## **Reagan Duff**

From:	PSOEastSussex < PSOEastSussex@environment-agency.gov.uk >
Sent:	04 January 2021 12:44
То:	Reagan Duff
Cc:	SSD Enquiries
Subject:	SSD197929 - Product 4/8 Request - Land at Neilston
Attachments:	JFlow Caveats.pdf; Risk of Flooding from Surface Water.pdf; Flood Map for Planning (Rivers and
	Sea).pdf

Dear Reagan,

Thank you for your data request for Land at Neilston, East Sussex. Please accept my apologies for the delay in our response to your enquiry. Please see attached flood map for planning and surface water risk.

Unfortunately we do not hold Product 4 or 8 data for the site in question, so I am unable to provide you with any model information. The Flood Zones in this area have been informed by the National Generalised JFlow modelling undertaken in 2004. As such we do not hold detailed levels or depths data, or hazard mapping for the site. JFlow data is unsuitable for consideration when undertaking developments as its coarse nature is not sufficiently accurate to inform development proposals and decisions. Please see attached JFlow Caveat explaining this further.

Regarding the planned outfall, should it be located on the section of watercourse designated 'main river' (immediately downstream of the site), then you will be required to apply for a Flood Risk Activity Permit from the Environment Agency. At this point we would determine the suitability of the installation. To find out more If it is to be located in the stretch designated 'ordinary watercourse', then it would be a matter for the Lead Local Flood Authority (East Sussex County Council), and you may need to apply for an Ordinary Watercourse consent. You can enquire about this at their address: <u>watercourse.consenting@eastsussex.gov.uk</u> In any case, it would be the LLFA who would comment on discharge/runoff rates, as surface water flooding and SuDS are under their jurisdiction.

I hope the above is helpful, sorry we cannot provide you with more detailed information on this occasion.

Kindest regards Dean Crispin FCRM Officer East Sussex Partnerships & Strategic Overview Team

Flood & Coastal Risk Management, Solent & South Downs Area Environment Agency | Guildbourne House, Chatsworth Road, Worthing, West Sussex, BN11 1LD

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Creating a better place for people and wildlife





## SSD197929 Risk of flooding from Surface Water, centred E572296 N111752

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## JFLOW Outputs Caveat

- Our work to produce Flood Zones followed a 10 year programme which delivered more detailed mapping for 821 locations. However, in order to complete Flood Zones we needed national coverage, hence a generalised approach was used to provide this national coverage within the time available, to fill the gaps between the 821 locations where we had more detailed information. The Flood Zones are therefore not as accurate as we would normally specify for river modelling, but they do provide an adequate indication of the extent of flood risk such that developers can consider flooding as part of their proposals to ensure they are not unknowingly putting additional lives at risk. This is the purpose for which the Flood Zones were produced.
- Neither water depths nor water levels were outputs that were specified when we commissioned this generalised modelling for Flood Zones. Whilst the modelling process does provide some information on depth of water, it would have been possible to produce the flood extents without storing the water depth values, since water depth is only a 'by-product' of the calculation process. As the JFLOW modelling method was developed, tested and reviewed for production of the Flood Zone extents only, we currently have no information on the accuracy of the water depth data.
- The models were run using a Digital Terrain Model (DTM) with a 5m x 5m grid. However the DTM grids were generalised to between 5m and 100m (depending on the type of model and location, for reasons such as processing speed). Fluvial modelling produced depth data which can be processed using the DTM to provide water level data. However the differing grid sizes means that there is a significant potential for inaccuracy in producing level data, because of the DTM generalisation.
- Therefore because of the nature of the model and the DTM, in many cases it will not be possible to confidently assess whether or not a site is above the resulting water level. This is because there are further inherent uncertainties in the depth calculation and within the DTM itself.
- Depth or level outputs from the National Generalised Modelling (JFLOW) are only suitable to be used for decision making at a broad catchment or Shoreline Management Plan coastal cell scale (or larger).
- They are not suitable for use in site specific Flood Risk Assessments or Strategic Flood Risk Assessments and must not normally be used for these studies. However, where in exceptional circumstances Nationalised Generalised Modelling outputs are requested to be used for anything other than at a broad catchment or Shoreline Management Plan coastal cell scale further verification must be undertaken. As part of this verification the outputs must be proven to be suitable and appropriate bearing in mind the conclusions the user wishes to draw from them and this use must be agreed in writing by the local Environment Agency staff.
- If any agreement is given by the Environment Agency in pursuance of the above, the User accepts and agrees that such agreement by the Environment Agency that that National Generalised Modelling outputs are suitable for a particular use does not imply agreement that the proposals are appropriate or that the Environment Agency has no further comment on flood risk, rather that following verification the User has proven that the outputs are suitable to help assess the flood risk in the particular circumstances.

Environment Agency Solent & South Downs Office Address: Guildbourne House, Chatsworth Road, Worthing, West Sussex, BN11 1LD Email: <u>enquiries@environment-agency.gov.uk</u> customer service line 03708 506 506 gov.uk/environment-agency



- Any assessment of Flood Risk undertaken must be appropriate for the decisions that need to be based upon it, consider the risks and also take into account any limitations of the data use.
- Please read the enclosed Notice and be aware that the Environment Agency does not guarantee that this data is suitable for your purposes.
- The consultants employed to deliver JFLOW Flood Zones to the Environment Agency were Jeremy Benn Associates (JBA). I should make you aware that JBA will not release information that either is owned by the Environment Agency or based upon Environment Agency information as they are not licensed to do so. You will need to request any information you require from the Environment Agency.
- Information provided relates solely to flood risk issues and is based on the best available information to date in the Environment Agency. If further information becomes available to the Environment Agency (on flood risk issues or on other environmental issues which affect a FRA) or policy changes, we reserve the right to comment further or to supply further information or to amend information sent.
- If this information is supplied in connection with a flood risk assessment of development proposals and any material amendments made thereto at any stage prior to the submission of a planning application, the User should be aware of the need to consult the Environment Agency further.



SSD197929 Flood Map for Planning (Rivers and Sea), centred E572296 N111752

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