

# Flood Risk Assessment

**Proposed extension of existing multi-use commercial building to provide toilets  
and storeroom.**

Cherry Park, South Road, Chapel St Leonards, PE24 5TS.



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## DOCUMENT HISTORY

<b>ISSUE NO</b>	<b>COMMENTS</b>	<b>DATE</b>
1	Planning	12/09/2023

## 1 Introduction

1.1 This Statement has been prepared to accompany a full planning application for pergoda, to be used as an outdoor seating area associated with the café within the adjacent brick building.

1.2 The Government has placed increasing priority on the need to take full account of the risks associated with flooding at all stages of the planning and development process. This course of action seeks to reduce the future damage to property and risk to life resulting from incidents of flooding. National Planning Policy does not prevent all development in flood risk areas, and this would be unsustainable and result in economic stagnation, depriving existing communities of much needed homes, services, employment opportunities etc. It is in the essential interests of the vitality of settlements and for the wider economic and social wellbeing of the community, that development opportunities are not unnecessarily constrained. Accordingly, the aims of this site specific FRA will be as follows:

- Identify and address flood risk issues associated with the development.
- Assess if the project is likely to be affected by flooding from all relevant sources both now and in the future.
- Assess whether the project will increase the flood risk elsewhere.
- Demonstrate that the project is safe and where possible, reduces flood risk.
- Propose measures to deal with the identified effects and risks.

## 2 Existing Site

2.1 The application site is located along South Road, within the town of Chapel St Leonards. The grid reference is TF 55961 71158 (See Figure 1).

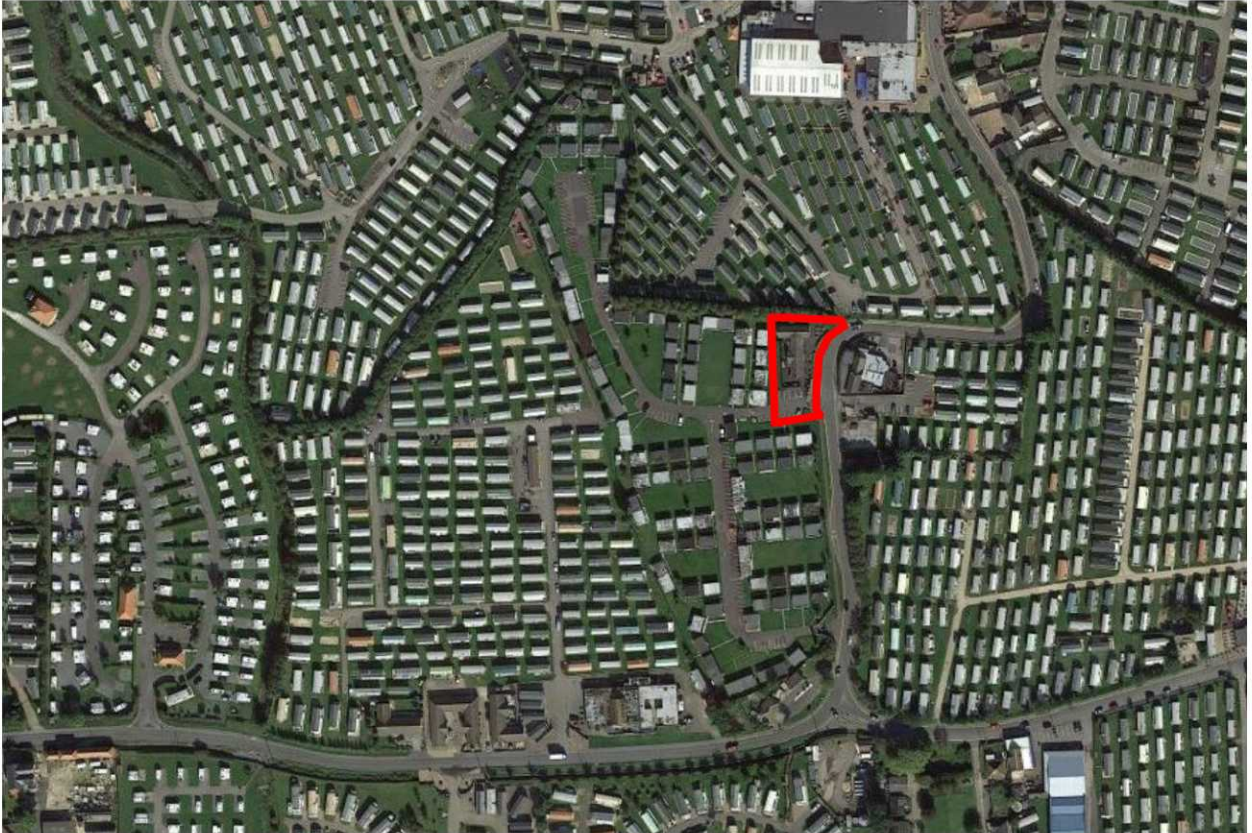


Figure 1- Aerial photograph showing the location of the site (site shown by red outline)

2.2 The site currently forms part of the wider site known as Cherry Park. Cherry Park comprises an existing brick building of multiple usage, including a fish and chip shop, site reception, convenience store, café with kitchen and dining areas, along with associated facilities such as W/Cs, preparation areas and stores which serve the wider park consisting of cedar wood chalets. The existing brick building is adjacent to the location of the proposed pergoda and is of a traditional form and construction with gable ends and pitched roofs with central apex ridges.

- 2.3 The Environment Agency flood map for planning identifies the site as being within Flood Zone 3a (See Figure 2).

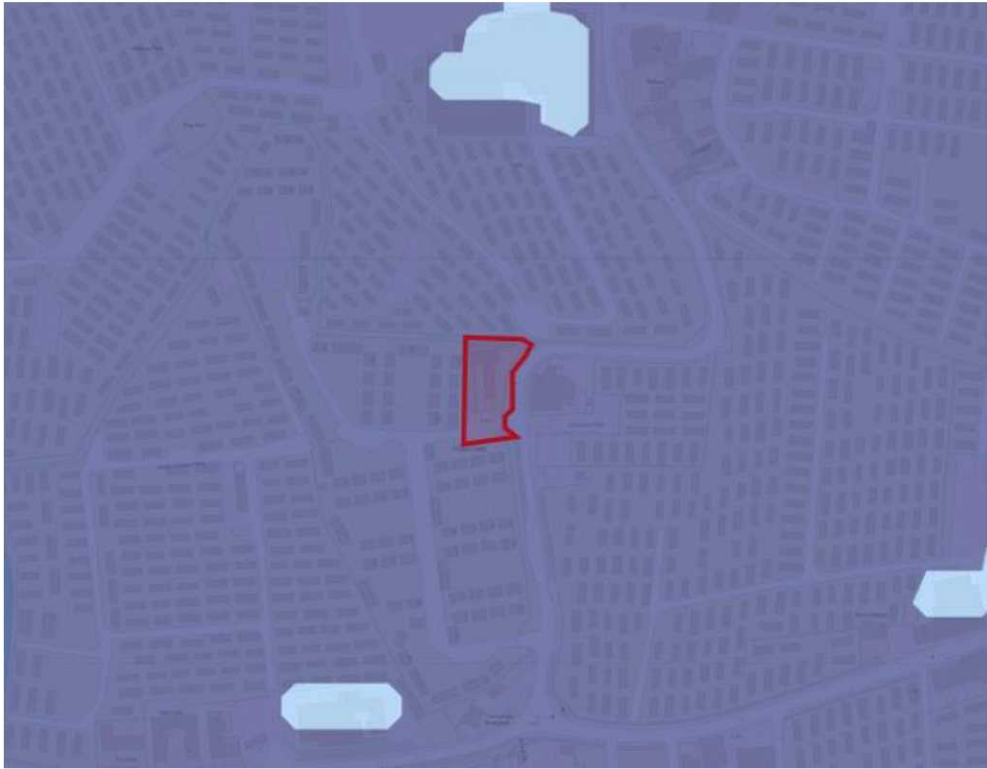


Figure 2- Extract from the Environment Agency flood map for planning showing the location of the site in relation to the flood zones

### 3 Proposed Scheme

- 3.1 The proposed application seeks full planning approval for the construction of a pergola for outdoor seating, associated with the adjacent café within the brick building.

### 4 The Sequential & Exceptions Test

- 4.1 The NPPF requires that proposals should be subject to the Sequential Test, and if necessary, the Exception Test at the planning application stage.
- 4.2 The proposed development consists of an extension to an existing building, and therefore cannot be relocated anywhere else, therefore the sequential test cannot be applied to such development.

**TABLE 1: FLOOD ZONES**

*Source: NPPG*

**Zone 3a - high probability**

Land having a 1 in 100 or greater annual probability of river flooding; or  
Land having a 1 in 200 or greater annual probability of sea flooding.  
(Land shown in dark blue on the Flood Map)

**TABLE 2: FLOOD RISK VULNERABILITY CLASSIFICATION** *Source: NPPG*

**Less Vulnerable**

- Police, ambulance & fire stations which are not required to be operational during flooding.
- Buildings used for shops; financial, professional and other services; restaurants, cafes and hot food takeaways; offices; general industry, storage and distribution; non-residential institutions not included in the 'More Vulnerable' class; and assembly and leisure.
- Land and buildings used for agriculture and forestry.
- Waste treatment (except landfill\* and hazardous waste facilities).
- Minerals working and processing (except for sand and gravel working).
- Water treatment works which do not need to remain operational during times of flood.
- Sewage treatment works, if adequate measures to control pollution and manage sewage during flooding events are in place.

**TABLE 3: FLOOD RISK VULNERABILITY AND FLOOD ZONE 'COMPATIBILITY'** *Source: NPPG*

Flood Zones	Essential Infrastructure	Highly Vulnerable	More Vulnerable	Less Vulnerable	Water compatible
Zone 1	✓	✓	✓	✓	✓
Zone 2	✓	Exception Test Required	✓	✓	✓
Zone 3a	Exception Test Required	✗	Exception Test Required	✓	✓
Zone 3b	Exception Test Required	✗	✗	✗	✓

✗ = Development should not be permitted    ✓ = Development is appropriate

Table 3 confirms that the proposed development is appropriate in Flood Zone 3.

## 5 Historic Flooding

- 5.1 Figure 3 shows a historic flood map from the Department for Environment Food & Rural Affairs, the map shows the extent of historical flooding. The map shows the extent of the 1953 flood, where the North Sea overtopped the tidal defences, the site, the rest of Chapel St Leonards, and the wider area along the East coast were affected.

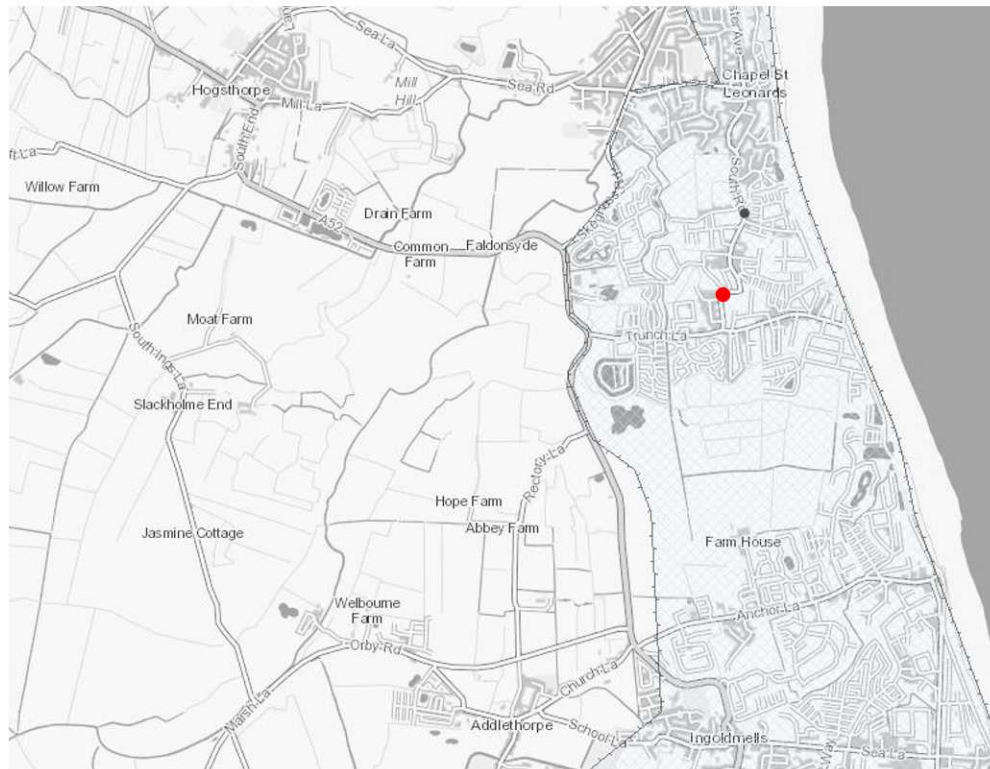


Figure 3 - Extract from the Department for Environment Food & Rural Affairs historic flood map, proposed development site identified with red dot.



## 6 Assessment of potential sources of flooding and possible impact

6.0 This section presents an assessment of Flood Risk to the development from

- a) external sources; and
- b) potential of the proposed development to cause flood risk elsewhere

**TABLE 1: POSSIBLE FLOODING MECHANISMS**

Source	Significant?	Comment
Fluvial	No	Distance from watercourse
Tidal/Coastal	Yes	If a breach of the defences occurred
Pluvial (drainage)	Low	On site run off.
Groundwater	No	Unlikely due to local drainage network
Overland flow	No	No higher ground adjacent to the site
Blockage	No	No culverts or bridges close to the site
Infrastructure failure	No	No major infrastructure has been identified
Rainfall ponding	No	No depressed areas which could encourage ponding.

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

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

- 6.1.1 The site is not considered to be at risk of flooding from main rivers.
- 6.1.2 The North Sea is located approximately 700 meters to east of the site therefore tidal flooding is considered to be a source of flood risk.

#### 6.2 Assessment of Flood Risk from Overland Flow (Pluvial)

- 6.2.1 The Environment Agency Surface Water Flood Map shows that the site is not at risk of surface water flooding.

#### 6.3 Assessment of Flood Risk from Ground Water

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

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

6.4.1 The Environment Agency Risk of Flooding from Reservoirs Map shows that the site falls within an area of flood risk from reservoirs when there is also flooding from rivers.

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

6.5 In order to mitigate flood risk posed from the site post development adequate control measures have been considered for the site. The proposed development is situated within an existing area of hardstanding and therefore will not increase the impermeable area within the site. As the site is previously developed, it is assumed that the existing building has a surface water outfall, therefore surface water is to discharge to existing provisions utilised by the site.

#### **Mitigation Measures**

- 6.6 The potential source of flooding has been identified as Tidal. Whilst some areas of the development are stated to be within the flood plain the likelihood of flooding is considered to be extremely low, though some areas of the site are still 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 proposals involves the construction of a pergoda for the provision of an outdoor seating area associated with the existing café. Therefore, mitigation such as raising floor levels or flood warning systems are not viable for such structure.

## 7 Conclusion

7.1 The following conclusions, in relation to the questions posed at the start of this document, are as follows:

7.2 **Identify and address flood risk issues associated with the proposed development;**  
The potential sources of flood risk have been discussed within this report. It has been established that tidal flooding is the dominant source of flood risk in the area.

7.3 **Assess if the project is likely to be affected by flooding from all relevant sources both now and in the future:**

The Flood Maps show that the site could be affected by a breach or overtopping of the sea defences in the future. The likelihood of a breach in the defences is considered low given their current good condition and the commitment by the Humber Estuary Coastal Authorities Group to maintain and raise the defences in the medium and long term future.

7.4 **Assess whether the project will increase the flood risk elsewhere:**

The proposed pergola will not increase impermeable area as it is located within an area of the site comprising existing hardstanding and therefore will not increase surface water run-off.

7.5 This report demonstrates the proposed development is compliant with the requirements of the National Planning Policy Framework, and it is considered that planning permission should not be refused on flood risk grounds.