32 Spring Avenue | Hampton Vale | Peterborough | Cambs. | PE7 8HW
t: +44 01733 242 852 m: +44 07714 332 331 e: info@chiswickarchitectural.com

Registered in England & Wales | 11843354

PLANNING APPLICATION FOR CONSTRUCTION OF A CHALET BUNGALOW AND SINGLE GARAGE ON LAND LOCATED BETWEEN HEREWARD WAY, PE6 0BL AND THE REAR OF 38 REFORM STREET, CROWLAND, PE6 0AN

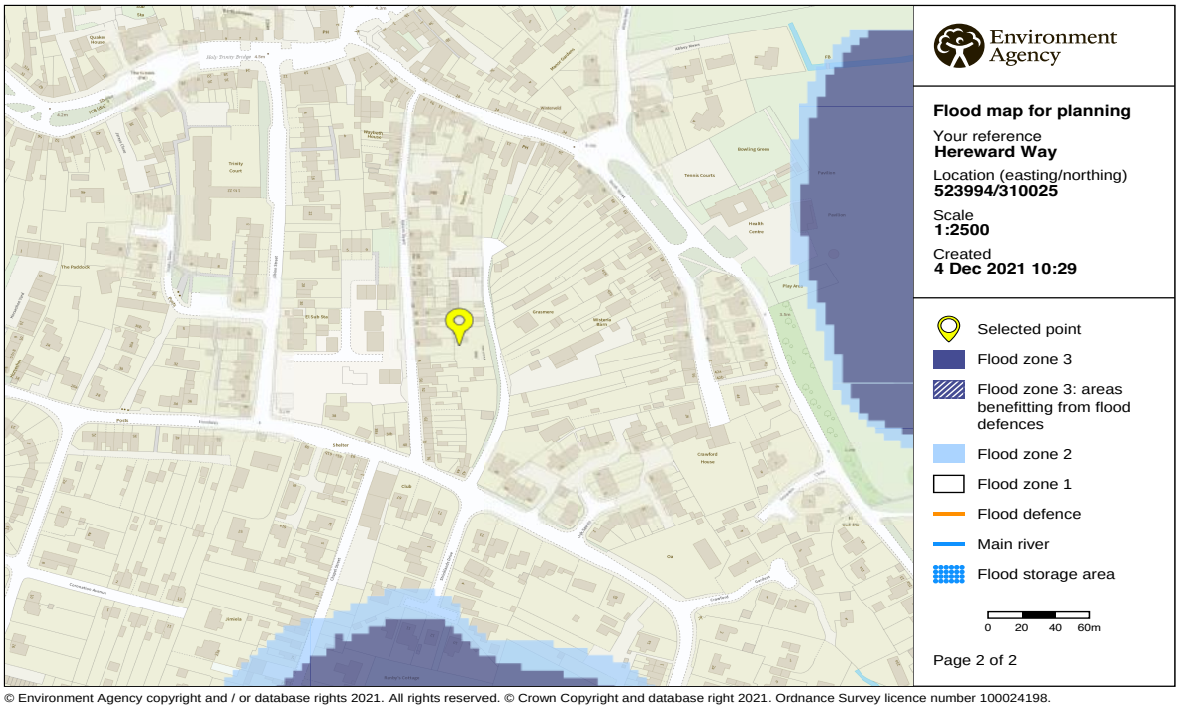
FLOOD RISK ASSESSMENT

1.0 INTRODUCTION

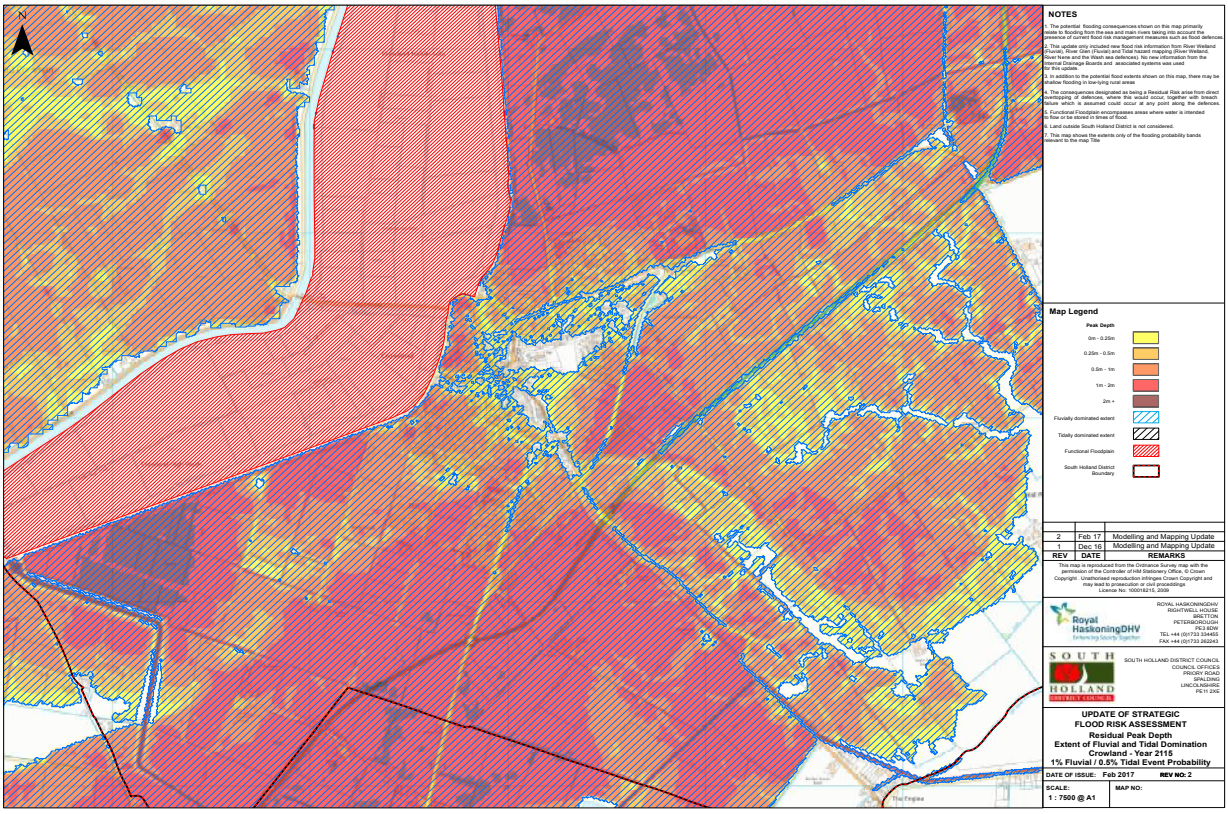
1.1 This Flood Risk Assessment supports a planning application relating to land fronting Hereward Way, Crowland.

1.2 The application site is located between the east side of Reform Street and the west side of Hereward Way, which is a narrow lane running north from Broadway but stopping at the rear of properties on south side of the South Street.

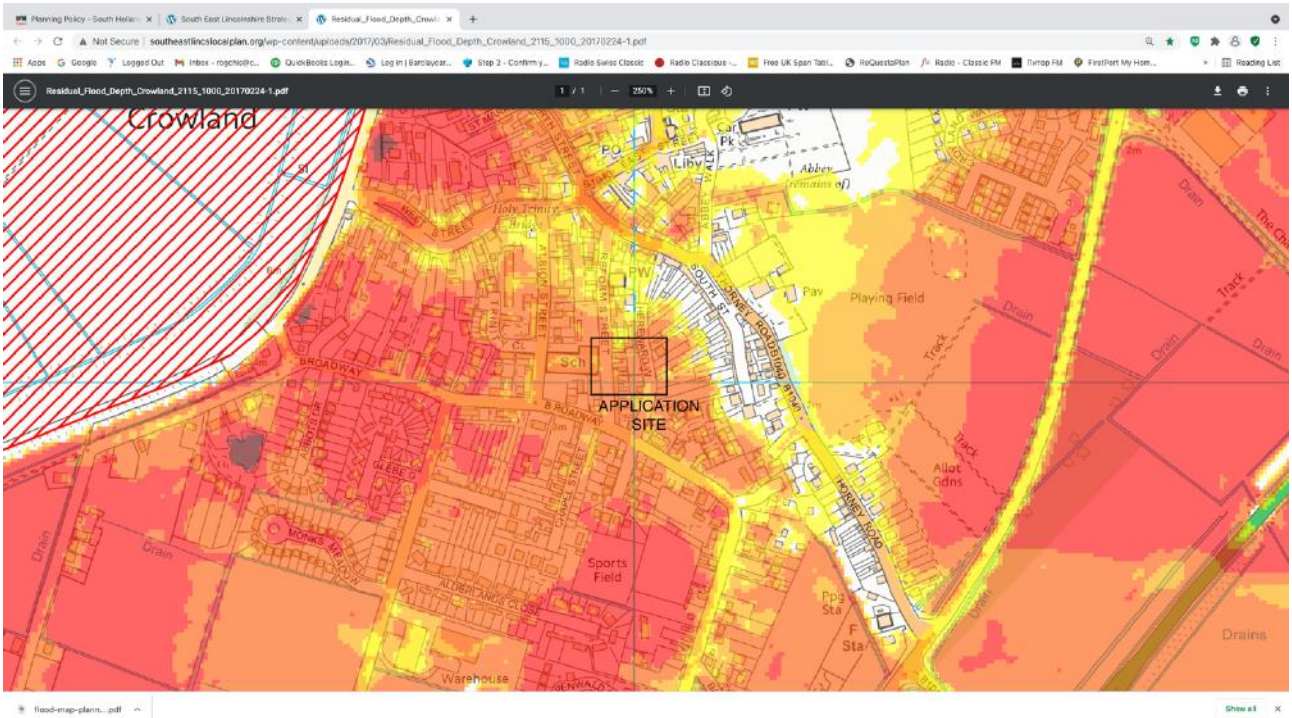
1.3 The site lies within Flood Zone 1, as defined by the Environment Agency's Flood Map and in a "Danger for Most" hazard area on the 1% 2115 South Holland Strategic Flood Risk Mapping, with a peak flood depth of 0.5m to 1m.



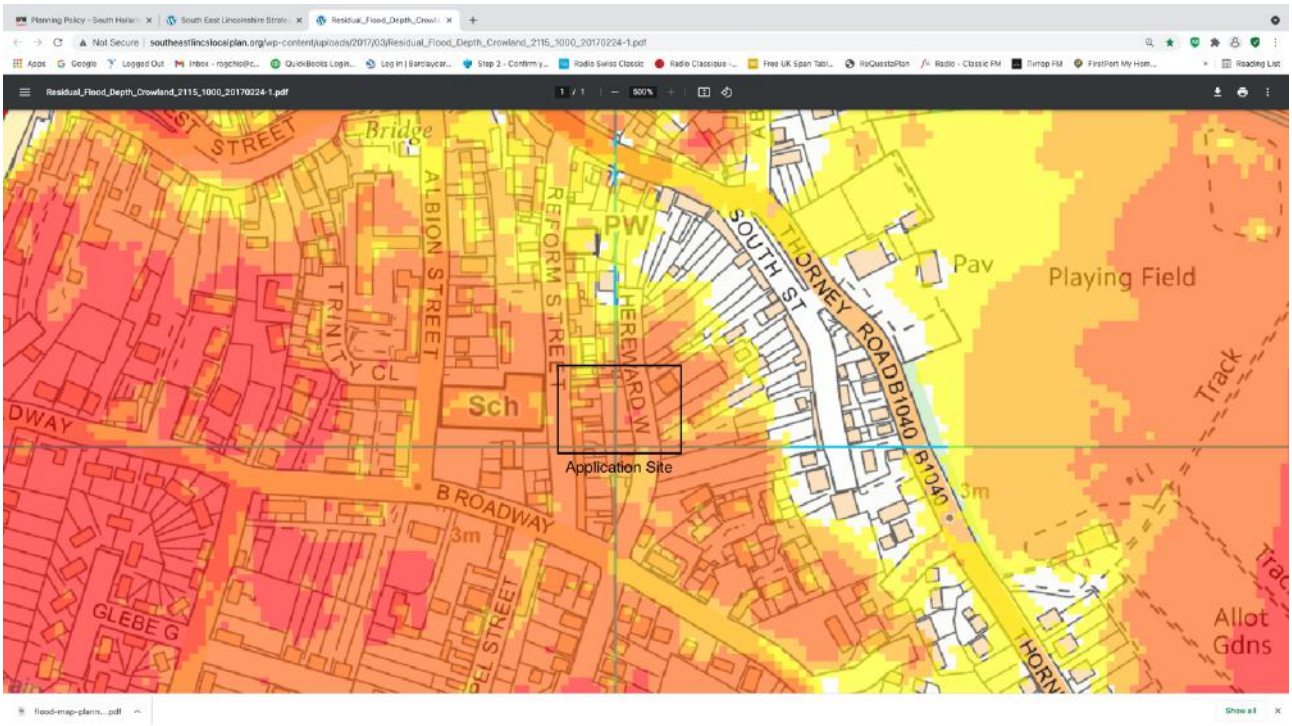
© Environment Agency copyright and / or database rights 2021. All rights reserved. © Crown Copyright and database right 2021. Ordnance Survey licence number 100024198.



1% 2115 South Holland Strategic Flood Risk Mapping



1% 2115 South Holland Strategic Flood Risk Mapping (enlargement 1)



1% 2115 South Holland Strategic Flood Risk Mapping (enlargement 2)

2.0 PROPOSED DEVELOPMENT

2.1 The Planning Application to which this Assessment refers is for a new chalet bungalow of 89 m^2 ground floor area, with two further bedrooms and a bathroom within the roof space.

2.2 Block Plan GEB21_003 shows the position of the building with the existing and proposed ground and floor levels, (AOD).

3.0 ASSESSING FLOOD RISK

3.1 The 1% 2115 South Holland Strategic Flood Risk Mapping indicates a peak flood depth of 0.5m to 1m on the site.

3.2 Anecdotal evidence asserts that no flooding has occurred during the last twenty + years, but it is to be assumed future flooding is possible.

4.0 MANAGING AND MITIGATING FLOOD RISK

4.1 The proposed first level of protection against possible flooding of the site and therefore the ground floor of the chalet bungalow is to set the finished floor level at 750mm above ground level, i.e., FFL of 3.800m, GL of 3.050m. This floor level is arrived at by grading the proposed drive 150mm up from the adjacent surface of Hereward Way, then setting the FFL at 150mm above this.

4.2 In Pre-Application discussions, it was confirmed that a bungalow would not be appropriate nor acceptable, whereas a chalet bungalow would. The first floor gives an initial escape provision above any future flood event.

4.3 Further protection and mitigation provisions will be incorporated in the construction of the building and surrounding surfaces. Relevant details for flood proofing / resilience and resistance will be as recommended in 'Improving the flood performance of new dwellings' CLG (2007).

- 4.3.1 Concrete trench fill foundations.
- 4.3.2 Concrete ground floor on well compacted hardcore and blinding, with rigid phenolic insulation beneath the screed.
- 4.3.3 Class A engineering bricks to external walls to 600mm above floor level.
- 4.3.4 Plasterboard internal wall finishes.
- 4.3.5 External door thresholds to be raised, not flush.
- 4.3.6 SUDS: External surfacing – garage drive, footpaths – are to be permeable bonded resin on granular sub-base. Channel gullies are to be included at the road edge, connected to the new perforated pipe laid in the existing open ditch along the site boundary / road verge.

The above details would be agreed after consultation with Building Control and Anglian Water.

Roger Chiswick
Chiswick Architectural Ltd June 2022