

REPORT

Boston Alternative Energy Facility

Outline Code of Construction Practice

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1 Outline Code of Construction Practice

1.1 Introduction

Background

- 1.1.1 This Outline Code of Construction Practice (OCoCP) relates to the Boston Alternative Energy Facility (the Facility). The OCoCP forms part of a set of documents that supports the Environmental Statement (ES) (document reference 6.2) submitted by the Applicant as part of the Development Consent Order (DCO) application.
- 1.1.2 A final detailed Code of Construction Practice (CoCP) will be produced post-consent, prior to construction of the Facility, and will follow the principles outlined within this OCoCP (as secured under Requirement 10 of the draft DCO (document reference 2.1)).
- 1.1.3 The final CoCP will provide a key mechanism, enforceable via the DCO, through which the relevant regulatory authorities can be assured that environmental impacts associated with construction of the Facility will be formally controlled and mitigated. The final CoCP will provide this control through agreed site practices and mitigation as outlined in this document.
- 1.1.4 This OCoCP reinforces commitments made in the ES (document reference 6.2).

1.1 Structure of the OCoCP

- 1.1.5 The OCoCP summarises the general principles and control measures to be adopted during construction of the Facility, and provides the framework for the preparation of the final, more detailed CoCP which will be developed post-consent.
- 1.1.6 A number of management plans will set out how the appointed principal contractor(s) (and any appointed subcontractors) will manage environmental risks associated with construction activities. These plans will set out specific control measures necessary to deliver the requirements of the CoCP and any other management and mitigation measures that the Applicant will implement, during the construction phase. These management plans and strategies are detailed in the sections below and summarised in **Table 1-1**.

Table 1-1 Code of Construction Practice

Description	Section of OCoCP
A Health and Safety Plan will include appropriate industry standards and will be adopted and implemented in line with the Construction (Design and Management) (CDM) Regulations 2015.	Section 2.2
A Surface and Foul Water Drainage Plan will be prepared which describes the approach to surface water and foul water drainage, and water supply during construction and details of existing drainage within the construction areas. The plan will detail local baseline conditions, and summarise the Water Framework Directive (WFD) assessment. The plan will detail any control measures and mitigation measures which will be implemented, along with any monitoring and reporting requirements, for construction drainage and surrounding land (in consultation with landowners where appropriate).	Section 11
A Construction Noise and Vibration Monitoring and Management Plan will be prepared which describes measures to minimise noise and vibration impacts on sensitive receptors and comply with relevant legislation, requirements, standards and best practice relating to construction noise. The plan will detail noise and vibration baseline conditions and assessments, and describe mitigation to minimise adverse impacts which will be followed for construction activities. The plan will also specify the procedures to be followed in the event of a noise or vibration environmental incident, alongside any monitoring or reporting which may be required.	Section 8
A Site Waste Management Plan will be prepared which describes measures to manage waste across the construction areas in accordance with a waste hierarchy to minimise, reuse and recycle waste materials. The plan will identify training and monitoring required, and highlight areas where best practice in waste management can be achieved to reduce the quantities of waste going to landfill, maximising opportunities for reuse and recycling that are cost neutral (or cost negative), and provides options for planning and processing waste during the construction and excavation activities.	Section 6
A Soil Management Plan will be prepared which describes methods to avoid mixing of topsoil and subsoil, minimise soil compaction and disturbance to the surrounding areas, and reinstatement of soils in general accordance with their original structure and location. The Soil Management Plan will require the production of Methods Statements for soil handling.	Section 5 and Section 7
A Materials Management Plan will be prepared which describes methods to quantify wastes generated from construction related excavation and its potential reuse, and the import and export of construction materials.	Section 6
An Air Quality and Dust Management Plan will be prepared describing control measures to manage dust and emission during construction works. The plan will detail air quality baseline conditions, and describe mitigation to minimise adverse impacts during the construction phase and any monitoring and reporting which may be required.	Section 9

Description	Section of OCoCP
<p>A Pollution Prevention and Incident Response Plan will be prepared which describes controls for the prevention of pollution which will be in place during construction works. The plan will include all emergency incident response procedures (including unconsented discharge to land or water, release of silt, emergency pollution events to air, flooding and extreme weather) and will detail key site and emergency contacts. The Pollution Prevention and Response Plan will require the production of a Groundwater Protection Method Statement and Construction Method Statements for the protection of onshore waters.</p>	<p>Section 4 and Section 5</p>
<p>An Artificial Light Emissions Management Plan will be prepared and implemented. The plan will detail the appropriate management and mitigation measures to be taken to manage artificial light emissions. The plan will detail any sensitive receptors, and describe the Artificial Light Emissions Management Plan which will be implemented, including lighting requirements, positioning and hours of operation, alongside any monitoring and reporting which might be required.</p>	<p>Section 3.7</p>
<p>The final CoCP would incorporate measures for reducing potential impacts on terrestrial ecology during construction.</p>	<p>Section 10</p>

1.1.7 The OCoCP describes the following:

- Section 2: General Principles
- Section 3: General Site Operations
- Section 4: Pollution Prevention and Incident Response
- Section 5: Contaminated Land and Groundwater
- Section 6: Waste Management
- Section 7: Soil Management
- Section 8: Noise and Vibration
- Section 9: Air Quality
- Section 10: Terrestrial Ecology
- Section 11: Surface Water and Drainage Management
- Section 12: Utility Providers
- Section 13: Monitoring and Site Inspections
- Section 14: Contingency Planning

1.2 Additional Plans

1.2.1 The following plans will also be prepared, but do not form part of the OCoCP or the final CoCP:

- A **Design and Access Statement** has been prepared detailing the design principles of the Facility. This has been submitted with this DCO application (document reference 5.3);
- A **Landscape and Ecological Mitigation Strategy** will be prepared and will set out the overarching principles of landscape and ecological management to be adhered to. This strategy will include the Applicant's approach to managing and committing to providing habitat enhancement as part of the mitigation strategy for loss of marine ecological habitat caused by the construction of the wharf. This will be developed in conjunction with the relevant ecological stakeholders. An Outline Landscape and Ecological Mitigation Strategy (OLEMS) (document reference, 7.4) has been submitted with this DCO application, ;
- An **Archaeological Written Scheme of Investigation (WSI)** will be prepared to outline what further archaeological work is to be done post consent before work can commence, and/or to deal with what would happen in the instance that some unknown archaeological assets are discovered during construction. An outline version of this plan has been submitted with this DCO application (Outline WSI, document reference, 7.3);
- A **Construction Traffic Management Plan (CTMP)** (which includes a Travel Plan) will be prepared, detailing the standards and procedures for managing the impact of Heavy Goods Vehicle (HGV) traffic during the construction period, including localised road improvements necessary to facilitate the safe use of the existing road network. This plan will also detail how construction personnel traffic would be managed and controlled. An outline version of this plan has been submitted with this DCO application (Outline CTMP, document reference 7.2);
- A **Navigation Management Plan (NMP)** will be produced in consultation with the Port of Boston to manage the potential impacts which could arise from the construction and operation of the Facility, in order to manage navigational safety and potential biosecurity risks introduced by vessels serving the Facility. The NMP will be produced during the design process when the design for the wharf is finalised and the contractor is in place and will define the potential risks taking into account the findings of Chapter 18 Navigational Issues (document reference 6.2.18) and the subsequent Navigational Risk Assessment. The production of a NMP is secured through Requirement 14 of the draft DCO.

- A **Flood Risk Emergency Plan** will be produced due to the high hazard rating and residual risk of a breach in the defences. The FREP will be produced in accordance with the 2019 Association of Directors of Environment, Economy, Planning and Transport (ADEPT) document “Flood risk emergency plans for new development”.

1.3 Purpose and Scope of final CoCP

- 1.3.1 The purpose of the final CoCP is to support and guide the principal contractor(s) (and any sub-contractors) to ensure that the construction of Facility complies with relevant European and UK legislation and requirements in the DCO. The document is also a mechanism to deliver environmental commitments as set out in the ES and to promote environmental and construction best practice. The final CoCP will set out the management measures which will be adopted in construction of the Facility. The final CoCP will be developed in conjunction with the relevant Contractor(s).
- 1.3.2 The final CoCP will be produced in accordance with Schedule 2, Part 1 – Requirement 10 of the draft DCO.
- 1.3.3 The OCoCP has been compiled with the objective of demonstrating environmental management controls in one cohesive document for the Facility.
- 1.3.4 The scope of this document is not intended to identify the responsibilities at an implementation level or provide specific detailed methods, but rather to highlight the proposed content of the final CoCP and outline the approach to be taken within the context of the wider framework of the Applicant’s environmental management controls.
- 1.3.5 Practical implementation and compliance arrangements associated with CoCP commitments will primarily be delivered via other associated and topic specific plans as identified in **Table 1-1**.

2 General Principles

2.1 Environmental Management Principles

2.1.1 During the construction phase, the Applicant will require all contractors to provide written processes and procedures by which risks associated with construction activities are managed. The Applicant will require contractors employed during the construction phase to operate an Environmental Management System (EMS) based on the requirements of ISO 14001:2015 or an equivalent recognised standard. The EMS will describe environmental policy commitments, such as compliance with relevant legislation and standards, pollution prevention and continual improvement in environmental performance and describes how they are measured, monitored and delivered.

2.1.2 Contractors undertaking work on behalf of the Applicant will be screened and selected using a variety of criteria that will include environmental credentials. Their EMS will, inter alia, provide for the preparation and implementation of a programme of environmental monitoring and auditing to ensure that the Applicant's environmental standards are being adhered to.

2.1.3 The Applicant will provide the final version of the CoCP to the relevant planning authority for review and approval. The measures and standards identified in the CoCP will then be implemented by the appointed Contractors.

2.2 Health and Safety Principles

2.2.1 The Applicant recognises that its decisions and activities may have a direct impact on the health, safety and welfare of those working for the Applicant and on their behalf. The Applicant will set specific health and safety goals and monitor performance in relation to the construction of the Facility. The final CoCP will include a health and safety plan, within which the Applicant (and any contractors employed to work during the construction phase) will:

- Demonstrate commitment to health and safety by their actions and behaviours;
- Ensure that Health and Safety issues are fully considered as an integral part of project management throughout the Facility's life; from design and through construction; following which, the principles will be adopted during operation and maintenance, and future decommissioning;
- Require all designers to consider and include the control measures necessary to minimise the risks to the health and safety of all those engaged in construction, maintenance (and demolition) of the Facility or to others who may be affected;

- Ensure that only suitably competent employees and other designers, engineers, supervisors and contractors are engaged to undertake the responsibilities associated with the Facility;
- Ensure that all products, materials and processes used in construction, operation and maintenance present no significant risk to the health and safety of persons carrying out those duties or to others who may be affected by that activity;
- Ensure that suitable and sufficient resources, (including labour, materials, time and finances), are made available to effectively manage the health and safety requirements;
- Require that parties involved in construction of the Facility have, where appropriate, a readily available, valid, suitable and sufficient Pre- Construction Information document and Health and Safety Plan as defined in the Construction (Design and Management) (CDM) Regulations 2015;
- Ensure that upon completion of construction a suitable and sufficient Health and Safety File is completed and transferred, where appropriate, to the Applicant; and
- Site access for members of the public shall be restricted during the construction phase of the project, to ensure public safety. Site access for all parties involved in construction will also be managed through a number of actions, including signing in procedures, exclusion zones and induction certificates. A method statement detailing the safety measures to be imposed on site will be prepared prior to the commencement of the development. All site visitors not directly involved in the construction works will be chaperoned.

2.3 Construction Principles

- 2.3.1 The Principal Contractor's appointed Construction Manager and delegated management team will be responsible for implementation of the CoCP provisions, and for ensuring that all construction contractors are in compliance with these requirements. The practical implementation arrangements and responsibilities conferred to the construction contractors will be detailed in further management protocols to be developed, such as the associated plans as identified in **Table 1-1**.
- 2.3.2 The provisions of the CoCP, will be incorporated into the contracts for the construction of the Facility and will be required to be adhered to. The Applicant and its contractors will be required to comply fully with the terms of the CoCP. The Construction Manager will be responsible for monitoring compliance of the CoCP by carrying out regular audits; and the Applicant will carry out periodic

independent audits to ensure that the CoCP is being complied with.

2.3.3 Aims of the final CoCP include the avoidance of nuisance to the public and to safeguard the environment during construction.

2.3.4 In addition to the arrangements under the CoCP, the appointed contractors will be encouraged to register with the Considerate Constructors Scheme¹ which is a voluntary code of practice that seeks to:

- Enhance the appearance of the site;
 - Constructors ensure sites appear professional and well managed.
- Secure everyone's safety;
 - Constructors attain the highest levels of safety performance.
- Respect the community;
 - Constructors give utmost consideration to their impact on neighbours and the public.
- Care for the workforce; and
 - Constructors provide a supportive and caring working environment.
- Protect the environment.
 - Constructors protect and enhance the environment.

2.4 Construction Method Statements

2.4.1 Detailed Construction Method Statements (CMS) will be developed by the Principal Contractor for relevant construction operations.

2.4.2 Each CMS will follow construction industry good practice guidance and adhere to the following:

- Environment Agency Pollution Prevention Guidance (PPG²) 01 – General guide to the prevention of water pollution;
- Environment Agency PPG05 – Works near or liable to affect watercourses;
- Environment Agency PPG06 – Working at construction and demolition sites;
- Environment Agency PPG08 – Storage and disposal of used oils;
- Environment Agency PPG11 – Preventing pollution at industrial sites;

¹ <https://www.ccscheme.org.uk/>

² N.B PPG guidance withdrawn in 2015 by the UK Government. Following which, Pollution Prevention for Businesses was published in 2016. The PPGs are revoked as regulatory guidance in England, but still provide a useful guide for best practice measures.

- Environment Agency PPG 21 – Pollution incident response planning;
- Environment Agency, Pollution Prevention for Businesses (2016);
- The Sustainable Drainage System (SuDS) Manual, C697/C753, CIRIA (2007 and 2015);
- Site Handbook for the Construction of SuDS, C698, CIRIA (2007);
- CIRIA Report C502 Environmental Good Practice on Site;
- CIRIA Report C532 Control of Water Pollution from Construction Sites;
- CIRIA Report C648 Control of Pollution from Linear Construction Project Technical Guidance;
- CIRIA Handbook C692 Environmental Good Practice on Site; and
- CIRIA Handbook C651 Environmental Good Practice on Site Checklist.

2.5 Local Community Liaison

- 2.5.1 The Applicant will ensure effective and open communication with local residents and businesses that may be affected by the construction works. Communications will be co-ordinated on site by a designated member of the construction management team who will be appointed as local community liaison officer.
- 2.5.2 A proactive public relations campaign will be maintained, keeping local residents informed of the type and timing of works involved, paying particular attention to activities which may occur in close proximity to receptors, or, for example, advanced warning of noisy activities such as piling. A combination of communication channels, for example information boards and parish council meetings, will be employed to keep local residents informed.
- 2.5.3 A designated local community liaison officer will respond to any public concerns, queries or complaints in a professional and diligent manner as set out by a project community and public relations procedure which will be submitted for comment to the relevant planning authority.
- 2.5.4 Parish Councils in the relevant area will be contacted (in writing) in advance of the proposed works and ahead of key milestones. This information will include indicative details for timetable of works, a schedule of working hours, the extent of the works, and a contact name, address and telephone number in case of complaint or query. Enquiries will be dealt with in an expedient and courteous manner. Any complaints will be logged, investigated and, where appropriate, rectifying action will be taken.

3 General Site Operations

3.1 Working Hours and Timing of Works

3.1.1 In general, construction activities would take place six days a week (Monday to Saturday) between 8am and 8pm (with an option of 7am to 7pm), with no bank holiday or public holiday working. Some activities, for example slip-forming may require 24 hour working, any additional activities other than those specified in the DCO would require prior approval of the relevant planning authority.

3.1.2 Where works are undertaken out with consented hours in response to emergency situations, the relevant planning authority will be advised as soon as practical, outlining the circumstances for the works, the likely duration and the management and mitigation measures implemented.

3.1.3 The Applicant will use best endeavours to sensitively time and minimise the duration of construction activities. The relevant planning authority will be advised of the likely timetable of works. This timetable will also be shared with affected communities through the local community liaison officer.

3.2 Construction Site Layout and Housekeeping

3.2.1 The final CoCP will include the final site layout of the Facility. Any changes to site layout or design following approval of the final CoCP will require updated layouts to be issued to the relevant planning authority in accordance with arrangements set out in the final CoCP.

3.2.2 A good housekeeping policy will be applied across all construction areas throughout the construction period. This will include the following requirements:

- All working areas will be kept in a clean and tidy condition;
- Open fires and burning of rubbish are prohibited at all times;
- Any weeds will be appropriately managed;
- Static plant will have suitable drip tray protection;
- A wheel washing service will be provided for all vehicles leaving the site to minimise trackout;
- Storage, machinery, equipment and temporary buildings will be carefully positioned to reduce environmental effects;
- Machinery, plant and equipment will be regularly serviced and maintained in accordance with manufacturers' instructions;

- A site layout map showing key areas such as material storage, spill kits, material and waste storage and drains will be printed off and placed on site notice boards;
- Appropriate lighting and security such as control of lighting/illumination to reduce visual intrusion or any adverse effects on sensitive receptors; and
- Adequate welfare facilities for staff, and designated smoking areas and containers for their waste.

3.3 Screening and Fencing

3.3.1 Requirement 10 provides that the final CoCP must include, “details of screening and fencing to be installed during construction”. Details of permanent and temporary fencing, walls and other means of enclosure will be in accordance with the specification for fences set out in the Specification for Highway Works, Vol. 3 (BS1722 Part 2), or equivalent, using single wire detail or sheep netting with similar horizontal spacing.

3.3.2 Details of temporary construction screening, fencing and site security will be included within the final CoCP based on the following:

- The Facility site will be enclosed by a temporary perimeter fence for the duration of the construction period with a permanent fence installed at the end of the construction works; and
- All working areas shall be sufficiently and adequately fenced off from members of the public and to prevent animals from straying on to the construction areas.

3.4 Site Induction

3.4.1 The construction of the Facility will require all personnel working on or attending site to have a site induction that includes an environmental protection and good practice component. Prior to commencing work on site, personnel must attend the site induction. Site inductions will include (*inter alia*):

- Key roles and responsibilities;
- Reference to compliance with relevant requirements / licence conditions;
- Environmental requirements (including the OCoCP);
- Environmental management structure and contacts;
- Pollution Prevention Plans;
- Site specific environmental sensitivities;
- Waste management arrangements;

- Water and wastewater management;
- Hazardous material management;
- Fuel, oil and chemical management;
- Spill contingency;
- Environmental emergency response;
- Relevant risk assessments and operating procedures;
- Reporting of incidents and complaints; and
- The relevant (mandatory) Personal Protective Equipment (PPE) requirements.

3.4.2 More specific information will be provided to staff according to their role and activities.

3.5 Site Security

3.5.1 Adequate security will be provided by contractors working on behalf of the Applicant to protect the public and staff, prevent theft from or damage to the works, and prevent unauthorised entry to or exit from the site. Site gates will be closed and locked when there is no site activity and appropriate security measures shall be implemented. Further details on site security measures will be provided in the final CoCP.

3.6 Welfare

3.6.1 Construction areas will be serviced by temporary construction offices and necessary welfare facilities, which may include mess rooms, locker rooms, showers and toilet facilities, plus facilities for mobile construction teams. These will be in compliance with relevant legislation and codes of practice.

3.7 Artificial Light Emissions

3.7.1 An Artificial Light Emissions Management Plan dealing with the construction phase will be prepared as part of the final CoCP and this will be adhered to throughout the construction of the relevant works

3.7.2 Details of the location, height, design and luminance of all floodlighting to be used during the construction of the Facility, together with measures to limit obtrusive glare to nearby residential properties, will be set out in the Artificial Light Emissions Management Plan.

3.7.3 Site lighting will be positioned and directed to minimise nuisance to footpath users,

residents and users of The Haven, to minimise distractions to navigation and to minimise sky glow, so far as reasonably practicable. Lighting spillage will also avoid or minimise impacts on ecological receptors, including nocturnal species.

3.7.4 Lighting requirements with regards to reducing impacts on bats could include the following:

- All temporary lighting to be designed in line with the Bat Conservation Trust (BCT) Bats and Lighting in the UK guidance (2018). This to include the use of directional lighting during construction;
- Construction phase lighting will be limited to permitted working hours in low light conditions, with lower-level security lighting outside of these times; and
- Ensure that dark corridors remain in place during the construction phase.

3.7.5 Lighting requirements with regards to minimising navigational distractions to users of The Haven would include:

- the careful locating of lighting columns within the Facility;
- the careful design of the lighting columns to ensure that they are no taller than needed;
- angling the face of lights downwards, away from the river and avoiding angling them up- or down-stream to prevent light spilling down The Haven;
- ensuring the lighting is passive, i.e. it automatically dims when there is no movement within the Facility such as when there is no construction activity at night; and
- restricting the use of mobile lighting that is taller than any fixed lighting columns and not operating such lighting outside of normal construction hours.

4 Pollution Prevention and Incident Response

- 4.1.1 As part of the final CoCP, a Pollution Prevention and Incident Response Plan will be prepared. The plan will include a response flow chart and detail how to report and deal with an environmental incident, including the measures available to contain/clean up an incident (e.g. spill kits, waste reception facilities). A contact list for notifying relevant stakeholders and the relevant timescales for which notification must be provided will be appended to the Plan.
- 4.1.2 Personnel working on site, including any subcontractors, will be trained in the Facility's environmental emergency response procedures, so that they are prepared and able to respond to an incident promptly and effectively. Where appropriate, the Applicant encourages environmental emergency response plans to be tested on-site in consultation with the relevant planning authority.
- 4.1.3 The main objectives with regard to managing potential hazardous materials are:
- Ensuring that appropriate measures are in place to prevent hazardous materials being released into the environment; and
 - Complying with relevant legislation and good practice associated with the storage and use of hazardous materials to prevent harm to human health and the environment.
- 4.1.4 The final CoCP will consider and outline controls associated with the delivery, storage and handling of hazardous materials and in particular oils and fuels taking into account the requirements of the Control of Pollution (Oil Storage) (England) Regulations 2001 and best practice guidelines (such as Pollution Prevention for Business).
- 4.1.5 The Pollution Prevention and Incident Response Plan will require the production of a Groundwater Protection Method Statement and Construction Method Statements for the protection of onshore waters.

4.2 Control Measures

- 4.2.1 The following best practice will be implemented:
- Oil and fuel will be stored in a bunded compound, the volume of which shall be at least equivalent to the capacity of the tank or tanks plus 10% and be located in designated areas taking into account security, the location of sensitive receptors and pathways such as drains and watercourses, and safe access and egress for plant and manual handling. Spill response materials

will be provided nearby and be readily accessible, with personnel trained in spill response;

- Oils and chemicals will be clearly labelled and the site should retain an up-to-date COSHH (Control of Substances Hazardous to Health) inventory, which identifies the location, quantity and types of chemicals being stored. Activities involving the handling of large quantities of hazardous materials, such as deliveries and refuelling, will be undertaken by designated and trained personnel;
- Oil, fuel and chemical storage areas will be inspected, at least weekly, for signs of spillage, leaks and damage. Rainwater, materials and general debris the collect in bunds and drip trays that compromise contingency storage shall be removed as part of the maintenance programme and in accordance with regulatory protocols;
- Inspection of all construction plant for fuel leaks will take place before being delivered to the working area;
- Facilities storing oils and fuels will be locked and made secure when not in use; and
- Small plant will be provided with drip trays or commercial 'plant nappies'.

Risks of Spillages Affecting the Marine Environment

4.2.2 Good environmental practices (as set out in the Construction Industry Research and Information Association (CIRIA): Coastal and Marine Environmental Site Guide, second edition, August 2015) during construction works will be followed to reduce the scale of certain impacts, particularly with respect to potential changes to water quality. This relates to maintaining equipment in good working order to reduce spillages and incidents that could cause pollution, ensuring that works where spillages could occur and could leak into the natural environment are bunded and that contingency planning measures are put into place to reduce the likelihood of issues arising if spillages do occur.

4.2.3 All work practices and vessels would adhere to the requirements of the International Convention for the Prevention of Pollution from Ships (MARPOL) 73/78; specifically Annex 1 Regulations for the prevention of pollution by oil concerning machine waters, bilge waters and deck drainage and Annex IV Regulations for the prevention of pollution by sewage from ships concerning black and grey waters.

4.2.4 Additionally, to reduce the scale of impacts from spillages to the marine

environment, all storage of oil/fuels/other potentially polluting liquids will be bunded, concrete sealed, and a SuD installed. If a discharge for the construction works is needed, a permit would be applied for to the Environment Agency to control any potential pollution incidents (see **Section 11**). Relevant parties would be informed of any pollution events. All management with regards to managing water pollution will be carried out through the IDB.

- 4.2.5 As part of the Pollution Prevention and Incident Response Plan, a contingency plan for any possible spillages during both construction and operation will be produced and will include potential for impacts, and all possible clean-up measures, and will be agreed with the nature conservation organisations.

5 Contaminated Land and Groundwater

5.1.1 **Chapter 11 Contaminated Land, Land Use and Hydrogeology** of the ES (document reference 6.2.11) identifies sensitive receptors to ground condition impacts (including groundwater) and management and mitigation measures proposed to reduce impacts. The control measures set out below are to be applied to ensure that any potential effects upon these receptors are adequately mitigated.

5.2 Control Measures

5.2.1 Good environmental practice shall be followed during the construction phase, in accordance with the Pollution Prevention Guidelines PPG (PPG1, PPG5, PPG6, PPG21 and PPG22)³ and current best practice guidelines. In addition, the following management measures shall be employed during the construction:

- All works/operations to be carried out by appropriately trained personnel;
- Appropriate PPE and working practices to be adopted by construction workers, including subcontractors, and health and safety measures would be undertaken to mitigate any short term risk during construction. A CDM Regulations site specific risk assessment will be developed;
- Adherence to a Pollution Prevention and Incident Response Plan (see **Section 4**) which will be drafted in advance of any construction works;
- Adoption of a CL:AIRE⁴ Industry Code of Practice (Definition of Waste Code of Practice (DoW CoP)) to manage excavated soils on site, thereby maximise sustainability and providing an audit trail to demonstrate the appropriate use of materials; and
- A Soil Management Plan (SMP) will be developed (see **Section 7**).

5.2.2 In the event that unexpected contamination is encountered, work in the area will cease on instruction by the Construction Manager or appointed delegate and be contained and made as safe as reasonably practical pending assessment by suitably qualified environmental specialist. Consultation with the relevant planning authority and the Environment Agency will be undertaken and agreement reached on plans for further investigation and remediation measures where necessary.

5.2.3 It may be necessary to collect soil or water samples for laboratory analysis. Some types of contamination may need to be removed to ensure the safety of

³ It should be noted that the Pollution Prevention Guidelines are no longer the current documents used by the Environment Agency, although the mitigation presented in the guidelines is still appropriate for managing pollution prevention on construction sites.

⁴ CL:AIRE is an environmental body providing training, information and resources for all those involved in sustainable land management. <https://www.clair.co.uk/>

construction workers, in which case this will be advised by a competent environmental specialist.

- 5.2.4 Where necessary, laboratory analysis will be completed allowing conclusions to be reached as to whether material needs to be removed from the construction area and sent to an authorised waste facility in accordance with the waste duty of care and the waste hierarchy.

6 Waste Management

6.1.1 **Chapter 23 Waste** of the ES (document reference 6.2.23) assesses the impacts of the Facility in terms of waste generation during the construction, operation and decommissioning phases. The Applicant will ensure that contractors manage waste in accordance with the waste duty of care, waste management legislation and the waste hierarchy by avoiding waste generation and promoting waste minimisation in the first instance. Contractors on site will be required to consider potential reuse or recycling or recovery options for waste on-site where practical and economically feasible before off-site disposal options are considered. This will be secured by the Site Waste Management Plan (see paragraph 6.2.2 below).

6.2 Control Measures

Materials Management Plan

6.2.1 A Materials Management Plan (MMP) will be drafted in advance of any construction works as part of the final CoCP. This plan will show how and where all materials on the ground are to be dealt with; and a tracking system to monitor excavated material movements as part of the 'cut and fill' requirements of the site, which will be clarified prior to construction; and also contingency measures must be defined, i.e. who takes responsibility and what happens in the event that the material is not suitable for use.

Site Waste Management Plan

6.2.2 A Site Waste Management Plan (SWMP) for the Facility will be developed as part of the final CoCP. The plan will manage construction waste in accordance with the waste hierarchy to minimise, reuse, recycle and recover waste materials. The plan will be developed in line with legislation and best practice and will record the following information, as a minimum:

- The types and quantities of waste generated (using the appropriate European Waste Catalogue (EWC) code and description for each waste type);
- The management approach for each waste type (Reduce, Reuse, Recycle, Recover, Dispose) including any treatment;
- The storage arrangements for each waste type; and
- The site waste monitoring and reporting arrangements.

General Waste Management Measures

6.2.3 In addition, the following management measures shall be employed during the construction:

- Adhere to waste legislation for storage and handling on-site and also ensure that the relevant regulatory controls have been applied to the reuse, recycling or recovery of waste on-site;
- No waste from the Facility shall be deposited outside the boundary of the site, unless it is at a facility that holds a valid environmental permit or suitable authorised exemption. Off-site waste management facilities are legally obliged to operate under an environmental permit (or an authorised exemption), which is in place to ensure that the site is operated in a manner to prevent emissions causing harm to human health or the environment;
- Ensure that those who remove waste from site have the appropriate authorisation (i.e. are registered waste carriers); and those facilities that receive waste from the site hold a valid environmental permit or authorised exemption;
- Allocate space on site for the storage of waste materials and ensure that storage areas and containers are clearly labelled so site workers know which wastes should be put there. Paved areas/impermeable surfaces may be required, as considered necessary, to prevent direct contact with the ground;
- Hazardous waste must be stored separately from non-hazardous wastes to avoid contamination. The Hazardous Waste Regulations make it illegal to mix hazardous waste with non-hazardous waste;
- Provide separate containers for dry recyclables, such as paper and cardboard, plastic, glass, wood and metal. This would encourage recycling and increase the potential value of the recyclable items by avoiding contamination;
- Monitor the actual quantities of wastes produced during construction and update the SWMP to allow comparison with waste arisings estimated prior to construction. Record the proposed waste management option (e.g. reuse on site, recycle off-site, or dispose off-site) for each waste produced;
- Site waste will be segregated as far as practical (and at a minimum to separate hazardous wastes) and stored in labelled and secure facilities;
- Duty of Care requirements in relation to the storage, transfer and disposal of waste will be complied with;
- Site waste management and environmental, health and safety plans will be prepared in advance of all construction or other disruptive site works;
- All personnel will be fully trained in these matters to ensure compliance;
- Site waste management will feature as a topic in the site environmental induction, which all staff working on site must attend, which will be supplemented by Tool Box Talks (TBT's);

- All wastes that are removed off site would be described on a waste transfer note or hazardous waste consignment note (as appropriate) that tracks the movement of the waste to the specified disposal or recovery facility; and
- The appointed contractors should identify appropriate staff that are responsible for waste management; and ensure that all contractor staff are aware of the appropriate reuse, recovery or disposal routes for each waste.

6.3 Monitoring

- 6.3.1 Waste arisings, transfers and disposals will be monitored by the appointed Contractor(s) through the SWMP. Additional monitoring measures are outlined in **Section 13**.

7 Soil Management

7.1.1 **Chapter 11 Contaminated Land, Land Use and Hydrogeology** (document reference 6.2.11) and **Chapter 13 Surface Water, Flood Risk and Drainage Strategy** (document reference 6.2.13) of the ES identifies the soil resource potentially affected by the Facility. There is the potential for soil compaction and erosion as well as changes to soil drainage during the construction process. Measures will be implemented on site to minimise any effects. The Soil Management Plan will require the production of Methods Statements for soil handling.

7.2 Control Measures

7.2.1 A Soil Management Plan (SMP) including CMS for soil handling, would be produced by a competent soil science contractor or competent environmental consultant and agreed with the relevant planning authority in advance of the works. This would be completed pre-construction once an earthworks contractor has been appointed and detailed earthworks phasing information is available.

7.2.2 The earthworks contractor would be required to comply with the SMP. The SMP will typically include the following measures:

- Soils handling, storage and reinstatement by a competent contractor under Defra (2009) Construction code of practice for the Sustainable Use of Soils on Construction Sites;
- Topsoil stripping within all construction areas and storage adjacent to where it is extracted, where practical;
- Storage of the excavated subsoil separately from the topsoil, with sufficient separation to ensure segregation;
- Handling of soils according to their characteristics. Topsoil from agricultural land may be treated as a single resource for stockpiling and reuse;
- Where under storage areas, loosening of subsoils is proposed when dry to improve permeability before the topsoil is replaced;
- For most after-uses, subsoils may be treated as a single resource for stockpiling;
- During wet periods, limiting mechanised soil handling in areas where soils are highly vulnerable to compaction;
- Restricting movements of heavy plant and vehicles to specific routes and avoidance of trafficking of construction vehicles in areas of the site which are not subject to construction phase earthworks;

- Minimising the excavation footprint where possible; and
- In circumstances where construction has resulted in soil compaction, further remediation may be provided, through an agreed remediation strategy

8 Noise and Vibration Management

8.1.1 There is the potential for noise to be generated during the construction process, from for example heavy plant and machinery, as identified in **Chapter 10 Noise and Vibration** of the ES (document number 6.2.10). Measures will be implemented on site to minimise any effects and a programme of monitoring may be required.

8.1.2 The main objectives with regard to managing construction noise are to:

- Minimise noise and vibration impacts on nearby residents and other sensitive receptors to acceptable levels; and
- Comply with relevant legislation, requirements, standards and best practice relating to construction noise.

8.2 Control Measures

8.2.1 A Construction Noise and Vibration Monitoring Management Plan will be submitted to and approved by the relevant planning authority and form part of the final CoCP.

8.2.2 The ES identifies receptors that are potentially sensitive to noise and vibration impacts, including both on site construction noise and noise from construction traffic, together with management and mitigation measures for the project. Standard noise and vibration mitigation techniques will be considered, such as specified working times and use of low noise emitting plant and equipment, detail of these measures shall be presented in the final CoCP. As a minimum, the following standards shall be adhered to:

- BS 5228:2009+A1:2014 - Noise and vibration control on construction and open sites;
- BS4142:2014 – Rating and assessment of industrial and/or commercial sound;
- Environmental Protection Act 1990 Part III; and
- Noise and Statutory Nuisance Act 1993.

8.2.3 Best practice noise mitigation measures, to be implemented and controlled through the Construction Noise and Vibration Monitoring and Management Plan, will typically include:

- Management of construction operating hours;
- Use of screens and noise barriers / acoustic screens, where appropriate;

- Construction site layout to minimise or avoid reversing with use of banksmen where appropriate. Output noise from reversing alarms set at levels for health and safety compliance;
- Use of modern, fit for purpose, well maintained plant and equipment to minimise noise generation.
- Plant and vehicles will be fitted with mufflers / silencers maintained in good working order.
- Use of silenced equipment, as far as possible and low impact type compressors and generators fitted with lined and sealed acoustic covers.
- Doors and covers housing noise emitting plant will be kept closed when machines are in use.
- The positioning and specification of any generators used close to residential properties shall be positioned so as to ensure compliance with the assessed noise guidance thresholds.
- No audible music or radios to be played outside on site;
- Ensuring engines are switched off when machines are idle;
- Regular communication with site neighbours to inform them of the construction schedule, and when noisy activities are likely to occur; and
- Use of pre-construction surveys to identify road surface irregularities which require remediation in order to mitigate vibration impacts (including monitoring of haul road condition).

8.2.4 A CTMP, under requirement 12 of the draft DCO, will also be submitted to and approved by the relevant planning authority which will outline measures to minimise noise impacts of construction vehicles.

8.3 Monitoring

8.3.1 The Construction Noise and Vibration Monitoring and Management Plan will set out a procedure for monitoring of the management and mitigation measures. If it is deemed by the relevant planning authority that during construction monitoring of construction noise is necessary, then the locations for such monitoring will be agreed in advance with the relevant planning authority. Additional monitoring of management and mitigation measure is described in **Section 13**.

9 Air Quality Management

9.1.1 **Chapter 14 Air Quality** of the ES (document reference 6.2.14) identifies receptors that are potentially sensitive to air and dust emissions. The control measures set out below in **Section 9.2** are to be applied in order to ensure that any potential effects upon these receptors are adequately mitigated.

9.2 Control Measures

9.2.1 A number of management and mitigation measures in relation to the emission of dust and other emissions during construction works have been identified.

9.2.2 An Air Quality and Dust Management Plan (AQDMP) will be developed and implemented as part of the final CoCP, which may include measures to control other emissions

9.2.3 Contact details of person(s) accountable for air quality and dust issues and the head or regional office contact information shall be clearly displayed at suitable positions along the site boundary to allow members of the public to raise comments on air quality and dust matters.

Construction Traffic Related Air Quality Management

9.2.4 The movement of HGVs travelling to construction sites can influence air quality and as such the emissions associated with vehicle movements are taken account of in the strategies used to manage traffic. A commitment will be included within the CTMP which will require all construction vehicles to comply with the Euro VI emission standard where practicable (however, it is noted that some specialist vehicles may not be able to comply with this requirement). Project-related emissions would therefore be minimised insofar as is possible.

Mitigation Measures

Dust Management

9.2.5 Throughout the construction works, the following dust management measures are highly recommended to be implemented where possible to maintain suspended particulates to suitable levels.

- 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 Boston Borough Council (BBC) when asked.

- Record any exceptional incidents that cause dust and/or air emissions, either on- or offsite, and the action taken to resolve the situation in the log book.
- Carry out regular site inspections to monitor compliance with the DMP, record inspection results and make an inspection log available to BBC 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.
- Plan the site layout so that machinery and dust causing activities are located away from receptors, as far as is practicable.
- Erect solid screens or barriers around dusty activities, or the site boundary, that are at least as high as any stockpiles on site.
- Fully enclose site or specific operations where there is a high potential for dust production and the site is active for an extensive period.
- Take measures to control site runoff 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 possible.
- Cover, seed or fence stockpiles to prevent wind whipping.
- Ensure all vehicles switch off engines when stationary - no idling vehicles.
- Avoid the use of diesel or petrol-powered generators and use mains electricity or battery powered equipment where practicable.
- Produce a CTMP to manage the sustainable delivery of goods and materials.
- 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 possible and appropriate.
- Use enclosed chutes and conveyors and covered skips.
- Minimise drop heights from conveyors, 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.

- Bonfires and burning of waste materials should not be permitted.
- Undertake daily on-site and off-site inspection, where receptors (including roads) are nearby, to note any dust deposition, record inspection results, and make the log available to the relevant planning authority when asked.
- Impose and signpost a maximum-speed-limit of 15 mph on surfaced, and 10 mph on unsurfaced, haul roads and work areas.
- Implement the travel plan principles identified in the CTMP, which supports and encourages sustainable travel for contractor operatives and staff (public transport, cycling, walking, and car-sharing).

Measures Specific to 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.
- Avoid scabbling (roughening of concrete surfaces) if possible.
- 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.

Measure Specific to Trackout

- Use water-assisted dust sweeper(s) on the access and local roads, to remove, as necessary, any material tracked out of the site.
- Avoid dry sweeping of large areas.
- Ensure loaded 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 log book.
- Install hard surfaced haul routes, which 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 site where reasonably practicable.

- 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.
- Locate site access gates at least 10 m from receptors where possible.

Measures Specific to Earthworks

- Re-vegetate or cover earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable.
- Use Hessian, mulches or tackifiers where it is not possible to re-vegetate or cover with topsoil, as soon as practicable.
- Only remove the cover in small areas during work and not all at once.

Measures Specific to Non-Road Mobile Machinery (NRMM)

9.2.6 Non-Road Mobile Machinery (NRMM) and plant would be well maintained. If any emissions of dark smoke occur, then the relevant machinery should stop immediately, and any problem rectified. In addition, the following controls should apply to NRMM:

- All NRMM should use fuel equivalent to ultralow sulphur diesel (fuel meeting the specification within EN590:2004).
- All NRMM should comply with regulation (EU) 2016/1628 of the European Parliament and of the Council on requirements relating to gaseous and particulate pollutant emission limits and type-approval for internal combustion engines for non-road mobile machinery.
- All NRMM should be fitted with Diesel Particulate Filters (DPF) conforming to defined and demonstrated filtration efficiency (load/duty cycle permitting).
- The ongoing conformity of plant retrofitted with DPF, to a defined performance standard, should be ensured through a programme of onsite checks.
- Fuel conservation measures should be implemented, including instructions to:
 - throttle down or switch off idle construction equipment;
 - switch off the engines of trucks while they are waiting to access the site and while they are being loaded or unloaded; and
 - ensure equipment is properly maintained to ensure efficient fuel consumption.

10 Terrestrial Ecology

- 10.1.1 **Chapter 12 Terrestrial Ecology** of the ES (document reference 6.2.12) includes applicable management and mitigation measures for the construction and operational phases. The measures have been provided to reduce the impact of the Facility on terrestrial ecology.
- 10.1.2 The proposed design has where possible avoided sensitive ecological receptors such as habitats and/or features known to support legally protected species. Where this is not possible, and habitats and/or features require removal, these will be programmed to be removed to avoid sensitive periods (i.e. outside of nesting bird season). In addition, suitable maintenance of any newly planted habitats following construction will have an aftercare period, with any failures being replaced.
- 10.1.3 Lighting requirements associated with the Facility would be designed to be sensitive to bats and birds in accordance with the relevant and most recent industry guidance. The lighting requirements are provided in **Section 3.7**.
- 10.1.4 The OLEMS (document reference 7.4) will set out the overarching principles of landscape and ecological management to be adhered to.

10.2 Control Measures

- 10.2.1 In addition to the embedded mitigation measures, species specific mitigation measures are considered below.

Reptiles

- 10.2.2 Mitigation measures will include the adherence to a precautionary method of working (PMoW) during construction, including tool box talks, habitat manipulation and ecological supervision. This PMoW comprises the implementation of reptile sensitive clearance methodology (under ecological supervision) prior to any construction works within the footprint of the Facility. This will ensure that any reptiles are safeguarded from the construction process.

Birds

- 10.2.3 Should there be a requirement for vegetation to be removed during the nesting bird season (March – August inclusive), a check of any vegetation to be removed would be required. A competent ecologist will need to check the area for nesting birds a maximum of 48 hours prior to the commencement of the works. Active nests and their associated vegetation/location must remain until young birds have left the nest and during this period an alternative approach to the works must be

undertaken.

11 Surface Water and Drainage Management

11.1.1 **Chapter 13 Surface Water, Flood Risk and Drainage Strategy** of the ES (document reference 6.2.13) includes applicable management and mitigation measures for the construction and operational phases. The measures have been provided to reduce the impact of the Facility on surface and groundwater resources. The main objectives with regards to managing potential surface water and foul water drainage are as follows:

- To protect surface and groundwater by ensuring that appropriate measures are in place to prevent contaminants (e.g. sediment release) from entering the surrounding environment and in particular pathways that might lead to water receptors. An overview of proposed controls for hazardous materials is provided in **Section 11.2**.
- To comply with relevant legislation and good practice in terms of managing surface and foul water abstractions and discharges.
- To maintain and protect private water supplies during construction.

11.1.2 In particular, the control measures are designed to manage flood risk. Control measures identified are set out below.

11.2 Control Measures

11.2.1 A Surface and Foul Water Drainage Plan (SWDP) will be produced as part of the final CoCP. This is discussed further in the following sections.

11.2.2 Post construction surface water drainage requirements will be presented in the final SWDP and will be designed to meet the requirements of the National Planning Policy Framework (NPPF) and National Policy Statement (NPS) EN-1, with runoff limited, where feasible, through the use of infiltration techniques which can be accommodated within the area of development.

11.2.3 The drainage strategy will be developed according to the principles of the sustainable drainage system (SuDS) discharge hierarchy.

Sediment Management

11.2.4 To minimise potential impacts from the construction phase on land, surface water or groundwater receptors, where possible, the following measures will be implemented:

- A Construction Method Statement (CMS) will be developed for the construction activities and will adhere to construction industry good practice guidance as detailed in the PPG notes (including PPG01, PPG05, PPG08 and PPG21) (EA, 2007) and CIRIA's 'Control of water pollution from construction sites: Guidance for consultants and contractors (C532)' (CIRIA, 2001). Specific measures to control sediment supply that will be captured within the CMS include:
 - Temporary works areas (e.g. mobilisation and storage areas) within the development area will comprise hardstanding of permeable gravel aggregate underlain by geotextile, or other suitable material to a minimum of 50% of the total area to minimise the area of open ground.
 - Subsoil exposure will be minimised and strips of undisturbed vegetation will be retained on the edge of the working area where possible (e.g. buffer zones along the drainage ditches).
 - On-site retention of sediment will be maximised by routing all drainage through the site drainage system.
 - The drainage system will include silt fences at the foot of soil storage areas to intercept sediment runoff at source. Where practicable, runoff will be routed into swales, which incorporate check dams to further intercept sediment and/or attenuation ponds which incorporate sediment forebays. Suitable filters will be used to remove sediment from any water discharged into the surface drainage network;
 - Additional silt fences will be included in parts of the working area that are in proximity to surface drainage channels.
 - Soil and sediment accumulation on road surfaces will be minimised as far as reasonably practicable by washing the wheels of vehicles leaving site and, where required, clearance of the road surface. Traffic movement would be restricted to minimise the potential for surface disturbance.

Pollution Prevention

11.2.5 Specific measures relating to pollution prevention that will be captured within the CMS will typically include:

- Concrete and cement mixing and washing areas will be situated at least 10m away from the nearest watercourse. These will incorporate settlement and recirculation systems to allow water to be re-used. All washing out of equipment will be undertaken in a contained area, and all water will be collected for off-site disposal.

- All fuels, oils, lubricants and other chemicals will be stored in an impermeable bund with at least 110% of the stored capacity. Damaged containers will be removed from site. All refuelling will take place in a dedicated impermeable area, using a bunded bowser. The refuelling and fuel storage area will be located at least 10m from the nearest watercourse. Biodegradable oils will be used where possible.
- Spill kits will be available on site at all times. Sand bags or stop logs will also be available for deployment on the outlets from the site drainage system in case of emergency spillages.
- Foul drainage (e.g. from construction welfare facilities) will be collected through a mains connection to an existing mains sewer (if a suitable connection is identified as being available or a spur connection to the site can be implemented from an existing mains sewer line, following consultation with Anglian Water during the design process), or collected in a septic tank located within the development boundary and transported off site for disposal at a licensed facility. The specific approach to dealing with foul drainage will be determined during detailed design with consideration of the availability of mains connections and the number of working hours for site attendees.

Site Drainage

11.2.6 Specific measures to manage site drainage that will be captured within the final CoCP and associated plans include:

- Changes in surface water runoff as a result of the increase in impermeable area from the development will be attenuated and discharged at a controlled rate, in consultation with the Lead Local Flood Authority (LLFA), Black Sluice Internal Drainage Board (IDB) and Environment Agency.
- The controlled runoff rate will be equivalent to the greenfield runoff rate.
- A SWDP will be implemented to minimise water within the construction areas and ensure ongoing drainage of surrounding land. This will comprise a sealed surface water drainage system where water enters the excavations during construction from surface runoff or groundwater seepage and is then pumped via settling tanks, sediment basins or mobile treatment facilities to remove sediment, before being discharged into local ditches or drains via temporary interceptor drains in order to prevent increases in fine sediment supply to the watercourses.

Measures for in-situ concrete pouring

11.2.7 Temporary Works Risk Assessments will be carried out to inform Temporary Works Method Statements to reduce any accidental risk to the environment in general. All wash down of mixers and forms will take place away from site in

designated wash down areas which will be bunded to prevent leaks.

11.3 Other Consents and Permits

11.3.1 **Table 11-1** sets out the additional consents or permits necessary prior to construction in relation to water resources and flood risk. These consents and permits are outside of the DCO application.

Table 11-1 Licences or Permits Necessary prior to Construction in relation to water resources and flood risk

Issuing body	Name of consent	Applicable to
Environment Agency	Flood Risk Activity Permit issued under the Environmental Permitting (England and Wales) Regulations 2016	A permit may be required for any proposed works or structures within 8m of any fluvial defence; any proposed works or structures in/under/over/within 8m of the top of the bank of a main river, or 16m if it is a tidally influenced main river.
	Environmental Permit for water discharge or waste operations / registration of exempt waste operations and water discharges (as necessary or registered exemption from such)	Discharge to surface water (main river or ordinary watercourse) or groundwater of anything other than clean, uncontaminated surface water run-off.
Lead Local Flood Authority (Lincolnshire County Council) or Black Sluice Internal Drainage Board	Consent for works affecting ordinary watercourses (Ordinary Watercourse Consent – also known as Land Drainage Consent)	Works in/over/under/near an ordinary watercourse

11.4 Abstractions

11.4.1 Abstraction of water is not anticipated to be required and the Facility will connect to the mains water supply. However, in the event of an interruption to supply there may a requirement for use during site activities, such as concrete batching or washing.

11.4.2 If any abstraction is required, the appointed Contractor will be responsible for

obtaining any permits from the Environment Agency, for the use of abstracted water during the construction related activities in advance of use; and for monitoring and recording associated abstraction rates or other licence requirements to demonstrate compliance.

- 11.4.3 Any landowners with private water supplies will be identified during landowner consultations, and all affected landowners and water supplies will be monitored appropriately during construction works. Standard mitigation, where required, would include pre- and post-construction monitoring surveys of the water supply, development of risk management measures and the preparation of contingency supply arrangements.

11.5 Discharge

- 11.5.1 The appointed Contractor will be responsible for obtaining any permits from the Environment Agency associated with the use of septic tanks or other effluent / washout water treatment facilities, in advance of discharge; and for monitoring and recording specified volumetric, quality or reference conditions, to demonstrate compliance.
- 11.5.2 If the permanent connection to the foul sewer is not available at any point during the construction phase, the foul water and sewage effluents produced by the construction workforce shall be contained by temporary foul drainage facilities to be installed. In the case of the latter, all foul water shall be disposed of off-site by a licensed contractor.

12 Utility Providers

- 12.1.1 Utility providers potentially affected by construction works would be contacted prior to construction works commencing.
- 12.1.2 The continuity of utilities during the construction works would be ensured. Prior to construction, the team on the ground would be made aware of the precise locations of existing services.

13 Monitoring and Site Inspections

- 13.1.1 The management and mitigation measures described above will be monitored by the Principal Contractor's environmental management representative who will engage with relevant competent ecologists throughout the construction phase, where ecological mitigation is required to be monitored.
- 13.1.2 Site inspections will be carried out routinely at a frequency that will be identified by the Principal Contractor's management system to monitor compliance with the requirements of the CoCP and all relevant management systems and permit for work requirements.
- 13.1.3 If non-conformance with any of the management and mitigation measures is identified, it will be recorded and appropriate remedial actions will be implemented in accordance with the management system.
- 13.1.4 A monitoring programme will be established for environmental aspects associated with the Facility, which will be documented in the final CoCP. The Principal Contractor's (and any sub-consultants') EMS and will require the Principal Contractor(s) and the Applicant to audit the construction work on a periodic basis. The audit scope will be identified to construction workers during toolbox talks and will be identified in the appointed Contractor's monitoring and inspection regime.

14 Contingency Planning

- 14.1.1 The Pollution Prevention and Incident Response Plan, detailing how to report and deal with an environmental incident, is discussed in **Section 4**.
- 14.1.2 During construction, all site staff will be made aware that the site is within Flood Zone 3, and will be required to read and understand the evacuation process in the event of a flood. The Principal Contractor and all sub-contractors will subscribe to the Environment Agency's Flood Warning Systems.
- 14.1.3 Requirement 6 of the draft DCO makes provision for unexpected finds or dealing

with remains that may be encountered on site. These are identified in the Written Scheme of Investigation (WSI), which identifies the watching brief and required approach to be supervised by a competent archaeologist.

- 14.1.4 If, during construction, remains are found unexpectedly, they will not be removed. In such circumstances, the local environmental health officer and the supervising archaeologist will be consulted to assess the remains and the police will be informed. If the police conclude that the remains are of no investigative significance and it is necessary to exhume the remains, then an application for a licence will be made to the Ministry of Justice. Should any animal remains be discovered during the construction phase that indicate a potential burial site, the main works contractor would cease all work in the vicinity and immediately advise the Animal Health Regional Office accordingly. Works would only resume if they are of no investigative significance following confirmation from the Animal Health Regional Office.

15 References

BCT (2018) Guidance Note 8 Bats and artificial lighting :

<https://cdn.bats.org.uk/pdf/Resources/ilp-guidance-note-8-bats-and-artificial-lighting-compressed.pdf?mtime=20181113114229>

BSI (2000) Specification for Highway Works, Vol. 3 (BS1722 Part 2):

<http://adlib.everysite.co.uk/adlib/defra/content.aspx?id=000HK277ZW.0ACCZB7C5T2BNU>

BSI (2005) BS 5837 (Trees in relation to design, demolition and construction –

Recommendations: <https://www.rbkc.gov.uk/idoxWAM/doc/Other-1592559.pdf?extension=.pdf&id=1592559&location=Volume2&contentType=application/pdf&pageCount=1>

CIRIA (2001) Report C532 Control of Water Pollution from Construction Sites:

<https://www.ciria.org/ItemDetail?iProductCode=C532&Category=BOOK&WebsiteKey=3f18c87a-d62b-4eca-8ef4-9b09309c1c91>

CIRIA (2006) Report C648 Control of Pollution from Linear Construction Project
Technical Guidance:

<https://www.ciria.org/ItemDetail?iProductCode=C648&Category=BOOK&WebsiteKey=3f18c87a-d62b-4eca-8ef4-9b09309c1c91>

CIRIA (2007) The Sustainable Drainage System Manual, C697

<https://www.thenbs.com/PublicationIndex/documents/details?Pub=CIRIA&DocID=281766>

CIRIA (2007) Site Handbook for the Construction of SuDS, C698

https://www.ciria.org/Resources/Free_publications/site_handbook_SuDS.aspx

CIRIA (2010) Handbook C692 Environmental Good Practice on Site:

https://warwick.ac.uk/fac/sci/eng/eso/modules/year4/es94y/c692_environmental_good_practice_on_site_3rd_edition.pdf

CIRIA (2015) The Sustainable Drainage System Manual, C753

https://www.ciria.org/Resources/Free_publications/SuDS_manual_C753.aspx

Defra (2001) Control of Pollution (Oil Storage) (England) Regulations 2001 and best practice guidelines:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69255/pb5765-oil-storage-011101.pdf

Defra (2009) Construction Code of Practice for the Sustainable Use of Soils on Construction Sites. Available online at:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/716510/pb13298-code-of-practice-090910.pdf

Environment Agency (2004) PPG08 – Storage and disposal of used oils:
<https://web.anglia.ac.uk/estates/downloads/environment/ISO14001/03-Guidance/PPG8%20Safe%20Storage%20and%20Disposal%20of%20Waste%20Oils.pdf>

Environment Agency (2007) PPG05 – Works near or liable to affect watercourses:
<https://www.sepa.org.uk/media/100531/ppg-5-works-and-maintenance-in-or-near-water.pdf>

Environment Agency (2008) PPG11 – Preventing pollution at industrial sites:
<https://www.thenbs.com/PublicationIndex/documents/details?Pub=EA&DocID=250496>

Environment Agency (2009) PPG 21 – Pollution incident response planning:
<https://www.sepa.org.uk/media/100557/ppg-21-pollution-incident-response-planning.pdf>

Environment Agency (2012) PPG06 – Working at construction and demolition sites:
<https://www.sepa.org.uk/media/60125/ppg-6-working-at-construction-and-demolition-sites.pdf>

Environment Agency (2014) Pollution Prevention Guidance (PPG) 01 – General guide to the prevention of water pollution:
<https://web.anglia.ac.uk/estates/downloads/environment/ISO14001/03-Guidance/PPG1%20Pollution%20Prevention%20Guidelines.pdf>

Environment Agency (2017) Groundwater Protection Principles and Practice. Available online at:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/598799/LIT_7660.pdf

HM Government (1990) Environmental Protection Act:
<https://www.legislation.gov.uk/ukpga/1990/43/contents>

HM Government (1993) Noise and Statutory Nuisance Act:
<https://www.legislation.gov.uk/ukpga/1993/40/contents>

HM Government (2009) Private Water Supplies Regulations:
<http://www.legislation.gov.uk/uksi/2009/3101/contents/made>

HM Government (2015) Construction (Design and Management) (CDM) Regulations:
<http://www.legislation.gov.uk/uksi/2015/51/contents/made>