

Site 255A- Chertsey Bittams-Green Lane

Site Number	255A	Site Name	Chertsey Bittams-Green Lane
Site Location	KT16 9QP	Grid Reference	TQ 03489 65600
Location Plan			
KEY:	<ul style="list-style-type: none"> Red line boundary Main River *Other Rivers *Where other indicates: Drains, culverts, streams, brooks etc. 		
Description	<p>This site is within Chertsey Meads. The M25 forms the sites north-eastern boundary, Green Lane the south-western boundary and it shares a boundary with the Salesian school to the north-west. The site is principally open fields but contains one dwelling, 316 Green Lane.</p>		

Risk Assessment

Defences

There are no formal raised defences that would protect this site.

Mapping

KEY:

Red line
boundary

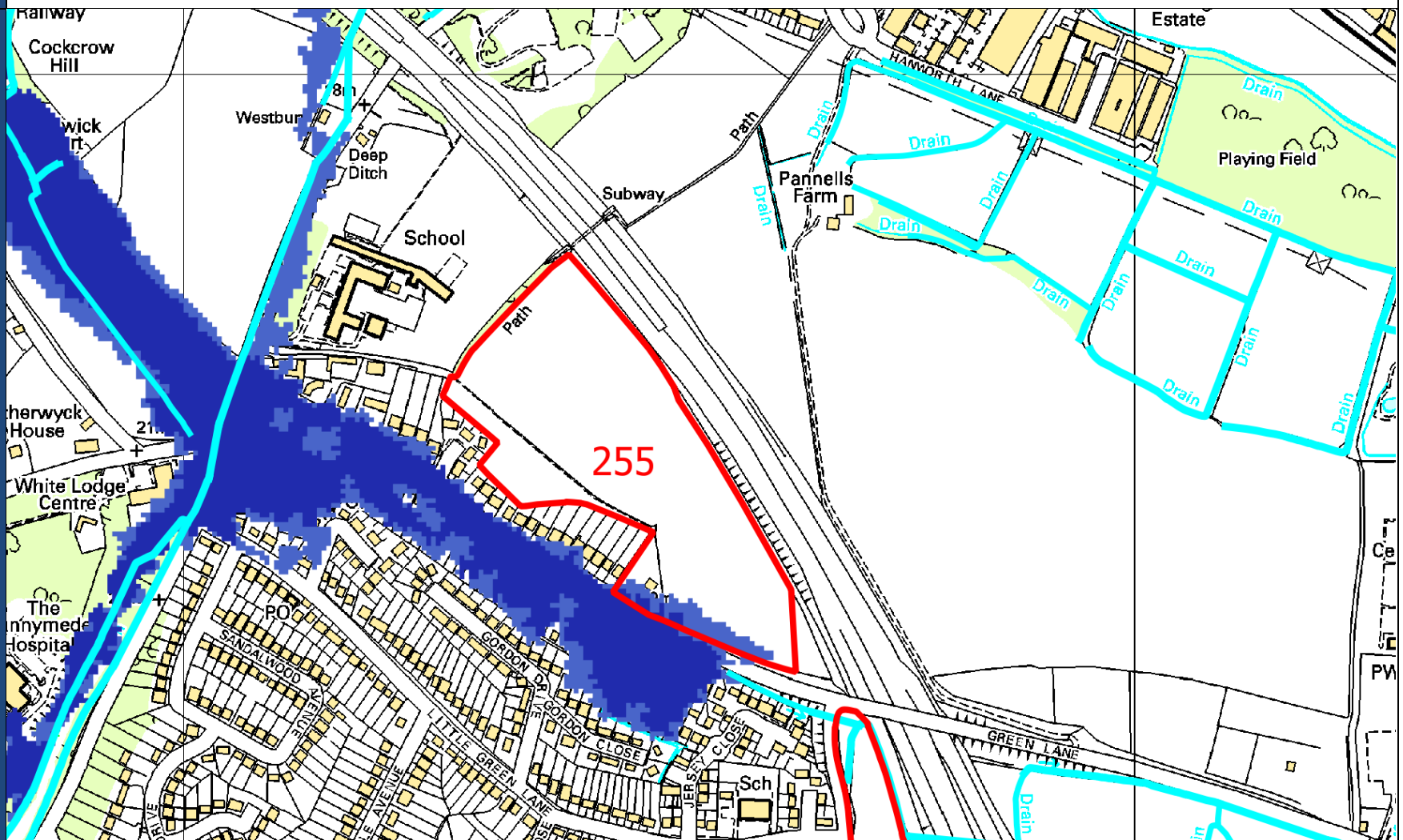
Main

River

*Other Rivers

Flood Zone 2

Flood Zone 3



Flood Zones

The site is shown to lie principally in Flood Zone 1. A small area at the south-east corner of the site lies in Flood Zones 2 and 3 (0.37ha or a total of 5.4% of the site area).

Flood Zone 1 – 6.57 ha, 94.6%

Flood Zone 2 – 0.30 ha, 4.3%

Flood Zone 3 – 0.07 ha, 1.1%

Sources of Flooding

Fluvial

Both the 2009 the River Thames Reach 3 flood model and the 2005 Chertsey Bourne flood model do not show any flooding neither within the site nor in a wider area around the site, even when the 20% climate change allowance is taken into account.

1 in 100 year Flood – 0 ha, 0%

1 in 100 year + 20%CC Flood – 0 ha, 0%

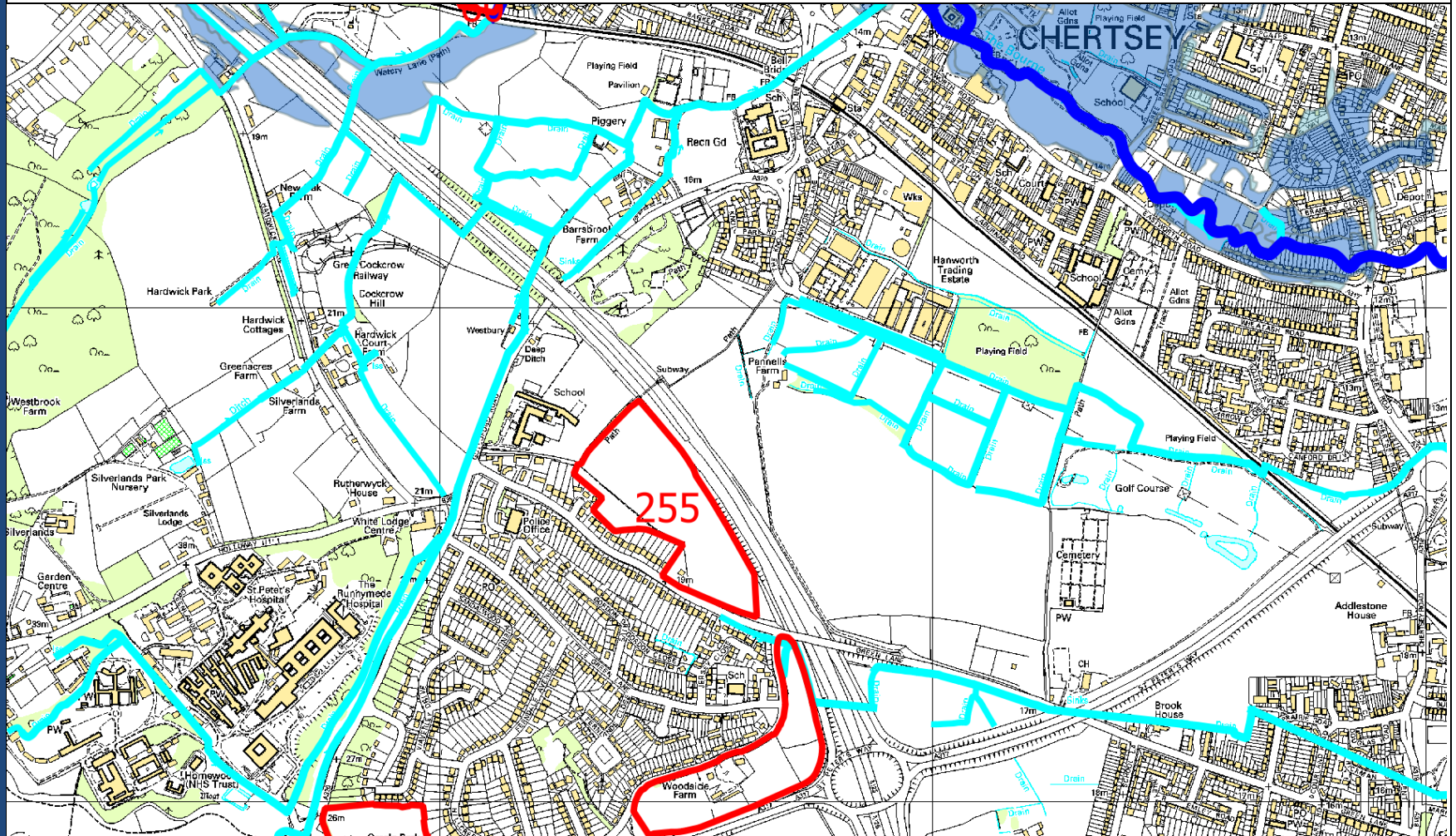
The local land drainage system that drains into the Chertsey Bourne along the A320, Guildford Road, probably accounts for the flooding shown in the Flood Zone mapping.

1 in 100yr +20%CC

Flood Extent



1 in 100yr Flood Extent



River Thames 2018 Model Output

1 in 100 year
and
1 in 100 year +
35% Climate
Change

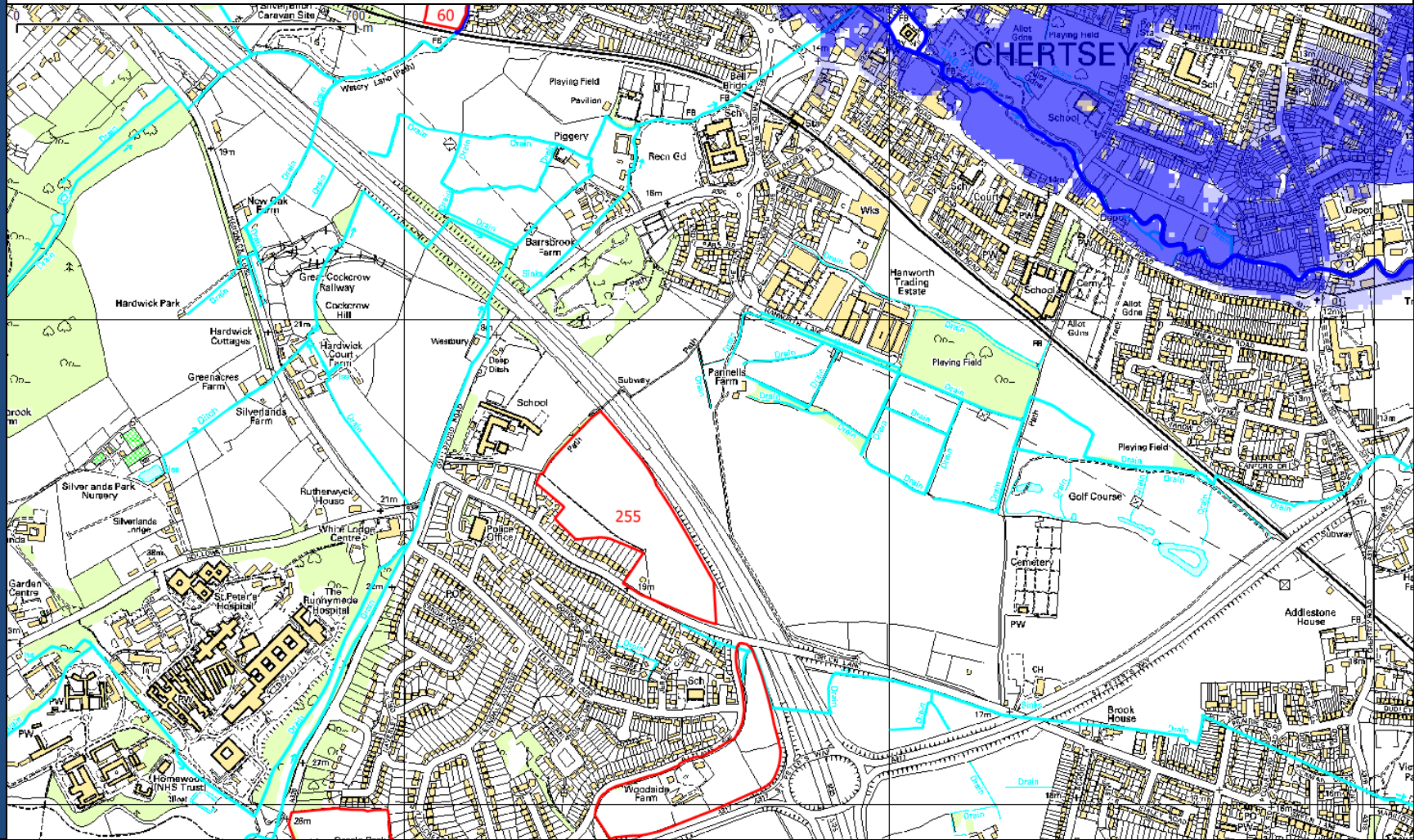
1 in 100yr + 35%CC
Flood Extent



1 in 100yr Flood Extent



Limited output from the 2018 River Thames Flood Model has been received from the Environment Agency. This consists of the 1 in 100 year flood envelope and the 1 in 100 year plus 35% allowance for climate change envelope. The 2018 Model for the River Thames and Chertsey Bourne show that flood does not extend to this site, even when the 35% allowance for climate change is taken into consideration.



Hazard Mapping

As the site lies outside of the 1 in 100 year flood envelope, both from the 2005 Chertsey Bourne modelling and the 2018 Thames and Chertsey Bourne, including allowances for climate change, there is no hazard.

Surface Water/Sewer

The Risk of Flooding from Surface Water map shows there is a medium risk of small areas of surface water flooding within the site. Otherwise, the site is at very low risk of pluvial flooding.

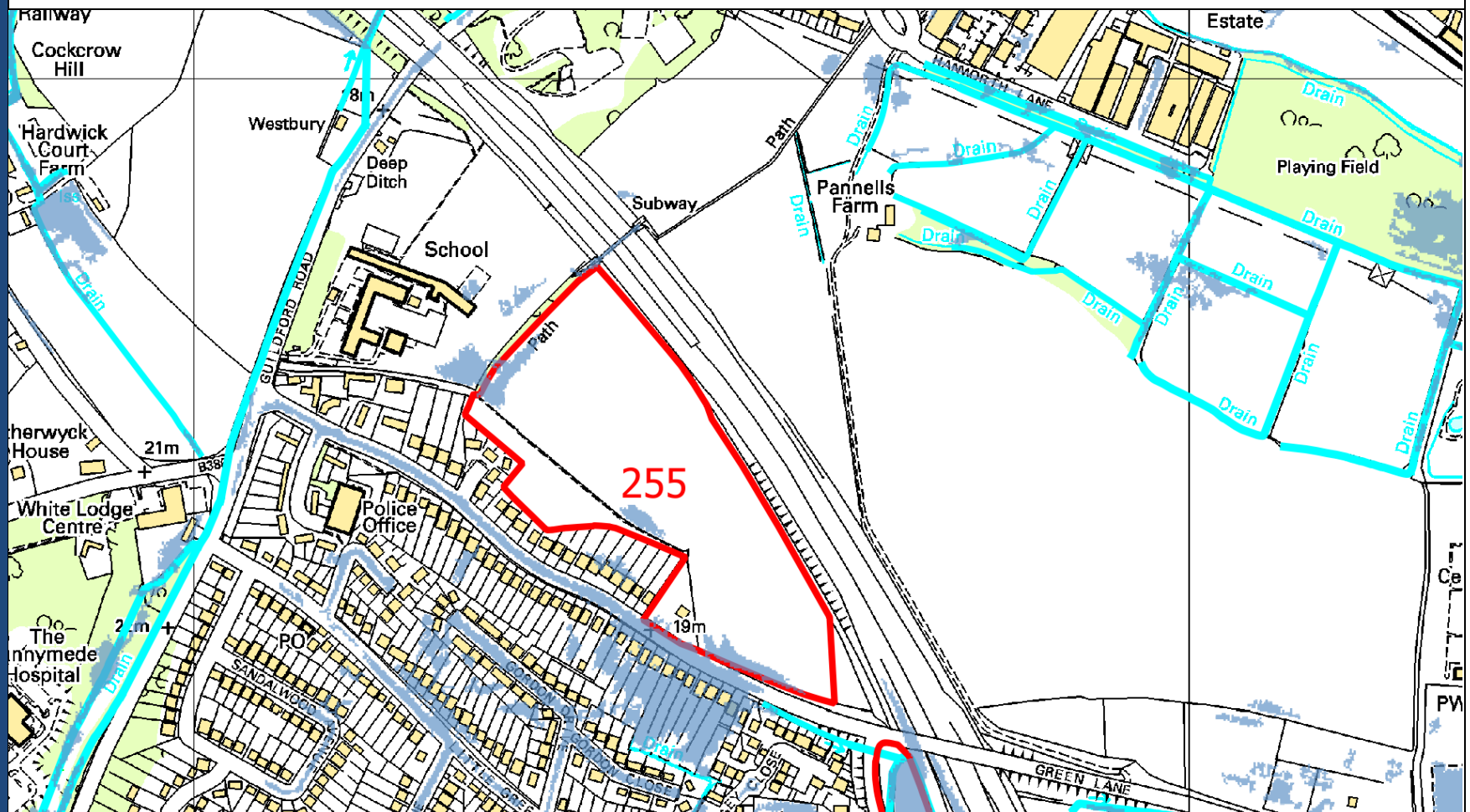
KEY:

Red line boundary

Main River

*Other Rivers

SW Flood Extent



Artificial

The site lies outside of the area predicted to be at risk from flooding from a reservoir breach.

Summary of flood risk from all sources of flooding

- Flooding from Fluvial sources – The detailed modelling indicates that the site lies outside of the 1 in 100 year flood envelope, including an 20% allowance for climate change. Most of the site lies in Flood Zone 1 with a small area lying in Floods Zones 2 and 3. The extent of the flooding predicted by the 2005 Chertsey Bourne flood model, even when a 20% climate change allowance is made, is so remote from the site that it is unlikely that the site will be affected by flooding from the Chertsey Bourne when the new climate change allowances are applied. However, the potential for flooding from the local watercourse system needs to be considered.
- Flooding from Pluvial Sources - There is a very low risk of pluvial flooding for most of the site. Small areas are at a medium risk to low risk of pluvial flooding
- Flooding from Artificial Sources – No risk of flooding from a reservoir breach has been identified.

Risk Management – Guidance will be provided in the following section to inform policy development

<p>Flood Risk Management Recommendations</p>	<ul style="list-style-type: none"> • The site is almost 100% a greenfield site. • The British Geological Survey in its SuDS mapping indicates area that the ground water table is high. However, they have identified that there are opportunities for bespoke infiltration SuDS. • Any runoff from the development will need to be attenuated to greenfield runoff rates. • In accordance with the SuDS Hierarchy, if infiltration is not practicable for all or some of the surface water runoff from the site then discharge to a watercourse or other water body. There is a watercourse on the south side of Green Lane and it may be possible to discharge into this. • Upstream of this watercourse is a public surface water sewer. • The surface water drainage system should be designed to ensure that no flooding occurs up to the 1 in 30 year pluvial event and that ensure that no on site property flooding or increased off site flood risk occurs for events up to the 1 in 100 year event, including allowance for climate change. • As the site is principally in Flood Zone 1, all classifications of development are appropriate. Within the site, the development should be undertaken sequentially with the development taking place in Flood Zone 1. Where appropriate, level for level floodplain compensation will be considered in order to rationalise the area of development. • It does not seem that the site will be affected by flooding from the Chertsey Bourne and River Thames when the updated climate change allowances are applied. However, the flooding of the local watercourse system needs to be considered. • Safe access and egress from the site is achievable to the east along the Green Lane.
<p>Reasonable prospect of compliance within the Exception Test?</p>	<p>As the site lies outside of Flood Zone 3 there will be no requirement to satisfy the Exception Test.</p>
<p>Flood Risk Suitability Score</p>	<p style="text-align: center;">4</p>