

## **Longfield Solar Farm**

Statement of Common Ground – Environment Agency

Deadline 21B

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Longfield Solar Energy Farm Ltd



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## 1. Introduction

### 1.1 Purpose of this document

- 1.1.1 This Statement of Common Ground (SoCG) has been prepared as part of the proposed Longfield Solar Farm Development Consent Order (the Application) made by Longfield Solar Energy Farm Ltd (The Applicant) to the Secretary of State for Business, Energy and Industrial Strategy (the Secretary of State) pursuant to the Planning Act 2008 (PA 2008).
- 1.1.2 This SoCG has been produced to confirm to the Examining Authority (ExA) where agreement has been reached between the parties, and where agreement has not (yet) been reached. SoCGs are an established means in the planning process of allowing all parties to identify and focus on specific issues that may need to be addressed during the examination.
- 1.1.3 This SoCG does not seek to replicate information which is available elsewhere within the Application documents. All documents are available in the deposit locations and/or the Planning Inspectorate website.
- 1.1.4 The SoCG is an evolving document and the detailed wording within it is still being discussed in detail between the parties. Therefore future iterations will evolve from this point and both parties reserve the right to supplement the matters identified as discussions progress, to ensure it is comprehensive. We will continue to work together, seeking resolution where appropriate to ensure it is a reliable and up to date document which can inform the examination.

#### 1.2 Parties to this Statement of Common Ground

- 1.2.1 This SoCG has been prepared by (1) Longfield Solar Energy Farm Ltd as the Applicant and (2) the Environment Agency.
- 1.2.2 Collectively, Longfield Solar Energy Farm Ltd and the Environment Agency. are referred to as 'the parties'.

### 1.3 Terminology

1.3.1 In the table in the Issues chapter of this SoCG:

"Agreed" indicates where the issue has been resolved.

"Not Agreed" indicates a final position, and

"Under discussion" indicates where these points will be the subject of ongoing discussion wherever possible to resolve, or refine, the extent of disagreement between the parties.



## 2. Record of Engagement

### **2.1** Summary of consultation

2.1.1 The parties have been engaged in consultation since the beginning of the proposed development. A summary of the meetings and correspondence that has taken place between Longfield Solar Energy Farm Ltd and the Environment Agency in relation to the Application is outlined in **Table 2-1**.

## **Table 2.1 - Record of Engagement**

[Table to be completed for next version]

2.1.2 It is agreed that this is an accurate record of the key meetings and consultation undertaken between (1) Longfield Solar Energy Farm Ltd and (2) the Environment Agency in relation to the issues addressed in this SoCG.



## 3. Issues

## 3.1 Water

Ref	Sub-topic	Stakeholder Comment	Applicant's Response	Status
1	Flood risk – development in Flood Zones 2 and 3	Considering the very large site area, and the relatively small areas of Flood Zones 2 and 3 within the site boundary, the Sequential Approach should be applied to the siting of the development, and the Flood Risk Assessment should show that the solar panels will all be located within Flood Zone 1 wherever possible. [Scoping]	A sequential approach has been applied to siting the buildings, equipment and structures that form the solar farm and associated development. As a result of this, no above ground development is proposed within Flood Zones 2 or 3, and all solar panels, buildings, structures and equipment will be sited in Flood Zone 1, as per the EA's advice.	Agreed
2	Flood risk – Watercourse Modelling (Section 2.5 to 2.9 of Relevant Representation and statutory consultation	The watercourses will not need to be hydraulically modelled, providing that all the solar panels are located within Flood Zone 1. [Scoping]	All solar panels are located within Flood Zone 1. Hydraulic modelling of watercourses has not been necessary, in accordance with the EA's advice.	Agreed
3	Flood risk – Watercourse Modelling (Section 2.5 to 2.9 of Relevant Representation and statutory consultation	Although currently the majority of the new climate change allowances have not exceeded the current extent of the existing flood zone 2 (where modelled), given the scale of this NSIP we feel it is appropriate to request the applicant to model the River Ter; designated main river, and the Boreham Brook including the non-main element upstream of it in order to incorporate the new climate change allowances.  Peak river flow allowances: the Upper end allowance should be applied for Essential Infrastructure. For the River Ter (north end of the	Given all PV panel installations are in Flood Zone 1 no further modelling has been undertaken. There is no critical infrastructure located within the Flood Zones 2 and 3, all built development is located in Flood Zone 1.  It is considered that fluvial modelling of both the River Ter and Boreham Brook is not required as it is reasonable to assume fluvial flood levels would not reflect an increase in flood level, as the PV panels sit are located outside the estimated Flood Zone 2 levels.  Additionally, both the Braintree and Chelmsford SFRAs indicate Flood Zone 2 as a proxy for the	Agreed



Ref

Sub-topic

#### **Stakeholder Comment**

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Status

site) this may affect a very small proportion of PV installations.

For the ordinary watercourse (Southern end of the site) upstream of the main River Boreham Brook, the extent of the floodplain is more unknown and therefore should be modelled to identify if any of the proposed PV installations would be located in the flood plain.

If the applicant does not undertake modelling ahead of the DCO submission then they should be able to justify why modelling is not required. The FRA has not shown the built development in relation to the Flood Zones therefore this will need to be updated within the FRA before it can be concluded that hydraulic modelling is not required at this time.

The FRA should refer to modelled flood levels to make a comparison with topographic levels/levels of infrastructure to establish the flood risk/depth. Further detail should be provided of the infrastructure level in mAOD. The SFRA does not have modelled levels for the River Ter or Boreham Brook tributary.

Section 9.1.12 discusses the two developable areas which fall within the vicinity of the Flood Zones. Noting a level difference of 4m between the Flood Zone 2 boundary and the potential developable area for area 1 and for area 2 a 1.5m difference in level when comparing an overlay of the EA long term fluvial flood risk maps on a 3D surface to determine the approximate level difference between both the Flood Zone 3 and Flood Zone 2 extents. Paragraph 9.1.16 assumes that the PV panels will not be affected.

65% climate change extent, with the revised climate change allowances now only requiring 16% for design purposes; the fluvial design extent level would be less, providing a greater depth difference to the PV panels. The Upper End referred to is for a sensitivity assessment, not design purposes.

At the River Ter, the Flood Zone 2 boundary, at its highest point in the Order limits, is approximately 34.00m AOD. The nearest point of the Potential Developable Areas (PDAs) (i.e. PV panels), is approximately 38.00m AOD; a level difference of 4m. Due to the limited upstream catchment characteristics and free flow downstream, it is highly unlikely that fluvial flood risk will rise by 4m in this location. The channel width at this depth would be in the region of 250m wide. For comparison, the upstream catchment is approx. 4,761ha with a (HR Wallingford) greenfield runoff rate calculated at 20.4m<sup>3</sup> during the 1 in 100 year storm (24m<sup>3</sup> for a 1 in 200 year storm). A channel depth of 2.5m, with an assumed bed width of 1.0m and 1 in 3 sides, would provide 28.7m<sup>3</sup>/s flow rate, and a channel top width of 16m, assuming a manning 'n' of 0.05 and a conservative channel gradient of 1 in 300. This effectively exceeds the estimated upstream catchment characteristics for the River Ter. Assuming a worst case 100% increase in flows form the catchment, i.e. 40.4m<sup>3</sup>, to account for minimal urban development and climate change, the channel width would be approx. 19m and 3m deep, which is still well below the PV panel level. The same assessment applies to the Boreham Brook, with PV panels set at approx. 48m AOD.



Ref

Sub-topic

#### **Stakeholder Comment**

#### **Applicant's Response**

#### Status

However, in light of the requirements in paragraph 4.8.8 of EN-1, it cannot be ascertained accurately from the information provided whether there is any risk to critical parts of the infrastructure without knowing what levels these are set at and what the flood level would be for the 0.1% AEP plus the maximum credible climate change uplift values to peak river flows.

The FRA should assess if further modelling is required to establish flood levels noting the requirements of the NPS EN-1 4.8.8 and the requirement to establish the 0.1% AEP plus the maximum credible climate change uplift values to peak river flows.

Whilst this may seem negligible, it is currently unknown what flood level this represents and how infrastructure could be affected. Infrastructure should be 'designed and constructed to remain operational and safe in times of flood' as required by the 'Flood and Coastal Change' guidance document.

It needs to be clear from the applicant's documentation and risk assessments as to whether there are any features of the infrastructure that are critical to its operations close to the boundaries of the flood zones. If there are critical elements of the infrastructure close to the boundaries of FZs 2 and 3 then the 37% peak river flow uplift should be applied.

This should be through hydraulic modelling of the River Ter and Boreham Brook (tributary). [Statutory consultation and Relevant Representation]

The level of 48m AOD is not reached on the right bank of the water course for approximately 1km. With a smaller river catchment than the River Ter (614ha, 87% smaller) in this location, it is considered flood levels will not have capacity to reach 48m AOD across such a width.

Appendix 9A Flood Risk Assessment [EN010118/APP/6.2] discusses this in more detail.

Given all PV panel installations and other above ground structures, buildings or equipment are in Flood Zone 1 no further modelling has been undertaken. Justification and plans to support the approach have been provided in **Appendix 9A Flood Risk Assessment [EN010118/APP/6.2]**, including a plan showing the Scheme and Flood Zones (Figure 3).



Ref	Sub-topic	Stakeholder Comment	Applicant's Response	Status
4	Flood risk – Planning – Draft NPS EN-3 (Section 2.1 of Relevant Representation)	The Flood Risk Assessment (FRA) doesn't refer to the draft NPS EN3 Renewable Energy in section 3. The Environment Agency is not a statutory consultee to the land use planning system for the consideration of surface water flood risk and management. We therefore recommend that you consider the comments from the relevant Lead Local Flood Authority on this issue	Noted. FRA will be updated to include reference to NPS-EN3 and impact of drainage.	Agreed
5	Flood Risk – Terminology (Section 2.4 of Relevant Representation)	Rather than just referring to Flood Zone 2/3, the FRA should state 0.1% (1 in 1000) annual probability flood event or 1% (1 in 100) annual probability flood event	Noted. FRA will update text to reflect.	Agreed
6	Flood risk - Safety	The FRA will need to show how the development will be safe in the event of a flood and not increase flood risk to others. [Scoping]	The FRA is provided within Appendix 9A Flood Risk Assessment [EN010118/APP/6.2], and considers safety. It concludes that through the sequential process and design iterations there are no buildings located within the floodplain. All compounds for site staff and battery storage units have been located out of Flood Zones 2 and 3 (i.e. within Flood Zone 1). Access to the PV Panels would not be sought during flooding conditions.	Agreed
7	Flood risk – Solar panel dislodging	There is a risk of debris being caught up in the solar panel support structures or solar panels themselves as a result of flooding. The possibility of the solar panels becoming dislodged by flood water should also be investigated as they could pose a blockage risk downstream, especially to culverts.  [Scoping]	Solar PV panels are located in Flood Zone 1 only and not in a flood flow pathway. PV panels are located at least 3.5m above the Flood Zone 2 estimated extents for the Ter and Boreham Brook, and at least 47m from the estimated flood zone 2 extent. It is highly unlikely fluvial flows will reach this level and carry sufficient quantities of debris to block against the structure of the panel legs.	Agreed



Ref	Sub-topic	Stakeholder Comment	Applicant's Response	Status
8	Standing waterbody and bankside enhancement	As with any development the Environment Agency wish to see open watercourses retained and bankside habitats enhanced and buffered with natural vegetation.  Ponds and any standing water should also be protected and enhanced. Natural water features should not be shaded or negatively impacted by the proposals.  [Scoping]	There will be a minimum buffer of 8m around watercourses (measured from the water/channel edge under normal flows) within which there will be no built development. For main rivers a 10m buffer measured from the centre line of the watercourse as marked on Ordnance Survey mapping has been allowed for (this is to take account of the variance in the position of the bank from which Environment Agency flood risk regulatory controls are defined). A minimum buffer of 5m around all ponds is proposed.  Cable crossings of Boreham Brook will be installed below the bed using a non-intrusive method, to maintain an open watercourse. Access track crossings of ephemeral drainage ditches are required but generally use existing culverts with only minimal extension likely to be required (the assumed worst case is approximately a 2m extension). A 1.55m extension of the Cranham Road culvert of Boreham Brook will also be required to enable access to the site.  Existing ponds in poor condition will be restored with the aim of maximising their wildlife value. This will partly be achieved by de-silting to ensure that they remain at least partly wet during normal conditions, allowing amphibians and invertebrates to complete their life cycles. Where existing ponds are overshaded by mature trees, including poplars, willows and oak pollards, these trees will be prioritised for re-pollarding, to increase light and decrease leaf fall onto the ponds. Scrub clearance and de-silting around ponds will be phased over five years, to prevent the site-wide loss of existing shaded pond habitats and to provide ponds in various stages of natural	Agreed



Ref	Sub-topic	Stakeholder Comment	Applicant's Response	Status
			succession to provide a wider range of niches for wildlife. Water features tend to be colonised naturally, therefore no planting is considered necessary or desirable in these areas.  The Biodiversity Design Strategy also demonstrates an aspiration for restoration of existing floodplain grassland to create more diverse grassland typical of traditional floodplain meadows. This area will be managed as hay meadow, allowing grassland plants to flower and set seed during the summer months, while also providing floodwater storage capacity when required throughout the year.	
9	Battery safety and pollution	Siting of battery units should be carefully designed to prevent risk to watercourse pollution and consequent harm to fish and aquatic life.  Battery storage will be provided. Consideration must be given to how a fire and any resulting firefighting run off would be managed to prevent pollution. We recommend that discussions take place with the local fire and rescue service on potential firefighting strategies used on battery storage installations which will help inform development of a pollution incident response plan. Guidance on pollutant containment systems can be found in the CIRIA publication "Containment systems for the prevention of pollution C736F" [Scoping]	The battery units are sited away from watercourses and will be provided with pollution control measures, including management of firefighting water.  An outline drainage strategy is provided within Appendix 9C SuDS Strategy  [EN010118/APP/6.2] detailing the approach to managing firewater runoff. Consultation with the ECC Fire and Rescue department and the EA has been undertaken during development of the strategy.  The fire safety management plan has been carefully designed to control risks of pollution from firewater. This includes a penstock to enable the drainage attenuation pond for the BESS to be closed off, and proposals to recycle fire water from this pond.	Working towards agreement Agreed
10	Control of Spills	The CEMP also needs to reduce any potential polluting impacts (e.g. run off containing silt/sediment or oil pollution arising from a spill) in addition to nuisances. The CEMP should also include a pollution incident response plan.	Measures for protecting the water environment from pollution during construction are outlined in Chapter 9 of the ES and in Appendix 2A Outline Construction Environmental Management Plan (CEMP) [EN010118/APP/7.X]], including a	Working towards agreement Agreed



Ref	Sub-topic	Stakeholder Comment	Applicant's Response	Status
		[Scoping]	pollution incident response plan. This sets out that the Contractor will follow Guidance for Pollution Prevention in relation to the safe storage of material, maintenance and cleaning, responding to spills and works near to water.	
11	H++ Climate Change Scenario (Statutory Consultation and Section 2.6 of Relevant Representation)	We consider it essential that a FRA considers the implications of the H++ scenario and the approach that could be taken to manage this risk. The H++ scenario (a requirement for FRAs that look at "safety critical" elements of infrastructure proposals) is currently found in the document "Adapting to climate change: guidance for risk management authorities".	The report referenced ("Adapting to climate change: guidance for risk management authorities") has been withdrawn in July 2020 with advice now provided in:  https://www.gov.uk/guidance/flood-and-coastal-risk-projects-schemes-and-strategies-climate-change-allowances  It is understood H++ no longer applies to river flows, and the current sensitivity test for river flows is the Upper End allowance, i.e. for the Credible Maximum Scenario. In this catchment the value is 37% peak river flow climate change allowance for the epoch of the lifetime of the development, as per the online guidance and mapping.  H++ applies to sea level rise, although this specific area of the UK is not considered to be impacted by sea level rise.  As noted, the Upper End allowance value of 37% would be required for sensitivity only.  As noted above, it is unrealistic for water flows and levels to reach the areas of the PV panels, with estimated 100% increase in catchment flows, to account for minimal urban development and climate change.	Agreed
12	Development areas and Flood Zones	Appendix A of the FRA shows the layout of the development. It should also have a map showing built development in relation to the flood zones (including climate change, for the lifetime of development and beyond, as a sensitivity test). [Statutory consultation]	The updated FRA is available in <b>Appendix 9A Flood Risk Assessment [EN010118/APP/6.2]</b> . Figure 3 shows areas where above ground development may be located in relation to Flood Zones.	Agreed



Ref	Sub-topic	Stakeholder Comment	Applicant's Response	Status
13	Boreham Brook and cable routes (Relevant Representation)	Section 9.7 of the Environmental Statement outlines the requirements for a Flood Risk Activity Permit This section states "Please also note that Boreham Brook is only a Main River downstream of the Order limits and not within the Order limits itself".  We however highlight that there is in fact a section of Main River known as the Boreham Brook that is within the order limits as shown on drawing EN010118  Figure 92b – Fluvial Flood Zones including indicative concept design.  Cable routes at the south-western margin of the Order limits cross Flood Zone 3 of the Boreham Tributary at three locations. These are approximately located at NGR TL 75877 10899, TL 75747 10495 and TL 75396 10374.  Please note that TL 75396 10374, crosses the main river Boreham Brook. The other two locations are non-main River.	This point is agreed. In paragraph 9.6.20 of Chapter 9 it is stated that "Boreham Tributary is an ordinary watercourse, while it becomes Main River south of Brick House Farm". This is in agreement with the EA's relevant representation. The statement in Section 9.7 regarding being a Main River downstream of the Order limits is an error. It is agreed that crossing TL 75396 10374 would be beneath the main river, and the crossings at TL 75877 10899 and TL 75747 10495 beneath the ordinary watercourse section.	Agreed
14	Cranham Road Culvert (relevant representation)	In relation to paragraph 9.7.23 we note that a 1.55m widening of the culvert of Boreham Brook under Cranham Road may also be required to accommodate road widening of Cranham Road to improve access to the Scheme during construction, operation, and decommissioning. In relation to paragraph 9.7.25 - The requirements for access tracks and the Cranham Road culvert are secured through the Design Principles.	Noted and no further actions appear to be required on this point.	Agreed
15	Pollution Prevention (relevant representation)	We agree with the findings that there are no significant risks to surface water quality from the Scheme. Potential risks have been comprehensively assessed. We welcome the inclusion of detailed measures for fire water storage at the BESS (also in the SuDS document	The Bull's Lodge substation extension has no battery storage element, which is where the risk of firewater contamination arises. Bull's Lodge substation would have standard facilities/ switchgear which would be bunded for items that contain oil.	Working towards agreementAgreed



Ref	Sub-topic	Stakeholder Comment	Applicant's Response	Status
		and Outline Battery Safety Management Plan), which have been developed with Essex FRS. However details of fire water mitigation at the Bulls Lodge substation vaguely refer to the SuDS strategy document, with no clear statement on how this SuDS strategy will mitigate risks posed by fire water.  Please provide clarification on how the SuDS strategy at Bulls Lodge substation with mitigate risks to the water environment from contaminated fire water.		
16		Paragraph 9.6.21 states that Boreham Tributary is at Moderate Ecological Status for the 2019 classification. The Catchment Data Explorer website shows this waterbody is currently at Good Ecological Status	Noted, and agreed that this was an error in paragraph 9.6.21. This would not affect the assessment as the Boreham Tributary is classified as a High Importance receptor for the purposes of the assessment, and the Good Ecological Status would not affect this.	Agreed



## 3.2 Soils

Ref	Sub-topic	Stakeholder Comment	Applicant's Response	Status
17	Soil Strategy	We wish to see a soil strategy to improve and rest soils on the site from agricultural use and ensure restoration of structure and texture whilst preventing erosion compaction and loss of fine sediment into the watercourses. This will be especially important in the construction phase when work on bare ground could cause serious damage to soils and watercourse habitats. Conservation of soil habitat and soil biodiversity will be an important issue. We would not wish to see areas of land that is completely shaded or routinely treated with herbicide as this would be more liable to erosion and will not support the full natural range of biodiversity of a healthy soil. [Statutory consultation]	The Scheme will result in soils being rested from intensive agriculture. The current application of fertiliser will end for the duration of the operation of the Scheme.  Measures for protecting the water environment from pollution (including runoff of fine sediment during construction) are outlined in the ES chapter and in the Appendix 2A Framework  Construction Environmental Management Plan (CEMP) [EM010118/APP/7.10].  An outline Soil Resources Management Plan has been produced for the Scheme and is included as Appendix A within Appendix 2A Framework  Construction Environmental Management Plan (CEMP) [EM010118/APP/7.10]. The outline Soil Resources Management Plan covers all phases of the project, but is not attached to the OEMP and Decommissioning Strategy to avoid duplication. It does focus predominantly on construction and decommissioning because these are considered the key phases with regards to soil management.  The Outline Operational Environmental Management Plan (OEMP) includes details of how soils will be managed during the operation of the Scheme [EN010118/APP/7.11].  Similarly the Outline Landscape and Ecology Management Plan (OLEMP) also discusses soil management during operation [EN010118/APP/7.13].	Working towards agreementUnder discussion



## 3.3 Consents

Ref	Sub-topic	Stakeholder Comment	Applicant's Response	Status
18	Flood Risk Activity Permit	The applicant may need an environmental permit for flood risk activities if they want to do work in, under, over or within 8 metres (m) from a fluvial main river and from any flood defence structure or culvert. The Rivers Ter and Boreham Brook are designated as Main Rivers. Anyone carrying out these activities without a permit where one is required, is breaking the law.  [Scoping / Statutory Consultation]	A minimum buffer of 8m has been provided around all watercourses (including ordinary watercourses) except where crossings are required. The buffer has been extended to 10m around main rivers.  Requirements for an environmental permit are outlined within ES Chapter 9, Section 9.2.  Boreham Brook is only a Main River downstream of Brick House Farm, in the vicinity of the grid connection to Bull's Lodge substation.	Agreed
19	Disapplication of Consents	The applicant seeks by way of Article 6 in the draft Development Consent Order to disapply the requirement for environmental permits under Regulation 12 of the Environmental Permitting Regulations (England and Wales) 2016. All types of permits under this regime are issued by the Environment Agency. The applicant also seeks disapplication of the requirements for abstraction licences and impounding licences under the Water Resources Act 1991. For any disapplication to be made in a Development Consent Order the Environment Agency must first give its consent under s150 Planning Act 2008.  We have no objection in principle to the disapplication of flood risk activity permits under the EPR subject to protective provisions acceptable to us being included in the Development Consent Order (we are currently considering the draft protective provisions included in the draft Development Consent Order by the applicant and will endeavour to agree a form of protective provisions with the applicant).	The draft Development Consent Order will be updated to reflect the draft protective provisions required by the Environment Agency once agreed for disapplication of flood risk activity permits. We note the EA's position that other types of environmental permit and impounding and abstraction licences cannot be disapplied, and the Applicant is currently considering this and will respond to the EA shortly in this respect. The Applicant has considered the Environment Agency's response in relation to the disapplications sought in Article 6, and accepts the Environment Agency's position in this respect. Amendments made to the dDCO at this Deadline 1B reflect this.  In this respect, flood risk activity permits will be disapplied with the draft protective provisions included in the dDCO. Abstraction licenses or impounding licenses will not be disapplied and are removed from the dDCO.	Working towards agreement Agreed



RefSub-topicStakeholder CommentApplicant's ResponseStatus

However, the Environment Agency's current position on disapplying other types of environmental permit and impounding and abstraction licences is that these regimes involve complex statutory provisions relating to ongoing activities and it is not appropriate for us to agree to disapply the legislation relating to them. We will require Article 6 in the draft Development Consent Order to be amended in the light of our comments set out above.



## 3.4 Biodiversity

Ref	Sub-topic	Stakeholder Comment	Applicant's Response	Status
20	Biodiversity Enhancement	Suggestion for positive impacts on Biodiversity, and careful planning and design of habitat management areas and areas between solar PV arrays to deliver biodiversity benefits.  Working with nature allowing hedges to grow out a little with good buffer zones to watercourses and plentiful blossom for invertebrates and fruit for winter feeding birds could be a great improvement to most intensely farmed arable landscapes. If the site was seeded with a native wildflower mix before development, there would be key long-term gains to develop a pollinator strategy here on land that should not need agricultural pesticides for the duration of the solar farm. This could be a huge win-win for landscape and habitats for ailing species. Sward length will also be a key factor in whether the current farmland becomes more of a wildlife haven or a barren industrial site. Reptiles and small mammals will flourish in a slightly tussocky grassland with benefits up the food-chain to top predators.	In addition to generating a substantial amount of renewable electricity, which itself is a positive environmental outcome, the Scheme has been carefully designed to deliver environmental enhancements, which include a biodiversity net gain of 79% (please not this figure is subject to minor revision as this is being updated using the latest Natural England Biodiversity calculator). The OLEMP includes new woodland, scrub, grassland and hedge habitats to buffer and enhance connectivity across the site.  A Biodiversity Design Strategy has been developed and was included as part of the DCO application.	Working towards agreement Agreed
21	Habitat connectivity and severance	Landscape and habitat connectivity should also be considered. There are opportunities to link existing habitats and benefit many struggling species. However, if fencing surrounds the site and goes to ground-level there will be dire consequences for mammals such as badger, otter and hedgehog.	The Scheme has been carefully designed to create new green infrastructure to link woodland and habitats. Fences will include features to enable mammals to pass.	Working towards agreement Agreed
22	Native tree planting	Landscape screening and softening should embrace the biodiversity opportunities and consider planting native trees and scrub to complement the ancient woodland around the site.	The Scheme has been carefully designed to create new green infrastructure to link woodland and habitats using native tree species.	Working towards agreement Agreed



## 3.5 Groundwater and Contaminated Land

Ref	Sub-topic	Stakeholder Comment	Applicant's Response	Status
23	Document EN010118/APP6.2 1 Environmental Statement Volume 1 Chapter 9 Water Environment (relevant representation)	With regard to horizontal Directional Drilling as referred to in paragraph 9.7.15, we agree with the proposals to carry out a Frac Out Risk Assessment once ground conditions have been investigated further at crossing points. Frac out is the unintentional return of drilling fluids to the surface. It is therefore important that a detailed risk assessment to demonstrate that the likely event of this occurring whilst horizontal directional drilling is taking place is low is undertaken. The assessment should also include the management of drilling muds/wastewater.	As outlined in Chapter 9 [EN010118/APP6.1], a site specific frac-out risk assessment would be developed following further investigation of specific ground conditions at the crossing locations, and appropriate mitigation developed in line with best construction practice (secured in the OCEMP [EN010118/APP/7.10]). This will include appropriate management of drilling muds and wastewater so that this would not be spilt into the channel when working close to the banks of a watercourse.	Agreed
24	Document EN010118/APP/6.2 Environmental Statement Volume 2 Appendix 9C: Longfield Solar Farm SuDS Strategy (relevant representation)	We note the low infiltration rates detected at the site and the proposals not to use infiltration as a primary way to manage surface water. The Environment Agency therefore have no further comments on the strategy proposed.	Noted and no further actions appear to be required on this point.	Agreed
25	Document EN010118/APP/6.2 Environmental Statement Volume 2 Appendix 16A: Stafe 1 – Tier 1: Preliminary Risk (relevant representation)	Overall, the former land use at the development site presents a low risk to the water environment. We are pleased however to see provision for finding unexpected contamination included in the report. If significant contamination was detected, reference should be made in the document to contacting the Regulatory Authorities to discuss and review any proposed remedial activities. We agree a Piling Risk Assessment should be undertaken.	Noted and no further actions appear to be required on this point.	Agreed



## **3.6** Fisheries, Biodiversity and Ecology

Ref	Sub-topic	Stakeholder Comment	Applicant's Response	Status
26	Culvert crossings (relevant representation)	Any culvert crossings should be generous in size and well designed to ensure mammal and fish passage is not compromised. Any existing narrow culverts should be replaced with better designs for this reason.  Any new crossings should have ecological enhancement incorporated with them - for instance if the original bed has been damaged some addition of appropriately sized gravels will help enhance the watercourse bed and overall channel habitat.  In relation to section 9.7.23 we note that a 1.55m widening of the culvert of Boreham Brook under Cranham Road may also be required to accommodate road widening of Cranham Road to improve access to the Scheme during construction, operation, and decommissioning.	Culvert extensions are required for Cranham Road and access crossings, but no new culverts are required. Culvert design will aim to minimise changes in alignment and length as much as is feasible. The channel bed would be sunken where they are existing box culverts to allow development of a naturalised bed and encourage ecological continuum, or oversized where they are pipe culverts to achieve a similar effect in terms of naturalised substrate.  Existing culverts would not be replaced unless a pre-construction check identifies an issue.	Agreed
27	Riparian Planting (relevant representation)	We would welcome additional planting of native trees and shrubs along the riparian zone to enhance the river corridor. Trout rivers such as the Ter rely on being kept cool for the survival of sensitive species like Brown trout and lamprey. Shade is beneficial and will be crucial in mitigating the impacts of climate change.  Any enhancements should aim to complement the natural diversity and form to add to the natural morphology and flow diversity of the watercourses. The Environment Agency would favour addition of flow deflectors and woody debris where suitable along with tree and shrub planting rather than addition of macrophytes or other species. There is a risk that non-native species can be inadvertently transferred with new	The Biodiversity Design Strategy includes for restoration of existing floodplain grassland around the River Ter to create more diverse grassland typical of traditional floodplain meadows. This area will be managed as hay meadow, allowing grassland plants to flower and set seed during the summer months, while also providing floodwater storage capacity when required throughout the year. Opportunities for planting of native trees and shrubs in the riparian zone can also be considered within the Biodiversity Design Strategy, which is intended to influence the evolution of the final Landscape and Ecology Management Plan.	Working towards agreement Agreed



Ref	Sub-topic	Stakeholder Comment	Applicant's Response	Status
		planting. For this reason and to ensure the maximum benefit of the proposed new speciesrich grassland we would wish to see this seed sourced solely from a UK provenance.		
28	Works to watercourses (relevant representation)	The Environment Agency should be contacted if	Noted. The Environment Agency will be contacted ahead of any works to watercourses. Maintenance requirements are secured through the SuDS Strategy, and the requirement for Environment Agency consultation ahead of works to the River Ter or Boreham Tributary will be included within the SuDS maintenance and management strategy if required (tbc). However, any direct works to these watercourses would be expected to relate only to the Cranham Road culvert extension and drainage outfall required for Boreham Brook, with all watercourse crossings being beneath the channel. The culvert and outfall would require regular maintenance checks.	Agreed



# 4. Signatories

### 4.1 Overview

4.1.1 The above SoCG is agreed between Longfield Solar Farm Limited (LFS Limited) (the Applicant) and the Environment Agency, as specified below.

Duly authorised for and on behalf of <b>Longfield Solar</b>	Name	
Limited	Job Title	
	Date	
	Signature	
Duly authorised for and on behalf of <b>Environment Agency</b>	Name	
	Job Title	
	Date	

Signature