

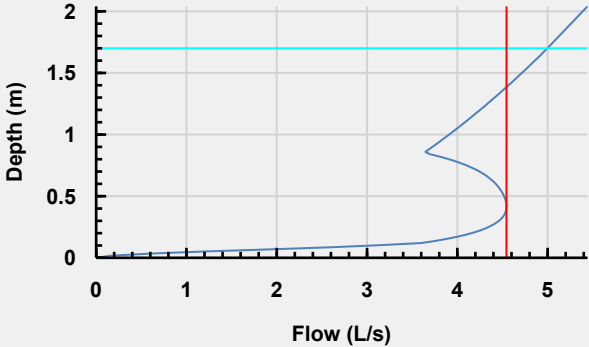
Project: OLDHAM ROAD MILES PLATTING SW Calcs		Date: 21/03/2025			
Report Details: Type: Junctions Storm Phase: Surface Network 1		Designed by: JG	Checked by:		Approved By:
		18-20 HARRINGTON STREET: L2 9QA LIVERPOOL			

Name	Junction Type	Easting (m)	Northing (m)	Cover Level (m)	Depth (m)	Invert Level (m)	Chamber Shape	Diameter (m)
PS5	Manhole	385788.459	399578.795	54.977	1.375	53.602	Circular	1.200
PS11	Manhole	385798.883	399614.256	55.726	1.579	54.147	Circular	1.200
PS3	Manhole	385803.551	399612.808	55.777	0.650	55.127	Circular	0.450
PS10	Manhole	385804.386	399620.648	55.600	1.273	54.328	Circular	0.450
PS9	Manhole	385821.554	399631.039	55.600	1.022	54.578	Circular	0.450
PS8	Manhole	385833.028	399612.590	55.600	0.750	54.850	Circular	0.450
PS14	Manhole	385770.023	399599.383	55.150	1.985	53.165	Circular	1.200
PS13	Manhole	385770.954	399602.881	55.188	1.987	53.201	Circular	1.500
PS12	Manhole	385777.822	399607.421	55.323	2.040	53.283	Circular	1.200
PS7	Manhole	385783.370	399598.852	55.252	1.867	53.386	Circular	1.200
PS4	Manhole	385785.986	399600.454	55.339	1.078	54.262	Circular	0.600
PS2	Manhole	385797.440	399584.073	55.150	0.639	54.512	Circular	0.450
PS1	Manhole	385829.651	399606.198	55.600	0.600	55.000	Circular	0.450
PS6	Manhole	385783.252	399586.458	54.895	1.386	53.509	Circular	1.350

Name	Lock
PS5	None
PS11	None
PS3	None
PS10	None
PS9	None
PS8	None
PS14	None
PS13	None
PS12	None
PS7	None
PS4	None
PS2	None
PS1	None
PS6	None

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Outlets

Junction	Outlet Name	Outgoing Connection	Outlet Type
PS5	Outlet	PS5-S6	Free Discharge
PS11	Outlet	PS11-PS12	Free Discharge
PS3	Outlet	PS3-PS4 (1)	Free Discharge
PS10	Outlet	PS10-PS11	Free Discharge
PS9	Outlet	PS9-PS10	Free Discharge
PS8	Outlet	PS8-PS9	Free Discharge
PS13	Outlet	PS13-S14	Hydro-Brake®
	Invert Level (m)	53.201	
	Design Depth (m)	1.700	
	Design Flow (L/s)	5.0	
	Objective	Minimise Upstream Storage Requirements	
	Application	Surface Water Only	
	Sump Available	☒	
	Unit Reference	SHE-0095-5000-1700-5000	
			
PS12	Outlet	PS12-PS13	Free Discharge
PS7	Outlet	PS7-PS12	Free Discharge
PS4	Outlet	PS4-PS7	Free Discharge
PS2	Outlet	PS2-PS4	Free Discharge
PS1	Outlet	PS1-PS2	Free Discharge
PS6	Outlet	PS6-PS7	Free Discharge

Project: OLDHAM ROAD MILES PLATTING SW Calcs	Date: 21/03/2025		
	Designed by: JG	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Storm Phase: Surface Network 1	18-20 HARRINGTON STREET: L2 9QA LIVERPOOL		





Porous Paving

Type : Porous Paving

Dimensions

Exceedance Level (m)	54.700
Depth (m)	0.300
Base Level (m)	54.400
Paving Layer Depth (mm)	130
Membrane Percolation (m/hr)	360.0
Porosity (%)	30
Length (m)	12.239
Long. Slope (1:X)	48.00
Width (m)	4.139
Total Volume (m³)	2.584

Advanced

Conductivity (m/hr)	50.0
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Porous Paving (1)

Type : Porous Paving

Dimensions

Exceedance Level (m)	55.000
Depth (m)	0.300
Base Level (m)	54.700
Paving Layer Depth (mm)	130
Membrane Percolation (m/hr)	360.0
Porosity (%)	30
Length (m)	14.846
Long. Slope (1:X)	48.00
Width (m)	3.894
Total Volume (m³)	2.948

Advanced

Conductivity (m/hr)	50.0
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Porous Paving (2)

Type : Porous Paving

Dimensions

Exceedance Level (m)	55.200
Depth (m)	0.300
Base Level (m)	54.900
Paving Layer Depth (mm)	130
Membrane Percolation (m/hr)	360.0
Porosity (%)	30
Length (m)	9.263
Long. Slope (1:X)	48.00
Width (m)	3.786
Total Volume (m³)	1.789

Advanced

Conductivity (m/hr)	50.0
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Report Details: Type: Stormwater Controls Storm Phase: Surface Network 1	18-20 HARRINGTON STREET: L2 9QA LIVERPOOL		



Porous Paving (3)

Type : Porous Paving

Dimensions

Exceedance Level (m)	55.760
Depth (m)	0.300
Base Level (m)	55.460
Paving Layer Depth (mm)	130
Membrane Percolation (m/hr)	360.0
Porosity (%)	30
Length (m)	30.109
Long. Slope (1:X)	103.00
Width (m)	10.554
Total Volume (m³)	16.207

Advanced

Conductivity (m/hr)	50.0
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Porous Paving (4)

Type : Porous Paving

Dimensions

Exceedance Level (m)	55.450
Depth (m)	0.300
Base Level (m)	55.150
Paving Layer Depth (mm)	130
Membrane Percolation (m/hr)	360.0
Porosity (%)	30
Length (m)	18.001
Long. Slope (1:X)	103.00
Width (m)	8.246
Total Volume (m³)	7.570

Advanced

Conductivity (m/hr)	50.0
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	Designed by: JG	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Storm Phase: Surface Network 1	18-20 HARRINGTON STREET: L2 9QA LIVERPOOL		





Cellular Storage

Type : Cellular Storage

Dimensions

Exceedance Level (m)	55.400
Depth (m)	1.000
Base Level (m)	53.640
Number of Crates Long	10
Number of Crates Wide	4
Number of Crates High	5
Porosity (%)	95
Crate Length (m)	1
Crate Width (m)	1
Crate Height (m)	0.2
Total Volume (m³)	38.760

Project: OLDHAM ROAD MILES PLATTING SW Calcs	Date: 21/03/2025		
	Designed by: JG	Checked by:	Approved By:
Report Details: Type: Connections Storm Phase: Surface Network 1	18-20 HARRINGTON STREET: L2 9QA LIVERPOOL		



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)
PS10-PS11	8.434	Pipe	46.751		0.6	150	55.600	54.328
PS8-PS9	21.726	Pipe	79.994		0.6	150	55.600	54.850
PS9-PS10	20.068	Pipe	79.985		0.6	150	55.600	54.578
PS13-S14	3.619	Pipe	99.978		0.6	150	55.188	53.201
PS4-PS7	3.068	Pipe	3.501		0.6	150	55.339	54.262
PS7-PS12	10.209	Pipe	99.986		0.6	225	55.252	53.386
PS12-PS13	8.234	Pipe	100.043		0.6	225	55.323	53.283
PS6-PS7	12.395	Pipe	100.039		0.6	225	54.895	53.509
PS1-PS2	39.078	Pipe	79.996		0.6	150	55.600	55.000
PS5-S6	9.264	Pipe	100.043		0.6	225	54.977	53.602
PS2-PS4	19.988	Pipe	80.016		0.6	150	55.150	54.512
PS3-PS4 (1)	21.474	Pipe	24.811		0.6	150	55.777	55.127
PS11-PS12	22.142	Pipe	25.636		0.6	225	55.726	54.147
Pipe	2.843	Pipe	2.166		0.6	150	56.052	55.460
Pipe (1)	3.165	Pipe	1.624		0.6	150	55.625	55.150
Pipe (2)	2.286	Pipe	1.509		0.6	150	55.393	54.900
Pipe (3)	2.303	Pipe	1.934		0.6	150	55.309	54.700
Pipe (4)	1.933	Pipe	2.422		0.6	150	54.955	54.400
Pipe (5)	6.549	Pipe	172.348		0.6	225	55.400	53.640

Name	Downstream Cover Level (m)	Downstream Invert Level (m)	Part Family	Lock	Flow Restriction (L/s)	Culvert Type	Culvert Entrance	Wall Thickness (mm)
PS10-PS11	55.726	54.147		None		(None)	(None)	0
PS8-PS9	55.600	54.578		None		(None)	(None)	0
PS9-PS10	55.600	54.328		None		(None)	(None)	0
PS13-S14	55.150	53.165		None	5.4	(None)	(None)	0
PS4-PS7	55.252	53.386		None		(None)	(None)	0
PS7-PS12	55.323	53.283		None		(None)	(None)	0
PS12-PS13	55.188	53.201		None		(None)	(None)	0
PS6-PS7	55.252	53.386		None		(None)	(None)	0
PS1-PS2	55.150	54.512		None		(None)	(None)	0
PS5-S6	54.895	53.509		None		(None)	(None)	0
PS2-PS4	55.339	54.262		None		(None)	(None)	0
PS3-PS4 (1)	55.339	54.262		None		(None)	(None)	0
PS11-PS12	55.323	53.283		None		(None)	(None)	0
Pipe	55.726	54.147		None		(None)	(None)	0
Pipe (1)	55.188	53.201		None		(None)	(None)	0
Pipe (2)	55.252	53.386		None		(None)	(None)	0
Pipe (3)	54.895	53.509		None		(None)	(None)	0
Pipe (4)	54.977	53.602		None		(None)	(None)	0
Pipe (5)	54.977	53.602		None		(None)	(None)	0

Project: OLDHAM ROAD MILES PLATTING SW Calcs		Date: 21/03/2025			
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		18-20 HARRINGTON STREET: L2 9QA LIVERPOOL			

Name	Material	Trench Width (mm)	Bedding Material	Surrounding Material
PS10-PS11		0		
PS8-PS9		0		
PS9-PS10		0		
PS13-S14		0		
PS4-PS7		0		
PS7-PS12		0		
PS12-PS13		0		
PS6-PS7		0		
PS1-PS2		0		
PS5-S6		0		
PS2-PS4		0		
PS3-PS4 (1)		0		
PS11-PS12		0		
Pipe		0		
Pipe (1)		0		
Pipe (2)		0		
Pipe (3)		0		
Pipe (4)		0		
Pipe (5)		0		

Project: OLDHAM ROAD MILES PLATTING SW Calcs		Date: 21/03/2025			
Report Details: Type: Inflow Summary Storm Phase: Surface Network 1		Designed by: JG	Checked by:		Approved By:
		18-20 HARRINGTON STREET: L2 9QA LIVERPOOL			

Inflow Label	Connected To	Flow (L/s)	Runoff Method	Area (ha)	Percentage Impervious (%)	Urban Creep (%)	Adjusted Percentage Impervious (%)	Area Analysed (ha)
20.37m - 4.001	PS6		Time of Concentration	0.002	100	0	100	0.002
32.96m - 2.003	Porous Paving (2)		Time of Concentration	0.003	100	0	100	0.003
50.04m - 1.003	Porous Paving (3)		Time of Concentration	0.005	100	0	100	0.005
63.67m - 4.001	Porous Paving (1)		Time of Concentration	0.006	100	0	100	0.006
71.41m - 4.000	Porous Paving		Time of Concentration	0.007	100	0	100	0.007
91.70m - 1.002	PS10		Time of Concentration	0.009	100	0	100	0.009
102.04m - 1.002	PS10		Time of Concentration	0.010	100	0	100	0.010
107.36m - 2.001	PS2		Time of Concentration	0.011	100	0	100	0.011
127.40m - 1.000	PS8		Time of Concentration	0.013	100	0	100	0.013
149.47m - 1.004	Porous Paving (4)		Time of Concentration	0.015	100	0	100	0.015
197.48m - 3.000	PS3		Time of Concentration	0.020	100	0	100	0.020
267.47m - 1.003	Porous Paving (3)		Time of Concentration	0.027	100	0	100	0.027
271.66m - 2.000	PS1		Time of Concentration	0.027	100	0	100	0.027
TOTAL		0.0		0.155				0.155

Project: OLDHAM ROAD MILES PLATTING SW Calcs	Date: 21/03/2025			
	Designed by: JG	Checked by:	Approved By:	
Report Details: Type: Outfall Details Storm Phase: Surface Network 1	18-20 HARRINGTON STREET: L2 9QA LIVERPOOL			

Outfalls

Outfall	Outfall Type	Gated	Fixed Surcharged Level (m)	Level Curve
PS14	Free Discharge			

Project: OLDHAM ROAD MILES PLATTING SW Calcs	Date: 21/03/2025		
	Designed by: JG	Checked by:	Approved By:
Report Details: Type: Rainfall Analysis Criteria	18-20 HARRINGTON STREET: L2 9QA LIVERPOOL		



Runoff Type	Dynamic
Output Interval (mins)	5
Time Step	Default
Urban Creep	Use Catchment Values
Junction Flood Risk Margin (mm)	0
Perform No Discharge Analysis	☐

Project: OLDHAM ROAD MILES PLATTING SW Calcs	Date: 21/03/2025		
	Designed by: JG	Checked by:	Approved By:
Report Details: Type: Inflows Summary Storm Phase: Surface Network 1	18-20 HARRINGTON STREET: L2 9QA LIVERPOOL		



FSR: 2 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Inflow

Inflow	Storm Event	Inflow Area (ha)	Max. Inflow (L/s)	Total Inflow Volume (m³)
71.41m - 4.000	FSR: 2 years: +0 %: 15 mins: Summer	0.01	1.4	0.620
271.66m - 2.000	FSR: 2 years: +0 %: 15 mins: Summer	0.03	5.4	2.347
91.70m - 1.002	FSR: 2 years: +0 %: 15 mins: Summer	0.01	1.8	0.794
107.36m - 2.001	FSR: 2 years: +0 %: 15 mins: Summer	0.01	2.1	0.932
267.47m - 1.003	FSR: 2 years: +0 %: 15 mins: Summer	0.03	5.3	2.314
149.47m - 1.004	FSR: 2 years: +0 %: 15 mins: Summer	0.01	3.0	1.292
127.40m - 1.000	FSR: 2 years: +0 %: 15 mins: Summer	0.01	2.5	1.100
197.48m - 3.000	FSR: 2 years: +0 %: 15 mins: Summer	0.02	3.9	1.712
102.04m - 1.002	FSR: 2 years: +0 %: 15 mins: Summer	0.01	2.0	0.881
63.67m - 4.001	FSR: 2 years: +0 %: 15 mins: Summer	0.01	1.3	0.549
32.96m - 2.003	FSR: 2 years: +0 %: 15 mins: Summer	0.00	0.7	0.288
20.37m - 4.001	FSR: 2 years: +0 %: 15 mins: Summer	0.00	0.4	0.177
50.04m - 1.003	FSR: 2 years: +0 %: 15 mins: Summer	0.01	1.0	0.432

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Report Details: Type: Inflows Summary Storm Phase: Surface Network 1	18-20 HARRINGTON STREET: L2 9QA LIVERPOOL		



FSR: 30 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Inflow

Inflow	Storm Event	Inflow Area (ha)	Max. Inflow (L/s)	Total Inflow Volume (m³)
71.41m - 4.000	FSR: 30 years: +0 %: 15 mins: Summer	0.01	2.7	1.169
271.66m - 2.000	FSR: 30 years: +0 %: 15 mins: Summer	0.03	10.2	4.444
91.70m - 1.002	FSR: 30 years: +0 %: 15 mins: Summer	0.01	3.5	1.499
107.36m - 2.001	FSR: 30 years: +0 %: 15 mins: Summer	0.01	4.0	1.754
267.47m - 1.003	FSR: 30 years: +0 %: 15 mins: Summer	0.03	10.1	4.372
149.47m - 1.004	FSR: 30 years: +0 %: 15 mins: Summer	0.01	5.6	2.444
127.40m - 1.000	FSR: 30 years: +0 %: 15 mins: Summer	0.01	4.8	2.084
197.48m - 3.000	FSR: 30 years: +0 %: 15 mins: Summer	0.02	7.4	3.232
102.04m - 1.002	FSR: 30 years: +0 %: 15 mins: Summer	0.01	3.8	1.670
63.67m - 4.001	FSR: 30 years: +0 %: 15 mins: Summer	0.01	2.4	1.037
32.96m - 2.003	FSR: 30 years: +0 %: 15 mins: Summer	0.00	1.2	0.540
20.37m - 4.001	FSR: 30 years: +0 %: 15 mins: Summer	0.00	0.8	0.333
50.04m - 1.003	FSR: 30 years: +0 %: 15 mins: Summer	0.01	1.9	0.819

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Report Details: Type: Inflows Summary Storm Phase: Surface Network 1	18-20 HARRINGTON STREET: L2 9QA LIVERPOOL		



FSR: 100 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Inflow

Inflow	Storm Event	Inflow Area (ha)	Max. Inflow (L/s)	Total Inflow Volume (m³)
71.41m - 4.000	FSR: 100 years: +0 %: 15 mins: Summer	0.01	3.5	1.507
271.66m - 2.000	FSR: 100 years: +0 %: 15 mins: Summer	0.03	13.2	5.742
91.70m - 1.002	FSR: 100 years: +0 %: 15 mins: Summer	0.01	4.5	1.936
107.36m - 2.001	FSR: 100 years: +0 %: 15 mins: Summer	0.01	5.2	2.266
267.47m - 1.003	FSR: 100 years: +0 %: 15 mins: Summer	0.03	13.0	5.649
149.47m - 1.004	FSR: 100 years: +0 %: 15 mins: Summer	0.01	7.3	3.160
127.40m - 1.000	FSR: 100 years: +0 %: 15 mins: Summer	0.01	6.2	2.692
197.48m - 3.000	FSR: 100 years: +0 %: 15 mins: Summer	0.02	9.6	4.175
102.04m - 1.002	FSR: 100 years: +0 %: 15 mins: Summer	0.01	5.0	2.155
63.67m - 4.001	FSR: 100 years: +0 %: 15 mins: Summer	0.01	3.1	1.345
32.96m - 2.003	FSR: 100 years: +0 %: 15 mins: Summer	0.00	1.6	0.699
20.37m - 4.001	FSR: 100 years: +0 %: 15 mins: Summer	0.00	1.0	0.429
50.04m - 1.003	FSR: 100 years: +0 %: 15 mins: Summer	0.01	2.4	1.056

Project: OLDHAM ROAD MILES PLATTING SW Calcs	Date: 21/03/2025		
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Report Details: Type: Inflows Summary Storm Phase: Surface Network 1	18-20 HARRINGTON STREET: L2 9QA LIVERPOOL		



FSR: 100 years: Increase Rainfall (%): +45: Critical Storm Per Item: Rank By: Max. Inflow

Inflow	Storm Event	Inflow Area (ha)	Max. Inflow (L/s)	Total Inflow Volume (m³)
71.41m - 4.000	FSR: 100 years: +45 %: 15 mins: Summer	0.01	5.0	2.187
271.66m - 2.000	FSR: 100 years: +45 %: 15 mins: Summer	0.03	19.2	8.317
91.70m - 1.002	FSR: 100 years: +45 %: 15 mins: Summer	0.01	6.5	2.807
107.36m - 2.001	FSR: 100 years: +45 %: 15 mins: Summer	0.01	7.6	3.284
267.47m - 1.003	FSR: 100 years: +45 %: 15 mins: Summer	0.03	18.9	8.191
149.47m - 1.004	FSR: 100 years: +45 %: 15 mins: Summer	0.01	10.5	4.580
127.40m - 1.000	FSR: 100 years: +45 %: 15 mins: Summer	0.01	9.0	3.902
197.48m - 3.000	FSR: 100 years: +45 %: 15 mins: Summer	0.02	13.9	6.047
102.04m - 1.002	FSR: 100 years: +45 %: 15 mins: Summer	0.01	7.2	3.122
63.67m - 4.001	FSR: 100 years: +45 %: 15 mins: Summer	0.01	4.5	1.950
32.96m - 2.003	FSR: 100 years: +45 %: 15 mins: Summer	0.00	2.3	1.011
20.37m - 4.001	FSR: 100 years: +45 %: 15 mins: Summer	0.00	1.4	0.624
50.04m - 1.003	FSR: 100 years: +45 %: 15 mins: Summer	0.01	3.5	1.536

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Report Details: Type: Junctions Summary Storm Phase: Surface Network 1	18-20 HARRINGTON STREET: L2 9QA LIVERPOOL		



FSR: 2 years: Increase Rainfall (%): +0: 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
PS5	FSR: 2 years: +0 %: 15 mins: Summer	54.97 7	53.60 2	53.771	0.169	5.9	0.192	0.000	2.8	2.648	OK
PS11	FSR: 2 years: +0 %: 15 mins: Summer	55.72 6	54.14 7	54.183	0.036	6.9	0.041	0.000	6.6	3.268	OK
PS3	FSR: 2 years: +0 %: 15 mins: Summer	55.77 7	55.12 7	55.161	0.034	3.9	0.005	0.000	3.9	1.710	OK
PS10	FSR: 2 years: +0 %: 15 mins: Summer	55.60 0	54.32 8	54.381	0.053	6.2	0.008	0.000	6.0	2.768	OK
PS9	FSR: 2 years: +0 %: 15 mins: Summer	55.60 0	54.57 8	54.613	0.035	2.5	0.006	0.000	2.3	1.094	OK
PS8	FSR: 2 years: +0 %: 15 mins: Summer	55.60 0	54.85 0	54.887	0.037	2.5	0.006	0.000	2.5	1.098	OK
PS14	FSR: 2 years: +0 %: 15 mins: Summer	55.15 0	53.16 5	53.216	0.051	4.5	0.000	0.000	4.5	6.267	OK
PS13	FSR: 2 years: +0 %: 15 mins: Summer	55.18 8	53.20 1	53.773	0.571	7.4	1.010	0.000	4.5	6.333	Surcharged
PS12	FSR: 2 years: +0 %: 15 mins: Summer	55.32 3	53.28 3	53.773	0.490	11.7	0.554	0.000	6.6	6.709	Surcharged
PS7	FSR: 2 years: +0 %: 15 mins: Summer	55.25 2	53.38 6	53.773	0.387	11.4	0.438	0.000	5.1	6.442	Surcharged
PS4	FSR: 2 years: +0 %: 15 mins: Summer	55.33 9	54.26 2	54.295	0.033	10.7	0.009	0.000	10.6	4.978	OK
PS2	FSR: 2 years: +0 %: 15 mins: Summer	55.15 0	54.51 2	54.579	0.067	7.3	0.011	0.000	6.8	3.271	OK
PS1	FSR: 2 years: +0 %: 15 mins: Summer	55.60 0	55.00 0	55.052	0.052	5.4	0.008	0.000	5.2	2.348	OK
PS6	FSR: 2 years: +0 %: 15 mins: Summer	54.89 5	53.50 9	53.773	0.264	4.8	0.378	0.000	3.1	3.347	Surcharged

Project: OLDHAM ROAD MILES PLATTING SW Calcs	Date: 21/03/2025		
	Designed by: JG	Checked by:	Approved By:
Report Details: Type: Junctions Summary Storm Phase: Surface Network 1	18-20 HARRINGTON STREET: L2 9QA LIVERPOOL		





FSR: 30 years: Increase Rainfall (%): +0: 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
PS5	FSR: 30 years: +0 %: 60 mins: Summer	54.97 7	53.60 2	53.932	0.330	19.0	0.374	0.000	3.8	22.633	Surcharged
PS11	FSR: 30 years: +0 %: 15 mins: Summer	55.72 6	54.14 7	54.200	0.053	13.4	0.059	0.000	13.2	6.218	OK
PS3	FSR: 30 years: +0 %: 15 mins: Summer	55.77 7	55.12 7	55.175	0.047	7.4	0.008	0.000	7.3	3.231	OK
PS10	FSR: 30 years: +0 %: 15 mins: Summer	55.60 0	54.32 8	54.404	0.077	11.7	0.012	0.000	11.5	5.245	OK
PS9	FSR: 30 years: +0 %: 15 mins: Summer	55.60 0	54.57 8	54.627	0.048	4.7	0.008	0.000	4.5	2.077	OK
PS8	FSR: 30 years: +0 %: 15 mins: Summer	55.60 0	54.85 0	54.901	0.051	4.8	0.008	0.000	4.7	2.082	OK
PS14	FSR: 30 years: +0 %: 30 mins: Summer	55.15 0	53.16 5	53.216	0.051	4.5	0.000	0.000	4.5	13.887	OK
PS13	FSR: 30 years: +0 %: 60 mins: Summer	55.18 8	53.20 1	53.931	0.730	7.7	1.290	0.000	4.5	28.622	Surcharged
PS12	FSR: 30 years: +0 %: 60 mins: Summer	55.32 3	53.28 3	53.932	0.649	9.3	0.734	0.000	6.7	30.036	Surcharged
PS7	FSR: 30 years: +0 %: 60 mins: Summer	55.25 2	53.38 6	53.932	0.546	18.0	0.618	0.000	4.1	31.540	Surcharged
PS4	FSR: 30 years: +0 %: 15 mins: Summer	55.33 9	54.26 2	54.307	0.045	20.4	0.013	0.000	20.2	9.412	OK
PS2	FSR: 30 years: +0 %: 15 mins: Summer	55.15 0	54.51 2	54.610	0.099	13.9	0.016	0.000	13.1	6.189	OK
PS1	FSR: 30 years: +0 %: 15 mins: Summer	55.60 0	55.00 0	55.075	0.075	10.2	0.012	0.000	9.9	4.445	OK
PS6	FSR: 30 years: +0 %: 60 mins: Summer	54.89 5	53.50 9	53.933	0.423	18.7	0.606	0.000	4.0	24.316	Surcharged

Project: OLDHAM ROAD MILES PLATTING SW Calcs		Date: 21/03/2025			
Report Details: Type: Junctions Summary Storm Phase: Surface Network 1		Designed by: JG	Checked by:		Approved By:
		18-20 HARRINGTON STREET: L2 9QA LIVERPOOL			



FSR: 100 years: Increase Rainfall (%): +0: 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
PS5	FSR: 100 years: +0 %: 60 mins: Winter	54.97 7	53.60 2	54.140	0.538	20.1	0.608	0.000	3.7	30.655	Surcharged
PS11	FSR: 100 years: +0 %: 15 mins: Summer	55.72 6	54.14 7	54.208	0.060	17.4	0.068	0.000	17.1	8.051	OK
PS3	FSR: 100 years: +0 %: 15 mins: Summer	55.77 7	55.12 7	55.182	0.054	9.6	0.009	0.000	9.5	4.173	OK
PS10	FSR: 100 years: +0 %: 15 mins: Summer	55.60 0	54.32 8	54.418	0.090	15.2	0.014	0.000	14.8	6.774	OK
PS9	FSR: 100 years: +0 %: 15 mins: Summer	55.60 0	54.57 8	54.634	0.055	6.0	0.009	0.000	5.8	2.684	OK
PS8	FSR: 100 years: +0 %: 15 mins: Summer	55.60 0	54.85 0	54.909	0.059	6.2	0.009	0.000	6.0	2.690	OK
PS14	FSR: 100 years: +0 %: 120 mins: Winter	55.15 0	53.16 5	53.216	0.051	4.5	0.000	0.000	4.5	51.870	OK
PS13	FSR: 100 years: +0 %: 60 mins: Winter	55.18 8	53.20 1	54.139	0.938	6.6	1.657	0.000	4.5	26.945	Surcharged
PS12	FSR: 100 years: +0 %: 60 mins: Winter	55.32 3	53.28 3	54.140	0.856	9.0	0.968	0.000	5.8	30.183	Surcharged
PS7	FSR: 100 years: +0 %: 60 mins: Winter	55.25 2	53.38 6	54.139	0.754	18.6	0.852	0.000	4.0	36.840	Surcharged
PS4	FSR: 100 years: +0 %: 15 mins: Summer	55.33 9	54.26 2	54.314	0.052	26.3	0.015	0.000	26.1	12.162	OK
PS2	FSR: 100 years: +0 %: 15 mins: Summer	55.15 0	54.51 2	54.631	0.119	18.0	0.019	0.000	16.9	7.998	OK
PS1	FSR: 100 years: +0 %: 15 mins: Summer	55.60 0	55.00 0	55.088	0.088	13.2	0.014	0.000	12.8	5.741	OK
PS6	FSR: 100 years: +0 %: 60 mins: Winter	54.89 5	53.50 9	54.140	0.631	19.5	0.903	0.000	3.9	31.562	Surcharged

Project: OLDHAM ROAD MILES PLATTING SW Calcs	Date: 21/03/2025		
	Designed by: JG	Checked by:	Approved By:
Report Details: Type: Junctions Summary Storm Phase: Surface Network 1	18-20 HARRINGTON STREET: L2 9QA LIVERPOOL		



FSR: 100 years: Increase Rainfall (%): +45: 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
PS5	FSR: 100 years: +45 %: 120 mins: Winter	54.977	53.602	54.570	0.968	18.3	1.095	0.000	3.2	57.150	Surcharged
PS11	FSR: 100 years: +45 %: 120 mins: Winter	55.726	54.147	54.571	0.424	8.6	0.479	0.000	8.6	29.220	Surcharged
PS3	FSR: 100 years: +45 %: 15 mins: Summer	55.777	55.127	55.192	0.065	13.9	0.010	0.000	13.7	6.036	OK
PS10	FSR: 100 years: +45 %: 120 mins: Winter	55.600	54.328	54.571	0.243	7.1	0.039	0.000	7.2	20.957	Surcharged
PS9	FSR: 100 years: +45 %: 15 mins: Summer	55.600	54.578	54.646	0.068	8.8	0.011	0.000	8.5	3.890	OK
PS8	FSR: 100 years: +45 %: 15 mins: Summer	55.600	54.850	54.923	0.073	9.0	0.012	0.000	8.8	3.900	OK
PS14	FSR: 100 years: +45 %: 240 mins: Winter	55.150	53.165	53.216	0.051	4.5	0.000	0.000	4.5	103.484	OK
PS13	FSR: 100 years: +45 %: 120 mins: Winter	55.188	53.201	54.569	1.368	5.6	2.418	0.000	4.5	56.692	Surcharged
PS12	FSR: 100 years: +45 %: 120 mins: Winter	55.323	53.283	54.570	1.287	8.6	1.456	0.000	5.0	59.082	Surcharged
PS7	FSR: 100 years: +45 %: 120 mins: Winter	55.252	53.386	54.570	1.184	18.0	1.339	0.000	3.6	66.310	Surcharged
PS4	FSR: 100 years: +45 %: 120 mins: Winter	55.339	54.262	54.570	0.309	12.9	0.087	0.000	12.8	37.630	Surcharged
PS2	FSR: 100 years: +45 %: 15 mins: Summer	55.150	54.512	54.762	0.251	25.0	0.040	0.000	22.8	11.532	Surcharged
PS1	FSR: 100 years: +45 %: 15 mins: Summer	55.600	55.000	55.126	0.126	19.2	0.020	0.000	17.4	8.283	OK
PS6	FSR: 100 years: +45 %: 120 mins: Winter	54.895	53.509	54.571	1.061	18.4	1.518	0.000	3.3	58.331	Surcharged

Project: OLDHAM ROAD MILES PLATTING SW Calcs		Date: 21/03/2025			
Report Details: Type: Stormwater Controls Summary Storm Phase: Surface Network 1		Designed by: JG	Checked by:		Approved By:
		18-20 HARRINGTON STREET: L2 9QA LIVERPOOL			



FSR: 2 years: Increase Rainfall (%): +0: 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. Residual Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Percentage Available (%)	Status
Porous Paving	FSR: 2 years: +0 %: 480 mins: Summer	54.727	54.404	0.072	0.004	0.3	0.905	0.000	0.000	0.1	1.725	64.980	OK
Porous Paving (1)	FSR: 2 years: +0 %: 960 mins: Summer	55.064	54.702	0.055	0.002	0.1	0.875	0.000	0.000	0.1	2.022	70.336	OK
Porous Paving (2)	FSR: 2 years: +0 %: 960 mins: Summer	55.151	54.901	0.058	0.001	0.1	0.311	0.000	0.000	0.0	1.129	82.608	OK
Porous Paving (3)	FSR: 2 years: +0 %: 1440 mins: Summer	55.826	55.464	0.074	0.004	0.5	7.316	0.000	0.000	0.1	8.471	54.860	OK
Porous Paving (4)	FSR: 2 years: +0 %: 1440 mins: Summer	55.398	55.152	0.073	0.002	0.3	2.549	0.000	0.000	0.1	4.862	66.333	OK
Cellular Storage	FSR: 2 years: +0 %: 30 mins: Summer	53.692	53.692	0.052	0.052	5.0	1.973	0.000	0.000	2.4	1.732	94.910	OK

Project: OLDHAM ROAD MILES PLATTING SW Calcs		Date: 21/03/2025			
Report Details: Type: Stormwater Controls Summary Storm Phase: Surface Network 1		Designed by: JG	Checked by:		Approved By:
		18-20 HARRINGTON STREET: L2 9QA LIVERPOOL			



FSR: 30 years: Increase Rainfall (%): +0: 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. Residual Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Percentage Available (%)	Status
Porous Paving	FSR: 30 years: +0 %: 480 mins: Summer	54.790	54.405	0.135	0.005	0.5	1.571	0.008	0.000	0.2	3.155	39.193	Flood
Porous Paving (1)	FSR: 30 years: +0 %: 480 mins: Summer	55.119	54.703	0.110	0.003	0.4	1.505	0.000	0.000	0.2	2.651	48.949	OK
Porous Paving (2)	FSR: 30 years: +0 %: 360 mins: Summer	55.193	54.903	0.100	0.003	0.3	0.538	0.000	0.000	0.2	1.320	69.948	OK
Porous Paving (3)	FSR: 30 years: +0 %: 1440 mins: Winter	55.883	55.464	0.131	0.004	0.6	12.182	0.053	0.000	0.2	15.181	24.832	Flood
Porous Paving (4)	FSR: 30 years: +0 %: 1440 mins: Summer	55.454	55.153	0.130	0.003	0.4	4.229	0.000	0.000	0.2	8.612	44.137	OK
Cellular Storage	FSR: 30 years: +0 %: 60 mins: Summer	53.932	53.932	0.292	0.292	18.6	11.109	0.000	0.000	3.6	10.440	71.340	OK

Project: OLDHAM ROAD MILES PLATTING SW Calcs		Date: 21/03/2025			
Report Details: Type: Stormwater Controls Summary Storm Phase: Surface Network 1		Designed by: JG	Checked by:		Approved By:
		18-20 HARRINGTON STREET: L2 9QA LIVERPOOL			



FSR: 100 years: Increase Rainfall (%): +0: 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. Residual Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Percentage Available (%)	Status
Porous Paving	FSR: 100 years: +0 %: 240 mins: Summer	54.956	54.406	0.301	0.006	1.0	1.803	0.056	0.000	0.4	2.972	30.226	Flood
Porous Paving (1)	FSR: 100 years: +0 %: 480 mins: Summer	55.152	54.704	0.143	0.004	0.6	1.855	0.030	0.000	0.2	3.451	37.073	Flood
Porous Paving (2)	FSR: 100 years: +0 %: 480 mins: Summer	55.221	54.903	0.128	0.003	0.3	0.688	0.000	0.000	0.2	1.949	61.555	OK
Porous Paving (3)	FSR: 100 years: +0 %: 960 mins: Summer	55.918	55.467	0.165	0.007	1.6	13.369	0.442	0.000	0.6	16.094	17.508	Flood
Porous Paving (4)	FSR: 100 years: +0 %: 960 mins: Summer	55.490	55.154	0.165	0.004	0.8	5.087	0.082	0.000	0.3	9.246	32.804	Flood
Cellular Storage	FSR: 100 years: +0 %: 60 mins: Winter	54.140	54.140	0.500	0.500	20.1	18.999	0.000	0.000	3.5	10.932	50.984	OK

Project: OLDHAM ROAD MILES PLATTING SW Calcs		Date: 21/03/2025			
Report Details: Type: Stormwater Controls Summary Storm Phase: Surface Network 1		Designed by: JG	Checked by:		Approved By:
		18-20 HARRINGTON STREET: L2 9QA LIVERPOOL			



FSR: 100 years: Increase Rainfall (%): +45: 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. Residual Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Percentage Available (%)	Status
Porous Paving	FSR: 100 years: +45 %: 120 mins: Winter	54.958	54.731	0.303	0.331	1.6	3.134	0.550	0.000	2.7	3.854	-21.315	Flood
Porous Paving (1)	FSR: 100 years: +45 %: 240 mins: Summer	55.311	54.707	0.302	0.007	1.3	2.161	0.155	0.000	0.7	3.792	26.701	Flood
Porous Paving (2)	FSR: 100 years: +45 %: 360 mins: Summer	55.394	54.904	0.301	0.004	0.5	0.937	0.025	0.000	0.3	2.567	47.619	Flood
Porous Paving (3)	FSR: 100 years: +45 %: 360 mins: Summer	56.055	55.473	0.303	0.013	4.9	14.681	1.456	0.000	2.6	16.537	9.413	Flood
Porous Paving (4)	FSR: 100 years: +45 %: 240 mins: Summer	55.627	55.159	0.303	0.009	3.0	5.662	0.487	0.000	1.2	7.680	25.204	Flood
Cellular Storage	FSR: 100 years: +45 %: 120 mins: Winter	54.570	54.570	0.930	0.930	17.8	35.347	0.000	0.000	2.9	18.629	8.806	OK