

Mr Mark Wilkinson
Oakmere Homes
Helme Bank (Suite 1) Helm Lane
Natland
Cumbria
LA9 7PS

Our ref: NO/2021/113242/02-L01
Your ref: Oakmere Accrington Road

Date: 30 July 2021

Dear Mr Wilkinson

**FLOOD MODEL RUNS APPRAISAL COMMENTS REQUESTED LAND OFF
ACCRINGTON ROAD, WHALLEY, BB7 9TB**

Thank you for your request for charged advice regarding the above site.

We have reviewed the model summary Technical Note supplied by JBA, reference 2021s0600, rev.0001, June 2021 and we have the following comments.

Model Results

The proposed Phase 1 and 2 areas have been altered since previous conversations which is clearly shown and explained in paragraph 1.1 and Figure 1-1 of the Technical Note.

The 2020 Flood Risk Management Scheme appraisal model developed by Mott MacDonald has been provided by the EA and minor fixes have been applied by JBA to allow the model to run.

Updated climate change allowances

We would like to make you aware that the Climate Change allowances were updated on 20th July 2021 and these will impact your development. Further detail can be found here; <https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances>

Your proposed development is classed as “more vulnerable”, with a design life of 100 years, located in Flood Zones 2 and 3a within the Ribble Management Catchment area. As a result, the development will now need to be made safe for a 1%AEP event with a climate change allowance of 36%. This will reduce the focus on the 70% climate change scenario which has been modelled.

Understanding of flood risk

The model has been updated and run across a range of scenarios to understand when and how the site is affected by flooding. The report and modelling demonstrates that the site is at risk from fluvial events greater than 1%AEP. Most importantly for the planning application, we can see the site floods in the 1%AEP plus 35% climate change event. It was also found that flood water enters the site by overtopping the River Calder channel

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banks to the south-west corner of the site, not from the Mill Race.

Proposed levels

Table 3-1 shows a range of proposed levels;

- Residential properties (finished flood level) – should this be “floor” level? We agree this is an acceptable FFL and provides betterment on our statutory advice.
- Access road – This has been raised as a minimum of 0.01m above 1%AEP plus 35% climate change event peak water level. This should provide flood-free access and egress to dwellings, however, as some road levels will only be raised 0.01m above the 1%AEP plus 35% climate change, some shallow water levels may be experienced in this event or greater. The adequacy of evacuation plans and procedures is not within the remit of the EA, therefore it is advised that this approach to safe access and egress is agreed with the LPA.

Compensatory storage

The modelling has shown that the modelled ground level changes are unlikely to increase flood risk elsewhere, as such, the ground level alterations are considered to be acceptable in principle. When submitted to planning, please provide more detail on the proposed ground levels of the compensatory storage scheme and over the site as a whole. It is expected that the proposed levels in the planning application will reflect the levels inputted into the model.

We will request that the proposed ground levels are secured by condition on the planning decision notice. We are also likely to request that the compensatory storage scheme is implemented prior to construction and maintained for the development's lifetime. We will caveat this last point with wording that allows the LPA to agree to the removal of the phase 1 compensatory storage scheme should the EA's flood defence scheme for Whalley proceed, allowing the development of a phase 2 proposal for the site.

In our assessment at planning, we will want to see that the compensatory storage area will;

- Act as part of the flood plain. This means it should freely fill during and then drain after a flood event.
- We will also want to see that surface water will not pond in the area which could reduce the capacity to store fluvial flood water. Information has not been provided at present to confirm this, but the submission of the proposed ground levels (i.e. to see the slope of the ground), FRA and Technical Note should be sufficient to assess this

We are satisfied that based on the information provided within the Technical Note and the model grids, that the modelled raised ground levels/ compensatory storage scheme will in principle, be acceptable and is not likely to result in increasing flood risk elsewhere. When the application is submitted, the modelling and proposed ground levels will be assessed in further detail.

We have posed some questions to our modelling team regarding the model and information required to be submitted at planning which we will relay to you as soon as possible.

Yours sincerely

Carole Woosey
Planning Advisor

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