

Light Valley Solar

Outline Construction Environmental Management Plan

Document Reference: EN0110012/APP/LVS/07.02

September 2026
Version 2

APFP Regulation: 5(2)(q)
Category: 7



**Light Valley
Solar**

Infrastructure Planning

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

Light Valley Solar

DCO Submission

Outline Construction Environmental Management Plan

Regulation Reference	APFP Regulation 5(2)(q)
Planning Inspectorate Case Reference	EN0110012
Application Document Reference	EN0110012/APP/LVS/07.02
Author	Light Valley Solar Limited

Version	Date	Status of Version
1.0	February 2026	DCO Submission
2.0	September 2026	DCO Deadline 2 Submission

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1 Introduction

1.1 Overview and purpose of the document

- 1.1.1 Light Valley Solar Limited (the 'Applicant') has prepared this Outline Construction Environmental Management Plan (oCEMP) in relation to an Application for a Development Consent Order (DCO) for the construction, operation, maintenance, and decommissioning of Light Valley Solar (the 'Proposed Development').
- 1.1.2 The Proposed Development is being led by the Applicant, Light Valley Solar Limited, which is a subsidiary of Island Green Power (IGP) UK Limited. IGP is a leading international developer of renewable energy projects, established in 2013.
- 1.1.3 The aim of this oCEMP is to demonstrate how the mitigation measures relevant to construction activities included in the ES will be implemented. This document does not address operational, maintenance or decommissioning activities, which are subject to separate environmental management plans and procedures. Please refer to the Outline Operational Environmental Management Plan (oOEMP) [EN0110012/APP/LVS/07.03] and Outline Decommissioning Environmental Management Plan (oDEMP) [EN0110012/APP/LVS/07.04] for further information.
- 1.1.4 An Environmental Impact Assessment (EIA) process has been followed and the Environmental Statement (ES) Volume 1 of the ES (Chapters 5 to 17) reports on the assessment of likely significant effects. A range of 'standard' or good practice mitigation and construction management measures are accounted for in the assessments, and these will be implemented during the construction of the Proposed Development. This oCEMP details these construction mitigation measures. It also sets out the monitoring activities designed to demonstrate that such mitigation measures are carried out, and that they are effective.
- 1.1.5 It is recognised that there could be multiple CEMP(s) prepared in substantial accordance with this oCEMP to deal with different parts of the Proposed Development, depending on the detailed construction and contracting strategy undertaken. Where this is the case, each detailed CEMP will set out how the management of construction impacts will be co-ordinated across areas covered by different CEMPs.
- 1.1.6 One or more detailed Construction Environmental Management Plans (CEMP(s)) may be prepared by the appointed Contractor(s) substantially in accordance with this oCEMP.
- 1.1.7 This management plan incorporates embedded and good practice measures, as well as any further mitigation that arises out of the EIA process. An outline version of this management plan is submitted alongside the ES as part of this DCO Application to secure the commitments within each assessment. A Requirement is included in the draft DCO [EN0110012/APP/LVS/03.01] to ensure detailed management plans will be prepared to full versions by the appointed

Contractor(s), substantially in accordance with the outline management plans, and will be submitted for approval by North Yorkshire Council in advance of starting the relevant phase of works.

- 1.1.8 This oCEMP is designed with the objective of ensuring compliance with the relevant environmental legislation and mitigation measures set out within the ES. This document provides the likely structure of the detailed CEMP(s) and relevant preliminary information. It also indicates what additional information or controls might be included under each sub-section within each detailed CEMP(s).
- 1.1.9 The key elements of this oCEMP include:
- 1) An overview of the Proposed Development and associated construction programme;
 - 2) Proposed design and other mitigation measures to prevent or reduce potential adverse environmental effects;
 - 3) Monitoring and reporting of effectiveness of mitigation measures; and
 - 4) Links to other complementary plans and procedures.
- 1.1.10 The appointed Contractor(s) will be responsible for working in accordance with the environmental controls documented in the oCEMP and for the preparation and implementation of each detailed CEMP.
- 1.1.11 Any additional licences, permits, or approvals that are required will be listed in the detailed CEMP(s) (refer to Other Consents and Licences Statement (Volume 5) [EN0110012/APP/LVS/05.04]).

1.2 The Order Limits and Proposed Development

Order Limits

- 1.2.1 The Order Limits outline the maximum extent of the land that will be required to facilitate the construction, operation and maintenance, and decommissioning of the Proposed Development and are shown on Figure 1.1: Site Location and Order Limits Plan (Volume 2) [EN0110012/APP/LVS/06.02.01.01]. The Order Limits are described in Chapter 2: The Proposed Development (Volume 1) [EN0110012/APP/LVS/06.01.02] of the Environmental Statement (ES).
- 1.2.2 The Order Limits cover an area of approximately 1,270 hectares (ha) located within the administrative area of North Yorkshire Council, near Selby. It is possible that some temporary works may be required for construction access within the jurisdiction on York City Council. The Proposed Development comprises four broad areas:
- 1) Solar Development Sites (total area of 900 ha);
 - 2) Cable Route Corridor (total area of 328.5 ha)
 - 3) Highways Improvement Areas (HIA) (total area of 17.1 ha); and
 - 4) Solar Development Site 8 Access (total area of 24.1 ha).

The Proposed Development

- 1.2.3 The Proposed Development comprises a solar photovoltaic (PV) electricity generating station of over 100 megawatts (MW) and ‘associated development’ comprising a Battery Energy Storage System (BESS), grid connection infrastructure and other infrastructure integral to the construction, operation and maintenance, and decommissioning phases.
- 1.2.4 The main element of the Proposed Development comprises seven Solar Development Sites (Solar Development Sites 1-4 and 6-8) that will accommodate the Solar PV Panels. A BESS Compound will be located within Solar Development Site 2. The BESS is intended to store surplus electricity generated by the solar PV system and/or energy from the grid.
- 1.2.5 The Cable Route Corridor is the area within which the export connection cables (hereafter referred to as the ‘Grid Connection Cables’) would be located to connect the Solar PV Sites to the National Grid at the existing Monk Fryston Substation (hereafter referred to as the ‘Existing National Grid Monk Fryston Substation’) and the area which cables connecting the Solar Development Sites would be located (hereafter referred to as ‘Interconnecting Cables’) (refer to Figure 2.1: Illustrative Site Layout Plans (ES Volume 2) **[EN0110012/APP/LVS/06.02.02.01]**).
- 1.2.6 Where practicable a means of cable construction will be used which best enables the removal of underground cabling should this ultimately be the preferred environmental option at the time of decommissioning.
- ~~1.2.6~~ 1.2.7 Further details of the Proposed Development are presented in Chapter 2: The Proposed Development **[EN0110012/APP/LVS/06.01.02]** and the design envelope for the Proposed Development is set out in the Design Parameters and Commitments document **[EN0110012/APP/LVS/05.06]** and the limits of deviation shown on the Works Plan **[EN0110012/APP/LVS/02.03]**.

2 Construction environmental management

2.1 Introduction

2.1.1 The following section establishes the Proposed Development's construction and general site arrangements.

2.2 Roles and responsibilities

2.2.1 This section sets out the key Contractor(s) roles and responsibilities during the construction phase in managing environmental impacts. The detailed CEMP(s) prepared by the appointed Contractor(s) prior to construction will confirm exact roles and responsibilities and include contact details for key members of staff. Clearly establishing roles and responsibilities is vital to ensure the successful construction of the Proposed Development, including the implementation of the detailed CEMP(s). Roles will likely include but are not limited to:

- 5) Construction Stage Project Manager – Overall responsibility for ensuring all elements of the DCO, the detailed CEMP(s) and all environmental legal and other requirements are implemented, and appropriately resourced, managed, reviewed and reported;
- 6) Site Manager – Overall responsibility for activity on-site, and will be based on-site full time;
- 7) Environmental Manager – Responsible for the overall management of environmental aspects on-site, ensuring environmental legislation and best practices are complied with, and environmental mitigation and monitoring measures identified are implemented. The Environmental Manager will oversee environmental monitoring on-site and carry out regular environmental site inspections, will liaise with relevant environmental bodies and other third parties as appropriate;
- 8) Archaeological Clerk of Works – Responsible for monitoring the completion of all archaeological works undertaken by the Archaeological Contractor;
- 9) Archaeological Contractor – Responsible for the delivery of the archaeological mitigation programme as detailed in the Archaeology Mitigation Strategy (AMS) [EN0110012/APP/LVS/07.11], reporting and responding to any incidents or non-compliance;
- 10) Arboricultural Clerk of Works – Responsible for monitoring the completion of all arboricultural works in accordance with the approach detailed in the Arboricultural Impact Assessment and Tree Protection Plan (ES Volume 2) [EN0110012/APP/LVS 06.03.16.02], making sure all impacts are avoided, mitigated or compensated for;
- 11) Ecological Clerk of Works (ECoW) – Management of the risks to biodiversity on construction sites, advising on protected valued biodiversity features and providing practical solutions;

- 12) Flood Warden – There will be a dedicated individual responsible for preparing, and managing, the response to flood incidents and ensuring compliance with the approved Flood Warning and Evacuation Plan (FWEPP), which will be developed taking into account the measures outlined in the Flood Risk Assessment (FRA) [EN0110012/APP/LVS/06.03.15.01];
- 13) Health and Safety Manager - Responsible for the monitoring and controlling of health and safety compliance and related rules and regulations on-site;
- 14) Community Liaison Officer – A Community Liaison Group will be set up in accordance with the DCO prior to construction and will continue through until final commissioning of the Proposed Development as a formal forum for local issues to be raised. A Community Liaison Officer will be appointed to lead discussions with local communities and also act as the primary point of contact should there be any queries or complaints;
- 15) Traffic Safety and Control Officer – Main point of contact for all duties related to traffic management, and to ensure works are being carried out in accordance with the Construction Traffic Management Plan (CTMP); and
- 16) All other Staff will be expected to understand and implement procedures relevant to their role as laid out in the detailed CEMP, conduct work with a view to reducing environmental impact and to raise any environmental concerns with the Site Manager, and to report all environmental incidents to the Site Manager.

2.2.2 These roles and responsibilities are indicative and will be confirmed in the detailed CEMP(s). It is noted that even if there is more than one CEMP, this does not necessarily mean the above roles will be duplicated to match each CEMP. Any detailed CEMP(s) which follow a first CEMP to be approved will set out how roles and responsibilities will be managed across the different works covered by the respective CEMPs.

2.3 Construction programme

2.3.1 Subject to being granted development consent and following a final investment decision, the earliest construction could start is in 2028. Construction work is unlikely to start on the Solar Development Sites in all locations at the same time. Each individual Solar Development Site and Cable Route Corridor would likely require different lengths of construction given their variance in size, and therefore there would be some overlapping of construction works between the Solar Development Sites and cabling for the Cable Route Corridor.

2.3.2 It is estimated that the construction period would require approximately 24-36 months in total. Based on the above, it is currently anticipated that construction works will commence, at the earliest, in 2028.

2.3.3 Construction works within the southern portion of Solar Development Site 1 (250 m section; see Figure 4 in the Shadow Habitat Regulations Assessment [EN0110012/APP/LVS/05.11]) that adjoin the bird mitigation area (BMA) will be limited to construction activities that do not give rise to noise levels equal to or

above 50 dB during the non-breeding period. Construction works that are likely to generate noise levels above 50d B will be undertaken during the breeding season only (specifically April–August) when qualifying species presence is considered low and not ornithologically meaningful.

- 2.3.4 The construction of the Cable Route Corridor located within the Site of Special Scientific Interest (SSSI) Impact Risk Zone (IRZ) (Solar Development Site 1 to Thorpe Willoughby) will be limited to the breeding and passage season only (April-October), to enable avoidance of the sensitive non-breeding period. Construction of the Cable Route Corridor located outside of this zone is not limited seasonally due to its temporary impacts and the BMA being functional.
- 2.3.5 Once the BMA is established and functioning as a higher-capacity refuge of improved habitat quality, construction throughout the Order Limits will not be subject to further seasonal restriction, with the exception of the Cable Route Corridor which lies within the SSSI IRZ (limited to April to October) and the southern portion of Solar Development Site 1 (April-August and as set out in paragraph 2.3.3 above).

2.4 Working hours

- 2.4.1 Construction activities will be carried out Monday to Friday 07:00 – 18:00 and between 08:00 and 13:30 on Saturdays, which constitute core working hours (save for start-up or shut down works). This is with the exception of HDD works, which will take place on a 24/7 basis.
- 2.4.2 Some activities may be required outside of the core working hours (such as the arrival and departure of construction workers, the delivery of abnormal loads, concrete pours for foundations, nighttime working for cable construction works in public highways, or in emergencies).
- 2.4.3 Non start up or shut down constructions work required outside the core working hours will require written approval from the local planning authority, except in respect of HDD works or emergencies.
- 2.4.4 Construction deliveries by HGV will be scheduled to arrive between 09:30-16:30. The deliveries will be coordinated to avoid construction vehicle movements during the traditional AM peak hour (08:00-09:00) and PM peak hour (17:00-18:00). These provisions are set out in the Outline Construction Traffic Management Plan (oCTMP) [EN0110012/APP/LVS/07.12] and are secured by a Requirement in the draft DCO. Further matters in relation to working hours are set out in the relevant topic tables below.

2.5 HDD Method Statement

- 2.5.1 Any works relating to Horizontal Directional Drilling (HDD) activities will be undertaken in line with a Method Statement [which will be developed in consultation with Natural England and the Environment Agency. Consultation with the EA and Natural England on the timings and construction methodology of construction in the vicinity of the River Ouse and Selby Dam will be undertaken,](#)

specifically to identify works outside of sensitive migratory periods for lamprey, European eel, Atlantic salmon and sea trout. The timing of avoidance periods should be agreed in consultation with the EA. However, it is assumed that the core spring migrations and the core winter spawning migration will be avoided, unless otherwise agreed with the EA. HDD under the River Ouse will therefore be undertaken between July and September, unless otherwise agreed with the EA, to avoid sensitive times for fish.

- 2.5.2 Strict adherence to the Method Statement will be required when undertaking HDD with any changes requiring approval from the Contractor(s) Project Manager and documented risk assessments. The Method Statement will cover project details, equipment set-up, drilling procedures, and the handling of drilling fluids, emphasising adherence to safety measures and risk assessments.
- 2.5.3 The document will also include details on environmental monitoring requirements, emergency response procedures, environmental protection strategies, and the use of personal protective equipment. It will also stress the importance of training, supervision, and communication among all personnel involved to ensure the successful and safe completion of the works.
- 2.5.4 A frac-out contingency plan will also be implemented which will include measures to prevent, contain and control the risk of frac-out including clean-up procedures.

2.6 Control of noise and vibration

- 2.6.1 It is anticipated that construction works will be undertaken in accordance with Best Practicable Means (BPM) (as defined in Section 72 of the Control of Pollution Act 1974), to minimise noise and vibration impacts. Control measures will be consistent with the measures set out in the relevant topic tables below and, where appropriate to the Proposed Development, the measures within the current version of BS 5228 'Code of Practice for Noise and Vibration Control on Construction and Open Sites' – 'Part 1: Noise' and 'Part 2: Vibration'.
- 2.6.2 The detailed CEMP will set out a Stakeholder Communications Plan. This will include a scheme for the provision of monthly reporting information to and from local residents to advise of potential noisy works that are due to take place and for monitoring of noise complaints and reporting to the Applicant for immediate investigation and action. Further details will be confirmed in the detailed CEMP.

2.7 Control of light

- 2.7.1 Lighting will be required during construction for safety reasons but will be temporary in nature and predominantly limited to the core working hours, save for HDD works, emergency works or any works outside those hours approved by the local planning authority.
- 2.7.2 Lighting will be designed and used in accordance with appropriate standards and guidance, to be confirmed in the detailed CEMP. The following principles for lighting will be adhered to (including for non-core working hour works):

- 1) Lights installed to be of the minimum brightness and/or power rating capable of performing the desired function
- 2) Lighting during construction will follow a sensitive design (motion-sensor, downward-directed, low-intensity) to minimise light spill towards sensitive ecological receptors
- 3) Use of focused directional fittings to minimise outward light spill and glare (e.g. hoods / cowls which direct light below downwards) outside of the Solar Development Sites
- 4) Lighting to be directed towards the middle of the Solar Development Sites rather than towards the boundaries
- 5) Where the use of security cameras is required, no visible lighting will be required as infrared lighting provided by the CCTV/security system to provide night vision functionality.

2.7.3 Any unavoidable artificial lighting during the hours of darkness required within the period March to October inclusive will only be developed following consultation with the ECoW, in order to determine the severity of potential impacts and appropriate mitigation steps, including agreed hours of operation and numbers / specification of luminaires.

2.7.4 Security lighting may be installed on temporary site compounds and permanent structures following consultation with the ECoW to establish appropriate locations. Security lighting will be limited to the minimum number of luminaires required, which will be defined through consultation with the ECoW and based on the sensitivity of the habitats potentially affected and baseline lux levels. Security luminaires will be motion-sensitive and set on a short (less than two minute) timer and orientated to reduce upward light spill as far as practicable (i.e. horizontally orientated) in order to reduce the potential impact on light sensitive species, such as bats.

2.8 Traffic management

2.8.1 During construction, the appointed Contractor(s) will ensure that the impacts from construction traffic on the local community (including local residents and businesses and users of the surrounding transport network) are minimised, where reasonably practicable, by implementing the measures set out in the oCTMP [EN0110012/APP/LVS/07.12].

2.8.2 Construction access will be confirmed in the detailed CEMP(s) and CTMP as the design progresses and in consultation with the relevant highways authority.

2.9 Off-site delivery routes

2.9.1 The oCTMP [EN0110012/APP/LVS/07.12] provides details of the proposed HGV construction vehicle routes. It also details any measures designed to reduce travel during peak hours on the local road network.

2.10 Parking

2.10.1 As detailed in the oCTMP [EN0110012/APP/LVS/07.12], the temporary construction compounds will include parking areas. The parking provisions on-site, loading and unloading areas for plant and materials, storage areas, wheel washing facilities and construction traffic management measures will be set out in the CTMP, which will also include a description of any laydown areas or welfare facilities.

2.10.2 Wheel washing equipment will be available and used onsite within the construction areas, as required, to prevent the transfer of dirt and stones onto the public highway. Rumble strips or dry brushing will be used to minimise water use. All drivers will be required to check that their vehicle is free of dirt, stones and dust prior to departing from the site.

2.10.3 Wheel washing activities will be undertaken in a designated impermeable area which is bunded to prevent runoff. Wash water will either be disposed of off-site by a licensed contractor or directed to a permanent drainage system incorporating appropriate treatment measures for suspended solids, which may include SuDS components and silt management measures. The method of containment, treatment (where required) and disposal will be confirmed at detailed design stage within the detailed COEMP. Where SuDS are used, these will be designed to provide sufficient treatment for suspended sediment, metals and hydrocarbons.

2.11 Recycling and waste

2.11.1 In order to control the waste generated during site preparation and construction, the contractor(s) will separate the main waste streams on-site, prior to transport to an approved, licensed third party waste facility for recycling or disposal.

2.11.2 A detailed Materials and Waste Management Plan (MWMP) will be prepared by the Contractor(s), in substantial accordance with the Outline Materials and Waste Management Plan [EN0110012/APP/LVS/07.07], which will specify the waste streams which would be monitored and targets set with regards to the waste produced, including any re-use and recycling of materials. The MWMP will be finalised with specific measures to be implemented prior to the start of construction.

2.11.3 In accordance with the waste hierarchy, the Proposed Development will prioritise waste prevention, followed by preparation for reuse, recycling and recovery, with landfill disposal as the last resort.

2.11.4 All waste to be removed from Site will be undertaken by a fully licensed waste carrier and taken to a suitably licensed waste management facility and managed in line with the requirements of the Waste (England and Wales) Regulations (2011) and the Hazardous Waste (England and Wales) Regulations (2005) (as amended).

2.12 Security

- 2.12.1 Site security during construction will be managed by the Contractor(s). The Site security fencing will remain in place throughout the duration of the construction period. Any storage of materials will be kept secure to prevent theft or vandalism. A safe system for accessing the materials storage areas would be implemented by the Contractor(s).

2.13 Responding to environmental incidents and emergencies

- 2.13.1 An outline Pollution and Spillage Response Plan [EN0110012/APP/LVS/07.08] has been prepared which sets the intended strategies for managing pollution and spillage incidents on site. A detailed PSRP will be developed following the appointment of the Contractor(s), prior to the start of construction and will be subject to review and comment by the Environment Agency (EA). The ~~Environment Agency (EA)~~ Pollution Prevention Guidance (PPG) (2007) (Ref 4) will also be adopted and will inform pollution prevention controls as part of the detailed CEMP(s) (it is understood by the Applicant that the PPG are withdrawn). The Pollution Prevention for Businesses guidance will be followed (Ref 6).
- 2.13.2 A Flood Warning and Evacuation Plan (FWEP) will also be developed to accompany the detailed CEMP(s) and will be in place prior to commencement of construction of the site. The FWEP will be developed taking into account the measures outlined in the FRA [EN0110012/APP/LVS/06.03.15.01].
- 2.13.3 As outlined in the outline Battery Safety Management Plan [EN0110012/APP/LVS/07.06] an Emergency Response Plan will be developed as part of the detailed Battery Safety Management Plan, in consultation with the relevant local planning authority emergency planning officer, emergency services including NYFRS, as well as the Environment Agency in relation to responding to flood warnings and events. The plan will detail the procedures for responding to incidents and emergencies on-site, and any reporting.

2.14 Good practice

- 2.14.1 The Considerate Constructors Scheme (CCS) (Ref 2) will be adopted to assist in reducing pollution and nuisance from the Proposed Development, by employing good practice measures which go beyond statutory compliance. Public communication and liaison
- 2.14.2 Prior to commencing works on-site, the Contractor(s) will develop and implement a Stakeholder Communications Plan that includes community engagement (including taking account of the proposed Community Liaison Group to be set up) and will detail a complaints procedure. A display board will be installed on-site, and a website will be set-up. These will include contact information for the Site Manager or alternative public interface with whom nuisance or complaints can be lodged, and the head or regional office contact information. A logbook of

complaints will be prepared and managed by the Site Manager or nominated representative.

2.14.3 Any environmental complaints will be investigated, with appropriate action taken and recorded, so that a full audit trail is available should the complainant raise the issue(s) with the local planning authority.

2.14.4 A Community Liaison Officer (or alternative) would be appointed to lead discussions with the local community during construction, as part of the proposed Community Liaison Group. Details of the frequency and attendees to the Community Liaison Group will be agreed with the local planning authority pursuant to a requirement in the draft DCO.

2.14.5 The Community Liaison Officer (or alternative) will engage specifically with Field House Farm including construction traffic movements to ensure that impacts to that business are managed.

2.14.6 The Applicant will seek (as it cannot force others to attend) to establish a construction working group, that will involve inviting representatives from North Yorkshire Council and the promoters of overlapping and adjacent developments (including Yorkshire Green, Ferrybridge Next Generation, Hillam Solar, Sealm Park Energy Project and Harmony BESS) identified in the Interrelationship Report submitted into the Examination to attend, where the construction periods for those projects overlap with the Proposed Development. The working group will seek to co-ordinate construction activities, programmes and mitigation measures, as reasonably practicable, to minimise cumulative impacts to the local community.

2.14.52.14.7 As construction develops, NYC will be able to suggest other attendees for this group, whom the Applicant must then invite to participate in the group.

3 Mitigation and management

3.1 Purpose

- 3.1.1 This section of the oCEMP sets out the mitigation and management measures to be included as a minimum in the detailed CEMP(s). It also identifies where monitoring is proposed, to assess the effectiveness of the mitigation measures. Nothing in this oCEMP would prevent the modification or omission of the control measures set out in Table 3-1 to Table 3-14, where the construction methodology means that the measures can be so modified or omitted. This will be confirmed (including confirming that the absence or change to such control measures would not lead to any materially new or materially different effects than those reported in the ES) at the time of submission of the detailed CEMP.

3.2 Committed mitigation and management measures

3.2.1 A summary of the mitigation and management measures to be included as a minimum in the detailed CEMP(s) (save where reference is made to other management plans where the measures will be included in detailed versions of those plans), is provided below.

Table 3-1 Air Quality

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
Increased NO₂ and particulate matter (PM) from on-site and off-site construction vehicle / plant emissions. Increased particulates and deposited dust from activities on the Sites, materials transportation, storage and handling, including use of haul roads.	Appropriate mitigation and control measures would include the following measures from the Institute of Air Quality Management (IAQM) (Ref 3) best practice guidance. Dust management mitigation measures would take into account the sensitivity of Ancient Woodland sites (Common Wood and two at Gilbertson's Wood), refer to Appendix 16.1 Construction Dust Assessment (ES Volume 3) [EN0110012/APP/LVS/06.03.16.01]. General - Develop and implement the stakeholder communications plan that includes community engagement before work commences on-site. - Display the name and contact details of person(s) accountable for air quality and dust issues on the Site. This may be the environmental manager, construction project manager or the site manager. - Display the Contractor(s) head or regional office contact information. - Develop and implement a Dust Management Plan (DMP), which may include measures to control other emissions, approved by the relevant local planning authority. Site Management - Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken. - Make the complaints log available to the local planning authority when asked.	The overall responsibility will be with the Applicant. Specific responsibilities will be confirmed in the CEMP(s). The following monitoring will be undertaken in line with the IAQM best practice guidance: - Undertake daily on-site and off-site inspection, where receptors (including roads) are nearby, to monitor dust, record inspection results and make the log available to the local planning authority when asked. - Carry out regular site inspections to monitor compliance with the DMP, record inspection results, and make an inspection log available to the local planning authority or authorities when asked. - Increase the frequency of site inspections by the person

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	- Record any exceptional incidents that cause dust and/or air emissions, either on-site or offsite, and the action taken to resolve the situation in the logbook. - Hold regular liaison meetings with other third party, high-risk construction sites within 250m of the Order limits, to ensure plans are co-ordinated and dust and particulate matter emissions are minimised. It is important to understand the up-to-date picture of the interactions of the off-site transport / deliveries which might be using the same strategic road network routes. Preparing and maintaining the Sites - Plan site layout so that machinery and dust causing activities are located away from receptors, as far as practicable. - Erect solid screens or barriers around dusty activities or the Solar Development Sites that are at least as high as any stockpiles on-site. - Fully enclose site or specific operation where there is a high potential for dust production and the site is active for an extensive period. - Avoid site run-off of water or mud. - Keep site fencing, barriers and scaffolding clean using wet methods. - Remove materials that have a potential to produce dust from site as soon as practicable, unless being re-used on-site. If they are being re-used on-site cover as described below; and - Cover, seed, or fence stockpiles to prevent wind-whipping. Operating vehicle / machinery and sustainable travel - Ensure all vehicles / machinery switch off engines when stationary / not in use – no idling vehicles. - Avoid the use of diesel or petrol powered generators and use mains electricity or battery powered equipment where practicable. - Impose and signpost a maximum-speed-limit of 15 mph on surfaced and 10 mph on unsurfaced haul roads and work areas.	accountable for air quality and dust issues on-site when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions. Agree dust deposition, dust flux, or real-time PM₁₀ continuous monitoring locations with the local planning authority. Where practicable, commence baseline monitoring at least three months before work commences on-site or, if a large site, before work on a phase commences. Further guidance is provided by IAQM on monitoring during demolition, earthworks and construction.

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	- A detailed Construction Traffic Management Plan(s) will be produced in substantial accordance with the Outline Construction Traffic Management Plan [EN0110012/APP/LVS/07.12] to manage the sustainable delivery of goods and materials. - Ensure all off-road vehicles comply with the requirements of the Non-Road Mobile Machinery (NRMM) standards, where applicable. Use stage 4 NRMM as a minimum and stage 5 where practicable. - Encourage sustainable travel (public transport and car-sharing). Operations - Only use cutting, grinding or sawing equipment fitted, or in conjunction with, suitable dust suppression techniques, such as water sprays or local extraction e.g. suitable local exhaust ventilation systems. - Ensure an adequate water supply on the site for effective dust / particulate matter suppression mitigation, using non-potable water where practicable and appropriate. - Use enclosed chutes and conveyors and covered skips. - Minimise drop-heights from loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate. - Ensure equipment is readily available on-site to clean any dry spillages and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods. Waste management - No bonfires and burning of waste materials. Earthworks - Re-vegetate earthworks and exposed areas / soil stockpiles to stabilise surfaces as soon as practicable. - Use Hessian, mulches or tackifiers where it is not practicable to revegetate or cover with topsoil, as soon as practicable.	

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	- Only remove the cover in small areas during work and not all at once. Construction - Avoid scabbing (roughening of concrete surfaces) if practicable. - Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place. - Ensure bulk cement and other fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery. - For small supplies of fine powder materials ensure bags are sealed after use and stored appropriately to prevent dust. Trackout - Use water-assisted dust sweeper(s) on the access and local roads, to remove, as necessary, any material tracked out of the Sites. This may require the sweeper being continuously in use. - Avoid dry sweeping of large areas. - Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport. - Inspect on-site haul routes for integrity and instigate necessary repairs to the surface as soon as reasonably practicable. - Record all inspections of haul routes and any subsequent action in a site logbook. - Ensure haul routes are regularly damped down with fixed or mobile sprinkler systems, or mobile water bowsers and regularly cleaned. - Implement a wheel washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the Sites where reasonably practicable).	

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	▪ Ensure there is an adequate area of hard surfaced road between the wheel wash facility and the site exit, wherever site size and layout permits. ▪ Access gates to be located at least 10 m from receptors where practicable.	

Table 3-2 Agricultural Land and Soils

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
Temporary loss of agricultural land and impact on soils	The following embedded and good practice mitigation will be implemented to address impacts on land use and soils: - An Outline Soil Resource Management Plan (oSRMP) [EN0110012/APP/LVS/07.14] has been prepared as part of this Application. Detailed Soil Resource Management Plan(s) (SRMP) will be prepared by the Contractor(s) which will outline the adoption and implementation of good practice measures for all phases of the Proposed Development to minimise damage to soils that remain in place and those that are stripped, stockpiled and reinstated, to minimise soil carbon losses, maintain water infiltration and enhance soil biodiversity. - A record of the condition will be carried out (photographic and descriptive) of the working areas that would be affected by the construction activities. This record will be available for comparison following reinstatement after the works have been completed to ensure that the standard of reinstatement at least meets that recorded in the pre-condition survey. - Land used temporarily during construction will be reinstated where practicable to its pre-construction condition and use (or as agreed with the landowner). Hedgerows, fences and walls (including associated earthworks and boundary features) will be reinstated to a similar style and quality to those that were removed, with landowner agreement. - Consultation with affected landowners will be carried out to investigate the current extent of land drainage. If necessary, pre-construction land drainage will be explored with the intent of maintaining the efficiency of the existing land drainage system and to assist in maintaining the integrity of the working areas during construction. The Proposed Development may include a system of 'cut-off' drains which feed into a new header drain and the Proposed Development will also consider surface water runoff measures.	Guidelines for monitoring the soil resource during construction will be included in the detailed SRMP. Continuous, live monitoring by the Contractor(s) of soil handling / weather conditions, as well as visual monitoring of ground conditions, will be required. Monitoring the soil resource during construction will primarily involve the Contractor(s) who is responsible for ensuring the detailed SRMP is adhered to. Periodic monitoring by a suitably qualified soil practitioner may also be required.

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	▪ All movement of plant and vehicles between fields will cease in the event of a notification of a disease outbreak that would require the cessation of construction activities in order to avoid the risk of spreading the disease. Advice will be sought from the relevant authorities to develop suitable working methods required to reduce the biosecurity risk associated with the continuation of works. ▪ Where deemed necessary, clay bungs or other vertical barriers will be constructed within the trench excavations for the cables by a suitable experienced person, to prevent the creation of preferential drainage pathways. ▪ Cables will be laid to a depth of up to 2 m within farmland, unless ground conditions render this impracticable, to ensure no interference with agricultural use. Agricultural land required temporarily for the cable route corridor would be restored to enable continued agricultural use after installation.	

Table 3-3 Biodiversity

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
Potential for obtrusive glare and light spill to impact on ecology. Potential for spillages to enter watercourses and impact ecology. Clearance or damage of habitat to facilitate construction resulting in temporary or permanent reduction in habitat extent and potential direct and indirect effects on associated species. Dust deposition on sensitive ecological receptors. Spread of invasive species during construction	The detailed CEMP(s) will outline measures and approaches to be adopted which will limit the likelihood of impacts upon retained habitats through damage, pollution and disturbance during the construction phase in order to achieve the objectives set out in the Environmental Statement. This will include (among others) the following provisions: ▪ <u>Fencing of the Solar Development Areas within the Solar Development Sites will be designed to let small mammals pass through where practicable, and the Proposed Development has been designed to retain numerous commuting corridors around existing linear features (ditches and hedgerows) that will be free of obstacles to faunal movement.</u> Detail on the location and specification of temporary and permanent protective fencing to be installed prior to the onset of construction. It is anticipated that the specified buffer zones will drive these locations. <u>is provided in the Design Parameters and Commitments document [EN0110012/APP/LVS/05.06]. During the construction phase, all fencing will be periodically checked to ensure it is in a sound condition.</u> ▪ <u>An ECoW will have the authority to enforce a halt of works should any unacceptable works/methodologies with regards to ecology take place. Construction will only re-commence when deemed appropriate by the ECoW</u> ▪ <u>In addition, construction will halt following the potential discovery of a protected species or evidence of a protected species (e.g. burrows) and the ECoW will be consulted. Construction will only re-commence following successful application for a species mitigation licence (where this is required) or when suitable mitigation is in place as advised by the ECoW</u> ▪ <u>Any ecological incidents will be immediately reported by the ECoW/site personnel to the main contractor, and where appropriate the relevant authoritative body (North Yorkshire Council, Environment Agency or Natural England).</u>	A pre-condition site walkover will be undertaken in advance of mobilisation/any potential advance works (at least three months prior to start of works) to reconfirm the ecological baseline conditions and to identify any new ecological risks, such as newly constructed badger sets and / or new otter resting places / holts. Updated species surveys, including bats, otter, water vole, brown hare and badger, would be completed as appropriate to reconfirm the status of protected species identified, to inform mitigation requirements and support protected species licence applications, if required, and the requirement for any ECoW supervision during the construction phase. <u>Although unlikely, any materially different outcomes from pre-construction surveys will be suitably mitigated following best practice guidance once the updated survey results have been received. Due to the size of the Order Limits, this is not thought to pose a major concern.</u>

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	- Construction personnel will receive a Toolbox Talk by the ECoW detailing the presence of sensitive ecological features at or close to the Sites and will be informed that no materials should be stored, or vehicles drive, through buffer zones. - Site checks will be completed periodically by the site manager or a suitable delegate during the construction phase to ensure compliance with requirements of the CEMP - Construction personnel will be provided briefings and toolbox talks which will identify visual and olfactory indicators of contamination and the need to implement protocols when these are encountered. Construction personnel will receive a Toolbox Talk detailing the presence of sensitive ecological features at or close to the Sites and will be informed that no materials should be stored, or vehicles drive, through buffer zones. Construction personnel will be provided briefings and toolbox talks which will identify visual and olfactory indicators of contamination and the need to implement protocols when these are encountered. - Restrictions on the use of fuels and other contaminants in proximity to boundary features and other sensitive habitats. - Measures to limit dust generating activities, such as when working in dry conditions, as set out in Table 3-1. - Measures to limit the mobilisation of sediments and run-off, such as when working in very wet conditions or the use of silt fencing when working in ditches, as set out in Table 3-13. - Silt fencing will be used strategically (i.e. within overland flow paths) at watercourse crossings where required to minimise sediment pollution to watercourses. - The sensitive lighting strategy referred to in Section 2.7 will follow good practice methods to minimise potential for light spill within and outside the Order Limits towards valuable ecological features.	Such surveys would be undertaken sufficiently in advance of construction works to account for seasonality constraints and to allow time for the implementation of any necessary mitigation, prior to construction. Additional surveys may be required during construction as advised by the Applicant's ECoW, based on the findings of the updated walkover and protected species surveys, or otherwise as identified as appropriate by the Applicant or their appointed Contractor(s).

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	Measurable lighting protection controls will be put in place within the detailed CEMP to ensure this. ▪ The inclusion of ramps or mammal ladders should any excavations be left open overnight to reduce the likelihood of mammal entrapment. ▪ Construction will halt following the potential discovery of a protected species or evidence of a protected species (e.g. burrows) and the ECoW will be consulted. Construction will only re-commence following successful application for a species mitigation licence or when suitable mitigation is in place as advised by the ECoW. ▪ A detailed Invasive Species Management Plan will be produced to accompany the detailed CEMP(s), which will be in substantial accordance with the Outline Invasive Species Management Plan [EN0110012/APP/LVS/07.22]. The oISMP includes Precautionary Working Methods to be adhered to during construction, such as completing a Toolbox Talk for all construction staff on the issue to ensure vigilance for these species, as well as inspections of proposed working locations at watercourses and ditches by an ecologist prior to commencement. ▪ Designated buffer zones during construction (as outlined in the Tree Protection Plan within the Arboricultural Impact Assessment (ES Volume 3) [EN0110012/APP/LVS/06.03.16.02] include: ○ A minimum 15 m buffer or the Root Protection Area (RPA), whichever is larger, will be provided to all ancient woodland. The only location where such a buffer may be breached is where the Cable Route Corridor passes Common Wood SINC to enable Cable Route Corridor construction traffic to utilise an existing culvert to cross an associated ditch in this location. ○ A buffer of 15 times the stem diameter, as measured at 1.5 m, will be put in place around ancient / veteran trees. ○ A minimum 10 m buffer or the RPA, whichever is larger, will be provided to non-ancient woodland (identified from the National	

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	Forestry Inventory and surveys) and a minimum 5 m buffer, or the RPA will be provided where practicable for all non-ancient / non-veteran trees. ○ A minimum offset of 10 m from bank top for all watercourses from all construction works (50 m for Canal and River Trust watercourses, e.g. River Ouse), except where watercourse crossings are required (access tracks / cable routing /fencing will be located to pass across existing watercourse crossings where feasible). ○ Suitable buffer distances from protected species, (for example, 30 m from known badger sett locations etc.) will be utilised where practicable. If suitable buffer distances cannot be achieved then any setts that require removal to facilitate the Proposed Development would be closed under a Natural England licences and with appropriate compensation measures in place to abide by legislation. ▪ Fencing of the Solar Development Areas within the Solar Development Sites will be designed to let small mammals pass through where practicable, and the Proposed Development has been designed to retain numerous commuting corridors around existing linear features (ditches and hedgerows) that will be free of obstacles to faunal movement. ▪ Silt fencing will be used strategically (i.e. within overland flow paths) at watercourse crossings where required to minimise sediment pollution to watercourses. ▪ Access for construction will utilise existing field entrances and gaps in hedgerows and other linear habitats wherever practicable. <u>Where new temporary access points are created during construction the land required will be reinstated to its prior condition, as far as practicable once the construction period for which that access point is being used is complete.</u> - The detailed measures relating to minor hedgerow removal and pruning will be set out in an Arboricultural Method	

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	Statement (to be prepared post-consent to accompany the detailed CEMP(s)) once the final route has been confirmed. - Trenchless technologies will be used to cross some ditches within the Cable Route Corridor. The final locations where trenchless technologies will be utilised for the entirety of the Cable Route Corridor will not be confirmed until the detailed design stage, however, the use of trenchless technologies for some locations has been committed to at this stage, known as Avoidance Areas. These include the River Ouse (and Ouse Bank-Westfield-Riccall Ings SINC that flanks the river), main rivers, IDB watercourses, and WER water body line watercourses, hedgerows, mature vegetation, as well as ditches that lead to the following designated sites: Nightingale Wood SINC, Burr Closes SSSI, and Barber Rain SINC. The entry and exit pits will be located a minimum of 10 m from the bank top of the watercourse, but at greater distances in some instances (50 m for Canal and River Trust watercourses, e.g. River Ouse), and will always be located outside of the Avoidance Areas (as shown in Figure 2.5 (ES Volume 2) [EN0110012/APP/LVS/06.02.02.05]). This will leave the watercourses and surrounding habitats unaffected by the works in these locations. - Where there are no existing crossing points, and trenchless technologies will not be employed, open cut crossing will be used to cross ditches. The detailed CEMP(s) will include measures to protect biodiversity during the creation and use of such open cut crossing in the construction phase. Should any works be required in an area where English bluebells have been recorded, the bluebells will be translocated to an area outside of construction workings prior to the start of the works.	
Impact on bats as a result of the construction phase of development	Any trees to be lost to the Proposed Development are to be assessed for their bat roosting potential via a Ground Level Tree Assessment (GLTA) in early 2026. If a roost is confirmed in a tree to be removed, a Natural	Monitoring of any required bat roost mitigation would form part of, and be detailed within, any Natural England licence if it is required.

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	England bat licence will be required before the tree can be felled which will secure relevant mitigation measures. In some cases, following the GLTA, where the tree is identified to provide roosting suitability for individual bats on an occasional basis (PRF-I) but does not contain a known roost, the tree may be felled under the supervision of an ECoW without further survey of licence. No artificial lighting is considered likely to be required during construction outside of the winter months, however, during winter, artificial lighting may be required within the construction zone due to the short-day lengths. A sensitive lighting strategy will be implemented, whereby all artificial lighting is designed and installed to limit light spill onto these habitats.	
Impacts to ditches on-site and subsequent impact to water vole	<u>The only location with confirmed water vole burrows where works are proposed within 10 m of the ditch is within D2.1 (Site 2). These works will therefore be completed under a Natural England Water Vole Displacement Class Licence (CL31), supported by the Draft Water Vole Mitigation Strategy (16807 R06b).</u> <u>Possible presence of water vole was also recorded within A Natural England water vole licence should be in place before any proposed works within the 10 m buffer zone of D2.1 (Site 2), D3.2 (Site 3), D4.8 (Site 4), D6.3 (Site 6) and D9.16 (Cable Route Corridor), however no works are proposed within 10 m of these ditches or they are to be crossed via trenchless techniques. If plans change at any time, a Natural England water vole licence will be in place before any works commence within the 10 m buffer zone of these ditches, to protect water voles known to be that may be present within the ditches, assuming presence of water voles is confirmed prior to construction.</u> An updated suite of water vole surveys of the Order Limits <u>(including all affected watercourses and ditches, including seasonally wet ditches</u>	Potential for a Natural England water vole licence if presence confirmed within a ditch to be impacted. Any required monitoring would form part of, and be detailed within, the licence. <u>Current monitoring requirements are included in the Draft Water Vole Mitigation Strategy (16807 R06b), detailing that locations that have undergone displacement will be monitored for the presence or absence of water voles and to check the establishment of habitat in the immediate vicinity of where works were carried out, by way of a single monitoring survey in the</u>

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	<u>where works are proposed</u>) will also be conducted in the suitable season (one survey April to June, one survey July to September) prior to the start of works, to confirm the use of the ditch network by the species at that time, which may be impacted by disturbance or directly impacted through proposed de-vegetation / construction activities. Should water vole be confirmed within the ditches <u>(i.e. evidence of water vole is recorded during the updated surveys)</u> where work is required, <u>this will trigger the requirement of a Natural England licence</u> will to be procured which would include relevant mitigation measures <u>for works within that ditch to protect water vole.</u> To further reduce construction impacts to water vole, Precautionary Working Methods (PWMs) will be adopted to protect the species, <u>such as:</u> ▪ e.g. Tthe supervision of <u>relevant</u> works by an ECoW <u>of works, including supervised displacement if required;</u> ▪ , Mminimum 10 m offset from the bank top for entry and exit pits <u>for trenchless techniques;</u> ▪ The use of , use of <u>sensitive crossing methods where feasible;</u> ▪ Use of aappropriate machinery to minimise noise and vibration; n ▪ , and supervised displacement.<u>Maintenance of established buffer zones from watercourses excluding where works within the buffer zone are unavoidable i.e. to cross the watercourse;</u> ▪ If water vole/water vole signs are identified at any time during works <u>in areas not known to support water vole, works must stop immediately and the EcOW will be contacted to put in place suitable mitigation to protect the species prior to the recommencement of works within that area.</u>	<u>year following reinstatement.</u> <u>Monitoring records will be kept and provided to Natural England with the Annual Report for the licence.</u> <u>This monitoring survey will therefore seek to confirm that the habitats temporarily lost within the working area have been reinstated, and water vole are once again present within the working area. Opportunities for remedial habitat planting will be explored if water vole are not found to be present in the works area during the monitoring survey.</u>

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
Impacts to amphibians / reptiles during construction activities	To minimise the risk of accidental killing/injury of common amphibians/reptiles during the construction phase, the detailed CEMP(s) will set out the supervision and protective measures required during works affecting potentially suitable habitat for common amphibians/reptiles at field boundaries, for example where new hedgerow gaps for access or cabling are required, or works within ditch buffer zones for example where open span ditch crossing are utilised within the Cable Route Corridor. These will include sympathetic, staged habitat clearance and supervised by an ECoW where required. To further reduce construction impacts to common amphibians / reptiles within the Order Limits, PWMs will be adopted to protect the species e.g. through infilling of excavations / providing ladders to reduce the likelihood of entrapment, maintaining a tidy site and preserving important commuting routes. With regards to GCN, during the eDNA surveys, 10 ponds in 250 m of the Solar Development Sites could not be accessed. As a precautionary approach, these ponds are therefore assumed to be positive for GCN. In addition, one pond, Pond 1.14, located approximately 50 m west of Site 1 was the only pond to return a positive eDNA result for GCN. Due to the characteristics of these ponds i.e. presence of potential dispersal barriers, distance from the Order Limits, sub optimal GCN habitats within 250 m of the ponds, and no other GCN records in 2 km of any pond, potential impacts on GCN within these ponds can therefore be appropriately managed through avoidance, PWMs and pre-commencement controls, including: Clearance of sub-optimal cropland within 250 m of the pond will only be completed following a pre-commencement check of the area by an ECoW to ensure GCN are absent;	Supervision of an ECoW where necessary during construction works, to be confirmed following additional 2026 eDNA surveys. Should the additional eDNA surveys return a positive result suitable Precautionary Working Methods will be adopted and / or registration under District Level Licensing.

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	<u>Suitable GCN habitat within 250 m of these ponds will be retained, appropriately buffered and protected through development;</u> <u>Should any small areas of suitable GCN habitats within 250 m of these ponds require removal/impact, the ECoW will inspect the area immediately prior to the works to confirm GCN are absent. The clearance will then be completed under ecological supervision and will be staged/sympathetic to GCN;</u> <u>In the unlikely event a GCN is found at any time (by ECoW or site personnel), works will stop immediately and will not continue in 250 m of that pond until a suitable licence is in place;</u> <u>A toolbox talk will be provided by the ECoW to all contractors working within the Order Limits to provide information on the location of pond buffers, PWMs, and what to do should a GCN be found;</u> <u>The work within 250 m of the ponds will be undertaken between 1st April – 1st October inclusive (outside of hibernation period) to avoid any impacts to hibernating GCN that may be present;</u> <u>Excavations will be infilled/ ladders provided to reduce the likelihood of entrapment;</u> <u>A tidy site will be maintained to reduce potential refugia for GCN within the 250 m of ponds;</u> <u>All cut vegetation will be immediately removed from the 250 m buffer to reduce potential refugia for GCN</u> Scarrow Green Pond-Little Skipwith SINC supports great crested and smooth newts. The road adjacent to the SINC will be used for construction traffic for the Cable Route Corridor. No vegetation clearance will take place within SINC, with any passing places also located outside the SINC, which will protect GCN and smooth newt during construction.	

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	The detailed CEMP(s) will also include provisions to ensure pollution from the adjacent road does not enter the SINCR, above current levels.	
Impacts to brown hare, fish, otter, badger and hedgehog during construction activities	Brown hare - To minimise the risk of accidental killing/injury of brown hare a 150-mph speed limit will be applied across the construction sites and Cable Route Corridor on surfaced haul roads and 105-mph on unsurfaced haul roads. - In addition, the detailed CEMP(s) will outline how the existing arable habitats will be cleared or left fallow prior to construction. It will also detail that, as part of their induction, construction staff will be informed of the potential presence of protected species including hare as well as the need to temporarily cease works and implement an exclusion zone in the unlikely event that dependent leverets are discovered within a working area. A pre commencement check for leverets by an ECoW may also be required if certain areas of habitat are cleared during brown hare breeding season. Fish - To minimise the risk of impacts to fish during construction works, a precautionary avoidance period should be observed for Atlantic salmon, brown trout and lamprey species. For river lamprey, peak avoidance periods for migration are between October and March. For sea lamprey, peak avoidance periods for migration are between April and May. For Atlantic salmon/brown trout, peak avoidance periods for migration are between October and February, noting that spawning/incubation habitat is absent. - Consultation with the EA and Natural England on the timings and construction methodology of construction in the vicinity of the River Ouse and Selby Dam will be undertaken, specifically to identify works outside of sensitive migratory periods for lamprey, European eel, Atlantic salmon and sea trout. The timing of avoidance periods should be agreed in consultation with the EA. However, it is assumed that	Pre-commencement check of suitable habitat by an aquatic ECoW. Further detail to be provided within the detailed CEMP(s).

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	the core spring migrations and the core winter spawning migration will be avoided, unless otherwise agreed with the EA. HDD under the River Ouse will therefore be undertaken between July and September, unless otherwise agreed with the EA, to avoid sensitive times for fish. ▪ Timing of construction works expected to substantially increase noise and vibration around watercourses (expected to be HDD, vibro-rolling and press/push installation of solar frames) to be out with periods of fish spawning and migration or noise mitigation provided, where practicable. ▪ Regular water quality monitoring will also be undertaken to efficiently detect potential accidental pollution events. The detailed CEMP(s) will outline the requirements (including timeframes) for monitoring works. ▪ Culvert replacement on Selby Dam (if required) will proceed using staged construction to maintain channel connectivity, wherever practicable. Prior to any dewatering works, fish will be captured and translocated under licence where required, with releases made to suitable receptor habitats under the direction of an aquatic ECoW. The timing of works will be agreed with the EA to avoid fish spawning and emergence windows. ▪ An aquatic ECoW will be present on site to oversee compliance with the method statements, to undertake environmental monitoring, and to adjust mitigation in response to site conditions where necessary. The construction programme will be kept as short as practicable, with clearly defined working windows and contingency plans to demobilise during high flow events in order to prevent uncontrolled sediment release or fish stranding. ▪ Passage for fish will be maintained through suitable watercourse crossing design to facilitate the free movement of fish under a variety of flow conditions and aim to maintain or enhance aquatic habitats and fluvial geomorphological processes.	

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	▪ <u>The design and installation of temporary crossings and culvert structures on Selby Dam and Habholme Dyke, if required, will ensure that fish passage is maintained for the duration of construction. Temporary watercourse crossing designs will facilitate the free movement of fish across a range of flow conditions and will seek to maintain, as far as practicable, the existing aquatic habitats and underlying fluvial geomorphological processes that influence habitat distribution and quality within both watercourses.</u> ▪ <u>Should permanent culverts be required, these would be designed to allow the free passage/migration of mobile aquatic/riparian ecological receptors, including but not limited to fish and water vole as per C786 guidance.</u> ▪ <u>Mitigation measures in relation to fish passage during the construction of temporary and permanent culverts on minor drains with the potential to support fish will be consulted upon with the EA with full details to be included in the detailed CEMP.</u> ▪ <u>The detailed CEMP will set out the EMF mitigation measures that are proposed to be deployed (including the depth of cabling) for all main rivers where >132 kV cables are proposed to be buried beneath. The detailed CEMP will explain how that has taken account of the latest research and practice, and consultation with Environment Agency and Natural England on this matter. The starting point will be that the depth of the cabling will be a minimum of 5 metres below the bed to mitigate EMF effects, unless otherwise agreed by the Environment Agency and Natural England as part of the aforementioned consultation.</u> Otter ▪ A pre-commencement otter survey will be conducted at least three months prior to the start of works, to check for any new otter resting places / holts which may be impacted by disturbance or directly impacted through proposed de-vegetation / construction activities. If	

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	new holts / resting places are identified, suitable mitigation will be put in place to protect / mitigate the feature impacted. - Any replacement culverts over Selby Dam, or newly created culverts over ditches within the Order Limits (which are of low/negligible value to otter) will be designed to ensure they allow for passage of mammals. Badger - Two pre-commencement badger surveys will be conducted, the first at least three months prior to the start of works, and the second at least one month prior to the start of works, to check for any new setts which may be impacted by disturbance or directly impacted through proposed de-vegetation / construction activities. Hedgehog - Construction fencing within the Proposed Development has been designed to let small mammals such as hedgehog pass through where practicable, and construction lighting will be controlled to limit impacts on surrounding habitats, including habitats of importance to hedgehog. To further reduce construction impacts to protected species, PWMs will be adopted to protect the species e.g. through infilling of excavations / providing mammal ladders to reduce the likelihood of entrapment, maintaining a tidy site and preserving important commuting routes. Potential impacts from trenchless techniques will also be minimised via, where required, the supervision of works by an ECoW, use of appropriate machinery to minimise noise and vibration, and other Precautionary Working Methods. <u>No construction within the commuting corridors will be undertaken including the newly created corridors through the centre of the Solar Development Sites and also the buffer zones around retained boundary habitat such as ditches and hedgerows. will be undertaken, with the corridors comprising will comprise retrained and created habitat only.</u>	

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	<u>manged sympathetically for wildlife. The commuting corridors will join to one another, to important habitat within the order limits, and to habitats outside the order limits. The only works to be undertaken within the corridors during operation of the Proposed Development is habitat and ditch management.</u>	

Table 3-4 Climate Change Resilience and Greenhouse Gas Emissions

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
Greenhouse Gas (GHG) emissions from construction traffic, equipment and materials.	- Increasing recyclability by segregating construction waste to be re-used and recycled where reasonably practicable. - Designing, constructing and implementing the Proposed Development in such a way as to minimise the creation of waste and maximise the use of alternative materials with lower embodied carbon, such as locally sourced products and materials with a higher recycled content where feasible. - Reusing suitable infrastructure and resources already available in the Order Limits where practicable to minimise the use of natural resources and unnecessary materials (e.g. reusing excavated soil for fill requirements or storing, preserving and restoring top soil). - Encouraging the use of lower carbon modes of transport through the implementation of sustainable travel initiatives as outlined in the CTMP. This includes the use of shared transport and providing appropriate facilities for the safe storage of cycles. - Implementing shared transport options as part of the Construction Traffic Management Plan (CTMP) to reduce the volume of construction staff and employee trips to the Proposed Development. - Conducting regular planned maintenance of the construction plant and machinery to optimise efficiency.	To be confirmed in the detailed CEMP(s) and CTMP
Increased frequency and intensity of extreme weather events	- Health and safety plans and risk assessments developed for construction activities will be required to account for potential climate change impacts on workers, such as flooding and heatwaves. This will include for the provision of flood defence equipment (e.g. sandbags) on-site and good practice health management measures for construction staff working in heat such as wearing loose clothing, staying hydrated and applying sun protection. - Protecting workers and resources from extreme weather conditions through appropriate PPE and working practices.	Regular monitoring of weather forecasts for extreme conditions and activation of response plans as needed to reduce risks to the Proposed Development from heatwaves, heavy rainfall, and strong winds during construction phase. A record of extreme weather incidents impacting construction of

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	- Using equipment's cooling systems where necessary / adapting working practice and equipment used based on current weather conditions. - Monitoring weather forecasts and news for Environment Agency flood warnings, relevant weather warnings, and water levels of the local waterways.	the Proposed Development (e.g., road surface damage, flooding, snow, ice) to help identify thresholds that trigger maintenance. Post-event inspections should follow intense rainfall or other extreme conditions to assess damage and apply necessary mitigation. Conduct regular inspections of drainage systems, materials, and structures to identify signs of deterioration. Additional checks should be carried out after extreme weather events (e.g., flooding, heatwaves, droughts, storms), with repairs or replacements scheduled as needed.

Table 3-5 Cultural Heritage

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
Construction phase impacts upon heritage / archaeology assets	Where appropriate the installation of concrete feet (or other non-ground penetrative techniques) for the panels will serve to preserve sub-surface archaeological remains in situ (in line with Historic England's Advice Note 15: Commercial Renewable Energy Development and the Historic Environment). The mitigation will be applied for either type of Solar PV Panel (i.e., fixed or tracker) selected to ensure the preservation commitment is adequately mitigated Proposed locations for concrete feet or other non-ground penetrative techniques are within Fields 1.16, 1.17, 1.29, 1.28, 4.5, 4.12 and 2.3 as shown on Figure 2.6 Concrete Feet Locations [EN0110012/APP/LVS/06.02.02.06]. The exact locations of where archaeological protection will be required will be confirmed in the detailed CEMP(s). Further archaeological investigation may find smaller areas of protection are required or that further areas need to be protected. Other additional mitigation measures include on-site traffic management, toolbox talks and protective barriers to avoid impacts to remains preserved <i>in situ</i>. Where remains cannot be preserved <i>in situ</i> (e.g. within the footprint of the permanent infrastructure) a scheme of archaeological excavation or archaeological monitoring will be undertaken to record archaeological features impacted by the Proposed Development. Important Hedgerows have been identified through ecological and historical research within the Proposed Development. Construction works will avoid two Important Hedgerows with ecological and cultural significance within Solar Development Site 1 [H1.16] and Site 6 [H6.10]. These hedgerows will remain <i>in situ</i>.	Temporary fencing will be erected around any areas identified to mitigate against impacts to archaeological remains in situ. Banksmen will be aware of areas with archaeological assets and will be responsible for ensuring no vehicle/plant movement occurs in these areas. Where ecological mitigation is proposed this should not include any ground disturbance beyond baseline conditions and where practicable look to minimise impacts cause by arable land usage.
Construction phase impacts upon buried archaeological assets	A full suite of archaeological assessment supported by targeted evaluation trenching within the main solar sites, has identified the presence, absence, extent, form and significance of potential concentration of archaeological features. The results of the archaeological assessment and evaluation works, with consideration to	Provision for archaeological mitigation and monitoring is detailed in the AMS [EN0110012/APP/LVS/07.11]. The

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	the differing potential impacts of varying elements of the Proposed Development, have been used to determine a strategy of archaeological mitigation detailed in the Archaeological Mitigation Strategy (AMS) [EN0110012/APP/LVS/07.11]. Once the final design of the Proposed Development has been identified a Written Scheme of Investigation will be developed in to detail the specific mitigation approach and programme for each phase of the construction works in line with the Outline Written Scheme of Investigation included in the AMS. Mitigation by design using non-intrusive concrete feet or other non-ground penetrative techniques is required for safeguarding archaeological remains against the impacts cause by the installation of solar panels. Where a high-level impact is likely to occur mitigation by record in the form of archaeological monitoring will be undertaken where baseline evidence has not identified a potential for archaeological remains i.e. cable routes, substations and temporary construction compound areas. Mitigation in the form of 'strip, map and sample' will be required in high impact areas that have a potential for buried archaeological deposits to be present. Temporary fencing must be erected around areas of no development for archaeological reasons to ensure no works are undertaken within these areas. Where ecological mitigation is proposed this should not include any ground disturbance beyond baseline conditions (i.e. scrapes or ponds) and where practicable look to minimise impacts caused by arable land usage (except where scrapes are required in the Bird Mitigation Area, as detailed in the Outline Bird Mitigation Management Plan [EN0110012/APP/LVS/07.19]).	AMS must be adhered to during constructional phases. Areas where concrete feet or other non-ground penetrative techniques are required will be laid out by a surveyor in line with requirements of the AMS. All archaeological works will be undertaken by suitable qualified and experienced professional archaeological specialists. All archaeological works will be undertaken in line with national guidance. The Archaeological Clerk of Works and/or the Archaeological Advisors to the LPA will monitor the completion of works in accordance with the programme set out in the AMS.

Table 3-6 Arboriculture

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
Tree removals	The Tree Protection Plan (Annex B: Tree Protection Plan within the Arboricultural Impact Assessment (ES Volume 3) [EN0110012/APP/LVS/06.03.16.02]) outlines how trees within the Order Limits will be protected during construction and compliance with these measures will be included in the detailed CEMP. The plan identified trees to be retained, defines their Root Protection Area (RPA) and specifies mitigation measures to protect and prevent harm. Tree removal will be avoided, wherever practicable. If unavoidable, preference will be given to removing trees of lower quality and shorter life expectancy, following a specific hierarchy: Category U trees are prioritised for removal first, followed by Categories C, B, and A respectively. The Arboricultural Impact Assessment (ES Volume 3) [EN0110012/APP/LVS/06.03.16.02] details that three trees will require removal from an area of coniferous woodland, alongside the Highways Improvement Area. These trees will be replaced as modified grassland of poor condition post development. Ancient/veteran trees (AVTs) will not be removed under any circumstances. A buffer of 15 times the stem diameter, as measured at 1.5 m, will be put in place around ancient / veteran trees (as outlined in Annex B: Tree Protection Plan within the Arboricultural Impact Assessment (Volume 3) [EN0110012/APP/LVS/06.03.16.02]). Removal of Category A trees along the Cable Route Corridor and to facilitate construction of the cable route will be avoided as far as practicable by micro-siting. Trenchless techniques such as horizontal directional drilling (HDD) will be used to avoid Root Protection Areas (RPAs) of AVTs and Category A trees where micro-siting or minor encroachment is not possible. Refer to Annex B: Tree Protection Plan within the Arboricultural Impact Assessment (Volume 3) [EN0110012/APP/LVS/06.03.16.02] for further specifics on the trees	Ongoing by the Arboricultural Clerk of Works

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	identified as requiring RPAs during construction and other relevant protection measures. Trees for removal will be marked on-site by the Arboricultural Clerk of Works, with final decisions made during detailed site design and cable trench micro-siting. Only the qualified Arboricultural Contractor, working in accordance with British Standard 3998:2010, will perform tree work. Construction workers will not perform tree removals unless qualified and specifically instructed. Prior to removal, legal restrictions, such as those protecting nesting birds and roosting bats, will be observed. Detailed tree protection matters will be set out in an Arboricultural Method Statement (ArbMS) produced prior to the commencement of each phase of development (and in accordance with the Arboricultural Impact Assessment (ES Volume 3) [EN0110012/APP/LVS/06.03.16.02]). The Contractor(s) is to comply with the measures set out in this document and in the AMS.	
Root loss/damage from excavation or soil compaction within RPAs	The detailed CEMP will set out that: Retained trees will be protected during construction by establishing a Construction Exclusion Zone (CEZ) around their RPAs or crown spreads (whichever is greater) achieved by the erection of barriers in the form of fencing that is immovable and braced against accidental impact. Across most of the Solar Development Sites, the permanent security fencing will serve as the tree protection fencing. The perimeter security would be installed to enclose the working areas of the Proposed Development. Fencing will be deer wire mesh and wooden post fencing with a maximum height of 2.5 m. The fencing will be sited outside of RPAs and tree canopies. Where the security fencing does not protect RPAs and cannot be adjusted (e.g., for retained trees located within fields and trees/hedges along the Cable Route Corridor), temporary tree	Ongoing Arboricultural Clerk of Works Monitoring Reports will be prepared to document the findings of any site visits and assessment work and provide recommendations of any remedial action or any changes in management required. The Arboricultural Clerk of Works will check that the permanent security fencing is to specification and fit for purpose prior to

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	protection fencing will be installed to protect trees during the construction phase. The fencing will be erected to a specification similar to drawing 3 in BS 5837:2012 where construction activity is close to vegetation, and can be of a lower specification (e.g., ski netting secured with road pins) where construction activity is more distant. All temporary tree protection fencing will carry identifying signs that state its purpose and proscribe its removal until all construction work is complete. The fencing will prevent the entry of vehicles, machinery, materials, or spoil into the CEZs. The fencing will be installed for each phase prior to any plant and materials arriving on-site, and will be kept in good condition for the duration of works. Construction traffic will avoid the use of access tracks within the AVT/Ancient Woodland Buffer Zones (refer to the Arboricultural Impact Assessment (ES Volume 3) [EN0110012/APP/LVS/06.03.16.02]) to avoid soil compaction within RPAs. Where existing farm access tracks within AVT RPAs are used for construction access tracks, or during operation and decommissioning, a ground protection system will be laid over existing ground levels to bridge the RPA and avoid soil compaction. All excavation within AVT/Ancient Woodland Buffer Zones will be avoided. No-dig construction solutions will be used where access tracks cross all other non-AVT retained trees. Temporary Construction Compounds in the Solar Development Sites and the Cable Route Corridor, alongside the construction laydown areas, will be sited outside of the RPAs and crown spreads of adjacent trees and woodlands. In cases where construction activities must occur within RPAs but the tree can be retained, suitable ground protection and fencing will be installed prior to works commencing to prevent soil compaction. The specification for ground protection will be appropriate	construction commencing for each phase.

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	to the weight of traffic traversing the RPA and will comply with BS5837:2012 recommendations. Micro-siting techniques will be used during cable installation to minimize root disturbance by avoiding the RPAs of retained trees. If work within RPAs is unavoidable, work must follow the measures to be set out in an Arboricultural Method Statement (ArbMS), for example precautionary measures such as hand digging and root pruning and will be supervised and guided by the Arboricultural Clerk of Works. No work will occur within the RPAs of AVT trees. Instead, HDD will be utilized to avoid damaging roots, maintaining a minimum depth of 1m to bypass the majority of roots and ensuring that the launch and receptor pits are located outside of the RPAs and crown spreads. All HDD machinery and spoil piles (including at watercourse crossings) will be sited outside the canopies and RPAs of retained trees. Throughout construction, the movement of machinery and storage of materials will be managed to prevent encroachment into RPAs. In the event that access is required, temporary ground protection will be employed to safeguard the tree roots. A detailed ArbMS will be produced prior to construction of each phase that will detail the measures to be taken for any work required within the RPAs or crown spreads of retained trees.	
Tree pruning (for example near Temporary and Permanent Access Points, access tracks, Highways Improvement Areas and for visibility splays)	Pruning of retained trees will be avoided as far as practicable by siting construction operations outside of crown extents. Pruning identified as necessary to facilitate development will be specified on the basis of the smallest extent of works that would facilitate the required construction operation. Prior to any tree pruning, the Arboricultural Clerk of Works will liaise with the Contractor(s) on the requirements for pruning and will provide a specification for the pruning works in accordance with BS3998: 2010 that can then be implemented by a suitably qualified, insured and	Ongoing Arboricultural Clerk of Works To be confirmed in the detailed CEMP(s)

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	experienced Arboricultural Contractor working in accordance with BS3998: 2010. Pruning works to AVTs will be avoided, where practicable. No tree works will be undertaken by construction workers unless they are qualified and instructed to do so. All tree pruning works will have due consideration for ecological mitigation. This will be further detailed in the detailed CEMP(s).	
Dust/sediment impacts to adjacent woodlands (including ancient woodlands)	Measures will be taken to limit dust-generating activities, such as when working in dry conditions, near woodlands, as set out in Table 3-1. To mitigate the risk of airborne contamination, dust suppression and management measures will be implemented as set out in Table 3-1.	No monitoring required
Damage to canopies/stems from machinery movements	Damage to tree canopies and stems from machinery will be avoided by establishing a CEZ around the RPAs or crown spreads (whichever is greater) maintained using physical barriers (fencing) as detailed above. If physical separation between machinery and retained trees cannot be achieved, and access under tree canopies is essential for a construction operation and can be achieved without pruning, then a banksman will be used to ensure that there is no conflict between plant/machinery and trees. If access can only be achieved by tree pruning then the measures set out in the Tree Pruning section above will be followed.	Ongoing Arboricultural Clerk of Works Monitoring Reports will be prepared to document the findings of the surveys and assessment work and provide recommendations of any remedial action or any changes in management required.

Table 3-7 Landscape and Visual

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
Loss of existing landscape features e.g. vegetation	Landscape mitigation measures for construction works proposed include: - Retention of existing woodland and hedgerow. Vegetation loss will be kept to a minimum and is likely only to be required to facilitate access points, cable routing and fencing, with reinstatement provided within the technical constraints of cable easements. - Limited areas of planting may need to be undertaken prior to, or at the commencement of the construction phase to allow for sufficient growth ahead of the operational phase of the Proposed Development, subject to detailed design and remodelling of it. - The planting, if required, and not otherwise secured via voluntary arrangements with landowners, will be undertaken early in the construction phase to ensure establishment to mitigate the potential impact of glint and glare that could occur on road and rail users, and dwellings, from the solar panels over short lengths in Year 1. Indicative locations are shown on Figure 16.1 (ES Volume 2) [EN0110012/APP/LVS/06.02.16.1]. The detailed LEMP(s) will set out the details of the planting proposed, if it is required, to ensure that there are no significant glint and glare effects arising at Year 1 of the Proposed Development. The detailed CEMP will therefore not include details of these matters. Tree protection measures as identified in Table 3-6. - Installation of underground cables using trenching, where practicable, causing minimal disruption to the ground, by cutting, installing and back-filling in one operation. However, trenchless techniques, such as horizontal directional drilling (HDD) are acknowledged as being required in Avoidance Areas, at railway crossings or where trenched crossings are not practicable for road crossings. - A number of Avoidance Areas have been identified where non-intrusive installation methods will be used to avoid impact to	Refer to the oLEMP for monitoring to be undertaken during landscaping establishment. Refer to detailed CEMP for further information on appropriate mitigations.

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	sensitive features such as watercourses, hedgerows and mature vegetation. - Proposed underground cabling to be located in existing hedgerow gaps, wherever feasible. Where this is not feasible, the shortest possible length of hedge will be removed to facilitate the installation of the cable, and the remaining hedge will be protected from accidental damage during construction by the use of barriers (temporary tree protection fencing, or similar). Trees and hedge lengths removed for cable installation will be replanted with a species rich length of hedge once construction is complete. - Any works affecting registered Village Greens will be reinstated to match existing standards, as far as is reasonably practicable unless otherwise agreed with North Yorkshire Council.	

Table 3-8 Major Accidents and Disasters

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
Major Accident and Disasters	All works will be undertaken in accordance with relevant Health and Safety legislation and guidance. Details of fire, policy, emergency services and hospitals will be publicised and included in the site induction. The relevant risk assessments for safety during construction will be required and produced by the Contractor(s) prior to construction, which will be implemented to minimise the risk of accidents and disasters on-site. An Outline Battery Safety Management Plan (oBSMP) [EN0110012/APP/LVS/07.06] has been submitted with the Application. This explores the risks associated with fires from the BESS and sets out measures to minimise the impact of an incident during construction, operation and decommissioning of the facility. Further risks of major accidents and disasters are covered in the other tables in this document relating to Hydrology, Flood Risk and Drainage; Transport and Access; Ground Conditions; Human Health and Other Environmental Matters. <u>The Applicant will provide arrangements for Sherburn Aerodrome fire and rescue service, or North Yorkshire Fire & Rescue Service on their behalf, to gain access to the Site in the event of an aircraft incident.</u>	Consultation with the Pipeline Operators and HSE required for any decommissioning works that fall within identified COMAH sites.

Table 3-9 Noise and Vibration

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
Noise and vibration due to construction activities impacting Noise Sensitive Receptors (NSR), including construction traffic, plant and machinery noise.	The following Best Practicable Means (BPM) will be applied during construction works to minimise noise and vibration at Noise Sensitive Receptors (NSRs), including neighbouring residential properties and other sensitive receptors arising from construction activities: - Careful selection of plant and construction methods. Only plant conforming to relevant national, EU or international standards, directives and recommendations on noise and vibration emissions will be used. - Design and use of site enclosures, housing and temporary stockpiles, where practicable and necessary, to provide acoustic screening at the earliest opportunity. - Where practicable, doors and gates will not be located opposite occupied noise-sensitive buildings. The mechanisms and procedures for opening doors/gates will minimise noise, as far as reasonably practicable. - Choice of routes and programming for the transport of construction materials, spoil and personnel. - Careful programming so that activities which may generate significant noise are planned with regard to local occupants and sensitive receptors. - All vehicles and mechanical plant shall be fitted with effective exhaust silencers and shall be maintained in good and efficient working order and operated to minimise noise emissions. - All compressors and generators shall be 'sound reduced' models fitted with properly lined and sealed acoustic covers which will be kept closed whenever the machines are in use, and all pneumatic percussive tools will be fitted with mufflers or silencers of the type recommended by the manufacturers. - All machines in intermittent use will be shut down in the intervening periods between works or throttled down to a minimum. Lorry	The detailed CEMP(s) will outline a Stakeholder Communications Plan for prior warning of activities with the potential to cause disturbance, alongside details on the establishment of the Community Liaison Group. During construction, appropriate mechanisms to communicate with local residents will be set-up to highlight potential periods of disruption for both noise and vibration. The Stakeholder Communications Plan will include a point of contact for the Contractor(s) for any queries or complaints. Any noise or vibration complaints will be investigated and appropriate action taken, as required. Where relevant, the Contractor(s) will carry out noise and/or vibration monitoring during peak periods at the receptors most likely to be impacted. Details of the monitoring strategy will be developed for the detailed CEMP(s).

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	engines will be switched off, as soon as practicable, when vehicles are stationary. - Noise emitting equipment which is required to run continuously will be housed in a suitable acoustic enclosure. - Temporary noise barriers will be used to reduce noise levels where appropriate and practicable. Such measures will be particularly appropriate for stationary or near-stationary plant such as pneumatic breakers, piling rigs and compressors. Barriers will be located as close to the plant as practicable, and in order to provide adequate attenuation and will have a mass per unit area of at least 7 kg/m². - Plant and equipment liable to create noise and/or vibration whilst in operation will, as far as reasonably practicable, be located away from sensitive receptors and away from walls reflecting towards sensitive receptors. - Where night working is required and (with the exception of HDD and emergency works) agreed with the local planning authority, materials for night-time working shall be delivered, where practicable, during normal hours of working and be placed as close as practicable to the work area for which they are required. - Where reasonably practicable, fixed items of construction plant will be electrically powered in preference to combustion engine driven. - To minimise potential vibration impacts, where required compaction could be achieved without using a vibratory system, however there may be a resulting increase in the duration of the compaction works. - Where simultaneous HDD works during the night-time are required close to receptors, additional noise modelling of the HDD works will be undertaken prior to construction to define specific mitigation measures to avoid adverse impacts. The detailed CEMP will include mitigation measures to ensure no significant effects on dog kennels and horse stables/liveries	Where construction vibration may be perceptible for residents, the Contractor will engage to provide reassurance that properties will not be at risk of damage.

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	(including Woodhaven Kennels). The detailed CEMP will also include relevant measures from the British Horse Society within their advice note on Construction Sites and Horses [Ref 9], as appropriate for the works in question and the surrounding environment, to ensure no significant effects on horses along PRow.	
Noise and vibration due to construction activities impacting NSR outside core working hours.	No noisy operations will take place during mobilisation/shut down which is 1 hour before and after working hours. Requirements and locations for cable construction activities will not be finalised until the cabling Contractor is appointed. Therefore, a hierarchy of mitigation measures is listed below for any potential night-time operations for HDD: ▪ Where practicable, avoid cable construction works within 300m of residential receptors. ▪ Advance notice and details of any night working to be provided by the contractor to the relevant local planning authority and any sensitive residential receptors. ▪ The potential use of quieter equipment will be explored by the Contractor. ▪ Depending on location, plant and timing of works, noise barriers will be installed to minimise noise emissions to environment	The detailed CEMP(s) will outline a Stakeholder Communication Plan for prior warning of activities with the potential to cause disturbance. During construction, appropriate mechanisms to communicate with local residents will be set-up to highlight potential periods of disruption for both noise and vibration. The Stakeholder Communication Plan will include a point of contact for the Contractor(s) for any queries or complaints. Any noise or vibration complaints will be investigated and appropriate action taken, as required.

Table 3-10 Ornithology

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
Impacts to internationally and nationally designated Sites and non-breeding and breeding birds (in particular species listed within the Lower Derwent Valley and Humber Estuary SPA and Ramsar citation, and species considered as part of the waterbird assemblage).	Appropriate standard and good practice control measures will be included in the detailed CEMP(s), which would include: ▪ To protect woodland treeline features supporting birds, refer to Table 3-6. ▪ An 8 m buffer will also be set between solar panel construction works and hedgerows to aid preservation and enhance foraging, nesting and commuting routes for boundary thriving and farmland bird species assemblages. ▪ <u>Percussive piling is not anticipated to be used within Solar Development Site 1, but if found to be needed it would not be used during the non-breeding bird period and will be constrained to the breeding bird period only (April to August inclusive).</u> ▪ A 10 m buffer from construction works will be provided from the bank top of all watercourses and riparian boundaries (except for watercourse crossings and a 50 m buffer for Canal and River Trust watercourses, e.g. River Ouse), which will reduce disturbance and retain habitat quality for riparian species like reed bunting and water rail. ▪ Noise and vibration intensive works, such as Horizontal Directional Drilling (HDD) or frame installation, will be timed to avoid sensitive ecological periods whenever practicable, which, while primarily targeting aquatic fauna, will also reduce disturbance to nesting birds near and / or within riparian areas. ▪ The final cable alignment will be selected to avoid ecologically sensitive features, and any unavoidable habitat losses will be appropriately mitigated. Trenchless solutions, for example HDD, is proposed for the crossing of the River Ouse, main rivers, IDB watercourses, and WER water body line watercourses. Trenchless solutions will be utilised when/if crossing ditches that lead to the following designated sites: Nightingale Wood SINC, Burr Closes SSSI, and Barber Rain SINC. Trenchless solutions will also be	To be confirmed in the LEMP and sensitive lighting strategy Additional surveys may be required during the advance works, site clearance and construction phase as advised by the Applicant's ecologist, based on the findings of the updated walkover and protected species surveys (i.e. Schedule 1), or otherwise as identified as appropriate by the Applicant or their appointed Contractor(s).

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	employed to pass beneath Ouse Bank-Westfield-Ricall Ings SINC that flanks the river Ouse, which will avoid direct impacts to the designated site. This will minimise impacts to wetland and linear habitats that are often of high value to birds. Furthermore, existing access points and field gaps will be utilised where practicable, and the cable route will be sited to minimise hedgerow removal, preserving important nesting and foraging corridors. ▪ A sensitive lighting strategy will be implemented as set out in Section 2.7 of this oCEMP. This will be in line with ecological good practice and designed to minimise light spill, particularly towards ecologically valuable features such as hedgerows, woodland edges, and riparian corridors, reducing potential disturbance to nocturnal ornithological species. ▪ Temporary and permanent fencing of ecological buffer zones will be adopted to prevent accidental encroachment and ensure undisturbed conditions around retained habitats, including nesting and foraging areas for protected and priority bird species. Temporary hoarding will also be required to offset noise around both the Cable Route Corridor and the Solar Development Sites (for example, within 250 m of the southern portion of the Solar Development Site 1, where it adjoins the Bird Mitigation Area) (where appropriate). To avoid noise exceedances within the Bird Mitigation Area, no construction works generating 50dB or above will occur within 250 m of the Bird Mitigation Area where it adjoins the southern portion of Solar Development Site 1 during the sensitive non-breeding period. During the breeding period, construction works may proceed without this restriction. ▪ Pollution prevention protocols, addressing risks associated with refuelling, dust generation, sediment run-off, and other polluting activities, which could affect sensitive watercourses and the wider environment will be adopted as set out in Tables Table 3-1 and Table 3-13.	

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	▪ The ECoW will carry out nesting bird checks prior to the start of construction, bird checks during passage period within the Cable Route Corridor Impact Risk Zones (to ensure no large aggregates of SPA birds are present), provide ecological supervision during sensitive works, ensure that construction proceeds in line with ecological mitigation commitments, including timing restrictions and habitat protection. ▪ Delivery of a Toolbox Talk by the ECoW to all site personnel, raising awareness of sensitive ecological features (such as bird nesting areas, non-breeding birds and buffer zones) and communicating the correct working practices to minimise disturbance or harm.	

Table 3-11 Socioeconomics

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
Peak impacts on the socio-demographic and tourism environment	Works during the construction phase are phased and staggered across the Solar Development Sites and Cable Route Corridor to reduce the likely significant effects on environmental receptors, to reduce the peak number of construction workers requiring access to local accommodation, and to reduce the peak intensity of on-site works.	To be confirmed in the detailed CEMP(s)
Demand for local employment	An Outline Skills, Supply Chain and Employment Plan (oSSCEP) [EN0110012/APP/LVS/07.13] has been submitted with the Application. This plan sets out the likely economic benefits of the Proposed Development, and the context and characteristics of the local community and economy in which it is located. It identified potential opportunities for activities relating to Skills, Supply Chain and Employment which the Applicant could take forward post-planning, together with a framework for future delivery. This includes the promotion of apprenticeships schemes, workforce training and STEM education initiatives in fields such as construction, engineering, and energy technology. The Applicant will seek opportunities to work with further and higher education providers in and around the Study Area to offer apprenticeships and academic support. Practicable opportunities to promote local recruitment and procurement, education and skills uplifting, and apprenticeship and training schemes for construction, manufacturing, and the energy industry are also to be explored through the SSCEP. Employment benefits will be maximised through local recruitment efforts, including engagement with Job Centre Plus, local planning authority, and recruitment agencies. The Applicant will also introduce measures to promote workforce diversity, equality, and inclusion, targeting underrepresented groups such as women in construction, young people, and the long-term unemployed.	To be confirmed in the SSCEP.

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
Disruption to the local travel network	The detailed CTMP(s) will set out that additional signage will be adopted to enforce preferred HGV and construction traffic routes particularly where non-compliance would cause adverse effects to receptors; provide warning signs at points where sensitive receptors are within close proximity to cross construction traffic routes on-site.	To be confirmed in the CTMP
Additional demand for housing	The Contractor(s) will provide support for construction workers to find suitable accommodation, either in the form of private rental accommodation, or hotels, or other serviced accommodation (e.g. furnished apartments for short-to-medium term stays), in locations where impact upon existing residents and visitors can be minimised.	To be confirmed in the detailed CEMP(s)
Visual impact on tourism and recreation facilities	The embedded visual mitigation includes designing the layout of the Sites to provide buffers from the roads, as well as 15 m buffers from PRoWs, neighbouring buildings, and other tourism destinations. Construction laydown areas are to be suitably located and screened from these receptors to minimise construction impacts. BRE National Solar guidance will be adhered: - Security fencing will be used sparingly and kept as low as practicable to minimise visual impact - Fencing will incorporate existing hedges or landscaping to blend naturally with the environment, where practicable - Vegetation planting will be used to enhance site security discreetly.	To be confirmed in the detailed CEMP(s)
Disruption to users of Public Rights of Way, cycle routes and other recreational amenities	The Outline PRoWMP sets out the measures that will be put in place to manage impacts during construction, and these will be detailed further in the detailed PRoWMP(s). This includes that recreational routes crossing or within the Order limits will be sought to be kept open during construction, with any crossing or traffic conflict points overseen by spotters or banksmen for HGVs. Where closures are deemed necessary, these will be temporary in nature and supported by appropriate amount of notice and suitable diversions. Any diversions to routes will be appropriately signed, and the duration and length of	To be confirmed in the detailed Public Right of Way Management Plan (PRoWMP)

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	diversions will be optimised to minimise impacts on accessibility and desirability. Diversions to three PRoWs affecting bridleways 35.28/1/1 and 35.67/6/1 and footpath 35.28/3/1 are required. All diversions will be implemented prior to construction and involve permanent re-routing to accommodate site infrastructure. The affected route(s) will be diverted along alignments preferred by existing users, which will be agreed through engagement with local stakeholders, with new paths provided to maintain connectivity.	
Construction noise and increased traffic movements impacting sensitive receptors	A number of receptors have been identified as requiring specific mitigation to minimise effects during construction of the Proposed Development. These are outlined below, but further detail and specifics will be developed as part of the detailed CEMP(s). Birkin Fishery and Gascoigne Wood Fishery ▪ Maintaining ongoing engagement with fishery operators to coordinate works during key events. ▪ Scheduling noisy activities outside peak fishing times (early mornings, evenings, weekends). ▪ Installing temporary acoustic and visual screening along boundaries closest to the fishery to reduce disturbance effects. Birkin Fisheries Tea Room ▪ Managing HGV movements to avoid peak visitor times. ▪ Providing advance notice of high-activity periods and maintaining communication with operators. ▪ Considering temporary screening for outdoor seating areas to reduce visual disturbance. Fairfield Equine Facilitated Wellbeing and Homestead Livery Yard ▪ Ensuring safe access routes for riders during construction; avoiding HGV conflicts. ▪ Using banksmen at crossing points and clearing signage for temporary diversions.	To be confirmed in the detailed CEMP(s)

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	- Avoiding sudden visual disturbances (e.g., flashing lights, high-visibility equipment) near paddocks. - Providing advance notice of high-activity periods and maintaining communication with operators.	
Community apprehension and anxiety ahead of construction activities	Provision of a dedicated Community Liaison Officer, responsible for managing relationships with community groups (including the establishment of the Community Liaison Group), and elected members to ensure community concerns are being addressed and actioned by the construction Contractor(s). This role should also be used as an intermediary between the construction Contractor(s) and members of the public for the provision of construction information, availability for consultation on construction activities, and for complaints or compliance issues to be raised.	To be confirmed in the detailed CEMP(s).

Table 3-12 Traffic and Movement

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
Increased traffic flows, including HGVs on the roads leading to the Site. Local disruption to traffic routes surrounding the site and surrounding residential areas	A number of embedded mitigation measures are set out in the oCTMP [EN0110012/APP/LVS/07.12] for the control of vehicles associated with the construction phase and will be confirmed in the detailed CTMP(s). This will include: - Signs to direct construction vehicles associated with the Proposed Development will be installed along the agreed construction traffic route. Delivery drivers, Contractor(s) and visitors will be provided with a route plan in advance of delivery to the Proposed Development to ensure that vehicles follow the identified route. - A compound area(s) for Contractors will be set up on-site including appropriate parking spaces. Contractors and visitors will be advised that parking facilities will be provided on-site in advance of visiting the Proposed Development and that they should not park on-street. - A wheel wash facility will be provided ahead of exiting the Proposed Development. - A road sweeper will be provided for surrounding local roads along the designated route to alleviate any residual debris generated during the construction phase, as required. - The Proposed Development will be secured at all times. - A requirement for engines to be switched off on-site when not in use. - Spraying of areas with water supplied as and when conditions dictate to prevent the spread of dust. - Vehicles carrying waste material off-site to be sheeted. - Banksmen will be provided at Site access junctions where required to indicate to construction traffic when it is safe for them to enter and exit the Proposed Development. - All residents in the Order Limits will be provided with contact details of the Community Liaison Officer via notices on the website, and details will also be provided on a noticeboard at each site access and egress junctions. The Community Liaison Officer (or alternative)	To be confirmed in the detailed CTMP. Any unforeseen issues that arise in relation to construction vehicle movement will be logged by the Site Manager. If necessary, the issues will be discussed with the local highway authority so that they can be resolved as appropriate.

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	<u>will engage with and manage interactions at those locations impacted by construction traffic activities including for example Field House Farm.</u> <u>A Traffic Liaison Group will be established (if representatives are willing) including representatives of NYC, National Highways and the promoters of other developments promoters of the developments identified in the Interrelationship Report submitted into the Examination (including Yorkshire Green, Ferrybridge Next Generation, Hillam Solar, Scalm Park Energy Project and Harmony BESS) Next Generation to minimise and mitigate the combined impact of construction traffic. The Applicant will seek (as it cannot force others to attend) to establish a Traffic Liaison Group that will involve inviting representatives from North Yorkshire Council, National Highways and the promoters of the developments identified in the Interrelationship Report (whose construction periods are identified, based on the information available at the time of the start of construction as overlapping with the Proposed Development) submitted into the Examination to attend.</u> <u>The Traffic Liaison Group would seek to manage and co-ordinate the delivery of the schemes in order to minimise and mitigate the combined impact of construction traffic, (including AIL movements). This will include seeking to agree a co-ordinated approach to road remediation where multiple scheme HGVs use the same road.</u> <u>The Highways Improvement Areas works will be undertaken to enable abnormal load deliveries as needed.</u>	

Table 3-13 Water Resources and Flood Risk

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
- Leakage or accidental spillage of construction materials and potential pollutants used on-site, migrating to nearby surface watercourses or infiltrating to groundwater. - Any flooding during construction could flood construction equipment / materials, causing release of pollutants to nearby surface watercourses or infiltrating to groundwater. - Hydro-morphological impacts to waterbodies including changes to physical form (for example where temporary watercourse crossings are required) which underpin habitats.	<u>Flood risk including surface water runoff</u>Surface runoff / flood risk - A minimum offset of 10 m from bank top for all watercourses (50 m for Canal and River Trust watercourses, e.g. River Ouse) and their associated riparian zones from all construction works including stockpiling of construction materials and excavated spoil will be adopted, except where watercourse crossings are required (access tracks / cable routing / fencing will be located to pass across existing watercourse crossings where feasible). - A suitable Flood Warning and Evacuation Plan (FWEP) will be prepared to accompany the detailed CEMP(s), considering the measures outlined in the FRA [EN0110012/APP/LVS/06.03.15.01], and put in place prior to and during construction. - Solar PV access tracks will be of permeable construction to allow water to filtrate through and maintain greenfield runoff rates. Wherever practicable, the design will maintain existing catchments and surface water will be managed such that existing greenfield runoff rates are maintained. - Where surface water attenuation may be needed, Lead Local Flood Authority guidance will be followed to ensure the overall volume of surface water leaving the site is managed. - A 50 m stand-off will be applied from all groundwater and surface water abstractions, both licensed and private water supplies. - All on-site activities likely to generate effluent will be identified to determine whether it constitutes a pollutant should it be discharged into the water environment. - A detailed Surface Water Management Plan will be prepared to accompany the detailed CEMP(s) prior to the commencement of construction and will provide details on suitable management and monitoring measures for surface water during construction. A Water Discharge Activity Permit will be acquired, as necessary.	Monitoring will be undertaken when construction activities are within 500 m or upstream / upgradient of a monitoring location by the ECoW and key construction team members. Further monitoring requirements (including frequency) will be detailed within the detailed CEMP(s), detailed PSRP, MMS, frac-out contingency plan, Hydrogeological Impact Assessment, Foundation Works Risk Assessment and detailed SWMP. <u>A monitoring plan will be developed (in consultation with the EA) which will outline the frequency of water quality monitoring prior to and during construction.</u>

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	- Localised changes to ground levels will only be undertaken where necessary for the safe and effective installation and operation of infrastructure. Any proposed changes will be assessed through detailed design to confirm that existing overland flow routes will remain functional and that flood risk will not be increased elsewhere. The location, extent and associated mitigation for any such changes will be set out in the detailed CEMP prior to the relevant works commencing. Construction methodology - Monitoring as set out in Section 3 of outline Pollution and Spillage Response Plan [EN0110012/APP/LVS/07.08] - The ECoW and construction team will conduct visual inspections of watercourses and water management systems. These checks will look for signs of colour change, oil, scum, turbidity, aquatic non-native species and algal blooms. Inspections will include observations from the banks and drainage management features to record the water and runoff conditions. - In active construction areas visual checks will be undertaken daily, with observations reported back to senior personnel on a weekly basis. The visual inspections will be focussed on areas where high risk activities are being undertaken, such as concrete pouring, stockpiling of materials and refuelling. - Locations for monitoring will be identified at the final detailed design once the design is complete, and monitoring requirements as set out in the detailed CEMP(s) and detailed Pollution and Spillage Response Plan (PSRP) where necessary. <u>A detailed PSRP will be developed following the appointment of the Contractor(s), prior to the start of construction</u> - Use of underground cabling methodology that minimises disruption to the ground (e.g. where practicable cable plough which cuts, installs and backfills in one operation). The use of underground	

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	cabling will consider the risk of groundwater flooding and be appropriately waterproofed. ▪ Use of piling methodology that minimises likelihood of creating pollution pathway to groundwater. This will be assessed in a foundation works risk assessment. ▪ Trenchless solutions, for example horizontal directional drilling (HDD) is proposed for the crossing of the River Ouse, main rivers, IDB watercourses, and WER water body line watercourses. Trenchless solutions will also be utilised when/if crossing ditches that lead to the following designated sites: Common Wood SINC, Nightingale Wood SINC, Burr Closes SSSI, and Barber Rain SINC. Trenchless solutions will also be employed to pass beneath Ouse Bank-Westfield-Riccall Ings SINC that flanks the River Ouse, which will avoid direct impacts to the designated site. Trenchless solutions would also be used for railway crossings. Road crossings will be a combination of trenchless and open cut crossings. ▪ A frac-out contingency plan for HDD will be produced by the Contractor(s) prior to commencement of construction activities ▪ Minimising area of hardstanding required for laydown and Construction Compounds. ▪ Surface water and groundwater monitoring plans for abstractions and other receptors immediately adjacent to Construction Compounds, trenchless solutions such as HDD or sites where excavations and/or construction dewatering occurring, to include requirement to cease works if impacts are detected. The monitoring plans will be developed in consultation with the EA. ▪ Construction flood risk management including scheduling of temporary/ construction works excavations and storage to not increase flood risk or be placed within the floodplain as far as practicable.	

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	- Where Construction Compounds are needed to be placed within the floodplain, for example for trenchless solutions such as HDD, then flood warnings and additional processes will be established. - Temporary land take areas (construction compound with car parking, temporary storage area, temporary laydown areas, welfare facilities etc.) will be fully reinstated following the construction period to reduce areas of semi-impermeable surfaces. - Clay stanks or alternative impermeable material will be included at regular intervals along the length of the cable trench when passing close to Burr Closes SSSI, to minimise in-trench groundwater flow (i.e. to prevent the pipeline<u>cable trench</u> acting as a preferential flowpath). - Fuel for machinery and generators would be delivered by a fuel bowser as required and stored in integrally bunded above ground fuel storage tanks which comply with Oil Storage Regulations. Fuel storage tanks to be covered to prevent rainwater accumulation and damage which could result in spillage. - Spill kits would be carried by all plant and would be available at the fuelling point and other strategic locations on the Site to allow for prompt clean up. All construction workers would be trained in pollution prevention and spill kit use. - Oil storage areas should avoid areas susceptible to flooding. - Containment measures to be used for all curing, mixing and pouring of concrete on-site, such as lined pit or bunded areas. A control at source approach is to be adopted. Work is to be minimised during heavy rainfall and to be scheduled for dry periods where practicable. - Suitable means of access and egress will remain available during a flood event for critical infrastructure. - In locations that are identified as being at greater risk from contamination releases a non-permeable 'Durabase Mat System' or a similar non-ground penetrating mat system would be installed to protect groundwaters during construction.	

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	- A Foundation Works Risk Assessment will be prepared to accompany the detailed CEMP(s) for any required foundations or piling activities, prior to commencement of construction works: <u>and for any foundation solution likely to interact with, or else create a new pollution pathway to, a Secondary or Principal aquifer.</u> - Works will be scheduled during low-flow periods where practicable to reduce ecological disturbance. - Cables are to be PFAS free where practicable, and fluid-filled cables will not be used, these measures are to mitigate against contamination to groundwater. <u>The detailed CEMP will include details on fuel and oil storage, and disposal of water from concrete during construction in line with the Oil Storage Regulations for Business (Ref 5),- and disposal of water from concrete during construction.</u> <u>with</u> Drainage and abstraction - During construction, measures will be implemented to prevent adverse impacts on field drainage ditches, ensuring that existing agricultural drainage infrastructure is not obstructed, damaged, or compromised by excavation or vehicle movements associated with the Cable Route Corridor. Where land use changes from agricultural use to solar PV, existing agricultural land drainage systems would no longer be required. Where there is the potential for interaction with existing land drains that are required to be retained, their locations would be identified through pre-construction surveys and measures implemented to avoid, protect and / or divert them where practicable. Any land drains temporarily disturbed or damaged during construction would be reinstated, diverted, or otherwise made good to their original condition upon completion of the works to ensure that existing surface water and land drainage arrangements are maintained post-construction.	

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	- Where land drainage from agriculture is encountered during construction, actions will be taken to divert the flow to an appropriate location, such as the construction drainage network. Prior to completion of the Proposed Development, these field drains will be reinstated to the original locations, where practicable, or to a suitable alternative discharge point determined before the end of construction. <u>An Outline Drainage Strategy [EN0110012/APP/LVS/06.03.15.04] is included in the application and includes the management of surface and foul water in the temporary scenario. These techniques will be confirmed within the detailed Drainage Strategy. Such measures (included in this oCEMP for context) include:</u> <u>Temporary drainage measures will be implemented to control runoff rates, with flows restricted to levels equivalent to greenfield conditions where practicable. Construction areas will be designed to prevent overland flow entering watercourses and to avoid the accumulation of standing water which could mobilise contaminants. Measures such as bunding, settlement lagoons, sediment traps and grass filter strips will be implemented where there is a risk of sediment-laden runoff entering the water environment, and spill kits will be available to ensure any accidental releases of fuels, oils or other hazardous materials are promptly contained.</u> <u>During construction of substations and the BESS compound, temporary drainage and pollution control measures will be implemented to manage runoff from these areas prior to the permanent drainage system becoming operational. Where practical, elements of the permanent drainage system will be constructed at an early stage of the works to reduce the duration over which temporary measures are required.</u> <u>The requirement for, and extent of, any enhanced pollution control measures for BESS and substation areas will be determined at</u>	

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	<u>detailed design stage and secured through the detailed CEMP, taking into account the higher pollution risk associated with the intended end use of these areas. This will include consideration of measures consistent with those identified within the Outline Drainage Strategy, such as the management and containment of fuels, oils and chemicals, and, where relevant, firewater runoff.</u> - Measures will be implemented to protect groundwater and control sources of contamination within construction compounds. This may include the use of non-permeable matting systems, such as a 'Durabase Mat System' or equivalent non-ground penetrating solutions, in areas of increased risk, including where superficial deposits are absent. Construction activities involving potentially polluting materials, including concrete, will be carefully managed to reduce risks to the water environment, including through appropriate timing of works and implementation of standard good practice measures. - Foul water generation will be limited to welfare facilities. In the absence of mains sewer connections, temporary foul flows will be managed via a sealed non-mains drainage solution, comprising either a cesspool or package treatment plant subject to detailed design. Where required, off-site disposal will be undertaken by a licensed contractor, or treated effluent will be discharged in accordance with the Environment Agency's General Binding Rules or an environmental permit. Systems will be designed to avoid impacts on water resources and located outside areas of flood risk, as confirmed by the Flood Risk Assessment [EN0110012/APP/LVS/06.03.15.01]. - Receptors susceptible to local pollution incidents (such as groundwater dependent terrestrial ecosystems, licensed abstractions and private water supplies) will be avoided where practicable as the design develops. However, a large portion of the Proposed Development overlies the Principal Sherwood Sandstone	

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	Aquifer, and various SPZs associated with local public water supplies. As such, pollution prevention and control measures are critical to preventing impacts to groundwater receptors. - Ground investigation will be undertaken to inform the detailed design of the BESS, substations and construction compounds. This is to ensure that appropriate drainage design and aquifer protection measures are incorporated into the construction and operational designs, tailored to the specific geological/ groundwater conditions at each location, to protect the water environment. Ground investigation will be carried out in accordance with the Environment Agency's Land contamination risk management (LCRM) guidance (Ref 7) and BS10175:2026 (Ref 8). - If groundwater control measures are required, construction dewatering would be designed and undertaken in line with the appropriate regulatory licenses and permits and be non-consumptive. Water returned to ground will need to be free of contaminants and sediment. Groundwater control measures are to be designed out where practicable. The detailed CEMP must provide the results of a proportionate assessment of impacts of dewatering undertaken once site-specific groundwater levels are established through -ground investigations. - Temporary storage tanks for abstracted water from licensed abstractions or mains water supply will be required periodically along the working corridor to store for use in construction activities. - Where a small unlicensed abstraction is considered for water supply (<20 m³/d), this will be undertaken in a fashion so as to ensure that there will be no impact on nearby receptors. Temporary drainage measures must also be provided, to ensure that surface water runoff and quality is adequately managed. - Construction activities within the floodplain, such as trenching for the Cable Route Corridor will be carefully managed to avoid adverse impacts on flood storage and conveyance. A sequential approach	

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	will be adopted, ensuring that spoil from excavation is stored outside the functional floodplain and Flood Zone 3, thereby reducing the risk of obstruction to flood flows and minimising potential contamination of the water environment. ▪ Additionally, concrete used during construction contains hexavalent chromium, a substance classified as a specific pollutant in relation to surface water. To minimise the risk of contamination, construction activities involving concrete should be avoided during periods of heavy precipitation and, where practicable, scheduled during drier months. ▪ The Applicant has engaged with the EA regarding interfaces with EA-managed assets, including the River Ouse and the associated set-back flood defences located to the north of Wistow Lordship. All necessary permissions via the EA's Protective Provisions will be secured in advance of any works beneath these features. ▪ The cables will be installed using trenchless construction techniques to minimise disturbance in these locations, and both pre- and post-construction condition surveys will be undertaken to ensure the integrity of the flood defence infrastructure including EA flood defence assets is maintained. During the works the condition of the defences will be monitored to ensure their integrity. A contingency plan for if embankments become damaged or start to collapse during works will be produced prior to works commencing. ▪ Post-consent condition surveys (pre- and post-construction) of EA assets subject to cable- crossings will be undertaken to inform the methodology for these crossings (the detail of which will be approved pursuant to the EA's Protective Provisions). ▪ At the detailed stage the design of the Cable Route Corridor/construction methodology will be completed in such a way that any pre-existing piled foundations (including under flood defences) are not disrupted.	

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	- Construction areas will be designed to prevent overland flow entering watercourses and the accumulation of standing water, to reduce the potential for pollutants to enter the water environment. Spill kits will be available to ensure any spills of oils, fuels or hazardous materials are promptly contained and cleaned to prevent contamination of surface and ground waters. - Furthermore, bunding, settlement lagoons, sediment traps and grass filter strips would be implemented in areas where there is a risk of silt entering watercourses. <u>Bankside habitats will be reinstated. Specific reinstatement methods will be confirmed in the detailed CEMP, which may include measures such as -sowing of species rich sward.</u> Watercourse crossings - Existing watercourse crossings are to be used wherever practicable. - Where watercourse crossing structures are required, the design will maintain a natural watercourse bed, where reasonably practicable. - Culverts will be sized appropriately to the flow in the watercourse. - The construction haul road will be designed to avoid drainage ditches and watercourses where practicable, based on the surface water flood map for the region. Where watercourses cannot be avoided, temporary culverts with the type of crossing selected determined on site specific factors. Refer to the Crossings Schedule [EN0110012/APP/LVS/07.01] for proposed details of the crossing methodology for each watercourse. - Temporary culverts will not be used to cross the River Ouse, main rivers, IDB watercourses and WER waterbody line watercourses. - Trenching for the cable installation within the Solar Development Sites will be short-term and any ditches / watercourses affected will be returned to a functional condition once the cabling has been installed. - Works will be scheduled during low-flow periods where practicable to reduce ecological disturbance.	

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	- Temporary watercourse crossing structures should be removed once they are no longer required for the purposes of construction. - When a temporary watercourse crossing structure is removed, the watercourse should be reinstated to the baseline condition or to a better condition than baseline. - A Hydrogeological Impact Assessment will be prepared (as required) to accompany the detailed CEMP(s) prior to construction of watercourse crossings.	

Table 3-14 Other Environmental Matters

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
Waste Impacts of waste to the surrounding environment. Potential to impact on sensitive receptors (human, wildlife and controlled waters) if not stored and managed appropriately. Impacts on waste recycling and handling facility capacity.	As detailed in the outline Materials and Waste Management Plan (oMWMP) [EN0110012/APP/LVS/07.07] the Contractor(s) will consider the objectives of sustainable resource and waste management and seek to use material resources efficiently, reduce waste at source, reduce waste that requires final disposal to landfill and apply the principles of the waste hierarchy. This would include, where reasonably practical, working towards a cut-and-fill balance for excavations, segregation of construction materials on-site for appropriate re-use, recycling and recovery with landfill as a last resort. This would be achieved by a combination of measures, including: ▪ A detailed MWMP will be prepared before commencement of construction and will be implemented by the Contractor(s), once appointed. ▪ All waste transported off-site will be delivered to the appropriately licensed receivers of such materials. ▪ As part of the MWMP, the Contractor(s) would segregate construction waste to be re-used and recycled, where reasonably practicable. To minimise impacts of waste on the surrounding environment, the following measures would be implemented: ▪ Off-site pre-fabrication, where reasonably practical, including the use of prefabricated structural elements, cladding units, mechanical and electrical risers and packaged plant rooms. ▪ Burning of waste or unwanted materials would not be permitted on-site. ▪ All hazardous materials including chemicals, cleaning agents and solvent containing products to be properly sealed in sealed containers at the end of each day prior to storage in appropriately protected and bunded storage areas.	The types, quantities and final destination of waste generated during the construction phase would be identified, measured and recorded through the MWMP. A register of all waste loads leaving the Order Limits would be maintained to provide a suitable audit trail for compliance purposes and to facilitate monitoring and reporting of waste types, quantities and management methods.

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	- Materials requiring removal from the Sites would be transported using licensed carriers and records kept, detailing the types and quantities of waste moved and the destinations of this waste, in accordance with the relevant regulations. - The provision of pre-fabricated welfare units and construction site offices also allows for the reduction of construction and demolition waste generated by the Proposed Development as they can be reused on other construction projects.	
Utilities, telecommunications and television receptors	The following embedded measures have been incorporated to identify and manage utilities interactions. These include precautionary measures, comprising: - The Contractor(s) will utilise ground penetrating radar before excavation to identify any unknown utilities. - Infrastructure that crosses the Proposed Development will be mapped and avoided through the design where practicable; and - Consultation and agreement of construction/demobilisation methods relevant to operators will be undertaken prior to works commencing (this would be covered by the protective provisions included in the draft DCO Application).	No monitoring required.
Contaminated Land	Ground investigation will be undertaken to inform the detailed design of the proposed development prior to construction. This will include appropriate soil sampling and analysis to assess potential contamination sources. This will ensure that appropriate protection measures are incorporated into the construction and operational designs, tailored to the specific geological/ groundwater conditions at each location, to protect human health and the water environment. Ground investigation will be carried out in accordance with the Environment Agency's Land contamination risk management (LCRM) guidance (Ref 7) and BS10175:2026 (Ref 8).	If contamination sources are identified, results of sampling and any risk assessments and proposed methods for management/remediation (if required) will be documented and submitted for information to the local planning authority Contaminated Land Officer and Environmental Agency.

Potential Impact	Mitigation/Enhancement Measure	Monitoring Requirement
	<u>Areas of historic ground working will be avoided or investigated and remediated where necessary.</u>	
Contaminated Land Potential to encounter unexpected contamination during earthworks and construction	During construction earthworks the potential exists that previously unidentified soil and groundwater contamination may be exposed. The Contractor(s) will implement a watching brief and discovery strategy for managing unexpected contamination identified during excavations. In the unlikely event that contamination is encountered that is not consistent with the risk assessment and observations from any intrusive ground investigations this will be identified as unexpected contamination and the following procedures implemented: • Works should cease in the area affected and the area cordoned off. • A competent geoenvironmental specialist should be consulted who will advise on next steps. • Contaminated material should be sampled and tested, either in-situ in the ground (and left undisturbed while the samples are tested and results interpreted) or if safe to do so excavated and stockpiled separately in an appropriate manner (i.e. bunded, covered and away from surface watercourses). • Measures should be taken to ensure protection of site staff, neighbours and the environment, particularly by controlling dust and surface water runoff from the contaminated area. • <u>-with</u>	Records of the contamination identified, results of sampling and risk assessment and proposed method for remediation will be documented and submitted to the local planning authority Contaminated Land Officer and Environment Agency.
Electromagnetic fields Potential for risks to human health associated with electromagnetic fields	A minimum setback distance of 5 m should be implemented between receptors and live electrical cables during construction activities (if necessary). All proposed cables and associated electrical infrastructure will be 'UKCA' and / or 'CE' marked.	The Environmental Manager will regularly record compliance in a logbook.

References

- Ref 1 Planning Act 2008 (UK Gov). [Online] Available at: <https://www.legislation.gov.uk/ukpga/2008/29/contents> [Accessed January 2026]
- Ref 2 Considerate Constructors Scheme (2022). Code of Considerate Practice. Considerate Constructors Scheme. [Online] Available at: [\[Redacted\]](#) [Accessed January 2026]
- Ref 3 IAQM, "Guidance on the Assessment of Dust from Demolition and Construction (Version 2.1)," 2024. [Online]. Available at: <https://iaqm.co.uk/wp-content/uploads/2013/02/Construction-Dust-Guidance-Jan-2024.pdf> [Accessed January 2026]
- Ref 4 Environment Agency (2007) Pollution Prevention Guidance notes (PPG1, PPG5, PPG8 and PPG21).
- Ref 5 Environment Agency and Department for Environment, Food and Rural Affairs (2023). Oil storage regulations for businesses. [Online]. Available at: <https://www.gov.uk/guidance/storing-oil-at-a-home-or-business> [Accessed June 2026].
- Ref 6 Environment Agency and Department for Environment, Food and Rural Affairs (2026). Pollution prevention for businesses. [Online]. Available at: <https://www.gov.uk/guidance/pollution-prevention-for-businesses> [Accessed June 2026].
- Ref 7 Environment Agency (2025) Land contamination risk management (LCRM). [Online]. Available at: <https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm> [Accessed June 2026].
- Ref 8 British Standards Institute (2026) BS 10175:2026. Investigation of potentially contaminated sites – Code of practice.
- Ref 9 The British Horse Society (2024) Advice on Construction sites and horses. [Online]. Available at: [\[Redacted\]](#) [Accessed June 2026].



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