



Heritage-sensitive car park transforms disused reservoir into coastal asset

Devil's Point



 **Installer:** Classic Builders (SW) Ltd

 **Devil's Point Car Park, Admiralty Road, Stonehouse, Plymouth, PL1 3RS**

 **Contractor:** I K Crowle Groundworks & Civil Engineering

 **Sector:** Public Sector

Project Overview

Devil's Point, located on the waterfront of Plymouth, is a popular coastal destination known for its historic significance and scenic views.

The site previously included a disused reservoir, no longer in active service. As part of wider efforts to improve visitor access and increase parking capacity, the area was earmarked for redevelopment into a public car park. However, due to the site's heritage context, existing ground conditions, and drainage considerations, the project demanded a low-impact, visually sympathetic, and permeable surfacing solution that could also handle vehicle loads.

The Challenge

Heritage sensitivity:

Devil's Point is a historically significant and environmentally sensitive area, adjacent to coastal paths and public green spaces. Planners and stakeholders required a low-impact solution that would preserve the site's natural character and avoid visual intrusion, ruling out hard urban surfacing.

Drainage complexities:

The existing site had limited drainage infrastructure, and its bowl-like topography created a risk of surface water pooling. Any surfacing system needed to be fully permeable to allow natural infiltration and avoid costly drainage installations, whilst also complying with SuDS (Sustainable Drainage Systems) principles.

Unstable ground conditions:

As a disused reservoir, the site featured uneven, compacted, and water-retentive ground, which was not suitable for traditional surfacing methods like asphalt or concrete without significant excavation and ground preparation. These invasive methods were deemed costly, disruptive, and environmentally inappropriate for the sensitive setting.

Load-bearing requirements: While the site was being repurposed for light vehicular use, including cars and service vehicles, the solution still needed to provide a strong, load-distributing surface that wouldn't degrade or rut under pressure – even on softer sub-soils.

Innovative Solutions:

We provided our Golpla™ gravel retention system, offering a uniquely effective solution for the complex site conditions at Devil's Point.

◆ Superior gravel retention:

Golpla™ panels provide strong containment for loose gravel, preventing migration and rutting often seen in traditional gravel surfaces. Unlike loose gravel alone, Golpla locks the gravel in place, preventing migration, tracking, and surface wear.

◆ Engineered load distribution:

The system is engineered to support cars and light commercial vehicles, distributing loads evenly across the surface and reducing ground pressure. Despite the lightweight structure, Golpla™ panels provide excellent load distribution, ensuring a stable, rut-free surface over the site's softer, reclaimed ground.

◆ Complete permeability:

Fully SuDS-compliant, Golpla™ allows rainwater to drain through naturally, avoiding surface runoff and helping recharge the ground below. The system is 100% permeable, eliminating the need for additional drainage infrastructure whilst ensuring full compliance with Sustainable Drainage Systems guidelines.

◆ Environmental integration:

The open, green-cell structure reduces visual impact and helps the surface blend with the surrounding landscape. The open-cell structure of Golpla™ and natural gravel finish helped the new car park blend seamlessly with the surrounding coastal landscape.

Key Achievements:

1

Heritage compliance:

Our environmentally sensitive design was critical for planning approval in this heritage and environmentally sensitive location, where visual impact needed to be minimal.

3

Efficient delivery:

The modular nature of Golpla™ allowed for quick installation, helping the project stay on schedule. This was particularly important for public realm work, where delays can affect access and stakeholder confidence.

2

Minimal site disruption:

Golpla™ could be installed with minimal excavation or sub-base preparation, avoiding disturbing the reservoir's existing structure whilst keeping project costs and disruption low.

4

Long-term performance:

The solution results in a cleaner, safer, and more professional appearance with reduced maintenance over time, essential for this exposed coastal public facility.

Measurable Impact

Key project metrics:

- **Zero major excavation** – protecting reservoir structure and heritage setting
- **20 tonnes** – material optimisation achieved
- **Same volume** – efficient space utilisation

This project demonstrates our expertise in:

Heritage site solutions delivering sensitive development that respects historical and environmental contexts

Public sector experience understanding the demands of durable, low-maintenance infrastructure for high-traffic coastal locations

SuDS compliance providing fully permeable solutions that eliminate drainage infrastructure requirements

Rapid deployment enabling efficient installation with minimal disruption to public access



Our Golpla™ system proves that heritage preservation and functional infrastructure can work together seamlessly. When your public project demands both environmental sensitivity and long-term performance, Geosynthetics Ltd delivers solutions that protect valuable coastal assets whilst creating accessible community facilities.

For more information on how Geosynthetics Ltd can support your project please contact our technical team for a consultation on your project requirements.