

SITE: Town Farm Poultry Unit, Town Farm Road, Castle Frome, Ledbury, Herefordshire HR8 1HQ

TYPE: Planning Permission

DESCRIPTION: Erection of 2 No. additional poultry buildings and associated infrastructure on established poultry farm

APPLICATION NO: 172144

GRID REFERENCE: OS 366061, 246061

APPLICANT: Mr Paul Davies

AGENT: Mr Ian Pick

DATE OF THIS RESPONSE: 15th August 2017

Introduction

This response is in regard to flood risk and land drainage aspects, with information obtained from the following sources:

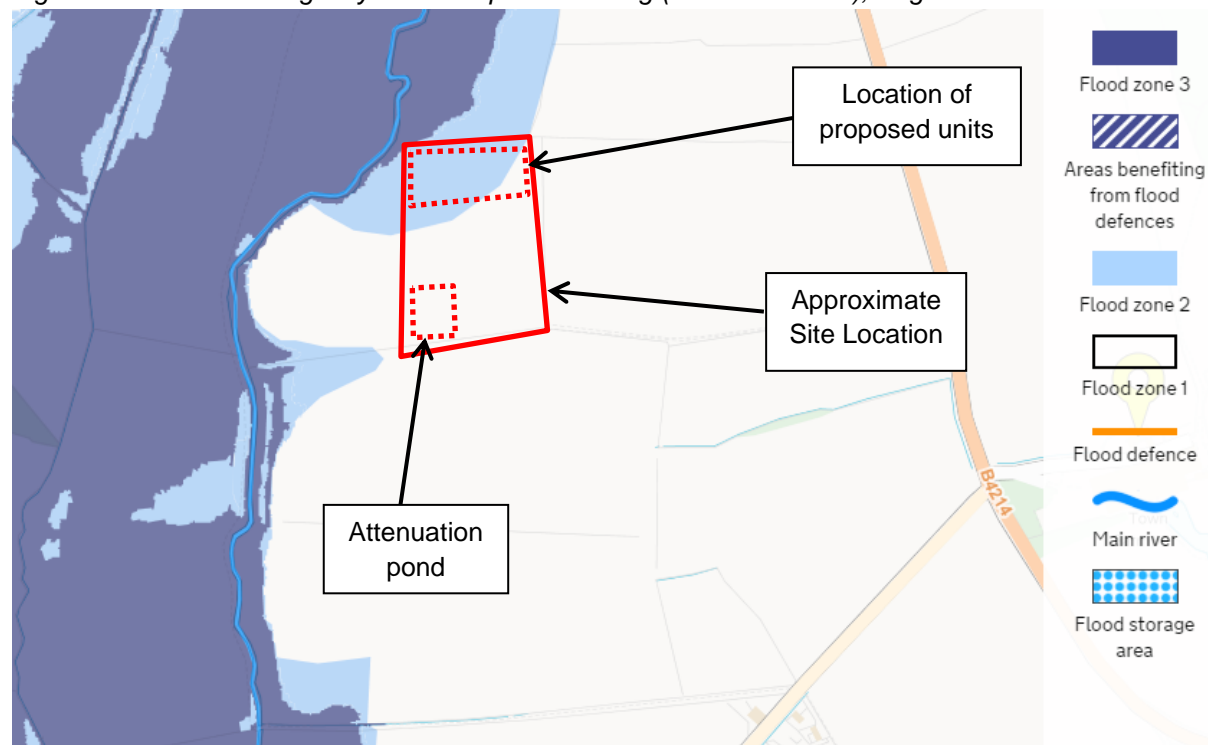
- Environment Agency (EA) indicative flood maps available through the EA website.
- EA groundwater maps available through the EA website.
- Ordnance Survey mapping.
- Cranfield University Soilscales mapping available online.
- Strategic Flood Risk Assessment for Herefordshire.
- Core Strategy 2011 - 2031.

Our knowledge of the development proposals has been obtained from the following sources:

- Application for Planning Permission;
- Location Plan (Ref: IP/DP/02);
- Existing Plans inc. topography (Ref: IP/DP/01)
- Proposed Plans (Ref: IP/DP/03);
- Flood Risk Assessment (Ref: K0809/1);

Site Location

Figure 1: Environment Agency Flood Map for Planning (Rivers and Sea), August 2017



Overview of the Proposal

The Applicant proposes the construction of 2 additional poultry building to the north of 4 existing poultry buildings. The proposed poultry units cover an area of approx. 1.0ha and is currently used as a Greenfield site (adjacent to existing poultry units to the south). The River Frome is located approx. 15m to the west of the proposed development site. The topography of the site slopes down from approx. 71m AOD in the northeast to approx. 70.4m AOD in the southwest and 72.7m AOD in the northwest.

Flood Risk

Fluvial Flood Risk

Review of the Environment Agency's Flood Map for Planning (Figure 1) indicates that the proposed poultry buildings are located within the medium risk Flood Zone 2 and partly within the low risk Flood Zone 1. Flood Zone 1 comprises land assessed as having less than a 1 in 1,000 annual probability of river flooding. Flood Zone 2 comprises land where the annual probability of flooding from fluvial sources is between 1% and 0.1% (between 1 in 100 and 1 in 1000).

This planning application has been supported by a Flood Risk Assessment (FRA) which states that the Environment Agency Flood Map is not accurate. We concur with this technical assumption. Based on the Environment Agency mapping, the extent of Flood Zone 3 extends to approx. 70.2m AOD. The proposed poultry buildings are at 71.2m AOD existing ground levels. The Applicant has not stated the finished floor levels of the proposed broiler units. The finished floor levels should demonstrate that risk of fluvial flooding has been mitigated. As there is around 1m of freeboard between the existing Flood Zone 3 extent and the proposed site, we consider that there is sufficient freeboard to cater for increased levels arising from 20% climate change.

The Applicant should refer the Applicant to Environment Agency Standing Advice for the requirements of their development in the identified flood zone. (<https://www.gov.uk/guidance/flood-risk-assessment-standing-advice>).

Other Considerations and Sources of Flood Risk

Review of the EA's Risk of Flooding from Surface Water map indicates that the site is not located within an area at significant risk of surface water flooding. Review of the EA's Groundwater map indicates that the site is not located within a designated Source Protection Zone or Principal Aquifer.

Surface Water Drainage

The Applicant is proposing to extend the existing attenuation pond to accommodate the surface water runoff from the additional poultry units. It is proposed to have 1 in 3 slopes and it has been assumed that no infiltration occurs through the base or sides of the pond.

We note that the base of the pond is around 400mm lower than the Flood Zone 3 extent (70.2m AOD). We consider it would be beneficial to redesign the pond with a higher outlet pipe. This may result in standing water forming at the base of the pond, one option could be to backfill this. Based on the topographical survey it appears possible to attenuate the flows at a higher level. The Applicant should consider a revised design.

Also, it has been noted that not enough freeboard was provided in the design. We request that 300mm of freeboard is provided above the 1 in 100 year + 20% Climate Change event.

The hydro-brake optimum vortex control has a design outflow of 2.9l/s which ensures that the post-development runoff rate has not exceeded the pre-development runoff rate. The hydro-brake needs to be accessible and built into a headwall to allow for maintenance.

The drainage system should be designed to ensure no flooding from the drainage system (which can include on-the-ground conveyance features) in all events up to the 1 in 30 year event. The Applicant must provide details of the proposed pipework to ensure that the surface water runoff will be effectively conveyed the attenuation pond.

Foul Water

The Applicant is proposing to use a dirty water tank. The Applicant should provide further information in regards to ensuring that no water during wash down events will get into the attenuation pond. Non-return diverter valves should be used.

Overall Comment

We recommend that the following information is provided prior to the Council granting planning permission:

- Details regarding the sizing of the drainage pipework which conveys surface water flows from the proposed broiler units to the attenuation pond;
- Redesign of the attenuation pond including 300mm of freeboard above the 1 in 100 year + 20% Climate Change event. The Applicant should provide revised calculations to support the design of the pond.

Once the above information has been submitted and approved, should the Council be minded to grant planning permission, the following information should be provided within suitably worded planning conditions:

- Details to demonstrate that dirty water will not get into the attenuation pond.

Please refer to “Herefordshire Council Planning Applications: Flood Risk and Drainage Checklist” (Ref: RCLHP001-AM0070-RP-003) for details of the documentation to be submitted for planning applications.