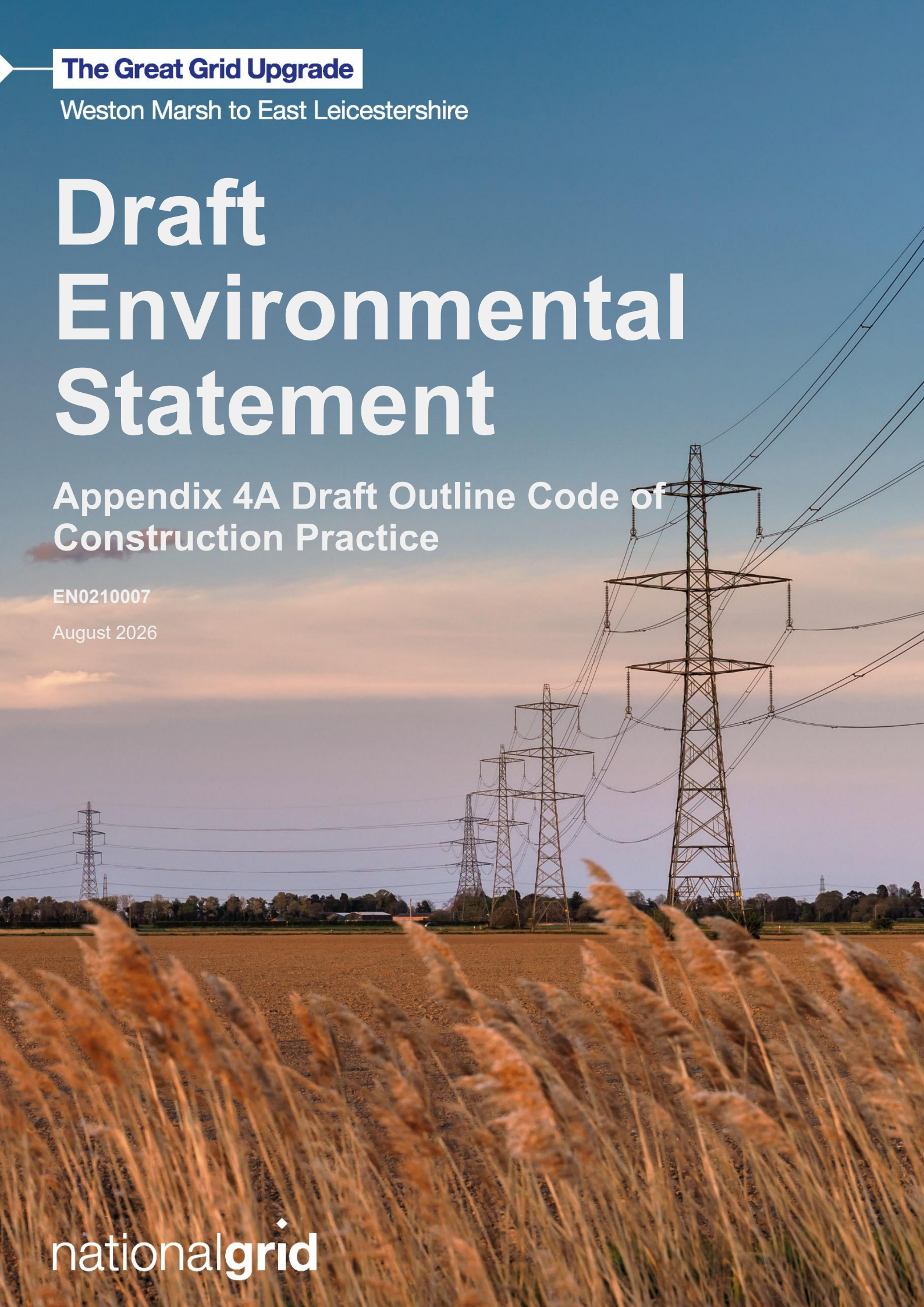




The Great Grid Upgrade

Weston Marsh to East Leicestershire

Draft Environmental Statement

Appendix 4A Draft Outline Code of Construction Practice

EN0210007

August 2026

nationalgrid

Contents

4A.	Draft Outline Code of Construction Practice	4A-1
4A.1	Introduction	4A-1
	Overview	4A-1
4A.2	Purpose of the Code of Construction Practice	4A-2
4A.3	Preparation of the CoCP	4A-2
	Stage 1: Initial Outline CoCP	4A-2
	Stage 2: Draft Outline CoCP (with this DES)	4A-3
	Stage 3: Outline CoCP (with the ES)	4A-3
	Stage 4: CoCP	4A-3
4A.4	Construction Schedule	4A-4
4A.5	Roles and Responsibilities	4A-4
	Early Contractor Involvement	4A-4
	Environmental Management Systems	4A-5
	Project Responsibilities	4A-5
4A.6	Control and Management Measures	4A-7
	Table 4A.1 Illustrative key roles and responsibilities for the Project	4A-5
	Table 4A.2 Environmental Control Plans	4A-7
	Table 4A.3 Control and management measures	4A-8
	Image 4A.1 Code of Construction Practice Process	4A-4
	References	4A-30

4A. Draft Outline Code of Construction Practice

4A. Draft Outline Code of Construction Practice

4A.1 Introduction

Overview

4A.1.1 The Weston Marsh to East Leicestershire Project ('the Project') is being developed by National Grid Electricity Transmission plc (National Grid) to increase the ability of the transmission system to transfer power between other proposed transmission infrastructure in the east of England and the Midlands. The objective of the Project is to reinforce the electricity transmission network, facilitating the connection of planned offshore wind generation, interconnectors with other countries and other sources of electricity, allowing clean green energy to be carried on the network.

4A.1.2 The Project is expected to include the following elements:

- Approximately 60 km of new 400 kV overhead transmission line, from the proposed substation at Weston Marsh (to be delivered by the Grimsby to Walpole Project), to the west.
- A new 400 kV substation to be built in the vicinity of the existing 4VK (Cottam – Wymondley) 400 kV overhead line to the west of Corby Glen, South Kesteven (referred to as 'WMEL-A').
- A new 400 kV substation to be built in the vicinity of the existing ZA (Cottam – Sundon) 400 kV overhead line to the west of the village of Ab Kettleby and north west of Melton Mowbray, Melton (referred to as 'WMEL-B').
- Reconductoring of approximately 66 km of the existing ZA 400 kV overhead line from WMEL-B to the existing Grendon substation, east of Northampton.
- Realignment of short sections of existing 400 kV overhead line and local changes to the distribution networks to facilitate the construction of the new overhead line and substations.

4A.1.3 The Project has been divided five Sections, shown in **Figure 1.1 Site Location Plan** and described in **Table 4.1 of Chapter 4 Description of the Project**. These are:

- Section 1: Infrastructure within South Holland District;
- Section 2: Infrastructure within South Kesteven District;
- Section 3: Infrastructure within Melton Borough, with an additional area of offsite highway works in Charnwood Borough;
- Section 4: Infrastructure within Harborough District; and
- Section 5: Infrastructure within Northamptonshire (including both North Northamptonshire and West Northamptonshire unitary areas).

4A.2 Purpose of the Code of Construction Practice

- 4A.2.1 This is the draft Outline Code of Construction Practice (CoCP) for the Project, which has been produced to support the non-statutory Draft Environmental Statement (DES) (referred to in this document as “DES” and non-statutory DES”). It has been produced to set out control and management measures that will be undertaken during construction of the Project. The CoCP aims to ensure that adverse effects from the construction phase of the Project, on the environment and local communities, are minimised and controlled appropriately.
- 4A.2.2 The preliminary assessment is based on the assumption that measures identified in this draft Outline CoCP will be implemented as part of standard good practice and would be delivered regardless of EIA. This enables the assessment to be proportionate and focused on the likely significant effects that would be material to the decision. This is in accordance with the Institute of Environmental Management and Assessment guidance document, Delivering Quality Development (Ref 4A.1).
- 4A.2.3 The CoCP will be updated as the Project evolves to include additional measures identified through the engineering design, the Environmental Impact Assessment (EIA) process, and from engagement with stakeholders. An Outline CoCP will be submitted as an appendix to the Environmental Statement (ES) as part of the application for development consent. During the examination of the application, this Outline CoCP may be updated as agreed with the Examining Authority. The content of the Final CoCP, substantially in accordance with the approved Outline CoCP, will be secured by way of a requirement in the development consent order (DCO).
- 4A.2.4 The Project will be delivered in compliance with all relevant legislation, consents and permits. Any statutory requirements listed in this document and industry good practice guidance which has informed each part of the document, are not to be seen as exhaustive.
- 4A.2.5 National Grid will put in place robust procedures to audit and inspect the Project, including its supply chain of contractors, to make sure the control measures set out in the Outline CoCP are adopted when constructing the Project. The Outline CoCP will apply to all pre-construction and pre-commencement activities carried out pursuant to the DCO.

4A.3 Preparation of the CoCP

- 4A.3.1 This section describes the four-stage iterative approach to developing the CoCP, from the initial outline through to the Final CoCP which the contractor(s) will implement throughout the construction of the Project (see **Image 4A.1**).

Stage 1: Initial Outline CoCP

- 4A.3.2 The Initial Outline CoCP for the Project was produced to support the EIA Scoping Report which was submitted in November 2025. It was produced to set out control and management measures that may be undertaken during construction of the Project if the application for development consent is granted.

Stage 2: Draft Outline CoCP (with this DES)

- 4A.3.3 This current iteration of the document is the draft Outline CoCP, which has been prepared for the DES, based on known project information. This draft Outline CoCP includes control and management measures which have been identified through the preliminary technical assessments reported in the DES.

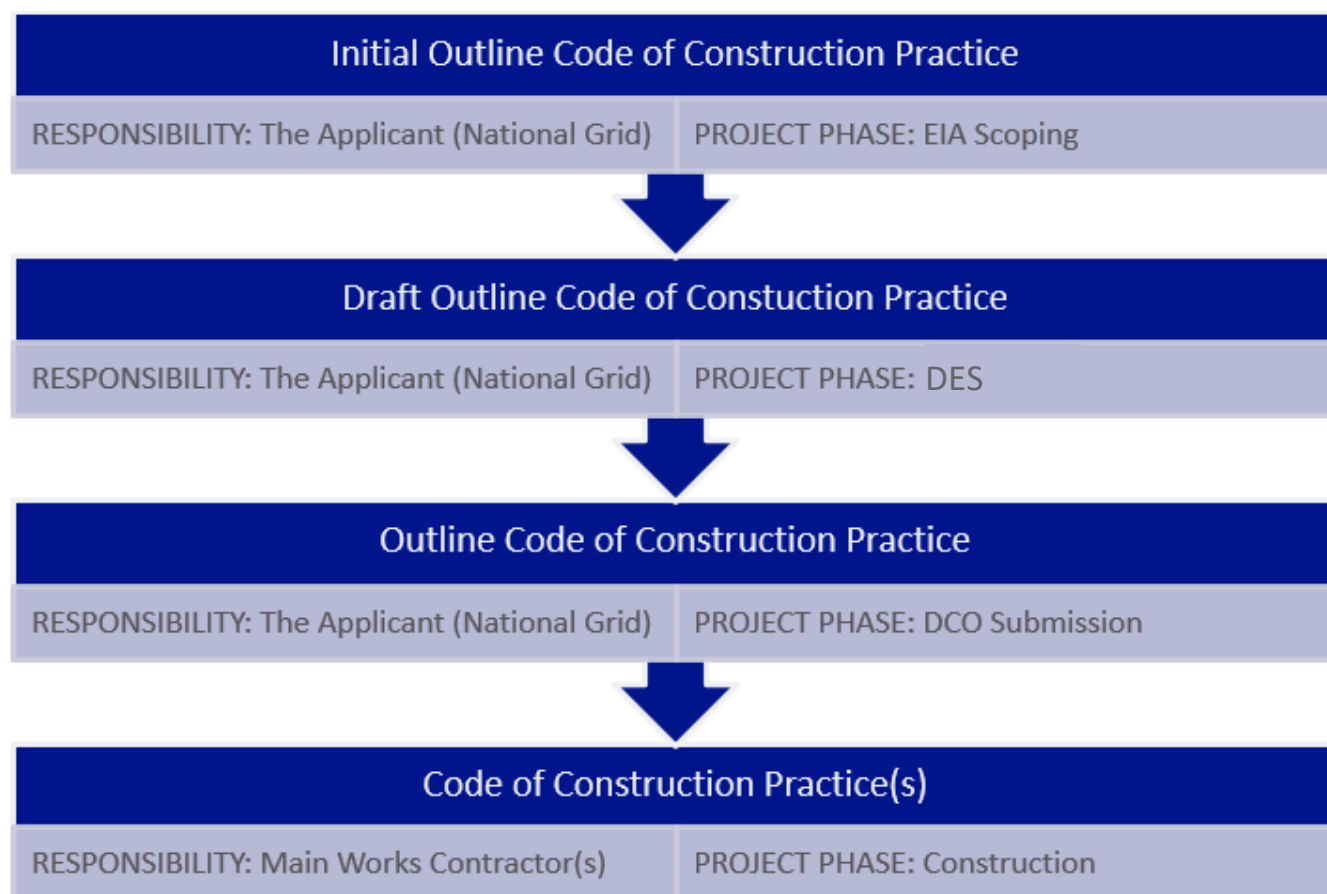
Stage 3: Outline CoCP (with the ES)

- 4A.3.4 This draft Outline CoCP, published with this DES at Stage 2 Consultation, will be updated to form the Outline CoCP, which will be submitted alongside the ES to support the application for development consent. The Outline CoCP will likely be the subject of discussion during the examination of the application for development consent and may be updated in the course of examination.
- 4A.3.5 The Outline Environmental Control Plans (ECPs), listed in **Table 4A.2** below, will be developed by the contractor(s) prior to the commencement of relevant works into final control plans.
- 4A.3.6 The mitigation measures and environmental commitments contained within the Final CoCP (stage 4) will be presented with reference to relevant Project Sections, ensuring that commitments and controls are reported in relation to their specific locations.
- 4A.3.7 The format of the Outline CoCP is also likely to differ from the draft Outline CoCP, to allow for the CoCP to be managed and implemented by multiple contractor(s) appointed to construct the Project.
- 4A.3.8 The Outline CoCP will be used to control any pre-commencement works.

Stage 4: CoCP

- 4A.3.9 The Outline CoCP will be developed into the Final CoCP (following detailed design) by the contractor(s), to discharge a DCO Requirement. The Final CoCP will be in accordance with the requirements of the Outline CoCP and will be developed prior to commencement of construction and adhered to throughout the construction phase.
- 4A.3.10 The CoCP will include specific organisational information such as organograms, contact details of the Environmental Managers/Environmental Clerks of Works, or specific organisational commitments.
- 4A.3.11 The Final CoCP will either be supported by outline or draft ECPs, or include requirements for those plans to be developed by the contractor(s) prior to the commencement of construction. Where relevant, the ECPs will include contractor-specific working methodologies.

Image 4A.1 Code of Construction Practice Process



4A.4 Construction Schedule

- 4A.4.1 Should development consent be granted in 2029, it is anticipated that access and construction of the Project would commence in 2030, starting with enabling works including site clearance activities and the installation of construction compounds and access roads. It is expected the main construction works would continue through to 2035.
- 4A.4.2 The phasing of the programme is yet to be confirmed. Further information will be contained in the Outline CoCP as previously noted.

4A.5 Roles and Responsibilities

Early Contractor Involvement

- 4A.5.1 The Project is part of the Great Grid Partnership, which has been established by National Grid to assist in delivering the new electricity network infrastructure. The partnership includes major contractors and consultants with a focus on network design and construction. This provides the Project with early involvement of construction contractors during the pre-application stage, bringing forward specialist contractor knowledge and expertise to inform design and production of key project deliverables, such as the Construction Environmental Management Plan (CEMP).

Environmental Management Systems

- 4A.5.2 National Grid and its supply chain will implement management processes and briefings so that the works are carried out in accordance with current legislation and guidance at the time of construction. This will be achieved by application of well-established work processes that apply the recognised British Standard (BS) EN ISO 14001:2026 (Ref 4A.2) or equivalent.
- 4A.5.3 The contractor(s) will have an Environmental Policy that meets the requirements of ISO 14001 or equivalent, through their internal Business Management System procedures. The policy statement will be displayed on the site notice boards, publicised to all site staff and operatives, and made available to interested parties upon request.

Project Responsibilities

- 4A.5.4 The Outline CoCP would include an organisational chart encompassing all staff roles responsible for environmental work. This will set out the respective roles and responsibilities about the environment and identify the nominated Construction Environmental Manager(s). Illustrative key roles and responsibilities are set out in **Table 4A.1**.

Table 4A.1 Illustrative key roles and responsibilities for the Project

Role	Organisation	Responsibilities
Environmental Manager(s)	Contractor(s)	The Environmental Manager(s) will be responsible for the maintenance of all environmental plans and registers, including monitoring that the environmental measures and mitigations are implemented on site as described in the CoCP and ECPs. They will be the main point of contact for all environmental matters on the Project. They will also develop good working relationships with external stakeholders such as the Environment Agency, Natural England, and the relevant planning authorities.
Environmental Clerk(s) of Works (EnvCoW)	Contractor(s)	The EnvCoW(s) will monitor the works to ensure that they proceed in accordance with relevant environmental DCO requirements and adhere to the required mitigation measures. The EnvCoW will be supported by appropriate technical specialist advisors depending on the location and potential effects.
Ecological Clerk(s) of Works (ECoW)	Contractor(s)	The ECoW(s) will monitor the works to ensure compliance with any licences, permits and consents obtained to avoid effects on protected species and habitats, along with ensuring compliance with environmental legislation. The ECoW will oversee ecological pre-construction surveys and will also manage ecological operatives engaged in ecological mitigation activities, such as undertaking ecological watching briefs and translocation of protected species.

Role	Organisation	Responsibilities
Arboricultural Clerk(s) of Works (ACoW)	Contractor(s)	The ACoW(s) will monitor works, conducted by a suitably qualified and experienced arboriculturist, to/within proximity to high grade trees, including trees under Tree Preservation Orders and veteran trees, to ensure relevant control measures are in place to protect these trees.
Permits and Consents Manager(s)	Contractor(s)	The Permits and Consents Manager(s) will collaborate with the Environmental Manager to draft and submit permits and consents on behalf of the Project, track the progress, provide updates, and communicate approvals.
Works Supervisor(s)	Contractor(s)	The Works Supervisor(s) will be responsible for delivering the works in accordance with the requirements of the CoCP and implementing good environmental practices required by the Environmental Manager(s). Works Supervisor(s) are responsible for managing operatives, plant, and their areas of work in accordance with the principles of good environmental practice.
Land Officer(s)	Contractor(s)	The Land Officer(s) will have an agricultural background and experience of working with utility companies. They will provide a single point of contact for both the contractor(s) and the landowner or occupier of the land. They will be responsible for delivering site access in line with pre-agreed timescales, help facilitate the dialogue between the contractor(s) and the landowner/occupier as necessary and will be the first point of contact for any issues escalated by the landowner/occupier or the contractor(s). They will be responsible for witnessing and agreeing all land condition surveys conducted by the contractor(s).
Technical specialist advisors	Contractor(s)/ National Grid	These might include an arboriculturist, land contamination specialist, soil specialist, ecologist, or archaeologist and will have the relevant experience to supervise their respective aspects of the works.

- 4A.5.5 This section will be further developed within the Outline CoCP, and subsequently within the Final CoCP, by the contractor(s) to include the following:
- Project organograms and contact details of the key staff;
 - lines of communication and reporting;
 - approaches for engagement with the community and stakeholders;
 - emergency procedures; and
 - specific organisational commitments.

4A.6 Control and Management Measures

- 4A.6.1 Control and management measures have been identified that would reduce impacts from the Project on the environment (**Table 4A.3**). These are generally standard measures that would normally be implemented on a well-run construction site, but also include a number of good practice measures that have been identified through the scoping work to support a proportionate assessment. They also include effective measures that have typically been employed on other projects, including those of National Grid.
- 4A.6.2 Control and management measures in **Table 4A.3** have been assigned a reference number, for example (GG01) for ease of cross-reference. The contractor(s) will comply with these measures during construction. Some abbreviations used in **Table 4A.3** below are defined in **Table 4A.2**.
- 4A.6.3 The CoCP, once approved by the relevant planning authorities, will be issued to contractor(s), and fed into the relevant contracts for the Weston Marsh to East Leicestershire construction works. The contractor(s) will prepare detailed management plans to explain how the management measures provided in the CoCP will be implemented and monitored.
- 4A.6.4 As described in paragraph 4A.3.11, ECPs may be prepared to accompany the CoCP. They will be further developed by the contractor(s) as a requirement of the CoCP which shall be secured as a requirement of the DCO. The final ECPs may be developed in consultation with the relevant planning authority. The contractor(s) would implement the Final CoCP and ECPs during the construction of the Project. The ECPs will detail further topic-specific environmental measures to avoid, reduce or (if required) compensate for any detrimental effects on the environment for example the Materials and Waste Management Plan (MWMP) which details how materials will be managed efficiently during construction.
- 4A.6.5 Whilst the Outline CoCP and any Outline ECPs will be expected to be approved during the DCO examination process, it is anticipated that DCO requirements will require the Final CoCP and ECPs to be submitted to and approved by the relevant planning authority. The anticipated ECPs are described in **Table 4A.2**.

Table 4A.2 Environmental Control Plans

Plan	Description
Construction Environmental Management Plan (CEMP)	Details how to mitigate and manage the identified environmental impacts during the construction of the Project.
Landscape Ecological Management Plan (LEMP)	Details how habitats and other ecological enhancements will be managed and maintained throughout the Project lifecycle.
Material and Waste Management Plan (MWMP)	Details how waste and materials will be managed efficiently and disposed of legally during the construction of the Project.
Construction Traffic Management Plan (CTMP)	Details the environmental and traffic control measures which may be implemented in relation to the traffic generated during the construction phase for the Project.

Plan	Description
Public Rights of Way Management Plan (PRoWMP)	Details the management and environmental measures strategy for all Public Rights of Way (PRoWs) and Open Access Land affected by the Project.
Outline Written Scheme of Investigation (WSI)	Details required measures to mitigate direct adverse impacts to the historic environment.
Soil Management Plan (SMP)	Details management measures to minimise adverse effects on the soil resource.

Table 4A.3 Control and management measures

Ref	Control and Management Measures
General Project commitments	
GG01	The Project will be compliant with all relevant legislation, consents and permits.
GG02	The Project will be designed to comply with existing National Grid standards and relevant external guidelines and policies relating to electric and magnetic fields (EMFs) as stated in National Policy Statement for Electricity Networks Infrastructure (EN-5) (Ref 4A.3), including the International Commission on Non-Ionising Radiation Protection (ICNIRP) guidelines for reducing effects in relation to EMFs. Compliance is mandated through National Grid's Technical Specifications and Policy Statements which dictates that all designs must comply with these EMF policies, ensuring the Project is designed to meet these obligations.
GG03	A Final CoCP (based on the provisions in the Outline CoCP) will be produced prior to the commencement of construction ¹ .
GG04	Suitably experienced Environmental Managers will be appointed for the duration of the construction phase. In addition, qualified and experienced EnvCoW(s) will be available during the construction phase to advise, supervise and report on the delivery of the mitigation methods and controls outlined in the Management Plans. The EnvCoW(s) will monitor that the works proceed in accordance with relevant environmental DCO requirements and adhere to the required good practice and mitigation measures. The EnvCoW(s) will be supported as necessary by appropriate specialists, including ecologists and arboriculturists, soils and land drainage experts.
GG05	Construction workers will undergo training to increase their awareness of environmental issues as applicable to their role on the Project. Topics will include but not be limited to: • pollution prevention and pollution incident response; • dust management and control measures; • location and protection of sensitive environmental sites and features;

¹ Measures GG03 and GG06 will be secured through the Requirements of the DCO.

Ref	Control and Management Measures
	• adherence to protected environmental areas around sensitive features; • working hours and noise and vibration reduction measures; • working with potentially contaminated materials; • waste management and storage; • flood risk response actions; • agreed construction traffic routes and access; • soil management; and • drainage management.
	Pre-commencement
GG06	A record of condition will be carried out (photographic and descriptive) of the working areas that may be affected by the construction activities, prior to works commencing. 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.
	Construction
GG07	A CEMP, LEMP, MWMP, CTMP, PRowMP, Overarching WSI, along with a SMP will be produced prior to construction. These are collectively referred to as ‘the Environmental Control Plans’ (ECPs).
GG08	The CEMP shall include measures to manage dust, waste, water, noise, vibration and soil during construction. The contractor(s) shall undertake regular site inspections to check conformance to the CEMP.
GG09	Land used temporarily will be reinstated where practicable to its pre-construction condition (including Agricultural Land Classification grade) and use. Hedgerows, fences, and walls (including associated earthworks and boundary features) will be reinstated to a similar style to those that were removed, unless otherwise agreed with the Local Planning Authority and/or landowner.
GG10	Where sensitive features such as ancient woodland and protected habitats are to be retained within or immediately adjacent to the Order Limits, an appropriate protective area will be established using appropriate fencing and signage and will be inspected, repaired, and replaced as necessary. The protective areas will be shown on the Retention and Reinstatement Plans contained within the LEMP.
	Construction site setup
GG11	The name and contact details for the Project will be displayed at the entrance to all compounds. This will include an emergency number.

Ref	Control and Management Measures
GG12	Any activity carried out or equipment located within a construction compound that may produce a noticeable nuisance, including but not limited to dust, noise, vibration and lighting, will be located away from sensitive receptors such as residential properties or ecological sites where practicable.
GG13	Appropriate site layout and housekeeping measures will be implemented by the contractor(s) at all construction sites. These will include but not be limited to: • preventing pests, controlling vermin and treating any infestation promptly, including arrangements for the proper storage and disposal of waste produced on site; • locating dust-generating materials, waste and equipment away from sensitive receptors, where practicable; • inspecting and collecting any waste or litter found on site; • monitoring the delivery of materials to site to ensure these are unloaded in a way that reduces the risk of damage; • locating or designing site offices and welfare facilities to limit the overlooking of residential properties and reduce visual intrusion, as far as practicable; • siting temporary construction compounds to avoid impacts on existing landscape features and key characteristics as far as practicable; • minimising the need for temporary access tracks, particularly associated with proposed reconductoring works (i.e. use of track pads or low impact vehicles); • locating designated smoking/vaping areas to avoid nuisance to neighbours; • managing staff/vehicles entering or leaving site, especially at the beginning and end of the working day; and • managing potential off-site contractor and visitor parking.
GG14	Vehicles will be correctly maintained and operated in accordance with manufacturer's recommendations and in a responsible manner. All plant and vehicles will be required to switch off their engines when not in use and when it is safe to do so. Plant and construction vehicles will conform to relevant applicable standards for the vehicle type as follows: • Euro 4 (NO_x) for petrol cars, vans and minibuses; • Euro 6 (NO_x and PM) for diesel cars, vans and minibuses; • Euro VI (NO_x and PM) for lorries, buses, coaches and Heavy Goods Vehicles (excluding specialist abnormal indivisible loads); and • Stage V (NO_x, PM, hydrocarbons, carbon monoxide (CO) and sulphur dioxide (SO₂)) for non-road engines (static plant and non-road mobile machinery).

Ref	Control and Management Measures
GG15	Materials and equipment will not be moved or handled unnecessarily. When loading and unloading materials from vehicles, including excavated materials, drop heights will be limited.
GG16	Fuels, oils and chemicals will be stored responsibly, away from sensitive water receptors. Where practicable, they will be stored >15 m from watercourses, ponds and groundwater dependent terrestrial ecosystems. Where it is not practicable to maintain a >15 m distance, additional measures will be identified and implemented. All refuelling, oiling and greasing of construction plant and equipment will take place above drip trays and away from drains as far as is reasonably practicable. Vehicles and plant will not be left unattended during refuelling. Appropriate spill kits will be made easily accessible for these activities. Potentially hazardous materials used during construction will be safely and securely stored including use of secondary containment where appropriate. Hazardous liquids will be protected either by double-walled tanks or stored in a bunded area with a capacity of at least 110% of the largest tank or 25% of the total storage capacity of all containers, whichever is greater. Spill kits will be located nearby.
GG17	Runoff across the site will be controlled through a variety of methods including header drains, buffer zones around watercourses, on-site ditches, silt traps and bunding. There will be no intentional discharge of site runoff to ditches, watercourses, drains or sewers without appropriate treatment and agreement of the appropriate authority (except in the case of an emergency). Where appropriate, clean surface water runoff may be discharged off-site, subject to suitable inspection, controls and agreement with the relevant authority. Any discharge to drains or sewers will be undertaken only where permitted and in accordance with relevant regulatory requirements.
GG18	Wash down of vehicles and equipment will take place in designated areas. Wash water will be prevented from passing untreated into watercourses and groundwater. Appropriate measures will include use of sediment traps or similar measures.
GG19	Wheel-washing facilities will be provided at each main compound, where appropriate. Road sweepers will be deployed on public roads where necessary to prevent excessive dust or mud deposits.
GG20	To avoid dust generation, earthworks and stockpiled soil will be protected by covering, seeding, or using water suppression where appropriate.
GG21	Bonfires and the burning of waste material on site will be prohibited.
GG22	Construction lighting will be of the lowest luminosity necessary to safely perform each task.
GG23	The Site Waste Management Plan (SWMP) shall be produced prior to construction and include (but not be limited to):

Ref	Control and Management Measures
	• waste forecasts; • assumptions on how waste will be reused, managed and disposed of in accordance with the waste hierarchy; • identification of recovery routes; and • records of waste arisings generated during construction (via waste data reporting templates), including quantities, waste types, recovery routes and final destinations. It will be required to follow the guidance in the Code of Practice developed by Contaminated Land: Applications in Real Environments (CL:AIRE) 'A Definition of Waste: Development Industry Code of Practice (DoWCoP)'. Dedicated waste management areas will be designed to sufficiently accommodate the types and volumes of waste produced and to reduce the risk of environmental impacts associated with storing waste on site (covered, secured and away from drainage).
GG24	An Emergency Action Plan will be developed for the construction phase which will outline procedures to be implemented in case of unplanned events, including but not limited to site flooding and pollution incidents.
GG25	Where necessary, temporary work pads of suitable materials (stone, wooden bog mats or similar) will be installed in areas where heavy equipment, such as cranes and piling rigs, are to be used. The work pads will provide stable working areas and will reduce disturbance to the ground by spreading loads. Also refer to AS09.
GG26	Working areas will be appropriately fenced when required. The type of fencing installed will depend on the area to be fenced and will take into consideration the level of security required in relation to the surrounding land and public access, rural or urban environment and arable or stock farming. For some locations the fence used may also serve to provide acoustic and visual screening of the work sites and reduce the potential for disturbance of users in the surrounding areas. Fencing will be regularly inspected and maintained and removed as part of the demobilisation unless otherwise specified.
Additional commitments	
GG27	Members of the community and local businesses will be kept regularly informed of the works through active community liaison and groups with local membership. This will include notification of noisy activities, heavy traffic periods and start and end dates of key phasing. A contact number will be provided which members of the public can use to raise any concerns or complaints about the Project. All construction-related complaints will be logged by the contractor(s) in a complaints register, together with a record of the responses given and actions taken.

Ref	Control and Management Measures
GG28	Active private water supplies will be identified with landowners through the landowner discussions. Appropriate protection measures will be considered during construction. In the event of a landowner or tenant reporting that installation activities have affected their private water supplies, an initial response will be provided. Where the installation works are confirmed to have affected a private water supply, an alternative water supply will be provided, as appropriate. The contractor shall be responsible for promptly investigating and remediating any pollution impacts to private water supplies, with all remedial measures agreed in consultation with the Environment Agency and other relevant stakeholders to ensure appropriate and compliant resolution.
GG29	The Contractor's Stakeholder Engagement Plan (or equivalent) shall include appropriate strategies and tools to tailor engagement to local needs, including effective communication with diverse and less heard groups. All communication shall be in plain English and translated information shall be provided where reasonable and upon request.
Landscape and visual	
LV01	A pre-condition survey will be undertaken to ensure appropriate reinstatement is undertaken. The contractor(s) will retain vegetation where practicable. The duration of temporary disturbance will be minimised, with reinstatement undertaken as soon as reasonably practicable following the completion of construction works. Any gaps in vegetation where construction access is required to pass through hedgerows will also be minimised, and planting with suitable native species will be provided to fill in the gaps as part of construction reinstatement. Where vegetation is lost and trees cannot be replaced in situ due to the restrictions associated with land rights required for operational safety, native shrub planting approved by National Grid will be used as a replacement, in accordance with the outline vegetation reinstatement plans included within the LEMP. Replacement vegetation will be planted as close by as practicable and will complement landscape character and be sympathetic to the local habitat type in order to maintain or enhance biodiversity value.
LV02	The contractor(s) will apply the relevant protective principles set out in British Standard (BS) 5837:2012 Trees in relation to design, demolition and construction (Ref 4A.4). This will be applied to those trees within the Order Limits which will be preserved through the construction phase, and to trees outside the Order Limits (either trees overhanging or adjacent and considered to be an obstruction) where such measures do not hinder or prevent the use of the relevant working width for construction. An ACoW will ensure the suitability of tree protection before and during the construction phase. All works to high grade trees, including trees under any Tree Preservation Orders and veteran trees, will be undertaken, or supervised by a suitably qualified arboriculturist.

Ref	Control and Management Measures
	Aftercare
LV03	A five-year aftercare period will be established for all reinstatement and mitigation planting, details of which will be set out in the LEMP.
	Lighting
LV04	Construction lighting will be directional and minimised where possible to reduce the intrusion into adjacent properties, protected species and habitats.
	Soil Surveys
LV05	Pre-construction soil surveys will be undertaken where necessary in areas of proposed mitigation planting where no existing soil survey data are available. This will support the soil management measures and inform selection of suitable plant species.
	Ecology and biodiversity
B01	The contractor(s) will comply with relevant protected species legislation. Appropriate licences will be obtained where necessary from Natural England or the Environment Agency for all works affecting protected species as identified by the Environmental Statement and through pre-construction surveys. All applicable works will be undertaken in accordance with the relevant requirements and conditions set out in those licences.
B02	Where practicable, vegetation with the potential to support breeding birds will not be removed during the main breeding bird season (01 March to 31 August). In the event that vegetation or any other feature is identified as having the potential to support breeding birds and is required to be removed during the main breeding bird season (01 March to 31 August) or, in the case of Schedule 1 birds (e.g. barn owl), is likely to be disturbed, then works will be undertaken in the presence of an EnvCoW. Appropriate protection measures will be put in place should active nests be found. These will include exclusion zones around active nests until chicks fledge or nests become inactive as determined by monitoring by the EnvCoW. Active nests of wild birds are protected at all times and therefore the same measures will be put in place if an active nest is identified at any time of year.
B03	Where there will be a risk of animal entrapment, a means of escape will be installed into all excavations left open overnight.
B04	To control the spread of invasive weeds in accordance with the Wildlife and Countryside Act 1981, any plant or machinery that has been used in areas contaminated with invasive species (both terrestrial and aquatic), such as Japanese knotweed and Himalayan balsam, will be thoroughly cleaned prior to being moved to other areas or removed from site. Appropriate records of inspection and cleaning will be maintained. Water used to clean vehicles will be discharged or emptied into the contaminated area to prevent the spread of the plant (through plant

Ref	Control and Management Measures
	propagules, e.g. seeds, rhizomes, fragments). The area will be cordoned off to prevent any inadvertent spreading. Where discharge is proposed, the area will be suitably treated and assessed prior to discharge. Any plant material or soil contaminated with plant propagules if removed from a site is classified as controlled waste and will be disposed of in a suitably licensed landfill site, accompanied by appropriate Waste Transfer documentation, and must comply with Section 34 of the Environmental Protection Act 1990.
B05	Subject to the location and scale of impact, suitable habitat for common reptiles will be identified by a suitably qualified ecologist. This will be subject to two-stage habitat manipulation that will take place between mid-March and mid-October. Firstly, vegetation will be cut to approximately 150 mm (with the arisings removed) under the supervision of an ECoW and the site left for a minimum of two days to allow reptiles to naturally disperse from the area. Secondly, vegetation will be cleared down to ground level under the supervision of an ECoW. Vegetation will be cleared using appropriate equipment based on the type of vegetation to be removed, the area affected, and the risk of mortality or injuring reptiles. Construction works could commence immediately after completion of the second stage if in accordance with all other requirements of the CoCP and supporting documentation. Reptile hibernacula will be retained and protected during construction where practicable. If unavoidable, the removal of vegetation and groundworks at hibernacula will be timed to avoid the hibernation season (late October to early March). Replacement hibernacula and refugia will be provided.
B06	Alternative roost structures (bat boxes) will be provided (with landowner consent) on retained trees within the Order Limits or areas outside the Order Limits agreed with landowners. Unless specified otherwise by the provisions of any protected species licence for bats, two boxes will be provided for each tree to be felled where Potential Roost Features (PRF) on that tree are classified as PRF-I bat roost potential (low-moderate roost suitability). Five boxes will be provided for each tree with PRF-M bat roost potential (high roost suitability) to be felled.
B07	Alternative barn owl breeding sites (barn owl boxes) will be provided (with landowner consent) on retained trees or poles within the Order Limits or areas outside the Order Limits agreed with landowners. Three boxes will be provided for any confirmed breeding site that is to be permanently or temporarily lost as a result of the proposed works. Two boxes will be provided for each breeding site impacted but not lost.
B08	Where the works require the crossing or removal of hedgerows, the gap will be reduced to a width required for safe working. Where hedge removals are necessary, 'dead hedging' should be used, where practicable, in the interim periods to retain connectivity during construction. Dead hedging can comprise vegetation arisings or artificial provision, such as willow screening panels or fencing covered in camouflage netting. New hedgerow planting will contain native, woody species of local provenance.

Ref	Control and Management Measures
B09	Habitat translocation or any species translocation (if required) that is not covered by protected species licences will be undertaken in accordance with a method statement. The method statement will be specific to the habitat type or species affected and will detail the appropriate construction methods, timing, management, receptor site preparation and post-construction habitat management and monitoring. The receptor site will be clearly identified and prepared in advance of translocation.
Historic environment	
H01	Known heritage assets and locations of known archaeological interest will have been identified by a programme of desk-based assessment and field evaluation prior to construction. Wherever possible, identified heritage assets and archaeological remains will be avoided by the Project design. Where avoidance has not been possible, archaeological mitigation measures comprising the preservation of archaeological remains, or a programme of archaeological investigation will be implemented. Areas of archaeological preservation, or where archaeological work is planned, will be demarcated using appropriate fencing and signage to prevent unintentional damage. The fencing and condition of the areas will be inspected, repaired, and replaced as necessary. The areas of archaeological preservation or investigation will be identified on plans within the Written Scheme of Investigation (WSI) and CEMP. Prior to construction, a suitably qualified and experienced (or team of suitably qualified and experienced) Archaeological Clerk of Works (ACoW) will be appointed to support with implementation of archaeological mitigation.
H02	Where a previously unknown heritage asset is discovered, or a known heritage asset proves to be more significant than foreseen at the time of application, the Project will inform the relevant authorities and will agree a solution that protects the significance of the new discovery, so far as is practicable, within the Project parameters. An outline process for dealing with the unexpected discovery of archaeological remains including human remains and treasure during construction will be set out in the Outline WSI and CEMP.
H03	Where practicable, the Project will maintain elements within the historic landscape such as vegetation and hedgerows (including reinstating hedgerows and fences).
Water environment	
W01	All works within main rivers or ordinary watercourses will be in accordance with a method approved under environmental permits issued under the Environmental Permitting Regulations 2016, the Land Drainage Act 1991, Internal Drainage Board (IDB) Byelaws (where relevant) or the protective provisions of the DCO for the benefit of the Environment Agency, Lead Local Flood Authorities (LLFAs) and IDBs.

Ref	Control and Management Measures
W02	For any open cut watercourse crossings and installation of vehicle crossing points, good practice measures will include but not be limited to, where practicable: • reducing the working width for open cut crossings of a main or ordinary watercourse whilst still providing safe working; • installation of a pollution boom downstream of open cut works; • the use and maintenance of temporary lagoons, tanks, bunds, silt fences or silt screens as required in accordance with an approved site-specific erosion and sediment control plan; • spill kits and sediment curtains readily available at all crossing points for downstream emergency use in the event of a pollution incident; • the use of all static plant such as pumps in appropriately sized spill trays; • preventing refuelling of any plant or vehicle within 15 m of a watercourse; • preventing storage of soil stockpiles within 15 m of a main river; • inspection of all plant, daily, for leaks of fuel or hydraulic fluids; and • reinstating the riparian vegetation and natural bed of the watercourse, using the material removed when appropriate, on completion of the works and compacting as necessary. If additional material is required, appropriately sized material of similar composition will be used. Any such material will be certified as compliant with relevant biosecurity best practice.
W03	Riverbank and in-channel vegetation will be retained where not directly affected by installation works. Where appropriate, natural substrate will be provided through temporary watercourse crossings.
W04	Where watercourses are to be crossed by construction traffic, measures to be applied include the use of temporary culverts or temporary spanned bridges. Once the temporary culvert is installed, typically the area above the temporary culvert will be backfilled and construction mats placed over the backfilled area to permit the passage of plant, equipment, materials, and people. Temporary culverts will be sized to reflect the span width and the estimated flow characteristics of the watercourse under peak flow conditions and kept free from debris. Where used, temporary bridges will be designed specifically to consider the span length and the weight and size of plant and equipment that will cross the bridge. Specific detailed designs for each watercourse crossing, consistent with these design principles, will be prepared by the construction contractor. These will be subject to the appropriate consent by the relevant drainage authority (Flood Risk Activities Permit from the Environment Agency for main rivers; Ordinary Watercourse Consent from the LLFA or IDB for ordinary watercourses).
W05	The contractor(s) will comply with all relevant consent conditions or DCO provisions regarding de-watering and other discharge activities. This will particularly be with regard to volumes and discharge rates and will include discharges to land, water bodies or third-party drains/sewers.

Ref	Control and Management Measures
W06	The Project will incorporate appropriate surface water drainage measures into its final design for the haul roads, access tracks, works compounds and laydown areas so that they do not lead to a significant increase in flood risk. Temporary haul routes within Flood Zone 3 and areas of high and medium risk of flooding from surface water will be removed at the end of the construction phase and the ground surface will be reinstated to pre-Project levels.
W07	The contractor(s) will subscribe to the Environment Agency's Floodline service, which provides advance warning of potential local flooding events, and subscribe to the Met Office's weather warnings email alerts system and any other relevant flood warning information. The contractor(s) will implement a suitable flood risk action plan, which will include appropriate evacuation procedures should a flood occur or be forecast.
W08	Active private water supplies will be identified with landowners through the landowner discussions. Appropriate measures will be considered during construction. In the event of a landowner or tenant reporting that installation activities have affected their private water supplies, an initial response will be provided within 24 hours. Where the installation works are confirmed to have affected a private water supply, an alternative water supply will be provided, as appropriate. The contractor shall be responsible for promptly investigating and remediating any pollution impacts to private water supplies, with all remedial measures agreed in consultation with the Environment Agency and other relevant stakeholders to ensure appropriate and compliant resolution.
W09	In the event of a significant spill (e.g. fuels, oils and chemicals) appropriate emergency response procedures will be implemented in accordance with the Construction Environmental Management Plan (CEMP) and Pollution Incident Response Plan. To determine if there are any private water supplies that might be affected; an assessment of the likelihood of groundwater contamination reaching identified private water supplies will be undertaken, and where a private water supply is judged likely to be affected, an alternative water supply will be provided, as appropriate. The contractor shall be responsible for promptly investigating and remediating any pollution impacts to private water supplies, with all remedial measures agreed in consultation with the Environment Agency and other relevant stakeholders to ensure appropriate and compliant resolution.
W10	Severance of existing land drainage routes, including agricultural field drainage systems, will be managed during construction through provision of temporary alternative drainage routes, and these drainage systems would be permanently reinstated to ensure their existing function is maintained.
W11	Appropriate control of runoff from working areas will be achieved through implementation of a Drainage Management Plan (DrMP) for the construction phase. The DrMP will use sustainable drainage systems (SuDS) principles, promoting infiltration of runoff wherever possible and

Ref	Control and Management Measures
	specifying appropriate treatment and attenuation storage to ensure any discharges to watercourses are uncontaminated and limited to greenfield rates. The DrMP will cover all aspects of construction works and temporary infrastructure. Drainage measures will be phased to be completed before the commencement of earthworks operations, in a specific area, and will be retained until the drainage system of the completed Project is fully operational, or site restoration works are completed in that specified area. This will include the temporary diversion of existing agricultural drainage around working areas, if required, followed by reinstatement on completion of works.
W12	Surface water monitoring may be required prior to and during construction to support the identification of potential pollution risks at an early stage and to ensure the effective operation of temporary drainage systems. Monitoring requirements will be confirmed in consultation with the Environment Agency. Should monitoring be deemed necessary, full details of the scope will be developed following DCO approval and set out within the Surface and Groundwater Management Plan, forming part of the CEMP.
Geology and hydrogeology	
GH01	Intrusive ground investigations and assessment will be undertaken prior to construction which will inform appropriate geotechnical design in relation to the site/structure-specific ground conditions including ground instability/adverse ground conditions.
GH02	Construction methods such as appropriate piling techniques will be required to minimise the risk of mixing of aquifer bodies through the creation of new pathways. This includes the provision of a Foundation Works Risk Assessment (FWRA), which will be undertaken once the proposed foundation solutions are known, in accordance with Environment Agency guidance (Ref 4A.5).
GH03	Use of appropriate occupational health and safety measures e.g. Personal Protective Equipment (PPE), and statutory health and safety compliance (e.g. compliance with The Confined Spaces Regulations 1997 in relation to ground gas from working in confined spaces/trenches) to minimise the risks associated with anticipated/unexpected contamination. This would be based on risk assessment informed by site-specific information.
GH04	Construction workers will be appropriately trained in the use and handling of chemicals and general construction site good environmental and waste management procedures should be utilised (e.g. regular vehicle checks, use of spill kits, correct waste storage and disposal).
GH05	All use and storage of chemicals to be undertaken in accordance with The Control of Pollution (Oil Storage) Regulations 2001; and Environment Agency guidance (Ref 4A.6).

Ref	Control and Management Measures
GH06	The control of earthworks or materials movement (including any re-use of materials) will only take place under appropriate Environmental Permits, exemptions or The Definition of Waste: The Development Industry Code of Practice (Ref 4A.7).
GH07	Any temporary dewatering activities during construction will be undertaken in accordance with Environment Agency guidance, and if required, an Abstraction Licence and Environmental Permit (for the discharge). As far as reasonably practicable, these will be limited to the depth and time required to facilitate construction activities, and be non-consumptive.
GH08	A protocol for dealing with any unexpected contamination will be included in the CEMP.
GH09	General good contamination avoidance and waste management procedures for construction sites (e.g. regular vehicle checks, use of spill kits, correct waste storage and disposal).
GH10	If required, herbicides to be used in accordance with relevant Department for Environment, Food and Rural Affairs (Defra) guidance (Ref 4A.8).
GH11	Any application of salt grit (for example, to prevent access tracks freezing) shall comply with recommended rates in 'Control of water pollution from linear construction projects - site guide (C648)' (Ref 4A.9) with appropriate measures implemented to control runoff during any application in Source Protection Zones.
GH12	All water discharges from site will be undertaken in accordance with the requirements of an approved Surface and Groundwater Management Plan to be in place prior to starting any works on the Project, and any permit/licence conditions applicable to the discharge activity. Where appropriate, pre-treatment of waters (e.g. de-silting) may be required in order to ensure these requirements are met prior to discharge.
GH13	Areas of hardstanding required for laydown and construction compounds will be minimised, to reduce the associated risk of reduction of recharge to groundwater.
Agriculture and soils	
AS01	Soil management measures will be set out in the SMP. The SMP will include, but not be limited to the following: • details of the soil resources present; • how topsoil and subsoil will be stripped and stockpiled; • suitable conditions for soil handling, for example avoiding handling of waterlogged soil; • indicative soil storage locations; • how soil stockpiles will be designed taking into consideration site conditions and the nature/composition of the soil; • specific measures for managing sensitive soils;

Ref	Control and Management Measures
	• suitable protective surfacing where soil stripping can be avoided, based on sensitivity of the environment and proposed works; • approach to reinstating soil that has been compacted, where required; • details of measures required for soil restoration; and • requirements for monitoring.
AS02	Where land is being returned to agricultural use on completion of construction, the appropriate soil conditions (for example through the replacement of stripped layers and the removal of any compaction) will be recreated in accordance with any specifications agreed with the landowner prior to commencing construction works on the land. This will be achieved to a depth of 1.2 m, or the maximum natural soil depth if this is shallower, reflecting established best practice for agricultural land reinstatement.
AS03	Access to and from residential, commercial, community and agricultural land uses will be maintained throughout the construction period or as agreed through the landowner discussions. This may require signed diversions or temporary restrictions to access. The means of access to affected properties, facilities and land parcels will be communicated to affected parties during the pre-construction period, with any changes communicated in advance of the change being implemented. Where field-to-field access points require alteration as a result of construction, alternative field access will be provided in consultation with the landowner/occupier.
AS04	Existing water supplies for livestock will be identified pre-construction. Where supplies will be lost or access compromised by construction works, temporary alternative supplies will be provided. Water supplies will be reinstated following construction in accordance with any specifications agreed with the landowner prior to commencing construction works that interfere with the water supply.
AS05	Consultation with affected landowners will be carried out to investigate the current extent of land drainage. A scheme of pre-construction land drainage will be designed with the intent of maintaining the efficiency of the existing land drainage system and to assist in maintaining the integrity of the working area during construction. The Project may include a system of 'cut-off' drains which feed into a new header drain and the Project will also take into account surface water runoff measures.
AS06	Should animal bones be discovered during construction, which may indicate a potential burial site, works will cease, and advice will be sought from the Animal Health Regional Office on how to proceed, relevant to the origin and age of the materials found.
AS07	All movement of plant and vehicles between fields will cease in the event of a notification by Defra of a disease outbreak in the vicinity of the site that requires the cessation of activities. Advice will be sought from Defra in order to develop suitable working methods required to reduce the biosecurity risk associated with the continuation of works.

Ref	Control and Management Measures
AS08	Vertical barriers, such as clay bungs, will be constructed within trench excavations where deemed necessary, to prevent the creation of preferential drainage pathways.
AS09	Temporary work pads of suitable materials (stone, wooden bog mats or similar) will be installed in areas where heavy equipment, such as cranes and piling rigs, are to be used, as outlined in GG25. The work pads will provide stable working areas and will reduce disturbance to the ground. The work pad area will be stripped of the topsoil (and subsoil where required), which will be stored and reinstated (following removal of the stone pad material) in accordance with the soil management measures outlined in the SMP.
AS10	Where reasonably practicable, soils stripped during construction will be retained and reused on site for reinstatement and restoration purposes. Soils will be handled, stored and replaced in accordance with good practice to protect soil structure, prevent compaction and maintain soil quality.
Traffic and transport	
TT01	The CTMP will set out measures to reduce route and journey mileage to and from, and around the site, and prevent nuisance to residents, businesses and the wider community caused by parking, vehicle movements and access restrictions. It will also provide suitable control for the means of access and egress to the public highway and set out measures for the maintenance and upkeep of the public highway. The plan will identify access for emergency vehicles and will also set out measures to reduce safety risks through construction vehicle and driver quality standards and measures to manage abnormal loads.
TT02	The contractor(s) will implement a monitoring and reporting system to check compliance with the measures set out within the CTMP. The contractor(s) will also monitor the number of construction vehicles on key approach routes between the site and the strategic and/or 'A' road network. Deviations from the authorised routes or changes to traffic levels that are higher than the CTMP assumptions will require discussion of the need for additional mitigation measures with highways authorities.
TT03	All affected PRowWs will be identified, and any potential permanent or temporary closures detailed in the DCO. All designated PRowWs crossing the working area will be managed, with access only closed for periods while construction activities occur. Any required diversions will be clearly marked at both ends with signage explaining the diversion, the duration of the diversion and a contact number for any concerns; and will be subject to a PRowWMP. PRowWs crossing the working areas and applications for their potential temporary closures, will be managed in discussion with the relevant local authorities. Access disruption will be reduced as reasonably practicable while construction activities occur.

Ref	Control and Management Measures
	Noise and vibration
NV01	Best Practicable Means (BPM), as defined under Section 72 of the Control of Pollution Act 1974 will be demonstrated at all times during construction works to minimise noise (including vibration) at neighbouring residential properties and other Noise Sensitive Receptors. BPM mitigation measures shall be considered in the following hierarchy: • Control at source – e.g. the selection of quiet and low vibration equipment, review of construction programme and methodology to consider quieter methods, and use of less intrusive alarms, such as broadband vehicle reversing warnings. • Control on site – e.g. location of equipment on site, control of working hours, the provision of acoustic enclosures, and screening, including local screening of equipment, perimeter hoarding or the use of temporary stockpiles to limit the hours of spoil movements.
NV02	Construction working will be undertaken as far as reasonably practicable within normal working hours set out within the DCO.
	Air quality
AQ01	Dust management plans will be prepared prior to the construction of each planned work package for the Project. Dust-emitting activities will be reduced by applying site-specific mitigation measures for high-risk sites during construction. Professional judgement is required for the mitigation measures, as it is difficult to provide generic guidance. These measures are not expected to be applied at all locations. These would include, but are not limited to, the following controls: Communications: • signs on the site boundary to include display of the name and contact details of person(s) accountable for air quality and dust issues; • Display the head or regional office contact information of the Main Works Contractor(s) • Implement a Dust Management Plan 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 • Record any exceptional incidents that cause dust and/or air emissions, either on or off-site and the action taken to resolve the situation in the log book • Hold regular liaison meetings with other high risk construction sites within 250 m of the site boundary, to ensure plans are co-ordinated and dust and particulate matter emissions are minimised

Ref	Control and Management Measures
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Monitoring:

- Undertake regular 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 LPA when asked. This should include regular dust soiling checks of surfaces such as street furniture and cars within 100 m of site boundary. The frequency and extent of dust soiling checks should be proportionate to site-specific risk and receptor sensitivity, and may be adjusted where necessary in consultation with the relevant LPA
- Carry out regular site inspections to monitor compliance with the Dust Management Plan, record inspection results and make an inspection log available to the LPA, when asked
- Increase the frequency of site inspections by the person 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 PM_{2.5} and PM₁₀ continuous monitoring locations with the LPA. Baseline monitoring will commence at least three months before work commences on site, at agreed locations where monitoring is considered to be necessary

Preparing and maintaining the site:

- Plan the site layout so that machinery and dust-causing activities are located away from receptors, as far as practicable or possible
- Erect solid screens or barriers around dusty activities or the site boundary that are at least as high as any stockpiles on site (where appropriate and practicable)
- Avoid site runoff of water or mud
- Keep site fencing, barriers and scaffolding clean using wet methods where appropriate
- Remove materials that have a potential to produce dust from site as soon as practicable, unless being re-used on site
- Cover, seed or fence stockpiles to prevent wind whipping (where needed and depending on duration)

Operating vehicle/machinery and sustainable travel:

- Ensure all vehicles switch off engines when stationary – no idling vehicles where practicable
- 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 on haul roads and work areas
- Implement a Construction Worker Travel Plan that supports and encourages sustainable travel (public transport, cycling, walking, and car-sharing)

Ref	Control and Management Measures
	Operations: • Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques, such as water sprays or local extraction where reasonably practicable • Ensure an adequate water supply on the site for effective dust /particulate matter suppression/ mitigation • Use enclosed chutes and conveyors and covered skips where reasonably practicable • Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use the 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 where practicable Waste Management: • Avoid bonfires and burning of waste materials Demolition: • Avoid explosive blasting, use appropriate manual or mechanical alternatives where reasonably practicable • Bag and remove any biological debris or damp down such material before demolition Earthworks: • Re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable in line with the Appendix 12A Draft Outline Soils Management Plan Construction: • 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 smaller 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 site. This may require the sweeper being continuously in use • Avoid dry sweeping of large areas • Ensure vehicles entering and leaving the site are covered to prevent escape of materials during transport where practicable • Inspect on-site haul roads for integrity and instigate necessary repairs to the surface as soon as reasonably practicable

Ref	Control and Management Measures
	- Record all inspections of haul roads and any subsequent actions in a site log book - Where practicable, install hard surfaced haul roads, which are regularly damped down with fixed or mobile sprinkler systems, or mobile water bowsers and regularly cleaned so far as is reasonably practicable - Access gates to be located at least 10 m from sensitive receptors (a location that may be affected by dust emissions during demolition and construction. Human receptors include locations where people spend time and where property may be impacted by dust. Ecological receptors are habitats that might be sensitive to dust) where practicable
AQ02	The contractor will ensure that soft strip will be used inside buildings prior to demolition (retaining walls and windows in the rest of buildings where possible, to provide a screen against dust). Sufficient effective water suppression will be used during demolition operations. The use of explosive blasting will be avoided where possible, using appropriate manual or mechanical alternatives.
AQ03	The contractor is to ensure exposed areas of earthworks are to be vegetated and stabilised as soon as practicable. Hessian, mulches or trackifiers will be used as soon as practicable where it is not possible to re-vegetate or cover with topsoil. Use of hessian, mulches or trackifiers where it is not possible to re-vegetate or cover with topsoil, as soon as practicable. Covers will only be removed in small areas during working.
AQ04	During construction, bulk cement and other fine powder materials are to be delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery. Sand and other aggregates are stored in bunding areas and not allowed to dry out, unless this is required for a particular process, in which case it will be ensured that appropriate control measures to reduce dust are in place. For smaller supplies of fine powder materials, bags are to be sealed after use and stored appropriately.
AQ05	The contractor is to inspect on-site haul routes for integrity and instigate necessary repairs to the surface as soon as reasonably practicable.
AQ06	Burning of waste materials and bonfires are not to be undertaken.
Socio-economics, recreation and tourism	
S01	Provision of briefing or training, where applicable, to construction workers, particularly in relation to working hours and the management of emissions (e.g. dust, noise, vibration).
S02	As set out in TT03, PRoWs including any promoted recreational routes crossing the working areas will be managed in discussion with the relevant local authorities and will be subject to a PRoWMP. This will ensure users of PRoWs, including any promoted recreational routes, are informed of any temporary or permanent diversions, which will help ensure any potential disruption is avoided or limited.

Ref	Control and Management Measures
	Climate change
CC01	The contractor(s) will develop and implement a Carbon Efficiency Plan as part of their Environmental Management System, to manage carbon emissions from construction activities. This may contain: • proposed measures to reduce significant sources of construction energy use (fuel/electricity) and associated emissions; • the approach to securing energy from renewable and/or zero or low emission sources; • the approach to energy and carbon dioxide reporting from relevant site activities including construction activities and the transportation of materials and waste; and • consideration of the procurement, maintenance and use of energy and carbon-efficient construction plant.
CC02	Mitigation measures set out within the Carbon Efficiency Plan may include: • a commitment to avoid or prevent greenhouse gas (GHG) emissions as far as reasonably practicable by maximising the potential for re-using and/or refurbishing existing assets to reduce the extent of new construction required, and/or explore alternative lower carbon options to deliver the Project objectives; • a commitment to reduce GHG emissions as far as reasonably practicable by implementing low carbon and/or reduced resource consumption solutions (including technologies, materials and products) to minimise resource consumption during construction, operation, and at end of life; • the design of the Project should minimise the requirement for energy-consuming operational equipment such as lighting wherever possible. Where lighting cannot be avoided, use of low lux and demand-sensitive lighting should be considered; • the contractor shall select materials with fewer embodied GHG emissions (e.g. where practicable, sustainable materials, materials with a higher recycled content and locally sourced materials should be selected), including where feasible, design for end of component lifespan (e.g. reuse or recovery); • use of renewable/zero or low carbon energy sources for construction vehicles, plant and machinery where reasonably practicable, e.g. electric vehicles and plant; • efficient use of construction plant and machinery, i.e., using appropriately sized plant and machinery, and switching off when not in use; • fuel use monitoring; • employing low carbon construction techniques; • keeping plant and machinery in good working order to maintain power efficiency; • sufficient training for operatives to use machinery and plant efficiently;

Ref	Control and Management Measures
	- the Project will aim to use local grid connections for temporary site power, where viable. Where not viable, an alternative sustainable option should be used, such as appropriately sized alternatively fuelled or hybrid generators for plant and any temporary buildings, etc, where practicable; - All Enterprise Partners shall ensure no diesel is used in the delivery of the works (including GI and survey works) where there are technically viable and sustainable alternatives available. This applies to any project-procured plant, equipment and vehicles. The design of the Project shall plan for the use of alternative fuels to diesel to achieve this requirement. If HVO is used, it should be sourced with the correct certifications and in line with responsible sourcing of HVO Supply Chain Sustainability School procurement guidance (Ref 4A.10); - nominating named individuals with responsibility for minimising energy use on site; - commitments to recycle/reuse demolition waste wherever practicable; - commitments to reduce water use and disposal; - provision of suitable thermal insulation for site accommodation to minimise energy demand for heating; - early connection to grid electricity to reduce use of mobile diesel energy generation; - efficient transportation of construction materials and waste transport, with the aim to use electric vehicles wherever practicable; - sourcing construction materials from local suppliers where practicable to reduce transport emissions; - promotion and provision of modes of sustainable transport for construction workers; - material excavated during construction should be processed for use in the works wherever possible to reduce the amount of material disposed of off-site as well as imported from other sources; - the Project design should carefully consider the use of appropriate tree and shrub species to reduce associated maintenance operations; and - once operational, asset data should be managed, maintained and monitored to ensure the Project design is operating as intended. Corrective action to be taken where necessary.
CC03	The contractor will pay due consideration to the impacts of extreme weather events and related conditions during construction. Measures will include, for example: - health and safety plans to prevent worker exhaustion due to heat. Supportive measures for working in high temperatures might include the provision of sunblock, sun hats and lightweight clothing, refreshment breaks and cooled water supply; - temporary buildings designed with measures to cool summertime overheating; and - safety measures to mitigate against issues caused by high winds, such as increased dust or damage to structures/construction plant.

Ref	Control and Management Measures
CC04	The contractor should use a short to medium-range weather forecasting service from the Met Office, or other approved meteorological data and weather forecast provider, to inform short to medium-term programme management, environmental control and impact mitigation measures, e.g. health and safety plans to include supportive measures for working in extreme high or low temperatures. The contractor's Environmental Management System will consider all measures deemed necessary and appropriate to manage severe weather events and should as a minimum cover training of personnel and prevention and monitoring arrangements. As appropriate, construction method statements should also consider severe weather events where risks have been identified.
CC05	An early warning system for wildfire detection and evacuation procedures for construction workers should be implemented alongside fire safety measures such as clearance of vegetation around temporary structures (where appropriate), access to fire extinguishing equipment, and evacuation protocols developed.

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