Self Assessment - Wayne Glenton

16 Papworth Drive, Crowland

Flood Risk Assessment

Issue 1

January 2025

Revision Schedule

Version	Date	Status	Prepared by	Reviewed by
1.0	Feb 25	First Issue	Wayne Glenton	

Contents

References

British Geological Survey 21 Feb 2025 Map accessed at : https://geologyviewer.bgs.ac.uk/

Planning application H02-0673-18 found at:
https://planning.sholland.gov.uk/OcellaWeb/showDocuments?reference=H02-0673-18&module=pl

South East Lincolnshire Strategic Flood Risk Assessment March 2017:
https://southeastlincslocalplan.org/article/25230/South-East-Lincolnshire-Strategic-Flood-Risk-Assessment

NPPF December 2024:
https://www.gov.uk/government/publications/national-planning-policy-framework--2

1. Introduction

1.1. This is a self-assessment report undertaken by Wayne Glenton, the resident. It is required after the changes on 16 December 2024 by the NPPF

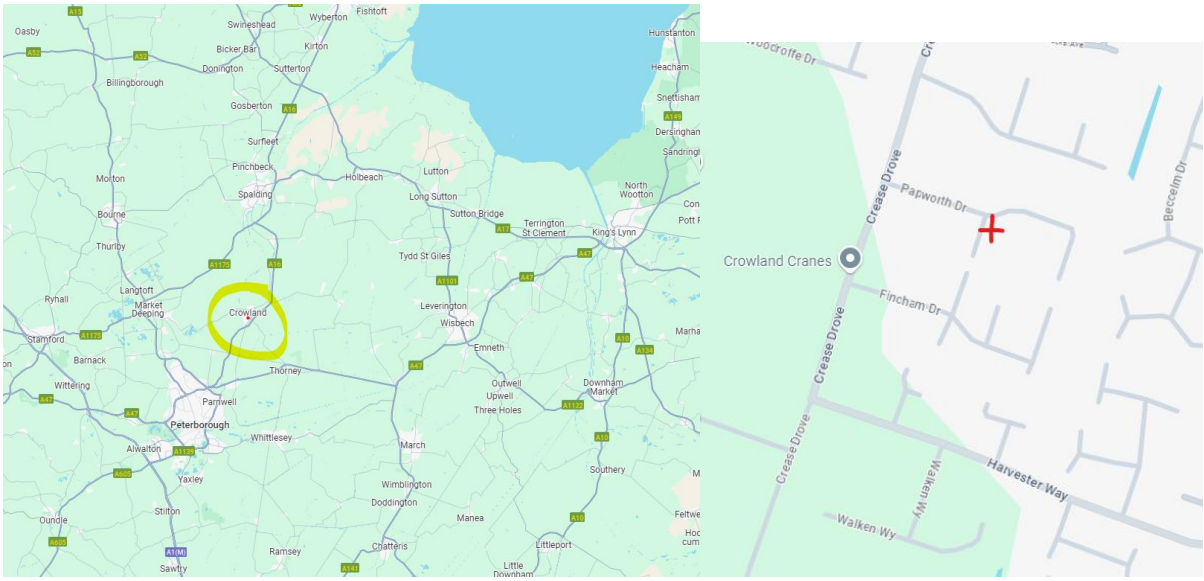
1.2. The purpose of this report is to assess flood risk and drainage in accordance with the National Planning Policy Framework (NPPF) in support of the planning application for a minor development at an existing residence. The requirement for a flood risk assessment is based primarily upon the flood zone classification affecting the site, Zone 3 (Surface Water flooding).

1.3. A full Flood Risk Assessment was conducted for Planning Application H02-0673-18, approved on 4th February 2019. There have been no changes since then that would affect flood risk. Given that the wider development was deemed acceptable, there is no reasonable basis to suggest that a garden office would pose any additional risk or would require additional mitigating activities. Even with the NPPF publication on 12 December 2024, a minor development in the garden of a residence on an established prior development does not justify a fully detailed assessment.

2. Site Description

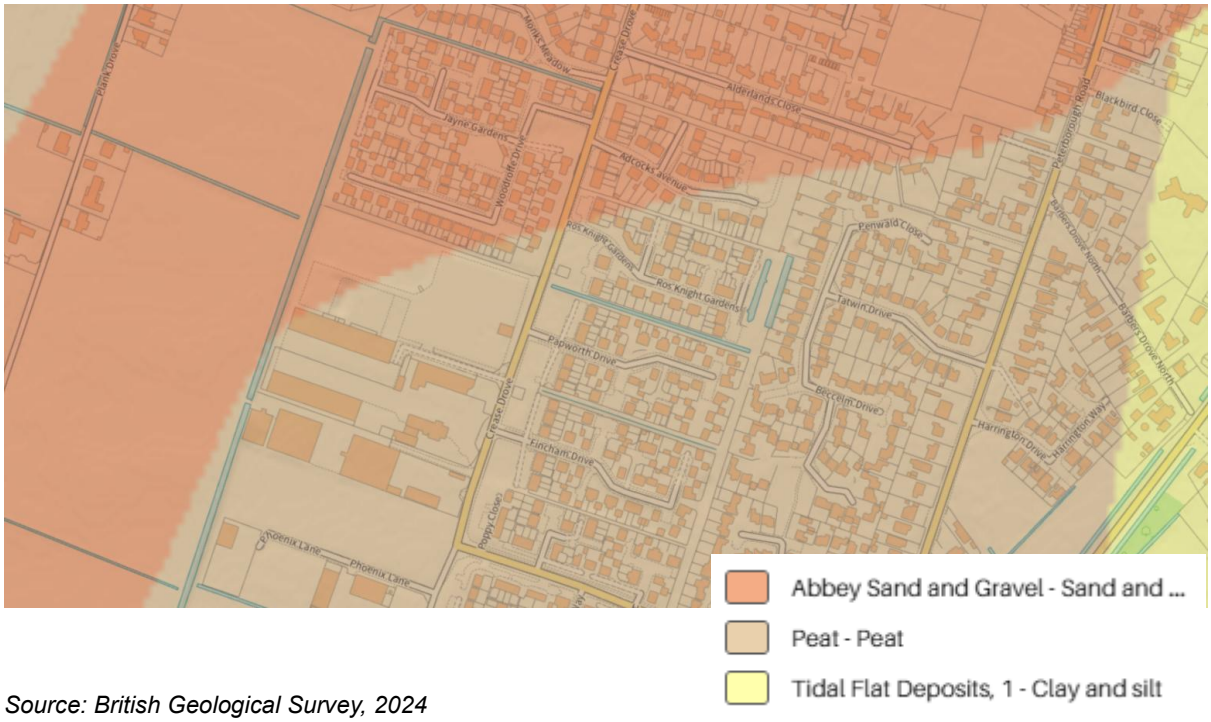
2.1. The site is located to the south of Crowland. Access to the site is from Papworth Drive which runs east/west to join a junction with Crease Drove on its Western side.

Figure 1: Site Location Plan



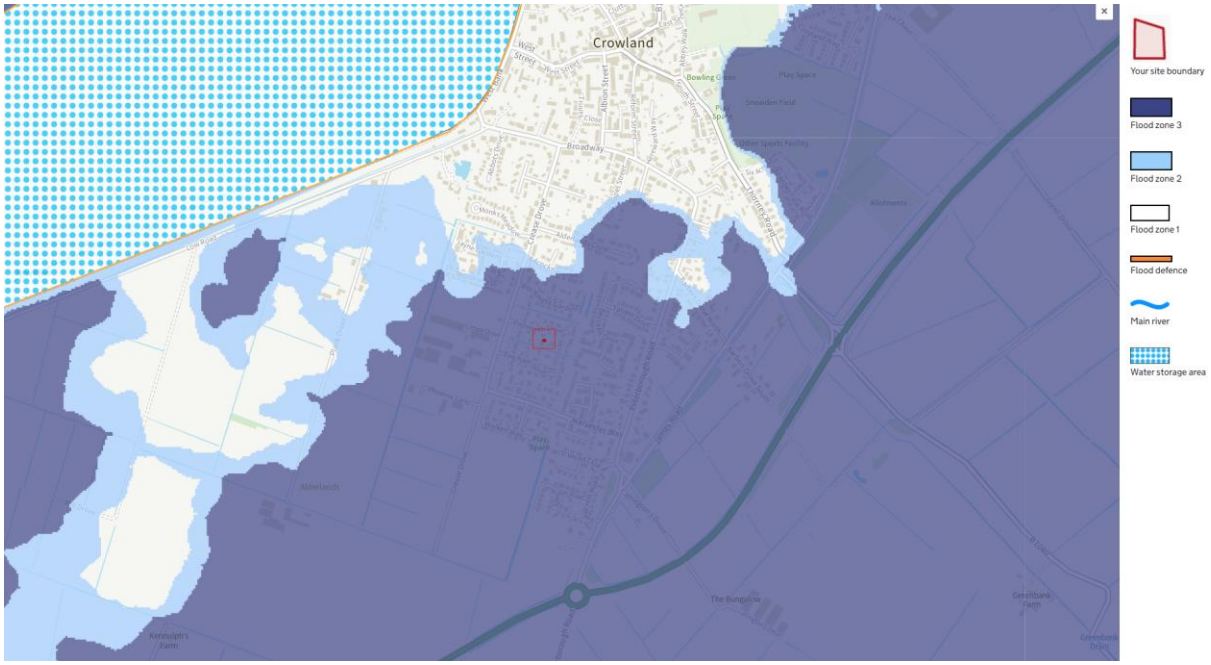
2.2. I have obtained records from the British Geological Survey (BGS) that indicate that the bedrock geology is Oxford Clay Formation – Mudstone. Sedimentary Bedrock formed approximately 157.3 to 166.1 million years ago in the Jurassic Period. The local environment was previously dominated by shallow seas. Superficial deposits are indicated as comprising peat, superficial deposits formed up to 2.588 million years ago in the Quaternary Period.

Figure 2: Superficial Deposits (British Geological Survey)



Source: British Geological Survey, 2024

Figure 3: Flood map



2.3. The site is in Flood Zone 3.

2.4. I have reviewed LIDAR data from the LIDAR Point Cloud from the Department for Environment Food & Rural Affairs (DEFRA), collected in 2023 and this shows that the surrounding area lies at approximately 1m above sea level with a full range of 1.2m below sea level to 3.6m above. At the residence the level is 0.75m.

Figure 4: Topographic map – wider area

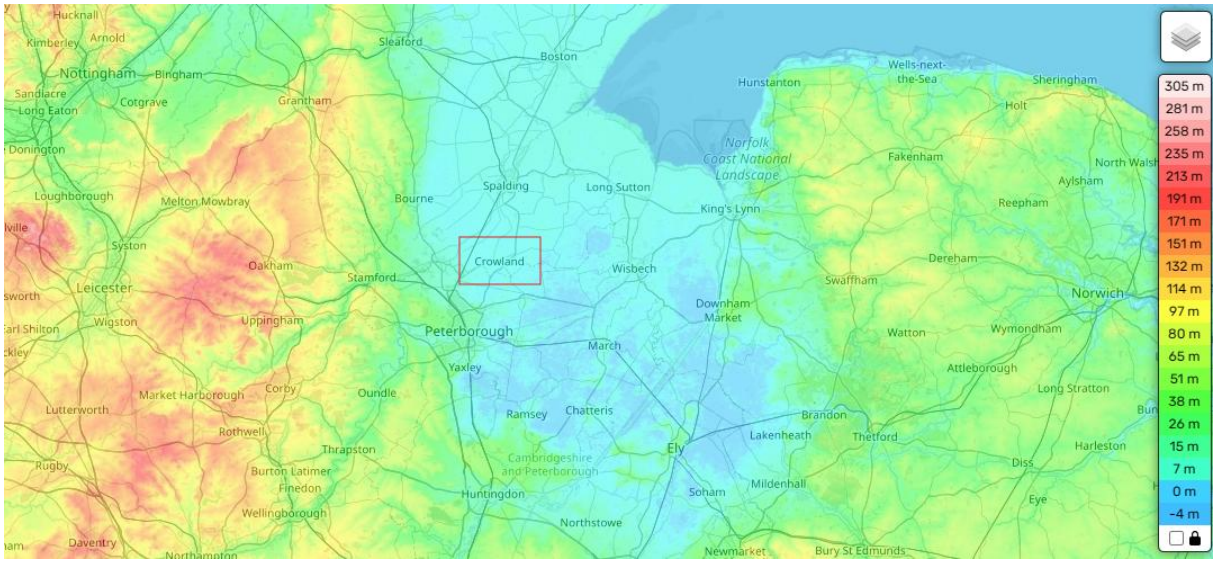


Figure 5: Topographic map – development site

Watercourses

2.5. There are surface watercourses in between each of the recent developments around Fincham Drive, Papworth Drive and Ros Knight Gardens that were placed as part of the flood management strategy under application H02-0673-18.

2.6. The closest designated main river is The River Welland and lies approximately 1km north of the site.

3. References and reports

National Planning Policy Framework (NPPF)

3.1. This establishes the flood zone definitions

3.1.1. Zone 1: Low Probability

- Annual probability of flooding: Less than 0.1% (1 in 1000 years).
- Suitable for most types of development without the need for a detailed Flood Risk Assessment, except in specific cases.

3.1.2. Zone 2: Medium Probability

- Annual probability of flooding: 0.1% to 1.0% for rivers (1 in 1000 to 1 in 100 years), 0.1% to 0.5% for coastal areas.
- Requires a site-specific Flood Risk Assessment for certain developments.

3.1.3. Zone 3a: High Probability

- Annual probability of flooding: Greater than 1.0% for rivers (1 in 100 years), 0.5% for coastal areas (1 in 200 years).
- Development is restricted and requires a detailed Flood Risk Assessment.
- Vulnerable uses (e.g., residential) need to pass a Sequential Test and possibly an Exception Test.

3.1.4. Zone 3b: Functional Floodplain

- Annual probability similar to Zone 3a but specifically designated for areas where water is stored or flows during floods.
- Development is severely restricted, typically limited to water-compatible uses or essential infrastructure.

3.2. The non-statutory technical standards for sustainable drainage systems, published by the Department for Environment, Food and Rural Affairs, March 2015, are used in conjunction with NPPG noted above. This document provides additional guidance with reference to:

- Flood risk assessments,
- Peak flow and volume control,
- Structural integrity,
- Design and construction of drainage within a proposed site.

These standards have been considered as part of this study.

3.3. The site is therefore in Zone 3a.

4. Flood Risk Assessment and Mitigation

4.1. Given that the site is located on a recent larger development, there is no deemed additional risk in terms of:

a) Increased risk to the residence.

b) Risk to the surrounding flood management strategy.

4.2. The development has a pitched roof to the north, and has guttering along the ceiling length creating flow to the corner that is connected to the main guttering network on the property and directing waterflow in to the existing drainage area.

4.3. The development is assessed as minimal to no risk and no further mitigation is required.