

Land at Cae Stanley Bontnewydd Water Conservation Statement

Kingscrown Land & Commercial Ltd Suites 7 - 10 Prudential Buildings 61 St Petersgate Stockport SK1 1DH Tel: 0161 820 8036 Email: dr@kingscrown.group www.kingscrown.group/

March 2023



CONTENTS

PAGE

1.0	Introduction	2
2.0	Surface Water Management	3
3.0	Foul Water Discharge	5

1.0 Introduction

- 1.1 This Water Conservation Statement has been prepared in support of a full planning application for residential development comprising 24 dwellings, arranged as a mixture of one- and two-bedroom cottage flats (Class C3), including car parking, landscaping and a new access ('the Proposed Development') on 1 acre of land off Cae Stanley, Bontnewydd, Caernarfon ('the Application Site'), in accordance with Policy PCYFF6 of the Anglesey & Gwynedd Joint Local Development Plan.
- 1.2 Policy PCYFF6 of the Anglesey and Gwynedd Joint Local Development Plan deals with Water Conservation and states that:

"Proposals should incorporate water conservation measures where practicable, including Sustainable Urban Drainage Systems (SUDS). All proposals should implement flood minimisation or mitigation measures where possible, to reduce surface water runoff and minimise its contribution to flood risk elsewhere.

Proposals greater than 1,000 m² or 10 dwellings should be accompanied by a Water Conservation Statement."

1.3 The Application is accompanied by a Flood Consequence Assessment and Drainage Strategy (Ref. ECL.9516.R05.001) which provides further details on the proposed management of runoff form the Proposed Development.



2.0 Surface Water Management

- 2.1 As part of the Welsh Government Standards the management of surface water runoff from developments should be prioritised with reference to the choice of discharge destinations. The priority hierarchy is listed below:
 - 1. Collect for re-use;
 - 2. Infiltrate to ground;
 - 3. Discharge to a surface water body;
 - 4. Discharge to a surface water sewer and/or highway drain; and
 - 5. Discharge to a combined sewer.
- 2.2 The proposed development is for 24 x one and two bedroom cottage flats. Whilst the first priority is rainwater harvesting (for re use) it was considered and deemed not suitable. From a cost/benefit approach, individual single property systems are considered to be unsuitable. A shared communal system was also considered but deemed inappropriate with regard management and maintenance. The provision of rainwater butts will be promoted to provide some rainwater re-use for garden maintenance and rain gardens will be considered.
- 2.3 The second priority is to consider infiltration of surface water runoff into the ground. The site generally falls from the South and East to the North and West, falling towards the watercourse.
- 2.4 Datrys undertook porosity tests at the site of a proposed new housing development on the 1st & 2nd February 2023. The findings indicate that the site ground conditions vary across the site with areas of the site offering no capacity for infiltration whilst the western side of the site suggests a good capacity for infiltration. However, the depth of suitable ground is limited to approximately 1.4m with the underlying strata consisting of a predominately clay soil.
- 2.5 Based on this it is considered that soakaways should not be relied upon as the primary means of managing surface water across the whole site since a) infiltration rates were poor.
- 2.6 Due to the variedness of the sites permeability it is envisaged that the majority of the proposed SUDs devices will be designed without an allowance for infiltration whilst the main site attenuation basin will utilise infiltration as well as positive outfall to the Afon Beuno



- 2.7 The third priority is to consider discharge to a surface water body. The Afon Beuno (an Ordinary Watercourse) runs to the north and west of the Application Site. The watercourse is recorded on the Natural Resources Wales Long Term Flood Risk Maps. As per the findings and proposals within the submitted Flood Consequence Assessment, and as referred to above, the development proposals include provision for discharge of surface water runoff from the site into the watercourse via the SUDs basin. The proposed choice of surface water runoff destination will therefore be a combination of SUDs and discharge into the watercourse.
- 2.8 Discharge to surface water sewers/highway drains or combined sewers has not been considered.

3.0 Foul Water Discharge

- 3.1 The foul water generated from the proposed development will connect to the existing foul sewer on Lon Caethro south of the site.
- 3.2 The onsite drainage system will be designed in accordance with the requirements of Part H of the Building Regulations 2015.