

TOWN AND COUNTRY PLANNING ACT 1990
LAND AT CHICHELE ROAD, OXTED
APPEAL BY CALA HOMES (SOUTH HOME COUNTIES) LTD
PINS REF. APP/M3645/W/24/3345915

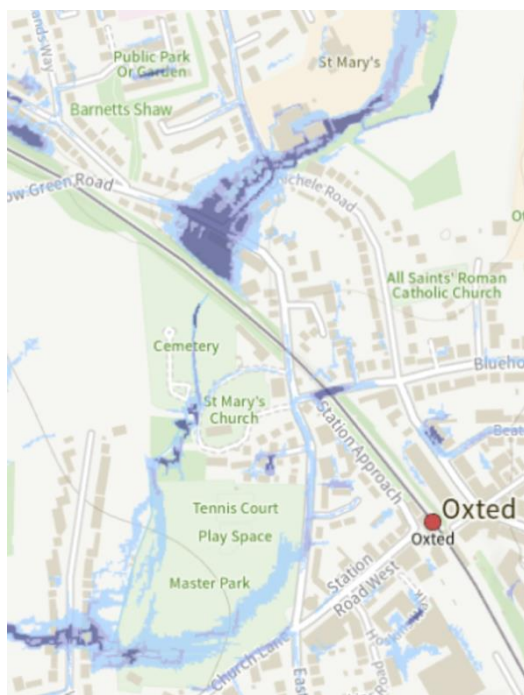
REBUTTAL PROOF OF EVIDENCE

FLOOD RISK AND DRAINAGE

OXTED & LIMPSFIELD RESIDENTS GROUP AND OXTED PARISH COUNCIL

EVIDENCE OF: MICHAEL HURMAN

1. I wish to make the following comments regarding Appendix 1 of the Proof of Evidence of Simon Slatford which comprises a response from Motion consultants to the Rule 6 flooding concerns.
2. The gov.uk flood mapping states that the area shown has a high risk of annual flooding: <https://check-long-term-flood-risk.service.gov.uk/surface-water>
3. This area map includes flooding on or directly adjacent to the proposed SuDs Attenuation Chamber and the proposed SuDs catchment basin on the western side of the development site:



Key

Surface water

⊙ Extent

■ High

More than 3.3% chance each year

■ Medium

Between 1% and 3.3% chance each year

■ Low

Between 0.1% and 1% chance each year

4. The response from Motion provides figures to show that 100 year flood events will apparently be attenuated and improve current runoff. However, this does not address concerns over the access road.
5. Paragraph 2.12 states *“With regards to runoff from the access road, we acknowledge that due to levels and the presence of root protection zones (RPZ’s) that is has not been possible to route surface water back into the site and to the attenuation features. Instead, rainwater will be captured by road gulleys and below-ground drainage so that it will not issue into Chichele Road and will be commuted to a below-ground drainage system. This will be designed to work with the RPZ’s and require minimal excavation.”*
6. This seems to suggest that the access road drainage will be commuted to the existing Chichele Road surface water drainage system rather than onto the surface. In most cases this is able to accommodate but not during the high rainfall events previously shown in the flood photographs in my proof.
7. Paragraph 2.14 of the Motion response states: *“Therefore, additional surface water discharge from the access road of up to 2.8 l/s would still not be additional to what it is currently receiving from the undeveloped site. As such,*

there would be no increase in surface water runoff over the existing."

8. However, the calculations seem to miss the speed of surface water in high rainfall events that occur in the space of an hour and the time delay factor on hard surfaces rather than greenfield runoff.
9. When assessing the time delay factor for surface water runoff between greenfield (natural or undeveloped land) and hard surfaces (impermeable surfaces such as concrete or asphalt), it is important to consider these hydrological factors:
 10. Firstly, the Time of Concentration, that is the time it takes for water to flow from the furthest point in the catchment area to the outlet. Hard surfaces have a much shorter time of concentration due to reduced infiltration and increased velocity of surface runoff.
 11. Secondly, Lag Time. The lag time between the peak of a rainfall event and the peak discharge into a stream or drainage system is significantly shorter for hard surfaces. Greenfield sites generally exhibit longer lag times due to slower surface runoff and higher rates of infiltration and storage. The runoff from a hard surface is rapid, and there is very little to no infiltration or delay.
 12. Our localised intense rainfall flooding problems generally occur within the space of an hour from build up to dissipation. The appellant's proof of evidence has not considered these calculations. With a 2.8 l/s runoff rate as suggested in the proof paragraph 2.14, we are talking of an additional 10,080 litres of water in that time frame. Add some leaf blockage to the new drainage gullies on the access road, which is highly likely, then the drain attenuated water become surface water emptying into Chichele Road.
 13. On the 19 August this year, I received the following response from Surrey County Council regarding the flooding issues locally. It states that there is a capacity issue:

From: Surrey County Council <noreply_scc@ondemand.confirm.co.uk>

Subject: Surrey Highways: Response - Enquiry 162377

Date: 19 August 2024 at 11:02:38 BST

To: mjhurman8@gmail.com

Your Reference Number: 3026518

Highways Reference Number: 162377

Dear Mike Hurman ,

Thank you for your enquiry which has been logged as follows:

Issue: Flooding Incidents (Carriageway and Footway)

Location: Chichele Road Oxted

The location has been attended and the water build-up at the location was caused by a larger capacity issue. The highway gullies at this location drain into a Southern water system that was not able to cope with the quantity of water present during the storm. Due to the layout of the system and the geography of the location the water struggled to get into the larger system. Southern Water has been contacted in regards to this issue.

Sign up to '[Your Highways Update](#)' to stay up to date with highways information for your local area.

Kind regards,

Jack Nicholls

Highways Customer Officer

14. With regards to Foul Water drainage, paragraph 2.18 of the response from Motion notes that the appellant's drainage strategy states that a capacity check had not been carried out with Southern Water, but this would be completed in due course. It appears the appellant has not contacted Southern Water and acknowledges that network reinforcement may be needed of the existing foul water drainage system. A condition should therefore be attached to any grant of permission, prohibiting the commencement of development until that reinforcement has been undertaken (if required). Given the risks to human health and the environment associated with overloading the sewerage system, it would clearly be unacceptable for this development to be built before a solution has been found and implemented.