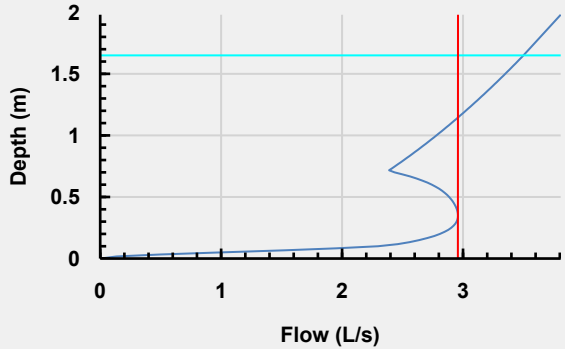


Project: 100.202004 Bury Old Road, Prestwich	Date: 25/08/2022			
	Designed by: JBW	Checked by: JS		Approved By: NB
Report Details: Type: Junctions Storm Phase: Phase	Company Address: 1912 Mill, Sunny Bank Mills, Town Street, Farsley LS28 5UJ			

Outlets

Junction	Outlet Name	Outgoing Connection	Outlet Type
SW 2 FC	Outlet	Pipe (14)	Hydro-Brake®
	Invert Level (m)	77.735	
	Design Depth (m)	1.650	
	Design Flow (L/s)	3.5	
	Objective	Minimise Upstream Storage Requirements	
	Application	Surface Water Only	
	Sump Available	☒	
	Unit Reference	SHE-0080-3500-1650-3500	
			
PPIC 1	Outlet	1.002	Free Discharge
PPIC 2	Outlet	1.004	Free Discharge
PPIC 3	Outlet	1.007	Free Discharge
PPIC 5	Outlet	1.006	Free Discharge
PPIC 4	Outlet	1.009	Free Discharge
PPIC 6	Outlet	1.005	Free Discharge
SW 1	Outlet	1.012	Free Discharge
PPIC 7	Outlet	1.010	Free Discharge
PPIC 8	Outlet	1.011	Free Discharge
RE 1	Outlet	1.001	Free Discharge
RE 3	Outlet	1.008	Free Discharge
RE 2	Outlet	1.003	Free Discharge
CW 1	Outlet	Pipe (15)	Free Discharge

Project: 100.202004 Bury Old Road, Prestwich	Date: 25/08/2022		
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Report Details: Type: Stormwater Controls Storm Phase: Phase	Company Address: 1912 Mill, Sunny Bank Mills, Town Street, Farsley LS28 5UJ		



Tank

Type : Tank

Dimensions

Exceedence Level (m)	80.500
Depth (m)	2.700
Base Level (m)	77.800
Freeboard (mm)	0
Initial Depth (m)	0.000
Porosity (%)	95
Average Slope (1:x)	0.00
Total Volume (m³)	28.614

Depth (m)	Area (m²)	Volume (m³)
0.000	18.09087	32.533
1.600	18.09087	32.533
1.601	18.09087	32.533

Inlets

Inlet

Inlet Type	Point Inflow
Incoming Item(s)	1.010
Bypass Destination	(None)
Capacity Type	No Restriction

Inlet (2)

Inlet Type	Point Inflow
Incoming Item(s)	1.012
Bypass Destination	(None)
Capacity Type	No Restriction

Outlets

Outlet

Outgoing Connection	Pipe
Outlet Type	Free Discharge

Advanced

Perimeter	Circular
Length (m)	15.135

Project: 100.202004 Bury Old Road, Prestwich		Date: 25/08/2022			
Report Details: Type: Connections Storm Phase: Phase		Designed by: JBW	Checked by: JS		Approved By: NB
		Company Address: 1912 Mill, Sunny Bank Mills, Town Street, Farsley LS28 5UJ			

Name	Length (m)	Connection Type	Slope (1:x)	Manning's n	Colebrook-White Roughness (mm)	Diameter / Base Width (mm)	Upstream Cover Level (m)	Upstream Invert Level (m)
Pipe	1.315	Pipe	87.686		0.6	150	80.500	77.800
1.001	32.690	Pipe	99.061		0.6	150	80.400	80.000
1.002	22.173	Pipe	98.547		0.6	150	80.400	79.670
1.004	10.092	Pipe	34.210		0.6	150	80.100	79.445
1.005	10.602	Pipe	96.385		0.6	150	80.100	79.300
1.006	3.568	Pipe	89.190		0.6	150	80.100	79.190
1.007	9.533	Pipe	95.334		0.6	150	80.100	79.150
1.009	11.658	Pipe	145.722		0.6	150	80.100	79.050
1.003	33.582	Pipe	94.596		0.6	150	80.100	79.800
1.008	25.147	Pipe	41.912		0.6	150	80.100	79.650
1.010	2.006	Pipe	133.750		0.6	150	80.100	78.970
1.012	2.035	Pipe	31.311		0.6	150	80.400	79.305
1.011	13.919	Pipe	95.991		0.6	100	80.400	79.500
Pipe (14)	4.555	Pipe	15.707		0.6	150	80.500	77.735
Pipe (15)	5.934	Pipe	237.346		0.6	150	80.550	77.445

Name	Downstream Cover Level (m)	Downstream Invert Level (m)	Flow Restriction (L/s)
Pipe	80.500	77.785	
1.001	80.400	79.670	
1.002	80.100	79.445	
1.004	80.100	79.150	
1.005	80.100	79.190	
1.006	80.100	79.150	
1.007	80.100	79.050	
1.009	80.100	78.970	
1.003	80.100	79.445	
1.008	80.100	79.050	
1.010	80.500	78.955	
1.012	80.500	79.240	
1.011	80.400	79.355	
Pipe (14)	80.550	77.445	3.8
Pipe (15)	80.120	77.420	

Project: 100.202004 Bury Old Road, Prestwich		Date: 25/08/2022			
		Designed by: JBW	Checked by: JS		Approved By: NB
Report Details: Type: Inflow Summary Storm Phase: Phase		Company Address: 1912 Mill, Sunny Bank Mills, Town Street, Farsley LS28 5UJ			

Inflow Label	Connected To	Flow (L/s)	Runoff Method	Area (ha)	Percentage Impervious (%)	Urban Creep (%)	Adjusted Percentage Impervious (%)	Area Analysed (ha)
Catchment Area	PPIC 6		Time of Concentration	0.003	100	0	100	0.003
Catchment Area (1)	PPIC 3		Time of Concentration	0.002	100	0	100	0.002
Catchment Area (2)	PPIC 4		Time of Concentration	0.002	100	0	100	0.002
Catchment Area (3)	PPIC 7		Time of Concentration	0.003	100	0	100	0.003
Catchment Area (4)	PPIC 7		Time of Concentration	0.003	100	0	100	0.003
Catchment Area (5)	PPIC 4		Time of Concentration	0.002	100	0	100	0.002
Catchment Area (6)	SW 1		Time of Concentration	0.003	100	0	100	0.003
Catchment Area (7)	PPIC 4		Time of Concentration	0.002	100	0	100	0.002
Catchment Area (8)	SW 1		Time of Concentration	0.003	100	0	100	0.003
Catchment Area (9)	PPIC 4		Time of Concentration	0.002	100	0	100	0.002
Catchment Area (10)	PPIC 8		Time of Concentration	0.003	100	0	100	0.003
Catchment Area (11)	PPIC 4		Time of Concentration	0.002	100	0	100	0.002
Catchment Area (12)	PPIC 2		Time of Concentration	0.031	100	0	100	0.031
Catchment Area (13)	PPIC 1		Time of Concentration	0.023	100	0	100	0.023
TOTAL		0.0		0.084				0.084

Project: 100.202004 Bury Old Road, Prestwich	Date: 25/08/2022		
	Designed by: JBW	Checked by: JS	Approved By: NB
Report Title: Rainfall Analysis Criteria	Company Address: 1912 Mill, Sunny Bank Mills, Town Street, Farsley LS28 5UJ		



Runoff Type	Dynamic
Output Interval (mins)	1
Time Step	Shortest
Urban Creep	Apply Global Value
Urban Creep Global Value (%)	0
Junction Flood Risk Margin (mm)	300
Perform No Discharge Analysis	☐

Rainfall

FSR

Type: FSR

Region	England and Wales
M5-60 (mm)	18.4
Ratio R	0.350
Summer	☒
Winter	☒

Return Period

Return Period (years)	Increase Rainfall (%)
100.0	40

Storm Durations

Duration (mins)	Run Time (mins)
15	30
30	60
60	120
120	240
240	480
360	720
480	960
960	1920
1440	2880

Project: 100.202004 Bury Old Road, Prestwich	Date: 25/08/2022		
	Designed by: JBW	Checked by: JS	Approved By: NB
Report Details: Type: Junctions Summary Storm Phase: Phase	Company Address: 1912 Mill, Sunny Bank Mills, Town Street, Farsley LS28 5UJ		



FSR: 100 years: Increase Rainfall (%): +40: Critical Storm Per Item

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
SW 2 FC	FSR: 100 years: +40 %: 120 mins: Winter	80.50 0	77.73 5	79.230	1.495	3.8	2.139	0.000	3.3	38.929	Surcharged
PPIC 1	FSR: 100 years: +40 %: 15 mins: Winter	80.40 0	79.67 0	80.001	0.331	12.5	0.053	0.000	11.2	5.767	Surcharged
PPIC 2	FSR: 100 years: +40 %: 15 mins: Winter	80.10 0	79.44 5	79.930	0.485	27.2	0.077	0.000	22.6	13.785	Flood Risk
PPIC 3	FSR: 100 years: +40 %: 15 mins: Winter	80.10 0	79.15 0	79.747	0.597	23.7	0.095	0.000	23.3	15.543	Surcharged
PPIC 5	FSR: 100 years: +40 %: 15 mins: Winter	80.10 0	79.19 0	79.748	0.558	5.2	0.089	0.000	6.5	1.490	Surcharged
PPIC 4	FSR: 100 years: +40 %: 15 mins: Winter	80.10 0	79.05 0	79.554	0.504	27.8	0.143	0.000	27.5	17.935	Surcharged
PPIC 6	FSR: 100 years: +40 %: 15 mins: Winter	80.10 0	79.30 0	79.749	0.449	3.9	0.071	0.000	3.3	0.834	Surcharged
SW 1	FSR: 100 years: +40 %: 15 mins: Winter	80.40 0	79.30 5	79.347	0.042	4.3	0.036	0.000	4.2	1.978	OK
PPIC 7	FSR: 100 years: +40 %: 120 mins: Winter	80.10 0	78.97 0	79.232	0.262	14.4	0.074	0.000	14.4	41.378	Surcharged
PPIC 8	FSR: 100 years: +40 %: 15 mins: Winter	80.40 0	79.50 0	79.533	0.033	1.4	0.005	0.000	1.4	0.660	OK
RE 1	FSR: 100 years: +40 %: 15 mins: Winter	80.40 0	80.00 0	80.001	0.001	0.0	0.000	0.000	0.0	0.000	OK
RE 3	FSR: 100 years: +40 %: 15 mins: Summer	80.10 0	79.65 0	79.650	0.000	0.0	0.000	0.000	0.0	0.000	OK
RE 2	FSR: 100 years: +40 %: 15 mins: Winter	80.10 0	79.80 0	79.931	0.131	2.6	0.000	0.000	2.0	0.159	Flood Risk
CW 1	FSR: 100 years: +40 %: 120 mins: Winter	80.55 0	77.44 5	77.504	0.059	3.3	0.067	0.000	3.3	38.805	OK
EX MH	FSR: 100 years: +40 %: 120 mins: Winter	80.12 0	77.42 0	77.475	0.055	3.3	0.000	0.000	3.3	38.805	OK

Project: 100.202004 Bury Old Road, Prestwich		Date: 25/08/2022			
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Report Details: Type: Stormwater Controls Summary Storm Phase: Phase		Company Address: 1912 Mill, Sunny Bank Mills, Town Street, Farsley LS28 5UJ			



FSR: 100 years: Increase Rainfall (%): +40: Critical Storm Per Item

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Residual Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Percentage Available (%)	Status
Tank	FSR: 100 years: +40 %: 120 mins: Winter	79.231	79.231	1.431	1.431	15.8	24.592	0.000	0.000	3.8	39.538	14	OK

Project: 100.202004 Bury Old Road, Prestwich		Date: 25/08/2022			
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Report Details: Type: Connections Summary Storm Phase: Phase		Company Address: 1912 Mill, Sunny Bank Mills, Town Street, Farsley LS28 5UJ			



FSR: 100 years: Increase Rainfall (%): +40: Critical Storm Per Item

Connection	Storm Event	Connection Type	From	To	Upstream Cover Level (m)	Max. US Water Level (m)	Max. Flow Depth (m)	Discharge Volume (m³)	Max. Velocity (m/s)	Flow / Capacity	Max. Flow (L/s)	Status
Pipe	FSR: 100 years: +40 %: 15 mins: Winter	Pipe	Tank	SW 2 FC	80.5	78.796	0.150	5.446	0.6	0.28	5.2	Surcharged
1.001	FSR: 100 years: +40 %: 15 mins: Winter	Pipe	RE 1	PPIC 1	80.4	80.001	0.150	0.000	0.0	0	0.0	OK
1.002	FSR: 100 years: +40 %: 15 mins: Winter	Pipe	PPIC 1	PPIC 2	80.4	80.001	0.150	5.766	0.8	0.63	11.2	Surcharged
1.004	FSR: 100 years: +40 %: 15 mins: Winter	Pipe	PPIC 2	PPIC 3	80.1	79.930	0.150	13.626	1.3	0.74	22.6	Flood Risk
1.005	FSR: 100 years: +40 %: 15 mins: Winter	Pipe	PPIC 6	PPIC 5	80.1	79.749	0.150	0.685	0.4	0.18	3.3	Surcharged
1.006	FSR: 100 years: +40 %: 15 mins: Winter	Pipe	PPIC 5	PPIC 3	80.1	79.748	0.150	0.683	0.4	0.35	6.5	Surcharged
1.007	FSR: 100 years: +40 %: 15 mins: Winter	Pipe	PPIC 3	PPIC 4	80.1	79.747	0.150	14.885	1.3	1.28	23.3	Surcharged
1.009	FSR: 100 years: +40 %: 15 mins: Winter	Pipe	PPIC 4	PPIC 7	80.1	79.554	0.150	17.935	1.6	1.88	27.5	Surcharged
1.003	FSR: 100 years: +40 %: 15 mins: Winter	Pipe	RE 2	PPIC 2	80.1	79.931	0.150	0.000	0.1	0.11	2.0	Flood Risk
1.008	FSR: 100 years: +40 %: 15 mins: Summer	Pipe	RE 3	PPIC 4	80.1	79.650	0.150	0.000	0.0	0	0.0	OK
1.010	FSR: 100 years: +40 %: 15 mins: Winter	Pipe	PPIC 7	Tank	80.1	79.227	0.150	19.247	1.7	1.93	29.6	Surcharged

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1.012	FSR: 100 years: +40 %: 15 mins: Winter	Pipe	SW 1	Tank	80.4	79.347	0.039	1.978	1.1	0.13	4.2	OK
1.011	FSR: 100 years: +40 %: 15 mins: Winter	Pipe	PPIC 8	SW 1	80.4	79.533	0.033	0.660	0.6	0.23	1.4	OK
Pipe (14)	FSR: 100 years: +40 %: 120 mins: Winter	Pipe	SW 2 FC	CW 1	80.5	79.230	0.043	38.898	0.8	0.07	3.3	Surcharged
Pipe (15)	FSR: 100 years: +40 %: 120 mins: Winter	Pipe	CW 1	EX MH	80.6	77.504	0.057	38.805	0.5	0.29	3.3	OK