

**DRAINAGE STRATEGY**  
**FOR**  
**FULL PLANNING APPLICATION FOR 4 NO.**  
**DWELLINGS, HIGHWAYS IMPROVEMENTS AND A**  
**PROPOSED CHURCH (PLACE OF WORSHIP)**



**KERRY ROAD**  
**ABERMULE**

November 2016



---

## INTRODUCTION

---

- 1.1 This overview has been prepared in support of a planning application by the Dolafon Gospel Trust for 4 no. dwellings, highways improvements and a proposed church (place of worship) on land north of Kerry Road, Abermule.
- 1.2 The report is submitted with and as part of a planning application to the Local Authority.

---

## **2.0 FOUL WATER DRAINAGE**

---

- 2.1 Research has located a Water Company sewer in Kerry Road at the junction of Kerry Road and Court Close. The sewer is 150 mm in diameter, approximately 2.5 metres deep and about 4 metres below the suggested floor level of the building (99.00 m AOD). It is expected that, subject to approval by the Water Company under the Water Industry Act 1991, a gravity connection will be made to this sewer.
- 2.2 The new connection to the existing sewer in Kerry Road will pass under Kerry Road for the first 50 metres before entering the site at the proposed new access road. It is anticipated that this sewer will be designed to serve the adjacent housing development and will be offered for adoption by the Water Company under Section 104 of the Water Industry Act 1991.

---

## 3.0 SURFACE WATER

---

- 3.1 A detailed Flood Risk Assessment has been prepared by Mr. David Floyd, consultant hydrologist/water resources engineer, in October 2016.
- 3.2 The report concludes that:-
- 1) The site is not subject to flooding;
  - 2) The proposed building will not flood;
  - 3) The ground is suitable for ground infiltration techniques (SUDs) so that the nett increase in surface water flows from the site will be nil.
- 3.3 It should be noted that the infiltration test parameters used in the report are not appropriate for the design of soakaways. It is recommended that Building Research Digest 365 (BRE 365) is used for the design of soakaways. However, in support of the planning application, the author has extrapolated the equivalent infiltration rates in accordance with the BRE 365 from the Floyd report and rates between  $4.36E^{-06}$  and  $6.0E^{-04}$  m/s have been determined with an average of  $2.53E^{-04}$ . The rate of  $2.53E^{-04}$  is an entirely suitable rate for the design and implementation of ground infiltration techniques (SUDs). It is, however, recommended that further investigation is undertaken, should planning permission be granted, to determine the most suitable location of soakaways, particularly for the building drainage as it is expected that the car parking will be surfaces with permeable materials.

**Doug Hughes RIBA**

**OCTOBER 2016**