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	1.000	Preferred Cover Depth (m)	1.200
Time of Entry (mins)	4.00	Include Intermediate Ground	✓
Maximum Time of Concentration (mins)	30.00	Enforce best practice design rules	✓
Maximum Rainfall (mm/hr)	100.0		

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Easting (m)	Northing (m)	Depth (m)
1	0.012	4.00	33.940	27.472	68.932	0.390
PERM PAVING			33.940	45.882	68.811	0.500

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	1	PERM PAVING	1.000	0.600	33.550	33.440	0.110	9.1	225	4.00	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	4.365	173.6	2.2	0.165	0.275	0.012	0.0	17	1.488

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	1.000	9.1	225	Circular	33.940	33.550	0.165	33.940	33.440	0.275

Link	US Node	Node Type	DS Node	Node Type
1	1	Junction	PERM PAVING	Junction

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Connections	Link	IL (m)	Dia (mm)
1	27.472	68.932	33.940	0.390	0	1	33.550	225
PERM PAVING	45.882	68.811	33.940	0.500	1	1	33.440	225

Simulation Settings

Rainfall Methodology	FEH-22	Analysis Speed	Normal	Additional Storage (m³/ha)	20.0
Summer CV	1.000	Skip Steady State	x	Check Discharge Rate(s)	x
Winter CV	1.000	Drain Down Time (mins)	240	Check Discharge Volume	x

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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 %)
10	0	0	0
30	0	0	0
100	45	10	0

Node PERM PAVING Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.08172	Invert Level (m)	33.410	Slope (1:X)	500.0
Side Inf Coefficient (m/hr)	0.08172	Time to half empty (mins)	37	Depth (m)	0.250
Safety Factor	1.5	Width (m)	11.600	Inf Depth (m)	0.250
Porosity	0.30	Length (m)	10.000		

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Results for 10 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	10	33.576	0.026	4.9	0.0160	0.0000	OK
30 minute summer	PERM PAVING	21	33.455	0.015	4.3	1.2301	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
15 minute summer	1	1	PERM PAVING	4.9	1.930	0.028	0.0025
30 minute summer	PERM PAVING	Infiltration		1.6			

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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	10	33.579	0.029	6.3	0.0180	0.0000	OK
30 minute summer	PERM PAVING	22	33.469	0.029	5.6	1.7008	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
15 minute summer	1	1	PERM PAVING	6.3	2.085	0.036	0.0030
30 minute summer	PERM PAVING	Infiltration		1.8			

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Results for 100 year +45% CC +10% A 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	9	33.591	0.041	12.7	0.0278	0.0000	OK
60 minute summer	PERM PAVING	43	33.549	0.109	8.3	4.4834	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
15 minute summer	1	1	PERM PAVING	12.7	2.559	0.073	0.0076
60 minute summer	PERM PAVING	Infiltration		1.8			

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