



Longfield Solar Farm

Written Summary of Longfield Solar Energy Farm Limited's Oral Submissions at the Environmental Matters Hearing on 29 September 2022

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1. Introductory remarks

1.1 Introduction

- 1.1.1 The Environmental Matters Hearing was held at 10:00am on 29 September 2022 using the virtual platform of Microsoft Teams.
- 1.1.2 The Environmental Matters Hearing took the form of running through the items listed in the agenda published by the Examining Authority ("The ExA") on 16 September 2022 (the "Agenda"). The discussion on environmental matters predominantly focused on:
 - 1.1.2.1 Best and Most Versatile ("BMV") agricultural land;
 - 1.1.2.2 ecology and biodiversity;
 - 1.1.2.3 battery technology and safety;
 - 1.1.2.4 historic environment; and
 - 1.1.2.5 other points of clarification, namely flood modelling, proposed hours of construction and minerals.

2. Agenda Item 1 – Introduction of the Participants

2.1 The Examining Authority

2.1.1 Rory Cridland.

2.2 The Applicant

2.2.1 **SPEAKING ON BEHALF OF THE APPLICANT:** Alexis Coleman (Senior Associate at Pinsent Masons LLP).

2.2.2 Present from the Applicant: Carly Vince (Chief Planning Officer at EDF Energy Renewables) and Matt Bussey (Assistant Project Manager at Pershing Consultants – the Applicant’s project managers for the application).

2.2.3 The Applicant’s consultants and legal advisors: Richard Griffiths (Partner at Pinsent Masons LLP), Alex Tresadern (Solicitor at Pinsent Masons LLP), Neil Tittle (Technical Director, EIA, AECOM), Alison Leeder (Technical Director, Planning, AECOM), Jon Howells (Associate Director, Social Economics, AECOM), Ruth Metcalfe (RSK ADAS Ltd), Graham Roberts (Chartered Engineer, Battery Energy Storage System and Solar PV Lead, EDF Energy Renewables), Loic Boscher (Principal Heritage Consultant, AECOM), Mark Service (Principal Built Heritage Consultant, AECOM), Mike Padfield (Associate Director, Ecology, AECOM), Sam Griffiths (Principal Landscape Architect, AECOM) and Chris Brandon (Principal Flood Engineer, AECOM).

2.3 Host Authorities

2.3.1 Braintree District Council (BDC): Tim Havers (Planning Lead), Julie O’Hara (Senior Planning Policy Officer), Pam Sharp (Environmental Health), Carol Wallis (Senior Planning Officer, BDC Policy Planner) and Laura Johnson (Senior Heritage Consultant for Place Services on behalf of Braintree District Council).

2.3.2 Chelmsford City Council (CCC): Ruth Mabbutt (Planning Lead), Michael Hurst (Principal Heritage Officer).

2.3.3 Essex County Council (ECC): Rachael Donovan (Lead Planning Officer), Glenn Shaw (Water Regulation Engineer), Teresa O’Connor (Historic Environment Consultant), Claire Tomalin (Planning Officer for Minerals and Waste), Philip Dash (Planning Officer for Minerals and Waste), Robert Lee (Public Rights of Way Officer, representing the Highway Authority) and Matthew Bradley (Strategic Development Manager, representing the Highway Authority).

2.3.4 Bobby Browne and Gill Wynne-Williams (representing Braintree District Council, Chelmsford City Council and Essex County Council from a Landscape and Visual Impact Assessment perspective).

2.3.5 Hamish Jackson (Ecological Consultant, Place Services – representing Braintree District Council and Chelmsford City Council).

2.4 Interested Parties

2.4.1 Katherine Evans – Chairperson of Essex Local Access Forum.

2.4.2 Dr Linda Reed (Councillor, Boreham Parish Council).

2.4.3 Graham Reeve (Essex Ramblers Association).

3. Agenda Item 2 – Main Discussion Points

3.1 Best and Most Versatile Agricultural Land

Policy

- 3.1.1 In response to a question from **the ExA** as to how the 2015 Ministerial Statement had been taken into account by the Applicant, and what weight should be given to the 2015 Ministerial Statement, **Alexis Coleman** on behalf of the Applicant noted that the Applicant would confirm its position in writing. Ms Coleman noted that the National Policy Statement (“NPS”) and draft revised NPSs are the predominant policy, so it is at the discretion of the Secretary of State as to the weight to be attributed to the Ministerial Statement.
- 3.1.2 **Richard Griffiths** on behalf of the Applicant added that in this written position statement, the Applicant would explain that its position is that the 2015 Ministerial Statement is not a “relevant and important” matter and therefore should not be taken into account under section 105 of the Planning Act 2008. In the event that the Secretary of State decides otherwise, then it is the Applicant’s position that no weight should be given to this 2015 Ministerial Statement on the basis that its applicability is to applications made under the Town and Country Planning Act 1990 and not the Planning Act 2008, with the Energy National Policy Statements and Draft Energy National Policy Statements being given the greater weight.
- 3.1.3 **Post hearing note:** The Applicant has provided a note at Deadline 3 in response to this question, which is appended to this document at Appendix A.
- 3.1.4 **The ExA** noted that the Braintree Local Plan has been adopted, meaning that the Applicant’s documents would need to be updated to refer to this adopted Local Plan. This is also the case for the Chelmsford Solar Farm SPD – **the ExA** asked **Ruth Mabbutt** of Chelmsford City Council (“CCC”) to provide a copy of the updated SPD at Deadline 3, which was agreed.
- 3.1.5 **Ms Coleman** confirmed that the Applicant’s Planning Statement would be updated in this respect. **Post hearing note:** The Applicant intends to provide this update at Deadline 4.
- 3.1.6 **The ExA** asked about the position of Braintree District Council (“BDC”) on the BMV Land included within the Order Limits for the Scheme, and the non-compliance with policy referred to in BDC’s Local Impact Report [REP1B-059].
- 3.1.7 **Ms Coleman** referred to the relevant parts of the BDC Local Plan policy LLP 3, as follows –
- 3.1.7.1 *“Proposals for renewable energy schemes will be encouraged where the benefit in terms of low carbon energy generating potential outweighs harm to or loss of ... best and most versatile agricultural land ...”* – Ms Coleman noted that BDC had not undertaken the balancing exercise in its Local Impact Report. Ms Coleman referred to the position of CCC in its Local Impact Report [REP1b—063], at

paragraph 6.148, where in applying its own policy it had reached a similar conclusion to BDC in terms of the loss of BMV land, but in undertaking the balancing exercise it concluded that the need for low carbon energy generation and other benefits from the Scheme outweighed the loss.

- 3.1.7.2 *Requirement for large scale solar farm applications to be accompanied by a sequential assessment* – Ms Coleman noted that the Applicant had done this assessment (in the **Planning Statement [EN010118/APP/7.13(A)]**) and BDC had not raised any concerns in this respect.
- 3.1.7.3 *“Compelling justification must be provided for proposals on high quality agricultural land”* – Ms Coleman noted that the Applicant’s application documents provided this justification, and submissions from the Applicant made during the hearing would also provide further justification for inclusion of some BMV land within the Order Limits.
- 3.1.7.4 *Proposals on high quality agricultural land “should demonstrate how the installation allows for continued agricultural use and/or enhances biodiversity around the panels”* – Ms Coleman confirmed that the proposed Scheme complied with this policy requirement, noting the biodiversity net gain of 79% to be delivered as part of the Scheme. Ms Coleman also noted how the Applicant has worked closely with the landowner to ensure the ongoing viable, agricultural use of the remainder of the landholding.
- 3.1.7.5 *Requirement for a condition for the site to be decommissioned and restored* – Ms Coleman confirmed that the Applicant’s draft DCO included a requirement to decommission and restore the site, and that it now also included a 40 year limit on the operation of the Scheme.
- 3.1.8 **Rachael Donovan** on behalf of Essex County Council (“ECC”) noted that, in regard to BMV land, ECC supports the positions of BDC and CCC.
- 3.1.9 **Ms Coleman** noted that with respect to concerns raised in the CCC and BDC Local Impact Reports, that the solar farm may not be considered a “temporary” use, the Applicant’s position that the Scheme was temporary and reversible had been agreement with **Natural England in the Statement of Common Ground (“SoCG”) [EN010118/EX/8.4(A)]**, line 32, in which agreement is recorded as follows:
- “Although 150ha of BMV land is used for the Scheme, only 15ha of farmland is permanently lost during operation and could not be farmed while the Scheme is operational; this includes 6ha of BMV land. The other BMV land is not lost, could still be used for some pastoral farming, benefits from the removal of intensive farming practices for 40 years, and is available for all types of farming again following decommissioning of the Scheme.”*
- 3.1.10 And line 33 where Natural England’s position is recorded as follows (emphasis added):
- “We consider that the proposed development, if temporary as described, is unlikely to lead to significant permanent loss of BMV agricultural land,***

as a resource for future generations. *This is because the solar panels would be secured to the ground by steel piles with limited soil disturbance and could be removed in the future with no permanent loss of agricultural land quality likely to occur, provided the appropriate soil management is employed and the development is undertaken to high standards. Natural England would advise that a requirement should be secured by a suitably worded requirement in the DCO, if the project is approved, to safeguard soil resources and agricultural land, including a required commitment for the preparation of reinstatement, restoration and aftercare plans; normally this will include the return to the former land quality (ALC grade)."*

- 3.1.11 **Ms Coleman** also noted the position in Little Crow, where the Secretary of State agreed with the ExA's conclusion that solar production for a 35-year period amounted to a temporary, reversible impact which would not amount to a permanent loss of farmland. **Ms Coleman** quoted from the Secretary of State's decision letter in Little Crow, paragraph 4.50 as follows:

"The majority of the agricultural land that would be used is Grade 3b, which does not constitute BMVL, although 36.6ha would be Grade 3a (which is BMVL) [ER 4.10.37]. This would be affected for the 35 year lifetime of the proposed Development and then be returned to agricultural use, and the ExA considered this did not amount to a permanent loss of farmland [ER 4.10.38]. The ExA agreed the proposed Development's impact on agricultural land would be short term, reversible, local in extent, and of negligible significance during the construction and decommissioning phases, and medium term, reversible, local in extent and of negligible significance during the operational phase with a moderate beneficial effect for the quality of the soils because intensive cropping would be replaced by the growing of grass [ER 4.10.39]. ... The Secretary of State agrees with the ExA's approach to this issue."

- 3.1.12 **Tim Havers** noted that BDC are raising the 40 year time period in the Application as a question, rather than concluding definitely that this is temporary or permanent. **Ruth Mabbutt** stated that the question concerns the perception of this time period, referencing paragraph 6.1.5 of CCC's Local Impact Report.
- 3.1.13 **Mr Griffiths** on behalf of the Applicant noted with respect to the 40 year timeframe, that the project is one of national significance and referenced the national need to transition from high carbon to low carbon energy, and the 40 year period represents that transition period.
- 3.1.14 **Alan Swash** noted that food production is an important consideration when considering BMV land, specifically land used for this in the current environment which demands the UK be more self-sustainable.
- 3.1.15 **Ms Coleman** responded by noting that there is no policy that specifically refers to food security for the purposes of deciding the application under the PA 2008 – the Applicant's position is that food security requirements are reflected in current policy on BMV land, as they go hand in hand with the protection of high grade agricultural land, rather than being subject to any additional policy.

Baseline and Operational Effects

- 3.1.16 **The ExA** asked for an explanation of the effects on BMV land as assessed in Chapter 12 of the Environmental Statement [APP-044], with respect to impacts that occurred during construction and whether they carried on throughout operation.
- 3.1.17 **Jon Howells** noted that the Applicant had considered temporary and permanent impacts in its assessment, which in line with EIA standard practice. The findings of the assessment in terms of loss of BMV land was that because of the temporary nature of the effect, it is assessed to not be significant pursuant to Natural England's guidance. The approach taken by the Applicant reflects that the guidance is not overly prescriptive, and so the Applicant discussed its approach with Natural England who have agreed with the approach taken in the Applicant's assessment (see **SoCG [EN010118/EX/8.4(A)]**). The operational impacts have been covered by the temporary and permanent loss that first occur in the construction period, such that there is no further assessment required in relation to these.
- 3.1.18 **The ExA** queried whether the impact in question only occurs during construction. **Alexis Coleman** confirmed that the impacts are introduced in construction, but are ongoing throughout the development, which the assessment has considered.
- 3.1.19 **The ExA** referenced the potential effect on food production during the operational phase, and whether this has been considered in the Applicant's assessment. **The ExA** queried the land use, noting that the land currently supports a certain type of agriculture during construction and operation, and asked whether the Environmental Statement considers changes to the baseline in general terms.
- 3.1.20 **Richard Griffiths** answered that the impact on the soils occurs at the construction stage, by stripping the soil to construct the scheme, which is managed via the soil resource management plan. This is also the point when the change of use occurs, where some of the land that is currently in agricultural use is used primarily for electricity generation. The project then operates for 40 years; with the change of use continuing for 40 years, but there is no additional effect on soils. Then, at decommissioning, the soil management plan ensures that the land retains its BMV status and is returned to agricultural use. The only exception is the 15ha which is permanently lost.
- 3.1.21 **Mr Griffiths** explained that the baseline can change continuously with the type of agricultural use changing over time and the output of land varying by year. A farmer can choose to switch between food crops, energy crops, grazing and entering land into biodiversity enhancement schemes with no notice and often guided by commercial considerations. This would make it very difficult to estimate the impact of the change of use on food production for the 40 year period. There is no permanent change of use and agricultural use can resume over most land within the Order Limits after the Scheme is decommissioned.
- 3.1.22 **Mr Griffiths** also noted in terms of food security that the policies aimed at minimising impacts on and use of BMV land, go hand in hand with food security, as those policies are for the purpose of providing protection for best and most versatile agricultural land, which is land that is used for cropping,

food production, running livestock etc. As set out in submissions, such as those from the solar campaign alliance, climate change is one of the biggest threats to food production in the UK. Rather than threatening food production, the scheme is part of the solution to fighting climate change over the next 40 or so years – which in turn supports food security.

- 3.1.23 **Mr Griffiths** confirmed that the figures show that even with government plans to reach 70gw of solar by 2035 (British Energy Security Strategy – an increase of 56gw from current solar capacity), total solar coverage of the UK would only amount to 0.4-0.6% of land, equivalent to about 0.8% of currently agricultural land use. Mr Griffiths submitted that solar is not at odds with food security and agriculture, rather there are opportunities for these land uses to co-exist and for solar to support continued and more efficient agricultural, including food production, in the long term.
- 3.1.24 **Katherine Evans** asked if livestock farming had been considered as agricultural use when considering the impact on BMV.
- 3.1.25 **Alison Leeder** confirmed that it had and confirmed that the Applicant has considered the area of land lost, rather than current use, noting that the farmers remain entitled to farm their land in whichever way they see fit at any given time. The assessment is one that is based on the grade of the agricultural land, rather than its current use.
- 3.1.26 **Mrs Evans** sought reassurance that when the balancing was done, in relation to the policy points described above, the land used by livestock was considered.
- 3.1.27 **Ms Leeder** provided this reassurance and noted again that the focus was on the classification of the land, rather than the use. The classification of agricultural land focuses on the potential for the land to facilitate agricultural activities so is not affected by current land practices, such as current land drainage or whether the field is in arable or pastoral use.

Agricultural Land Survey

- 3.1.28 The ExA sought clarification with respect to the Applicant's **Agricultural Land Classification Survey Report (ES Appendix 12A) [EN010118/APP/6.2]**, in particular the reason brackets were used around certain figures in some tables; in relation to samples identified as being "borderline" between two categories (e.g. Grades 3a/b) and how many of these fall within the Order Limits and how have these informed the assessment; and which factors the Applicant used to determine the allocation / grading of "borderline" samples and to confirm in this respect that the approach taken has enabled a worst case assessment.
- 3.1.29 **Alexis Coleman** confirmed the Applicant would respond in writing on all points.
- 3.1.30 **Post hearing note:** The Applicant has prepared a note addressing these points, and this is attached to this written summary at **Appendix B**.

Continued agricultural use including factors that will determine whether the land is grazed during operational lifetime

- 3.1.31 **The ExA** sought clarification on the Applicant's position in relation to grazing, particularly which factors would be considered with regard to whether grazing would take place.
- 3.1.32 Alexis Coleman noted that the position is that there is the potential for grazing to be explored for the management of some habitats on the site (see **ES Chapter 12: Socio-economics and Land Use [EN010118/APP/6.1]**).
- 3.1.33 **Ms Coleman** confirmed that there is nothing in the design of the Scheme that would prohibit grazing (for example, spacing between panels), however, the Applicant's understanding is that rather than the operator of the solar farm grazing sheep, the usual approach would be that local sheep farmers may approach the solar farm operator to graze their sheep on the solar farm. Ms Coleman confirmed that the Applicant is open to this, however, it is difficult for the Applicant to commit to grazing at this stage as it is largely outside of its control.
- 3.1.34 For the purposes of compliance with relevant policy, **Ms Coleman** confirmed that the Applicant does not rely upon the potential for continued agricultural use by way of grazing. The Applicant considers that it has demonstrated how the impacts on BMV land have been minimised – both in relation to the amount of land temporarily affected, and due to the soil management practices that would be in place and the reversible and temporary nature of the Scheme.
- 3.1.35 The Applicant also considers sustainability considerations such as the effective and efficient use of the land, and in particular the overwhelming and urgent need for renewable energy, justify the small proportion of BMV land that will be used temporarily by the Scheme (and the even smaller proportion, a mere 6ha, that will be lost permanently).
- 3.1.36 **Ms Coleman** also noted that in terms of contributing to ongoing agricultural use -
- 3.1.36.1 The Applicant has worked closely with the Landowner in developing the design of the Scheme, in order to enable the retention by the landowner of a large area of farmland to the east of the Order Limits that they can continue to farm. The design has avoided creating pockets of agricultural land that would be isolated from the rest of the agricultural holding, in order to avoid inefficiencies in the farming that will continue on the rest of the holding, and so as not to affect the viability of the remaining areas that will continue to be farmed.
- 3.1.36.2 The Applicant is working to find an academic partner to collaborate with in developing a biodiversity trial area, with a view to undertaking research on the trial area to study and develop the research around solar farms and improvements to biodiversity and soil management, and the interaction with practices such as grazing. It is anticipated that different methods of planting under and around PV Arrays would initially be trialled to investigate which methods may be most effective in the context of current, operational and future needs of the land. There is the potential for outcomes of this research to be fed

back into the management of the Longfield solar farm, in particular management of biodiversity and soil, and also to be used more widely for other solar farms, which in turn has potential benefits for BMV land and agricultural, alongside solar farm, more generally.

- 3.1.37 **The ExA** confirmed that the Applicant is not putting forward grazing as a benefit, rather it is noting that the land is not sterilised during the 40-year period.
- 3.1.38 **Ms Coleman** confirmed this, noting that grazing would not be prohibited and that the Applicant, whilst not committed to it, will explore the possibility of grazing. Ms Coleman also confirmed that grazing would not affect the Applicant's Biodiversity Net Gain commitment.
- 3.1.39 **Dr Linda Reid** stated that many environmentalists would consider heavy grazing to have an impact on Biodiversity Net Gain, and therefore would expect grazing to be limited.
- 3.1.40 **Ms Coleman** responded by confirming that the Applicant's draft DCO included a requirement committing it to delivery of a minimum percentage of Biodiversity Net Gain (79%) and that requirement is enforceable against the Application. Ms Coleman added that there are monitoring obligations in the OLEMP in relation to delivery of the Biodiversity Net Gain. Ms Coleman confirmed that the Applicant is committed to the delivery of 79% net gain and will ensure that any grazing is considered within this, and an update would be provided at Deadline 4.

Justification for BMV remaining within the Order Limits

- 3.1.41 The Applicant proposed taking the ExA through the BMV land that remains within the Order Limits, to explain the justification in this respect. This was undertaken by the Applicant with reference to Figure H from the **Planning Statement [EN010118/APP/7.2(A)]**, page 84.
- 3.1.42 **Alison Leeder** on behalf of the Applicant explained that the Applicant has worked closely with the landowner in relation to BMV land to be included and excluded from the Order Limits, alongside considering the BMV survey. The farmers have told us that the ALC Grade 2 and 3a land retained within the Longfield Solar Farm would not be viable to farm on its own alongside the solar scheme. There has been effort made to exclude grade 2 and 3a land from the proposed solar development, and to keep good quality land with the farming tenants.
- 3.1.43 In terms of the specific areas of BMV land that are included within the Scheme, these are justified by particular factors related to their location and context within the Scheme, the wider landholding, and in relation to adjacent and surrounding land. Figure H provided on page 84 of the Planning Statement **[EN010118/APP/7.2(A)]**, identifies six areas of BMV agricultural land that are included within Order Limits. The PDA numbers are references to land parcels as shown on the Works Plans.
- 3.1.44 **Ms Leeder** talked through each of the main areas of BMV land included within the Scheme by reference to Figure H as follows -

- 3.1.44.1 **Area 1** is located to the far south of the Order Limits and comprises an area of Grade 2, 3a and 3b land. The parcel is located between the two areas of Toppinghoehall Wood (PDA 31). This field benefits from existing visual screening from established woodland on three sides. This visual screening can be further enhanced and makes it a good location for the BESS and Longfield Substation which are the largest structures that form part of the Scheme within the Longfield Site. The ability to site these structures in a location that is well screened helps to minimise the landscape and visual impact of the Scheme, making it less impactful in these respects than if the field was excluded from Order Limits and the BESS and Solar Substation located elsewhere. This sustainability consideration justifies the inclusion of the BMV land in this area within the Order Limits. Areas located in close proximity to woodland can also have increased risk of pests and wildlife, which can reduce yields, meaning that it would not be an ideal field for the landowner to retain and farm as part of the remaining holding.
- 3.1.44.2 **Area 2** is the area to the north, north-west and west of Ringers Wood, PDA 12, 13, 15, part of 16, 17, 18. This area is in the centre of the site so some development would always be required in this area to connect the other parts of the site and create an efficient solar farm. The higher quality lands around PDA 17, PDA 16 and PDA 15 are not straight-forward to crop, due to the public footpath, woodland, and pylon lines passing through these fields. These areas are and will be surrounded by both the wildlife rich areas of the solar farm and the woodland, and we expect that both of these factors will lead to increased pest pressure on the crops and therefore reduced yields, and the small, isolated areas will make it difficult to control the pests. The BMV land in this area mostly forms sections of larger fields in which the remaining land is of a lower ALC grade; it is not practical or desirable to split existing agricultural units to avoid these areas.
- 3.1.44.3 **Area 3** is part of PDA 5 and 6 on the Works Plans and comprises Grades 2, 3a and 3b land. This area is isolated from the other farmed land and the crop storage facilities to the east of the scheme. The extra travel to the small areas would require more time and burn more diesel to continue farming so it would not be efficient to include this land in the remaining holding. As per area 2 above, there are areas of woodland adjacent to the area of BMV land and the BMV land comprises part of agricultural fields that also contain lower grade areas.
- 3.1.44.4 **Area 4** is located to the far north of the Order Limits and comprises some 3a land. No panels are proposed in this area, it is proposed for habitat management only. This area is adjacent to the River Ter and is currently not used for arable farming so using this for biodiversity would not change its current use or reduce the area being used for arable farming.

- 3.1.44.5 **Area 5** is located close to area 4 in the far north of the Scheme and is used for livestock grazing rather than arable farming. It is included within the Scheme for biodiversity mitigation and enhancement, and may be managed for this purpose by grazing, which would continue the current use of the field, albeit potentially with fewer grazing animals. The inclusion of this field within the Scheme is justified by the biodiversity and enhancement benefits which outweigh any limited loss of agricultural productivity. National schemes exist that encourage farmers to set aside areas of agricultural land for biodiversity purposes so the principle of using land for this purpose is not unusual.
- 3.1.44.6 **Area 6** includes PDA 27 and 29 and is a small area of Grade 2 land connecting other parts of the Scheme to the east and the west. The areas to the east and west of the Grade 2 land are classified as Grade 3b. In PDA 27 we have created a new, artificial field boundary to avoid some BMV land to the east of the Order Limits, but the remaining south-western corner of PDA27 that is classified as Grade 2 land is awkward to farm, as natural features such as trees and ponds prevent efficient cropping. In addition to this the two pylon towers in PDA27 also mean that cropping machinery cannot take straight runs. To omit this semi-circular area would not create a logical additional area to farm and would reduce the area for the solar farm so would not be an effective use of land. Area 29 is adjacent to the woodland, which tends to increase pest pressure and is bordered to the east and west by areas of 3b land so omitting it would also require omitting areas of lower value land. The area of BMV land here is also small and awkwardly shaped.
- 3.1.45 **Ms Leeder** concluded that overall, the areas of BMV land that could be omitted from the Scheme and effectively farmed alongside the Scheme have been removed through the design process. The remaining areas are generally, small, awkwardly shaped and dispersed across the site, interspersed with areas of lower quality land. Other sustainability considerations have also influenced the final site boundary, such as the inclusion of the well screened area for the BESS and inclusion of the area of land in the north that would not be an efficient area to farm for the landowner if omitted from the solar farm. This meant that while the design of the scheme sought to preferentially use areas of lower quality land in line with policy in EN-1, some areas of BMV land are retained to deliver maximum energy generation benefits where continuing farming those areas would not constitute an efficient use of land.
- 3.1.46 **Alexis Coleman** for the Applicant summarised that the Applicant had worked hard to minimise the BMV land included within the Scheme. For those parts remaining, the Applicant considered these were justified having regard to the various sustainability considerations set out by Ms Leeder. On balance, the Applicant considered the BMV land remaining within the Order Limits to be justified, having regard to all relevant factors, including the urgent need for renewable energy.
- 3.1.47 **Ms Coleman** noted that the above analysis set out by Ms Leeder is supported by the landowner's views, and the Applicant and the landowner have worked

together closely to ensure that the proposed solar farm is as sympathetic as possible to existing farming operations.

3.2 Ecology / Biodiversity

OLEMP – Monitoring and Remedial Measures

- 3.2.1 **Mike Padfield** on behalf of the Applicant explained that at Deadline 1B, the Applicant updated the **Outline Landscape and Ecology Management Plan (“OLEMP”)** [EN010118/APP/7.13(A)] to include further detail with respect to monitoring. Mr Padfield explained that there would be monitoring of the enhancements made under the OLEMP, and that results of monitoring would be compared with the baseline data. There would be an Ecological Advisory Group to feedback on the results coming out of the monitoring, to inform any further actions to be taken.
- 3.2.2 **The ExA** asked if further detail could be added to the OLEMP to expand upon the monitoring and remedial measures, and the Applicant agreed to do this. Post hearing note: The Applicant has added further detail in this respect in the OLEMP at Deadline 3.
- 3.2.3 **Dr Linda Reid** asked if the OLEMP measures covered the entire Order Limits of the Scheme, which Mr Padfield confirmed that the monitoring measures in the OLEMP cover anywhere that these enhancements are created within the Scheme.

Arboricultural Impact Assessment

- 3.2.4 **Neil Titley** noted that the Applicant intends to submit an Arboricultural Impact Assessment report at Deadline 3. This was undertaken in August 2022 and verifies the findings in the Environmental Statement. The assessment has highlighted two trees which could potentially be at risk when assessed against the Illustrative Concept Design – one located where an access may go and another in the cable route. In the case of the cable the DCO application already commits to avoiding this tree through HDD and a minimum depth for HDD will be added to the Outline CEMP. For the track there is sufficient flexibility in the design parameters and works schedule to allow micro-siting to avoid this tree. The Applicant intends to update the Outline CEMP to include that commitment to avoid those trees during the construction of the scheme. An updated Illustrative Concept Design will also be provided at Deadline 3.
- 3.2.5 **Hamish Jackson** on behalf of BDC and CCC raised queries regarding the Environmental Statement around whether hedgerows would be lost, using the example of Table 8.10 in **Chapter 8 of the Environmental Statement [EN010118/APP/6.1]** – it was noted that there was no objection to such removal of hedgerows, but clarity was sought over the appropriate consideration for protected species. It was also noted that this is a temporary adverse effect on hedgerows and this will be reinstated post-construction.
- 3.2.6 **Mike Padfield** confirmed that there would be hedgerow removal as shown in Table 8.10, Chapter 8 of the ES.
- 3.2.7 **The ExA** queried the effect of permanent rights and restrictive covenants for the easement for the cable route, on the Boreham Road Gravel Pits Local

Wildlife Site (“LoWS”). The Applicant undertook to confirm the position in writing.

- 3.2.8 **Post hearing note:** In terms of impact on the LoWS during construction, **Chapter 8 of the ES [EN010118/APP/6.1]** confirms at paragraph 8.8.3 that where Boreham Road Gravel Pits LoWS is crossed by the proposed grid connection cable, measures (such as the use of HDD) will be undertaken to avoid habitat loss during construction. Post-construction, any habitat loss within the footprint of the grid connection cable will be restored to its pre-construction condition.
- 3.2.9 In Chapter 8, Table 8-9 it is confirmed that the construction of the Scheme will not directly impact on habitat within this designated site and measures to ensure incursion during construction to designated sites will be put in place.
- 3.2.10 In Chapter 8, paragraph 8.10.6, it is noted that there will be a small amount of hedgerow loss due to construction activities at the LoWS, and that replanting is part of the Scheme design.
- 3.2.11 Construction activities for the access routes and grid connection routes (noting use of HDD at Boreham Gravel Pits LoWS), will result in the direct loss of small sections of existing hedgerow, with the total loss of hedgerow across the Order Limits being approximately 450m and likely to be of no more than 10m sections of hedgerow removal in any one place. The majority of hedgerows across the Scheme will be avoided and replanting has been embedded within the Scheme design for creation of hedgerows, replacement planting and bolstering currently defunct hedgerows. It is noted that this may take time to develop and therefore, there is likely to be a temporary and short-term adverse effect on this habitat type in some areas.
- 3.2.12 Table 3.3 of the **Outline CEMP [EN010118/APP/7.10(B)]** commits to the crossing of Boreham Brook using HDD methods to avoid impacts to watercourses. Paragraph 2.35 of the **OLEMP [EN010118/APP/7.13(B)]** secures the other measures in relation to the LoWS as follows:

“Ensuring that the existing designated site, the Boreham Road Gravel Pits Local Wildlife Site (LoWS) which lies within the Order Limits is retained, and measures are embedded within the Scheme design to ensure that ecology is not impacted during construction, e.g. through siting construction routes away from and outwith the LoWS or using measures (such as the use of Horizontal Directional Drilling (HDD)) to minimise any temporary habitat loss during construction.”

- 3.2.13 In terms of the permanent cable rights sought in this location, those rights are necessary for protection of the cable and to allow maintenance of it, however, it is not envisaged that the rights or restrictions sought would impact on the LoWS.

Confidence in Assessments

- 3.2.14 **The ExA** asked for clarification around the ecological surveys that have been and will be undertaken, including pre-construction.
- 3.2.15 **The ExA** noted that pre-construction surveys will be undertaken for Hazel Dormice and asked how this commitment would be secured.

- 3.2.16 **Mike Padfield** responded by noting that the Applicant is proposing a range of updated surveys pre-construction, following indications that Hazel Dormice are expanding their range in Essex in a fashion that is not currently close to the Scheme, but has the potential to require surveys prior to construction (in approximately 2026), particularly when looking at the cable corridor. The Applicant's approach is to cover off any potential protected species issues that may be found in the future.
- 3.2.17 **The ExA** asked how this would be secured in the Application, and the Applicant took this point away to confirm. Please see the post hearing note at the end of this section in this respect.
- 3.2.18 **The ExA** queried the potential vegetation loss at the Boreham Road Local Wildlife Site and the risk in relation to bat roosts in that area.
- 3.2.19 **Mr Padfield** noted that this has been considered, with access given to this area that confirmed there were no bat roosts nor potential bat roost impacts identified in that corridor.
- 3.2.20 **The ExA** asked about the potential reasonable avoidance measures for Great Crested Newts, and how these would be secured.
- 3.2.21 **Mr Padfield** responded by describing the 10m buffer zone surrounding all ponds on the site. It was noted that one pond is identified as containing Great Crested Newts, but this would be retained and buffered sufficiently. In addition, the terrestrial habitats surrounding that pond contain arable land, which is not a suitable habitat for these newts. The Applicant is adopting a precautionary approach when working close to these areas, with no works nor infrastructure in the buffer zones. This is also the case for some ponds which are just outside the Order Limits, with buffer zones being implemented for these, though noting that no habitats close to these ponds would be impacted, save for the arable land which is not a suitable habitat for such newts.
- 3.2.22 **The ExA** asked BDC about the recommendation of good practice measures in its policy, and **Hamish Jackson** responded that he was satisfied that the precautionary measures described above by the Applicant are sufficient.
- 3.2.23 **Post hearing note:** With respect to how pre-construction surveys for Hazel Dormice and Great Crested Newts are secured, in the **OCEMP [EN010118/APP/7.10(B)]** and **OLEMP [EN010118/APP/7.13(B)]** it is stated that pre-construction surveys will cover relevant protected species surveys needed at that time. The OCEMP states in Table 3.3:
- 3.2.24 *"Pre-construction surveys will be undertaken to validate and, where necessary, update the baseline survey findings. The purpose of the pre-construction surveys is to ensure mitigation during the construction phase is based on the latest protected species information. This will also be required for any protected species licensing."*
- 3.2.25 The OLEMP covers all potential protected species under 2.3.6 Updated Surveys and 4.1 Monitoring (including a minor amendment made at Deadline 3 to make clear "potentially other protected species" are included which does cover off other protected species such as Hazel Dormouse).

3.2.26 The above provisions therefore secure any validation surveys pre-commencement, which would include Hazel Dormice and Great Crested Newts.

Biodiversity Net Gain (Trading Issue)

3.2.27 **The ExA** asked for an update on the trading issue in connection with the Applicant's biodiversity net gain calculation, relating to woodland lost as part of the proposed Scheme, noting that the Applicant had set out the options assessed to mitigate or offset this loss at Deadline 2.

3.2.28 **Mike Padfield** confirmed that the Applicant is currently working on a report relating to Biodiversity Net Gain, which is aiming to be issued at Deadline 3. In addition, the trading rules have been overcome following the update using Metric 3.1. The trading rules were addressed by switching 5ha of land between the two types of woodland and adjusting some of the conditions based on updated walkover surveys. The results are approximately the same as the previous Biodiversity Net Gain figures – between 70-80% gain.

Ecological Advisory Group

3.2.29 **The ExA** requested an update from the Applicant on when the details regarding this Group's role will follow and how such obligations relating to it will be secured.

3.2.30 **Alexis Coleman** confirmed that the Applicant remains in discussions with the Councils and that the Group will be created, with the latest status being that the Applicant is looking at the Terms of Reference for this Group and will discuss these with the Councils, with a view to updating the OLEMP for Deadline 4.

3.2.31 **The ExA** asked if the membership will be wide-ranging, including stakeholders such as the Councils, Natural England and relevant wildlife groups, which Ms Coleman confirmed would be the case. Ms Coleman recorded the Applicant's intention to update the OLEMP with details of the Ecological Advisory Group for Deadline 3.

Buffer Zone for Watercourses

3.2.32 **The ExA** asked the Applicant to clarify the size of the buffer zones for watercourses.

3.2.33 **Alexis Coleman** noted that 8m is the Environment Agency's recommendation, which is the minimum that the Applicant has committed to, but in some instances the Applicant has extended these to 10m.

3.2.34 **Post hearing note:** The Applicant has further considered the documents referred to by the ExA and can confirm that the Environment Agency's guidance would be adhered to by the Applicant, and the Design Principles and O-CEMP secure a larger buffer for watercourses.

3.2.34.1 **Design Principles [EN010118/APP/7.3A (B)]** secure (with respect to Work No. 4, the cable route) *"A minimum buffer of 10m around watercourses (measured from the water/channel edge under normal flows) will be maintained within which there will be no built*

development (other than essential works such as watercourse crossings or drainage etc.).”

3.2.34.2 Table 3.3 of the **O-CEMP [EN010118/APP/7.10(B)]** confirms that *“No works will be undertaken within at least 10m of all watercourses, including a minimum of 8m from the edge the floodplain of the River Ter which is considered sufficient to mitigate for potential hazards such as chemical and soils spills into watercourses and avoid potential direct impacts to the River Ter and Otter, which occasionally use the river for commuting and foraging.”*

3.2.34.3 **Environmental Statement, Chapter 9 [EN010118/APP/6.1]**, Paragraph 9.3.3, Bullet Point (b) explains the precautionary approach taken by reference to the Environment Agency’s recommendation – *“There will be a minimum buffer of 10m around watercourses (measured from the water/channel edge under normal flows) within which there will be no built development. However, for main rivers the Environment Agency may stipulate 8m measured from the landward toe of any bank that itself may be set back from the edge of the channel under normal flows. To accommodate potential uncertainty in the local position of banks (that will vary) the buffer for main rivers has been increased to 10m.”*

3.2.35 **The Applicant** notes that the apparent discrepancy identified by the ExA is likely to be because Table 9.1 in Chapter 9, which is responding to stakeholder comments on the statutory consultation, states that there will be a minimum buffer of 8m around watercourses (measured from the water/channel edge under normal flows) within which there will be no built development. However, for main rivers a 10m buffer measured from the centre line of the watercourse as marked on Ordnance Survey mapping has been allowed for. This is repeated in Para 9.7.27.

3.3 Battery Technology / Safety

Applicant’s Approach to Battery Safety, including an explanation of minimising the risk of fire or a toxic plume event

3.3.1 **Graham Roberts** on behalf of the Applicant, set out his experience in connection with battery storage. Mr Roberts introduced himself as a Chartered Engineer with over 20 years’ experience, who has worked for over a decade for EDF and EDF Renewables.

3.3.2 **Mr Roberts** explained that he is the Battery & Solar Technology lead in the EDF Renewables Central Technical Office where he leads a team of Battery and Solar Engineers. He explained that his team supports the business (EDF) in its rollout of battery and solar, development and construction projects, and also supports the Asset Operations teams.

3.3.3 **Mr Roberts** explained that he has worked on Battery Storage since 2017 when EDF built their first battery in the UK, the 50 MW West Burton B (WBB) Battery, which was the largest of its kind in Europe at the time. Mr Roberts’ role included design responsibility, general engineering, commissioning and then following the completion of the plant he took responsibility for the day to

- day operation of the asset alongside the development of a number of other battery storage sites.
- 3.3.4 During his time working on WBB Battery Mr Roberts also oversaw the first large scale lithium ion battery system extension in the UK, where the battery was upgraded to provide additional Services to National Grid.
- 3.3.5 **Mr Roberts** noted that EDF operates around 117GW of generation globally, and with regards battery storage systems in the UK EDF has 100MW/100MWh of battery in operation and a further 100MW/200MWh of battery storage under construction today, with no adverse events with regarding battery safety.
- 3.3.6 **Mr Roberts** noted EDF's approach to battery safety which starts with the belief that all harm is preventable and the target of Zero Harm is an enduring priority.
- 3.3.7 **Mr Roberts** explained that to achieve this ambition the whole life of a project from concept to decommissioning is considered. EDF Group experience is also drawn upon. It was recognised that lithium ion batteries carry risk and that risk is now understood and mitigated. This began during the design of EDF's first battery system at West Burton B where guidance was sought from a range of experts, including colleagues in the UK, from thermal and nuclear, from the wider EDF Group around the world and external support to ensure that the design was safe and robust. The list of external support includes the Health and Safety Laboratories, DNV, insurers, the Institute of Fire Engineering, the fire Service and the battery module manufacturer. Knowledge continues to be built upon and all projects draw on a global network of battery storage teams, backed up with R&D activities and external support as required. Therefore for each battery storage site, there is a rigorous exercise, following a process safety approach.
- 3.3.8 **Mr Roberts** explained that at the lowest level a battery storage system comprises a number of battery cells. These battery cells are stacked and connected in series and parallel to increase the voltage and capacity to a desired level. These stacks are held in battery modules. The battery modules are again stacked in series and parallel to achieve the required system DC voltage and storage capacity. A stack of modules is typically known as a rack or string, and a group of interconnected racks as a battery bank. Battery banks are held in enclosures or other structures. This may be a building that could hold an entire system, a shipping container holding one or more banks, or a series of interconnected smaller enclosures or cubes, each one holding a part of a bank. Typically, each battery bank is connected to an inverter which takes the Direct Current and converts it in to alternating current. The output of the inverter is connected to a transformer where the voltage is then stepped up into a more useful level for more efficient transmission.
- 3.3.9 In the case of this Application, **Mr Roberts** explained that the output of the BESS transformers is likely to be around 33kV. The output of both the solar and battery systems will then be combined and further stepped up to 400kV for onward transmission on the National Grid.
- 3.3.10 The Applicant's safety objectives for the design of the BESS, as laid out in the **Outline Battery Safety Management Plan [EN010118/APP/7.6]**, starts with

- the initial minimisation of the likelihood of an event occurring – this is the overriding priority. Then, the next steps are:
- 3.3.10.1 To automatically detect an event as soon as possible;
 - 3.3.10.2 To minimise the consequences should an event occur;
 - 3.3.10.3 To ensure any personnel on site are able to escape safely away from the event;
 - 3.3.10.4 To ensure that emergency responders can operate in reasonable safety where necessary; and
 - 3.3.10.5 To restrict any event to site and minimise any impact on the surrounding areas, including that from fire, smoke, and gasses does not significantly affect occupants in surrounding buildings and areas.
- 3.3.11 To prevent an event happening, the mechanisms that instigate a failure of BESS must be understood, focussing on the most conspicuous issue which is the thermal runaway of a cell.
- 3.3.12 **The ExA** asked about the levels of thermal runaway, which **Mr Roberts** confirmed can be from cell level up to system level, with various factors determining this.
- 3.3.13 **Mr Roberts** continued by noting that the risk of thermal runaway must be mitigated. Thermal runaway can arise from a number of indicators, including but not limited to manufacturing defects, overcharging, mechanical damage/abuse, overheating and short circuits. These indicators are then looked at and an understanding developed as to how they may arise, to ensure mitigating factors are put in place against them.
- 3.3.14 The **Outline Battery Safety Management Plan [EN010118/APP/7.6]** goes into more detail, but an example is considering manufacturing defects of the cells or modules. To mitigate this and ensure that only a high quality product is used, only battery suppliers who have been qualified in a 3 step process are considered. **Mr Roberts** explained this three step process below.
- 3.3.15 Firstly a desktop review of the manufacturer is undertaken, where all aspects from conformity and certification through financial standing to health and safety performance are considered.
- 3.3.16 Secondly a factory audit is undertaken. This reviews several factors, such as manufacturing techniques, their quality assurance material sourcing and handling. This extends to all of the various components within a battery system beyond the cell manufacture, including circuit board manufacture for the various battery controllers from module to bank management system.
- 3.3.17 Thirdly random cells and modules from the production line are selected and in house testing for a number of properties is undertaken, including rapid ageing, degradation, thermal properties and destructive testing.
- 3.3.18 **Mr Roberts** explained that this qualification is undertaken at EDF Group level for the global business, it is time bound and is renewed regularly. This allows a high confidence in the chosen cell manufacturer to meet the technical and safety requirements.

- 3.3.19 The other initiators mentioned can manifest at other times in the delivery, construction, operation and maintenance processes. One of the mitigations for this is to ensure that an integrator is selected, which is the name given to the overall battery system manufacturer who typically integrates a battery manufacturers system into their energy storage system.
- 3.3.20 **Mr Roberts** explained that only an integrator that has a proven track record and designs in accordance with the UK and internationally recognised good practice is selected. Most integrators have produced their own safety or risk assessments and these are reviewed during the formal tender process. Due to the pipeline of battery projects, tenders both in the UK and internationally are regularly undertaken, which in itself allows a great view of the latest industry standards and trends.
- 3.3.21 Once an integrator is selected, they are worked with to further understand the safety of their design. To this extent, internal risk assessments are undertaken with their support. Taking the knowledge of the failure mechanisms of a battery and then identifying those barriers within the proposed system design prevents the initiators leading to an undesired event.
- 3.3.22 The risks are assessed and scored, both with and without mitigations in place to determine whether risks have been reduced to a satisfactory level in line with corporate safety policies.
- 3.3.23 If the risk is still not tolerable, work is done with the designer to modify the design or include additional mitigations or controls.
- 3.3.24 **Mr Roberts** explained that to further minimise the likelihood of an event the candidate design also contains a battery chemistry that is regarded as being less prone to thermal runaway and fire: Lithium Ion Phosphate. This chemistry has a higher thermal stability and therefore is safer during all kinds of thermal or electrical abuse.
- 3.3.25 In the event that the chemistry were to change, the **Outline Design Principles [EN010118/APP/7.3A (B)] require** a further assessment to ensure that impact would not be different to the original assessment outcomes.
- 3.3.26 The system design is reviewed regarding items such as fuses, surge protection devices and insulation monitoring that can act quickly in the event of a fault.
- 3.3.27 As part of the integrator / battery manufacturer selection, it is ensured that the energy management system has visibility down to module level to identify any parts of the system that are not operating as expected. This may be parameters such as cell voltages and state of charge. It is then ensured that the correct logic is employed in the controller to either create an early alarm warning or trip or shutdown of that part of the system for further investigation.
- 3.3.28 It is also ensured that battery systems comprise state of the art detection systems, employing not only traditional heat or smoke detection but also very early smoke detection “by aspiration” which is able to detect smoke at extremely low levels by drawing air across a sensitive detector. This is paired with gas detectors that identify very low levels of hydrogen or carbon monoxide which are some the first off-gas components as a thermal runaway

- occurs in a cell. This allows the whole system to be immediately shut down in the event of a detection.
- 3.3.29 Fire suppressant is then employed in the design. The exact nature of the fire suppressant may vary, as industry guidance changes – an example is the recent discussions with Essex Fire and Rescue Service in which they have stated that there may be a desire to avoid Novec, which is a refrigerant suppressant, which will be considered in the final design.
- 3.3.30 To minimise the consequences should an event occur, the scale of an event needs to be minimised. **Mr Roberts** explained that the site layout plays a significant role here to ensure that the system design allows suitable separation and segregation – typically, the NFPA855 guidelines regarding separation of components are followed and potentially exceeded where space permits. This allows space around the system to minimise transmission and also allow emergency response access.
- 3.3.31 There are some overlaps with the selection of the integrator here; for example, an integrator that segregates a battery into smaller quantities of interconnected batteries within their own enclosure is already reducing the severity of a failure in a number of ways, such as reducing the scale of an event and introducing additional barriers to spread due to the fire rated walls; either slowing an event down or preventing it completely.
- 3.3.32 For this application, following consultation with Essex Fire and Rescue Service, recognising the scale of the site and the distance from a hydrant, the unusual step has been taken to install water tanks that can be used by the emergency Services. The sizing is around 4 times the minimum requirement allowing a robust emergency response to take place. This availability will further help to contain an event.
- 3.3.33 To minimise the impact on the surrounding areas, the least impactful location for the systems is identified. For this application, the location of the energy storage system was selected primarily due its remoteness from receptors, with the decision to locate the substation nearby taken after the battery location was determined.
- 3.3.34 To understand the potential impact on receptors in the event of a fire, samples have been taken of the candidate cell and, as part of the qualification process along with the R&D activities, have undertaken destructive testing. This destructive testing was undertaken in conjunction with INERIS in France, which is similar to the UK health and safety laboratories, to get a real world assessment of the likely off-gas constituents to be used in the event modelling. It should be noted that the candidate cells did not catch fire during the destructive testing.
- 3.3.35 In addition, the working group has reviewed the global fire events, where data is available and, along with other data sources, reviewed the incidents, their duration and impact and used this to inform understanding of fire events and how they develop. This has then been modelled in a conservative credible worst case in conjunction with specialist consultants to determine the possible upper envelope consequences in terms of a fire, explosion or potential plume.

- 3.3.36 The **Plume Assessment [EN010118/APP/6.3]** has determined the contours at which health and safety executive defined specified level of toxicity (“slot”) is reached. The threshold of slot was found to be around 60m, however this distance is conservative as the temperature of the release and the buoyancy of the emissions showed a gradual rise of any plume to around 12m. It should also be noted that these longer distance impacts described are derived from very low windspeeds leading to a very narrow and therefore limited area plume. It is worth noting that a higher windspeed would actually have more turbulence leading to a faster dilution and a shorter range impact.
- 3.3.37 For fire, a jet type fire of a build-up of hydrogen, which is very unlikely, has also been modelled with the threshold of 6.3kw/m² being reached at a distance of 10m from the source. Radiation levels below this are taken as ‘safe escape’ with only a 1% chance of fatality if exposed for 90 seconds allowing time for escape.
- 3.3.38 The unconfined explosive potential has been modelled to be around 20m to reach the 3.5kpa value with the 15kpa being slightly less than 20m. This would ensure that any explosive effects are contained within the site perimeter. An explosion within a cube would be significantly less impactful due to deflagration panels, which are also a requirement of the battery systems and would direct an explosion into the air away from personnel. Computational fluid dynamics & finite element analysis modelling of the candidate design has shown that for cube structures, the total kinetic energy of an explosion of a full cube volume stoichiometric mixture is relatively low, indicating that there is not a significant amount of mass moving quickly, and therefore minimal displacement and a low risk of flying debris.
- 3.3.39 **Mr Roberts** explained that the above demonstrates that even with a conservative view, the likely risk beyond the site boundary is very low. The main risk, which is validated by fire events, appears to be to emergency responders, and the Applicant will continue to consult and work with them and indeed all stakeholders to ensure that systems remain safe.
- 3.3.40 This will be done by maintaining the target of zero harm and continuing to learn and improve the extensive understanding of battery energy storage systems. This knowledge will then be captured in the scheme.
- 3.3.41 **The ExA** asked **Tim Havers** his thoughts on this, noting in particular the battery safety management plan. **Tim Havers** noted that BDC is happy with the comprehensive measures to be put in place, should the DCO be granted.
- 3.3.42 **Ruth Mabbutt** also noted no objections in principle, but noted that she would be guided by appropriate stakeholders.
- 3.3.43 **Rachael Donovan** agreed with the above position from the other councils and was particularly reassured that there is dialogue with the Essex Fire and Rescue Service, noting the consultation with the Ambulance Service as well.
- 3.3.44 **The ExA** referred to Cleve Hill and asked the Applicant if the approach for this scheme is of a similar nature, with **Alexis Coleman** noting that this was the case.

- 3.3.45 **Ms Coleman** confirmed that there had been ample engagement with Essex Fire and Rescue Service, with no issues outstanding in the SoCG with them, and that the Applicant had also agreed to host a site familiarisation session for the Ambulance Trust, with these obligations to be secured in the Section 106 agreement.
- 3.3.46 **Dr Linda Reid** asked whether the location of the battery storage so closely adjacent to the ancient woodland has been considered in the process.
- 3.3.47 **Mr Roberts** referred to the offset between the battery system and the site boundary, then a 15m offset between the site boundary and the ancient woodland, meaning any thermal radiation reaching the ancient woodland would very likely be too low to ignite the trees.

3.4 Historic Environment

Ringers Farmhouse – Proposed / Additional Mitigation

- 3.4.1 **OLEMP [EN010118/APP/7.13(B)]** on behalf of the Applicant stated that the mitigation at Ringers Farmhouse is robust – there is a strong field boundary with hedgerow and standard trees and shrubs and mitigation will improve this by gapping it up. The Applicant has pulled back the solar PV in the field to the north east of Ringers Farmhouse to mitigate the impact. As far as the Applicant is aware, there are no outstanding issues or concerns with Ringers Farmhouse with Historic England or the councils.
- 3.4.2 **Mr Service** noted that when the Scheme started, the Order Limits were closer to this asset and there was a parcel of land close to the north-east of the asset which was identified as being impactful. However, this was subsequently removed, which only leaves a parcel of land to the north-west of the asset within the Order Limits (190m away at the closest point). At this closest point, if one travels along the field boundary from the road, the field boundary of the hedge is dense and tall, which becomes less dense as one gets closer to the asset. The mitigation of this area will take the form of improving its gapping up and improvements to the hedgerow. Behind that, a buffer of 5m before the nearest development will be implemented. The mitigation is therefore robust.
- 3.4.3 **The ExA** asked if the Applicant's position is that the additional mitigation and/or planting proposed by Chelmsford City Council is not required.
- 3.4.4 **Mr Service** responded by noting that whilst additional setting back could diminish the impact further, the setting of the asset is very wide, and this additional setting back would not change the assessment to an impact of "very low". In terms of the additional planting, this would not be beneficial due to the height of the proposed development and the flat nature of the landscape.
- 3.4.5 **Michael Hurst** on behalf of CCC noted that the additional planting would reduce the level of harm and, whilst not being significant enough to achieve an impact of "very low", remains a worthwhile consideration.
- 3.4.6 **Mr Service** remained unconvinced how the harm would be reduced by additional planting, as the developed area remains the same proximity from the asset – for example, the mitigation in place currently blocks the view of the scheme if one stands next to the asset. If one walked through PDA23, through

the developed area of the scheme and towards the asset, the asset would also be screened from the scheme – the extra planting would not help with this.

- 3.4.7 **Mr Hurst** noted that the benefit of additional planting would aid with visual impact in terms of screening, though noting that greater mitigation would be to pull the panels back and therefore suggested a halfway house of asking for additional planting without asking for anything more significant.
- 3.4.8 **Alexis Coleman** noted that the Applicant has set out the mitigation provided, which it considers to be sufficient, and the discussion that has taken place would seem to indicate there is a question as to how effective any further mitigation could be. In any event, **Ms Coleman** noted that the Applicant would consider this point further.
- 3.4.9 **Post hearing note:** a review of the mitigation planting proposed in proximity to ringer's farm has been undertaken by the Applicant. This has confirmed that no additional planting is required to screen potential visibility of the scheme from ringer's farm given the distance of the property from the Order Limits, the existing vegetation on the property's northern boundary and the existing hedgerow making the southern edge of PDA 23 which will be subject to improvements such as 'gapping up', as detailed in section 3.4 of the **Outline Landscape and Ecology Management Plan [EN010118/APP/7.13(B)]**.

Archaeology

- 3.4.10 **Loic Boscher** stated that the Overarching WSI has been submitted at Deadline 2 and has been shared with Essex County Council, with comments received from Essex County Council's archaeologist and subsequent discussions have led to an agreement. It is intended to submit an agreed version of the Overarching WSI at Deadline 3.
- 3.4.11 Overall, the Applicant has established as much as possible on the basis of the archaeology that is known in the area and has assessed the significance of this. The mitigation strategy has been discussed with Essex County Council in detail, with additional trial trenching pre-construction to follow and an additional mitigation plan to be prepared in due course.
- 3.4.12 **Teresa O'Connor** agreed that the wording of the OCEMP and WSI is agreed and noted the Council's confidence in the mitigation strategy being implemented.
- 3.4.13 The Applicant will undertake measures to ensure the SoCG will be updated at Deadline 4 to reflect the position between the parties on this matter.
- 3.4.14 **Michael Hurst** on behalf of CCC raised several additional matters with respect to built heritage that were discussed and are recorded below.

Stocks Farm

- 3.4.15 **Michael Hurst** noted that at PDA28, in the area around Stocks Farm, there is a non-listed building (farmhouse) which the heritage assessment indicates is of low significance, but in CCC's view should be increased to medium based on table 7.1 in the Environmental Statement. Mr Hurst set out his reasoning for this position.

- 3.4.16 **Mark Service** on behalf of the Applicant responded by noting that this would still result in harm which is less than substantial and that various non-designated heritage assets had all been assessed, as per the scoping, to be of low significance. In terms of the impact on Stocks Farm, and on most of the other assets along the road, because of the large setback and lack of development on the side of the road, the low impact conclusion is justified and there is no case for increasing this to be moderate.
- 3.4.17 **The ExA** queried the point about the group value of the buildings at Stocks Farm.
- 3.4.18 **Mr Service** responded by noting that there remains a connection along the road between the buildings and there is a reasonable setback to the east, behind this road. Whilst the intervisibility would not remain, the road does remain as an access route.
- 3.4.19 **The ExA** asked if this impact was considered as part of the assessment.
- 3.4.20 **Mr Service** confirmed it had and reiterated that the connection along the road remains and that the assets are non-designated and the harms remains less than substantial.
- 3.4.21 **Mr Hurst** agreed that the harm is not substantial, and expanded upon his reasoning for reaching different conclusions on the assessment to the Applicant.
- 3.4.22 **The ExA** asked whether, if Mr Hurst's assessment is taken, there would be a suggestion that further exploration of mitigation would be required.
- 3.4.23 **Sam Griffiths** on behalf of the Applicant noted that there is an existing limit on intervisibility because of the mature hedgerow that exists south of Stocks Farm. The panels are to be screened in this location, so would not block any view. Mitigation offsets have also been agreed with residents during consultation, with the mitigation design being intentional. **Mr Griffiths** took the ExA through the relevant viewpoint for this location (viewpoint 55 in photo sheets **Figure 10-11 [EN010118/APP/7.3]**)
- 3.4.24 **The ExA** noted that his site visit would take place in December and he would consider this point.

Little Holts

- 3.4.25 **Michael Hurst** set out the reasoning for his different conclusions as to the level of impact upon Little Holts.
- 3.4.26 **Mark Service** responded that the connection of the land at Little Holts with Great Holts was more significant here, with the road remaining accessible to maintain this connection. A similar approach should be taken to the point above, with the ExA to consider this during the upcoming site visit.
- 3.4.27 **Mr Hurst** stated that the boundary could be redrawn as a mitigation measure.
- 3.4.28 **The ExA** asked the Applicant what it thought of this potential mitigation measure, and the Applicant agreed to take this away to consider further.

Noakes Lane

- 3.4.29 **Michael Hurst** noted a difference of opinion in terms of the level of impact and significance for Noakes Lane which is a protected lane and a non-designated heritage asset.
- 3.4.30 **Loic Boscher** responded by referring to the assessment of protected lanes conducted on behalf of Chelmsford City Council, which shows that the value of the lane in question derives from its historic standing, rather than any visual or archaeological impact. This is not the highest protected lane in terms of value, which is why it has been assessed accordingly. It was also clarified that the applicant used the criteria of Chelmsford City Council, rather than a broader category of archaeological interests, and in doing so the group value was used which identified the connection to the historic landscape. The value of Noakes Farm is not greatly derived from such a connection nor its archaeological status – it is from its historic standing, which is not going to be greatly impacted by the scheme (as the impact is limited to a single crossing).
- 3.4.31 **The ExA** confirmed that in all of Mr Hurst's points above, the harm still remains less than substantial, and noted that a SoCG is being worked up between the parties.
- 3.4.32 **Laura Johnson** on behalf of BDC noted that she was in agreement with the findings from Mr Service thus far and stated that she was still working on the SoCG with Mr Service and Mr Hurst.
- 3.4.33 **Post hearing note:** Attached to this summary (Appendix C) is a note prepared by the Applicant in relation to the heritage matters discussed above.

3.5 Other Points of Clarification

Flood Modelling

- 3.5.1 **The ExA** asked for an update on the further information and negotiations between the Applicant, the Councils and the Environment Agency.
- 3.5.2 **Chris Brandon** noted that the further information required was provided in the Deadline 2 version of the appropriate SoCG with the Environment Agency REP2-016 at line 3 (under 3.1 Water).

Proposed Hours of Construction

- 3.5.3 **Alexis Coleman** noted that the working hours are 7am – 7pm Monday to Saturday. For the overhead line works at the bulls lodge substation, works will be 7am – 7pm Monday to Sunday. The outline **OCEMP [EN010118/APP/7.10(B)]** sets out these working hours at page 7.10-4.
- 3.5.4 **The ExA** asked why such hours were required on Saturdays and whether this could be reduced.
- 3.5.5 **Ms Coleman** responded that this was in order to be as efficient as possible in the construction of the Scheme.
- 3.5.6 **Katherine Evans** noted that it is common practice for Saturday working hours to finish by midday.

- 3.5.7 **Ms Coleman** responded that the Scheme is a nationally significant project and is responding to an urgent need for renewable energy generation. Through efficient delivery of the Scheme, the Applicant is seeking to prevent the prolonging of the overall impact on the users of the rights of way and nearby residents. In response to a question from the ExA, **Ms Coleman** confirmed that if working hours on Saturdays were reduced, the overall construction period would be longer.
- 3.5.8 **Pam Sharp** noted that BDC typically applies hours of 8am – 1pm on Saturdays and asked if restrictions could be considered on noisier works close to residential properties on weekends.
- 3.5.9 **Post hearing note:** The Applicant has considered the point raised by BDC and has amended the Outline CEMP at Deadline 3 to commit to not doing heavy ground works within 30 metres of residential properties before 8am or after 6pm on any weekday, or within 50 metres of residential properties before 8am and after 1pm on Saturdays.
- 3.5.10 **Alan Swash** sought confirmation that the construction hours also apply to deliveries, and Ms Coleman confirmed they do.

4. Agenda Item 3 – Updates on Statements of Common Ground

- 4.1.1 **The ExA** requested an update on the status of the various SoCGs.
- 4.1.2 **Alexis Coleman** provided an update as follows:
 - 4.1.2.1 Essex County Council, Braintree District Council and Chelmsford City Council – an updated version to be submitted at Deadline 4;
 - 4.1.2.2 UK Health Security Agency (Office for Health Improvement and Disparities) – agreement on all matters, with an updated version to be submitted at Deadline 4;
 - 4.1.2.3 Essex Fire & Rescue Service – all matters are agreed. An updated version will be submitted at Deadline 3;
 - 4.1.2.4 National Grid (NGET and NGENSO SoCGs) – one matter outstanding, which is being confirmed. Expected to submit updated SoCGs by Deadline 4;
 - 4.1.2.5 Environment Agency – one final point being confirmed. The SoCG will be updated and submitted at Deadline 4;
 - 4.1.2.6 Natural England – all matters are agreed. A signed SoCG will be submitted at a future deadline;
 - 4.1.2.7 East of England Ambulance Service (EEAST) – all matters are agreed and an updated version of the SoCG will be provided at Deadline 3;
 - 4.1.2.8 Historic England – all matters are agreed and an updated version of the SoCG will be provided at Deadline 3;
 - 4.1.2.9 National Highways – all matters are agreed. An updated version will be submitted at Deadline 3; and
 - 4.1.2.10 Network Rail – largely agreed, subject to agreement on the protective provisions. Submission of an agreed SoCG will follow agreement in this respect.

5. Agenda Item 4 – Other Matters

5.1 Minerals

- 5.1.1 **Rachael Donovan** on behalf of ECC referenced the conflict at the Bulls Lodge Substation Extension between the Application and the extant planning permission in relation to minerals and noted that it is unclear how this issue will be resolved, given that Hanson Aggregates have not engaged with the process.
- 5.1.2 **The ExA** noted that this is an issue of sterilisation which will persist regardless of Hanson Aggregates' engagement in the process.
- 5.1.3 **Philip Dash** on behalf of ECC referenced concerns regarding the proposal compromising the ability of a permitted mineral development to be carried out, noting that the objection was one of principle.
- 5.1.4 **Richard Griffiths** on behalf of the Applicant stated that the majority of the land within the Order Limits is located within a Mineral Safeguarding Area for sand and gravel and part of the Order Limits is within a Mineral Consultation Area associated with the consented Bulls Lodge Quarry. However, there is only one part of the Order Limits where sterilisation would occur, and that is in respect of the proposed location for the Bulls Lodge Substation Extension (Work Number 5b on the **Works Plan [EN010118/APP2.2(B)]** and Plot number 1/2c on the **Land Plans [EN010118/APP/2.1(A)]**). The Application therefore engages planning policy on minerals.
- 5.1.5 **Mr Griffiths** set out that the NPS for Overarching Energy, EN-1, states at paragraph 5.10.9 that Applicants "should safeguard any mineral resources on the proposed site as far as possible" and paragraph 5.10.22 of EN-1 states that the "Secretary of State should ensure that appropriate mitigation measures have been put in place to safeguard mineral resources." The draft NPS for Overarching Energy repeats these tests.
- 5.1.6 In terms of the Local Development Plan, **Mr Griffiths** stated that Policy S8 of the Essex Minerals Local Plan 2014 is relevant with the key policies being:
- 5.1.7 The Minerals Planning Authority is to be consulted on all planning applications for development on a site located within a mineral safeguarded area that is 5ha or more for sand gravel; and
- 5.1.8 The Minerals Planning Authority is to be consulted on any planning application for development on a site located within a mineral consultation area and proposals that would "unnecessarily" sterilise mineral resources shall be opposed.
- 5.1.9 **Mr Griffiths** submitted that, taking these policies, there are two key principles. First, at the NPS level the Applicant is to safeguard minerals "as far as possible" and second, at the Local Plan level, the local authority will oppose the unnecessary sterilisation of minerals.
- 5.1.10 As referred to by Mr Griffiths at the Compulsory Acquisition Hearing, the Applicant considered alternative locations for the substation required to

transmit the electricity generated by the solar farm to the Grid. Following that exercise, the Applicant with National Grid, identified Bulls Lodge as the appropriate solution to take forward in the Application. Recognising that this site is within the Mineral Safeguarding Area and the Mineral Consultation Area by virtue of being within the area consented for mineral extraction under a planning permission for extraction (known as the Boreham planning permission which includes Brick Farm being the location of the substation), National Grid and the Applicant worked to mitigate the footprint of the substation extension by utilising gas insulated technology rather than air insulated technology. National Grid has confirmed in the **Statement of Common Ground with the Applicant [EN010118/APP/8.4]** that *“the proposed Bulls Lodge Substation extension reflects the current GIS equipment commercial availability and therefore reflects the smallest footprint available currently for the extension.”*

- 5.1.11 **Mr Griffiths** confirmed that, as a result of this mitigation, it has been calculated that the permanent land take comprises an area of approximately 0.2 hectares which represents approximately 0.1% of the 243 hectares of land within the boundary of Bulls Lodge Quarry and 0.4% of the 46.3 hectares of land within the Brick Farm Quarry. As reported in the Applicant’s **Mineral Infrastructure Impact Assessment [EN010118/APP/7.8(A)]**, it has been calculated that this land take would equate to 18,000m³ of minerals, which represents less than 0.5% of the remaining 6 million m³ reserve that has consent to be worked.
- 5.1.12 **Mr Griffiths** reported that the Applicant has considered whether the 18,000m³ could be worked in advance of the substation, but this would require the minerals to be worked on their own given that planning permission has just been granted by Essex County Council for the continuation of minerals working beyond the original cessation date and for the phases to change – this means that minerals will not be worked in the area of the Bulls Lodge Substation until between 2035 and 2039, which is after the Applicant’s construction and commencement of operation dates.
- 5.1.13 Accordingly, the sterilised area would have to be worked on its own and both the Applicant and ECC agree that it would not be practical or viable to work this area in isolation (see for example, paragraphs 11.2 and 11.3 of the Local Impact Report from Essex County Council, [REP1b-067]). Furthermore, both the Applicant and ECC agree that the loss of 18,000m³ of minerals would not impact on the overall viability of the quarry (see paragraph 11.17 of Essex County Council’s Local Impact Report). Mr Griffiths noted that should an agreement not be reached with Hanson Aggregates (despite the Applicant making repeated efforts to engage with Hanson Aggregates), Hanson Aggregates would receive compensation for those minerals.
- 5.1.14 Accordingly, it is the Applicant’s submission, as set out by Mr Griffiths, that the Applicant has complied with NPS EN-1 and draft NPS EN-1 as it has mitigated its impact on the safeguarded minerals “as far as possible” and it has satisfied Policy S8 of the Minerals Local Plan as the sterilisation is not unnecessary as:-
- 5.1.14.1 The footprint of the substation is as small as it can be – as National Grid has confirmed in its Statement of Common Ground;

- 5.1.14.2 The development itself is necessary for the solar farm and alternative locations have been ruled out;
- 5.1.14.3 The minerals cannot be worked in advance as a result of recent planning decisions and as agreed by ECC; and
- 5.1.14.4 The sterilisation of the minerals would not impact on the viability of the quarry, as agreed by ECC.
- 5.1.15 **Mr Griffiths** submitted that it would appear that ECC supports this conclusion from paragraph 11.12 of its Local Impact Report, which states “any sterilisation would not be “unnecessary”, which meets the MLP Policy S8 test”.
- 5.1.16 **The ExA** asked whether the Applicant’s position was that it accepted there was a sterilisation which would be weighed in the planning balance.
- 5.1.17 **Mr Griffiths** noted that when one works through the policy tests, mitigation has been provided and the Applicant has acted in accordance with the policy requirements. There remains a question of planning balance, but the Secretary of State’s role is to decide whether the loss (despite its compliance with policy) is a reason to refuse consent in the face of a nationally significant project.
- 5.1.18 **Mr Dash** referred to the planning balance judgment and noted that ECC’s position is that there is a conflict with Policy S8 above.
- 5.1.19 **The ExA** noted that it is the overall balance which is where these issues will be weighed up and concluded upon.
- 5.1.20 **Mr Griffiths** noted that the Applicant has assessed alternatives, provided mitigation and complied with policy.
- 5.1.21 **The ExA** queried whether ECC would withdraw its objection if the Applicant comes to an agreement with Hanson Aggregates.
- 5.1.22 **Claire Tomalin** noted that it is still Hanson Aggregates’ intention to work the area in question, so ECC would have to consider any planning application to remove this area, and the justification for doing so, before it could say that its objection would be removed.
- 5.1.23 **Alan Swash** noted a concern for Bulls Lodge being chosen as the site for the substation and requested further information on this selection.
- 5.1.24 **Mr Griffiths** noted that the Applicant did look at placing the substation elsewhere, as the application documents detail, but BMVL would be permanently lost in these other locations as the substation is a permanent National Grid asset (as opposed to the solar farm itself, which is decommissioned after 40 years). On balance, the preferred location was at Bulls Lodge.

5.2 Public Rights of Way (PRoWs)

- 5.2.1 **Richard Griffiths** noted that in response to queries raised by Katherine Evans in the Issue Specific Hearing on the DCO, at Deadline 3 the Applicant will be submitting a plan showing users permitted along the path in question,

- accompanied with a note to explain where different users would be permitted and why.
- 5.2.2 **Post hearing note:** attached to this summary (Appendix D) is a note prepared by the Applicant explaining the design rationale for the Scheme and how it has responded to the existing network of PRowS, as well as users of permissive paths.
- 5.2.3 **Sam Griffiths** on behalf of the Applicant, noted that all permitted paths will be open for cyclists and pedestrians, provided the PRowS connecting into the permissive paths allowed cyclists to use them in order to connect into the permissive paths. The Applicant's expectation is that on the PRowS travelling on foot is allowed, which includes a cyclist dismounting and pushing their bicycle.
- 5.2.4 **The ExA** asked if a similar situation applied to horses, and Mr Sam Griffiths noted that equestrian use would be permitted on the permissive paths, however, riding or leading a horse on a PRow is not permitted under the Highway Code, and it is therefore only proposed by the Applicant as a permitted use of a permitted path, where access via a permitted route is possible (e.g. access from the highway).
- 5.2.5 **Mrs Evans** asked for clarification that the permissive paths are now solely to be used on foot.
- 5.2.6 **Mr Sam Griffiths** confirmed that bikes could be ridden on the permissive paths and that this is not a change to the existing proposals for the permissive paths. Mr Sam Griffiths confirmed that equestrians or cyclists are permitted on permitted paths, provided they are accessed legally (i.e. by walking with a bike in the case of a PRow).
- 5.2.7 **Mrs Evans** noted that at Noakes Lane, where the permissive paths cross this lane, bikes and horses could be ridden, but only to the end of this permissive path. Mr Sam Griffiths confirmed that was correct. The Applicant offered to talk to Mrs Evans outside of the hearing, to talk her through the note and plan to be submitted at Deadline 3.
- 5.2.8 **Robert Lee** on behalf of ECC questioned the practical usage of allowing cycles/horses along these permitted paths, due to the lack of onward connectivity for cyclists, and asked for signage requiring cyclists to dismount and noting the lack of onwards usage.
- 5.2.9 **Mr Richard Griffiths** noted that the Applicant is balancing the Local Access Forum's criticism of limitations on users with the need to work within the existing PRow network and what is permitted by connecting footpath.
- 5.2.10 **Post hearing note:** With respect to signage requiring cyclists to dismount, relevant requirements are already secured. The Applicant notes that the **OOEMP [EN010117/APP/7.11(B)]** includes management measures for permissive paths, including the following in relation to signage requirements:
- "Where proposed cycle paths connect to PRow (where pedestrians have the right of way) or join public highways, signage will be installed to instruct cyclists to dismount and warn of the hazard ahead. Bollards or gates will be installed*

to slow cyclists where there is considered to be an elevated safety hazard to cyclists or pedestrians.”

5.2.11 In addition, the Applicant's **Outline PRow Management Plan [EN010118/APP6.3(A)]**, provides at 3.2.7:

“Where any proposed cycle paths connect to PRow (where pedestrians have the right of way) or join public highways, signage will be installed to instruct cyclists to dismount and warn of the hazard ahead. Bollards or gates will be installed to slow cyclists where there is considered to be an elevated safety hazard to cyclists or pedestrians. This detail will be agreed with the relevant local authority at detailed design stage post consent as part of the final OEMP, along with the Permissive Path Plan showing the route, surfacing material, and widths of proposed permissive paths.”

5.2.12 **Graham Reeve** of the Essex Ramblers Association raised concerns about the visual impact during the operational phase, in particular for the Essex Way. The ExA asked Mr Reeve to put the above in writing at Deadline 3.

5.2.13 **Mr Sam Griffiths** noted that, in respect of the above concerns, the key point to note is that significant mitigation has been included by the Applicant. The Applicant's aim is to soften the appearance in relation to field PDA1; implementation of screening was considered to make the biggest difference, and that was therefore what was suggested as part of the Scheme.

5.2.14 **Mr Reeve** recorded his position with respect to the impact on the Essex Way, being that he would still prefer that PDA1 was removed entirely, but was comforted to hear that mitigation had been considered.

5.2.15 **Gill Wynne-Williams** on behalf of BDC and CCC acknowledged in relation to PDA1 that the Applicant has taken great care to mitigate, but that points of difference remain between the parties. Should PDA1 remain, advanced planting will be required to appropriately mitigate.

5.2.16 **Mr Sam Griffiths** confirmed that advanced planting would be implemented and that this would be corrected in the documentation at Deadline 3 if this was not already clear. This advanced planting would start, for certain locations (such as PDA1), during this winter's planting season wherever possible.

5.2.17 **Post hearing note:** The Applicant has undertaken a review of the Advanced Planting Plan, presented on page 44 and 45 of the **Outline Landscape and Ecology Management Plan [EN010118/APP/7.13(B)]**. This confirmed that the planting proposed at the northern extent of the Order Limits, designed to mitigate landscape effects on the Ter Valley North Local Landscape Character Area and visual effects on views from the Essex Way, is included as advanced mitigation planting as requested by the Host Authorities' Landscape Consultants. The phased approach to mitigation planting has been proposed to deliver effective mitigation as early in the Scheme's operation as possible. Detail of the approach is provided in paragraph 10.7.7 of the **Landscape and Visual Impact Assessment [EN010118/APP/6.1(A)]**.

5.2.18 **Mr Richard Griffiths** noted that there is a voluntary agreement between the Applicant and the landowner that gives the Applicant the necessary rights to undertake the advanced planting.

- 5.2.19 **Ruth Mabbutt** on behalf of CCC asked what consenting mechanism would be used if the advanced planting is to be done early. Mr Richard Griffiths confirmed that the advanced planning is permitted to be done by the landowner now, with no planning permission required.
- 5.2.20 **Mrs Evans** queried the reference to a 10m wide passageway in relation to the permissive paths and what else falls within this. Mr Richard Griffiths noted that the permission paths are within Work No. 10 (see Schedule 1 of the **draft DCO [EN010118/APP/3.1(C)]**), which includes landscape and biodiversity protection, with the paths themselves not being 10m wide.
- 5.2.21 In response to a request from the ExA, the Applicant has provided a visualisation of an indicative section through a PRow, which is included in Appendix D, being the note appended to this summary covering PRows and permissive paths.
- 5.2.22 **Robert Lee** asked if the above submission could cover the actual width afforded to the PRows. Mr Richard Griffiths stated that this level of detail strays into detailed design, which cannot be promised at Deadline 3 – the plans and parameters will be provided at this stage.
- 5.2.23 **Mrs Evans** noted that some PRows will be dug up and have cableways placed underneath, before being re-covered – the process of which will affect the grassy surfaces on the PRows.
- 5.2.24 **Mr Richard Griffiths** responded that the PRows cannot be avoided, as these go across the site for the Scheme and the cables are required to connect the various elements of the solar farm together. In terms of the reinstatement of the PRows, this will be governed by the PRow Management Plan and they will be reinstated to the same condition as before as far as possible. Any disruption relating to closure of the PRows would be minimised by the Applicant as far as possible.

Appendix A – BMV Land Policy Position Statement

1. INTRODUCTION

1.1 This note relates to Longfield Solar Energy Farm Limited's (**the Applicant**) application for a development consent order (**DCO**) under the Planning Act 2008 (**the 2008 Act**) for Longfield Solar Farm (**Longfield**) (**the Application**).

1.2 At Issue Specific Hearing (2) on Environmental Matters held on 29 September 2022 (**the Hearing**), the Examining Authority (**ExA**) asked a question as to the applicability to the determination of the Application of a Ministerial Statement made by the Secretary of State for Communities and Local Government¹ on 25 March 2015 (**the Ministerial Statement**).² This was with particular reference to the section on 'Solar energy: protecting the local and global environment' which considers best and most versatile land (**BMV Land**).

1.3 The key points the Ministerial Statement sets out in this context are:

1.3.1 particular factors relating to large scale solar farms that a local council will need to consider and, where a proposal includes agricultural land, this includes "*being quite clear this is necessary and that poorer quality land is to be used in preference to land of a higher quality*". From reading the Ministerial Statement, we consider that the reference to "*high quality*" land is a reference to BMV Land; and

1.3.2 that there are "*continuing concerns*" regarding the "*unjustified use of high quality agricultural land*" and that "*in light of these concerns we want it to be clear that any proposal for a solar farm involving the best and most versatile agricultural land would need to be justified by the most compelling evidence.*"

1.4 Pinsent Masons LLP, representing the Applicant at the Hearing, confirmed that it would submit a statement to the Examining Authority for Deadline 3 which sets out the policy position in relation to BMV Land..

1.5 In summary, the Applicant considers that:

1.5.1 the Ministerial Statement should not be considered to be an "important and relevant" matter in the determination of the Application. This is on the ground that the language used in the Ministerial Statement clearly demonstrates that it is directed towards planning applications under the Town and Country Planning Act 1990 (**the 1990 Act**) rather than the 2008 Act.

1.5.2 Should the Secretary of State decide that the Ministerial Statement is an important and relevant matter, then we consider that no weight should be afforded to it, given its focus on the 1990 Act and on the basis that the relevant NPSs including the draft NPSs, should have greater weight given the application of section 105 of the 2008 Act.

1.5.3 However, in the event that some weight is afforded to the Ministerial Statement, the Applicant considers that the Application complies with the policy set out in that Ministerial Statement regardless.

2. LEGISLATIVE AND POLICY CONTEXT

2.1 The Applicant's Planning Statement [REP1b-028] sets out the legislative and policy position relevant to the determination of the Application (see section 1.3 and chapter 5). In summary, there is currently no National Policy Statement (**NPS**) designated for solar

¹ Now known as 'Department for Levelling Up, Housing and Communities'

² 'Planning Update'. Statement UIN HCWS488. Statement made by Mr Eric Pickles, Secretary of State for Communities and Local Government on 25 March 2015.



generating stations. There is an Overarching NPS for Energy (NPS EN-1), but it does not provide specific guidance on solar technologies. Accordingly, the Application will be determined in accordance with section 105 of the 2008 Act.

- 2.2 The Government is currently reviewing and updating the Energy NPSs. The Government published a suite of Draft Energy NPSs for consultation on 6 September 2021. These include the Draft National Policy Statement for Renewable Energy (Draft NPS EN-3), which has specific policies for solar photovoltaic generation nationally significant infrastructure projects (**NSIPs**). The Planning Statement was prepared on the basis that Draft NPS EN-3 would not have been designated before the Application was accepted for examination. Draft NPS EN-3 remains to be designated and therefore the national policy position remains as per the Planning Statement.
- 2.3 Section 105(2) of the 2008 Act provides the basis for deciding the Application because no technology specific NPS has effect. The Secretary of State must have regard to the provisions set out in that section of the 2008 Act. This includes any matters which the Secretary of State deems to be both “*important and relevant*” to their decision. The Applicant considers the following NPSs are important and relevant: NPS EN-1, NPS for Renewable Energy (EN-3), NPS for Electricity Networks Infrastructure (NPS EN-5), Draft Overarching NPS for Energy (Draft NPS EN-1), Draft NPS EN-3 and Draft NPS for Electricity Networks Infrastructure (Draft NPS EN-5).
- 2.4 Another relevant national policy is the National Planning Policy Framework (**NPPF**) which states that planning policies and decisions should contribute to and enhance the natural and local environment by e.g. recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services. This includes the economic and other benefits of BMV Land. However, the Applicant’s position is that the NPPF should be afforded less weight than the Energy NPSs and the Draft Energy NPSs (paragraph 5.5.3 of the Planning Statement).
- 2.5 It is down to the decision maker, in this case the Secretary of State, to decide what weight to give a matter that they consider to be “important and relevant” to their decision. Such weight can range from no weight to significant weight.

3. THE MINISTERIAL STATEMENT – POLICY APPLICATION

- 3.1 Case law demonstrates that a Written Ministerial Statement is a material consideration (where its contents are relevant to the planning application in question) in planning decisions.³ In the context of DCO applications, this means such a statement may be an important and relevant matter for the Secretary of State to have regard to when deciding an application, but again only where the contents of the Written Ministerial Statement is of relevance.
- 3.2 It is the Applicant’s position that the Ministerial Statement, as introduced in paragraph 1.2 above, is not relevant for the purposes of determining the Application, and should therefore not be considered an “important and relevant” matter. This is for two principal reasons:
 - 3.2.1 First, the language used in the Ministerial Statement clearly demonstrates that it is directed towards planning applications under the Town and Country Planning Act 1990 (**the 1990 Act**) rather than the 2008 Act. For example, the section in the Ministerial Statement regarding solar, states that “*When we published our new planning guidance in support of the Framework [i.e. the*

³ Lord Slynn of Hadley in *R (Alconbury Developments Ltd) v Secretary of State for the Environment, Transport and the Regions* [2003] 2 AC 295 stated that it is for Parliament and Ministers to determine the objectives of planning policy and for those policies to be set out in legislation, ministerial directions and planning policy guidelines. The status of Ministerial Statements as a material consideration in planning terms is confirmed in *R (West Berks DC) v Communities Secretary* [2016] 1 WLR.



NPPF, we set out the particular factors relating to large scale ground mounted solar photovoltaic farms that a *local council* will need to consider” (emphasis added). The decision-maker for applications under the 1990 Act in normal circumstances is the local council, whereas it is in fact the Secretary of State under the 2008 Act. The NPPF and the planning practice guidance do not carry the same weight in NSIP applications as they do for applications under the 1990 Act, which is why the NPPF and the planning practice guidance are not referenced in section 104 of the 2008 Act. Where an NSIP is determined under section 104, the NPS takes primacy, with the Secretary of State deciding, on a case by case basis whether the NPPF should be considered “an important and relevant matter” and, if so, what weight to give it. As the content of the Ministerial Statement is in respect of a solar development being determined at the local level, so it follows that must be given less weight than the weight to be attached to the Energy NPSs and the Draft Energy NPSs.

3.2.2 Secondly,, the Ministerial Statement is not referenced in the following important documents for either of the two solar NSIPs which have been granted development consent, being Cleve Hill Solar Park (2020) and Little Crow (2022) – the Planning Statements, the Examining Authority’s Recommendation Report and the Secretary of State’s Decision Letter. In other words, the Ministerial Statement was either not considered to be an “important and relevant” matter, or, if it was, it was given no weight.

3.3 For the above reasons, the Applicant considers that the Ministerial Statement is not a relevant policy document for the Application and should not be considered “important and relevant” and thus should not be taken into account. Nonetheless, it is recognised that through the application of section 105(2) of the 2008 Act, the Secretary of State may consider that they must have regard to it as an important and relevant matter. In that scenario, the Applicant considers that the Ministerial Statement should be given no weight on the basis that the Energy NPSs (and draft NPSs) should be given greater weight as the primary policy documents.

4. THE MINISTERIAL STATEMENT – SUBSTANTIVE APPLICATION

4.1 In the event that the Secretary of State is to have regard to the Ministerial Statement as an important and relevant matter to the decision and applies some weight to it, the Applicant considers that the Application is compliant with the policy it sets out. The rationale for this is that the policy presented in the Ministerial Statement is consistent to the relevant policies set out within the Energy NPSs, to include the Draft NPSs.

4.2 NPS EN-1 at paragraph 5.10.8 and Draft NPS EN-1 at paragraph 5.11.8 provide that applicants should “*seek to minimise impacts*” on BMV Land and “*preferably use land in areas of poorer quality*”, except where inconsistent with other sustainability considerations. Appendix C (National Policy Statement Accordance Table) of the Planning Statement explains that most of the land in the Order Limits is not BMV Land. The land which is BMV Land is justified by other sustainability considerations, as per section 9.6 of the Planning Statement. This demonstrates the clear “*preference*”, as referred to in the Ministerial Statement, the Applicant has for using land which is not BMV Land. In terms of the “*most compelling evidence*” referred to in the Ministerial Statement, this is set out in the Statement of Need [EN0101118/APP/71].

4.3 Paragraph 2.48.13 of Draft NPS EN-3 requires that relevant solar projects should avoid using BMV Land where possible. However, land type “*should not be a predominating factor determining the suitability of the site location*”. The Applicant has explained how it has taken account of this at paragraph 6.3.33 of the Planning Statement - a detailed agricultural land survey it has undertaken confirmed that the majority of land within the



Order limits is classified as Grade 3b, which is not BMV Land (see **Appendix 12A, ALC Survey Report of the Environmental Statement [APP-092]**).

- 4.4 In addition, Draft NPS EN-3 states at paragraph 2.48.15 that “*applicants should explain their choice of site, noting the preference to be on brownfield and non-agricultural land*”, but acknowledges that the scale of NSIPs means it is likely that proposals may use some agricultural land. As is stated at paragraph 6.3.34 of the Planning Statement the Applicant has provided the necessary explanation in section 6.6 of that document and chapter 3 of the Environmental Statement [**APP-035**].

5. CONCLUSION

- 5.1 The Applicant considers that the Ministerial Statement is not an important and relevant matter for the purposes of the Application in line with decisions on recent solar DCOs. This is on the ground that the language used in the Ministerial Statement clearly demonstrates that it is directed towards planning applications under the Town and Country Planning Act 1990 (**the 1990 Act**) rather than the 2008 Act.
- 5.2 Should the Secretary of State decide that the Ministerial Statement is an important and relevant matter, then we consider that no weight should be afforded to it, given its focus on the 1990 Act and on the basis that the relevant NPSs including the draft NPSs, should have greater weight given the application of section 105 of the 2008 Act.
- 5.3 However, in the event that some weight is afforded to the Ministerial Statement, the Applicant considers that Application complies with the policy set out in that Ministerial Statement regardless.

**Pinsent Masons LLP
6 October 2022**

Appendix B – ALC Sampling Technical Note

Technical Note

Subject: Note on BMV Land and ALC Survey following the Hearing on Environmental Matters dated 29 September 2022

Introduction and Purpose

The purpose of this note is to provide additional information to assist the Examining Authority on Longfield Solar Farm project in relation to the matter of Best and Most Versatile (BMV) Land. It specifically addresses the queries raised by the Inspector at Issue Specific Hearing 2 (ISH2) in respect of the Agricultural Land Survey as set out in the document "Soil Resources and Agricultural Land Quality of Land North-east of Chelmsford" [APP-092, Appendix 12A of the ES].

In summary, this note provides information to clarify the following, set out in-turn:

1. the use of brackets "(x)" within the classification of Agricultural Land Classification Grade in the Soil Resources Survey Details table of the ALC survey report [APP-092];
2. what observations that have a 'borderline' grade (e.g. 2/3a) represent and implications for the assessment conclusions in Chapter 12: Socio-economics of the ES [APP-044].

The use of brackets "(x)" in ALC Grading

The use of the brackets which appear in the in the Soil Resources Survey Details table of the Report from page 13 onwards is derived from Table 6 of the Agricultural Land Classification Guidelines published by MAFF. The brackets indicate where the presence of calcareous topsoil has raised the ALC grade by one, e.g. 3a would be raised to 2. This is explained in paragraph 3.9 (including footnote 6) of the ALC survey report [APP-092]. Where occasional calcareous patches exist within otherwise dominant non calcareous soils these are not classified as the higher grade, which is consistent with the MAFF guidelines. These are denoted with brackets in the table in the Report.

'Borderline' Grade Observations

The Agricultural Land Classification Guidelines published by MAFF are the source of the sampling assessment methodology used, with the Soil Resources Survey Details are derived from this methodology.

The 'borderline' classifications recordings (e.g. 2/3a) in the ALC survey report [APP-092] represent where survey calculations (soil wetness or droughtiness) show sampling points to be on the boundary between ALC classifications. To exemplify, much of the land limited by wetness depends on the observed depth to an underlying clay layer (which affects the drainage). If the key threshold between 3a and 3b is a depth of 50 cm and the observation was say, 49 cm or 51 cm, then the sampling would record a borderline grading, as 3b/3a or 3a/3b respectively.

These borderline points are not always at the boundary of ALC classifications and are often within areas clearly of one ALC classification. Where borderline observations are located within areas obviously of a certain ALC classification, they are rounded to match the most numerous observation in the vicinity. In other words, borderline observations are mapped as the dominant grade. For example, scattered observations coming out as 3b/3a within a large area of 3a would be mapped as 3a, or vice versa. This is as per the MAFF guidelines.

Of the 438 observations, 34 have a borderline classification, representing 7.8% of the total observations. Of the 34, only 19 (55%) were assigned the lower ALC grade. Of the 34 observations, 14 were borderline BMV (3a/3b or 3b/3a) and assigned a lower grade of 3b; this is only 3% of the total 438 observations surveyed.

Chapter 12 of the ES concluded that the total area temporarily required during construction and throughout operation of the Scheme is approximately 439ha of which 109.5ha is BMV land. The temporary effect of the Scheme on the use of BMV agricultural land was assessed to be not significant as it was reversible. As the extent of BMV land was not a relevant factor in this assessment, conducted using the Natural England guidelines, who have agreed with the approach, it can be considered to be sound when taking into account any potential variation due to borderline grades.

The permanent effect of the Scheme on the use of BMV agricultural land was assessed to be not significant as, at 6ha, it amounted to less than 20ha which is the significance threshold in the Natural England guidelines. Even with the level of uncertainty inherent in the sampling method described by MAFF, the 20ha threshold would not be exceeded.

It is acknowledged that there will be small degree of uncertainty associated with any sampling methods when determining baseline conditions, but it is considered that this level of uncertainty is small and does not affect the findings of the ES. The approach taken aligns with the MAFF guidelines regarding the recording and mapping of borderline grades and has not been disputed by Natural England or the host Councils. It is therefore considered that the ES findings remain valid.

Appendix C – Heritage Technical Note

Technical Note

Subject: Response to additional comments raised by Principal Heritage Officer, Chelmsford City Council at Hearing on Environmental Matters dated 29 September 2022 and consideration of additional mitigation alongside other material considerations.

Purpose

This technical note sets out the Applicant's response to three issues raised by the Principal Heritage Officer, Chelmsford City Council at Hearing on Environmental Matters dated 29 September 2022. These were:

1. The significance of Whitehouse Farm (NBH15), Stocks Farm (NBH9) and Birds Farm Lane/Noakes Lane (no number);
2. The assessment of magnitude of impact on Stocks Farm (NBH9), Little Holts (DBH59), Whalebone Cottages (NBH8) and at Birds Farm Lane/Noakes Lane (no number); and
3. The appropriateness of mitigation to the west of the Site in the vicinity of Stocks Farm (NBH9); The Thatched Cottage (NBH6), Stocks Cottages (NBH7); Little Holts (DBH59); Whalebone Cottages (NBH8) and at Noakes Farm Lane (no number).

1 - Significance of Whitehouse Farm, Stocks Farm and Birds Farm Lane/Noakes Lane

Whitehouse Farm (NBH15) and Stocks Farm (NBH9) are non-designated assets of local significance which have been assessed as having Low significance (value) in Appendix 7A to the ES (Heritage Desk Based Assessment) [APP-057, Appendix 7A of the ES] following the methodology presented in the Scoping Report and using available information. It is acknowledged that given the available information there is room for professional disagreement on the significance of such assets.

Birds Farm Lane/Noakes Lane is a Protected Lane, a non-designated asset of a type only used in Essex and secured through the CCC Local Plans. It was assessed in the Heritage Desk Based Assessment [APP-057] as having a Low heritage value. The asset's significance is borne of a number of features not all of which are related to heritage but are matters of landscape and ecology. Given the asset's status as a Protected Lane it is suggested that it is of local significance and as such has been correctly assessed.

Were the three assets to be awarded a Medium value in line with the Principal Heritage Officer's request, the residual effect, as a result of a low magnitude of impact as concluded in the submitted assessment, would rise from Negligible to Minor adverse. This remains as not significant in EIA terms and is not considered to change the overall findings of the EIA.

2 - Assessment of magnitude of impact on Stocks Farm, Little Holts, Whalebone Cottages, and Birds Farm Lane/Noakes Lane

Within Chapter 7: Cultural Heritage of the ES [APP-039] Stocks Farm (NBH9) and Little Holts (DBH59) were assessed as receiving Low magnitudes of impact. Whalebone Cottages (NBH8) was assessed as receiving a Very Low magnitude of impact. Impact on Birds Farm Lane/Noakes Lane (no number) was assessed as receiving a Low impact. In all cases the Principal Heritage Officer considers that the level of impact should be raised.

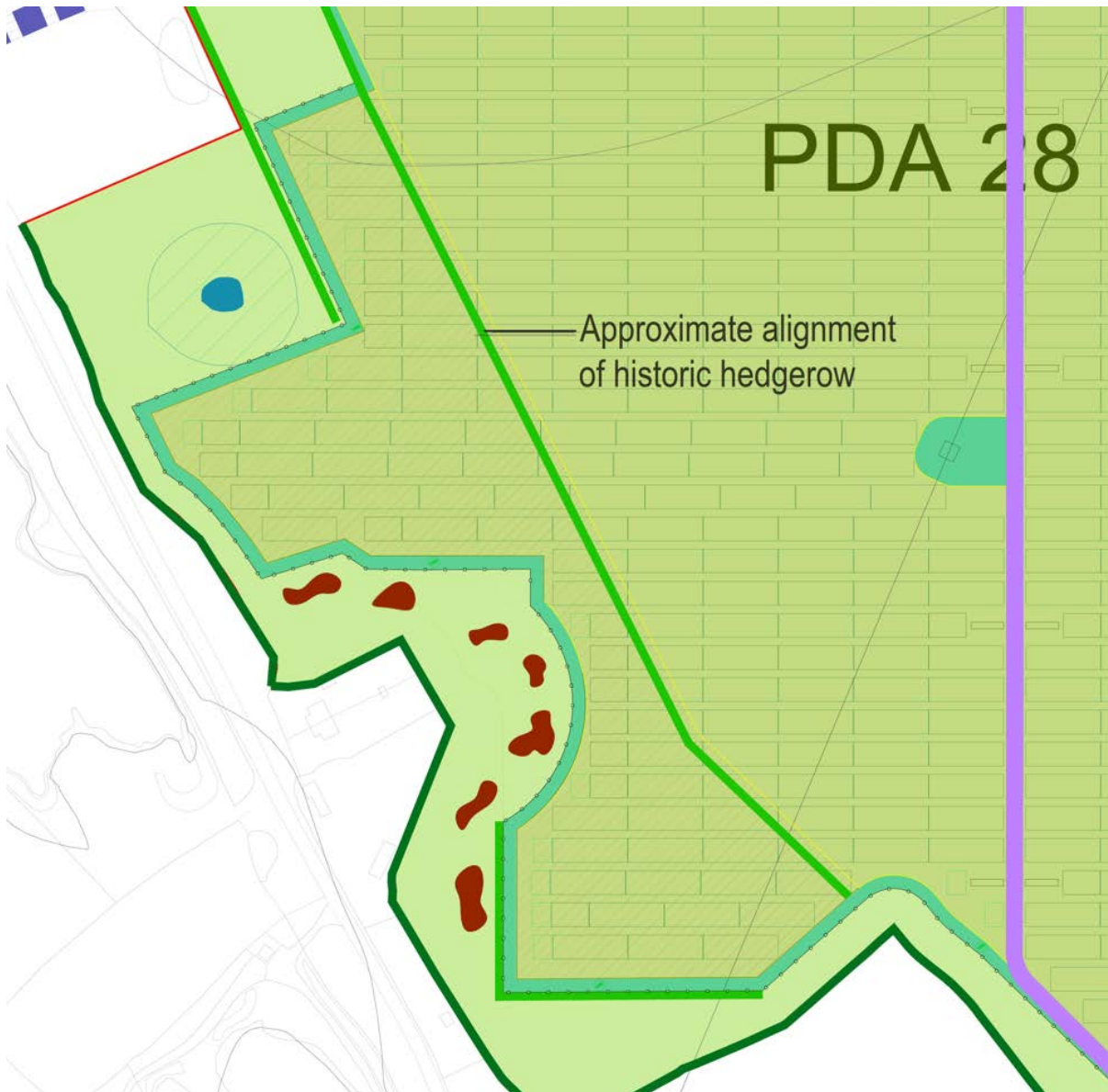
AECOM has revisited the magnitudes of impact following the hearing and stands by the original assessment presented in the DCO application in each case. However, given the nature of impact as a result of changes to setting, it is acknowledged that there is room for professional disagreement in the assessment of the magnitude of such impact.

It should be noted that should the Principal Heritage Officer's recommendations for increases in magnitudes of impact be taken up, the highest effect resulting from these recommendations would be Moderate adverse for Little Holts which would be a change from (Minor) not significant to significant. It is understood that the Principal Heritage Officer agrees this Moderate effect would not cause "substantial harm" for the purposes of the policy tests under the National Policy Statements. The effect on Stocks Farm and Birds Farm Lane/Noakes Lane would change from Negligible to Minor adverse and the effect on Whalebone Cottages would remain at Negligible. None of these effects are deemed significant in EIA terms and are therefore not considered to change the overall findings of the EIA.

When also considering the proposed increased significance discussed in Section 1 of this note alongside the proposed increases in magnitude of impact by the Principal Heritage Officer set out in this section, the residual effect at Stocks Farm (NBH9) would increase from Negligible to Moderate, which would change the conclusions from not significant to significant. The residual effect at Birds Farm Lane/Noakes Lane would change from negligible to moderate, which again would be a change from not significant to significant. It is understood that the Principal Heritage Officer agrees these Moderate effects would not cause substantial harm (noting that for NPS purposes, whilst the Secretary of State should consider impacts on non-designated heritage assets, policy tests relating to substantial and less than substantial harm will only be relevant in the context of built heritage for designated heritage assets).

3 - Mitigation

It is the Principal Heritage Officer's opinion that mitigation in the form of a further setback should be applied in order to reduce harm to assets ranged along the Boreham Road. The Principal Heritage Officer's request is to remove part of PDA 28 back to a hedgerow shown on historic maps and illustrated below (marked as the "approximate alignment of historic hedgerow"). It is the Applicant's contention that while removal of this part of the scheme would reduce impact on the assets present it would not reduce the significance of effect in EIA terms – whether you take the significance conclusions to be that in the environmental statement or by the Principal Heritage Officer. It should be noted that the level of harm that would result from the Scheme with the current mitigation would already be less than substantial. The Principal Heritage Officer's suggested mitigation would therefore (as any additional mitigation would) result in a reduction of less than substantial harm rather than a total removal of any harm. For these reasons, it is the Applicant's position that the proposed setback is not justified in EIA terms given it would reduce the significance level (i.e. from moderate to negligible if you took the Principal Heritage Officer's position).



For Birds Farm Lane/Noakes Lane the Principal Heritage Officer's request is that setbacks are employed either side of the lane in PDA 11 and PDA 12. It is the Applicant's contention that such setbacks are not considered necessary or as the presence of solar PV on either side of the lane with improved screening (as is proposed) would not affect its significance and that the breach in this screening to allow for a crossing between the two PDAs would affect such a short length of the lane that the impact would be only slightly increased.

Conclusions on heritage matters and position on proposed additional mitigation

Apart from the Moderate adverse effect assessed for Ringers Farmhouse (DBH14), none of the effects on built heritage assets assessed in Chapter 7: Cultural Heritage are significant in EIA terms. If the Principal Heritage Officer's recommendations for increases in levels of significance and impact are taken in isolation the effect for only one asset, the grade II listed Little Holts, would increase to Moderate adverse which is deemed significant in EIA terms. The other effects would not rise above Minor adverse, which is not deemed significant in EIA terms.

For two assets, Stocks Farm and Birds Farm Lane/Noakes Lane (both non-designated), the Principal Heritage Officer has requested an increase in both significance and impact. Taken together these increases would result in Moderate adverse effects which are deemed significant in EIA terms. It is understood that the Principal Heritage Officer agrees these Moderate effects would not cause substantial harm.

In AECOM's professional opinion and for the reasons given above, it is considered that the significant of effects presented in the ES remain valid.

Asset	Effect presented in the ES (APP-039)	Change requested by the Principal Heritage Officer	Effect after requested changes
Whitehouse Farm (NBH15)	Negligible	Significance	Minor adverse
Stocks Farm (NBH9)	Negligible	Significance and Impact	Moderate adverse
Little Holts (DBH59)	Minor adverse	Impact	Moderate adverse
Whalebone Cottages (NBH8)	Negligible	Impact	Negligible
Birds Farm Lane/Noakes Lane	Negligible	Significance and Impact	Moderate adverse

With respect to the further mitigation proposed by the Principal Heritage Officer, as set out above, the effectiveness of such mitigation would be limited, and would not result in removal of harm nor change in the significance of the effects being mitigated.

However, the proposal to remove solar PV from within part of PDA28 would have an impact on the benefits provided by the Scheme, namely the generation of renewable energy, in response to an urgent national need for renewable energy generation. The Applicant estimates that pulling back PDA28 in the way suggested would result in a loss of generation capacity for the Scheme of around 1% (circa 4-5MW). Given the limited effectiveness of the suggested additional mitigation, the Applicant does not consider the additional mitigation to be reasonable, justified or proportionate having regard to the consequential reduction in generation capacity.

Appendix D – Permissive Paths Technical Note

Project name:
Longfield Solar Farm**From:**
Sam Griffiths**Date:**
05 October 2022

Technical Note

Subject: Approach to existing footpaths and proposed permissive paths

Purpose

This technical note sets out the design rationale that has informed the proposed layout of Longfield Solar Farm (the Scheme) in relation to existing Public Rights of Way (PRoW) that cross the Order limits. This technical note also details the uses permitted on each permissive path proposed across the Order limits during the operational phase.

The Scheme's relationship to PRoW

A number of PRoW cross the Order limits. These are listed in the Public Right of Way Management Plan [APP-095]. The Scheme's layout has been designed to mitigate, as far as possible, adverse visual effects for people walking on these PRoW. This has included the retention of existing vegetation, proposal of new planting that is in keeping with the local character and the integration of 'breaks' in the solar array to provide areas of openness and visual connections to features in the wider landscape.

Specifically, with reference to Figures 60640215-ACM-XX-XX-DR-LA-0001 and 0002 in the Outline Landscape and Ecology Management Plan [APP-217], this includes:

- No development is proposed in the field between Terling Spring and Sandy Wood, protecting visual amenity from **PRoW 113_11** (part of the Essex Way).
- New planting, in the form of woodland, tree belts, scrub vegetation, hedgerows and individual trees, will be planted on the northern extent of the Scheme, screening the solar array from **PRoW 113_11** along the floor of the Ter Valley, and softening the appearance of the solar array from **PRoW 221_29** (part of the Essex Way).
- Improvements (gapping up and allowing the existing hedge to grow to 3m tall) will be made to the hedgerow on the edge of the Order limits between Scarlett's Farm and Rolls Farm Lane to screen views of the solar array from **PRoW 113_33**.
- New hedgerow and tree planting will be implemented either side of **PRoW 221_53** between Boreham Road and Scarlett's Wood to screen views of the solar array, whilst maintaining a sense of openness. The illustrative Concept Design shows a distance of 20m from the fence proposed to the north and south, which will accommodate the PRoW and proposed planting. This distance is secured through the area allocated to Work Number 6, as shown on drawing 4077_LGF_DR_PRE_0008.4 [REP2-004].
- An offset, measuring c. 100 x 100m, in which no development is proposed is incorporated north of **PRoW 113_25** east of Noakes Lane, maintaining northerly open views across a proposed wildflower meadow. This view is illustrated by the photomontage prepared from Viewpoint 56, provided in ES Volume 3: 6.3 Environmental Statement - Figure 10-13 Type 3 Visualisations 5 of 5. The footpath continues east, where the proposed fence line includes a number of chamfered corners and offsets to create a series of more open areas adjacent to the footpath.

- Land adjacent to **PRoW 113_30**, stretching between Terling Hall Road in the east and the edge of PDA 22 in the west, utilises existing vegetation such as hedgerows and Ringer's Wood and proposed planting in the form of hedgerows, to maintain a vegetated setting to at least one side of the footpath at all times. The same approach has been taken to **PRoW 213_5** between Stocks Farm and Toppinghoehall Wood.
- Between Toppinghoehall Wood and Porters Wood, new woodland planting would screen the proposed solar array in easterly views from **PRoW 113_32**. Once south of Porter's Wood a wide offset (117m at its widest point) would retain a sense of openness, whilst new hedgerows would screen the appearance of the solar array.
- Blocks of woodland proposed at both ends of the BESS, north of Toppinghoehall Wood, would screen the appearance of the BESS from **PRoW 213_19** and **PRoW 90_36**.

An indicative section, demonstrating the relationship of the Scheme to an existing PRoW, is presented in Figure 1 below.

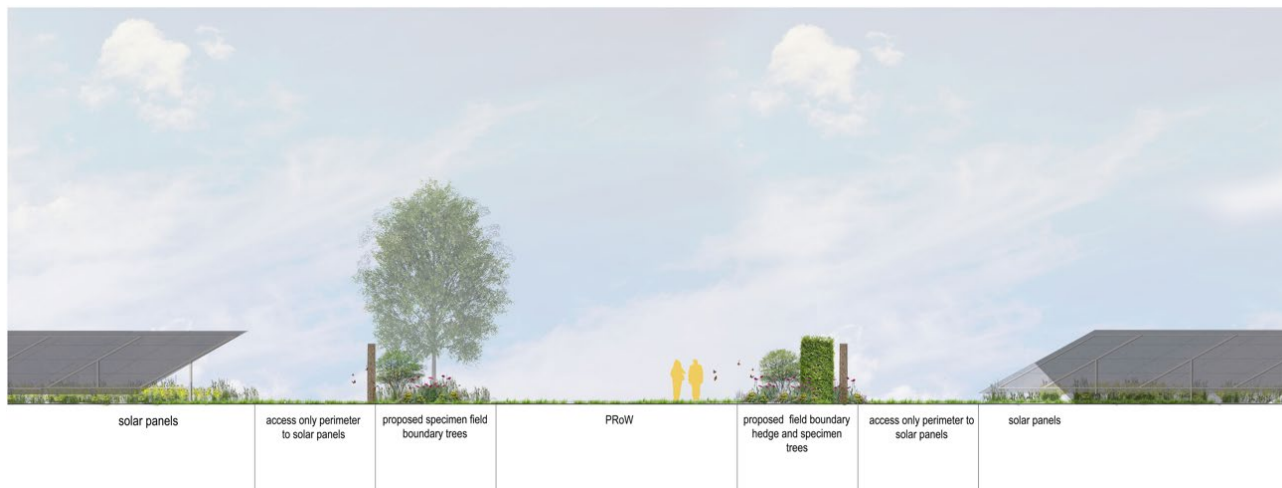


Figure 1 Indicative section through PRoW

Users of the proposed permissive paths

A series of permissive paths have been proposed to enhance recreational access to the Order limits. In recognition that the existing PRoW network provides access from east to west, the permissive paths have, in particular, been designed to create a coherent north / south route through the Order limits. This section should be read with reference to the plan provided in Appendix A which shows the alignment of each permissive path, its reference number and the adjoining footpaths.

The Scheme intends to make the proposed network of permissive paths accessible to as broader group of users as possible. Any limitations to access identified in this section are due to access restrictions resulting from the existing PRoW network, for example equestrian users not being permitted on footpaths.

Three potential uses have been considered, namely pedestrians, cyclists and equestrian users. Walking is permitted on all permissive paths. Cycling and equestrian use is also permitted on all permissive paths. However, since riding a bike or a horse is not permitted on a footpath, and none of the proposed permissive paths join a bridleway, the following access would be permitted in reality:

- Cyclists may use all permissive paths where access is via the public highway or a bike is pushed along an existing footpath in order to access the permissive path; and
- Since riding and leading a horse on footpaths is not permitted under the Highway Code (Rule 54)¹, equestrian users may only access and use permissive paths where access via a permitted route is possible (e.g. access from the public highway).

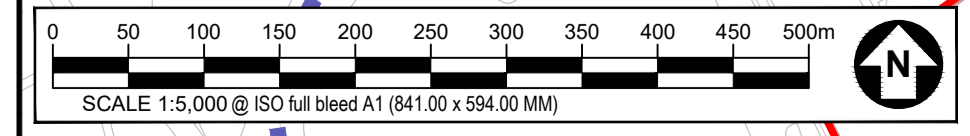
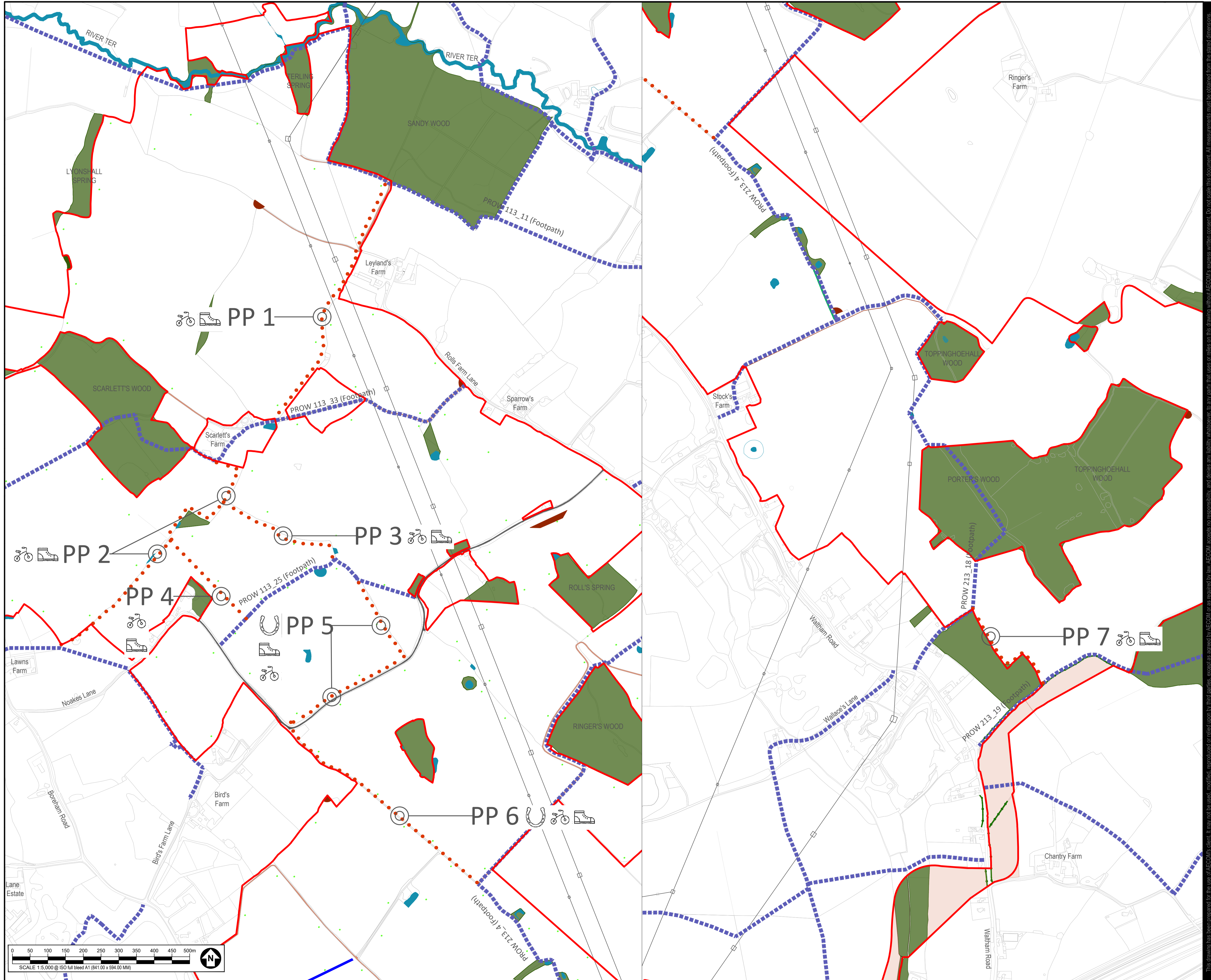
In line with the statements above, Table 1 sets out the permitted use of each permissive path.

¹ <https://www.gov.uk/guidance/the-highway-code/rules-about-animals-47-to-58>

Table 1 Permitted use of each permissive path

Permissive Path Reference	Permitted Users	Reason
PP 1	Pedestrians Cyclists	Cycling is permitted but cyclists must dismount at each end of the permissive path to join the adjacent footpaths.
PP 2	Pedestrians Cyclists	As above.
PP 3	Pedestrians Cyclists	As above.
PP 4	Pedestrians Cyclists	As above.
PP 5	Pedestrians Cyclists Equestrian	Cyclists and equestrian users can access the permissive path from Noakes Lane. However at the end of the permissive path cyclists must dismount and equestrian users must return along the permissive path to re-join the public highway (Noakes Lane).
PP 6	Pedestrians Cyclists Equestrian	As above
PP 7	Pedestrians Cyclists	Cycling is permitted but cyclists must dismount at each end of the permissive path to join the adjacent footpaths.

The Outline Operational Environmental Management Plan [APP-215] and Public Rights of Way Management Plan [APP-095] both identify that clear signage will be displayed at the entrance of each permissive path detailing the uses permitted by the land owner. Signage will also be installed to instruct cyclists to dismount where leaving a permissive path and joining a footpath. Both of the documents referenced above also state that the detailed design of permissive paths will be agreed with the Host Authorities.

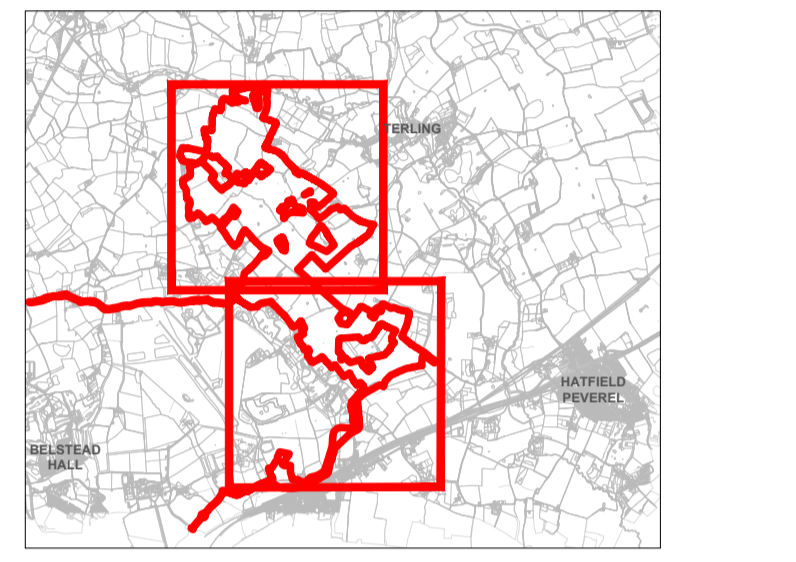


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LOCATION PLAN (NTS)



- NOTES**
1. Do not scale from this drawing.
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KEY

	ORDER LIMITS.
	EXISTING PUBLIC RIGHT OF WAY.
	PROPOSED PERMISSIVE PATH.
	PATH REFERENCE NUMBER.

ISSUE PURPOSE

FOR INFORMATION

PINS REFERENCE NUMBER
EN010118

FIGURE TITLE
PERMISSIVE PATHS - OVERVIEW

FIGURE NUMBER
Appendix A

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