



spelstormwater
joy in water

SPEL Basin[®]

Modular stormwater storage

OVERVIEW

SPEL Basin[®] Modular Bioretention System is a highly advanced stormwater filtration system. It can be used in place of standard catch basin structures, rain gardens, bioretention cells and media filters.

BENEFITS

- Can be used in a wide range of configurations
- A pre-filter chamber eliminates the need for maintenance to be undertaken in the Bioretention chamber.
- The Modular Bioretention System can be installed downstream of retention systems.

APPLICATIONS

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- Car Parks & Shopping Centers
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- Council Depots
-
- Industrial Estates
-
- Heavy Vehicle Maintenance
-
- Transport Depots & Loading Bays
-
- Tunnels
-
- Highways & Transport Corridors
-
- Recycling Yards
-
- Airport Aprons & Tarmacs



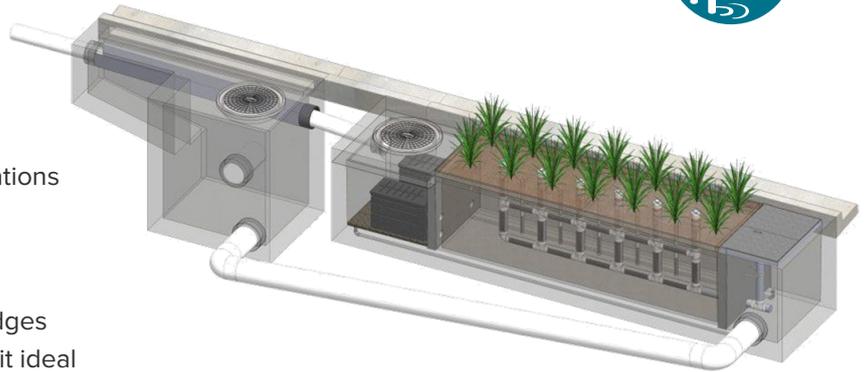
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Benefits

- Built-In Bypass Available with all configurations
- All Configurations Utilise a Pre-Treatment Chamber Which Contains:
 - Litter Capture
 - Sediment Chamber & Pre-Filter Cartridges
- The SPEL Basin's size and capacity make it ideal for stormwater treatment trains that require high pollutant reduction in a small footprint.

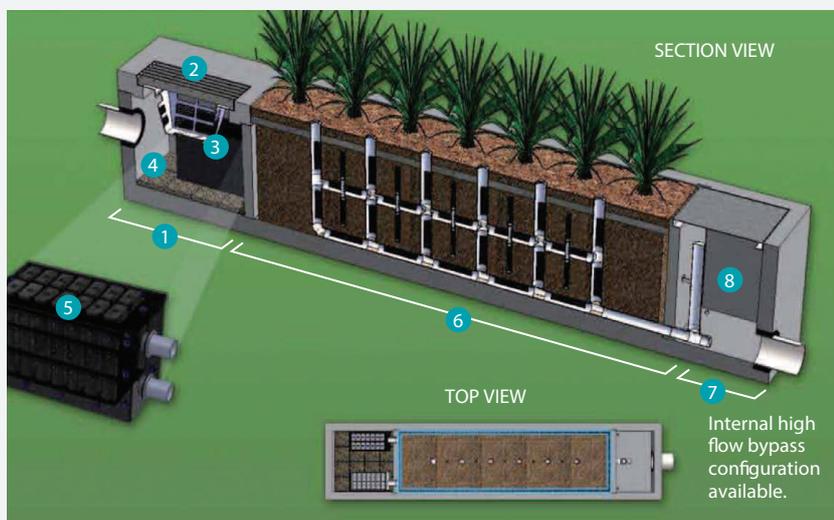


Features

- | | |
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| <p>1 Pre-treatment chamber
Captures incoming runoff and contains the first three stages of treatment.</p> | <p>5 Pre-filter cartridge
Provides the third stage of treatment by physically and chemically capturing fine TSS, metals, nutrients, and bacteria.</p> |
| <p>2 Grate type catch basin inlet
A standard grate type traffic rated catch basin opening directs stormwater into the system.</p> | <p>6 Wetland chamber
Provides the final stage of treatment through a combination of physical, chemical and biological processes.</p> |
| <p>3 Catch basin insert filter
Provides the first stage of treatment by capturing trash & litter, gross solids, and sediment.</p> | <p>7 Discharge chamber
Contains flow control, high flow bypass and optional drain down filter.</p> |
| <p>4 Settling chamber
Provides the second stage of treatment by separating out larger suspended solids.</p> | <p>8 Multi-level flow control
Orifice plates and/or valves are used to control the flow through the treatment stages.</p> |



Sunshine coast field test site installation



Pollutant	Efficiency
TSS (mean particle size 8 microns)	82%
Total Phosphorus (TP)	68%
Ortho-Phosphate	48%
Total Nitrogen (TN)	75%
Copper	>52%
Zinc	79%
TPH	>99%
Turbidity	71%
E.Coli	83%
Faecal Coliform	72%