

QUESTIONS FOR PANEL AT PUBLIC FLOOD MEETING ON THURSDAY 25TH APRIL

Extract showing Gleeson questions and responses.

Gleeson Homes Question:

1. Why did the new houses flood at the Gleesons site on Winceby Gardens when they have just been built? The drainage goes into the Thunker Drain.

Flooding is always devastating for residents and local communities and particularly frustrating where new properties are affected that have had the benefit of being designed to recent standards.

As far as we are aware the new properties did not flood from the surface water drainage directly associated with the development. We were aware of historic overland flood routes coming from the north-east. There are abrupt changes in direction of the watercourse upstream of our site, which contribute to these flows when the watercourse is full. We are told that the overland flow route follows the natural path of the watercourse before it was diverted for farming reasons.

Our development has been designed for a 1:100 year plus climate change storm event and accommodates flows from the development within the storage. We also account for any overland flows coming from offsite and any flows from onsite, either generated onsite or flowing through our site, to ensure that this doesn't cause flooding issues to neighbours beyond our site. The floor levels of the properties have been set above the predicted flood level to minimise the risk of internal flooding, with the external garden levels designed such that they allow for overland flows, in this case from offsite, to be accommodated, should the principal overland flow routes along the roads & footways be overloaded.

The volume of overland flow from the north-east on October 20th was far in excess of that anticipated in the 1:100 design. It has been quoted as being more like a 1 in 1000-year storm. The volume of water could not escape as planned and impacted newly constructed properties on the development. Plots 18-20 were flooded internally and plots 13, 14, 16 and 17 had flooding around their properties.

The overland flow would have also been exacerbated by the saturated clayey soils in the adjacent fields. Effectively, the fields acted as an impermeable surface that allowed the water to flow much more rapidly into the site than you would see in normal circumstances from agricultural land.

Added to that, any water flowing through the site could not get away as needed, as the amount of rainfall in the area meant Thunker Drain was full, as were the onsite attenuation ponds as well as all areas downstream of the site.

To mitigate any issues such as this in future, accepting that more severe storms are becoming more frequent, we have constructed a cut-off ditch just to the east of our site boundary. In fact, this was installed in the immediate aftermath of the main storm. If any substantial flows are accounted again, they will be captured by this ditch and flow down towards Thunker Drain. Should capacity be compromised, the ditch is bunded on the development side, so flows will not breach into the housing development and will be held on the field until levels subside.

We will provide similar mitigation as we progress the designs of our proposed additional development on Wesley Way, which is the field in question. We are proposing additional ditches, bunds and works to the main watercourses along the eastern boundary to ensure overland flooding is prevented and held back in periods of extreme rainfall.

Gleeson Homes Supplementary Question (received via email 24/04/24):

2. My house flooded with water from Poppy Fields at 2.30 in the morning. The storm water came from the alleviation pond which is situated in the corner of Poppy Fields directly above Clarke Court where I live. What have Gleeson Developments done to prevent this happening again the next time there is extreme rainfall.

We never want to see local residents affected by flooding, particularly where it is in proximity to our development and there is a suggestion we have adversely impacted our neighbours. However, on this occasion, we don't believe it was directly related to our development or works we had carried out.

As we had started stripping parts of the new Poppy Fields development, we had installed the basin in the north-west corner of the site which will become a permanent part of the surface water attenuation system. We knew this would be beneficial for temporary surface water management. During Storm Babet and the rainfall leading up to that event also, the basin was full of water, however, we are not aware that it ever overtopped.

We believe the main issue in that area related to the exiting watercourse along the northern boundary of the Poppy Fields development, which is not in our ownership or control. The watercourse was full. We knew from discussions with the Internal Drainage Board during the Poppy Fields design stage, that there was a reluctance to allow any flows into this watercourse as the downstream section had been compromised. Sections ran through back-to-back gardens, and we believe the line of the watercourse may have been affected to the point of being blocked. This meant the full watercourse had nowhere to run downstream so excess flows overtopped just beyond our site boundary and then flowed into the garden of 36 Wesley Way, and to a lesser extent 38 Wesley Way, which are the properties served off the short section of drive immediately beyond the watercourse. This excess water, added to already excessive rainfall in this and surrounding areas, made its way, following natural topography, along Wesley Way and into Clarke Court, which falls with the natural levels towards Thunker Drain.

Clarke Court is itself a relatively recent development and similarly to Winceby Fields, did not manage to accommodate and direct excessive flows away from properties, again due to the rainfall far exceeding the design guidance for the drainage of the site.

Responses compiled by Jamie Moran, Technical Director

10th May 2024