

Travis Baker		Page 0
Trinity Point	HIGHAM ON THE HILL	
New Road Halesowen	STORM	
West Midlands B63 3HY	100YR +40%	
Date 09.11.23	Designed by GE	
File HIGHAM STORM 19.10.23.MDX	Checked by	
Micro Drainage	Network 2016.1	

100 year Return Period Summary of Critical Results by Maximum Level (Rank
1) for HIGHAM STORM.SWS

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m³/ha Storage	0.000
Hot Start Level (mm)	0	Inlet Coeffiecient	0.800
Manhole Headloss Coeff (Global)	0.500	Flow per Person per Day (l/per/day)	0.000
Foul Sewage per hectare (l/s)	0.000		

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

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.400
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	20.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	ON

Profile(s)	Summer and Winter
Duration(s) (mins)	15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080
Return Period(s) (years)	100
Climate Change (%)	40

									Water
	US/MH			Return	Climate	First (X)	First (Y)	First (Z)	Overflow
PN	Name	Storm	Period	Change	Surcharge	Flood	Overflow	Act.	Level (m)
1.000	1	15 Winter	100	+40%	100/15 Summer				112.223
1.001	2	15 Winter	100	+40%	100/15 Summer				112.153
1.002	3	15 Winter	100	+40%	100/15 Summer				111.900
1.003	4	15 Winter	100	+40%	100/15 Summer				111.161
2.000	19	15 Winter	100	+40%	100/15 Summer				112.622
2.001	20	15 Winter	100	+40%					111.153
1.004	5	15 Winter	100	+40%	100/15 Summer				110.535
1.005	6	15 Winter	100	+40%					110.042
1.006	7	15 Winter	100	+40%					109.293
1.007	8	15 Winter	100	+40%					108.187
1.008	9	360 Winter	100	+40%	100/15 Summer				108.037
1.009	POND	360 Winter	100	+40%	100/60 Winter				108.036
1.010	11	360 Winter	100	+40%	100/60 Winter				108.037
3.000	21	15 Winter	100	+40%					109.398
4.000	23	15 Winter	100	+40%					109.986
3.001	22	15 Winter	100	+40%					109.310
1.011	12	480 Winter	100	+40%	100/15 Summer				108.041

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100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for HIGHAM STORM.SWS

PN	US/MH Name	Surcharged Flooded		Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status	Level Exceeded
		Depth (m)	Volume (m³)					
1.000	1	1.673	0.000	1.05		55.2	FLOOD RISK	
1.001	2	1.633	0.000	1.53		99.9	FLOOD RISK	
1.002	3	1.486	0.000	2.28		151.8	SURCHARGED	
1.003	4	0.883	0.000	2.95		182.1	SURCHARGED	
2.000	19	0.847	0.000	1.63		106.9	SURCHARGED	
2.001	20	-0.122	0.000	0.64		143.0	OK	
1.004	5	0.326	0.000	2.03		326.8	SURCHARGED	
1.005	6	-0.060	0.000	1.00		366.7	OK	
1.006	7	-0.232	0.000	0.59		445.2	OK	
1.007	8	-0.065	0.000	0.68		474.0	OK	
1.008	9	0.600	0.000	0.47		75.0	SURCHARGED	
1.009	POND	0.236	0.000	0.20		74.3	SURCHARGED	
1.010	11	0.259	0.000	0.09		47.0	SURCHARGED	
3.000	21	-0.077	0.000	0.75		24.7	OK	
4.000	23	-0.119	0.000	0.45		39.2	OK	
3.001	22	-0.110	0.000	0.51		72.5	OK	
1.011	12	0.979	0.000	0.25		9.4	SURCHARGED	

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									Water
	US/MH			Return Climate	First (X)	First (Y)	First (Z)	Overflow	Level
PN	Name	Storm	Period	Change	Surcharge	Flood	Overflow	Act.	(m)
1.012	13	2160 Winter	100	+40%					106.735
1.013	14	2160 Winter	100	+40%					106.311
1.014	15	2160 Winter	100	+40%					106.090
1.015	16	2160 Winter	100	+40%					105.696
1.016	17	5760 Summer	100	+40%					104.422

		Surcharged		Flooded	Pipe		Level	
PN	US/MH Name	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status	Exceeded
1.012	13	-0.150	0.000	0.24		9.4	OK	
1.013	14	-0.149	0.000	0.25		9.4	OK	
1.014	15	-0.150	0.000	0.24		9.4	OK	
1.015	16	-0.170	0.000	0.14		9.4	OK	
1.016	17	-0.149	0.000	0.25		9.4	OK	