



SUNCOAST SOLAR FARM, LAND AT EASTBOURNE PARK

FLOOD RISK ASSESSMENT

LOW CARBON

PART 2 OF 6

APPENDICES 5 - 6

Document Reference: L514-DOC01-FRA-ISSUE 1

NOVEMBER 2023

PFA Consulting
Stratton Park House
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engineering the future

Rebecca Smith

From: Enquiries, Unit <enquiries@environment-agency.gov.uk>
Sent: 30 January 2023 10:18
To: 'scosgrove@pfaplc.com'
Subject: FW: ref: 230130/KT01 - L514: Eastbourne Solar Farm, Eastbourne - Flood Risk Data Information Request
Attachments: L514-01 Site location plan.pdf; L514-02 - Flood Zones.pdf; L514-Site boundary.zip

Good Morning,

I have passed your e-mail to the local customer team who will deal with your request.

The Freedom of Information Act and Environmental Information Regulations state that a public authority must respond to requests for information within 20 working days.

You can find more information about our service commitment by clicking on the link below:-

<https://www.gov.uk/government/publications/environment-agency-customer-service-commitment>

You can contact our customer team directly on the contact details below, or call the National Customer Contact Centre on 03708 506506 who will transfer you to the area team.

Please quote your enquiry reference **230130/KT01** in any correspondence with us regarding this matter.

Customer and Engagement

Environment Agency - Solent and South Downs Area. Email address SSDEnquiries@environment-agency.gov.uk

Kind regards,

Kirsty Taylor

Customer Service Adviser, National Customer Contact Centre
Operations : Regulation, Monitoring & Customer
Environment Agency

☎ Tel: 03708 506 506

🌐 Web Site: www.gov.uk/environment-agency

Click an icon to keep in touch with us:-



From: Stephanie Cosgrove <scosgrove@pfaplc.com>
Sent: 19 January 2023 10:31
To: Enquiries, Unit <enquiries@environment-agency.gov.uk>
Cc: 'Ben Fox' <bfox@pfaplc.com>
Subject: ref: 230130/KT01 - L514: Eastbourne Solar Farm, Eastbourne - Flood Risk Data Information Request

Good morning,

L514: Eastbourne Solar Farm, Eastbourne – Flood Risk Data Information Request

PFA Consulting Ltd have been commissioned to investigate flood risk for a potential Solar Farm development in Eastbourne, East Sussex. The site boundary is shown as the red line on the PDF and has a centre grid reference of 561222 , 100909 (TQ 61222 00909). The closest available postcode is BN23 6QJ.

The site is entirely within Flood Zone 3 and lies to the south and west of Southbourne Lake. Please can you provide any information you may hold which would be relevant to our flood risk assessment.

I am particularly interested in:

- The latest modelled river and tidal flood levels within the wider search area for the 1:20 year, 1:20 year (including allowance for climate change – all available scenarios) ; 1:25 year, 1:100 year, 1:100 (including allowance for climate change – all available scenarios and +26%, 43%, 44% and +76% if possible), 1:200, 1:200 (including allowance for climate change – all available scenarios) and 1:1000 year flood events;
- Details of climate change allowances used in the modelling (peak river flow, sea level rise, offshore wind speed and extreme wave height allowances).
- Details of the flood model (including node locations and any supporting modelling reports);
- Outputs from flood model (flood extents, depth grids etc in GIS format (.shp and .ascii grids))
- Details of any breach modelling conducted in the search area;
- Details of any flood defences in the wider search area (location, standard of protection and quality); and
- Historic flood incidents in the vicinity of the site (from all sources of flooding).

As such we require all the products listed below to fully assess flood risk on the site:

- Product 4: Detailed Flood Risk Assessment Map, including flood zones, defences and storage areas, areas benefiting from defences, statutory main river designations, historic flood event outlines and more detailed information from our computer river models (including model extent, information on one or more specific points, flood levels, flood flows).

and

- Product 5: reports, including flood modelling and hydrology reports and modelling guidelines.
- Product 6: Model Output Data, including product 5 in GIS format (.shp / .ascii)

Please find attached PDFs detailing the site boundary and flood zone extents of the area of interest along with a .zip file containing the shapefiles for the site boundary. Let me know if you require any further information to process this flood risk information request.

Regards

Stephanie Cosgrove

Graduate Engineer



PFA Consulting Ltd
Stratton Park House
Wanborough Road
Swindon SN3 4HG

E: scosgrove@pfapl.com / T: 01793 828000

www.pfapl.com / Find us on [LinkedIn](#)

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or for litigation. Email messages and attachments sent to or from any Environment Agency address may also be accessed by someone other than the sender or recipient, for business purposes.

Rebecca Smith

From: Stephanie Cosgrove <scosgrove@pfaplc.com>
Sent: 13 February 2023 11:48
To: Ben Fox
Subject: FW: 230131 SSD297057 Eastbourne Solar Farm, Eastbourne - Flood Risk Data Information Request
Attachments: SSD297057 _Cover Letter.pdf; Flood Map for Planning (Rivers and Sea).pdf; FRA Advisory Text.pdf; Historic Flood Outlines.pdf; Risk of Flooding from Surface Water.pdf; SSD Pre-app advice note September 2019.pdf

FYI

Regards

Stephanie Cosgrove
Graduate Engineer



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E: scosgrove@pfaplc.com / T: 01793 828000

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From: PSOEastSussex <PSOEastSussex@environment-agency.gov.uk>
Sent: 13 February 2023 10:19
To: scosgrove@pfaplc.com
Subject: RE: 230131 SSD297057 Eastbourne Solar Farm, Eastbourne - Flood Risk Data Information Request

Dear Stephanie Cosgrove,

Thank you for your request of Product 4, 5 and 6, please see Appendix 1 below detailing each product.

Your request for a Product 4 falls under the exemption in provision 6(1)(a) and (b) of the Environmental Information Regulations 2004 (EIR) and on this occasion we are not providing the information in the requested format, but in an alternative format. Further detail of the provisions under the EIR can be found in Appendix 2.

I have provided a P4 cover letter along with the relevant maps. Please find these documents attached. You are encouraged to use and re-use the information provided freely and flexibly, however there are a few conditions. Please see licence details here: <http://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/>

Please note that I have not provided any flood levels and depths as you have requested for P6 data.

Please find the Eastbourne fluvial model result files and report (P5 and P6 in GIS format) here:

<https://ea.sharefile.com/d-s533a9ffffcad4b559b31838f484fce65>

Please find the Eastbourne coastal model result files and report (P5 and P6 in GIS format) here:

1. Link to Coastal report: <https://ea.sharefile.com/d-sa2c5e521b11c4893ab21445ad2385e5b>
2. Link to Coastal P6: <https://ea.sharefile.com/d-s66e440e971a745c1a44453821f0bd5e2>

You are encouraged to use and re-use the information provided freely and flexibly, however there are a few conditions. Please see licence details here: [Environment-Agency-conditional-licence](#)

For FRA and pre-planning advice please see attached 'FRA Advisory Text' and 'SSD Pre-app advice note September 2019'.

For information on flooding from other sources such as surface water please contact the Lead Local Flood Authority, East Sussex County Council.

Guidance on climate change allowances and how to use them in Flood Risk Assessments can be found [here](#).

For future reference, detailed flood information and maps can be viewed using the [Long Term Flood Risk Information](#) service and [Flood Map for Planning](#) service. Flood and Coastal Risk Management asset information, and details of all planned maintenance activities can be viewed using the [Asset Management](#) Service.

Please do not hesitate to contact us at PSOEastSussex@environment-agency.gov.uk if you have any further queries regarding this enquiry.

Kind regards,

Richard Gregory

East Sussex Partnership and Strategic Overview Team

Environment Agency | Solent and South Downs | Romsey Office, Canal Walk, Romsey, Hampshire, SO51 8DU



Appendix 1

Product 4	Detailed Flood Risk Assessment Map, including flood zones, defences and storage areas, areas benefiting from defences, statutory main river designations, historic flood event outlines and more detailed information from hydraulic models (including model extents and 2D flood level data for specific points)
Product 5	Reports, including flood modelling reports, model user logs and guides, hydrology reports, etc
Product 6	Model Output Data, including product 5. <ul style="list-style-type: none">• flood outlines usually provided in shapefile format• 2D grids (level (h), depth (d) velocity (v) and hazard ZKU0) usually provided in ASCII or GeoTIFF format• 1D flow and level data Requires GIS software such as ArcGIS, MapInfo, QGIS or similar.
Product 7	Calibrated and Verified Model Input Data (CaVMID), including product 5. Enables customer to re-run and/or make changes to a hydraulic model. Requires specific hydraulic modelling software such as Flood Modeller, TUFLOW, or ICM InfoWorks.
Product 8	Breach Hazard Map Provides a hazard map of breaches in PDF format including, maximum flood depth, maximum flood velocity and maximum flood hazard. Please note product 8 is not available for fluvial models.

Appendix 2

The exemption in provision 6(1)(a) and (b) of the Environmental Information Regulations 2004 (EIR) states that

'.....6.—(1) Where an applicant requests that the information be made available in a particular form or format, a public authority shall make it so available, unless—

(a) it is reasonable for it to make the information available in another form or format; or

(b) the information is already publicly available and easily accessible to the applicant in another form or format.....'

On this occasion we are not providing the information in the requested format, for the following reasons:

- Complying with the preference would incur a significant cost, which the public authority [The Environment Agency] cannot pass on to the requester;
- Using a Product 5/6/7 allows us to make the information available at a lower cost; and
- The impact on the available resources of the public authority [The Environment Agency], of supplying a Product 5/6/7, is therefore much less.

From: Stephanie Cosgrove <scosgrove@pfaplc.com>

Sent: 19 January 2023 10:31

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Cc: 'Ben Fox' <bfox@pfaplc.com>

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Stephanie Cosgrove
Graduate Engineer



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Our ref: SSD297057

Date: 13/02/2023

Dear Stephanie Cosgrove,

Enquiry Regarding Product 4 for Flood Risk Assessment for Eastbourne Solar Farm, Eastbourne

Thank you for your enquiry which was received on 19th January 2023.

We respond to requests under the Freedom of Information Act 2000 and Environmental Information Regulations 2004. The information is attached.

The information on Flood Zones in the area relating to this address is as follows:

The site is located within Flood Zone 3 as shown on our Flood Map for Planning (Rivers and Sea). Please find attached a copy of the Flood Map for Planning (Rivers and Sea) for the area relating to your address.

The likelihood of flooding from surface water in this area:

The east site is predominately in an area at **very low risk** of surface water flooding, and the west site is predominately in an area at **low risk** of surface water flooding. For more information about how surface water flooding is managed in your local area please contact Lead Local Flood Authority, **East Sussex County Council**.

Note - This information relates to the area that the above named property is in and is not specific to the property itself as it is influenced by factors such as the height of door steps, air bricks or the height of surrounding walls. We do not have access to this information and is not currently used in our flood modelling.

Flood Zone definitions can be found at www.gov.uk/guidance/flood-risk-and-coastal-change#Table-1-Flood-Zones

Flood Defences - This site is protected by the Eastbourne Sea Defence to a standard of protection of a 1 in 200 year flood event. This means that in any given year, there will be a 0.5% chance that this area will experience flooding from the sea.

The defence, built in 1999 run from Holywell to Langney Point. The existing defences consist of timber groynes running from Holywell to Langley point which retain a wide shingle beach and seawalls which run along the rear of the beach between the Holywell Cliffs to the start of Fishing Station.

However you should be aware that flood defences can fail or be overtopped.

Model Information - All modelled data taken from the East Sussex Coastal Model, completed Summer 2012 by JBA Consulting. The model is a 1D-2D ESTRY TUFLOW model. All fluvial modelling taken from Polegate & Willingdon Levels (Lower Model) Flood Risk Mapping/Flood Study, completed in 2007 by Capita Symonds this is an ISIS-TUFLOW (1D-2D).

Flood History – We have the following records of flooding in this area:

December 2009	
Event Code	3242
Event Name	07418K402FEO_DEC2009_Polegate_Willingdon
Start Date	05/12/2009
End Date	08/12/2009
Source of Flooding	Main River
Cause of Flooding	Channel capacity exceeded (no raised defences)

July 1980	
Event Code	3196
Event Name	07418K421FEO_JUL1980_LottbridgeSewer
Start Date	07/07/1980
End Date	07/07/1980
Source of Flooding	Unknown
Cause of Flooding	Unknown

Please note our records are not comprehensive and may not include all events. We recommend contacting the Lead Local Flood Authority, **East Sussex County Council** or the Local Authority, **Eastbourne District Council** for a more comprehensive flood history check.

Flood Warning – This site falls within the *Eastbourne Town* and *Langney Haven at Langney, Willingdon and Eastbourne* Flood Warning Areas. We suggest all properties sign up to Flood Warnings Direct wherever possible to receive direct messages whenever flooding is expected that may affect your property. More information is available at: <http://www.environment-agency.gov.uk/homeandleisure/floods/38289.aspx> alternatively call Floodline on: 0345 988 1188

Data Available Online

Many of our flood datasets are available online:

- Flood Map For Planning ([Flood Zone 2](#), [Flood Zone 3](#), [Flood Storage Areas](#), [Flood Defences](#), [Areas Benefiting from Defences](#))

- [Risk of Flooding from Rivers and Sea](#)
- [Historic Flood Map](#)
- [Current Flood Warnings](#)

This information is supplied subject to the notice which can be viewed via the following link
<http://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/>

We respond to requests for recorded information that we hold under the Freedom of Information Act 2000 (FOIA) and the associated Environmental Information Regulations 2004 (EIR).

If you are not satisfied with our response to your request for information you can contact us within 2 calendar months to ask for our decision to be reviewed.

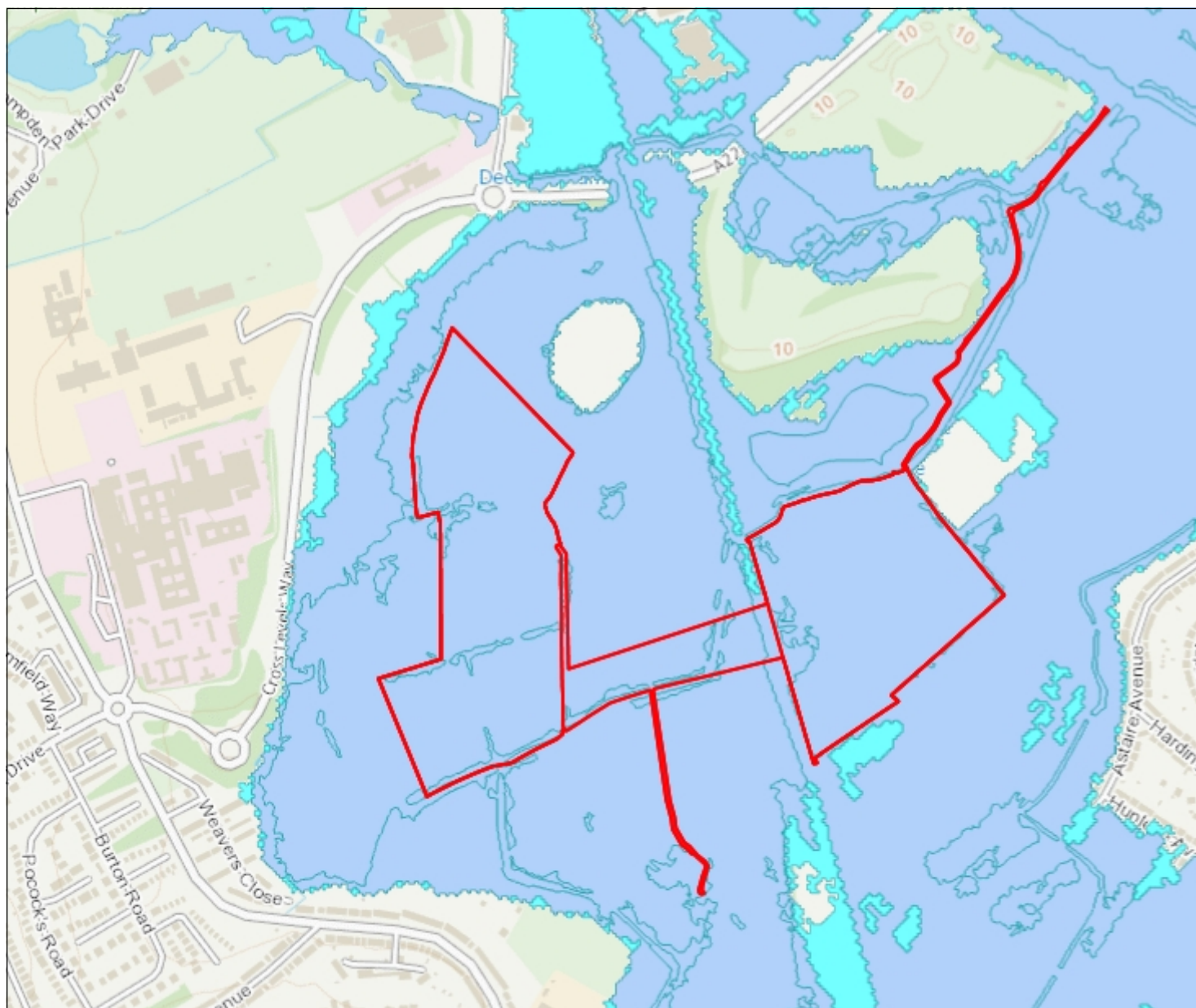
If you have any queries or would like to discuss the content of this letter further please contact PSOEastSussex@environment-agency.gov.uk.

I hope that we have correctly interpreted your request.

Yours sincerely,

Richard Gregory
Flood & Coastal Risk Management Officer
East Sussex Partnership and Strategic Overview Team

Flood Map for Planning (Rivers and Sea). Centred on BN23 6QJ. Created 07/02/2023.



1: 10,000

0 Metres 250



Flood Map for Planning (Rivers & Sea)

- Defences
- Flood Storage Areas
- Flood Zone 3
- Flood Zone 2

Flood Map Areas (assuming no defences)


Flood Zone 3 shows the area that could be affected by flooding:

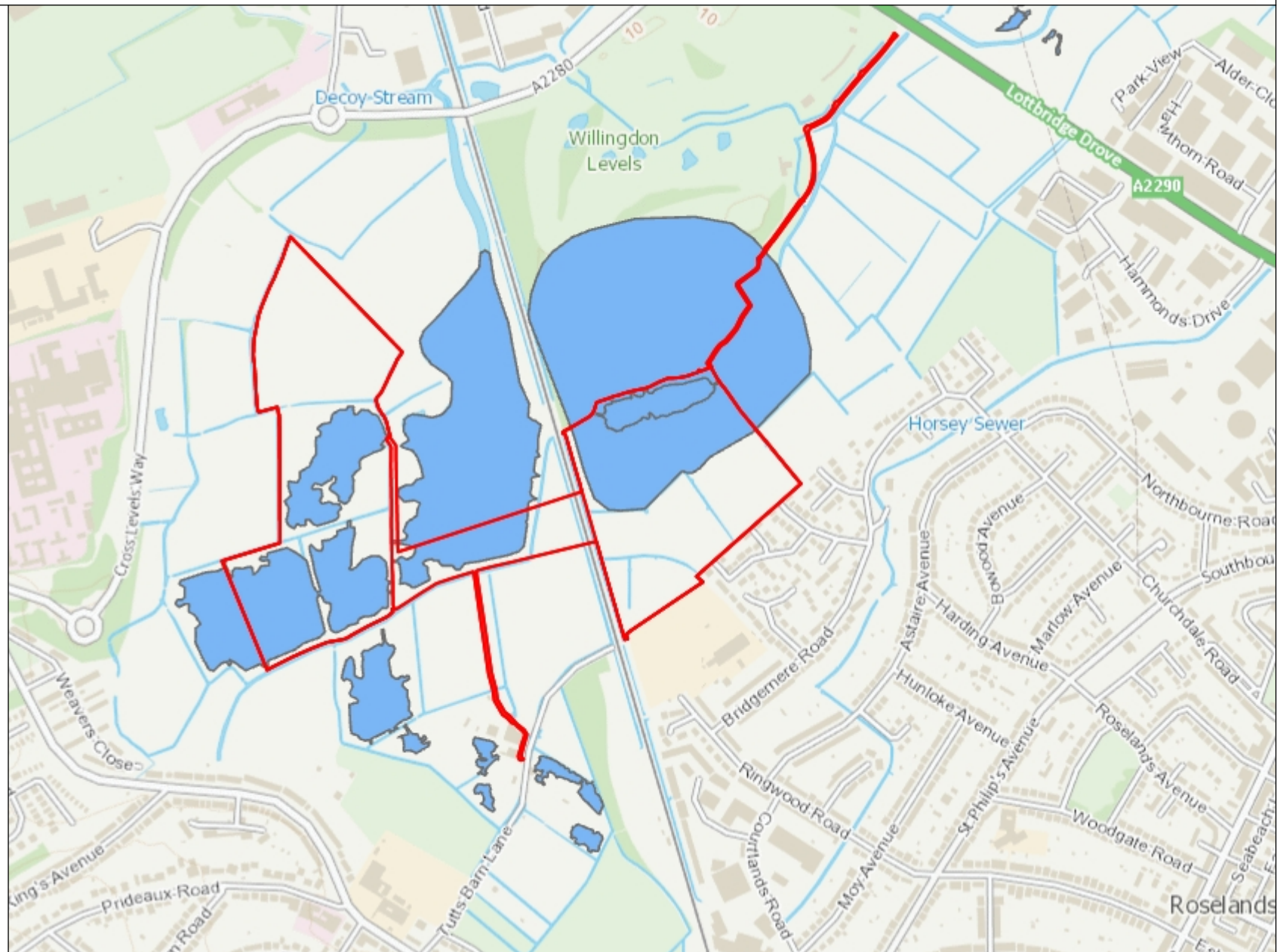
- from the sea with a 1 in 200 or greater chance of happening each year
- or from a river with a 1 in 100 or greater chance of happening each year.

Flood Zone 2 shows the extent of an extreme flood from rivers or the sea with up to a 1 in 1000 chance of occurring each year.

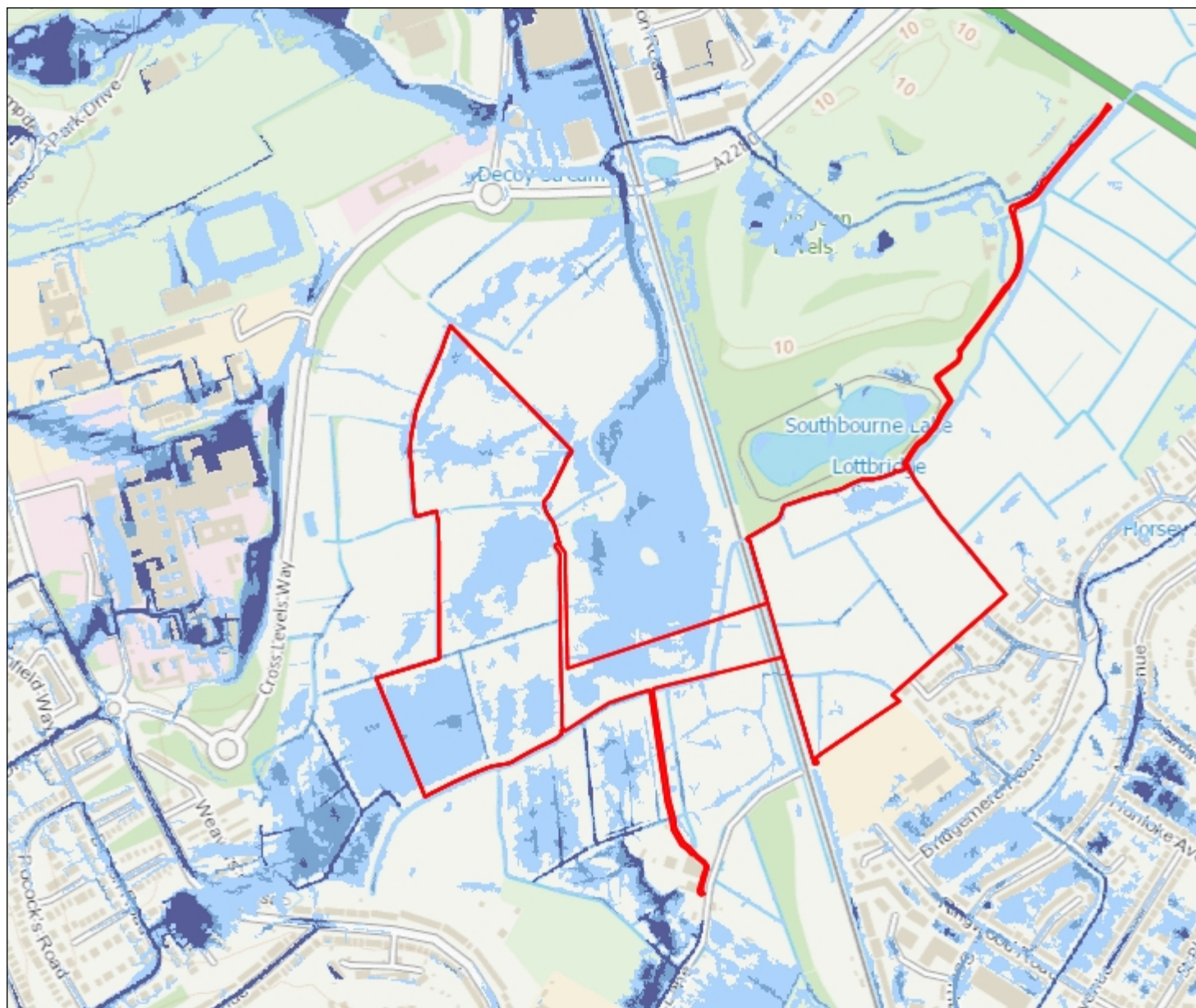
Historic Flood Outlines

Legend

 All recorded flood outlines



Risk of flooding from Surface Water. Centred on BN23 6QJ. Created 07/02/2023.



1: 10,000

0 Metres 250



Likelihood of flooding from Surface Water

- High ($\geq 3.3\%$)
- Medium (3.3% - 1%)
- Low (1% - 0.1%)
- Very Low
- Flood Extent 1 in 30
- Flood Extent 1 in 100
- Flood Extent 1 in 1000

Likelihood of flooding from Surface Water

- High: Greater than or equal to 3.3% (1 in 30) chance in any given year
- Medium: Less than 3.3% (1 in 30) but greater than or equal to 1% (1 in 100) chance in any given year
- Low: Less than 1% (1 in 100) but greater than or equal to 0.1% (1 in 1,000) chance in any given year
- Very Low: Less than 0.1% (1 in 1,000) chance in any given year

This information is shown on the Risk of Flooding from Surface Water map on GOV.UK.

Use of Environment Agency Information for Flood Risk Assessments

Important

The Environment Agency are keen to work with partners to enable development which is resilient to flooding for its lifetime and provides wider benefits to communities. If you have requested this information to help inform a development proposal, then we recommend engaging with us as early as possible by using the pre-application form available from our website:

<https://www.gov.uk/government/publications/pre-planning-application-enquiry-form-preliminary-opinion>

We recognise the value of early engagement in development planning decisions. This allows complex issues to be discussed, innovative solutions to be developed that both enables new development and protects existing communities. Such engagement can often avoid delays in the planning process following planning application submission, by reaching agreements up-front. We offer a charged pre-application advice service for applicants who wish to discuss a development proposal.

We can also provide a preliminary opinion for free which will identify environmental constraints related to our responsibilities including flooding, waste, land contamination, water quality, biodiversity, navigation, pollution, water resources, foul drainage or Environmental Impact Assessment.

In preparing your planning application submission, you should refer to the Environment Agency's Flood Risk Standing Advice and the Planning Practice Guidance for information about what flood risk assessment is needed for new development in the different Flood Zones. This information can be accessed via:

<https://www.gov.uk/flood-risk-assessment-standing-advice>
<http://planningguidance.planningportal.gov.uk/>

You should also consult the Strategic Flood Risk Assessment or other relevant materials produced by your local planning authority.

You should note that:

1. Information supplied by the Environment Agency may be used to assist in producing a Flood Risk Assessment (FRA) where one is required, but does not constitute such an assessment on its own.
2. This information covers flood risk from main rivers and the sea, and you will need to consider other potential sources of flooding, such as groundwater or surface water runoff. Information produced by the local planning authority referred to above may assist here.
3. Where a planning application requires an FRA and this is not submitted or is deficient, the Environment Agency may raise an objection.

Solent & South Downs Area

Pre-application Advice Note

September 2019

This document sets out the environmental issues we will consider when providing our planning application consultation advice to Local Councils. It can be used by applicants, developers and consultants at the pre-planning stage.

Fluvial Flood Risk

Development must be safe and should not increase the risk of flooding.

You can view a site's flood zone on the Flood Map for Planning on our website: <https://flood-map-for-planning.service.gov.uk>

If your proposed development is located within flood zone 2 or 3 you should consult the Flood Risk and Coastal Change pages of the National Planning Policy Guidance (NPPG)

<http://planningguidance.communities.gov.uk/blog/guidance/flood-risk-and-coastal-change/>

Here you can determine whether the flood risk vulnerability of your proposed development and the flood zone are compatible. You can also establish if there are flood risk sequential test and exception test requirements for your proposed development. In the first instance we recommend the developer/applicant liaises with the Local Planning Authority (LPA) to undertake the Sequential Test in accordance with the National Planning Policy Framework (NPPF).

If your proposed development is located within flood zone 2 or 3 and its vulnerability and flood zone are considered acceptable under the NPPG then a site specific Flood Risk Assessment (FRA) is required to support any subsequent planning application. This is required by paragraph 163 of the NPPF: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf

Guidance on the content of a site specific FRA can be found in the NPPG and online: <https://www.gov.uk/guidance/flood-risk-assessment-for-planning-applications>

More detailed flood risk modelling data is available to help you produce a FRA please contact our Customers and Engagement team at SSDenquiries@environment-agency.gov.uk.

Climate Change Allowances

On 19 February 2016, we published new guidance for planners and developers on how to use climate change allowances in a site-specific FRA: <https://www.gov.uk/guidance/flood-risk-assessments-climatechange-allowances>

Groundwater Quality

Development must not cause pollution to the water environment.

Source Protection Zones

We have defined Source Protection Zones (SPZs) for 2000 groundwater sources such as wells, boreholes and springs used across the country for public drinking water supply. These zones are more sensitive to contamination from activities that might cause pollution in the area. The closer the activity, the greater the risk.



SPZ1s are the areas designated as most at risk from contamination and development activities and in these areas we may consider it inappropriate for development to discharge foul or surface water into the ground.

To see if your proposed development is located within a Source Protection Zone, please use our online map: <https://magic.defra.gov.uk/>

Contaminated Land

The NPPF takes a precautionary approach to land contamination. Before the principle of development can be determined, land contamination should be investigated to see whether it could preclude certain development due to environmental risk or cost of remediation. Where contamination is known or suspected, a desk study, site investigation, remediation and other works may be required to enable safe development.

Pollution

If the proposed development use has the potential to pollute ground or surface water receptors then an assessment to establish whether the risk of pollution is acceptable or can be mitigated will be required within any planning application.

Foul Drainage

When drawing up wastewater treatment proposals for any development, the first presumption is to provide a system of foul drainage discharging into a public sewer to be treated at a public sewage treatment works (those provided and operated by the water and sewerage companies). This should be done in consultation with the sewerage company of the area prior to the submission of a formal planning application.

If connection to a public sewage treatment plant is not feasible, a package sewage treatment plant may be considered. If you would like further advice please call 03708 506 506.

Cemeteries

The development of new cemeteries in areas where groundwater vulnerability is high should be avoided, except where the thickness and nature of the unsaturated zone, or the impermeable formations beneath the site, protect groundwater; or where the long-term risk is mitigated by appropriate engineering methods.

Main Rivers

Ecology

In accordance with the National Planning Policy Framework (NPPF), any development proposal should avoid significant harm to biodiversity and seek to protect and enhance it. Opportunities to incorporate biodiversity in and around the development will be encouraged.

Your scheme should be designed with a naturalised buffer zone of at least 8 metres from the main river to protect and enhance the conservation value of the watercourse and ensure access for flood defence maintenance.

This buffer zone should be managed for the benefit of biodiversity for example by the planting of locally appropriate, UK native species. The buffer zone should be undisturbed by development with no fencing, footpaths or other structures. This buffer zone will help provide more space for flood waters, provide improved habitat for local biodiversity and allows access for any maintenance requirements.

To identify any Main Rivers in proximity to your proposed development please see our Main Rivers Consultation Map: <http://apps.environment-agency.gov.uk/wiyby/151293.aspx>

customer service line
03708 506 506

www.gov.uk/environment-agency

incident hotline
0800 80 70 60

floodline
0345 988 1188

Culverting

The Environment Agency is likely to oppose culverting as it is damaging to the ecological integrity of the river channel and its corridor and acts as a barrier to the movement of wildlife, including fish and may also increase flood risk. If the proposal will impact an existing culvert the Environment Agency may oppose planning consent for development either over, or within 8 metres of an existing culvert. Wherever possible, existing culverts should be removed and the river channel and bankside habitat reinstated to restore the ecological continuity of the river channel and its corridor.

Water Framework Directive (WFD)

Any marine works below MHWS require an assessment of possible impacts on Water Framework Directive (WFD). The assessment should include all elements of the works that fall within, or have the potential to affect, a WFD water body and any of the protected areas therein (including Bathing Waters and Shellfish Waters).

The WFD assessment should follow the 'Clearing the Waters for All' guidance available at <https://www.gov.uk/guidance/water-framework-directive-assessment-estuarine-and-coastal-waters>

Where appropriate, a WFD Assessment should assess any potential impacts and demonstrate that the required enhancements will be delivered. In some cases the requirements of a WFD assessment can be incorporated into an Environmental Impact Assessment (EIA). Any development that has the potential to cause deterioration in classification under WFD or that precludes the recommended actions from being delivered in the future is likely to be considered unacceptable to us.

Permits & Consents

Environmental Permitting Regulations

To see if your proposed development requires an Environmental Permit under the Environmental Permitting Regulations please refer to our website: <https://www.gov.uk/guidance/check-if-you-need-an-environmental-permit>

From 6 April 2016 an Environmental Permit is required for any proposed works or structures, in, under, over or within 8 metres of the top of the bank of designated Main River, and within 16 metres of a tidal defence.

Ordinary Watercourse Consent

The prior written consent of the relevant Lead Local Flood Authority is required for the erection of any flow control structures, culverting or diversion of ordinary watercourses, including streams, land drains and ditches.

Marine Licence

A marine licence may be required for any activities at the mean high water spring tide up to the territorial limit. This also includes the waters of every estuary, river or channel where the tide flows at mean high water spring tide.

Any development must demonstrate how adverse impacts on migratory fish, bathing waters, shellfish waters, designated sites, protected and priority species and habitats will be avoided, minimised, mitigated and if necessary compensated for. Works within or affecting a Water Framework Directive (WFD) waterbody will need to demonstrate that compliance with WFD objectives will be achieved. 'Clearing the Waters for All' provides guidance on how the impacts on WFD should be addressed, and should be used when preparing an assessment, including the screening and scoping of activities. <https://www.gov.uk/guidance/water-framework-directive-assessment-estuarine-and-coastal-waters>

Further pre-application options

The information provided above details generic information which may or may not be applicable to your development. We are able to provide more detailed and bespoke advice and answer technical questions for a charged fee of £100 per person per hour +VAT.

If you are interested in finding out more about this service, please email:

planningssd@environment-agency.gov.uk

We can explain this service and provide you with a bespoke quote for further pre-application advice that you may require please see .gov - <https://www.gov.uk/government/publications/pre-planning-application-enquiry-form-preliminary-opinion>

Please note

Please note that the view expressed in this letter by the Environment Agency is in response to the enquiry only and does not represent our final view in relation to any future planning application made in relation to this site.

We reserve the right to change our position in relation to any such application.

As part of this preliminary response we have not technically reviewed any documents. This opinion is based on the information submitted and current planning policy and guidance.

If you have any questions please contact the Solent & South Downs Sustainable Places team:

planningssd@environment-agency.gov.uk

To make a request for data

Please submit your request for data to ssdenquiries@environment-agency.gov.uk. You should get the information within 20 working days. We will tell you when to expect the information if we need more time.

There are many datasets available online at www.data.gov.uk including flood maps, historic landfill, waste exemptions, consented discharges to controlled waters, and much more.

customer service line
03708 506 506

www.gov.uk/environment-agency

incident hotline
0800 80 70 60

floodline
0345 988 1188

Rebecca Smith

From: Nelson, Phoebe <Phoebe.Nelson@environment-agency.gov.uk>
Sent: 20 July 2023 13:25
To: Ben Fox
Cc: Moffatt, Grant; 'Rebecca Smith'; 'Anna Woodward'
Subject: RE: Cost Recovered Advice Meeting - Eastbourne Park Solar Farm (ENVPAC/1/SSD/00286)
Attachments: (V2) ENVPAC_1_SSD_00286 Eastbourne Solar Park Detailed Advice.pdf

Afternoon Ben,

Many thanks for your email. It was good meeting you all last week.

Thank you very much for the meeting minutes, we are happy that this reflects what was discussed.

Grant has taken a look at our asset information on our mapping system and unfortunately it appears that we don't have any information on the culvert on the Lottbridge Stream so a site specific assessment of it will need to be undertaken.

I have attached our updated detailed advice following the meeting. Please let me know if you have any queries in regards to this.

If you need any more information please do not hesitate to contact me.

Kind regards,

Phoebe

Phoebe Nelson

Sustainable Places Advisor | Environmental Planning and Engagement | Solent and South Downs
Environment Agency | Chichester Office, Oving Road, Chichester, West Sussex, PO20 2AG

phoebe.nelson@environment-agency.gov.uk
Tel: 02077141637

Please accept my thanks for your email in advance - each person sending one less 'thank you' email a day would save more than 16,400 tonnes of carbon a year.

My **preferred pronouns** are *She/Her* ([What is this, and what are preferred pronouns?](#))



From: Ben Fox <bfox@pfaplc.com>

Sent: 19 July 2023 17:12

To: Nelson, Phoebe <Phoebe.Nelson@environment-agency.gov.uk>

Cc: Moffatt, Grant <grant.moffatt@environment-agency.gov.uk>; 'Rebecca Smith' <rsmith@pfaplc.com>; 'Anna Woodward' <anna.woodward@dwdllp.com>

Subject: RE: Cost Recovered Advice Meeting - Eastbourne Park Solar Farm (ENVPAC/1/SSD/00286)

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Good afternoon Phoebe

Nice to meet you and Grant last week. I found the meeting productive and hopefully we can continue to work with each other to bring the scheme forward.

Please find attached the meeting minutes. I would be grateful if you could review and feedback any changes so they can be finalised for our records.

Summary of actions:

- EA to provide details of existing watercourse crossing contained on their asset database
- PFA to liaise with LLFA and WLMB regarding the maintenance requirements for ordinary watercourses.
- EA to update written pre application advice on the basis of the points agreed / discussed at the meeting (watercourse buffers, watercourse crossings (permanent and temporary) and floodplain storage volume).

If you wish to discuss this request give me or Becca a call and we can assist.

Many thanks

Ben Fox BSc (Hons) MCIWEM C. WEM CEnv
Associate



Transport Planning / Highways & Infrastructure Design / Flood Risk & Water Management

PFA Consulting Ltd, Stratton Park House, Wanborough Road, Swindon SN3 4HG

T: 01793 828000 **M:** 07511 084888



PFA Consulting Ltd
Company Registered in England 03871018.
Registered address as above.

From: Rebecca Smith <rsmith@pfaplc.com>

Sent: 11 July 2023 14:34

To: 'Nelson, Phoebe' <Phoebe.Nelson@environment-agency.gov.uk>

Cc: 'Moffatt, Grant' <grant.moffatt@environment-agency.gov.uk>; 'Ben Fox' <bfox@pfaplc.com>

Subject: RE: Cost Recovered Advice Meeting - Eastbourne Park Solar Farm (ENVPAC/1/SSD/00286)

Good Afternoon Phoebe,

Please find attached Drawing No. L514/06 Rev B 'Watercourse Context Plan' which shows the emerging layout with the topographical survey overlaid. The layout is being revised to incorporate the 8m buffer between the main river (Lotterbridge Sewer) and the site layout, which can be seen on the northern boundary of the eastern parcel.

We will require temporary access in the northeast corner of the eastern parcel, we plan to use a temporary construction access which can be removed post construction, such as a clear span structure/bridge. We are also planning to utilise the existing crossing across the main river (Lotterbridge Sewer) in the centre of the site. Our aim is for minimal interaction with the main river.

If you have any further questions please do not hesitate to get in touch.

Regards,

Rebecca Smith
Assistant Engineer



PFA Consulting Ltd
Stratton Park House
Wanborough Road
Swindon SN3 4HG

E: rsmith@pfaplc.com / T: 01793 828000
www.pfaplc.com / Find us on [LinkedIn](#)

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From: Nelson, Phoebe <Phoebe.Nelson@environment-agency.gov.uk>
Sent: 10 July 2023 13:36
To: Rebecca Smith <rsmith@pfaplc.com>
Cc: Moffatt, Grant <grant.moffatt@environment-agency.gov.uk>; 'Ben Fox' <bfox@pfaplc.com>
Subject: RE: Cost Recovered Advice Meeting - Eastbourne Park Solar Farm (ENVPAC/1/SSD/00286)

Hi Rebecca,

Thank you very much for sending the agenda over.

The only thing that I think would be useful for the meeting is to have some more detailed drawings of the proposals near the main rivers if possible. If these aren't available yet then we can talk about this in general.

Looking forward to speaking soon.

Phoebe

Phoebe Nelson
Sustainable Places Advisor | Environmental Planning and Engagement | Solent and South Downs
Environment Agency | Chichester Office, Oving Road, Chichester, West Sussex, PO20 2AG

phoebe.nelson@environment-agency.gov.uk
Tel: 02077141637

Please accept my thanks for your email in advance - each person sending one less 'thank you' email a day would save more than 16,400 tonnes of carbon a year.

My **preferred pronouns** are *She/Her* (What is this, and what are preferred pronouns?)



From: Rebecca Smith <rsmith@pfaplc.com>
Sent: 10 July 2023 10:53
To: Nelson, Phoebe <Phoebe.Nelson@environment-agency.gov.uk>
Cc: Moffatt, Grant <grant.moffatt@environment-agency.gov.uk>; 'Ben Fox' <bfox@pfaplc.com>
Subject: RE: Cost Recovered Advice Meeting - Eastbourne Park Solar Farm (ENVPAC/1/SSD/00286)

Warning: The sender of this message could not be validated. Please use caution when opening any message content such as attachments or links

Good Morning Phoebe,

Thank you for setting up the meeting to discuss the Eastbourne Solar Park on Thursday 13th July 2-3pm. To ensure the meeting is as productive as possible we suggest the following agenda:

- Introductions – PFA & EA
- Summary of Development and Flood Risk - PFA
- Overview Environment Agency Response - EA
- Discussion Points - PFA & EA
 - Floodplain Storage Volume
 - Watercourse Crossings (Lottbridge Sewer) - PFA & EA
 - Permanent – use of existing crossing (potential upgrade)
 - Temporary – new crossing
- Confirm actions / next steps - PFA & EA
- AOB - PFA & EA

Do you have anything you wish to add to the agenda and please circulate to the attendees your side.

We look forward to meeting you all next week.

Regards,

Rebecca Smith
Assistant Engineer



PFA Consulting Ltd
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Wanborough Road
Swindon SN3 4HG

E: rsmith@pfapl.com / T: 01793 828000
www.pfapl.com / Find us on [LinkedIn](#)

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-----Original Appointment-----

From: Nelson, Phoebe <Phoebe.Nelson@environment-agency.gov.uk>

Sent: 29 June 2023 15:30

To: Rebecca Smith; 'Ben Fox'; Moffatt, Grant

Subject: Cost Recovered Advice Meeting - Eastbourne Park Solar Farm (ENVPAC/1/SSD/00286)

When: 13 July 2023 14:00-15:00 (UTC+00:00) Dublin, Edinburgh, Lisbon, London.

Where: Microsoft Teams Meeting

1 hour meeting to discuss the pre-application proposal for Eastbourne Solar Farm.

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 397 094 470 861

Passcode: qAm27S

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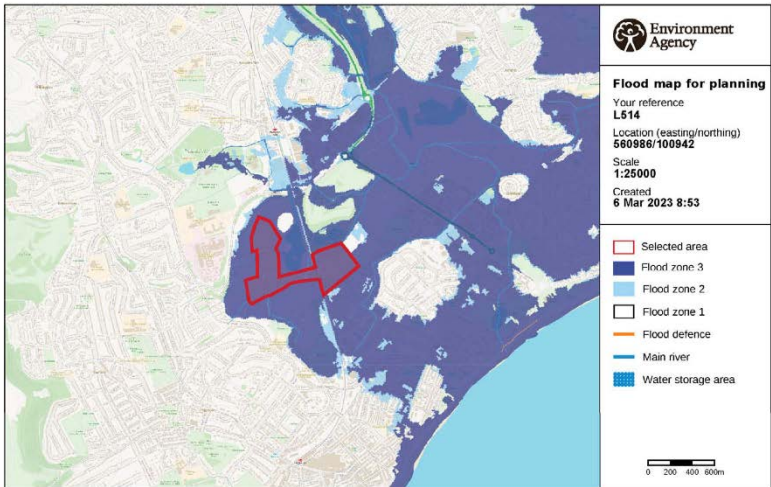
MEETING NOTES



JOB No:	L514		
PROJECT:	Solar Farm, Eastbourne Park		
DATE:	13.07.23	VENUE:	MS Teams
SIGNED:		DATE:	

PRESENT:		DISTRIBUTION:	
<u>PFA Consulting</u>		Those Present	
Ben Fox	Associate		
Rebecca Smith	Assistant Engineer	<u>DWD</u>	
		Anna Woodward	Senior Planner
<u>Environment Agency</u>		Lisa Hall	Planner (Consultant)
Phoebe Nelson	Sustainable Places Advisor		
Grant Moffatt	Technical Advisor (Flood Risk)		
<u>Low Carbon</u>			
Samuel Dix	Project Development Manager		

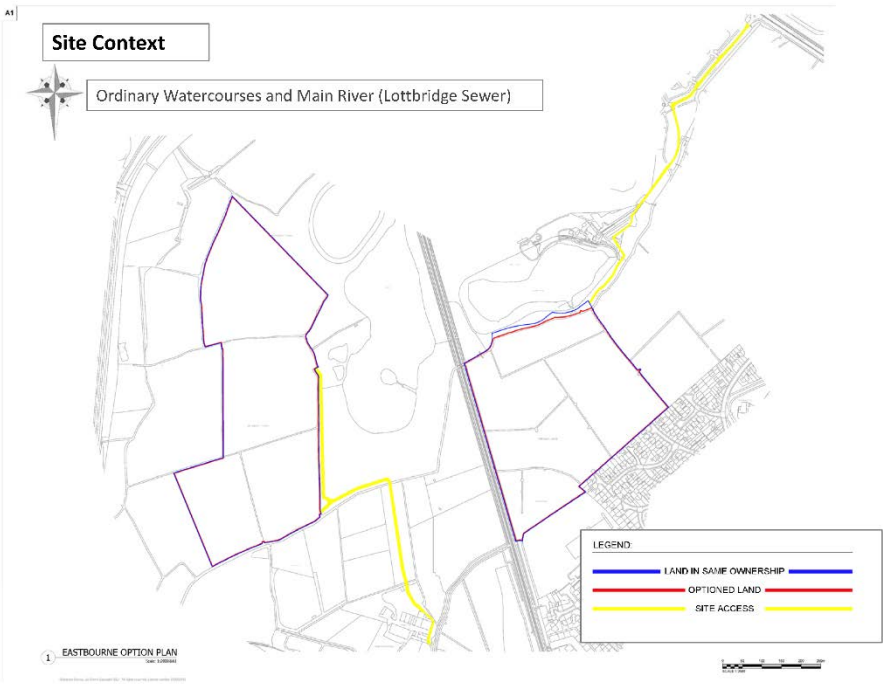
	Actions
<p>1. Introduction</p> <p>1.1. Purpose of meeting was to discuss the proposed Solar Farm at Eastbourne Park, East Sussex and the Environment Agency's (EA) written pre application response issued on 23rd June 2023 (Ref: HA/2023/125063/02 & ENVPAC/1/SSD/00286) in response to PFA Consulting's 'Preliminary flood risk appraisal' (Ref: L514-FN08, dated March 2023).</p> <p>2. Summary of Development and Flood Risk</p> <p>2.1. BF summarised the key conclusions of the 'Preliminary flood risk appraisal' and a copy of the slides from presentation are reproduced below.</p>	

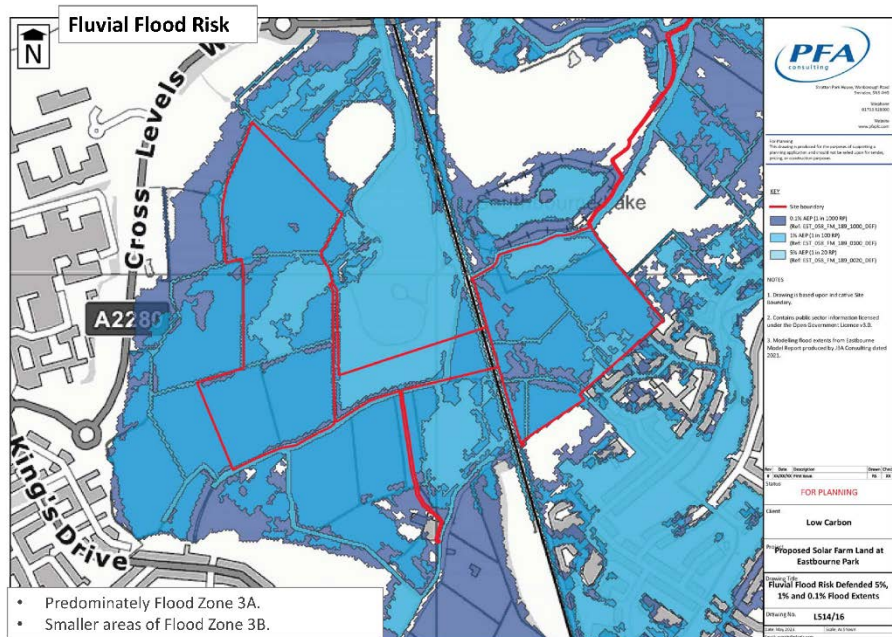
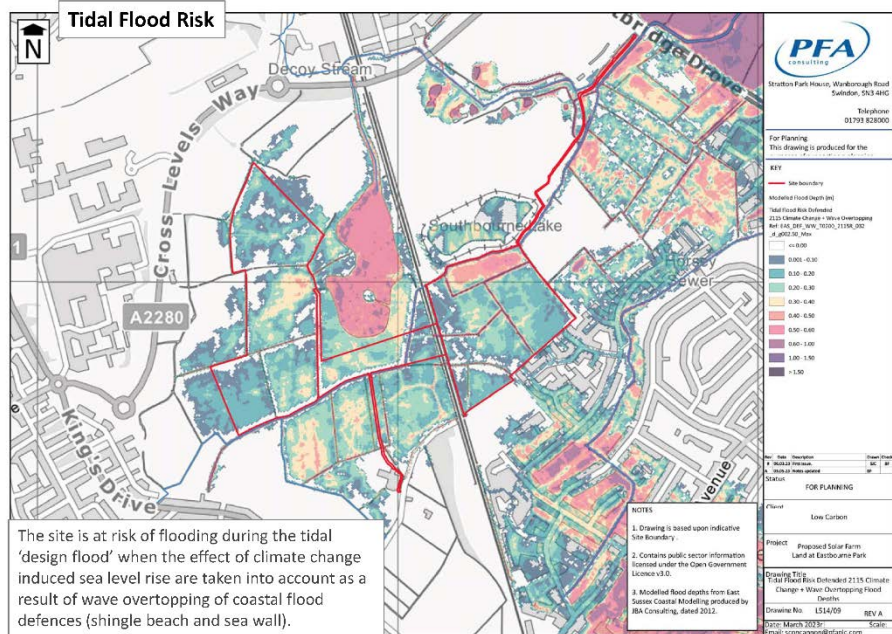


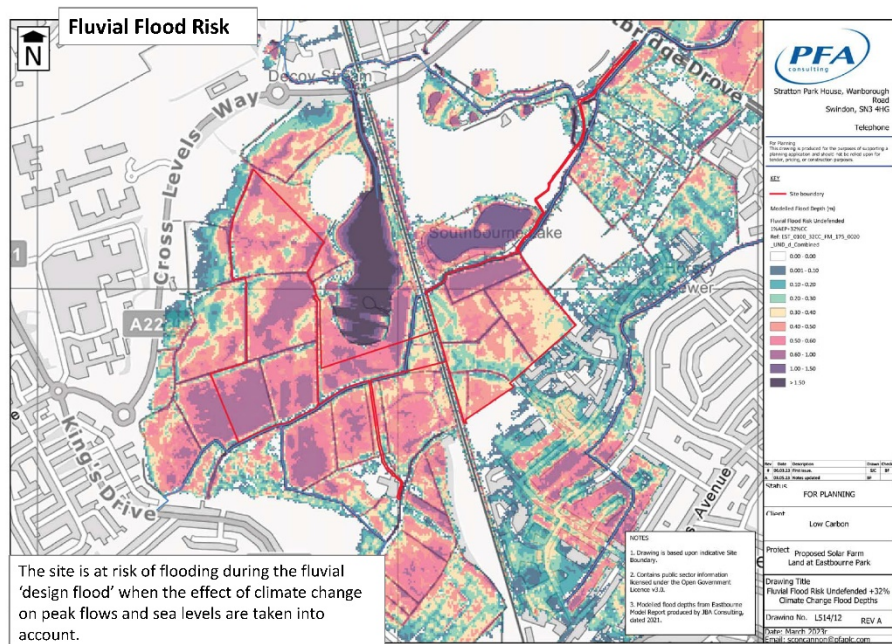
Flood Risk Summary

This site is situated in Eastbourne Park which is a flat low-lying landscape of grazed wetland at the centre of Eastbourne and its primary role is a flood storage area and a network of watercourses cross and drain the site.

Based on a preliminary review of the Environment Agency the site is at risk of flooding from watercourses and tidal sources (when the effects of climate change induced sea level rise are taken into account).

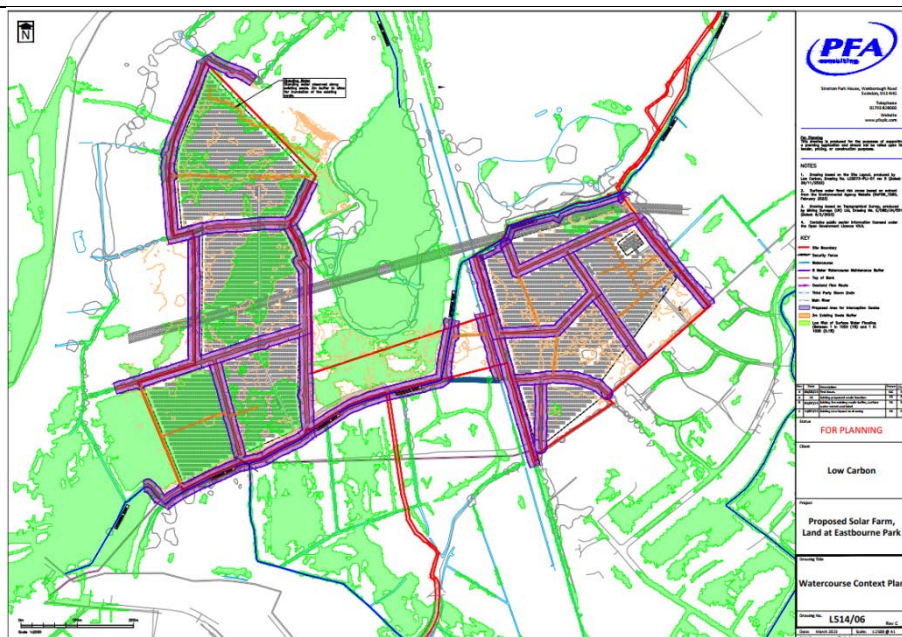






Summary of Preliminary Flood Mitigation Measures

- Solar arrays and control equipment will be **raised** at least +0.3m above the fluvial 'design flood' level (including an allowance for climate change).
- Panel supports and security fencing in flood risk areas will be **securely piled** into the ground and designed to allow for the effect of flowing water pressures and to be resistant to inundation during a flood event.
- Security fencing **mesh size** in flood risk areas is increased to 150mm square to minimise the risk of it collecting debris.
- All development (including security fencing) is **at least 8m from the onsite Main Rivers** and ordinary watercourses (except for access track watercourse crossings).
- Construction contractor and operating staff will register to receive flood alerts / warnings from the Environment Agency and follow **site evacuation** procedures during periods of elevated tidal flood risk.



Watercourse Crossing – Permanent

- 3.5. BF explained there are two crossings of the Lottbridge Sewer proposed. The western development parcel utilises an existing crossing point. The eastern development parcel would be served by a temporary construction access which requires a temporary watercourse crossing.
- 3.6. The design of the permanent crossing point has yet to be finalised. BF stated that if any alterations to the crossing are required the design of the crossing would not create a hydraulic restriction but would replicate the existing crossing structure. The EA raised no concern with this approach and noted that any alterations would require an Environmental Permit for flood risk activities.
- 3.7. GM offered to provide any details the EA may hold on the existing watercourse crossing structure from their asset database.

EA

Watercourse Crossing – Temporary

- 3.8. BF explained that a clear span structure such as the CB8 or CB12 Mitchell Bridges (or similar approved) would be utilised for the temporary construction access. BF explained the design and requirements have yet to be finalised but the intention was for a clear span structure which would be removed at the end of the construction. The permanent access for the eastern development parcel is through the residential development to the south. EA raised no concern with this approach.
- 3.9. GM noted the temporary access / watercourse crossing require an Environmental Permit for flood risk activities.

	Actions
Environmental Permit	
3.10. GM stated all works affecting the Main River could be covered by one Environmental Permit to simplify matters. GM confirmed Environmental Permits normally take two months to determine but at the moment the time scale is more like three-four months due to resourcing issues. GM noted the Environmental Permit process can be run in parallel with the planning application and would require a high level of detail of the proposals.	
3.11. GM recommended reconsulting with the EA to confirm the information required for the Environmental Permit application.	
Floodplain Storage Volume	
3.12. BF drew the EA's attention to the conclusion that due to the nature and design of the supporting framework any displacement of flood waters during a flood event will be insignificant and would not impede floodwaters.	
3.13. GM confirmed that the displacement of floodwaters by equipment framework is insignificant in the context of the floodplain and floodplain compensation is not required.	
Other Matters	
3.14. SD raised the matter of the presence of existing swales on the site (shallow depressions) which temporarily hold water and drain towards the onsite ditches/ordinary watercourses. BF stated this should be a matter for the LLFA / WLMB and not the EA.	
3.15. GM recommended engaging with the LLFA (East Sussex County Council) and WLMB (Pevensey and Cuckmere Water Level Management Board) to confirm their maintenance access requirements for ordinary watercourses and alignment for security fencing. GM provided the East Sussex County Council switchboard number for the local drainage engineer Revai Kinsella Tel: 0345 608 0190 who works for both the LLFA/WLMB.	PFA
3.16. AW requested that the EA update their written pre application response on the basis of the points agreed / discussed at the meeting (watercourse buffers, watercourse crossings (permanent and temporary) and floodplain storage volume). This updated response can then feed into the planning application targeted for Autumn 2023.	EA
4. AOB	
4.1. None.	

Rebecca Smith
PFA Consulting Ltd
Stratton Park House
Wanborough Road
Swindon
SN3 4HG

Our ref: HA/2023/125063/02
Your Ref: ENVPAC/1/SSD/00286

Date: 20 July 2023

Dear Rebecca,

Detailed Advice for Solar Farm, Eastbourne Park (updated version)

Thank you for accepting our offer to provide detailed planning advice. We have reviewed the following documents:

- Preliminary flood risk appraisal (reference: L514-FN08, dated March 2023)

We are providing this advice under Agreement No. ENVPAC/1/SSD/00286. Please note we have taken 6 hours in total to review and provide our advice on this document and discuss in a meeting which is the less we estimated in our Programme of Works. The revised total will be £600 plus VAT 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.

Position summary

We have no objections in principle to the submitted document, which addresses all the required flood risk issues.

Detailed advice

Eastbourne Park was designed with the primary purpose of providing flood protection to existing and proposed residential development within the Eastbourne area. The majority of the area is within Flood Zone 3, with a large proportion of this being within the functional floodplain. Although we are not opposed to the consideration of a solar farm within Eastbourne Park, any development within the park should ensure that its primary role of providing flood protection is safeguarded. Proposals should not result in net loss to floodplain storage, impede water flows or increase flood risk elsewhere. Any potential loss of floodplain storage would require sufficient flood risk mitigation measures. Overall, our preference would be for Eastbourne Park to remain as flood storage area,

with its primary purpose to provide flood protection to the existing and proposed residential development within the Eastbourne area.

The submitted Preliminary Flood Risk Appraisal would appear to address the relevant flood risks within the catchment and utilises the latest East Sussex County Council and Environment Agency approved model outputs.

The document also makes suitable recommendations for minimum solar panel and control equipment levels, including an appropriate freeboard allowance, for the recommended tidal and fluvial return periods.

Section 7.2 discusses the potential requirement to install culverts on main rivers. The applicant should be aware that we have a presumption against culverting and that we would recommend that the contact our permitting team at their earliest opportunity to discuss this. They can be contacted at PSOEastSussex@environment-agency.gov.uk.

It is acknowledged that an 8 metre buffer is proposed from the top of the bank of the river to the proposed development, including security fencing. It will need to be ensured that any fencing does not affect our maintenance/emergency access and therefore this should also be discussed with our permitting team as soon as possible as this may have minor implications on the site layout. The two crossings of the Lottbridge Sewer will require a flood risk activity permit, and we support the use of a clear span structure for the temporary construction access.

We are likely to recommend conditions about the minimum heights that the solar panels and control equipment are set in line with Sections 7.5 and 7.13 of the submitted document. In addition, we are likely to recommend that a condition of planning also be imposed in line within Section 7.16 of the document to protect a minimum 8 metre buffer zone on both banks of the main river. Due to the minimal size of the equipment framework in the context of the floodplain, we do not require floodplain compensation in this instance.

Next Steps

As mentioned above, the applicant should contact our permitting team to discuss potential river crossings and our access requirements, and we would encourage parallel tracking of the planning application with the Environmental Permit application to minimise any delays.

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 contact me on the details below.

Yours sincerely,

Phoebe Nelson

Sustainable Places Advisor | Solent and South Downs
Environment Agency | Chichester Office, Oving Road, Chichester, West Sussex, PO20 2AG

phoebe.nelson@environment-agency.gov.uk

Tel: 02077141637

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.