

YYDE
Protection of SuDS
features during the
construction phase

Ysgol Y Deri Expansion

SAB Works: Protection of SuDS Features during Construction Phase

Introduction

The performance of SuDS depends on careful planning and implementation of the works on site during the construction phase. This is important to ensure that the SuDS features are not damaged or degraded by construction activities. This document identifies the control measures to be applied to protect the various types of SuDS features across the scheme during construction.

SuDS features appropriate for this project

The following SuDS features are being constructed on this project and their protection measures are identified on the following pages:

1. Swale
2. Rain garden
3. Geo-cellular systems – attenuation tanks
4. Permeable asphalt (MUGA)
5. Permeable asphalt (access roads)
6. Permeable paving (parking bays)

2	25/01/23	Updated as per new design
1	19/07/22	First Issue
Rev	Date	Reason for Issue



Date 19/07/22

Number	Revision
YYDE/DrainSAB	2

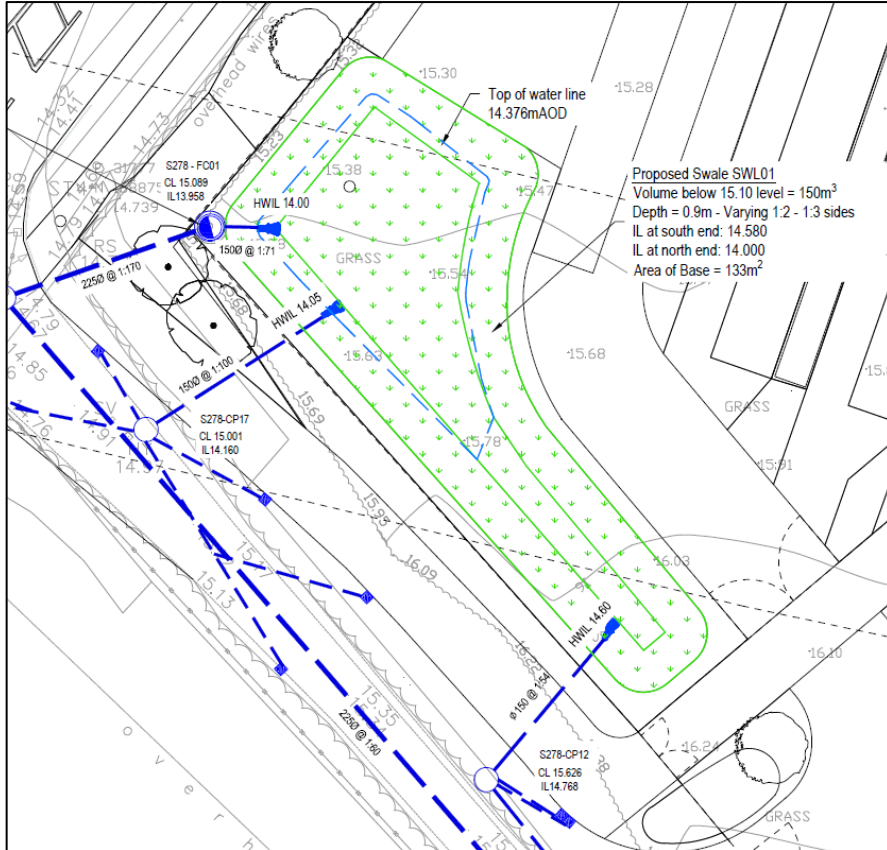
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Location Plan:



1. Swale



Location

- Multiple rain gardens around the building taking run off from hard standing and rain water pipes

Protection Control Measures

- Identify and sign protection areas e.g. buffer zones
- No construction run-off should enter the Swale
- Construction will be coordinated with the S278 road works
- Grading to be of a high standard and no undulations
- Once tilled no plant will be permitted in the basins
- Exclusion zone erected to ensure that over-compaction does not take place – no plant will drive across the basin
- Sediment matts will be used to capture any run-off

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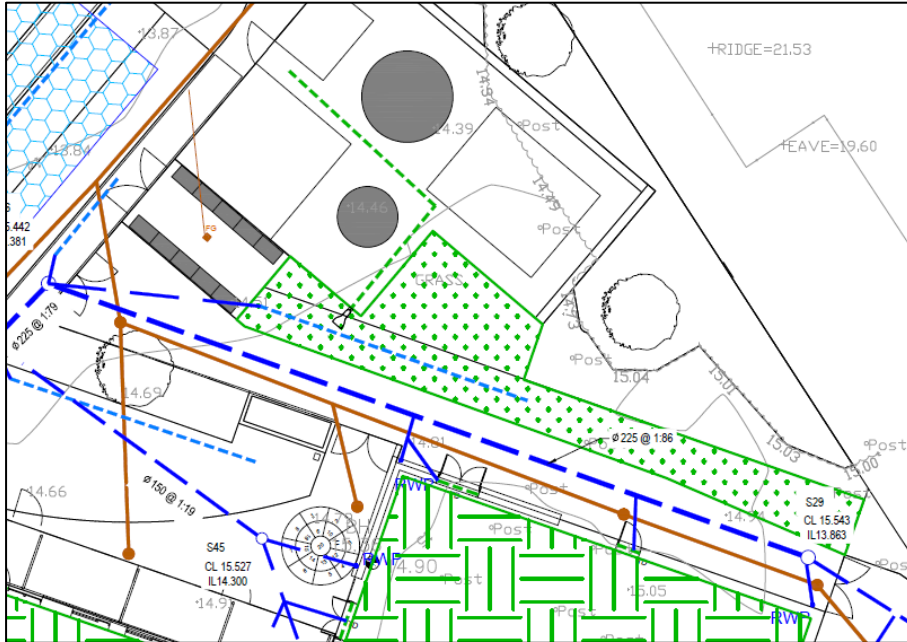
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Location Plan:



2. Rain Garden



Location

- The rain garden is to the North of the building taking run off from service yard hard standing

Protection Control Measures

- Identify and sign protection areas e.g. buffer zones
- No construction run-off should enter the raingarden
- Construction will be at the end of the programme of works
- Exclusion zone erected to ensure that over-compaction does not take place – no plant will drive across the garden
- No piling of mulch
- Geo-textiles to not be torn during construction

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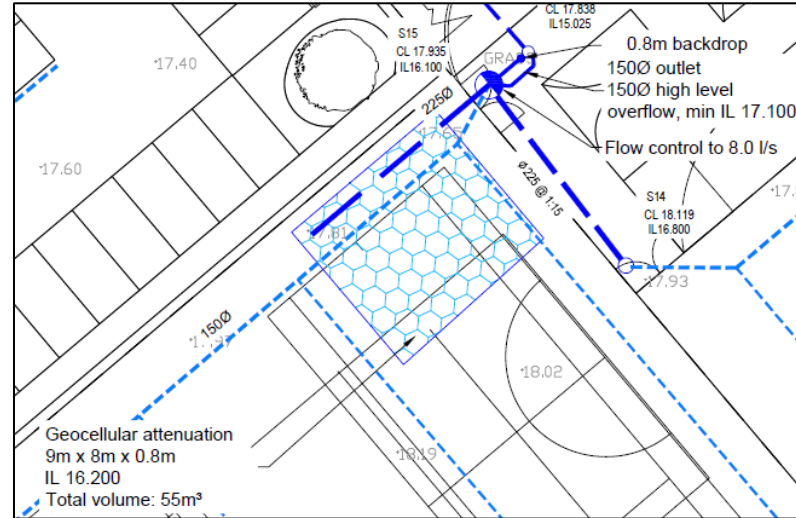
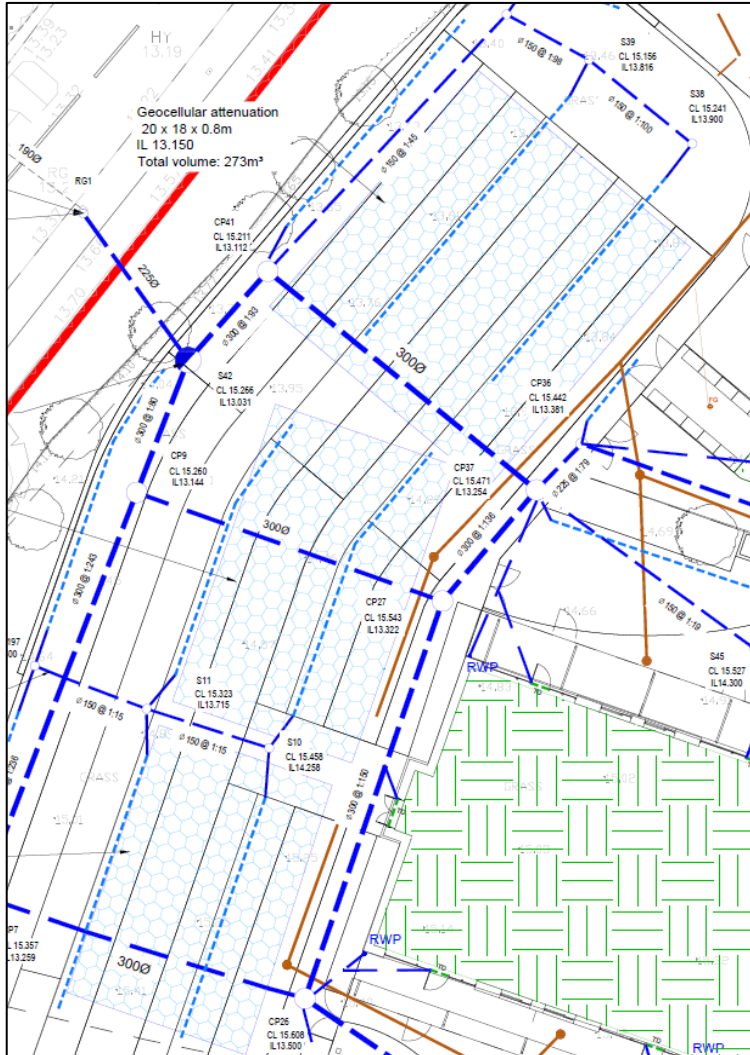
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Location Plan:



3. Geo-cellular Attenuation Crates



Location

- 3 no. large tanks positioned beneath bus drop off area, and a smaller tank located beneath the MUGA

Protection Control Measures

- Identify and sign protection areas e.g. buffer zones during construction
- Ground preparation to follow manufacturers guidance
- Backfill as per the specification with good quality material
- Only loads that are in compliance with the tank will be allowed over it – this will be controlled with an exclusion zone.
- Run-off will be prevented from entering the tanks with straw bales / sediment mats and silt netting

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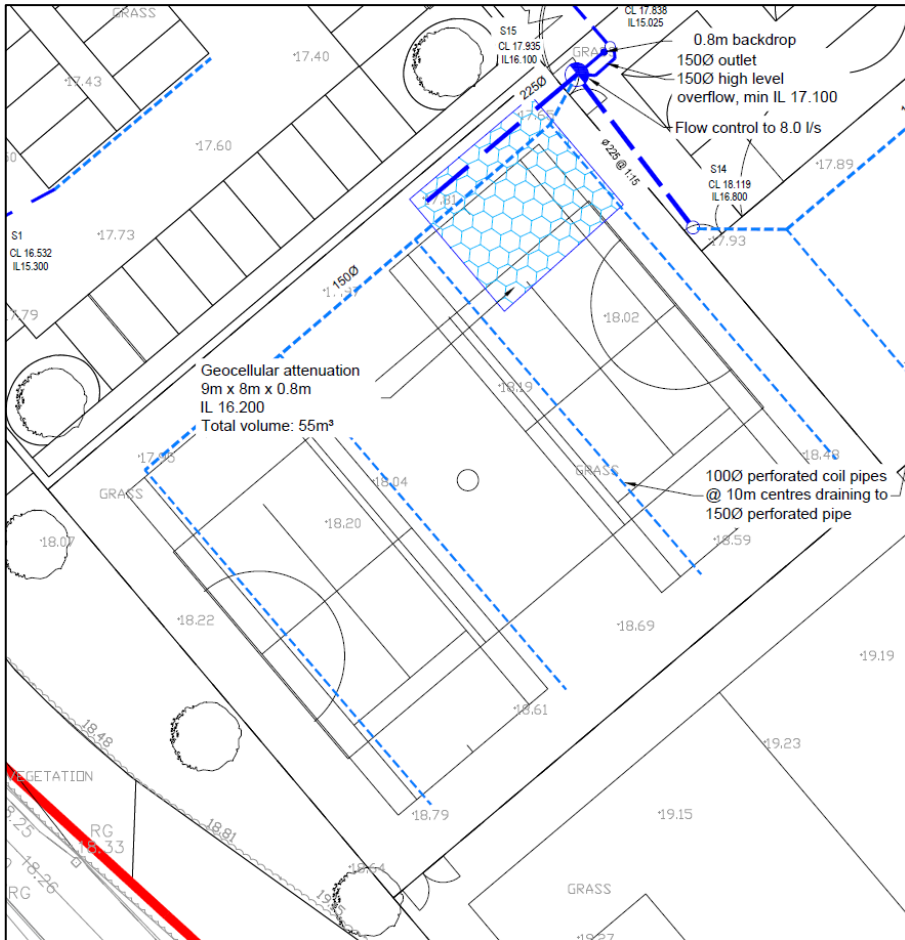
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Location Plan:



4. Permeable Asphalt (MUGA Playing Surface)



Location

- Positioned to the south of the main building between the car park and the grass / artificial pitches

Protection Control Measures

- Identify and sign protection areas e.g. buffer zones
- Exclusion zone erected to ensure that over-compaction does not take place
- No construction traffic will drive on the finished surface to minimise risk of clogging
- Finished area to be surrounded by silt fencing, as required, to avoid any run off from adjacent areas
- No soil or subsoil to be stored near to the MUGA
- Regular inspections throughout project duration

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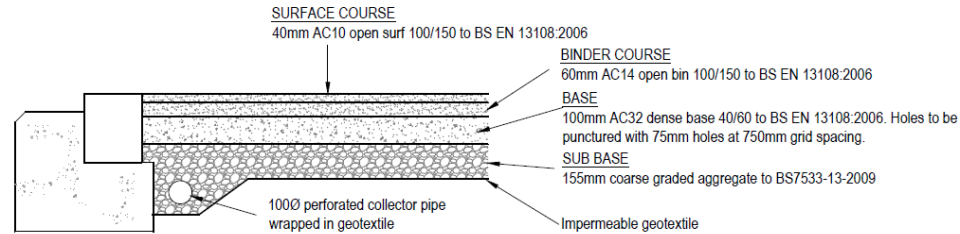
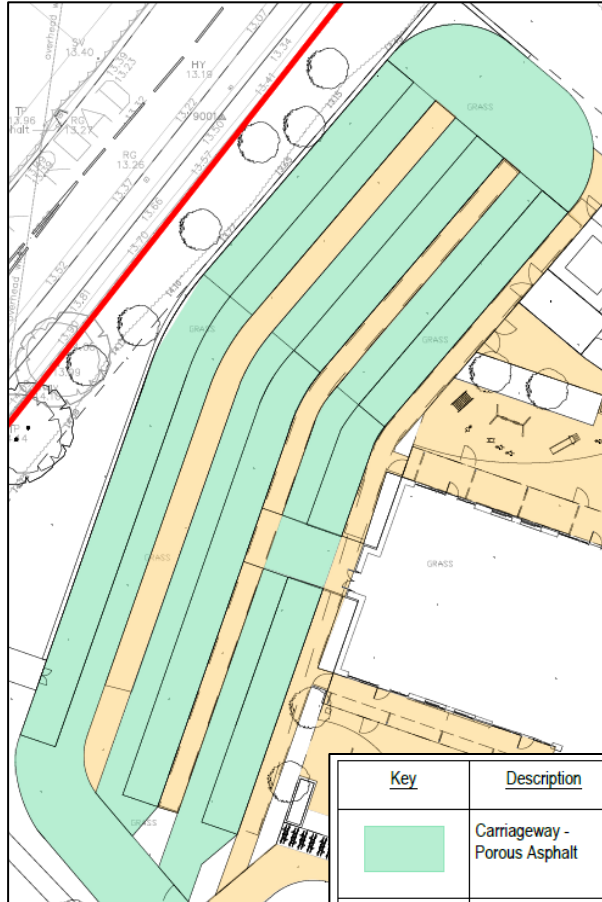
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Location Plan:



5. Permeable Asphalt (Access Roads)



POROUS ASPHALT

SCALE 1:20

Location

- Multiple vehicle access roads around site, through bus drop off area and car park

Protection Control Measures

- Roads will be constructed to base course only during main construction phase. This AC32 base has 75mm holes at 750mm grid spacings which allow it to be used for construction traffic as it avoids sediment build up
- The binder and surface courses will be installed near the completion of project and will not trafficked by construction vehicles
- No storage of soil or top soil adjacent to roadways without sufficient silt fencing installed

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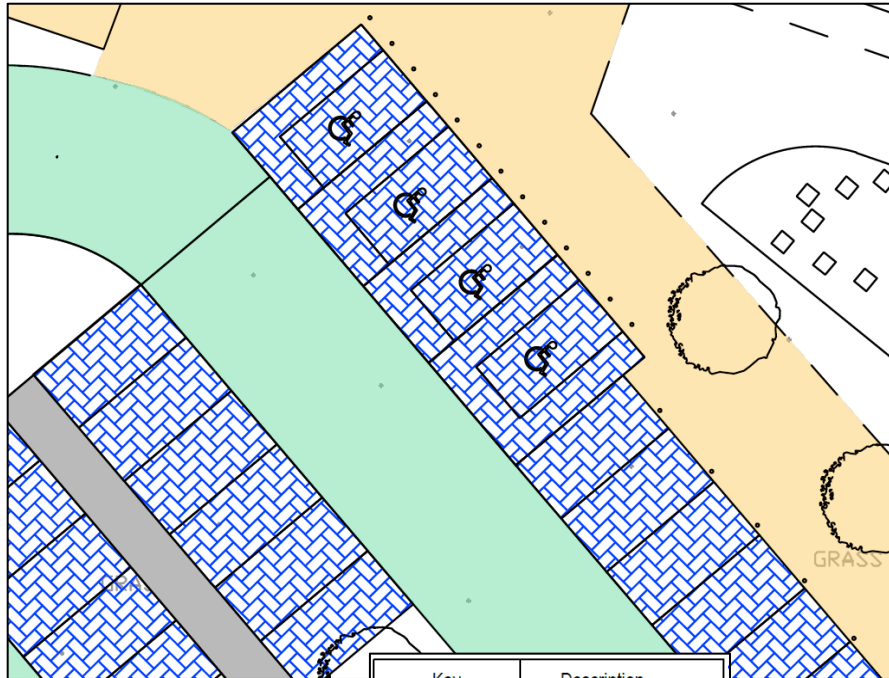
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

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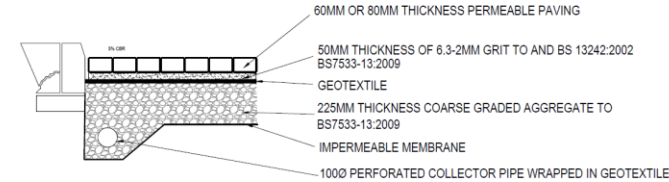
Location Plan:



6. Permeable Paving (Car Parking Spaces)



Key	Description
	Carriageway - Porous Asphalt
	Permeable Block Paving



Typical Permeable Paving Detail

Scale 1:20

Location

- Parking bays within in car park (including disabled parking bays and associated access areas)

Protection Control Measures

- Identify and sign protection areas e.g. buffer zones
- Exclusion zone erected to ensure that over-compaction does not take place to make up
- No construction traffic will drive on the finished surface to minimise risk of clogging
- Finished area to be surrounded by silt fencing, as required, to avoid any run off from adjacent areas
- No soil or subsoil to be stored near to the car park
- Regular inspections throughout project duration

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