SOUTH DERBYSHIRE DISTRICT COUNCIL'S ANSWERS TO THE EXAMING AUTHORITY'S THIRD WRITTEN QUESTIONS

ANSWERS FOR DEADLINE 6

Oaklands Farm Solar Farm NSIP

(Construction and operation of a solar farm plus energy storage with associated infrastructure and connection to the grid)

Application by Oaklands Farm Solar Ltd

PINS Reference: EN010122

Ref:	ExA's Question	SDDC Answer:
1.	**Draft Development Consent Order (dDCO) and other consents**	
	General points	
	Part 1 - Preliminary	
1.2	Article 2 – Interpretation - Site preparation works SDDC [REP5-040] refer to the definitions of 'enabling works' in the dDCO [REP5-003] and Outline Construction Environmental Management Plan (Outline CEMP) [REP5-011] and say that the dDCO [REP5-003] has the potential to allow for extensive and destructive works to take place in advance of pre-commencement conditions having been fully scrutinised and discharged. Since the Application, including in response to the ExA's questions, the Applicant has updated various dDCO [REP5-003] provisions in relation to 'site preparation works', including Requirements 8(4), 9(4), 9(5), 10(4), 13(1), 16(2), 16(6), 16(7), and 18(1). The Outline CEMP [REP5-011] and Outline Landscape and Ecological Management Plan (Outline LEMP) [REP4-040] do not appear to refer to 'site preparation works' and have few measures in relation to 'pre-commencement', which would include 'site preparation works'. a) Please could the Applicant carry out a detailed review of the Outline CEMP [REP5-011] and Outline LEMP [REP4-040] and other relevant draft management and mitigation plans to ensure that they are fully consistent with the provisions for 'site preparation works' in the dDCO [REP5-003]?	c) SDDC has been in discussion with the Applicant and are now content with the Applicant's approach which is consistent with other consented DCOs for solar and other forms of development.

Ref:	ExA's Question	SDDC Answer:
	b) Please could the Applicant consider whether it can clarify/ simplify the use of terms such as 'pre-commencement', 'enabling works' and 'pre-construction' in the Outline CEMP [REP5-011] and Outline LEMP [REP4-040] for consistency with the dDCO [REP5-003]? c) Please could the Applicant and SDDC discuss SDDC's comments and each provide an update, including any proposed updates to the dDCO [REP5-003], Outline CEMP [REP5-011], and Outline LEMP [REP4-040]? d) Please could SDDC also summarise any outstanding concerns at Deadlines 7 and 8 with suggestions about how they might be addressed?	
	Part 2 - Principal Powers	
	N/A	
	Part 3 - Streets	
1.4	Article 11 - Temporary stopping up of public rights of way a) Further to Issue Specific Hearing 1 [EV4-002] Item 9m), please could SDDC set out any concerns about Article 11? b) Please could SDDC also summarise any outstanding concerns at Deadlines 7 and 8 with suggestions about how they might be addressed?	a) The temporary stopping up of public rights of way as provided for in the DCO, particularly under Article 11, also raises concerns, as it grants broad powers to stop up, divert, or alter public rights of way without extensive restrictions. Whilst it is recognised that public rights of way may need to be temporarily obstructed to facilitate construction, the guidance suggests that such powers should be exercised with caution to minimise disruption to the public. The DCO allows for the stopping up of rights of way without clearly defined or stringent criteria for restoring access or mitigating impacts. There is also flexibility for the applicant to use public rights of way for temporary worksites, which may further inconvenience local communities. The guidance

Ref:	ExA's Question	SDDC Answer:
		emphasises that access for pedestrians and affected communities should be carefully managed to minimise disruption, and provisions for restoring rights of way after works should be clear and enforceable. The absence of specific measures in the DCO for quickly reinstating public access, or for providing sufficient alternative routes, raises concerns about how public convenience and access will be safeguarded during the development.
	Part 5 – Powers of Acquisition	
	N/A	
	Part 7 - Miscellaneous/General	
	N/A	
	Schedule 1, Part 2 - Requirements	
	N/A	
	Schedule 1, Part 3 – Procedure for Discharge of Requirements	
	N/A	
	Schedule 10 – Protective Provisions	
	N/A	
2.	**Land rights, related matters, and statutory undertakers**	
	N/A	
3.	**General and cross-topic planning matters**	

Ref:	ExA's Question	SDDC Answer:
3.2	Local Planning Authority (LPA) resources a) Please could the Applicant, DCC, and SDDC provide an update about discussions about council resources for the consideration of any submissions, approvals and monitoring necessary for impact mitigation? b) Please could the Applicant set out how it is proposed that any resources are secured, for example through a Deed of Obligation or Planning Performance Agreement, and demonstrate that it is secured? c) Please could DCC and SDDC also summarise any outstanding concerns at Deadlines 7 and 8 with suggestions about how they might be addressed?	a) As requested by SDDC, the Applicant has signposted SDDC towards other similar developments citing the approach they have taken as being appropriate. The Applicant's latest proposal is to specify fees within the dDCO as per the TCPA charging schedule and for this to be supplemented by addressing the provision of additional resourcing needs through flexible mechanisms like PPAs or Agreements under Section 111 of the Local Government Act 1972, and for this to be referenced in the SoCG. SDDC is considering these proposals.
3.3	Solar panel and battery storage replacement during the operation stage The ExA notes the potential for adverse impacts in relation to Heavy Goods Vehicle (HGV) movements during the operation stage in various chapters of the Environmental Statement (ES), including for the replacement of solar panels and other equipment. It refers to the Mallard Pass Solar Farm Outline Operational Environmental Management Plan, which includes related provisions in paragraphs 2.2.2, 2.2.3 and 2.2.5. The Applicant [REP5-024, REP5-026] has updated paragraph 3.1.4 of the Outline Operational Environmental Management Plan (Outline OEMP) [REP5-013] to "*provide greater certainty on the HGV vehicle movements associated with any solar panel replacement*": "*3.1.4 Solar panels are not expected to be replaced during the operational life of the Proposed Development, save for individual instances of damage or unexpected failure of specific panels,*	a) SDDC would welcome being notified about maintenance for forthcoming years along with supporting information, and that SDDC would need to confirm panel replacement will not lead to any materially new or materially more adverse environmental effects arising from any planned maintenance activities.

Ref:	ExA's Question	SDDC Answer:
	and that to account for this an annual replacement rate of 0.2% per year has been assumed in the ES. This results in an estimated 500 panels replaced per year. A standard HGV can hold approximately 750 solar panels. *Therefore, a single HGV two-way movement and associated unloading vehicle (telehandler) is sufficient to deliver/remove the annual amount of panels that need to be replaced due to damage or unexpected failure. To clarify, wholesale replacement/upgrade of all panels on site is not anticipated.*" The ExA is seeking firmer and more precise commitments and suggests the following, or similar: • Annually during the operational lifetime of the Proposed Development, the Applicant will provide notification, which is not subject to approval, of planned maintenance activities to the local planning authority for the forthcoming year. The notification will include supporting environmental and traffic information to evidence that there will be no materially new or materially more adverse environmental effects arising from any planned maintenance activities when compared to those identified in the assessment of the operational phase in the ES. This supporting information must include confirmation that the approach to planned maintenance set out in the notification is consistent with the approved Operational Environmental Management Plan. • The replacement of the solar panels cannot take place until the local planning authority has provided confirmation that they agree that the activities will not lead to materially new or materially different environmental effects to those identified in the assessment of the operational phase in the ES. The traffic movements associated with the replacement of	

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	solar panels, whether planned or not, must be no more than one HGV two-way movement per year. a) Please could the Applicant and SDDC comment? b) Please could SDDC also summarise any outstanding concerns at Deadlines 7 and 8 with suggestions about how they might be addressed?	
4.	**Need case, effects on climate change, alternatives, electricity generation, and grid connection**	
	N/A	
5.	**Project lifetime and decommissioning**	
5.1	<u>End state after decommissioning</u> Section 3.1 and paragraph 1.7 of Appendix A of the Outline Decommissioning Environmental Management Plan (Outline DEMP) [REP5-015] set out the anticipated end state after decommissioning. The Applicant [REP5-024, REP5-025] considers that it is not necessary to review and agree updates to the description of the end state through the construction and operational phases. a) Do SDDC, DCC, EA, or NE have any comments? b) Please could the Applicant set out the consideration given to potential conflicts between restoring land to agricultural use after operation with any habitats established on the same land at that time, and how these potential conflicts are addressed by the Outline DEMP [REP5-015]? c) Please could SDDC, DCC, EA, NE also summarise any outstanding concerns at Deadlines 7 and 8 with suggestions about how they might be addressed?	a) SDDC are of the view that the review and agreement of updates to the end state after decommissioning during the construction and operational phase could ensure that the end state is appropriately described.

Ref:	ExA's Question	SDDC Answer:
5.2	Funding for decommissioning The ExA is considering whether, to respond to concerns and provide security, a commitment should be made to building a decommissioning fund during operation. The Applicant [REP5-026] states that it is not appropriate for a decommissioning bond to be secured under the dDCO [REP5-003], but proposes the following wording if it is required: *"Requirement 27 – Decommissioning fund* *27— (1). No phase of the authorised development may commence until a decommissioning fund or other form of financial guarantee that secures the cost of performance of all decommissioning obligations under Requirement 22 of this Order has been submitted to and approved by the local planning authority.* *(2) The value of the decommissioning shall be agreed between the Undertaker and the local planning authority or, failing agreement, determined (on application by either party) by a suitably qualified independent professional as being sufficient to meet the costs of all decommissioning obligations referred to in Requirement 22 of this Order.* *(3) The decommissioning fund shall be maintained in favour of the local planning authority until the date of completion of the works to be undertaken in accordance with Requirement 22 of this Order.* *(4) The value of the decommissioning fund shall be reviewed by agreement between the Undertaker and the local planning authority by a suitably qualified independent professional no less than every five years and increased or decreased to take*	a) SDDC would welcome the inclusion of measures to build up a decommissioning fund during operation.

Ref:	ExA's Question	SDDC Answer:
	account of any variation in costs of compliance with decommissioning obligations and best practice prevailing at the time of each review." a) Please could SDDC comment? b) Please could SDDC also summarise any outstanding concerns about funding for decommissioning at Deadlines 7 and 8 with suggestions about how they might be addressed?	
6.	**Agriculture, land use, soils, ground conditions, minerals, and geology**	
6.3	Agricultural Land Classification (ALC) NE [AS-022] [REP1-037] raise various concerns regarding ALC, including: • where Best and Most Versatile (BMV) agricultural land is not expected then a semi detailed survey (1 auger per 2 ha plus representative pits) will suffice; • in areas that BMV agricultural land is expected then a full ALC (1 auger per ha plus representative pits) must be undertaken; • it does not concur with the assumption that land quality is mostly 3b within the cable route; • an ALC survey should be undertaken on the cable route; • in the absence of a detailed survey for most of the cable corridor it is impossible to provide an accurate baseline and demonstrate the likely potential impacts; • the survey requires an experienced ALC surveyor to make the correct professional judgements;	c) SDDC accept that the Additional Land Classification Survey at Park Farm was undertaken by an appropriate professional. SDDC note that of the 48.2Ha surveyed in the 2021, 7.3Ha was subgrade 3a (Good) ALC, i.e. 15.2% of that area. However, of the additional 10.2Ha surveyed in 2024, 8.1Ha was subgrade 3a (Good) ALC, i.e. 79.4% of that area. SDDC are of the view that the total impacted area of BMV agricultural land is clearly significantly more when the additional survey area is taken into account, more than double, and this increases the concerns SDDC has in regard to the loss of BMV agricultural land resulting from the development.

Ref:	ExA's Question	SDDC Answer:
	• detail should be provided of the professional credentials and experience required of soil scientists (surveyors) experience carrying out ALC; and • the ALC survey will inform the SMP. NE [AS-033] say that they have no further concerns regarding ALC survey methodology, but did not provide any further detail. The Applicant [REP3-032, REP4-011, REP5-024, REP5-025, REP5-026] has responded and provided an Additional Land Classification Survey at Park Farm [REP5-036]. SDDC [REP5-039] generally concur with NE's comments, adding that soil scientists (surveyors) should be British Society of Soil Science standard, and that ALC survey must inform the SMP. a) Please could NE address each of the above concerns individually, in each case setting out whether it is satisfied, and either how it is satisfied or how it could be? b) Please could the Applicant respond to SDDC's additional concerns and ensure that any necessary related mitigation is secured? c) Do NE or SDDC have any comments on the Additional Land Classification Survey at Park Farm [REP5-036]? d) Does NE have any other concerns about ALC? How might they be addressed? e) Please could SDDC and NE set out any remaining concerns at Deadlines 7 and 8 with suggestions about how they might be addressed? f) Please could the Applicant update ES Chapter 15 [APP-169] to reflect the Additional Land Classification Survey at Park Farm [REP5-036] and also update any related	

Ref:	ExA's Question	SDDC Answer:
	mitigation in the relevant management and mitigation plans?	
6.5	Decommissioning of underground cables The ExA [EV4-002] requested that the Applicant respond to SDDC's concerns that cables left in place after decommissioning could conflict with future agricultural land uses including in relation to the reinstatement of land drainage. Chapter 4 of the ES [REP5-019] secures a minimum depth of cables of 0.9m, apart from a minimum depth of 0.7m at onsite cabling between PV modules and inverters and from inverters to transformers and the crossing of Coton Road. NE [AS-033] say that "*the maximum possible depth of a soil profile is generally considered to be 1.2 m and therefore, the cables may be laid partially within the depth of the natural soil profile, but will be well below the topsoil layer and the minimum depth of cover over the cables is not considered to compromise the ability of the overlying agricultural crops to produce a functioning and effective root system. This depth is expected to be consistent with the industry standard of 0.9m depth.*" Paragraph 2.6.9 of the Outline CEMP [REP5-011] includes that "*During construction of the Proposed Development, piling of solar panel mounts and / or the installing underground electrical cabling via trenching may result in disturbance or damage to existing land drains. Where this occurs and creates an unacceptable surface drainage issue, other measures (e.g., repairing or installing new land drains) would be available to rectify such drainage issue. Once established, the drainage on-site will be monitored, and drainage measures altered or improved as necessary.*"	a) SDDC are of the view that it is important to understand and fully consider at this stage whether cables will be removed or not, since cable removal at decommissioning is likely to have a significant adverse impact on soil quality at that time.

Ref:	ExA's Question	SDDC Answer:
	Section 3.1.4 of the Outline DEMP [REP5-015] says that "*the Applicant intends to remove buried cables after decommissioning, though will be led by the planning authority and relevant policy in place at the time of decommissioning. The cables may be left in situ, depending on the method which is likely to have the least environmental impact at the time.*" Paragraph 1.6 of the Outline SMP embedded in the Outline DEMP [REP5-015] includes that "*The Applicant commits to the repair of land drains or the installation of new land drains where removal of solar panel mounts and/or the removal of underground electrical cabling results in damage or disturbance to existing land drains and where an unacceptable surface water issue occurs as a result. Once established, the drainage on-site will be monitored for up to 5 years, and drainage measures altered or improved as necessary.*" a) Does SDDC have any comments? b) Noting NE's comments in relation to soils, and the need to provide adequate protection to cables crossing roads, does the Applicant consider that all cables should be laid to a minimum depth of 0.9m? If not, why not? EA [REP5-043] say that: • cables in general, unless oil filled, would be unlikely to be considered as a waste if left in the ground; • the Applicant would need to demonstrate that leaving cables in situ would not result in pollution; • if the Applicant proposes to install cables in such a manner as to mitigate likely adverse impacts, a risk assessment will need to be undertaken to determine what can be designed in or out to achieve appropriate mitigation; and	

Ref:	ExA's Question	SDDC Answer:
	• risks to the environment will remain at the time of decommissioning so another risk assessment should also be carried out before decommissioning takes place. a) Please could the Applicant respond to the matters raised by the EA and ensure that any necessary related mitigation is secured? b) Please could EA and SDDC summarise any outstanding concerns about the decommissioning of cables in relation to agriculture, soils, and pollution at Deadlines 7 and 8 with suggestions about how they might be addressed?	
7.	**Biodiversity**	
7.2	Draft DCO [REP5-003] Article 38 - Trees subject to Tree Preservation Orders (TPO) Ancient/ veteran trees SDDC [REP4-014] and DCC [REP4-012] raised concerns about impacts on ancient/ veteran trees. The ExA [EV4-002] referred to Planning Act 2008: Content of a Development Consent Order required for Nationally Significant Infrastructure Projects, and suggested that the Applicant identify trees subject to a TPO that would be affected and the works permitted to each tree (e.g. fell, lop, or cut back its roots) in a schedule to the dDCO [REP5-003]. The Applicant [REP5-024, REP5-026] responds to the concerns and has revised Article 38 (trees subject to tree preservation orders) of the dDCO [REP5-003] to limit the powers granted by that article to the trees identified in Schedule 13 of the dDCO. Schedule 13 identifies trees within the area identified as W4 in SDDC's TPO No. 122.	a) Within the latest dDCO, the Schedule identifies Works Nos. 5 and 5A to take place to tree within W4 that are afforded protection by TPO 122. SDDC has specific concerns in relation to any veteran/ancient trees (irreplaceable habitat) within that woodland and it would be helpful if it could be clarified if any veteran/ancient trees occur within W4 and, if so, for those trees to be identified, afforded special protection, and/or avoided completely during proposed works.

Ref:	ExA's Question	SDDC Answer:
	a) Please could SDDC and DCC comment? b) Please could SDDC and DCC also summarise any outstanding concerns at Deadlines 7 and 8 with suggestions about how they might be addressed?	
7.3	Habitat Constraints Plan SDDC [REP4-014] and DCC [REP4-012] referred to the need for a Habitat Constraints Plan with interpretable maps to provide the necessary details and extent of site clearance works relating to buffer zones to sensitive features such as ancient/ veteran trees, other retained trees, ponds, watercourses, hedgerows and woodlands. The Outline CEMP [REP5-011] includes provisions for a Habitats Constraint Plan [Section 2.8.5] and buffers [Sections 2.6.4, 2.6.5, 2.8.2, 2.8.3, 2.8.5, and 2.8.6]. The Applicant provides a series of interpretable maps of habitat constraints [REP5-030]. a) Please could the Applicant add the draft interpretable maps to the Outline CEMP [REP5-011] and secure that interpretable maps be included in the final CEMP? b) Please could SDDC and DCC comment? c) Please could SDDC and DCC also summarise any outstanding concerns at Deadlines 7 and 8 with suggestions about how they might be addressed?	b) SDDC have reviewed those interpretable maps and they provide useful clarity and should be attached to the Outline CEMP for further comprehensive review.
7.4	Skylark SDDC [REP4-014] considers that the Proposed Development would harm skylark or other ground nesting birds and that specific mitigation for skylark would be appropriate in the form of	b) SDDC accept the principle of utilising a S106 unilateral undertaking to secure off-site mitigation of skylark plots to benefit skylark and other farmland birds.

Ref:	ExA's Question	SDDC Answer:
	skylark plots to be created within arable fields adjacent to Oakland Farm. The Applicant [REP5-024, REP5-026] considers that specific mitigation for skylark is not necessary, but acknowledging SDDC's differing position is in the process of agreeing the terms of a S106 unilateral undertaking to provide for offsite mitigation in the form of skylark plots. The Applicant's position is that the mitigation being proposed would be sufficient to result in a benefit for this species. It says that the terms of any undertaking would require a skylark mitigation strategy to be submitted to SDDC prior to the commencement of development and the skylark mitigation areas maintained for the lifetime of the development. a) Please could the Applicant provide evidence that the S106 unilateral undertaking is secured, as described? b) Please could SDDC comment? c) Please could SDDC also summarise any outstanding concerns at Deadlines 7 and 8 with suggestions about how they might be addressed?	
7.5	Barn owl The ExA [EV4-002] requested that the Applicant clarify the evidence to support that impacts and mitigation can be identified without a barn owl survey and asked it to consider whether a barn owl survey and update of mitigation measures is required before the start of the site preparation works. The Applicant [REP5-024, REP5-026] says that specific barn owl surveys were not undertaken as "*there is a very good understanding of barn owl ecology*", and provides reasoning to support that view. The mitigation for barn owl in Section 2.8.6 of	b) SDDC understood that the Applicant had agreed for a survey to be undertaken to better quantify the barn owl population in the surrounding area and identify the degree of impact. An approximation of the barn owl population of the surrounding area would be useful to determine the level of necessary mitigation.

Ref:	ExA's Question	SDDC Answer:
	the Outline CEMP [REP5-011] has been updated and includes pre-construction checks. The ExA notes that, as defined by the dDCO [REP5-003], 'pre-construction' is not necessarily before the site preparation works. a) Please could the Applicant consider whether a barn owl survey and update of mitigation measures is required before the start of the site preparation works and ensure that necessary mitigation is secured accordingly? b) Please could SDDC comment? c) Please could SDDC also summarise any outstanding concerns at Deadlines 7 and 8 with suggestions about how they might be addressed?	
7.6	Great crested newt The ExA [EV4-002] requested that the Applicant consider whether additional precautionary mitigation is required for great crested newt. The Applicant [REP5-024, REP5-026] provides reasoning for why it considers it highly unlikely for great crested newt to occur within the site or to be impacted by the Proposed Development. The mitigation for great crested newt in Section 2.8.7 of the Outline CEMP [REP5-011] has been updated to require "*best practice methods*" for the construction works. Section 2.8.7 of the Outline CEMP [REP5-011] includes for pre-construction surveys for great crested newt. The ExA notes that, as defined by the dDCO [REP5-003], 'pre-construction' is not necessarily before the site preparation works. a) Please could the Applicant consider whether a great crested newt survey is required before the start of the site	b) Pre-cautionary checks as part of ECoW immediately before site preparation works (any vegetation clearance or heavy traffic) of potential refuges and marginal areas adjacent to potential newt habitat including ponds/scrub would be appropriate particularly in the vicinity of Park Farm and Hill Covert to help conclude that mobile individuals are not at risk from proposed works.

Ref:	ExA's Question	SDDC Answer:
	preparation works and ensure that necessary mitigation is secured accordingly? b) Please could SDDC comment? c) Please could SDDC also summarise any outstanding concerns at Deadlines 7 and 8 with suggestions about how they might be addressed?	
8.	**Historic environment**	
	N/A	
9.	**Landscape, visual, glint, and glare**	
9.2	The National Forest SDDC [REP5-039] says that it will be content with the proposals in relation to compliance with Local Plan Policy INF8 once detailed tree works are provided for SDDC to consider. a) Have SDDC's concerns been addressed? How might they be addressed? b) Please could SDCC set out any remaining concerns at Deadlines 7 and 8 with suggestions about how they might be addressed?	a) SDDC have no further concerns in relation to compliance with Local Plan Policy INF8 and will review detailed tree works once provided.
10.	**Noise and vibration**	
10.1	Noise assessment and mitigation The ExA [EV4-002] requested that SDDC consider the noise assessment concerns raised by Diane Abbott [REP4-022] and any implications for SDDC being content with the assessment and mitigation. The Applicant [REP5-025] comments on Diane Abbott's concerns [REP4-022].	a) SDDC has prepared answers to Diane Abbott's concerns – please see separate document attached.

Ref:	ExA's Question	SDDC Answer:
	a) Please could SDDC comment on Diane Abbott's concerns [REP4-022] and set out the reasons for any disagreement with the Applicant's comments [REP5-025]. b) Please could the Applicant update the SoCG with DCC and SDDC [AS-029] as necessary? c) Please could SDDC summarise any outstanding concerns at Deadlines 7 and 8 with suggestions about how they might be addressed?	
10.2	Piling for the solar panels SDDC [REP4-014, REP5-039] says that it has yet to have discussions with the Applicant following the ExA's previous question [PD-012 Question 10.3] about the potential for noise impacts from piling during construction and mitigation measures for piling. Paragraph 2.2.3.9 of the Outline CEMP [REP5-011] includes that mitigation measures in relation to piling of the solar panels will include scheduling the work at times to minimise impact on nearest receptors, employing multiple rigs to reduce the time taken for piling in a given area before moving on, and screening or low-noise plant models. a) Please could SDDC set out its concerns and suggest how they might be addressed? b) Please could SDDC also set out any remaining concerns at Deadlines 7 and 8 with suggestions about how they might be addressed?	a) SDDC welcomes the inclusion of the mitigation measures with the Outline CEMP, and this addresses SDDC's concerns in this regard.
11.	**Traffic and transport**	
	N/A	

Ref:	ExA's Question	SDDC Answer:
12.	**Water quality, resources, drainage, and flooding**	
12.2	Flood Risk Assessment (FRA) The EA [REP5-043] raised concerns about the Sequential Test and flood risk climate change allowance. a) Is the EA satisfied that the submitted update to the FRA [REP5-017] addresses its concerns? The EA [REP5-042, [REP5-043] also raised concerns about the proposed river crossings/ culverts and consequent increases in flood risk off site, which it notes is against the Overarching National Policy Statement for Energy (NPS EN-1) policy in relation to the Exception Test. It suggested possible solutions, including make all new crossings temporary, to be in situ for only the construction and decommission phases. The updated FRA [REP5-017 Section 8.5] indicates increases in flood risk off site. Paragraph 5.8.11 of NPS EN-1 states that: "*Both elements of the Exception Test will have to be satisfied for development to be consented. To pass the Exception Test it should be demonstrated that:* *c) the project would provide wider sustainability benefits to the community that outweigh flood risk; and* d) *the project will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible will reduce flood risk overall.*" The Applicant [REP5-026] updated paragraph 1.14.1 of the Outline CEMP [REP5-011] to include that the "*Temporary Construction Haul Road would be removed following construction and reinstated for decommissioning. Following*	c) SDDC would defer to Derbyshire County Council as Lead Local Flood Authority.

Ref:	ExA's Question	SDDC Answer:
	removal of the Temporary Construction Haul Road (after construction and decommissioning), the land will be restored to its current condition. This will include removal of temporary culverts." Paragraph 3.1.2 of the Outline DEMP [REP5-015] now includes that the "*Temporary Construction Haul Road (including temporary culverts) would be removed following decommissioning, and the land will be restored to its current condition*". b) Please could the Applicant provide any necessary updates in relation to satisfying paragraph 5.8.11 of NPS EN-1? c) Do EA or DCC (as Lead Local Flood Authority) have any comments? d) Please could EA and DCC also summarise any outstanding concerns at Deadlines 7 and 8 with suggestions about how they might be addressed?	
12.3	Potential damage to existing land drainage The ExA [EV4-002] requested that the Applicant demonstrate whether damage to existing land drains could be mitigated to avoid increasing flood risk and asked it to respond to SDDC's concerns regarding the potential for water no longer in the existing land drains to be directed more towards areas with higher flood risk. The Applicant was requested to secure the necessary mitigation. The Applicant [REP5-024, REP5-026] states that: • it broadly knows where the land drains are based on information from the landowner and that several of its team had been through the site field by field and recording them;	b) SDDC are of the view that if, as stated by the Applicant, any damage to land drains will reduce off-site flows, thus reducing off-site flood risk, the damage may adversely impact on soil quality.

Ref:	ExA's Question	SDDC Answer:
	• it provides a map identifying where land drains are understood to be present [REP5-017 paragraph 4.2.5]; • the land drainage is generally at lower parts of fields, nearer watercourses, where farmers try to speed up water flow through a land drain; • due to the expected low number of land drains on the Site, and the very small area of the Site affected by cable trench excavations (approximately 2% of Site, with trenches almost exclusively routed around the perimeter of fields), the main source of damage to any existing land drains is expected to be piling for the solar panel mounting structure legs; • water flow would be slowed if there is any damage to the drains; • some of the detailed information regarding depth of pipes would need to be investigated and identified using a digger but that this could be dealt with in detail post-consent in the Soil Management Plan; • any problem post-construction would become obvious as there would be a damp area; • if there are patches these can be rectified in the same manner as farmers would, which would not affect flood risk; • new land drains and other drainage features can be installed under and around the piling for the solar panels and buried cables to address any issues identified from land drains found to have been damaged during construction; and • the exact locations of piles and buried cables installed by the Applicant would be known and recorded, and these features can therefore be avoided by careful design and installation of the new drainage.	

Ref:	ExA's Question	SDDC Answer:
	Paragraph 2.6.9 of the Outline CEMP [REP5-011] includes that "*During construction of the Proposed Development, piling of solar panel mounts and / or the installing underground electrical cabling via trenching may result in disturbance or damage to existing land drains. Where this occurs and creates an unacceptable surface drainage issue, other measures (e.g., repairing or installing new land drains) would be available to rectify such drainage issue. Once established, the drainage on-site will be monitored, and drainage measures altered or improved as necessary.*" Paragraph 1.6 of the Outline DEMP [REP5-015] includes that "*The Applicant commits to the repair of land drains or the installation of new land drains where removal of solar panel mounts and/or the removal of underground electrical cabling results in damage or disturbance to existing land drains and where an unacceptable surface water issue occurs as a result. Once established, the drainage on-site will be monitored for up to 5 years, and drainage measures altered or improved as necessary.*" a) Please could the Applicant ensure that any mitigation required for damage to existing land drainage that is not identified until post-construction is secured in the Outline OEMP [REP5-013]? b) Do DCC (as Lead Local Flood Authority) or SDDC have any comments? c) Please could DCC and SDDC also summarise any outstanding concerns at Deadlines 7 and 8 with suggestions about how they might be addressed?	
13.	**Other planning topics**	
	N/A	

SOUTH DERBYSHIRE DISTRICT COUNCIL'S COMMENTS ON DIANE ABBOTT'S NOISE REPRESENTATION

Oaklands Farm Solar Farm NSIP

(Construction and operation of a solar farm plus energy storage with associated infrastructure and connection to the grid)

Application by Oaklands Farm Solar Ltd

PINS Reference: EN010122

Item:	Diane Abbott's Comment	SDDC Response:
1.	Once operational the site will produce noise both day and night, this will have a great impact on local residents and on the amenity of the site for users of the local road network and footpaths.	SDDC are of the view that these are not relevant receptors in determining the application.
2.	The noise report and methodology repeatedly seek to minimises the actual impact the development will have on the local population. An impartial study should review the various noise thresholds set within the report to determine if they are consistent with the appropriate planning requirements.	SDDC would advise that the planning guidance in regards noise does not seek to prevent impact but prevent significant adverse impacts. SDDC is satisfied that the submission by the applicant have considered the relevant noise standards.
3.	The magnitude of criteria for daytime construction noise has the starting threshold for "minimal" effect of 65dB, this seems unreasonably high for the typically tranquil nature of the surroundings and for works that will last for 2 years. A starting threshold of 50dB would be a more reasonable.	SDDC are of the view that such a low level is not in accordance with the guidance Environmental Health are obliged to consider, and SDDC are not able to support this suggestion.
4.	The methodology for the noise assessment fails to use the measured baseline noise survey data to set the LOAEL and SOAEL. Instead, it arbitrarily chooses to use BS8233 which is intended to be used to determine insulation requirements for new and refurbished dwellings in noisy areas. The Government document Method Implementation Document (MID) for BS4142 Section 8.5 states that "You must not use BS8233 to assess noise pollution from an industrial or commercial sound. It does not take into account any acoustic features such as tonality, impulsivity, intermittency or other distinguishing feature."	SDDC advise that it is appropriate to use a combination of both BS4142 and BS8233 in such assessments. Where background levels are very low, it is considered acceptable practice to consider the absolute levels with reference to the BS8233 standards to assess likely impacts. An excerpt from page 16 of the standard confirms this as follows: 'Where background sound

Item:	Diane Abbott's Comment	SDDC Response:
		levels and rating levels are low, absolute levels might be as, or more, relevant than the margin by which the rating level exceeds the background. This is especially true at night.'
5.	The use of this inappropriate standard artificially increases the baseline by up to 7dB (day) and 16dB (night), which is a massive misrepresentation. These new baselines already exceed the LOAEL and SOAEL thresholds in places – before the additional noise of the site is considered. The use of this clearly inappropriate standard to artificially increase baseline levels by up to 16dB show the willingness of BayWa misrepresent the development and to purposefully mislead the average layperson reading these reports. The LOAEL and SOAEL should be based on 5dB and 10dB increases above measured baseline – as defined by SDDC policy.	SDDC are satisfied that the levels are sufficiently low so as not to have a significant adverse impact.
6.	The long-term sound recording meter at Twin Oaks failed, therefore there is only limited short term data available for some of the closest properties to the development.	SDDC are satisfied that the monitoring is sufficient to characterise the existing noise climate, in terms of both duration and locations, given the nature of the noise under consideration.
7.	The short term attended noise assessments should not have been carried out during rush-hour as these times are not representative of the tranquil nature of the area. The Government document MID for BS4142 (Dec 2023) clarifies this, section 7.3 states: "You must not measure during the most unfavourable time interval and claim it is representative of the whole day or night period."	SDDC are satisfied that the monitoring is sufficient to characterise the existing noise climate, in terms of both duration

Item:	Diane Abbott's Comment	SDDC Response:
		and locations, given the nature of the noise under consideration.
8.	The noise survey mentions that passing trains can be heard at night (from 2km away). Trains can generate 80-95dBA (up close), but this is a transitory noise source, from a distance, lasting only a few seconds. Some of the operational equipment on site is expected to generate noise levels of >90dBA and is sited less than 500m from local properties. It therefore unlikely that the noise impacts on nearby receptors will be "negligible" as claimed. The noise document says that string inverters will be sited as far from receptors as possible. This is clearly not the case for the string inverters near to properties in Rosliston, and at Lad's Grave. To improve attenuation, the inverters should be positioned in the middle of the solar fields, rather than at the boundaries close to receptors. Actual noise levels for much of the operational equipment remains unknown and multiple approximations and assumptions have been made throughout the document. As a result, the proposed operational sound mapping is pure speculation, and I don't believe any meaningful conclusions of how residents will be affected can be drawn. Nevertheless, if the measured baseline levels are taken, then it can be shown that the noise on site will exceed the current nighttime LAOEL thresholds of 5dB over baseline for many of the properties.	SDDC is of the view that it is not uncommon for impact assessment to be undertaken in this manner to demonstrate a scheme is viable. As per previous comments 'It is also noted that the developer will be required to undertake and submit an operational noise assessment to the local planning authority prior to the start of works on site (DCO Requirement 15) to demonstrate that detailed design and plant selected do not demonstrably affect noise sensitive receptors in accordance with the conclusions of the assessment.'
9.	More information is required on the type of equipment and levels of noise that will be generated on-site. Referring to Appendix 6.1 Section 11.136. The noise report fails to add a sufficient modifier for the tonal noise source from the equipment (inverter and transformer hum will be noticeably tonal) which should result in a 5dB penalty. The report claims that it is only the transformers that will have a tonal quality, but in reality, the data simply isn't available to confirm this.	SDDC advise that the EIA noise chapter sufficiently demonstrates that the installation is capable of being developed, in principle, without resulting in significant adverse impacts from noise.

Item:	Diane Abbott's Comment	SDDC Response:
10.	There is also the expectation of a 3dB (or higher) modifier for acoustic features such as a whine, hiss or screech (again, refer to the MID for BS4142). This modifier this has not been applied despite it being well known that inverters and transformers can produce an unpleasant high-pitched noise. I'd also like to see an assessment on how low frequency noise from the site may impact neighbours.	SDDC considers that it would not be unreasonable to request the applicant to demonstrate whether any of the plant will include significant low frequency noise characteristics that might require further consideration at this stage.
11.	An independent report should be prepared to ensure that noise impacts are properly and impartially assessed using the appropriate standards. On the basis of this revised noise report, the developer should be expected to provide sound attenuated equipment, acoustic screening and other methods to minimise the impact on all nearby properties. There should also be provisions to check emitted noise levels once the site is running and to ensure that the claimed thresholds are met and enforced. **Definition of LOAEL & SOAEL** I remain convinced that the noise targets for the site should be based on the actual measured baselines from this tranquil area and should not be derived (either wholly or partially) from inappropriate standards such as BS8233. The British Standard's website includes the following information: **BS8233:2014 "Guidance on sound insulation and noise reduction for buildings."** BS 8233 provides guidance for the control of noise in and around buildings.	SDDC is satisfied that the application has correctly considered the relevant guidance when determining the significance of potential noise impacts.

Item:	Diane Abbott's Comment	SDDC Response:
	BS 8233 is applicable to the design of new buildings, or refurbished buildings undergoing a change of use, but does not provide guidance on assessing the effects of changes in the external noise levels to occupants of an existing building. Similarly, the WHO guidelines are designed to minimise health risks from noise levels and should therefore be considered to be the very highest threshold allowable from a new development. As such they are therefore not appropriate for use in quiet rural areas Although the Applicant's state that BS4142 indicates that absolute sound levels may be more appropriate as a measure, this is in the context of maintaining a tranquil soundscape, rather than referring to absolute maximum thresholds such as WHO guidance. This is clarified by the IEMA Guidelines for Environmental Noise Impact Assessment which notes: "The Influence of Absolute Noise Level: Relying solely on the change in noise level is not appropriate because it risks ignoring the context of the noise change…For an area which is valued because of the soundscape, a relatively small impact could be considered as having a potentially substantive effect if the quality of the noise environment were to be eroded. This particularly relates to tranquil, quiet or calm areas." I therefore suggest that the LOAEL and SOAEL are derived from the mean of the measured baseline noise levels provided by the Applicant – these are 35dB (day) and 28dB (night) which would create LOAEL max figures of 40dB (day) and 33dB (night) and SOAEL max figures of 45dB (day) and 38dB (night). The high magnitude threshold of 10dB over baseline will therefore be >45dB (day) and >38dB (night).	

Item:	Diane Abbott's Comment	SDDC Response:

This is summarised in the following table (my proposed figures shown in green):

			Applicant's noise thresholds		Defined by measured baseline		Response / Action
Magnitude of effect / Threshold			Day	Night	Day	Night	
High	SOAEL	>10dB above background	>50dB	>50dB	**>45dB**	**>38dB**	Unacceptable adverse effect / Prevent
Medium	SOAEL	> 5dB above background	45-50dB	45-50dB	**40-45dB**	**33-38dB**	Significant Adverse Effect / Avoid
Low	LOAEL	<5 dB above background	40-45dB	40-45dB	**35-40dB**	**28-33dB**	Present and Obtrusive / Mitigate and reduce to a minimum
Minimal		Less than or equal to background	<40db	<40dB	**35dB**	**28dB**	Present Not Intrusive / No action
		Measured baseline noise level (mean)			35dB	28dB	

It should be noted that a 10dB increase equates to a subjective doubling of perceived noise level. Therefore, the original suggested thresholds would have nighttime noise levels more than doubling whilst remaining within the LOAEL threshold and there would be a subjective quadrupling of perceived noise within the SOAEL category.

Item:	Diane Abbott's Comment	SDDC Response:
12.	**Night-time noise predictions.** In Section A11.3.4 (Appendix 11.3 Operational Noise Source Data) it is stated that the string inverter fans will run when the ambient temperature is above 20°C and solar output is above 70kW. The Applicants claim (without presenting evidence) that this is unlikely to occur before 7am and therefore the night-time noise predictions "assume" that the inverters only emit 62dB (rather than 84dB with fans running). Due to climate change, we are now seeing more tropical nighttime temperatures (exceeding 20°C) in the UK, and this trend will continue. As the sun rises as early as 5am in the summer, I believe it is quite likely that during warmer periods the cooling fans could be running well before 7am. This therefore needs to be factored into the night-time noise predictions. Could the Applicants provide more evidence regarding the likelihood of the inverter fans running in the early morning or late evening and / or resubmit noise predictions based on fan noise at nighttime. NB: Mallard Pass section 10.5.7 assumed the worst case; that fans would run at maximum power during all daylight hours: "This plant will mainly operate during the daytime, in which background noise levels tended to be more elevated; however, during the summer months, daylight periods may extend to early morning periods (05:00 to 07:00) and evening periods (18:00 to 23:00). Therefore, as a worst case, the plant noise from the Proposed Development has been considered against these quieter periods. Also, the plant has been assumed to operate at full duty (with its maximum level of noise emission) during this period."	SDDC consider that there is a potential for the temperatures to exceed 20ºc during noise sensitive hours, albeit it on very rare occasions. However, given that the Applicant has not considered this potential impact in detail, it would not be unreasonable for further assessment or controls to be provided. In the absence of any assessment of this impact, SDDC would suggest the applicant put measures in place to ensure that the system does not operate during noise sensitive hours in the event the ambient temperatures exceed 20ºc.

Item:	Diane Abbott's Comment	SDDC Response:
13.	**<u>Operational Noise from String Inverters</u>** With reference to the existing noise levels at Oakland's Farm, the Applicant states that they are controlled by the fans on the cow sheds. "The background noise levels during both survey visits at this location were observed to be controlled by ventilation fans on Oaklands Farm." Whilst the sound power levels of these fans are not known, the recorded noise levels from these four fans ranged between 63 and 71dB LA90 (at 5m) which elevated background noise at Twin Oaks House to 41dB (day) and 36dB (night). The sound power levels of the string inverters with the fans running are shown in the documentation to be 84dBA. It might therefore be reasonable to assume that the inverter fans will become the dominant background noise surrounding the site (both day and night). This needs to be considered in line with the potentially revised LOAEL and SOAEL.	SDDC is satisfied that the noise levels, in absolute terms, are sufficiently low that further consideration of this is unnecessary at this stage.
14.	I am not satisfied with the response regarding low frequency noises as these are known to travel for considerable distances (several km) with minimal attenuation. The Applicant fails to consider this fact when they state: "The most likely source of low frequency sound would be from the substation plant which has been located over 500m from residential properties and is not assessed to result in a significant noise impact."	Low frequency noise can be a significant issue in regards to the types of installations commonly associated with solar farms. However, this can be suitably controlled through the submission of the operational noise assessment to the Local Planning Authority prior to the start of works.