Application for DCO by FOSSE GREEN
Representation by Interested Party reference [redacted]
Deadline 5

Summary of Submissions

The submission is divided into sections as follows:-

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Section A Comments on REP3A-025 Applicant's response to Deadline 2 Submissions

Table 2.2 Permanent Sealing of land pages 52 and 53

1.0 Applicant's response

The proposed development can be differentiated from other solar developments as, unlike others which have sought to retain substations, tracks and other infrastructure, all infrastructure will be removed from the proposed development and therefore, other than the vegetation planting, there is no permanent sealing.

Unlike other solar developments where the infrastructure such as tracks and substation are sited on Grade 1 or 2 land where it is more difficult to restore land back to its former ALC grade, the BESS, substation and tracks associated with the proposed development are sited on mainly Grade 3b with some on Grade 3a soils which can be restored to their former ALC grade on decommissioning.

The tracks and solar stations in the Mallard Pass DCO were located on Grade 2, Grade 3a and Grade 4 soils and it was acknowledged that there would be a potential downgrading of soils on decommissioning and therefore permanently sealed. In contrast, the substation at Mallard Pass was sited on Grade 3a and 3b soils and this land has not been assessed as

permanently sealed. The difference in approach seems to be due to the existence or absence of very high sensitivity soils.

Other schemes since Mallard Pass such as Gate Burton, Tillbridge, East Yorkshire Solar and Fenwick have not assessed land as permanently sealed. The Applicant considers it prudent to follow current good industry practice rather than aligning with an assessment carried out in 2022.

1.0 Comments in reply

1.1 The Applicant has constantly shifted its approach to the issue of permanent sealing of agricultural land during the examination.

1.2 **Approach number 1-** At the ISH on 7 January 2026 (ENV2-011) the Applicant suggested that the permanent sealing of agricultural land in the IEMA Guidelines related to the sealing of land by roads and buildings and not solar developments, citing Tillbridge, Cottam and West Burton.

1.3 In response at Deadline 1 in REP1-106 I set out that neither the ExA Recommendation Reports nor the Secretary of State's decision letters in these cases made any reference to the IEMA Guidelines nor the definition of permanent sealing within those guidelines.

1.4 **Approach number 2** -At Deadline 3 the Applicant responded to ExAQ2 (REP3-045), FS.2.02 by stating that it was not aware of any solar NSIPs where areas of hard infrastructure were included in the calculation of land permanently sealed except where the applicant was not proposing to remove these works on decommissioning. This is despite my Deadline 1 submission (REP1-106) which stated at paragraph 2.4.3 that with reference to the Mallard Pass, Heckington Fen, Gate Burton and Beacon Fen DCOs:-

"The intention in all of the cases referred to above, with the exception of Gate Burton (where the future of the substation was to be decided at the time of decommissioning), was to remove the infrastructure and revert the use of the land to agriculture on decommissioning. In all cases there is an acknowledgement that there would be a permanent loss of agricultural land for the areas of the substations, BESS etc.".

1.5 **Approach number 3**- The Applicant seeks to suggest that the issue of whether land is permanently sealed relates to the ALC grading of the soils on which the hard infrastructure is built; that as it is more difficult to restore Grade 1 or 2 back to its former ALC grade, there would be a potential downgrading of soils on decommissioning and therefore the land would be permanently sealed. The Applicant has cited Mallard Pass as an example of this differential approach depending on the existence or absence of high sensitivity soils.

1.6 Table 12-4 of Chapter 12 of the Mallard Pass DCO (APP-042) refers to the ALC grading of access tracks and solar station areas. The total area was 8ha of which 0.5ha was Grade 2 and 2.5 ha was Grade 3a. Paragraph 12.4.16 states that "in light of a time limit not being proposed for the consent, these areas are considered as though they are permanently sealed". The Applicant's conclusion in the Mallard Pass DCO that these areas of land were

permanently sealed over was therefore nothing to do with the high sensitivity of the soil as the Applicant now asserts.

1.7 The Applicant suggests that the area of the substation in the Mallard Pass DCO was treated differently due to the lesser quality of the soils and therefore not considered as permanently sealed over. Table 12-5 of Chapter 12 of the Mallard Pass DCO (APP-042) sets out that the substation covers 6.4ha of which 1.2 ha is Grade 3a and 5.2ha is Grade 3b. Paragraph 12.4.45 states that even though the substation would be removed on decommissioning, it was treated as being developed and for the same reasons given for the access tracks and solar stations, this would be on a permanent basis. There was therefore no differentiation in the way that the access tracks/solar stations and the substation were treated in the Mallard Pass DCO, both areas were considered to be permanently sealed and this was nothing to do with the sensitivity of the soils.

1.8 **Approach number 4**- The Applicant says that other schemes since Mallard Pass (decided 12 July 2024) such as Gate Burton, Tillbridge, East Yorkshire Solar and Fenwick have not assessed land as permanently sealed. This statement is not correct.

Gate Burton:-
This was a 60 year time limited consent. The consultants were AECOM. Paragraphs 12.8.8 of Chapter 12 Socio Economics and Land Use (REP4-010) stated that "the Solar Energy and Solar Park contains 73.6 ha of BMV and 6.8 ha of estimated BMV of which approximately 2 ha will be permanently lost due to the construction of the substation and permanent planting on site…". Paragraph 4.174 of the Secretary of State's decision letter dated **12 July 2024** states "The Secretary of State agrees with the ExA that 2 ha of BMV would be permanently lost and around 73ha would be out of arable use for 60 years".

East Yorkshire:-
This was a 40 year consent. The decision letter was **9 May 2025**. The consultants were AECOM. Paragraph 15.7.12 of Chapter 15 Soils and Agricultural Land (APP-067) states that the land for the grid connection substation and accesses was assessed as being subject to permanent development/permanent loss of agricultural land. Paragraph 3.9.48 of the Recommendation Report dated 17 February 2025 noted that relatively small amounts of non BMV land (0.41ha) would be lost to tree planting and the grid connection substation compounds.

Tillbridge:-
This was a 60 year consent. The Secretary of States decision letter was **14 October 2025**. The consultants were AECOM. Paragraph 15.8.4 of Chapter 15 Soils and Agriculture (APP-046) states that the components which will remain after decommissioning and therefore have the potential to be permanent are the on-site substations and proposed woodland.

Fenwick:-
This was a 40 year consent. The consultants were AECOM. On decommissioning the future of the onsite substation would be agreed prior to decommissioning (paragraph 12.7.99 of Chapter 12 refers (APP-064). Paragraph 12.7.52 of the Chapter states "Permanent land take will be required within the solar PV site for the construction of the onsite substation".

Paragraph 3.8.42 of the ExA Recommendation Report dated 18 November 2025 states “we accept that there would be a permanent loss of agricultural land beneath the substation”. Paragraph 4.52 of Secretary of States decision letter dated **18 February 2026** refers to the “permanently” affected land required for the substation.

1.9 What can be taken from the four decisions referred to by the Applicant in paragraph 1.8 above since the Mallard Pass decision was that AECOM were the consultants in each case, and that in all four cases it was accepted that the substations within the site were or had the potential to be permanently sealed. This contrasts to Fosse Green where the same consultants do not even acknowledge that the substation will be permanently sealed.

1.10 **Approach number 5** - The Applicant suggests that it is prudent to follow current good industry practice rather than aligning with the Mallard Pass assessment carried out in 2022 and have cited the four cases set out in paragraph 1.8 above. The Applicant’s definition of “good industry practice” appears to be synonymous with the practice of AECOM to assess only the substations as permanently sealed (and not even that concession in the Fosse Green DCO). In assessments by other consultants since Mallard Pass, namely in Beacon Fen and Heckington Fen there has been a conclusion that all hard infrastructure will be permanently sealed over.

1.11 In paragraph 4.49 of the recent decision letter of the Secretary of State in Springwell dated **8 April 2026**, it was noted that the ExA agreed with NKDC that the sealed over hardstanding areas of the proposed development such as the satellite collector compounds, BESS, substation and main collector compound should be treated on a precautionary basis as “permanently lost” (ER 8.4.16). The paragraph goes on to say “The Secretary of State notes that this approach has been followed on other similar solar developments to provide a worst case scenario where such areas cannot be returned to the same ALC grade and considers it appropriate to use this approach in this case too”.

1.12 In the light of the decision made by the Secretary of State in Springwell, the Applicant should now accept that the areas of the BESS (centralised or distributed), the access tracks, the substation and the solar station compounds including the swales surrounding these on the proposed development will be permanently sealed over and the Applicant should clarify the amount and grading of the areas of such land.

Table 2.2 Bassingham Conservation Area pages 68 and 69

2.0 Applicant’s response

Any representations that identify any harm to Bassingham Conservation Area (especially those that cite substantial harm) would be an outlier compared to the professional, expert opinions expressed by others.

None of the heritage advisers to the NKDC, LCC or HE have raised concerns regarding the assessment of the Bassingham Conservation Area which confirms the Detailed Heritage Asset Setting Assessment (APP-127) is accurate, proportionate and appropriate.

2.1 Comments in reply

2.1.1 The Applicant infers that my opinions on the harm that will be caused to the Bassingham Conservation area neither expert nor professional. For 35 years I was employed as a solicitor in local government in Lincolnshire. I worked for three district councils in the County and latterly for Lincolnshire County Council where I was Planning and Highways Legal Services Manager. Throughout that time, I acted as the advocate at planning appeals, enforcement notice appeals, local plan inquiries and in prosecutions for breaches of planning control including those relating to Conservation Areas and Listed Buildings. I also have a PhD from York University in the monastic and secular medieval landscapes of Lincolnshire. I suggest therefore that my opinion on the impact of the proposed development on Bassingham Conservation Area is not entirely without merit.

2.1.2 The Applicant states that HE and the local councils identify no harm to the Conservation Area. Neither HE, LCC or NKDC have specifically referred to Bassingham Conservation Area in their submissions nor have they commented on my submission in REP1-106 and REP2-061 about the impact of the proposed development on the CA. It is a non sequitur that the failure to comment means that the Applicant's assessment is "accurate, proportionate and appropriate".

Table 2.2 Impact of noise on PRoW pages 70 and 71

3.0 Applicant's response

The WHO Guidelines are not intended to address temporary exposure to noise for PRoW users.

Predicted (A weighted) levels in the general area are between 35 and 50dB and this is in line with the wider sound environment.

A PRoW is a highway (Highways Act 1980) and is not a noise sensitive receptor in national policy so cannot be aligned with a land designation such as parkland or a Conservation Area from the WHO Guidelines.

Weight would only be given to tranquility of a PRoW if it was located within a Conservation Area, a National Park, an AoNB or a designated quiet area. The site contains none of these designations.

3.1 Comments in reply

3.1.1 The WHO Guidelines sets out values for specific health effects of noise and for specific environments. The time base for the specific environment in Table 1 of the Guidance varies from long term exposure to noise eg 16 hours for outdoor living areas to short term bases eg 1 hour for public addresses and 4 hours for festivals. The Guidelines therefore cover short term or temporary exposure to noise.

3.1.2 The Applicant stated in REP1-047 page 257 that the operational noise from the proposed development would be “akin to the existing sound environment in the area”. The Applicant now says they would be “in line with the wider sound environment”. Those phrases without qualification are so vague as to be meaningless. The “wider sound environment” or the “sound environment in the area” could encompass a wide range of existing sound environments. In order to assess the impact of noise from the proposed development on PRoW, baseline sound levels need to be taken along the ProW and the Applicant has not carried out such surveys.

3.1.3 The Hands off Our Marsh (HOOM) website includes on the homepage within the article headed “Small Solar farms vs new-breed solar power stations” a video taken of a member of the HOOM action group at the Cleve Hill solar farm speaking about the noise from the inverters (minute 5:09 of the video). She describes the noise as “a ringing, a buzz, a whirring which is so loud”. In the video, noise from the inverters can be heard over her voice. This gives some indication of the levels and tonal quality of the noise that we can expect to hear from the proposed development.

3.1.4 In considering the impact of noise from the operational activities of the proposed development, it is not just absolute noise levels that should be taken into account. The WHO guidelines referred to above say that “noise can produce a number of social and behavioural effects as well as annoyance. Annoyance in population varies not only with the characteristics of the noise, including the noise source, but also depends to a large degree on many non-acoustical factors of a social, psychological or economic nature”.

3.1.5 One of the studies referred to by the Applicant is Ahmadi *et al* 2026 “Exploring the relationship between mental health and urban green space soundscapes: A scoping review” PLoS One 21(3) which shows that natural soundscapes such as birdsong and water promote stress reduction and cognitive restoration, while mechanical noise is associated with adverse mental health problems. I suggest that the characteristics of the mechanical inverter noise from the proposed development which will be heard along the PRoW will cause nuisance and annoyance to the users of the footpaths.

3.1.6 The Applicant says that PRoW are not noise sensitive receptors in national policy. There is no specific guidance on noise levels that would constitute significant effect for users of PRoW because, unlike for example residential properties which are fixed points, it is not possible to have a single objective noise-based measure that defines SOAEL (Significant Observed Adverse Effect Level) that is applicable to all sources of noise in all situations (paragraph 2.22 Noise Policy Statement for England March 2010). The lack of guidance on a specific noise level does not mean that there could not potentially be a significant adverse impact from noise experienced along ProW.

3.1.7 The Applicant refers to the tranquillity of the PRoW. Paragraph 123 of the NPPF says that ‘planning policies and decisions should aim to identify and protect areas of tranquillity which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason”. CPRE’S report “Give Peace a Chance, Has Planning Policy contributed to Rural Tranquillity? (CPRE 2015) found that most planning authorities had a

tranquillity policy in AONB management plans or National Park Local Plans – designated landscapes with higher protection and generally higher levels of tranquillity. Whilst it is acknowledged that the proposed development is not within such a designated area, the WHO Guidelines does not specify that the "parkland or conservation areas" only relate to those areas protected by such designations.

Table 2.2 Visitor Economy Impact pages 85 to 90

4.0 Applicant's response

The assessment recognises that recreational walking forms part of the local visitor offering; however, the evidence indicates that walking activity is primarily influenced by route availability, safety and connectivity, all of which will be maintained throughout construction and operation of the proposed development.

The Tourism and Recreation assessment set out in Chapter 12 Socio-Economics and Land Use (AS-016) concludes, based on established methodologies, local evidence and experience from comparable solar developments that likely significant adverse effects on the visitor economy are not anticipated.

4.1 Comments in Reply

4.1.1 The Applicant has not cited the "evidence" on which it relies to assert that walking activity is primarily influenced by route availability, safety and connectivity. The aim of the 2016 study by N J Davies "Who walks, where and why? Practitioners' observations and perspectives on recreational walkers at UK tourist destinations" Annals of Leisure Research (accessed online 7.4.26) was to understand the characteristics, preferences and motivation of people who walk in tourist spaces. Twenty three interviews were undertaken with practitioners who had long-standing and continued exposure to the needs and wants of walkers. The interviews reflected that the motivation for recreational walking was health and wellbeing, relaxation, the escape from the everyday, discovery of surroundings, history, culture and the visual experience. In terms of location preference, sensory factors were widely important to choices. Seasonal variations in the visual appearance of landscapes are also significant elements of location preference: "So, it's a closeness to nature and how that changes through the seasons".

4.1.2 In a study by the same author, N Davies 2016 "Investigating route-choice by recreational walkers in the English Lake District" University of Lancashire, 518 respondents were interviewed at various locations in the Lake District over a year. The survey asked about factors in the choice of route and 86.7% of the respondents rated scenery as 4 or 5 out of 5 (with 5 being the highest). These studies show that the visual experience of recreational walking is therefore a major factor in route choice.

4.1.3 The Applicant concludes that likely significant adverse effects on the visitor economy are not anticipated. The impact on tourism was considered as part of the Springwell DCO. At paragraph 11.4.5 of the ExA Recommendation Report dated 8 January 2026 it was noted

that the applicant had made the point that a relatively small proportion of the Stepping Out network would be affected (only 5 trails are within or adjacent to the order limits).

4.1.4 In addition to the Stepping Out Walks impacted by Springwell, three further Stepping Out walks will be impacted by the proposed development, namely Thorpe on the Hill and Tunman Wood, Bassingham circular and Morton and Tunman Wood. At what point will the threshold be met for the adverse cumulative visual impacts as well as the impact from construction and operational noise along the footpaths to affect visitor draw to the area?

4.1.5 The Applicant bases it's conclusion that there will be no likely significant adverse effects on the visitor economy on *inter alia* experience from comparable solar developments. As the only comparable solar development is Cleve Hill which has been in operation for less than a year, on what experience of large scale solar developments has the Applicant based it's assessment?

Section B Comments on REP4-018 Applicant's response to Deadline 3 and 3A submissions

Permanent loss of agricultural land- page 70

5.0 Applicant's response

There are 4.6 ha of land (areas of planting and habitat creation) which have been assessed as permanently lost.

The swales around the centralised and distributed BESS are not intended to be free draining. They will be lined with an impermeable lining.

The original application for Mallard Pass was not time limited and the Environmental Statement assumed certain infrastructure was permanent because it could be left in situ permanently. A time limit of 60 years was introduced by the Applicant but the soil assessment was not revisited as it already presented a worst case scenario.

5.1 Comments in reply

5.1.2 I refer to my comments in paragraph 1.11 above. Given the decision made this month by the Secretary of State in the Springwell DCO, presumably the Applicant will now accept that it is not just the 4.6 ha of planting and habitat creation that will be permanently lost but also the areas of hardstanding including the centralised and distributed BESS, the access tracks, the substation and the solar compounds including the swales around these (as the Applicant has now confirmed that these will be impermeably lined).

5.1.3 The Applicant has sought to distance itself from the rationale in its own DCO application for Mallard Pass and has put forward varying explanations for the difference in approach between that case and the Fosse Green application to the question of permanent sealing.

5.1.4 The Applicant now says in Mallard Pass it was assumed that the hard infrastructure was permanent in the ES and that the soil assessment was not revisited when the Applicant introduced a time limit of 60 years. These comments do not reflect the facts. In REP3-028 (at a point in the examination process when there was not proposed to be a time limited consent) the Applicant anticipated that the development would be decommissioned at some point. Paragraph 2.1.1 of the original Outline Decommissioning Environmental Management Plan (tracked version at REP7-20) sets out that it had assumed an operational life of 40 years to assess decommissioning. At paragraph 2.1.2 the oDEMP says that on decommissioning all the solar infrastructure was to be removed. The Applicant is therefore not correct to say that the hard infrastructure was assumed to be left in situ permanently. It is also not correct to say that the soil assessment was not revisited when the Applicant subsequently amended the application to a time limited consent for 60 years. The ExA requested the Applicant to provide a chapter by chapter assessment of the potential changes to the conclusions in the ES in the light of the introduction of a 60 year lifespan rather than the 40 years modelled in the ES (page 7 of REP7-036). The Applicant submitted this assessment at REP7-038. In relation to Chapter 12 Land and Soils, the Applicant stated at paragraph 1.1.32 that "the ES (Chapter 12 APP-042) assesses the effects on agricultural land and soils on the basis that the solar farm will be removed on decommissioning and the land returned to the same condition as is now". Paragraph 1.1.33 "The time period for this to happen was not specified, so the capping of the operation phase at 60 years does not change this assessment".

5.1.6 The Applicant has sought to explain why it has taken a different approach to the issue of permanent sealing of land in the Mallard Pass DCO application from that in relation to the proposed development. These reasons do not stand up to scrutiny. Both Mallard Pass and Fosse Green are 60 year consents and in both cases, the intention was/is to remove all infrastructure on decommissioning. The Mallard Pass ES considered the impact on soils on that basis and the conclusion was that given the length of time that the soils underneath the hard infrastructure were sealed over, these areas were considered as permanently sealed.

Traffic and Transport page 72

<u>6.0 Applicant's response</u>

<u>L11 Link Road Safety assessment:-</u>

The Applicant acknowledges that in Table 13-38 of Chapter 13 the Receptor Assessment for Road Safety at L11, the adjusted magnitude of effect should be Medium rather than Low as currently stated.

The assessment for magnitude of effect has been undertaken in accordance with the IEMA guidelines which does not take account of speed camera locations or road alignment, some of the collisions occurred at receptor J4 which has been assessed separately, it is unclear where the traffic flow figure of 78 comes from in the am and pm hours, the only larger vehicles travelling at these times are the shuttle buses.

Clay Lane, Bassingham:-

The sensitivity of this link for "Severance/pedestrian delay, non-motorised user amenity and fear and intimidation" as set out in Table 13-28 of Chapter 13 should remain as Very Low, based on the criteria as set out in Table 13-7 as no residential properties have a direct frontage to the highway, it has no pedestrian footways, or designated cycle infrastructure, and it is not a PRoW, but has a PRoW running parallel and adjacent to it. Regarding magnitude of change, the "movement rule" that the Applicant has applied is an exercise in caution that the IEMA guidelines advise when considering very low baseline flows.

6.1 Comments in reply:-

Link 11 Butts Lane/South Hykeham Road, Haddington-Road Safety Assessment

Sensitivity

6.1.1 Having looked further at the Applicant's Road Safety assessment of the L11 link as set out in Table 13-38, I question whether the sensitivity is correctly assessment as Low. Paragraph 13.7.55 of Chapter 13 states that the criteria used for the assessment (I assume this refers to the Sensitivity assessment) in Table 13-38 are the same as used to evaluate Severance and Pedestrian Delay set out at Table 13-7. Turning to Table 13-7, the criteria for High/Medium sensitivity appears to apply to L11 rather than Low sensitivity as assessed by the Applicant, as it is a residential street with properties on both sides of the road, Well House and Bridge Farmhouse are both Grade II Listed Buildings that front onto Butts Lane/ South Hykeham Road and cycle and pedestrian routes are on-road.

Magnitude of Effect

6.1.2 In paragraph 13.4.44 of Chapter 13 the Applicant states with regard to Road Safety and the magnitude of effect that a review of the baseline characteristics including the collision rate and any collision clusters will be used to assess whether the additional construction traffic from the proposed development would be likely to have a detrimental impact on road safety. This paragraph is taken from paragraphs 3.42 and 3.43 of the IEMA Guidelines. However, the IEMA Guidelines acknowledge the limited benefits of this traditional assessment of road safety and advocate a Safe System approach which includes modelling a baseline road safety level and the effects of additional development traffic using tools such as iRAP Star Ratings protocols. The iRAP Star Rating provides a standardised method for assessing road safety risk based on infrastructure features, independent of crash history. Roads are coded for more than 50 attributes that influence the likelihood and severity of crashes. The 50 attributes include the sharpness of bends, lane width, speed limit, heavy vehicle proportion, pedestrian facilities such as footpaths and speed calming features.

6.1.3 The Applicant's comment that the IEMA guideline does not take account of matters such as road alignment is not therefore correct. This is specifically one of the 50 attributes that the iRAP Star Rating, advocated by the IEMA, takes into account. The Applicant has

relied solely on collision rates to inform its assessment of the magnitude of effect for Road Safety and should instead apply the iRAP protocol or similar to make such assessment.

Baseline Traffic Flows

6.1.4 The Applicant has acknowledged that the proposed development will result in an increase of 10% or above in HGV flows at the L11 link and therefore, in accordance with IEMA guidelines, the receptor should be analysed on a case by case basis to assess the magnitude of effect for Road Safety (paragraph 13.7.55 of Chapter 13 refers). However, the Applicant has understated the impact of the increased number of HGVs at L11. This, in turn, will affect the determination of the magnitude of impact, particularly if the Applicant accepts that it should apply the iRAP Star rating protocol or similar.

6.1.5 Table 13-4 of Chapter 13 sets out that the 2023 DfT traffic survey was used for baseline traffic flows at L11. Figure 13-3 Traffic Survey Locations (AS-071) identifies that the traffic survey count location for L11 was DfT 808542. The DfT website has the traffic counts for location 808542 which shows that whilst the overall annual daily traffic flows for that location have generally increased since 2020, the number of HGVs at that location has declined:-

Year	All Motor Vehicles	HGVs
2020	4040	251
2021	4964	205
2022	4942	200
2023	5001	197
2024	5788	172

Average Annual Daily Flows at Dft Traffic Count location 808542

6.1.6 The Applicant has set out baseline traffic flows at Table 13-13 using the 2023 DfT traffic flow count for L11. This shows 5001 vehicles at L11 over a 24 hour daily period, of which 197 were HGVs representing 3.9% of the total vehicles. Assessing the percentage HGVs to total vehicles figures for DfT traffic counts at L11 since 2020 the percentages are as follows:-

2020 6.2%
2021 4.2%
2022 4.0%
2023 3.9%
2024 2.9%

6.1.7 In order to calculate the future baseline traffic flows, traffic growth has been calculated using National Road Traffic Forecast growth factors (paragraph 13.5.43 of Chapter 13 refers). For an average day, a growth factor of 1.0589 (as set out in Table 13-19) has been applied to provide future baseline traffic flows for L11 as shown in Table 13-20. This gives a total of 5296 vehicles at L11 over a 24 hour period, of which 209 are HGVs, representing 3.9% of the total vehicles. The Applicant has not considered local factors in assessing future baseline HGV traffic flows at L11. Based on the DfT count data for this

location, the trend over the last 5 years of recorded data is that the numbers of HGVs and the proportion of HGVs to overall traffic numbers has declined. There appears to be no justification therefore to assume that the number of HGVs and their proportion to overall traffic will increase.

6.1.8 The result of this overinflation of future baseline HGV numbers at L11 is to reduce the impact of the numbers of HGVs from the proposed development at L11. Appendix 13-D Receptor Traffic Flows shows that over a 24 hour daily period at L11 there will be 288 construction vehicles of which 109 are HGV.

6.1.9 Comparing the additional 109 HGV arising from the proposed development with the Applicant's future baseline figure of 209 HGV at L11, amounts to an increase of 52% in HGV. However, if the future baseline number of HGV at L11 is less than assumed (as the trend indicates), the increase of 109 HGV will result in a higher percentage of change from the future baseline figure. In turn, this will impact the determination of the magnitude of effect for Road Safety.

<u>Clay Lane, Bassingham</u>

Sensitivity

6.1.10 The Applicant remains of the view that the sensitivity of the Clay Lane, Bassingham for Severance, Pedestrian Delay, Non-motorised User Amenity and Fear and Intimidation as set out in Table 13-28 of Chapter 13 should remain as Very Low, based on the criteria as set out in Table 13-7. I do not understand the Applicant's point that Clay Lane "is not a PRoW, but has a PRoW running parallel and adjacent to it". This is Clay Lane:-

6.1.11 There is no PRoW "running parallel and adjacent to it". Clay Lane is a public highway open to all traffic including pedestrians, there is no separate footpath. Turning to the criteria which the Applicant has used to base the "Very Low" assessment of sensitivity as set

out in Table 13-7 of Chapter 13, below is an extract from Table 13-7 of the relevant sensitivity values/criteria:-

Sensitivity Value	**Sensitivity Criteria**
Very Low	Walk/cycle links including PRoW: Pedestrian /cycle route not running alongside highway, or lightly trafficked highway with off-road pedestrian/cycle route
Medium	Walk/cycle links including PRoW: Lightly trafficked highway with on-road pedestrian/cycle route

With regard to the walk/cycle links, the difference between medium and very low sensitivity assessment is whether the routes are on-road (medium sensitivity) or off-road (very low sensitivity). It is clear that the walk/cycle routes on Clay Lane are ON-ROAD and according to the Applicant's own criteria, the sensitivity should be Medium, not Very Low as the Applicant asserts.

Magnitude of Effect

6.1.12 The Applicant has justified the downgrading of the initial High magnitude score for Clay Lane in Table 13-36 by its application of the "movement" rule as explained in paragraph 13.4.23 which the Applicant says is an exercise in caution that the IEMA guidelines advise when considering very low baseline flows. An "exercise in caution" should not equate to the application of a blanket rule across the board, each case should be considered individually.

6.1.13 To put these facts and figures into the context of the likely experience that the residents of Haddington will endure for the two year construction period, a resident of Graveney, a village close to the Cleve Hill solar development says (pers. comm.):-

"The road through the village is a rural road and the continuous HGV movements made it look as if a bomb had hit it. The verges were decimated, loads of mud, hollows, potholes. We had regular roadworks because of the gas and water leaks. These were rare before the development started but they became a regular occurrence – the developer said it had nothing to do with them, but we were getting regular convoys of up to six HGVs on a small rural road. We had steady streams of concrete mixer lorries."

Bats page 75

<u>7.0 Applicant's response</u>

The Applicant has considered the impact of the proposed development on bats and has considered relevant research where appropriate.

Any compliance issues or failure of mitigation strategies on the Gwent Levels is not directly relevant to the proposed development

The potential impacts of the loss of 1.98 km of hedgerows are outweighed by the increased hedgerow being provided.

The Applicant has not identified a bat assemblage of national importance.

7.1 Comments in reply

7.1.1 In paragraph 8.12.29 of Chapter 8 Ecology, the Applicant states that there is "limited scientific literature available on the impact of bats from solar farms" and cites three research papers. In my submission at REP1-106 I set out at length a number of academic papers that specifically relate to the impact of artificial lighting, noise and habitat fragmentation on bats. I do not understand why the Applicant has decided that this research is either not relevant or it is not appropriate to consider it.

7.1.2 The Applicant has not explained why "compliance issues or failure of mitigation strategies on the Gwent Levels is not directly relevant to the proposed development". In paragraph 4.7 of my REP1-106 submission I refer to the Llanwern Solar farm development on the Gwent Levels which was granted planning permission in 2018. The reports to Newport City Council under planning reference 24/0293 comprised a Year 3 Ecological Monitoring and Review Report dated January 2024. The aim of the report was to establish the effectiveness of the measures undertaken to avoid, mitigate or compensate for impacts to biodiversity. In paragraph 5.1.5 the report states that "the number of bat species recorded at each location has not shown a trend with time but the number of passes has greatly decreased in the array areas in the post-construction years compared to the baseline survey". The report concluded that in the short-term post-construction bat abundance has been affected by the new solar arrays. The adverse impact of the solar development on bats was as a result of the failure of the mitigation strategies rather than an issue of compliance.

7.1.3 Comparing elements of the Llanwern solar development with the proposed development indicates that the mitigation strategies being proposed by the Applicant will be just as ineffective but the scale of the adverse impact on bats will be greater given the amount of land take and the length of disruption from construction:-

Llanwern solar development	**Fosse Green solar development**
130 ha	1070 ha (principal site)
4 month construction period	2 year construction period
No hedgerows to be removed	1.98km of hedgerow to be removed
No confirmed evidence of bat roosting within the site	Breeding roosts either confirmed or likely to be present
9 species of bat recorded during baseline survey	At least 10 species recorded during baseline survey
Foraging and commuting activity widespread	Foraging and commuting activity widespread
Adverse lighting impacts will be avoided during construction	Lighting directed away from habitats and maximum 8kVA power output during construction

65 bat boxes to be provided	Bat boxes to be installed
Field and hedge management potentially will improve value of existing habitats for foraging bats	Various measures to improve and supplement habitats which will benefit bats
Programme of ecological monitoring	Programme of ecological monitoring

7.1.4 The Applicant considers that the planting of new hedgerows will outweigh the loss of 1.98 km of hedgerows as a result of the construction of the proposed development. The Applicant has not considered the impact that the loss of 1.98 km of foraging and commuting routes will have on species such as bats in the intervening 10-15 years until the new hedgerows reach maturity.

7.1.5 The Applicant states that it has not identified a bat assemblage of national importance. Table 2 of Appendix 8-I (APP-141) includes the scoring mechanism for the presence of different species of bats within the DCO and wider study area. The overall bat assemblage score is stated to be 24 out of 26. This equates to 92.3% which meets the threshold for National Importance.

Restoration of solar farms to productive farmland page 77

8.0 Applicant's response

The Applicant refers to the Lancaster University study of 32 solar farms and the Welsh ADAS Report. The key message from research studies is that a Soil Management Plan is key to avoiding soil deterioration.

If the proposed development is delivered correctly, there can be positive soil outcomes and for this reason a Framework Soil Management Plan (REP3-022) has been produced.

8.1 Comments in Reply

8.1.1 The Applicant has strayed from the original point raised in this thread of submissions at ExA Q1 FS.1.09. The Applicant was asked to provide examples of where, at the conclusion of the operation of a solar farm, there has been restoration of the affected farmland to it's original ALC classification. At REP2-029 (page 73) the Applicant accepts that it knows of no such examples but cites Triton Knoll as a project where soil has been successfully reinstated, which the Applicant considers to be relevant to the proposed development. In my response at REP3A-037 paragraph 9, I conclude that for the reasons set out in my submission, whilst the Triton Knoll project might be analogous to the cable laying along the cable corridor of the proposed development, it bears no relation to the work proposed on the principal site at construction, operation or decommissioning and is therefore is of no relevance to the ExA's question.

8.1.2 The Applicant repeatedly cites the Lancaster University and Welsh ADAS reports so it is not helpful to repeat my comments on these research papers and others in relation to impacts on soil (paragraphs 9.2.3, 9.2.4 and 12.2 (impacts of water-runoff) of REP3A-037

and paragraphs 2.5.4 to 2.5.12 of REP1-106). As the Applicant acknowledges, there is no empirical evidence of soils being returned to their former ALC grading after 60 years of operation of a solar farm. The Applicant relies on the implementation of its Framework Soil Management Plan to deliver "positive soil outcomes", but another "key message" from the research is that despite soil management plans, soils may not recover for many years or at all following decommissioning.

Framework Soil Management Plan page 78 and 79

9.0 Applicant's response

The Framework Soil Management Plan (REP3-022) refers to post construction in Section 6. This is the operational phase.

Mitigation in relation to soils during decommissioning is in Table 7 of the Framework Decommissioning Environmental Plan (REP3-020).

The detailed SMP will establish methods for stripping, storage on-site and re-use.

9.1 Comments in reply

9.1.1 The Applicant says that Section 6 of the FSMP (REP3-022) refers to the operational phase, although this is not clear as Section 6 is entitled Post Construction Allocation. Paragraphs 6.1 to 6.7 of that section refer to the various options for using the stripped soil for use on the site but these activities will take place during the construction and not the operational phase, eg use for structural fill or creation of landscaping.

9.1.2 The only reference in Section 6 of the FSMP to any activities during the operational phase are set out in paragraph 6.9 Soil Maintenance (aftercare requirements). This very brief paragraph refers to the establishment of maintenance regimes within green spaces and a programme of monitoring soil conditions but lacks any parameters for soil protection measures:-

-to avoid compaction, eg restricting vehicles to designated tracks
- to control erosion eg measures to ensure continuous ground cover to prevent erosion
- to alleviate compacted areas eg provision of a Remediation Action Plan
- to preserve soil resources eg ensuring topsoil is not removed or contaminated
- to manage soil disturbance during eg cable repairs
- to manage vegetation without causing compaction eg strategies for sheep grazing or mowing

9.1.3 The Applicant states that mitigation in relation to soils during decommissioning is in Table 7 of the Framework Decommissioning Environmental Plan (REP3-020). Table 7 states that the FSMP "details the threats to soil resource during the decommissioning phase". However, the revised FSMP still does not include any detail about decommissioning.

9.1.4 At paragraph 11.2 of REP3A-037, I questioned why, if the Applicant is so confident that the current ALC grades of the soils within the principal site can be restored on decommissioning, there should be no reason why the commitment in the FSMP to restore the soils within the cable corridor cannot be extended to the soils within the principal site on decommissioning. Other than reiterating its assessment of the impact of the proposed development on soils, the question remains unanswered.

Water run-off page 79

10.0 Applicant's response

When considered in the round, the available evidence supports the Applicant's position that, with appropriate design and management, solar development does not give rise to significant or permanent adverse effects on runoff characteristics when compared to existing agricultural conditions.

10.1 Comments in reply

The Expert Assessment

The Flood Risk Assessment (APP227) in the Cleve Hill solar ES stated:-

Paragraph 130- As a result of the installation of PV panels, there will be an increase of 41.62% in run-off rates.

Paragraph 132 Once rainfall has fallen off a PV panel, the water will be able to spread and flow along the ground under the PV panels.

Paragraph 142 The area under the drip lines will be seeded with a suitable grass mix, to prevent rilling and an increase in surface water runoff rates.

Paragraph 146 The effects associated with runoff from the PV array are assessed as negligible.

The Reality

Flooding around the solar PV panels at Cleve Hill 2 March 2026
(Photograph courtesy of Stop Oversized Solar)

Flooding around solar PV panels at Cleve Hill 2 March 2026
(Photograph courtesy of Stop Oversized Solar)

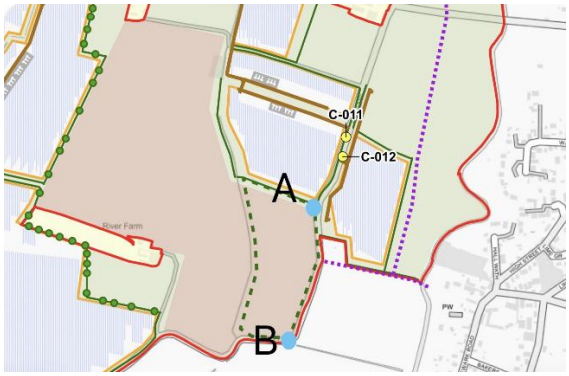
Section C Drafting error in REP3-028

11.0 The Framework Landscape and Ecological Management Plan (REP3-028) contains drafting errors. Paragraphs 5.3.57 and 5.3.58 as drafted do not make any sense:-

> "5.3.57 Measures for modified grassland (moderate condition) will focus on a regime of:
>
> 5.3.58 Sheep grazing (if undertaken) at a stocking density and time periods which favour sward diversity within the modified grassland (moderate condition).
>
> a. Visual inspections during the growing season.
> b. Control of undesirable species (e.g. arable weeds) and injurious weeds to prevent colonisation and domination of the grassland using spot treatment of herbicide.
> c. The results of annual monitoring surveys will be used to adjust the management regime to maximise biodiversity."

Section D Comments on REP4-006/REP4-007

12.0 The revised Indicative Fixed South Facing Site Layout Plan (REP4-006) and the revised Indicative Single Axis Tracker Site Layout Plan (REP4-007) show the permissive paths during the operation of the proposed development. Both plans show a permissive path with a green dotted line along Clay Lane, Bassingham between the points marked A and B:-



As I have already pointed out in paragraph 3.3.2 of my submission REP2-061, Clay Lane is a public highway over which there are existing rights of way for pedestrians. The Applicant should therefore amend these plans accordingly to remove this length of “permissive path”.