

7 Bertal Road London SW17 0BX	Whaley Development Network 1 Calculations
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Date 24.09.18 File Network 1 - 24.09.18.mdx	Designed by MDS Checked by MDS
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XP Solutions	Network 2015.1
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Simulation Criteria for Storm

Volumetric Runoff Coeff	0.840	Foul Sewage per hectare (l/s)	0.000
Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	40.000
Hot Start (mins)	0	MADD Factor * 10m ³ /ha Storage	2.000
Hot Start Level (mm)	0	Run Time (mins)	720
Manhole Headloss Coeff (Global)	0.500	Output Interval (mins)	6
Number of Input Hydrographs	0	Number of Storage Structures	0
Number of Online Controls	0	Number of Time/Area Diagrams	0
Number of Offline Controls	0		

Synthetic Rainfall Details

Rainfall Model	FEH
Return Period (years)	100
Site Location	GB 373650 436500 SD 73650 36500
C (1km)	-0.025
D1 (1km)	0.397
D2 (1km)	0.353
D3 (1km)	0.399
E (1km)	0.300
F (1km)	2.461
Summer Storms	No
Winter Storms	Yes
Cv (Summer)	0.750
Cv (Winter)	0.840
Storm Duration (mins)	360

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Summary of Results for 360 minute 100 year Winter (Storm)

Margin for Flood Risk Warning (mm) 300.0 DVD Status OFF
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

PN	US/MH Name	US/CL (m)	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Maximum Vol (m ³)	Discharge Vol (m ³)	Pipe	Status
									Flow (l/s)	
1.000	S1	69.750	68.228	-0.397	0.000	0.03	0.085	177.943	20.7	OK
2.000	S2	73.000	71.535	-0.265	0.000	0.03	0.053	29.953	3.5	OK
2.001	S3	73.470	71.282	-0.248	0.000	0.07	0.112	59.927	7.0	OK
2.002	S4	73.250	71.133	-0.237	0.000	0.10	0.138	89.939	10.5	OK
2.003	S5	72.900	70.942	-0.235	0.000	0.11	0.142	119.018	13.8	OK
2.004	S6	72.100	70.664	-0.236	0.000	0.10	0.122	189.022	22.0	OK
2.005	S7	70.750	69.321	-0.229	0.000	0.13	0.087	258.979	30.1	OK
2.006	S8	69.000	67.595	-0.205	0.000	0.22	0.115	328.185	38.2	OK
1.001	S9	68.500	66.942	-0.358	0.000	0.09	0.172	571.672	66.5	OK
1.002	S10	66.250	64.704	-0.346	0.000	0.12	0.192	637.488	74.1	OK
1.003	S11	65.100	63.558	-0.342	0.000	0.13	0.204	705.764	82.0	OK
3.000	S12	63.000	60.944	-0.394	0.000	0.03	0.131	41.753	4.9	OK
3.001	S13	63.300	60.915	-0.375	0.000	0.07	0.263	83.534	9.7	OK
1.004	S14	63.750	60.863	-0.377	0.000	0.29	0.464	831.466	96.6	OK
1.005	S15	63.750	60.784	-0.366	0.000	0.32	1.927	873.632	101.4	OK
1.006	S16	63.125	60.718	-0.358	0.000	0.31	1.736	915.611	106.2	OK
4.000	S17	69.850	68.641	-0.394	0.000	0.04	0.090	56.275	6.6	OK
4.001	S18	70.250	68.565	-0.373	0.000	0.07	0.269	112.558	13.1	OK
4.002	S19	69.750	68.457	-0.353	0.000	0.11	0.349	168.929	19.7	OK
4.003	S20	71.600	68.361	-0.339	0.000	0.14	0.434	225.298	26.2	OK
4.004	S21	73.100	68.261	-0.326	0.000	0.17	0.550	281.625	32.8	OK
4.005	S22	73.900	68.140	-0.315	0.000	0.20	0.677	338.104	39.3	OK
4.006	S23	74.000	67.983	-0.303	0.000	0.23	0.821	394.464	45.9	OK
5.000	S24	83.300	81.888	-0.287	0.000	0.01	0.014	22.691	2.6	OK
5.001	S25	79.650	78.251	-0.274	0.000	0.02	0.040	45.410	5.3	OK
5.002	S26	77.750	76.358	-0.267	0.000	0.03	0.052	68.137	7.9	OK
5.003	S27	75.750	74.361	-0.264	0.000	0.04	0.058	89.949	10.5	OK
4.007	S28	73.400	67.858	-0.272	0.000	0.33	1.139	563.566	65.5	OK
4.008	S29	70.900	67.623	-0.343	0.000	0.13	0.407	642.916	74.7	OK
4.009	S30	67.600	66.054	-0.346	0.000	0.12	0.201	722.327	83.9	OK
4.010	S31	66.100	64.557	-0.343	0.000	0.13	0.198	801.632	93.1	OK
4.011	S32	64.500	62.957	-0.343	0.000	0.13	0.192	880.783	102.2	OK
6.000	S33	62.000	60.653	-0.389	0.000	0.02	0.525	46.291	5.4	OK
1.007	S34	62.450	60.652	-0.323	0.000	0.54	4.080	1912.541	221.7	OK
7.000	S35	66.750	65.285	-0.265	0.000	0.03	0.054	49.933	5.8	OK
7.001	S36	66.150	64.700	-0.250	0.000	0.07	0.091	99.878	11.6	OK
7.002	S37	65.650	64.224	-0.226	0.000	0.14	0.137	149.899	17.4	OK
7.003	S38	65.400	64.001	-0.199	0.000	0.25	0.207	199.877	23.3	OK
7.004	S39	66.000	63.863	-0.191	0.000	0.29	0.273	249.851	29.1	OK
7.005	S40	65.500	63.360	-0.380	0.000	0.06	0.115	299.982	34.9	OK
7.006	S41	61.500	60.694	-0.310	0.000	0.21	0.308	350.147	40.7	OK
1.008	S42	61.500	60.345	-0.545	0.000	0.17	1.112	2263.503	262.2	OK
1.009	S43	60.500	59.355	-0.545	0.000	0.17	0.906	2264.730	262.1	OK
1.010	S44	59.500	58.515	-0.385	0.000	0.48	2.112	2265.365	262.4	OK

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Simulation Criteria for Storm

Volumetric Runoff Coeff	0.840	Foul Sewage per hectare (l/s)	0.000
Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	40.000
Hot Start (mins)	0	MADD Factor * 10m ³ /ha Storage	2.000
Hot Start Level (mm)	0	Run Time (mins)	2880
Manhole Headloss Coeff (Global)	0.500	Output Interval (mins)	24
Number of Input Hydrographs	0	Number of Storage Structures	0
Number of Online Controls	0	Number of Time/Area Diagrams	0
Number of Offline Controls	0		

Synthetic Rainfall Details

Rainfall Model	FEH
Return Period (years)	100
Site Location	GB 373650 436500 SD 73650 36500
C (1km)	-0.025
D1 (1km)	0.397
D2 (1km)	0.353
D3 (1km)	0.399
E (1km)	0.300
F (1km)	2.461
Summer Storms	No
Winter Storms	Yes
Cv (Summer)	0.750
Cv (Winter)	0.840
Storm Duration (mins)	1440

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Summary of Results for 1440 minute 100 year Winter (Storm)

Margin for Flood Risk Warning (mm) 300.0 DVD Status OFF
 Analysis Timestep Fine Inertia Status OFF
 DTS Status ON

PN	US/MH Name	US/CL (m)	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Maximum Vol (m ³)	Discharge Vol (m ³)	Pipe	Status
									Flow (l/s)	
1.000	S1	69.750	68.201	-0.424	0.000	0.01	0.037	255.140	7.4	OK
2.000	S2	73.000	71.516	-0.284	0.000	0.01	0.020	42.958	1.3	OK
2.001	S3	73.470	71.262	-0.268	0.000	0.02	0.064	85.986	2.5	OK
2.002	S4	73.250	71.107	-0.263	0.000	0.04	0.075	129.087	3.8	OK
2.003	S5	72.900	70.914	-0.263	0.000	0.04	0.077	170.953	5.0	OK
2.004	S6	72.100	70.637	-0.263	0.000	0.04	0.066	271.462	7.9	OK
2.005	S7	70.750	69.291	-0.259	0.000	0.05	0.047	372.149	10.8	OK
2.006	S8	69.000	67.556	-0.244	0.000	0.08	0.065	471.687	13.7	OK
1.001	S9	68.500	66.903	-0.397	0.000	0.03	0.095	821.740	23.8	OK
1.002	S10	66.250	64.660	-0.390	0.000	0.04	0.107	916.769	26.6	OK
1.003	S11	65.100	63.513	-0.387	0.000	0.05	0.113	1015.898	29.4	OK
3.000	S12	63.000	60.917	-0.421	0.000	0.01	0.061	59.881	1.7	OK
3.001	S13	63.300	60.887	-0.403	0.000	0.02	0.157	119.857	3.5	OK
1.004	S14	63.750	60.770	-0.470	0.000	0.11	0.226	1197.434	34.6	OK
1.005	S15	63.750	60.685	-0.465	0.000	0.12	0.745	1259.236	36.4	OK
1.006	S16	63.125	60.608	-0.468	0.000	0.11	0.621	1321.045	38.1	OK
4.000	S17	69.850	68.613	-0.422	0.000	0.01	0.042	80.708	2.3	OK
4.001	S18	70.250	68.535	-0.403	0.000	0.02	0.159	161.554	4.7	OK
4.002	S19	69.750	68.416	-0.394	0.000	0.04	0.194	242.521	7.0	OK
4.003	S20	71.600	68.314	-0.386	0.000	0.05	0.225	323.627	9.4	OK
4.004	S21	73.100	68.209	-0.378	0.000	0.06	0.252	404.874	11.7	OK
4.005	S22	73.900	68.083	-0.372	0.000	0.07	0.278	486.228	14.1	OK
4.006	S23	74.000	67.923	-0.363	0.000	0.08	0.312	567.716	16.4	OK
5.000	S24	83.300	81.880	-0.295	0.000	0.00	0.000	32.544	0.9	OK
5.001	S25	79.650	78.234	-0.291	0.000	0.01	0.008	65.139	1.9	OK
5.002	S26	77.750	76.339	-0.286	0.000	0.01	0.017	97.791	2.8	OK
5.003	S27	75.750	74.343	-0.282	0.000	0.01	0.024	129.192	3.8	OK
4.007	S28	73.400	67.782	-0.348	0.000	0.12	0.373	811.266	23.5	OK
4.008	S29	70.900	67.578	-0.388	0.000	0.05	0.218	925.826	26.8	OK
4.009	S30	67.600	66.010	-0.390	0.000	0.04	0.112	1040.546	30.1	OK
4.010	S31	66.100	64.512	-0.388	0.000	0.05	0.110	1155.410	33.4	OK
4.011	S32	64.500	62.912	-0.388	0.000	0.05	0.107	1270.494	36.7	OK
6.000	S33	62.000	60.504	-0.538	0.000	0.01	0.144	66.387	1.9	OK
1.007	S34	62.450	60.500	-0.475	0.000	0.19	0.997	2760.917	79.6	OK
7.000	S35	66.750	65.267	-0.283	0.000	0.01	0.021	71.597	2.1	OK
7.001	S36	66.150	64.681	-0.269	0.000	0.02	0.053	143.311	4.2	OK
7.002	S37	65.650	64.193	-0.257	0.000	0.05	0.075	215.139	6.3	OK
7.003	S38	65.400	63.960	-0.240	0.000	0.09	0.119	287.095	8.3	OK
7.004	S39	66.000	63.818	-0.236	0.000	0.10	0.149	359.151	10.4	OK
7.005	S40	65.500	63.335	-0.405	0.000	0.02	0.070	431.344	12.5	OK
7.006	S41	61.500	60.636	-0.368	0.000	0.08	0.157	503.623	14.6	OK
1.008	S42	61.500	60.259	-0.631	0.000	0.06	0.458	3269.622	94.1	OK
1.009	S43	60.500	59.268	-0.632	0.000	0.06	0.456	3274.544	94.1	OK
1.010	S44	59.500	58.357	-0.543	0.000	0.17	0.914	3279.315	94.0	OK