

FLOOD RISK ASSESSMENT

Proposed Development of a Mews of 6 Residential Dwellings

within the grounds known broadly as West Barn, Old Dairy Lane, Norton, Aldingbourne PO20 3AF

Development classification: Residential development is classified as “More Vulnerable” as defined in Table 2 of the Technical Guidance to the National Planning Policy Framework.

Relevant Historic Flood Risk Assessment:

Reference has been made to a Flood Risk Assessment prepared by Monson Engineering Limited dated 10th October 2014 for previous and comparable application on this site. The Monson report was prepared as Environmental Agency Mapping data at the time suggested the site was located close to flood zone 3a.

Subsequently and as a response to the Monson report, a Letter from the Environment Agency (HA/2008/104649/01-L01 dated 15 August 2008) confirmed and concluded as follows:

1. 'On further investigation this [the flood zone designation] appears to be inaccurate in terms of flooding.'
2. '... we have no objection in principle to the proposal but at any planning application stage it will be necessary for a Planning Condition to be imposed where finished floor levels should be set 300mm above existing ground levels.'
3. 'There would however be little benefit in registering with the flood warning service as the area is not covered by telemetry for the purposes of flood forecasting.'
4. With regards to surface water disposal we are encouraged it is proposed to utilize a Sustainable Drainage System (SuDS). Any system needs to be designed to accommodate a 1 in 100 year event plus 20% for potential climate change factors'.
5. 'If soakaways are considered, generally we would advise that infiltration rates for soakaways be based on permeability tests undertaken over the winter period and not done during drier months. The design should be based on Building Research Establishment (BRE) 365 and cater for the 1 in 10 year storm between the invert of the entry pipe to the soakaway and the highest recorded water table. It should have provision to ensure there is capacity in the system to contain below lowest ground level the 1 in 100 year plus 20% on stored volumes.'

Sequential Test: As the Environment Agency have confirmed the site is not at flood risk the assumption is that a classification of flood zone 1 can be made and as such the Sequential Test can be passed.

Exception Test: As flood zone 1 the Exception Test does not apply.

Flooding Information:

By reference to:

<https://flood-warning-information.service.gov.uk/long-term-flood-risk>

For the broader site of:

WEST BARN, OLD DAIRY LANE, NORTON, CHICHESTER, PO20 3AF

The following results are reported:

Rivers and the sea: Very low risk

Surface water: Very low risk

Flooding from Reservoirs, canals and other artificial sources: None

Flooding from Groundwater: The SFRA produced by Arun District Council recognises that groundwater flooding can be an issue in the district but has not identified this particular flood risk at Aldingbourne

Existing Surface water drainage: The existing use of the land is as a tennis court which is impermeable with no formal drainage.

Proposed surface water discharge: to new soakaways designed for the 1 in 100 year plus climate change event. The run-off when the proposal is completed will therefore be significantly less than the present site conditions.

Localised Flooding: In previous applications within the locality it has been reported that Highway flooding along Norton Lane has occurred in the past but drainage works undertaken by the Highway Authority have rectified this problem.

The risk following a failure of the defences: There are no flood defences which protect this property so the residual risk is not applicable.

General Ground Levels at the tennis court: 15.7m ODN

Proposed Ground Floor Slab Level: minimum 16m ODN

Soakaway Capacity: Above and beyond the previous narrative, it is noted on Arun Planning Application Reference: AL/34/20/PL that Arun Drainage Engineers have stipulated there should be capacity to contain below ground level the 1 in 100 year event plus 40% stored volumes as an allowance for climate change. This parameter is respected and considered the design criteria for this proposal.

NAB/LAB: 21/08/2020