CEMP

Construction and Environmental Management Plan

Project: C653 Caerwern House, Social Housing Scheme, Llanelli
Jones Brothers (Henllan) Ltd

Author	Date	Version
James Player	March 26	C1

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1. Introduction

1.1 Outline of the Development

Demolition of Caewern House and construction of 36 no. affordable residential flats in five 3-storey blocks together with access, parking, footpaths, drainage, open space, landscaping and associated works including electric vehicle charging points, bin/cycle storage, pv solar arrays and air source heat pumps.

1.2 Key Contacts

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1.3 PLANNING & SAB APPROVALS

The CEMP is required to encompass environmental controls when required with due consideration to environmental legislation and to satisfactorily demonstrate our pollution control, wildlife and tree protection proposals to SAB and Planning Authority. The CEMP provides the framework for which commitments made can be realised. The CEMP outlines Jones Brothers' approach to environmental management throughout the construction phases with the primary aim of reducing any adverse impacts from construction on local sensitive receptors.

The site has demolitions, earthworks, and for practical purposes the ground is generally considered impermeable. A detailed surface water management plan has been prepared to support effective management of surface and ground water during construction (Please see Appendix 3).

Planning Consent for the site has been granted (Ref 2024/0301) and **Condition 8** requires that a Construction Environmental Management Plan (CEMP) be developed.

Condition 8:
No development, including any site clearance, shall commence until a Demolition and Construction Environmental Management Plan (CEMP) has been submitted to and approved in writing by the Local Planning Authority. The CEMP shall be made with reference to the requirements of British Standard BS5228-1:2009 - Code of practice for noise and vibration control on construction and open sites. The approved CEMP shall be adhered to throughout the demolition and construction phases and shall provide for:
a. Construction methods: details of the extent and phasing of development; details for the storage and management of plant and materials used in constructing the development;
b. Drainage: Details of drainage measures during construction phases to ensure that the drainage of any adjoining land, and land downstream is not interrupted or otherwise adversely affected by the development;
c. General Site Management: details of the construction programme including timetable; details of site clearance; details for erection and maintenance of security hoarding including decorative displays and facilities for public viewing;
d. Control of Nuisances: Wheel washing facilities and measures to control light spill;
e. Traffic Management: details of site deliveries including routes of vehicles, plus delivery and construction times, taking into account the proximity of residential dwellings and school, there shall be no deliveries in excess of 3.5 tonnes shall access or leave the site via any route during the hours of 8am to 9.30am and 2.30pm to 4pm during school term times; details for the loading and unloading of plant and materials; details for the parking of vehicles of site operatives and visitors; scheme for the erection of temporary/semi-temporary signage warning drivers of the presence of children and speed restrictions; Measures to prevent stacking of vehicles onto the public highway; The frequency and size of vehicles used to transport the waste material arising from the demolition works;
f. Hours of working on site, including specified hours for deliveries; details of restrictions to be applied during construction and demolition works (including timing, duration and frequency of works) to prevent noise or nuisance amenity issues to surrounding properties; and
g. Responsible Persons: details of the persons and bodies responsible for activities associated with the CEMP and emergency contact details, the CEMP must also be signed by the responsible person.

In addition to the Planning Approval, the SAB Authority has conditioned the requirement for a SAB Construction Method Statement / CEMP.

Condition 5 SAB Decision: *"Prior to work commencing on site a scheme shall be submitted to the SAB for approval in writing, detailing how surface water through the site will be controlled to avoid any damage to any part of the sustainable drainage system during the construction of the site."*

Condition 6 SAB Decision: *"A scheme shall be submitted and approved in writing by the SAB detailing methods of controlling temporary flows of surface water, to prevent damage to other areas of land during the construction of the development."*

Condition 7 SAB Decision: *"No development, including site clearance, shall commence until a Construction Environmental Management Plan (CEMP) has been submitted to and approved in writing by the Local Planning Authority.*
The CEMP should include the following information:

- *Construction methods: management of waste, the parking of vehicles of site operatives and visitors, loading and unloading of plant and materials, storage of plant and materials used in constructing the Su DS scheme.*
- *A scheme for recycling/disposing of waste resulting from construction works.*
- *Details of the construction programme including timetable, details of site clearance; details of site construction drainage, containments areas, appropriately sized buffer zones between storage areas (of spoil, oils, fuels, concrete mixing and washing areas) and any watercourse or surface drain.*
- *Details of the extent and phasing of development; location of SuDS features, landscape and environmental resources.*
- *Details of fuel and chemical storage and containment.*
- *Pollution Prevention: demonstrate how relevant Guidelines for Pollution Prevention and best practice will be implemented, including details of emergency spill procedures and incident response plan.*
- *Details of the persons and bodies responsible for activities associated with the CEMP and emergency contact details.*
- *Landscape/ecological clerk of works to ensure construction compliance with approved plans and environmental regulations for the duration of the construction of the SuDS scheme.*
- *Measures of flood evacuation during construction.*

The CEMP shall be implemented as approved throughout the site SuDS scheme preparation and construction phases of the development."

2.0 Working Methodology

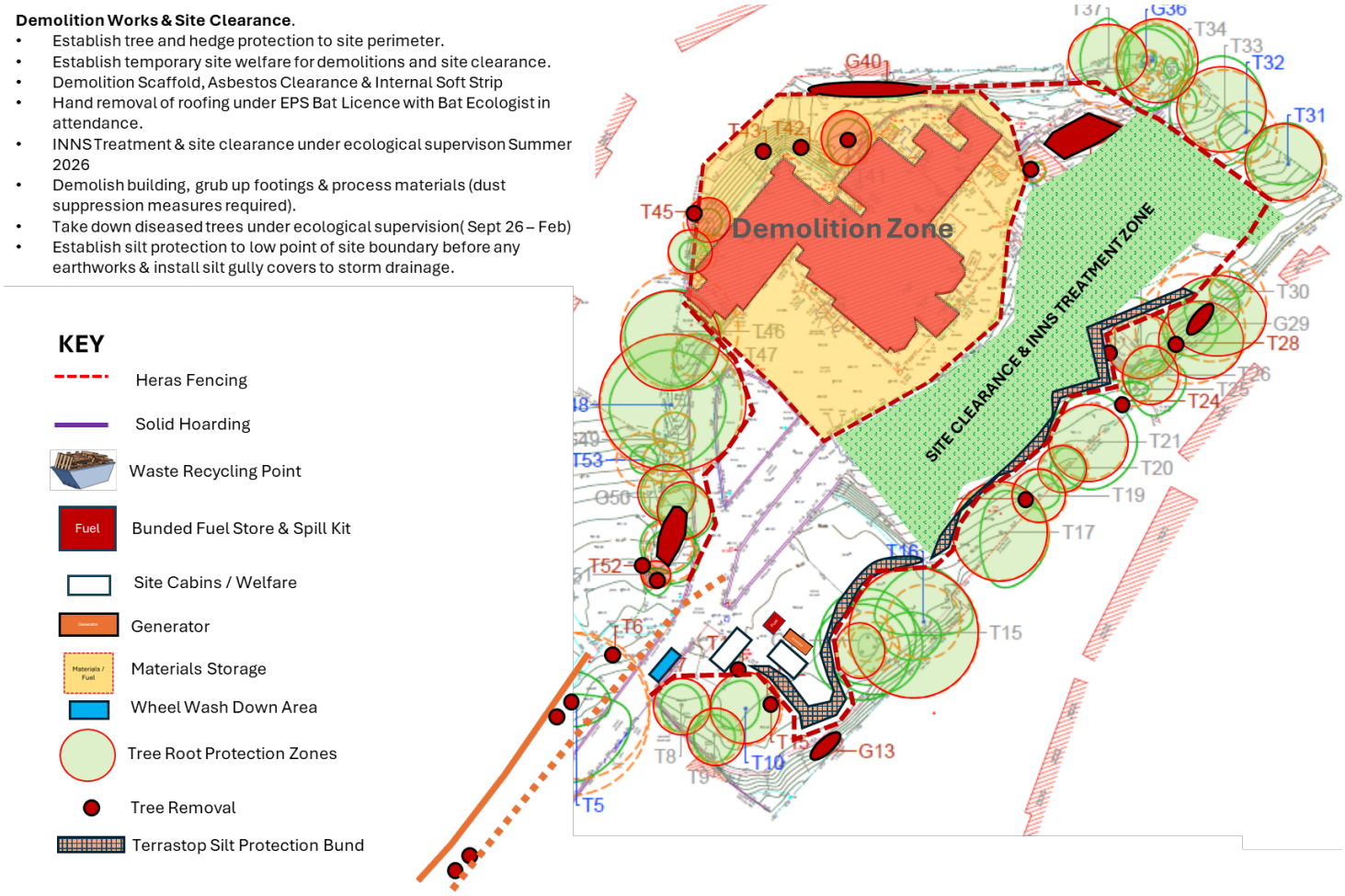
2.1 As the site is close to a residential area the site hours of work are as follows:

- 8:00- 18:00 Monday to Friday
- 8:00 – 13:00 Saturday (when required)

No construction will take place on Sundays and Bank Holiday

Access to the site from the adopted highway will be via the existing site entrance off Dwr-Y-Felin Road. The current access is quite narrow with restricted visibility and turning so it is the intention to undertake Section 278 works, the widening of the existing entrance, at the beginning of the project, in advance of main Construction Works.

Figure 1 - Temporary Welfare Enabling Works



Initial works involve:

- Tree protection fencing
- Asbestos Removal
- Bat License Works
- INNS Treatment and associated scrub clearance (Ecological Supervision)

- Demolition
- Gas Main Diversion
- Tree and scrub clearance
- Further Site Investigation Works
- Mine Grouting
- Section 278 New Entrance (Follows Tree Clearance)

During the enabling works there will be limited welfare and offices on site as Figure 1 below. NB **Appendix 1** includes sequenced Outline Methodology and Logistics Plan for the full project, including enabling phase.

Site Offices, Welfare Units & Storage facilities for the main phase of works are indicated below in Figure 2. This will follow site construction and formation of new retaining structures to give a platform for the permanent compound.

Figure 2 – Site Set Up Main Works

Car parking facilities for site staff, site operatives and visitors will be within the designated site parking area, this will minimise any on street parking directly adjacent the Development.

Jones Bros Ltd will ensure all site staff, operatives and visitors are briefed to avoid the potential obstruction of the existing highway.

Bulk materials will be stored within a temporary storage area on site until required for construction. The location of this temporary storage area is also shown in Figure 2. We will operate a “just in time “ delivery protocol to minimise on site storage.

The site layout has been developed to consider the various environmental aspects of the project:

- Site pollution control of silt, dust, mud, noise, chemicals and fuel.
- Tree protection
- Waste management
- Ecological protection
- Parking for contractors
- Site security
- Traffic management
- Welfare arrangements for operatives

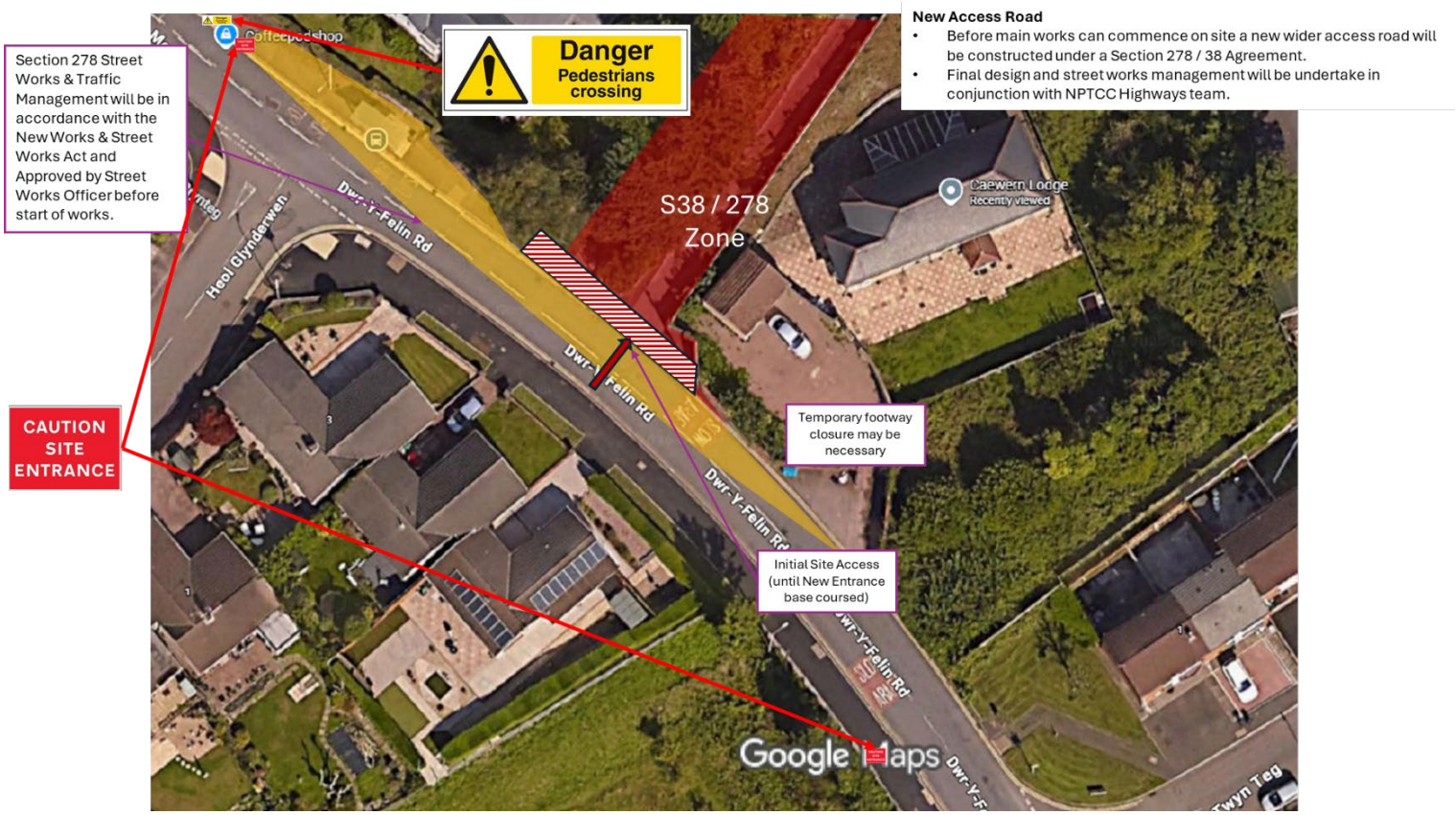
2.2 Section 278 Site Entrance Works

Early construction of the permanent site access is critical to the overall programme, enabling the establishment of a controlled and durable access route that can be maintained in a clean condition and minimise the risk of mud being deposited on the public highway ahead of the main construction works commencing.

It is therefore proposed to complete the widening of the existing site access at an early stage, incorporating the required Section 278 and Section 38 works, to create a two-way site entrance together with a dedicated holding area for deliveries. This will allow vehicles to enter, wait and manoeuvre safely within the site boundary, avoiding disruption to traffic on the adjacent main road and improving overall site logistics from the outset.

Traffic management arrangements will be agreed in advance with the Highway Authority Street Works team and implemented in accordance with Chapter 8 of the New Roads and Street Works Act, ensuring safe operation for both the public and the workforce during the access construction phase.

Figure 3 – Section 278 Works



3.0 <u>Roles & Responsibilities</u>

3.1 **Project Manager – Lyn James**

The Project Manager shall be responsible for:

- ensuring that the CEMP is prepared, kept on site, and fully implemented throughout all phases of the project;
- ensuring that the CEMP is reviewed and updated as necessary when relevant information is provided by stakeholders in relation to each section of the document;
- maintaining the CEMP and ensuring that all contractors and visitors comply with its requirements;
- ensuring that environmental matters identified within the Pre-Construction Information, pre-construction site surveys, and other relevant information obtained from statutory bodies, local authorities and other stakeholders are properly addressed;
- preparing project-specific environmental controls for all significant identified risks and implementing appropriate mitigation measures to minimise the potential for environmental harm;
- communicating the requirements of the CEMP, together with other related documents, to employees, contractors and the client's representative;
- nominating and appointing a suitably experienced Ecological Consultant to monitor habitat protection measures and other biodiversity considerations; and
- ensuring that any proposed deviation to the works that may affect the measures set out in this CEMP and/or the LEMP is agreed in writing in advance with the supervising ecologist, the Local Planning Authority and the SAB Officer before such works are undertaken

3.2 Contractors and Visitors

Contractors and visitors to the project shall be responsible for:

- complying with the environmental control measures identified within the CEMP and relevant environmental surveys, insofar as they relate to their activities or site visit; and
- notifying the Project Manager (or nominated site management representative) immediately of any non-conformance with environmental control measures, or any environmental incident or near miss where the environment has been, or may have been, placed at risk.

3.3 Site Manager – Paul Dowley

Site Manager Responsibilities

The Site Manager shall be responsible for:

Site Environmental Control and Protection

- ensuring the site, including all stored materials, fuels and chemicals, is safe, secure and appropriately controlled;
- ensuring fuel storage areas are suitably bunded and that spill kits are available, maintained and accessible;
- implementing effective dust control measures;
- ensuring adjoining highways are kept clean and free from mud, debris and silt arising from site operations;
- ensuring adjacent watercourses, drainage systems and surface water infrastructure are protected from siltation and pollution;
- ensuring the site is maintained in a clean, tidy and orderly condition at all times;
- ensuring waste is managed in accordance with company procedures and the Site Waste Management Plan;
- controlling site access and egress arrangements, including arrangements for safe evacuation in the event of a pollution or spillage incident;
- ensuring adequate first aid facilities, trained first aid personnel and spill response equipment are available on site at all times; and
- ensuring statutory and site information signage, including the F10 notice, Principal Contractor signage and visitor reporting arrangements, are clearly displayed.

Workforce Awareness and Compliance

The Site Manager shall ensure that all personnel working on site:

- receive the JBHL site induction, including briefings on environmental risks relevant to the project;
- receive appropriate toolbox talks relating to environmental controls and site-specific risks;
- understand and comply with site rules;
- are aware of emergency arrangements, including muster points, spill response procedures and first aid provisions;
- review and understand the site hazard board;
- hold appropriate training and certification relevant to their activities; and
- are informed of environmental sensitivities and constraints applicable to the works.

Control of Site Operations

The Site Manager shall ensure that works are carried out:

- safely and in accordance with good practice and relevant manufacturer’s guidance;

- in accordance with approved Risk Assessments and Method Statements (RAMS), particularly where activities present potential environmental risk;
- in compliance with the Site Waste Management Plan;
- in accordance with the requirements of the Construction Environmental Management Plan (CEMP) throughout all phases of the project; and
- in accordance with relevant environmental legislation, planning conditions, permits and statutory consents.

Monitoring, Inspection and Reporting
The Site Manager shall be responsible for:

- undertaking daily inspections to ensure the site remains secure, clean and compliant with environmental controls;
- carrying out weekly inspections, toolbox talks and recorded site audits;
- consulting with site personnel regarding the effectiveness of environmental protection measures and implementing improvements where appropriate;
- maintaining records of inspections, audits, incidents and near misses;
- reporting environmental incidents, non-conformances and corrective actions in accordance with company procedures;
- delivering site-based environmental awareness training where required; and
- monitoring and reporting environmental performance data.

Environmental Champion Role
In their role as Environmental Champion, the Site Manager shall:

- ensure site operations comply with environmental legislation, planning conditions, permits and statutory consents;
- ensure compliance with the objectives, targets and commitments set out within the CEMP;
- ensure site personnel operate in accordance with approved RAMS and environmental control measures; and
- ensure ongoing compliance with JBHL environmental procedures, inductions and toolbox talk requirements relating to environmental risk management.

3.4 Ecological Consultants

The Project Manager and Site Manager must ensure the appropriate ecologists attends site to supervise relevant work as defined in the CEMP or approved Planning Conditions, for the benefit of doubt this includes all Bat License Inspections, Toolbox talks, inspections for nesting birds etc.

Ecologist:
I & G Ecology, Contact: Iestyn Evans / Glyn Lloyd Jones
Email: Iestyn.igecol@gmail.com

The Ecologists will provide a written summary of all work undertaken on site to the Project Manager and Site Manager. Summary of works requiring ecological supervision:

- Installation of temporary and permanent fencing for tree protection
- Installation of bat and bird boxes prior to start

- Review of designs for bat roof access and roof details
- Toolbox Talks to demolition operatives
- Supervison of Bat Box and Bird Box pre-demolitions
- Supervision of specified tree removal
- Inspection of all fencing to ensure small mammal passes are installed
- Installation of all bat and bird boxes within units.
- Any other fauna or flora issues that arise during construction.

4.0 Information for Contractors & Visitors

4.1 All contractors and visitors to the site will be made aware of the Environmental policy and the controls applicable to their presence and activities on site including but not limited to:

- Method statements
- Risk Assessments
- Site Induction which include Environment briefing
- Toolbox talks

4.2 The Projects Manager will be responsible for monitoring communications between all relevant parties to the project ensuring that all environmental matters to the project are discussed and managed and observation of the communications will be documented in the weekly site meetings and sent by e-mail. In addition, a copy of all correspondence will be held in this file.

4.3 Relevant site layout and location plans/CDM drawing detailing the location and construction of the site compound, storage locations and car parking are to be displayed on an information board at the site entrance.

5.0 Ecology

5.1 Table below indicates the completed Ecological measures, as approved under Planning Conditions. that have been undertaken over the past 12 months. Figures 2 & 3 overleaf highlight the planned works prior to start to manage invasive species and site clearance.

Enabling Works Calendar Table

		Month / Year											
		Jun 26	Jul 26	Aug 26	Sept 26	Oct 26	Nov 26	Dec 26	Jan 27	Feb 27	Mar 27	Apr 27	May 27
	Ecology Enabling Works												
Install heras fencing & tree protection	0												
INNS Removal & Supervised Scrub Clearance	0												
Bat & Bird Box Installation / Pre Demolitions													
Tree Removal Under Ecological Supervision (Select Tree in Summer – residual trees in Autumn													
Asbestos Clearance Works													
Bat Licence Works – Hand Stripping of roof structure under ecological supervision	0												
Soft Strip & Demolition Works	0												
Post Demolition Site Investigation	0												
Grouting works to shallow mine works													

5.2.1 Invasive Non- Native Species

Pockets of Montbretia and Japanese Knotweed are present within the site boundary as indicated in Figures 2 & 3. These have been undergoing spray treatment over

the last two years, with regular survey reports from the specialist. Treated areas have been dugout, sifted in early 2025 and residual controlled waste has been buried 1m below any planned construction works by the specialist and the location, coordinates, levels and depth of the cell recorded.

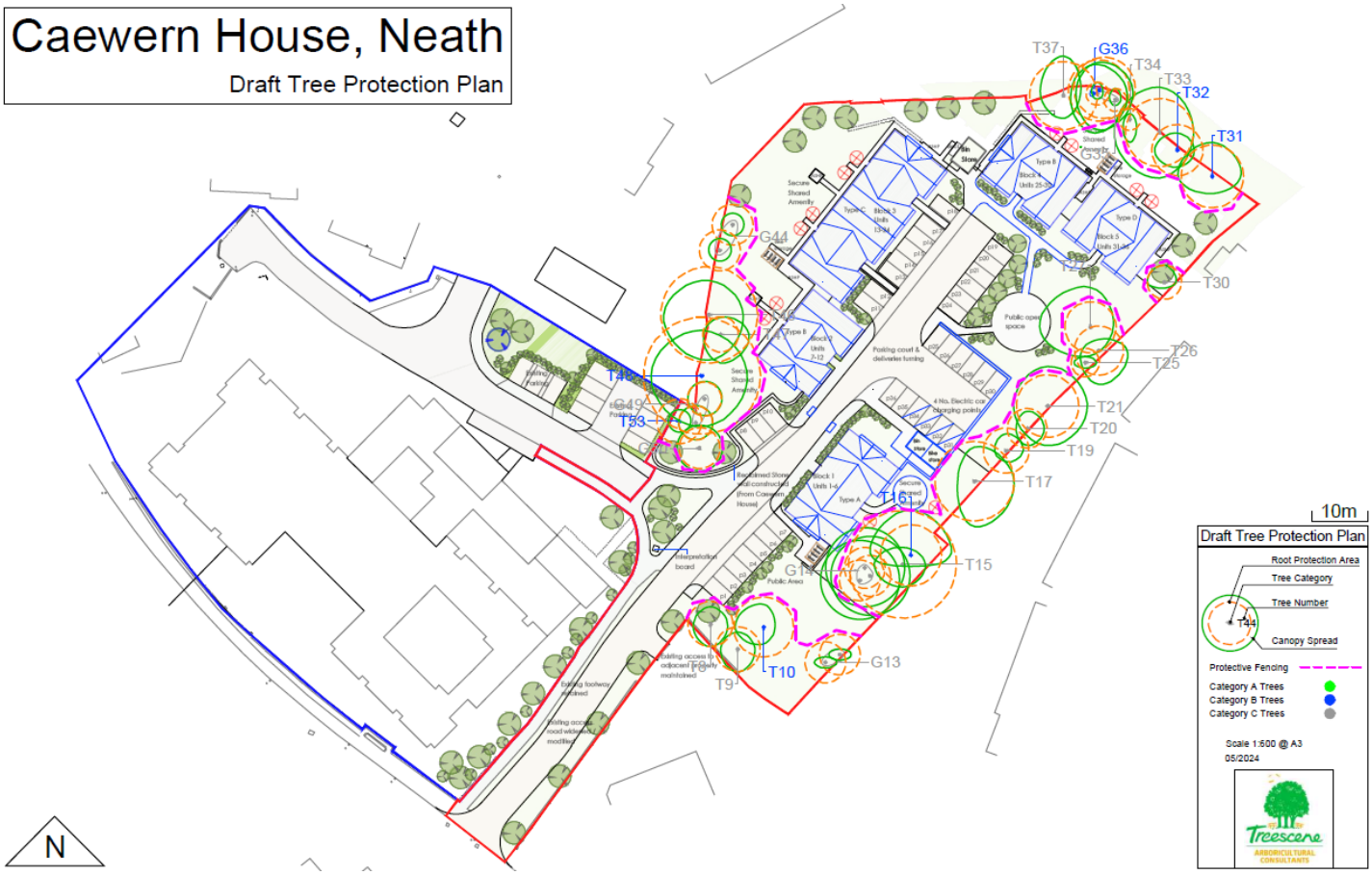
5.2.2 <u>Tree Protection</u>

Works will be undertaken in accordance with the **Treescene Arboricultural Impact Assessment (AIA)**. Heras tree protection fencing will be installed at the commencement of the project in accordance with the **Treescene Tree Protection Plan** (see Figure 4).

All retained trees and designated ecological buffer zones will be protected using Heras fencing, as shown on the **Site Set-Up Plans** (Figures 1 and 2). These protection measures will be installed prior to the start of any construction activities and will remain in place for the duration of the works unless otherwise agreed in writing with the Project Arboricultural Consultant and Local Planning Authority.

Access, storage of materials, plant movements, level changes, or ground disturbance within the protected areas will not be permitted unless specifically authorised and supervised in accordance with the approved arboricultural documentation.

Figure 4 – Tree Protection Plan



- An access gate through the fencing is required to ensure landscaping around retained buffer zones can be maintained.

5.2.4 **Top Soil Storage**

Topsoil will be stripped in stages and set aside in an area to the Northeast of the site as indicated in Figure 1. The sequence of works is shown in more detail in Appendix 2.

5.3 **Species Protection Measures**

Construction activities at Caewern House will be undertaken in accordance with the recommendations of the Preliminary Ecological Appraisal, Bat Survey Reports, and the NRW European Protected Species (EPS) Licence (Ref. S096253/1) together with the approved Bat Mitigation Method Statement.

Bats (European Protected Species)

Bat emergence surveys identified day roosts of common pipistrelle and soprano pipistrelle within the existing building, with peak counts of five common pipistrelle and four soprano pipistrelle recorded. The proposed demolition of Caewern House will therefore result in the loss of these resting places and is being undertaken under licence from Natural Resources Wales.

Accordingly:

- All works affecting the building structure will be undertaken in strict accordance with the NRW EPS bat licence and associated method statement;
- A licensed bat ecologist (LBW) will supervise roof stripping and removal of tiles prior to demolition;
- Roof coverings will be removed carefully by hand under ecological supervision;
- No night-time working or artificial illumination affecting roost locations will take place during licensed works;
- If bats are encountered during works, all works will cease immediately and the Licensed Ecologist will be contacted before works recommence;
- Replacement roost provision will be installed in accordance with the approved mitigation strategy;
- Bat boxes will be installed on suitable retained trees within the wider site boundary;
- A sensitive lighting strategy will maintain dark corridors along retained tree lines, particularly along eastern and southern site boundaries;
- Toolbox talks relating to bat protection legislation and working procedures will be delivered to all site staff prior to commencement of relevant works.

These measures are secured through the EPS licence and compliance with its conditions is mandatory.

Bats – Trees
Tree surveys undertaken to support the planning application identified one tree (T11 – Goat Willow) with limited potential to support roosting bats (PRF-I suitability). No evidence of bat use was recorded during aerial inspection.
Accordingly:

- Tree T11 will be subject to a pre-works inspection by a licensed bat ecologist prior to removal;
- If bats are identified during inspection, works will cease and NRW licensing requirements will apply;
- No further bat mitigation is required for other trees identified for removal.

Nesting Birds
Some clearance of Invasive Non-Native Species (INNS) and adjacent scrub vegetation is programmed for Summer 2026. These works will be undertaken with a suitably qualified ecologist in attendance, who will supervise operations and undertake a progressive fingertip search of scrub and trees immediately ahead of clearance works.

Where vegetation clearance is required during the bird nesting season (March to August inclusive), including the planned works between June 2026 and August 2026, the following control measures will be implemented:

- vegetation will be inspected by a suitably qualified ecologist immediately prior to clearance;
- a progressive fingertip search will be undertaken during clearance operations where appropriate;
- if any active nests are identified, works in the affected area will cease immediately and an appropriate exclusion buffer zone will be established until nesting activity has ceased and the nest is no longer in use;
- the extent of the exclusion zone will be determined by the supervising ecologist based on species and site conditions; and
- bird nesting boxes will be installed within the completed development in accordance with planning conditions and the approved architectural biodiversity enhancement proposals.

Where practicable, vegetation clearance and tree removal works will otherwise be programmed outside the bird nesting season (March–August inclusive) to avoid disturbance to nesting birds

Habitats and Site Vegetation
The Preliminary Ecological Appraisal identified the site as being of generally low ecological value for foraging and commuting bats, although boundary trees along the eastern and southern edges provide local habitat connectivity and will be retained where possible.
Accordingly:

- retained trees and boundary vegetation will be protected during construction in accordance with the Arboricultural Impact Assessment and Tree Protection Plan;
- construction activities will avoid encroachment into retained vegetation areas;
- lighting design will avoid illumination of retained tree corridors;
- replacement planting and landscaping proposals will enhance invertebrate habitat availability and biodiversity value across the site.

Lighting Strategy (Ecological Protection)

Designated Site Delivery Ro – From East and West A465

As the site is close to a residential area th site hours of work are as follows:

8:00- 18:00 Monday to Friday
8:00 – 13:00 Saturday (when required)

Deliveries scheduled to avoid school commuting times where practicable.

No construction will take place on Sunda and Bank Holiday.

External lighting has been designed in accordance with ILP guidance for bats and will:

- avoid illumination of retained trees;
- avoid illumination of commuting routes along site boundaries;
- minimise light spill onto newly created habitat areas;
- support continued bat activity across the site following development.

Other Protected Species

No evidence of other protected species requiring licensing (e.g. badger, dormouse, reptiles, or great crested newts) was identified within the ecological surveys supporting the planning application.

However:

- if protected species are encountered during works, works will cease immediately;
- the Project Ecologist will be contacted;
- works will only recommence following ecological advice and agreement with NRW or the Local Planning Authority where required.

Enhancement Measures

The development incorporates biodiversity enhancement measures including:

- installation of bat boxes on retained trees;
- installation of bird nesting boxes;
- additional planting to increase invertebrate availability for bats;
- retention of boundary vegetation corridors where practicable.

These measures ensure the development delivers biodiversity enhancement in accordance with planning policy and EPS licensing requirements.

6.0 <u>Air Quality & Dust Management</u>

6.1

It is recognised that a key concern for the local community and surrounding area will be potential disturbance to air quality arising from construction activities and traffic movements associated with the proposed scheme.

Site management will ensure that all contractors and material suppliers are safely directed to site and that deliveries take place within approved site working hours. All subcontractors, operatives and suppliers will be made aware of the delivery arrangements, and **school and college movement times will be avoided where practicable**. Vehicle movements at the site entrance will be supervised by a **Traffic Marshal**.

6.2 A Construction Traffic Management Plan (CTMP) will be prepared and issued to the Highway Authority for approval as part of the **Section 278 works**, and will be adhered to at all times.

The following control measures will be implemented to minimise air pollution:

(Figure 5 – Designated Site Delivery Routes)

- all suppliers and contractors will be informed of approved delivery routes (see Figure 5);
- school movement times will be avoided where practicable;
- no site deliveries will be accepted before **08:00 or after 18:00 Monday to Friday**;
- site entrances will be maintained clean and clear at all times;
- wheel-washing facilities will be provided for vehicles exiting the site;
- a road sweeper will be deployed where required to prevent mud transfer onto the public highway;
- hardstanding will be installed at an early stage of the works (see Appendix 1);
- all materials will be unloaded within the site boundary to minimise congestion;
- vehicles involved in removal of subsoil (“muck away”) will be sheeted prior to leaving site;
- engines of all vehicles and plant will not be left idling unnecessarily;
- low-emission vehicles and plant fitted with catalytic converters or diesel particulate filters will be used where practicable;
- ultra-low sulphur fuels will be used where possible;
- plant will be maintained and serviced in accordance with manufacturers’ recommendations; and

- diesel or petrol generators will be avoided where practicable in favour of mains electricity or battery-powered equipment.

6.3 Typical plant to be used on site is expected to include:

- earthmoving equipment;
- dozer;
- tracked loader;
- hydraulic excavator;
- telehandler forklift;
- roller;
- road paver;
- tipper vehicles;
- small mobile cranes;
- concrete wagons;
- mixers; and
- dumpers.

6.4 Only trained, certified and competent operatives will be permitted to operate plant machinery. Records of operator certification will be maintained within the site office.

6.5 All plant will arrive on site with a current service record and annual inspection documentation. Weekly inspections of operated plant will be undertaken by the Site Manager and recorded.
All plant maintenance and refuelling operations will be undertaken within designated compound areas. Drip trays will be used during refuelling operations.

6.6 Management of Dust
Standard dust control measures in accordance with **BRE guidance (Control of Dust from Construction and Demolition Activities, BRE 2003)** will be implemented throughout the construction phase.
Measures will include:

- monitoring site conditions for surface dust generation;
- damping down working areas during dry weather using hosepipes and water bowsers;
- provision of water supply during early stages of the contract where soil movement and storage occurs;
- recording all dust and air quality complaints and implementing corrective actions where required;
- recording any exceptional dust emission incidents and actions taken in the site log;
- monitoring access roads for dust build-up and implementing damping down and sweeping where required; and
- prohibition of bonfires and burning of waste materials on site

6.7 Demolition and Masonry Crushing Activities

Demolition of the existing building and associated masonry crushing operations have the potential to generate elevated levels of dust if not appropriately controlled. These activities will therefore be undertaken in accordance with best practice guidance and under the supervision of site management and the project ecologist where required (particularly in relation to licensed bat works).

Dust risk associated with demolition and crushing activities will be managed in accordance with the **Institute of Air Quality Management (IAQM) Guidance on the Assessment of Dust from Demolition and Construction (2014)**, applying the established hierarchy of mitigation measures including:

- prevention of dust generation at source wherever practicable;
- control of emissions through damping down and water suppression techniques;
- containment of dust through careful sequencing of demolition activities and material handling; and
- monitoring and responsive management of dust where required.

The following site-specific control measures will be implemented:

- demolition works will be undertaken in accordance with the approved **EPS bat licence method statement**, including supervised roof stripping where required;
- a **soft-strip approach** will be adopted prior to structural demolition to minimise uncontrolled dust release;
- water suppression techniques will be used during demolition activities where required;
- damping down will be undertaken during breaking, crushing and loading of masonry materials;
- crushing plant will be located away from sensitive site boundaries where practicable;
- stockpiles of crushed material will be kept to the minimum necessary height and damped down where required;
- processing activities will be avoided during periods of high winds where there is a risk of off-site dust migration;
- loading and transfer of crushed materials will be controlled to minimise drop heights;
- vehicle movements associated with demolition materials will follow approved site haul routes;
- all wagons transporting crushed materials off site will be sheeted prior to leaving site; and
- dust levels will be monitored throughout demolition and crushing operations and additional mitigation measures implemented where necessary.

Demolition and crushing activities will be programmed to minimise impacts on neighbouring properties and sensitive receptors and will be undertaken within approved working hours only.

7.0 Construction Site Waste Management Plan (SWMP)

7.1 Policy Statement

This Site Waste Management Plan (SWMP) forms part of the Construction Environmental Management Plan (CEMP) and sets out the procedures that will be implemented to manage waste arising from the demolition of **Caerwern House** and the construction of the proposed development.

All works will comply with:

- Environmental Protection Act 1990 (Duty of Care)
- Waste (England and Wales) Regulations 2011
- Environmental Permitting (England and Wales) Regulations
- Hazardous Waste Regulations
- Applicable Local Planning Authority conditions
-

Waste will be managed in accordance with the **waste hierarchy**, prioritising prevention, reuse and recycling over disposal.

The Site Manager will be responsible for implementation and monitoring of this SWMP.

Construction and Waste Management

7.2 SWMP Implementation

The SWMP will be maintained on site throughout demolition and construction works and will:

- identify anticipated waste streams;
- define waste handling procedures;
- identify responsible personnel;
- record waste quantities generated;
- record reuse, recycling and disposal routes;
- maintain Duty of Care documentation;
- monitor compliance with planning conditions and environmental legislation.

The SWMP will be available for inspection by site personnel, the Local Planning Authority and statutory consultees where required.

7.3 Principal Waste Arisings

The principal waste streams expected to arise from demolition of Caerwern House (traditional masonry load-bearing construction with timber floors and roof structure) and subsequent construction works include:

- masonry arisings (brick, block and concrete);
- timber joists and roof members;
- hardstanding and bituminous materials;
- excavated topsoil and subsoil;
- vegetation and clearance arisings;

- packaging materials;
- plasterboard and insulation;
- metals;
- plastics;
- general construction waste.

Where materials cannot be reused on site they will be removed using sheeted vehicles and transported to licensed recovery or disposal facilities.

Waste Acceptance Criteria (WAC) testing will be undertaken where required to confirm classification and appropriate disposal routes.

7.4 Construction Waste Streams

Additional construction waste streams anticipated during the works include:

- wood and pallets;
- metals;
- plastics;
- bricks and blocks;
- gypsum-based materials;
- insulation materials;
- WEEE;
- hazardous wastes (including oils, paints and adhesives);
- vegetation arisings;
- canteen waste; and
- residual mixed construction waste.

7.5 European Waste Catalogue (EWC) Codes

Typical waste streams and associated EWC codes include:

EWC Code	Waste Description
17 01 07	Concrete, bricks, tiles and ceramics
17 02 01 / 02 / 03	Wood, glass, plastic
17 03 01 / 02	Bituminous mixtures
17 04 07	Metals
17 05 03	Contaminated soils
17 05 04	Non-contaminated soils
17 06 05	Insulation / asbestos containing materials (if encountered)
17 08 02	Gypsum materials
17 09 04	Mixed construction waste
16 02 13 / 14	WEEE
16 06 04 / 01	Batteries
13 07 01	Liquid fuels

Waste Hierarchy

7.6 Waste Hierarchy Application

Waste arising from demolition and construction activities will be managed in accordance with the hierarchy:

1. Prevention / reduction
2. Re-use
3. Recycling
4. Energy recovery
5. Disposal (last resort)

Demolition sequencing of Caerwern House will prioritise segregation of masonry and timber components to maximise reuse and recycling opportunities.

Duty of Care Requirements

7.7 Waste Transfer Compliance

The Site Manager will ensure:

- controlled waste is transferred only to authorised persons;
- Waste Transfer Notes are retained for minimum **2 years**;
- Hazardous Waste Consignment Notes are retained for minimum **3 years**;
- waste descriptions are accurate and complete;
- waste carriers hold valid licences;
- receiving facilities hold appropriate environmental permits.

Responsibility for waste remains with the Contractor until final recovery or disposal.

Waste Segregation

7.8 Segregation Procedures

Waste materials will be segregated wherever practicable to:

- maximise reuse opportunities;
- maximise recycling rates;
- prevent cross-contamination;
- reduce landfill disposal.

Clearly labelled skips and storage areas will be provided within the site compound.

WEEE

7.9 Waste Electrical Equipment

Waste Electrical and Electronic Equipment (WEEE), including batteries and lighting units, will be segregated and removed via authorised recycling contractors.

Hazardous WEEE will be managed in accordance with hazardous waste procedures.

Re-use of Materials

7.10 Excavated Materials and Demolition Arisings

Opportunities will be maximised to reuse suitable materials on site including:

- reuse of subsoil as engineering fill;
- reuse of topsoil within landscaping;
- reuse of crushed masonry from demolition of Caerwern House as capping or sub-base material where suitable.

Reuse will be subject to appropriate engineering and environmental suitability testing.

Material Management

7.11 Waste Minimisation Measures

Waste generation will be minimised through:

- correct storage to prevent contamination or damage;
- efficient delivery scheduling;
- protection of materials from weather exposure;
- correct handling procedures;
- use of reclaimed materials where practicable.

Waste Auditing

7.12 Monitoring and Record Keeping

Records will be maintained throughout the works detailing:

- waste types generated;
- quantities (tonnes);
- reuse volumes;
- recycling volumes;
- disposal volumes;
- receiving facility details;
- waste carrier details.

These records will form part of the live SWMP maintained on site.

Excavated Materials

7.13 Soil and Stones

Suitable excavated soils will be reused within the development wherever practicable.

Unsuitable materials will be removed using sheeted vehicles and transported to licensed facilities following classification testing.

Invasive Non-Native Species (INNS)

7.14 Invasive Non-Native Species Management

Small localised patches of **non-Schedule 9 bamboo** and **Montbretia (*Crocosmia × crocosmiiflora*)** have been identified within the site boundary.

These species will be managed through a combination of **targeted herbicide treatment and controlled removal**, undertaken in accordance with ecological supervision requirements and best practice vegetation management procedures.

Control measures will include:

- initial treatment using an approved herbicide applied by a suitably competent operative;
- removal of treated vegetation and associated root material following treatment where required;
- segregation of INNS arisings from general green waste;
- removal of arisings from site as **controlled waste** by a licensed waste carrier;
- transport of material to a suitably licensed waste facility;
- avoidance of stockpiling untreated INNS vegetation on site; and
- implementation of appropriate **biosecurity measures** to prevent inadvertent spread during handling and transport.

Where vegetation clearance is undertaken during the nesting bird season, works will be supervised by a suitably qualified ecologist and subject to pre-clearance nesting bird checks in accordance with the CEMP ecological protection measures.

Records of removal and disposal routes will be maintained within the Site Waste Management Plan.

Masonry Demolition Arisings

7.15 Masonry from Caerwern House Demolition

Masonry arising from demolition of Caerwern House will be:

- segregated from timber and mixed wastes;
- crushed and reused on site as sub-base and piling mats;
- some of the existing stonework will be retained for re-use in proposed feature wall on site access;
- reused as engineered fill or sub-base material where appropriate;
- removed to licensed recycling facilities where reuse is not practicable.

This approach supports circular material reuse and reduces landfill disposal.

Concrete

7.16 Concrete Waste

Concrete waste will be returned to suppliers where practicable or removed to licensed recycling facilities.

A designated concrete washout area will be provided within the site compound.

Metals

7.17 Metal Waste

Metal arisings including reinforcement steel will be segregated and sent to licensed recycling facilities.

Timber

7.18 Timber from Demolition and Construction

Timber arising from demolition (including floor joists and roof timbers) will be:

- segregated;
- reused where suitable;
- returned via pallet recovery schemes where applicable;
- recycled through authorised facilities.

Packaging

7.19 Packaging and Plastics

Packaging waste will be segregated immediately following unpacking and stored within dedicated containers for recycling or return to suppliers where appropriate.

Blocks, Bricks and Tiles

7.20 Masonry Offcuts

Brick and block offcuts will be reused where practicable or crushed for reuse as sub-base material.

Hazardous Waste

7.21 Contaminated Ground and Hazardous Materials

Where hazardous materials are encountered:

- works will proceed in accordance with an agreed Remediation Strategy;
- materials will be segregated;
- disposal will be undertaken at licensed facilities;
- consultation with the LPA, Building Control and warranty provider will be undertaken where required.

Hazardous Liquids

7.22 Fuels and Chemicals

Fuels and chemicals will be stored within bunded containers providing **110% containment capacity**.

Spill kits will be located adjacent to storage areas at all times.

Canteen Waste

7.23 Welfare Waste

Segregated receptacles will be provided for:

- food waste;
- recyclable materials;
- residual waste.

Residual Waste

7.24 Non-Recyclable Waste

Residual mixed waste unsuitable for reuse or recycling will be stored in designated containers and removed to licensed facilities.

Container size and collection frequency will be reviewed throughout the works.

8.0 Water Consumption

8.1 Policy Statement

Effective construction management can deliver significant reductions in water consumption and associated environmental impacts, including energy use related to water supply and wastewater treatment.

Water use associated with demolition and construction activities at Caerwern House will be managed efficiently through monitoring, control measures and good site practices without compromising operational effectiveness or welfare provision.

8.2 Anticipated Construction Water Use

Water will typically be required during the works for the following activities:

Dust Suppression

- vehicular movement and haul routes;
- demolition of Caerwern House (masonry structure);
- masonry crushing operations;
- exposed ground surfaces;
- soil stockpiles.

Dust suppression activities will be undertaken using controlled application methods to minimise unnecessary water consumption.

Cleaning Activities

- wheel washing facilities;
- road sweepers;
- boot wash stations;
- high-pressure washing where required.

Cleaning operations will be managed to minimise runoff and prevent unnecessary water use.

Domestic and Welfare Facilities

Water consumption associated with welfare provision will include:

- toilets;
- food preparation;
- canteen facilities;
- site offices;
- drinking water supply.

Water-efficient welfare fittings will be used where practicable.

Construction Activities

Construction-related water consumption will typically include:

- mortar production;
- blockwork and brickwork;
- screeding;
- plastering;
- concrete-related activities where required;
- crushing and material processing operations where suppression is necessary.

Water use for construction activities will be controlled to minimise wastage.

Monitoring and Recording Water Consumption

Water consumption across the site will be monitored throughout demolition and construction works.

Monitoring measures will include:

- separating welfare water consumption from construction-related water use where practicable;
- undertaking regular meter readings from all meters, sub-meters and metered standpipes (weekly as a minimum where available);
- recording water consumption within site environmental records;
- reviewing consumption trends to identify excessive use or leakage; and
- implementing corrective actions where abnormal usage is identified.

Reduction of Uncontrolled Water Use

Measures to reduce unnecessary water consumption will include:

- use of push-fit or timed shut-off taps where practicable;
- installation of non-flush or low-flush urinals where appropriate;
- controlled use of standpipes and hoses; and
- supervision of dust suppression activities to prevent overuse.

Leak Prevention and Detection

The risk of leakage will be minimised by:

- ensuring valves, pipework and overflows remain visible and accessible;
- undertaking routine inspection of temporary water infrastructure;
- promptly repairing leaks where identified; and
- isolating unused supplies when not required.

8.3 Site Water Efficiency Culture

Promoting responsible water use across the workforce will form part of the project environmental management approach.

This will include:

- toolbox talks addressing efficient water use;

- awareness of environmental impacts associated with water consumption;
- guidance on reporting leaks or defective fittings;
- encouraging responsible use of welfare facilities; and
- reinforcing good housekeeping practices throughout the works.

8.4 Good Housekeeping Measures

Good housekeeping practices will support water efficiency across the site and will include:

- turning off taps and standpipes when not in use;
- avoiding unnecessary washing operations;
- reporting leaks promptly;
- using water suppression only where required;
- ensuring fittings remain in good working order; and
- monitoring usage as part of routine site environmental inspections.

9.0 <u>Construction Site Materials Storage</u>

9.1 Chemicals and hazardous materials such as fuels and lubricants are to be stored on site during the construction phase of the project.

9.2 These include but are not limited to:

- Fuels
- Oils
- Lubricants
- Paint and coating
- Adhesives and resins
- Solvents
- Compressed gases
- Cements and binders

9.3 Measures will be developed, implemented, maintained and monitored in order to comply with the Water Resources Act (1991) section 85 and associated regulations.

9.4 The site layout plan (available from the site manager) shows the storage location of the bunded fuel store and the store for small volume packed chemicals and materials.

9.5 The following list shows measures that will be put in place to prevent pollution and would conform to the best practice policy proposed by Natural Resources Wales (NRW) via the Pollution Prevention Guidelines (PPGs):

i. The handling, use and storage of hazardous material to be undertaken in line with the EA's Pollution Prevention Guidelines (e.g. PPG2 Above Ground Oil Storage Tanks);

ii. Adequately bunded and secure areas with impervious walls and floor for the temporary storage of fuel, oil and chemicals on site during construction. **The fueling up of plant will take place 30m away from any adjacent watercourses.**
iii. Drip trays to collect leaks from diesel pumps or from hard standing plant;

iv. Oil interceptor(s) fitted to all temporary discharge points and for discharge from any temporary oil storage/refuelling areas
v. Development of pollution control procedures in line with Natural Resources Wales Pollution Prevention Guidelines, and appropriate training for all construction staff
vi. Provision of spill containment equipment such as absorbent material onsite.

10.0 Surface Water and Groundwater Protection

10.1 Surface Water Management Strategy

A detailed Surface Water Management Plan (SWMP) has been prepared for the Caerwern House redevelopment and is included within Appendix 3 of this CEMP. The SWMP sets out the procedures to prevent the release of sediment-laden runoff, alkaline concrete washout water, drilling returns, grout migration or contaminated groundwater during demolition, ground remediation, mine-working stabilisation and construction activities. The control measures described within Appendix 3 will be implemented throughout the works and form part of the project's pollution prevention strategy.

10.2 Site Hydrogeological Context

The site is underlain by **Coal Measures strata classified as a Secondary A aquifer**, with localised **perched groundwater** identified within superficial deposits and historic **shallow mine workings** present beneath parts of the site.

These conditions create an increased risk of temporary groundwater pathways forming during excavation, drilling and stabilisation works. Construction activities therefore require

enhanced monitoring and control measures to prevent migration of sediment or cementitious materials into controlled waters.

10.3 High-Risk Activities

The SWMP identifies the following construction stages as presenting the greatest potential risk to surface water and groundwater receptors:

- vegetation clearance and exposure of soils to rainfall;
- demolition of the existing Caerwern House structure;
- crushing of masonry arisings;
- removal of foundations and hardstandings;
- service trenching and foundation excavations;
- temporary pumping of groundwater;
- drilling and pressure grouting associated with mine-working stabilisation works; and
- temporary material storage and working platforms.

Control measures for each stage are defined within **Appendix 3** and will be implemented throughout the works.

10.4 Runoff and Sediment Control Measures

Surface water protection measures will include:

- progressive vegetation stripping to minimise exposed ground;
- retention of vegetated margins outside active working areas;
- installation of **silt fencing, V-ditches, rock checks and silt wattles** along downslope site boundaries where required;
- controlled positioning of stockpiles away from drainage pathways;
- bunding and sealing of temporary stockpiles where appropriate;
- provision of temporary infiltration zones and settlement features for management of pumped water;
- visual inspection of pumped water prior to discharge; and
- progressive reinstatement of completed working areas to reduce sediment mobilisation risk.

Temporary drainage controls established during early works will be maintained throughout the construction phase.

10.5 Protection During Demolition and Crushing Activities

During demolition of the existing masonry load-bearing Caerwern House structure and associated crushing operations:

- crushing plant will be located away from surface runoff pathways;
- crusher washout water will be contained within designated washout areas;
- no direct discharge of washout water to ground will be permitted;
- crushing operations will be avoided during periods of heavy rainfall where practicable;
- crushed material stockpiles will be located on stable working platforms away from drainage routes; and

- runoff from demolition and processing areas will be monitored for evidence of suspended solids migration.

These measures are defined within Appendix 3 and form part of the site-wide dust and pollution prevention strategy.

10.6 Mine-Working Stabilisation and Groundwater Protection

Additional groundwater protection measures will be implemented during drilling and pressure grouting operations associated with stabilisation of shallow abandoned mine workings beneath the site.

These controls will include:

- controlled rotary drilling methods to minimise mobilisation of fines;
- temporary casing of drillholes through superficial deposits where required;
- monitoring of grout injection pressures and volumes;
- suspension of works if unexpected grout loss or breakout occurs;
- containment and settlement of drilling returns prior to discharge;
- inspection of downslope site margins during stabilisation works; and
- monitoring of existing groundwater observation wells where accessible.

These measures are designed to prevent the creation of temporary groundwater pathways between strata and protect underlying Secondary A aquifer conditions.

10.7 Concrete Washout, Fuels and Chemical Storage

Pollution prevention controls described elsewhere within this CEMP will be implemented in conjunction with the SWMP, including:

- provision of designated concrete washout areas located away from drainage routes;
- storage of fuels, oils and chemicals within bunded containment areas;
- location of spill kits adjacent to refuelling and batching areas;
- prevention of storage of materials within temporary drainage pathways; and
- inspection of refuelling locations and storage areas as part of routine environmental monitoring.

10.8 Monitoring and Inspection

Monitoring will be undertaken throughout demolition, earthworks, stabilisation and construction activities and will include:

- inspection of exposed working areas during rainfall events;
- inspection of stockpiles and crushing areas;
- monitoring of excavation bases for perched groundwater;
- monitoring of temporary drainage routes following rainfall;
- monitoring of settlement features and pumped discharges;
- inspection of downslope boundaries for sediment migration; and
- monitoring of grout injection pressures and volumes during stabilisation works.

Monitoring frequency and trigger levels requiring escalation are defined within **Appendix 3**.

10.9 Incident Response Procedures

Defined trigger levels and response procedures are included within Appendix 3 and will be implemented where required.

These include:

- suspension of pumping where turbidity is observed leaving the site boundary;
- containment and treatment of alkaline concrete washout water;
- cessation of drilling or grouting where unexpected groundwater inflow or grout breakout occurs;
- deployment of additional settlement capacity during heavy rainfall events; and
- escalation to site management and **Natural Resources Wales** where pollution risks are identified.

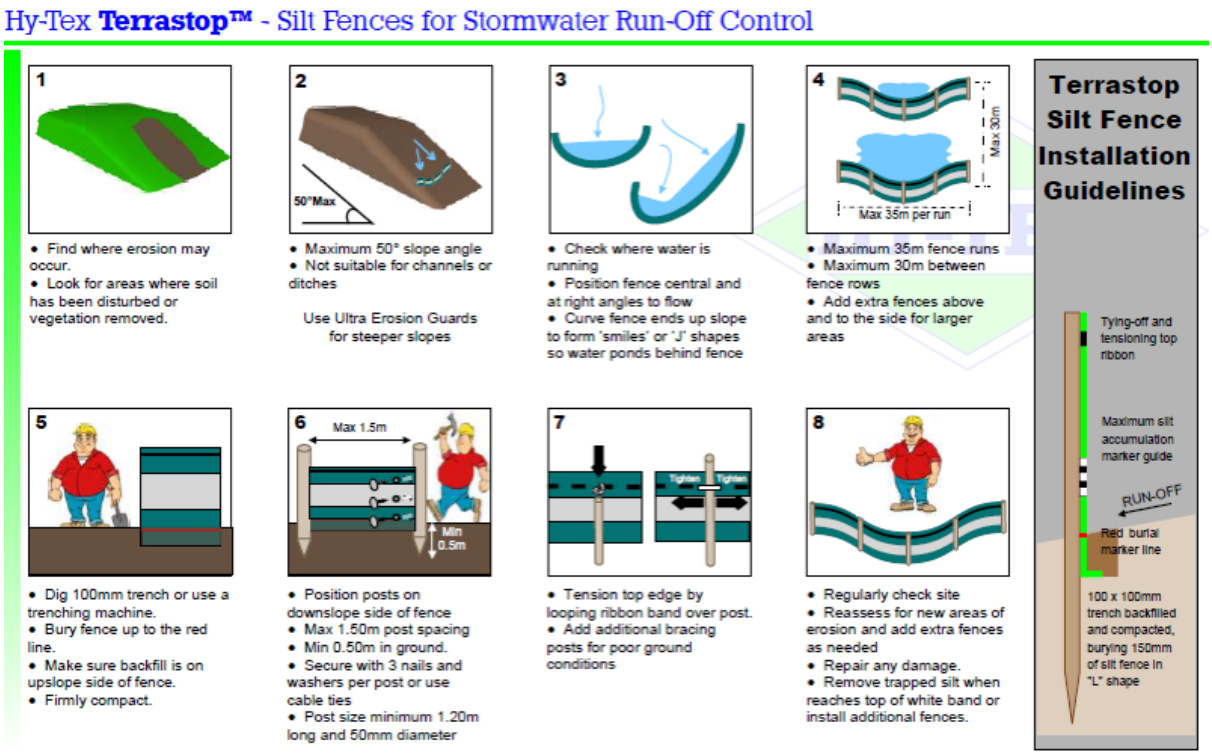
NRW Reporting Hotline: **0300 065 3000**

10.10 Responsibilities and Review

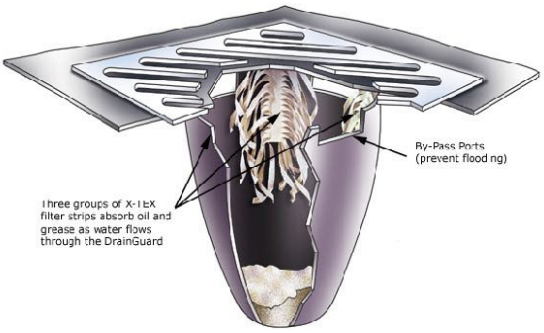
Implementation of the Surface Water Management Plan will be coordinated by the Site Manager, supported by the Environmental Clerk / Supervisor and specialist stabilisation contractors.

The SWMP included within **Appendix 3** will remain a **live document** and will be reviewed and updated as construction sequencing progresses or where site conditions change.

Silt Fence



Drain Guard Silt Protection



11.0 Temporary and Security Lighting

11.1 Temporary and security lighting required during demolition and construction works will be designed and managed to minimise nuisance to **adjacent residential receptors**, the surrounding environment, and ecological features within and adjacent to the site.

Security lighting will be **passive infra-red (PIR) activated** and will only operate when movement is detected within the site boundary.

11.2 Where temporary lighting is required, appropriate measures will be implemented to minimise obtrusive light spill, including careful positioning, shielding and directional control of luminaires.

Lighting will be installed only where necessary for safe working operations and site security.

11.3 Construction activities will normally be undertaken during daylight hours within approved working times. Temporary task lighting may occasionally be required during periods of reduced daylight availability in winter months to maintain safe working conditions.

No routine construction working outside approved site working hours will take place.

11.4 Temporary task lighting will only be used where required to ensure safe working conditions during normal site working hours.

No temporary task lighting will be operated **after 18:00 hours**, unless otherwise agreed in advance with the Local Planning Authority.

Where lighting is required during working hours, it will be positioned to minimise light spill beyond the site boundary and avoid unnecessary illumination of retained vegetation and ecological buffer areas.

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11.5 No night-time construction working will be undertaken unless otherwise agreed in advance with the Local Planning Authority and required for reasons of safety or programme-critical operations.

Security lighting will remain PIR-activated only and will not operate continuously overnight.

12.0 Noise & Vibration

12.1 Legislative Framework

Noise and vibration arising from demolition and construction activities are controlled under the Environmental Protection Act 1990 and the Control of Pollution Act 1974.

All works will be undertaken using Best Practicable Means (BPM) to minimise noise and vibration impacts on neighbouring receptors.

12.2 Sources of Construction Noise and Vibration

Potential noise disturbance associated with the works may arise from:

- demolition of the existing Caerwern House structure;
- vehicle movements to and from site;
- operation of plant and machinery;
- breaking of hardstanding and foundations;
- masonry crushing operations;
- service trenching and foundation excavations.

These activities will be managed to minimise disturbance to nearby residential properties and other sensitive receptors.

12.3 Contractor Method Statements

Prior to commencement of works, contractors will provide method statements identifying:

- plant and equipment to be used;
- sequencing of demolition and construction activities;
- anticipated noise-generating operations; and
- proposed mitigation measures.

These method statements will be prepared in accordance with the principles set out in BS 5228-1:2009+A1:2014 and BS 5228-2:2009+A1:2014 (Code of Practice for noise and vibration control on construction and open sites).

12.4 Compliance with Relevant Standards

All demolition and construction activities will be undertaken in accordance with:

- Control of Pollution Act 1974;
- Environmental Protection Act 1990; and
- BS 5228-1 and BS 5228-2 (current versions).

Where required, liaison will be undertaken with the Local Authority Environmental Health Officer regarding particularly noise-sensitive operations.

12.5 Plant Noise Control Measures

Plant and equipment used on site will incorporate appropriate noise attenuation measures, including:

- compressors fitted with properly lined and sealed acoustic covers kept closed during operation;
- pneumatic percussion tools fitted with manufacturer-recommended silencers;
- switching off or throttling down plant when not in active use;
- minimising impact noise during loading, unloading and material handling operations; and
- maintaining plant silencers and acoustic enclosures in good working condition.

12.6 Best Practicable Means (BPM) Controls

The following Best Practicable Means will be implemented to reduce noise impacts on neighbouring receptors:

- materials will be handled carefully (e.g. scaffolding and steelwork placed rather than dropped);
- drop heights from vehicles and plant will be minimised;
- fixed or semi-fixed plant (including generators, compressors and pumps) will be located away from sensitive site boundaries where reasonably practicable;
- temporary acoustic screening or barriers will be deployed where required;
- plant will be maintained in good working order with particular attention to silencers and acoustic enclosures;
- defective noise-control equipment will be repaired before further use wherever reasonably practicable;
- electrically powered plant will be used in preference to diesel or petrol-powered alternatives where reasonably practicable;
- vehicles and plant will be fitted with effective exhaust silencers and operated to minimise emissions;
- intermittent plant will be shut down or throttled down between operational periods.

12.7 Monitoring and Method Statement Compliance

Risk Assessments and Method Statements (RAMS) provided by contractors will be reviewed and authorised prior to commencement of works to ensure noise mitigation requirements are incorporated into working methods.

Compliance with agreed working hours and noise-control measures will be monitored by the Site Manager throughout the demolition and construction phases.

Where necessary, additional mitigation measures will be implemented in consultation with the Local Planning Authority Environmental Health Officer.

13.0 House Keeping & Security

13.1 Figure 1 and 2 Site Set Up highlight site compound plan location, contractor parking and and the material storage plan; highlighting key areas such as:

- Main office & welfare facility's
- Tool stores
- Material store
- Waste skips

12.2 Security fencing consisting of a Heras type fence shall be provided to general boundaries as Figure 1. The 16 Steps to Site Security will be implemented as guidance by the Loss Prevention Council. This will include CCTV Site Monitoring being set up at the start of the project.

13. 3 Fire risk assessment will be in place and a spread of flame assessment for timber frame will also be undertaken to inform timber frame design and site planning.

12.3 Pollution Prevention Guidelines by Environment Agency set out basic environmental management guidance regarding housekeeping and will be used to set up stores etc.

Section 4 Materials storage, stockpiles & exposed ground.

- *Must prevent stockpiles on exposed ground from generating pollution as water run-off or dust*
- *Locate stockpiles away from watercourses and on level ground to prevent any run-off from entering drains, ditches or watercourses*
- *Contaminated material must be stockpiled on an impermeable surface, in a bunded area, at least 10m from a watercourse.*

Section 9 Chemicals and hazardous substances

- *Store all chemicals and hazardous substances away from watercourses and drains in a contained, bunded area on an impermeable surface*
- *Store all chemicals and hazardous substances away from areas where there is a risk of damage from impact or collision e.g. site traffic*
- *Ensure all chemicals and hazardous substances are labelled, containers are sealed when not in use and inspected regularly and fit for purpose*
- *Dispose of any damaged/old containers in line with the duty of care requirements, these may be considered hazardous waste*
- *Train staff in use of spill kits/emergency procedure*
- *Ensure there is always a designated "responsible person" on site*
- *Lock storage facilities when not in use*

14.0 Environmental Incident Response

14.1 Reporting of Environmental Incidents

All environmental incidents or near misses will be reported **immediately to the Site Manager and Project Manager** and recorded within the site environmental incident log. Where incidents present a risk to controlled waters, protected species, neighbouring land, or public receptors, escalation procedures described within this CEMP and **Appendix 3 – Surface Water Management Plan** will be implemented without delay.

14.2 Definition of Environmental Incidents

Environmental incidents may include (but are not limited to):

a. fuel, oil, grout, concrete washout or chemical spillages onto ground, into drainage systems or watercourses;
b. release of silt-laden runoff beyond site boundaries;
c. unexpected groundwater inflow or grout breakout during stabilisation works;
d. damage to retained vegetation, ecological buffer zones or tree protection areas;
e. disturbance to nesting birds or damage to habitats supporting protected species;
f. harm or risk of harm to protected species (including bats);
g. discovery of previously unidentified contamination;
h. incidents involving waste management, including fly-tipping, incorrect segregation or transfer to unauthorised facilities;
i. failure of temporary drainage, settlement features or pollution control measures;
j. storage or containment failure involving fuels, oils or hazardous materials.

14.3 Immediate Response Procedures

Where an environmental incident occurs, the following actions will be implemented:

- stop works in the affected area immediately;
- make the area safe;
- prevent further spread of contamination;
- deploy spill kits, silt fencing, settlement controls or containment measures as appropriate;
- notify the Site Manager and Project Manager;
- record the incident within the environmental incident register; and
- seek advice from the project ecologist or specialist contractor where relevant.

14.4 Protection of Controlled Waters

Where pollution of surface water or groundwater is suspected:

- pumping operations will cease immediately;
- temporary drainage routes will be inspected;
- settlement features will be checked and supplemented where required;
- discharge pathways will be isolated where practicable; and

- appropriate mitigation measures will be implemented in accordance with **Appendix 3 – Surface Water Management Plan**.

Where necessary, **Natural Resources Wales** will be notified without delay.

14.5 Ecological Incident Procedures

Where protected species or nesting birds are encountered unexpectedly:

- works will cease immediately in the affected area;
- the project ecologist will be contacted;
- exclusion zones will be established where required; and
- works will only recommence following ecological advice and agreement with the Local Planning Authority where necessary.

Where bat roost features are affected, procedures set out within the **EPS licence method statement** will be followed.

14.6 Waste and Contamination Incidents

Where unexpected contamination or waste-related incidents occur:

- materials will be isolated;
- handling will cease until assessment is completed;
- the material will be classified where required;
- disposal routes will be agreed with licensed waste contractors; and
- consultation will be undertaken with the Local Planning Authority if required under planning conditions.

14.7 Monitoring, Recording and Review

All environmental incidents and near misses will be:

- recorded in the site environmental log;
- reviewed by the Site Manager;
- investigated where appropriate to identify root causes; and
- used to inform corrective actions and toolbox talks where required.

Environmental incident procedures will be reviewed periodically throughout the works and updated where site conditions or construction sequencing changes.

15.0 <u>Internal Communication & Training</u>

15.1 The CEMP will be distributed to the project team, including subcontractors, to ensure that the environmental requirements are communicated effectively. Key activities and environmentally sensitive operations will also be briefed to staff and subcontractors. Project, client and company environmental policies shall be displayed on site.

15.2 A schedule of meetings will be developed to include weekly Safety, Health and Environment meetings, where any issues or incidents will be raised for the attention of the client, along with proposed remedial action and additional control if required. An environmental register must be signed and updated to confirm toolbox talks, training and weekly meetings by the environmental team.

15.3 During the construction phase, internal communication will include reporting on the following: Inspections, audits and non-conformance. Environmental performance data including any incidents, near misses and progress on reaching targets. Group HSEQ and the account director will be informed of any visits by external bodies and the outcome or feedback from them.

15.4 Site staff will be competent to perform tasks that have potential to cause environmental impact. Competence is defined in terms of appropriate education, training and experience. Where project specific training is required, training will be appropriate to the role and seniority of staff.

15.5 Environmental awareness and training shall be achieved by:

- All managers and supervisors being briefed on the CEMP. All sub-staff and operators are to undergo an environmental induction and toolbox talks and the CEMP will be signed and updated on the Environmental Register
- Site inductions, including relevant environmental issues, such as waste management, working near watercourses, noise & dust management and ecological risk;
- Emergency preparedness and response briefings, including communication and reporting of incidents, use of spill kits and other equipment, learning lessons
- Method statement and risk assessment briefings including reference to environmental risk;
- Toolbox talks to cover specific task related matters of environmental risk
- Key project specific environmental issues and briefings

15.6 Meetings provide the Site Manager and the team an opportunity to exchange information and receive immediate feedback.

Appendices

Appendix 1 - C653 Design & Construction Programme Rev C3

Appendix 2 - C653 Outline Site Logistics and Construction Methodology Rev C1

Appendix 3 - C653 Surface Water Management Plan Rev C1