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Date 13/02/2019 19:11 File FS0316-CUR-00-00-M3-C-9200-V07_SW_NETWORK...	Designed by dimitrov_i Checked by	
XP Solutions	Network 2017.1.2	

100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Surface Network 1

Simulation Criteria

Areal Reduction Factor 1.000 Manhole Headloss Coeff (Global) 0.500 MADD Factor * 10m³/ha Storage 2.000
Hot Start (mins) 0 Foul Sewage per hectare (l/s) 0.000 Inlet Coeffiecient 0.800
Hot Start Level (mm) 0 Additional Flow - % of Total Flow 0.000 Flow per Person per Day (l/per/day) 0.000

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 5 Number of Storage Structures 5 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 20.000 Cv (Summer) 0.750
Region England and Wales Ratio R 0.404 Cv (Winter) 0.840

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

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Overflow Cap. (l/s)	Pipe Flow (l/s)
1.000	SW01	480 Winter	100	+40%	100/15 Summer				19.150	1.015	0.000	0.00	0.0
1.001	SW02A	480 Winter	100	+40%	100/15 Summer				19.150	1.377	0.000	0.02	1.1

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	US/MH		Level
PN	Name	Status	Exceeded
1.000	SW01	SURCHARGED	
1.001	SW02A	FLOOD RISK	

100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Surface Network 1

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Surcharged			Flow / Overflow Cap. (l/s)	Pipe Flow (l/s)
									Level (m)	Depth (m)	Volume (m ³)		
2.000	SW09	15 Summer	100	+40%	100/15 Summer				17.875	0.032	0.000	0.48	6.8
2.001	SW10	15 Summer	100	+40%	100/15 Summer				17.809	0.297	0.000	1.18	12.8
1.002	SW02B	15 Winter	100	+40%	100/15 Summer				17.804	0.335	0.000	0.57	23.5
1.003	SW03	15 Winter	100	+40%	100/15 Summer				17.737	0.496	0.000	0.76	29.2
3.000	SW11	15 Winter	100	+40%	100/15 Winter				18.272	0.017	0.000	0.10	7.7
3.001	SW12	15 Winter	100	+40%	100/15 Summer				18.266	0.341	0.000	0.83	44.5
4.000	SW14	15 Winter	100	+40%	100/15 Summer				18.478	0.328	0.000	1.26	25.3
4.001	SW15	15 Winter	100	+40%	100/15 Summer				18.189	0.263	0.000	0.74	25.1
3.002	SW13	15 Winter	100	+40%	100/15 Summer				18.006	0.536	0.000	1.04	68.5
1.004	SW04	15 Summer	100	+40%	100/15 Summer				17.666	0.535	0.000	1.16	116.0
5.000	SW16	15 Winter	100	+40%					18.574	-0.076	0.000	0.48	6.7
5.001	SW17	15 Winter	100	+40%					18.268	-0.077	0.000	0.48	6.7
5.002	SW18	15 Winter	100	+40%					17.999	-0.096	0.000	0.27	18.2
1.005	SW05	960 Winter	100	+40%	100/15 Summer				17.642	0.694	0.000	0.14	16.8
1.006	SW06	960 Winter	100	+40%	100/15 Summer				17.640	0.801	0.000	0.18	17.4
6.000	SW19	15 Winter	100	+40%	100/15 Summer	100/15 Summer			19.106	0.526	6.053	1.12	45.9
6.001	SW20	15 Winter	100	+40%	100/15 Summer	100/15 Summer			19.096	0.900	1.024	1.52	45.5
6.002	SW21	15 Winter	100	+40%	100/15 Summer	100/15 Summer			19.097	0.937	0.818	1.29	46.2
6.003	SW22	15 Winter	100	+40%	100/15 Summer	100/15 Summer			19.110	1.025	0.157	1.14	46.1
6.004	SW23	15 Winter	100	+40%	100/15 Summer	100/15 Winter			19.096	1.321	0.142	1.29	45.6
6.005	SW24	15 Winter	100	+40%	100/15 Summer	100/15 Winter			19.016	1.311	0.016	1.43	45.8
6.006	SW25	15 Winter	100	+40%	100/15 Summer				19.001	1.347	0.000	1.21	45.0
6.007	SW26	15 Winter	100	+40%	100/15 Summer				18.953	1.399	0.000	2.53	101.4
7.000	SW33	15 Winter	100	+40%	100/15 Summer				18.798	0.698	0.000	1.02	12.2
7.001	SW34	15 Winter	100	+40%	100/15 Summer				18.691	0.820	0.000	1.02	11.5

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2.000	SW09	SURCHARGED	
2.001	SW10	SURCHARGED	
1.002	SW02B	SURCHARGED	
1.003	SW03	SURCHARGED	
3.000	SW11	SURCHARGED	
3.001	SW12	SURCHARGED	
4.000	SW14	SURCHARGED	
4.001	SW15	SURCHARGED	
3.002	SW13	SURCHARGED	
1.004	SW04	SURCHARGED	
5.000	SW16	OK	
5.001	SW17	OK	
5.002	SW18	OK	
1.005	SW05	SURCHARGED	
1.006	SW06	SURCHARGED	
6.000	SW19	FLOOD	2
6.001	SW20	FLOOD	3
6.002	SW21	FLOOD	2
6.003	SW22	FLOOD	2
6.004	SW23	FLOOD	1
6.005	SW24	FLOOD	
6.006	SW25	FLOOD RISK	
6.007	SW26	FLOOD RISK	
7.000	SW33	SURCHARGED	

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PN	US/MH Name	Status	Level Exceeded
7.001	SW34	SURCHARGED	

100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Surface Network 1

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Overflow Cap. (l/s)	Pipe Flow (l/s)
8.000	SW27	60 Winter	100	+40%	100/15 Summer	100/60 Winter			18.850	0.675	1.386	0.47	18.8
8.001	SW28	60 Winter	100	+40%	100/15 Summer				18.841	0.875	0.000	0.06	3.5
9.000	SW31	15 Winter	100	+40%	100/15 Summer	100/15 Summer			18.838	0.738	2.856	1.46	21.3
9.001	SW32	15 Winter	100	+40%	100/15 Summer				18.477	0.611	0.000	1.19	19.5
8.002	SW29	15 Winter	100	+40%	100/15 Summer				17.817	0.028	0.000	0.64	26.1
10.000	SW35	15 Winter	100	+40%	100/15 Summer				18.958	0.710	0.000	0.96	14.2
10.001	SW36	15 Winter	100	+40%	100/15 Summer				18.904	0.730	0.000	1.59	34.2
8.003	SW30	15 Winter	100	+40%	100/15 Summer				17.747	0.041	0.000	1.25	55.6
1.007	TANK	960 Winter	100	+40%	100/15 Summer				17.638	0.863	0.000	0.05	5.1
1.008	SW07	960 Winter	100	+40%					16.394	-0.331	0.000	0.03	5.1

PN	US/MH Name	Status	Level Exceeded
8.000	SW27	FLOOD	1
8.001	SW28	FLOOD RISK	
9.000	SW31	FLOOD	4
9.001	SW32	SURCHARGED	
8.002	SW29	SURCHARGED	
10.000	SW35	SURCHARGED	
10.001	SW36	SURCHARGED	
8.003	SW30	SURCHARGED	
1.007	TANK	SURCHARGED	

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	US/MH		Level
PN	Name	Status	Exceeded
1.008	SW07	OK	