

Atlantis®
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Taylors Beach Tank

Project Location

Taylors Beach, NSW, Australia

Atlantis Application

Underground Infiltration Tanks

Project Overview

The Taylors Beach project involved the construction of an underground stormwater infiltration tank using 4,859 Atlantis Flo-Vault® modules. Commissioned by Daracon Group and completed in December 2021, the system was designed to capture stormwater runoff and facilitate infiltration below ground.

The underground configuration allowed the infiltration system to occupy the subsurface while retaining the area above for other uses. The installation included excavation, on-site assembly of the modular tank, integration with the stormwater infrastructure, and subsequent backfilling and surface restoration.

Technical Summary

Project	Taylors Beach Tank
Location	Taylors Beach, NSW, Australia
Application	Underground Infiltration Tanks
Completion	December 2021
Size	4,859 Flo-Vault® Modules
Surface Use	Not specified
Atlantis System	Flo-Vault®

Design Challenge

The project required a large underground system capable of managing stormwater runoff through infiltration while maintaining usable surface area above the installation.

01 Provide an underground system capable of capturing and infiltrating stormwater runoff.

02 Accommodate a large-scale modular installation comprising 4,859 Flo-Vault® modules.

03 Reduce surface runoff through below-ground stormwater management.

04 Facilitate infiltration of collected stormwater into the surrounding ground.

05 Integrate the underground Flo-Vault® system with the existing stormwater infrastructure.

06 Maintain the availability of the surface above the tank for other uses following backfilling and restoration.

Solution

The infiltration tank was constructed using 4,859 Atlantis Flo-Vault® modules, assembled on site within the excavated tank footprint. The modular configuration enabled the underground infiltration structure to be progressively assembled within the prepared excavation.

The Flo-Vault® system was integrated with the existing stormwater infrastructure to enable stormwater capture and infiltration. Once the underground system was installed, the excavation was backfilled and the surface restored for subsequent use.

Benefits

- 4,859 Flo-Vault® modules incorporated into a single underground infiltration system.
- Underground capture and infiltration of stormwater runoff.
- Reduced surface runoff through subsurface stormwater management.
- Infiltration supports groundwater recharge.
- Modular construction facilitated on-site assembly of the tank.
- Underground installation retained the surface area for other uses.
- System integrated with the existing stormwater infrastructure.

Considerations

The documented construction sequence comprised:

- Excavation of the area required for the underground tank.
- On-site assembly of 4,859 Flo-Vault® modules.
- Connection of the Flo-Vault® system to the existing stormwater infrastructure.
- Backfilling following completion of the underground installation.
- Restoration of the surface for other uses.

Project Outcomes

- 4,859 Flo-Vault® modules were supplied for the underground infiltration tank.
- The system was completed in December 2021.
- Stormwater runoff was managed through an underground infiltration system.
- The installation was connected to the existing stormwater infrastructure.
- Collected stormwater was directed into the infiltration system to facilitate infiltration into the ground.
- Installation below ground retained the surface above the tank for other uses.
- Following installation, the tank was backfilled and the surface restored.

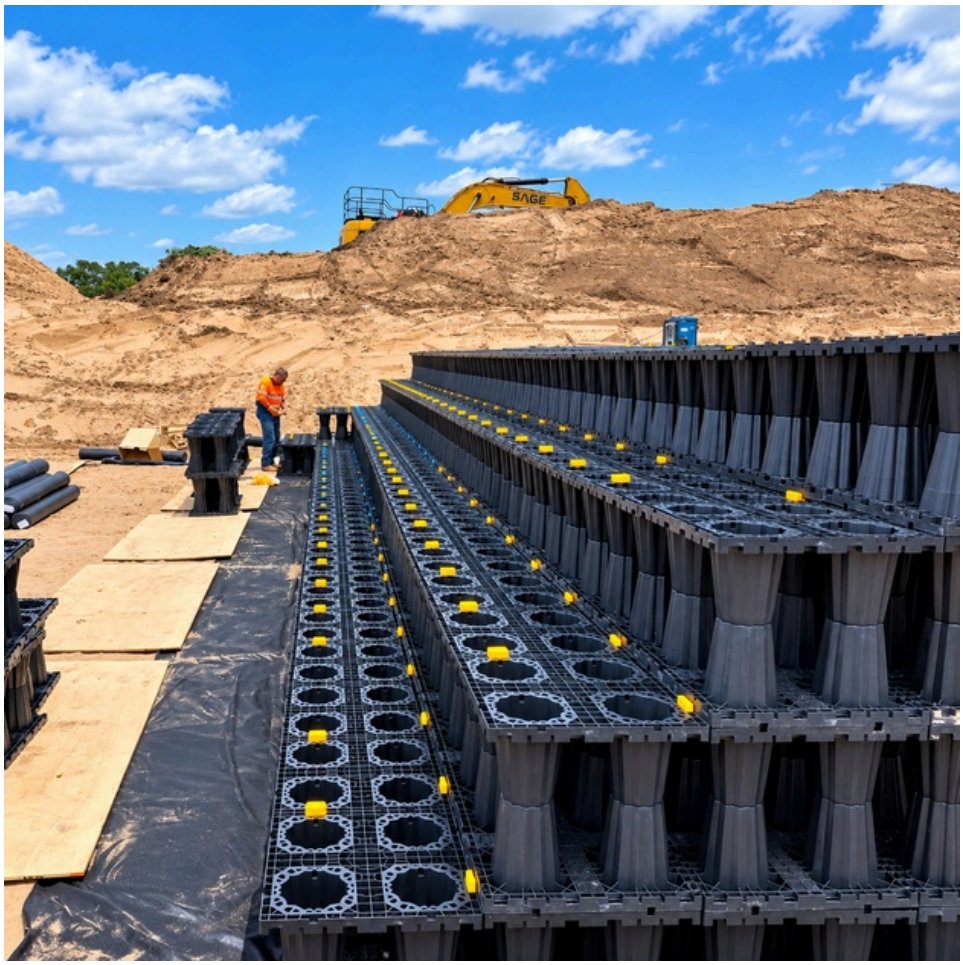
The completed project demonstrates the use of a large modular Flo-Vault® installation to provide underground stormwater infiltration while preserving usable land above the system.

Did You Know?

The Taylors Beach infiltration tank incorporated 4,859 individual Flo-Vault® modules.

Rather than occupying surface area with stormwater infrastructure, the complete modular system was assembled below ground, connected to the stormwater network and subsequently backfilled, allowing the area above the tank to remain available for other uses.




SAGE











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Thank You For Your Attention



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