EAST YORKSHIRE SOLAR FARM

East Yorkshire Solar Farm

EN010143

Applicant's Summary of Oral Submissions and Post Hearing Notes at Issue Specific Hearing 2 on Environmental Matters

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1. Introduction

1.1.1 An Issue Specific Hearing was held at 10:00 on Wednesday 10 July 2024 at The Parsonage Hotel, Escrick, in relation to environmental matters and in accordance with the Planning Act 2008.

1.1.2 Parties from the Examining Authority, Pinsent Masons LLP (the Applicant's legal advisers for the Application), Aecom Limited (the Applicant's planning and environmental consultants for the Application), North Yorkshire Council, East Riding of Yorkshire Council and three individual representatives were present at the Issue Specific Hearing. It is the Parties' oral submissions that are summarised in this document.

Table 1-1 Applicant's Summary of Oral Submissions and Post Hearing Notes

#	Agenda Item	Post-Hearing Notes
1.	**Welcome, introductions and arrangements for the hearing**	The following parties were present at the hearing: • Simon Warder, the Examining Authority (**the ExA**). • Amy Stirling, Senior Associate, Pinsent Masons LLP, the solicitors for East Yorkshire Solar Farm Limited (**the Applicant**) for this matter. • Gareth Phillips, Partner, Pinsent Masons LLP. • Jack Spurway, Head of Planning, the Applicant. • Rebecca Condillac, Associate Director / Landscape Architect, Aecom. • Clare Heeley, Associate Director / Infrastructure Consents and Town Planning / Environment and Sustainability, Aecom. • Esther Howe, Associate Director / Economic Development, Aecom. • Nicola Lewis, Principal Ecologist, Aecom. • Neil Titley, Technical Director / EIA, Aecom. • Neal Gates, Principal Ecologist, Aecom. • Lewis Deacon, Biodiversity Net Gain and Ecological Innovation Lead, Aecom. • Chris Carter, Assistant Director / Planning, Aecom.

- Edward Robinson, Principal Acoustic Consultant, Aecom.
- Dr James Riley, Principal Ecologist, Aecom.
- Michael Reynolds, Policy and Place Officer, North Yorkshire Council.
- Jenny Crossley, Senior Planning Officer, North Yorkshire Council.
- John Wainwright, Principal Landscape Architect, North Yorkshire Council.
- Michelle Saunders, Public Health Officer, North Yorkshire Council.
- Joanne Marshall, Principal Planning Officer, East Riding of Yorkshire Council.
- Jennifer Woollin, Biodiversity Officer, East Riding of Yorkshire Council.
- Catherine White, Landscape and Visual Impact Officer, East Riding of Yorkshire Council.
- Rachel Hodgson, Planning Officer, East Riding of Yorkshire Council.
- Mr Michael Field, individual representative.
- Mr Stephen Lunn, individual representative.
- Mr Anthony Scott Warren, individual representative.
- Mrs Sally Beckitt, individual representative.

2. Main discussion points

a) Landscape and visual impact

Landscape impact, including the assessment methodology and the scale of change

The ExA raised the East Riding of Yorkshire Council's Local Impact Report **[REP2-022]** which identified a number of concerns regarding the absence of certain viewpoints in certain locations and the value given to other viewpoints, particularly paragraphs 7.51 and 7.57. The ExA also raised Mr Taylor's written representations **[REP1-144]** and **[REP1-145]** and the absence of the immediate setting of the receptor landscape and the small scale loss of farmland. Additionally the ExA asked about local residents and the methodology carried out under Guidelines for Landscape and Visual and Impact Assessment (GLVIA3).

Ms Condillac on behalf of the Applicant explained that a number of different processes were used in the selection and identification of viewpoints, including the production of the zone of theoretical visibility (ZTV) with Surface Features – Solar PV Panels in Figure 10-5 **[APP-160]**.

In response to the East Riding of Yorkshire Council's concern in paragraph 7.51 of its Local Impact Report **[REP2-022]** of a "*Lack of viewpoints in respect to solar PV area 2a with potential residential/PRoW/road users Breighton (to the west) and B1228 to the east*", Ms Condillac referred to the ZTV in Figure 10-5 **[APP-160]** which identified where there was the potential for visibility for viewpoints. Ms Condillac referred to Viewpoint G to the south of Breighton on Figure 10-7 – Potential Representative Viewpoint Locations **[APP-162]**. Ms Condillac explained that the ZTV was ground-truthed and subsequently Viewpoint G was removed from the assessment as there were no views from this viewpoint.

Ms White on behalf of East Riding of Yorkshire Council asked if any consideration was given to the footpath that goes through the centre of area 2A on Figure 10-7 **[APP-162]**. Ms Condillac explained that it was not initially identified, but the potential and proposed viewpoints were agreed with East Riding of Yorkshire Council prior to submission of the Preliminary Environmental Information Report and this viewpoint was not raised. Ms Condillac explained that public rights of way (PRoWs) users have been considered in Chapter 10 of the Environmental Statement (ES) **[REP1-014]**. The ExA explained that the footpath (called The Outgang) has historical significance and asked if that heightens the case for having a viewpoint assessment somewhere along that route. Ms Condillac explained that the assessment has followed the guidance outlined in Appendix 10-2: Landscape and Visual Impact Assessment Methodology of the ES **[APP-099]** which assesses the receptor for the

PRoW on whether the PRoW is a long distance path or a strategic route, both of which would increase its sensitivity, whereas historic importance does not.

The ExA explained that the other issue raised in paragraph 7.51 of the East Riding of Yorkshire Council's Local Impact Report **[REP2-022]** was "*the northern solar PV areas around Willitoft and Gribthorpe appear more in line with VP28, medium value as opposed to low value, with strong hedgerows and mature trees dominating the views*".

Ms Condillac referred to Viewpoint 28 **[REP1-029]** and explained that the sensitivity of receptors is a combination of the value of the view and the susceptibility. The value of the view has been assigned using professional judgement and varies as a result of landscape structure and the presence of detractors. The visual assessment in Table 10-12 of Chapter 10 of the ES **[REP1-014]** identified high sensitivity for residential and PRoW users and medium sensitivity for road users for Viewpoint 28, at Willitoft and Gribthorpe. A change in the value of the view would not change the assessment of the impact. The ExA asked Ms Condillac to explain why the impact would not change. Ms Condillac explained that the value of view and the rating of susceptibility are combined and provided some examples of other Viewpoints (8, 10a, 10b, 12a). If the value of the view has been assigned low and the sensitivity of the receptor is medium, the value of view has not had a stronger weighting than the sensitivity of the receptor. The sensitivity is then combined with magnitude of impact to identify the significance of effect. Ms White on behalf of East Riding of Yorkshire asked if the value that has been given to the view would affect the impact. Ms Condillac replied that it would not affect the impact.

The ExA highlighted paragraph 7.57 of the East Riding of Yorkshire Council's Local Impact Report **[REP2-022]** which "*recommends that the following points are reviewed where potential impacts may have been underestimated and/or further opportunities for mitigation/enhancements may be available*". Ms White on behalf of East Riding of Yorkshire explained its concern around the frequency and repetition of the footpaths use in terms of their use and them not being transient or not being regularly used by residents. Ms Condillac explained that the duration of travelling through a PRoW, as opposed to static views (e.g. from a dwelling), is considered in the magnitude of impacts and considered in the assessment of impact in Chapter 10 of the ES **[REP1-014]**.

The ExA explained that the Council's concern seems to be the effect on multiple properties in certain locations, which would be a public facing impact and if it has been fully assessed. Ms Condillac

explained that the assessment is considered robust and in accordance with guidance contained within GLVIA3. Where there are a number of dwellings, these have been taken into consideration of the viewpoint and the assessment of those viewpoints.

The ExA asked about the characterisation of landscape area, such as the Humberhead Levels and the small-scale loss of farmland. The ExA asked the Applicant to consider the absence of the immediate setting which Mr Taylor **[REP1-144]** and **[REP1-145]** and the ExA raised and the scale at which landscape effects are assessed. Ms Condillac explained that the landscape assessment presented in Chapter 10: Landscape and Visual Amenity, ES Volume 1 **[REP1-014]** is considered by the Applicant to be robust and has utilised the published East Riding of Yorkshire Landscape Character Assessment that has been produced as part of the evidence base for the East Riding of Yorkshire Council Local Plan.

As set out in sections 5.12 to 5.15 of GLVIA3, published and adopted landscape character assessments are considered the most robust documents. Paragraph 5.50 of GLVIA3 relates to the geographical extent over which landscape impacts arising from a development may be experienced – "*this is distinct from the size or scale of the effect*". The impacts of the Scheme will be experienced across a larger area than the Site and immediate setting of the Site and therefore it is at the local Landscape Character Area (LCA), Landscape Character Type (LCT) and National Character Area (NCA) level that the impacts of the Scheme have been assessed within the ES Chapter 10: Landscape and Visual Amenity **[REP1-014]**. The landscape assessment has been undertaken on a local level using the subdivided LCAs which are LCA 5A and LCA 5B within LCT 5 and LCA 7A and LCA 7B within LCT 7. The assessment is provided in Table 10-11: Assessment of landscape effects – Local of ES Chapter 10 **[REP1-014]**). Within ES Chapter 10 **[REP1-014]**, the landscape assessment has assessed that LCA 5A will experience significant effects during the period of operation of the Scheme as a result of the large geographic extent over which the Scheme will influence landscape character (direct and indirect) within LCA 5A. Ms Condillac explained the assessment of the LCAs are robust for the scale of the scheme.

The ExA asked about paragraph 5.50 of GLVIA3, around the geographical scope, and is concerned the assessment does not say enough about the site level scale. Ms Condillac explained that the assessment has utilised the local landscape character areas which considered landscape

characteristics in the area within the Order Limits, including where the Taylor family are located within area 5A. However, the assessment would not change if it was undertaken at a smaller scale. The ExA asked the Applicant to explain in writing why the conclusion that the landscape assessment would not change at a smaller scale than (as used) the landscape characteristics in the Order Limits (see below).

The ExA stated there was concern from several Interested Parties that the solar panels would be too close to residential properties and that fencing/hedging would have a closing off/tunnelling effect on footpath views. Ms Condillac explained that the buffer separation for PRoWs is a considerable width and allows views of tall vegetation such as trees and woodlands that would appear in the background of the view. There would be some enclosing of views in direct proximity of solar PV but the Framework Landscape and Ecological Management Plan (LEMP) **[REP1-063]** shows intermittent woodland edge planting to break up that view but to allow areas to see the background. This includes buffers of 15m where the solar PV lies to one side of the PRoW and 20m where the solar PV is both sides of the PRoW.

Ms Condillac explained that for residential viewpoints the buffer varies across the Scheme. In general the mitigation is hedgerow planting, woodland planting, orchard planting and grass buffers. Within ES Chapter 10 **[REP1-014]** there are a number of residential viewpoints identified with significant effects identified at year 1 and the mitigation planting softens the impact by operation year 15. There is also potential to see some solar PV panels from the upper floor of residential properties, but this will be softened by mitigation planting and will result in a not significant effect.

The ExA asked whether, in locations where there is a significant effect in year 1, consideration had been given to more mature planting in year 1 so it has a better effect earlier in the lifetime of the project. Ms Condillac explained that paragraph 6.1.7 of the Framework LEMP **[REP1-063]** states that opportunities for mature planting will be explored with landowners in targeted locations to mitigate the effects on the most sensitive receptors.

Ms Marshall explained that East Riding of Yorkshire Council would have liked more engagement on impact on impact of PRoWs. Ms Stirling explained that the plan is to utilise broad principles, which will be applied on a PRoW-by-PRoW basis and it will ultimately be subject to approval from the East Riding of Yorkshire Council in accordance with Requirement 17 of Schedule 2 of the draft DCO

[REP1-006], but the Applicant is happy to continue to engage with the Council on whether there are specific locations where additional mitigation could be provided to address concerns.

Mr Lunn explained that his property is next to Mr Taylor's property on Spaldington Road. Viewpoint 5 looks towards Zone 2F of the solar farm and it is partially obscured by existing trees. If it was moved 100m east, it would be in front of Mr Lunn's property, thereby obscuring it. Ms Condillac explained that in Table 10-12 Viewpoint Assessment of ES Chapter 10 **[REP1-014]**, the viewpoints have been selected on the ZTV and are generally representative, but every single dwelling in the study area cannot be assessed with an individual viewpoint. This viewpoint assesses receptors as residential, which are of high sensitivity, and road users. Ms Condillac explained that the assessment identified during construction year 1 in that location that there will be a moderate adverse significant effect for residents due to considerations such as gaps in hedgerows and adverse views from upper story windows. At operation year 15, however, those views reduce to low magnitude and minor adverse for residents. Mr Lunn asked what direction the viewpoint is facing. Ms Condillac stated that it is south east. Ms Condillac also explained that there is potential for more mature specimens to be planted in year 1 at this location.

Proposals for the retention of existing trees and vegetation

The ExA raised paragraph 8.3 of North Yorkshire Council's Local Impact Report **[REP2-023]**, which states that "*the provision for tree and vegetation protection within the Applicant's submission is uncertain, convoluted across multiple documents and lacks clarity*". The ExA asked the Council about the Applicant's mitigation.

My Reynolds explained there has been a productive meeting about the grid corridor on the Framework LEMP **[REP1-063]** and worst case scenario in the arboricultural impact assessment **[APP-102]**. Whilst there are still questions on how the detailed design comes forward, North Yorkshire Council will continue to engage with the Applicant. Mr Wainwright explained there is a lack of clarity on the worst case scenario for tree protection and loss; the LVIA **[REP1-014]** implies that no trees will be lost, but the arboricultural impact assessment **[APP-102]** implies that trees could be lost. Additionally, it is not clear how the detailed design would deal with tree protection in the grid connection corridor as the Outline Design Principles Statement **[REP1-051]** does not mention it. The Framework LEMP **[REP1-063]** and Operational Environmental Management Plan (OEMP) **[REP1-055]** concern with the

operational part of the scheme. Mr Wainwright explained it may be because there are a number of interlinking documents.

The ExA highlighted paragraph 7.46 of the East Riding of Yorkshire Council's Local Impact Report **[REP2-022]** which sets out its concerns. Ms Woollin explained that this is based on the Arboricultural Impact Assessment **[APP-102]**. There are two grid connection options, but one is preferred in terms of tree loss. There are some regrettable losses of trees, but these are justified and there are no significant concerns. Ms White explained that the comments in paragraph 7.46 are comments about whether they can be done, if they are practicable and East Riding of Yorkshire Council would like reassurance that they will be done and that there will be a process for doing that.

Ms Stirling explained that the Applicant is preparing an updated Framework LEMP for Deadline 3 to provide clarity along the grid connection corridor, noting that because of the nature of the above ground infrastructure of North Yorkshire Council, it may have been less clear for below ground infrastructure. The current proposal is to split out the Framework LEMP so part of it is specifically related to the grid connection corridor so that is clearer. Ms Stirling continued and corrected Mr Wainwright's statement that the Framework LEMP was an operational document, as the Framework LEMP is a pre-commencement requirement and the Applicant would not be able to build the Scheme without approval from North Yorkshire Council or the East Riding of Yorkshire Council on this, depending on the location. The ExA asked the Applicant to consider strengthening mitigation proposals in certain residential locations in the updated Framework LEMP.

Post Hearing Note

The Applicant was asked to explain in writing why the conclusion that the landscape assessment would not change at a smaller scale than (as used) the landscape characteristics in the Order Limits.

*The landscape assessment presented in Chapter 10: Landscape and Visual Amenity of the Environmental Statement **[REP1-014]** is considered by the Applicant to be robust, in accordance with guidance contained within GLVIA3, and has utilised the published East Riding of Yorkshire Landscape Character Assessment that has been produced as part of the evidence base for the East*

Riding of Yorkshire Council Local Plan (adopted 2016). This process wasn't challenged by East Riding of Yorkshire Council during the Statutory Consultation stage.

The landscape assessment has been undertaken on a local level using the subdivided Landscape Character Areas (LCA), LCA 5A and LCA 5B within Landscape Character Type (LCT) 5 and LCA 7A and LCA 7B within LCT 7. The assessment is provided in Table 10-11: Assessment of landscape effects – Local ***[REP1-014]****. The scale of the LCA is considered by the Applicant to be proportionate to the scale of the Scheme and therefore an appropriate scale at which the impacts on landscape characteristics are assessed.*

For the immediate setting of the Solar PV Areas, the perceptual influence of the Solar PV panels on landscape character will extend outside of the individual Solar PV Area boundary, although the influence will be limited by the low-lying topography, existing hedgerows and existing woodland blocks. The influence on local landscape characteristics of the Solar PV Areas, with reference to Figure 10-5 Zone of Theoretical Visibility with Surface Features – Solar PV Panels ***[APP-160]****, will be up to approximately 750m from the Solar PV Areas. Although this distance is reduced and is often limited to the boundary of Solar PV Areas where existing vegetation restricts visibility. This limits the in-direct impacts on landscape character and therefore limits the perceptual qualities on landscape character within the identified LCA.*

If the published LCA were subdivided, which would be needed to assess the Scheme at a smaller scale than the published LCA, the direct impacts on key characteristics of the landscape and the indirect impacts on the perceptual qualities of the landscape character would remain as identified within Table 10-11: Assessment of landscape effects – Local ***[REP1-014]****. This would be as a result of the limiting factors of landform and vegetation on the impact of the Scheme, as described above, that would not change if the published LCA were subdivided.*

Updates have also been made in the Framework LEMP which the Applicant has submitted at Deadline 3 to provide clarity on vegetation protection and retention along the Grid Connection Corridor, which is set out in section 8. Section 6 also provides detail on mature planting.

b) Use of agricultural land, with particular regard to the scale of change

The ExA asked about the East Riding of Yorkshire Council's Local Impact Report **[REP2-022]** which refers to recommendations from an independent consultant on agricultural land. Ms Marshall confirmed a desk based assessment was submitted with the Local Impact Report and a written response can be provided. The consultant recommended further surveys along the cable route to ensure that soil resources are not damaged and to determine the agricultural land classification (ALC) grade where permanent structures will be based for restoration and points around sheep grazing.

The ExA queried the Applicant's answer to the ExA's written question 1.02 and asked the Applicant to expand on it. The ExA also raised Mr Burton's written representation **[REP1-108]** about the land's agricultural value.

Mr Titley on behalf of the Applicant explained in response to the East Riding of Yorkshire Council's point along the cable route that it was picked up in Chapter 15 of the ES **[APP-067]**, acknowledging that a targeted survey would be done on any agricultural land along the cable corridor to support the soil management plan. The Framework Soil Management Plan (SMP) **[REP1-058]** includes the commitment for targeted surveys, and Requirement 15 of Schedule 2 of the draft DCO **[REP1-006]** requires that a SMP be produced that substantially accords with the framework SMP and which would be signed off by the Council. Therefore, the Applicant is aligned with the East Riding of Yorkshire Council's independent consultant. Mr Titley explained that sheep grazing is explored in detail after the consent stage as it relies on a farmer and a grazier. The solar farm is a minimum of 1m above the ground and because it is using single axis tracker panels, these will move towards the horizontal position in the day so can be around 2m from the ground. The Grazing Feasibility Report **[APP-071]**, undertaken by a sheep grazing expert, demonstrates that sheep grazing is not prohibited on the site.

Mr Titley explained that the land is 92.9% non-best and most versatile (BMV) land and primary surveys were carried out by a specialist agricultural land company. That was after a desk-based assessment using the 1988 DEFRA maps seen in Figure 15-1 in Chapter 15 of the ES **[APP-067]** which showed most of the site was Grade 4. University of Cranfield data was used to update the data available and is presented in Figure 15-2 of Chapter 15 of the ES **[APP-067]**, which showed more of the site was Grade 3b and some Grade 3a and Grade 2 land. The ALC survey is what is most relied on and this was carried out in May-September 2023 using densities agreed with Natural England. The land itself

is used for a mix of farming, some of it is used for food production, some for animal feed and some for biomass. The site also has different soils, such as clay and loamy, meaning some areas of the site can become waterlogged and difficult to farm.

The ExA asked, in terms of the range of produce grown, if the Applicant had information on the proportions of these. Mr Titley answered that it is not part of the Application as it changes year on year and the Applicant knows that, speaking to the farmers, they have a mix of food production, animal feed and biomass but there are no specific numbers on each of these.

The ExA explained that a number of submissions and the ExA's question 1.0.2 highlighted the alternative of using rooftops for agricultural land. The ExA queried if the provisions of the most recent written ministerial statement, which addresses the relationship between solar farms and agricultural land, means rooftop solar should play a larger role in meeting targets than in has been done to date. Ms Heeley on behalf of the Applicant referenced the Statement of Need **[REP2-010]** where the Applicant recognises that rooftop solar power generation has a role in decarbonisation, but it is not likely to deliver sufficient capacity that is required by National Policy Statements (NPS)-EN1 and NPS-EN3 at the required pace and affordable cost. Ms Heeley explained that the ministerial statement stated that rooftop solar is encouraged, but as referenced in NPS-EN3, it is not the only source of solar energy. Mr Phillips on behalf of the Applicant explained that the written ministerial statement is aligned with both NPS that was adopted in January 2024 and the general focus in policy and by the new government is to push rooftop solar as much as possible. Mr Phillips explained that there are a lot of constraints with rooftop solar such as design, engineering and grid constraints which means solar at scale will not be delivered through rooftop alone, it needs to be part of the mix of technologies that are available to decarbonise the country.

The ExA referred to its question 8.0.16 that referred to changes to the land use character of the area. The ExA asked for an expansion on the Applicant's response on what may be perceived as loss of the traditional rural area. Mr Titley on behalf of the Applicant explained that this is the reason why the Applicant has made a commitment to incorporate sheep grazing which would help retain the agricultural usage. The farmers currently have a wide range of options available, for example, they could revert it to grassland or convert it to woodland. The Applicant acknowledges there will be some

change in the area with the scheme, but the Applicant has aspirations to retain some of the agricultural use within the site.

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c) <u>The efficiency of the proposal, with particular regard to the output of the proposal in relation to its land take</u>

The ExA explained that this topic was part of the ExA's first written questions in 1.15.1 **[REP1-081]**. The ExA queried if the Applicant should use AC rather than DC as a measure of output, as per NPS-EN3, and when areas of solar panels are discussed whether it should include associated infrastructure such as fencing and PRoWs. Recalculated on that basis, the proposal uses just under 6 acres per MW which is higher than NPS-EN3 and other solar farms (1.3-4.7 acres per MW).

The ExA also explained a second point in response to the Applicant's response to his first written questions in 1.2.4 **[REP1-081]**, which relates to achieving the 400MW peak output that is determined by the grid connection offer. The ExA asked the Applicant to produce a technical note which sets out – (1) output profile of the Scheme over the year, bearing in mind the amount of electricity generated at different times of the year/day (as opposed to output peak); (2) estimate of the degradation of the output over the lifetime of Project (out of that will come the appropriate approach to overplanting); and (3) assumptions re. panel numbers and output per panels.

Ms Stirling clarified that paragraph 2.10.17 of EN3, regarding the acres per megawatt, does not set a policy range nor require a solar farm to be within that range, it instead identifies the range but recognises that "this will vary significantly depending on the site, with some being larger and some being smaller". It also refers to associated infrastructure, but Ms Stirling noted that PRoWs, ecological mitigation and landscaping are not infrastructure. Instead, Ms Stirling suggested that infrastructure is items that are essential to the generation of the solar PV, such as field stations and inverters.

Mr Field queried the Applicant's calculation of 480 MW of installed capacity. Mr Titley explained that the Applicant has developed an Indicative Site Layout **[REP1- 028]** based on 480 MW DC. The grid connection is a 400 MW AC export, which is the maximum that can be exported. With the overplanting, that is a ratio of 1.2. The Statement of Need **[REP2-010]** outlines the concept of overplanting as it offsets the degradation of panels over time (explained in paragraph 2.10.55 of EN3), it is common in

industry and adds more generation capacity when conditions are not ideal e.g. due to a cloudy day. The cost of overplanting is when conditions are right, e.g. when it is a sunny day, the solar farm has the ability to produce more electricity, but it is capped at 480 MW. Generally, an optimum overplanting ratio is 1.2-1.25 and at 1.5 it becomes less efficient. It is the Applicant's objective to maximise energy delivery and there is a strong need in the NPS for energy in the UK.

Mr Field was concerned that the solar panels were losing energy because they are not receiving light directly at them as they are in a horizontal position, as outlined in Mr Field's submission **[REP2-026]**. Mr Titley explained that the single axis tracker solar panel is the more efficient technology in the UK and is new technology in the UK that has not yet been used because of its cost – however, the cost of this type of panel has recently reduced, making it now viable in the UK. The single axis tracker panels are 13% more efficient than fixed tracker panels with the same number of panels. If fixed panels are used 143,000 more of them could be used on the site yet the annual yield would still be 3% less than the current proposal with the current number of single axis trackers. Mr Titley explained that the differences in Mr Field's and other questions are likely because they have undertaken online modelling using freely available screening software, which developers do not use, but the Applicant uses an industry standard tool called PVsyst for its modelling which produces the most accurate results using specific meteorological and geometrical data for the Scheme site.

The Applicant will also include details in the technical note of: (1) detail re. comparisons with other solar NSIPs re. MW per ha; and (2) comparison of energy yields / different panels, e.g. single axis tracker vs fixed south facing, including explanation of 13% and 3% figures.

Post Hearing Note

The Applicant has provided this technical note at Deadline 3.

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d) Human health

Whether the assessment adequately takes into account more vulnerable people in the population

The ExA asked North Yorkshire Council to expand on paragraph 14.4 onwards of its Local Impact Report **[REP2-023]**. Mr Reynolds explained that North Yorkshire Council had met with the Applicant recently to expand on some of the concerns, particularly on the assessment cumulative and in combination effects of over 65s and those with long term health conditions/a disability. North Yorkshire will need to consider the Applicant's response.

Ms Stirling explained that the Applicant will respond to the concerns raised in the Council's Local Impact Report at Deadline 3.

Whether the proposal adequately mitigates impacts on local health facilities, and the nature and scale of change brought about by the proposal on the mental health and well-being of local communities

Mr Warren expressed concerns that the Scheme could have an impact on such a large area that people's mental health and physical health could be affected by it.

Ms Howe on behalf of the Applicant explained the Applicant recognises that the potential for future environmental changes associated with the Scheme during construction, operation and decommissioning are currently a source of concern for local residents. To address this concern, the Applicant has undertaken a comprehensive and robust Environmental Impact Assessment (EIA) so that any likely significant effects of the Scheme can be identified and mitigated.

Chapter 14: Human Health within the ES **[APP-066]** assesses the potential effects of the Scheme on health and wellbeing of local residents. The assessment takes a holistic approach to health and defines health in line with the World Health Organisation (WHO) Europe and the Institute of Environmental Management and Assessment (IEMA) guidance as a "*state of complete physical, mental and social wellbeing not merely the absence of disease or infirmity*". The assessment considers effects of the scheme on a wide range of health determinants which are relevant to quality of life and amenity (for example, changes in landscape and visual amenity, noise, access to open space and employment) as well as physical health (for example, associated with air pollution and access to healthcare facilities). No significant adverse effects are identified with regard to human health.

In the Framework Construction Environmental Management Plan **[REP1-053]** there is a commitment to develop and implement a stakeholder communications plan and there is commitment to set up a community liaison group to make sure there is engagement between those who are working on the site and to ensure, if anything does come up, it can be acted upon, which is an important step in mitigating anything adverse on mental health.

The ExA asked about the specifics of how the Scheme will affect these communities. Ms Howe explained the determinants of health in the assessment that are considered which are the effects on other social infrastructure, including schools and community facilities, noise and vibration, air pollution and dust, access to open space and active travel, access to employment and training, social cohesion and neighbourhoods, flood risk and landscape and visual amenity. For many of these, the Chapter 14 of the ES refers to the assessment and mitigation from these other topics. Ms Howe explained that the assessment for the effects on other social infrastructure considers the sensitivity of the population – the older population has been given high sensitivity and the rest of the population has been given a medium sensitivity. For this particular topic, stress on GP services from construction works is considered as is traffic severance to determine the magnitude effect. This creates the overall effect which is minor adverse.

Mr Warren expressed concern about individuals around the site. Ms Howe referred back to the definition of health which is focused on individuals, accessing employment in ES Chapter 12 **[APP-064]**, the Framework Skills, Supply Chain and Employment Plan **[APP-247]**, local people being able to use PRoWs and transport, and landscape and visual effects.

The ExA asked about concerns about safety and crime. Mr Spurway on behalf of the Applicant explained that the team has recognised these concerns and designed the Scheme to mitigate them. Ms Stirling explained that there is community liaison group which will be established prior to construction and through to final commissioning (see Requirement 4 of Schedule 2 of the draft DCO **[REP1-006]**) and will be used to manage some of the concerns and it will endure for the operational lifetime for the Scheme. The EIA indicated no risk of fire or crime. The ExA added that the battery element of the Scheme has been removed.

Mr Reynolds raised a concern about data gathering. Ms Saunders raised concerns that the assessment had not been carried out with up-to-date patient numbers and the concerns around

cumulative impacts. The ExA asked if the up-to-date data has been available to the Applicant. Ms Saunders explained that they have advised the Applicant to contact the NHS ICB to capture this data because public health do not have this information, but the Applicant should be able to obtain the data from the GPs. Ms Stirling explained that the Applicant is still considering the information, but its current view is that the Applicant's assessment is still an appropriate worst-case scenario and the data would not change the assessment. It was agreed that provisional progress on this matter will be provided at Deadline 3, with a final version agreed between the parties to be submitted at Deadline 4.

Post Hearing Note

The Applicant has considered the impact of new data on human health on the assessment in the Environmental Statement as requested by North Yorkshire Council, and has set out its response to paragraph 14.4 of North Yorkshire Council's Local Impact Report within the document titled 'Applicant's Response to Local Impact Reports' submitted at Deadline 3.

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e) Biodiversity

The effect of the proposal on European Sites and the Habitats Regulations Assessment (HRA)

The ExA queried the Applicant's updated HRA **[REP2-012]** at Deadline 2. The ExA's query was in relation to the ExA's question 2.1.4, which requested additional information on in-combination effects and qualifying features. Dr Riley on behalf of the Applicant replied that the in-combination effects and the appropriate assessment in section 8 of the HRA added detail to the designated sites, the impact pathways and why the impact pathways will not arise on those designated sites. Dr Riley added that he understood that the ExA was satisfied with the level of detail in the in-combination assessment and added there was a response from Natural England who was satisfied with the assessment that was sent on 09/07/24.

The ExA stated that the 2023 and 2024 wintering birds data was a concern of Yorkshire Wildlife Trust. The ExA queried if the Applicant was in dialogue with Yorkshire Wildlife Trust and whether it was aware of the survey data. Dr Riley explained that the Applicant has been concentrating on dialogue

with Natural England, from a statutory perspective, but will move onto the Yorkshire Wildlife Trust to close out their concerns once agreement has been reached with Natural England.

Whether the proposed mitigation is satisfactory

The ExA explained that the Yorkshire Wildlife Trust has raised concerns around the mitigation areas of the Golden Plover and pink-footed geese as the Yorkshire Wildlife Trust stated that it should be secured in perpetuity, but Applicant says it would be for lifetime of the Scheme. The ExA queried about biodiversity enhancement and landowner interests.

Ms Stirling explained that managing the mitigation areas in perpetuity would be disproportionate and would serve no useful planning purpose, as there would be nothing left to mitigate against once the Scheme is no longer present, so it would be a disproportionate burden on the Applicant and the landowners affected as they would be unable to deal with their land freely (including for continued agricultural use). Ms Stirling explained that with regards to the compulsory acquisition of land, the Applicant is seeking freehold acquisition of the mitigation areas but there is a firm intention to conclude voluntary agreements with the relevant landowners, which are option for lease agreements (for a defined term, being the operational life of the Scheme). Permanent acquisition powers are being sought because if the landowner fails to honour the option for lease agreement, the Applicant would require control of the land entirely and it would not be appropriate to take a lesser right over the land. Such an approach is also for benefit to the landowner as it allows them a greater compensation claim.

The ExA queried that if mitigation areas 1G and 1H are not compulsorily acquired permanently, how would the provisions in the Framework LEMP and draft DCO **[REP1-006]** bind on the landowners that control the land. Ms Stirling explained that the Applicant is looking to secure the rights and obligations on the landowner in terms of the management of the land through the option for lease agreements and there will be covenants that both parties will be legally required to comply with. Ms Stirling continued and explained that the ultimate responsibility of securing the mitigation is on the Applicant, which is secured through the Framework LEMP.

The effects on Local Wildlife Sites (LWS)

The ExA queried the justification for undertaking works and the mitigation at the LWSs at Wressle Verge and at Tottering Lane, Gribthorpe, which was raised by the Yorkshire Wildlife Trust.

Ms Lewis on behalf of the Applicant explained that the LWSs comprise narrow grass verges alongside the roads passing between the fields, which need to be connected. Wressle Verge is located between Solar PV Areas 3a and 3b (along Wood Lane). Tottering Lane, Gribthorpe is located between Solar PV Area 1a and Solar PV Areas 1b and 1e. The ecological importance and value of LWSs is acknowledged in Chapter 8 of the ES **[APP-060]**, which states that the auger to be used during the cable installation to retain the hedgerows at these locations is not long enough to pass under both the hedgerow and the verge. Therefore, it was determined to be preferable to protect the hedgerow, which in some cases also forms part of the LWSs, and temporarily affect the verge itself for this minimal width of 5m. The cable installation is anticipated to take approximately two days. With regards to the cabling works, once the cables have been installed, the removed turfs and soil from the LWSs (stored separately to that of adjacent fields) will be backfilled and replaced promptly, retaining the original top soil and seed bank. The habitat loss associated with the installation of the cables will therefore be short term and temporary.

Ms Lewis explained that the Framework LEMP **[REP1-063]** details the works that will impact these LWSs and the mitigation that will be applied to minimise any permanent effects. Additionally, large areas of grassland creation are included within the landscape design throughout the Solar PV areas, both around the panels and in the field margins of each field (c. 112.4ha of species-rich grassland, c. 3.5ha of flower rich grassland and c. 797.9ha of semi-improved grassland (under and around the solar PV panels)). Some of these areas of grassland can be managed towards the LWS criteria. Therefore, the temporary impact to small areas of LWSs can be fully mitigated, plus the additional areas provided can provide overall benefits to the grasslands. This outweighs the temporary balance, and the Scheme delivers far more wide-reaching benefits.

The ExA asked the Applicant to expand on biodiversity of value which may be achieved with the LWSs. Ms Lewis explained that these are two good quality of life grassland sites with good quality established semi-natural grassland verges with hedgerows, and BNG provides some improved grassland that goes towards LWS criteria and can exceed it in some cases.

Mr Deacon on behalf of the Applicant explained that there are established areas of created grassland on the site which is being managed to try and replicate that at the LWSs, to provide additional benefits on top of the loss. Other areas that will be impacted will be replaced and managed.

The effects on other bird, mammal and fish species

The ExA raised concerns about the level of survey effort, namely that the fencing around the solar PV will divert deer and that bird species will be impacted by the change in land.

Ms Lewis explained that extensive effort has gone into mammal surveys, such as badgers, bats, otters and water voles. There is confirmed presence of brown hare, but with a lot of species the Applicant assumes presence so they can be mitigated accordingly with the Framework LEMP **[REP1-063]** and therefore there are provisions in the Framework Construction Environmental Management Plan **[REP1-053]**. The Scheme provides large areas of habitats so it does not constrain connectivity, wildlife corridors along the field margins and gaps for access for smaller mammals, so the mammals can move freely and are protected as part of the Framework Construction Environmental Management Plan **[REP1-053]**. The ExA asked about deer, to which Ms Lewis explained that small deer can get through the gaps but the large deer cannot. However, they can move around through field margins and woodlands which will be maintained and enhanced.

The ExA asked about bird species, to which Mr Gates on behalf of the Applicant explained that it would be best to cover these as ground nesting bird species, which would be associated with open spaces and those species that would be associated with hedgerows and other boundary features. Mr Gates explained that the Applicant has undertaken extensive ornithological surveys over a number of years which can be found in the Survey Report for Breeding Birds **[APP-087]**, the Survey Report for Non-Breeding Birds **[APP-089]**. The impacts on the birds are summarised in Table 8-12 and Table 8-13 of Chapter 8 of the ES **[APP-060]**. Existing field margins, boundaries and hedgerows are maintained throughout the Scheme and there are a number of embedded mitigations which will improve the quality of these habitats, such as grassland planting to increase the number invertebrates, which is important for both ground nesting birds and species that would be associated with hedgerows and other boundary features. These enhancements will provide increased nesting opportunities for species such as buzzard, and increase small mammal populations so there is increased food

availability. For species that need open space, there are spaces which will remain open with better quality, permanent grassland and will not be subject to farming practices (e.g. with harvesting).

Ms Woollin was concerned about the mitigation for ground nesting birds. Mrs Beckitt was concerned about the impact on the deer and how the Applicant would add benefit to field margins. Mr Deacon explained that the Applicant is seeking to enhance the field margins and the Scheme will produce around 163 hectares of better condition grass than is currently present.

The achievement of Biodiversity Net Gain and wider environmental enhancements

The ExA asked about degradation beneath the panels over time and what could happen to reverse that, a concern which originated form The Wildlife Trust.

Mr Deacon explained that in the Framework LEMP **[REP1-063]** the Applicant has committed to BNG monitoring visits across the period at years, 2, 5 10, 15, 20, 25 and 30 to ensure the condition and target condition is managed, to reduce the changes of degradation. Mr Deacon explained that the target conditions are detailed in the Biodiversity Net Gain Assessment Report **[REP1-061]** and the management is described in the Framework LEMP **[REP1-063]**. There are a number of criteria to be managed, one of which is bare ground and impacts of shading – to remedy this, shade tolerant species of grass and overseeding can be used or changing in management prescriptions will be done. The ExA queried that if the species used at the start of the Scheme do not thrive, whether they could be changed over time. Mr Deacon explained that management activities can be monitored and dynamically changed over time.

The ExA asked the East Riding of Yorkshire Council to clarify paragraph 7.124 of its Local Impact Report **[REP2-022]**. Ms Woollin clarified it was concerns about the first iteration of the BNG assessment and hedgerow mitigation. Mr Deacon explained that the Applicant reduced working with hedgerows, particularly within the grid connection corridor route and worked to enhance hedgerows that were not already in good condition.

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f) Public Rights of Way

Potential changes in the definitive map

The ExA explained that the information from PRoWs needed to come from East Riding of Yorkshire Council and asked if dialogue between the parties is happening. Ms Stirling on behalf of the Applicant explained that the powers in the draft DCO **[REP1-006]** apply to designated PRoWs in the definitive map and if that route could be shared that would be helpful. Ms Stirling explained that East Riding of Yorkshire Council's proposal to amend the definitive map to alter two public footpaths as restricted byways are already identified within the Framework Public Rights of Way Management Plan **[APP-245]** and as they are already PRoWs this would not affect the Applicant's assessment or mitigation. The claimed PRoW in North Yorkshire that is not on the definitive map is also on the Public Rights of Way Management Plan **[APP-245]**, so it would be managed in the same way as the PRoWs that already exist. Mr Reynolds had nothing to add.

Whether the characterisation of routes and impacts on them has been adequately assessed, and whether the proposed mitigation is satisfactory

The ExA stated that the Joint Local Access Forum and the East Riding of Yorkshire Council have expressed concerns about the Applicant's assessments and mitigation. Ms Marshall explained that they consider there is insufficient detail on the proposed screening and landscaping as they are looking for more discussion on a path-by-path basis. The ExA asked the Applicant if it needs to make an assessment on a path-by-path basis. Ms Stirling explained that a path-by-path basis of mitigation is not possible at this stage of the project, as the purpose of the Framework Public Rights of Way Management Plan **[APP-245]** is to establish a suite of mitigation measures that could be employed at the detailed design stage and would ultimately be approved by East Riding of Yorkshire Council. Mr Carter on behalf of the Applicant explained that the purpose of the Framework Public Rights of Way Management Plan **[APP-245]** is to set out what needs to be agreed and how the Applicant would manage these effects. It is secured via requirement 17 of Schedule 2 the draft DCO **[REP1-006]** and a detailed plan would have to be prepared for works on each PRoW. Paragraphs 3.2-3.6 of the Framework Public Rights of Way Management Plan **[APP-245]** set out which PRoWs would be affected, which would need to be managed, which would have temporary diversions, and which are subject to managed motorised vehicle use. This is the appropriate level of detail for the Scheme at this stage. The ExA asked Ms Marshall to engage with the Applicant if necessary.

The ExA asked about the purpose of the eastward permissive path that was also part of the ExA's first written questions **[REP1-081]**. Mr Carter explained that the purpose of the path is to take people to the habitat enhancement area to view it and it is intended as a route there and back.

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g) Historic environment

The updated written scheme of investigation

The ExA queried requirement 10 of the draft DCO **[REP1-006]** that refers to a written scheme of investigation (WSI) for archaeology, whereas the proposal refers an overarching WSI followed by a site-specific WSI, along with an implementation clause. Ms Stirling explained that the draft DCO **[REP1-006]** is being updated for Deadline 3 with these amendments.

Whether the effect on non-designated heritage assets has been adequately assessed

The ExA referred to Mr Pinnock-Humble's representation **[REP1-119]** and highlighted that the representation references that cultural heritage does not clearly identify non-designated assets and their settings such as Spalding Grange, Sandwood House, Chapel Farm, Willitoft Hall and moated sites at Spaldington, noting that the Applicant has responded with the methodology but not with the specific sites. The ExA asked the Applicant to address this in writing in its post-hearing submissions.

Post Hearing Note

*The Applicant has provided an updated response to David Pinnock-Humble's written representation at Deadline 1 [REP-119] in relation to the above, which is set out in a document titled 'Applicant's Additional Responses to heritage matters raised by Written Representation **[REP1-119]** and **[REP1-103]** Submitted at Deadline 1', which has been submitted at Deadline 3.*

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h) Noise and vibration

Whether the construction and operation phase night-time noise level criteria are appropriate

The ExA queried if the East Riding of Yorkshire Council had any concerns further to paragraph 7.184 of its Local Impact Report **[REP2-022]**. Ms Marshall had nothing else to add. Ms Stirling responded on the point around if it is appropriate for transformer switch gears to be housed within one field station unit. Ms Stirling confirmed the Applicant was seeking flexibility for three different field station arrangements, as defined in Schedule 1 of the draft DCO **[REP1-006]**. A requirement to commit to any particular arrangement now is not supported by the technical assessment carried out by the Applicant which supports the flexibility and provides appropriate mitigation.

The effect of piling on residential properties

The ExA raised a concern about piling and the effect of vibration on residential properties. Mr Robinson on behalf of the Applicant explained that the potential for cosmetic building damage is considered as part of the assessment, as well as human disturbance. The level of disturbance required for cosmetic damage to a building is substantially higher than the significant observed adverse effect level (SOAEL) for human disturbance. The SOAEL is 1mm per second for disturbance and cosmetic damage is 7.5mm per second, and cosmetic damage would only occur in very close proximity to a property. As part of the assessment, the Applicant identified that there are no properties within 50m of proposed solar PV areas and on that basis there were no exceedances of the SOAEL for human disturbance and therefore there would also be no cosmetic damage to properties. The ExA asked if there is guidance or methodology in place for this. Mr Robinson explained the assessment looks at the level of vibration generated by piling that is measured and presented in BS5228 Part 2, and regression analysis on this is used to calculate the distances of the likely level of piling. For example, for auger or bored piling (what would occur at substation or field station units), the lowest observed adverse effect level (LOAEL) of 0.3mm per second at 50m would not exceed this.

Mrs Beckitt asked how deep the pilling is, as she is concerned about piling because of the geology near her house, as her house does not have foundations. Ms Stirling answered that the Applicant will provide this in its post-hearing submissions.

Post Hearing Note

*As set out in the Outline Design Principles Statement **[REP1-051]** the installation depth of mounting structures would be a minimum of 3.0 m below ground level (existing levels), with the indicative depth of between 3 m and 5 m subject to archaeological and geotechnical surveys, as set out in Table 2-1 of Chapter 2 of the Environmental Statement **[APP-054]**.*

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i) Other points of clarification

Protection of existing land drainage

The ExA queried the potential for physical damage to land drains from piling. Ms Heeley explained that the Applicant is aware of the drains and that their purpose is to move water away from topsoil into drainage ditches. There is the potential for construction for damage to the drains, but the location of the drains will be assessed and developed in the Framework Construction Environmental Management Plan **[REP1-053]**. In regard to the protection of the drains, the land will be returned to the landowners in its original condition once the Scheme has ended, which will include the repair of any existing drains if this is required, which will be secured in the Framework Decommissioning Environmental Management Plan **[REP1-057]** and Requirement 18 of the draft DCO **[REP1-006]**. The ExA queried that if the damage would not be repaired until decommissioning, would this increase flood risk. Ms Heeley explained that the drains would be identified as part of the Framework Construction Environmental Management Plan **[REP1-053]** and repaired as required for the temporary construction drainage system. The ExA asked if the Applicant knew the location of all of the drains. Ms Heeley responded that more investigation is required, but the Applicant is committed to do so as part of the Framework Construction Environmental Management Plan **[REP1-053]**. The ExA advised the Applicant to consider making this clearer in a future iteration of the Framework Construction Environmental Management Plan **[REP1-053].**

Whether a S278 Agreement (under the Highways Act 1980) is required

Ms Stirling explained that the Applicant is willing to enter into a S278 agreement if required by East Riding of Yorkshire Council. Article 14 of the draft DCO **[REP1-006]** allows for such agreement and Article 14(1)(c) allows for agreements with the street authority, in this case East Riding of Yorkshire Council, in regard to any street works. The Applicant understands any S278 agreement would be a

		post-consent agreement, it would be entered into for preparation for submitting the detailed Construction Traffic Management Plan (CTMP) and would be progressed in the detailed design stage. Ms Marshall explained that all of the mitigation works in the limits of the public highway will need to be carried out under the provisions of S278 and this can indeed be post-consent. **Updates to the Construction Traffic Management Plan** Mr Carter explained that the Applicant has seen paragraph 7.80 of East Riding of Yorkshire Council's Local Impact Report **[REP2-022]**, but the Applicant would like to clarify if this is something East Riding of Yorkshire Council wish to see in the Framework Construction Traffic Management Plan (CTMP) **[REP1-053]** or in the CTMP post consent. Ms Marshall confirmed that the Highways Officer for East Riding of Yorkshire Council has confirmed that this information is to be in the CTMP post-consent. Mr Carter confirmed that the Applicant does not need to submit a further CTMP at this stage.
3.	**Update on the Statements of Common Ground**	Ms Stirling gave an update on the latest status of the various Statements of Common Ground. The latest position on these can be found in the Applicant's updated Statement of Commonality submitted at Deadline 3.
4.	**Other Matters**	Mr Lunn asked whether the survey for the ALC has been carried out over the entire year and whether it has taken into account all ground condition. He also expressed concern about sheep grazing due to the amount of water that can be on the land. Ms Stirling explained that one of the reasons that the land is not higher grade BMV is because it is prone to flooding. Mr Titley explained that the ALC survey was carried out between May-Sept 2023. Whilst some surveys are seasonally driven this does not apply to soils, rather it is about access to fields, if the soil is frozen, because the survey technique is to use handheld augers, drill down and pull up the soil. There is summary of the methodology in Chapter 15 of the ES **[APP-067]**. Chapter 9 of the ES, Flood Risk Drainage and Water Environment **[APP-061]** also discusses hydraulic modelling. Some parts of the site are prone to flooding and waterlogging and Mr Titley explained that sheep would not be on land when it is waterlogged as they would be rotated out onto land elsewhere.
5.	**Close**	N/A