

EA Ref: HA/2022/124189/04-L01

Further to our letter dated 16th October 2023. A local resident has sent us an additional set of flood images showing an even higher flood level than previously photographed. Again, it is unlikely that the photographs were taken at the peak extents of the flooding.

Appendix 1 includes the photographs of the event and the same view taken at 2pm on the same day, the significant drop in water level in a period of only a few hours indicates how transient the flooding at this location is and thus this reduces the likelihood that any photographs are taken at the actual peak of the flooding.

The later photographs were used to identify the actual level the water extended to and measure this back to the telegraph pole on the north side of the bridge as a geo-fixed location. This showed that the photographed flood extent on the brideway was 11.7m north of the telegraph pole and 16.4m to the south. These positions marked onto the applicant's drainage plan is shown below as figure 1.

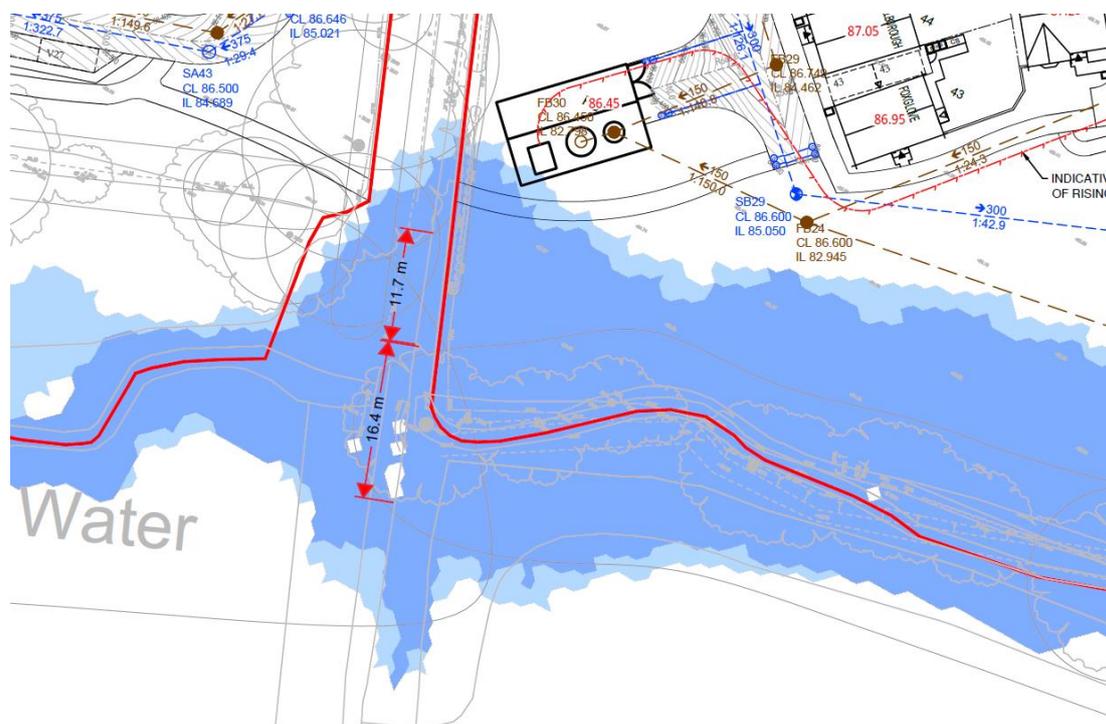


Figure 1: Drainage Plan A359-RM-51 showing position of Telegraph Pole. The darker blue area is the modelled 1 in 100-year flood zone extent.

The 1 in 100-year flood zone extent shown on the above plan is 38m along the brideway (ignoring the drainage gullies along its eastern side). As previously stated, the 20-year modelled flood extent is about 10m. Thus, the flooding extent photographed on 2nd November 2023 at 28m is far closer to the 100-year event than it is a 20-year event.

We also draw your attention to the photograph below taken at the same time on 2nd November 2023 showing the flood water extending far beyond the treeline into the proposed development site.



Image taken 2/11/23 from the telegraph pole looking east across the development site.

The MSDC Drainage Engineer (Flood Risk) has provided us with feedback about the definition of a 20-year event as being one which has a 5% likelihood of occurring. Considering the probability, we still believe that to have so many recent observed flood events far in excess of the 20-year event, and actually approaching much closer to the 100-year extent makes it unlikely that the model is accurately predicting the likelihood of flooding in the 20 and 100-year events.

We therefore continue to recommend that RPS are asked whether their hydraulic model is adequately predicting the frequency and extent of the flooding when compared to the photographic evidence. As they are the hydraulic modelling experts, we believe it is reasonable that RPS provide a response regarding this matter, rather than a third-party consultant interpreting the output of their model.

Appendix 1



Photographs taken on 2/11/23 at 8:20am (left) and 2pm (right) looking north.
The nearest red spot on the later image representing the water level at 10am was measured at 11.7m from the telegraph pole



Photographs taken on 2/11/23 at 8:20am (left) and 2pm (right) looking south
The nearest yellow spot on the later image representing the water level at 10am was measured at 16.4m from the telegraph pole