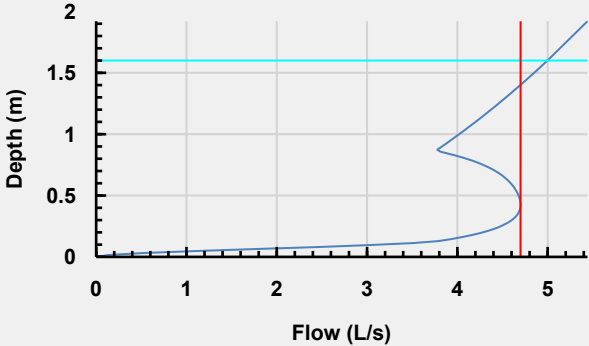


Project: 100.202004 Bury Old Road, Prestwich Rev: P3	Date: 16/02/2024			
Report Details: Type: Junctions Storm Phase: Phase	Designed by: JBW	Checked by: NB	Approved By: NB	
Company Address: Adept Consulting Engineers 7 St James Square, 4th Floor, Manchester, M2 6DN				

Outlets

Junction	Outlet Name	Outgoing Connection	Outlet Type
SW 2 FC	Outlet	Pipe (14)	Hydro-Brake®
	Invert Level (m)	77.680	
	Design Depth (m)	1.600	
	Design Flow (L/s)	5.0	
	Objective	Minimise Upstream Storage Requirements	
	Application	Surface Water Only	
	Sump Available	☒	
	Unit Reference	SHE-0097-5000-1600-5000	
			
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 Rev: P3	Date: 16/02/2024			
Report Details: Type: Stormwater Controls Storm Phase: Phase	Designed by: JBW	Checked by: NB	Approved By: NB	
Company Address: Adept Consulting Engineers 7 St James Square, 4th Floor, Manchester, M2 6DN				



Tank

Type : Tank

Dimensions

Exceedance Level (m)	80.500
Depth (m)	2.765
Base Level (m)	77.735
Freeboard (mm)	0
Initial Depth (m)	0.000
Porosity (%)	95
Average Slope (1:X)	0.00
Total Volume (m³)	41.178

Depth (m)	Area (m²)	Volume (m³)
0.000	25.920	0.000
1.625	25.920	40.014
1.626	25.921	40.039

Inlets

Inlet (2)

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

Inlet (1)

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

Outlets

Outlet

Outgoing Connection	Pipe
Outlet Type	Free Discharge

Advanced

Perimeter	Circular
Length (m)	21.021

Project: 100.202004 Bury Old Road, Prestwich Rev: P3		Date: 16/02/2024			
Report Details: Type: Connections Storm Phase: Phase		Designed by: JBW	Checked by: NB		Approved By: NB
		Company Address: Adept Consulting Engineers 7 St James Square, 4th Floor, Manchester, M2 6DN			

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	240.053		0.6	300	80.500	77.735
1.001	32.690	Pipe	39.624		0.6	225	80.400	80.000
1.002	22.173	Pipe	205.564		0.6	300	80.400	79.100
1.004	10.092	Pipe	200.537		0.6	300	80.100	78.992
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	198.653		0.6	300	80.100	78.942
1.009	11.658	Pipe	200.030		0.6	300	80.100	78.894
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
1.012	2.035	Pipe	100.012		0.6	150	80.400	79.205
1.011	13.919	Pipe	95.991		0.6	100	80.400	79.400
Pipe (14)	4.555	Pipe	19.384		0.6	150	80.500	77.680
Pipe (15)	5.934	Pipe	237.346		0.6	150	80.550	77.445
1.010	2.115	Pipe	210.853		0.6	300	80.100	78.836

Name	Downstream Cover Level (m)	Downstream Invert Level (m)	Part Family	Lock	Flow Restriction (L/s)
Pipe	80.500	77.730		All	
1.001	80.400	79.175		All	
1.002	80.100	78.992		All	
1.004	80.100	78.942		All	
1.005	80.100	79.190		All	
1.006	80.100	79.150		All	
1.007	80.100	78.894		All	
1.009	80.100	78.836		All	
1.003	80.100	79.445		All	
1.008	80.100	79.050		All	
1.012	80.500	79.185		All	
1.011	80.400	79.255		All	
Pipe (14)	80.550	77.445		All	5.4
Pipe (15)	80.120	77.420		None	
1.010	80.500	78.826		All	

Project: 100.202004 Bury Old Road, Prestwich Rev: P3		Date: 16/02/2024			
Report Details: Type: Manhole Schedule Storm Phase: Phase		Designed by: JBW	Checked by: NB		Approved By: NB
		Company Address: Adept Consulting Engineers 7 St James Square, 4th Floor, Manchester, M2 6DN			

Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
SW 2 FC	80.500 77.680	Diameter / Length: 1.350	{1} Pipe	Pipe	77.730	Diam/Width:300	Manhole
E:383288.824 N:402366.199	2.820		{a} Pipe (14)	Pipe	77.680	Diam/Width:150	Not Applicable
PPIC 1	80.400 79.100	Diameter / Length: 0.600	{1} 1.001	Pipe	79.175	Diam/Width:225	Manhole
E:383266.285 N:402324.885	1.300		{a} 1.002	Pipe	79.100	Diam/Width:300	Not Applicable
PPIC 2	80.100 78.992	Diameter / Length: 0.600	{1} 1.002	Pipe	78.992	Diam/Width:300	Manhole
E:383274.910 N:402345.313	1.108		{2} 1.003	Pipe	79.445	Diam/Width:150	
			{a} 1.004	Pipe	78.992	Diam/Width:300	Not Applicable
PPIC 3	80.100 78.942	Diameter / Length: 0.600	{1} 1.004	Pipe	78.942	Diam/Width:300	Manhole
E:383278.709 N:402354.662	1.158		{2} 1.006	Pipe	79.150	Diam/Width:150	
			{a} 1.007	Pipe	78.942	Diam/Width:300	Not Applicable

Project: 100.202004 Bury Old Road, Prestwich Rev: P3		Date: 16/02/2024			
Report Details: Type: Manhole Schedule Storm Phase: Phase		Designed by: JBW	Checked by: NB		Approved By: NB
		Company Address: Adept Consulting Engineers 7 St James Square, 4th Floor, Manchester, M2 6DN			

Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
PPIC 5	80.100 79.190	Diameter / Length: 0.450	{1} 1.005	Pipe	79.190	Diam/Width:150	Manhole
E:383275.400 N:402355.995	0.910						
			{a} 1.006	Pipe	79.190	Diam/Width:150	Not Applicable
PPIC 4	80.100 78.894	Diameter / Length: 0.600	{1} 1.007	Pipe	78.894	Diam/Width:300	Manhole
E:383287.536 N:402351.061	1.206		{2} 1.008	Pipe	79.050	Diam/Width:150	
			{a} 1.009	Pipe	78.894	Diam/Width:300	Not Applicable
PPIC 6	80.100 79.300	Diameter / Length: 0.450					Manhole
E:383279.138 N:402365.916	0.800						
			{a} 1.005	Pipe	79.300	Diam/Width:150	Not Applicable
SW 1	80.400 79.205	Diameter / Length: 1.050	{1} 1.011	Pipe	79.255	Diam/Width:100	Manhole
E:383302.268 N:402357.639	1.195						
			{a} 1.012	Pipe	79.205	Diam/Width:150	Not Applicable
PPIC 7	80.100 78.836	Diameter / Length: 0.600	{1} 1.009	Pipe	78.836	Diam/Width:300	Manhole
E:383291.911 N:402361.867	1.264						
			{a} 1.010	Pipe	78.836	Diam/Width:300	Not Applicable

Project: 100.202004 Bury Old Road, Prestwich Rev: P3		Date: 16/02/2024			
Report Details: Type: Manhole Schedule Storm Phase: Phase		Designed by: JBW	Checked by: NB		Approved By: NB
		Company Address: Adept Consulting Engineers 7 St James Square, 4th Floor, Manchester, M2 6DN			

Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
PPIC 8	80.400 79.400	Diameter / Length: 0.450					Manhole
E:383315.149 N:402352.366	1.000		{a} 1.011	Pipe	79.400	Diam/Width:100	Not Applicable
RE 1	80.400 80.000	Diameter / Length: 0.300					Manhole
E:383296.536 N:402312.496	0.400		{a} 1.001	Pipe	80.000	Diam/Width:225	Not Applicable
RE 3	80.100 79.650	Diameter / Length: 0.000 Width: 0.000					Manhole
E:383310.826 N:402341.574	0.450		{a} 1.008	Pipe	79.650	Diam/Width:150	Not Applicable
RE 2	80.100 79.800	Diameter / Length: 0.000 Width: 0.000					Manhole
E:383305.794 N:402332.128	0.300		{a} 1.003	Pipe	79.800	Diam/Width:150	Not Applicable
CW 1	80.550 77.445	Diameter / Length: 1.200	{1} Pipe (14)	Pipe	77.445	Diam/Width:150	Manhole
E:383284.603 N:402367.910	3.105		{a} Pipe (15)	Pipe	77.445	Diam/Width:150	Not Applicable

Project: 100.202004 Bury Old Road, Prestwich Rev: P3		Date: 16/02/2024			
		Designed by: JBW	Checked by: NB		Approved By: NB
Report Details: Type: Manhole Schedule Storm Phase: Phase		Company Address: Adept Consulting Engineers 7 St James Square, 4th Floor, Manchester, M2 6DN			

Name	Cover Level (m) Invert Level (m)		Connection Details				Type
Coordinates (m)	Depth (m)	Manhole Size (m)	Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
EX MH	80.120 77.420	Diameter / Length: 1.200	{1} Pipe (15)	Pipe	77.420	Diam/Width:150	Manhole
E:383286.813 N:402373.417	2.700						Not Applicable

Project: 100.202004 Bury Old Road, Prestwich Rev: P3		Date: 16/02/2024			
Report Details: Type: Inflow Summary Storm Phase: Phase		Designed by: JBW	Checked by: NB		Approved By: NB
		Company Address: Adept Consulting Engineers 7 St James Square, 4th Floor, Manchester, M2 6DN			

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	0.007	100	0	100	0.007
Catchment Area (1)	PPIC 3		Time of Concentration	0.003	100	0	100	0.003
Catchment Area (2)	PPIC 4		Time of Concentration	0.003	100	0	100	0.003
Catchment Area (3)	PPIC 7		Time of Concentration	0.005	100	0	100	0.005
Catchment Area (4)	PPIC 7		Time of Concentration	0.005	100	0	100	0.005
Catchment Area (5)	PPIC 4		Time of Concentration	0.003	100	0	100	0.003
Catchment Area (6)	SW 1		Time of Concentration	0.005	100	0	100	0.005
Catchment Area (7)	PPIC 4		Time of Concentration	0.003	100	0	100	0.003
Catchment Area (8)	SW 1		Time of Concentration	0.005	100	0	100	0.005
Catchment Area (9)	PPIC 4		Time of Concentration	0.003	100	0	100	0.003
Catchment Area (10)	PPIC 8		Time of Concentration	0.006	100	0	100	0.006
Catchment Area (11)	PPIC 4		Time of Concentration	0.003	100	0	100	0.003
Catchment Area (12)	PPIC 2		Time of Concentration	0.034	100	0	100	0.034
Catchment Area (13)	PPIC 1		Time of Concentration	0.054	100	0	100	0.054
TOTAL		0.0		0.140				0.140

Project: 100.202004 Bury Old Road, Prestwich Rev: P3	Date: 16/02/2024	
Report Title: Rainfall Analysis Criteria	Designed by: JBW Checked by: NB Approved By: NB	
Company Address: Adept Consulting Engineers 7 St James Square, 4th Floor, Manchester, M2 6DN		

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	40.000
1.0	0.000
30.0	0.000

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 Rev: P3		Date: 16/02/2024			
Report Details: Type: Junctions Summary Storm Phase: Phase		Designed by: JBW	Checked by: NB		Approved By: NB
		Company Address: Adept Consulting Engineers 7 St James Square, 4th Floor, Manchester, M2 6DN			



FSR: 100 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank By: Max. Depth

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	80.500	77.680	79.348	1.668	5.6	2.387	0.000	5.0	60.537	Surcharged
PPIC 1	FSR: 100 years: +40 %: 120 mins: Winter	80.400	79.100	79.349	0.249	10.3	0.070	0.000	10.3	29.549	OK
PPIC 2	FSR: 100 years: +40 %: 120 mins: Winter	80.100	78.992	79.349	0.357	16.6	0.101	0.000	16.6	47.856	Surcharged
PPIC 3	FSR: 100 years: +40 %: 120 mins: Winter	80.100	78.942	79.348	0.407	18.5	0.115	0.000	18.5	53.278	Surcharged
PPIC 5	FSR: 100 years: +40 %: 120 mins: Winter	80.100	79.190	79.349	0.159	1.3	0.025	0.000	1.3	3.623	Surcharged
PPIC 4	FSR: 100 years: +40 %: 120 mins: Winter	80.100	78.894	79.348	0.454	21.4	0.129	0.000	21.4	61.540	Surcharged
PPIC 6	FSR: 100 years: +40 %: 120 mins: Winter	80.100	79.300	79.349	0.049	1.3	0.008	0.000	1.3	3.625	OK
SW 1	FSR: 100 years: +40 %: 120 mins: Winter	80.400	79.205	79.348	0.143	3.1	0.124	0.000	3.1	8.988	OK
PPIC 7	FSR: 100 years: +40 %: 120 mins: Winter	80.100	78.836	79.348	0.512	23.4	0.145	0.000	23.4	67.151	Surcharged
PPIC 8	FSR: 100 years: +40 %: 15 mins: Winter	80.400	79.400	79.455	0.055	3.4	0.009	0.000	3.3	1.561	OK
RE 1	FSR: 100 years: +40 %: 15 mins: Summer	80.400	80.000	80.000	0.000	0.0	0.000	0.000	0.0	0.000	OK
RE 3	FSR: 100 years: +40 %: 15 mins: Summer	80.100	79.650	79.650	0.000	0.0	0.000	0.000	0.0	0.000	OK
RE 2	FSR: 100 years: +40 %: 15 mins: Summer	80.100	79.800	79.800	0.000	0.0	0.000	0.000	0.0	0.000	Flood Risk
CW 1	FSR: 100 years: +40 %: 120 mins: Winter	80.550	77.445	77.520	0.075	5.0	0.085	0.000	5.0	60.374	OK
EX MH	FSR: 100 years: +40 %: 120 mins: Winter	80.120	77.420	77.489	0.069	5.0	0.000	0.000	5.0	60.374	OK

Project: 100.202004 Bury Old Road, Prestwich Rev: P3		Date: 16/02/2024			
		Designed by: JBW	Checked by: NB		Approved By: NB
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase		Company Address: Adept Consulting Engineers 7 St James Square, 4th Floor, Manchester, M2 6DN			



FSR: 100 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank By:
 Max. Avg. Depth

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. Residant 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	79.348	79.348	1.613	1.613	26.5	39.717	0.000	0.000	5.6	61.513	3.547	OK

Project: 100.202004 Bury Old Road, Prestwich Rev: P3				Date: 16/02/2024				
Report Details: Type: Connections Summary Storm Phase: Phase				Designed by: JBW	Checked by: NB	Approved By: NB		
				Company Address: Adept Consulting Engineers 7 St James Square, 4th Floor, Manchester, M2 6DN				



FSR: 100 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank By: Max. Flow

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	80.500	78.933	0.300	8.086	0.5	0.12	8.4	Surcharged
1.001	FSR: 100 years: +40 %: 15 mins: Summer	Pipe	RE 1	PPIC 1	80.400	80.000	0.029	0.000	0.0	0	0.0	OK
1.002	FSR: 100 years: +40 %: 15 mins: Winter	Pipe	PPIC 1	PPIC 2	80.400	79.239	0.178	13.741	0.7	0.37	28.7	OK
1.004	FSR: 100 years: +40 %: 15 mins: Winter	Pipe	PPIC 2	PPIC 3	80.100	79.210	0.225	22.262	0.8	0.59	46.1	OK
1.005	FSR: 100 years: +40 %: 15 mins: Winter	Pipe	PPIC 6	PPIC 5	80.100	79.347	0.048	1.684	0.7	0.2	3.6	OK
1.006	FSR: 100 years: +40 %: 15 mins: Winter	Pipe	PPIC 5	PPIC 3	80.100	79.238	0.046	1.682	0.8	0.19	3.6	OK
1.007	FSR: 100 years: +40 %: 15 mins: Winter	Pipe	PPIC 3	PPIC 4	80.100	79.174	0.237	24.778	0.9	0.66	51.5	OK
1.009	FSR: 100 years: +40 %: 15 mins: Winter	Pipe	PPIC 4	PPIC 7	80.100	79.135	0.239	28.626	1.0	0.76	59.6	OK
1.003	FSR: 100 years: +40 %: 15 mins: Summer	Pipe	RE 2	PPIC 2	80.100	79.800	0.000	0.000	0.0	0	0.0	Flood Risk
1.008	FSR: 100 years: +40 %: 15 mins: Summer	Pipe	RE 3	PPIC 4	80.100	79.650	0.039	0.000	0.0	0	0.0	OK
1.012	FSR: 100 years: +40 %: 15 mins: Winter	Pipe	SW 1	Tank	80.400	79.292	0.081	4.175	0.9	0.5	8.9	OK
1.011	FSR: 100 years: +40 %: 15 mins: Winter	Pipe	PPIC 8	SW 1	80.400	79.455	0.053	1.561	0.8	0.54	3.3	OK
Pipe (14)	FSR: 100 years: +40 %: 120 mins: Winter	Pipe	SW 2 FC	CW 1	80.500	79.348	0.055	60.497	0.8	0.12	5.0	Surcharged
Pipe (15)	FSR: 100 years: +40 %: 120 mins: Winter	Pipe	CW 1	EX MH	80.550	77.520	0.072	60.374	0.6	0.44	5.0	OK

Project: 100.202004 Bury Old Road, Prestwich Rev: P3				Date: 16/02/2024										
Report Details: Type: Connections Summary Storm Phase: Phase				Designed by: JBW		Checked by: NB							Approved By: NB	
				Company Address: Adept Consulting Engineers 7 St James Square, 4th Floor, Manchester, M2 6DN										
1.010	FSR: 100 years: +40 %: 15 mins: Winter	Pipe	PPIC 7	Tank	80.100	79.072	0.218	31.216	1.2	0.85	65.1	OK		