

DRAINAGE & FLOOD RISK CONSULTATION

PROJECT: Proposed Concrete Crushing and Soil Recycling Facility.

Reference: WSCC/041/19

Revisions:

Date: 14 June 2019

Recommendation: No Objection

1 INTRODUCTION

- 1.1 West Sussex County Council (WSCC) has been consulted on the above proposed development in respect of flood risk & drainage strategy.
- 1.2 The LLFA considers the proposed drainage strategy to be acceptable, in principle; however, revised calculation of storage requirements for storm water is sought as set out in Section 3. In view of the low level of flood risk associated with the proposed development, the LLFA is recommending that the clarification on storm water volumes is conditioned as set out in Section 5.

2 FLOOD RISK

- 2.1 The site is located within Flood Zone 1 as defined on The Environment Agency mapping.
- 2.2 The developable site area is 0.51 ha (para 3.7.1 of Drainage Strategy). As there are no significant existing flood risk issues for the site, an FRA is not required.
- 2.3 The LLFA concurs with the assessment of flood risks set out in the Drainage Strategy.

3 SURFACE WATER

- 3.1 The West Sussex LLFA Policy for the Management of Surface Water:

 https://www.westsussex.gov.uk/media/12230/ws Ilfa policy for management of surface

 water.pdf sets out how information for FRAs / Drainage strategies to support planning applications is to be presented.
- 3.2 Attention is drawn to paragraph 5.3.3 of the above policy regarding the use of appropriate values for Cv in MicroDrainage calculations and to SuDS policy 3 that states: *storage* calculations should be based upon FEH rainfall values.
- 3.3 Clarifications from the applicant are sought to the following queries:

- The storage simulation provided in Appendix H is based upon the 1:30 Storm (+CC) and no data has been presented for the 1:100 storm event (+CC). It is also unclear from the Drainage Strategy what the design volumes for the two detention ponds and swale are and the nature of exceedance flows and how these are being manage. This information needs to be provided pre-commencement of works.
- What storage values are generated from the MicroDrainage Simulations using an FEH rainfall model and recommended values for Cv?
- Explanation is sought for the statement on page 1 of Appendix H: *Outflow is too low. Design is unsatisfactory*.

4 SUMMARY & CONDITIONS

- 4.1 The LLFA considers the proposed drainage strategy to be acceptable, in principle. However, additional information is sought as evidence to underpin the statement in para 5.2.4 of the Drainage Strategy: Any water up to a 1 in 100 year storm event including 40% climate change will be attenuated within the curtilage of the site in the proposed drainage system.
- 4.2 In view of the low flood risk for the site, it is recommended that grant of planning permission for the application is conditioned as follows:
 - a) No work shall commence until an addendum to the Drainage Strategy is provided responding to the clarifications sought in Section 3 of this response;

In addition, the following pre-commissioning condition is recommended:

b) The site is not to be commissioned until a Verification Report pertaining to the surface water drainage system, carried out by a Chartered Engineer, has been submitted to the Local Planning Authority which demonstrates the suitable operation of the drainage system such that flood risk is appropriately managed, as approved by the Lead Local Flood Authority. The Report shall contain information and evidence (including photographs) of earthworks; details and locations of inlets, outlets and control structures; extent of planting; details of materials utilised in construction including subsoil, topsoil, aggregate and membrane liners; full as built drawings; and topographical survey of 'as constructed' features;

R C Drabble Flood Risk Engineer (Sustainable Drainage) Residents' Services – Highways and Transport West Sussex County Council