

Haigh Huddleston & Associates		Page 0
Firth Buildings 99-101 Leeds Road Dewsbury WF12 7BU		
Date 01/01/0001	Designed by j.mcbride	
File PRELIM DESIGN 4 FULL SI...	Checked by	
Micro Drainage	Network 2020.1	

Summary of Critical Results by Maximum Level (Rank 1) for PRELIM DESIGN  
2.SWS

Simulation Criteria

Areal Reduction Factor 1.000      Additional Flow - % of Total Flow 0.000  
Hot Start (mins) 0      MADD Factor \* 10m<sup>3</sup>/ha Storage 0.000  
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 Storage Structures 2  
Number of Online Controls 2      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 0.326  
Return Period (years)      30 Cv (Summer) 0.750  
Region England and Wales Cv (Winter) 0.840  
M5-60 (mm)      19.000

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)

Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720  
Sensitivity flows(s) (%)      0

PN	US/MH Name	Storm	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)
S1.000	S1	15	Winter	+0%				183.693
S1.001	S2	15	Winter	+0%				181.689
S2.000	S18	15	Winter	+0%				180.909
S1.002	S3	15	Winter	+0%				180.684
S1.003	S4	15	Winter	+0%				179.265
S1.004	S5	15	Winter	+0%				177.629
S1.005	S6	240	Winter	+0%	+0%/15	Winter		176.466
S1.006	S7	15	Winter	+0%				175.338
S1.007	S8	15	Winter	+0%				174.737
S1.008	S9	15	Winter	+0%				174.233
S3.000	S19	15	Winter	+0%				175.481
S3.001	S20	15	Winter	+0%				174.564
S1.009	S10	15	Winter	+0%				173.667
S1.010	S11	15	Winter	+0%				172.897
S4.000	S21	15	Winter	+0%				172.341
S1.011	S12	15	Winter	+0%				172.139
S1.012	S13	15	Winter	+0%				170.887
S5.000	S22	15	Winter	+0%				174.853
S5.001	S23	15	Winter	+0%				172.879

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PN	US/MH Name	Surcharged Flooded		Flow / Overflow Cap. (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
		Depth (m)	Volume (m <sup>3</sup> )					
S1.000	S1	-0.132	0.000	0.36		40.4	OK	
S1.001	S2	-0.131	0.000	0.37		43.0	OK	
S2.000	S18	-0.091	0.000	0.66		34.6	OK	
S1.002	S3	-0.085	0.000	0.70		86.1	OK	
S1.003	S4	-0.148	0.000	0.51		124.0	OK	
S1.004	S5	-0.125	0.000	0.63		155.1	OK	
S1.005	S6	0.673	0.000	0.08		4.1	SURCHARGED	
S1.006	S7	-0.204	0.000	0.23		37.7	OK	
S1.007	S8	-0.205	0.000	0.22		37.7	OK	
S1.008	S9	-0.180	0.000	0.34		59.0	OK	
S3.000	S19	-0.169	0.000	0.14		16.5	OK	
S3.001	S20	-0.140	0.000	0.31		33.3	OK	
S1.009	S10	-0.165	0.000	0.42		92.3	OK	
S1.010	S11	-0.157	0.000	0.46		100.9	OK	
S4.000	S21	-0.153	0.000	0.48		39.9	OK	
S1.011	S12	-0.134	0.000	0.58		146.0	OK	
S1.012	S13	-0.109	0.000	0.72		191.1	OK	
S5.000	S22	-0.112	0.000	0.50		53.3	OK	
S5.001	S23	-0.092	0.000	0.65		83.4	OK	

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Summary of Critical Results by Maximum Level (Rank 1) for PRELIM DESIGN 2.SWS

PN	US/MH Name	Storm	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)
S5.002	S24	15	Winter	+0%				170.299
S5.003	S25	15	Winter	+0%				169.325
S6.000	S26	180	Winter	+0%				168.465
S1.013	S14	180	Winter	+0%	+0%/15	Winter		168.466
S1.014	S15	480	Winter	+0%				167.165
S1.015	S16	480	Winter	+0%				166.938

PN	US/MH Name	Surcharged Flooded			Half Drain Pipe		Status	Level Exceeded
		Depth (m)	Volume (m <sup>3</sup> )	Flow / Overflow Cap. (l/s)	Time (mins)	Flow (l/s)		
S5.002	S24	-0.058	0.000	0.90		106.2	OK	
S5.003	S25	-0.071	0.000	0.93		106.0	OK	
S6.000	S26	-0.223	0.000	0.01		17.6	OK	
S1.013	S14	0.841	0.000	0.38		14.6	SURCHARGED	
S1.014	S15	-0.385	0.000	0.05		14.6	OK	
S1.015	S16	-0.362	0.000	0.09		14.6	OK	