

Phil Brant Engineering Ltd		Page 1
6 Northfields Way East Leake Loughborough LE12 6RZ	HATTON	
Date 08 July 2017 14:55 File Storm4 2yr15min.SIM	Designed By HOME Checked By	
Micro Drainage Simulation W.11.4		

Global Variables

Region	FSR - England & Wales
Return Period (yrs)	2
M5-60 (mm)	19.000
Ratio R	0.400
Volumetric Runoff Coef	0.750
Profile Type	Summer
PIMP (%)	100
Areal Reduction Factor	1.000
Storm Duration (mins)	15
Hot Start (mins)	0
Hot Start Level (mm)	0
Manhole Headloss Coefficient	0.500
MADD Factor * 10m³/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\2014 Schemes\EL14-17 Hatton\MX\STORM4.SWS

Freely Discharging Outfalls

Outfall Pipe Number	Outfall MH/No	C.Level (m)	I.Level (m)	D,L (mm)	B (mm)
1.007	14	52.920	52.050	1200	0

On-Line Controls (Hydro-Brake®)

US/PN	Volume (m ³)	Ctrl MH Name	Invert (m)	Type	Dia (m)	D.Head (m)	D.Flow (l/s)	Headloss (m)	Flow (l/s)
1.006	4.692	13	52.122	Md1	0.091	1.000	9.2	0.1	3.6
								0.2	4.9
								0.3	5.0
								0.4	5.8
								0.5	6.5
								0.6	7.1
								0.7	7.7
								0.8	8.2
								0.9	8.7
								1.0	9.2
								1.2	10.0
								1.4	10.8
								1.6	11.6
2.004	3.626	13	52.122	Md1	0.091	1.000	9.2	0.1	3.6
								0.2	4.9
								0.3	5.0
								0.4	5.8
								0.5	6.5
								0.6	7.1
								0.7	7.7
								0.8	8.2
								0.9	8.7
								1.0	9.2
								1.2	10.0
								1.4	10.8
								1.6	11.6

Storage Pond at pipe 1.007 USMH 13

Storage Pond Invert Level (m) 52.122

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	600.0	2.0	600.0	2.4	600.0
0.1	600.0	0.5	600.0	0.9	600.0	1.3	600.0	1.7	600.0	2.1	600.0	2.5	600.0
0.2	600.0	0.6	600.0	1.0	600.0	1.4	600.0	1.8	600.0	2.2	600.0		
0.3	600.0	0.7	600.0	1.1	600.0	1.5	600.0	1.9	600.0	2.3	600.0		

Phil Brant Engineering Ltd		Page 4
6 Northfields Way East Leake Loughborough LE12 6RZ	HATTON	
Date 08 July 2017 14:55 File Storm4 2yr15min.SIM	Designed By HOME Checked By	
Micro Drainage	Simulation W.11.4	

Summary of Results

Return Period (years)	2
Storm Duration (mins)	15
Profile Type	Summer
Margin for Flood Risk warning (mm)	275
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	52.874	-0.306	0.000	0.18	0.0	20.0	0 K
1.001	52.839	-0.302	0.000	0.17	0.0	23.2	0 K
1.002	52.792	-0.273	0.000	0.28	0.0	40.8	0 K
1.003	52.719	-0.211	0.000	0.43	0.0	47.3	0 K
1.004	52.687	-0.204	0.000	0.40	0.0	55.4	0 K
1.005	52.640	-0.174	0.000	0.69	0.0	72.1	0 K
1.006	52.517	-0.280	0.000	0.31	0.0	72.1	0 K
2.000	53.019	-0.153	0.000	0.22	0.0	8.4	0 K
2.001	52.665	-0.320	0.000	0.15	0.0	21.7	0 K
2.002	52.598	-0.299	0.000	0.20	0.0	26.7	0 K
2.003	52.542	-0.290	0.000	0.27	0.0	28.6	0 K
2.004	52.447	-0.350	0.000	0.11	0.0	28.7	0 K
1.007	52.221	-0.351	0.000	0.02	0.0	3.5	0 K