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)	0.000
CV	0.750	Preferred Cover Depth (m)	0.450
Time of Entry (mins)	5.00	Include Intermediate Ground	x
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)
1	0.010	5.00	34.300	450	0.550
2	0.045	5.00	34.300	450	0.730
Outfall			34.350	450	0.805

Simulation Settings

Rainfall Methodology	FEH-22	Analysis Speed	Detailed	Starting Level (m)	
Rainfall Events	Singular	Skip Steady State	x	Check Discharge Rate(s)	x
Summer CV	1.000	Drain Down Time (mins)	240	Check Discharge Volume	x
Winter CV	1.000	Additional Storage (m³/ha)	0.0		

Storm Durations

15	60	180	360	600	960	2160	4320	7200	10080
30	120	240	480	720	1440	2880	5760	8640	

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
1	0	0	0
30	0	0	0
100	0	0	0
100	45	0	0

Node 1 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	33.850	Slope (1:X)	9999.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	8	Depth (m)	
Safety Factor	2.0	Width (m)	0.950	Inf Depth (m)	
Porosity	0.30	Length (m)	8.500		

Node 2 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	33.750	Slope (1:X)	9999.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	6	Depth (m)	
Safety Factor	2.0	Width (m)	0.950	Inf Depth (m)	
Porosity	0.30	Length (m)	8.500		

Node 1 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	34.175	Slope (1:X)	160.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)		Depth (m)	
Safety Factor	2.0	Width (m)	8.800	Inf Depth (m)	
Porosity	0.30	Length (m)	31.000		

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Node 2 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	34.175	Slope (1:X)	160.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)		Depth (m)	
Safety Factor	2.0	Width (m)	8.500	Inf Depth (m)	
Porosity	0.30	Length (m)	31.000		

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Results for 1 year Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	1	11	33.779	0.029	1.1	0.0046	0.0000	OK
15 minute summer	2	10	33.670	0.100	6.2	0.0159	0.0000	SURCHARGED
15 minute summer	Outfall	10	33.625	0.080	6.1	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)
15 minute summer	1	1.000	2	1.1	0.219	0.182	0.0868	
15 minute summer	2	1.001	Outfall	6.1	0.820	0.990	0.0175	2.7

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Results for 30 year Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	1	12	34.082	0.332	4.3	0.6141	0.0000	FLOOD RISK
15 minute summer	2	12	34.034	0.464	20.3	0.7603	0.0000	FLOOD RISK
15 minute summer	Outfall	8	33.640	0.095	18.7	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)
15 minute summer	1	1.000	2	4.7	0.596	0.770	0.1402	
15 minute summer	2	1.001	Outfall	18.7	2.392	3.047	0.0187	10.2

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Results for 100 year Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	1	13	34.209	0.459	5.9	1.1850	0.0000	FLOOD RISK
15 minute summer	2	12	34.186	0.616	25.1	1.1773	0.0000	FLOOD RISK
15 minute summer	Outfall	7	33.640	0.095	22.0	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)
15 minute summer	1	1.000	2	6.2	0.798	1.032	0.1402	
15 minute summer	2	1.001	Outfall	22.0	2.814	3.586	0.0187	12.8

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Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	1	14	34.267	0.517	9.3	2.8744	0.0000	FLOOD RISK
15 minute summer	2	12	34.259	0.689	35.3	2.8033	0.0000	FLOOD RISK
15 minute summer	Outfall	6	33.640	0.095	23.5	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)
15 minute summer	1	1.000	2	8.7	1.115	1.442	0.1402	
15 minute summer	2	1.001	Outfall	23.5	2.998	3.819	0.0187	18.6

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