

COLLEGE ROAD**Flood Risk & Drainage – Amendment of Drainage Strategy**

07/11/2023

REVISION	PREPARED	CHECKED
P1	RS	RW

PURPOSE OF DOCUMENT

This note has been prepared to summarise the changes in drainage strategy since the approved planning application (21/01999/F) for the proposed works at the site College Road, in Bristol and provide the required information to discharge the drainage related pre-commencement condition. In summary, the strategy has been kept the same with the only changes arising from design development.

RELEVANT INFORMATION

The following lists the relevant drawings and information that should be read in conjunction with this technical note to provide necessary evidence that the drainage strategy has reached a detailed level of design.

- CRB-WWS-XX-XX-D-C-01000 – Proposed Drainage Layout
- CRB-WWS-XX-XX-D-C-01001 – Manhole Schedules
- CRB-WWS-XX-XX-D-C-01010 – Proposed Levels
- CRB-WWS-XX-XX-D-C-01020 – Pavement Details
- CRB-WWS-XX-XX-D-C-01030 – Drainage Details Sheet 1
- CRB-WWS-XX-XX-D-C-01030 – Drainage Details Sheet 2
- CRB-WWS-XX-XX-T-C-00001 - Below Ground Drainage General Specification
- P451392 College Road Flow Output
- Geodyne, West Car Park Phase II Exploratory Investigation, June 2021

CHANGES IN STRATEGY

In principle, the drainage strategy is largely the same as the strategy issued within the initial planning application. In lieu of any infiltration test results, the initial strategy assumed infiltration was not feasible given the ground conditions. However, since the planning application was submitted, soakaway tests have been conducted and found that a sufficient rate is present to allow infiltration. The strategy was therefore

changed to split the single attenuation tank into three soakaway crates to encourage the site to infiltrate, in line with the discharge hierarchy. This removed the connection of surface water to the public foul water sewer and therefore minimising sewer flood risk. One of the three soakaway crates (attenuation tank 2) is to drain the adopted highway only, the remaining two crates will infiltrate runoff from all remaining positively drained areas.

The strategy has been remodelled on Causeway Flow to check the tanks are sufficiently sized to ensure no onsite flooding for all storm events up and including the 1in100 year storm event plus 40% allowance for climate change. The results show all crates meet the half drain down time within 24 hours as detailed in BRE Digest 365 and the West of England Sustainable Developers Guide. All soakaways are sited at least 5m from any building, structure, adoptable road, or site boundary. Details of the soakaway crates have been provided in the enclosed detail sheets.

Additional Maintenance Requirements

The maintenance requirements set out in section 5 of the drainage strategy produced by Hydrock for the planning application remain valid. As the attenuation tanks will be allowed to infiltrate, a maintenance regime is important to prevent silt build up and maintain their operational state. No further maintenance requirements are required on top of the table detailing the maintenance requirements for buried cellular tanks. It is expected the maintenance for all SuDS on site will be picked up as part of the wider site maintenance plan.