Technical Memorandum

To:	**From:**
Company: WRAP/Torfaen CBC	**SLR Consulting Limited**
cc:	**Date:** 6 November 2026
	Project No. 402.065983.00001

RE: Torfaen CBC Interim Waste Bulking Facility, Blaenavon
Drainage Statement – Phase 1

Introduction

SLR Consulting have been appointed by WRAP/Torfaen CBC to prepare a SuDS Approving Body (SAB) pre-application for a proposed interim waste bulking facility within the existing car park area at Units 1 and 2, Kays & Kears Industrial Estate, Blaenavon, as an interim measure pending redevelopment of the wider site (Phase 1). The interim facility will be in use for approximately 4 Years until the main Phase 2 area of the site, immediately west of the proposed Phase 1 facility, is in operation. After this time, the facility will be removed as part of the wider redevelopment of the site.

Phase 1 will comprise two waste storage bays, an existing roadway for delivery vehicles and articulated lorries to access the site, and temporary parking and office/welfare facilities. Refer to Drawing No. 402.065983.00001.004.PA0 (Phase 1 – Proposed Site Layout) by SLR Consulting, enclosed with this Drainage Statement.

Proposed Surface Water Drainage Strategy

The proposed development area is currently entirely covered by hardstanding forming the car park of the previous development. Refer to Drawing No. TTS/0428 (Topographical Survey) by Total Surveying Solutions Limited, enclosed with this Drainage Statement. The interim bays will be constructed within an area that is already impermeable and runoff from this area currently discharges to the existing on-site surface water drainage network, without attenuation or water quality treatment.

Runoff from the roof areas of the proposed interim facility and the hardstanding areas on site will be collected and discharged to the on-site surface water drainage network.

The proposed drainage strategy is based upon retaining the existing site drainage regime whilst incorporating sustainable drainage measures where reasonably practicable.

Runoff from the roof areas of the bays is considered to have a low pollution risk and is therefore suitable to be collected in two modular rain gardens (SuDS planters[1]) connected to the rainwater downpipes from the roof areas of the bays. Refer to Drawing No. 402.065983.00001.006.PA0 (Phase 1 – Proposed Drainage) by SLR Consulting, enclosed with this Drainage Statement.

The proposed SuDS planters will collect roof runoff and filter it through a layer of plants and filtration media. Runoff will be released slowly into the surface water drainage network. Refer to the SuDS planter specifications, enclosed with this Drainage Statement.

The proposed planters will provide appropriate attenuation and water quality treatment.

Runoff from the front of the proposed facility will be treated as foul drainage, due to the potential for contamination from waste and will be governed by an NRW Permit. Runoff from

[1] https://www.sudsplanter.com/ accessed October 2026

this area will be collected in a separate concrete channel and discharged to a foul water storage tank. Foul water will be removed off site for treatment.

S1: Surface water runoff destination

Surface water runoff will be collected in the existing on-site drainage network and discharged to the existing on-site drainage network.

The impermeable area on the site will remain the same post development, Infiltration to ground is not viable for this site due to the high potential for contaminated runoff

S2: Surface water hydraulic control

Runoff from the roofs will be routed via SuDS planters, which provide storage of rainwater, filtration and gradual release to the on-site drainage network. Runoff from the ground areas will discharge to the existing surface water drainage network, as for the existing situation.

The entire site (2,350m^2) is currently covered by hardstanding and this will remain post development. The existing brownfield runoff rates for the site are presented in Table 1 below. The runoff rate for the proposed site will be marginally less, due to storage and filtration by the proposed SuDS planters.

Table 1 – Brownfield runoff rates for existing site

Return Period	Storm Duration (mins)	Rainfall Depth (mm)	Catchment Area (m^2)	Discharge Rate (l/s)
1:2	30	8.40	2,350	10.97
1:30	30	22.44	2,350	29.30
1:100	30	28.25	2,350	36.88

S3: Water Quality

The proposed SuDS planters will provide a source control drainage measure that treats the water through filtration, interception and biological uptake within the planting. This will enhance the water quality of the roof water and improve water quality from the site prior to discharge.

S4: Amenity

The site is a waste materials recycling facility and is not open to the general public. However, the proposed SuDS planters will be planted with low maintenance plant species which are flood and drought tolerant, which will improve the amenity value for the site.

S5: Biodiversity

The proposed SuDS planters will improve the biodiversity of the site by the inclusion of a variety of low maintenance plant species within the planters. The species will be selected to enhance local biodiversity requirements.

S6: Design of drainage for construction, operation and maintenance

The proposed SuDS planters are constructed off-site and installed and maintained according to the manufacturers' instructions. The systems are modular, and can be moved to the Phase 2 site for re-use when the Phase 1 site is decommissioned. Maintenance will include removal of debris, inspection and maintenance of inlets, outlets and pipework and replacement or management of the planting as required.

Conclusion

As the proposals do not materially increase impermeable area or significantly alter existing runoff characteristics, the development represents an appropriate and sustainable interim drainage solution pending implementation of the wider site redevelopment proposals.

The proposed surface water drainage strategy will meet the requirements of the statutory national standards for sustainable drainage systems in Wales, and will enhance the water quality, amenity and biodiversity of the site.

Regards,

SLR Consulting Limited

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Associate Hydrologist

Andrew Dannatt, MICE, MCIWEM C.WEM
Technical Director, Hydro & Hydrogeology

Attachments

Drawing No. 402.065983.00001.004.P0 (Phase 1 – Proposed Site Layout) by SLR Consulting

Drawing No. 402.065983.00001.003.P0 (Phase 1 – Existing Site Layout and Services) by SLR Consulting

Drawing No. 402.065983.00001.006.PA0 (Phase 1 – Proposed Site Drainage) by SLR Consulting

Drawing No. TTS/0428 (Topographical Survey) by Total Surveying Solutions Limited

Specification and details for SuDS planters by SuDS Planter

SuDSPlanter® Roof Rainwater Management System

Product Name: SuDSPlanter®

System type: Packaged Rainwater Planter

Functions: Stormwater treatment, Stormwater attenuation, Biodiversity provision

Materials: Thermoplastic powder coated **stainless steel** frame with 100% recycled plastic lumber infill or natural timber infill.

Unit dimensions (mm):	Extra Large – 2000 wide x 1000 deep x c. 950 high Large – 2000 wide x 600 deep x c.950 high Medium – 1600 wide x 600 deep x c.950 high Small – 1200 wide x 600 deep x c.950 high Extra Small – 800 wide x 600 deep x c.950 high Bespoke sizes also available Height can vary depending on degree of levelling required
Storage Capacity (m^3):	Extra Large – 0.9m^3 Large – 0.5m^3 Medium – 0.4m^3 Small – 0.3m^3 Extra Small – 0.2m^3
Weights (no soil):	Extra Large – 205 Kg Large – 175 Kg Medium – 150 Kg Small – 115 Kg Extra Small – 100 Kg
Key Components:	Integral high strength stainless steel adj. feet for levelling Outlet with integral flow control Overflow outlet Integral, vertical high-level emergency overflow High volume storage compartment High quality, guaranteed watertight liner Special pre-mixed growing media/soil

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Registered in Eng & Wales No. 11095109 Registered Office: Central Chambers, Lion Street, Abergavenny, Wales, NP7 5PE

Description

SuDSPlanter® is a packaged roof rainwater management system designed to provide stormwater treatment, retention and attenuation for roof runoff prior to discharge to downstream SuDS measures or surface water drainage systems.

Each SuDSPlanter® unit is supplied ready assembled with all internal components in place, and all required growing media/soil and required connection pipework and fittings for controlled outlet and overflow outlet.

The system consists of high-strength, thermoplastic powder coated stainless steel frame, 100% recycled plastic lumber or natural timber infill, high volume storage zone, guaranteed waterproof liner, outlet with integral flow control, overflow outlet, internal emergency high level overflow and all required specially mixed growing media/soil.

Each SuDSPlanter® unit is supplied with integral stainless steel adjustable feet to facilitate quick and easy levelling once in position

Outlets

Standard SuDSPlanter® units are supplied with a low level outlet with an integral flow control to restrict the flow to a maximum of 0.1 l/s which is achieved when the high volume storage zone in the base is full.

The discharge rate from this lower outlet is linear from 0 l/s when empty, up to 0.1 l/s when full.

There is also an overflow outlet from the top of the storage zone which discharges freely and only discharges when this zone is full. This outlet discharges at up to 4l/s intermittently in syphonic mode.

Key Features

Made from recycled and recyclable materials.

Requires no construction or assembly.

All internal components, special growing media/soil and outlet pipework supplied

Quick to install and commission

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