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4 Brindley Road City Park Manchester M16 9HQ	Chipping Lane Longridge	
Date 10.08.16 File SW Network 1, Rev C.mdx	Designed by CD Checked by SG	
Micro Drainage		Network 2014.1.1

Summary of Critical Results by Maximum Level (Rank 1) for SW1.SWS

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
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 Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 1 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.282
Region England and Wales Cv (Summer) 0.750
M5-60 (mm) 18.800 Cv (Winter) 0.840

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

Profile(s) Summer and Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360
Return Period(s) (years) 100
Climate Change (%) 30


PN	Storm	Return Period	Climate Change	First X Surcharge	First Y Flood	First Z Overflow	O/F Act.	Lvl Exc.
1.000	240 Winter	100	+30%					
1.001	240 Winter	100	+30%					
2.000	15 Winter	100	+30%	100/15	Summer			
2.001	15 Winter	100	+30%	100/15	Summer			
2.002	15 Winter	100	+30%	100/15	Summer			
2.003	15 Winter	100	+30%	100/15	Summer			
1.002	240 Winter	100	+30%	100/180	Winter			
3.000	15 Winter	100	+30%					
3.001	240 Winter	100	+30%	100/180	Winter			
1.003	240 Winter	100	+30%	100/120	Winter			
1.004	240 Winter	100	+30%	100/120	Winter			
1.005	240 Winter	100	+30%	100/120	Winter			
1.006	240 Winter	100	+30%	100/120	Winter			
1.007	240 Winter	100	+30%	100/60	Winter			
1.008	240 Winter	100	+30%	100/60	Winter			
4.000	15 Winter	100	+30%					
4.001	240 Winter	100	+30%	100/60	Winter			
1.009	240 Winter	100	+30%	100/60	Summer			

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PN	Storm	Return Period	Climate Change	First X Surcharge	First Y Flood	First Z Overflow	O/F Act.	Lvl Exc.
1.010	240	Winter	100	+30%	100/30	Winter		
5.000	15	Winter	100	+30%				
5.001	30	Winter	100	+30%	100/15	Winter		
5.002	30	Winter	100	+30%	100/15	Summer		
5.003	30	Winter	100	+30%	100/15	Summer		
5.004	30	Winter	100	+30%	100/15	Summer		
5.005	30	Winter	100	+30%	100/15	Summer		
5.006	30	Winter	100	+30%	100/15	Summer		
5.007	30	Winter	100	+30%	100/15	Summer		
5.008	30	Winter	100	+30%	100/15	Summer		
5.009	30	Winter	100	+30%	100/15	Summer		
5.010	30	Winter	100	+30%	100/15	Summer		
5.011	30	Winter	100	+30%	100/15	Summer		
5.012	30	Winter	100	+30%	100/15	Summer		
6.000	15	Winter	100	+30%				
6.001	15	Winter	100	+30%				
6.002	30	Winter	100	+30%	100/15	Summer		
6.003	30	Winter	100	+30%	100/15	Summer		
5.013	30	Winter	100	+30%	100/15	Summer		
5.014	30	Winter	100	+30%	100/15	Summer		
5.015	30	Winter	100	+30%	100/15	Summer		
5.016	30	Winter	100	+30%	100/15	Summer		
7.000	30	Winter	100	+30%	100/15	Summer		
5.017	30	Winter	100	+30%	100/15	Summer		
5.018	30	Winter	100	+30%	100/15	Summer		
5.019	30	Winter	100	+30%	100/15	Summer		
5.020	240	Winter	100	+30%	100/60	Winter		
5.021	240	Winter	100	+30%	100/60	Winter		
5.022	240	Winter	100	+30%	100/30	Winter		
1.011	240	Winter	100	+30%	100/30	Summer		
1.012	240	Winter	100	+30%	100/15	Summer		

PN	US/MH Name	Water		Flooded		Pipe		Status
		Level (m)	Surch'd Depth (m)	Volume (m³)	Flow / Cap.	O'flow (l/s)	Flow (l/s)	
1.000	1	104.109	-0.097	0.000	0.01	0.0	17.7	OK
1.001	2	104.109	-0.010	0.000	0.01	0.0	18.4	OK
2.000	15	105.307	0.217	0.000	0.57	0.0	20.9	SURCHARGED
2.001	16	105.260	0.323	0.000	0.50	0.0	30.7	SURCHARGED
2.002	17	105.191	0.684	0.000	1.39	0.0	45.7	SURCHARGED
2.003	18	105.095	0.644	0.000	1.65	0.0	87.4	SURCHARGED
1.002	3	104.109	0.018	0.000	0.04	0.0	43.4	SURCHARGED
3.000	19	104.129	-0.148	0.000	0.50	0.0	35.1	OK
3.001	20	104.109	0.013	0.000	0.09	0.0	9.7	SURCHARGED
1.003	4	104.110	0.045	0.000	0.03	0.0	53.2	SURCHARGED

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PN	US/MH Name	Water		Flooded		Pipe		Status
		Level (m)	Surch'd Depth (m)	Volume (m³)	Flow / Cap. (l/s)	O'flow (l/s)	Flow (l/s)	
1.004	5	104.110	0.087	0.000	0.03	0.0	53.7	SURCHARGED
1.005	6	104.111	0.127	0.000	0.04	0.0	50.4	SURCHARGED
1.006	7	104.111	0.150	0.000	0.03	0.0	47.7	SURCHARGED
1.007	8	104.110	0.192	0.000	0.04	0.0	49.2	SURCHARGED
1.008	9	104.110	0.215	0.000	0.02	0.0	56.0	SURCHARGED
4.000	21	104.329	-0.138	0.000	0.31	0.0	20.7	OK
4.001	22	104.110	0.240	0.000	0.07	0.0	14.1	SURCHARGED
1.009	10	104.110	0.309	0.000	0.03	0.0	59.7	SURCHARGED
1.010	11	104.110	0.389	0.000	0.04	0.0	59.5	SURCHARGED
5.000	23	108.244	-0.153	0.000	0.22	0.0	15.6	OK
5.001	24	107.760	0.026	0.000	0.50	0.0	40.4	SURCHARGED
5.002	25	107.708	0.662	0.000	0.60	0.0	37.5	SURCHARGED
5.003	26	107.686	0.837	0.000	0.70	0.0	35.0	SURCHARGED
5.004	27	107.668	0.945	0.000	1.35	0.0	228.2	FLOOD RISK
5.005	28	107.550	0.894	0.000	0.82	0.0	231.9	SURCHARGED
5.006	29	107.399	1.059	0.000	1.28	0.0	217.8	FLOOD RISK
5.007	30	107.277	1.028	0.000	0.66	0.0	216.1	FLOOD RISK
5.008	31	107.145	1.234	0.000	0.70	0.0	206.3	SURCHARGED
5.009	32	107.012	1.374	0.000	2.35	0.0	223.6	SURCHARGED
5.010	33	106.854	1.238	0.000	2.26	0.0	225.3	SURCHARGED
5.011	34	106.697	1.109	0.000	1.10	0.0	231.0	SURCHARGED
5.012	35	106.538	1.089	0.000	1.08	0.0	241.8	SURCHARGED
6.000	46	108.531	-0.142	0.000	0.29	0.0	24.5	OK
6.001	47	107.366	-0.076	0.000	0.76	0.0	69.7	OK
6.002	48	106.762	0.684	0.000	0.84	0.0	65.4	SURCHARGED
6.003	49	106.577	0.908	0.000	0.54	0.0	156.0	SURCHARGED
5.013	36	106.365	1.899	0.000	2.06	0.0	360.1	SURCHARGED
5.014	37	106.147	1.726	0.000	1.85	0.0	368.0	SURCHARGED
5.015	38	105.912	1.560	0.000	2.53	0.0	387.8	SURCHARGED
5.016	39	105.658	1.342	0.000	2.66	0.0	390.0	SURCHARGED
7.000	50	105.419	0.795	0.000	0.19	0.0	10.3	SURCHARGED
5.017	40	105.401	1.103	0.000	2.33	0.0	400.4	SURCHARGED
5.018	41	105.130	0.875	0.000	1.89	0.0	416.1	SURCHARGED
5.019	42	104.534	0.445	0.000	1.99	0.0	437.4	SURCHARGED
5.020	43	104.113	0.181	0.000	0.09	0.0	208.5	SURCHARGED
5.021	44	104.112	0.247	0.000	0.08	0.0	208.1	SURCHARGED
5.022	45	104.111	0.344	0.000	0.09	0.0	215.9	SURCHARGED
1.011	12	104.111	0.429	0.000	0.11	0.0	248.0	SURCHARGED
1.012	13	104.109	1.716	0.000	0.81	0.0	49.7	SURCHARGED