RESIDENTIAL DEVELOPMENT ON LAND OFF CRADGE BANK SPALDING

RESPONSE TO LETTER FROM ENVIRONMENT AGENCY DATED 29th JULY 2022

Environment Agency Reference AN/2022/133290/01-L01

South Holland DC Reference H16-0673-22

Introduction

This response should be read in conjunction with the topographical survey by Axis Surveys Ltd dated 10th February 2022 which was submitted with the outline application reference H16-0668-16.

Flood Risk Assessment dated 15th February 2021

The following paragraph is reproduced from the above flood risk assessment. The location of the cross section shown on page 2 of this report has been added to the plan.

The map showing the predicted flood depth in a 1 in 1000 year event in 2115 is shown below.



It can be seen that the predicted flood depth across most of the site is between 500mm and 1.0 metre. The maps showing the 1 in 100 year and the 1 in 1000 year predicted flood depths are almost identical.

If the levels along Spalding Common shown on the topographical survey are compared with the flood depths shown on the section of the road on the map above it can be shown that the length that is not predicted to flood is higher than 3.35m ODN and the length of road where flooding is predicted to happen is lower then 3.35m ODN.

The average level of the northern section of Cradge Bank is 2.45m ODN and the predicted flood depth is between 500mm and 1.0 metre, and therefore this would add weight to the calculated highest flood level of 3.35m ODN.

The greater part of the site where the flood depth is predicted to be between 500mm and 1.0 metre is at a level of between 2.35m and 2.60m ODN, which again fits with a

predicted flood depth of 3.35m ODN. There are a few other areas lower than 2.35m ODN which are shown in the 500mm – 1.0m (orange) band.

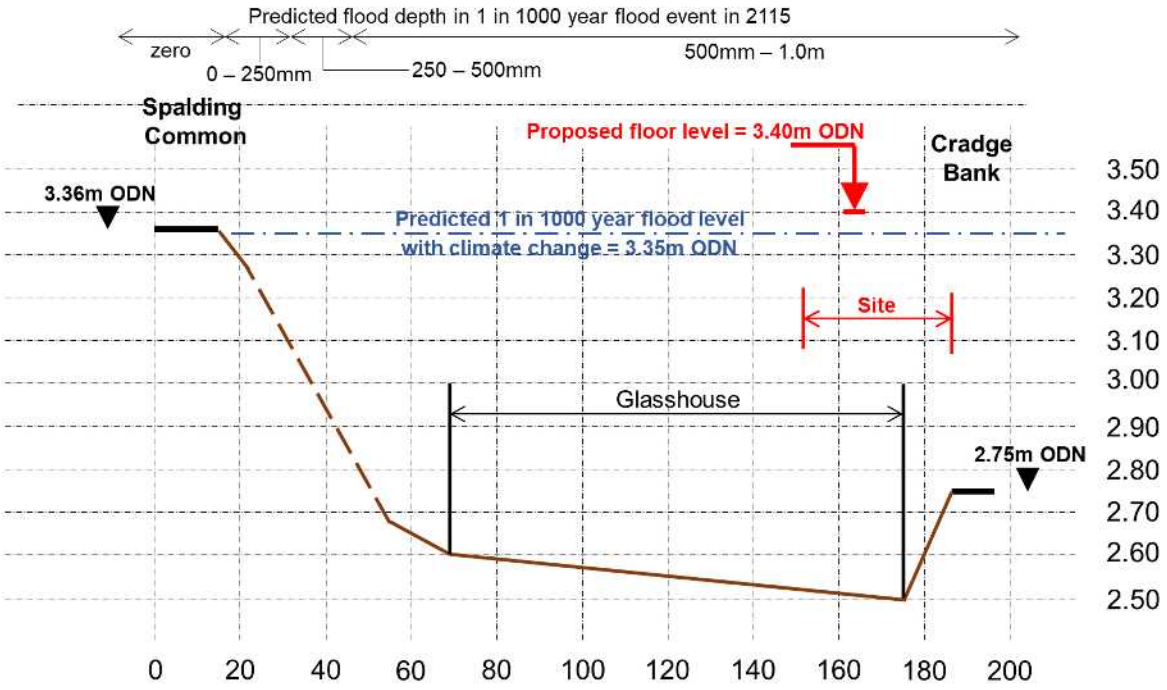
Therefore the conclusion is that the best estimate of the maximum predicted flood level in a 1 in 1000 year event in 2115 is 3.35m ODN.

Additional Information

A cross section has been drawn across the site in the location shown on the map below and the map showing the predicted depth of flooding on the previous page.



The cross section is shown below



Conclusions

The flood risk assessment dated 15th February 2021 uses the map showing the predicted flood depths in a 1 in 1000 year event in 2115 and the topographical survey to assess that the predicted flood level in this event is 3.35m ODN.

The cross section shown on page 2 of this report reaches the same conclusion as the flood risk assessment.

Therefore it is considered that the proposal to raise ground floor levels of the proposed dwellings to a minimum level of 3.40m ODN provides adequate mitigation against the risk of flooding.

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