

# **Flood Risk Assessment (Flood Zones 2 & 3)**

## **CHANGE OF USE OF AGRICULTURAL LAND TO SUI GENERIS USE FOR PRIVATE DOG WALKING AND TRAINING WITH ASSOCIATED MINOR WORKS**

### **LAND AT WOOD BOTTOM ROAD, NETHERTON, HUDDERSFIELD**

#### **Flood Zone Classification**

Flood Zone 2 – Medium probability (between 1 in 100 and 1 in 1,000 annual probability of river flooding).

Flood Zone 3 – High probability (greater than 1 in 100 annual probability of river flooding).

#### **Sources of Flooding**

Fluvial flooding: Primary risk from nearby stream

Surface water flooding: Potential ponding in low-lying areas during heavy rainfall.

Groundwater flooding: Possible but less significant.

Sewer flooding: Unlikely due to rural location.

#### **Flood Risk Vulnerability Classification**

Private dog walking field use: Classified as “water-compatible development” under NPPF guidance.

This means the land use is acceptable in Flood Zones 2 and 3, provided risks are managed.

## **Flood Risk Assessment**

Likelihood: Medium to high, depending on river levels and rainfall.

Extent: Flood mapping shows the north-east part of the site may be inundated during a 1 in 100-year flood event.

Depth & Duration: Flood depths may exceed 0.5m in Zone 3, lasting several hours to days.

## **Mitigation Measures**

Fencing: Flood-resilient post and tape fencing will be installed that allows water to pass through.

Shelters: No dog shelters are proposed. The shelter to the north of the site is for equipment storage only.

Escape routes: There will be clearly signposted pedestrian exits to higher ground. The exit is not within a flood zone.

Parking: The proposed car park is not within a flood zone and is on higher ground.

Drainage: A permeable surface is proposed for the parking area.

Emergency plan: The field will be closed during flood warnings and users will be notified via the booking system.

## **Impact on Surrounding Area**

The development is low-impact and does not increase built footprint significantly.

No displacement of floodwater is expected due to permeable fencing and minimal structures.

Surface water management ensures no increase in runoff to neighbouring land.

## **Climate Change Considerations**

The proposed development allows for increased flood depths and frequency due to climate change (Environment Agency guidance suggests up to 35–70% increase in peak river flows).

Escape routes and infrastructure have been designed with future flood scenarios in mind.

## **Conclusion**

The proposed private dog walking field is water-compatible and acceptable in Flood Zones 2 and 3.

With mitigation measures (resilient fencing, emergency closure plan, safe access/egress), the site can operate safely without increasing flood risk elsewhere.