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Technical Appendix 3.1: Outline Construction Environmental Management Plan

Cossans Solar & BESS EIA Report

TRIO POWER Ltd

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Making Sustainability Happen

Revision Record

Revision	Date	Prepared By	Checked By	Authorised By
1.0	30 April 2025	Gregory Walton	Bronwyn Fisher	Gavin Spowage
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Appendices

Appendix A Relevant Legislation

A.1 Relevant Legislation

Acronyms and Abbreviations

AOD	Above Ordnance Datum
BESS	Battery Energy Storage System
BS	British Standards
CAR	Water Environment (Controlled Activities) (Scotland) Regulations 2011
CEMP	Construction Environmental Management Plan
CIRIA	Construction Industry Research and Information Association
COSHH	Control of Substances Hazardous to Health
СТМР	Construction Traffic Management Plan
DNO	Distribution Network Operator
ECoW	Ecological Clerk of Works
EEMs	Embedded ecology measures
EHO	Environmental Health Officer
EIA	Environmental Impact Assessment
EIRS	Environmental Incident Response Strategy
EM	Environment Manager
EPPS	Emergency Pollution Prevention Strategy
EWC	European Waste Catalogue
HGV	Heavy goods vehicles
HSE	Health and Safety Executive
MW	Megawatts
MWp	Megawatt peak
NPF4	National Planning Framework 4
PC	Principal Contractor
PD	Principal Designer
РМ	Project Manager
PV	Photovoltaic
RAMS	Risk assessment and method statements
SEPA	Scottish Environment Protection Agency
SQE	Suitably Qualified Ecologist
SuDS	Sustainable Drainage System
SWMP	Site Waste Management Plan
SWMS	Site Waste Management Strategy
TBTs	Toolbox Talks

1.0 Introduction

1.1 Overview

- 1.1.1 This outline Construction Environmental Management Plan (Outline CEMP) has been prepared to support the Section 36 Application for the construction and operation of the Cossans Solar and Battery Energy Storage System (BESS) (hereafter referred to as the Proposed Development).
- 1.1.2 This outline CEMP aims to:
 - Ensure all the relevant mitigation measures identified within the Environmental Impact Assessment Report are implemented during the construction works;
 - Ensure that any planning conditions relating to the works are adhered to; and
 - Ensure that all relevant legislation, Government and industry standards and construction industry codes of practice and best practice standards are complied with throughout the construction of the Proposed Development.

1.2 Legal Compliance

- 1.2.1 Considerable environmental legislation will apply to the construction of the Proposed Development. All relevant legislation, including requirements for licenses, permits and/or consents shall be identified and TRIO POWER Limited (the 'Applicant') will be required to provide details of how compliance is to be achieved as part of the construction process.
- 1.2.2 For each significant environmental aspect, the relevant applicable environmental legislation and regulations will be identified from, but not limited to, the list provided in **Appendix A**. The list of relevant legislation and its applicability to the proposed works will be reviewed and updated where necessary.

1.3 Structure of this Outline CEMP

- 1.3.1 This Outline CEMP details the environmental controls and procedures that will need to be adopted during the proposed works. It sets out roles and responsibilities for the management of these controls and procedures.
- 1.3.2 This Outline CEMP includes details of the following:
 - **The Site:** Including management structure, roles and responsibilities, location of any potentially sensitive receptors such as watercourses, trees, residents etc., and any designations with associated criteria;
 - **Proposed works:** A description of the works, works programme and proposed working hours;
 - Environmental Management: Methods for managing environmental risks (includes mitigation), emergency procedures, waste and hazardous materials storage procedures, proposed liaison with residents and stakeholders and outline specific management plans relating to dust, landscape, lighting and noise; and

• Legal Compliance: A schedule of relevant and current environmental legislation.

1.4 Document Control and Distribution

- 1.4.1 This document is a "live" document and will be subject to periodic review and updating. The document is intended for use by the Applicant and their contractors specifically involved in the construction of the Proposed Development. When this document is updated, the document control table will be updated (Table 1-1) and will be issued to all personnel named on the distribution list below (Table 1-2).
- 1.4.2 It is the responsibility of all users to ensure that they have the current version of the document.

Table 1-1: Document Control

Status	Date Issued	Prepared by	Summary of Alterations
Version 1.0	22-04-2025	SLR	First Issue

Role	Organisation	Contact
Applicant	TRIO POWER Limited	Name: E-mail [:]
		Mobile:
Principal Designer (PD)	ТВС	ТВС
Principal Contractor (PC)	ТВС	ТВС
Project Manager (PM)	ТВС	ТВС
Environment Manager (EM)	ТВС	ТВС
Local Authority	Angus Council	ТВС

Table 1-2: Distribution List

2.0 Proposed Development and Site Context

2.1 Site and Surrounding Area

- 2.1.1 The Proposed Development is located approximately 1.6 km west of Forfar, within the Angus Council administrative area. The Site mainly comprises two land parcels on either side of a local road, surrounded by agricultural fields and woodland. The total area of the Site is approximately 87 ha. Ground elevations generally decrease radially from a high point within the centre of the Site. The Site is generally flat approximately 55m Above Ordnance Datum (AOD) in the east, rising to approximately 65m AOD in the west.
- 2.1.2 The Site is bordered by trees to the west and along part of the northern boundary, while the other boundaries are more open. A buried gas pipeline traverses the eastern portion of the Site, running from north to south, which has been appropriately accounted for in the overall design and layout of the Proposed Development.
- 2.1.3 There are no landscape, ecological or cultural heritage designations within the Site boundary.

2.2 Proposed Development Description

- 2.2.1 The Proposed Development will consist of the following main components:
 - A ground-mounted solar photovoltaic (PV) array with an export capacity of up to 49.9 MW and a build out capacity of 65 Megawatt peak (MWp), with modules mounted on prefabricated alloy frames and reaching a maximum height of 2.87 m above ground level;
 - Approximately 24 BESS containers (8.3 m x 3.1 m x 2.6 m), and six associated Power Conversion System (PCS) units (9.2 m x 5.4 m x 2.3 m), located within a dedicated compound in the eastern parcel (refer to **Figure 1)**;
 - Four transformer stations and string inverters distributed across the Site to ensure voltage compatibility and energy conversion from DC to AC;
 - An on-site Distribution Network Operator (DNO) substation (3.6 m x 2.5 m x 2.6 m), a customer (private) substation (8.1 m x 2.6 m x 2.7 m), a spares and communications container (6.1 m x 2.4 m x 2.9 m), and a standalone spares container (12.2 m x 2.4 m x 2.9 m);
 - Underground electrical cabling linking the PV modules, inverters, transformers, and substations via trenching along internal access tracks;
 - Two access points to each land parcel from the local road network, plus two additional access points to the BESS compound;
 - Internal access tracks with a typical running width of 4 m, constructed using local compacted aggregates and designed to accommodate construction and maintenance traffic;
 - A temporary construction compound (approximately 3,000 m²) located south of the BESS area, incorporating laydown and vehicle parking areas, along with a welfare container (6.1 m x 2.4 m x 2.9 m) and a 300 m³ water tank (approx. 7.5 m in height); and

- Security infrastructure comprising 2.4 m high palisade fencing around the Site perimeter, 5 m wide double-leaf access gates, and CCTV cameras mounted on 4.5 m poles at key locations within the Site.
- 2.2.2 Figure 1 shows the Proposed Site Layout.

3.0 Construction Management

3.1 Roles and Responsibilities

- 3.1.1 As the Proposed Development is at the application stage, the outline CEMP has been developed to provide advisory guidance and describes good construction practices. This is a live document and will ultimately be provided to the contractors appointed to construct the Proposed Development. It will form part of the documentation required to ensure compliance not only with planning requirements but also environmental and other legislative requirements.
- 3.1.2 It is expected that the contractor selected to construct the Proposed Development will further develop this outline CEMP with respect to the following:
 - task-specific method statements;
 - detailed Sustainable Drainage System (SuDS) design;
 - Site Waste Management Plan; and
 - additional Management Plans as may be required by planning conditions.
- 3.1.3 The anticipated roles and responsibilities of the parties involved in the proposed works are set out in **Table 3-1**. However, it should be noted that all members of staff are responsible for ensuring the requirements of the outline CEMP will be met.

Role	Individual / Organisation	Responsibilities	
The Applicant / Holder of the Consent	TRIO POWER Limited	The holder of the consent must take overall responsibility for the adherence to the CEMP and Consent Conditions. As such, the Applicant / Holder of the Consent will be responsible for:	
		 Appointing an Ecological Clerk of Works (ECoW) for the duration of the constriction phase; 	
		 Be fully familiar with the EIA Report, Consent Conditions and CEMP; 	
		 The overall implementation of the CEMP; 	
		 Ensuring compliance, by all parties, and the imposition of penalties for noncompliance; 	
		 Implementing corrective and preventative measures, where required, and 	
		 Preventing pollution and actions that will cause harm to the environment. 	
Principal Designer (PD)	ТВС	Providing detailed designs of all infrastructure.	
Principal Contractor (PC)	ТВС	The day-to-day management of Health and Safety, Environmental and Quality performance during the works. The PC will be responsible for implementing the CEMP, including monitoring the performance of sub-contractors and maintaining records to demonstrate compliance with and implementation of the CEMP.	

Table 3-1: Roles and Responsibilities

Role	Individual / Organisation	Responsibilities	
Project Manager (PM)	ТВС	Directing the PC on the delivery of the CEMP. This will include checking that the PC has allocated sufficient resources to allow delivery of the CEMP, participating in communication with Angus Council and other third parties as required and arranging for the update of the CEMP.	
Environment Manager (EM)	ТВС	An EM (supported by an ECoW (as detailed below)) will be on-site supervising and monitoring sensitive locations, ensure implementation of the CEMP, provide advice and deliver toolbox talk to all staff and subcontractors.	
ECoW	TBC	Reports to the Applicant and is responsible for monitoring the implementation of the environmental mitigation measures on Site prior to, during and post-construction. The ECoW will be, or will be supported by, a Suitably Qualified Ecologist (SQE), will be aware of the ecological sensitivities on the Site and the legal implications of not complying with agreed working practices. The ECoW will be responsible for:	
		 Undertaking pre-construction surveys to provide up to date baseline ecology information, prior to construction activity commencing; 	
		 Providing toolbox talks to Site contractor staff (at the commencement of construction and from then on as considered appropriate by the EM); 	
		 Undertaking routine Site visits and providing expert advice and guidance during construction to ensure ecological and wider environmental compliance; and 	
		 Ensuring adherence to generic and specific measures by Site contractor, during construction. 	
		 Installation and maintenance of ecological protection zones; 	
		 Monitoring of badger setts to inform protected species licence applications and supporting mitigation plans as required; 	
		 Overseeing the delivery of mitigation strategies and ensuring compliance with protected species licence conditions; 	
		 Nesting bird checks within 48 hours prior to any Site clearance works during the nesting bird season (March to August inclusive); 	
		 Liaison with NatureScot, SEPA and Angus Council as required; and 	
		 Reporting any incidences of non-compliance with the ECoW works to the EM. 	
All staff and	ТВС	All staff and subcontractors have a responsibility to:	
subcontractors		 Work to agreed plans, methods and procedures to minimise environmental effects and nuisance to receptors during the works; 	
		 Understand the importance of avoiding pollution on- Site, including noise and dust and how to respond in 	

Role	Individual / Organisation	Responsibilities	
		the event of an incident to avoid or limit environmental effects;	
		Report all incidents immediately to their line manager;	
		 Monitor the workplace for potential environmental risks and alert their line manager if any are observed; and 	
		 Co-operate as required during Site inspections and audits. 	

3.2 Communication

- 3.2.1 Prior to the commencement of construction, the Applicant will inform Angus Council prior to any construction starting on-site and communication will be maintained with updates of any incidents or significant changes notified within one week of occurrence. The Applicant will provide contact details to the Angus Council of key Site personnel prior to the start of the works.
- 3.2.2 Any resident who has a question regarding the construction of the Proposed Development will be directed to the Applicant's PM. All questions will be logged and responded to within a specified number of days.
- 3.2.3 Careful monitoring of any complaints received, including recording details of the location of the affected party, time of the disturbance and nature of the issue will assist with managing the works to reduce the likelihood of further incidents.

3.3 Construction Programme

3.3.1 The construction of the Proposed Development is expected to take place over eight to twelve months and anticipated to commence in 2031 due to the grid availability and is anticipated to conclude in 2032.

4.0 Construction Management

4.1 Health and Safety / RAMS

- 4.1.1 Risk assessment and method statements (RAMS) are to be reviewed and approved by the Applicant. A daily brief will be read out to all members of the working party.
- 4.1.2 The work area will be barriered off for security and segregation.
- 4.1.3 Only authorised persons will be allowed on the Site. To prevent unauthorised access to Site the following arrangement will be implemented:
 - Everyone employed on the project will receive a site-specific induction to inform them
 of the health and safety and environment arrangements, welfare on-site and to ensure
 they understand the requirements of the risk assessment and method statement
 relevant to their work. Workers will be informed of their legal obligation to comply with
 health and safety. The Site induction will evolve to reflect changes in the CEMP as the
 project develops. Environmental topics covered in the induction shall include, but will
 not be limited to:
 - Water Resources;
 - Pollution Prevention;
 - Emergency Response Procedures;
 - Waste Management and Housekeeping;
 - Management Structure;
 - o Duties and Responsibilities;
 - Relevant Procedures;
 - o Ecologically and Ornithological Sensitive Areas and Times;
 - Incident and Non-Conformance Reporting;
 - o Consents and Licences and Compliance;
 - o Legislation; and
 - Environmental Good Practice.
- 4.1.4 Toolbox Talks Toolbox Talks (TBTs) on specialised topics shall supplement the induction course. TBTs shall be used to highlight issues of concern and to disseminate any new information or responsibilities. They will also be used as a means of providing basic environmental training to crews on a specialised topic, e.g. water management. The TBTs also offer Site personnel the opportunity to provide feedback. TBTs will be provided when:
 - There is a change to existing legislation, which requires an operational change;
 - Site inspections or audits have identified corrective actions which require rolling out;
 - Work is being undertaken in particularly sensitive areas; and
 - There are significant changes in environmental conditions, e.g. heavy rainfall.
- 4.1.5 Records of all TBTs undertaken, including attendance, will be maintained

4.2 Working Hours

- 4.2.1 Normal construction hours will be:
 - 07:00 19:00 Monday to Friday; and
 - 09:00 13:00 on Saturdays.
- 4.2.2 No work and ancillary operations, which are audible at the planning application boundary, will be permitted outside these working hours unless fully justified to the Angus Council on the grounds of engineering necessity or for the reason of health and safety. Any such works should be kept to an absolute minimum.
- 4.2.3 No continuous 24-hour activities are envisaged at this stage and any working on Sundays or Bank Holidays is not allowed. Any change to working hours will be agreed with the Local Planning Authority.
- 4.2.4 These hours will be strictly adhered to unless or in the event of:
 - An emergency demands continuation of works on the grounds of safety; or
 - Completion of an operation that would otherwise cause greater interference with the environment/general public if left unfinished.
- 4.2.5 The majority of deliveries will be programmed to arrive during normal working hours only. Night-time deliveries will be minimal and will only be undertaken with special consideration. Care will be taken to minimise noise when unloading vehicles, and construction traffic would be prohibited from un-necessary idling within the Site boundary or at the Site access points.

4.3 Methods of Work

4.3.1 Construction Method Statement(s) will be produced by the PC and will provide details of all on-site construction works. These will be held with the CEMP within the Site office and will be made available for all Site personnel.

4.4 Phasing

- 4.4.1 Indicative construction phases for the Proposed Development have been identified in this outline CEMP. These will be confirmed and further details provided if consent is granted. The indicative high-level phases are:
 - Phase 1 Enabling Works
 - Any upgrades required for the existing access junction and Site access track;
 - Construction of new internal access tracks.
 - Establishment of temporary construction compound, including laydown and vehicle parking areas.
 - Erection of security fencing and gated access.
 - Phase 2 Site Set-Up:
 - Installation of welfare facilities and temporary power (e.g. diesel generators).



- Delivery and set-up of storage areas for plant and materials.
- Preparation of ground and layout marking for infrastructure installation.
- Phase 3 Main Construction Works:
 - Piling and erection of PV module mounting frames.
 - \circ $\;$ Installation of battery storage containers , transformers, switchgear, and inverters.
 - o Trenching and laying of underground electrical and communication cables.
 - Construction of the on-site substation and drainage infrastructure (including SuDS).
 - o Installation of lighting columns, CCTV systems, and security infrastructure.
- Phase 4 Commissioning:
 - Electrical testing of all installed systems (PV and BESS).
 - Grid connection works and energisation.
 - Final commissioning of solar array and battery storage systems.
- Phase 5 Demobilisation and Site Reinstatement:
 - Removal of temporary construction compound and laydown areas.
 - Restoration of disturbed ground and landscaping in accordance with the approved Landscape and Biodiversity Plan.
 - Completion of final habitat enhancements and planting measures (e.g. hedgerow enhancement, species-rich grassland, installation of bird/bat boxes).
- Phase 6 Post-Construction Monitoring
 - Environmental compliance checks and performance reporting.
 - Maintenance period for new planting and habitats (e.g. 5 years).
 - Ongoing ecological monitoring as required under planning conditions.
- 4.4.2 Based on data from the EIA Report (**Chapter 10**), the development will generate a range of traffic movements, including deliveries of infrastructure components and daily staff travel.
- 4.4.3 At the peak of construction activity, the Site is expected to experience 1,751 two-way vehicle movements per month, made up of 1,404 car movements and 347 heavy goods vehicles (HGV) movements. Assuming a 26-day working month, this would equate to a maximum of 67 two-way vehicle movements per day which would consist of 54 car movements and 13 HGV movements on average. In other quieter months, the daily average HGV movements are anticipated to be between 2 and 13.
- 4.4.4 Over the course of the project, the following types of HGV deliveries will take place:
 - Aggregates and material for internal access track construction and the temporary compound.
 - Transport of solar frames, inverters, transformers, substation components, battery packs, and storage containers.
 - Panel deliveries, with approximately 94,000 solar panels delivered to Site in batches.

- Miscellaneous deliveries such as welfare units, fencing, water tanks, and general plant and materials.
- 4.4.5 All construction traffic will access the Site via the A90 trunk road, connecting through the A94 and then along Drumgley Road. As agreed with Angus Council, passing places will be enhanced on Drumgley Road to ensure safe movement of larger vehicles. These will include informal widening measures using grasscrete where appropriate.
- 4.4.6 Vehicle routing, delivery scheduling, and driver briefings will be managed through a sitespecific Construction Traffic Management Plan (CTMP), which is provided as Technical Appendix 10.2 to the EIA Report.

5.0 Schedule of Commitments – Mitigation and Implementation

5.1 Schedule of Mitigation

- 5.1.1 Chapter 12: Schedule of Mitigation and Summary of Residual Effects of the EIA Report summarises the various mitigation measures that have been proposed to offset the potential impacts of the Proposed Development.
- 5.1.2 Alongside each mitigation measure identified, the proposed mechanism by which it will be adopted, implemented or enforced has been provided as well as the period by which the mitigation measure will be undertaken.
- 5.1.3 These mitigation measures will be required to be implemented prior to and/or during construction of the Proposed Development.

5.2 Site-Specific Environmental Mitigation Measures

- 5.2.1 The Proposed Development has been designed and refined in response to Site constraints and environmental sensitivities identified through detailed surveys and public consultation. The following mitigation measures will be implemented to manage potential environmental impacts during construction and operation:
 - A minimum 15 m buffer will be maintained around ancient woodlands, core paths, and other ecologically sensitive features. These buffer zones will be clearly marked on Site and respected throughout construction
 - Flood-prone areas within the development boundary, particularly parts of Field 2 (refer to Figures 2.1 and 2.2 in Volume 2a of the EIA Report), have been excluded from the layout. Where panels are located in areas with minor flood potential, the minimum clearance above ground level has been increased to 1.5 m to reduce risk.
 - The BESS compound has been relocated to an area that benefits from existing natural screening and is at least 300 m away from the nearest residential properties. This change reduces visual and amenity impacts on neighbouring receptors.
- 5.2.2 The findings of the Glint and Glare Assessment (Chapter 11 of the EIA Report) have been incorporated into the layout. This includes ensuring the solar panels are oriented to minimise reflective glare and making use of existing vegetation to shield views from sensitive receptors, including residences and roads such as the A90.
- 5.2.3 Habitat buffers and ecological stand-offs have been applied to features used by protected species including otters and bats. Tree lines, hedgerows, and watercourses have been preserved or avoided where necessary to minimise disturbance and protect biodiversity.
- 5.2.4 These mitigation measures form part of the embedded design and must be reflected in the Construction Method Statement and on all relevant Site layout drawings. The ECoW will be responsible for monitoring implementation and ensuring compliance throughout the construction phase.

5.3 Implementation and Control

- 5.3.1 Compliance with the CEMP is the key control measure required during construction to ensure mitigation is appropriately addressed. It documents the principles and processes to be followed to implement all relevant agreed environmental mitigation.
- 5.3.2 The PC will be required to prepare a series of method statements in accordance with the Schedule of Mitigation. These method statements will detail how the contractor intends to implement the mitigation set out in the CEMP and will be integrated with their detailed Construction Method Statements.
- 5.3.3 If any significant changes are required to mitigation due to changing environmental sensitivities, results of pre-construction surveys, unforeseen events or for any other reason, these will be discussed and agreed with statutory bodies in advance of any amended works being carried out. The Schedule of Mitigation will be revised with any approved changes required resulting from the discussions with the relevant statutory bodies.

6.0 General Construction Good Practice

6.1 Handling of Excavated Materials

- 6.1.1 The construction of internal access tracks, BESS foundations, and infrastructure platforms will require an element of excavation and stripping of soils, including topsoil and subsoil. Materials excavated during construction will primarily comprise soil and, to a lesser extent, rocks.
- 6.1.2 Where possible, materials will be reused onsite for backfilling, reinstatement around compound areas, cable trenches, and site grading. Topsoil and subsoil will be stored separately to prevent degradation, and any upper vegetated layers (turves) removed, will be reinstated adjacent to similar habitat areas under guidance from the ECoW.

6.2 Materials Storage

- 6.2.1 Granular or non-organic materials will be stockpiled in designated locations a minimum of 50m from any watercourse and away from sensitive habitats including marshy or boggy grassland. Stockpiles will be compacted to reduce erosion risks and managed per ECoW recommendations.
- 6.2.2 In the formation of the BESS compound, temporary silt fences and drainage control structures may be installed, especially near slopes or watercourses, in line with Construction Industry Research and Information Association (CIRIA) C532 Control of water pollution from construction sites: guidance for consultants and contractors. Material excavated during new and upgraded access track construction will be stored adjacent to the track and compacted in order to limit instability and erosion potential.

6.3 The Management and Movement of Concrete

Accidental Spillage

- 6.3.1 Spill kits with absorbent materials will be stationed in all construction zones. In the event of a concrete or fuel spill, emergency measures outlined in the Pollution Prevention and Incident Plan (PPIP) will be implemented.
- 6.3.2 In the event of any spillage or pollution of any watercourse the emergency spill procedures as described in the PPIP will be implemented immediately (refer to **Section 7.0**)
- 6.3.3 A speed limit of 15mph will apply for vehicles onsite and will be monitored and enforced by the PC. Maximum vehicle load capacities will not be exceeded.

Vehicle Washing

6.3.4 There will be a wash-out facility within the construction compound consisting of a sump overlain with a geosynthetic membrane. The geosynthetic membrane will filter out the concrete fines leaving water to pass through to the sump. The sump water will either be pumped to a licenced carrier and taken offsite for approved disposal, or it will be discharged to surrounding vegetated surfaces where such discharge meets the requirements of NatureScot and SEPA.



No washing of concrete-associated vehicles will be undertaken outside the wash out facility, and the area will be signposted, with all site contractors informed of the locations.

Concrete Pouring

- 6.3.5 To prevent pollution, it is important that all concrete pours are planned and specific procedures will be adopted in accordance with CIRIA C532 *Control of water pollution from construction sites: guidance for consultants and contractors.* These procedures will include:
 - ensuring that all excavations are sufficiently dewatered before concrete pours begin and that dewatering continues while the concrete cures. Construction good practice will be followed to ensure that fresh concrete is isolated from the dewatering system; and
 - ensuring that covers are available for freshly placed concrete to avoid the surface of the concrete washing away during heavy precipitation; and
 - perimeter drains with silt traps are used to prevent any cement/fines washout entering watercourses.
- 6.3.6 The excavated area will be back-filled with compacted layers of graded material from the original excavation, where this is suitable, and capped with soil.

6.4 Surplus and Waste Material

6.4.1 Initiated as part of the Defra Red Tape Challenge, aiming to reduce bureaucracy for business, the site Waste Management Plans Regulations 2008 (SWMP) were repealed on 01 December 2013. However, it has been adopted as best practice to produce a Site Waste Management Strategy (SWMS) for large scale construction sites and to append planning applications and as such are recommended to be adopted in this project.

The SWMS will be included as part of the final CEMP. This will include appropriate level of detail on how construction waste materials will be managed, including the management and definition of excavated materials.

- 6.4.2 The PC and any other contractors and subcontractors will take all reasonable steps to ensure that all waste from the site is dealt with in accordance with the requirements under the Environmental Protection (Duty of Care) (Scotland) Regulations 2014 and that materials will be handled efficiently and waste managed appropriately.
- 6.4.3 Appropriate waste management, disposal and waste carrier documentation and licences will be obtained (e.g. complete waste transfer notes prior to waste leaving site, ensure all waste carriers have a valid waste carrier's registration certificate, ensure wastes are disposed of at a correctly licensed site, complete notification for hazardous waste to SEPA).
- 6.4.4 Waste streams will include wastes generated by plant, machinery and construction workers over the period of the works, for example waste oils, sewage, refuse (paper, carton, plastic etc.), wooden pallets, waste batteries, fluorescent tubes etc.

Soils and Spoils

6.4.5 It is planned that any materials excavated onsite in the course of the construction works will be stored onsite ideally close to the excavation location and re-used where it is appropriate to do so. As such, offsite disposal of this material is not anticipated but when required will be disposed of appropriately.

Hazardous and Other Wastes

6.4.6 **Table 6-1** lists some of the waste types that may be generated during the construction works with their corresponding European Waste Catalogue (EWC) codes. Although some waste types may be generated in locations other than the construction compounds such waste materials will be stored within the construction compounds only. Waste materials generated outside the construction compounds will be taken to the compounds on a daily basis to be managed thereafter.

Table 6-1: Con	nmon Constru	action Wastes
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EWC Code	Description
13 01 10*	Used mineral hydraulic oil (non-chlorinated)
13 02 08*	Other waste engine, gear or lube oil
13 02 05*	Waste engine, gear or lube oil (non-chlorinated)
13 02 08*	Other waste engine, gear or lube oil
16 01 07*	Oil filters
20 01 23*	Discarded equipment containing CFCs e.g. waste fridges & freezers
16 06 01*	Lead batteries
16 07 08*	Oily waste from transport and storage tanks
16 10 01*	Hazardous liquid wastes to be treated off-site
20 01 21*	Fluorescent tubes and other mercury-containing waste
20 01 33*	Hazardous batteries and accumulators that are collected separately
15 02 02*	Absorbents, filter materials, wiping cloths, clothing contaminated by dangerous substances
15 01 01	Cardboard or paper packaging
15 01 02	Plastic packaging e.g. toner & ink cartridges, polythene sheeting
15 01 03	Wooden packaging e.g. timber pallets
15 01 04	Metallic packaging e.g. drink cans, paint tins
16 01 03	Tyres
16 01 15	Antifreeze fluids that do not contain dangerous substances e.g. Coolants
16 01 17	Ferrous metal from vehicles e.g. car parts
16 02 14	Non-hazardous waste electricals e.g. washing machines, power tools
16 05 05	Gases in pressure containers i.e. gas cylinders
17 01 01	Concrete
17 02 01	Wood from construction or demolition e.g. timber trusses, supports, frames, doors
17 04 11	Cables that do not contain dangerous substances e.g. electric cabling
20 01 01	Paper & card similar to that from households e.g. office paper, junk mail
20 01 30	Non-hazardous detergent e.g. flushing agent/universal cleaner
20 01 39	Separately collected plastics e.g. plastic containers, bottles
20 03 01	Mixed waste similar to that from households e.g. mixed office, kitchen & general waste

* Denotes Hazardous Waste, as categorised by the European Waste Catalogue.

Regulatory Compliance

6.4.7 Waste will need to be transferred to a licensed waste management site or site with a waste exemption. The PC will need to check that the site is licensed and that the licence permits the

site to take the type and quantity of waste involved. Copies of the waste management licence or waste exemption license will need to be held on file.

- 6.4.8 A 'Waste Transfer Note' must be completed by all parties involved and must be retained for a period of two years. Sub-contractors excavating and hauling waste offsite must complete their own Waste Transfer Notes and copy them to the PC. It is not necessary to have a Waste Transfer Note for each load of waste and a Waste Transfer Note can be issued weekly or monthly as a season ticket.
- 6.4.9 It will be the responsibility of the PC to ensure that other parties involved in the transport, storage and disposal of waste are legally entitled to carry out their duties.

6.5 Dust Management and Air Quality Management

6.5.1 Good practice measures as listed in **Table 6-2** will be adopted during construction to control the generation and dispersion of dust such that significant impacts on neighbouring habitats should not occur. The hierarchy for mitigation will be prevention – suppression – containment.

Task	Mitigation Measures	
Excavation and Earthworks	• Working areas will be stripped as required in order to minimise exposed areas;	
	 during excavation works drop heights will be minimised to control the fall of materials reducing dust escape; and 	
	 temporary cover may be provided for earthworks if necessary and completed earthworks and other exposed areas will be covered with topsoil and re- vegetated as soon as it is practical in order to stabilise surfaces. 	
Stockpiling of loose materials	Ensure that stockpiles exist for the shortest possible time;	
	 material stockpiles will be low mounds without steep sides or sharp changes in shape; 	
	 material stockpiles will be located away from the Site boundary, sensitive receptors, watercourses and surface drains; and 	
	 material stockpiles will be Sited to account for the predominant wind direction and the location of sensitive receptors. 	
Track works/ traffic movements	 Water bowsers will be available on-site and utilised for dust suppression where required; 	
	 daily visual inspections will be undertaken to assess need for use of water bowsers; and 	
	vehicle loads to be covered.	

Table 6-2: Dust Mitigation Measures

- 6.5.2 The Applicant will be required to control and limit dust, air quality, odour and exhaust emissions during the construction works as far as reasonably practicable and in accordance with best practice measures. This will include reference to publications on best practice including the following:
 - Guidance on the Assessment of the Impacts of Construction on Air Quality and the Determination of their Significance, Institute of Air Quality Management, January 2014 (IAQM 2014);

- Air Quality Monitoring in the Vicinity of Demolition and Construction Sites, Institute of Air Quality Management, November 2012 (IAQM 2012); and
- EU Directive 97/68/EC Requirements relating to gaseous and particulate pollutant emission limits and type-approval for internal combustion engines for non-road mobile machinery (NRMM).

6.6 Noise Management

- 6.6.1 The sources of construction noise are temporary and vary both in location and their duration as the different elements of the Site are constructed. Construction noise will arise primarily through the operation of large items of plant and equipment such as bulldozers, diesel generators, vibration plates, concrete mixer trucks, rollers etc. Noise also arises due to the temporary increase in construction traffic near the Site. The level of noise varies depending on the different elements of the Site being constructed.
- 6.6.2 The works will comply with BS 5228-1:2009 "Code of practice for noise and vibration control on construction and open sites. Noise" and BS 5228-2:2009 "Code of practice for noise and vibration control on construction and open sites. Vibration" and the following mitigation measures will be considered:

Plant and Equipment

- Plant will be certified to meet relevant current EU legislation and should be no noisier than would be expected based on the noise levels contained in BS 5228-1: 2009;
- The following threshold noise levels have been set using the 'ABC method' provided in BS 5228 (British Standards Institution, 2014): Weekday daytimes (weekdays 07:00 – 19:00 and Saturdays 07:00 – 13:00) – 65 dB;
- Noisy plant or equipment will be situated as far as possible from Site boundaries and will be fitted with exhaust silencers, maintained in good and efficient working order and operated in such a manner as to minimise noise emissions. Plant will comply with the relevant statutory requirements;
- Equipment and vehicles to be shut down when not in use; and
- Semi-static equipment is to be sited and oriented as far as is reasonably practicable away from noise sensitive receptors and will have localised screening if deemed necessary.

Methods of Working

- Site inductions will highlight the need for vehicle horns and alerts to only be used when absolutely necessary;
- No work which is audible at the Site boundary will be undertaken outside the specified hours, except in cases of emergency where safety is an issue, or where a prior agreement has been reached with the Angus Council Environmental Health Officer (EHO) and local residents have been informed;
- The PC will comply with the requirements of the Control of Pollution Act 1974 (with particular reference to Part III), the Environmental Protection Act 1990, the Health and Safety at Work Act 1974 and the Control of Noise at Work Regulations 2005;

- All trade contractors will be made familiar with current noise legislation and the guidance contained in BS 5228 (Parts 1 and 2) which will form a prerequisite of their appointment;
- Deviation from approved method statements will be permitted only with prior approval from the PC and other relevant parties. This will be facilitated by formal review before any deviation is undertaken; and
- A contact number which the public may use shall be displayed prominently on the Site board.

6.7 Site Lighting

- 6.7.1 Temporary Site lighting may be occasionally required for specific activities to ensure safe working conditions, during periods of limited natural light but will be carried out within the limits of the permissible working hours. It is intended the type of lighting will be non-intrusive and specifically designed to negate or minimise any effect to local properties and any other environmental considerations.
- 6.7.2 The use of artificial lighting may be required in order to facilitate the works, such as vehicle and plant headlights; compound lighting; office portacabin lighting; and localised floodlights / mobile lighting units. There will be fewer requirements for artificial lighting in the summer months when natural lighting will be present during normal working hours. There are no known issues with regards to the limit of lighting levels in this area, but lighting will be provided to meet the required lighting levels for the respective works which are being undertaken, especially where there is plant and machinery involved. Any issues identified with regards to limiting the lighting levels, either the lux values, or the time/duration of the lighting will be taken into consideration as part of the developed construction method statement.
- 6.7.3 In accordance with embedded mitigation measures set out in Chapter 6: Ecology in Volume 1 of the EIA Report, a sensitive lighting scheme that aims to avoid disruption to bat, otter and badger foraging and commuting behaviour and nesting bird activity will be adopted during construction. The following measures are to be incorporated into the design and installation of temporary lighting during works:
 - Any lighting will be directional (using fittings such as hoods, cowls or shields to direct light downwards wherever possible and avoid unnecessary light spill);
 - LED Luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability;
 - A warm white spectrum (ideally <2700 Kelvin, max 4000 Kelvin) should be adopted to reduce the blue light component;
 - Lighting will be positioned to avoid illuminating suitable foraging, commuting and nesting habitat within hedgerows and edge habitat adjacent to the Site and any newly created woodland and hedgerow habitats that form part of the planting design for the Site; and
 - The times during which lighting is on should be limited to provide dark periods.
- 6.7.4 During the construction phase the following good practice measure, endorsed by NatureScot is recommended:



• Wherever possible works should be undertaken during daylight hours, but avoiding the two hours from sunrise and the two hours before sunset (this can be reduced to one hour from November to February, inclusive, when daylight hours are limited);

7.0 Environmental Incident Prevention Measures

7.1 Environmental Incident Response Strategy

- 7.1.1 The PC will be responsible for developing and implementing an Environmental Incident Response Strategy (EIRS). The EIRS will provide reference to procedures to be followed in the event of a specific incident. In general, if an environmental incident was to occur, the following will take place immediately:
 - mitigation will immediately be implemented to stop or reduce impacts from the incident always ensuring the health and safety of people;
 - if these are ineffective, work in the area will cease immediately;
 - if necessary, monitoring will be undertaken to identify the source of the incident;
 - work will only recommence once it is considered that it will not continue to adversely impact sensitive environmental receptors; and
 - provision of a full report by the PC and separately by the ECoW to the Applicant following an incident occurring.
- 7.1.2 The EIRS will reflect site-specific conditions/issues. The PC will submit the detailed Strategy to the Applicant for approval prior to any construction works commencing on-site. The Strategy will provide:
 - a summary of local environmental sensitivities, e.g. environmentally designated areas, protected species or habitats and high amenity areas;
 - an outline of the construction works and appropriate references to other environmental plans and construction method statements;
 - an inventory of stored materials and emergency response spill kits;
 - details on training requirements, evidence of training of Site staff / plant operators in emergency response procedures including inclusion of Environmental Incident and Response training in Site inductions and TBTs; and key staff contacts for environmental management and emergency response;
 - detailed procedures to be taken in the event of an incident or emergency (including procedures for positioning and movement of plant) and identification of relevant personnel who will be responsible for implementing such procedures; and
 - contact telephone numbers for the emergency services and SEPA Pollution Hotline (0800 80 70 60).
- 7.1.3 A plan of the Site will also be provided, detailing:
 - all areas of potential pollution sources including the locations of car parks, delivery and fuel / chemical storage areas, oil separator equipment, excavations, and any other high risk areas that could give rise to pollution;
 - the location of potential sensitive environmental receptors, including sensitive habitats or species, surface watercourses, drains or culverts where pollution may travel to; and
 - the location of spill kits and other pollution control or emergency response equipment.

7.1.4 The procedures for responding to a major pollution incident will be a regular topic at on-site TBTs and management meetings in order to ensure that the incident response plan is fully understood by all personnel, and that all involved know their role in it. Any lessons learnt from any response to real incidents will be fed back into the plan to ensure that best practice is followed.

7.2 Re-Fuelling of Vehicles, Plant and Machinery

- 7.2.1 Generally, re-fuelling of mobile plant and machinery will be carried out at a designated location within the Site.
- 7.2.2 Vehicle re-fuelling will take place either at a dedicated impermeable refuelling pad or by mobile double bunded bowsers at their place of work. The refuelling pad will have an impermeable base and bund with a capacity of 110% such that they do not drain directly into the surface water drains. Where practicable, drainage will be passed through oil interceptors prior to discharge. Refuelling will be carried out using an approved mobile fuel bowser with a suitable pump and hose. Absorbent material (spill kits) will be available on-site and will be deployed to contain drips and small spillages.
- 7.2.3 All other fuels, oils and potential contaminants, as well as waste oils, will be stored in secure, fit for purpose containers within bunded containment as appropriate and in accordance with SEPA guidance. The bunded containment will have a capacity of 110% of the volume to be stored and will have impervious, secured walls and base. Maintenance of mobile plant will take place within the construction compounds only and will comply with SEPA PPG 7 (The safe operation of refuelling facilities, July 2011).
- 7.2.4 There will be no fuel storage outside the contractor's designated Site. Plant will be maintained in good operational order and any fuel/oil leaks recorded for attention. Absorbent pads/granules in the case of an accidental leak/spillage will be available at the construction compound.

7.3 Spillage

7.3.1 Spillage of fuel, oil and chemicals will be minimised by implementation of an Emergency Pollution Prevention Strategy (EPPS) which will be prepared by the PC as part of the CPP. In the event of any spillage or pollution of any watercourse the emergency spill procedures as described in the EPPS will be implemented immediately. Procedures developed in the EPPS will be adhered to for storage of fuels and other potentially contaminative materials to minimise the potential for accidental spillage.

7.4 Other Storage

- 7.4.1 Stripped topsoil/superficial soil will be stockpiled in a suitable location away from the area of movement of heavy vehicles, machinery and equipment, to minimise compaction of soil. Stockpiling of excavated material will be managed such that the potential contamination of down slope water supplies and/or natural drainage systems is mitigated / minimised.
- 7.4.2 Low mound stockpiles will be formed from excavated material, adjacent to construction areas, away from open drains.



7.4.3 Waste storage and raw material will be at the construction works compound and will be suitably stockpiled in a safe manner that prevents any migration of silts/contamination.

7.5 Silt

7.5.1 Silt laden runoff could be expected from any areas of recently exposed soil or rock and from access tracks in regular use. There will be no discharge or disposal of any material directly into any river, stream or drainage ditch.

7.6 Hydrocarbon Contamination

Vehicle Maintenance

7.6.1 Plant and machinery will be regularly maintained to ensure that the potential for fuel or oil leaks/spillages is minimised. All maintenance will be conducted on suitable absorbent spill pads to minimise the potential for groundwater and surface water pollution. All machinery will be equipped with drip pans to contain minor fuel spillage or equipment leakages.

Chemical Storage

- 7.6.2 All fuels, oils and other chemicals will be stored in secure, fit for purpose containers within bunded containment as appropriate and in accordance with SEPA guidance. The bunded containment will have a capacity of 110% of the volume to be stored and will have impervious, secured walls and base.
- 7.6.3 The bunded area will be underlain by an impermeable ground membrane layer to reduce the potential pathways for contaminants to enter watercourses and groundwater.
- 7.6.4 The PC will ensure that a Control of Substances Hazardous to Health (COSHH) register is maintained for all storage and use of chemicals during the construction.

8.0 Biodiversity

- 8.1.1 Any development within the Site should ensure that valuable habitat areas are protected or reinstated and, where appropriate, enhanced to ensure opportunities for net gain in biodiversity, in line with National Planning Framework (NPF4).
- 8.1.2 Best practice guidelines should be followed throughout all stages of any development to protect existing wildlife within the Site. Where applicable, this includes obtaining appropriate species licences prior to the commencement of works and implementing mitigation strategies to ensure compliance with relevant wildlife legislation.

8.2 Embedded Mitigation

- 8.2.1 Specific requirements for mitigation within the Site would include standard embedded ecology measures (EEMs):
 - Not more than 12 months prior to construction of the Proposed Development, the Applicant will engage a SQE to undertake a series of pre-construction ecological and ornithological surveys to update the baseline information reported **Chapter 6: Ecology** of the EIA Report. The aim of these surveys would be to provide up to date information in order to inform Species Protection Plans, and finalise the requirements for mitigation and licencing (if required).
 - Recommended disturbance buffers apply for protected species places of rest and/or denning/natal sites and bird species at their nest sites, with recommended distances outlined by Goodship and Furness (2022)¹ and the Forestry Commission (FCS, 2007)². Any disturbance or intentional or reckless harassment to Schedule 1A species is considered to be a criminal offence and therefore should any nests or activity from such species be identified in future pre-commencement surveys and ongoing monitoring, no heavy construction works will take place within the recommended guidance distances (i.e. 150-300m for red kite).
 - In order to avoid the abandonment of nests or breeding territories as a result of disturbance during the breeding season, all works including vegetation removal and/or Site clearance will be undertaken outside of the breeding bird season wherever possible. If this is not possible, all works will be subject to pre-construction nesting bird checks. The appointed ECoW will identify active nesting locations prior to any works taking place. If nest Sites are identified, then appropriate mitigation measures (such as suitable exclusion zones/buffers for all species) to protect nest sites will be implemented. The recommended (no) disturbance buffer required for heavy construction activities is 200-300m for curlew, and 50-100m for breeding locations of oystercatcher (Goodship and Furness, 2022). Lapwing is not mentioned within the guidance but another plover species, ringed plover, has recommended distance of

² FCS, 2007. FCS Guidance Note 34: Forest operations and European protected species in Scottish forests. Retrieved from: <u>https://www.forestry.gov.scot/publications/32-forest-operations-and-european-protected-species-in-scottish-forests/viewdocument/32</u>



¹ Goodship, N. M., & Furness, R. W. (2022). Disturbance Distances in selected Scottish Bird Species – NatureScot Guidance. Retrieved from <u>https://www.nature.scot/doc/disturbance-distances-selected-scottish-bird-species-naturescot-guidance</u>

100-200m as has dunlin (Goodship and Furness, 2022) and so a similar value is presumed appropriate for lapwing.

- protection of breeding bird nests from damage and/or destruction during the breeding season will need to be ensured. Any works carried out during the breeding season will only be done so following a pre-construction nesting check of the area within 48 hours, and following any requirements for mitigation.
- Unnecessary disturbance to habitats will be avoided, by minimising the extent of ground clearance and other construction practices as far as practicable.
- An ecological TBT will be given to all construction personnel as part of Site induction on the potential presence of species and any measures that need to be undertaken should such species be discovered during construction activities. The toolbox talk will also include the requirement to report and log any protected species or bird casualties at the Proposed Development during construction and operation of the Site.

8.3 Biodiversity Enhancement Measures

- 8.3.1 An Outline Biodiversity Enhancement and Management has been produced and is included as Technical Appendix 6.5 in Volume 3 of the EIA Report. This will be finalised prior to construction commencing. The focus will be on creating priority meadow habitat, wetland features and connect existing blocks of woodland providing habitat corridors and enhanced resources for protected and priority species. The enhancement measures will correspond with any required protected species mitigation. The following objectives are proposed:
 - Species-rich meadow creation on and off-site;
 - Wetland scrapes and wet meadow creation both on and off-site;
 - Creation of species-rich hedgerows and tree planting;
 - Native woodland and scrub planting, riparian planting and woodland edge enhancement;
 - Wetland features of biodiversity value incorporated into Sustainable Drainage Systems (SuDS); and
 - Installation of bird boxes, and log piles.

9.0 Drainage and Surface Water Management

9.1 Introduction

- 9.1.1 Control of water is of great importance during construction to prevent exposed soils eroding and silting up surrounding drainage channels and watercourses. It is essential that the works have little or no impact on the existing hydrology in order to minimise potential impact on ecology and environmental quality of the surrounding area.
- 9.1.2 The following principles are intended to demonstrate measures that could be used across the Site to adequately protect hydrological, and related, resources. Detailed proposals for such measures will be documented prior to construction, and will provide the same or greater protection for the water environment as those described in this document. The measures are proportionate to the risk and, where greater risk is highlighted at specific locations prior to construction, specific measures will be agreed for those locations.

9.2 Construction Site Licence

9.2.1 In accordance with Controlled Activity Regulations (CAR) prior to any construction at Site, a Construction Site Licence application will be made to SEPA. The Licence, which is regulated by SEPA, is used to ensure that runoff from a construction Site does not cause pollution of the water environment. The Construction Site Licence requires the development of pollution prevention measures, which once agreed with SEPA is adhered to on-site.

9.3 Site Drainage

- 9.3.1 During the construction phase of the Proposed Development, measures will be adopted, in order to prevent silt, chemicals and/or other contaminants from being washed into watercourses. Discharge into watercourses will require CAR authorisation under The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended). Areas exposed due to the removal of existing structures and/or vegetation are more susceptible to erosion during heavy rainfall so areas will be reinstated as soon as possible to minimise this effect.
- 9.3.2 The appropriate methodologies to cover water control and the means of drainage from all hard surfaces and structures within the Site are described in the following sections.

9.4 Management of Sediment and Surface Waters

- 9.4.1 Good practice construction techniques will be adopted for the management of sediment and surface water run-off generated during the construction phase of the Proposed Development. SuDs will be used where applicable.
- 9.4.2 Drainage from the Site will include elements of SuDS design. SuDS replicate natural drainage patterns and have a number of benefits:
 - SuDS will attenuate run-off, thus reducing peak flow and any flooding issues that might arise downstream;



- SuDS will treat run-off, which can reduce sediment and pollutant volumes in run-off before discharging back into the water environment; and
- SuDS measures, such as lagoons or retention ponds (described below), where appropriate and correctly implemented will produce suitable environments for wildlife.
- 9.4.3 The proposed drainage / SuDS scheme will comprise the management of surface water runoff from the proposed BESS development area. The development area will be drained via a herringbone drainage system and a perimeter filter drain around the development extents.
- 9.4.4 The development area will be constructed with semi-permeable materials to allow rainwater to infiltrate into the underlying makeup where it will be intercepted by perforated pipework (herringbone drainage system) and conveyed to a SuDS Basin at the eastern extents of the BESS area via conventional drainage measures. The SuDS basin will provide suitable treatment and attenuation prior to discharge to the Dean Water to the south of the site.
- 9.4.5 In addition, a wet weather protocol will be developed and implemented by the PC to manage activities during periods of heavy and prolonged precipitation. The protocol will be approved by Angus Council in consultation with SEPA.
- 9.4.6 Heavy or prolonged rainfall during construction may lead to sediment transport or vegetation causing blockage to infrastructure drainage channels. Regular monitoring and prompt maintenance of these assets will ensure that the drainage system continues to function as designed.

9.5 Foul Drainage

9.5.1 During the construction phase, effluent and waste from on-site construction personnel will be captured and stored for off-site disposal by a licensed contractor, as there is no connection to the public foul sewer.

10.0 Audit, Monitoring and Review

- 10.1.1 Reporting procedures will be defined by the Applicant who will hold overall responsibility for providing feedback on the environmental performance of the works.
- 10.1.2 All injury accidents occurring as a result of the Proposed Development's work activities or conditions are to be reported to the PM and recorded in the Site Accident Book. First aid will be provided and where necessary, arrangements will be made to get the injured person to hospital.
- 10.1.3 The PM will report all injury accidents, 'near misses' and dangerous occurrences to Applicant's representative Health and Safety Department who will carry out an investigation of all notifiable injury accidents and incidents as scheduled under The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) 2013. Minor injury accidents will be investigated where it is deemed beneficial.
- 10.1.4 The Developer will hold the responsibility for maintaining a register of all environmental monitoring, which will be made available for auditing and inspection.

10.1 Incident Response

- 10.1.1 The PM will advise the Applicant within 24 hours of any incidents of non-compliance with the CEMP and will respond to any reported incidents within 24 hours, or as soon as reasonably practicable. In the event of working practices being deemed dangerous either by the Applicant's representative or the Health and Safety Executive (HSE), immediate remedial action will be taken.
- 10.1.2 The formal procedure for handling Environmental Incidents will be developed and agreed by the Applicant/PC but may include a procedure similar to that detailed below:
 - Environmental Incidents are to be reported to PM;
 - The PM (or nominated representative) will record full details of the Environmental Incident and ensure that they are responded to as soon as reasonably practicable (preferably within one hour but always within 24 hours);
 - The PM (or nominated representative) will monitor and ensure that appropriate action is taken; and
 - The PM (or nominated representative) will undertake an investigation to assess what corrective and preventive action, or further investigation is necessary to avoid recurrence of the Environmental Incident.

10.2 Communications and Complaints

10.2.1 The PM will define procedures for managing incidents. A centralised register of all reported complaints and incidents will be maintained by the PM.

30 April 2025

11.0 Figures



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Appendix A Relevant Legislation



A.1 Relevant Legislation

Environmental Legislation	Summary of Relevance to the Site			
	Hazardous Substances			
Control of Substances Hazardous to Health (COSHH) Regulations 2002 (and amended 2003, 2004)	The COSHH regulations provide a legal framework for controlling people's exposure to all 'very toxic, toxic, harmful, corrosive or irritant' substances and apply to all places of work. There are various requirements including an assessment of the risk to the health of employees arising from their work and what precautions are needed, introduction of appropriate measures to prevent or control the risk (ensuring that measures of control do not increase the overall risk to health and safety), use of control measures and maintenance of equipment.			
	Waste			
The Waste (Scotland) Regulations 2012	These Regulations provide for the collection, transport and treatment of dry recyclable waste and food waste, and for related matters.			
Environmental Protection (Duty of Care) Regulations 1991 (amended 2003)	A legal duty of care is imposed on anyone – from producers to carriers and disposers of waste, to ensure that:			
	 Waste is not illegally disposed of or dealt with without a licence or in breach of a licence or in any way that causes pollution or harm; 			
	 Waste is transferred only to an 'authorised person', i.e., a local authority, registered carrier or a licensed disposer; and 			
	 When waste is transferred, it is accompanied by a full written description which forms part of a waste transfer note (or consignment note for hazardous wastes). 			
	All persons subject to duty of care are required to ensure that neither they nor any other person commit an offence under the Regulations.			
Environmental Protection Act (EPA) 1990: Part 2 – Waste on Land (amended 2010)	This Act builds on the system put in place by the Control of Pollution Act with stricter licensing controls and other provisions aimed at ensuring waste handling, disposal and recovery operations do not harm the environment. It reorganised Local Authority responsibilities for waste management, introduced a duty of care for producers and handlers of waste and described the offences of unauthorised storage, treatment and disposal of waste.			
Environmental Protection Act (EPA) 1990: Part 2a	The section of the EPA created by the Environment Act 1995 setting out the legislative framework for identifying and dealing with contaminated land.			
Environment Act 1995	Inserted Part '2a' to the EPA 1990 giving powers and responsibilities to Local Authorities regarding contaminated land.			
Discharge to Water / Land				
Water Industry Act 1999	The Act prohibits certain discharges to sewers including:			
	 Any matter likely to injure the sewer or interfere with the free flow of its contents or to affect the treatment, disposal of its contents; 			

Environmental Legislation	Summary of Relevance to the Site
	 Liquid waste or steam at a temperature higher than 110°F or any other chemical waste which is dangerous, a nuisance or prejudicial to health;
	Any petroleum spirit; and
	Calcium carbide.
	Trade effluents may be discharged into public sewers only with the consent, or by agreement with, the sewerage undertaker (i.e., local water company). The consent may stipulate conditions relating to:
	Nature or composition of the effluent;
	Maximum daily volume allowed;
	Maximum daily rate of flow; and
	Sewer into which the effluent is discharged.
Water Resources (Scotland) Act 2013	An Act of the Scottish Parliament to make provision for the development of Scotland's water resources; to bring large-scale water abstraction under Ministerial control; to extend Scottish Water's functions and to authorise grants and loans in favour of related bodies; to permit the taking of steps for the sake of water quality; to create contracts for certain non-domestic water and sewerage services; to protect the public sewerage network from harm and to allow for maintenance of private sewage works; to enable the making of water shortage orders; and for connected purposes.
Water Environment and Water Services (Scotland) Act 2003	An Act of the Scottish Parliament to make provision for protection of the water environment, including provision for implementing European Parliament and Council Directive 2000/60/EC; to amend the Sewerage (Scotland) Act 1968 and the Water (Scotland) Act 1980 in relation to the provision of water and sewerage services; and for connected purposes.
Groundwater Regulations 1998 (amended 2009)	The Regulations transpose the requirements of the Groundwater Directive into UK legislation. The Regulations aim to prevent and limit the pollution of groundwater by certain listed substances or groups of substances. The listed substances are the same as those in the Groundwater Directive. The Regulations aim to prevent entry of List I substances into groundwater and prevent groundwater pollution by List II substances. The direct or indirect discharge of List I or II substances must be subject to prior investigation and authorisation. The Regulations also allow notices to be served to control activities which might lead to an indirect discharge of List I substances or groundwater pollution by an indirect discharge of substances in List II.
	Emissions to Air / Noise
Control of Pollution Act (COPA) 1974 (Sections 60, 61) (amended 1989)	Section 60 of COPA gives powers to the Local Authority to control noise and vibration from construction Sites. The basis of the COPA legislation is that Best Practical Means should be used to control noise and vibration pollution.
	Control is by service of an abatement notice (under S60) on the person responsible for the noise requiring specific controls to minimise noise and vibration. The notice may specify types of plant and machinery, hours of work, boundary noise levels, etc.

Environmental Legislation	Summary of Relevance to the Site
	Section 61 provides for OCU to apply to the Local Authority for consent before works commence. This protects the contractor from action by the local authority under S60, but not from individual residents' complaints.
Clean Air Act 1993	The Act prohibits, subject to certain conditions, the emission of dark and black smoke from chimneys serving boilers and other industrial plant. Limits also apply to dust, grit, sulphur and car fume emissions. All new furnaces shall be so far as practicable, smokeless. The Local Authority is empowered to undertake an examination of a plant likely to be causing air pollution, considering the possible relevance of statutory exemptions.
Noise and Statutory Nuisance Act 1993	This Act amends the Environmental Protection Act (EPA) 1990 to make noise emitted from vehicles, machinery or equipment in the street a statutory nuisance. It gives the Local Authority powers to serve an abatement notice on the person responsible.
Noise Act 1996	Introduces a new procedure for Local Authorities to seize noisy equipment, in relation to statutory nuisance offences under the EPA 1990.
Control of Noise at Work Regulations 2005	Requires that all employers must assess the exposure and therefore of the risk of their employees to noise where they have reason to believe that any of the specified action levels for various noise exposures is or could be exceeded.
Construction Plant and Equipment (Harmonisation of Noise Emission Standards) Regulations 1985 (as amended 1995)	Provides for examination and certification of construction plant that comply with noise emission standards. The Regulations require that plant is certified by approved bodies. Various types of plant manufactured after the dates of the regulations are to meet noise emission standards and are certified as such.
Environmental Protection Act (EPA) 1990: Part 3 – Statutory Nuisance (section 80)	When a complaint of statutory nuisance is made to the Local Authority by a person living in its area, the Authority must take steps to investigate the nuisance. Statutory nuisances include any premises maintained in such a state to be prejudicial to health or a nuisance; any dust, steam, smell or other effluvia arising on industrial, trade or business premises and being prejudicial to health or a nuisance. Noise emitted from premises to be prejudicial to health or a nuisance.
BS 5228-1:2009 Code of practice for noise and vibration control on construction and open Sites. Noise	Recommends basic methods to control noise on construction and open Sites with significant noise levels arising from work activities/operations.
BS 5228-2:2009 Code of practice for noise and vibration control on construction and open Sites. Vibration	Recommends basic methods to control vibration on construction and open Sites with significant vibration levels arising from work activities/operations.
Health and Safety at Work Act 1974	The primary piece of legislation covering occupational health and safety in Great Britain. It's sometimes referred to as HSWA, the HSW Act, the 1974 Act or HASAWA.
	It sets out the general duties which: employers have towards employees and members of the public:

Environmental Legislation	Summary of Relevance to the Site
	employees have to themselves and to each other; and
	certain self-employed have towards themselves and others.
Air Quality Monitoring in the Vicinity of Demolition and Construction Sites (IAQM, 2012)	This document provides updated guidance on air quality monitoring in the vicinity of demolition and construction Sites.
	Vehicles
Road Vehicles (Construction and Use) Regulations 1986 (as amended 2020)	It is an offence to use a vehicle if it is emitting 'smoke, visible vapour, grit, sparks, cinders or oily substances' in such a way as is likely to cause 'damage to any property or injury to any person'. It is an offence to use a vehicle in such a way as to cause excessive noise.
Road Traffic (Vehicle Emissions) (Fixed Penalty) Regulations 1997 (as	These Regulations give powers to Local Authorities to enforce vehicle emission standards at the roadside as part of the implementation of the national air quality strategy.
amended 2002 and 2003)	Under the Regulations, Local Authorities may issue fixed penalty notices to users of vehicles that do not comply with emissions standards set in the Road Vehicles (Construction and Use) Regulations 1986 as amended. Appropriately trained Local Authority officers can test emissions from vehicles with the help of a uniformed police officer to stop the vehicle. The Local Authority officer may also issue a fixed penalty notice to drivers who leave their engines running unnecessarily.
EU Directive 97/68/EC Requirements relating to gaseous and particulate pollutant emission limits and type-approval for internal combustion engines for non- road mobile machinery	This Directive makes provision on emission standards and type- approval procedures for engines to be installed in non-road mobile machinery.
EU Directive 98/69/EC Relating to measures to be taken against air pollution by emissions from motor vehicles	Amends the Annexes to Directive 70/220/EEC relating to measures to be taken against air pollution by emissions from motor vehicles.
	Biodiversity
Wildlife and Countryside Act 1981	The Act deals with the protection of certain animals, birds and species of flora, as well as providing power to protect habitats, and Sites of special scientific interest.
	It lists the protected animals and plants. Any activity that could result in the killing or injuring of animals or plants could breach the Act.
	When developing any Site, care and caution must be taken to ensure habitats are not damaged.
	Invasive non-native species
	 It is an offence to release or allow to escape into the wild, any; animal:
	 plants or otherwise cause to grow in the wild any plant.

Environmental Legislation	Summary of Relevance to the Site
	Details are set out in Schedule 9, this includes species of crayfish, Japanese knotweed and Himalayan Balsam. When these species are present you must take reasonable steps to control them to stop them spreading.
Conservation of Habitats and Species Regulations SI 2017/1012	 These regulations provide for the: designation and protection of European Sites; protection of European protected species; adaptation of planning and other controls to protect European Sites. They provide for the safeguarding of protected European animals and plans in Great Britain. They make it an offence, subject to exceptions, to: capture, injure or kill any wild animal of a European protected species; Deliberately disturb wild animals of any such species; Deliberately take or destroy the eggs of such an animal; or Damage or destroy a breeding Site or resting place of such an animal
Conservation (Natural Habitats etc.) Regulations SI 1994/2716	The Regulations designate Sites as special areas of conservation and introduce management agreements which maintain these Sites and remove the threat of their degradation and destruction, by restricting potentially damaging operations. They also provide powers to make bylaws which prevent the entry or movement into a Site and the killing or taking of wildlife protected by European law and the disturbance of their habitats, breading grounds and surrounding vegetation. Similar provisions are also issued for plants. There are exemptions to certain regulations, which are fully outlined.
The Town and Country Planning (Tree Preservation Order and Trees in Conservation Areas) (Scotland) Regulations 2010	Tree preservation orders can be created under the Town and Country Planning Act. The Regulations contain, amongst other things, the procedure connected to making appeals against such orders as well as the procedure connected to applying for consent to cut down, top, lop or uproot trees protected by a tree preservation order. Applications for consent must be on a form issued by the Secretary of State and must include the required details and documents.
National Parks and Access to the Countryside Act 1949	 The Act makes provision for: national parks; the maintenance of nature reserves; the recording, creation, maintenance and improvement of public paths; and access to open country.
Protection of Badgers Act 1992	The Act establishes provisions relating to badgers, which make it an offence to intentionally kill, injure, ill-treat or take them, unless under strict conditions.

Environmental Legislation	Summary of Relevance to the Site
Wild Mammals (Protection) Act 1996	This Act makes it an offence to mutilate, kick, beat, nail (or otherwise impale), stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering.
Countryside and Rights of Way Act 2000	The Act provides additional levels of protection for wildlife. Schedule 12 of the Act amends the Wildlife and Countryside Act 1981, strengthening the legal protection for threatened species. The provisions make certain offences 'arrestable', create a new offence of 'reckless' disturbance, confer greater powers to police and wildlife inspectors for entering premises and obtaining wildlife tissue samples for DNA analysis, and enable heavier penalties on conviction of wildlife offences.



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