

Drainage Statement

Ref: 14325

Date: 10 January 2020

Subject: Kingspark – Justification of Attenuated Surface Water Discharge Rate

Introduction

Persimmon Homes North Scotland Ltd attended a monthly SuDS meeting at Dundee City Council offices on 27th November 2019 to discuss the above project.

The basis of the discussions were to respond to [REDACTED] (Dundee City Council) email of 14 November 2019.

This Drainage Statement formalises the justification provided and agreed at the meeting in relation to Point 4 of the above noted email:

Calculations/statement to be submitted to demonstrate that the attenuated surface water discharge from the development site to the Gelly Burn culvert (1.5l/s during the 1:30 year event plus allowance for climate change and 1.8l/s during the 1:200 year event plus allowance for climate change) will not increase flood risk elsewhere. If any other additional flow is to be introduced to the culvert/Gelly Burn (ie. from the cut off drainage to side slope in the southern part of the site, then calculations/statement to be submitted to demonstrate that this additional flow will not increase flood risk elsewhere.

Proposed Attenuated Surface Water Discharge Rate

To accommodate increases in predicted climate change from the original design, and the requirement to redesign the basin in accordance with FEH rainfall (previously FSR), it is proposed to increase the attenuated surface water discharge rate to 2 litres/second/hectare.

For the proposed development area of 2.86 hectares, this equates to a run-off rate of 5.72l/s for the M30 plus climate change allowance.

As discussed and agreed at the meeting of 14 November 2019, this represents a significant betterment from the existing situation, where the greenfield run-off currently discharges unrestricted to the culvert in Gillburn Road via existing gullies.

Greenfield run-off rate is generally accepted as 5 litres/second/hectare for a site of this nature, generating a pre-development run-off rate of 14.3l/s for 2.86 hectares.

Summary

The amended post-development attenuated discharge rate (5.72l/s) will provide significant betterment to the existing flows (14.3l/s) to the culvert and will therefore not increase flood risk elsewhere.