Reagan Duff

From:	Su DS Consultations - Flood <su.ds@eastsussex.gov.uk></su.ds@eastsussex.gov.uk>
Sent:	19 March 2021 15:45
То:	Reagan Duff
Cc:	Su DS Consultations - Flood
Subject:	RE: Enquiry Regarding Proposed Development South of Ninfield Sub Station

Dear Regan

Thank you for your email.

In the absence of detailed hydraulic modelling which would have determined the fluvial flood plain adjacent to the site taking into account climate change, we recommend that all built foot print and surface water management structures be located outside both the flood zone currently shown and the current 1 in 1000 surface water flood extent.

Kind regards

Revai Kinsella Flood and Water Officer **Pevensey and Cuckmere Water Level Management Board**

01273 335534 07785 406974 <u>https://www.wlma.org.uk/pevensey-cuckmere/development/</u> <u>eastsussex.gov.uk</u>







From: Reagan Duff <reagand@arcusconsulting.co.uk>
Sent: 16 February 2021 12:51
To: Su DS Consultations - Flood <Su.DS@eastsussex.gov.uk>
Subject: Enquiry Regarding Proposed Development South of Ninfield Sub Station

Dear Sir / Madam,

I have just spoke to a member of your team on the phone, who indicated this would be the appropriate contact email address to discuss the below.

Arcus are currently working on a proposed Development to be located on greenfield land immediately to the south west of Ninfield substation approximately 1.5 km to the east of Ninfield at approximate Nation Grid Reference: 572217,111785, with a site location attached.

The Site infrastructure shall be located entirely within Flood Zone 1, excluding one area of perimeter fencing which shall not comprise of any significant footprint and areas of underground cabling and it is considered this shall not displace flood waters nor impact storage capacity. The proposed access route shall be located partly within FZ2, however this area already consist of paved access and therefore shall not comprise any Development infrastructure. The flood zone categorisation issued by the EA is defined via 1:1,000-year event JFlow data, which has been confirmed by the EA during consultations. It is acknowledged that JFlow has limitations as a modelling mechanism and as such the 1:1,000-year event from the EA Risk of Flooding from Surface Water mapping has been consulted as a proxy source for flooding emanating from the adjacent Watermill Stream, which is considered to act as a proxy representation of the 1:100 + Climate Change event, given the lack of detailed hydraulic modelling available and the significant proportion of the Site being located within FZ1.

Such mapping indicates that during the 1:1,000-year extent an area of approximately less than 0.8 m² shall be located within the 1:1,000-year extent emanating from the Watermill Stream (still within FZ1) with maximum depths of 0.3, with such infrastructure to be raised anyhow and therefore above any pluvial depths. Areas which will comprise depths of 0.15 to 0.3 m are less than 0.1 m² in area, with areas comprising depths of less than 0.15 m approximately 0.7 m². It is considered that the limited area (<0.8 m) which will be within the proxy 'floodplain' and limited depths within this small area shall not result in any significant displacement of flood waters nor impact storage capacity and as such flood risk elsewhere would not be impacted.

Please note that a SuDS network shall also be included at the Site, which will attenuate and discharge flows at the site to the Watermill Stream at the greenfield rate, with the proposed attenuation features located within FZ1.

Please could you provide any comment on the above rationale and methodology. There are somewhat tight timescales on this development and as such if a response could be treated as urgent it would be much appreciated.

Kind regards,

Reagan Duff Flood Risk Consultant

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