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## **The Applicant's Response to the Secretary of State's Request for Information**

**October 2025**



# Helios Renewable Energy Project

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Planning Inspectorate Reference: EN010140

October 2025

**Prepared on behalf of Enso Green Holdings D Limited**

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|---------------------|--------------|
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Stantec  
Arthur Stanley House  
40-50 Tottenham St  
W1T 4RN

Tel: 020 7446 6888



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## **1. Introduction**

### **1.1. Overview**

- 1.1.1. This document sets out the responses from Enso Green Holdings D Limited (the Applicant) to the request made by the Secretary of State (SoS) for further information, issued by way of a Request for Information (RfI) letter on 26<sup>th</sup> September 2025, in relation to the Development Consent Order Application (the DCO Application) for the Helios Renewable Energy Project (the Proposed Development). The DCO Application Order Limits comprise 475 hectares (ha) of land (the Site) located within the host authority area of North Yorkshire Council.
- 1.1.2. References to the DCO Application documentation, as received by the Planning Inspectorate on 2<sup>nd</sup> July 2024, and to the documents submitted during the Examination, are provided in accordance with the referencing system as set out in the Planning Inspectorate's 'Helios Renewable Energy Project Examination Library'.
- 1.1.3. The Applicant considers this document answers all of the matters raised by the SoS. However, if they do require any further information, the Applicant will be happy to provide this.



## 2. Greenhouse Gas Emissions

### 2.1. Whole-life Greenhouse Gas Assessment

#### 2.1.1. Paragraph 3 of the RfI states:

*The Applicant should provide information to clearly explain how they have assessed whole-life Greenhouse Gas (GHG) in accordance with the Overarching National Policy Statement for Energy Infrastructure (NPS EN-1) paragraph 5.3.4. Despite the Applicant highlighting the limitations in quantifying the embodied carbon, this should include, noting assumptions, the consideration of embodied GHG impacts from the construction stage - in particular, the embodied carbon associated with construction materials and the manufacture of battery and solar photovoltaic components. The Applicant should also confirm how the decommissioning stage has been considered in the whole-life GHG assessment, as is required under NPS EN-1, despite transport emissions during decommissioning being scoped out during the scoping opinion on the 'basis that effects would be no greater than the construction phase and the decommissioning phase is too far in the future to be able to accurately predict traffic flows and emissions'.*

2.1.2. This note provides an assessment of the Proposed Development's whole-life greenhouse gas (GHG) emissions. The approach for this assessment draws upon ISEP, formerly IEMA, guidance (ISEP, 2022)<sup>1</sup>, as detailed in Climate Change ES Chapter 12 [APP-032], and is considered alongside the baseline established within the Climate Change ES Chapter 12 [APP-032]. The ISEP (2022) guidance recognises that qualitative assessments are acceptable, particularly where mitigation measures are agreed early in the design stage, and where detailed project information is not available to complete carbon calculations at the point of submission. Whilst the Applicant has prepared indicative plans for the scale of the development, the exact number of solar panels cannot be confirmed at this stage as technological advancements may change requirements in terms of unit numbers and size, the following effects have been made for the lifecycle of the project based on best assumptions for this scale of renewable energy development.

2.1.3. The scope of this GHG Emissions assessment uses the PAS 2080 (2023)<sup>2</sup> lifecycle stages to include both direct (Scope 1) and indirect (Scope 2 and 3) GHG emissions

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<sup>1</sup> ISEP (2022). Assessing Greenhouse Gas Emissions and Evaluating their Significance. [Online] Available at: [https://www.iema.net/media/xmgpooopk/2022\\_iema\\_greenhouse\\_gas\\_guidance\\_eia.pdf](https://www.iema.net/media/xmgpooopk/2022_iema_greenhouse_gas_guidance_eia.pdf)

<sup>2</sup> BSI (2023). Publicly Available Standard (PAS) 2080:2023 Carbon management in Infrastructure. [Online] Available at: <https://www.bsigroup.com/en-GB/insights-and-media/insights/brochures/pas-2080-carbon-management-in-infrastructure-and-built-environment/>

as defined by the GHG Protocol (WBCSD and WBI, 2004)<sup>3</sup>. This assessment will also address key criteria regarding Greenhouse Gas Emissions within the National Policy Statements for Energy Infrastructure Overarching National Policy Statement for energy (EN-1) (NPS, 2023)<sup>4</sup>.

- 2.1.4. The figures in this response differ from those used in ES Chapter 12 Climate Change **[APP-032]** as they reflect carbon emissions derived from a more detailed breakdown of materials, transport (including shipping) and waste associated with the Proposed Development. This in turn provides a more granular assessment of emission figures. The ES Chapter 12 Climate Change **[APP-032]** used the 2023 National Grid carbon intensity figure, which has been updated for this assessment and now considers a 2029 forecast to account for changes in the baseline and the year of electrification.
- 2.1.5. The following PAS 2080 lifecycle stages have been reviewed to identify the whole-life GHG emissions for the Proposed Development:
- **Construction;** A1 – A3 Product Stages, A4 Transport to Site, A5 Construction Installation Process.
  - **Operation;** B1 – Use, B2-5 Maintenance, Repair, Replacement, Refurbishment, B6 – Operational Energy Use.
  - **Decommissioning;** C1 – C4 End of Life Stage.
- 2.1.6. The metric for assessing carbon emissions is units of CO<sub>2</sub> equivalent (CO<sub>2</sub>e). This allows the use of Global Warming Potential (GWP) for the emissions of the seven key GHGs to be expressed in terms of their equivalent GWP as a mass of CO<sub>2</sub>e.
- 2.1.7. The carbon emissions have been calculated by multiplying assumptions on project activity provided by the Applicant by relevant carbon factors sourced from industry accepted sources, such as DESNZ GHG Conversion Factors 2025<sup>5</sup>. The calculation used is as follows:

$$\text{Activity data} \times \text{GHG emissions factor} = \text{GHG emissions value}$$

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<sup>3</sup> World Business Council for Sustainable Development (WBCSD) and World Resources Institute (WRI) (2004). Greenhouse Gas Protocol Guidance.

<sup>4</sup> UK Government (2023) Overarching National Policy Statement for energy (EN-1). [Online] Available at: <https://www.gov.uk/government/publications/overarching-national-policy-statement-for-energy-en-1>

<sup>5</sup> UK Government (2025) GHG Conversion Factors 2025. [Online] Available at: <https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fassets.publishing.service.gov.uk%2Fmedia%2F6846a4f55e92539572806125%2Fghg-conversion-factors-2025-full-set.xlsx&wdOrigin=BROWSELINK>

- 2.1.8. Carbon emissions from water use, energy use during operation and waste generated during construction and operation have not been calculated due to limited project information for these areas. Based on the nature of the project and other similar projects, these emissions are expected to be minimal and each less than 1% of total GHG emissions. This approach is in line with ISEP guidance and PAS2080 methodology.

### **Construction Effects**

- 2.1.9. The construction phase includes embodied carbon emissions from raw material supply, transport within the supply chain and manufacturing of purchased materials required to construct the Proposed Development. It is anticipated that Scope 3 embodied carbon will represent the greatest source of construction-phase emissions.
- 2.1.10. The embodied carbon associated with the Proposed Development will be heavily influenced by the type and amount of material required to construct the Proposed Development. Extraction and production processes can be carbon intensive, particularly for materials such as steel. It is also noted that embodied carbon is heavily influenced by available materials and supply chains in the local and wider area.
- 2.1.11. The below list outlines the assumed primary materials which typically go into the construction of the components of the Proposed Development:
- Solar panels: silicon, steel or aluminium and glass;
  - Transformers and Substations: oil, steel, copper, brick and plasterboard;
  - Cables: copper, aluminium and plastic;
  - BESS and Switchgears: steel and aluminium;
  - Fencing: wire; and
  - Access Roads (internal): crushed permeable stone
- 2.1.12. The supply chains for construction of the Proposed Development are not yet known and will depend on market conditions such as detailed technical specification, pricing, availability of materials and programme. It is reasonable to assume the solar PV panels would be responsibly sourced from China, as China accounts for



approximately 80% of global solar PV panel production. Other materials are anticipated to be sourced from Europe and the UK. It is reasonable to assume therefore that there will be emissions associated with transport by sea and HGV delivery from port to the Site.

- 2.1.13. An analysis of the construction HGV and staff traffic was assessed in the Climate Change ES Chapter 12 [APP-032], and is expected to last 12 months.
- 2.1.14. The construction phase is also expected to result in carbon emissions as a result the combustion of fuel for the construction plant and equipment, water use, soil disturbance, and waste disposal.
- 2.1.15. The temporary construction office, welfare facilities, and temporary lighting on the Site may require on-site fuel generators. This will result in direct GHG emissions generated from the burning of fossil fuels on Site.
- 2.1.16. All phases of construction waste management, such as reuse, recycling and recovery before disposal to landfill, will result in indirect GHG emissions.
- 2.1.17. Table 2.1 summarises the embodied emissions anticipated during the construction phase from both manufacture of the materials and components and the emissions resulting from the construction phase.

**Table 2.1: Potential Construction Emissions**

| Emissions Source   | Carbon Emissions (tCO <sub>2</sub> e) | Proportion of total carbon emissions (%) |
|--|---------------------------------------|--|
| Solar PV Modules and Framework                                       | 44,970                                | 35.7                                     |
| BESS   | 74,480                                | 59.1                                     |
| Transformers and Inverters   | 103                                   | 0.1                                      |
| Cables   | 581                                   | 0.5                                      |
| Aggregate  | 151                                   | 0.1                                      |
| Transportation of products and materials (shipping & HGV movements). | 5,128                                 | 4.1                                      |
| Worker commuting   | 209                                   | 0.2                                      |
| Fuel use   | 389                                   | 0.3                                      |
| <b>Total</b>   | <b>126,011</b>                        | <b>100</b>                               |

### Operational Effects

- 2.1.18. As set out in the Climate Change ES Chapter 12 [APP-032], the Proposed Development will contribute to the decarbonisation of the energy sector through the

generation of renewable energy exported to the National Grid. Solar aids in reducing the National Grid average emissions, so the Proposed Development would contribute to the Government's net zero trajectory. The delivery of the Proposed Development in 2029 also demonstrates that the Proposed Development will support decarbonisation well before the 2050 net zero target. The operational phase of the Proposed Development is 40 years.

- 2.1.19. In accordance with Requirement 10 of the Draft Development Consent Order, it is anticipated that the future management of the Proposed Development will be carried out in compliance with a Landscape and Environmental Management Plan (LEMP) to secure the long-term establishment of proposed planting. This is anticipated to support greater levels of carbon sequestration within the Site.
- 2.1.20. The Proposed Development is anticipated to have residual emissions as a result of maintenance activities, including servicing of plant and equipment and vegetation management, will be undertaken and are anticipated to require equipment that burns fossil fuels.
- 2.1.21. As noted in the Climate Change ES Chapter 12 **[APP-032]**, it is anticipated that vehicle movements will be minimal during the operation phase.
- 2.1.22. There will also be some required energy and water use for the operation of the Proposed Development.
- 2.1.23. Table 2.2 sets out the anticipated carbon emissions during the operation stage for maintenance, including replacement of solar panels, transport of materials and staff.

**Table 2.2: Potential Operation Emissions**

| Emission Source                    | Carbon Emissions (tCO <sub>2</sub> e) | Proportion of total carbon emissions (%) |
|------------------------------------|---------------------------------------|--|
| Materials (Replacement components) | 11                                    | 15                                       |
| Transportation of materials        | 60                                    | 84                                       |
| Worker transport                   | 0.5                                   | 1  |
| <b>Total (Annual)</b>              | <b>71.5</b>                           | <b>100</b>                               |
| <b>Total (40-year Operation)</b>   | <b>2,831</b>                          |  |

### Decommissioning Effects

- 2.1.24. The Proposed Development is anticipated to be decommissioned over a 12-month period from the end of the 40-year operational lifetime of the Proposed Development, commencing in 2069 at the earliest. This is beyond the timeframe for the 2050 net

target set by the Climate Change Act 2008. There is therefore a lot of uncertainty around the future technology that will be used to decommission the project.

- 2.1.25. The decommissioning phase has the potential to result in carbon emissions due to decommissioning traffic, combustion of fuel for plant and equipment and waste disposal.
- 2.1.26. It is assumed that the Proposed Development will be compliant with 'do-minimum' standards set through regulation, with relevant mitigation measures for this phase included in the outline Decommissioning Environment Management Plan (oDEMP) **[SoS Consultation 1 Submission]**. It would not be appropriate to outline specific decommissioning requirements at this stage as the decommissioning environment following the 40-year operational period is uncertain. However, policy is likely to be considerably different to today and is expected to consider the use of alternatives to fossil-fuels given the legal context of the 2050 net zero target.
- 2.1.27. Table 2.3 sets out the anticipated decommissioning emissions. It is assumed that fuel use and worker commuting emissions would correspond to construction emissions.

**Table 2.3: Potential Decommissioning Emissions**

| Emissions Source            | Carbon Emissions (tCO <sub>2</sub> e) | Proportion of total carbon emissions (%) |
|-----------------------------|---------------------------------------|--|
| Transportation of materials | 1,077                                 | 59                                       |
| Worker commuting            | 209                                   | 11                                       |
| Fuel use                    | 389                                   | 21                                       |
| Waste recycling/disposal    | 143                                   | 8  |
| <b>Total</b>                | <b>1,818</b>                          | <b>100</b>                               |

## Net Carbon Emissions & Carbon Intensity

**Table 2.4: Potential Whole-Life Carbon Emissions**

| Emissions Source     | Carbon Emissions (tCO <sub>2</sub> e) | Proportion of total carbon emissions (%) |
|----------------------|---------------------------------------|--|
| Construction         | 125,994                               | 96                                       |
| Operation (40 years) | 2,831                                 | 2  |
| Decommissioning      | 1,818                                 | 1  |
| <b>Total</b>         | <b>130,660</b>                        | <b>100</b>                               |

- 2.1.28. Based on an export capacity of 190 MW and the net carbon emissions in Table 2.4 the Proposed Development is anticipated to have a carbon intensity factor of 0.0186 kgCO<sub>2</sub>e/kWh. The average carbon intensity of the National Grid in 2024 was 0.125



kgCO<sub>2</sub>e/kWh<sup>6</sup> and this is forecast to decrease to 0.049 kgCO<sub>2</sub>e/kWh by 2029 (the opening year for the Proposed Development). It should however be noted that the National Grid carbon intensity only takes into account operational emissions from the generation of electricity, whereas the net carbon emissions from the Proposed Development also include construction and decommissioning. The comparison of the Proposed Development's carbon intensity figure to the average National Grid is therefore conservative.

- 2.1.29. This demonstrates that the Proposed Development would have a lower carbon intensity value per kWh than that of the National Grid. Based on a comparison to the forecast average carbon intensity of the National Grid for 2029, it is estimated that the Proposed Development could save approximately 5,250 tCO<sub>2</sub>e per year, and 210,014 tCO<sub>2</sub>e over a 40-year project lifetime. While the Scheme is not directly replacing fossil fuel sources, there is a clear difference between the carbon intensity between a gas fired CCGT plant which has a representative carbon intensity of 0.202 kgCO<sub>2</sub>e/kWh<sup>7</sup>, and this Proposed Development.

### **Overall GHG Impact and Significance**

#### Construction

- 2.1.30. Annual emissions from the construction of the Proposed Development (and their magnitude) are compared to the significance definitions outlined in Section 12.3 of the Climate Change ES Chapter. In line with ISEP criteria for assessing the significance of GHG impacts, construction of the Proposed Development can be assumed to be consistent with applicable existing and emerging policy requirements. As such, it is considered that the Proposed Development will have a Minor Adverse (Not Significant) effect on GHG emissions.
- 2.1.31. The Proposed Development will deliver nationally significant low-carbon infrastructure, generating 190 MW of low-carbon electricity to support the UK's net zero objectives and sixth Carbon Budget targets.

#### Operation

- 2.1.32. Based on the comparison of Proposed Development's low carbon renewable energy generation with the average carbon intensity of the National Grid, undertaken within

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<sup>6</sup> National Energy System Operator. Britain's Electricity Explained 2024 Review. [Online] Available here: <https://www.neso.energy/news/britains-electricity-explained-2024-review>

<sup>7</sup> GOV.UK (2025) Greenhouse gas reporting: conversion factors 2025. [Online] Available here: [ghg-conversion-factors-2025-full-set.xlsx](#)

the Climate Change ES Chapter 12, alongside consideration of the above, it is reasonable to assume future emissions would be avoided as a result of the Proposed Development. The operational effects of the Proposed Development are therefore considered to be Major Beneficial (**Significant**) at the local level and Minor Beneficial (**Not Significant**) at the national level, as concluded in the Climate Change ES Chapter 12.

#### Decommissioning

- 2.1.33. Based on the assumption that fossil fuels will not be used in a net zero economy by 2069 and that activities will align with policy requirements and good practice standards at the time of decommissioning, including the implementation of a DEMP, it is considered that there would be a **Negligible** and therefore **Not Significant** effect.

#### Summary

- 2.1.34. The Proposed Development's carbon savings when compared to the average carbon intensity of the National Grid is 210,014 tCO<sub>2</sub>e. This is inclusive of the new emissions considered for construction and decommissioning. From this, it can be assumed that the Proposed Development will offset emissions arising from the construction, operation and decommissioning stages.
- 2.1.35. The provision of the whole-life carbon assessment has not changed the residual effect conclusions within the ES Chapter 12 Climate Change **[APP-032]**.

## **2.2. Mitigation and GHG Reduction Strategy**

- 2.2.1. Paragraph 4 of the RfI states:

*The Applicant should confirm mitigation (including during the design phase, construction, operation and decommissioning) to be implemented and whether a GHG Reduction Strategy is to be secured, as required by NPS EN-1 paragraphs 5.3.6 and 5.3.7 and, if not, justification for not including such measures.*

- 2.2.2. The proposed mitigation measures relevant to the assessment of GHG Emissions for the Proposed Development include those embedded into the project design, as well as those set out in the outline Construction Environmental Management Plan (oCEMP) **[SoS Consultation 1 Submission]** and the outline Construction Traffic Management Plan (oCTMP) **[REP4-017]**. The mitigation measures expected to be

included in these documents are set out below:

- Grid connection works will comprise minor excavation impacts to limit effects to minor short-term disturbances to soil and hedgerows;
- The use of diesel- or petrol-powered generators will be avoided and mains electricity or battery powered equipment will be used instead where practicable.
- The Proposed Development will be constructed and implemented in such a way as to minimise the creation of waste and, where possible, maximise the use of alternative materials with lower embodied carbon, such as locally sourced products and materials with a higher recycled content where feasible; and
- Management/mitigation associated with construction access arrangements, construction vehicle routing, construction vehicle trip generation.

2.2.3. The full CEMP and CTMP documents will be secured by DCO requirement. It is expected that the full CEMP and CTMP documents will be adequate in addressing the minor adverse effects from GHG emissions during construction.

2.2.4. By providing a form of low carbon electricity generation infrastructure (i.e. solar and energy storage), both of which are key parts of the Government's strategy for decarbonisation of the energy sector. Solar projects such as this one would contribute to meeting the Government's targets of 45-47 GW of solar energy capacity by 2030 (Clean Power 2030 Action Plan)<sup>8</sup> and the legally binding Net Zero target 2050, particularly when considering the anticipated electrification date of 2029, demonstrating that the Proposed Development can deliver low carbon energy ahead of the 2050 trajectory to net zero.

2.2.5. The Proposed Development plays a clear and positive role in the decarbonisation of the National Grid being of Critical National Priority, which is crucial for the decarbonisation of the energy sector and wider UK economy. Therefore, a standalone GHG Reduction Strategy for the Proposed Development is not required.

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<sup>8</sup> UK Government (2024) Clean Power 2030 Action Plan. [Online] Available at: <https://www.gov.uk/government/publications/clean-power-2030-action-plan>.



### 3. Alternatives and Site Selection Search Area

#### 3.1.1. Paragraphs 5-6 of the RfI state:

*The Applicant should provide additional detailed reasons and considerations for the following:*

- a. the 5km search radius from the grid connection point at Drax power station; and*
- b. the consideration of alternative sites within the 5km search radius.*

*With reference to EN-1, the explanation should provide information clarifying the necessity of Best and Most Versatile land required for the Proposed Development and further detail on the suitability of the 5km search area including environmental and economic reasons. The explanation should also include why alternatives were discounted within the area.*

#### 3.2. Search Radius

- 3.2.1. There is no Government guidance available on what a reasonable search area is. Consequently each application should be considered on its own facts, and EN-3 acknowledges at paragraphs 2.10.24, 2.10.25 and 2.10.60 that this will involve taking commercial, planning and environmental and practical constraints into account.
- 3.2.2. The site selection process including the setting of the search area is as set out in the Alternative Site Assessment **[APP-227]** and further elaborated on within this response.
- 3.2.3. The starting point in site selection is the receipt of a grid connection offer from National Grid setting the Point of Connection (PoC). For the Proposed Development that was confirmed as being at National Grid Drax 132kV Substation in a grid connection offer letter dated December 2020.
- 3.2.4. A search area was established based on a radius from the PoC. The Applicant considered a 5km search radius to be proportionate when looked at with the energy generation capacity of the Proposed Development of 190MW as after this distance increased electrical transmission losses and increased installation costs would affect the viability of the Proposed Development.
- 3.2.5. Limiting the distance from solar development from the PoC is consistent with Paragraphs 2.10.25 of NPS EN-3: *'To maximise existing grid infrastructure, minimise disruption to existing local community infrastructure or biodiversity and reduce*

*overall costs, applicants may choose a site based on nearby available grid export capacity'.*

- 3.2.6. It is important to note that the cost per kilometre of cable is not uniform across all projects. The cost of cabling is directly related to the type of land available for the route (i.e. agricultural land or installation within the road network), land rights and complex crossings of major environmental constraints (such as rivers and railways) all of which can significantly alter the cabling costs per kilometre.
- 3.2.7. If the Proposed Development were located elsewhere within the 5km search area, or just outside it (should suitable land have been available which the Applicant contests was the case) the need to cross the River Ouse and or Aire if connecting from the north, or to cross an operational passenger railway if coming from the south would have materially and adversely impacted the viability of the Proposed Development.
- 3.2.8. Even though the Applicant has been able to avoid the most significant costs of a grid connection corridor with location of the Proposed Development the Applicant is not able to lay the grid connection cable in the most cost efficient manner as the highway bridge over the railway owned by Drax is not capable of carrying the cable. Therefore, the Applicant is having to incur additional costs to install the cable under the privately owned and operated railway using trenchless methods.
- 3.2.9. Noting the above, we draw the SoS's attention to a number of other consented solar DCO schemes which have also used an initial 5km search area from the point of connection. Cleve Hill Solar Park and Longfield Solar Farm are both consented DCO solar schemes of a significantly larger scale than the Proposed Development (373MW and up to 500MW respectively), both of which used a 5km search radius for site selection. Similar search areas were also used for Oaklands Solar Farm (4km, 138MW), Byers Gill Solar Farm (6km, 180MW), West Burton Solar Project (5km, 480MW) and Cottam Solar Project (5km, 600MW), although we note that the search area for these projects was later expanded due to there being insufficient land available in the initial radius.
- 3.2.10. As explained in the Alternative Site Assessment **[APP-227]**, ES Chapter 4 Alternatives and Design Evolution **[AS-013]** and below, suitable land became available for the Proposed Development within the 5km area, and the search area radius did not need to be expanded to identify additional land.
- 3.2.11. The Applicant was cognisant of that fact that there is a very high proportion of the

Proposed Development located on Best and Most Versatile (BMV) agricultural land but given the constraints set out above in identifying a viable grid connection route it is necessary for the Proposed Development to be located on the site selected.

**Consideration of Alternatives within the 5km search radius**

3.2.12. The Applicant assessed alternative locations for the Proposed Development within the 5km search radius based on the following environmental and social constraints:

- Solar Irradiation
- Topography and Natural Landforms
- Landscape Designations and Green Belt
- Ecological Designations
- Heritage Designations
- Flood Risk
- Local Allocations, Designations and Consented Schemes
- Agricultural Land Classification
- Proximity to Dwellings
- Brownfield Land

3.2.13. The approach and level of detail provided by the Applicant regarding alternative assessment is consistent with NPS EN-1 Paragraph 4.3.15, which requires the ES to include information about the reasonable alternatives they have studied which 'should include an indication of the main reasons for the applicant's choice, taking into account the environmental, social and economic effects and including, where relevant, technical and commercial feasibility'.

Brownfield Land

3.2.14. As set out at Paragraph 2.10.31 of NPS EN-3, there is a preference for development to take place on suitable brownfield, industrial and low and medium grade agricultural land.



- 3.2.15. A review of brownfield land within the search radius was undertaken, however no brownfield sites of an appropriate size were identified in the 5km radius and the closest brownfield site to the PoC lies within the village of Camblesforth which did not provide sufficient area (1.26ha) and would have resulted in development in close proximity to an increased number of sensitive environmental receptors.

Proximity to Dwellings

- 3.2.16. The Applicant considered the proximity of potential locations to existing sensitive receptors to minimise impacts on visual amenity and glint and glare. The human settlements within the 5km search area include Drax Village (1km southeast of the PoC), Camblesforth (2km southwest of the PoC), Carlton (3.5km south of the PoC) and Barlow (1.7km northwest of the PoC). By discounting locations within close proximity of these settlements, the site selection area was focused on land in the south and west of the search area.

Natural Landforms

- 3.2.17. The Applicant discounted the areas north of the River Ouse and south of the River Aire as bringing forward the Proposed Development on either side of the river opposite to the grid connection point would result in unnecessary technical complexity and have increased environmental impacts (including on Grade 1 ALC).

Ecological Designations

- 3.2.18. The ecological designations in the search area include River Derwent SAC and SSSI, located in the northeast of the search area, and the Eskamhorn Meadows SSSI, which comprises four individual fields, located approximately 2.7km south of the PoC. Isolated areas of SINC are located in the south, southwest and west of the search area and a LNS is located in the northwest quadrant of the search area. Two non-statutory designated nature reserves are located directly west and 3.25km west of Drax, both north of the A1041. Ecological designations and their surrounding areas were discounted to reduce the potential for impacts.

Best and Most Versatile Land

- 3.2.19. NPS EN-1 requires applicants to provide justification for locating their scheme on best and most versatile agricultural land and requires areas of poorer quality land to be used in preference to those of a higher quality where development of agricultural

land is demonstrated to be necessary (Paragraphs 5.11.34, 5.11.12).

- 3.2.20. As shown on Figure A.1 of Appendix A, all land of a size capable of accommodating the Proposed Development within the 5km search area is of some degree of BMV agricultural land, with the exception of the land occupied by Drax Power Station. The siting of the Proposed Development on BMV agricultural land within the 5km search radius is therefore unavoidable.
- 3.2.21. Within the 5km search radius from the PoC, 78.78% of land is either Grade 1 or Grade 2, and 18.54% is Grade 3. There is no Grade 4 or 5 ALC land within the search area.
- 3.2.22. In accordance with the requirements of NPS EN-1 and EN-3 to use lower grade agricultural land in preference to higher quality, the Applicant considered the band of provisional Grade 3 land for siting the Proposed Development. However, as can be seen on Figure A.1 that land was unavailable because:
- There were (now are) are two solar schemes planned for sites on or partially on this area of provisional Grade 3 land (which when surveyed was found to be a combination of Grades, 1, 2, 3a and 3b);
  - There are also three Sites of Importance for Nature Conservation (SINCs) to the north of Camblesforth; and
  - There is a designated historic park and garden to the east of Carlton.
- 3.2.23. The Applicant also assessed the area of Grade 3 land adjacent to the Drax Power Station for the Proposed Development, however much of this is subject to a planning application associated with the Barlow Ash Mound and is not available for development.
- 3.2.24. The presence of these constraints on and in close proximity to the areas of Grade 3 land within the search area limited the Applicant's ability to locate the Proposed Development on Grade 3 land within the search area. Therefore, having considered the use of lower quality agricultural land, in accordance with policy, it became necessary to consider higher quality agricultural land for the siting of the Proposed Development.
- 3.2.25. Of the remaining land in the search area, areas to the north and northeast of the PoC are identified as Grade 1 BMV. This is the least preferable agricultural land on which

to propose development from an ALC perspective and when partnered with the technical difficulties and associated environmental impacts of crossing the River Ouse, the Applicant discounted these areas from the site assessment process. Similarly, the pocket of Grade 1 land wedged between the River Ouse and River Aire was excluded from the site search.

- 3.2.26. As such, taking into account the search area, the Proposed Development could not avoid being located on BMV.

Impact on BMV

- 3.2.27. NPS EN-1 at paragraph 5.11.12 states that applicants 'should seek to minimise impacts on the best and most versatile agricultural land (defined as land in grades 1, 2 and 3a of the Agricultural Land Classification) and preferably use land in areas of poorer quality (grades 3b, 4 and 5)'. Paragraph 5.11.13 notes that 'Applicants should also identify any effects and seek to minimise impacts on soil health and protect and improve soil quality taking into account any mitigation measures proposed'.
- 3.2.28. NPS EN-3 Paragraph 2.10.30 advises that the development of ground mounted solar arrays is not prohibited on land of ALC Grades 1, 2 or 3a, but that the impacts of this must be considered.
- 3.2.29. The assessment in ES Chapter 14 Soils and Agricultural Land **[APP-034]** identifies the potential impacts and proposes suitable and adequate mitigation to conclude that there will be no significant impact on the soils. ES Chapter 14 Soils and Agricultural Land **[APP-034]**, explains that the construction of a solar farm causes limited damage to agricultural land. The mounting structures are pushed into the ground with minimal disturbance to the soils. Only modest areas are disturbed, for tracks, inverter stations and substation. The overall area disturbed by these elements or sterilised for the duration of the operational phase involves 7ha of Grades 1 and 2, and less than 5ha of Subgrade 3a. Nevertheless, the ES proposes and the dDCO secures at Requirement 8 a Soil Resource Management Plan to ensure that there are no significant adverse effects to the soils as a result of the construction of the Proposed Development.
- 3.2.30. The ES concludes that there are no adverse effects during the operational phase. As set out at Issue Specific Hearing 1 **[REP1-007]**, the Site could still be used for agricultural practices such as grazing livestock. The Cable Route Corridor will be

available for continued farming use. The cable connection between the Solar PV Array areas, the Cable Route Corridor, is a wide area but the actual installation within that reserved area, will be narrow. During construction, a 20 metre working width will be needed, and the topsoil will be removed and will be stored at one edge of the working width. The trench will be dug and once the cable has been installed, the soils will be returned in the same order, the topsoil respread, the area cultivated and returned to the farmer. Thereafter there will be no restrictions on farming use. The land quality of the Cable Route Corridor would therefore not be affected.

- 3.2.31. The decommissioning phase will be subject to a soil resources management plan pursuant to DCO Requirement 8 which will ensure that the Site is restored in a manner to enable the use of the land for intensive agricultural practices once again.

#### Flood Risk

- 3.2.32. As shown on Figure A.2: Flood Risk of Appendix A, the majority of the search area is within Flood Zone 3a. There are small patches of Flood Zone 2, however these are located closer to settlements or on Grade 1 BMV land. Due to the nature of solar development requiring large land take, within the search area it was generally unavoidable for the Proposed Development to be located outside Flood Zone 3. From a practical site selection perspective, this was not seen as a completely limiting factor, as many aspects of solar development are considered to be compatible or resilient to flooding (for example, solar panels can be 'stowed' above flood waters and typically feature a permeable ground surface, reducing the risk of increased flooding elsewhere).
- 3.2.33. With specific reference to the sequential test process, the Alternative Site Assessment [APP-227] demonstrates that there are no alternative sites suitable for the Proposed Development within the search area. As such with regards to flooding it can be concluded that there are no reasonably available sites appropriate for the Proposed Development in the search area with a lower risk of flooding and therefore the Sequential Test can be satisfied.

#### Availability of Land

- 3.2.34. Land which was subject to a consented or submitted planning application was discounted. The most influential of these in the site selection process were the two solar schemes located between the Proposed Development and the PoC and land associated with the Barlow Ash Mound, to the immediate northwest of the PoC,

identified as follows:

- Land North and South of Camela Lane, Camblesforth, Selby, North Yorkshire (2021/0788/EIA) approved in July 2022;
- Land South of A645, Wade House Lane, Drax (2022/10054/SCN, now 023/0128/EIA) approved in April 2024; and
- Barlow Ash Mound, Park Lane, Barlow, Selby YO8 8JW (2022/0107/NYSCO), approved in 2022.

- 3.2.35. These sites were therefore discounted for the Proposed Development. Land subject to local plan allocations and designations was also discounted, as set out in the Alternative Sites Assessment **[APP-227]**.
- 3.2.36. The land immediately surrounding the grid connection point and to the north of the grid connection point was discounted as it is owned and operated by Drax Group, and is either committed for their own development needs or already developed (i.e. Drax Power Station).
- 3.2.37. Directly east of the grid connection point, on land between the River Ouse and River Aire, there is a narrow section of land that was identified as potentially feasible for development. This land was, however, discounted on two grounds. Firstly, this area is ALC Grade 1 land and as per the NPS EN-1 Paragraph 5.11.34, 'poorer quality [agricultural] land should be preferred to those of a higher quality'. Secondly, this land hosts an onshore windfarm, which makes development of the Proposed Development in this area impractical due to the restrictions on the location of the solar panels and electrical infrastructure in the vicinity of such development.
- 3.2.38. The land immediately adjacent to the west of the PoC (a broadly triangular area of land between the Drax Power Station and the disused railway corridor running in a northwest - southeast direction to the east, the A1041 to the west, and the settlement of Camblesforth to the south) was considered. A review of this land identified constraints including the presence of the settlement of Camblesforth immediately south, the presence of the consented solar scheme at Land North and South of Camela Lane, Camblesforth, and the presence of Barlow Common Local Nature Reserve (LNR) and several Sites of Importance for Nature Conservation.
- 3.2.39. Consideration was therefore given to land beyond the A1041. The ability to integrate

any remaining viable parcels east of the A1041 with land west of the A1041 was considered technically complex and therefore ruled out. Consideration was therefore given to assembling a contiguous site west of the A1041 where the land was far less constrained and sensitively located away from Camblesforth and the surrounding population, businesses and recreational uses.

### Summary

3.2.40. To summarise, in response to the SoS request for information:

- a) **Search Area** – The extent of the search area is appropriate based on environmental, technical and viability constraints. Sufficient suitable land became available within this area so there was no need to extend the search area. This approach is compliant with policy in NPS EN-1 and EN-3.
- b) **Alternatives (Agricultural Land)** – The use of lower grade agricultural land and non-agricultural land including brownfield sites was considered, in accordance with policy in NPS EN-1 and EN-3. Appropriate sites of a lower grade agricultural land or brownfield sites were not available, so the use of BMV has been demonstrated to be necessary. Policy in NPS EN-1 and EN-3 does not exclude the use of BMV land for this type of development.
- c) **Alternatives** – Alternatives within the 5km search area have been considered and discounted on the basis of constraints including natural landforms, ecological designations, proximity to dwellings and availability of land. This approach to assessing alternatives is compliant with policy in NPS EN-1 and EN-3.



## **4. Aviation Safety**

### **4.1. Policy and Guidance**

#### **4.1.1. Paragraph 8(c) of the RfI states:**

*In their responses, the Applicant and BGC should, where appropriate, set out the policy or guidance underpinning their approach and assumptions, including the relevance of the Aerodrome Safeguarding Advice Note 5: Renewable Energy Developments issued by the Civil Aviation Authority's Combined Aerodrome Safeguarding Team.*

#### **4.1.2. The Advice Note published by the Combined Aerodrome Safeguarding Team (CAST) highlights the potential issues arising from solar and wind developments that should be considered in the interest of aviation safety, particularly for unlicensed/general aviation aerodromes. The note highlights potential risks from solar reflections, interference with communication/navigation/surveillance aids, and physical obstruction risks. The note does not prescribe a formal methodology for assessing these impacts or define an impact classification (i.e. to state whether a certain level of impact from a development is a corresponding level of impact upon aviation activity).**

#### **4.1.3. Where relevant, the Advice Note is referenced in the responses below.**

### **4.2. Engine Failure After Take-Off**

#### **Land Rights and Ownership**

#### **4.2.1. Paragraph 7(a) of the RfI states:**

*Clarify how land rights and ownership might affect emergency responses, particularly whether they could restrict or otherwise influence options available in the event of an EFATO.*

#### **4.2.2. Land rights and ownership are not expected to affect emergency responses, i.e. an emergency service physically attending a site in the event of an emergency or an emergency landing being undertaken by an aircraft. However, to use land for a specific purpose outside of the ownership of any person requires the consent and agreement of that landowner. There is no agreement in place with the landowners involved in the Proposed Development for them to keep their land available for use by Burn Gliding Club in any capacity.**

- 4.2.3. The Applicant has not suggested that in the event of a genuine emergency, when it is not possible to turn the glider and land back at the airfield that there would be any legal impediment to them landing on the Site of the Proposed Development. However, the assessment undertaken by the Applicant's professional advisors demonstrates that there is sufficient land available should the Proposed Development be granted consent and be built that means that there are no significant adverse effects on the operation of the Burn Gliding Club.
- 4.2.4. Furthermore the landowners of the Proposed Development Site are generational farmers and they have told the Applicant that they have not experienced any occasion where Burn Gliding Club have contacted them to enter onto their land to retrieve a glider which has had to undertake an emergency landing in their fields, nor have they seen any damage to their fields, crops or boundaries which would indicate that such an event had occurred.
- 4.2.5. The Applicant does not intend to diminish the seriousness of the consequences in the event of an emergency but in light of the assessment work it has carried out and experience of the landowners the Applicant submits that there is no material impact on the operation of Burn Gliding Club.

#### **Impact on Aviation Operations**

- 4.2.6. Paragraph 7(b) of the RfI states:

*Review and, if necessary, update their assessments of the Proposed Development's impact on aviation operations. This review should compare scenarios with and without the development in place, identify any risks arising from an EFATO event, and clearly set out the assumptions underpinning the analysis. Where significant impacts are identified, propose appropriate mitigation measures. For example, a reduction in solar panel coverage in specific areas of the site could be considered to reduce exposure to EFATO-related hazards.*

- 4.2.7. Advice Note 5 outlines the considerations to Engine Failure After Take-Off (EFATO) in section 2.2.2. Gliding aircraft do not use engines and therefore cannot experience engine failure; however, considerations to EFATO are applicable to aerotow launch (an engine-powered aircraft towing a gliding aircraft) and can be adopted for gliding aircraft as Glider Launch Failure (GLF), defined as a failure of the launch (of a gliding aircraft) from the point after the wheels leave the ground until the aircraft reaches a height of 300ft above the ground.
- 4.2.8. Advice Note 5 states 'there is no official safeguarding criteria for safeguarding

against an EFATO' however recommends not conducting a turn greater than 45 degrees from straight ahead.

- 4.2.9. In accordance with the recommendation outlined in the Advice Note 5 and a literature review of relevant guidance (including The Glider Pilot's Manual published by Ken Stewart), an area that may be considered safe to perform an emergency landing for gliding pilots following GLF is defined as 45 degrees either side of the runway centreline out to 2km from the launch points (defined as the runway intersections by Burn Gliding Club).
- 4.2.10. The assessment in the High-level Investigative Report **[REP7-017]** calculated the percentage of loss of land within the defined GLF areas due to the areas proposed for solar panels, in addition to areas that were not deemed suitable by Burn Gliding Club.
- 4.2.11. Table 4.1 below (Table 3 of the High-level Investigative Report **[REP7-017]**) summarises the percentage of area available within the defined areas with consideration to the Proposed Development and suitable areas defined by Burn Gliding Club.

**Table 4.1: Available areas for emergency landing**

| Runway | Percentage of Land Unavailable (%) |                      | Total Percentage of Available Land <sup>9</sup> (%) |
|--------|------------------------------------|----------------------|---|
|        | Due to Panels                      | Due to Unsuitability |   |
| 07     | 9%                                 | 38%                  | 53%   |
| 15     | 17%                                | 41%                  | 42%   |

- 4.2.12. Figures from the High-level Investigative Report showing the land available for GLF in relation to the Proposed Development and land not deemed suitable by Burn Gliding Club are re-provided for ease of reference within Appendix B of this submission (Figures 3 to 7 of the High-level Investigative Report **[REP7-017]**). Figures B.1 to B.3 of Appendix B show the areas of land relative to the Proposed Development within 2km from the launch points (runway intersections), considering 45 degrees either side of the runway centreline. The Proposed Development is shown in Figure B.3 not to reduce the area defined for GLF from runway 19, and as such, runway 19 has not been included in Table 4.1 above. Figures B.4 and B.5 show for runways 07 and 15 areas that are not suitable for an emergency landing (in areas of red) relative to the panel areas (blue) and the BESS (orange) for the Proposed

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<sup>9</sup> As a total when considering the Proposed Development and suitable areas defined by Burn Gliding Club cumulatively.

Development.

- 4.2.13. Considering the percentage of land that remained available, a significant impact is not anticipated. Most significantly, gliders can remain flying in a forward direction without being significantly impacted by the Proposed Development, which is considered best practice in accordance with the guidance.

### **Mitigation Measures**

- 4.2.14. Paragraph 7(c) of the RfI states:

*Explain what mitigation measures have been incorporated into the layout and design of the Proposed Development to safeguard against EFATO risk where identified, including details of their dimensions, location, and relationship to the scheme's objectives.*

- 4.2.15. Mitigation for EFATO/GLF has not been incorporated into the design, as the Proposed Development was not considered to significantly impact EFATO/GLF because:

- The land available following GLF from runway 19 remains as per the baseline and is unaffected by the Proposed Development, due to no solar panels occupying the defined 90-degree (45 degrees either side of the runway centreline)/2km area.
- In the event of GLF from runway 07, a pilot can remain flying forward as per the baseline and is unaffected by the Proposed Development due to no solar panels occupying land along the extended runway centreline. To remain flying in a forward direction (i.e. not conducting a turn) is considered best practice.
- The Proposed Development occupies a lateral distance between 510m and 840m along the runway centreline, and in line with the launch point of runway 15. In the event of EFATO/GLF during this section, a pilot has the option of performing a right-hand turn within the defined 90-degree/2km sector as per the baseline and is unaffected by the Proposed Development, due to no solar panels occupying land between the runway centreline and 45-degrees southeast of the centreline. After 840m along the runway centreline, a pilot can remain flying forward as per the baseline and is unaffected by the Proposed Development due to no solar panels occupying land along the extended runway centreline.

#### 4.3. Cliffe Airfield

##### 4.3.1. Paragraph 9 of the RfI states:

*The Applicant should confirm details of the consultation undertaken with Cliffe Airfield as advised by the Civil Aviation Authority Airfield Advisory Team (CAA AAT) in the Relevant Representation dated 30 September 2024 from the CAA AAT and provide details of any engagement, investigations and outcomes pursuant to that consultation.*

4.3.2. As set out in the Solar PV Glint and Glare Study **[REP4-010]**, Cliffe Airfield is an unlicensed aerodrome. It is not known who the aerodrome is owned or operated by. Contact details for the operator cannot be located, and there is no legal requirement for unlicensed aerodromes to publish such details. It has therefore not been possible to undertake consultation with them. While Cliffe Airfield is outside of the consultation mailing radius as set out in the Statement of Community Consultation **[APP-201]** it is situated within the circulation area of the Selby Times in which the Applicant published the statutory notifications about the Application and no representation has been received by the Applicant or PINS throughout the course of the application process.

4.3.3. Notwithstanding that direct consultation has not been possible with Cliffe Airfield, the potential effect of the Proposed Development on the Airfield has been assessed within the Solar PV Glint and Glare Study **[REP4-010]**.

4.3.4. The two runways at Cliffe Airfield are referenced as Runway 10 and Runway 28 in the Solar PV Glint and Glare Study. The results of the glint and glare assessment conclude that:

- The instances of glare with 'potential for temporary after-image' towards the approach for Runway 28 can be operationally accommodated by the operator of the airfield/pilot. As per guidance provided in CAP 793 'Safe Operating Practices at Unlicensed Aerodromes', aerodrome operators should implement safe practices by being aware of their environment and noting possible hazards on a map which can include the marking of the solar farm on aeronautical charts used by the airfield, and noting that there may be instances of glare so they are aware when carrying out their operations. Physically, pilots will wear sunglasses to mitigate views of the sun, even without the Proposed

Development in place.

- No impact is predicted upon pilots on approach towards Runway 10, as solar reflections are not geometrically possible.



## 5. Community Liaison

5.1.1. Paragraph 10 of the RfI states:

*The Applicant should confirm the details of the community liaison proposed and identified at Requirement 4(2)(b) - Construction Environmental Management Plan CEMP) of the draft Development Consent Order (dDCO) [REP9-003] and update the outline CEMP [REP8-009] accordingly, if required.*

5.1.2. The outline CEMP has been updated to clarify that Section 2.8 (previously labelled 'Public Communication and Liaison') refers to Community Liaison as referred to at Requirement 4(2)(b) of the draft Development Consent Order. Section 2.8 has been changed to 'Public Communication and Community Liaison' for clarity.

5.1.3. As set out in the outline CEMP, the Community Liaison will comprise the following:

'Boards will be displayed at relevant locations on-Site detailing the nature of the work being undertaken, with key contact details including a telephone number and postal address for any enquiries and complaints.

Communication will be maintained with neighbouring residents and Parish Councils (including but not limited to: Long Drax; Camblesforth; Carlton; Hirst Courtney; and Burn) throughout the duration of works to provide updates on the construction programme.

A register of complaints will be kept which will include the complainants name, date and time of the complaint, cause of complaint and the action taken to resolve the complaint. All complaints will be dealt with by the Site Manager.'

5.1.4. Specific arrangements will be confirmed in the detailed CEMP(s).

## 6. Operational Noise

### 6.1. Requirement 23 (Operational Noise)

#### 6.1.1. Paragraph 11 of the RfI states:

*The Applicant and NYC should comment on the suitability of replacing "LAeq" with "LAr" in the wording of Requirement 23 (Operational Noise) in the dDCO.*

#### 6.1.2. The Applicant is content that replacing "LAeq" with "LAr" in the wording of Requirement 23 (Operational Noise) in the dDCO is suitable.

#### 6.1.3. Following this amendment, Requirement 23 would read:

##### **Operational Noise**

23. The rating level (LAr) of noise from the operation of the authorised development shall not exceed: 40 dB LAr for any fifteen-minute period between 23:00 and 07:00; and 50 dB LAr for any one-hour period between 07:00 and 23:00, determined one metre free-field external to any window or door of any existing permanent residential premises using the definitions and methods described in 'Methods for rating industrial and commercial sound' British Standards Institution BS4142 2014+A1:2019.

#### 6.1.4. Paragraph 12 of the RfI states:

*The Applicant and NYC should also provide comment on the suitability of alternative wording for Requirement 23 given that the Applicant notes the operational noise generated from the proposed development is significantly below the thresholds proposed as set out in [REP8-020] ref DCO-PC17:*

*(1) No part of Work (Nos 1, 2 and 3) may commence until an operational noise assessment containing details of how the design of the authorised development has incorporated mitigation to ensure the operational noise rating levels as set out within Table 11-17 and 11. 18 in Chapter 11 of the environmental statement are to be complied with for that part has been submitted to and approved by the relevant planning authority for that part.*

*(2) The mitigation measures described in the operational noise assessment for each part of the authorised development must be implemented as approved and maintained throughout the operation of the relevant parts of the authorised development to which the plan relates.*

#### 6.1.5. The Applicant can accept the alternative wording subject to the minor amendment

below to remove 'operational' from (1) and (2), as it would not be possible to provide an operational noise assessment prior to commencement of development:

(1) No part of Work (Nos 1, 2 and 3) may commence until an noise assessment containing details of how the design of the authorised development has incorporated mitigation to ensure the operational noise rating levels as set out within Table 11-17 and 11. 18 in Chapter 11 of the environmental statement are to be complied with for that part has been submitted to and approved by the relevant planning authority for that part.

(2) The mitigation measures described in the noise assessment for each part of the authorised development must be implemented as approved and maintained throughout the operation of the relevant parts of the authorised development to which the plan relates.

6.1.6. Paragraph 13 of the RfI states:

*The Applicant and NYC should advise on the need for monitoring of the operational noise associated with the proposed development and confirm where, if required, this will be secured.*

6.1.7. Monitoring of the operational noise associated with the Proposed Development is not required. The Applicant is already obligated to comply with the noise levels secured in Requirement 23.

## 7. Certified Documents

7.1.1. Paragraph 14 of the RfI states:

*The Applicant should provide an updated oLEMP including the Annexes listed therein and the correct revision number across the document.*

7.1.2. The outline Landscape and Ecological Management Plan (oLEMP) has been resubmitted with the correct date and revision number (October 2025, Revision 05) throughout the document and with the Annexes attached. The content of the oLEMP has not been amended since the Deadline 8 submission **[REP8-011]**.

7.1.3. Paragraph 15 of the RfI states:

*The Applicant should provide an updated clean version of the outline Decommissioning Environmental Management Plan, that aligns with the tracked version (REP6-009). The version provided at Deadline 6 (REP6-008) consists of the outline Operational Environmental Management Plan in what is considered error.*

7.1.4. The clean version of outline Decommissioning Environmental Management Plan (oDEMP) has been submitted (October 2025, Revision 02). The content of the oDEMP has not been amended since the tracked Deadline 6 submission **[REP6-009]**.

7.1.5. Paragraph 16 of the RfI states:

*The Applicant should check other documents listed in Schedule 11 of the dDCO are complete, of the latest revision, and that the correct versions are on the Planning Inspectorate's website. The Applicant should provide an up-to-date version of Schedule 11 with the latest and accurate revision numbers.*

7.1.6. The Applicant has submitted the following updated / corrected documents as per the RfI regarding Community Liaison and Certified Documents:

- Outline Construction Environmental Management Plan
- Outline Landscape and Ecological Management Plan
- Outline Decommissioning Environmental Management Plan

7.1.7. The Applicant has submitted an updated Schedule 11 (Appendix C) with the following amendments:

- Outline Construction Environmental Management Plan – updated to Revision 5

(October 2025).

- Outline Landscape and Ecological Management Plan – updated to Revision 05 (October 2025).
- Outline Decommissioning Environmental Management Plan – updated to Revision 02 (October 2025).
- Environmental Statement 6.3 Appendix 8.9 – corrected to Revision 6 (May 2025) as per final submitted version at Deadline 8.
- Environmental Statement 6.3 Appendix 14.3 Outline Soil Resource Management Plan – removed due to duplication.

7.1.8. The Applicant confirms that there are no further updates required to Schedule 11 and that the correct versions are on the Planning Inspectorate's website.

## 8. Battery Fire Safety

8.1.1. Paragraph 17 of the RfI states:

*NYFRS should provide comments on the Applicant's Outline Battery Safety Management Plan.*

8.1.2. As set out in the Statement of Commonality **[REP8-017]**, NYFRS advised on 4<sup>th</sup> April 2025 that the appropriate point for the FRS to respond would be at consultation from the LPA when the requirement to submit a final Battery Safety Management Plan is discharged, as per Requirement 9 in the dDCO **[REP7-003]**.

8.1.3. The Applicant welcomes comments from NYFRS on the Outline Battery Safety Management Plan if they are now in a position to respond.



## 9. Land Rights

### 9.1. Network Rail (NR)

#### 9.1.1. Paragraph 18 of the RfI states:

*The Applicant and NR are requested to provide an update on whether any agreement has been reached regarding respective Protective Provisions.*

9.1.2. The Applicant liaised with NR's legal representatives throughout the examination process, highlighting to them that NR only had rights of access over land within the Order Limits and no land or physical assets within the Order Limits which in the Applicant's view could not coexist with the Proposed Development as there is no cause or intention of extinguishing these. Therefore the Applicant did not consider that protective provisions were necessary as NR did not successfully make a case of serious detriment to their undertaking.

9.1.3. Whilst NR did contact the Applicant after the close of examination, its position had not changed, i.e. it was still unable to tell the Applicant of the railway property which may be so affected by the Proposed Development that it would result in a serious detriment to their undertaking. The Applicant did invite NR to contact them again should this position change. NR's legal representative contacted the legal representative of the Applicant on the 10 October 2025 at 16.56 and informed them that NR's "rights and covenants relate to any accommodation works that the original railway company may have been obliged to construct on the land for the benefit of land severed by the railway. NR remains liable to any adjoining owners for the maintenance of any such accommodation works even when (as here) the land is former railway land which it no longer owns"

9.1.4. NR have confirmed that they do not know what those accommodation works may consist of or which plots within the Order Limits, if any, they relate to. Given that these obligations are unquantified and relate solely to ongoing adjacent landowners of a now defunct railway which NR do not own this cannot amount to a serious detriment to their undertaking such that protective provisions are justified.

9.1.5. The Applicant does not consider that the late provision of this information from NR warrants a change from its position as set out in document 9.20 *Summary Statement of Outstanding Issues [REP9-013]* submitted at deadline 9 of the examination.

**9.2. Drax Power Limited (DPL)**

9.2.1. Paragraph 19 of the RfI states:

*The Secretary of State notes that, as per the Book of Reference and Land Plans, between plots 50 to 69 there are 19 plots which would facilitate the Proposed Development's grid connection at Drax Substation. Of these, 12 are owned by DPL. The Applicant and DPL are requested to provide an update on whether any agreement has been reached regarding the relevant land rights for these 12 plots.*

9.2.2. The Applicant and Drax Power Limited (DPL) are in advanced stages of negotiation and are confident that a voluntary legal agreement can be reached, subject to due diligence, documentation and management approval.

9.2.3. This position is confirmed in the letter at Appendix D which is signed by the Applicant and DPL.

## 10. Ground Nesting Bird Monitoring

### 10.1.1. Paragraphs 20-21 of the RfI state:

*NE and NYC should confirm whether the monitoring requirements for the groundnesting bird mitigation areas, as updated in the tracked outline Landscape and Ecological Management Plan (oLEMP) [REP8-012], encompass the full monitoring requirements expected.*

*NE and NYC should comment if the updates made by the Applicant to Section 5.3.1 Monitoring of REP8-012 encompass the monitoring requirements of both ground nesting bird habitat as well as the recording of the number and locations of plots.*

### 10.1.2. The Applicant notes that queries regarding ground nesting bird monitoring have been directed to NE and NYC, however the Applicant sets out its position below in the event that is helpful to the SoS.

### 10.1.3. The Applicant's commitment at Section 5.3.1 of the oLEMP is:

'To check the implementation of the management prescriptions and monitor whether these have provided suitable ground nesting bird habitat, monitoring surveys will be undertaken by a suitably qualified ecologist in years 5 and 10 following implementation of the scheme.

This will comprise a single visit each monitoring year during the peak breeding season (April to June) with a walkover of the mitigation areas to record that suitable habitat has been established in line with Countryside Stewardship management practices as set out in AB4: Skylark Plots and IN140 Neutral Grassland for Lapwing. The management strategy will be reviewed following each monitoring visit, and any required actions will be notified to the landowner / farmer.'

### 10.1.4. The Applicant can not be required to demonstrate use of the habitats by ground nesting bird habitats because it is not possible to control where the bird species may, or may not choose to nest. The most that can be required of the Applicant is to demonstrate that suitable habitat has been established in line with Countryside Stewardship management practices as set out in AB4: Skylark Plots and IN140 Neutral Grassland for Lapwing such that if the species are present they could use it.

### 10.1.5. Requirement 10 of the dDCO obliges the Applicant to record the details of the location and established ground nesting bird habitats each year to ensure

compliance with the oLEMP throughout the lifetime of the development. The records will be made available for inspection upon request.

- 10.1.6. The Applicant considers that the recording of skylark plots, and confirmation that the requisite habitats are in place, are sufficient to monitor mitigation measures specified within the Environmental Statement.
- 10.1.7. As per the Final Statement of Common Ground with Natural England **[REP5-009]**, Natural England have not raised any issues with the Applicant's approach to monitoring ground nesting birds, and all matters have been agreed.

## 11. Flood Risk

### 11.1.1. Paragraph 22 of the RfI states:

*The Secretary of State notes that the Environment Agency has published new data following an update to the National Flood Risk Assessment. The Flood Map for Planning and flood zones were also updated on 25 March 2025. The Applicant should explain whether the updates have any implications for the conclusions of the Environmental Statement, including APP-029 Environmental Statement Chapter 9: Water Environment and REP7-008 Flood Risk Assessment. The Applicant should provide revised documents, as necessary.*

### 11.1.2. The Applicant has prepared and submitted 'Water Environment Supplementary Assessment 2' (Appendix E) to address the implications of the EA's national flood modelling on the Proposed Development. In summary:

'Following the release of the flood risk datasets which underpin NaFRA 2 the extents of Flood Zones 2 and 3 presented on the Flood Map for Planning have not been updated at this location. The EA approved site-specific flood model provides the best available information for the assessment of tidal and fluvial flood risk on the Site. The updates to the EA's strategic flood models following the update to NaFRA2 are therefore considered not to be relevant with respect to fluvial and tidal flooding and the conclusions of the FRA (supported by approved site-specific flood model) remain unchanged.

With respect to surface water flood risk, the strategic surface water flood model (RoFSW dataset) refined the extents of elevated surface water flood risk on the Site. Although the extents of the elevated risk of surface water flooding have changed with the updated EA RoFSW dataset, the flood mitigation and adaption measures set out in the FRA remain appropriate. The majority of the Site remains at 'very low' risk (less than 0.1%) of surface water flood risk and areas of deeper flooding (>0.6m) would be restricted to the channels of onsite watercourses.

Due to the size of the Site and extensive areas of 'very low' risk it remains possible to preferentially locate ancillary control equipment in areas of 'very low' surface water flood risk as part of the detailed site design. The Proposed Development assessed raising finished floor levels of any ancillary control equipment at least +0.3m (and up to +0.6m) above existing ground level and this remains an appropriate mitigation to increase resilience to surface water

flood risk.

The supplementary assessment provides confirms that the conclusions of the FRA are robust, that implementation of the embedded design mitigation measures (including the flood mitigation and adaption measures set out in the FRA) would safely manage any residual risks from flooding and the Proposed Development would remain operational and safe and would not increase flood risk elsewhere during the pluvial 'design flood'.



## 12. Comments on Deadline 9 and 10 Submissions

12.1.1. Paragraph 23 of the RfI states:

*The Applicant should provide responses to the following Deadline 9 and Deadline 10 Examination submissions from Interested Parties: REP9-015 to REP9-017; REP 10-001 to REP10-002.*

**Table 12.1: The Applicant's Comments on Deadline 9 and 10 Submissions from Interested Parties**

| PINS Reference | Interested Party | Document   | Applicant's Comments   |
|----------------|------------------|--|--|
| REP9-015       | David Wilkinson  | Late Deadline 9 Submission Accepted at the Discretion of the Examining Authority | <p>REP9-015 is a resubmission of Mr Wilkinson's submission dated 18/03/2025 [REP5-027]. As per the Applicant's previous response [REP6-034], the Applicant responded as necessary in Table 2.2 of the Applicant's Written Summary of the Applicant's Oral Submissions – Open Floor Hearing 2 [REP5-011].</p> <p>The site visit location requested by Mr Wilkinson was visited by the Examining Authority (ExA) during Unaccompanied Site Inspection 2 (USI2) [EV9-001].</p> <p>The Applicant has no further comments on this submission.</p> |
| REP9-016       | Lesley Marson    | Late Deadline 9 Submission Accepted at the Discretion of the Examining Authority | <p>Each technical chapter within the ES includes a summary of cumulative effects, which are subsequently summarised in Chapter 15 Cumulative Effects [APP-035] which addresses both inter- and intra-project effects. The Applicant explained the approach and requirements regarding cumulative assessment at Issue Specific Hearing 2, as set out in the Written Summary [REP5-012].</p> <p>The Applicant has no further comments on this submission.</p>  |

## Helios Renewable Energy Project

### The Applicant's Response to the Secretary of State's Request for Information

| PINS Reference | Interested Party     | Document   | Applicant's Comments  |
|----------------|----------------------|--|---|
| REP9-017       | Pamela Joy Spreckley | Late Deadline 9 Submission Accepted at the Discretion of the Examining Authority | <p>The Applicant has addressed the concerns raised regarding battery safety in the Responses to Relevant Representations <b>[REP1-004]</b> Section 3.17:</p> <p><i>'A BESS Safety Management Plan <b>[APP-119]</b> has been produced to define the proposed safety strategy, requirements, and processes necessary to meet agreed safety objectives and to set a level of safety performance that the BESS is to be measured against. It also provides the basis for the safety management processes and procedures required to satisfy the identified safety requirements for the BESS. Consultation and communication has also been undertaken with North Yorkshire Fire and Rescue Service (NYFRS) which have informed the outline BESS safety management plan. The BESS Safety Management Plan is secured by Requirement 9 of the dDCO.'</i></p> <p>As set out in The Applicant's Responses to Written Representations <b>[REP3-009]</b>, whilst the Applicant has prepared indicative plans for the number of units that will be in operation, the exact numbers of BESS units cannot be confirmed at this stage as technology may improve, changing requirements in terms of unit numbers and size. The indicative plans represent a worst-case scenario for the purposes of the Environmental Impact Assessment in the ES. A more detailed specification will be provided at detailed design, with the necessary details subject to approval from the local planning authority as per Requirement 3 of the dDCO.</p> <p>See response to REP9-016 above regarding cumulative impacts.</p> <p>See carbon calculations provided at Section 2 'Greenhouse Gas Emissions' of this document.</p> |

## Helios Renewable Energy Project

### The Applicant's Response to the Secretary of State's Request for Information

| PINS Reference | Interested Party | Document                                    | Applicant's Comments   |
|----------------|------------------|---|--|
| REP10-001      | David Wilkinson  | Deadline 10 comments                        | Questions 1 and 2 - Please see response to REP9-015 above.<br><br>In response to Question 3, only development within the parameters set out in the application and assessed within the Environmental Statement would be consented and carried out under the DCO. |
| REP10-002      | David Wilkinson  | Deadline 10 comments – Site Meeting Request | The site visit location requested by Mr Wilkinson was visited by the Examining Authority (ExA) during Unaccompanied Site Inspection 2 (USI2) <b>[EV9-001]</b> .  |

Appendix A: Site Constraints

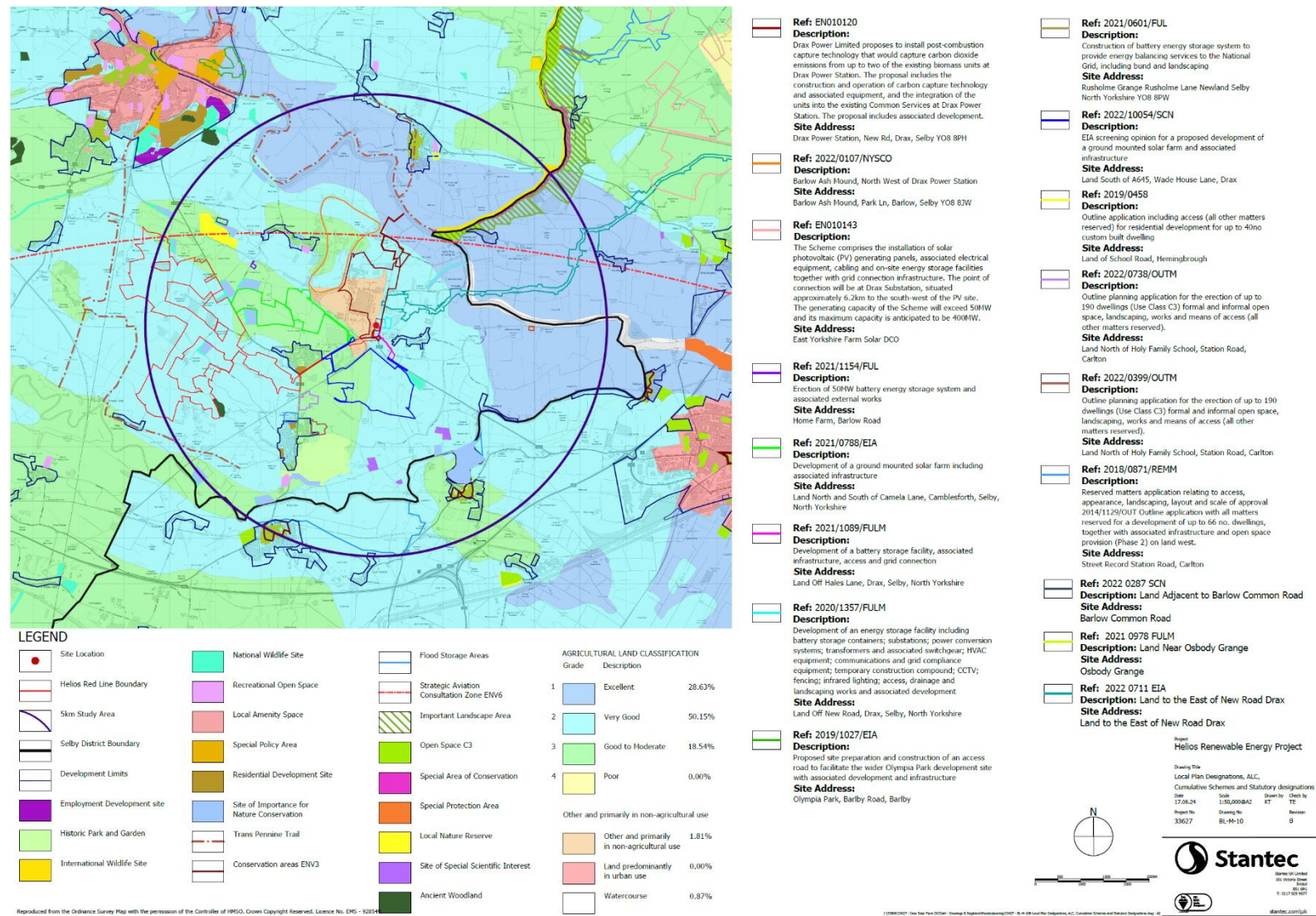


Figure A.1: Combined Constraints Plan



Helios Renewable Energy Project  
The Applicant's Response to the Secretary of State's Request for Information

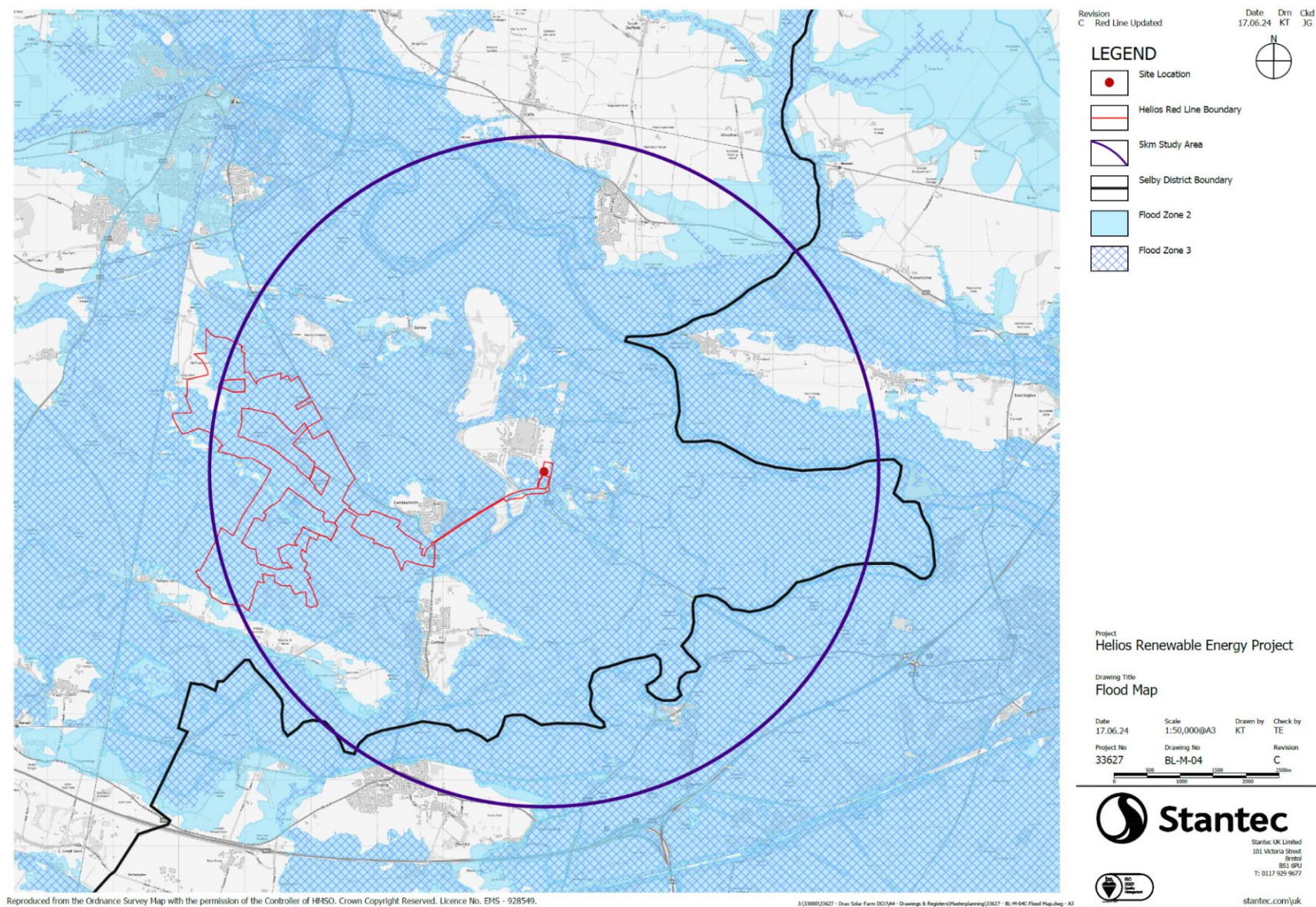
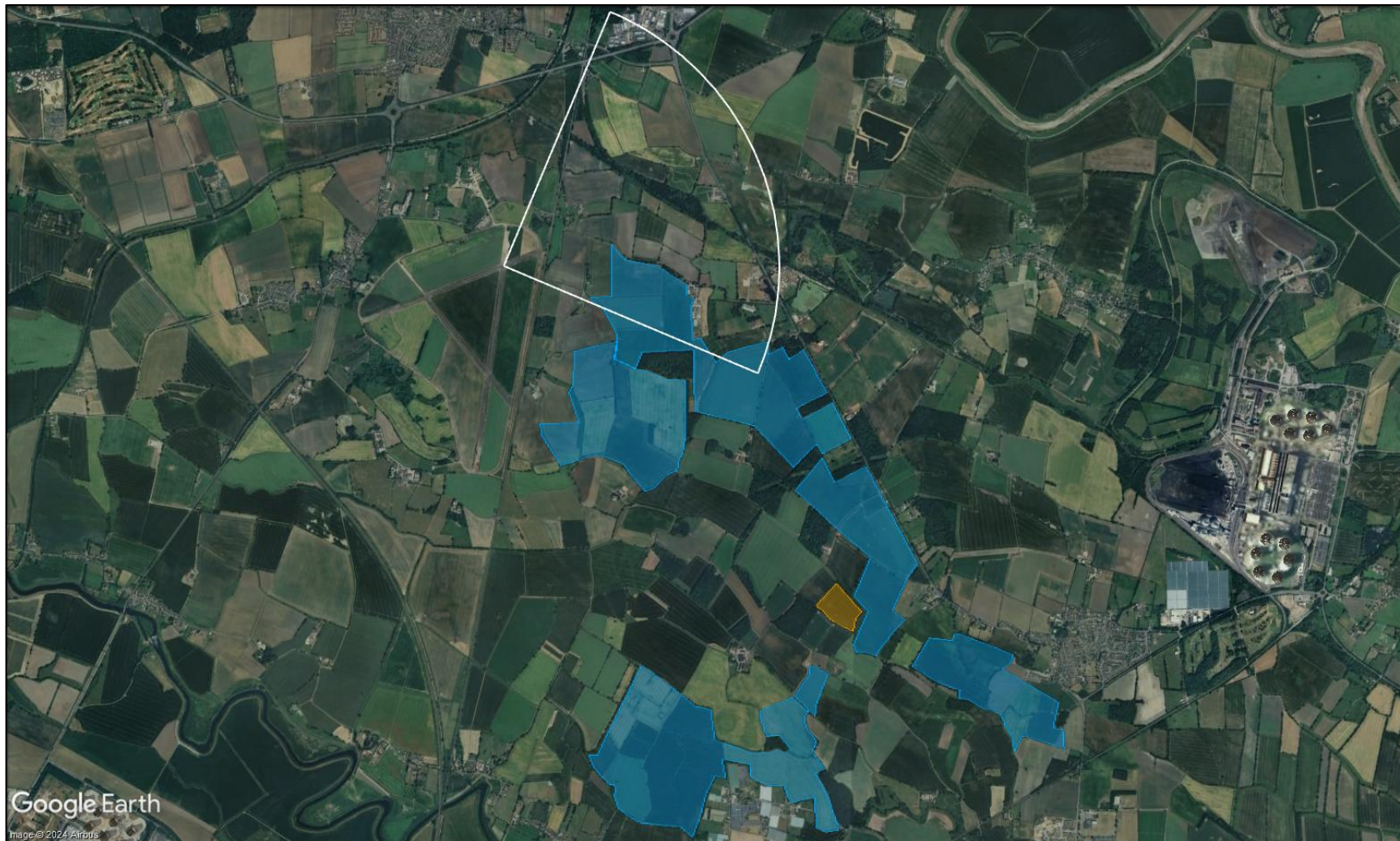


Figure A.2: Flood Risk

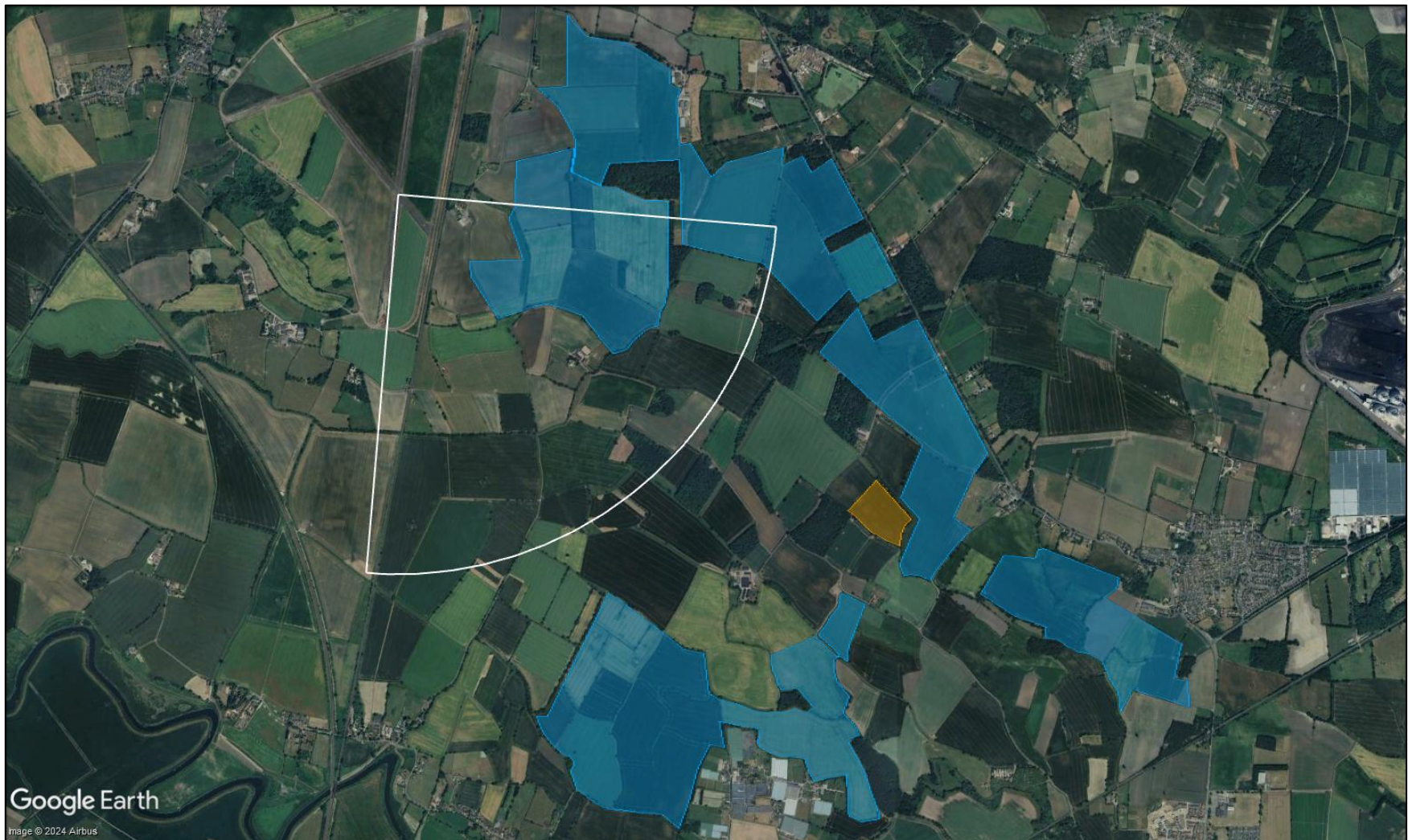


## Appendix B: Land Availability for Glider Launch Failure



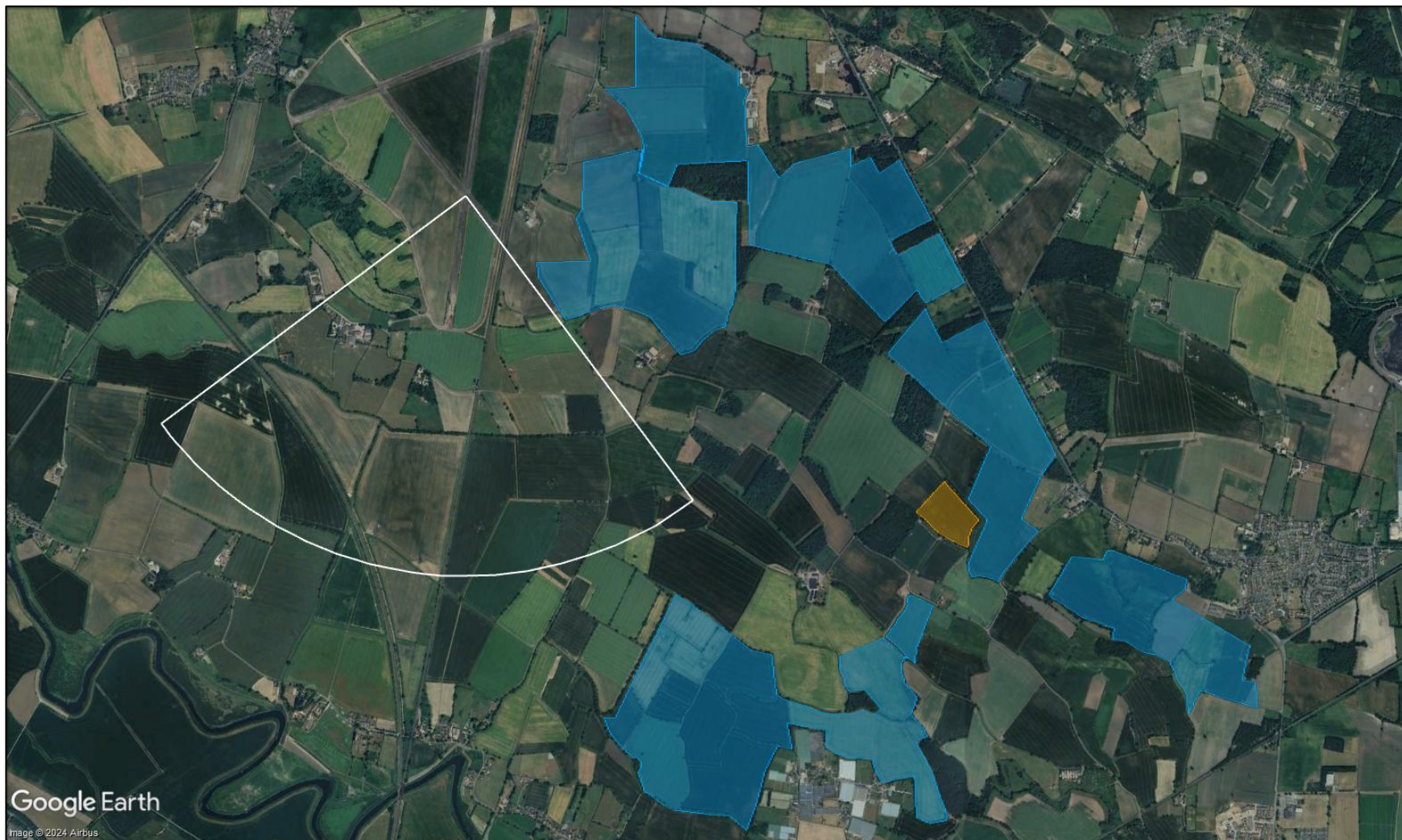
**Figure B.1: GLF areas from runway 07 relative to the Proposed Development**





**Figure B.2: GLF areas from runway 15 relative to the Proposed Development**





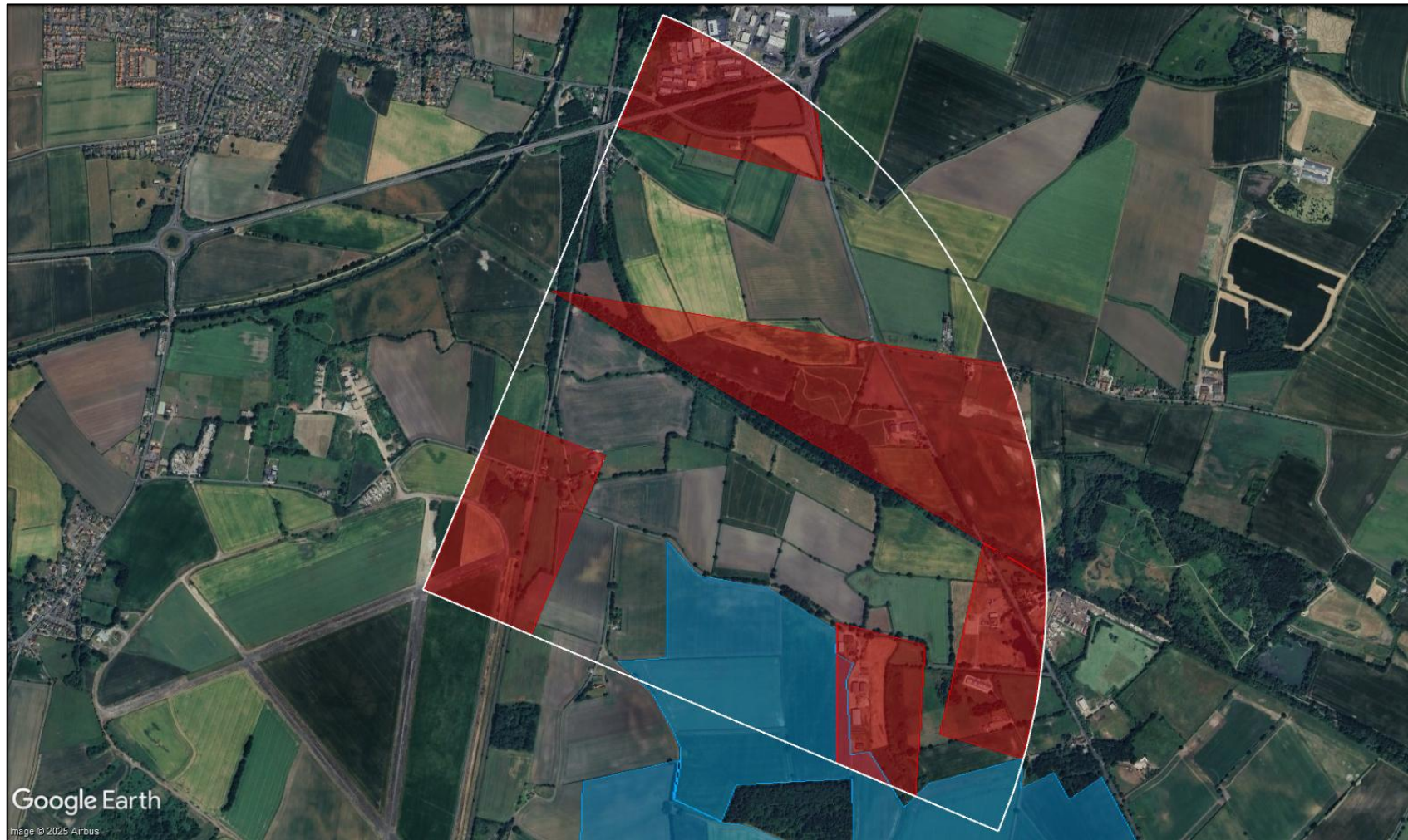
**Figure B.3: GLF areas from runway 19 relative to the Proposed Development**



## Helios Renewable Energy Project

### The Applicant's Response to the Secretary of State's Request for Information

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**Figure B.4: GLF areas from runway 07 relative to the Proposed Development (blue/orange) and not suitable areas identified by BGC (red)**





**Figure B.5: GLF areas from runway 15 relative to the Proposed Development (blue/orange) and not suitable areas identified by BGC (red)**

## **Appendix C: Schedule 11 Documents to be Certified**

The tables below show the tracked and clean versions of Schedule 11 following the amendments noted in Section 5 (Community Liaison) and Section 7 (Certified Documents).

The revision number of the oDEMP has not been amended in Schedule 11 as the October 2025 submission is Revision 02 and the April 2025 submission was Revision 01. Schedule 11 previously listed oDEMP Revision 02 in error.

# Helios Renewable Energy Project

## The Applicant's Response to the Secretary of State's Request for Information

**Table C.1: Schedule 11 Documents to be Certified (Tracked)**

| (1) Document                                     | (2) Application Document Reference   | (3) Revision   | (4) Date                           |
|--|--|----------------|------------------------------------|
| Access and rights of way plan                    | 2.4  | 4              | June 2024                          |
| Book of reference                                | 4.1  | B              | May 2025                           |
| Environmental statement                          | Environmental Statement 6.1 (excluding Chapter 4)  | 0              | June 2024                          |
|  | Environmental Statement 6.1 Chapter 4  | 1              | June 2024                          |
|  | Environmental Statement 6.2 (excluding Figures 7.1-7.12)   | 0              | June 2024                          |
|  | Environmental Statement 6.2 Figures 7.1-7.12   | 1              | June 2024                          |
|  | Environmental Statement 6.3 (excluding Appendices 2.5, 3.1, 5.1, 5.2, 5.3, 5.4, 7.9, 8.8, 8.9, and 14.3) | 0              | June 2024                          |
|  | Environmental Statement 6.3 Appendix 2.5   | 8              | February 2025                      |
|  | Environmental Statement 6.3 Appendix 8.8   | A              | January 2025                       |
|  | Environmental Statement 6.3 Appendix 8.9   | <del>5</del> 6 | <del>April 2025</del> May 2025     |
|  | <del>Environmental Statement 6.3 Appendix 14.3</del>   | <del>1</del>   | <del>January 2025</del>            |
|  | Environmental Statement 6.4  | 1              | June 2024                          |
| Flood risk assessment                            | 7.5  | 3.1            | April 2025                         |
| Land and crown plans                             | 2.2  | 5              | February 2025                      |
| Location and order limits plan                   | 2.1  | 0              | June 2024                          |
| Outline archaeological mitigation strategy       | 6.3.6.2  | 4              | June 2024                          |
| Outline battery safety management plan           | 6.3.3.1  | 5              | February 2025                      |
| Outline CEMP                                     | 6.3.5.1  | <del>4</del> 5 | <del>May 2025</del> October 2025   |
| Outline CTMP                                     | 6.3.5.2  | A              | February 2025                      |
| Outline design principles document               | 9.15   | 0              | April 2025                         |
| Outline DEMP                                     | 6.3.5.3  | 2              | <del>April 2025</del> October 2025 |
| Outline LEMP                                     | 6.3.7.9  | <del>4</del> 5 | <del>May 2025</del> October 2025   |
| Outline OEMP                                     | 6.3.5.4  | 2              | April 2025                         |
| Outline soil resource management plan            | 6.3.14.3   | 1              | January 2025                       |
| Outline supply chain, employment and skills plan | 9.16   | 0              | April 2025                         |
| Works plans                                      | 2.3  | 6              | June 2024                          |

# Helios Renewable Energy Project

## The Applicant's Response to the Secretary of State's Request for Information

**Table C.2: Schedule 11 Documents to be Certified (Clean)**

| <i>(1) Document</i>                              | <i>(2) Application Document Reference</i>  | <i>(3) Revision</i> | <i>(4) Date</i> |
|--|--|---------------------|-----------------|
| Access and rights of way plan                    | 2.4  | 4                   | June 2024       |
| Book of reference                                | 4.1  | B                   | May 2025        |
| Environmental statement                          | Environmental Statement 6.1 (excluding Chapter 4)  | 0                   | June 2024       |
|  | Environmental Statement 6.1 Chapter 4  | 1                   | June 2024       |
|  | Environmental Statement 6.2 (excluding Figures 7.1-7.12)   | 0                   | June 2024       |
|  | Environmental Statement 6.2 Figures 7.1-7.12   | 1                   | June 2024       |
|  | Environmental Statement 6.3 (excluding Appendices 2.5, 3.1, 5.1, 5.2, 5.3, 5.4, 7.9, 8.8, 8.9, and 14.3) | 0                   | June 2024       |
|  | Environmental Statement 6.3 Appendix 2.5   | 8                   | February 2025   |
|  | Environmental Statement 6.3 Appendix 8.8   | A                   | January 2025    |
|  | Environmental Statement 6.3 Appendix 8.9   | 6                   | May 2025        |
|  | Environmental Statement 6.4  | 1                   | June 2024       |
| Flood risk assessment                            | 7.5  | 3.1                 | April 2025      |
| Land and crown plans                             | 2.2  | 5                   | February 2025   |
| Location and order limits plan                   | 2.1  | 0                   | June 2024       |
| Outline archaeological mitigation strategy       | 6.3.6.2  | 4                   | June 2024       |
| Outline battery safety management plan           | 6.3.3.1  | 5                   | February 2025   |
| Outline CEMP                                     | 6.3.5.1  | 5                   | October 2025    |
| Outline CTMP                                     | 6.3.5.2  | A                   | February 2025   |
| Outline design principles document               | 9.15   | 0                   | April 2025      |
| Outline DEMP                                     | 6.3.5.3  | 2                   | October 2025    |
| Outline LEMP                                     | 6.3.7.9  | 5                   | October 2025    |
| Outline OEMP                                     | 6.3.5.4  | 2                   | April 2025      |
| Outline soil resource management plan            | 6.3.14.3   | 1                   | January 2025    |
| Outline supply chain, employment and skills plan | 9.16   | 0                   | April 2025      |
| Works plans                                      | 2.3  | 6                   | June 2024       |

## **Appendix D: Letter from DPL and the Applicant**



02 October 2025

John Wheadon  
Head of Energy Infrastructure Planning Delivery  
Department for Energy Security & Net Zero  
3-8 Whitehall Place  
London  
SW1A 2AW

**Non binding letter of intent**

Dear Mr Wheadon,

**Helios Renewable Energy Project Development Consent Order (Application Reference: EN010140)  
Land Rights Update | Enso Green Holdings D Limited & Drax Power Limited**

Enso Green Holdings D Limited and Drax Power Limited are in advanced stages of negotiation and are confident that a voluntary legal agreement can be reached, subject to due diligence, documentation and management approval.

This letter is not intended to have any legal effect and is to provide commercial comfort only.

Yours sincerely,

[Redacted Signature]

Principal Planner

[Redacted Signature]

General Counsel

Signed by:  
[Redacted Signature]

For and on behalf of Enso Green Holdings D Limited

DocuSigned by:  
[Redacted Signature]

For and on behalf of Drax Power Limited



## **Appendix E: Water Environment Supplementary Assessment 2**



# Helios Renewable Energy Project Water Environment Supplementary Assessment 2

Enso Green Holdings D Limited  
October 2025

## DOCUMENT CONTROL

|                |   |            |
|----------------|---|------------|
| Job No         | E216  |            |
| File Reference | G:\workfiles\E216 CAMBELSFORTH\REPORTS\E216-DOC03-Water Environment Supplementary Assessment 2-Issue 1.docx |            |
|                | Name  | Date       |
| Prepared By    | B. Fox  | 06.10.2025 |
| Checked By     | M. Skivington   | 06.10.2025 |

| Issue   | Approved By                             | Date       | Comments              |
|---------|---|------------|-----------------------|
| Issue 1 | Ben Fox<br>BSc (Hons) MCIWEM C.WEM CEnv | 09.10.2025 | <i>For Submission</i> |

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| Figure 2.2 | Flood Risk from Surface Water Map                      |

APPENDICES

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| Appendix A | Copy of email correspondence with Environment Agency during Examination      |
| Appendix B | Surface Water Flood Risk Modelled Flood Depths<br>Drawing No. E216/172 Rev A |

## 1. INTRODUCTION

- 1.1. PFA Consulting Ltd has been commissioned on behalf of Enso Green Holdings D Ltd (the Applicant) to review the Environment Agency's ('EA') updated national flood risk maps, dataset and Flood Map for Planning and advise on the implications for the Proposed Development.
- 1.2. The application for the Helios Renewable Energy Project was supported by a range of assessments associated with water environment matters (flood risk and water quality). For completeness the current documents relating to the water environment are as follows:
- Flood Risk Assessment ('FRA') Issue 3.1 (updated at Deadline 7)
    - Part 1 of 6 [\[REP7-006\]](#)
    - Part 2 of 6 [\[REP7-008\]](#)
    - Part 3 of 6 [\[REP7-009\]](#)
    - Part 4 of 6 [\[REP7-010\]](#)
    - Part 5 of 6 [\[REP7-011\]](#)
    - Part 6 of 6 [\[REP7-012\]](#)
  - ES Chapter 9 Water Environment [\[APP-029\]](#)
  - Water Environment Supplementary Assessment Issue 2 [\[REP4-049\]](#)
  - Outline Construction Environmental Management Plan ('oCEMP') [SoS Consultation 1 Submission]
  - Outline Operational Environmental Management Plan ('oOEMP') [\[REP6-010\]](#) (updated at Deadline 6)
  - Alternative Site Assessment [\[APP-227\]](#)
  - Environment Agency Final Statement of Common Ground ('SoCG') dated May 2025 [\[REP8-015\]](#)
  - North Yorkshire Council Final SoCG dated April 2025 [\[REP8-016\]](#)
- 1.3. Following the completion of the Examination on 3 June 2025 and the submission of the Examining Authority's Report and Recommendation to the Secretary of State on 3 September 2025, the Secretary of State has requested additional information from the Applicant.
- 1.4. With respect to Flood Risk, point 22 states:
- "The Secretary of State notes that the Environment Agency has published new data following an update to the National Flood Risk Assessment. The Flood Map for Planning and flood zones were also updated on 25 March 2025. The Applicant should explain whether the updates have any implications for the conclusions of the Environmental Statement, including APP-029 Environmental Statement Chapter 9: Water Environment and REP7-008 Flood Risk Assessment. The Applicant should provide revised documents, as necessary."**
- 1.5. The purpose of this Water Environment Supplementary Assessment 2 is to explain the implications of the Environment Agency's updated national flood modelling that provides evidence for the updated National Flood Risk Assessment ('NaFRA2') on the Proposed Development and the conclusions of the Environmental Statement and FRA.

## 2. UPDATED NATIONAL FLOOD MODELLING

2.1. To inform NaFRA2 the Environment Agency uses new national modelling alongside local models to assess flood risk from fluvial (watercourses), tidal and pluvial (heavy rainfall) flood sources. The Environment Agency updated the following datasets following the publication of NaFRA2:

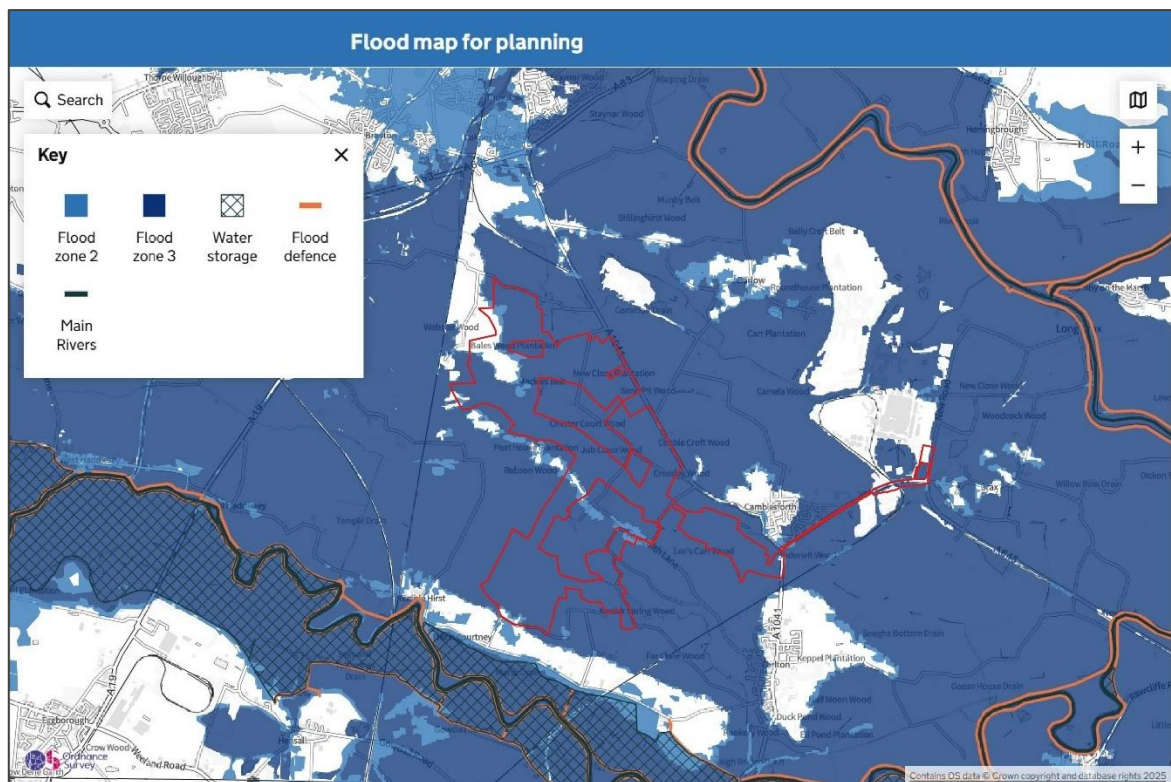
- 'Risk of flooding from rivers and sea'
- 'Risk of flooding from surface water'

2.2. The implications of the updated datasets are considered below.

2.3. The 'Flood Map for Planning' was also updated and presents different scenarios from the new national modelling and is relevant for the application of planning policy.

### Fluvial / Tidal Flood Risk

2.4. The updated Flood Map for Planning is shown in **Figure 2.1** below.



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**Figure 2.1: Environment Agency Flood Map for Planning (06/10/2025)**

2.5. By comparison with the Flood Map shown as Appendix 3 of the FRA, it can be seen that the Flood Map appears to be unchanged in this location.

2.6. Site-specific flood modelling was undertaken by Aegaea. Following engagement with the EA over the course of the project, the site-specific flood model was approved in July 2024.



- 2.7. The site-specific flood model therefore remains the best available information to assess fluvial/tidal flood risk on the Site. The updates to the EA's strategic flood models following the update to the NaFRA2 are therefore considered not to be relevant with respect to fluvial and tidal flooding and the conclusions of the FRA (supported by approved site-specific flood model) remain unchanged.
- 2.8. The site-specific flood model provides evidence for the assessment of tidal and fluvial flood risk on the Site and refines the strategic flood mapping with supplementary survey and assessment of climate change scenarios.
- 2.9. This position was acknowledged at the Examination during correspondence between the Applicant and the EA. A copy this correspondence is reproduced in **Appendix A**.

## Pluvial (Surface Water) Flood Risk

### Baseline Flood Risk

- 2.10. Surface water flooding happens when rainwater does not drain away through the normal drainage systems or soak into the ground, but lies on or flows over the ground instead. The GOV.UK's Flood risk from surface water map indicates where surface water may be expected to flood or pond and references the EA's 'Risk of flooding from Surface Water' ('RoFSW') dataset.
- 2.11. The RoFSW dataset assessed as part of the FRA was presented in Figure 14 of the FRA.
- 2.12. The RoFSW dataset was updated to take into account the new national modelling conducted by the EA to inform NaFRA2. The dataset now includes an allowance for 'mid-century' climate change which aligns with the 'Central' allowance for the 2050s epoch (2040-2060) for risk of flooding from surface water (+25% increase in peak rainfall intensity at this location). This is a suitable proxy for the pluvial 'design flood' which requires an assessment of +30% increase in peak rainfall intensity at this location (paragraph 3.81 of the FRA). The updated RoFSW Map is set out in **Figure 2.2** below.

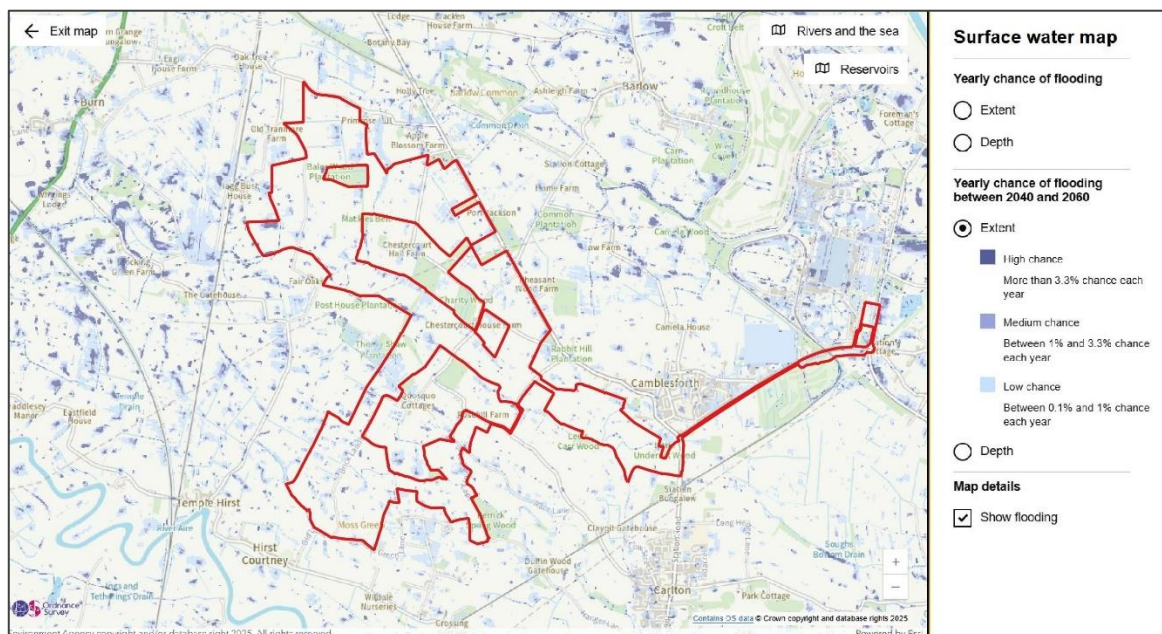


Figure 2.2: Flood Risk from Surface Water Map (06/10/2025)

2.13. With respect to the risk of flooding from surface water, paragraph 4.74 of the FRA stated:

*“The GOV.UK’s Flood risk from surface water map shows that the majority of the Site is at ‘very low’ risk (less than 0.1%). Smaller isolated areas of ‘low’ risk (between 0.1% and 1%), ‘medium’ risk (between 1% and 3.3%) and ‘high’ risk (greater than 3.3%) are present. The areas of elevated surface water flooding are associated with low points on the Site where surface water runoff could collect and routes of ordinary watercourses.”*

2.14. The assessment of surface water flood risk on the site remains broadly as assessed in the FRA, albeit with an increase in surface water flood extents (due to including an allowance for climate change within the RoFSW modelling).

2.15. The presentation of modelled flood depths has changed in the latest RoFSW dataset. The RoFSW is a probabilistic product, meaning that it shows the overall risk, rather than the risk associated with a specific event or scenario. The RoFSW dataset shows the likelihood of a flood occurring with water at a given depth (or lower) for depths up to 0.2m, 0.3m, 0.6m, 0.9m, and 1.2m. These datasets are presented on Drawing No. E216/172 Rev A contained in **Appendix B**.

2.16. Inspection of this drawing indicates that the flood depths are consistent with the assessment contained within the FRA which stated at paragraph 4.75 *‘The flood depths over 600mm deep are restricted to the channels of onsite watercourses. Areas of flooding with depths below 600mm are located at isolated areas throughout the Site. These are associated with lower lying areas of topography.’* Inspection of Drawing No. E216/172 Rev A indicates that the majority of the areas of elevated risk on the Site would be below 0.3m depth of flooding.

2.17. Modelled velocities of 0.25 m/s (or less) are predominately ‘very low’ probability of occurring indicating the surface water flooding is associated with surface waters collecting in localised low points rather than an overland flow route. Areas with modelled velocities over 0.25 m/s are associated with the routes of ordinary watercourses.

2.18. The conclusion of the FRA remains valid which stated:

*“The pre-development baseline risk of flooding from surface water is assessed as predominately ‘very low’ with areas of elevated risk associated with isolated low points and the route of onsite ordinary watercourses where surface water could collect.”*

#### **Flood Risk Mitigation Measures**

2.19. The FRA contained details of flood mitigation and adaption measures. These are primarily focused on ensuring the Proposed Development would be designed to be appropriately safe in the fluvial ‘design flood’ without increasing flood risk elsewhere. These measures would increase the resilience of the Proposed Development to the pluvial ‘design flood’.

2.20. The following flood mitigation and adaption measures relevant to surface water flood risk included:

- A. Ancillary control equipment would be preferentially located in areas of ‘very low’ surface water flood risk.
- B. Substation and Battery Energy Storage System (‘BESS’) Compound will be preferentially located in areas of ‘very low’ surface water flood risk.
- C. Finished floor levels of any ancillary control equipment in the Solar Farm Zone, including Invertor Station, Substation and BESS Compound will be raised at least +0.3m (and up to +0.6m) above existing ground level.



- 2.21. With respect to flood mitigation and adaption measure A) due to the size of the Site and extensive areas of 'very low' risk it would still be possible to preferentially locate ancillary control equipment in areas of 'very low' surface water flood risk as part of the detailed site design.
- 2.22. With respect to Flood Mitigation and Adaption measure B) the extents of elevated surface water flood risk have increased in the Substation and BESS Compound area taking into account the latest RoFSW dataset (which includes climate change). However, due to the size of the Substation and BESS Compound and extensive areas of 'very low' risk in this area it is considered it would still be possible to preferentially locate equipment in areas of 'very low' surface water flood risk as part of the detailed site design.
- 2.23. It should be noted that the surface water runoff contributing to the areas of elevated flood risk in the Substation and BESS Compound area would be generated by rainfall falling on this area of the Site. Following development, this rainfall would be intercepted by the surface water drainage system serving the Substation and BESS Compound area and managed (including temporary storage within the propose attenuation basins). Following the development of surface water drainage system serving the Substation and BESS Compound area the areas of elevated surface water flood risk in this area of the Site would reduce (due to the presence of a drainage system including attenuation storage). The presence of the surface water drainage system to manage rainfall (and therefore reducing surface water flood risk) could be taken into account as part of the detailed site design to optimise the design of the Substation and BESS compound.
- 2.24. With respect to flood mitigation and adaption measure C) raising ancillary control equipment +0.3m (and up to +0.6m) above existing ground level would continue to provide sufficient resilience to surface water flood risk. The modelled surface water flood depths remain consistent with the FRA.

#### **Development and Surface Water Flood Risk**

- 2.25. Taking into account the flood mitigation and adaption measures set out in the FRA the Proposed Development would remain resilient to surface water flood risk and the conclusion set out in paragraph 4.191 of the FRA remains relevant. This stated:

*"Where built development is proposed, the risk of flooding from surface water sources is the same as the pre-development baseline risk and ranges between 'high' and 'very low' on the Site. The design and management flood mitigation measures would ensure that the Proposed Development would remain operational and safe during the periods of elevated surface water flood risk and is compatible in these areas without increasing flood risk elsewhere."*

- 2.26. Although the extents of the elevated risk of surface water flooding have changed with the updated EA RoFSW dataset, the flood mitigation and adaption measures set out in the FRA remain appropriate. These measures would safely manage any residual risks from flooding and the Proposed Development would remain operational and safe and would not increase flood risk elsewhere during the pluvial 'design flood'.

### 3. SUMMARY

- 3.1. This supplementary assessment addresses the requests for additional explanation on the implications of the EA's national flood modelling on the Proposed Development.
- 3.2. Following the release of the flood risk datasets which underpin NaFRA 2 the extents of Flood Zones 2 and 3 presented on the Flood Map for Planning have not been updated at this location. The EA approved site-specific flood model provides the best available information for the assessment of tidal and fluvial flood risk on the Site. The updates to the EA's strategic flood models following the update to NaFRA2 are therefore considered not to be relevant with respect to fluvial and tidal flooding and the conclusions of the FRA (supported by approved site-specific flood model) remain unchanged.
- 3.3. With respect to surface water flood risk, the strategic surface water flood model (RoFSW dataset) refined the extents of elevated surface water flood risk on the Site. Although the extents of the elevated risk of surface water flooding have changed with the updated EA RoFSW dataset, the flood mitigation and adaption measures set out in the FRA remain appropriate. The majority of the Site remains at 'very low' risk (less than 0.1%) of surface water flood risk and areas of deeper flooding (>0.6m) would be restricted to the channels of onsite watercourses.
- 3.4. Due to the size of the Site and extensive areas of 'very low' risk it remains possible to preferentially locate ancillary control equipment in areas of 'very low' surface water flood risk as part of the detailed site design. The Proposed Development assessed raising finished floor levels of any ancillary control equipment at least +0.3m (and up to +0.6m) above existing ground level and this remains an appropriate mitigation to increase resilience to surface water flood risk.
- 3.5. The supplementary assessment provides confirms that the conclusions of the FRA are robust, that implementation of the embedded design mitigation measures (including the flood mitigation and adaption measures set out in the FRA) would safely manage any residual risks from flooding and the Proposed Development would remain operational and safe and would not increase flood risk elsewhere during the pluvial 'design flood'.



**From:** [REDACTED]  
**To:** [REDACTED]  
**Cc:** [Helios Renewable Energy](#); [Kirsty Lodge](#)  
**Subject:** RE: National Assessment of flood and coastal erosion risk 2024

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Afternoon Liz,

Thank you for flagging the updates to the Environment Agency's strategic flood risk datasets. As you are aware we benefit from a site-specific flood model which assesses fluvial and tidal flood risk to the site. The site-specific flood model has gone through the EA's model review process. As such this provides more relevant site-specific information compared with the strategic datasets updated in January 2025 (and to be updated in March 2025). As such we are not proposing any further assessment of this data as it will not change our understanding of the onsite fluvial/tidal flood risk.

Best wishes,

Abi

[REDACTED]  
Graduate Infrastructure and Environmental Planner

[REDACTED]@stantec.com

Stantec  
7 Soho Square  
London W1D 3QB



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**From:** [REDACTED]  
**Sent:** 28 February 2025 12:09  
**To:** [REDACTED]  
**Cc:** [REDACTED] ; Helios Renewable Energy  
**Subject:** National Assessment of flood and coastal erosion risk 2024

Dear Kirsty

Please find attached a standard letter we are issuing to all applicants regarding new national flood data that has/ is being published this January / March (National Flood Risk Assessment 2 – NaFRA2).

With regards to the Helios project, you have already undertaken bespoke modelling and therefore the new NaFRA2 data may not change what is required from the scheme. If you would like further confirmation, please contact us with such a request.

Regards,

Liz

[REDACTED]  
Planning Specialist, National Infrastructure Team

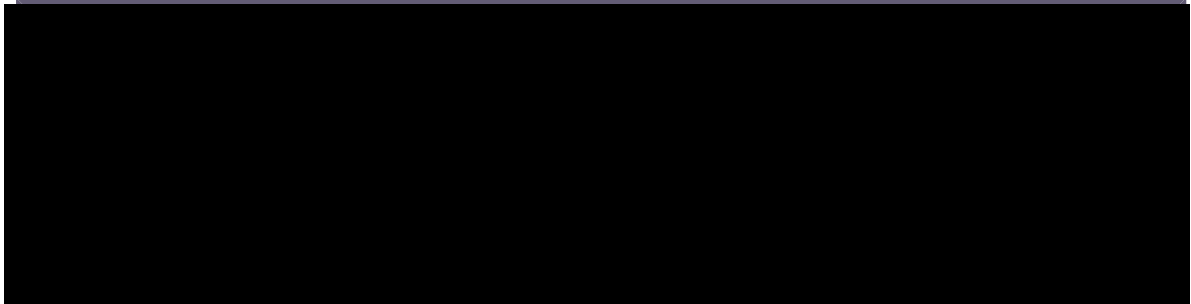
**Environment Agency**

[REDACTED]@environment-agency.gov.uk

Team mailbox: [NITeam@environment-agency.gov.uk](mailto:NITeam@environment-agency.gov.uk)

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Via email

██████████@ensoenergy.co.uk

**Our ref:** XA/2024/100131/01-L02

**Your ref:** EN010140

**Date:** 27 February 2025

Dear Kirsty

We are writing to make you and the Planning Inspectorate aware of new flood and coastal erosion risk data, some of which may affect your project. You may already be aware we are producing new data following the release of our [National assessment of flood and coastal erosion risk in England 2024](#) report in December.

### **What new data we are publishing and when**

On 28 January 2025 we published:

- **New surface water flood risk extents, including a climate change scenario** – may inform flood risk assessments but will require additional assessment as the climate change scenario is likely to fall short of what's needed in planning
- **New surface water flood risk depths, including a climate change scenario** – unlikely to be suitable for use in planning due to the climate change scenario chosen and because of how depth information is derived
- **New coastal erosion risk data** – suitable for use in planning
- **New risk of flooding from rivers and sea data** – not suitable for use in planning because of how flood risk management infrastructure is accounted for and due to the climate change scenario chosen

On 25 March 2025 we will publish further data, all of which will be relevant to planning:

- **Updated Flood Zones**
- **River and sea flood risk extents with defences for both a present day and a climate change scenario** in the 3.3%, 1%/0.5% and 0.1% annual exceedance probability events
- **River and sea flood risk extents without defences for both a present day and a climate change scenario** in the 1%/0.5% and 0.1% annual exceedance probability events

Following publication, we plan to update flood risk datasets every 3 months and coastal erosion risk datasets every 12 months to take account of any new local models. In 2025/26, flood risk updates may be more or less frequent as the new approach is established.

We also expect to publish further data in due course including:

- Surface water flood risk climate change extents using a climate change scenario more likely to be suitable for use in planning
- Surface water flood risk depth information suitable for use in planning
- River and sea flood depth information for both a present day and a climate change scenario, suitable for use in planning

### **Where new data will be available**

All our new data will be made freely available via the Defra [Data Services Platform](#).

The data published in January is available across various services:

- [Check your long term flood risk](#)
- [Shoreline Management Plan Explorer](#)
- [Check coastal erosion risk for an area in England](#)

The data published in March will be available on the [Flood Map for Planning](#) service.

The March data will not be available to you prior to publication.

### **Our expectations**

Once the new data is published we will expect you to assess whether it has any implications for your proposed development. In many cases our understanding of risk will not change significantly, but you will need to confirm to us that this assessment has been completed, and whether any additional assessments or changes to the proposed development are considered necessary in light of the new data.

We will continue to provide advice in response to consultations, following the usual process – including cost recovery. The Infrastructure Planning (Fees) (Amendment) Regulations 2024 allow us to recover our costs for all stages of the NSIP process from 1 April 2024. Therefore, additional charges may be incurred on submission of any updated information.

In the meantime, where relevant, flood risk and coastal change will be noted as ‘outstanding issues’ until such time as we are satisfied that the new data has been assessed and any potential impacts considered.

### **Next steps**

Please look out for the data planned for release on 25 March 2025.

We will write to you again when the date for subsequent data releases is known.

Yours faithfully

[REDACTED]

**Planning Specialist – National Infrastructure Team**

[REDACTED]

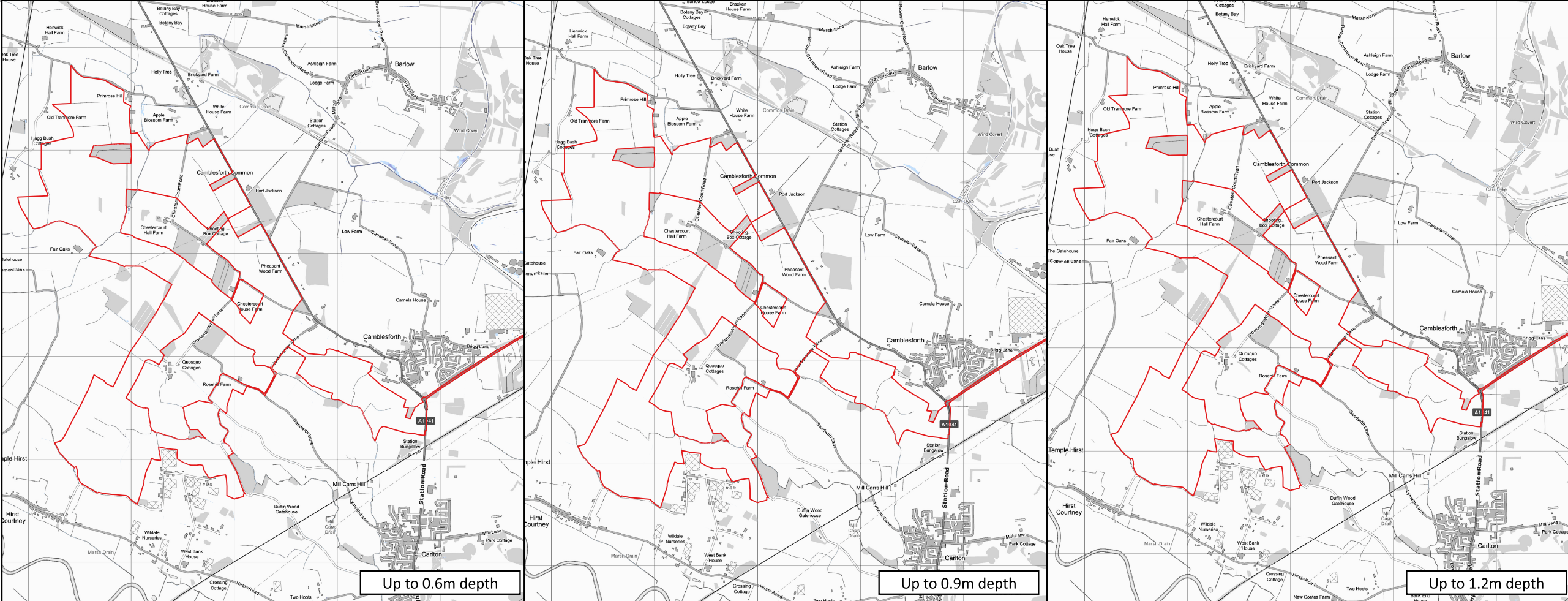
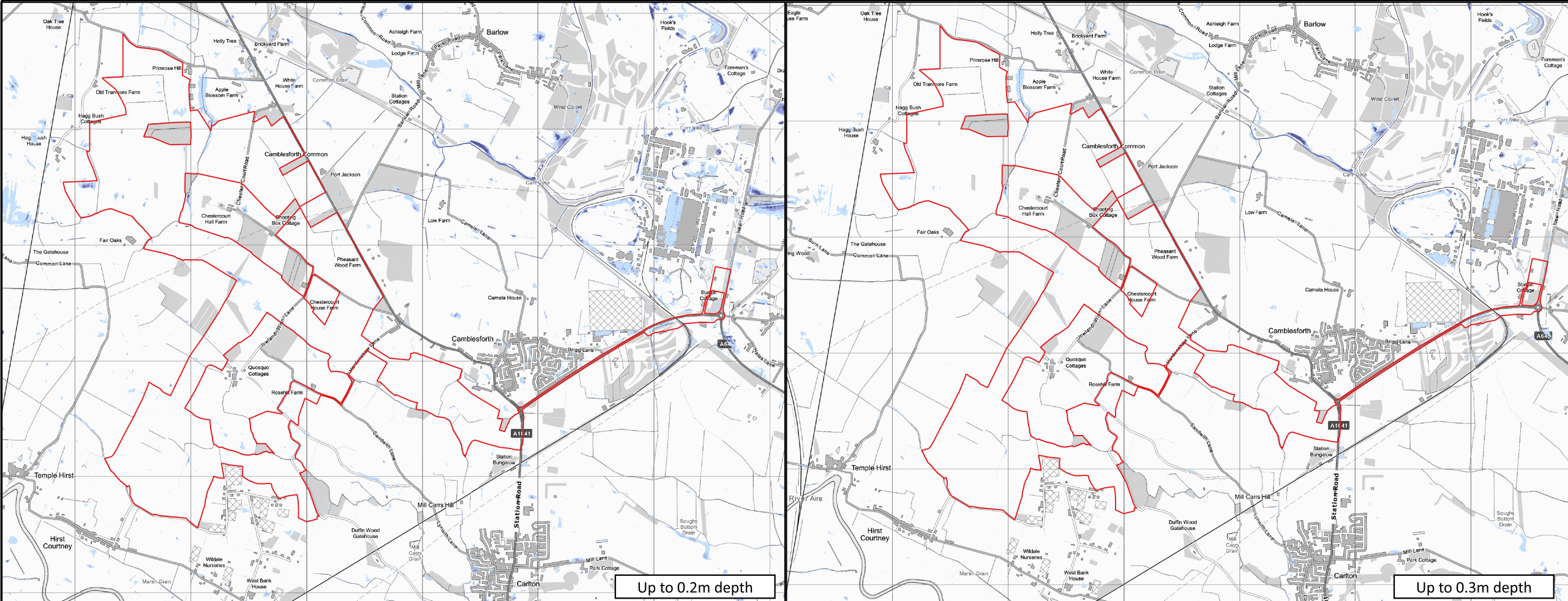
[REDACTED]@environment-agency.gov.uk

Cc [REDACTED]@stantec.com

[HeliosRenewableEnergy@planninginspectorate.gov.uk](mailto:HeliosRenewableEnergy@planninginspectorate.gov.uk)







Status

FOR PLANNING

This drawing is produced for the purposes of supporting a planning application and should not be relied upon for tender, pricing or construction purposes

0 225 450 675 900 1,125 m

N

Scale 1:45,000

KEY

Risk of Flooding from Surface Water (RoFSW)

Probability of Flood Depth Occurring

Ref: rofsw\_cc01\_4band

High

greater than or equal to 1 in 30 (3.3%) chance of flooding in any year

Medium

Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance of flooding in any given year

Low

Less than 1 in 100 (1%) but greater than or equal to 1 in 1000 (0.1%) chance of flooding in any given year

NOTES

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2. Contains public sector information licensed under the Open Government Licence v3.0.

3. Drawing is based upon Order Limits Location Plan, Enso Energy Drawing No. DX-01-P01 Rev11 dated 15/02/2024.

4. Drawing is based upon Parameter Plan, Enso Energy Drawing No. DX-01-P02 Rev 11 dated 15/04/2024.

Rev Date

Description

Drawn

Check

#

06/10/25

First issue,

BF

MWS

A

09/10/25

Parcel boundaries removed for clarity

BF

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Client

Enso Green Holdings D Limited

Project

Helios Renewable Energy Project

Drawing Title

Surface Water Flood Risk Modelled Flood Depths

Sheet 1 of 1

Drawing No.

1087/03

Rev

A

Email: bfox@pfaconsulting.co.uk

A3