

# FLOOD RISK, DESIGN AND ACCESS STATEMENT

## PROPOSED ERECTION OF 1NO DWELLINGS:

Land at West Lane, Haltham, Horncastle. LN9 6JG

## DOCUMENT HISTORY

ISSUE NO	COMMENTS	DATE
1	Planning Application	01.10.2019



12 Vickers Lane, Louth, Lincolnshire, LN11 9PJ

T: 01507 611155 W: [www.lincsdesignconsultancy.co.uk](http://www.lincsdesignconsultancy.co.uk)

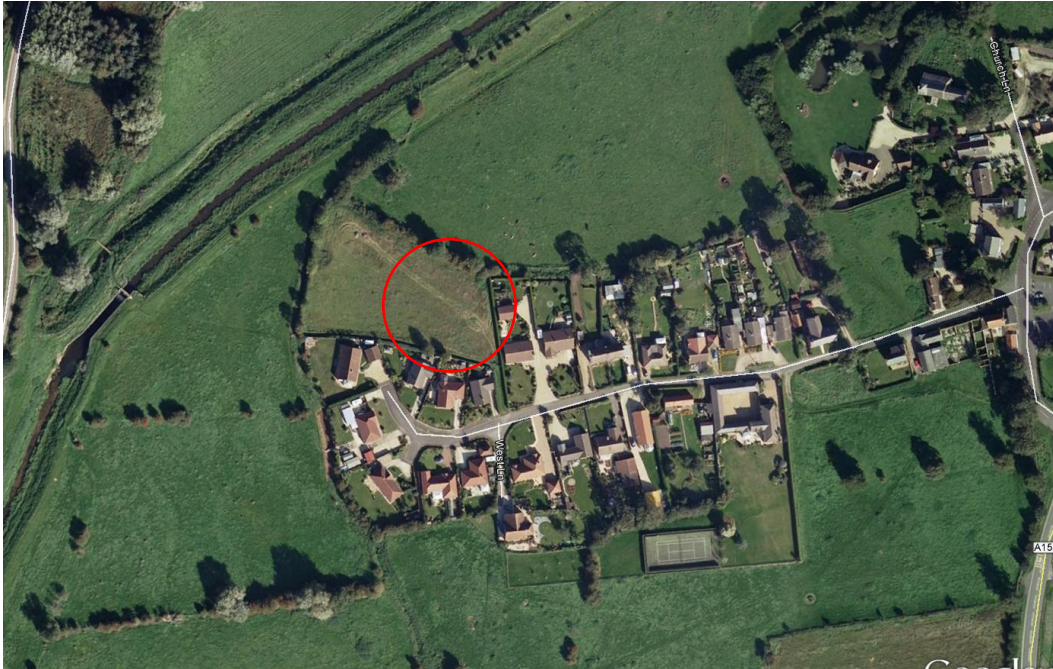
1	INTRODUCTION	3
2	EXISTING	4
3	PROPOSED DEVELOPMENT	6
4	FLOOD RISK & DRAINAGE	8
5	PLANNING POLICY	12
6	CONCLUSION	14

## **1 INTRODUCTION**

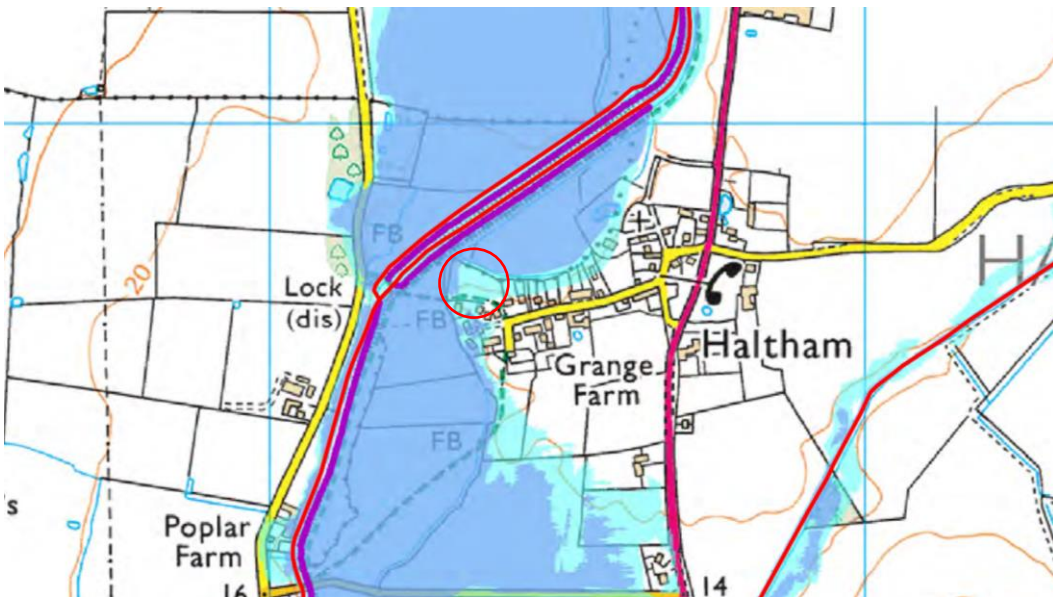
- 1.1 This Statement has been prepared to accompany a planning application for the proposed erection of 1 no dwelling at Land at West Lane, Haltham, Horncastle.

## 2 EXISTING

- 2.1 The application site is approximately 0.07ha in area and is located to the north east of the village of Haltham (See Figure 1). The Grid reference for the site is TF 24356 63731.
- 2.2 The application site currently comprises a grass paddock. The sites boundaries are composed of a mixture of fencing, hedges and sporadic trees. The site is relatively flat with heights of 14.700mAOD on the western boundary rising to 15.00mAOD on the eastern boundary.
- 2.3 A approved residential dwelling is located directly to the south of the site (S/074/00426/17). Existing residential dwellings are located to the east and south. These dwellings are of relatively modern construction and are all 1 storey in height. Agricultural fields are located to the north and west.
- 2.4 An existing entrance from West Lane provides access to the site. The access also incorporates a public right of way which runs north from West Lane and then runs west along the southern boundary of the site.
- 2.5 The site is within Flood Zone 2 as indicated on the Environment Agency Flood Maps (Figure 2).
- 2.6 The village is located on the A153 road providing easy access to the town of Horncastle, located approximately 4 miles to the north; the town provides a range of residential amenities including shops, super markets, medical facilities and schools. The A153 also provides access to the combined settlements of Coningsby and Tattersall which provide further residential amenities. A regular bus route provides public transport links to both of these settlements.



**FIGURE 1:** Aerial photographs highlighting location of site.



**FIGURE 2:** Extract from Environment Agency Flood Map, proposed site highlighted.

### **3 PROPOSED DEVELOPMENT**

#### **3.1 LAYOUT AND ACCESS**

- 3.1.1 The proposed dwelling will be located centrally within the plot, perpendicular to the northern boundary, fronting east. The dwelling has been positioned and orientated so that it will not have any adverse effects on the amenities of neighbouring dwellings.
- 3.1.2 The plot will provide an ample area of private garden surrounding the dwelling. The land to the west of the site will be retained as a grassed paddock. The existing landscaping to the site boundaries will be retained and reinforced where needed, new landscaping will be added within the site.
- 3.1.3 The layout of the proposed dwelling has been designed to take advantage of solar gain and also of the views to the north and west of the site.
- 3.1.4 The existing access from West Lane will be utilised to serve the dwelling. There is an appropriate area within the site to allow a car to fully turnaround and enter the highway in a forward gear. The existing route of the public right of way will be unaffected by the proposed development.

## **3.2 APPEARANCE AND SCALE**

3.2.1 The proposed dwelling will be 1 storey in height and will have a traditional appearance. The dwelling has been limited to 1 storey to meet the character of the locality which is defined by 1 storey bungalows. The proposed dwelling has been designed to be a traditional rural cottage. The dwelling will have a central apex ridge with a balanced front elevation. Traditional detailing will be incorporated into the heads, cills and eaves. The dwelling will be constructed from vernacular materials including red brick with a slate/pantile roof

## **3.3 USE AND AMOUNT**

3.3.1 The existing site is used as a grassed paddock. The proposed development will see the erection of a dwelling therefore changing the use to residential.

3.3.2 The proposed development will provide 1 no dwelling which will have the following internal programme;

- Kitchen/dining room
- Lounge
- Utility
- 3 no bedrooms
- Family bathroom

## 4 FLOOD RISK AND DRAINAGE

- 4.0 This section presents an assessment of Flood Risk to the development from
- external sources; and
  - potential of the proposed development to cause flood risk elsewhere

### A) Assessment of Flood Risk to Development from External Sources

#### 4.1 Assessment of Flood Risk from Fluvial/Tidal Sources

- 4.1.1 The site is located 22 miles from the North Sea and therefore is not at risk from Tidal Flooding.
- 4.1.2 The Environment Agencies Maps consider the dominant source of flood risk to the site is from the watercourse known as the Horncastle Canal located to the west of the site. The Hazard Maps provided by the Environment Agency (see Appendix A) show the hazard depth and velocity of water for present day and future flooding scenarios from the water course. A summary of the risks shown by the Hazard Maps is shown in Table 2, below. This data is taken from the River Bain Model (2009) and are in channel levels and therefore may not represent the flood levels on the flood plain, particularly where the channel is embanked or has raised defences.

**TABLE 2: SUMMARY OF HAZARD MAPS**

Node	Annual Exceedance Probability – Maximum Water Levels (mODN)				
	1% (1 in 100)	1% (1 in 100 inc 20% CC)	0.5% (1 in 200)	0.5% (1 in 1000)	0.1% (1 in 1000 inc 20% CC)
B_10120!	14.49	14.50	14.50	14.56	14.63

- 4.1.3 The Environment Agency have advised that the 1 in 100+ climate change scenario should be taken into account, therefore flood depths of 14.40mAOD.



4.1.4 The fluvial defences protecting the site consists of earth embankments. They are in fair condition and provide protection against a flood event with a 2% chance of occurring in a year (1 in 50).

#### **4.2 Assessment of Flood Risk from Overland Flow (Pluvial)**

4.2.1 The Environment Agency Surface Water Flood Map shows that the site is not at risk from surface water flooding.

#### **4.3 Assessment of Flood Risk from Ground Water**

4.3.1 The area surrounding the site is not known to suffer from ground water problems.

#### **4.4 Assessment of Flood Risk from Reservoirs**

4.4.1 The Environment Agency Risk of Flooding from Reservoirs Map shows the site is not at risk from reservoir flooding.

#### **B) Potential of the Proposed Development to Cause Flood Risk Elsewhere**

4.5 In order to mitigate flood risk posed from the site post development adequate control measures have been considered for the site. The proposed development will increase the area of impermeable area within the site. In accordance with recognised guidance there is a hierarchy of surface water from new development should be discharges. The should be as follows

- Infiltration
- Water course
- Public sewer

4.6 The BGS Geology Maps show that the site has a bedrock of Kimmeridge Clay Formation with River Terrace Deposits of sand and gravel. Infiltration drainage may be possible due to the superficial deposits, but this should be proven through percolation tests.

- 4.7 If it is proven that infiltration drainage is not appropriate that it is proposed to take the surface water to the watercourse located on the northern boundary of the site, this can be attenuated if required.

### **MITIGATION MEASURES**

- 4.8 The potential source of flooding has been identified as Fluvial. Whilst the development site is stated to be within the flood plain the likelihood of flooding is considered to be extremely low, though the site remains theoretically at risk of flooding. A precautionary approach should be adopted to ensure that the development is safe and not exposed unnecessarily to flooding. Therefore the following mitigation measures will be put into place;

- The Environment Agency require the floor level to be set 300mm above 14.50mAOD (1 in 100+ climate change scenario). The Environment Agency have also advised that the historic flooding level for the site was 15.100mAoD. Therefore, to address the flood risk posed the proposed finished floor level of the dwelling will be set at **15.200mAoD**.
- The proposed dwelling will be 1.5 storeys in height providing residents with a safe refuge upstairs during a flooding event.

- 4.9 Additional physical measures which should be considered include:

- Electrical circuits and sockets to be raised as high as reasonably possible i.e. 1m above floor level in accordance with the BRE Publication: Design Guidance on Flood Damage to Buildings (1996). The position of sockets etc. should also comply with the Building Regulations.
- Boilers to be wall mounted & under floor heating should be avoided if possible.
- Where possible, all service entries should be sealed (e.g. with expanding foam or similar closed cell material).

The Department of Communities and Local Government publication 'Improving the Flood Performance of New Buildings - Flood Resilient Construction', provides additional guidance for resilient construction. Reference should also be taken from the BRE Publication: Design Guidance on Flood Damage to Buildings (1996).

- 4.10 It is recommended that the dwelling is registered with the Environment Agency's 'Warnings Direct' flood warning system. The Agency provides this flood warning service in England and Wales and supports the public taking action to prepare and respond when these warnings are issued. The warnings are provided for flooding from rivers and the sea but not for localised flash flooding that cannot be predicted, for example from blocked or overloaded sewers or local groundwater flooding. The Agency issues warnings through media on TV and radio weather bulletins and on its website ([www.environment-agency.gov.uk/floodline](http://www.environment-agency.gov.uk/floodline)). In areas of particular risk, the Agency can send a warning message direct to people at home or at work by telephone, fax or pager using an Automatic Voice Messaging (AVM) system.

## 5 PLANNING POLICY

5.1 The site directly to the south received planning permission in 2019 for 1 no dwelling (ref S/074/00426/17) with local planning policy SP9 justifying the approval. Planning policy SP9 refers to Single Plot Exceptions is supported by a Supplementary Planning Document. The policy states that;

- 1) In the towns, large, medium and small villages of the Coastal Zone and the medium and small villages inland, the Council will support single plot development for affordable housing provided it meets all of the following:
  - the applicant can demonstrate they are unable to afford a suitable home currently available in the parish;
  - the applicant has an evidenced local connection to the parish;
  - the site is in or adjoining the settlement and does not constitute isolated or sporadic development;
  - the dwelling is affordable to the applicant and will remain affordable to subsequent occupiers in perpetuity.
  - The area of the site does not exceed 0.1ha and typically, the internal floor space of the proposed dwelling does not exceed 100 sqm or 110sqm where flood risk mitigation is required.
- 2) The resale market value of the development will be fixed at 80%.
- 3) Flood mitigation should be provided in areas of flood risk as per the advice of the Environment Agency.

## 5.2 In relation to these requirements;

- The applicant currently lives in the Haltham in a rented 2 bedroom bungalow with his partner and children. The current property is too small and unsuitable for the family.
- The applicant will not be subject to the cost of the plot purchase as the land is owned by the family. Policy SP9 restricts floor area to 110 sqm in the flood zone. A conservative estimate for build costs would be approximately £1200.00 per square metre, equating to an overall build costs approximately £132,000; though this may be considerably lower as the family have access to plant and machinery. The figure of £132,000 is within the budget of the applicant. An online search undertaken on the 01.10.2019 shows that there are currently 2 houses for sale in the village which both exceed £250,000, which is far beyond the budget of the applicant. It is therefore demonstrated that the applicant cannot afford a property in the village.
- The SPD provides guidance and criteria to prove local connection. Appendix A lists 8 criteria, for which 2 must be met by at least one member of the household. In relation to this, the applicant's mother has lived in the village for 54 years and his father is from Scrub Hill which is only 4 miles from the village, both parents were educated locally and lived locally when the applicant was born. The applicant's parents still live in the local area. The applicant was a permanent resident of the area throughout his childhood and attended local primary and secondary schools and has continued to live in the local area. The applicant is self-employed, working as relief for local farms as required and is also works at the family's butchery business in Horncastle. It is therefore demonstrated that the applicant has a local connection.
- The application site is located directly alongside the settlement with existing residential dwellings located to the south and east. An approved dwelling is located directly to the south of the site.
- The dwelling is affordable to the applicant and they will accept the requirement for the dwelling to remain affordable in perpetuity.

- The site is located in Flood Zone 2 and therefore the floor area is 110sqm.
- The applicant will accept the 80% resale value.
- Flood mitigation measures have incorporated.

## 6 CONCLUSION

- 6.1 This Supporting Statement has been prepared to accompany a planning application for the proposed erection of 1no dwelling at Land at West Lane, Haltham, Horncastle.
- 6.2 As the proposed development meets the requirements of Local Planning Policy SP9 and is supported by National Planning Policy. It is therefore submitted that the proposal can be granted planning permission.