

FLOOD RISK ASSESSMENT

FOR

PROPOSED REPLACEMENT DWELLING

AT

SILVERWOOD GARDEN CENTRE

BROWNSGATE

LONG SUTTON

LINCOLNSHIRE

PE12 9AU

1 DEVELOPMENT DESCRIPTION AND LOCATION.

1a Type of development and Location

The proposal is for Planning Approval for a Replacement Dwelling of one two story property

The site is part of Silverwood Garden Centre Brownsgate Long Sutton Lincs.

PE12 9AU

1b Vulnerability Classification

The development for a Residential development falls within Zone 3 of both the Environment Agency and South Holland District Councils Flood Maps.

1c Local Development Documents

The proposal is consistent with the relevant aspects of the Local Development Plan.

1d Sequential Test/Exception Test

The site is 0.665hectares and is for a Single Dwelling.

In terms of the sequential test there is no other similar land in the vicinity in the ownership of the applicant for the purposes of the test there is no other suitable land, or any alternative land that is at less risk in the immediate locality.

2 DEFINITION OF THE FLOOD HAZARD.

2a Sources of flooding that could affect the site.

The primary possible source of flooding of the site would be either from rivers or the sea, if there were no flood defences. This area could be flooded:

- from the sea by a flood that has a 0.5 per cent (1 in 200) or greater chance of happening each year;
- or from a river by a flood that has a 1 per cent (1 in 100) or greater chance of happening each year.

Extreme rainfall could be another possible cause of flooding.

2b Identified flooding sources – how they might affect the site.

Fluvial flow and overtopping of the embankments would not inundate the site rapidly as the site is located further away from the source than much of the more prone areas closer to the sea or river. Any flooding scenario would be likely to be signalled well in advance with flood warnings, weather reports and local observations as to water levels within the river.

Extreme rainfall on the site should not have a major effect, as the site stands alone, has well drained surfaces.

2c Existing surface water arrangements.

The adjacent existing properties are served by soakaways.

3 PROBABILITY

3a Flood Zone

The site is within Flood Zone 3

3b Existing Surface water rates and volumes of run off generated by the site.

The site will not generate any significant additional surface water run off as the site contains extensive buildings and tarmacked areas.

4 CLIMATE CHANGE

4a How is flood risk at site likely to be affected by climate change

The site may be at risk if sea levels and river flows increase with climate change.

The site may be at increased risk if rainfall increases with climate change.

In mitigation the proposed dwellings can be built in accordance with e the latest Environment Agency recommendations thus reducing any risk to a minimal level.

5 DETAILED DEVELOPMENT PROPOSALS.

5a Details of the proposed development

Please see drawings Numbers 1539-01, 1539-02 and 1539-03

Application is for the Replacement of a single two storey dwelling. F.F.L. 2.90

6 FLOOD RISK MANAGEMENT MEASURES

6a How will the site be protected from flooding, including the potential impacts of climate change over the developments lifetime.

The site sits some distance away from any rivers the nearest being the Nene on which the banks have been strengthened and raised and there are large areas of flood plain adjacent to the river.

The site sits some distance away from the sea and the existing defensive banks are in good condition. They were not breached in the 2013 tidal surge.

Occupiers of the property should register with the Environment Agency's Floodline Warnings Direct Service. If a very high tide is predicted (greater than 6.50m OD) then the occupiers are advised that they should make preparations to monitor the situation and evacuate the building for the duration of the very high tide. They should drive or walk to the central area of Long Sutton or be advised of a safer place to go.

On site surface water drainage should be discharged into soakaways and these should be designed to BRE Digest 365 and approved under Building regulations.

The proposed new dwelling will have its floor level raised to 600mm above that of the surrounding ground levels.

The building will incorporate flood resilient construction to a minimum of 500mm above the predicted Flood level.

7 OFF SITE IMPACTS

7a How will you ensure that your proposed development and measures to protect your site from flooding will not increase flood risk elsewhere.

By observation they will not because the main risk is from a breach of Sea/River defences and there will minimal additional storm water runoff.

7b How will you prevent run-off from the completed development causing an impact elsewhere.

Because the development is for a single dwelling to replace existing buildings and hardstandings there will be minimal increase in storm water runoff and new more efficient soakaways will be constructed as part of the development.