East Hemel Masterplan: Catchment A	Date: 02/07/2025		
	Designed by: LL	Checked by: AK	Approved By:
Report Details: Type: Inflows Summary Storm Phase: Increased size	Expedition Engineering:		

Critical Storm Per Item: Rank By: Max. Inflow

Inflow	Storm Event	Inflow Area (ha)	Max. Inflow (L/s)	Total Inflow Volume (m³)
Inflow A.1	FEH: 100 years: +40 %: 30 mins: Winter	20.35	2142.4	1798.582
Inflow A.2	FEH: 100 years: +40 %: 30 mins: Winter	9.49	1461.8	1237.294
Inflow to A.6	FEH: 100 years: +40 %: 30 mins: Winter	8.07	1243.0	1052.029
Inflow A.5	FEH: 100 years: +40 %: 30 mins: Winter	3.06	471.7	399.252
Inflow A.4	FEH: 100 years: +40 %: 30 mins: Winter	0.48	74.1	62.718
Inflow A.3	FEH: 100 years: +40 %: 30 mins: Winter	2.91	447.9	379.090

East Hemel Masterplan: Catchment A	Date: 02/07/2025		
	Designed by: LL	Checked by: AK	Approved By:
Report Details: Type: Junctions Summary Storm Phase: Increased size	Expedition Engineering:		

Critical Storm Per Item: Rank By: Max. Outflow

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
Simple Junction	FEH: 100 years: +40 %: 1440 mins: Winter				0.000	105.1			105.1	15302.413	OK
sewer	FEH: 100 years: +40 %: 240 mins: Winter				0.000	23.5			23.5	586.213	OK

East Hemel Masterplan: Catchment A	Date: 02/07/2025		
	Designed by: LL	Checked by: AK	Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Increased size	Expedition Engineering:		

Critical Storm Per Item: Rank By: Max. Resident Volume

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. Resident Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Percentage Available (%)	Status
A.5	FEH: 100 years: +40 %: 960 mins: Winter	104.792	104.792	1.992	1.992	232.4	13562.026	0.000	0.000	105.1	10049.954	0.709	OK
A.4	FEH: 100 years: +40 %: 360 mins: Winter	111.586	111.585	1.986	1.985	267.6	4091.652	0.000	0.000	222.7	7537.384	1.348	OK
A.1	FEH: 100 years: +40 %: 120 mins: Winter	121.971	121.965	1.971	1.965	1564.1	2797.077	0.000	0.000	496.6	3143.018	3.092	OK
A.6	FEH: 100 years: +40 %: 480 mins: Winter	111.383	111.383	1.983	1.983	337.6	3858.968	0.000	0.000	23.5	1181.880	1.706	OK
A.3	FEH: 100 years: +40 %: 240 mins: Winter	116.388	116.387	1.988	1.987	442.0	3497.722	0.000	0.000	274.1	6644.424	1.429	OK
A.2	FEH: 100 years: +40 %: 240 mins: Winter	118.983	118.983	1.983	1.983	839.9	3898.732	0.000	0.000	375.9	7493.985	1.805	OK

East Hemel Masterplan: Catchment A	Date: 02/07/2025		
	Designed by: LL	Checked by: AK	Approved By:
Report Details: Type: Connections Summary Storm Phase: Increased size	Expedition Engineering:		

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
A1-2	FEH: 30 years: +35 %: 480 mins: Winter	No Delay	A.1	A.2		121.557	0.150	5704.771	0.0		150.0	
A2-3	FEH: 100 years: +40 %: 1440 mins: Winter	No Delay	A.2	A.3		117.983	0.196	15593.832	0.0		239.9	
A3-4	FEH: 30 years: +35 %: 30 mins: Summer	No Delay	A.3	A.4		115.666	0.047	190.188	0.0		54.6	
A4-5	FEH: 100 years: +40 %: 360 mins: Winter	No Delay	A.4	A.5		111.586	0.132	7536.044	0.0		222.7	
A.6 to sewer (1)	FEH: 100 years: +40 %: 240 mins: Winter	No Delay	A.6	sewer		111.320	0.058	586.213	0.0		23.5	
A5 to sewer	FEH: 100 years: +40 %: 1440 mins: Winter	No Delay	A.5	Simple Junction		104.725	0.127	15302.413	0.0		105.1	
No Delay	FEH: 100 years: +40 %: 120 mins: Winter	No Delay	A.1	A.2		121.968	0.291	1097.856	0.0		348.2	
No Delay (1)	FEH: 100 years: +40 %: 240 mins: Winter	No Delay	A.2	A.3		118.982	0.139	863.952	0.0		137.1	
No Delay (2)	FEH: 100 years: +40 %: 240 mins: Winter	No Delay	A.3	A.4		116.385	0.142	5077.768	0.0		219.4	

East Hemel Masterplan: Catchment A	Date: 02/07/2025		
	Designed by: LL	Checked by: AK	Approved By:
Report Details: Type: Phase Management Storm Phase: Increased size	Expedition Engineering:		

Increased size
FEH: 100 years: Increase Rainfall (%): +40: 1440 mins: Winter

Tables

Name	Max. Inflow (L/s)	Total Inflow Volume (m³)	Max. Outflow (L/s)	Total Outflow Volume (m³)
Simple Junction			105.1	15302.413
sewer			23.5	3344.130
TOTAL	622.2	21254.781	128.5	18646.543

Graphs