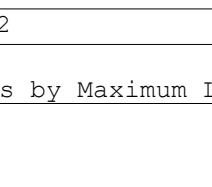


RSK LDE		Page 2
14 Beecham Court Pemberton Business Park Wigan WN3 6PR		
Date 01/01/0001 File SW1- 17.02.20.mdx	Designed by mrayner Checked by	
XP Solutions Network 2017.1.2		
<u>Synthetic Rainfall Details</u> Ratio R 0.344 Cv (Winter) 0.840 Profile Type Summer Storm Duration (mins) 30 Cv (Summer) 0.750		
©1982-2017 XP Solutions		

RSK LDE		Page 4	
14 Beecham Court Pemberton Business Park Wigan WN3 6PR			
Date 01/01/0001 File SW1- 17.02.20.mdx			
Designed by mrayner Checked by			
XP Solutions		Network 2017.1.2	

2 year Return Period 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 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	1
Number of Online Controls	0	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	0.327
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	18.000	Cv (Winter)	0.840

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

Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440	Summer and Winter
Return Period(s) (years)	2, 30, 100	
Climate Change (%)	0, 0, 40	

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)
1.000	1	15 Winter	2	+0%	100/15 Summer				18.297
1.001	2	15 Winter	2	+0%	30/15 Winter				17.990
1.002	3	15 Winter	2	+0%	30/15 Summer				17.711
1.003	4	15 Winter	2	+0%	30/15 Summer				17.659
1.004	5	15 Winter	2	+0%	30/15 Summer				17.625
1.005	6	15 Winter	2	+0%	30/15 Summer				17.543
1.006	7	240 Winter	2	+0%					17.027

Surcharged Flooded					Pipe		
PN	US/MH Name	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Level Status Exceeded
1.000	1	-0.081	0.000	0.42		7.9	OK
1.001	2	-0.153	0.000	0.22		10.5	OK
1.002	3	-0.228	0.000	0.13		12.6	OK
1.003	4	-0.096	0.000	0.46		30.9	OK
1.004	5	-0.015	0.000	1.00		52.4	OK
1.005	6	-0.067	0.000	0.96		52.4	OK

©1982-2017 XP Solutions

RSK LDE		Page 6
14 Beecham Court Pemberton Business Park Wigan WN3 6PR		
Date 01/01/0001 File SW1- 17.02.20.mdx	Designed by mrayner Checked by	
XP Solutions Network 2017.1.2		

30 year Return Period Summary of Critical Results by Maximum Level (Rank 1)
for SW1.SWS

Simulation Criteria

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

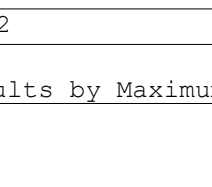
Synthetic Rainfall Details

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, 240, 360, 480, 960, 1440
Return Period(s) (years)	2, 30, 100
Climate Change (%)	0, 0, 40

									Water
PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Level (m)
1.000	1	15 Winter	30	+0%	100/15 Summer				18.331
1.001	2	15 Winter	30	+0%	30/15 Winter				18.161
1.002	3	15 Winter	30	+0%	30/15 Summer				18.121
1.003	4	15 Winter	30	+0%	30/15 Summer				18.098
1.004	5	15 Winter	30	+0%	30/15 Summer				17.994
1.005	6	15 Winter	30	+0%	30/15 Summer				17.773
1.006	7	240 Winter	30	+0%					17.177

PN	US/MH Name	Surcharged	Flooded	Flow / Cap.	Overflow (l/s)	Pipe	Status	Level Exceeded
		Depth (m)	Volume (m³)			Flow (l/s)		
1.000	1	-0.047	0.000	0.80		14.9		OK
1.001	2	0.018	0.000	0.45		21.4	SURCHARGED	
1.002	3	0.182	0.000	0.32		31.1	SURCHARGED	
1.003	4	0.343	0.000	0.97		65.0	SURCHARGED	
1.004	5	0.354	0.000	2.21		115.9	SURCHARGED	
1.005	6	0.163	0.000	2.12		115.6	SURCHARGED	

RSK LDE		Page 8	
14 Beecham Court Pemberton Business Park Wigan WN3 6PR			
Date 01/01/0001 File SW1- 17.02.20.mdx			
Designed by mrayner Checked by			
XP Solutions		Network 2017.1.2	

100 year Return Period 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 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 1
Number of Online Controls 0	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 0.327
Region England and Wales Cv (Summer)	0.750	
M5-60 (mm)	18.000 Cv (Winter)	0.840

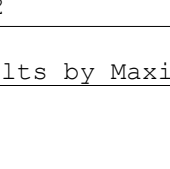
Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep 2.5 Second Increment (Extended)	
DTS Status	ON
DVD Status	OFF
Inertia Status	OFF

Profile(s)

Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440	Summer and Winter
Return Period(s) (years)	2, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)
1.000	1	15 Winter	100	+40%	100/15 Summer				19.146
1.001	2	15 Winter	100	+40%	30/15 Winter				18.977
1.002	3	15 Winter	100	+40%	30/15 Summer				18.937
1.003	4	15 Winter	100	+40%	30/15 Summer				18.912
1.004	5	15 Winter	100	+40%	30/15 Summer				18.682
1.005	6	15 Winter	100	+40%	30/15 Summer				18.112
1.006	7	240 Winter	100	+40%					17.372

Surcharged Flooded				Pipe		
PN	US/MH Name	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s) Status
1.000	1	0.768	0.000	1.46	27.1	FLOOD RISK
1.001	2	0.834	0.000	0.80	37.6	SURCHARGED
1.002	3	0.998	0.000	0.50	48.0	SURCHARGED
1.003	4	1.157	0.000	1.45	97.3	SURCHARGED
1.004	5	1.041	0.000	3.56	186.5	SURCHARGED
1.005	6	0.502	0.000	3.42	186.1	SURCHARGED

RSK LDE		Page 9
14 Beecham Court Pemberton Business Park Wigan WN3 6PR		
Date 01/01/0001 File SW1- 17.02.20.mdx		
Designed by mrayner Checked by		
XP Solutions		Network 2017.1.2

100 year Return Period Summary of Critical Results by Maximum Level (Rank
1) for SW1.SWS

		Surcharged Flooded			Pipe		
PN	US/MH Name	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Level Exceeded
1.006	7	-0.201	0.000	0.24		11.6	OK

©1982-2017 XP Solutions