

## Core Strategy Site Flood Risk Assessment: summary and recommendations

### Site Details

Site Name	The Warren - Hill Barn Lane
Site Location (OS NGR)	TQ140053
Site Area (ha)	9.01
Proposed use	Mix of uses (Educational and Residential)
Flood risk vulnerability classification (PPS25 Table D2):	More Vulnerable
Brown/Greenfield	Brownfield

### Flood Risk

Flood Zones (Fluvial & Tidal)	Comments
Flood Type	N/A No Tidal or Fluvial flood risk
Percentage of site in Flood Zone 3b	0%
Percentage of site in Flood Zone 3a	0%
Percentage of site in Flood Zone 2	0% This excludes any area contained within Flood Zone 3
Percentage of site in Flood Zone 1	100% Flood Zone 1 indicates the area lying outside of Flood Zones 2 and 3
Defended?	N/A Maintainer: N/A Standard of Protection: N/A

### Surface water flooding

Susceptibility	The north and eastern edge of the site is shown to be intermediate and less susceptible to surface water flooding during a 1 in 200 year event.
Flood map for surface water	The site shows the area along the eastern boundary along Hillbarn Lane is at risk of surface water flooding to depths of >0.1m, and in some small areas is at risk of surface water flooding to depths of >0.3m during a 1 in 200 year event. A few small areas within the site are also shown to be a risk of surface water flooding to depths > 0.1 and >0.3m during a 1 in 30 year events.

### Other sources of flood risk

Groundwater Flood Risk	The north of the site is underlain by Tarrant Chalk Member formation, the southern half of the site is underlain by Spetisbury Chalk Member formation and is within the EA's major aquifer high and intermediate vulnerability zones. Consequently the area may be susceptible to groundwater emergence. However the site is not covered by the EA groundwater susceptibility map, and there are no reported incidents of groundwater flooding in the area.
Sewer Flood Risk	There are no recorded incidents of sewer flooding within the site boundary. An incident was recorded to the northwest of the site (Hillside Avenue).

### Effect of climate change:

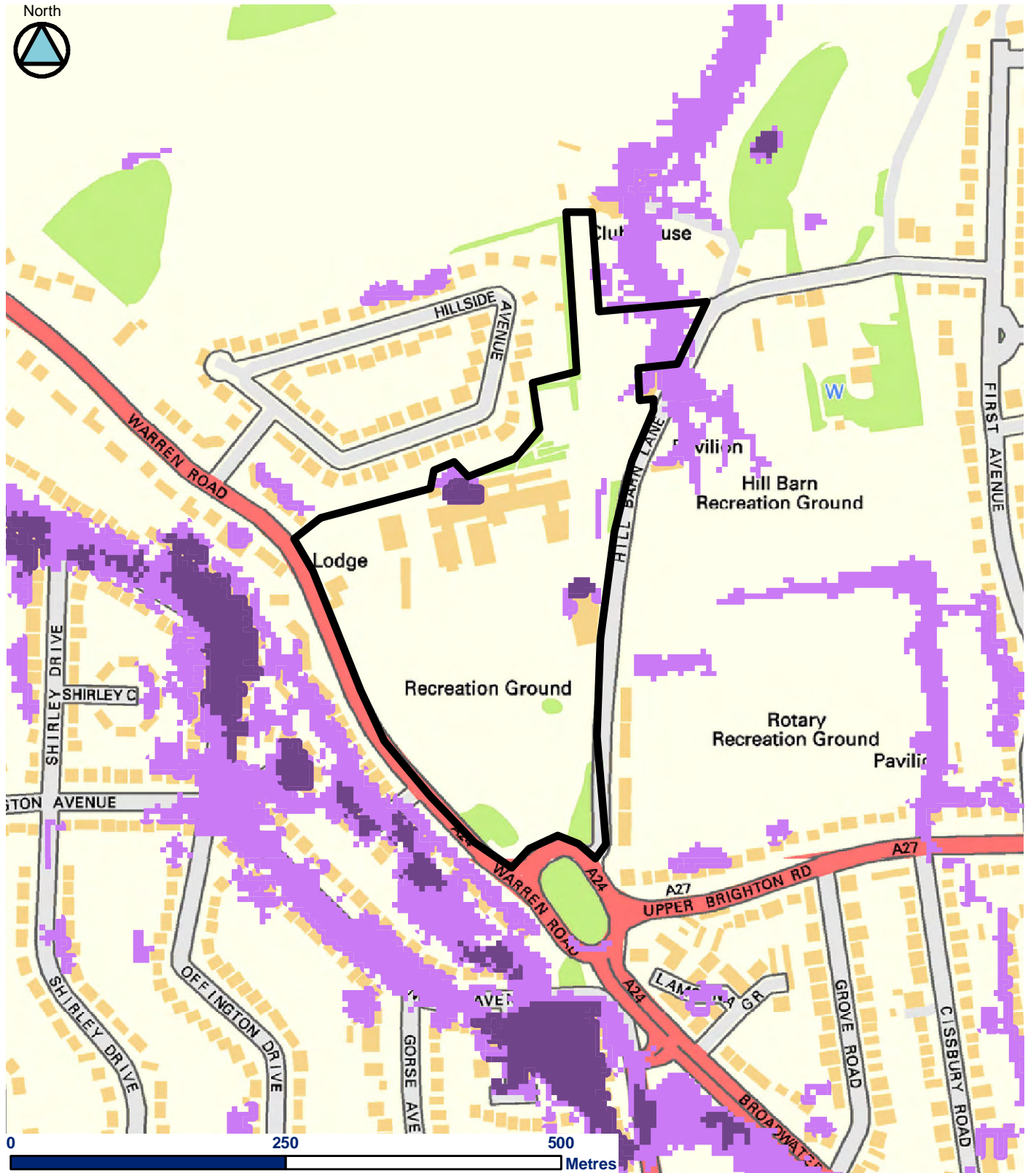
The impact of climate change on surface water or groundwater has not been assessed as part of this SFRA.
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### Is a site specific Flood Risk Assessment required?

FRA required?	Yes	As the site is greater than 1 ha proposed development would require an FRA to consider all sources of flooding and ensure flood risk is not increased elsewhere.
Exception test required for proposed use?	As the site is located within Flood Zone 1 - the Exception Test will not need to be applied.	

### Recommendations for Development


Future development in the area is likely to be redevelopment. There is no fluvial or tidal risk associated with the site. However the area appears to be at risk from surface water flooding. Future development should ensure that it would not increase surface water flood risk elsewhere, to achieve this existing flow paths should be maintained. Sustainable drainage techniques should be incorporated into new design to ensure runoff rates do not increase and where possible steps should be taken (such as rainwater harvesting for water reuse or infiltration) to further reduce runoff. As the area is highlighted as being at risk of surface water flooding steps should be taken to reduce the consequence of flooding, i.e. sequentially plan a development so resilient uses are placed on the ground flood, and the building is built with flood risk in mind. As the site is on chalk there could be subterranean flow paths associated with groundwater, any subterranean development should ensure it would be resilient to groundwater flooding, and would not disrupt groundwater flow paths.




**Legend**

 w9 - The Warren - Hill Barn Lane

**Depth**

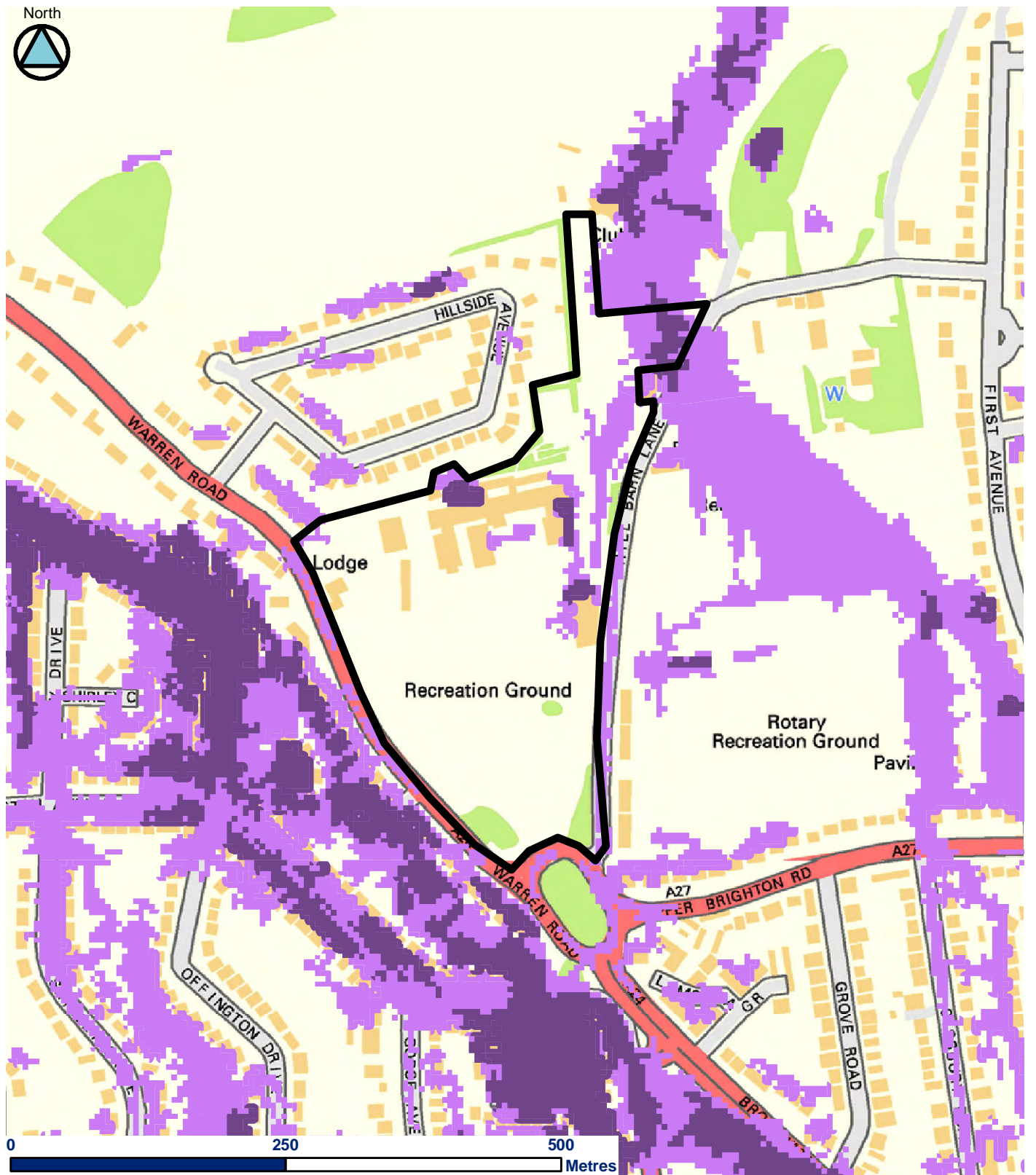
 > 0.3m

 > 0.1m



**The Warren  
Hill Barn Lane**

**Surface Water Flood Risk  
(Flood Map for Surface Water  
1 in 30 year)**



**Legend**

w9 - The Warren - Hill Barn Lane

**Depth**

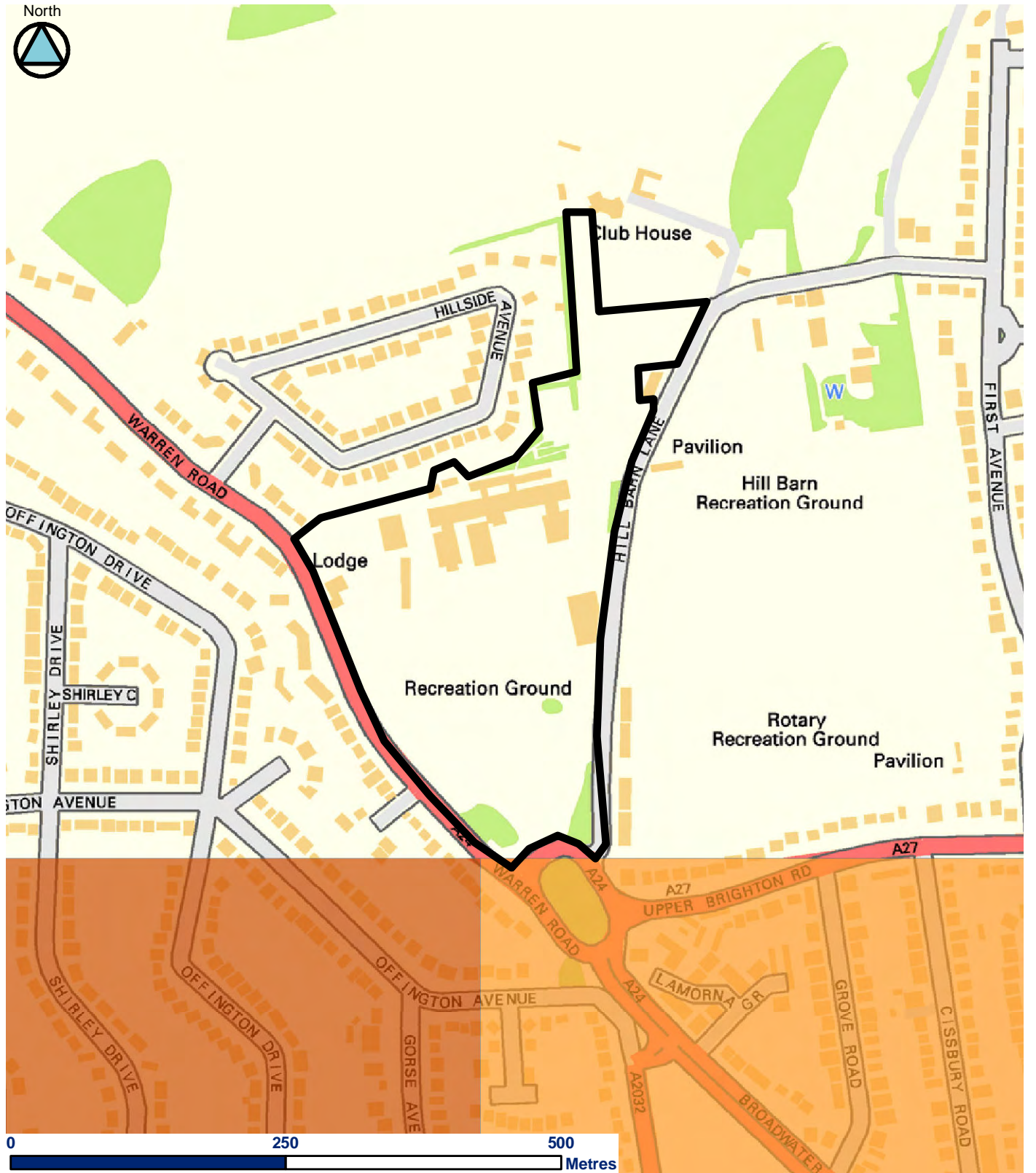
> 0.3m

> 0.1m



**The Warren  
Hill Barn Lane**

**Surface Water Flood Risk  
(Flood Map for Surface Water  
1 in 200 year)**



**Legend**

w9 - The Warren - Hill Barn Lane

ASTGWF

- $\geq 75\%$
- $\geq 50\% < 75\%$
- $\geq 25\% < 50\%$
- $< 25\%$





**The Warren  
Hill Barn Lane**

**Groundwater Flood Risk  
(Areas Susceptible to Groundwater  
Flooding)**



**Legend**

-  w9 - The Warren - Hill Barn Lane
-  Sewer Flooding



**The Warren  
Hill Barn Lane**

**Historic Flooding**