



Sarah Squire Sustainable Places – Planning Advisor Environment Ageny Sir John Moore House, Voctoria Square, Bodmin, Cornwall, PL31 1EB

Dear Sarah

Please find below a point-by-point summary in response to the EA's objection dated 27/09/2022:

HAVEN BANKS WATER LANE EXETER DEVON EX2 8BY

Furthermore, before determining the application your Authority will need to be content that the flood risk Sequential Test has been satisfied in accordance with the NPPF if you have not done so already and consult with your Emergency Planners in respect of the emergency evacuation. As you will be aware, failure of the Sequential Test or either part of the Exception Test is sufficient justification to refuse a planning application.

Refer to section 9 of the FRA addendum.

<u>Sequential Test</u>

With regard to the applicant's Sequential Test, we highlight that the flood risk for Land adj. St David's Station (site 3) is within Flood Zone 3a. It has the exact same flood risk at this proposed site (not a higher risk as stated). Further analysis for the flood risk modelling should be carried out if the applicant wishes to challenge this.

Furthermore, site 4 (Exmouth Junction) is not located within flood zone 2 as stated. The site is Flood Zone 1, but has Risk of Flooding from Surface Water.

See updated Flood Warning and Evacuation Plan (FWEP) and section 4 of the FRA and addendum.

Safe Access and Egress

The suggested access and egress route is at Extreme Flood Hazard (Risk to Life) and is therefore considered unsafe. Although Safe Refuge is mentioned as an alternative to a safe access and egress route, the FRA does not discuss the duration of the flooding, the possible damage to local services/utilities and the time it will take until the situation is 'normalised'. We advise that this is likely to well over 12 hours, perhaps as long as 24 hours. It is very likely that there will be no electricity, water or sewerage during this period. These factors will affect the suitability of safe refuge and must also be discussed/approved by the LPA.

The proposed route northwards over the River Exe is unfeasible, because it would have to go over the flood defence and through flood waters. This would be very unsafe (Risk to Life) once flood levels breach out of the 'normal' river channel and affect the footpaths (still on the wet side of the defences). Children and people with mobility problems would not be able to traverse this route once the flood gates are locked (which would be many hours before flooding starts).

See statement below.

We have advised the applicant (and other developers/Councils) that the only solution in this area of Exeter is to be part of a wider Strategic solution to the provide a Safe Access and Egress route toward the South East (the closest safe high ground). An old railway embankment has been identified as a possible solution to serve many development

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opportunities in the Haven Banks, Water Lane, Alphington Road and Marsh Barton Area. This site would need to access that route, via a new pedestrian bridge over the live railway line.

See updated Flood Warning and Evacuation Plan (FWEP) and paragraphs 8.6 to 8.10 of the FRA addendum.

It is accepted in principle, with foresight to the wider Exeter Strategy a dry route may be accessible to the old railway embankment via a footbridge. This could be sometime in the future and as flood events are based on probabilities, this could be a barrier to the alternative route previously presented in the advent of such a storm event earlier than the advice given by the Environment Agency becomes a reality. The previous strategy is predicated on the basis that early flood warning is adhered to and not necessarily during the flooding event as the gates would've been closed by then.

Minimum Floor Levels

Residential: Using the 2011 Flood modelling - The average site level, quoted as 7.5MAOD plus the average design flood depth (0.7m) gives us a Design Flood level of 8.2mAOD. A 0.3m freeboard is required to set the minimum finished floor level (FFL) of 8.5mAOD for Residential Development (defined as 'more vulnerable'). This min FFL of 8.5mAOD appears to be what is proposed, but these proposed floor levels are not shown on the site sections or floor block plans. The site layout ground floor plan drawing HREXE-PWA-00-00-DR-A0050 Rev G1 does show some proposed site and floor levels, but not enough to allow proper assessment/confirmation of this minimum level across the whole development.

The applicant has not provided details on how flood waters will flow under the buildings, to offset any loss of flood storage. These details should be provided including details of future maintenance.

See paragraph 9.7 of the FRA addendum.

Commercial: The application has chosen to set commercial (defined as 'less vulnerable') uses at or very close to the existing site floor levels (existing is 7.9mAOD). Section 8.5 & 9.4 of the FRA states that the FFLs for the commercial units will be provided up to 7.95mAOD, or 50mm (0.05m) above the current FFL. However, the FFL shown on the plans (The Site layout ground floor plan drawing HREXE-PWA-00-00-DR-A0050 Rev G1) shows levels at 7.6m (Block A), 7.7m (Block B & D), and 7.8 (Block C) all below the existing site FFLs. This is unacceptable and must be changed.

See section 6 of the FRA addendum. Levels to be updated across the architectural layouts and elevations.

The FRA and other planning documents state the reason to not raise any further than proposed is partially for mobility access reasons. We do not accept that the ground floor level of commercial units can only be built 50mm above the current levels. Given the very large site area, the lack of space to provide ramps for the mobility impaired is a very weak argument. Given the significant flood risks (and development is proposed 0.9m below the recommended levels) we wish to see written confirmation from your Authority that you will not accept ramps and/or raised floor levels/ridge heights in this location. We are happy to participate in a joint meeting to discuss this issue and agree what levels would be acceptable.

See paragraphs 9.4 and 9.5 of the FRA addendum.

Planning statement

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Section 6.165 of the planning statement states that we support the scheme, this incorrect. Through our pre application service, our last correspondence informed the applicant of our concerns and issues that need to be resolved before submitting the planning application.

Since Jan 2022 we have informed that applicant of our numerous concerns that needed to be fully resolved before we would not object to any subsequent planning application. Our correspondence in May, June and July 22 (before submission) and August 22 (after submission) again expressed our concerns with significant elements on the FRA and principles of the scheme. We recommended that the FRA and designs should be revised before submitting an application and that conversations with the LPA, Applicant and us may be the best way to overcome some of the concerns, including the provision of an appropriate access route and agreeing appropriate finished floor levels.

Refer to section 6 of the FRA addendum and architectural response.

New Flood modelling (2022) and NPPG guidance

The application was registered on the 1 August 2022 and since that date two significant changes in the flood risk planning guidance and evidence have taken place. The Council may wish to consider whether these should have any bearing on this application.

On the 25 August 2022 the NPPG on flood risk was refreshed, in part to keep up to date with previous NPPF changes (2018 & 2021) and to clarify certain aspects of the advice. Paragraph 048 provides additional clarification on the need for Safe Access and Egress and states "through off-site works that benefit the area more generally". This aligns with the recommendation for a strategic solution on Safe access and egress that we have been promoting.

Draft results of the 2022 flood modelling (included the impacts of the new flood scheme) became available in early August. The results do alter the 'Design Flood Level' and the minimum floor level and Flood Resilience level that was previously discussed with the applicant. The applicant was provided with these new levels on the 18 August 2022, after the submission. This new modelling shows that flood depths, with climate change and the new flood scheme have actually risen, and the minimum residential floor level is now 8.76mAOD (approx. 0.25m above the previous). This level should also be applicable to commercial development (which now has a 75 year lifetime of development consideration, so consideration of levels in the year 2097).

See updated Flood Warning and Evacuation Plan (FWEP) and section 6 of the FRA addendum

In view of this response, FRA addendum and updated documents, we trust that the EA are now able to review the objection to this proposal.

Yours sincerely,

Stedroy Allen Civil Engineer