

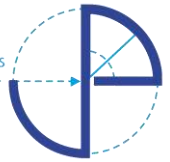
# Sturmer Hall, Church Walk, Haverhill

## Level 2 Flood Risk Assessment

Report: IE25/081/FRA2

27 November 2025

Rev. 00



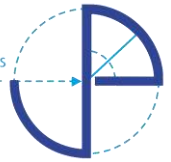
Sturmer Hall, Church Walk, Haverhill, CB9 7XD

## DOCUMENT CONTROL

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## ISSUE & REVISIONS RECORD

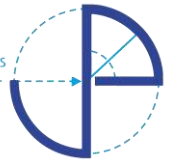
Document No:	Issue Date:	Issued to:	Format Issued		
IE25/081/FRA	27/11/2025	Daniel Hannan – <a href="mailto:dph3@me.com">dph3@me.com</a> Simon Henry - <a href="mailto:simon@meadows.co.uk">simon@meadows.co.uk</a>	<input checked="" type="checkbox"/>	Email	
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**Sturmer Hall, Church Walk, Haverhill, CB9 7XD**

## Table of Contents

DOCUMENT CONTROL .....	1
ISSUE & REVISIONS RECORD .....	1
EXECUTIVE SUMMARY .....	5
1. INTRODUCTION.....	6
1.1 Brief .....	6
1.2 Scope.....	6
2. EXISTING SITE LOCATION & DESCRIPTION.....	7
2.1 Location .....	7
2.2 Site Description .....	8
2.3 Geology.....	8
2.4 Hydrology .....	8
2.5 Hydrogeology.....	8
2.6 Topography .....	9
3. DEVELOPMENT PROPOSAL.....	10
3.1 Existing.....	10
3.2 Proposal.....	10
4. BACKGROUND TO FLOOD RISK AND REGULATORY CONTEXT .....	11
4.1 Current Guidance .....	11
4.2 Sequential / Exception Tests .....	11
5. Potential Sources of Flooding .....	12
5.1 General .....	12
5.2 Tidal/Coastal Flooding .....	12
5.3 Fluvial Flooding.....	12
5.4 Surface Water (Pluvial) Flooding .....	13
5.5 Extent of Flooding .....	14
5.6 Overland Flow Routes .....	17
5.7 Hazard Rating .....	18
5.8 Groundwater Flooding.....	20
5.9 Reservoir/Artificial Flooding.....	20
5.10 Sewer Flooding .....	20
5.11 Surface Water Management (Development run-off).....	21
6. CONCLUSION & RECOMMENDATIONS.....	22



**Sturmer Hall, Church Walk, Haverhill, CB9 7XD**

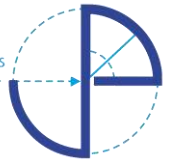
6.1	Flood Risk Summary .....	22
6.2	Recommendations .....	22
APPENDICES .....		23
Appendix A – Location Plan .....		A
Appendix B – EA Indicative Flood Map & QGIS Mapping .....		B
Appendix C – Architectural Plans .....		C
Appendix D – CON29DW .....		D

**FIGURES**

Figure 1 – Architect’s Location Plan .....	7
Figure 2 - Extract from Environment Agency LiDAR Data analysed through QGIS. ....	9
Figure 3 - Extract of Flood Map for Planning .....	12
Figure 4 – RoFRaS – Flooding Extent Risk .....	13
Figure 5 – RoFRaS - Flooding Extent with Climate Change Risk .....	13
Figure 6 - RoFSW Flooding Extent .....	14
Figure 7 - RoFSW Flooding Extent with Climate Change .....	14
Figure 8 - RoFSW Depth 0.2m .....	15
Figure 9 - RoFSW Depth 0.2m with climate change. ....	15
Figure 10 - RoFSW Depth 0.3m .....	15
Figure 11 - RoFSW Depth 0.3m with climate change .....	15
Figure 12 - RoFSW Depth 0.6m .....	15
Figure 13 - RoFSW Depth 0.6m with climate change. ....	15
Figure 14 - RoFSW Depth 0.9m .....	16
Figure 15 - RoFSW Depth 0.9m with climate change. ....	16
Figure 16- RoFSW Depth 1.2m .....	16
Figure 17 - RoFSW Depth 1.2m with climate change. ....	16
Figure 18 - Overland Flow Routes .....	17
Figure 19 - Hazard Rating 0.75 – Low Hazard .....	19
Figure 20 - Hazard Rating 0.75 – Low Hazard with CC .....	19
Figure 21 - Hazard Rating 1.25 – Moderate Hazard .....	19
Figure 22- Hazard Rating 1.25 – Moderate Hazard with CC .....	19
Figure 23 - Extract of FD2321 Guidance .....	20
Figure 24 - Extract from AW Asset Mapping (CON29DW) .....	21

**TABLES**

Table 1 - D3 - Flood Risk Vulnerability and Flood Zone 'Compatibility' .....	11
Table 2 - Flood Risk Associated with this Site .....	12
Table 3 - Depth of Flooding Table .....	16



**Sturmer Hall, Church Walk, Haverhill, CB9 7XD**

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Department for Leveling Up, Housing & Communities. (2022). *Flood Risk & Coastal Change* (<https://www.gov.uk/guidance/flood-risk-and-coastal-change>). Gov.uk.

Ministry of Housing Communities & Local Government. (2023). *National Planning Policy Framework (NPPF)*. Crown.

## **Resources**

- DEFRA – Data Services Platform – Flood Maps
- QGIS – Geographic Information System Analysis Software
- Indicative Flood Map for Planning,
- DEFRA Magic Mapping,
- BGS Geological Mapping and Borehole Records,
- OS Mapping
- CON29DW



**Sturmer Hall, Church Walk, Haverhill, CB9 7XD**

**EXECUTIVE SUMMARY**

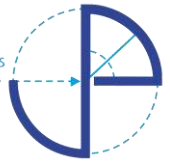
<b>Site Name/Address:</b>	Sturmer Hall, Church Walk, Haverhill, CB9 7XD
<b>Client:</b>	Daniel Hannan
<b>Planning Consultant:</b>	Simon Henry
<b>Local Planning Authority:</b>	Braintree District Council
<b>Application Type:</b>	Outline
<b>Present Site Use:</b>	Hotel/wedding venue
<b>Proposed Site Use:</b>	Special Education Needs and Disabilities (SEND) school with Hydro spa with accommodation lodges.
<b>Environment Agency Flood Zone</b>	Flood Zone 1, 2 &3
<b>Flood Source:</b>	Fluvial & Pluvial

<b>Summary:</b>		
<b>Development Description</b>	<b>Existing</b>	<b>Proposed</b>
<b>Development type</b>	Commercial	Mixed use including residential
<b>EA Vulnerability Classification</b>	Less Vulnerable	More Vulnerable
<b>External Ground Level</b>	The site lies in a valley sloping from the northwest to the south.	Set at 300mm above existing ground levels.
<b>Risk to Development</b>	<b>Summary</b>	<b>Comment</b>
<b>EA Flood Zone</b>	1,2 & 3	The site lies mainly in Flood Zone 1, with FZ2 and 3 skirting the southern edge of the site. The risk defined as Low to High.
<b>Flood Source</b>	Pluvial	Areas of surface water flooding are shown in the central to southern areas of the site.
<b>Safe access and egress route</b>	Yes – Flood Evacuation Plan recommended, together with joining EA warning service.	Safe access and egress would be via evacuation following a flood warning.
<b>Off Site Impacts</b>	<b>Summary</b>	<b>Comment</b>
<b>Displacement of flood water</b>	N/A	
<b>Increase in surface water runoff generation</b>	N/A	There will be an increase in surface water runoff due to new impermeable surfaces.

**Recommendations:**

Based on the findings of our desk-based research, JPC Environmental Services would advise as follows:

- The spatial allocation of land uses has been appropriately planned to mitigate fluvial flood risk, ensuring that all “more vulnerable” categories are confined to Flood Zone 1.
- The risk assessment has identified a risk of surface water ponding at Building 6, which should be considered further.
- We do not consider it necessary to undertake a Level 2 Flood Risk Assessment in order to further interrogate the level of risk.
- A surface water management plan should be developed to ensure that the risk of surface water flooding is not increased following the construction of the development and that the existing risk is mitigated.



**Sturmer Hall, Church Walk, Haverhill, CB9 7XD**

- BRE365 compliant infiltration testing should be undertaken to inform the detailed design of the SuDS compliant drainage strategy. We recommend this is secured by condition at the construction stage.

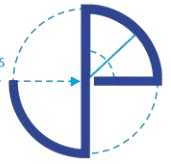
## **1. INTRODUCTION**

### **1.1 Brief**

- 5.1.1 JPC Environmental Services were appointed to produce a Level 1 Flood Risk Assessment to support a planning application to change the use of the existing building and add additional buildings at Church Walk, Sturmer, Haverhill (hereafter referred to as 'the site').
- 5.1.2 Authority to carry out this work was received by email instruction on the 30<sup>th</sup> September 2025 from Simon Henry of Meadows Planning Consultants on behalf of Mr Daniel Hannan for whom this report shall be for the private and confidential use. It should not be reproduced in whole or in part or relied upon by a third party for any use without the express written authority of JPC Environmental Services.
- 5.1.3 This Flood Risk Assessment has been written in accordance with, and meeting the requirements of, the National Planning Policy Framework, and considers 'Standing Advice' issued by the Environment Agency (EA).
- 5.1.4 In producing this report, we have exercised all reasonable skill, care and diligence to be expected of an appropriately qualified and competent consultant, experienced in carrying out equivalent services for similar developments.

### **1.2 Scope**

- 5.1.5 The main objectives of the assessment were as follows: -
- To ascertain the potential extent of fluvial/tidal flood zones,
  - To explore the risk of pluvial flooding not directly associated with a watercourse,
  - To explore the potential impact of the development with regard to surface water runoff,
  - To make recommendations on any additional investigations or hydraulic modelling that may be required,
  - To make recommendations regarding any flood mitigation or drainage measures required.



**Sturmer Hall, Church Walk, Haverhill, CB9 7XD**

## 2. EXISTING SITE LOCATION & DESCRIPTION

### 2.1 Location

**Address:** Sturmer Hall, Church Walk, Haverhill, CB9 7XD

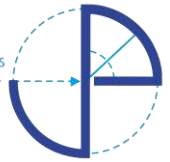
**Grid Reference:** **Easting:** 568949m **Northing:** 243848 m

**What3words:** commented.earphones.pill



*Figure 1 – Architect's Location Plan*

5.1.6 The full location plan is presented within the appendices.



## **Sturmer Hall, Church Walk, Haverhill, CB9 7XD**

### **2.2 Site Description**

5.1.7 The site comprises the land and outbuildings associated with Sturmer Hall, Haverhill. Sturmer Hall is a Grade II Listed building with converted outbuilding utilised as an entertainment complex linked to Sturmer Hall's wedding venue business. The service yard is currently surrounded by grass bunds. The remainder is laid to managed grass, assorted shrubs/trees and a pond.

5.1.8 The site is accessed off Church Walk via the A1017 from Sturmer village.

5.1.9 The northeastern boundary abuts St Mary's Church (Grade I Listed)

### **2.3 Geology**

5.1.10 With reference to the British Geological Survey's online mapping, we can advise that the site is likely to be underlain by superficial deposits comprising Lowestoft Formation (Diamicton) over bedrock geology which comprises Lewes Nodular Chalk Formation, and Seaford Chalk Formation.

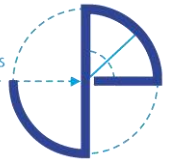
### **2.4 Hydrology**

5.1.11 The site lies within the catchment of the Stour Brook Watercourse, a tributary within the upper catchment of the River Stour. The Stour Brook rises ½ mile south of the source of the Stour, flows E in Cambridgeshire for a mile and then SE through Suffolk and Essex to join the Stour at the point where it becomes the border between Suffolk and Essex. From source to confluence, it is 7 miles by this brook and 12 by the Stour.

5.1.12 A second smaller watercourse flows in a west-east direction to the south of Sturmer Hall before converging with the Stour Brook to the east. A substantial pond or offline waterbody is present along this drainage feature, immediately south of the entertainment complex. It is not confirmed whether this waterbody is naturally occurring or an artificial impoundment. There is also a historic moat associated with Sturmer Hall.

### **2.5 Hydrogeology**

5.1.13 With reference to the groundwater mapping presented on DEFRA's MAGIC map, the superficial deposits are described as a Secondary (undifferentiated), while the underlying bedrock geology is described as being Principal Aquifer.



**Sturmer Hall, Church Walk, Haverhill, CB9 7XD**

5.1.14 In terms of groundwater vulnerability, the site is classified as Medium with a soluble rock risk on the Environment Agency's groundwater vulnerability mapping.

5.1.15 The site is within a drinking water protected or safeguarded zone (Surface Water).

**2.6 Topography**

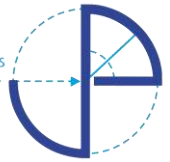
5.1.16 The site lies in a valley sloping from the northwest to the south.

5.1.17 The embankments surrounding the service yard are clearly shown in figures 1 and 2.

5.1.18 To refine our understanding of the site and its surroundings we have downloaded Lidar data for the area (TM15ne) and interrogated this using QGIS software. See figure below.



Figure 2 - Extract from Environment Agency LiDAR Data analysed through QGIS.



**Sturmer Hall, Church Walk, Haverhill, CB9 7XD**

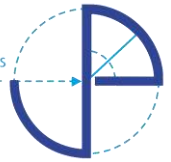
**3. DEVELOPMENT PROPOSAL**

**3.1 Existing**

3.1.1 Sturmer Hall was first recorded in the Domesday Book of 1086. By 1215, the village of Sturmer included a manor house, a mill, and a church (the present St Mary's). The estate covers approximately 29 acres of gardens and meadowland. The current owner has renovated the outbuildings and transformed Sturmer Hall and its associated structures into a hotel, conference centre, music venue, and wedding venue.

**3.2 Proposal**

3.2.1 The proposals comprise an outline application for the development of a new SEND school accommodating up to 40 young adults. A new structure is proposed within an area of the site currently used as a service yard, which is enclosed by grass bunds that will be retained. The existing buildings, currently operating as an entertainment complex, will be repurposed as a hydro spa facility primarily for use by the school, with limited public access. 2 No. existing buildings will be converted to specialist/supported living units. It is also proposed that 8No. accommodation lodges are constructed across the site.



**Sturmer Hall, Church Walk, Haverhill, CB9 7XD**

## **4. BACKGROUND TO FLOOD RISK AND REGULATORY CONTEXT**

### **4.1 Current Guidance**

4.1.1 In relation to flood risk, planning policy in England is currently guided by the National Planning Policy Framework (NPPF) and the associated flood risk guidance. The purpose of the NPPF is to ensure that flood risk is considered at each stage of the planning process and that new developments are steered towards lower risk areas (flood zone 1) in preference to higher risk areas (flood zone 3).

4.1.2 At all levels policy relies on a series of predicted flood zones, which are defined by the Environment Agency according to the annual event probability (AEP). These zones are:

- Zone 3b – Functional flood plain, greater than 5% AEP
- Zone 3a – Areas with greater than 1% AEP fluvial flooding or 0.5% AEP tidal flooding.
- Zone 2 – Extreme flood plain – 1 to 0.1% AEP fluvial or 0.5 to 0.1% AEP tidal flooding.
- Zone 1 – Outside the flood plain – Land with less than 0.1% AEP of tidal or fluvial flooding.

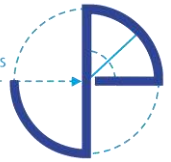
### **4.2 Sequential / Exception Tests**

4.2.1 The NPPF advises local authorities, developers and consultants to follow a sequential, risk-based approach to identifying land suitable for development. The development proposal involves the construction of a new school building and the remodelling of existing structures to meet the accommodation requirements of the proposed SEND school.

4.2.2 We have listed below the different buildings and their vulnerabilities; together with the flood zone in which they are located.

*Table 1 - D3 - Flood Risk Vulnerability and Flood Zone 'Compatibility'*

<b>Building No.</b>	<b>Building / Land Use</b>	<b>Vulnerability</b>	<b>Flood Zone</b>
1	SEND School	More Vulnerable	Flood Zone 1
2	Hydrotherapy & Wellness Centre	More Vulnerable	Flood Zone 1
3	Admin & Management Centre	Less Vulnerable	Flood Zone 1
4	New Educational supported Living	More Vulnerable	Flood Zone 1
5	Bungalow (Educational Supported Living)	More Vulnerable	Flood Zone 1
6	Barn Conversion to Specialist Care Living	More Vulnerable	Flood Zone 1
7	Site Warden Office & Accommodation	More Vulnerable	Flood Zone 1



**Sturmer Hall, Church Walk, Haverhill, CB9 7XD**

**5. Potential Sources of Flooding**

**5.1 General**

5.1.1 In line with the recommendations contained in the NPPF, we have explored the various potential sources of flooding, which could potentially impact the site both before and after the proposed development. This assessment will evaluate the following sources of potential flood risk:

*Table 2 - Flood Risk Associated with this Site.*

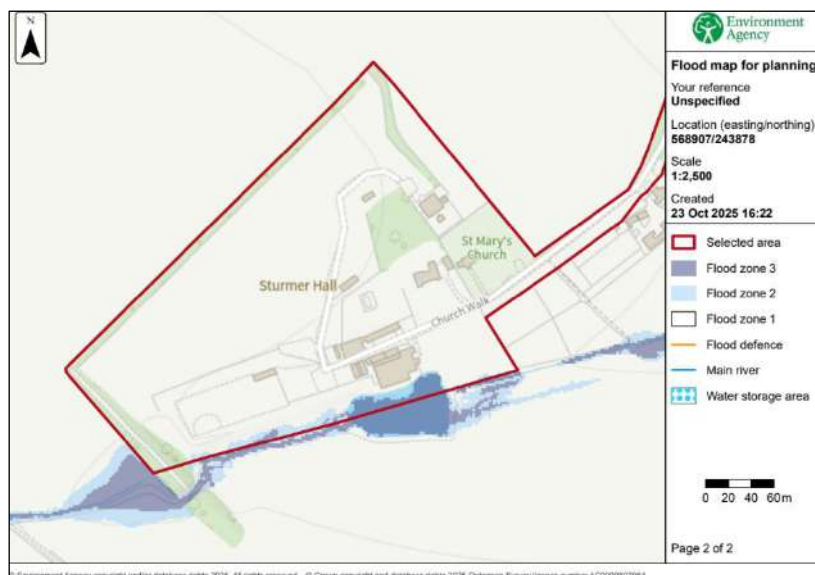
Flooding	Risk	Annual Exceedance Probability (AEP)
<b>Tidal/Coastal Flooding</b>	Very Low	N/A
<b>Fluvial</b>	Very Low	Less than 0.1% AEP
<b>Surface Water (Pluvial)</b>	Medium – High Risk	Between 1% and 3.3% (M) More than 3.3% (H)
<b>Groundwater</b>	Very Low	Due to ground conditions
<b>Reservoir/Artificial</b>	Not Applicable	
<b>Sewer</b>	Not Applicable	

**5.2 Tidal/Coastal Flooding**

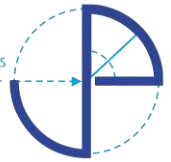
5.2.1 Due to the remote proximity of the site to the coast, tidal flooding is not considered to represent a viable source of flood risk (less than 0.1% Annual Exceedance Probability (EEP)).

**5.3 Fluvial Flooding**

5.3.1 The Environment Agency (EA)’s indicative flood mapping shows that part of the site lies within Flood Zone 3 – greater than 1% (1 in 100 chance Annual Exceedance Probability, AEP) and therefore considered to be at **High Risk** of flooding. See Figure below together with larger versions within the appendices.



*Figure 3 - Extract of Flood Map for Planning*



**Sturmer Hall, Church Walk, Haverhill, CB9 7XD**

- 5.3.2 The site has elements of flood zone 2 and 3 encroaching onto the site to the south, associated with the large pond/lake. All existing structures are within flood zone 1.
- 5.3.3 We have utilised QGIS software to interrogate this flood zone together with how climate change will affect the site.



Figure 4 – RoFRaS – Flooding Extent Risk



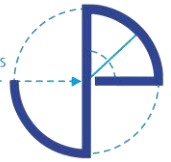
Figure 5 – RoFRaS - Flooding Extent with Climate Change Risk

- 5.3.4 Environment Agency mapping indicates that flood risk originates from the tertiary watercourse located southeast of the site, which flows into the secondary tributary (Stour Brook) before discharging into the River Stour to the east. Climate change projections show only a minimal increase in flood risk within this area, which does not affect the site itself.

**5.4 Surface Water (Pluvial) Flooding**

- 5.4.1 Pluvial flooding typically occurs when excessive rainfall occurs within a catchment to such an extent that it is unable to be absorbed by the underlying soils. Water that is unable to soak into the soil accumulates and migrates in line with the local topography, towards the nearest watercourse or surface water sewer. Due to the anticipated effects of climate change, this is expected to be a more frequent and increasing source of flood risk.
- 5.4.2 Pluvial flooding can be difficult to predict due to the difficulties in forecasting the location and volume of rainfall. In addition, local features can greatly affect the chance and severity of flooding. The EA defines pluvial flood risk as categories from ‘Very Low’ to ‘High’. These categories are:

- **Very Low** - area of less than 0.1% chance of flooding each year.
- **Low** - area of between 0.1% and 1% chance of flooding each year.
- **Medium** - area of between 1% and 3.3% chance of flooding each year. This category is designated the ‘design event’ for pluvial flooding; and
- **High** - area of more than 3.3% chance of flooding each year.



**Sturmer Hall, Church Walk, Haverhill, CB9 7XD**

**5.5 Extent of Flooding**

5.5.1 The most recent updates to the Environment Agency (EA) flood mapping were released on 27 August 2025, which included further enhancements to the Flood Map for Planning (FMfP). These updates followed a major release on 25 March 2025, that introduced new datasets from the [National Flood Risk Assessment \(NaFRA2\)](#) and expanded the information available, such as surface water flooding, defended and undefended flood extents, and updated flood zones. The mapping pertinent to the site is shown below, both with and without climate change.

5.5.2 The new surface water modelling shows 5 bands of depth for this site ranging from 0.2 – 1.2m. These are shown below, together with larger prints being presented within the appendices:



*Figure 6 - RoFSW Flooding Extent*



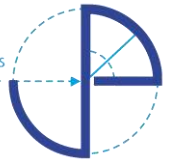
*Figure 7 - RoFSW Flooding Extent with Climate Change*

5.5.3 Surface water mapping identifies a medium to high risk of flooding within the site, mainly associated with the pond and adjacent watercourse. Further medium to high-risk areas are also present around the existing buildings located in the central area and towards the southern boundary.

5.5.4 The climate change scenario indicates a slight increase in medium-risk flooding within the central part of the site.

5.5.5 The map extracts below illustrate the predicted flood extents for depths ranging from 0.2m to 1.2m, both under current conditions and with climate change. The accompanying table summarises which flood depths are expected to affect the site in each scenario.

5.5.6 Current mapping shows that flood depths across the existing site are typically between 0.2m and 0.3m and localised rather than site wide.



**Sturmer Hall, Church Walk, Haverhill, CB9 7XD**



Figure 8 - RoFSW Depth 0.2m



Figure 9 - RoFSW Depth 0.2m with climate change.



Figure 10 - RoFSW Depth 0.3m



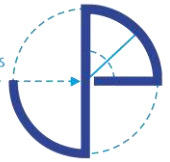
Figure 11 - RoFSW Depth 0.3m with climate change



Figure 12 - RoFSW Depth 0.6m



Figure 13 - RoFSW Depth 0.6m with climate change.



**Sturmer Hall, Church Walk, Haverhill, CB9 7XD**



Figure 14 - RoFSW Depth 0.9m



Figure 15 - RoFSW Depth 0.9m with climate change.



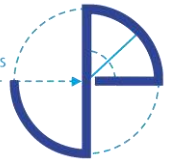
Figure 16- RoFSW Depth 1.2m



Figure 17 - RoFSW Depth 1.2m with climate change.

Table 3 - Depth of Flooding Table

No Climate Change – 2025 – 2040			Affecting the site	Climate Change – 2040 – 2060			Affecting the site
Depth	Risk (AEP)			Risk (AEP)			
0.2m	More than 3.3%	<b>H</b>	YES	More than 3.3%	<b>H</b>	YES	
	Between 1 – 3.3%	<b>M</b>	YES	Between 1 – 3.3%	<b>M</b>	YES	
	Between 0.1% and 1%	<b>L</b>	YES	Between 0.1% and 1%	<b>L</b>	YES	
0.3m	More than 3.3%	<b>H</b>	Minimal	More than 3.3%	<b>H</b>	YES	
	Between 1 – 3.3%	<b>M</b>	YES	Between 1 – 3.3%	<b>M</b>	YES	
	Between 0.1% and 1%	<b>L</b>	YES	Between 0.1% and 1%	<b>L</b>	YES	
0.6m	More than 3.3%	<b>H</b>	Minimal	More than 3.3%	<b>H</b>	Minimal	
	Between 1 – 3.3%	<b>M</b>	Minimal	Between 1 – 3.3%	<b>M</b>	Minimal	
	Between 0.1% and 1%	<b>L</b>	Minimal	Between 0.1% and 1%	<b>L</b>	Minimal	



**Sturmer Hall, Church Walk, Haverhill, CB9 7XD**

0.9m	More than 3.3%	<b>H</b>	NO	More than 3.3%	<b>H</b>	NO
	Between 1 – 3.3%	<b>M</b>	NO	Between 1 – 3.3%	<b>M</b>	NO
	Between 0.1% and 1%	<b>L</b>	NO	Between 0.1% and 1%	<b>L</b>	NO
1.2m	More than 3.3%	<b>H</b>	NO	More than 3.3%	<b>H</b>	NO
	Between 1 – 3.3%	<b>M</b>	NO	Between 1 – 3.3%	<b>M</b>	NO
	Between 0.1% and 1%	<b>L</b>	NO	Between 0.1% and 1%	<b>L</b>	NO

5.5.7 The depth scenarios above indicate that, in future, climate change is expected to increase the site’s flood risk slightly compared with current conditions, however, the current proposal does not require construction areas prone to flooding.

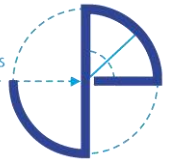
5.5.8 Overall, the application site is assessed as being at a **Medium** risk of pluvial flooding, while the risk to the proposed new buildings is considered **Low**. The risk to building 6 (existing) is currently **High** and therefore will require targeted mitigation.

**5.6 Overland Flow Routes**

5.6.1 We have reviewed the Environment Agency overland flow pathway dataset (2024) showing the likely flow routes of water together with the accumulation of ponding. This data assumes that there is no absorption of water through the soil. The modelling picks out depressions (utilising LiDAR Digital Terrain Model 1-metre composite (2022) in the ground surface and simulates some flow along natural drainage channels, rivers, low areas in floodplains, and flow paths. See figure below:



Figure 18 - Overland Flow Routes

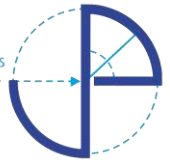


## Sturmer Hall, Church Walk, Haverhill, CB9 7XD

- 5.6.2 Obstruction of these overland flow routes may cause or increase the risk of surface water flooding during a significant flood event. Flood flow will follow default flood pathways, and this can lead to indiscriminate flooding.
- 5.6.3 The mapping indicates that flood flow routes originate within the site and move southwards towards the pond and watercourse, before ultimately discharging into the Stour Brook, a tributary in the upper catchment of the River Stour.
- 5.6.4 Larger versions of the above QGIS mapping can be found within the appendices.

### 5.7 Hazard Rating

- 5.7.1 RoFSW hazard ratings in the UK are calculated using the formula  $HR = D \times (V + 0.5) + DF$ , where  $D$  = flood depth (m),  $V$  = flood velocity (m/s), and  $DF$  = debris factor. The result is then classified into hazard categories: Low, Moderate, Significant, and Extreme, which indicate how dangerous surface water flooding could be for people and property.
- Depth ( $D$ ): How deep the water is (in metres).
  - Velocity ( $V$ ): How fast the water is moving (in metres per second).
  - Debris Factor ( $DF$ ): Accounts for floating debris that increases danger. Typically:
    - $DF = 0$  if depth  $< 0.25$  m
    - $DF = 0.5$  if depth  $\geq 0.25$  m
- 5.7.2 The EA RoFSW hazard mapping shows below mapping of hazard rating up to 0.75 – Low Hazard together with hazard rating -  $0.75 \leq 1.5$  Moderate Hazard



**Sturmer Hall, Church Walk, Haverhill, CB9 7XD**



Figure 19 - Hazard Rating 0.75 – Low Hazard



Figure 20 - Hazard Rating 0.75 – Low Hazard with CC

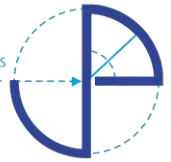


Figure 21 - Hazard Rating 1.25 – Moderate Hazard



Figure 22 - Hazard Rating 1.25 – Moderate Hazard with CC

5.7.3 The images above show the hazard risk areas. The hazard risk categories are shown below. The site is in the present day categorised as a Low Hazard – “Caution” – Floodwaters are shallow/slow, but still disruptive. This increases with climate change, particularly around the existing building No. 6. There are small areas that are considered a Moderate Hazard – “Danger for some” – Unsafe for children, elderly and less mobile people, mainly associated with the adjacent watercourse and pond within the site.



**Sturmer Hall, Church Walk, Haverhill, CB9 7XD**

5.7.4 Larger versions of the above QGIS mapping can be found within the appendices.

Hazard Rating (HR)	Category	Meaning
HR < 0.75	<b>Low hazard</b>	“Caution” – Floodwaters are shallow/slow, but still disruptive.
0.75 ≤ HR < 1.5	<b>Moderate hazard</b>	“Danger for some” – Unsafe for children, elderly, and less mobile people.
1.5 ≤ HR < 2.5	<b>Significant hazard</b>	“Danger for most” – Unsafe for the majority of people.
HR ≥ 2.5	<b>Extreme hazard</b>	“Danger for all” – Severe risk to life and property.

*Figure 23 - Extract of FD2321 Guidance*

**5.8 Groundwater Flooding**

5.8.1 Groundwater flooding occurs when water levels in the underlying soil rise, after prolonged rainfall. The areas at most risk are often low-lying areas where the water table is more likely to be at a shallow depth and flooding can be experienced through water rising up from the underlying aquifer or from water flowing from springs.

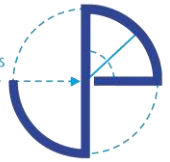
5.8.2 The Environment agency groundwater emergence map shows that the site is not within a ground water flooding area. We believe the risk to the site is Negligible.

**5.9 Reservoir/Artificial Flooding**

5.9.1 Non-natural sources of flooding include reservoirs, canals and lakes where water is retained above natural ground level and industrial processes such as quarrying. Where water is artificially contained, there is a residual risk that this containment might fail, where dams or earth bunds are breach. This may increase floodwater depths and velocities in adjacent downstream areas. The potential effects of flood risk management infrastructure therefore need to be considered.

5.9.2 The ‘extent of flooding from reservoirs’ mapping provided by the Environment Agency confirms that the site does not lie within an area known to be at risk from reservoir flooding. We consider the overall risk from this source to be Negligible.

**5.10 Sewer Flooding**



## Sturmer Hall, Church Walk, Haverhill, CB9 7XD

- 5.10.1 To explore the potential risk of sewer flooding, we have purchased a CON29DW report from Anglia Water. This has confirmed that there is a public sewer located within the adjacent highway “Rowley Hill”. This is classified as a foul water sewer. See Figure below.

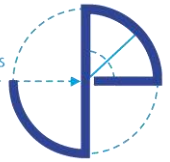


Figure 24 - Extract from AW Asset Mapping (CON29DW)

- 5.10.2 The report advises that the “building which is or forms part of the property (Sturmer Hall) is not at risk of internal flooding due to overloaded public sewers”. This response combined with the lack of combined sewers (which carry a higher risk of surcharging) leads us to consider the risk of sewer flooding to be Negligible.

### 5.11 Surface Water Management (Development run-off)

- 5.11.1 The proposed development will introduce an increased area of impermeable surfacing in the form of new buildings and parking. This change has the potential to elevate the rate of surface water run-off and, consequently, the risk of flooding both on-site and in adjoining areas. To mitigate this risk, the development must incorporate a suitably designed surface water management system that ensures no additional flood risk is generated. The system should be engineered to specifically reduce on-site hazard levels in accordance with best practice and regulatory requirements. Attention should be given to Building 6, where an existing risk of flooding has been identified.



**Sturmer Hall, Church Walk, Haverhill, CB9 7XD**

## **6. CONCLUSION & RECOMMENDATIONS**

### **6.1 Flood Risk Summary**

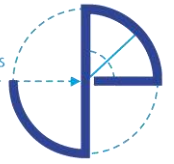
- 6.1.1 The site has **Negligible** risk of flooding from tidal, fluvial or sewer flooding.
- 6.1.2 Surface water flooding represents a **Low** to **Medium** risk (particularly existing building No. 6) to the site. However, this has the potential to increase due to the increased area of impermeable surfacing associated with the development. The development of a SuDS compliant strategy will mitigate this risk.
- 6.1.3 There is a **Negligible** risk of groundwater flooding occurring at the ground surface due to the presence of cohesive geology.

### **6.2 Recommendations**

6.2.1 Based on the information gathered as part of this desk-based risk assessment JPC Environmental Services would advise as follows:

- The spatial allocation of land uses has been appropriately planned to mitigate fluvial flood risk, ensuring that all “more vulnerable” categories are confined to Flood Zone 1.
- The risk assessment has identified a risk of surface water ponding at Building 6, which should be considered further.
- We do not consider it necessary to undertake a Level 2 Flood Risk Assessment in order to further interrogate the level of risk.
- A surface water management plan should be developed to ensure that the risk of surface water flooding is not increased following the construction of the development and that the existing risk is mitigated.

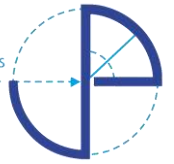
6.2.2 The opinions and recommendations expressed within this report are based on the results of desk-based research and information provided by third party agencies. No additional hydraulic modelling has been undertaken.



**Sturmer Hall, Church Walk, Haverhill, CB9 7XD**

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## **APPENDICES**



**Sturmer Hall, Church Walk, Haverhill, CB9 7XD**

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## **Appendix A – Location Plan**

Key Data

Ownership

- Development Zone  
Exact site area - TBC.
- Controlled Land  
Land within the control of the client.



Issue Data

A - First Issue: 07/2025

Scale 1:200



Sturmer Hall, Church Walk, Sturmer, CB9 7XD

EXISTING SITE

# A1

P.C. AA-25-1232 D.N. 001

N  
I

© 2025



**Sturmer Hall, Church Walk, Haverhill, CB9 7XD**

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**Appendix B – EA Indicative Flood Map & QGIS Mapping**

# Flood map for planning

Your reference	Location (easting/northing)	Created
Unspecified	568907/243878	23 October 2025 16:22

**Your selected location is in flood zone 3, an area with a high probability of flooding.**

## This means:

- you must complete a flood risk assessment for development in this area
- you should follow the Environment Agency's standing advice for carrying out a flood risk assessment (see <https://www.gov.uk/guidance/flood-risk-assessment-standing-advice>)

## Notes

The flood map for planning shows river and sea flooding data only. It doesn't include other sources of flooding. It is for use in development planning and flood risk assessments.

This information relates to the selected location and is not specific to any property within it. The map is updated regularly and is correct at the time of printing.

Flood risk data is covered by the Open Government Licence which sets out the terms and conditions for using government data. <https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3>

Use of the address and mapping data is subject to Ordnance Survey public viewing terms under Crown copyright and database rights 2025 AC0000807064. <https://flood-map-for-planning.service.gov.uk/os-terms>



### Flood map for planning

Your reference

**Unspecified**

Location (easting/northing)

**568907/243878**

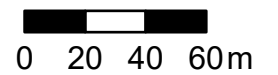
Scale

**1:2,500**

Created

**23 Oct 2025 16:22**

-  Selected area
-  Flood zone 3
-  Flood zone 2
-  Flood zone 1
-  Flood defence
-  Main river
-  Water storage area

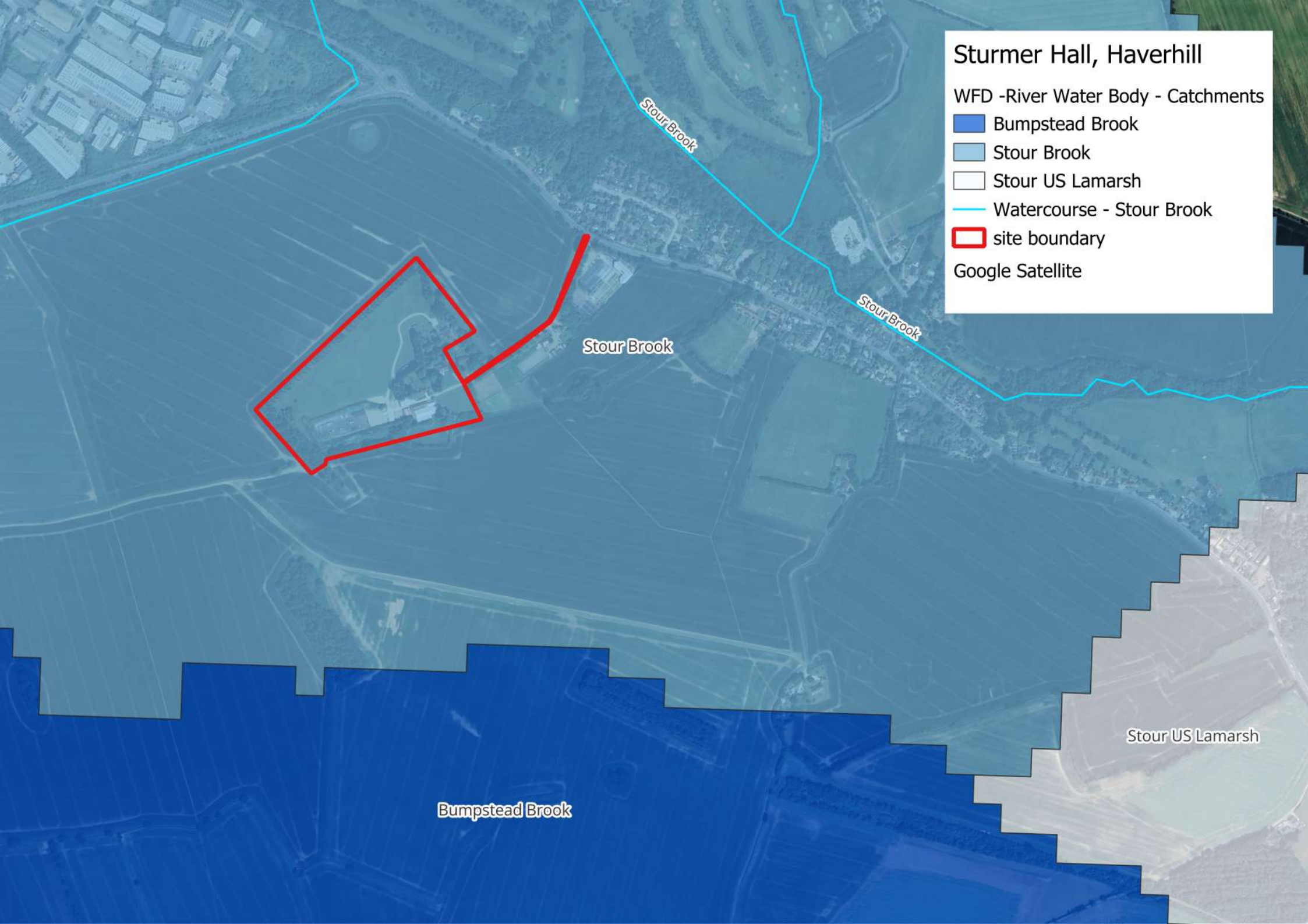


### Sturmer Hall, Haverhill

WFD -River Water Body - Catchments

-  Bumpstead Brook
-  Stour Brook
-  Stour US Lamarsh
-  Watercourse - Stour Brook
-  site boundary

Google Satellite





**Sturmer Hall, Haverhill**

Risk of Flooding from Surface Water

- High – More than 3.3% AEP
- Medium - Between 1% and 3.3% AEP
- Low – Between 0.1% and 1% AEP

site boundary

Google Satellite



### Sturmer Hall, Haverhill

RoFSW - 0.2m depth

- High – More than 3.3% AEP
- Medium - Between 1% and 3.3% AEP
- Low – Between 0.1% and 1% AEP
- site boundary

Google Satellite



### Sturmer Hall, Haverhill

RoFSW - 0.3m depth

- High – More than 3.3% AEP
- Medium - Between 1% and 3.3% AEP
- Low – Between 0.1% and 1% AEP
- site boundary

Google Satellite



**Sturmer Hall, Haverhill**

RoFSW - 0.6m depth

- High – More than 3.3% AEP
- Medium - Between 1% and 3.3% AEP
- Low – Between 0.1% and 1% AEP
- site boundary

Google Satellite



### Sturmer Hall, Haverhill

RoFSW - 0.9m depth

- High – More than 3.3% AEP
- Medium - Between 1% and 3.3% AEP
- Low – Between 0.1% and 1% AEP
- site boundary

Google Satellite

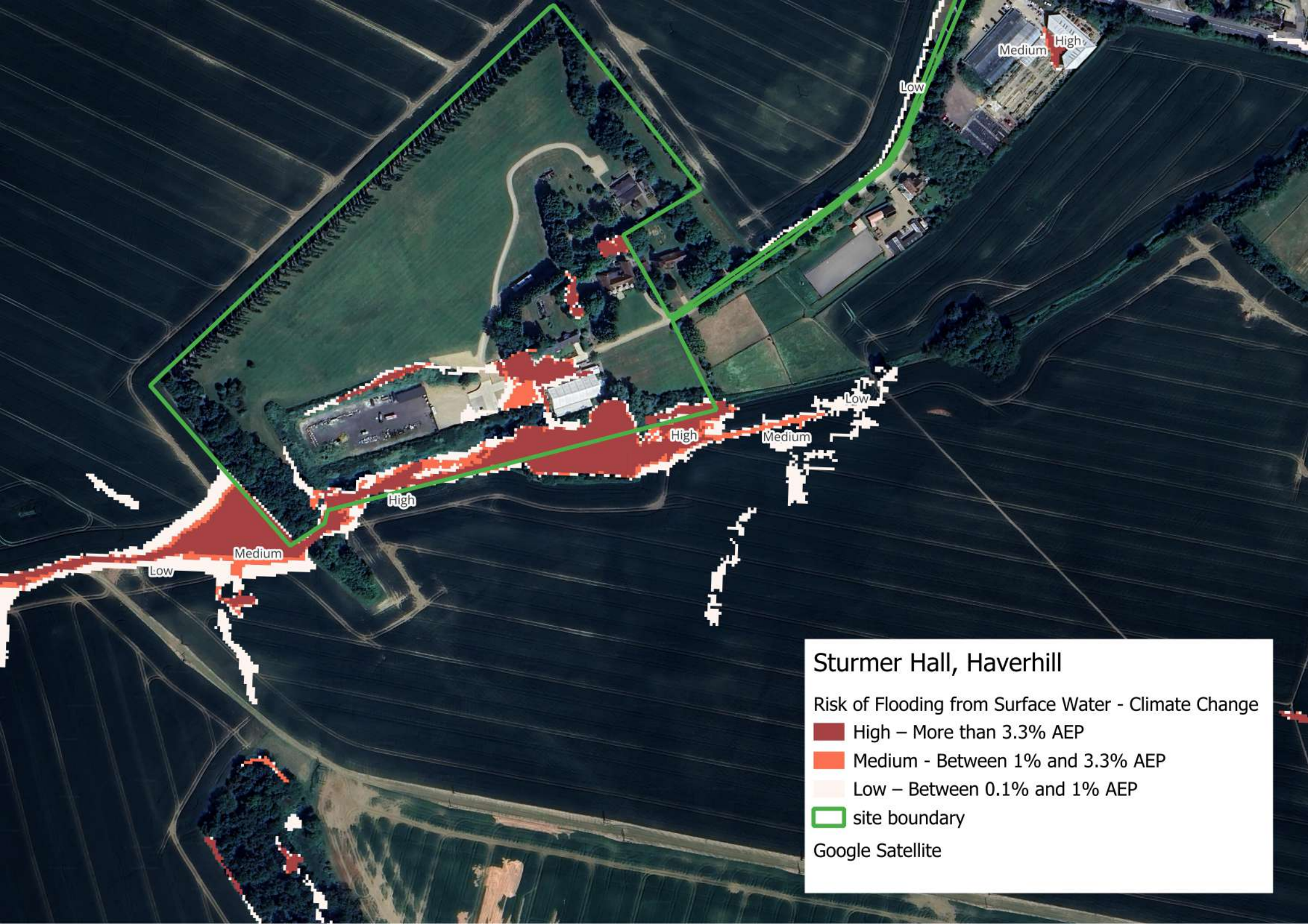


### Sturmer Hall, Haverhill

RoFSW - 1.2m depth

- High – More than 3.3% AEP
- Medium - Between 1% and 3.3% AEP
- Low – Between 0.1% and 1% AEP
- site boundary

Google Satellite

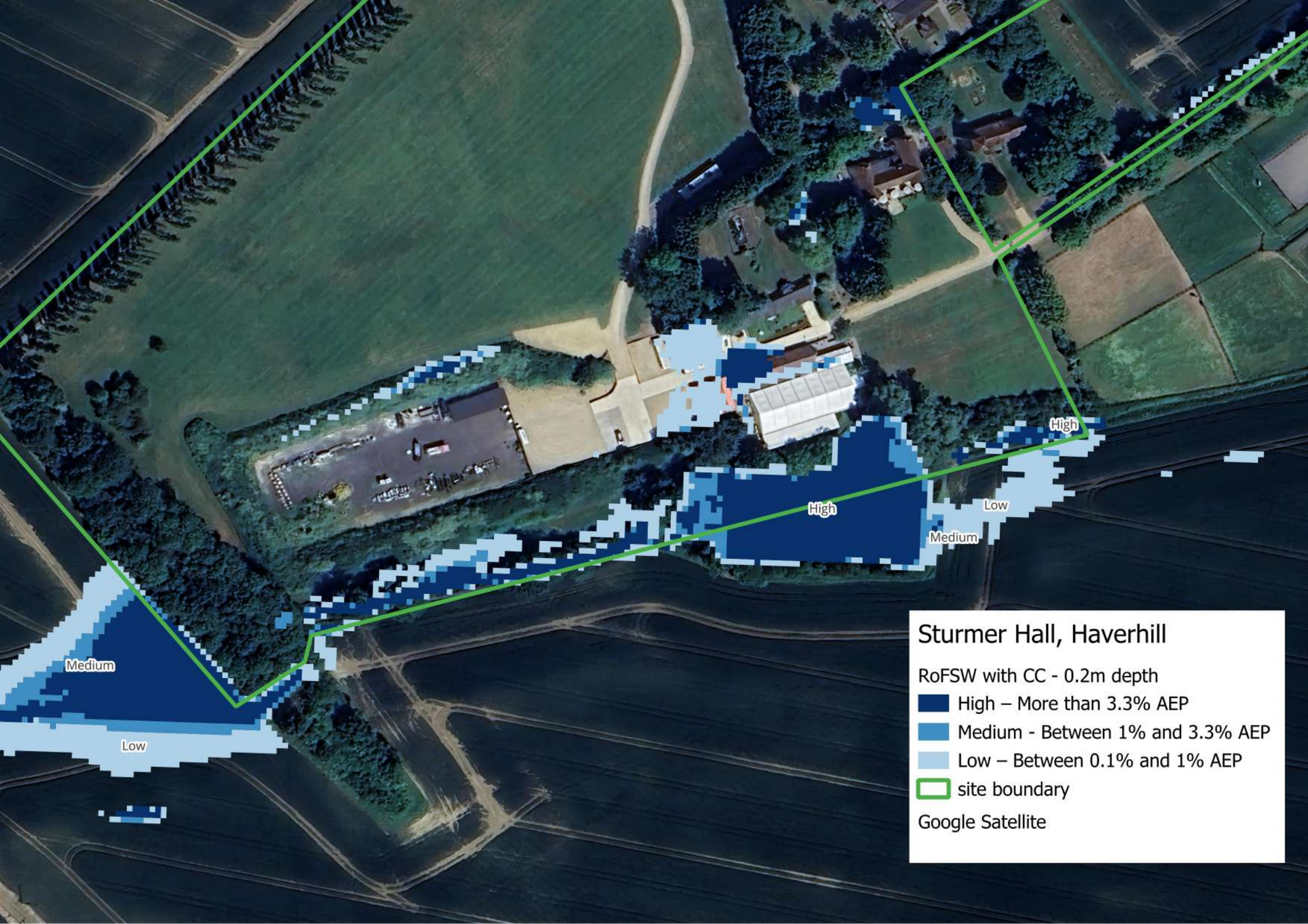


### Sturmer Hall, Haverhill

Risk of Flooding from Surface Water - Climate Change

- High – More than 3.3% AEP
- Medium - Between 1% and 3.3% AEP
- Low – Between 0.1% and 1% AEP
- site boundary

Google Satellite



**Sturmer Hall, Haverhill**

RoFSW with CC - 0.2m depth

- High – More than 3.3% AEP
- Medium - Between 1% and 3.3% AEP
- Low – Between 0.1% and 1% AEP
- site boundary

Google Satellite



### Sturmer Hall, Haverhill

RoFSW with CC - 0.3m depth

- High – More than 3.3% AEP
- Medium - Between 1% and 3.3% AEP
- Low – Between 0.1% and 1% AEP

site boundary

Google Satellite



### Sturmer Hall, Haverhill

RoFSW with CC - 0.6m depth

- High – More than 3.3% AEP
- Medium - Between 1% and 3.3% AEP
- Low – Between 0.1% and 1% AEP

site boundary

Google Satellite



### Sturmer Hall, Haverhill

RoFSW with CC - 0.9m depth

- High – More than 3.3% AEP
- Medium - Between 1% and 3.3% AEP
- Low – Between 0.1% and 1% AEP
- site boundary

Google Satellite



High  
Medium Low

**Sturmer Hall, Haverhill**

RoFSW with CC - 1.2m depth

- High – More than 3.3% AEP
- Medium - Between 1% and 3.3% AEP
- Low – Between 0.1% and 1% AEP
- site boundary

Google Satellite



### Sturmer Hall, Haverhill

- Overland Flow Pathways
- Overland Flow Pathways — Ponding
- site boundary

Google Satellite



### Sturmer Hall, Haverhill

- RoFSW - Hazard — 0.75 Hazard
- High – More than 3.3% AEP
  - Medium - Between 1% and 3.3% AEP
  - Low – Between 0.1% and 1% AEP
  - site boundary
- Google Satellite



### Sturmer Hall, Haverhill

RoFSW - Hazard CC — 0.75 Hazard

- High – More than 3.3% AEP
- Medium - Between 1% and 3.3% AEP
- Low – Between 0.1% and 1% AEP
- site boundary

Google Satellite



### Sturmer Hall, Haverhill

RoFSW - Hazard — 1.25 Hazard

High – More than 3.3% AEP

Medium - Between 1% and 3.3% AEP

Low – Between 0.1% and 1% AEP

site boundary

Google Satellite



**Sturmer Hall, Haverhill**

RoFSW - Hazard CC — 1.25 Hazard

- High – More than 3.3% AEP
- Medium - Between 1% and 3.3% AEP
- Low – Between 0.1% and 1% AEP
- site boundary

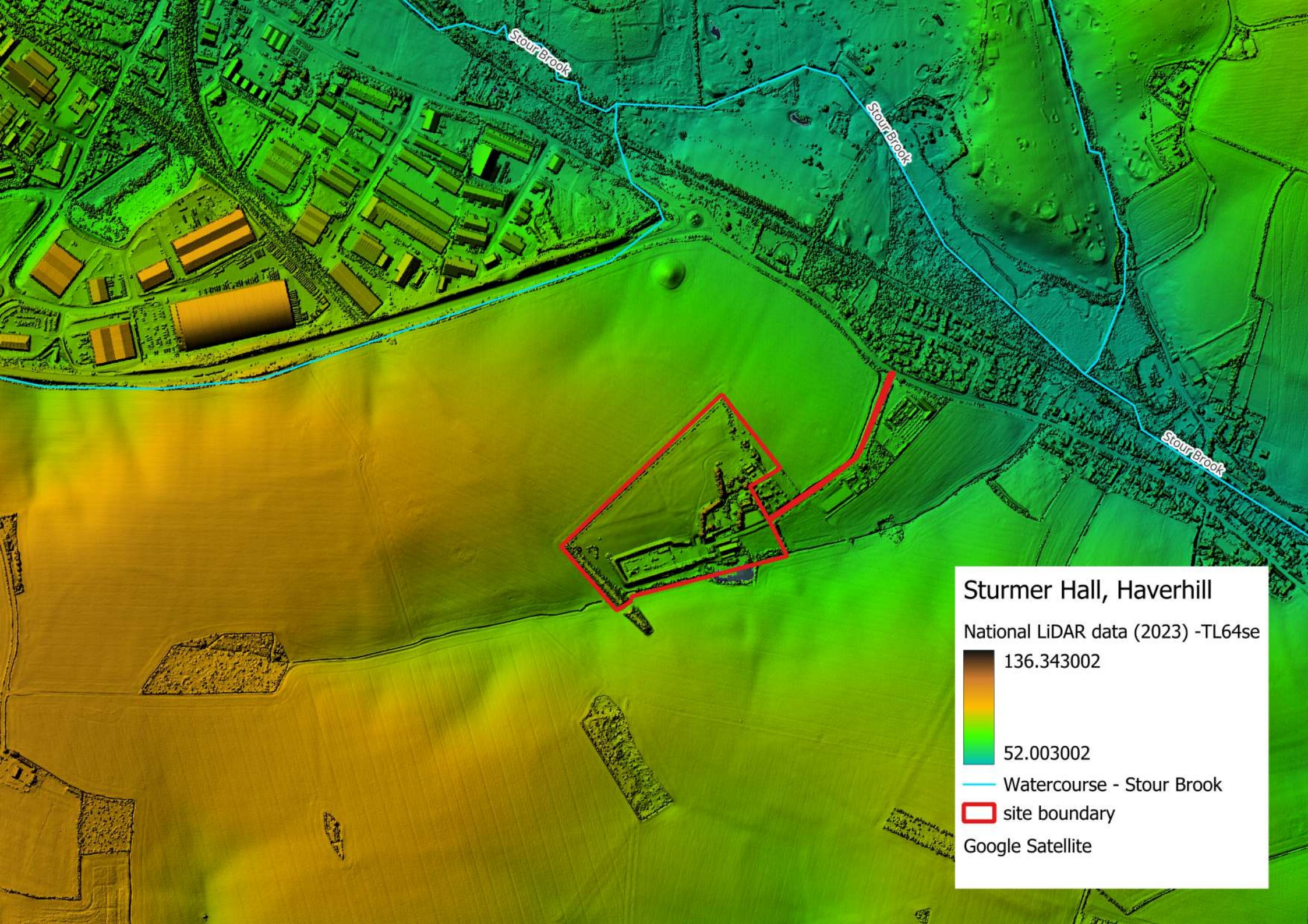
Google Satellite



**Sturmer Hall, Haverhill**

-  Groundwater\_Flooding
-  site boundary

Google Satellite



**Sturmer Hall, Haverhill**  
National LiDAR data (2023) -TL64se

136.343002

52.003002

Watercourse - Stour Brook

site boundary

Google Satellite