

Mr Andrew Sargent
Fulcrum Building Design Ltd.
9 Heneage Street
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Our ref: HA/2019/121744/02-L01
Your ref: ENVPAC/1/SSD/00112
Date: 28 November 2019

Dear Mr Sargent

DETAILED ADVICE: DEMOLITION OF 1 NO. EXISTING DWELLING & ERECTION OF 1 NO. NEW DWELLING

ATHERINGTON LODGE CLIMPING STREET CLIMPING BN17 5RN

We are providing this advice under Agreement No. ENVPAC/1/SSD/00112. Please note we have taken 4 hours to review and provide our advice on these documents which is slightly less than we estimated in our Programme of Works, which is payable on receipt of our invoice.

Environment Agency Advice

We have reviewed the submitted information in relation to the proposed development and have the following detailed comments

The Flood Risk Assessment (FRA) (dated 11/09/2019, produced by STM Environmental) and supporting drawings have been reviewed only in relation to fluvial and tidal flood risk. Arun District Council's own drainage engineers should be consulted in relation to surface water, groundwater and ordinary watercourses flood risk.

The proposed replacement dwelling is located in Flood Zone 3 (high risk) according to EA Flood Map for Planning (Rivers and the Sea).

The submitted FRA does not comply with the requirements for site-specific flood risk assessments, as set out in paragraphs 30 to 32 of the Flood Risk and Coastal Change section of the planning practice guidance. The FRA does not therefore adequately assess the flood risks posed by the development, and we would object to this application.

In the FRA it is stated that the site benefits from flood defences and therefore the flood risk is medium. It has to be borne in mind that flood defences can fail or be overtopped, and that the Environment Agency only have permissive powers to maintain flood and sea defences and this is subject to availability of Government

funding and in-house resource. Therefore when considering new developments the undefended scenarios have to be taken into account when designing flood risk mitigation measures. Instead the FRA only mentions the defended 0.5% AEP 2115 (3.65m AOD).

Arun to Pagham Flood and Coastal Erosion Risk Management Strategy (2009) produced by the Environment Agency in partnership with Arun District Council, contains recommendations on how flood and erosion risks are managed along the coastline between the River Arun and Pagham.

After further analysis, in 2014 we have changed our recommendation for Climping beach from 'Withdraw Maintenance' to 'Do Minimum'. This means that we can justify maintaining the existing defences as long as possible to prolong their life, a process called 'patch and repair'. However, the overall economic situation has not changed. There is very limited justification to invest central Government funds to continue to maintain these defences. We have assessed that Climping beach has a limited remaining life as a flood defence. For more information please visit <https://www.gov.uk/government/publications/arun-to-pagham-flood-risk-strategy>

Over the last few weeks we have experienced some of the highest spring tides of the year. This, combined with stormy conditions, has led to reduced quantities of shingle and damage to the beach at Climping. Although we are continuing to maintain the beach in line with the strategy recommendations, we are considering the future of the Climping frontage, which we will look to progress further next year.

Section 12.1.13 of the FRA, called 'The long term fluvial flood risk considering flood defences', provides a link to the EA long term flood risk information website which contains a series of maps showing different types of flood risk. The map available in Appendix 8 of the FRA (taken from the website) shows the flood risk from rivers and the sea taking into account flood defences. However in this section is described as showing the long term risk from fluvial flooding. This statement is misleading and should be changed to 'the flood risk from rivers and the sea taking into account flood defences', using the caveat that defences reduce but do not completely stop the chance of flooding as they can be overtopped, or fail.

Although this is a replacement dwelling we would strongly recommend that finished floor levels (FFL) are raised at least 300mm above ground levels. The FRA states that FFL will be retained as existing, but nowhere mentions what the existing floor levels are and if these are raised above ground levels. We would recommend this is clarified within the FRA. This is particularly important when considering sea level rise and long term climate change effects on our coastline.

It is good to see that all bedrooms will be located on the first floor. Also safe refuge on first floor is mentioned in the FRA, but no levels for the first floor are given. Therefore it is not possible to establish if first floor levels are above 5.04m AOD, which is the undefended 0.5% AEP 2115 events. The FRA should make this clear. In Section 15 of the FRA (Conclusion and Recommendations), the statement 'The EA considers the sites overall flood risk to be low' should be removed. How can it state that when the EA Flood Map for Planning (Rivers and the Sea) shows the site to be in Flood Zone 3 (high risk)?

To overcome our objection, the applicant should submit a revised FRA which addresses the points highlighted above.

The following issues are not within our direct remit or expertise, but nevertheless are

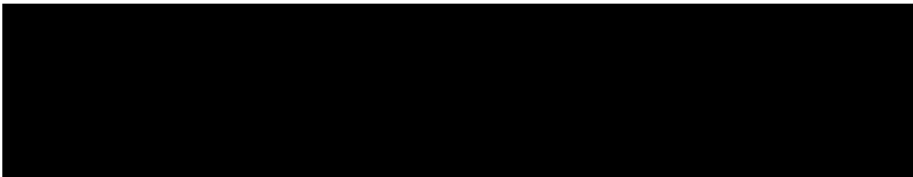
important considerations for managing flood risk for this development. Arun District Council's own drainage engineers should be also consulted.

- Adequacy of rescue or evacuation arrangements
- Details and adequacy of an emergency plan
- Provision of and adequacy of a temporary refuge
- Details and adequacy of flood proofing and other building level resistance and resilience measures
- Provision of an adequate means of surface water disposal such that flood risk on and off-site isn't increased

I hope the above advice is helpful. If there is any further work you anticipate needing our detailed advice on in relation to this project please be aware that as of the 1 April our charge has increased to £100 per person/hour plus VAT.

Yours sincerely

Miss Suz Greenwood
Planning Advisor, Environment Agency



Disclaimer

Our opinion is based on the information available to us at the time of the enquiry. When the formal planning application is submitted, our position may change if there have been changes to environmental risk or evidence, and/or planning policy.