Design Settings

Rainfall Methodology	FEH-22	Minimum Velocity (m/s)	1.00
Return Period (years)	2	Connection Type	Level Soffits
Additional Flow (%)	0	Minimum Backdrop Height (m)	0.200
CV	0.750	Preferred Cover Depth (m)	1.200
Time of Entry (mins)	5.00	Include Intermediate Ground	✓
Maximum Time of Concentration (mins)	30.00	Enforce best practice design rules	x
Maximum Rainfall (mm/hr)	50.0		

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Depth (m)
S64LA	0.045	5.00	101.000	1800	1.350
S64LB	0.011	5.00	101.000	1800	1.350
S64++	0.029	5.00	101.000	1800	1.875
HW10			100.500	1200	0.743

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
1.000	S64LA	S64++	15.158	0.600	99.650	99.125	0.525	28.9	900	5.04	50.0
2.000	S64LB	S64++	11.623	0.600	99.650	99.125	0.525	22.1	900	5.03	50.0
1.001	S64++	HW10	6.460	0.600	99.800	99.757	0.043	150.2	225	5.14	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
1.000	5.842	3716.5	6.1	0.450	0.975	0.045	0.0	27	1.142
2.000	6.673	4245.4	1.5	0.450	0.975	0.011	0.0	13	0.789
1.001	1.064	42.3	11.5	0.975	0.518	0.085	0.0	80	0.911

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
1.000	15.158	28.9	900	Circular	101.000	99.650	0.450	101.000	99.125	0.975
2.000	11.623	22.1	900	Circular	101.000	99.650	0.450	101.000	99.125	0.975
1.001	6.460	150.2	225	Circular	101.000	99.800	0.975	100.500	99.757	0.518

Link	US Node	Dia (mm)	Node Type	DS Node	Dia (mm)	Node Type
1.000	S64LA	1800	Manhole	S64++	1800	Manhole
2.000	S64LB	1800	Manhole	S64++	1800	Manhole
1.001	S64++	1800	Manhole	HW10	1200	Manhole

Manhole Schedule

Node	CL (m)	Depth (m)	Dia (mm)	MH Type	Connections	Link	IL (m)	Dia (mm)
S64LA	101.000	1.350	1800	Adoptable	0	1.000	99.650	900
S64LB	101.000	1.350	1800	Adoptable	0	2.000	99.650	900
S64++	101.000	1.875	1800	Adoptable	1	2.000	99.125	900
					2	1.000	99.125	900
					0	1.001	99.800	225
HW10	100.500	0.743	1200	Adoptable	1	1.001	99.757	225

Simulation Settings

Rainfall Methodology	FEH-22	Analysis Speed	Normal	Starting Level (m)	
Rainfall Events	Singular	Skip Steady State	x	Check Discharge Rate(s)	x
Summer CV	0.750	Drain Down Time (mins)	240	Check Discharge Volume	x
Winter CV	0.840	Additional Storage (m³/ha)	50.0		

Storm Durations

15	30	60	120	180	240	360	480	600	720	960	1440

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
100	40	0	0

Node S64++ Online StormBrake™ Control

Flap Valve	x	Design Flow (l/s)	5.0
Replaces Downstream Link	x	Product Code	FPM-SB1-01200-00500-1100
Invert Level (m)	99.800	Min Outlet Diameter (m)	0.150
Design Depth (m)	1.200	Min Node Diameter (mm)	1200

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.56%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	S64LA	92	100.714	1.064	8.5	4.4816	0.0000	FLOOD RISK
120 minute winter	S64LB	92	100.714	1.064	3.3	3.1407	0.0000	FLOOD RISK
120 minute winter	S64++	92	100.714	1.588	9.5	5.2706	0.0000	FLOOD RISK
60 minute summer	HW10	36	99.809	0.052	5.0	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	S64LA	1.000	S64++	4.9	0.249	0.001	9.6067	
120 minute winter	S64LB	2.000	S64++	3.0	0.086	0.001	7.3664	
120 minute winter	S64++	1.001	HW10	5.0	0.691	0.118	0.0467	35.3