	1200	 1			
						0	11.000	141.178	225
SW23	525071.352	227676.352	142.465	1.425	1200	 1			
						0	12.000	141.040	225
SW24	525041.430	227687.848	142.273	1.425	1200	 1	12.000	140.848	225
						0	12.001	140.848	225

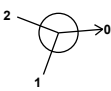
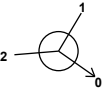
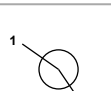
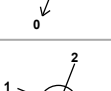
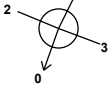
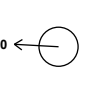
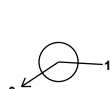
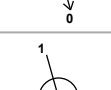
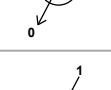
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
SW25	525034.489	227690.623	142.228	1.425	1200	 1 0	12.001	140.803	225
SW26	525056.913	227640.501	142.450	1.632	1350		12.002	140.803	225
SW27	525044.974	227611.417	142.200	1.589	1350	 0 1	13.000	140.818	300
SW28	525028.251	227618.076	142.128	1.650	1350		13.001	140.611	375
SW29	525008.898	227626.229	142.075	1.650	1350	 0 1	13.002	140.478	450
SW30	525026.937	227567.941	141.969	1.500	1200		13.003	140.425	450
SW31	525022.294	227564.579	141.944	1.500	1200	 0 1	14.000	140.469	300
11	525328.222	227774.816	143.900	3.222			14.001	140.444	300
12	525287.257	227741.535	143.850	3.268		 1 2 0	24.004	140.903	450
13	525266.449	227711.764	143.750	3.234			24.005	140.678	675
14	525261.172	227699.708	143.650	3.158		 1 0	26.005	140.882	375
SW37	525256.831	227690.094	143.550	3.079	1500		24.006	140.582	675
16	525252.437	227680.480	143.450	3.000		 1 0	24.007	140.516	675
							24.008	140.492	675
						 1 2 0	29.001	140.771	375
							24.008	140.471	675
						 1 0	24.009	140.471	675
							24.010	140.450	675

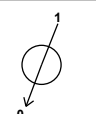
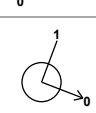
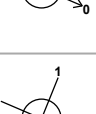
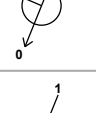
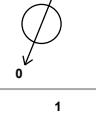
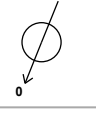
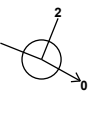
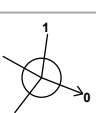
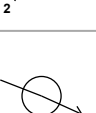
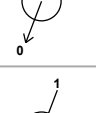
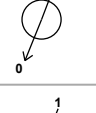
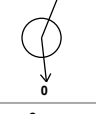
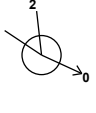
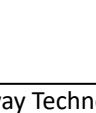
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
17	525223.494	227608.844	143.000	2.691		 1	24.010	140.309	675
						0	24.011	140.309	675
SW38	525222.370	227606.062	142.950	2.647	1500	 1	24.011	140.303	675
						0	24.012	140.303	675
19	525221.246	227603.280	143.200	2.903		 1	24.012	140.297	675
						0	24.013	140.297	675
20	525203.129	227558.536	142.550	2.341		 1	24.013	140.209	675
						2	16.014	140.284	600
						0	16.015	140.209	750
21	525180.863	227503.141	141.900	1.800		 1	16.015	140.100	750
						0	16.016	140.100	750
SW32	525312.626	227837.976	143.600	2.274	1350	 0	24.000	141.326	300
SW33	525300.698	227825.839	143.500	2.321	1350	 1	24.000	141.254	300
						0	24.001	141.179	375
SW34	525313.775	227809.356	143.650	2.539	1350	 1	24.001	141.111	375
						0	24.002	141.111	375
SW35	525329.909	227789.072	143.850	2.897	1350	 1	25.000	141.103	300
						2	24.002	141.028	375
						0	24.003	140.953	450
SW36	525335.958	227781.092	143.900	2.972	1350	 1	24.003	140.928	450
						0	24.004	140.928	450
SW41	525249.480	227792.512	143.250	1.500	1200	 0	26.000	141.750	300
SW42	525242.527	227770.427	143.400	1.747	1350	 1	26.000	141.653	300
						0	26.001	141.653	300
SW43	525240.097	227762.795	143.400	1.781	1350	 1	26.001	141.619	300
						0	26.002	141.619	300

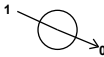
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
SW44	525257.954	227755.928	143.550	2.086	1350		1	27.000	141.693	150
						2	26.002	141.539	300	
						0	26.003	141.464	375	
SW45	525269.075	227756.841	143.600	2.172	1350		1	28.000	141.657	150
						2	26.003	141.428	375	
						0	26.004	141.428	375	
SW46	525283.956	227746.415	143.800	2.430	1350		1	26.004	141.370	375
						0	26.005	141.374	375	
SW47	525226.838	227734.319	143.400	1.500	1200		0	29.000	141.900	300
SW48	525216.049	227706.725	143.500	1.852	1350		1	30.000	141.723	300
						2	29.000	141.723	300	
						0	29.001	141.648	375	
SW39	525163.866	227508.483	141.939	1.875	1800		1	16.016	140.064	750
						0	16.017	140.064	750	
SW40	525133.909	227519.734	142.000	2.000	1800		1	33.001	140.450	225
						2	31.004	140.225	450	
						3	16.017	140.000	750	
						0	16.018	140.000	675	
SW49	525213.854	227779.285	143.200	2.023	1350		0	16.000	141.177	450
						1	16.000	141.095	450	
SW50	525181.150	227781.099	143.000	1.905	1350		0	16.001	141.095	450
						1	16.001	141.032	450	
SW51	525160.169	227767.178	143.000	1.968	1350		1	16.002	141.032	450
						0	16.002	140.994	450	
SW52	525164.293	227752.497	143.000	2.006	1350		1	16.002	140.994	450
						0	16.003	140.994	450	
SW53	525150.140	227725.540	143.000	2.157	1500		1	16.003	140.918	450
						0	16.004	140.843	525	
SW54	525140.071	227700.271	142.900	2.112	1500		1	16.004	140.788	525
						0	16.005	140.788	525	

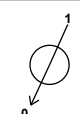
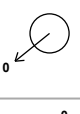
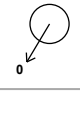
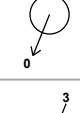
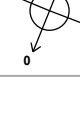
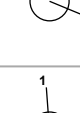
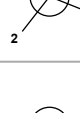
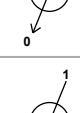
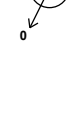
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
SW55	525132.637	227681.536	142.900	2.153	1500	 1	16.005	140.747	525
						 0	16.006	140.747	525
SW56	525120.366	227648.757	142.850	2.173	1500	 1	16.006	140.677	525
						 0	16.007	140.677	525
SW57	525150.218	227637.228	142.850	2.237	1500	 1	16.007	140.613	525
						 0	16.008	140.613	525
SW58	525178.332	227625.180	143.050	2.498	1500	 1 2	17.001	140.702	375
						 0	16.008	140.552	525
SW59	525170.965	227606.932	142.950	2.434	1500	 1	16.009	140.516	525
						 0	16.010	140.516	525
SW60	525164.250	227590.356	142.800	2.320	1500	 1	16.010	140.480	525
						 0	16.011	140.480	525
SW61	525159.623	227578.820	142.700	2.247	1500	 1 2	19.001	140.453	525
						 0	16.011	140.453	525
SW62	525178.854	227568.163	142.500	2.088	1500	 1 2 3	23.000	140.412	525
						 0	22.000	140.412	525
						 0	15.012	140.412	525
SW63	525200.255	227559.837	142.500	2.209	1500	1	16.013	140.412	600
						0	16.013	140.366	600
SW64	525107.196	227616.711	142.750	1.882	1200	1	16.014	140.291	600
						0	31.000	140.868	300
SW65	525097.340	227590.859	142.500	1.748	1350	1	31.000	140.752	300
						0	31.001	140.752	300
SW66	525081.022	227550.428	142.100	1.531	1350	1	31.001	140.569	300
						0	31.002	140.569	300
SW67	525081.943	227542.214	142.100	1.641	1200	1 2	32.000	140.609	225
						0	31.002	140.534	300
						0	30.003	140.459	375

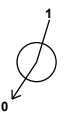
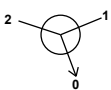
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
SW68	525103.416	227532.349	142.100	1.791	1350	 1	30.003	140.384	375
						0	31.004	140.309	450
SW69	525262.211	227879.011	143.100	1.611	1350	 0	1.000	141.489	300
SW70	525260.146	227858.126	143.050	1.650	1350	 1	1.000	141.400	300
						0	1.001	141.400	300
SW71	525206.895	227869.286	142.850	1.467	1200	 0	3.000	141.383	225
SW72	525205.789	227857.477	142.800	1.563	1350	 1	3.000	141.312	225
						0	3.001	141.237	300
SW73	525165.090	227866.503	142.692	1.425	1200	 0	4.000	141.267	225
SW74	525102.905	227869.228	142.741	1.425	1200	 0	5.000	141.316	225
SW75	525117.081	227842.508	142.560	1.500	1200	 1	5.000	141.135	225
						0	5.001	141.060	300
SW76	525136.141	227812.707	142.623	1.425	1200	 0	6.000	141.198	225
SW77	525127.905	227825.474	142.532	1.425	1200	 0	6.000	141.107	225
						1	6.001	141.107	225
SW78	525076.134	227802.274	142.408	1.500	1200	 1	7.000	140.908	300
						0	7.001	140.908	300
SW79	525144.089	227777.739	142.746	1.425	1200	 0	8.000	141.321	225
SW80	525139.878	227775.392	142.717	1.425	1200	 1	8.000	141.292	225
						0	8.001	141.292	225

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
SW81	525134.413	227763.281	142.737	1.600	1350	 1	8.001	141.212	225
						0	8.002	141.137	300
SW82	525126.243	227745.692	142.950	1.894	1350	 1	8.002	141.056	300
						0	8.003	141.056	300
SW84	525346.618	227802.549	143.850	2.656	1350	 0	25.000	141.194	300
SW85	525253.841	227744.609	143.600	1.350	1200	 0	27.000	142.250	150
SW86	525276.346	227769.003	143.600	1.350	1200	 0	28.000	142.250	150
SW87	525194.799	227715.269	143.450	1.500	1200	 0	30.000	141.950	300
SW88	525202.402	227684.831	143.200	1.350	1200	 0	17.000	141.850	150
SW89	525194.120	227664.291	143.100	2.259	1350	 1	19.000	140.916	300
						2	18.000	140.916	300
						3	17.000	141.066	150
						0	17.001	140.841	375
SW91	525204.822	227660.193	143.200	1.500	1200	 0	19.000	141.700	300
SW90	525181.611	227669.468	143.100	1.500	1200	 0	18.000	141.600	300
SW92	525147.429	227583.671	142.600	2.117	1500	 1	21.000	140.483	525
						2	20.000	140.483	525
						0	19.001	140.483	525
SW93	525153.295	227563.122	142.500	1.766	1350	 0	33.000	140.734	225
SW94	525143.617	227539.291	142.200	1.619	1350	 1	33.000	140.581	225
						0	33.001	140.581	225

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
SW95	525060.827	227556.250	142.186	1.425	1200		0	32.000	140.761	225
SW13	524980.115	227502.455	141.250	1.912	1350		1	1.023	139.338	225
							0	1.024	139.338	225
Tank 03	525173.743	227561.496	142.500	2.050						
							0	22.000	140.450	525
Tank 01	525073.604	227800.920	142.400	1.480						
							0	7.000	140.920	300
Tank 02	525179.996	227576.438	142.800	2.350						
							0	23.000	140.450	525
Tank 04	525146.892	227591.019	142.800	2.300						
							0	21.000	140.500	525
Tank 05	525139.801	227573.931	142.500	1.990						
							0	20.000	140.510	525
SW96	525034.127	227534.009	141.900	1.977	1500		1	15.000	139.998	600
							2	1.019	139.923	675
							0	1.020	139.923	675

Simulation Settings

Rainfall Methodology	FEH-22	Skip Steady State	x	Check Discharge Rate(s)	x
Rainfall Events	Singular	Drain Down Time (mins)	240	Check Discharge Volume	x
Summer CV	1.000	Additional Storage (m ³ /ha)	20.0		
Analysis Speed	Detailed	Starting Level (m)			

Storm Durations

15 | 30 | 60 | 120 | 180 | 240 | 360 | 480 | 600 | 720 | 960 | 1440

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
2	0	0	0
10	0	0	0
30	35	0	0
100	40	0	0

Node SW10 (FC) Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	✓	Sump Available	✓
Invert Level (m)	139.884	Product Number	CTL-SHE-0156-1430-2016-1430
Design Depth (m)	2.016	Min Outlet Diameter (m)	0.225
Design Flow (l/s)	14.3	Min Node Diameter (mm)	1800

Node Basin 04 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	139.950
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	489.2	0.0	1.000	1178.1	0.0	1.950	1900.2	0.0
0.500	819.4	0.0	1.500	1551.7	0.0			

Node Basin 03 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	140.100
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	7.7	0.0	1.000	101.3	0.0	1.800	230.2	0.0
0.500	41.5	0.0	1.500	177.4	0.0			

Node Basin 02 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	139.950
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	404.8	0.0	1.000	752.7	0.0	1.950	1136.9	0.0
0.500	571.1	0.0	1.500	948.5	0.0			

Node Tank 03 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	140.450
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	258.0	0.0	1.200	258.0	0.0	1.201	0.0	0.0

Node Basin 01 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	140.500
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	109.7	0.0	0.500	190.4	0.0	1.000	285.6	0.0	1.500	395.4	0.0

Node Tank 02 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	140.450
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	Time to half empty (mins)	

Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	258.0	0.0	1.200	258.0	0.0	1.201	0.0	0.0

Node Tank 01 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	140.920
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	Time to half empty (mins)	8

Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	96.0	0.0	0.800	96.0	0.0	0.801	0.0	0.0

Node Tank 04 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	140.500
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	Time to half empty (mins)	

Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	225.8	0.0	1.200	225.8	0.0	1.201	0.0	0.0

Node Tank 05 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	140.510
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	Time to half empty (mins)	

Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	225.8	0.0	1.200	225.8	0.0	1.201	0.0	0.0

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.41%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	Basin 04	480	140.586	0.636	77.2	445.2084	0.0000	OK
480 minute summer	Basin 03	480	140.586	0.486	2.7	11.7250	0.0000	OK
480 minute summer	Basin 02	480	140.586	0.636	66.6	324.9971	0.0000	OK
480 minute summer	SW10 (FC)	480	140.586	0.702	15.4	2.1136	0.0000	SURCHARGED
120 minute summer	SW11	196	139.835	0.094	14.3	0.1341	0.0000	OK
120 minute summer	SW12	196	139.553	0.097	14.3	0.1381	0.0000	OK
120 minute summer	EXManhole	196	139.104	0.074	14.3	0.0000	0.0000	OK
15 minute summer	SW14	10	141.191	0.077	9.8	0.1504	0.0000	OK
15 minute summer	SW01	10	141.396	0.068	7.9	0.1277	0.0000	OK
15 minute summer	SW02	11	141.301	0.144	34.8	0.3146	0.0000	OK
15 minute summer	SW03	11	141.170	0.225	73.5	0.8085	0.0000	OK
15 minute summer	SW04	12	141.122	0.247	92.8	0.6687	0.0000	OK
15 minute summer	SW05	12	141.020	0.322	150.5	0.8308	0.0000	OK
15 minute summer	SW06	12	140.953	0.334	153.2	0.7653	0.0000	OK
15 minute summer	SW07	12	140.903	0.312	160.0	0.6478	0.0000	OK
15 minute summer	SW08	13	140.821	0.267	206.5	0.6882	0.0000	OK
30 minute summer	Basin 01	22	140.767	0.267	182.2	35.0441	0.0000	OK
30 minute summer	1	23	140.753	0.166	6.1	0.0556	0.0000	OK
30 minute summer	2	23	140.752	0.223	15.4	0.0000	0.0000	OK
30 minute summer	3	23	140.750	0.269	142.5	0.0000	0.0000	OK
30 minute summer	4	23	140.633	0.285	140.2	0.0000	0.0000	OK
30 minute summer	5	23	140.620	0.290	153.7	0.0000	0.0000	OK
30 minute summer	6	23	140.600	0.293	160.6	0.0000	0.0000	OK
480 minute summer	7	480	140.586	0.409	69.1	0.0000	0.0000	OK
480 minute summer	8	480	140.586	0.454	67.9	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	Basin 04	16.019	SW10 (FC)	10.0	0.293	0.014	4.0532	
480 minute summer	Basin 03	15.000	SW96	-2.7	-0.029	-0.004	2.7362	
480 minute summer	Basin 02	1.019	SW96	15.3	0.207	0.037	4.6978	
480 minute summer	SW10 (FC)	Hydro-Brake®	SW11	14.3				
120 minute summer	SW11	1.022	SW12	14.3	0.897	0.357	0.7598	
120 minute summer	SW12	1.023	SW13	14.3	1.018	0.356	0.2775	
15 minute summer	SW14	9.000	SW15	9.7	0.648	0.242	0.2006	
15 minute summer	SW01	2.000	SW02	7.8	0.580	0.069	0.4086	
15 minute summer	SW02	1.002	SW03	35.1	0.781	0.219	2.4631	
15 minute summer	SW03	1.003	SW04	70.9	0.757	0.329	3.2734	
15 minute summer	SW04	1.004	SW05	90.9	0.916	0.423	5.1063	
15 minute summer	SW05	1.005	SW06	147.0	0.932	0.481	6.2396	
15 minute summer	SW06	1.006	SW07	152.8	0.988	0.500	2.1300	
15 minute summer	SW07	1.007	SW08	159.7	1.193	0.522	2.4555	
15 minute summer	SW08	1.008	Basin 01	206.0	2.268	0.421	1.2445	
30 minute summer	Basin 01	1.009	3	142.5	1.172	0.342	1.2632	
30 minute summer	1	10.000	2	-3.1	0.293	-0.007	2.4560	
30 minute summer	2	10.001	3	-15.4	0.285	-0.037	2.8027	
30 minute summer	3	1.010	4	140.2	1.016	0.353	10.0826	
30 minute summer	4	1.011	5	140.8	0.980	0.354	1.4712	
30 minute summer	5	1.012	6	153.9	1.045	0.386	1.8515	
30 minute summer	6	1.013	7	161.1	1.030	0.405	11.2039	
480 minute summer	7	1.014	8	67.9	0.759	0.171	5.9484	
480 minute summer	8	1.015	9	67.1	0.784	0.169	2.7290	

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.41%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	9	480	140.586	0.473	67.1	0.8358	0.0000	OK
480 minute summer	10	480	140.586	0.496	66.4	0.8764	0.0000	OK
480 minute summer	SW09	480	140.586	0.621	67.6	1.4053	0.0000	OK
15 minute summer	SW15	10	141.138	0.104	15.1	0.1910	0.0000	OK
15 minute summer	SW16	11	140.991	0.114	20.5	0.1750	0.0000	OK
15 minute summer	SW17	11	140.924	0.151	38.1	0.2514	0.0000	OK
15 minute summer	SW83	11	141.070	0.107	18.9	0.1632	0.0000	OK
15 minute summer	SW19	10	141.049	0.090	13.1	0.1882	0.0000	OK
15 minute summer	SW20	11	140.997	0.106	18.3	0.1962	0.0000	OK
15 minute summer	SW21	11	140.757	0.134	26.6	0.2770	0.0000	OK
15 minute summer	SW22	11	140.723	0.133	31.6	0.2407	0.0000	OK
15 minute summer	SW18	11	141.227	0.049	4.2	0.0727	0.0000	OK
15 minute summer	SW23	10	141.107	0.067	8.1	0.1214	0.0000	OK
15 minute summer	SW24	11	140.959	0.111	16.2	0.2025	0.0000	OK
15 minute summer	SW25	11	140.915	0.111	18.5	0.1512	0.0000	OK
15 minute summer	SW26	11	140.901	0.083	12.0	0.1913	0.0000	OK
15 minute summer	SW27	10	140.763	0.152	36.3	0.4997	0.0000	OK
15 minute summer	SW28	11	140.645	0.167	41.1	0.3039	0.0000	OK
15 minute summer	SW29	11	140.595	0.170	50.8	0.3653	0.0000	OK
480 minute summer	SW30	480	140.586	0.117	0.6	0.1573	0.0000	OK
480 minute summer	SW31	480	140.586	0.142	0.6	0.1606	0.0000	OK
15 minute summer	11	11	140.833	0.155	49.5	0.0000	0.0000	OK
15 minute summer	12	12	140.814	0.232	96.1	0.0000	0.0000	OK
15 minute summer	13	12	140.788	0.272	93.0	0.0000	0.0000	OK
15 minute summer	14	12	140.783	0.291	92.8	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	9	1.016	10	66.4	0.975	0.167	3.3957	
480 minute summer	10	1.017	SW09	65.3	0.612	0.078	4.9551	
480 minute summer	SW09	1.018	Basin 02	66.6	0.983	0.158	2.5318	
15 minute summer	SW15	9.001	SW17	14.8	0.886	0.369	0.1009	
15 minute summer	SW16	8.005	SW17	20.1	0.776	0.179	0.2401	
15 minute summer	SW17	8.006	SW08	37.5	0.886	0.229	1.1321	
15 minute summer	SW83	8.004	SW16	18.9	0.702	0.168	0.7238	
15 minute summer	SW19	11.001	SW20	12.9	0.659	0.179	0.3185	
15 minute summer	SW20	11.002	SW21	18.2	0.842	0.253	0.6023	
15 minute summer	SW21	11.003	SW22	26.6	0.674	0.164	0.5131	
15 minute summer	SW22	11.004	5	31.5	0.858	0.195	0.5073	
15 minute summer	SW18	11.000	SW19	4.1	0.650	0.102	0.1506	
15 minute summer	SW23	12.000	SW24	7.9	0.544	0.197	0.4718	
15 minute summer	SW24	12.001	SW25	15.9	0.814	0.397	0.1465	
15 minute summer	SW25	12.002	6	18.6	0.980	0.460	0.1433	
15 minute summer	SW26	13.000	SW27	11.7	0.749	0.163	0.4905	
15 minute summer	SW27	13.001	SW28	36.0	0.924	0.320	0.7012	
15 minute summer	SW28	13.002	SW29	41.3	0.763	0.257	1.1381	
15 minute summer	SW29	13.003	7	51.0	0.989	0.316	0.4722	
480 minute summer	SW30	14.000	SW31	0.6	0.305	0.008	0.1669	
480 minute summer	SW31	14.001	SW09	0.6	0.333	0.008	1.1712	
15 minute summer	11	24.005	12	48.4	0.587	0.122	4.4812	
15 minute summer	12	24.006	13	93.0	0.769	0.234	4.4143	
15 minute summer	13	24.007	14	92.8	0.684	0.233	1.8519	
15 minute summer	14	24.008	SW37	94.9	0.663	0.228	1.5903	

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.41%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	SW37	12	140.773	0.302	159.4	0.8422	0.0000	OK
15 minute summer	16	12	140.739	0.289	159.4	0.0000	0.0000	OK
15 minute summer	17	13	140.637	0.328	157.9	0.0000	0.0000	OK
15 minute summer	SW38	13	140.619	0.316	163.2	0.7698	0.0000	OK
15 minute summer	19	13	140.597	0.299	163.6	0.0000	0.0000	OK
480 minute summer	20	480	140.586	0.377	65.5	0.0000	0.0000	OK
480 minute summer	21	480	140.586	0.486	65.1	0.0000	0.0000	OK
15 minute summer	SW32	10	141.405	0.079	10.3	0.1547	0.0000	OK
15 minute summer	SW33	11	141.259	0.080	11.6	0.1201	0.0000	OK
15 minute summer	SW34	11	141.223	0.111	20.4	0.2071	0.0000	OK
15 minute summer	SW35	11	141.135	0.182	46.7	0.3863	0.0000	OK
15 minute summer	SW36	11	141.096	0.168	49.5	0.2582	0.0000	OK
15 minute summer	SW41	10	141.808	0.058	6.1	0.0934	0.0000	OK
15 minute summer	SW42	11	141.759	0.106	16.3	0.2248	0.0000	OK
15 minute summer	SW43	11	141.722	0.103	16.7	0.1530	0.0000	OK
15 minute summer	SW44	11	141.603	0.139	25.5	0.2268	0.0000	OK
15 minute summer	SW45	11	141.576	0.148	38.7	0.2590	0.0000	OK
15 minute summer	SW46	11	141.451	0.081	47.6	0.1530	0.0000	OK
15 minute summer	SW47	10	141.993	0.093	17.5	0.2349	0.0000	OK
15 minute summer	SW48	11	141.757	0.109	50.7	0.2511	0.0000	OK
480 minute summer	SW39	480	140.586	0.522	63.8	1.4956	0.0000	OK
480 minute summer	SW40	480	140.586	0.586	79.6	2.1711	0.0000	OK
15 minute summer	SW49	11	141.229	0.052	4.9	0.0900	0.0000	OK
15 minute summer	SW50	11	141.208	0.113	21.6	0.2806	0.0000	OK
15 minute summer	SW51	11	141.171	0.138	27.3	0.2531	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	SW37	24.009	16	159.4	1.066	0.384	1.5868	
15 minute summer	16	24.010	17	157.9	1.015	0.397	12.0874	
15 minute summer	17	24.011	SW38	155.9	0.930	0.374	0.5030	
15 minute summer	SW38	24.012	19	163.6	1.035	0.392	0.4745	
15 minute summer	19	24.013	20	164.6	1.038	0.414	7.6560	
480 minute summer	20	16.015	21	65.1	0.732	0.124	15.6271	
480 minute summer	21	16.016	SW39	62.7	0.677	0.114	5.6041	
15 minute summer	SW32	24.000	SW33	10.1	0.711	0.140	0.2419	
15 minute summer	SW33	24.001	SW34	11.5	0.522	0.102	0.4675	
15 minute summer	SW34	24.002	SW35	20.4	0.785	0.181	0.6908	
15 minute summer	SW35	24.003	SW36	46.9	0.823	0.292	0.5704	
15 minute summer	SW36	24.004	11	49.5	0.980	0.308	0.5037	
15 minute summer	SW41	26.000	SW42	6.0	0.387	0.083	0.3652	
15 minute summer	SW42	26.001	SW43	15.9	0.739	0.221	0.1740	
15 minute summer	SW43	26.002	SW44	16.8	0.814	0.234	0.3944	
15 minute summer	SW44	26.003	SW45	25.6	0.662	0.227	0.4315	
15 minute summer	SW45	26.004	SW46	38.8	1.367	0.345	0.5250	
15 minute summer	SW46	26.005	12	47.7	3.077	0.082	0.0914	
15 minute summer	SW47	29.000	SW48	17.1	0.942	0.199	0.5379	
15 minute summer	SW48	29.001	SW37	50.5	1.935	0.179	1.1502	
480 minute summer	SW39	16.017	SW40	61.9	0.596	0.113	11.1410	
480 minute summer	SW40	16.018	Basin 04	77.2	1.424	0.109	2.9807	
15 minute summer	SW49	16.000	SW50	4.8	0.239	0.030	0.6784	
15 minute summer	SW50	16.001	SW51	21.0	0.586	0.131	0.9130	
15 minute summer	SW51	16.002	SW52	27.0	0.623	0.169	0.6615	

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.41%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	SW52	11	141.142	0.148	36.5	0.2992	0.0000	OK
15 minute summer	SW53	12	141.011	0.168	41.5	0.3551	0.0000	OK
15 minute summer	SW54	12	140.976	0.188	50.7	0.4485	0.0000	OK
15 minute summer	SW55	12	140.941	0.194	55.6	0.4211	0.0000	OK
15 minute summer	SW56	12	140.903	0.226	64.4	0.5566	0.0000	OK
15 minute summer	SW57	12	140.875	0.262	66.7	0.5662	0.0000	OK
15 minute summer	SW58	12	140.854	0.302	114.7	0.8282	0.0000	OK
15 minute summer	SW59	12	140.802	0.286	112.8	0.5289	0.0000	OK
15 minute summer	SW60	12	140.739	0.259	117.2	0.5555	0.0000	OK
15 minute summer	SW61	12	140.665	0.211	121.3	0.4377	0.0000	OK
480 minute summer	SW62	480	140.586	0.174	31.9	0.5012	0.0000	OK
480 minute summer	SW63	480	140.586	0.295	29.4	0.6789	0.0000	OK
15 minute summer	SW64	10	140.947	0.079	11.3	0.1456	0.0000	OK
15 minute summer	SW65	11	140.860	0.108	20.9	0.2267	0.0000	OK
15 minute summer	SW66	11	140.718	0.149	30.4	0.3328	0.0000	OK
15 minute summer	SW67	11	140.629	0.170	44.1	0.2708	0.0000	OK
480 minute summer	SW68	480	140.586	0.277	10.6	0.4739	0.0000	OK
15 minute summer	SW69	10	141.551	0.062	6.9	0.1194	0.0000	OK
15 minute summer	SW70	11	141.497	0.097	15.6	0.2000	0.0000	OK
15 minute summer	SW71	10	141.447	0.064	6.7	0.1079	0.0000	OK
15 minute summer	SW72	10	141.320	0.083	11.3	0.1481	0.0000	OK
15 minute summer	SW73	10	141.343	0.076	9.3	0.1445	0.0000	OK
15 minute summer	SW74	10	141.397	0.081	11.1	0.1674	0.0000	OK
15 minute summer	SW75	10	141.206	0.146	30.8	0.3956	0.0000	OK
15 minute summer	SW76	10	141.280	0.082	11.6	0.1729	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	SW52	16.003	SW53	35.6	0.869	0.222	1.2569	
15 minute summer	SW53	16.004	SW54	41.2	0.644	0.190	1.7517	
15 minute summer	SW54	16.005	SW55	49.9	0.713	0.230	1.4322	
15 minute summer	SW55	16.006	SW56	54.4	0.694	0.253	2.8218	
15 minute summer	SW56	16.007	SW57	62.0	0.640	0.288	3.1411	
15 minute summer	SW57	16.008	SW58	69.0	0.621	0.320	3.6108	
15 minute summer	SW58	16.009	SW59	111.5	0.897	0.542	2.4469	
15 minute summer	SW59	16.010	SW60	113.2	1.009	0.524	2.0230	
15 minute summer	SW60	16.011	SW61	118.5	1.278	0.528	1.1642	
15 minute summer	SW61	15.012	SW62	86.5	1.323	0.401	1.3568	
480 minute summer	SW62	16.013	SW63	28.1	0.748	0.092	1.8531	
480 minute summer	SW63	16.014	20	29.3	0.775	0.091	0.4417	
15 minute summer	SW64	31.000	SW65	11.1	0.604	0.155	0.5185	
15 minute summer	SW65	31.001	SW66	20.4	0.713	0.285	1.2566	
15 minute summer	SW66	31.002	SW67	30.2	0.931	0.422	0.2687	
15 minute summer	SW67	30.003	SW68	43.8	0.974	0.391	1.0637	
480 minute summer	SW68	31.004	SW40	10.6	0.614	0.065	3.9378	
15 minute summer	SW69	1.000	SW70	6.8	0.461	0.094	0.3143	
15 minute summer	SW70	1.001	SW02	15.3	0.801	0.213	0.4205	
15 minute summer	SW71	3.000	SW72	6.6	0.729	0.164	0.1072	
15 minute summer	SW72	3.001	SW03	11.2	0.732	0.155	0.2413	
15 minute summer	SW73	4.000	SW04	9.1	0.801	0.227	0.1746	
15 minute summer	SW74	5.000	SW75	10.8	0.853	0.270	0.3840	
15 minute summer	SW75	5.001	SW05	30.3	0.948	0.423	0.4726	
15 minute summer	SW76	6.000	SW77	11.5	0.653	0.286	0.2676	

Results for 2 year Critical Storm Duration. Lowest mass balance: 99.41%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	SW77	10	141.229	0.122	19.9	0.2245	0.0000	OK
15 minute summer	SW78	10	140.961	0.053	6.6	0.0872	0.0000	OK
15 minute summer	SW79	10	141.400	0.079	8.6	0.1457	0.0000	OK
15 minute summer	SW80	10	141.369	0.076	9.3	0.0918	0.0000	OK
15 minute summer	SW81	11	141.223	0.086	12.6	0.1465	0.0000	OK
15 minute summer	SW82	11	141.166	0.110	17.2	0.1899	0.0000	OK
15 minute summer	SW84	10	141.272	0.078	10.4	0.1488	0.0000	OK
15 minute summer	SW85	10	142.290	0.040	5.6	0.0646	0.0000	OK
15 minute summer	SW86	10	142.299	0.049	7.8	0.0880	0.0000	OK
15 minute summer	SW87	10	142.040	0.090	20.6	0.2490	0.0000	OK
15 minute summer	SW88	10	141.879	0.029	2.7	0.0396	0.0000	OK
15 minute summer	SW89	11	140.995	0.153	39.1	0.2767	0.0000	OK
15 minute summer	SW91	10	141.745	0.045	14.5	0.1028	0.0000	OK
15 minute summer	SW90	10	141.649	0.049	15.0	0.1145	0.0000	OK
15 minute summer	SW92	11	140.631	0.148	57.7	0.5049	0.0000	OK
15 minute summer	SW93	10	140.791	0.057	5.7	0.1026	0.0000	OK
15 minute summer	SW94	11	140.675	0.094	14.0	0.1924	0.0000	OK
15 minute summer	SW95	10	140.829	0.068	7.9	0.1223	0.0000	OK
120 minute summer	SW13	196	139.414	0.076	14.3	0.1094	0.0000	OK
480 minute summer	Tank 03	480	140.586	0.136	4.6	33.3658	0.0000	OK
120 minute summer	Tank 01	82	140.932	0.012	1.0	1.0964	0.0000	OK
480 minute summer	Tank 02	480	140.586	0.136	4.6	33.3658	0.0000	OK
180 minute summer	Tank 04	108	140.608	0.108	14.0	23.0940	0.0000	OK
180 minute summer	Tank 05	116	140.605	0.095	11.7	20.3977	0.0000	OK
480 minute summer	SW96	480	140.586	0.663	15.3	1.1715	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	SW77	6.001	SW05	19.6	0.951	0.485	0.1156	
15 minute summer	SW78	7.001	SW07	4.3	0.546	0.059	0.0309	
15 minute summer	SW79	8.000	SW80	8.5	0.702	0.212	0.0585	
15 minute summer	SW80	8.001	SW81	9.2	0.804	0.229	0.1521	
15 minute summer	SW81	8.002	SW82	12.7	0.635	0.177	0.3895	
15 minute summer	SW82	8.003	SW83	17.3	0.795	0.241	0.0906	
15 minute summer	SW84	25.000	SW35	10.2	0.718	0.141	0.3053	
15 minute summer	SW85	27.000	SW44	5.5	1.515	0.144	0.0440	
15 minute summer	SW86	28.000	SW45	7.7	1.603	0.211	0.0682	
15 minute summer	SW87	30.000	SW48	20.2	1.174	0.183	0.3952	
15 minute summer	SW88	17.000	SW89	2.7	1.128	0.079	0.0522	
15 minute summer	SW89	17.001	SW58	38.5	0.959	0.337	1.6941	
15 minute summer	SW91	19.000	SW89	14.4	1.909	0.049	0.1209	
15 minute summer	SW90	18.000	SW89	14.9	1.750	0.059	0.1490	
15 minute summer	SW92	19.001	SW61	-36.3	-0.584	-0.167	0.9646	
15 minute summer	SW93	33.000	SW94	5.6	0.489	0.140	0.3012	
15 minute summer	SW94	33.001	SW40	13.7	0.902	0.342	0.3327	
15 minute summer	SW95	32.000	SW67	7.7	0.777	0.193	0.2524	
120 minute summer	SW13	1.024	EXManhole	14.3	1.236	0.234	0.2576	271.7
480 minute summer	Tank 03	22.000	SW62	-4.6	-0.217	-0.014	0.4488	
120 minute summer	Tank 01	7.000	SW78	-1.0	-0.428	-0.014	0.0081	
480 minute summer	Tank 02	23.000	SW62	-4.6	-0.217	-0.014	0.4462	
180 minute summer	Tank 04	21.000	SW92	-14.0	-0.708	-0.061	0.2605	
180 minute summer	Tank 05	20.000	SW92	-11.7	-0.548	-0.052	0.3954	
480 minute summer	SW96	1.020	SW10 (FC)	11.3	0.120	0.027	6.9752	

Results for 10 year Critical Storm Duration. Lowest mass balance: 99.41%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	Basin 04	488	140.833	0.883	114.9	693.7896	0.0000	SURCHARGED
480 minute summer	Basin 03	488	140.833	0.733	5.2	25.2265	0.0000	SURCHARGED
480 minute summer	Basin 02	488	140.833	0.883	100.0	489.4431	0.0000	SURCHARGED
480 minute summer	SW10 (FC)	488	140.833	0.949	36.7	2.8579	0.0000	SURCHARGED
600 minute summer	SW11	300	139.835	0.094	14.3	0.1341	0.0000	OK
1440 minute summer	SW12	720	139.553	0.097	14.3	0.1381	0.0000	OK
1440 minute summer	EXManhole	720	139.104	0.074	14.3	0.0000	0.0000	OK
15 minute summer	SW14	10	141.239	0.125	20.1	0.2427	0.0000	OK
15 minute summer	SW01	10	141.422	0.094	16.3	0.1776	0.0000	OK
15 minute summer	SW02	11	141.372	0.215	72.2	0.4689	0.0000	OK
15 minute summer	SW03	12	141.337	0.392	149.6	1.4070	0.0000	OK
15 minute summer	SW04	12	141.302	0.427	180.6	1.1556	0.0000	OK
15 minute summer	SW05	12	141.224	0.526	293.9	1.3558	0.0000	OK
15 minute summer	SW06	12	141.131	0.512	302.2	1.1728	0.0000	OK
15 minute summer	SW07	12	141.056	0.465	311.2	0.9652	0.0000	OK
15 minute summer	SW08	13	140.967	0.413	389.9	1.0651	0.0000	OK
30 minute summer	Basin 01	22	140.912	0.412	354.5	58.9344	0.0000	OK
15 minute summer	1	14	140.904	0.317	19.9	0.1061	0.0000	OK
30 minute summer	2	22	140.900	0.371	18.1	0.0000	0.0000	OK
30 minute summer	3	22	140.899	0.418	279.9	0.0000	0.0000	OK
480 minute summer	4	480	140.833	0.485	78.9	0.0000	0.0000	OK
480 minute summer	5	480	140.833	0.503	87.9	0.0000	0.0000	OK
480 minute summer	6	480	140.833	0.526	93.6	0.0000	0.0000	OK
480 minute summer	7	488	140.833	0.656	107.3	0.0000	0.0000	OK
480 minute summer	8	488	140.833	0.701	103.1	0.0000	0.0000	SURCHARGED

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	Basin 04	16.019	SW10 (FC)	-22.3	0.342	-0.031	4.1006	
480 minute summer	Basin 03	15.000	SW96	-5.2	-0.021	-0.008	2.9370	
480 minute summer	Basin 02	1.019	SW96	38.5	0.237	0.092	4.7632	
480 minute summer	SW10 (FC)	Hydro-Brake®	SW11	14.3				
600 minute summer	SW11	1.022	SW12	14.3	0.897	0.357	0.7598	
1440 minute summer	SW12	1.023	SW13	14.3	1.018	0.356	0.2775	
15 minute summer	SW14	9.000	SW15	19.8	0.729	0.494	0.3620	
15 minute summer	SW01	2.000	SW02	16.0	0.611	0.142	0.8841	
15 minute summer	SW02	1.002	SW03	70.5	0.805	0.439	5.2866	
15 minute summer	SW03	1.003	SW04	135.8	0.836	0.630	6.3006	
15 minute summer	SW04	1.004	SW05	175.1	0.925	0.814	9.8544	
15 minute summer	SW05	1.005	SW06	289.6	1.118	0.947	10.2464	
15 minute summer	SW06	1.006	SW07	303.6	1.236	0.992	3.3779	
15 minute summer	SW07	1.007	SW08	293.6	1.358	0.960	4.0147	
15 minute summer	SW08	1.008	Basin 01	384.5	2.436	0.786	2.1523	
30 minute summer	Basin 01	1.009	3	279.9	1.316	0.671	2.2103	
15 minute summer	1	10.000	2	-12.6	0.441	-0.030	5.2582	
30 minute summer	2	10.001	3	-18.1	0.331	-0.043	5.1678	
30 minute summer	3	1.010	4	277.9	1.140	0.699	17.9008	
480 minute summer	4	1.011	5	76.8	0.763	0.193	2.8409	
480 minute summer	5	1.012	6	87.1	0.842	0.219	3.6651	
480 minute summer	6	1.013	7	90.6	0.723	0.228	23.2623	
480 minute summer	7	1.014	8	103.1	0.723	0.259	8.7854	
480 minute summer	8	1.015	9	101.6	0.702	0.256	3.7293	

Results for 10 year Critical Storm Duration. Lowest mass balance: 99.41%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	9	488	140.833	0.720	101.6	1.2722	0.0000	SURCHARGED
480 minute summer	10	488	140.833	0.743	100.5	1.3130	0.0000	SURCHARGED
480 minute summer	SW09	488	140.833	0.868	101.9	1.9645	0.0000	SURCHARGED
15 minute summer	SW15	10	141.200	0.166	30.9	0.3057	0.0000	OK
15 minute summer	SW16	11	141.053	0.176	42.2	0.2705	0.0000	OK
15 minute summer	SW17	11	141.010	0.237	78.6	0.3936	0.0000	OK
15 minute summer	SW83	11	141.124	0.161	38.8	0.2463	0.0000	OK
15 minute summer	SW19	10	141.098	0.139	27.1	0.2912	0.0000	OK
15 minute summer	SW20	11	141.052	0.161	37.7	0.2983	0.0000	OK
480 minute summer	SW21	480	140.833	0.210	9.3	0.4323	0.0000	OK
480 minute summer	SW22	480	140.833	0.243	11.1	0.4384	0.0000	OK
15 minute summer	SW18	10	141.250	0.072	8.6	0.1061	0.0000	OK
15 minute summer	SW23	10	141.139	0.099	16.6	0.1787	0.0000	OK
15 minute summer	SW24	11	141.036	0.188	33.2	0.3413	0.0000	OK
15 minute summer	SW25	11	140.982	0.179	37.9	0.2433	0.0000	OK
15 minute summer	SW26	10	140.938	0.120	24.6	0.2766	0.0000	OK
15 minute summer	SW27	10	140.843	0.232	75.6	0.7645	0.0000	OK
480 minute summer	SW28	488	140.833	0.355	14.4	0.6453	0.0000	OK
480 minute summer	SW29	488	140.833	0.408	17.6	0.8756	0.0000	OK
480 minute summer	SW30	488	140.833	0.364	0.9	0.4894	0.0000	SURCHARGED
480 minute summer	SW31	488	140.833	0.389	1.0	0.4401	0.0000	SURCHARGED
15 minute summer	11	12	140.982	0.304	101.6	0.0000	0.0000	OK
15 minute summer	12	12	140.974	0.392	189.5	0.0000	0.0000	OK
15 minute summer	13	12	140.958	0.441	184.1	0.0000	0.0000	OK
15 minute summer	14	12	140.952	0.460	183.1	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	9	1.016	10	100.5	0.879	0.253	4.4219	
480 minute summer	10	1.017	SW09	99.1	0.708	0.119	5.6631	
480 minute summer	SW09	1.018	Basin 02	100.0	1.155	0.237	2.6109	
15 minute summer	SW15	9.001	SW17	30.4	1.041	0.758	0.1757	
15 minute summer	SW16	8.005	SW17	41.7	0.876	0.370	0.4430	
15 minute summer	SW17	8.006	SW08	77.6	0.972	0.473	2.3056	
15 minute summer	SW83	8.004	SW16	38.9	0.822	0.346	1.2863	
15 minute summer	SW19	11.001	SW20	26.6	0.764	0.370	0.5620	
15 minute summer	SW20	11.002	SW21	37.6	1.023	0.522	1.0250	
480 minute summer	SW21	11.003	SW22	9.3	0.510	0.057	1.0376	
480 minute summer	SW22	11.004	5	11.1	0.643	0.069	1.3116	
15 minute summer	SW18	11.000	SW19	8.4	0.794	0.208	0.2539	
15 minute summer	SW23	12.000	SW24	16.3	0.625	0.407	0.8327	
15 minute summer	SW24	12.001	SW25	32.6	0.941	0.813	0.2591	
15 minute summer	SW25	12.002	6	38.1	1.173	0.941	0.2446	
15 minute summer	SW26	13.000	SW27	24.4	0.770	0.340	1.0013	
15 minute summer	SW27	13.001	SW28	74.1	1.135	0.659	1.1762	
480 minute summer	SW28	13.002	SW29	14.2	0.566	0.088	2.9933	
480 minute summer	SW29	13.003	7	17.2	0.703	0.107	1.4065	
480 minute summer	SW30	14.000	SW31	0.9	0.337	0.012	0.4036	
480 minute summer	SW31	14.001	SW09	0.8	0.328	0.011	1.7427	
15 minute summer	11	24.005	12	95.1	0.614	0.239	9.7843	
15 minute summer	12	24.006	13	184.1	0.797	0.464	8.3903	
15 minute summer	13	24.007	14	183.1	0.754	0.460	3.3310	
15 minute summer	14	24.008	SW37	187.6	0.760	0.451	2.7624	

Results for 10 year Critical Storm Duration. Lowest mass balance: 99.41%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	SW37	12	140.940	0.469	316.2	1.3076	0.0000	OK
15 minute summer	16	12	140.902	0.451	314.7	0.0000	0.0000	OK
480 minute summer	17	488	140.833	0.524	61.0	0.0000	0.0000	OK
480 minute summer	SW38	488	140.833	0.530	63.3	1.2924	0.0000	OK
480 minute summer	19	488	140.833	0.536	62.9	0.0000	0.0000	OK
480 minute summer	20	488	140.833	0.624	98.4	0.0000	0.0000	OK
480 minute summer	21	488	140.833	0.733	93.7	0.0000	0.0000	OK
15 minute summer	SW32	10	141.442	0.116	21.1	0.2287	0.0000	OK
15 minute summer	SW33	11	141.305	0.126	23.9	0.1900	0.0000	OK
15 minute summer	SW34	11	141.282	0.171	42.0	0.3170	0.0000	OK
15 minute summer	SW35	11	141.228	0.275	96.1	0.5830	0.0000	OK
15 minute summer	SW36	11	141.175	0.247	101.4	0.3799	0.0000	OK
15 minute summer	SW41	10	141.833	0.083	12.5	0.1341	0.0000	OK
15 minute summer	SW42	11	141.816	0.163	33.4	0.3465	0.0000	OK
15 minute summer	SW43	11	141.774	0.155	34.3	0.2310	0.0000	OK
15 minute summer	SW44	11	141.678	0.214	52.4	0.3502	0.0000	OK
15 minute summer	SW45	11	141.644	0.216	79.5	0.3784	0.0000	OK
15 minute summer	SW46	11	141.489	0.119	98.0	0.2233	0.0000	OK
15 minute summer	SW47	10	142.040	0.140	36.0	0.3529	0.0000	OK
15 minute summer	SW48	10	141.811	0.163	104.6	0.3747	0.0000	OK
480 minute summer	SW39	488	140.833	0.769	91.7	2.2033	0.0000	SURCHARGED
480 minute summer	SW40	488	140.833	0.833	115.8	3.0868	0.0000	SURCHARGED
15 minute summer	SW49	11	141.275	0.098	10.0	0.1689	0.0000	OK
15 minute summer	SW50	11	141.272	0.177	42.7	0.4386	0.0000	OK
15 minute summer	SW51	11	141.243	0.211	54.9	0.3864	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	SW37	24.009	16	314.7	1.251	0.757	2.7402	
15 minute summer	16	24.010	17	311.4	1.173	0.782	20.6364	
480 minute summer	17	24.011	SW38	58.2	0.668	0.140	0.8964	
480 minute summer	SW38	24.012	19	62.9	0.763	0.151	0.9064	
480 minute summer	19	24.013	20	60.8	0.653	0.153	15.6516	
480 minute summer	20	16.015	21	93.7	0.689	0.179	24.7471	
480 minute summer	21	16.016	SW39	90.0	0.620	0.163	7.8189	
15 minute summer	SW32	24.000	SW33	20.8	0.861	0.288	0.4108	
15 minute summer	SW33	24.001	SW34	23.7	0.589	0.210	0.8546	
15 minute summer	SW34	24.002	SW35	41.8	0.817	0.371	1.4055	
15 minute summer	SW35	24.003	SW36	96.1	1.009	0.598	0.9533	
15 minute summer	SW36	24.004	11	101.6	1.218	0.631	0.8309	
15 minute summer	SW41	26.000	SW42	12.3	0.454	0.172	0.6355	
15 minute summer	SW42	26.001	SW43	32.6	0.867	0.454	0.3035	
15 minute summer	SW43	26.002	SW44	34.5	0.988	0.481	0.6684	
15 minute summer	SW44	26.003	SW45	52.7	0.806	0.467	0.7293	
15 minute summer	SW45	26.004	SW46	79.9	1.684	0.711	0.8669	
15 minute summer	SW46	26.005	12	98.2	3.708	0.169	0.1562	
15 minute summer	SW47	29.000	SW48	35.2	1.138	0.411	0.9217	
15 minute summer	SW48	29.001	SW37	103.7	2.336	0.366	1.9547	
480 minute summer	SW39	16.017	SW40	89.1	0.571	0.162	14.0839	
480 minute summer	SW40	16.018	Basin 04	112.4	1.579	0.159	3.1396	
15 minute summer	SW49	16.000	SW50	9.5	0.271	0.059	1.3642	
15 minute summer	SW50	16.001	SW51	42.0	0.651	0.261	1.6479	
15 minute summer	SW51	16.002	SW52	54.1	0.721	0.337	1.1432	

Results for 10 year Critical Storm Duration. Lowest mass balance: 99.41%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	SW52	11	141.214	0.220	73.6	0.4436	0.0000	OK
15 minute summer	SW53	12	141.138	0.295	85.0	0.6247	0.0000	OK
15 minute summer	SW54	12	141.125	0.337	98.8	0.8020	0.0000	OK
15 minute summer	SW55	12	141.110	0.363	104.8	0.7864	0.0000	OK
15 minute summer	SW56	12	141.088	0.411	119.2	1.0148	0.0000	OK
15 minute summer	SW57	12	141.063	0.450	128.0	0.9723	0.0000	OK
15 minute summer	SW58	12	141.035	0.483	225.6	1.3260	0.0000	OK
15 minute summer	SW59	12	140.960	0.444	228.6	0.8201	0.0000	OK
15 minute summer	SW60	12	140.863	0.383	240.5	0.8218	0.0000	OK
480 minute summer	SW61	488	140.833	0.380	53.6	0.7863	0.0000	OK
480 minute summer	SW62	488	140.833	0.421	55.7	1.2112	0.0000	OK
480 minute summer	SW63	488	140.833	0.542	38.6	1.2468	0.0000	OK
15 minute summer	SW64	10	140.984	0.116	23.2	0.2138	0.0000	OK
15 minute summer	SW65	11	140.915	0.163	43.1	0.3413	0.0000	OK
480 minute summer	SW66	488	140.833	0.264	10.8	0.5915	0.0000	OK
480 minute summer	SW67	488	140.833	0.374	15.7	0.5961	0.0000	OK
480 minute summer	SW68	488	140.833	0.524	16.8	0.8967	0.0000	SURCHARGED
15 minute summer	SW69	10	141.578	0.089	14.2	0.1719	0.0000	OK
15 minute summer	SW70	11	141.546	0.146	32.0	0.3001	0.0000	OK
15 minute summer	SW71	10	141.479	0.096	13.8	0.1610	0.0000	OK
15 minute summer	SW72	11	141.362	0.125	23.3	0.2235	0.0000	OK
15 minute summer	SW73	10	141.382	0.115	19.0	0.2180	0.0000	OK
15 minute summer	SW74	10	141.438	0.122	22.8	0.2504	0.0000	OK
15 minute summer	SW75	11	141.296	0.236	63.9	0.6416	0.0000	OK
15 minute summer	SW76	10	141.343	0.145	23.9	0.3051	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	SW52	16.003	SW53	72.5	1.016	0.452	2.3325	
15 minute summer	SW53	16.004	SW54	77.4	0.714	0.358	3.6858	
15 minute summer	SW54	16.005	SW55	90.7	0.767	0.417	3.0781	
15 minute summer	SW55	16.006	SW56	100.6	0.714	0.467	5.9634	
15 minute summer	SW56	16.007	SW57	120.6	0.687	0.560	6.0572	
15 minute summer	SW57	16.008	SW58	134.9	0.722	0.626	6.1941	
15 minute summer	SW58	16.009	SW59	225.9	1.119	1.097	3.9614	
15 minute summer	SW59	16.010	SW60	228.6	1.260	1.058	3.2495	
15 minute summer	SW60	16.011	SW61	240.4	1.623	1.071	1.8402	
480 minute summer	SW61	15.012	SW62	49.6	0.839	0.230	3.5939	
480 minute summer	SW62	16.013	SW63	35.2	0.765	0.115	5.1263	
480 minute summer	SW63	16.014	20	37.7	0.764	0.117	0.8487	
15 minute summer	SW64	31.000	SW65	23.0	0.720	0.320	0.8829	
15 minute summer	SW65	31.001	SW66	42.1	0.858	0.588	2.1362	
480 minute summer	SW66	31.002	SW67	10.8	0.711	0.151	0.5621	
480 minute summer	SW67	30.003	SW68	15.4	0.704	0.137	2.6051	
480 minute summer	SW68	31.004	SW40	15.0	0.593	0.093	5.2285	
15 minute summer	SW69	1.000	SW70	14.0	0.551	0.194	0.5370	
15 minute summer	SW70	1.001	SW02	31.5	0.970	0.438	0.7144	
15 minute summer	SW71	3.000	SW72	13.6	0.883	0.340	0.1831	
15 minute summer	SW72	3.001	SW03	22.9	0.850	0.318	0.5233	
15 minute summer	SW73	4.000	SW04	18.7	0.962	0.466	0.3116	
15 minute summer	SW74	5.000	SW75	22.7	0.886	0.565	0.7800	
15 minute summer	SW75	5.001	SW05	62.3	1.165	0.869	0.8466	
15 minute summer	SW76	6.000	SW77	23.3	0.704	0.581	0.4953	

Results for 10 year Critical Storm Duration. Lowest mass balance: 99.41%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	SW77	10	141.313	0.206	40.6	0.3771	0.0000	OK
15 minute summer	SW78	11	141.037	0.129	27.6	0.2134	0.0000	OK
15 minute summer	SW79	10	141.443	0.122	17.6	0.2253	0.0000	OK
15 minute summer	SW80	10	141.408	0.116	19.2	0.1390	0.0000	OK
15 minute summer	SW81	10	141.271	0.134	26.2	0.2270	0.0000	OK
15 minute summer	SW82	11	141.222	0.166	35.5	0.2868	0.0000	OK
15 minute summer	SW84	10	141.311	0.117	21.4	0.2220	0.0000	OK
15 minute summer	SW85	10	142.309	0.059	11.4	0.0953	0.0000	OK
15 minute summer	SW86	10	142.323	0.073	15.9	0.1322	0.0000	OK
15 minute summer	SW87	10	142.085	0.135	42.2	0.3731	0.0000	OK
15 minute summer	SW88	10	141.892	0.042	5.5	0.0570	0.0000	OK
15 minute summer	SW89	11	141.083	0.242	80.2	0.4355	0.0000	OK
15 minute summer	SW91	10	141.764	0.064	29.7	0.1460	0.0000	OK
15 minute summer	SW90	10	141.670	0.070	30.8	0.1632	0.0000	OK
480 minute summer	SW92	488	140.833	0.350	24.6	1.1935	0.0000	OK
480 minute summer	SW93	488	140.833	0.099	2.0	0.1800	0.0000	OK
480 minute summer	SW94	488	140.833	0.252	4.9	0.5166	0.0000	SURCHARGED
15 minute summer	SW95	10	140.864	0.103	16.3	0.1842	0.0000	OK
1440 minute summer	SW13	720	139.414	0.076	14.3	0.1094	0.0000	OK
480 minute summer	Tank 03	488	140.833	0.383	23.6	93.8380	0.0000	OK
15 minute summer	Tank 01	15	140.998	0.078	27.7	7.0836	0.0000	OK
480 minute summer	Tank 02	488	140.833	0.383	23.6	93.8380	0.0000	OK
480 minute summer	Tank 04	488	140.833	0.333	11.9	71.4101	0.0000	OK
480 minute summer	Tank 05	488	140.833	0.323	12.0	69.2672	0.0000	OK
480 minute summer	SW96	488	140.833	0.910	38.5	1.6082	0.0000	SURCHARGED

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	SW77	6.001	SW05	40.1	1.137	0.993	0.1959	
15 minute summer	SW78	7.001	SW07	-17.0	0.675	-0.234	0.1349	
15 minute summer	SW79	8.000	SW80	17.5	0.820	0.435	0.1025	
15 minute summer	SW80	8.001	SW81	18.9	0.965	0.470	0.2607	
15 minute summer	SW81	8.002	SW82	26.0	0.738	0.362	0.6832	
15 minute summer	SW82	8.003	SW83	35.5	0.962	0.495	0.1537	
15 minute summer	SW84	25.000	SW35	21.2	0.837	0.294	0.5638	
15 minute summer	SW85	27.000	SW44	11.3	1.831	0.294	0.0744	
15 minute summer	SW86	28.000	SW45	15.8	1.925	0.431	0.1161	
15 minute summer	SW87	30.000	SW48	41.6	1.413	0.376	0.6749	
15 minute summer	SW88	17.000	SW89	5.4	1.383	0.162	0.0871	
15 minute summer	SW89	17.001	SW58	78.5	1.073	0.687	3.7049	
15 minute summer	SW91	19.000	SW89	29.6	1.809	0.101	0.2914	
15 minute summer	SW90	18.000	SW89	30.7	1.705	0.122	0.3545	
480 minute summer	SW92	19.001	SW61	-18.2	-0.230	-0.084	2.3604	
480 minute summer	SW93	33.000	SW94	2.0	0.374	0.050	0.7280	
480 minute summer	SW94	33.001	SW40	4.9	0.678	0.122	0.8684	
15 minute summer	SW95	32.000	SW67	16.0	0.900	0.400	0.4772	
1440 minute summer	SW13	1.024	EXManhole	14.3	1.236	0.234	0.2576	1195.2
480 minute summer	Tank 03	22.000	SW62	-23.6	-0.334	-0.073	1.4882	
15 minute summer	Tank 01	7.000	SW78	-27.7	-1.787	-0.388	0.0516	
480 minute summer	Tank 02	23.000	SW62	-23.6	-0.334	-0.072	1.4797	
480 minute summer	Tank 04	21.000	SW92	-11.9	-0.302	-0.051	1.0949	
480 minute summer	Tank 05	20.000	SW92	-12.0	-0.324	-0.054	1.8070	
480 minute summer	SW96	1.020	SW10 (FC)	34.7	0.145	0.083	6.9903	

Results for 30 year +35% CC Critical Storm Duration. Lowest mass balance: 99.41%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute summer	Basin 04	735	141.238	1.288	99.2	1196.6260	0.0000	SURCHARGED
720 minute summer	Basin 03	735	141.238	1.138	6.3	63.4111	0.0000	SURCHARGED
720 minute summer	Basin 02	735	141.238	1.288	103.5	807.8143	0.0000	SURCHARGED
720 minute summer	SW10 (FC)	735	141.238	1.354	35.9	4.0765	0.0000	SURCHARGED
30 minute summer	SW11	23	139.835	0.094	14.3	0.1341	0.0000	OK
480 minute summer	SW12	208	139.553	0.097	14.3	0.1381	0.0000	OK
480 minute summer	EXManhole	208	139.104	0.074	14.3	0.0000	0.0000	OK
15 minute summer	SW14	10	141.394	0.280	35.5	0.5449	0.0000	SURCHARGED
15 minute summer	SW01	12	142.076	0.748	78.9	1.4104	0.0000	SURCHARGED
15 minute summer	SW02	12	142.083	0.926	115.9	2.0205	0.0000	SURCHARGED
15 minute summer	SW03	12	142.020	1.075	226.2	3.8594	0.0000	SURCHARGED
15 minute summer	SW04	12	141.924	1.048	292.6	2.8371	0.0000	SURCHARGED
15 minute summer	SW05	12	141.688	0.990	481.4	2.5516	0.0000	SURCHARGED
15 minute summer	SW06	12	141.422	0.803	504.9	1.8390	0.0000	SURCHARGED
15 minute summer	SW07	12	141.269	0.678	517.7	1.4079	0.0000	SURCHARGED
720 minute summer	SW08	735	141.238	0.683	90.8	1.7620	0.0000	SURCHARGED
720 minute summer	Basin 01	735	141.238	0.737	89.3	125.6129	0.0000	SURCHARGED
720 minute summer	1	735	141.238	0.650	1.5	0.2179	0.0000	OK
720 minute summer	2	735	141.238	0.709	1.7	0.0000	0.0000	SURCHARGED
720 minute summer	3	735	141.238	0.757	74.9	0.0000	0.0000	SURCHARGED
720 minute summer	4	735	141.238	0.890	70.4	0.0000	0.0000	SURCHARGED
720 minute summer	5	735	141.238	0.908	79.3	0.0000	0.0000	SURCHARGED
720 minute summer	6	735	141.238	0.931	85.7	0.0000	0.0000	SURCHARGED
720 minute summer	7	735	141.238	1.061	101.5	0.0000	0.0000	SURCHARGED
720 minute summer	8	735	141.238	1.106	100.1	0.0000	0.0000	SURCHARGED

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	Basin 04	16.019	SW10 (FC)	-21.7	0.341	-0.031	4.1006	
720 minute summer	Basin 03	15.000	SW96	-6.3	-0.022	-0.009	2.9370	
720 minute summer	Basin 02	1.019	SW96	38.8	0.137	0.093	4.7632	
720 minute summer	SW10 (FC)	Hydro-Brake®	SW11	14.3				
30 minute summer	SW11	1.022	SW12	14.3	0.897	0.357	0.7597	
480 minute summer	SW12	1.023	SW13	14.3	1.018	0.356	0.2775	
15 minute summer	SW14	9.000	SW15	34.6	0.871	0.865	0.5330	
15 minute summer	SW01	2.000	SW02	-50.2	0.633	-0.446	3.3182	
15 minute summer	SW02	1.002	SW03	105.3	0.801	0.655	8.6680	
15 minute summer	SW03	1.003	SW04	225.4	1.043	1.045	7.5387	
15 minute summer	SW04	1.004	SW05	296.2	1.371	1.377	11.0434	
15 minute summer	SW05	1.005	SW06	482.4	1.713	1.578	11.1403	
15 minute summer	SW06	1.006	SW07	504.3	1.790	1.648	3.8801	
15 minute summer	SW07	1.007	SW08	424.0	1.520	1.386	5.1677	
720 minute summer	SW08	1.008	Basin 01	89.3	1.000	0.183	3.0016	
720 minute summer	Basin 01	1.009	3	74.9	0.838	0.180	3.4270	
720 minute summer	1	10.000	2	0.9	0.117	0.002	10.2344	
720 minute summer	2	10.001	3	-1.1	0.063	-0.003	8.5186	
720 minute summer	3	1.010	4	70.4	0.712	0.177	26.0940	
720 minute summer	4	1.011	5	67.5	0.663	0.170	3.6265	
720 minute summer	5	1.012	6	78.2	0.729	0.196	4.4865	
720 minute summer	6	1.013	7	83.0	0.570	0.209	25.4618	
720 minute summer	7	1.014	8	100.1	0.580	0.252	8.8209	
720 minute summer	8	1.015	9	99.9	0.593	0.252	3.7293	

Results for 30 year +35% CC Critical Storm Duration. Lowest mass balance: 99.41%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute summer	9	735	141.238	1.125	99.9	1.9875	0.0000	SURCHARGED
720 minute summer	10	735	141.238	1.148	99.8	2.0282	0.0000	SURCHARGED
720 minute summer	SW09	735	141.238	1.273	103.7	2.8804	0.0000	SURCHARGED
15 minute summer	SW15	10	141.311	0.277	54.2	0.5102	0.0000	SURCHARGED
720 minute summer	SW16	735	141.237	0.360	8.4	0.5544	0.0000	OK
720 minute summer	SW17	735	141.237	0.464	15.8	0.7724	0.0000	SURCHARGED
720 minute summer	SW83	735	141.237	0.274	7.7	0.4204	0.0000	OK
720 minute summer	SW19	735	141.238	0.279	5.3	0.5822	0.0000	OK
720 minute summer	SW20	735	141.238	0.347	7.5	0.6432	0.0000	SURCHARGED
720 minute summer	SW21	735	141.238	0.615	11.0	1.2673	0.0000	SURCHARGED
720 minute summer	SW22	735	141.238	0.648	12.6	1.1702	0.0000	SURCHARGED
15 minute summer	SW18	10	141.273	0.095	15.3	0.1407	0.0000	OK
15 minute summer	SW23	11	141.381	0.341	29.4	0.6158	0.0000	SURCHARGED
15 minute summer	SW24	11	141.270	0.422	56.6	0.7682	0.0000	SURCHARGED
720 minute summer	SW25	735	141.238	0.435	7.6	0.5893	0.0000	SURCHARGED
720 minute summer	SW26	735	141.238	0.420	4.8	0.9655	0.0000	SURCHARGED
720 minute summer	SW27	735	141.238	0.627	14.8	2.0641	0.0000	SURCHARGED
720 minute summer	SW28	735	141.238	0.760	16.0	1.3818	0.0000	SURCHARGED
720 minute summer	SW29	735	141.238	0.813	19.2	1.7448	0.0000	SURCHARGED
720 minute summer	SW30	735	141.238	0.769	1.1	1.0333	0.0000	SURCHARGED
720 minute summer	SW31	735	141.238	0.794	1.0	0.8978	0.0000	SURCHARGED
15 minute summer	11	12	141.483	0.805	169.5	0.0000	0.0000	SURCHARGED
15 minute summer	12	12	141.422	0.840	305.7	0.0000	0.0000	SURCHARGED
15 minute summer	13	12	141.358	0.842	305.2	0.0000	0.0000	SURCHARGED
15 minute summer	14	12	141.334	0.842	312.9	0.0000	0.0000	SURCHARGED

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	9	1.016	10	99.8	0.766	0.251	4.4219	
720 minute summer	10	1.017	SW09	99.6	0.698	0.120	5.6631	
720 minute summer	SW09	1.018	Basin 02	103.5	1.198	0.245	2.6109	
15 minute summer	SW15	9.001	SW17	53.6	1.357	1.338	0.2281	
720 minute summer	SW16	8.005	SW17	8.4	0.613	0.075	1.0098	
720 minute summer	SW17	8.006	SW08	15.8	0.693	0.096	4.1972	
720 minute summer	SW83	8.004	SW16	7.7	0.552	0.068	2.6215	
720 minute summer	SW19	11.001	SW20	5.3	0.522	0.074	1.1111	
720 minute summer	SW20	11.002	SW21	7.5	0.661	0.104	1.9662	
720 minute summer	SW21	11.003	SW22	10.5	0.482	0.065	2.0617	
720 minute summer	SW22	11.004	5	11.9	0.602	0.074	2.1902	
15 minute summer	SW18	11.000	SW19	15.2	0.780	0.378	0.4935	
15 minute summer	SW23	12.000	SW24	28.0	0.705	0.699	1.2748	
15 minute summer	SW24	12.001	SW25	56.7	1.425	1.413	0.2973	
720 minute summer	SW25	12.002	6	7.6	0.770	0.187	0.2998	
720 minute summer	SW26	13.000	SW27	4.8	0.555	0.067	2.2139	
720 minute summer	SW27	13.001	SW28	13.8	0.655	0.122	1.9853	
720 minute summer	SW28	13.002	SW29	15.2	0.491	0.094	3.3273	
720 minute summer	SW29	13.003	7	18.6	0.617	0.115	1.4510	
720 minute summer	SW30	14.000	SW31	1.0	0.293	0.013	0.4036	
720 minute summer	SW31	14.001	SW09	0.9	0.268	0.012	1.7427	
15 minute summer	11	24.005	12	170.8	0.602	0.430	18.8413	
15 minute summer	12	24.006	13	305.2	0.879	0.768	12.9662	
15 minute summer	13	24.007	14	312.9	0.899	0.786	4.6978	
15 minute summer	14	24.008	SW37	319.1	0.909	0.767	3.7658	

Results for 30 year +35% CC Critical Storm Duration. Lowest mass balance: 99.41%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	SW37	12	141.310	0.839	521.2	2.3372	0.0000	SURCHARGED
15 minute summer	16	12	141.249	0.799	526.3	0.0000	0.0000	SURCHARGED
720 minute summer	17	735	141.238	0.929	62.2	0.0000	0.0000	SURCHARGED
720 minute summer	SW38	735	141.238	0.935	65.7	2.2808	0.0000	SURCHARGED
720 minute summer	19	735	141.238	0.941	65.2	0.0000	0.0000	SURCHARGED
720 minute summer	20	735	141.238	1.029	66.0	0.0000	0.0000	SURCHARGED
720 minute summer	21	735	141.238	1.138	62.8	0.0000	0.0000	SURCHARGED
15 minute summer	SW32	10	141.489	0.163	37.3	0.3198	0.0000	OK
15 minute summer	SW33	12	141.521	0.342	42.3	0.5154	0.0000	OK
15 minute summer	SW34	12	141.461	0.350	73.0	0.6505	0.0000	OK
15 minute summer	SW35	12	141.482	0.529	167.9	1.1227	0.0000	SURCHARGED
15 minute summer	SW36	12	141.454	0.526	171.9	0.8096	0.0000	SURCHARGED
15 minute summer	SW41	11	141.913	0.163	22.0	0.2631	0.0000	OK
15 minute summer	SW42	11	141.905	0.252	57.6	0.5362	0.0000	OK
15 minute summer	SW43	11	141.860	0.241	59.8	0.3593	0.0000	OK
15 minute summer	SW44	11	141.780	0.315	91.6	0.5151	0.0000	OK
15 minute summer	SW45	11	141.733	0.305	139.4	0.5341	0.0000	OK
15 minute summer	SW46	12	141.559	0.189	170.8	0.3557	0.0000	OK
15 minute summer	SW47	10	142.102	0.202	63.7	0.5092	0.0000	OK
15 minute summer	SW48	10	141.875	0.227	185.2	0.5204	0.0000	OK
720 minute summer	SW39	735	141.238	1.174	61.6	3.3631	0.0000	SURCHARGED
720 minute summer	SW40	735	141.238	1.238	77.8	4.5863	0.0000	SURCHARGED
15 minute summer	SW49	12	141.934	0.757	116.2	1.3008	0.0000	SURCHARGED
15 minute summer	SW50	12	141.830	0.735	73.8	1.8239	0.0000	SURCHARGED
15 minute summer	SW51	12	141.873	0.841	91.5	1.5374	0.0000	SURCHARGED
Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	SW37	24.009	16	526.3	1.474	1.267	3.7736	
15 minute summer	16	24.010	17	528.4	1.480	1.327	27.5808	
720 minute summer	17	24.011	SW38	59.7	0.561	0.143	1.0709	
720 minute summer	SW38	24.012	19	65.2	0.641	0.157	1.0709	
720 minute summer	19	24.013	20	63.6	0.493	0.160	17.2324	
720 minute summer	20	16.015	21	62.8	0.589	0.120	26.2761	
720 minute summer	21	16.016	SW39	60.5	0.583	0.109	7.8416	
15 minute summer	SW32	24.000	SW33	36.8	1.002	0.511	0.8468	
15 minute summer	SW33	24.001	SW34	44.6	0.598	0.394	2.2360	
15 minute summer	SW34	24.002	SW35	78.7	0.814	0.699	2.8179	
15 minute summer	SW35	24.003	SW36	162.1	1.196	1.010	1.5867	
15 minute summer	SW36	24.004	11	169.5	1.448	1.053	1.5784	
15 minute summer	SW41	26.000	SW42	21.2	0.490	0.295	1.1844	
15 minute summer	SW42	26.001	SW43	56.9	0.926	0.794	0.4962	
15 minute summer	SW43	26.002	SW44	59.9	1.049	0.835	1.1603	
15 minute summer	SW44	26.003	SW45	91.8	0.942	0.814	1.0870	
15 minute summer	SW45	26.004	SW46	138.7	1.918	1.234	1.3742	
15 minute summer	SW46	26.005	12	168.6	4.080	0.290	0.4842	
15 minute summer	SW47	29.000	SW48	62.5	1.297	0.728	1.4333	
15 minute summer	SW48	29.001	SW37	185.2	2.557	0.655	3.9438	
720 minute summer	SW39	16.017	SW40	59.8	0.572	0.109	14.0839	
720 minute summer	SW40	16.018	Basin 04	77.4	1.644	0.110	3.1396	
15 minute summer	SW49	16.000	SW50	-99.3	-0.650	-0.618	5.1897	
15 minute summer	SW50	16.001	SW51	67.6	0.672	0.420	3.9894	
15 minute summer	SW51	16.002	SW52	105.6	0.753	0.658	2.4161	

Results for 30 year +35% CC Critical Storm Duration. Lowest mass balance: 99.41%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	SW52	12	141.857	0.863	133.8	1.7428	0.0000	SURCHARGED
15 minute summer	SW53	12	141.828	0.985	136.7	2.0874	0.0000	SURCHARGED
15 minute summer	SW54	12	141.788	1.000	151.1	2.3833	0.0000	SURCHARGED
15 minute summer	SW55	12	141.750	1.003	169.0	2.1731	0.0000	SURCHARGED
15 minute summer	SW56	12	141.739	1.062	221.6	2.6199	0.0000	SURCHARGED
15 minute summer	SW57	12	141.617	1.004	236.0	2.1696	0.0000	SURCHARGED
15 minute summer	SW58	12	141.452	0.900	384.6	2.4692	0.0000	SURCHARGED
15 minute summer	SW59	12	141.253	0.737	373.5	1.3623	0.0000	SURCHARGED
720 minute summer	SW60	735	141.238	0.758	56.6	1.6263	0.0000	SURCHARGED
720 minute summer	SW61	735	141.238	0.785	58.0	1.6247	0.0000	SURCHARGED
720 minute summer	SW62	735	141.238	0.826	49.1	2.3769	0.0000	SURCHARGED
720 minute summer	SW63	735	141.238	0.947	28.0	2.1787	0.0000	SURCHARGED
15 minute summer	SW64	11	141.268	0.400	41.0	0.7378	0.0000	SURCHARGED
720 minute summer	SW65	735	141.238	0.486	8.4	1.0174	0.0000	SURCHARGED
720 minute summer	SW66	735	141.238	0.669	12.5	1.4986	0.0000	SURCHARGED
720 minute summer	SW67	735	141.238	0.779	17.4	1.2413	0.0000	SURCHARGED
720 minute summer	SW68	735	141.238	0.929	18.2	1.5892	0.0000	SURCHARGED
15 minute summer	SW69	11	142.168	0.679	25.1	1.3163	0.0000	SURCHARGED
15 minute summer	SW70	11	142.186	0.786	67.5	1.6206	0.0000	SURCHARGED
15 minute summer	SW71	12	142.095	0.712	24.5	1.1937	0.0000	SURCHARGED
15 minute summer	SW72	12	142.061	0.824	42.4	1.4748	0.0000	SURCHARGED
15 minute summer	SW73	12	141.989	0.722	33.7	1.3732	0.0000	SURCHARGED
15 minute summer	SW74	12	141.976	0.660	40.4	1.3585	0.0000	SURCHARGED
15 minute summer	SW75	12	141.835	0.775	105.8	2.1064	0.0000	SURCHARGED
15 minute summer	SW76	12	141.903	0.704	42.2	1.4787	0.0000	SURCHARGED

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	SW52	16.003	SW53	113.4	1.069	0.706	4.8240	
15 minute summer	SW53	16.004	SW54	131.8	0.705	0.609	5.8763	
15 minute summer	SW54	16.005	SW55	156.3	0.796	0.720	4.3544	
15 minute summer	SW55	16.006	SW56	185.1	0.857	0.860	7.5614	
15 minute summer	SW56	16.007	SW57	214.9	0.995	0.998	6.9133	
15 minute summer	SW57	16.008	SW58	228.6	1.058	1.062	6.6078	
15 minute summer	SW58	16.009	SW59	368.7	1.707	1.791	4.2513	
15 minute summer	SW59	16.010	SW60	375.1	1.737	1.737	3.8635	
720 minute summer	SW60	16.011	SW61	55.7	0.699	0.248	2.6851	
720 minute summer	SW61	15.012	SW62	37.0	0.736	0.171	4.4004	
720 minute summer	SW62	16.013	SW63	25.7	0.705	0.084	6.4684	
720 minute summer	SW63	16.014	20	27.3	0.686	0.085	0.8887	
15 minute summer	SW64	31.000	SW65	38.7	0.765	0.540	1.9473	
720 minute summer	SW65	31.001	SW66	8.3	0.507	0.116	3.0703	
720 minute summer	SW66	31.002	SW67	11.6	0.667	0.162	0.5820	
720 minute summer	SW67	30.003	SW68	16.5	0.619	0.147	2.6064	
720 minute summer	SW68	31.004	SW40	17.7	0.469	0.109	5.2285	
15 minute summer	SW69	1.000	SW70	37.1	0.598	0.516	1.4779	
15 minute summer	SW70	1.001	SW02	61.2	1.071	0.851	1.5489	
15 minute summer	SW71	3.000	SW72	25.3	0.990	0.632	0.4717	
15 minute summer	SW72	3.001	SW03	41.3	0.894	0.573	1.1126	
15 minute summer	SW73	4.000	SW04	31.1	0.993	0.774	0.6104	
15 minute summer	SW74	5.000	SW75	35.1	0.901	0.875	1.2030	
15 minute summer	SW75	5.001	SW05	100.2	1.424	1.398	1.0393	
15 minute summer	SW76	6.000	SW77	36.0	0.905	0.898	0.6042	

Results for 30 year +35% CC Critical Storm Duration. Lowest mass balance: 99.41%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	SW77	12	141.817	0.710	66.2	1.3020	0.0000	SURCHARGED
30 minute summer	SW78	23	141.250	0.342	101.5	0.5648	0.0000	SURCHARGED
15 minute summer	SW79	10	141.507	0.186	31.2	0.3430	0.0000	OK
15 minute summer	SW80	10	141.465	0.173	34.0	0.2072	0.0000	OK
15 minute summer	SW81	11	141.341	0.204	46.4	0.3463	0.0000	OK
15 minute summer	SW82	11	141.291	0.235	62.7	0.4057	0.0000	OK
15 minute summer	SW84	12	141.488	0.294	38.0	0.5584	0.0000	OK
15 minute summer	SW85	10	142.333	0.083	20.2	0.1344	0.0000	OK
15 minute summer	SW86	10	142.358	0.108	28.2	0.1954	0.0000	OK
15 minute summer	SW87	10	142.145	0.195	74.7	0.5372	0.0000	OK
15 minute summer	SW88	10	141.905	0.055	9.8	0.0756	0.0000	OK
15 minute summer	SW89	11	141.654	0.813	142.3	1.4659	0.0000	SURCHARGED
15 minute summer	SW91	10	141.786	0.086	52.7	0.1949	0.0000	OK
15 minute summer	SW90	11	141.695	0.095	54.5	0.2195	0.0000	OK
720 minute summer	SW92	735	141.238	0.755	46.1	2.5750	0.0000	SURCHARGED
720 minute summer	SW93	735	141.238	0.504	2.3	0.9149	0.0000	SURCHARGED
720 minute summer	SW94	735	141.238	0.657	5.7	1.3458	0.0000	SURCHARGED
720 minute summer	SW95	735	141.238	0.477	3.2	0.8538	0.0000	SURCHARGED
480 minute summer	SW13	208	139.414	0.076	14.3	0.1094	0.0000	OK
720 minute summer	Tank 03	735	141.238	0.788	23.7	193.1104	0.0000	SURCHARGED
30 minute summer	Tank 01	23	141.254	0.333	99.9	30.4129	0.0000	SURCHARGED
720 minute summer	Tank 02	735	141.238	0.788	23.7	193.1104	0.0000	SURCHARGED
720 minute summer	Tank 04	735	141.238	0.738	22.2	158.2917	0.0000	SURCHARGED
720 minute summer	Tank 05	735	141.238	0.728	22.7	156.1484	0.0000	SURCHARGED
720 minute summer	SW96	735	141.238	1.315	38.8	2.3233	0.0000	SURCHARGED

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	SW77	6.001	SW05	63.7	1.603	1.580	0.2231	
30 minute summer	SW78	7.001	SW07	-82.1	-1.177	-1.129	0.2772	
15 minute summer	SW79	8.000	SW80	30.9	0.914	0.770	0.1633	
15 minute summer	SW80	8.001	SW81	33.5	1.091	0.835	0.4085	
15 minute summer	SW81	8.002	SW82	46.1	0.834	0.643	1.0697	
15 minute summer	SW82	8.003	SW83	62.9	1.163	0.877	0.2247	
15 minute summer	SW84	25.000	SW35	37.3	0.847	0.518	1.5081	
15 minute summer	SW85	27.000	SW44	20.2	2.063	0.526	0.1200	
15 minute summer	SW86	28.000	SW45	27.9	2.167	0.765	0.1826	
15 minute summer	SW87	30.000	SW48	73.8	1.611	0.667	1.0488	
15 minute summer	SW88	17.000	SW89	9.7	1.442	0.290	0.2602	
15 minute summer	SW89	17.001	SW58	134.1	1.216	1.173	4.6520	
15 minute summer	SW91	19.000	SW89	52.6	1.813	0.180	0.4982	
15 minute summer	SW90	18.000	SW89	54.3	1.726	0.217	0.6056	
720 minute summer	SW92	19.001	SW61	-34.4	-0.313	-0.158	3.1854	
720 minute summer	SW93	33.000	SW94	2.3	0.351	0.057	1.0230	
720 minute summer	SW94	33.001	SW40	5.1	0.571	0.126	0.8684	
720 minute summer	SW95	32.000	SW67	3.2	0.541	0.079	1.0084	
480 minute summer	SW13	1.024	EXManhole	14.3	1.236	0.234	0.2576	493.1
720 minute summer	Tank 03	22.000	SW62	-23.7	-0.363	-0.073	1.8149	
30 minute summer	Tank 01	7.000	SW78	-99.9	-2.326	-1.396	0.2021	
720 minute summer	Tank 02	23.000	SW62	-23.7	-0.363	-0.073	1.8045	
720 minute summer	Tank 04	21.000	SW92	-22.2	-0.260	-0.096	1.5917	
720 minute summer	Tank 05	20.000	SW92	-22.7	-0.272	-0.101	2.6725	
720 minute summer	SW96	1.020	SW10 (FC)	32.7	0.091	0.078	6.9903	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.41%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	Basin 04	975	141.500	1.550	105.3	1587.5170	0.0000	SURCHARGED
960 minute summer	Basin 03	975	141.500	1.400	7.5	100.6936	0.0000	SURCHARGED
960 minute summer	Basin 02	975	141.500	1.550	100.4	1048.1510	0.0000	SURCHARGED
960 minute summer	SW10 (FC)	975	141.500	1.616	31.8	4.8657	0.0000	SURCHARGED
30 minute summer	SW11	21	139.835	0.094	14.3	0.1341	0.0000	OK
960 minute summer	SW12	375	139.553	0.097	14.3	0.1381	0.0000	OK
960 minute summer	EXManhole	375	139.104	0.074	14.3	0.0000	0.0000	OK
30 minute summer	SW14	20	141.630	0.516	41.6	1.0031	0.0000	SURCHARGED
15 minute summer	SW01	12	142.866	1.538	51.5	2.8992	0.0000	SURCHARGED
15 minute summer	SW02	12	142.858	1.701	134.9	3.7141	0.0000	FLOOD RISK
15 minute summer	SW03	12	142.743	1.798	286.9	6.4514	0.0000	FLOOD RISK
15 minute summer	SW04	12	142.580	1.705	370.9	4.6149	0.0000	FLOOD RISK
15 minute summer	SW05	12	142.211	1.513	610.7	3.9000	0.0000	FLOOD RISK
15 minute summer	SW06	12	141.790	1.171	638.9	2.6800	0.0000	SURCHARGED
30 minute summer	SW07	21	141.593	1.002	615.4	2.0824	0.0000	SURCHARGED
960 minute summer	SW08	960	141.500	0.946	87.9	2.4378	0.0000	SURCHARGED
960 minute summer	Basin 01	975	141.500	1.000	86.4	193.9156	0.0000	SURCHARGED
960 minute summer	1	975	141.500	0.913	1.5	0.3057	0.0000	SURCHARGED
960 minute summer	2	975	141.500	0.971	1.7	0.0000	0.0000	SURCHARGED
960 minute summer	3	975	141.500	1.019	69.2	0.0000	0.0000	SURCHARGED
960 minute summer	4	975	141.500	1.152	64.7	0.0000	0.0000	SURCHARGED
960 minute summer	5	975	141.500	1.170	73.7	0.0000	0.0000	SURCHARGED
960 minute summer	6	975	141.500	1.193	80.1	0.0000	0.0000	SURCHARGED
960 minute summer	7	975	141.500	1.323	97.3	0.0000	0.0000	SURCHARGED
960 minute summer	8	975	141.500	1.368	96.9	0.0000	0.0000	SURCHARGED

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	Basin 04	16.019	SW10 (FC)	-18.2	0.336	-0.026	4.1006	
960 minute summer	Basin 03	15.000	SW96	-7.5	-0.027	-0.011	2.9370	
960 minute summer	Basin 02	1.019	SW96	35.4	0.144	0.085	4.7632	
960 minute summer	SW10 (FC)	Hydro-Brake®	SW11	14.3				
30 minute summer	SW11	1.022	SW12	14.3	0.897	0.357	0.7594	
960 minute summer	SW12	1.023	SW13	14.3	1.018	0.356	0.2775	
30 minute summer	SW14	9.000	SW15	39.8	1.000	0.994	0.5330	
15 minute summer	SW01	2.000	SW02	30.3	0.625	0.269	3.3182	
15 minute summer	SW02	1.002	SW03	134.2	0.847	0.835	8.6680	
15 minute summer	SW03	1.003	SW04	283.8	1.314	1.316	7.5387	
15 minute summer	SW04	1.004	SW05	370.0	1.713	1.720	11.0434	
15 minute summer	SW05	1.005	SW06	609.5	2.164	1.994	11.1403	
15 minute summer	SW06	1.006	SW07	636.2	2.259	2.079	3.8801	
30 minute summer	SW07	1.007	SW08	476.5	1.692	1.558	5.1677	
960 minute summer	SW08	1.008	Basin 01	86.4	0.957	0.177	3.0016	
960 minute summer	Basin 01	1.009	3	69.2	0.762	0.166	3.4270	
960 minute summer	1	10.000	2	0.7	0.117	0.002	10.2942	
960 minute summer	2	10.001	3	-1.2	0.064	-0.003	8.5186	
960 minute summer	3	1.010	4	64.7	0.623	0.163	26.0940	
960 minute summer	4	1.011	5	62.3	0.575	0.157	3.6265	
960 minute summer	5	1.012	6	72.8	0.630	0.183	4.4865	
960 minute summer	6	1.013	7	78.5	0.533	0.197	25.4618	
960 minute summer	7	1.014	8	96.9	0.557	0.244	8.8209	
960 minute summer	8	1.015	9	96.8	0.576	0.244	3.7293	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.41%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	9	975	141.500	1.387	96.8	2.4507	0.0000	SURCHARGED
960 minute summer	10	975	141.500	1.410	96.6	2.4913	0.0000	SURCHARGED
960 minute summer	SW09	975	141.500	1.535	100.6	3.4736	0.0000	SURCHARGED
30 minute summer	SW15	20	141.569	0.535	62.8	0.9839	0.0000	SURCHARGED
30 minute summer	SW16	21	141.513	0.636	79.4	0.9775	0.0000	SURCHARGED
30 minute summer	SW17	21	141.501	0.728	147.3	1.2110	0.0000	SURCHARGED
30 minute summer	SW83	21	141.530	0.567	77.6	0.8691	0.0000	SURCHARGED
960 minute summer	SW19	975	141.500	0.541	5.4	1.1301	0.0000	SURCHARGED
960 minute summer	SW20	975	141.500	0.609	7.6	1.1298	0.0000	SURCHARGED
960 minute summer	SW21	975	141.500	0.877	11.0	1.8078	0.0000	SURCHARGED
960 minute summer	SW22	975	141.500	0.910	12.2	1.6439	0.0000	SURCHARGED
960 minute summer	SW18	975	141.500	0.322	1.7	0.4768	0.0000	SURCHARGED
15 minute summer	SW23	11	141.688	0.648	38.3	1.1698	0.0000	SURCHARGED
15 minute summer	SW24	11	141.536	0.688	73.6	1.2506	0.0000	SURCHARGED
960 minute summer	SW25	975	141.500	0.697	7.6	0.9448	0.0000	SURCHARGED
960 minute summer	SW26	975	141.500	0.682	4.8	1.5687	0.0000	SURCHARGED
960 minute summer	SW27	975	141.500	0.889	14.3	2.9276	0.0000	SURCHARGED
960 minute summer	SW28	975	141.500	1.022	15.9	1.8586	0.0000	SURCHARGED
960 minute summer	SW29	975	141.500	1.075	19.8	2.3076	0.0000	SURCHARGED
960 minute summer	SW30	975	141.500	1.031	1.1	1.3856	0.0000	SURCHARGED
960 minute summer	SW31	975	141.500	1.056	1.0	1.1943	0.0000	SURCHARGED
15 minute summer	11	12	141.971	1.293	198.5	0.0000	0.0000	SURCHARGED
15 minute summer	12	12	141.944	1.362	381.7	0.0000	0.0000	SURCHARGED
15 minute summer	13	12	141.882	1.366	382.7	0.0000	0.0000	SURCHARGED
15 minute summer	14	12	141.859	1.367	387.8	0.0000	0.0000	SURCHARGED

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	9	1.016	10	96.6	0.744	0.243	4.4219	
960 minute summer	10	1.017	SW09	96.5	0.699	0.116	5.6631	
960 minute summer	SW09	1.018	Basin 02	100.4	1.190	0.238	2.6109	
30 minute summer	SW15	9.001	SW17	61.7	1.552	1.538	0.2394	
30 minute summer	SW16	8.005	SW17	71.2	0.828	0.633	1.0165	
30 minute summer	SW17	8.006	SW08	137.7	0.918	0.840	4.1972	
30 minute summer	SW83	8.004	SW16	72.2	0.849	0.641	2.9615	
960 minute summer	SW19	11.001	SW20	5.4	0.534	0.075	1.1288	
960 minute summer	SW20	11.002	SW21	7.5	0.636	0.105	1.9662	
960 minute summer	SW21	11.003	SW22	10.1	0.452	0.062	2.0617	
960 minute summer	SW22	11.004	5	11.4	0.549	0.070	2.1902	
960 minute summer	SW18	11.000	SW19	1.7	0.503	0.042	0.9534	
15 minute summer	SW23	12.000	SW24	34.6	0.869	0.862	1.2748	
15 minute summer	SW24	12.001	SW25	70.7	1.779	1.764	0.2973	
960 minute summer	SW25	12.002	6	7.3	0.715	0.179	0.2998	
960 minute summer	SW26	13.000	SW27	4.3	0.521	0.060	2.2139	
960 minute summer	SW27	13.001	SW28	13.7	0.598	0.122	1.9853	
960 minute summer	SW28	13.002	SW29	15.8	0.436	0.098	3.3273	
960 minute summer	SW29	13.003	7	19.6	0.550	0.121	1.4510	
960 minute summer	SW30	14.000	SW31	1.0	0.253	0.013	0.4036	
960 minute summer	SW31	14.001	SW09	0.9	0.268	0.012	1.7427	
15 minute summer	11	24.005	12	199.5	0.609	0.502	18.8413	
15 minute summer	12	24.006	13	382.7	1.072	0.964	12.9662	
15 minute summer	13	24.007	14	387.8	1.086	0.975	4.6978	
15 minute summer	14	24.008	SW37	392.8	1.100	0.944	3.7658	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.41%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	SW37	12	141.826	1.355	684.9	3.7756	0.0000	SURCHARGED
15 minute summer	16	12	141.723	1.273	688.3	0.0000	0.0000	SURCHARGED
960 minute summer	17	975	141.500	1.191	61.5	0.0000	0.0000	SURCHARGED
960 minute summer	SW38	975	141.500	1.197	66.5	2.9200	0.0000	SURCHARGED
960 minute summer	19	975	141.500	1.203	66.3	0.0000	0.0000	SURCHARGED
960 minute summer	20	975	141.500	1.291	66.2	0.0000	0.0000	SURCHARGED
960 minute summer	21	975	141.500	1.400	58.7	0.0000	0.0000	SURCHARGED
15 minute summer	SW32	11	142.216	0.890	48.7	1.7524	0.0000	SURCHARGED
15 minute summer	SW33	12	142.185	1.005	54.6	1.5173	0.0000	SURCHARGED
15 minute summer	SW34	12	142.149	1.038	110.0	1.9278	0.0000	SURCHARGED
15 minute summer	SW35	12	142.095	1.142	190.3	2.4238	0.0000	SURCHARGED
15 minute summer	SW36	12	142.029	1.101	197.3	1.6947	0.0000	SURCHARGED
15 minute summer	SW41	12	142.373	0.623	28.8	1.0034	0.0000	SURCHARGED
15 minute summer	SW42	12	142.360	0.707	69.9	1.5061	0.0000	SURCHARGED
15 minute summer	SW43	12	142.317	0.698	69.1	1.0379	0.0000	SURCHARGED
15 minute summer	SW44	12	142.227	0.762	108.2	1.2451	0.0000	SURCHARGED
15 minute summer	SW45	12	142.178	0.750	161.9	1.3158	0.0000	SURCHARGED
15 minute summer	SW46	12	142.029	0.659	199.1	1.2406	0.0000	SURCHARGED
15 minute summer	SW47	12	142.511	0.611	83.1	1.5395	0.0000	SURCHARGED
15 minute summer	SW48	12	142.371	0.723	240.3	1.6584	0.0000	SURCHARGED
960 minute summer	SW39	975	141.500	1.436	60.4	4.1140	0.0000	SURCHARGED
960 minute summer	SW40	975	141.500	1.500	89.6	5.5574	0.0000	SURCHARGED
15 minute summer	SW49	12	142.642	1.465	153.4	2.5168	0.0000	SURCHARGED
15 minute summer	SW50	12	142.673	1.578	124.0	3.9146	0.0000	SURCHARGED
15 minute summer	SW51	12	142.622	1.590	102.8	2.9068	0.0000	SURCHARGED

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	SW37	24.009	16	688.3	1.928	1.657	3.7736	
15 minute summer	16	24.010	17	689.6	1.932	1.733	27.5808	
960 minute summer	17	24.011	SW38	60.4	0.490	0.145	1.0709	
960 minute summer	SW38	24.012	19	66.3	0.557	0.159	1.0709	
960 minute summer	19	24.013	20	66.2	0.427	0.166	17.2324	
960 minute summer	20	16.015	21	58.7	0.570	0.112	26.2761	
960 minute summer	21	16.016	SW39	58.6	0.567	0.106	7.8416	
15 minute summer	SW32	24.000	SW33	47.4	1.042	0.659	1.1983	
15 minute summer	SW33	24.001	SW34	68.9	0.625	0.609	2.3207	
15 minute summer	SW34	24.002	SW35	86.1	0.838	0.764	2.8587	
15 minute summer	SW35	24.003	SW36	187.3	1.242	1.166	1.5867	
15 minute summer	SW36	24.004	11	198.5	1.493	1.233	1.5784	
15 minute summer	SW41	26.000	SW42	24.8	0.484	0.346	1.6305	
15 minute summer	SW42	26.001	SW43	65.1	0.953	0.908	0.5641	
15 minute summer	SW43	26.002	SW44	67.4	1.052	0.940	1.3473	
15 minute summer	SW44	26.003	SW45	103.3	0.976	0.916	1.2307	
15 minute summer	SW45	26.004	SW46	155.7	1.933	1.385	2.0041	
15 minute summer	SW46	26.005	12	190.7	4.001	0.328	0.6499	
15 minute summer	SW47	29.000	SW48	81.3	1.311	0.948	2.0864	
15 minute summer	SW48	29.001	SW37	218.5	2.492	0.772	4.8578	
960 minute summer	SW39	16.017	SW40	60.2	0.567	0.110	14.0839	
960 minute summer	SW40	16.018	Basin 04	89.3	1.630	0.126	3.1396	
15 minute summer	SW49	16.000	SW50	-130.3	-0.822	-0.810	5.1897	
15 minute summer	SW50	16.001	SW51	77.3	0.683	0.481	3.9894	
15 minute summer	SW51	16.002	SW52	102.9	0.758	0.641	2.4161	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.41%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	SW52	12	142.584	1.590	135.7	3.2121	0.0000	SURCHARGED
15 minute summer	SW53	12	142.517	1.674	160.6	3.5465	0.0000	SURCHARGED
15 minute summer	SW54	12	142.486	1.698	211.3	4.0470	0.0000	SURCHARGED
15 minute summer	SW55	12	142.430	1.683	234.8	3.6469	0.0000	SURCHARGED
15 minute summer	SW56	12	142.306	1.629	268.5	4.0195	0.0000	SURCHARGED
15 minute summer	SW57	12	142.166	1.553	294.7	3.3570	0.0000	SURCHARGED
15 minute summer	SW58	12	142.009	1.457	516.0	3.9973	0.0000	SURCHARGED
15 minute summer	SW59	12	141.640	1.124	522.8	2.0781	0.0000	SURCHARGED
960 minute summer	SW60	975	141.500	1.020	52.8	2.1888	0.0000	SURCHARGED
960 minute summer	SW61	975	141.500	1.047	54.3	2.1672	0.0000	SURCHARGED
960 minute summer	SW62	975	141.500	1.088	46.1	3.1313	0.0000	SURCHARGED
960 minute summer	SW63	975	141.500	1.209	20.3	2.7817	0.0000	SURCHARGED
15 minute summer	SW64	11	141.746	0.878	53.5	1.6187	0.0000	SURCHARGED
15 minute summer	SW65	11	141.678	0.926	92.7	1.9393	0.0000	SURCHARGED
960 minute summer	SW66	975	141.500	0.931	11.7	2.0859	0.0000	SURCHARGED
960 minute summer	SW67	975	141.500	1.041	16.6	1.6591	0.0000	SURCHARGED
960 minute summer	SW68	975	141.500	1.191	18.1	2.0376	0.0000	SURCHARGED
15 minute summer	SW69	12	142.969	1.480	32.8	2.8703	0.0000	FLOOD RISK
15 minute summer	SW70	12	142.949	1.549	79.3	3.1941	0.0000	FLOOD RISK
15 minute summer	SW71	12	142.821	1.438	32.0	2.4101	0.0000	FLOOD RISK
15 minute summer	SW72	12	142.782	1.545	47.2	2.7647	0.0000	FLOOD RISK
15 minute summer	SW73	12	142.671	1.404	43.9	2.6726	0.0000	FLOOD RISK
15 minute summer	SW74	12	142.704	1.388	52.7	2.8553	0.0000	FLOOD RISK
15 minute summer	SW75	12	142.456	1.396	136.3	3.7945	0.0000	FLOOD RISK
15 minute summer	SW76	12	142.573	1.375	55.1	2.8861	0.0000	FLOOD RISK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	SW52	16.003	SW53	136.9	1.056	0.853	4.8240	
15 minute summer	SW53	16.004	SW54	162.3	0.751	0.749	5.8763	
15 minute summer	SW54	16.005	SW55	207.9	0.963	0.957	4.3544	
15 minute summer	SW55	16.006	SW56	229.2	1.061	1.065	7.5614	
15 minute summer	SW56	16.007	SW57	269.6	1.248	1.252	6.9133	
15 minute summer	SW57	16.008	SW58	296.0	1.370	1.375	6.6078	
15 minute summer	SW58	16.009	SW59	516.6	2.391	2.510	4.2513	
15 minute summer	SW59	16.010	SW60	521.6	2.415	2.415	3.8635	
960 minute summer	SW60	16.011	SW61	52.0	0.625	0.232	2.6851	
960 minute summer	SW61	15.012	SW62	26.0	0.642	0.120	4.4004	
960 minute summer	SW62	16.013	SW63	18.9	0.650	0.062	6.4684	
960 minute summer	SW63	16.014	20	19.9	0.656	0.062	0.8887	
15 minute summer	SW64	31.000	SW65	48.5	0.788	0.677	1.9473	
15 minute summer	SW65	31.001	SW66	89.7	1.274	1.252	3.0703	
960 minute summer	SW66	31.002	SW67	11.2	0.610	0.157	0.5820	
960 minute summer	SW67	30.003	SW68	16.4	0.539	0.147	2.6064	
960 minute summer	SW68	31.004	SW40	18.0	0.439	0.111	5.2285	
15 minute summer	SW69	1.000	SW70	37.9	0.609	0.525	1.4779	
15 minute summer	SW70	1.001	SW02	61.8	1.035	0.859	1.5489	
15 minute summer	SW71	3.000	SW72	25.9	0.981	0.646	0.4717	
15 minute summer	SW72	3.001	SW03	47.6	0.845	0.661	1.1126	
15 minute summer	SW73	4.000	SW04	34.7	1.048	0.865	0.6104	
15 minute summer	SW74	5.000	SW75	43.3	1.088	1.079	1.2030	
15 minute summer	SW75	5.001	SW05	121.6	1.727	1.696	1.0393	
15 minute summer	SW76	6.000	SW77	44.4	1.116	1.106	0.6042	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.41%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	SW77	12	142.427	1.320	83.5	2.4197	0.0000	FLOOD RISK
30 minute summer	SW78	23	141.531	0.623	160.4	1.0288	0.0000	SURCHARGED
15 minute summer	SW79	12	141.678	0.357	40.7	0.6600	0.0000	SURCHARGED
15 minute summer	SW80	12	141.643	0.351	43.6	0.4219	0.0000	SURCHARGED
30 minute summer	SW81	20	141.585	0.448	55.0	0.7588	0.0000	SURCHARGED
30 minute summer	SW82	20	141.553	0.497	72.0	0.8577	0.0000	SURCHARGED
15 minute summer	SW84	12	142.125	0.931	64.5	1.7663	0.0000	SURCHARGED
15 minute summer	SW85	12	142.414	0.164	26.4	0.2658	0.0000	SURCHARGED
15 minute summer	SW86	12	142.660	0.410	36.7	0.7437	0.0000	SURCHARGED
15 minute summer	SW87	12	142.527	0.577	97.5	1.5907	0.0000	SURCHARGED
15 minute summer	SW88	12	142.349	0.499	12.8	0.6830	0.0000	SURCHARGED
15 minute summer	SW89	12	142.278	1.437	169.9	2.5909	0.0000	SURCHARGED
15 minute summer	SW91	12	142.320	0.619	68.7	1.4112	0.0000	SURCHARGED
15 minute summer	SW90	12	142.327	0.727	71.1	1.6859	0.0000	SURCHARGED
960 minute summer	SW92	975	141.500	1.017	40.8	3.4689	0.0000	SURCHARGED
960 minute summer	SW93	975	141.500	0.766	2.3	1.3909	0.0000	SURCHARGED
960 minute summer	SW94	975	141.500	0.919	5.5	1.8829	0.0000	SURCHARGED
960 minute summer	SW95	975	141.500	0.739	3.2	1.3232	0.0000	SURCHARGED
960 minute summer	SW13	375	139.414	0.076	14.3	0.1094	0.0000	OK
960 minute summer	Tank 03	975	141.500	1.050	22.4	257.3631	0.0000	SURCHARGED
30 minute summer	Tank 01	23	141.532	0.612	157.3	55.7783	0.0000	SURCHARGED
960 minute summer	Tank 02	975	141.500	1.050	22.4	257.3630	0.0000	SURCHARGED
960 minute summer	Tank 04	975	141.500	1.000	19.8	214.5076	0.0000	SURCHARGED
960 minute summer	Tank 05	975	141.500	0.990	20.0	212.3639	0.0000	SURCHARGED
960 minute summer	SW96	975	141.500	1.577	35.4	2.7865	0.0000	SURCHARGED

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	SW77	6.001	SW05	75.8	1.907	1.879	0.2231	
30 minute summer	SW78	7.001	SW07	-134.9	-1.916	-1.855	0.2772	
15 minute summer	SW79	8.000	SW80	39.6	0.997	0.988	0.1917	
15 minute summer	SW80	8.001	SW81	42.9	1.129	1.069	0.5284	
30 minute summer	SW81	8.002	SW82	51.9	0.856	0.724	1.3657	
30 minute summer	SW82	8.003	SW83	70.4	1.212	0.982	0.2936	
15 minute summer	SW84	25.000	SW35	42.6	0.839	0.591	1.5117	
15 minute summer	SW85	27.000	SW44	26.0	2.072	0.677	0.2120	
15 minute summer	SW86	28.000	SW45	33.5	2.192	0.917	0.2495	
15 minute summer	SW87	30.000	SW48	95.1	1.652	0.860	1.6128	
15 minute summer	SW88	17.000	SW89	12.7	1.378	0.378	0.3899	
15 minute summer	SW89	17.001	SW58	143.8	1.304	1.258	4.6520	
15 minute summer	SW91	19.000	SW89	63.6	1.894	0.218	0.8070	
15 minute summer	SW90	18.000	SW89	62.4	1.732	0.249	0.9533	
960 minute summer	SW92	19.001	SW61	-28.9	-0.287	-0.133	3.1854	
960 minute summer	SW93	33.000	SW94	2.1	0.308	0.053	1.0230	
960 minute summer	SW94	33.001	SW40	5.4	0.525	0.133	0.8684	
960 minute summer	SW95	32.000	SW67	3.0	0.511	0.074	1.0084	
960 minute summer	SW13	1.024	EXManhole	14.3	1.236	0.234	0.2576	873.9
960 minute summer	Tank 03	22.000	SW62	-22.4	-0.327	-0.069	1.8149	
30 minute summer	Tank 01	7.000	SW78	-157.3	-2.488	-2.199	0.2021	
960 minute summer	Tank 02	23.000	SW62	-22.4	-0.327	-0.069	1.8045	
960 minute summer	Tank 04	21.000	SW92	-19.8	-0.246	-0.086	1.5917	
960 minute summer	Tank 05	20.000	SW92	-20.0	-0.263	-0.089	2.6725	
960 minute summer	SW96	1.020	SW10 (FC)	28.6	0.090	0.069	6.9903	

Design Settings

Rainfall Methodology	FEH-22	Minimum Velocity (m/s)	1.00
Return Period (years)	100	Connection Type	Level Soffits
Additional Flow (%)	0	Minimum Backdrop Height (m)	0.200
CV	1.000	Preferred Cover Depth (m)	1.200
Time of Entry (mins)	5.00	Include Intermediate Ground	✓
Maximum Time of Concentration (mins)	30.00	Enforce best practice design rules	x
Maximum Rainfall (mm/hr)	50.0		

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
Basin 04			141.900		525130.969	227511.445	1.950
Basin 03		5.00	141.900		525043.772	227537.970	1.800
Basin 02			141.900		525022.899	227537.704	1.950
SW10 (FC)	0.047	5.00	141.900	1800	525040.982	227515.666	2.016
SW11			141.700	1350	525032.098	227509.774	1.959
SW12			142.000	1350	524985.867	227521.328	2.544
EXManhole			141.030	1350	524967.824	227483.879	2.000
SW14	0.058	5.00	142.539	1200	525079.124	227759.059	1.425
SW01	0.047	5.00	143.400	1350	525287.578	227832.870	2.072
SW02	0.073	5.00	143.100	1350	525257.687	227836.268	1.943
SW03	0.169	5.00	142.800	1500	525203.269	227841.879	1.855
SW04	0.081	5.00	142.600	1500	525169.846	227851.911	1.725
SW05	0.073	5.00	142.498	1500	525123.933	227829.436	1.800
SW06	0.047	5.00	142.419	1500	525088.840	227811.196	1.800
SW07	0.028	5.00	142.391	1500	525079.789	227800.812	1.800
SW08	0.073	5.00	142.354	1500	525086.818	227783.866	1.800
Basin 01			142.000		525077.041	227779.627	1.500
1	0.022	5.00	141.900		525060.963	227835.215	1.313
2			141.900		525052.761	227807.569	1.371
3			141.900		525056.374	227783.981	1.419
4			141.900		525029.988	227715.812	1.552
5			141.900		525030.197	227705.655	1.570
6			141.900		525027.475	227693.385	1.593
7			141.900		524999.847	227627.627	1.723
8			141.900		524989.464	227605.204	1.768
9			141.900	1500	524990.526	227594.811	1.787
10			141.900	1500	524986.384	227583.137	1.810
SW09	0.048	5.00	141.900	1500	524999.497	227574.209	1.935
SW15	0.032	5.00	142.600	1350	525092.257	227756.388	1.566
SW16	0.010	5.00	142.750	1350	525098.178	227750.387	1.873
SW17	0.020	5.00	142.500	1350	525097.368	227759.567	1.727
SW83	0.010	5.00	142.950	1350	525123.788	227742.323	1.987
SW19	0.054	5.00	142.600	1350	525084.669	227713.295	1.641
SW20	0.032	5.00	142.400	1350	525079.257	227698.207	1.509
SW21	0.052	5.00	142.273	1350	525053.436	227708.831	1.650
SW22	0.031	5.00	142.240	1350	525041.394	227713.761	1.650
SW18	0.025	5.00	142.603	1200	525093.209	227735.695	1.425
SW23	0.048	5.00	142.465	1200	525071.352	227676.352	1.425
SW24	0.049	5.00	142.273	1200	525041.430	227687.848	1.425
SW25	0.016	5.00	142.228	1200	525034.489	227690.623	1.425
SW26	0.071	5.00	142.450	1350	525056.913	227640.501	1.632
SW27	0.148	5.00	142.200	1350	525044.974	227611.417	1.589

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
SW28	0.032	5.00	142.128	1350	525028.251	227618.076	1.650
SW29	0.059	5.00	142.075	1350	525008.898	227626.229	1.650
SW30	0.016	5.00	141.969	1200	525026.937	227567.941	1.500
SW31			141.944	1200	525022.294	227564.579	1.500
11			143.900		525328.222	227774.816	3.222
12			143.850		525287.257	227741.535	3.268
13			143.750		525266.449	227711.764	3.234
14			143.650		525261.172	227699.708	3.158
SW37	0.157	5.00	143.550	1500	525256.831	227690.094	3.079
16			143.450		525252.437	227680.480	3.000
17			143.000		525223.494	227608.844	2.691
SW38	0.089	5.00	142.950	1500	525222.370	227606.062	2.647
19			143.200		525221.246	227603.280	2.903
20			142.550		525203.129	227558.536	2.341
21			141.900		525180.863	227503.141	1.800
SW32	0.061	5.00	143.600	1350	525312.626	227837.976	2.274
SW33	0.009	5.00	143.500	1350	525300.698	227825.839	2.321
SW34	0.054	5.00	143.650	1350	525313.775	227809.356	2.539
SW35	0.100	5.00	143.850	1350	525329.909	227789.072	2.897
SW36	0.016	5.00	143.900	1350	525335.958	227781.092	2.972
SW41	0.036	5.00	143.250	1200	525249.480	227792.512	1.500
SW42	0.061	5.00	143.400	1350	525242.527	227770.427	1.747
SW43	0.005	5.00	143.400	1350	525240.097	227762.795	1.781
SW44	0.021	5.00	143.550	1350	525257.954	227755.928	2.086
SW45	0.035	5.00	143.600	1350	525269.075	227756.841	2.172
SW46	0.055	5.00	143.800	1350	525283.956	227746.415	2.430
SW47	0.104	5.00	143.400	1200	525226.838	227734.319	1.500
SW48	0.080	5.00	143.500	1350	525216.049	227706.725	1.852
SW39	0.030	5.00	141.939	1800	525163.866	227508.483	1.875
SW40	0.116	5.00	142.000	1800	525133.909	227519.734	2.000
SW49	0.029	5.00	143.200	1350	525213.854	227779.285	2.023
SW50	0.100	5.00	143.000	1350	525181.150	227781.099	1.905
SW51	0.039	5.00	143.000	1350	525160.169	227767.178	1.968
SW52	0.059	5.00	143.000	1350	525164.293	227752.497	2.006
SW53	0.038	5.00	143.000	1500	525150.140	227725.540	2.157
SW54	0.065	5.00	142.900	1500	525140.071	227700.271	2.112
SW55	0.043	5.00	142.900	1500	525132.637	227681.536	2.153
SW56	0.076	5.00	142.850	1500	525120.366	227648.757	2.173
SW57	0.044	5.00	142.850	1500	525150.218	227637.228	2.237
SW58	0.122	5.00	143.050	1500	525178.332	227625.180	2.498
SW59	0.010	5.00	142.950	1500	525170.965	227606.932	2.434
SW60	0.044	5.00	142.800	1500	525164.250	227590.356	2.320
SW61	0.034	5.00	142.700	1500	525159.623	227578.820	2.247
SW62	0.116	5.00	142.500	1500	525178.854	227568.163	2.088
SW63	0.059	5.00	142.500	1500	525200.255	227559.837	2.209
SW64	0.067	5.00	142.750	1200	525107.196	227616.711	1.882
SW65	0.058	5.00	142.500	1350	525097.340	227590.859	1.748
SW66	0.062	5.00	142.100	1350	525081.022	227550.428	1.531
SW67	0.038	5.00	142.100	1200	525081.943	227542.214	1.641
SW68	0.025	5.00	142.100	1350	525103.416	227532.349	1.791
SW69	0.041	5.00	143.100	1350	525262.211	227879.011	1.611
SW70	0.052	5.00	143.050	1350	525260.146	227858.126	1.650

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
SW71	0.040	5.00	142.850	1200	525206.895	227869.286	1.467
SW72	0.028	5.00	142.800	1350	525205.789	227857.477	1.563
SW73	0.055	5.00	142.692	1200	525165.090	227866.503	1.425
SW74	0.066	5.00	142.741	1200	525102.905	227869.228	1.425
SW75	0.119	5.00	142.560	1200	525117.081	227842.508	1.500
SW76	0.069	5.00	142.623	1200	525136.141	227812.707	1.425
SW77	0.050	5.00	142.532	1200	525127.905	227825.474	1.425
SW78	0.039	5.00	142.408	1200	525076.134	227802.274	1.500
SW79	0.051	5.00	142.746	1200	525144.089	227777.739	1.425
SW80	0.005	5.00	142.717	1200	525139.878	227775.392	1.425
SW81	0.021	5.00	142.737	1350	525134.413	227763.281	1.600
SW82	0.028	5.00	142.950	1350	525126.243	227745.692	1.894
SW84	0.062	5.00	143.850	1350	525346.618	227802.549	2.656
SW85	0.033	5.00	143.600	1200	525253.841	227744.609	1.350
SW86	0.046	5.00	143.600	1200	525276.346	227769.003	1.350
SW87	0.122	5.00	143.450	1200	525194.799	227715.269	1.500
SW88	0.016	5.00	143.200	1200	525202.402	227684.831	1.350
SW89	0.042	5.00	143.100	1350	525194.120	227664.291	2.259
SW91	0.086	5.00	143.200	1200	525204.822	227660.193	1.500
SW90	0.089	5.00	143.100	1200	525181.611	227669.468	1.500
SW92	0.174	5.00	142.600	1500	525147.429	227583.671	2.117
SW93	0.034	5.00	142.500	1350	525153.295	227563.122	1.766
SW94	0.050	5.00	142.200	1350	525143.617	227539.291	1.619
SW95	0.047	5.00	142.186	1200	525060.827	227556.250	1.425
SW13			141.250	1350	524980.115	227502.455	1.912
Tank 03		5.00	142.500		525173.743	227561.496	2.050
Tank 01		5.00	142.400		525073.604	227800.920	1.480
Tank 02		5.00	142.800		525179.996	227576.438	2.350
Tank 04		5.00	142.800		525146.892	227591.019	2.300
Tank 05		5.00	142.500		525139.801	227573.931	1.990
SW96			141.900	1500	525034.127	227534.009	1.977

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
1.021	SW10 (FC)	SW11	10.660	0.600	139.884	139.771	0.113	94.3	225	13.43	50.0
1.022	SW11	SW12	47.653	0.600	139.741	139.456	0.285	167.2	225	14.22	50.0
1.023	SW12	SW13	19.730	0.600	139.456	139.338	0.118	167.0	225	14.55	50.0
1.020	SW96	SW10 (FC)	19.582	0.600	139.923	139.884	0.039	500.0	675	13.30	50.0
1.019	Basin 02	SW96	13.343	0.600	139.950	139.923	0.027	500.0	675	13.02	50.0
16.019	Basin 04	SW10 (FC)	11.487	0.600	139.950	139.884	0.066	174.0	675	12.39	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
1.021	1.346	53.5	920.3	1.791	1.704	5.093	0.0	225	1.371
1.022	1.008	40.1	920.3	1.734	2.319	5.093	0.0	225	1.027
1.023	1.009	40.1	920.3	2.319	1.687	5.093	0.0	225	1.027
1.020	1.165	416.9	377.3	1.302	1.341	2.088	0.0	507	1.310
1.019	1.165	416.9	377.3	1.275	1.302	2.088	0.0	507	1.310
16.019	1.983	709.7	534.5	1.275	1.341	2.958	0.0	439	2.167

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
2.000	SW01	SW02	30.084	0.600	141.328	141.232	0.096	313.4	375	5.49	50.0
1.002	SW02	SW03	54.707	0.600	141.157	141.020	0.137	399.3	450	6.61	50.0
1.003	SW03	SW04	34.896	0.600	140.945	140.875	0.070	498.5	525	7.19	50.0
1.004	SW04	SW05	51.119	0.600	140.875	140.773	0.102	501.2	525	8.05	50.0
1.005	SW05	SW06	39.550	0.600	140.698	140.619	0.079	500.6	600	8.66	50.0
1.006	SW06	SW07	13.775	0.600	140.619	140.591	0.028	500.0	600	8.87	50.0
1.007	SW07	SW08	18.346	0.600	140.591	140.554	0.037	500.0	600	9.15	50.0
10.000	1	2	28.837	0.600	140.587	140.529	0.058	497.2	675	5.41	50.0
10.001	2	3	23.863	0.600	140.529	140.481	0.048	497.1	675	5.75	50.0
1.010	3	4	73.097	0.600	140.481	140.348	0.133	550.0	675	10.49	50.0
1.011	4	5	10.159	0.600	140.348	140.330	0.018	550.0	675	10.64	50.0
1.012	5	6	12.568	0.600	140.330	140.307	0.023	546.4	675	10.83	50.0
1.013	6	7	71.326	0.600	140.307	140.177	0.130	548.7	675	11.90	50.0
1.014	7	8	24.710	0.600	140.177	140.132	0.045	549.1	675	12.27	50.0
1.015	8	9	10.447	0.600	140.132	140.113	0.019	550.0	675	12.43	50.0
1.016	9	10	12.387	0.600	140.113	140.090	0.023	550.0	675	12.61	50.0
1.017	10	SW09	15.864	0.600	140.090	139.965	0.125	126.9	675	12.73	50.0
1.018	SW09	Basin 02	7.314	0.600	139.965	139.950	0.015	487.6	675	12.83	50.0
1.008	SW08	Basin 01	10.656	0.600	140.554	140.500	0.054	197.3	600	9.25	50.0
1.009	Basin 01	3	9.600	0.600	140.500	140.481	0.019	500.0	675	9.39	50.0
9.000	SW14	SW15	13.402	0.600	141.114	141.034	0.080	167.5	225	5.22	50.0
9.001	SW15	SW17	6.019	0.600	141.034	140.998	0.036	167.2	225	5.32	50.0
8.005	SW16	SW17	9.216	0.600	140.877	140.848	0.029	313.0	375	6.28	50.0
8.006	SW17	SW08	26.490	0.600	140.773	140.704	0.069	383.9	450	6.70	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
2.000	1.018	112.4	8.5	1.697	1.493	0.047	0.0	69	0.607
1.002	1.011	160.8	38.5	1.493	1.330	0.213	0.0	149	0.835
1.003	0.996	215.6	81.3	1.330	1.200	0.450	0.0	223	0.928
1.004	0.993	215.1	105.9	1.200	1.200	0.586	0.0	260	0.990
1.005	1.081	305.7	174.0	1.200	1.200	0.963	0.0	324	1.114
1.006	1.082	305.9	182.5	1.200	1.200	1.010	0.0	334	1.127
1.007	1.082	305.9	194.6	1.200	1.200	1.077	0.0	348	1.143
10.000	1.168	418.1	4.0	0.638	0.696	0.022	0.0	46	0.379
10.001	1.168	418.1	4.0	0.696	0.744	0.022	0.0	46	0.379
1.010	1.110	397.3	254.2	0.744	0.877	1.407	0.0	393	1.174
1.011	1.110	397.3	254.2	0.877	0.895	1.407	0.0	393	1.174
1.012	1.114	398.6	289.3	0.895	0.918	1.601	0.0	428	1.209
1.013	1.112	397.8	309.7	0.918	1.048	1.714	0.0	450	1.223
1.014	1.111	397.6	365.7	1.048	1.093	2.024	0.0	514	1.252
1.015	1.110	397.3	365.7	1.093	1.112	2.024	0.0	514	1.251
1.016	1.110	397.3	365.7	1.112	1.135	2.024	0.0	514	1.251
1.017	2.325	831.9	365.7	1.135	1.260	2.024	0.0	313	2.253
1.018	1.180	422.2	377.3	1.260	1.275	2.088	0.0	501	1.325
1.008	1.730	489.0	250.3	1.200	0.900	1.385	0.0	304	1.740
1.009	1.165	416.9	250.3	0.825	0.744	1.385	0.0	377	1.215
9.000	1.007	40.0	10.5	1.200	1.341	0.058	0.0	79	0.852
9.001	1.008	40.1	16.3	1.341	1.277	0.090	0.0	100	0.957
8.005	1.019	112.5	22.6	1.498	1.277	0.125	0.0	113	0.801
8.006	1.031	164.0	42.5	1.277	1.200	0.235	0.0	155	0.869

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
8.004	SW83	SW16	26.850	0.600	140.963	140.877	0.086	313.0	375	6.13	50.0
11.001	SW19	SW20	16.029	0.600	140.959	140.891	0.068	235.7	300	5.66	50.0
11.002	SW20	SW21	27.921	0.600	140.891	140.773	0.118	236.6	300	6.11	50.0
11.003	SW21	SW22	13.012	0.600	140.623	140.590	0.033	394.3	450	6.33	50.0
11.004	SW22	5	13.823	0.600	140.590	140.555	0.035	394.9	450	6.55	50.0
11.000	SW18	SW19	23.973	0.600	141.178	141.034	0.144	166.5	225	5.40	50.0
12.000	SW23	SW24	32.054	0.600	141.040	140.848	0.192	167.0	225	5.53	50.0
12.001	SW24	SW25	7.475	0.600	140.848	140.803	0.045	167.0	225	5.65	50.0
12.002	SW25	6	7.538	0.600	140.803	140.757	0.046	163.9	225	5.78	50.0
13.000	SW26	SW27	31.439	0.600	140.818	140.686	0.132	238.0	300	5.52	50.0
13.001	SW27	SW28	18.000	0.600	140.611	140.553	0.058	313.0	375	5.81	50.0
13.002	SW28	SW29	21.000	0.600	140.478	140.425	0.053	400.0	450	6.16	50.0
13.003	SW29	7	9.158	0.600	140.425	140.402	0.023	398.2	450	6.31	50.0
14.000	SW30	SW31	5.732	0.600	140.469	140.444	0.025	229.3	300	5.09	50.0
14.001	SW31	SW09	24.748	0.600	140.444	140.340	0.104	238.0	300	5.50	50.0
24.005	11	12	52.780	0.600	140.678	140.582	0.096	549.8	675	7.17	50.0
24.006	12	13	36.322	0.600	140.582	140.516	0.066	550.3	675	7.71	50.0
24.007	13	14	13.160	0.600	140.516	140.492	0.024	548.3	675	7.91	50.0
24.008	14	SW37	10.549	0.600	140.492	140.471	0.021	502.3	675	8.06	50.0
24.009	SW37	16	10.571	0.600	140.471	140.450	0.021	503.4	675	8.21	50.0
24.010	16	17	77.262	0.600	140.450	140.309	0.141	548.0	675	9.37	50.0
24.011	17	SW38	3.000	0.600	140.309	140.303	0.006	500.1	675	9.41	50.0
24.012	SW38	19	3.000	0.600	140.303	140.297	0.006	500.1	675	9.46	50.0
24.013	19	20	48.273	0.600	140.297	140.209	0.088	548.6	675	10.18	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
8.004	1.019	112.5	20.8	1.612	1.498	0.115	0.0	109	0.784
11.001	1.019	72.1	14.3	1.341	1.209	0.079	0.0	90	0.797
11.002	1.018	71.9	20.1	1.209	1.200	0.111	0.0	108	0.876
11.003	1.017	161.8	29.5	1.200	1.200	0.163	0.0	130	0.781
11.004	1.017	161.7	35.1	1.200	0.895	0.194	0.0	142	0.819
11.000	1.010	40.2	4.5	1.200	1.341	0.025	0.0	51	0.671
12.000	1.009	40.1	8.7	1.200	1.200	0.048	0.0	71	0.808
12.001	1.009	40.1	17.5	1.200	1.200	0.097	0.0	104	0.976
12.002	1.018	40.5	20.4	1.200	0.918	0.113	0.0	113	1.020
13.000	1.015	71.7	12.8	1.332	1.214	0.071	0.0	85	0.771
13.001	1.019	112.5	39.6	1.214	1.200	0.219	0.0	153	0.933
13.002	1.010	160.7	45.4	1.200	1.200	0.251	0.0	163	0.873
13.003	1.012	161.0	56.0	1.200	1.048	0.310	0.0	182	0.923
14.000	1.034	73.1	2.9	1.200	1.200	0.016	0.0	41	0.509
14.001	1.015	71.7	2.9	1.200	1.260	0.016	0.0	41	0.499
24.005	1.110	397.4	54.6	2.547	2.593	0.302	0.0	167	0.788
24.006	1.110	397.2	107.3	2.593	2.559	0.594	0.0	238	0.949
24.007	1.112	397.9	107.3	2.559	2.483	0.594	0.0	238	0.950
24.008	1.162	415.9	107.3	2.483	2.404	0.594	0.0	232	0.981
24.009	1.161	415.5	191.0	2.404	2.325	1.057	0.0	321	1.138
24.010	1.112	398.0	191.0	2.325	2.016	1.057	0.0	329	1.101
24.011	1.165	416.9	191.0	2.016	1.972	1.057	0.0	321	1.141
24.012	1.165	416.9	207.1	1.972	2.228	1.146	0.0	337	1.164
24.013	1.112	397.8	207.1	2.228	1.666	1.146	0.0	346	1.122

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
16.015	20	21	59.702	0.600	140.209	140.100	0.109	547.7	750	11.55	50.0
24.000	SW32	SW33	17.017	0.600	141.326	141.254	0.072	236.3	300	5.28	50.0
24.001	SW33	SW34	21.040	0.600	141.179	141.111	0.068	309.4	375	5.62	50.0
24.002	SW34	SW35	25.918	0.600	141.111	141.028	0.083	312.3	375	6.04	50.0
24.003	SW35	SW36	10.014	0.600	140.953	140.928	0.025	400.5	450	6.21	50.0
24.004	SW36	11	9.962	0.600	140.928	140.903	0.025	398.5	450	6.37	50.0
26.000	SW41	SW42	23.154	0.600	141.750	141.653	0.097	238.0	300	5.38	50.0
26.001	SW42	SW43	8.010	0.600	141.653	141.619	0.034	238.0	300	5.51	50.0
26.002	SW43	SW44	19.132	0.600	141.619	141.539	0.080	238.0	300	5.83	50.0
26.003	SW44	SW45	11.158	0.600	141.464	141.428	0.036	311.5	375	6.01	50.0
26.004	SW45	SW46	18.170	0.600	141.428	141.370	0.058	313.3	375	6.31	50.0
26.005	SW46	12	5.892	0.600	141.374	140.882	0.492	12.0	375	6.32	50.0
29.000	SW47	SW48	29.628	0.600	141.900	141.723	0.177	167.0	300	5.41	50.0
29.001	SW48	SW37	44.043	0.600	141.648	140.771	0.877	50.2	375	5.69	50.0
16.016	21	SW39	17.817	0.600	140.100	140.064	0.036	494.9	750	11.79	50.0
16.017	SW39	SW40	32.000	0.600	140.064	140.000	0.064	500.0	750	12.22	50.0
16.018	SW40	Basin 04	8.795	0.600	140.000	139.950	0.050	175.9	675	12.29	50.0
16.000	SW49	SW50	32.754	0.600	141.177	141.095	0.082	399.4	450	5.54	50.0
16.001	SW50	SW51	25.179	0.600	141.095	141.032	0.063	399.7	450	5.96	50.0
16.002	SW51	SW52	15.249	0.600	141.032	140.994	0.038	401.3	450	6.21	50.0
16.003	SW52	SW53	30.446	0.600	140.994	140.918	0.076	400.6	450	6.71	50.0
16.004	SW53	SW54	27.201	0.600	140.843	140.788	0.055	494.6	525	7.16	50.0
16.005	SW54	SW55	20.156	0.600	140.788	140.747	0.041	491.6	525	7.50	50.0
16.006	SW55	SW56	35.001	0.600	140.747	140.677	0.070	500.0	525	8.08	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
16.015	1.188	525.0	439.3	1.591	1.050	2.431	0.0	528	1.322
24.000	1.018	72.0	11.0	1.974	1.946	0.061	0.0	79	0.741
24.001	1.024	113.1	12.6	1.946	2.164	0.070	0.0	84	0.683
24.002	1.020	112.6	22.4	2.164	2.447	0.124	0.0	113	0.802
24.003	1.009	160.5	51.7	2.447	2.522	0.286	0.0	175	0.904
24.004	1.012	161.0	54.6	2.522	2.547	0.302	0.0	180	0.917
26.000	1.015	71.7	6.5	1.200	1.447	0.036	0.0	61	0.636
26.001	1.015	71.7	17.5	1.447	1.481	0.097	0.0	100	0.841
26.002	1.015	71.7	18.4	1.481	1.711	0.102	0.0	103	0.854
26.003	1.021	112.8	28.2	1.711	1.797	0.156	0.0	127	0.853
26.004	1.018	112.4	42.8	1.797	2.055	0.237	0.0	160	0.951
26.005	5.260	580.9	52.8	2.051	2.593	0.292	0.0	76	3.325
29.000	1.214	85.8	18.8	1.200	1.477	0.104	0.0	95	0.979
29.001	2.562	282.9	55.3	1.477	2.404	0.306	0.0	112	2.004
16.016	1.251	552.6	439.3	1.050	1.125	2.431	0.0	508	1.380
16.017	1.244	549.7	444.7	1.125	1.250	2.461	0.0	515	1.377
16.018	1.973	705.9	534.5	1.325	1.275	2.958	0.0	441	2.158
16.000	1.011	160.8	5.2	1.573	1.455	0.029	0.0	55	0.470
16.001	1.011	160.7	23.3	1.455	1.518	0.129	0.0	115	0.726
16.002	1.008	160.4	30.4	1.518	1.556	0.168	0.0	132	0.783
16.003	1.009	160.5	41.0	1.556	1.632	0.227	0.0	154	0.848
16.004	1.000	216.5	47.9	1.632	1.587	0.265	0.0	167	0.810
16.005	1.003	217.2	59.6	1.587	1.628	0.330	0.0	187	0.861
16.006	0.995	215.3	67.4	1.628	1.648	0.373	0.0	201	0.884

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
16.007	SW56	SW57	32.001	0.600	140.677	140.613	0.064	500.0	525	8.62	50.0
16.008	SW57	SW58	30.587	0.600	140.613	140.552	0.061	500.0	525	9.13	50.0
16.009	SW58	SW59	19.679	0.600	140.552	140.516	0.036	546.6	525	9.48	50.0
16.010	SW59	SW60	17.884	0.600	140.516	140.480	0.036	496.8	525	9.78	50.0
16.011	SW60	SW61	12.429	0.600	140.480	140.453	0.027	460.3	525	9.98	50.0
15.012	SW61	SW62	20.369	0.600	140.453	140.412	0.041	496.8	525	10.32	50.0
16.013	SW62	SW63	22.964	0.600	140.412	140.366	0.046	499.2	600	10.67	50.0
16.014	SW63	20	3.155	0.600	140.291	140.284	0.007	450.7	600	10.72	50.0
31.000	SW64	SW65	27.653	0.600	140.868	140.752	0.116	238.4	300	5.45	50.0
31.001	SW65	SW66	43.600	0.600	140.752	140.569	0.183	238.3	300	6.17	50.0
31.002	SW66	SW67	8.265	0.600	140.569	140.534	0.035	238.0	300	6.31	50.0
30.003	SW67	SW68	23.631	0.600	140.459	140.384	0.075	315.1	375	6.70	50.0
31.004	SW68	SW40	32.999	0.600	140.309	140.225	0.084	392.9	450	7.23	50.0
1.000	SW69	SW70	20.987	0.600	141.489	141.400	0.089	235.8	300	5.34	50.0
1.001	SW70	SW02	21.996	0.600	141.400	141.307	0.093	236.5	300	5.70	50.0
3.000	SW71	SW72	11.861	0.600	141.383	141.312	0.071	167.1	225	5.20	50.0
3.001	SW72	SW03	15.800	0.600	141.237	141.170	0.067	235.8	300	5.45	50.0
4.000	SW73	SW04	15.348	0.600	141.267	141.175	0.092	166.8	225	5.25	50.0
5.000	SW74	SW75	30.248	0.600	141.316	141.135	0.181	167.1	225	5.50	50.0
5.001	SW75	SW05	14.759	0.600	141.060	140.998	0.062	238.0	300	5.74	50.0
6.000	SW76	SW77	15.193	0.600	141.198	141.107	0.091	167.0	225	5.25	50.0
6.001	SW77	SW05	5.610	0.600	141.107	141.073	0.034	165.0	225	5.34	50.0
7.001	SW78	SW07	3.937	0.600	140.908	140.891	0.017	231.6	300	5.11	50.0
8.000	SW79	SW80	4.821	0.600	141.321	141.292	0.029	167.0	225	5.08	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
16.007	0.995	215.3	81.1	1.648	1.712	0.449	0.0	223	0.927
16.008	0.995	215.3	89.1	1.712	1.973	0.493	0.0	235	0.949
16.009	0.951	205.8	153.2	1.973	1.909	0.848	0.0	339	1.038
16.010	0.998	216.0	155.0	1.909	1.795	0.858	0.0	330	1.082
16.011	1.037	224.5	163.0	1.795	1.722	0.902	0.0	333	1.127
15.012	0.998	216.0	200.6	1.722	1.563	1.110	0.0	403	1.126
16.013	1.083	306.2	221.5	1.488	1.534	1.226	0.0	379	1.175
16.014	1.140	322.4	232.2	1.609	1.666	1.285	0.0	378	1.236
31.000	1.014	71.7	12.1	1.582	1.448	0.067	0.0	83	0.759
31.001	1.014	71.7	22.6	1.448	1.231	0.125	0.0	115	0.900
31.002	1.015	71.7	33.8	1.231	1.266	0.187	0.0	145	1.000
30.003	1.015	112.1	49.2	1.266	1.341	0.272	0.0	174	0.984
31.004	1.019	162.1	53.7	1.341	1.325	0.297	0.0	178	0.919
1.000	1.019	72.1	7.4	1.311	1.350	0.041	0.0	65	0.664
1.001	1.018	71.9	16.8	1.350	1.493	0.093	0.0	98	0.834
3.000	1.009	40.1	7.2	1.242	1.263	0.040	0.0	65	0.769
3.001	1.019	72.0	12.3	1.263	1.330	0.068	0.0	83	0.766
4.000	1.009	40.1	9.9	1.200	1.200	0.055	0.0	76	0.839
5.000	1.008	40.1	11.9	1.200	1.200	0.066	0.0	84	0.882
5.001	1.014	71.7	33.4	1.200	1.200	0.185	0.0	144	0.997
6.000	1.009	40.1	12.5	1.200	1.200	0.069	0.0	86	0.891
6.001	1.015	40.4	21.5	1.200	1.200	0.119	0.0	116	1.029
7.001	1.029	72.7	7.0	1.200	1.200	0.039	0.0	63	0.659
8.000	1.009	40.1	9.2	1.200	1.200	0.051	0.0	73	0.823

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
8.001	SW80	SW81	13.287	0.600	141.292	141.212	0.080	167.0	225	5.30	50.0
8.002	SW81	SW82	19.394	0.600	141.137	141.056	0.081	238.0	300	5.62	50.0
8.003	SW82	SW83	4.169	0.600	141.056	141.038	0.018	238.0	300	5.69	50.0
25.000	SW84	SW35	21.467	0.600	141.194	141.103	0.091	235.9	300	5.35	50.0
27.000	SW85	SW44	12.043	0.600	142.250	141.693	0.557	21.6	150	5.09	50.0
28.000	SW86	SW45	14.170	0.600	142.250	141.657	0.593	23.9	150	5.11	50.0
30.000	SW87	SW48	22.903	0.600	141.950	141.723	0.227	100.9	300	5.24	50.0
17.000	SW88	SW89	22.147	0.600	141.850	141.066	0.784	28.2	150	5.19	50.0
17.001	SW89	SW58	42.177	0.600	140.841	140.702	0.139	303.4	375	5.87	50.0
19.000	SW91	SW89	11.460	0.600	141.700	140.916	0.784	14.6	300	5.05	50.0
18.000	SW90	SW89	13.538	0.600	141.600	140.916	0.684	19.8	300	5.06	50.0
19.001	SW92	SW61	14.745	0.600	140.483	140.453	0.030	491.5	525	5.44	50.0
33.000	SW93	SW94	25.721	0.600	140.734	140.581	0.153	168.1	225	5.43	50.0
33.001	SW94	SW40	21.834	0.600	140.581	140.450	0.131	166.7	225	5.79	50.0
32.000	SW95	SW67	25.355	0.600	140.761	140.609	0.152	166.8	225	5.42	50.0
1.024	SW13	EXManhole	22.274	0.600	139.338	139.030	0.308	72.3	225	14.79	50.0
22.000	Tank 03	SW62	8.401	0.600	140.450	140.412	0.038	221.1	525	5.09	50.0
7.000	Tank 01	SW78	2.870	0.600	140.920	140.908	0.012	239.1	300	5.05	50.0
23.000	Tank 02	SW62	8.353	0.600	140.450	140.412	0.038	219.8	525	5.09	50.0
21.000	Tank 04	SW92	7.368	0.600	140.500	140.483	0.017	433.4	525	5.11	50.0
20.000	Tank 05	SW92	12.371	0.600	140.510	140.483	0.027	458.2	525	5.20	50.0
15.000	Basin 03	SW96	10.427	0.600	140.100	139.998	0.102	102.2	600	5.07	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
8.001	1.009	40.1	10.1	1.200	1.300	0.056	0.0	77	0.844
8.002	1.015	71.7	13.9	1.300	1.594	0.077	0.0	89	0.791
8.003	1.015	71.7	19.0	1.594	1.612	0.105	0.0	105	0.861
25.000	1.019	72.0	11.2	2.356	2.447	0.062	0.0	79	0.745
27.000	2.175	38.4	6.0	1.200	1.707	0.033	0.0	40	1.579
28.000	2.068	36.6	8.3	1.200	1.793	0.046	0.0	48	1.675
30.000	1.565	110.6	22.0	1.200	1.477	0.122	0.0	91	1.230
17.000	1.901	33.6	2.9	1.200	1.884	0.016	0.0	30	1.165
17.001	1.035	114.3	42.1	1.884	1.973	0.233	0.0	157	0.958
19.000	4.132	292.1	15.5	1.200	1.884	0.086	0.0	47	2.227
18.000	3.549	250.9	16.1	1.200	1.884	0.089	0.0	51	2.025
19.001	1.003	217.2	31.4	1.592	1.722	0.174	0.0	134	0.723
33.000	1.005	40.0	6.1	1.541	1.394	0.034	0.0	59	0.731
33.001	1.010	40.1	15.2	1.394	1.325	0.084	0.0	95	0.939
32.000	1.009	40.1	8.5	1.200	1.266	0.047	0.0	70	0.803
1.024	1.539	61.2	920.3	1.687	1.775	5.093	0.0	225	1.568
22.000	1.502	325.2	0.0	1.525	1.563	0.000	0.0	0	0.000
7.000	1.012	71.5	0.0	1.180	1.200	0.000	0.0	0	0.000
23.000	1.506	326.1	0.0	1.825	1.563	0.000	0.0	0	0.000
21.000	1.069	231.5	0.0	1.775	1.592	0.000	0.0	0	0.000
20.000	1.040	225.0	0.0	1.465	1.592	0.000	0.0	0	0.000
15.000	2.408	680.9	0.0	1.200	1.302	0.000	0.0	0	0.000

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
1.021	10.660	94.3	225	1 STANDARD	141.900	139.884	1.791	141.700	139.771	1.704
1.022	47.653	167.2	225	1 STANDARD	141.700	139.741	1.734	142.000	139.456	2.319
1.023	19.730	167.0	225	1 STANDARD	142.000	139.456	2.319	141.250	139.338	1.687
1.020	19.582	500.0	675	1 STANDARD	141.900	139.923	1.302	141.900	139.884	1.341
1.019	13.343	500.0	675	1 STANDARD	141.900	139.950	1.275	141.900	139.923	1.302
16.019	11.487	174.0	675	1 STANDARD	141.900	139.950	1.275	141.900	139.884	1.341
2.000	30.084	313.4	375	1 STANDARD	143.400	141.328	1.697	143.100	141.232	1.493
1.002	54.707	399.3	450	1 STANDARD	143.100	141.157	1.493	142.800	141.020	1.330
1.003	34.896	498.5	525	1 STANDARD	142.800	140.945	1.330	142.600	140.875	1.200
1.004	51.119	501.2	525	1 STANDARD	142.600	140.875	1.200	142.498	140.773	1.200
1.005	39.550	500.6	600	1 STANDARD	142.498	140.698	1.200	142.419	140.619	1.200
1.006	13.775	500.0	600	1 STANDARD	142.419	140.619	1.200	142.391	140.591	1.200
1.007	18.346	500.0	600	1 STANDARD	142.391	140.591	1.200	142.354	140.554	1.200
10.000	28.837	497.2	675	1 STANDARD	141.900	140.587	0.638	141.900	140.529	0.696
10.001	23.863	497.1	675	1 STANDARD	141.900	140.529	0.696	141.900	140.481	0.744
1.010	73.097	550.0	675	1 STANDARD	141.900	140.481	0.744	141.900	140.348	0.877
1.011	10.159	550.0	675	1 STANDARD	141.900	140.348	0.877	141.900	140.330	0.895
1.012	12.568	546.4	675	1 STANDARD	141.900	140.330	0.895	141.900	140.307	0.918
1.013	71.326	548.7	675	1 STANDARD	141.900	140.307	0.918	141.900	140.177	1.048
1.014	24.710	549.1	675	1 STANDARD	141.900	140.177	1.048	141.900	140.132	1.093
1.015	10.447	550.0	675	1 STANDARD	141.900	140.132	1.093	141.900	140.113	1.112
1.016	12.387	550.0	675	1 STANDARD	141.900	140.113	1.112	141.900	140.090	1.135
1.017	15.864	126.9	675	1 STANDARD	141.900	140.090	1.135	141.900	139.965	1.260
1.018	7.314	487.6	675	1 STANDARD	141.900	139.965	1.260	141.900	139.950	1.275
1.008	10.656	197.3	600	1 STANDARD	142.354	140.554	1.200	142.000	140.500	0.900

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.021	SW10 (FC)	1800	Manhole	1 STANDARD	SW11	1350	Manhole	1 STANDARD
1.022	SW11	1350	Manhole	1 STANDARD	SW12	1350	Manhole	1 STANDARD
1.023	SW12	1350	Manhole	1 STANDARD	SW13	1350	Manhole	1 STANDARD
1.020	SW96	1500	Manhole	1 STANDARD	SW10 (FC)	1800	Manhole	1 STANDARD
1.019	Basin 02		Junction		SW96	1500	Manhole	1 STANDARD
16.019	Basin 04		Junction		SW10 (FC)	1800	Manhole	1 STANDARD
2.000	SW01	1350	Manhole	1 STANDARD	SW02	1350	Manhole	1 STANDARD
1.002	SW02	1350	Manhole	1 STANDARD	SW03	1500	Manhole	1 STANDARD
1.003	SW03	1500	Manhole	1 STANDARD	SW04	1500	Manhole	1 STANDARD
1.004	SW04	1500	Manhole	1 STANDARD	SW05	1500	Manhole	1 STANDARD
1.005	SW05	1500	Manhole	1 STANDARD	SW06	1500	Manhole	1 STANDARD
1.006	SW06	1500	Manhole	1 STANDARD	SW07	1500	Manhole	1 STANDARD
1.007	SW07	1500	Manhole	1 STANDARD	SW08	1500	Manhole	1 STANDARD
10.000	1		Junction		2		Junction	
10.001	2		Junction		3		Junction	
1.010	3		Junction		4		Junction	
1.011	4		Junction		5		Junction	
1.012	5		Junction		6		Junction	
1.013	6		Junction		7		Junction	
1.014	7		Junction		8		Junction	
1.015	8		Junction		9	1500	Manhole	1 STANDARD
1.016	9	1500	Manhole	1 STANDARD	10	1500	Manhole	1 STANDARD
1.017	10	1500	Manhole	1 STANDARD	SW09	1500	Manhole	1 STANDARD
1.018	SW09	1500	Manhole	1 STANDARD	Basin 02		Junction	
1.008	SW08	1500	Manhole	1 STANDARD	Basin 01		Junction	

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
1.009	9.600	500.0	675	1 STANDARD	142.000	140.500	0.825	141.900	140.481	0.744
9.000	13.402	167.5	225	1 STANDARD	142.539	141.114	1.200	142.600	141.034	1.341
9.001	6.019	167.2	225	1 STANDARD	142.600	141.034	1.341	142.500	140.998	1.277
8.005	9.216	313.0	375	1 STANDARD	142.750	140.877	1.498	142.500	140.848	1.277
8.006	26.490	383.9	450	1 STANDARD	142.500	140.773	1.277	142.354	140.704	1.200
8.004	26.850	313.0	375	1 STANDARD	142.950	140.963	1.612	142.750	140.877	1.498
11.001	16.029	235.7	300	1 STANDARD	142.600	140.959	1.341	142.400	140.891	1.209
11.002	27.921	236.6	300	1 STANDARD	142.400	140.891	1.209	142.273	140.773	1.200
11.003	13.012	394.3	450	1 STANDARD	142.273	140.623	1.200	142.240	140.590	1.200
11.004	13.823	394.9	450	1 STANDARD	142.240	140.590	1.200	141.900	140.555	0.895
11.000	23.973	166.5	225	1 STANDARD	142.603	141.178	1.200	142.600	141.034	1.341
12.000	32.054	167.0	225	1 STANDARD	142.465	141.040	1.200	142.273	140.848	1.200
12.001	7.475	167.0	225	1 STANDARD	142.273	140.848	1.200	142.228	140.803	1.200
12.002	7.538	163.9	225	1 STANDARD	142.228	140.803	1.200	141.900	140.757	0.918
13.000	31.439	238.0	300	1 STANDARD	142.450	140.818	1.332	142.200	140.686	1.214
13.001	18.000	313.0	375	1 STANDARD	142.200	140.611	1.214	142.128	140.553	1.200
13.002	21.000	400.0	450	1 STANDARD	142.128	140.478	1.200	142.075	140.425	1.200
13.003	9.158	398.2	450	1 STANDARD	142.075	140.425	1.200	141.900	140.402	1.048
14.000	5.732	229.3	300	1 STANDARD	141.969	140.469	1.200	141.944	140.444	1.200
14.001	24.748	238.0	300	1 STANDARD	141.944	140.444	1.200	141.900	140.340	1.260
24.005	52.780	549.8	675	1 STANDARD	143.900	140.678	2.547	143.850	140.582	2.593
24.006	36.322	550.3	675	1 STANDARD	143.850	140.582	2.593	143.750	140.516	2.559
24.007	13.160	548.3	675	1 STANDARD	143.750	140.516	2.559	143.650	140.492	2.483
24.008	10.549	502.3	675	1 STANDARD	143.650	140.492	2.483	143.550	140.471	2.404
24.009	10.571	503.4	675	1 STANDARD	143.550	140.471	2.404	143.450	140.450	2.325

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.009	Basin 01		Junction		3		Junction	
9.000	SW14	1200	Manhole	1 STANDARD	SW15	1350	Manhole	1 STANDARD
9.001	SW15	1350	Manhole	1 STANDARD	SW17	1350	Manhole	1 STANDARD
8.005	SW16	1350	Manhole	1 STANDARD	SW17	1350	Manhole	1 STANDARD
8.006	SW17	1350	Manhole	1 STANDARD	SW08	1500	Manhole	1 STANDARD
8.004	SW83	1350	Manhole	1 STANDARD	SW16	1350	Manhole	1 STANDARD
11.001	SW19	1350	Manhole	1 STANDARD	SW20	1350	Manhole	1 STANDARD
11.002	SW20	1350	Manhole	1 STANDARD	SW21	1350	Manhole	1 STANDARD
11.003	SW21	1350	Manhole	1 STANDARD	SW22	1350	Manhole	1 STANDARD
11.004	SW22	1350	Manhole	1 STANDARD	5		Junction	
11.000	SW18	1200	Manhole	1 STANDARD	SW19	1350	Manhole	1 STANDARD
12.000	SW23	1200	Manhole	1 STANDARD	SW24	1200	Manhole	1 STANDARD
12.001	SW24	1200	Manhole	1 STANDARD	SW25	1200	Manhole	1 STANDARD
12.002	SW25	1200	Manhole	1 STANDARD	6		Junction	
13.000	SW26	1350	Manhole	1 STANDARD	SW27	1350	Manhole	1 STANDARD
13.001	SW27	1350	Manhole	1 STANDARD	SW28	1350	Manhole	1 STANDARD
13.002	SW28	1350	Manhole	1 STANDARD	SW29	1350	Manhole	1 STANDARD
13.003	SW29	1350	Manhole	1 STANDARD	7		Junction	
14.000	SW30	1200	Manhole	1 STANDARD	SW31	1200	Manhole	1 STANDARD
14.001	SW31	1200	Manhole	1 STANDARD	SW09	1500	Manhole	1 STANDARD
24.005	11		Junction		12		Junction	
24.006	12		Junction		13		Junction	
24.007	13		Junction		14		Junction	
24.008	14		Junction		SW37	1500	Manhole	1 STANDARD
24.009	SW37	1500	Manhole	1 STANDARD	16		Junction	

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
24.010	77.262	548.0	675	1 STANDARD	143.450	140.450	2.325	143.000	140.309	2.016
24.011	3.000	500.1	675	1 STANDARD	143.000	140.309	2.016	142.950	140.303	1.972
24.012	3.000	500.1	675	1 STANDARD	142.950	140.303	1.972	143.200	140.297	2.228
24.013	48.273	548.6	675	1 STANDARD	143.200	140.297	2.228	142.550	140.209	1.666
16.015	59.702	547.7	750	1 STANDARD	142.550	140.209	1.591	141.900	140.100	1.050
24.000	17.017	236.3	300	1 STANDARD	143.600	141.326	1.974	143.500	141.254	1.946
24.001	21.040	309.4	375	1 STANDARD	143.500	141.179	1.946	143.650	141.111	2.164
24.002	25.918	312.3	375	1 STANDARD	143.650	141.111	2.164	143.850	141.028	2.447
24.003	10.014	400.5	450	1 STANDARD	143.850	140.953	2.447	143.900	140.928	2.522
24.004	9.962	398.5	450	1 STANDARD	143.900	140.928	2.522	143.900	140.903	2.547
26.000	23.154	238.0	300	1 STANDARD	143.250	141.750	1.200	143.400	141.653	1.447
26.001	8.010	238.0	300	1 STANDARD	143.400	141.653	1.447	143.400	141.619	1.481
26.002	19.132	238.0	300	1 STANDARD	143.400	141.619	1.481	143.550	141.539	1.711
26.003	11.158	311.5	375	1 STANDARD	143.550	141.464	1.711	143.600	141.428	1.797
26.004	18.170	313.3	375	1 STANDARD	143.600	141.428	1.797	143.800	141.370	2.055
26.005	5.892	12.0	375	1 STANDARD	143.800	141.374	2.051	143.850	140.882	2.593
29.000	29.628	167.0	300	1 STANDARD	143.400	141.900	1.200	143.500	141.723	1.477
29.001	44.043	50.2	375	1 STANDARD	143.500	141.648	1.477	143.550	140.771	2.404
16.016	17.817	494.9	750	1 STANDARD	141.900	140.100	1.050	141.939	140.064	1.125
16.017	32.000	500.0	750	1 STANDARD	141.939	140.064	1.125	142.000	140.000	1.250
16.018	8.795	175.9	675	1 STANDARD	142.000	140.000	1.325	141.900	139.950	1.275
16.000	32.754	399.4	450	1 STANDARD	143.200	141.177	1.573	143.000	141.095	1.455
16.001	25.179	399.7	450	1 STANDARD	143.000	141.095	1.455	143.000	141.032	1.518
16.002	15.249	401.3	450	1 STANDARD	143.000	141.032	1.518	143.000	140.994	1.556
16.003	30.446	400.6	450	1 STANDARD	143.000	140.994	1.556	143.000	140.918	1.632

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
24.010	16		Junction		17		Junction	
24.011	17		Junction		SW38	1500	Manhole	1 STANDARD
24.012	SW38	1500	Manhole	1 STANDARD	19		Junction	
24.013	19		Junction		20		Junction	
16.015	20		Junction		21		Junction	
24.000	SW32	1350	Manhole	1 STANDARD	SW33	1350	Manhole	1 STANDARD
24.001	SW33	1350	Manhole	1 STANDARD	SW34	1350	Manhole	1 STANDARD
24.002	SW34	1350	Manhole	1 STANDARD	SW35	1350	Manhole	1 STANDARD
24.003	SW35	1350	Manhole	1 STANDARD	SW36	1350	Manhole	1 STANDARD
24.004	SW36	1350	Manhole	1 STANDARD	11		Junction	
26.000	SW41	1200	Manhole	1 STANDARD	SW42	1350	Manhole	1 STANDARD
26.001	SW42	1350	Manhole	1 STANDARD	SW43	1350	Manhole	1 STANDARD
26.002	SW43	1350	Manhole	1 STANDARD	SW44	1350	Manhole	1 STANDARD
26.003	SW44	1350	Manhole	1 STANDARD	SW45	1350	Manhole	1 STANDARD
26.004	SW45	1350	Manhole	1 STANDARD	SW46	1350	Manhole	1 STANDARD
26.005	SW46	1350	Manhole	1 STANDARD	12		Junction	
29.000	SW47	1200	Manhole	1 STANDARD	SW48	1350	Manhole	1 STANDARD
29.001	SW48	1350	Manhole	1 STANDARD	SW37	1500	Manhole	1 STANDARD
16.016	21		Junction		SW39	1800	Manhole	1 STANDARD
16.017	SW39	1800	Manhole	1 STANDARD	SW40	1800	Manhole	1 STANDARD
16.018	SW40	1800	Manhole	1 STANDARD	Basin 04		Junction	
16.000	SW49	1350	Manhole	1 STANDARD	SW50	1350	Manhole	1 STANDARD
16.001	SW50	1350	Manhole	1 STANDARD	SW51	1350	Manhole	1 STANDARD
16.002	SW51	1350	Manhole	1 STANDARD	SW52	1350	Manhole	1 STANDARD
16.003	SW52	1350	Manhole	1 STANDARD	SW53	1500	Manhole	1 STANDARD

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
16.004	27.201	494.6	525	1 STANDARD	143.000	140.843	1.632	142.900	140.788	1.587
16.005	20.156	491.6	525	1 STANDARD	142.900	140.788	1.587	142.900	140.747	1.628
16.006	35.001	500.0	525	1 STANDARD	142.900	140.747	1.628	142.850	140.677	1.648
16.007	32.001	500.0	525	1 STANDARD	142.850	140.677	1.648	142.850	140.613	1.712
16.008	30.587	500.0	525	1 STANDARD	142.850	140.613	1.712	143.050	140.552	1.973
16.009	19.679	546.6	525	1 STANDARD	143.050	140.552	1.973	142.950	140.516	1.909
16.010	17.884	496.8	525	1 STANDARD	142.950	140.516	1.909	142.800	140.480	1.795
16.011	12.429	460.3	525	1 STANDARD	142.800	140.480	1.795	142.700	140.453	1.722
15.012	20.369	496.8	525	1 STANDARD	142.700	140.453	1.722	142.500	140.412	1.563
16.013	22.964	499.2	600	1 STANDARD	142.500	140.412	1.488	142.500	140.366	1.534
16.014	3.155	450.7	600	1 STANDARD	142.500	140.291	1.609	142.550	140.284	1.666
31.000	27.653	238.4	300	1 STANDARD	142.750	140.868	1.582	142.500	140.752	1.448
31.001	43.600	238.3	300	1 STANDARD	142.500	140.752	1.448	142.100	140.569	1.231
31.002	8.265	238.0	300	1 STANDARD	142.100	140.569	1.231	142.100	140.534	1.266
30.003	23.631	315.1	375	1 STANDARD	142.100	140.459	1.266	142.100	140.384	1.341
31.004	32.999	392.9	450	1 STANDARD	142.100	140.309	1.341	142.000	140.225	1.325
1.000	20.987	235.8	300	1 STANDARD	143.100	141.489	1.311	143.050	141.400	1.350
1.001	21.996	236.5	300	1 STANDARD	143.050	141.400	1.350	143.100	141.307	1.493
3.000	11.861	167.1	225	1 STANDARD	142.850	141.383	1.242	142.800	141.312	1.263
3.001	15.800	235.8	300	1 STANDARD	142.800	141.237	1.263	142.800	141.170	1.330
4.000	15.348	166.8	225	1 STANDARD	142.692	141.267	1.200	142.600	141.175	1.200
5.000	30.248	167.1	225	1 STANDARD	142.741	141.316	1.200	142.560	141.135	1.200
5.001	14.759	238.0	300	1 STANDARD	142.560	141.060	1.200	142.498	140.998	1.200
6.000	15.193	167.0	225	1 STANDARD	142.623	141.198	1.200	142.532	141.107	1.200
6.001	5.610	165.0	225	1 STANDARD	142.532	141.107	1.200	142.498	141.073	1.200

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
16.004	SW53	1500	Manhole	1 STANDARD	SW54	1500	Manhole	1 STANDARD
16.005	SW54	1500	Manhole	1 STANDARD	SW55	1500	Manhole	1 STANDARD
16.006	SW55	1500	Manhole	1 STANDARD	SW56	1500	Manhole	1 STANDARD
16.007	SW56	1500	Manhole	1 STANDARD	SW57	1500	Manhole	1 STANDARD
16.008	SW57	1500	Manhole	1 STANDARD	SW58	1500	Manhole	1 STANDARD
16.009	SW58	1500	Manhole	1 STANDARD	SW59	1500	Manhole	1 STANDARD
16.010	SW59	1500	Manhole	1 STANDARD	SW60	1500	Manhole	1 STANDARD
16.011	SW60	1500	Manhole	1 STANDARD	SW61	1500	Manhole	1 STANDARD
15.012	SW61	1500	Manhole	1 STANDARD	SW62	1500	Manhole	1 STANDARD
16.013	SW62	1500	Manhole	1 STANDARD	SW63	1500	Manhole	1 STANDARD
16.014	SW63	1500	Manhole	1 STANDARD	20		Junction	
31.000	SW64	1200	Manhole	1 STANDARD	SW65	1350	Manhole	1 STANDARD
31.001	SW65	1350	Manhole	1 STANDARD	SW66	1350	Manhole	1 STANDARD
31.002	SW66	1350	Manhole	1 STANDARD	SW67	1200	Manhole	1 STANDARD
30.003	SW67	1200	Manhole	1 STANDARD	SW68	1350	Manhole	1 STANDARD
31.004	SW68	1350	Manhole	1 STANDARD	SW40	1800	Manhole	1 STANDARD
1.000	SW69	1350	Manhole	1 STANDARD	SW70	1350	Manhole	1 STANDARD
1.001	SW70	1350	Manhole	1 STANDARD	SW02	1350	Manhole	1 STANDARD
3.000	SW71	1200	Manhole	1 STANDARD	SW72	1350	Manhole	1 STANDARD
3.001	SW72	1350	Manhole	1 STANDARD	SW03	1500	Manhole	1 STANDARD
4.000	SW73	1200	Manhole	1 STANDARD	SW04	1500	Manhole	1 STANDARD
5.000	SW74	1200	Manhole	1 STANDARD	SW75	1200	Manhole	1 STANDARD
5.001	SW75	1200	Manhole	1 STANDARD	SW05	1500	Manhole	1 STANDARD
6.000	SW76	1200	Manhole	1 STANDARD	SW77	1200	Manhole	1 STANDARD
6.001	SW77	1200	Manhole	1 STANDARD	SW05	1500	Manhole	1 STANDARD

Pipeline Schedule

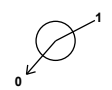
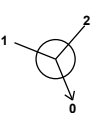
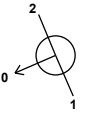
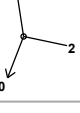
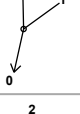
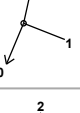
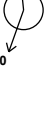
Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
7.001	3.937	231.6	300	1 STANDARD	142.408	140.908	1.200	142.391	140.891	1.200
8.000	4.821	167.0	225	1 STANDARD	142.746	141.321	1.200	142.717	141.292	1.200
8.001	13.287	167.0	225	1 STANDARD	142.717	141.292	1.200	142.737	141.212	1.300
8.002	19.394	238.0	300	1 STANDARD	142.737	141.137	1.300	142.950	141.056	1.594
8.003	4.169	238.0	300	1 STANDARD	142.950	141.056	1.594	142.950	141.038	1.612
25.000	21.467	235.9	300	1 STANDARD	143.850	141.194	2.356	143.850	141.103	2.447
27.000	12.043	21.6	150	1 STANDARD	143.600	142.250	1.200	143.550	141.693	1.707
28.000	14.170	23.9	150	1 STANDARD	143.600	142.250	1.200	143.600	141.657	1.793
30.000	22.903	100.9	300	1 STANDARD	143.450	141.950	1.200	143.500	141.723	1.477
17.000	22.147	28.2	150	1 STANDARD	143.200	141.850	1.200	143.100	141.066	1.884
17.001	42.177	303.4	375	1 STANDARD	143.100	140.841	1.884	143.050	140.702	1.973
19.000	11.460	14.6	300	1 STANDARD	143.200	141.700	1.200	143.100	140.916	1.884
18.000	13.538	19.8	300	1 STANDARD	143.100	141.600	1.200	143.100	140.916	1.884
19.001	14.745	491.5	525	1 STANDARD	142.600	140.483	1.592	142.700	140.453	1.722
33.000	25.721	168.1	225	1 STANDARD	142.500	140.734	1.541	142.200	140.581	1.394
33.001	21.834	166.7	225	1 STANDARD	142.200	140.581	1.394	142.000	140.450	1.325
32.000	25.355	166.8	225	1 STANDARD	142.186	140.761	1.200	142.100	140.609	1.266
1.024	22.274	72.3	225	1 STANDARD	141.250	139.338	1.687	141.030	139.030	1.775
22.000	8.401	221.1	525	1 STANDARD	142.500	140.450	1.525	142.500	140.412	1.563
7.000	2.870	239.1	300	1 STANDARD	142.400	140.920	1.180	142.408	140.908	1.200
23.000	8.353	219.8	525	1 STANDARD	142.800	140.450	1.825	142.500	140.412	1.563
21.000	7.368	433.4	525	1 STANDARD	142.800	140.500	1.775	142.600	140.483	1.592
20.000	12.371	458.2	525	1 STANDARD	142.500	140.510	1.465	142.600	140.483	1.592
15.000	10.427	102.2	600	1 STANDARD	141.900	140.100	1.200	141.900	139.998	1.302

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
7.001	SW78	1200	Manhole	1 STANDARD	SW07	1500	Manhole	1 STANDARD
8.000	SW79	1200	Manhole	1 STANDARD	SW80	1200	Manhole	1 STANDARD
8.001	SW80	1200	Manhole	1 STANDARD	SW81	1350	Manhole	1 STANDARD
8.002	SW81	1350	Manhole	1 STANDARD	SW82	1350	Manhole	1 STANDARD
8.003	SW82	1350	Manhole	1 STANDARD	SW83	1350	Manhole	1 STANDARD
25.000	SW84	1350	Manhole	1 STANDARD	SW35	1350	Manhole	1 STANDARD
27.000	SW85	1200	Manhole	1 STANDARD	SW44	1350	Manhole	1 STANDARD
28.000	SW86	1200	Manhole	1 STANDARD	SW45	1350	Manhole	1 STANDARD
30.000	SW87	1200	Manhole	1 STANDARD	SW48	1350	Manhole	1 STANDARD
17.000	SW88	1200	Manhole	1 STANDARD	SW89	1350	Manhole	1 STANDARD
17.001	SW89	1350	Manhole	1 STANDARD	SW58	1500	Manhole	1 STANDARD
19.000	SW91	1200	Manhole	1 STANDARD	SW89	1350	Manhole	1 STANDARD
18.000	SW90	1200	Manhole	1 STANDARD	SW89	1350	Manhole	1 STANDARD
19.001	SW92	1500	Manhole	1 STANDARD	SW61	1500	Manhole	1 STANDARD
33.000	SW93	1350	Manhole	1 STANDARD	SW94	1350	Manhole	1 STANDARD
33.001	SW94	1350	Manhole	1 STANDARD	SW40	1800	Manhole	1 STANDARD
32.000	SW95	1200	Manhole	1 STANDARD	SW67	1200	Manhole	1 STANDARD
1.024	SW13	1350	Manhole	1 STANDARD	EXManhole	1350	Manhole	1 STANDARD
22.000	Tank 03		Junction		SW62	1500	Manhole	1 STANDARD
7.000	Tank 01		Junction		SW78	1200	Manhole	1 STANDARD
23.000	Tank 02		Junction		SW62	1500	Manhole	1 STANDARD
21.000	Tank 04		Junction		SW92	1500	Manhole	1 STANDARD
20.000	Tank 05		Junction		SW92	1500	Manhole	1 STANDARD
15.000	Basin 03		Junction		SW96	1500	Manhole	1 STANDARD

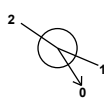
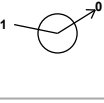
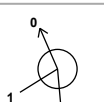
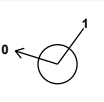
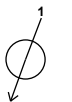
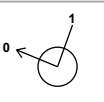
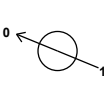
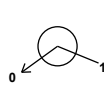
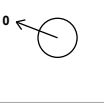
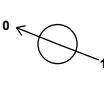
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
Basin 04	525130.969	227511.445	141.900	1.950			1 16.018	139.950	675
							0 16.019	139.950	675
Basin 03	525043.772	227537.970	141.900	1.800			0 15.000	140.100	600
Basin 02	525022.899	227537.704	141.900	1.950			1 1.018	139.950	675
							0 1.019	139.950	675
SW10 (FC)	525040.982	227515.666	141.900	2.016	1800		1 16.019	139.884	675
							2 1.020	139.884	675
							0 1.021	139.884	225
SW11	525032.098	227509.774	141.700	1.959	1350		1 1.021	139.771	225
							0 1.022	139.741	225
SW12	524985.867	227521.328	142.000	2.544	1350		1 1.022	139.456	225
							0 1.023	139.456	225
EXManhole	524967.824	227483.879	141.030	2.000	1350		1 1.024	139.030	225
SW14	525079.124	227759.059	142.539	1.425	1200		0 9.000	141.114	225
SW01	525287.578	227832.870	143.400	2.072	1350		0 2.000	141.328	375
							1 2.000	141.232	375
SW02	525257.687	227836.268	143.100	1.943	1350		2 1.001	141.307	300
							0 1.002	141.157	450
SW03	525203.269	227841.879	142.800	1.855	1500		1 3.001	141.170	300
							2 1.002	141.020	450
							0 1.003	140.945	525
SW04	525169.846	227851.911	142.600	1.725	1500		1 4.000	141.175	225
							2 1.003	140.875	525
							0 1.004	140.875	525
SW05	525123.933	227829.436	142.498	1.800	1500		1 6.001	141.073	225
							2 5.001	140.998	300
							3 1.004	140.773	525
							0 1.005	140.698	600

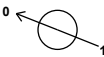
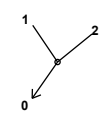
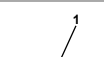
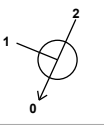
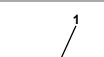
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
SW06	525088.840	227811.196	142.419	1.800	1500		1 1.005	140.619	600
						0	0 1.006	140.619	600
SW07	525079.789	227800.812	142.391	1.800	1500		1 7.001	140.891	300
						2	2 1.006	140.591	600
						0	0 1.007	140.591	600
SW08	525086.818	227783.866	142.354	1.800	1500		1 8.006	140.704	450
						2	2 1.007	140.554	600
						0	0 1.008	140.554	600
Basin 01	525077.041	227779.627	142.000	1.500			1 1.008	140.500	600
						0	0 1.009	140.500	675
1	525060.963	227835.215	141.900	1.313			0 10.000	140.587	675
2	525052.761	227807.569	141.900	1.371			1 10.000	140.529	675
						0	0 10.001	140.529	675
3	525056.374	227783.981	141.900	1.419			1 10.001	140.481	675
						2	2 1.009	140.481	675
						0	0 1.010	140.481	675
4	525029.988	227715.812	141.900	1.552			1 1.010	140.348	675
						0	0 1.011	140.348	675
5	525030.197	227705.655	141.900	1.570			1 11.004	140.555	450
						2	2 1.011	140.330	675
						0	0 1.012	140.330	675
6	525027.475	227693.385	141.900	1.593			1 12.002	140.757	225
						2	2 1.012	140.307	675
						0	0 1.013	140.307	675
7	524999.847	227627.627	141.900	1.723			1 13.003	140.402	450
						2	2 1.013	140.177	675
						0	0 1.014	140.177	675
8	524989.464	227605.204	141.900	1.768			1 1.014	140.132	675
						0	0 1.015	140.132	675
9	524990.526	227594.811	141.900	1.787	1500		1 1.015	140.113	675
						0	0 1.016	140.113	675

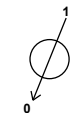
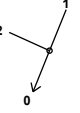
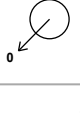
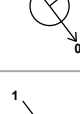
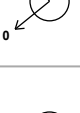
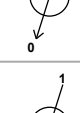
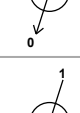
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
10	524986.384	227583.137	141.900	1.810	1500		1 1.016	140.090	675
							0 1.017	140.090	675
SW09	524999.497	227574.209	141.900	1.935	1500		1 14.001	140.340	300
							2 1.017	139.965	675
							0 1.018	139.965	675
SW15	525092.257	227756.388	142.600	1.566	1350		1 9.000	141.034	225
							0 9.001	141.034	225
SW16	525098.178	227750.387	142.750	1.873	1350		1 8.004	140.877	375
							0 8.005	140.877	375
SW17	525097.368	227759.567	142.500	1.727	1350		1 9.001	140.998	225
							2 8.005	140.848	375
							0 8.006	140.773	450
SW83	525123.788	227742.323	142.950	1.987	1350		1 8.003	141.038	300
							0 8.004	140.963	375
SW19	525084.669	227713.295	142.600	1.641	1350		1 11.000	141.034	225
							0 11.001	140.959	300
SW20	525079.257	227698.207	142.400	1.509	1350		1 11.001	140.891	300
							0 11.002	140.891	300
SW21	525053.436	227708.831	142.273	1.650	1350		1 11.002	140.773	300
							0 11.003	140.623	450
SW22	525041.394	227713.761	142.240	1.650	1350		1 11.003	140.590	450
							0 11.004	140.590	450
SW18	525093.209	227735.695	142.603	1.425	1200				
							0 11.000	141.178	225
SW23	525071.352	227676.352	142.465	1.425	1200				
							0 12.000	141.040	225
SW24	525041.430	227687.848	142.273	1.425	1200		1 12.000	140.848	225
							0 12.001	140.848	225

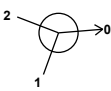
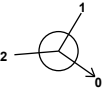
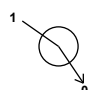
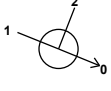
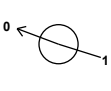
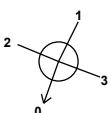
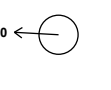
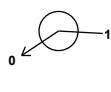
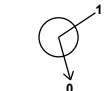
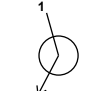
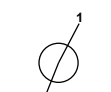
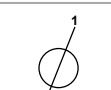
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
SW25	525034.489	227690.623	142.228	1.425	1200	 1 0	12.001	140.803	225
SW26	525056.913	227640.501	142.450	1.632	1350		12.002	140.803	225
SW27	525044.974	227611.417	142.200	1.589	1350	 0 1	13.000	140.818	300
SW28	525028.251	227618.076	142.128	1.650	1350		13.001	140.611	375
SW29	525008.898	227626.229	142.075	1.650	1350	 0 1	13.002	140.478	450
SW30	525026.937	227567.941	141.969	1.500	1200		13.003	140.425	450
SW31	525022.294	227564.579	141.944	1.500	1200	 0 1	14.000	140.469	300
11	525328.222	227774.816	143.900	3.222			14.001	140.444	300
12	525287.257	227741.535	143.850	3.268		 1 2 0	24.004	140.903	450
13	525266.449	227711.764	143.750	3.234			24.005	140.678	675
14	525261.172	227699.708	143.650	3.158		 1 0	26.005	140.882	375
SW37	525256.831	227690.094	143.550	3.079	1500		24.006	140.582	675
16	525252.437	227680.480	143.450	3.000		 1 0	24.007	140.516	675
							24.008	140.492	675
						 1 2 0	29.001	140.771	375
							24.008	140.471	675
						 1 0	24.009	140.471	675
							24.010	140.450	675

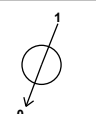
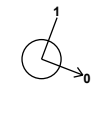
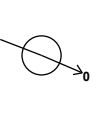
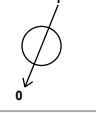
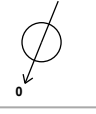
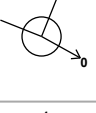
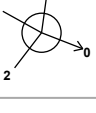
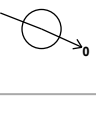
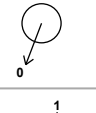
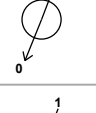
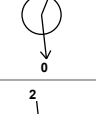
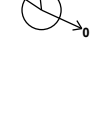
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
17	525223.494	227608.844	143.000	2.691		 1	24.010	140.309	675
						0	24.011	140.309	675
SW38	525222.370	227606.062	142.950	2.647	1500	 1	24.011	140.303	675
						0	24.012	140.303	675
19	525221.246	227603.280	143.200	2.903		 1	24.012	140.297	675
						0	24.013	140.297	675
20	525203.129	227558.536	142.550	2.341		 1	24.013	140.209	675
						2	16.014	140.284	600
						0	16.015	140.209	750
21	525180.863	227503.141	141.900	1.800		 1	16.015	140.100	750
						0	16.016	140.100	750
SW32	525312.626	227837.976	143.600	2.274	1350	 0	24.000	141.326	300
SW33	525300.698	227825.839	143.500	2.321	1350	 1	24.000	141.254	300
						0	24.001	141.179	375
SW34	525313.775	227809.356	143.650	2.539	1350	 1	24.001	141.111	375
						0	24.002	141.111	375
SW35	525329.909	227789.072	143.850	2.897	1350	 1	25.000	141.103	300
						2	24.002	141.028	375
						0	24.003	140.953	450
SW36	525335.958	227781.092	143.900	2.972	1350	 1	24.003	140.928	450
						0	24.004	140.928	450
SW41	525249.480	227792.512	143.250	1.500	1200	 0	26.000	141.750	300
SW42	525242.527	227770.427	143.400	1.747	1350	 1	26.000	141.653	300
						0	26.001	141.653	300
SW43	525240.097	227762.795	143.400	1.781	1350	 1	26.001	141.619	300
						0	26.002	141.619	300

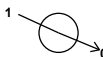
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
SW44	525257.954	227755.928	143.550	2.086	1350		1	27.000	141.693	150
						2	26.002	141.539	300	
						0	26.003	141.464	375	
SW45	525269.075	227756.841	143.600	2.172	1350		1	28.000	141.657	150
						2	26.003	141.428	375	
						0	26.004	141.428	375	
SW46	525283.956	227746.415	143.800	2.430	1350		1	26.004	141.370	375
						0	26.005	141.374	375	
SW47	525226.838	227734.319	143.400	1.500	1200		0	29.000	141.900	300
SW48	525216.049	227706.725	143.500	1.852	1350		1	30.000	141.723	300
						2	29.000	141.723	300	
						0	29.001	141.648	375	
SW39	525163.866	227508.483	141.939	1.875	1800		1	16.016	140.064	750
						0	16.017	140.064	750	
SW40	525133.909	227519.734	142.000	2.000	1800		1	33.001	140.450	225
						2	31.004	140.225	450	
						3	16.017	140.000	750	
						0	16.018	140.000	675	
SW49	525213.854	227779.285	143.200	2.023	1350		0	16.000	141.177	450
						1	16.000	141.095	450	
SW50	525181.150	227781.099	143.000	1.905	1350		0	16.001	141.095	450
						1	16.001	141.032	450	
SW51	525160.169	227767.178	143.000	1.968	1350		1	16.001	141.032	450
						0	16.002	141.032	450	
SW52	525164.293	227752.497	143.000	2.006	1350		1	16.002	140.994	450
						0	16.003	140.994	450	
SW53	525150.140	227725.540	143.000	2.157	1500		1	16.003	140.918	450
						0	16.004	140.843	525	
SW54	525140.071	227700.271	142.900	2.112	1500		1	16.004	140.788	525
						0	16.005	140.788	525	

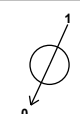
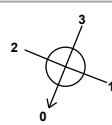
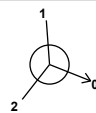
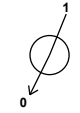
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
SW55	525132.637	227681.536	142.900	2.153	1500	 1	16.005	140.747	525
						0	16.006	140.747	525
SW56	525120.366	227648.757	142.850	2.173	1500	 1	16.006	140.677	525
						0	16.007	140.677	525
SW57	525150.218	227637.228	142.850	2.237	1500	 1	16.007	140.613	525
						0	16.008	140.613	525
SW58	525178.332	227625.180	143.050	2.498	1500	 1	17.001	140.702	375
						2	16.008	140.552	525
						0	16.009	140.552	525
SW59	525170.965	227606.932	142.950	2.434	1500	 1	16.009	140.516	525
						0	16.010	140.516	525
SW60	525164.250	227590.356	142.800	2.320	1500	 1	16.010	140.480	525
						0	16.011	140.480	525
SW61	525159.623	227578.820	142.700	2.247	1500	 1	19.001	140.453	525
						2	16.011	140.453	525
						0	15.012	140.453	525
SW62	525178.854	227568.163	142.500	2.088	1500	 1	23.000	140.412	525
						2	22.000	140.412	525
						3	15.012	140.412	525
						0	16.013	140.412	600
SW63	525200.255	227559.837	142.500	2.209	1500	 1	16.013	140.366	600
						0	16.014	140.291	600
SW64	525107.196	227616.711	142.750	1.882	1200	 1			
						0	31.000	140.868	300
SW65	525097.340	227590.859	142.500	1.748	1350	 1	31.000	140.752	300
						0	31.001	140.752	300
SW66	525081.022	227550.428	142.100	1.531	1350	 1	31.001	140.569	300
						0	31.002	140.569	300
SW67	525081.943	227542.214	142.100	1.641	1200	 1	32.000	140.609	225
						2	31.002	140.534	300
						0	30.003	140.459	375

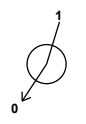
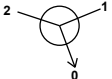
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
SW68	525103.416	227532.349	142.100	1.791	1350		1	30.003	140.384	375
						0	31.004	140.309	450	
SW69	525262.211	227879.011	143.100	1.611	1350		0	1.000	141.489	300
SW70	525260.146	227858.126	143.050	1.650	1350		1	1.000	141.400	300
						0	1.001	141.400	300	
SW71	525206.895	227869.286	142.850	1.467	1200		0	3.000	141.383	225
SW72	525205.789	227857.477	142.800	1.563	1350		1	3.000	141.312	225
						0	3.001	141.237	300	
SW73	525165.090	227866.503	142.692	1.425	1200		0	4.000	141.267	225
SW74	525102.905	227869.228	142.741	1.425	1200		0	5.000	141.316	225
SW75	525117.081	227842.508	142.560	1.500	1200		1	5.000	141.135	225
						0	5.001	141.060	300	
SW76	525136.141	227812.707	142.623	1.425	1200		0	6.000	141.198	225
SW77	525127.905	227825.474	142.532	1.425	1200		1	6.000	141.107	225
						0	6.001	141.107	225	
SW78	525076.134	227802.274	142.408	1.500	1200		1	7.000	140.908	300
						0	7.001	140.908	300	
SW79	525144.089	227777.739	142.746	1.425	1200		0	8.000	141.321	225
SW80	525139.878	227775.392	142.717	1.425	1200		1	8.000	141.292	225
						0	8.001	141.292	225	

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
SW81	525134.413	227763.281	142.737	1.600	1350	 1	8.001	141.212	225
						0	8.002	141.137	300
SW82	525126.243	227745.692	142.950	1.894	1350	 1	8.002	141.056	300
						0	8.003	141.056	300
SW84	525346.618	227802.549	143.850	2.656	1350	 0	25.000	141.194	300
SW85	525253.841	227744.609	143.600	1.350	1200	 0	27.000	142.250	150
SW86	525276.346	227769.003	143.600	1.350	1200	 0	28.000	142.250	150
SW87	525194.799	227715.269	143.450	1.500	1200	 0	30.000	141.950	300
SW88	525202.402	227684.831	143.200	1.350	1200	 0	17.000	141.850	150
SW89	525194.120	227664.291	143.100	2.259	1350	 1	19.000	140.916	300
						2	18.000	140.916	300
						3	17.000	141.066	150
						0	17.001	140.841	375
SW91	525204.822	227660.193	143.200	1.500	1200	 0	19.000	141.700	300
SW90	525181.611	227669.468	143.100	1.500	1200	 0	18.000	141.600	300
SW92	525147.429	227583.671	142.600	2.117	1500	 1	21.000	140.483	525
						2	20.000	140.483	525
						0	19.001	140.483	525
SW93	525153.295	227563.122	142.500	1.766	1350	 0	33.000	140.734	225
SW94	525143.617	227539.291	142.200	1.619	1350	 1	33.000	140.581	225
						0	33.001	140.581	225

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
SW95	525060.827	227556.250	142.186	1.425	1200	 0	32.000	140.761	225
SW13	524980.115	227502.455	141.250	1.912	1350	 1 0	1.023 1.024	139.338 139.338	225 225
Tank 03	525173.743	227561.496	142.500	2.050		 0	22.000	140.450	525
Tank 01	525073.604	227800.920	142.400	1.480		 0	7.000	140.920	300
Tank 02	525179.996	227576.438	142.800	2.350		 0	23.000	140.450	525
Tank 04	525146.892	227591.019	142.800	2.300		 0	21.000	140.500	525
Tank 05	525139.801	227573.931	142.500	1.990		 0	20.000	140.510	525
SW96	525034.127	227534.009	141.900	1.977	1500	 1 2 0	15.000 1.019 1.020	139.998 139.923 139.923	600 675 675

Simulation Settings

Rainfall Methodology	FEH-22	Skip Steady State	x
Rainfall Events	Consecutive	Drain Down Time (mins)	240
Summer CV	1.000	Additional Storage (m³/ha)	20.0
Additional Area (A %)	0	Starting Level (m)	
Additional Flow (Q %)	0	Check Discharge Rate(s)	x
Analysis Speed	Detailed	Check Discharge Volume	x

Time Offset (mins)	Duration (mins)	Return Period (years)	Climate Change (CC %)	Time Offset (mins)	Duration (mins)	Return Period (years)	Climate Change (CC %)
0	960	100	40	1440	480	10	35

Node SW10 (FC) Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	✓	Sump Available	✓
Invert Level (m)	139.884	Product Number	CTL-SHE-0156-1430-2016-1430
Design Depth (m)	2.016	Min Outlet Diameter (m)	0.225
Design Flow (l/s)	14.3	Min Node Diameter (mm)	1800

Node Basin 04 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	139.950
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	

Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	489.2	0.0	1.000	1178.1	0.0	1.950	1900.2	0.0
0.500	819.4	0.0	1.500	1551.7	0.0			

Node Basin 03 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	140.100
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	

Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	7.7	0.0	1.000	101.3	0.0	1.800	230.2	0.0
0.500	41.5	0.0	1.500	177.4	0.0			

Node Basin 02 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	139.950
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	

Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	404.8	0.0	1.000	752.7	0.0	1.950	1136.9	0.0
0.500	571.1	0.0	1.500	948.5	0.0			

Node Tank 03 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	140.450
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	Time to half empty (mins)	

Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	258.0	0.0	1.200	258.0	0.0	1.201	0.0	0.0

Node Basin 01 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	140.500
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	

Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	109.7	0.0	0.500	190.4	0.0	1.000	285.6	0.0	1.500	395.4	0.0

Node Tank 02 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	140.450
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	Time to half empty (mins)	

Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	258.0	0.0	1.200	258.0	0.0	1.201	0.0	0.0

Node Tank 01 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	140.920
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	Time to half empty (mins)	

Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	96.0	0.0	0.800	96.0	0.0	0.801	0.0	0.0

Node Tank 04 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	140.500
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	Time to half empty (mins)	

Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	225.8	0.0	1.200	225.8	0.0	1.201	0.0	0.0

Node Tank 05 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	140.510
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	Time to half empty (mins)	

Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)	Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	225.8	0.0	1.200	225.8	0.0	1.201	0.0	0.0

Results for Consecutive Rainfall Critical Storm Duration. Lowest mass balance: 99.23%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960-480	Basin 04	2895	141.882	1.932	136.4	2252.1200	0.0000	FLOOD RISK
960-480	Basin 03	2895	141.883	1.782	14.5	174.8035	0.0000	FLOOD RISK
960-480	Basin 02	2895	141.883	1.933	111.6	1449.6160	0.0000	FLOOD RISK
960-480	SW10 (FC)	2895	141.882	1.998	31.8	6.0170	0.0000	FLOOD RISK
960-480	SW11	375	139.835	0.094	14.3	0.1341	0.0000	OK
960-480	SW12	375	139.553	0.097	14.3	0.1381	0.0000	OK
960-480	EXManhole	375	139.104	0.074	14.3	0.0000	0.0000	OK
960-480	SW14	2880	141.882	0.768	4.3	1.4935	0.0000	SURCHARGED
960-480	SW01	2880	141.882	0.554	3.5	1.0443	0.0000	SURCHARGED
960-480	SW02	2880	141.882	0.725	14.5	1.5827	0.0000	SURCHARGED
960-480	SW03	2880	141.882	0.937	31.1	3.3629	0.0000	SURCHARGED
960-480	SW04	2880	141.882	1.007	40.6	2.7249	0.0000	SURCHARGED
960-480	SW05	2880	141.882	1.184	67.4	3.0522	0.0000	SURCHARGED
960-480	SW06	2880	141.882	1.263	70.7	2.8908	0.0000	SURCHARGED
960-480	SW07	2880	141.882	1.291	72.6	2.6824	0.0000	SURCHARGED
960-480	SW08	2880	141.882	1.328	89.1	3.4232	0.0000	SURCHARGED
960-480	Basin 01	2895	141.882	1.382	88.9	319.0996	0.0000	FLOOD RISK
960-480	1	2895	141.882	1.295	1.6	0.4338	0.0000	FLOOD RISK
960-480	2	2895	141.882	1.353	1.7	0.0000	0.0000	FLOOD RISK
960-480	3	2895	141.882	1.401	69.2	0.0000	0.0000	FLOOD RISK
960-480	4	2895	141.882	1.534	64.7	0.0000	0.0000	FLOOD RISK
960-480	5	2895	141.882	1.552	78.0	0.0000	0.0000	FLOOD RISK
960-480	6	2895	141.882	1.575	85.8	0.0000	0.0000	FLOOD RISK
960-480	7	2895	141.882	1.705	107.8	0.0000	0.0000	FLOOD RISK
960-480	8	2895	141.882	1.750	107.7	0.0000	0.0000	FLOOD RISK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960-480	Basin 04	16.019	SW10 (FC)	-18.2	0.336	-0.026	4.1006	
960-480	Basin 03	15.000	SW96	-14.5	-0.051	-0.021	2.9370	
960-480	Basin 02	1.019	SW96	35.4	0.144	0.085	4.7632	
960-480	SW10 (FC)	Hydro-Brake®	SW11	14.3				
960-480	SW11	1.022	SW12	14.3	0.897	0.357	0.7598	
960-480	SW12	1.023	SW13	14.3	1.018	0.356	0.2775	
960-480	SW14	9.000	SW15	4.1	0.523	0.103	0.5330	
960-480	SW01	2.000	SW02	3.2	0.481	0.028	3.3182	
960-480	SW02	1.002	SW03	14.5	0.675	0.090	8.6680	
960-480	SW03	1.003	SW04	30.8	0.627	0.143	7.5387	
960-480	SW04	1.004	SW05	40.4	0.804	0.188	11.0434	
960-480	SW05	1.005	SW06	67.2	0.694	0.220	11.1403	
960-480	SW06	1.006	SW07	70.5	0.674	0.230	3.8801	
960-480	SW07	1.007	SW08	67.7	0.733	0.221	5.1677	
960-480	SW08	1.008	Basin 01	88.9	0.957	0.182	3.0016	
960-480	Basin 01	1.009	3	69.2	0.762	0.166	3.4270	
960-480	1	10.000	2	1.5	0.117	0.004	10.2942	
960-480	2	10.001	3	1.4	0.064	0.003	8.5186	
960-480	3	1.010	4	64.7	0.623	0.163	26.0940	
960-480	4	1.011	5	64.5	0.575	0.162	3.6265	
960-480	5	1.012	6	78.0	0.630	0.196	4.4865	
960-480	6	1.013	7	85.8	0.533	0.216	25.4618	
960-480	7	1.014	8	107.7	0.557	0.271	8.8209	
960-480	8	1.015	9	107.6	0.576	0.271	3.7293	

Results for Consecutive Rainfall Critical Storm Duration. Lowest mass balance: 99.23%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960-480	9	2895	141.882	1.769	107.6	3.1265	0.0000	FLOOD RISK
960-480	10	2895	141.882	1.792	107.5	3.1672	0.0000	FLOOD RISK
960-480	SW09	2895	141.883	1.917	111.8	4.3393	0.0000	FLOOD RISK
960-480	SW15	2880	141.882	0.848	6.5	1.5601	0.0000	SURCHARGED
960-480	SW16	2880	141.882	1.005	8.5	1.5455	0.0000	SURCHARGED
960-480	SW17	2880	141.882	1.109	16.2	1.8440	0.0000	SURCHARGED
960-480	SW83	2880	141.882	0.919	7.9	1.4077	0.0000	SURCHARGED
960-480	SW19	2895	141.882	0.923	5.7	1.9292	0.0000	SURCHARGED
960-480	SW20	2895	141.882	0.991	7.9	1.8394	0.0000	SURCHARGED
960-480	SW21	2895	141.882	1.259	11.6	2.5962	0.0000	SURCHARGED
960-480	SW22	2895	141.882	1.292	13.7	2.3348	0.0000	SURCHARGED
960-480	SW18	2895	141.882	0.704	1.8	1.0434	0.0000	SURCHARGED
960-480	SW23	2895	141.882	0.842	3.5	1.5199	0.0000	SURCHARGED
960-480	SW24	2895	141.882	1.034	7.0	1.8810	0.0000	SURCHARGED
960-480	SW25	2895	141.882	1.079	8.0	1.4633	0.0000	SURCHARGED
960-480	SW26	2895	141.882	1.064	5.2	2.4487	0.0000	SURCHARGED
960-480	SW27	2895	141.882	1.271	15.9	4.1874	0.0000	SURCHARGED
960-480	SW28	2895	141.882	1.404	18.0	2.5543	0.0000	FLOOD RISK
960-480	SW29	2895	141.882	1.457	22.2	3.1288	0.0000	FLOOD RISK
960-480	SW30	2895	141.883	1.413	1.2	1.8997	0.0000	FLOOD RISK
960-480	SW31	2895	141.883	1.438	1.1	1.6269	0.0000	FLOOD RISK
960-480	11	2880	141.882	1.204	21.4	0.0000	0.0000	SURCHARGED
960-480	12	2880	141.882	1.300	41.1	0.0000	0.0000	SURCHARGED
960-480	13	2880	141.882	1.366	41.0	0.0000	0.0000	SURCHARGED
960-480	14	2880	141.882	1.390	40.9	0.0000	0.0000	SURCHARGED

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960-480	9	1.016	10	107.5	0.744	0.271	4.4219	
960-480	10	1.017	SW09	107.3	0.699	0.129	5.6631	
960-480	SW09	1.018	Basin 02	111.6	1.190	0.264	2.6109	
960-480	SW15	9.001	SW17	6.4	0.704	0.159	0.2394	
960-480	SW16	8.005	SW17	8.4	0.602	0.074	1.0165	
960-480	SW17	8.006	SW08	16.1	0.646	0.098	4.1972	
960-480	SW83	8.004	SW16	7.8	0.553	0.069	2.9615	
960-480	SW19	11.001	SW20	5.5	0.534	0.076	1.1288	
960-480	SW20	11.002	SW21	7.8	0.636	0.108	1.9662	
960-480	SW21	11.003	SW22	11.4	0.452	0.070	2.0617	
960-480	SW22	11.004	5	13.5	0.549	0.084	2.1902	
960-480	SW18	11.000	SW19	1.7	0.503	0.042	0.9534	
960-480	SW23	12.000	SW24	3.4	0.439	0.084	1.2748	
960-480	SW24	12.001	SW25	6.8	0.632	0.170	0.2973	
960-480	SW25	12.002	6	7.9	0.715	0.195	0.2998	
960-480	SW26	13.000	SW27	5.0	0.521	0.070	2.2139	
960-480	SW27	13.001	SW28	15.6	0.598	0.139	1.9853	
960-480	SW28	13.002	SW29	17.9	0.436	0.111	3.3273	
960-480	SW29	13.003	7	22.0	0.550	0.137	1.4510	
960-480	SW30	14.000	SW31	1.1	0.253	0.015	0.4036	
960-480	SW31	14.001	SW09	1.0	0.268	0.014	1.7427	
960-480	11	24.005	12	21.3	0.397	0.054	18.8413	
960-480	12	24.006	13	41.0	0.564	0.103	12.9662	
960-480	13	24.007	14	40.9	0.479	0.103	4.6978	
960-480	14	24.008	SW37	40.8	0.396	0.098	3.7658	

Results for Consecutive Rainfall Critical Storm Duration. Lowest mass balance: 99.23%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960-480	SW37	2880	141.882	1.411	74.8	3.9321	0.0000	SURCHARGED
960-480	16	2880	141.882	1.432	74.2	0.0000	0.0000	SURCHARGED
960-480	17	2880	141.882	1.573	74.1	0.0000	0.0000	SURCHARGED
960-480	SW38	2880	141.882	1.579	80.5	3.8524	0.0000	SURCHARGED
960-480	19	2880	141.882	1.585	80.3	0.0000	0.0000	SURCHARGED
960-480	20	2895	141.882	1.673	97.1	0.0000	0.0000	SURCHARGED
960-480	21	2895	141.882	1.782	98.1	0.0000	0.0000	FLOOD RISK
960-480	SW32	2880	141.882	0.556	4.5	1.0942	0.0000	SURCHARGED
960-480	SW33	2880	141.882	0.703	11.8	1.0608	0.0000	SURCHARGED
960-480	SW34	2880	141.882	0.771	18.3	1.4316	0.0000	SURCHARGED
960-480	SW35	2880	141.882	0.929	24.4	1.9710	0.0000	SURCHARGED
960-480	SW36	2880	141.882	0.954	21.5	1.4680	0.0000	SURCHARGED
960-480	SW41	2880	141.882	0.132	2.6	0.2126	0.0000	OK
960-480	SW42	2880	141.882	0.229	7.1	0.4876	0.0000	OK
960-480	SW43	2880	141.882	0.263	7.5	0.3912	0.0000	OK
960-480	SW44	2880	141.882	0.418	11.5	0.6824	0.0000	SURCHARGED
960-480	SW45	2880	141.882	0.454	19.0	0.7961	0.0000	SURCHARGED
960-480	SW46	2880	141.882	0.512	20.8	0.9643	0.0000	SURCHARGED
960-480	SW47	2655	141.961	0.061	7.6	0.1540	0.0000	OK
960-480	SW48	2880	141.882	0.234	22.5	0.5368	0.0000	OK
960-480	SW39	2895	141.882	1.818	99.2	5.2090	0.0000	FLOOD RISK
960-480	SW40	2895	141.882	1.882	132.3	6.9737	0.0000	FLOOD RISK
960-480	SW49	2880	141.882	0.705	10.1	1.2114	0.0000	SURCHARGED
960-480	SW50	2880	141.882	0.787	13.1	1.9529	0.0000	SURCHARGED
960-480	SW51	2880	141.882	0.850	11.9	1.5541	0.0000	SURCHARGED
Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960-480	SW37	24.009	16	74.2	0.668	0.179	3.7736	
960-480	16	24.010	17	74.1	0.523	0.186	27.5808	
960-480	17	24.011	SW38	74.0	0.490	0.178	1.0709	
960-480	SW38	24.012	19	80.3	0.557	0.193	1.0709	
960-480	19	24.013	20	80.3	0.427	0.202	17.2324	
960-480	20	16.015	21	98.1	0.570	0.187	26.2761	
960-480	21	16.016	SW39	97.5	0.567	0.176	7.8416	
960-480	SW32	24.000	SW33	11.5	0.560	0.159	1.1983	
960-480	SW33	24.001	SW34	16.7	0.409	0.148	2.3207	
960-480	SW34	24.002	SW35	21.4	0.625	0.190	2.8587	
960-480	SW35	24.003	SW36	20.3	0.649	0.127	1.5867	
960-480	SW36	24.004	11	21.4	0.764	0.133	1.5784	
960-480	SW41	26.000	SW42	2.6	0.309	0.036	1.0132	
960-480	SW42	26.001	SW43	7.1	0.613	0.099	0.4931	
960-480	SW43	26.002	SW44	7.6	0.650	0.106	1.2997	
960-480	SW44	26.003	SW45	16.5	0.525	0.146	1.2307	
960-480	SW45	26.004	SW46	16.8	1.060	0.149	2.0041	
960-480	SW46	26.005	12	19.8	2.408	0.034	0.6499	
960-480	SW47	29.000	SW48	7.6	0.751	0.089	0.5891	
960-480	SW48	29.001	SW37	22.5	1.448	0.080	4.0204	
960-480	SW39	16.017	SW40	97.7	0.567	0.178	14.0839	
960-480	SW40	16.018	Basin 04	132.0	1.630	0.187	3.1396	
960-480	SW49	16.000	SW50	10.1	0.194	0.063	5.1897	
960-480	SW50	16.001	SW51	9.0	0.481	0.056	3.9894	
960-480	SW51	16.002	SW52	11.8	0.504	0.073	2.4161	

Results for Consecutive Rainfall Critical Storm Duration. Lowest mass balance: 99.23%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960-480	SW52	2880	141.882	0.888	16.1	1.7941	0.0000	SURCHARGED
960-480	SW53	2880	141.882	1.039	18.7	2.2020	0.0000	SURCHARGED
960-480	SW54	2880	141.882	1.094	23.3	2.6072	0.0000	SURCHARGED
960-480	SW55	2880	141.882	1.135	26.3	2.4597	0.0000	SURCHARGED
960-480	SW56	2880	141.882	1.205	31.8	2.9730	0.0000	SURCHARGED
960-480	SW57	2880	141.882	1.269	34.8	2.7426	0.0000	SURCHARGED
960-480	SW58	2880	141.882	1.330	60.3	3.6498	0.0000	SURCHARGED
960-480	SW59	2880	141.882	1.366	60.8	2.5259	0.0000	SURCHARGED
960-480	SW60	2880	141.882	1.402	63.8	3.0087	0.0000	SURCHARGED
960-480	SW61	2880	141.882	1.429	66.1	2.9579	0.0000	SURCHARGED
960-480	SW62	2895	141.882	1.470	51.5	4.2303	0.0000	SURCHARGED
960-480	SW63	2895	141.882	1.591	40.9	3.6607	0.0000	SURCHARGED
960-480	SW64	2895	141.882	1.014	4.9	1.8686	0.0000	SURCHARGED
960-480	SW65	2895	141.882	1.130	9.0	2.3672	0.0000	SURCHARGED
960-480	SW66	2895	141.882	1.313	13.5	2.9425	0.0000	FLOOD RISK
960-480	SW67	2895	141.882	1.423	19.4	2.2684	0.0000	FLOOD RISK
960-480	SW68	2895	141.882	1.573	21.1	2.6916	0.0000	FLOOD RISK
960-480	SW69	2880	141.882	0.393	3.0	0.7625	0.0000	SURCHARGED
960-480	SW70	2880	141.882	0.482	6.4	0.9939	0.0000	SURCHARGED
960-480	SW71	2880	141.882	0.499	2.9	0.8363	0.0000	SURCHARGED
960-480	SW72	2880	141.882	0.645	4.9	1.1545	0.0000	SURCHARGED
960-480	SW73	2880	141.882	0.615	4.0	1.1703	0.0000	SURCHARGED
960-480	SW74	2880	141.882	0.566	4.8	1.1642	0.0000	SURCHARGED
960-480	SW75	2880	141.882	0.822	13.3	2.2341	0.0000	SURCHARGED
960-480	SW76	2880	141.882	0.684	5.1	1.4357	0.0000	SURCHARGED

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960-480	SW52	16.003	SW53	16.3	0.688	0.102	4.8240	
960-480	SW53	16.004	SW54	18.5	0.519	0.086	5.8763	
960-480	SW54	16.005	SW55	23.1	0.573	0.107	4.3544	
960-480	SW55	16.006	SW56	26.2	0.563	0.121	7.5614	
960-480	SW56	16.007	SW57	31.6	0.558	0.147	6.9133	
960-480	SW57	16.008	SW58	34.6	0.447	0.161	6.6078	
960-480	SW58	16.009	SW59	60.1	0.619	0.292	4.2513	
960-480	SW59	16.010	SW60	60.6	0.609	0.281	3.8635	
960-480	SW60	16.011	SW61	63.6	0.625	0.283	2.6851	
960-480	SW61	15.012	SW62	43.0	0.642	0.199	4.4004	
960-480	SW62	16.013	SW63	38.4	0.650	0.125	6.4684	
960-480	SW63	16.014	20	34.7	0.656	0.108	0.8887	
960-480	SW64	31.000	SW65	4.7	0.437	0.066	1.9473	
960-480	SW65	31.001	SW66	8.9	0.464	0.124	3.0703	
960-480	SW66	31.002	SW67	13.3	0.610	0.185	0.5820	
960-480	SW67	30.003	SW68	19.3	0.539	0.172	2.6064	
960-480	SW68	31.004	SW40	21.0	0.439	0.129	5.2285	
960-480	SW69	1.000	SW70	2.8	0.358	0.039	1.4779	
960-480	SW70	1.001	SW02	6.3	0.628	0.088	1.5489	
960-480	SW71	3.000	SW72	2.8	0.569	0.069	0.4717	
960-480	SW72	3.001	SW03	4.7	0.573	0.065	1.1126	
960-480	SW73	4.000	SW04	3.8	0.626	0.096	0.6104	
960-480	SW74	5.000	SW75	4.6	0.668	0.115	1.2030	
960-480	SW75	5.001	SW05	13.1	0.751	0.183	1.0393	
960-480	SW76	6.000	SW77	4.9	0.521	0.123	0.6042	

Results for Consecutive Rainfall Critical Storm Duration. Lowest mass balance: 99.23%

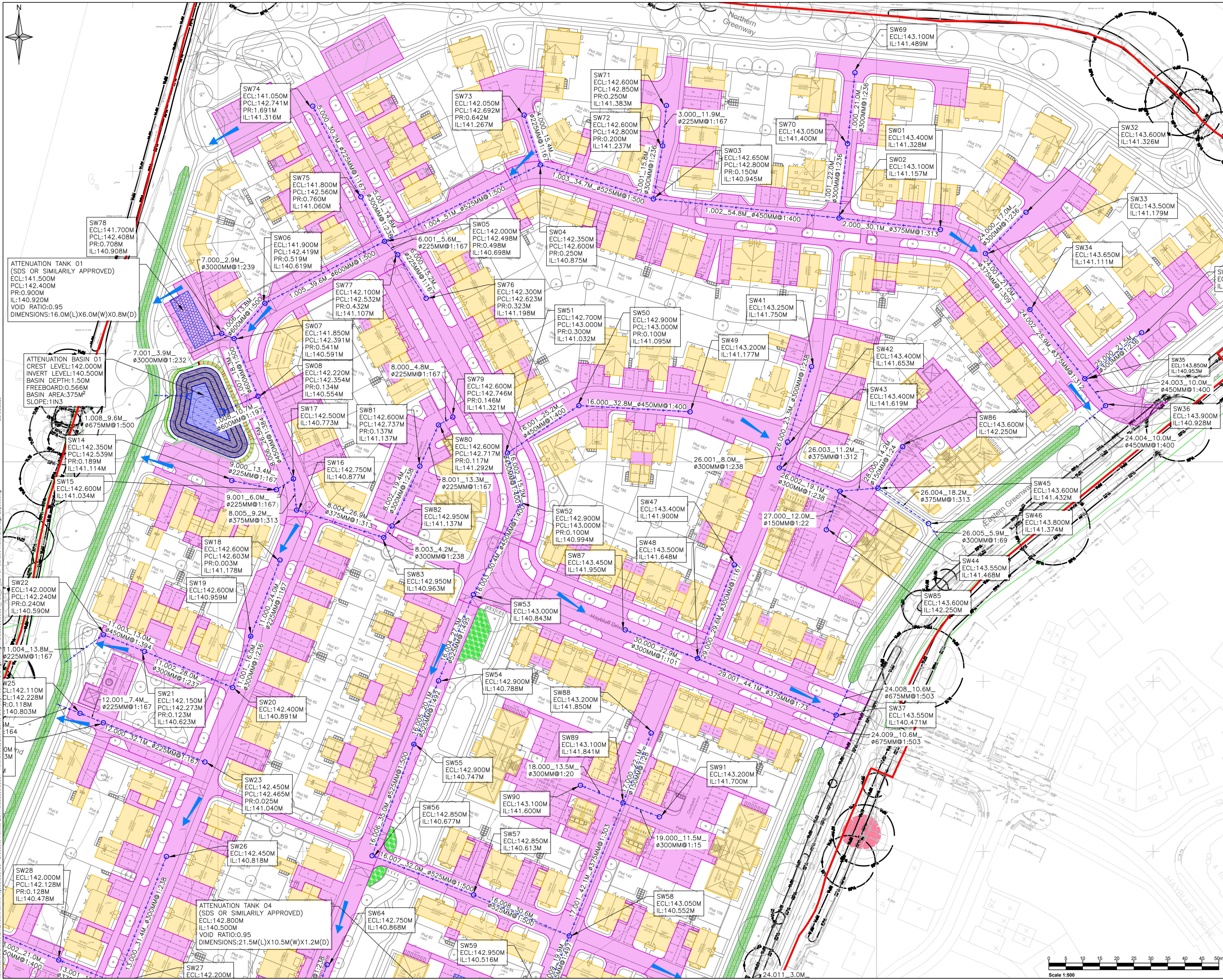
Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960-480	SW77	2880	141.882	0.775	8.6	1.4205	0.0000	SURCHARGED
960-480	SW78	2880	141.882	0.974	9.0	1.6079	0.0000	SURCHARGED
960-480	SW79	2880	141.882	0.561	3.7	1.0359	0.0000	SURCHARGED
960-480	SW80	2880	141.882	0.590	3.9	0.7084	0.0000	SURCHARGED
960-480	SW81	2880	141.882	0.745	5.3	1.2618	0.0000	SURCHARGED
960-480	SW82	2880	141.882	0.826	7.3	1.4262	0.0000	SURCHARGED
960-480	SW84	2880	141.882	0.688	8.1	1.3056	0.0000	SURCHARGED
960-480	SW85	2655	142.276	0.026	2.4	0.0421	0.0000	OK
960-480	SW86	2655	142.282	0.032	3.4	0.0573	0.0000	OK
960-480	SW87	2655	142.009	0.059	9.0	0.1628	0.0000	OK
960-480	SW88	2880	141.882	0.032	1.2	0.0439	0.0000	OK
960-480	SW89	2880	141.882	1.041	19.8	1.8771	0.0000	SURCHARGED
960-480	SW91	2880	141.882	0.182	6.3	0.4147	0.0000	OK
960-480	SW90	2880	141.882	0.282	6.5	0.6539	0.0000	OK
960-480	SW92	2880	141.882	1.399	40.8	4.7717	0.0000	SURCHARGED
960-480	SW93	2895	141.882	1.148	2.5	2.0851	0.0000	SURCHARGED
960-480	SW94	2895	141.882	1.301	6.0	2.6662	0.0000	SURCHARGED
960-480	SW95	2895	141.882	1.121	3.5	2.0078	0.0000	SURCHARGED
960-480	SW13	375	139.414	0.076	14.3	0.1094	0.0000	OK
960-480	Tank 03	2895	141.882	1.432	22.4	294.2426	0.0000	SURCHARGED
960-480	Tank 01	2880	141.882	0.962	8.8	73.0056	0.0000	SURCHARGED
960-480	Tank 02	2880	141.882	1.432	22.4	294.2426	0.0000	SURCHARGED
960-480	Tank 04	2880	141.882	1.382	19.8	257.5193	0.0000	SURCHARGED
960-480	Tank 05	2880	141.882	1.372	30.6	257.5193	0.0000	SURCHARGED
960-480	SW96	2895	141.882	1.959	35.4	3.4623	0.0000	FLOOD RISK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960-480	SW77	6.001	SW05	8.5	0.758	0.210	0.2231	
960-480	SW78	7.001	SW07	-6.1	0.468	-0.084	0.2772	
960-480	SW79	8.000	SW80	3.5	0.565	0.088	0.1917	
960-480	SW80	8.001	SW81	3.8	0.630	0.096	0.5284	
960-480	SW81	8.002	SW82	5.2	0.504	0.073	1.3657	
960-480	SW82	8.003	SW83	7.2	0.626	0.100	0.2936	
960-480	SW84	25.000	SW35	-6.2	0.563	-0.086	1.5117	
960-480	SW85	27.000	SW44	2.4	1.197	0.062	0.1088	
960-480	SW86	28.000	SW45	3.4	1.280	0.093	0.1303	
960-480	SW87	30.000	SW48	9.0	0.940	0.081	0.4538	
960-480	SW88	17.000	SW89	1.2	0.871	0.036	0.2255	
960-480	SW89	17.001	SW58	20.0	0.696	0.175	4.6520	
960-480	SW91	19.000	SW89	6.5	1.629	0.022	0.6598	
960-480	SW90	18.000	SW89	12.4	1.482	0.049	0.9419	
960-480	SW92	19.001	SW61	-28.9	-0.287	-0.133	3.1854	
960-480	SW93	33.000	SW94	2.4	0.308	0.059	1.0230	
960-480	SW94	33.001	SW40	5.9	0.525	0.147	0.8684	
960-480	SW95	32.000	SW67	3.4	0.511	0.084	1.0084	
960-480	SW13	1.024	EXManhole	14.3	1.236	0.234	0.2576	2338.8
960-480	Tank 03	22.000	SW62	-22.4	-0.327	-0.069	1.8149	
960-480	Tank 01	7.000	SW78	-8.8	-0.669	-0.123	0.2021	
960-480	Tank 02	23.000	SW62	-22.4	-0.327	-0.069	1.8045	
960-480	Tank 04	21.000	SW92	-19.8	-0.246	-0.086	1.5917	
960-480	Tank 05	20.000	SW92	-30.6	-0.263	-0.136	2.6725	
960-480	SW96	1.020	SW10 (FC)	28.6	0.090	0.069	6.9903	

Appendix B

Drawings





Notes:

- DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT DOCUMENTS AND SURFACE WATER DRAINAGE STRATEGY INCLUDING LEVELS.
- ALL LEVELS ARE SHOWN IN METRES ABOVE ORDNANCE DATUM.
- PROPOSED OUTFALL CONNECTION TO EXISTING MANHOLE SUBJECT TO CCTV SURVEY.
- DRAINAGE STRATEGY DESIGN ATTENUATES SURFACE WATER RUNOFF FOR THE 1 IN 100 YEAR EVENT PLUS 40% CLIMATE CHANGE.
- ADDITIONAL FREEBOARD PROVIDED TO ALLOW FOR IMPROVED HALF DRAIN TIMES.
- DISPLAYED ACRONYMS:
 - ECL - EXISTING COVER LEVEL
 - PCL - PROPOSED COVER LEVEL
 - PR - PROPOSED RAISING OF GROUND LEVELS
 - IL - INVERT LEVEL

Legend:

- SITE BOUNDARY
- EXISTING PUBLIC SURFACE WATER SEWER
- PROPOSED SURFACE WATER DRAIN
- PROPOSED HEADWALL
- PROPOSED PERFORATED DRAIN
- PROPOSED SWALE
- PROPOSED RAIN GARDEN
- PROPOSED ATTENUATION TANK
- PROPOSED ATTENUATION BASIN
- PROPOSED FLOOD EXCEEDANCE ROUTE
- PROPOSED IMPERMEABLE PAVED SURFACE AREA (3.058HA)
- PROPOSED IMPERMEABLE ROOF SURFACE AREA (1.850HA)
- TREE ROOT PROTECTION ZONE

P07	ARCHITECT LAYOUT UPDATED. SUDS AMENDED TO SUIT.	23.05.25	HE	NB	NB
P06	ARCHITECT LAYOUT UPDATED. SUDS AMENDED TO SUIT.	21.05.25	HE	NB	NB
P05	SUDS LAYOUT UPDATED.	13.05.25	HE	NB	NB
P04	SUDS LAYOUT UPDATED.	02.05.25	HE	NB	NB
P03	ARCHITECT LAYOUT UPDATED. SUDS AMENDED TO SUIT.	01.05.25	HE	NB	NB
P02	ARCHITECT LAYOUT UPDATED.	12.12.24	HE	NB	NB
Rev	Amendments	Date	By	Chk	Auth

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Drawing Status & Suitability Code

FOR INFORMATION

Client

CROUDACE HOMES

Project

LAND AT ROUNDWOOD, STEVENAGE

Drawing Title

SURFACE WATER DRAINAGE LAYOUT SHEET 1

Scale	1:500	@ A1	SLR Project No.	416.065599.00001			
Designed	HE	Drawn	HE	Checked	NB	Authorised	NB
Date	NOV 2024	Date	NOV 2024	Date	NOV 2024	Date	NOV 2024

Drawing Number: 416.065599.00001_PDL_01

Rev: P07

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- Notes:**
- DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT DOCUMENTS AND SLR DRAINAGE STRATEGY.
 - DRAINAGE STRATEGY IS SUBJECT TO DETAILED DESIGN INCLUDING LEVELS.
 - ALL LEVELS ARE SHOWN IN METRES ABOVE ORDNANCE DATUM.
 - PROPOSED OUTFALL CONNECTION TO EXISTING MANHOLE SUBJECT TO CCTV SURVEY.
 - DRAINAGE STRATEGY DESIGN ATTENUATES SURFACE WATER RUNOFF FOR THE 1 IN 100 YEAR EVENT PLUS 40% CLIMATE CHANGE.
 - ADDITIONAL FREEBOARD PROVIDED TO ALLOW FOR IMPROVED HALF DRAIN TIMES.
 - DISPLAYED ACRONYMS:
 - ECL - EXISTING COVER LEVEL
 - PCL - PROPOSED COVER LEVEL
 - PR - PROPOSED RAISING OF GROUND LEVELS
 - IL - INVERT LEVEL

- Legend:**
- SITE BOUNDARY
 - EXISTING PUBLIC SURFACE WATER SEWER
 - PROPOSED SURFACE WATER DRAIN
 - PROPOSED HEADWALL
 - PROPOSED PERFORATED DRAIN
 - PROPOSED SWALE
 - PROPOSED RAIN GARDEN
 - PROPOSED ATTENUATION TANK
 - PROPOSED ATTENUATION BASIN
 - PROPOSED FLOOD EXCEEDANCE ROUTE
 - PROPOSED IMPERMEABLE PAVED SURFACE AREA (3.058HA)
 - PROPOSED IMPERMEABLE ROOF SURFACE AREA (1.850HA)
 - TREE ROOT PROTECTION ZONE

P07	ARCHITECT LAYOUT UPDATED. SUDS AMENDED TO SUIT.	23.05.25	HE	NB	NB
P06	ARCHITECT LAYOUT UPDATED. SUDS AMENDED TO SUIT.	21.05.25	HE	NB	NB
P05	SUDS LAYOUT UPDATED.	13.05.25	HE	NB	NB
P04	SUDS LAYOUT UPDATED.	02.05.25	HE	NB	NB
P03	ARCHITECT LAYOUT UPDATED. SUDS AMENDED TO SUIT.	01.05.25	HE	NB	NB
P02	ARCHITECT LAYOUT UPDATED.	12.12.24	HE	NB	NB
Rev	Amendments	Date	By	Chk	Auth



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CROUDACE HOMES

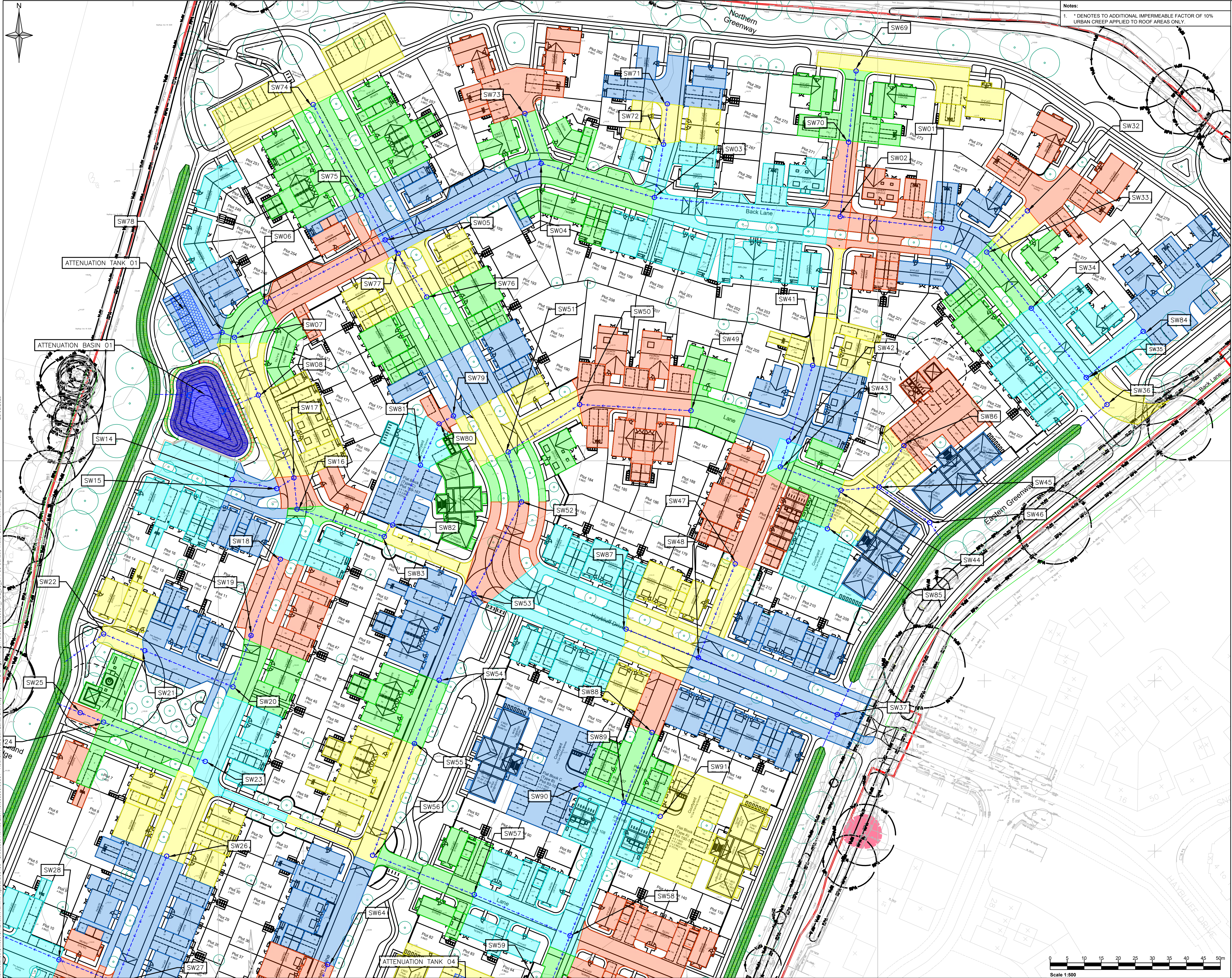
Project

LAND AT ROUNDWOOD, STEVENAGE

Drawing Title

SURFACE WATER DRAINAGE LAYOUT SHEET 2

Scale	1:500	SLR Project No.	416.065599.00001
Designed	HE	Checked	NB
Drawn	HE	Authorised	NB
Date	NOV 2024	Date	NOV 2024
Drawing Number	416.065599.00001_PDL_02	Rev	P07



Notes:
1. * DENOTES TO ADDITIONAL IMPERMEABLE FACTOR OF 10% URBAN CREEP APPLIED TO ROOF AREAS ONLY.

CATCHMENT AREAS		
CHAMBER	AREA* (HA)	CATCHMENT
SW01	0.047	
SW02	0.073	
SW03	0.169	
SW04	0.081	
SW05	0.073	
SW06	0.047	
SW07	0.028	
SW08	0.073	
SW09	0.048	
SW10	0.047	
SWALE	0.022	
SW14	0.058	
SW15	0.032	
SW16	0.010	
SW17	0.020	
SW18	0.025	
SW19	0.054	
SW20	0.032	
SW21	0.052	
SW22	0.031	
SW23	0.048	
SW24	0.049	
SW25	0.016	
SW26	0.071	
SW27	0.148	
SW28	0.032	
SW29	0.059	
SW30	0.016	
SW32	0.061	
SW33	0.009	
SW34	0.054	
SW35	0.100	
SW36	0.016	
SW37	0.157	
SW38	0.089	
SW39	0.030	
SW40	0.116	
SW41	0.036	
SW42	0.061	
SW43	0.005	
SW44	0.021	
SW45	0.035	
SW46	0.055	
SW47	0.104	
SW48	0.080	
SW49	0.029	
SW50	0.100	
SW51	0.039	
SW52	0.059	
SW53	0.038	
SW54	0.065	
SW55	0.043	
SW56	0.076	
SW57	0.044	
SW58	0.122	
SW59	0.010	
SW60	0.044	
SW61	0.034	
SW62	0.116	
SW63	0.059	
SW64	0.067	
SW65	0.058	
SW66	0.062	
SW67	0.038	
SW68	0.025	
SW69	0.041	
SW70	0.052	
SW71	0.040	
SW72	0.028	
SW73	0.055	
SW74	0.066	
SW75	0.119	
SW76	0.069	
SW77	0.050	
SW78	0.039	
SW79	0.051	
SW80	0.005	
SW81	0.021	
SW82	0.028	
SW83	0.010	
SW84	0.062	
SW85	0.033	
SW86	0.046	
SW87	0.122	
SW88	0.016	
SW89	0.042	
SW90	0.089	
SW91	0.086	
SW92	0.174	
SW93	0.034	
SW94	0.050	
SW95	0.047	
TOTAL	5.093	

P05	ARCHITECT LAYOUT & SUDS UPDATED.	23.05.25	HE	NB	NB
P04	ARCHITECT LAYOUT & SUDS UPDATED.	21.05.25	HE	NB	NB
Rev	Amendments	Date	By	Chk	Auth



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Drawing Status & Suitability Code

FOR INFORMATION

Client

CROUDACE HOMES

Project

LAND AT ROUNDWOOD, STEVENAGE

Drawing Title

SURFACE WATER
CATCHMENT PLAN
SHEET 1

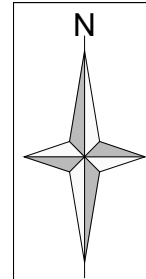
Scale	1:500	@ A1	SLR Project No.	416.065599.00001	
Designed	HE	Drawn	HE	Authorised	NB
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Date	NOV 2024	Date	NOV 2024	Date	NOV 2024

Drawing Number

416.065599.00001_PDL_03

Rev

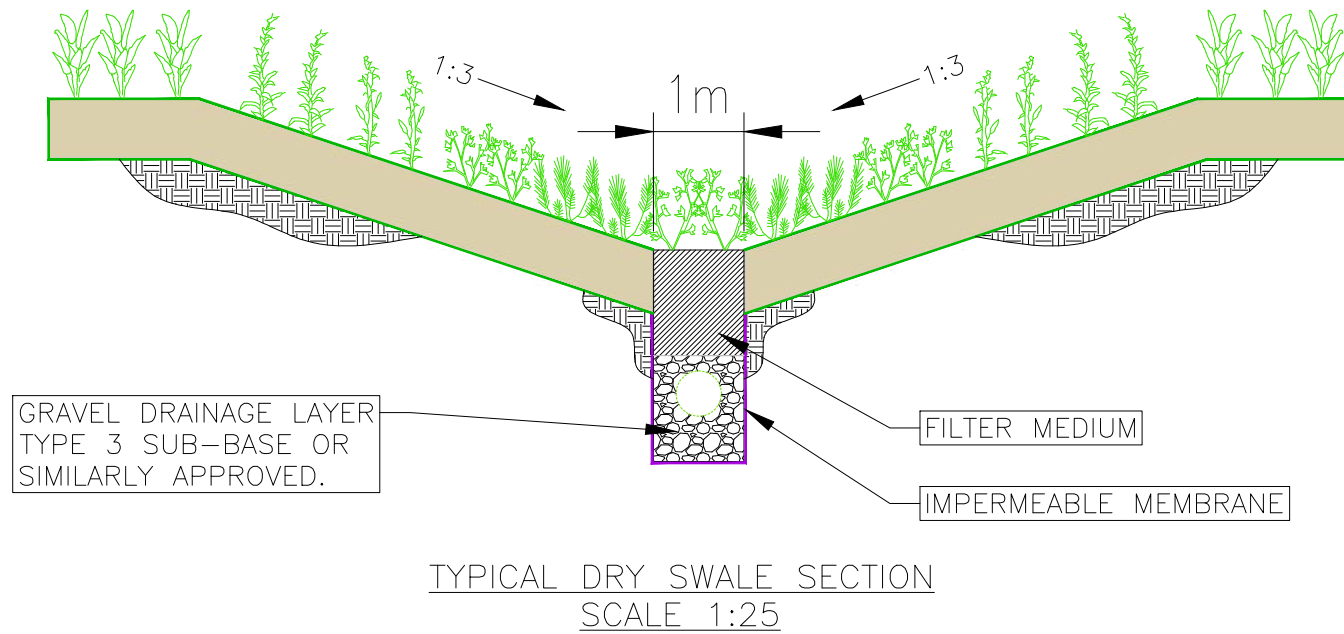
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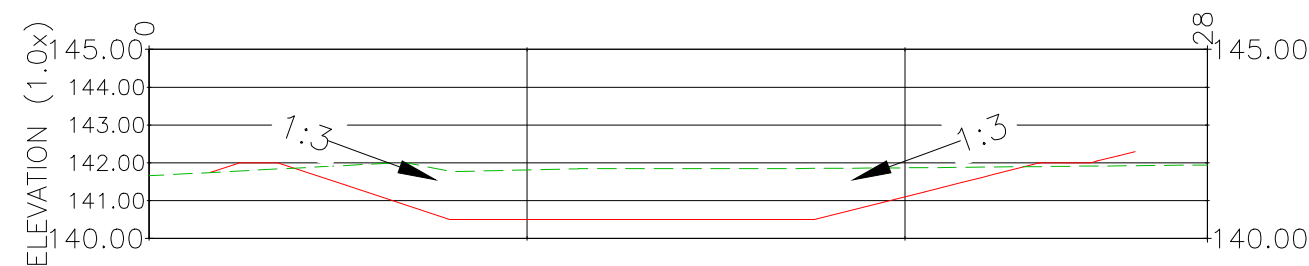
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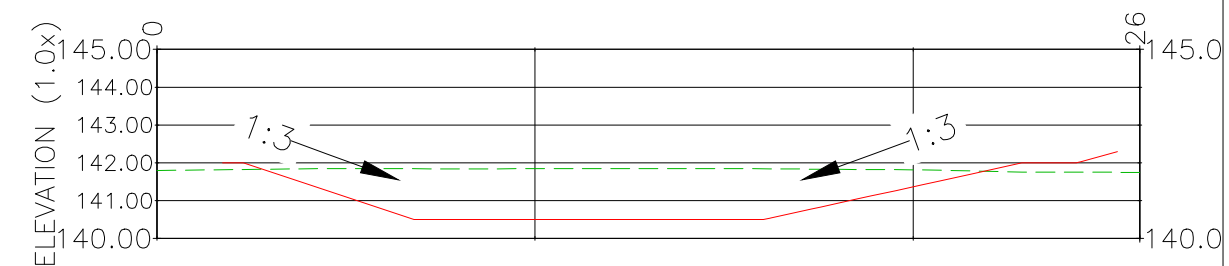
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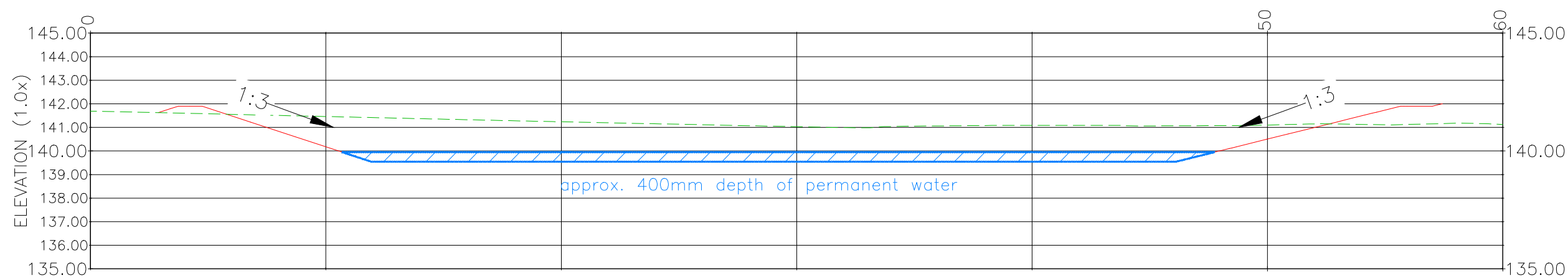
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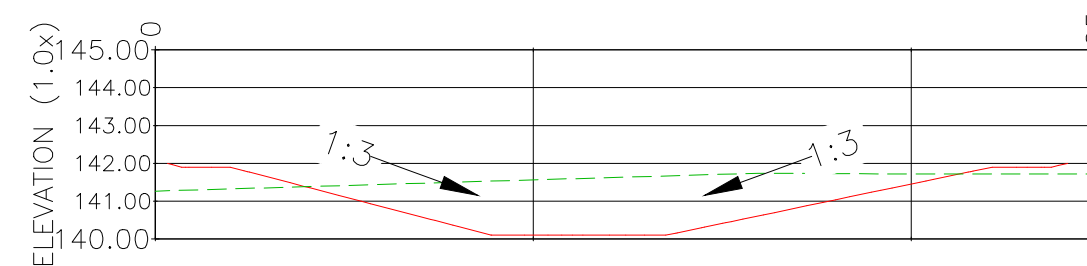
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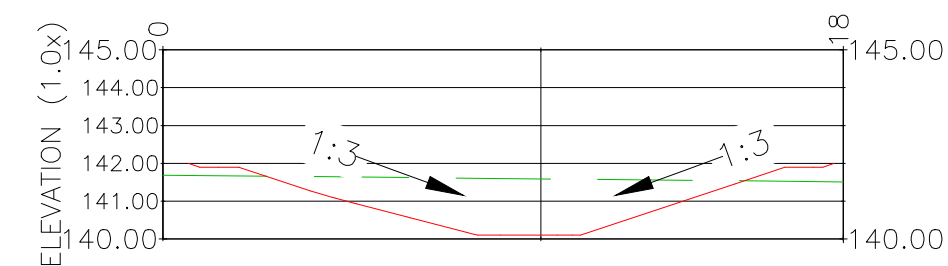
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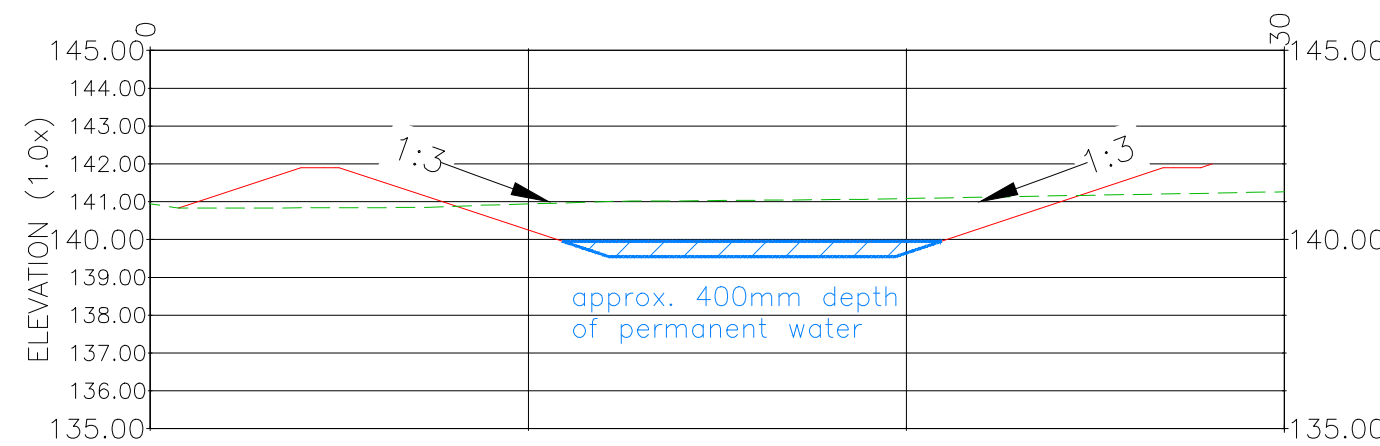
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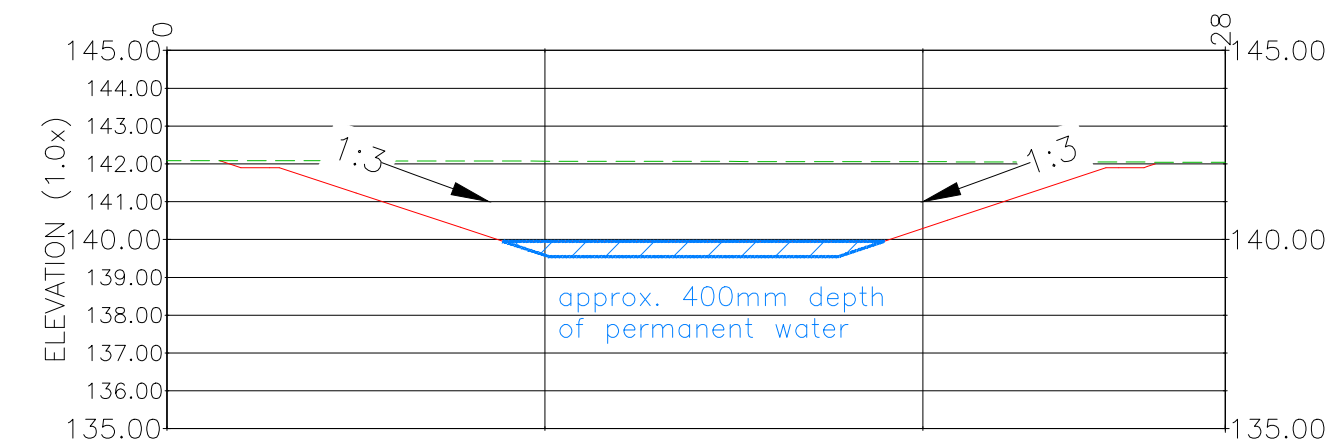
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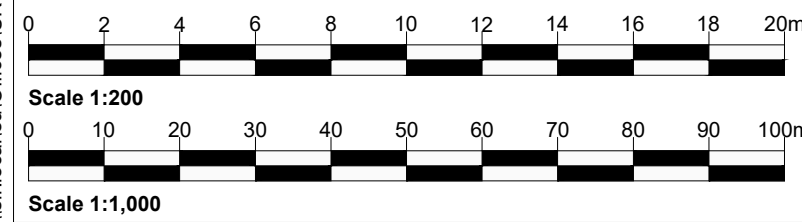
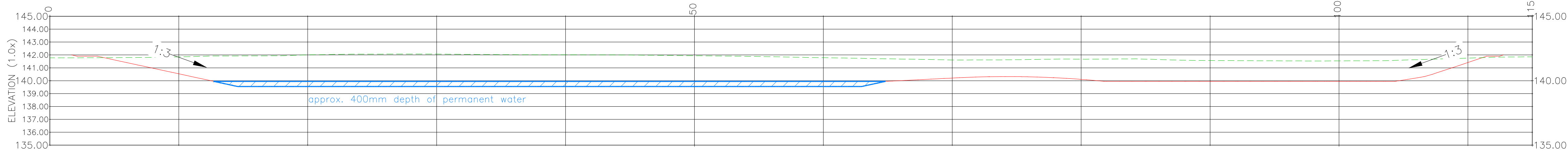
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LONG SECTION: Basin 04 A-A
SCALE: H:200, V:200
DATUM: 135.00



P01	First issue.	28.04.25	PB	NB	NB
Rev	Amendments	Date	By	Chk	Auth



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Drawing Status & Suitability Code
FOR INFORMATION

Client
CROUDACE HOMES

Project
LAND AT ROUNDWOOD,
STEVENAGE

Drawing Title
SURFACE WATER
SUDS SECTIONS

Scale 1:1000	@ A1	SLR Project No. 416.065599.00001
Designed HE	Drawn PB	Checked NB
Date APR 2025	Date APR 2025	Date APR 2025

Drawing Number
416.065599.00001_PDL_06

Rev
P01

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