

Old Marsh Farm Barns  
 Welsh Road Sealand  
 Flintshire CH5 2LY

Waddow View, Clitheroe  
 SW Network 4  
 10% Urban Creep



Date 16/12/2019 15:58  
 File DWH155 Networks with 10% Urban ...

Designed by JC  
 Checked by GW

Micro Drainage

Network 2018.1

100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Surface Network 4

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 10.000  
 Hot Start (mins) 0 MADD Factor \* 10m<sup>3</sup>/ha Storage 2.000  
 Hot Start Level (mm) 0 Inlet Coefficient 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 2 Number of Storage Structures 0 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR M5-60 (mm) 19.000 Cv (Summer) 0.750  
 Region England and Wales Ratio R 0.280 Cv (Winter) 0.840

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

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

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surchage	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m <sup>3</sup> )
1.000	S4.1	180 Winter	100	+40%	100/60 Summer				77.669	1.605	0.000
1.001	S4.2	180 Winter	100	+40%	100/60 Summer				77.669	1.694	0.000
1.002	S4.3 HB	180 Winter	100	+40%	100/15 Summer				77.669	2.857	0.000
1.003	S4.4	360 Winter	100	+40%	100/180 Winter				74.880	0.135	0.000
1.004	S4.5	360 Winter	100	+40%	100/180 Winter				74.881	0.180	0.000
2.000	S4.6	360 Winter	100	+40%	100/240 Winter				74.880	0.032	0.000
2.001	S4.7	360 Winter	100	+40%	100/180 Winter				74.880	0.086	0.000
2.002	S4.8	360 Winter	100	+40%	100/180 Winter				74.880	0.126	0.000
2.003	S4.9	360 Winter	100	+40%	100/180 Winter				74.880	0.166	0.000
2.004	S4.10	360 Winter	100	+40%	100/180 Winter				74.881	0.216	0.000
1.005	S4.11 HB	360 Winter	100	+40%	100/15 Summer				74.881	1.212	0.000

PN	US/MH Name	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status	Level Exceeded
1.000	S4.1	0.01		13.9	SURCHARGED	
1.001	S4.2	0.02		25.3	SURCHARGED	
1.002	S4.3 HB	0.85		11.0	FLOOD RISK	
1.003	S4.4	0.01		10.2	SURCHARGED	
1.004	S4.5	0.01		10.8	SURCHARGED	
2.000	S4.6	0.01		11.3	SURCHARGED	
2.001	S4.7	0.01		11.0	SURCHARGED	
2.002	S4.8	0.01		8.2	SURCHARGED	
2.003	S4.9	0.01		10.4	SURCHARGED	
2.004	S4.10	0.01		10.2	SURCHARGED	
1.005	S4.11 HB	0.30		11.6	SURCHARGED	