

Phil Brant Engineering Ltd		Page 1
6 Northfields Way East Leake Loughborough LE12 6RZ	HILTON	
Date 26 June 2019 16:33 File 30yr 180min.SIM	Designed By HOME Checked By	
Micro Drainage		

Global Variables

Region	FSR - England & Wales
Return Period (yrs)	30
M5-60 (mm)	19.000
Ratio R	0.400
Volumetric Runoff Coef	0.840
Profile Type	Winter
PIMP (%)	100
Areal Reduction Factor	1.000
Storm Duration (mins)	180
Hot Start (mins)	0
Hot Start Level (mm)	0
Manhole Headloss Coefficient	0.500
MADD Factor * 10m ³ /ha Storage	0.000
Foul Sewage/Hectare (l/s)	0.00
Additional Flow - % of Total Flow	0
Number of Input Hydrographs	0
Number of Time/Area Diagrams	0
Number of Bifurcations	0
Number of Overflows	0
Number of Off-Line Controls	0
Number of On-Line Controls	2

Starting Storm file name

H:\PBE\Schemes\2018 Schemes\EL18-11 Derby Road Hilton\MX\STORM.SWS

Freely Discharging Outfalls

Outfall Pipe Number	Outfall MH/No	C.Level (m)	I.Level (m)	D,L (mm)	B (mm)
1.010	SR1	63.090	60.841	1200	0

On-Line Controls (Hydro-Brake®)

US/PN	Volume (m³)	Ctrl MH Name	Invert (m)	Type	Dia (m)	D.Head (m)	D.Flow (l/s)	Headloss (m)	Flow (l/s)
1.009	1.031	CC1	60.900	Md6 SW Only	0.123	1.100	9.1	0.1	3.9
								0.2	7.6
								0.3	8.0
								0.4	7.6
								0.5	7.4
								0.6	7.4
								0.7	7.6
								0.8	7.9
								0.9	8.3
								1.0	8.7
								1.2	9.4
								1.4	10.2
								1.6	10.9
								1.8	11.6
								2.0	12.2
3.000	1.288	CC1	60.900	Md6 SW Only	0.123	1.100	9.1	0.1	3.9
								0.2	7.6
								0.3	8.0
								0.4	7.6
								0.5	7.4
								0.6	7.4
								0.7	7.6
								0.8	7.9
								0.9	8.3
								1.0	8.7
								1.2	9.4
								1.4	10.2
								1.6	10.9
								1.8	11.6
								2.0	12.2

Storage Pond at pipe 3.000 USMH HW1

Storage Pond Invert Level (m) 61.000

Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)
0.0	600.0	0.4	600.0	0.8	600.0	1.2	600.0	1.6	0.0	2.0	0.0	2.4	0.0
0.1	600.0	0.5	600.0	0.9	600.0	1.3	600.0	1.7	0.0	2.1	0.0	2.5	0.0
0.2	600.0	0.6	600.0	1.0	600.0	1.4	0.0	1.8	0.0	2.2	0.0		
0.3	600.0	0.7	600.0	1.1	600.0	1.5	0.0	1.9	0.0	2.3	0.0		

Summary of Results

Return Period (years)	30
Storm Duration (mins)	180
Profile Type	Winter
Margin for Flood Risk warning (mm)	300
Analysis Time Step	2.5 second increment (extended)
DTS Status	ON
DVD Status	ON
Inertia Status	OFF

PN	Water Lev. (m)	Surcharged Depth (m)	Flooded Vol (m³)	Flow/ Capacity	Overflow (l/s)	Pipe Flow (l/s)	Status
1.000	62.152	-0.293	0.000	0.11	0.0	11.1	0 K
1.001	62.051	-0.279	0.000	0.15	0.0	11.1	0 K
1.002	62.028	-0.280	0.000	0.14	0.0	13.2	0 K
1.003	61.961	-0.274	0.000	0.14	0.0	20.1	0 K
1.004	61.903	-0.118	0.000	0.37	0.0	28.6	0 K
1.005	61.889	-0.106	0.000	0.35	0.0	32.4	0 K
1.006	61.855	-0.084	0.000	0.42	0.0	36.1	0 K
2.000	62.085	-0.290	0.000	0.12	0.0	12.3	0 K
2.001	61.955	-0.270	0.000	0.17	0.0	20.2	0 K
2.002	61.885	-0.212	0.000	0.26	0.0	23.8	0 K
2.003	61.876	-0.189	0.000	0.24	0.0	27.0	0 K
2.004	61.853	-0.132	0.000	0.25	0.0	29.5	0 K
1.007	61.825	-0.070	0.000	0.31	0.0	67.6	0 K
1.008	61.766	0.016	0.000	0.26	0.0	68.9	SURCH'ED
1.009	61.601	0.081	0.000	0.34	0.0	78.2	SURCH'ED
3.000	61.431	-0.019	0.000	0.05	0.0	9.4	0 K
1.010	61.460	0.110	0.000	0.05	0.0	7.9	SURCH'ED