



**Construction &
Environmental
Management Plan
Cardonnel Court Rev D**



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Completed By:	Paul Griffiths	Date:	03 rd March 2026	Version No	Rev D
Project Name:	Cardonnel Court / Cardonnel Court Nursing Home				
Project Address:	Cardonnel Court, Cardonnel Road, Skewen, Neath, SA10 6BS				

 Revision Record				
Version Number	Date	Description of Changes	Prepared By	Reviewed By
Rev A	03 rd March 2026	Initial Copy	Paul Griffiths	Jon Pugh
Rev B	08 th May 2026	Addition of Flood Evacuation details (Page 40)	Paul Griffiths	Jon Pugh
Rev C	05 th June 2026	Update of Approved Tree Protection Plan (Page 35)	Paul Griffiths	Jon Pugh
Rev D	08 th June 2026	Activity Dates Updated – Page 10	Paul Griffiths	Jon Pugh

 Introduction
Welcome to the Construction and Environmental Management Plan (CEMP). It presents the environmental management approach that will be adopted by the project, including controls that will be implemented on site to effectively manage residual environmental risks and significant environmental aspects and their impacts, identified in the project risk profile and project environmental assessment respectively. This CEMP forms part of BECT Management System. The purpose of the plan is to ensure: • a consistent and formal approach is in place to allow the Project Team to plan for environmental issues • the project is delivered without any breaches of environmental legislation • environmental risks and impacts arising from the project are proactively managed to minimise their effects • the project is delivered in alignment with client requirements and any other relevant compliance obligations

 Project Details	
Project Description of Work	The project involves: Redevelopment of the former Cardonnel Court site, which has already been cleared following demolition of the former nursing home. Construction of a 23-bed specialist residential care home, two storeys with rooms in the roof. New surface water and foul drainage work, including: • A new pumping station • Rising main • Attenuation tank • Porous blockwork drainage systems • Connection to the existing watercourse
Site Location	The site is located: On land at the former Cardonnel Court, at Cardonnel Road, Skewen, Neath Adjacent to: • Broad-leaved woodland • A railway line to the east • Borders the NPTSINC099 Pentrefynnon ecological area The Site Location Plan confirms the red-line boundary and immediate surroundings. 



Project Environmental Setting

- Based on the **Preliminary Ecological Assessment (Sept 2025)**:
- The site is a **previously cleared plot** with:
 - Early successional vegetation
 - Scattered scrub
 - Partial hedgerow
 - Scattered trees
 - Invasive species (including **Japanese knotweed**)
 - Surroundings include:
 - **Broad-leaved woodland**
 - **Stream along the NE boundary (designated SINC)**
 - **Railway corridor** offering ecological connectivity
 - Ecological considerations:
 - **Potential bat foraging and commuting habitat**
 - Low potential for amphibians (no ponds), dormice, and badgers
 - **Reptile presence likely in low numbers**
 - Nesting birds possible in vegetation
 - Environmental requirements:
 - Sensitive lighting strategy
 - Reptile mitigation strategy
 - Native planting
 - Avoid vegetation clearance during nesting season



Main Construction Elements

(Based on the DAS and Quorum Engineering Review)

Building Construction

- Construction of a **23-bed specialist residential care home**, two storeys with rooms in the roof.
'L-shaped' building located largely on the footprint of the former 39-bed care home.
Accommodation includes en-suite bedrooms, craft room, sensory room, lounges, assisted bathrooms, staff areas and ancillary spaces.

Groundworks & Foundations

- Strip foundations (current design 1100mm wide, with potential for optimisation subject to updated geotechnical review).
Suspended precast beam & block ground floor.
Reinforced concrete retaining walls stepping with site levels.

Drainage Construction

- Foul drainage collected internally → pumped via rising main to existing combined sewer.
- Surface water system: permeable paving, attenuation tanks (45m³), granular sub-base conveyance → discharge to watercourse.

External Works

- Reformed car park providing **13 parking spaces**.
Three new garden / amenity spaces.
- Landscaping scheme including replacement planting and Japanese knotweed eradication.



Site Restrictions and Constraints

(From DAS, Ecology Report & Engineering Review)

Topographical & Geotechnical Constraints

- **Steeply sloping site** with significant level changes, requiring retaining structures.
Presence of **Made Ground** and variable soils; bedrock close to surface in some locations.
Ground conditions unsuitable for soakaways (negligible infiltration).

Ecological & Environmental Constraints

- Stream along north-east boundary is a **designated SINC**, with a mandatory **7m buffer zone**.
- **Japanese Knotweed** present along boundaries and watercourse.
- Limited potential for protected species but bat, reptile, and bird considerations require mitigation.

Drainage Constraints

- Existing retaining walls and steep bank restrict where drainage trenches can be safely excavated.
- A public sewer crosses the site (Welsh Water constraint).

Access & Highway Constraints

- Access is via a **single entrance off Cardonnel Road**, with no alternative access points.
- Narrow internal road network → low-speed vehicle movement only.

Planning & Regulatory Constraints

- Works require SAB approval (surface water).
- Construction Environmental Management Plan must protect the watercourse.



Construction Vehicle Route	(From DAS – Access & Movement) Primary Access Route for Construction Vehicles All construction traffic must access the site via: 1. M4 Junction 43 → route into Skewen 2. Pale Road 3. Burrows Road 4. Cardonnel Road → site entrance Internal Site Routing • Vehicles use the existing site access previously serving the former care home. Turning movements to be made within car park area. • Ambulance and fire tender swept-path analysis already demonstrated to be acceptable; similar geometry applies to large construction vehicles. Restrictions on Construction Traffic • Sensitive boundary to SINC watercourse → no excavation or heavy vehicle plant in buffer zone. Avoid excavation near existing retaining walls unless supervised (risk of undermining).
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Swept Path Analysis & Traffic Control Layout	TRAFFIC CONTROL LAYOUT <i>(Construction Phase Temporary Traffic & Movement Management)</i> The DAS provides a clear description of how vehicles reach the site: M4 J43 → A465 → Pale Road → Burrows Road → Cardonnel Road → Site Entrance 1. External Traffic Controls (Public Highway) Cardonnel Road – Primary Control Zone • Install temporary “Construction Traffic – Turning” warning signage on both approaches. • Banksman-controlled access required during: ○ HGV arrivals ○ Low-loader deliveries ○ Mobile crane deployment • Temporary STOP/GO paddles during peak deliveries to prevent conflict with residential traffic. • No full road closure is required—only intermittent traffic management. Pedestrian Management • Clear pedestrian footway maintained at all times along Cardonnel Road. • If footway obstruction is unavoidable, a temporary walkway with barriers and signage (“Pedestrians Diverted”) must be installed. On-Site Traffic Controls Access Gate (Single Entry Point) • Controlled by a banksman at all times during heavy vehicle movements. • Vehicle waiting area positioned inside the gate to prevent queuing on Cardonnel Road. One-Way Internal Movement • Adopt a clockwise internal system: ○ Entry via access road ○ Turn in car park ○ Reverse to unloading bay only under banksman control ○ Forward-gear exit Restricted Zones • No vehicle access east of the building line due to: ○ Ecological SINC buffer ○ Steep bank ○ Retaining wall instability risks Material & Plant Lay-Down Areas • Western hardstanding only • All deliveries directed to marked bays • Segregated pedestrian walkway from site cabins to work areas
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Delivery Scheduling & Controls	Delivery Windows - Avoid: - School drop-off/pick-up periods - Local peak traffic hours - Use timed slots for: - Concrete pours - Steel delivery - Timber/roof truss deliveries Vehicle Types & Constraints - Maximum recommended: 8-wheel rigid HGV - Articulated lorries permitted only with banksman & timed delivery because of turning space limits. Emergency Access - Access must remain clear for emergency services at all times. - Swept path already demonstrates ambulance & fire tender access is achievable.
Start Date:	May 2026 Duration (Weeks) 62 Weeks
Key Programme Dates	Key Programme Dates Planned Start on Site: Mid-July 2026 Total Construction Duration: 70 weeks Target Completion: November 2027 Enabling Works: Start immediately upon site possession (July 2026) Ecological Pre-Commencement Checks: Prior to any vegetation clearance, July 2026 (ECoW) Tree Protection Installation: Week 1 Japanese Knotweed Exclusion Zones & Biosecurity Setup: Week 1 Drainage & Groundworks Phase: July–November 2026 Superstructure Phase: From November 2026 Envelope & Roofing: December 2026 – March 2027 Internal Works & MEP: April – September 2027 External Works & Landscaping: June – September 2027 Commissioning & Final Inspections: October 2027
Site Working Hours	To minimise disturbance to nearby residents, protect sensitive ecological receptors, and comply with local authority expectations, the following site working hours will apply at Cardonnel Court: General Construction Hours Monday – Friday: 08:00 – 18:00 Saturday: 08:00 – 13:00 Sunday & Bank Holidays: No works permitted



Details of key project roles and consultants.

Client Details	Name	SWP SPV3 Ltd
	Address	First Floor South 101 New Cavendish Street London W1W 6XH
	Contact Details	Contact: Frazer Roberts Tel: 07742 007633 Email: frazer@swprop.co.uk
Principal Designer Details	Name	John Jones (BECT)
	Address	Unit 22 - Waterside Business Park, Lamby Way, Cardiff CF3 2ET
	Contact Details	Tel: 07983599930 Email: jjones@bect.co.uk
Consultant Engineers (Civil, Structural & Drainage)	Name	Quorum Consulting Engineers (Quorum Project Management Ltd.)
	Address	Office 45, Sony UK Technology Centre, Pencoed Technology Park, CF35 5HZ
	Contact Details	Tel: 01446 774493 Email: info@qapm.com
BECT (PC) Details	Name	Jon Pugh (BECT)
	Address	Unit 22 - Waterside Business Park, Lamby Way, Cardiff CF3 2ET
	Contact Details	Mob: 07971 156008 Email: jpugh@bect.co.uk



Management of Works

Responsibilities & Emergency Contacts	Kevin Skinner – Project Manager - Mob: 07484945438 Charlotte Williams – Assistant Site Manager - Mob: 07824 623131 Jon Pugh - Operations Director - Mob: 07971 156008 Daryl Jones – Design Manager - Mob: 07702 436386
Environmental Management structure & responsibilities (Individuals involved with the project, including details of their delegated responsibilities and contact information)	Dedicated Environmental Manager Paul Griffiths (FIIRSM, FSET, FloL, CMgr FCMI) Senior Health and Safety Manager BECT Building Contractors Limited Email: pgriffiths@bect.co.uk Telephone: 07854 121702



External Reference Documents (ERDs)

The following documents that consider the environment (e.g. contractual, planning, Client reports etc.) have been used to develop this CEMP and will be referred to during the project.

Item	Document Title / Description	Reference No.
ERD1	Preliminary Ecological Assessment (PEA)	Cardonnel Court – Ecological Assessment (Sept 2025) [20250714 C...Home (002) PDF].pdf
ERD2	Japanese Knotweed Management Plan & Method Statement	AD003_Japanese Knotweed Management Plan & Method Statement.pdf [AD003 Japa...Statement PDF]
ERD3	Drainage Strategy & SuDS Information	PM2503-25 – Foul & Surface Water Drainage Plans (C950) [SP803 - De...ompressed) PDF].pdf
ERD4	Design & Access Statement	SP803 – Design & Access Statement (Sept 2025) [20250714 C...Home (002) PDF].pdf
ERD5	Site Location Plan	SP803 – P100 Site Location Plan [AD003 Japa...Statement PDF]
ERD6	Engineering Review Letter (Foundations, Ground Conditions, Drainage)	20250714_Cardonnel Court Nursing Home (002).pdf [AD003 Japa...Statement PDF]
ERD7	Geotechnical / Site Investigation Summary (Included within engineering review)	Ground Investigation Extracts from 20250714_Cardonnel Court Nursing Home (002).pdf [AD003 Japa...Statement PDF]
ERD8	Arboriculture / Tree-Related Information (from PEA)	Tree habitat/retention requirements in PEA [20250714 C...Home (002) PDF].pdf
ERD9	Sensitive Lighting & Bat Mitigation Requirements	Ecology Report Lighting Guidance (PEA) [20250714 C...Home (002) PDF].pdf
ERD10	Environmental & Construction Methods Requirements	All ecological, drainage & engineering constraints extracted from uploaded documents



Consents & Permits

The environmental consents and permits applicable to this project, together with how compliance will be achieved and responsible person for ensuring compliance, are detailed below

Consent / Permit	Responsible Person	Compliance Requirements	File Location
Protected Species Licence (EPS – Bats)	PM (Kevin Skinner) with ECoW; SHE (Paul Griffiths) to monitor	Ecology confirms bat-sensitive boundaries and tree retention. No works that could affect bats/roosts may start until an NRW EPS licence (Reg. 55) is in place , and licence conditions (dark corridors/lighting controls, supervision, timing) must be followed. [20250714 C...Home (002) PDF].pdf).pdf).pdf).pdf)	CEMP > Appendix A > Consents Register (copy with Method Statement in Ecology folder)
SAB Approval (Schedule 3 – SuDS)	Design Manager (Daryl Jones) with PM	Required due to > 100m ² drainage works; drawings show attenuation, permeable systems and foul pumping. Works to drainage/SuDS cannot commence until SAB approval is granted ; build as per approved details. [AD003 Japa...Statement PDF]	CEMP > Appendix A > Consents Register; Engineering/Drainage folder
Ordinary Watercourse Consent *(if any works interface with	PM with Design Manager; ECoW to advise	Engineer notes culvert/stream interactions would need LLFA consent and temporary over-pumping/controls. If any structure/temporary works are proposed within the channel/banks, apply and receive consent before starting . [AD003 Japa...Statement PDF]	CEMP > Appendix A > Consents Register; Drainage/Temporary Works folder
Trade Effluent Discharge Consent (if wheel-wash/concrete washwater to sewer)	PM; SHE to check method	Welsh Water (DCWW) flagged a public sewer on site and accepted foul flows in principle. Any discharge of treated effluent to sewer (e.g., wheel-wash) requires DCWW consent ; otherwise use closed-loop or off-site disposal. [AD003 Japa...Statement PDF]	CEMP > Appendix A > Consents Register; Method Statements – Washout/WW folder
Hazardous Waste Producer Registration (Wales)	SHE (Paul Griffiths)	The Japanese Knotweed Plan classifies JK materials/contaminated soils as controlled waste (and can be hazardous depending on herbicide use). Register with NRW if hazardous waste threshold is triggered ; use licensed carriers and full Duty of	CEMP > Appendix A > Consents Register; Waste (Duty of Care) folder

		Care/consignment notes. [AD003 Japa...Statement PDF]	
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Environmental Conditions & Obligations

Planning Requirements (Environmental)

Planning Condition No.	Planning Condition	Reason &/or Compliance Requirements
(Ecology – Bats)	Protection of bats, roost features and commuting corridors. Lighting design must prevent light spill.	Ecology report confirms trees suitable for roosting bats and requires a dark buffer zone around boundaries and sensitive lighting strategy. Follow sensitive lighting guidance and retain all boundary trees.
(Ecology – SINC Watercourse)	Protection of the SINC-designated stream and watercourse. Construction must avoid encroachment into buffer zone.	PEA confirms the northern boundary watercourse is a SINC with a 7 m buffer requirement . No storage, run-off, pollution or excavation allowed within the buffer.
(Tree Retention)	All boundary trees to be retained and protected in accordance with BS 5837.	Ecology confirms trees must be retained; DAS shows reduced encroachment into watercourse buffer. Install protection fencing and prohibit works within RPAs.
(Japanese Knotweed – Invasive Species Management)	A full Japanese Knotweed Management Plan must be implemented before and during development.	KMP identifies widespread JK (JK01–JK05), requiring fencing, signage, biosecurity, controlled waste handling, and JK Clerk of Works supervision.
(Drainage – SAB Approval)	Scheme must comply with approved SuDS drainage design; no works to drainage until SAB approval issued.	Drainage drawings show attenuation tank, rising main, permeable paving, and surface water discharge to watercourse. SAB approval mandatory for >100sqm works.
(Construction Drainage / Pollution Control)	Prevent pollution, siltation or run-off into SINC watercourse during construction.	Ecology requires pollution prevention; engineers highlight risk of undermining existing banks during trenching. Silt fencing, settlement tanks, and drainage controls mandatory.
(Land Contamination – Ground Conditions)	Works to follow Site Investigation recommendations; unexpected contamination to be reported.	Engineering review identifies variable strata (made ground, diamicton, possible bedrock) and recommends further investigation; contaminated soils (JK zones) must be isolated.
(Noise & Construction Hours)	Restriction of noisy works; mitigation to protect neighbours.	DAS confirms proximity to residential boundaries; ecological sensitivity also requires restricted hours to protect bats.
(Landscape & Planting)	Submission and implementation of approved landscaping scheme, with native species and biodiversity net gain.	PEA requires native species planting; DAS emphasises landscaping, ecological buffers and enhancements.
(Surface Water Protection during Construction)	Temporary measures must ensure watercourse is protected during works.	PEA: watercourse sensitive; drainage drawings: foul and surface systems adjacent to slopes; risk of disturbance to retaining structures
(Bat & Bird Enhancements)	Install bat and bird boxes in accordance with ecological recommendations.	Required by ecology report for biodiversity net-gain and species protection.



Additional Legal and Other Compliance Requirements

The BECT Environmental Management System covers the scope of all relevant environmental legislation that generally applies to the activities of the business. The Preconstruction/Project Lead, with their appointed Environmental Advisor will review the project to ensure this scope is appropriately addressed by this system.



Bat Mitigation Strategy

Summary of Bat Presence / Potential

The ecological report confirms that:

- The site contains **trees suitable for roosting bats**, particularly around the boundaries.
- These trees **will be fully retained and protected** throughout construction.
- Bats may **forage and commute** across the site, especially along the woodland and stream edges.

Required Mitigation Measures

Retain and Protect All Boundary Trees

- All mature trees must be **kept in place** and protected behind tree protection fencing.
- Trees cannot be cut, pruned or disturbed during construction except under ecological supervision.

Establish Dark Corridors / Light-Exclusion Buffer Zones

The ecological report states that **light spill onto boundaries must be minimised**, and a “**dark buffer zone**” must be maintained along all site edges where bats are likely to commute or forage.

Buffer Zone Requirements

- Minimum **7m dark corridor** along all bat-sensitive boundaries (stream, woodland, hedgerows).
- No lighting columns within the buffer zone.
- Temporary construction lighting must be **low-level, directional and shielded**.

Construction-Phase Bat Protection Requirements

Avoid Disturbance

- No works causing vibration, heavy ground disturbance or excessive noise near boundary trees at dusk/dawn (critical bat periods).
- Delivery scheduling should avoid night-time activity.

Ecological Clerk of Works (ECoW)

- Required to inspect:
 - Lighting installations
 - Tree protection fencing
 - Pre-works checks on any buildings or trees with bat roost potential



Legal & Compliance requirements are [but not limited to]:

BECT will comply with all relevant legislation and statutory requirements, including the: Health and Safety at Work etc. Act 1974, BS 6187 for any demolition-related activities, wildlife and bat-protection laws under the Conservation of Habitats and Species Regulations 2017, and Natural Resources Wales licensing requirements (Regulation 55 EPS licence) before commencing any works affecting bats or roosts. All operations must follow applicable environmental, planning, ecological and safety regulations, adhere to planning conditions, and meet all obligations for pollution control, waste management, invasive species control, and worker safety.



Site Environmental Rules

The following site environmental rules shall be adhered to by both **BECT** staff and subcontractors whilst working on this project site:

- No wastewater or liquids are to be discharged to drains or sewers unless permission has been granted by site management.
- All spills of fuel, oils, chemicals, and potential polluting materials are to be reported to your supervisor immediately.
- Oils, fuels, chemicals, and other potentially polluting materials are to be located at least 10m from any watercourse or drain, and are to be securely contained, and banded.
- Hazardous waste items are not to be mixed with other hazardous or non-hazardous waste.
- Waste segregated practices on site are to be adhered to
- Site working hours are to be always adhered to
- All plant and machinery are to be switched off when not in use.
- Dust-generating activities will be controlled using **mandatory dust-suppression measures**, including **continuous dampening down of work areas, haul routes, stockpiles and cutting operations using water-spray systems** during all excavation, demolition, and material-handling activities. Dust suppression will be applied **whenever dust-producing tasks are underway** and **will not rely on discretionary assessment** by site personnel.
- Noise levels are to be always kept to a minimum where possible.
- Site management is to be notified immediately if any suspected Protected Species, Vermin, or Invasive Weeds are encountered.
- Burning of waste on site is strictly prohibited.
- Site speed limit to be always adhered to



Environmental Key Performance Indicators

The following section details the environmental KPIs that the project will adopt to measure its performance

No.	Key Performance Indicator	Target	Current Project Performance Against Target
1	Zero RIDDOR incidents	0	
2	Client Satisfaction	9 out of 10 or above	
3	Zero Defects at Handover	0	
4	SMART Waste Recording	100%	
5	SHEA inspections above 78%	78%	
6	Zero Environmental Incidents	0	
7	Drug & Alcohol Testing (Random) 0%	0%	



Environmental Monitoring

Project Commencement Environmental Review

- The Project Lead will liaise with the Senior SHE (Safety, Health & Environment) Manager to conduct a full review of the project environmental management approach after the project has been transferred from Preconstruction. This is to be completed prior to commencing on site.
- The purpose of the review will be to ensure all environmental management requirements for the project are in place and being implemented to achieve the BECT standards.
- Conduct regular weekly site inspections and audits to ensure ongoing compliance with environmental standards and to identify potential risks before they result in harm.
- **Specialist Supervision:** During high-risk groundworks, an Environmental Clerk of Works (ECoW) or Archaeologist will be present to monitor for biological (protected species) or non-biological (archaeological/geological) finds.
- **System Reviews:** Regular review meetings will be held to analyse trends in the monitoring system, improve site practices, and prevent the reoccurrence of any noted environmental issues.
- **Change Management:** Any significant changes to construction plans will trigger an immediate impact assessment and a subsequent update to the CEMP to reflect new mitigation measures.



Audits & Inspections

The following internal audits and inspections are to be conducted on the project:

Audit/Inspection	Frequency	Method	Conducted by
Site Team SHE inspection	Weekly	Site walk and inspection report	Kevin Skinner
SHE inspection	Monthly	Site walk and inspection report	Paul Griffiths
Director / Senior Manager HSE inspection	Monthly	Site walk and inspection report	Jon Pugh
Project Assessment Audit	Monthly	Audit Report	Paul Griffiths
Subcontractor HS&E Performance -	Monthly	SHEA Report	Kevin Skinner
Internal Audit	Monthly	ISO14001 compliance audit	BECT SHEA Department



Enforcement Agency Inspections & Visits

External Regulatory Authorities, including **Natural Resources Wales (NRW)** and the **Local Authority**, may undertake inspections of the site at any time. The Project Team will provide full cooperation and support during all regulatory inspections.

The **Senior SHE Manager** must be **notified immediately** of any planned regulatory visit as soon as formal notice is received. For unplanned or unannounced visits, the Project Team must inform the Senior SHE Manager **immediately upon the inspector's arrival on site**. This notification requirement is mandatory and applies to all personnel.



Risk Assessment & Method Statements (RAMS)

All site activities will be controlled through **task-specific Risk Assessments and Method Statements (RAMS)**. Each RAMS document will explicitly incorporate all relevant **environmental management controls** detailed within this CEMP and any project-specific environmental requirements.

RAMS must be **reviewed, approved, and signed off** by the Project Manager and the Senior SHE Manager **before the associated activity begins**. Any RAMS covering activities that present a **high environmental risk**—including works with potential to affect watercourses, protected species, contaminated ground, or air quality—must be **jointly reviewed with the appointed Environmental Manager** prior to approval.

RAMS compliance and review scheduling will be overseen through the **RAMS planner**, which the Project Team must maintain and update as part of routine site management. No high-risk activity may proceed unless the RAMS planner confirms that the relevant documentation has been reviewed, approved, and is fully current.



Project Environmental Aspects and Residual Risks

To deliver effective environmental management, it is crucial to:

Identify the residual environmental risks and aspects of the project.

Evaluate how the planned working activities on the project will potentially impact on the environment and the surrounding area so that appropriate controls can be identified and implemented



Project Environmental Controls

To manage residual risks and significant environmental aspects, effective control measures must be identified, documented, and implemented on site through this CEMP. Controls are to include those to manage site operations and activities. During the identification of controls reference is to be made to the Legal Environmental Register within the BECT Management System, and where necessary, advice sought from the Senior SHE (Safety, Health & Environment) Manager.

Controls will be subject to inspections and audits. The control measures detailed in this section will be implemented on this project to effectively manage any residual risks drawn from the Environmental Review and Project Risk Profile and the significant aspects and their impacts as identified in the Project Environmental Assessment.



Project Emissions

The following control measures will be employed on this project:

Overview of Emission Sources

Project emissions for Cardonnel Court will arise from four primary sources:

1. **Construction plant & machinery emissions**
2. **Transport emissions from deliveries, waste haulage, and personnel travel**
3. **Embodied carbon in construction materials**
4. **Temporary site accommodation energy use**

BECT will implement a structured and proactive approach to reducing emissions throughout the construction of the Cardonnel Court development. The measures below outline **what BECT will physically do on site**, day-to-day and through planning, to keep greenhouse gas emissions and environmental impact as low as practicably possible.

Reducing Emissions from Construction Plant & Machinery

BECT will:

- **Specify low-emission, modern NRMM-compliant machinery** for all excavators, telehandlers, dumpers and generators.
- Enforce a **strict “no-idling” policy** for all plant and delivery vehicles; plant operators will shut down engines during breaks or inactivity.
- Prioritise **hybrid or electric plant**, where available, particularly for small-to-medium load work.
- Implement **scheduled maintenance checks** to ensure engines operate at maximum efficiency, reducing fuel burn and CO₂ output.
- Use **HVO-compatible generators** or hybrid battery-generator systems to reduce diesel dependency.

(These actions support the sustainability approach outlined in the DAS, which emphasises low-energy and carbon-reduction measures.

Cutting Transport & Haulage Emissions

BECT will:

- **Coordinate delivery slots** to reduce repeat journeys, minimise congestion, and prevent queuing/idling at the gate.
- Use **local suppliers wherever possible**, reducing haulage distances and transport emissions — a measure reinforced in the DAS sustainability section.
- Combine deliveries to avoid part-load transport.
- Direct all delivery drivers to comply with BECT’s **anti-idling rules** before entering the access gate.
- Encourage subcontractors to use lower-emission haulage and logistics providers.

Reducing Emissions from Temporary Site Accommodation & Power

BECT will:

- Fit welfare cabins with **energy-efficient LED lighting**, PIR sensors, and low-energy heating systems, in line with DAS principles on energy efficiency.
- Use **timed power management** for all external and internal lighting so cabins and site lighting power down automatically outside working hours.
- Use **efficient hybrid tower lights** instead of diesel floodlights.
- Monitor electricity and fuel usage weekly and report to the PM and SHEQ for ongoing reduction review.

Minimising Material-Related Emissions (Embodied Carbon)

BECT will:

- Maximise **reuse of excavated material on site** to reduce bulk export and import.
- Work with suppliers to source **materials with lower embodied carbon** where practical (e.g., cement-reduced concrete, recycled aggregates).
- Require **EPD (Environmental Product Declaration) documentation** for key materials where feasible.
- Use **FSC/PEFC-certified timber** for all wood components.
- Minimise packaging waste by bulk-ordering and requesting supplier packaging reduction.

(These actions follow the DAS commitment to using sustainable materials and reducing energy and carbon in the building process.

Workforce Travel Emissions

BECT will:

- Promote **car sharing** for staff and subcontractors travelling from similar areas.
- Encourage use of public transport — local bus and rail links are highlighted in the DAS as accessible to the site.
- Provide **secure cycle storage** to support cycling as an alternative to driving.
- Limit on-site parking to essential personnel only to discourage unnecessary car use.

Monitoring, Reporting & Continuous Improvement

BECT will:

- Record fuel usage for all plant in a **weekly emissions log**.
- Track all deliveries and movements using a **vehicle movement register** to analyse reduction opportunities.
- Monitor accommodation energy use and review performance monthly.
- Include emissions-reduction performance in **weekly SHEQ reports**, reviewed by the PM and Operations Director.



Dust & Pollution Control Measures

The Cardonnel Court site contains **sensitive ecological receptors**, including a **SINC-designated stream**, woodland edges, and Japanese Knotweed contamination zones. BECT will therefore implement strict measures to control **dust, air pollution, water pollution, soil contamination, chemicals, fuel, and noise** during construction.

Dust Control

BECT will:

- Use **damping down** during excavation, breaking out and soil handling.
- Install **windbreak barriers** and **sheet all loads** leaving site.
- Keep access roads clean using **damp sweeping** only.
- Limit site traffic to **5 mph** and avoid stockpiling near the **SINC buffer**.
- Suspend works during **extreme wind** if dust cannot be controlled.

Air Pollution (Plant & Vehicle Emissions)

BECT will:

- Enforce **no-idling** for all plant and deliveries.
- Use **NRMM-compliant, well-maintained machinery**.
- Position generators away from the **SINC corridor**.
- Use **electric/hybrid lighting towers** and shield diesel exhausts.

Water Pollution Prevention

BECT will:

- Maintain a **7 m no-work buffer** to the SINC watercourse.
- Install **silt fencing, straw bales, bunds and settlement tanks**.
- Prevent run-off entering the stream using **channels and bunding**.
- Use **concrete washout trays** and keep hazardous materials on **hardstanding areas**.
- Filter all pumped water through **geotextile bags or settlement systems**.
- inspect manholes, gullies and drainage channels **routinely**.

Soil Contamination & Knotweed Biosecurity

BECT will:

- Fence and sign all **Japanese Knotweed zones**.
- Prevent **any soil movement** from JK areas without **JK Clerk of Works** approval.
- Clean plant, tools and footwear when exiting contaminated areas.
- Segregate JK-affected spoil from clean material.
- Prevent run-off from knotweed areas entering the watercourse.

Chemical, Fuel & Hazardous Substances

BECT will:

- Store fuels/chemicals in **bunded, locked COSHH-compliant units**, 10 m from the stream.
- Use **drip trays** under generators and bowzers.
- Follow controlled refuelling procedures (trained staff only, no refuelling in rain, spill kits present).
- Log and report all spills in the **Environmental Incident Log**.

**Noise & Vibration**

BECT will:

- Avoid high-noise tasks near boundaries at **dawn/dusk** (bat foraging periods).
- Use **acoustic screening** where needed.
- Use **low-impact methods** (e.g., hydraulic shears instead of breakers) where possible.

Monitoring & Compliance

BECT will:

- Carry out **daily environmental inspections**.
- Produce a **monthly SHEQ environmental report**.
- Keep **Pollution Response Kits** at key locations (entrance, fuel store, stream boundary).
- Empower all operatives with **Stop Work Authority** if pollution risks escalate.



Light Control Measures

The ecological assessment confirms the site contains **bat-sensitive boundaries**, including mature trees, woodland edges and the stream corridor. These features are used by bats for **commuting and foraging**, meaning lighting during construction has the potential to disrupt bat activity.

To protect bats and comply with environmental legislation, **BECT will implement strict lighting controls** throughout the construction phase.

Key Light Control Measures

1. Dark Buffer Zones

BECT will maintain **minimum 7 m dark corridors** along all tree lines, hedgerows and the stream boundary, with **no fixed or temporary lighting** allowed within these zones. Buffer areas will be clearly marked on the environmental

2. Directional, Shielded Lighting

BECT will use **hooded, cowled, downward-facing lighting** to prevent light spill towards boundary vegetation. All temporary lighting towers will be screened and angled away from tree lines and the stream corridor.

3. Low-Impact Lighting Technology

BECT will use **warm-colour (<2700K), low-lux LEDs**, PIR motion sensors and solar/hybrid tower lights to minimise unnecessary illumination and energy use.

4. Night-Time Working Restrictions

Night working will be **avoided**, unless essential and approved by the ECoW. No early-morning or late-evening works will occur near boundaries. Emergency lighting, if required, will be **fully shielded and low-intensity**, positioned close to ground level.

5. Lighting Placement Controls

All lighting will be placed **away from sensitive boundaries**, ensuring no direct illumination of:

- Tree lines
- Hedgerows
- Woodland edges
- Stream/SINC boundary

Placement will be agreed with the **Ecological Clerk of Works** before installation.

6. Monitoring & Adjustment

BECT will conduct **weekly checks** of all lighting to ensure no unintended spill occurs and will adjust or re-shield lights immediately if issues are identified. All changes will be recorded in the Environmental Inspection Log.

7. Integration With Ecology Requirements

Lighting controls will align with wider ecological measures, including tree protection, bat-sensitive landscaping and buffer zone protection. No lighting will affect potential **bat roosting habitats** in retained trees.



Site Waste Management Plan

BECT Building Contractors Ltd (SIC Code: 41100 – Development of Building Projects) is committed to sustainable construction practices and full compliance with waste legislation. A Site Waste Management Plan (SWMP) has been developed

Construction Waste:

Item	Waste Route
Bricks	Segregated skip for recycling
Concrete	BECT site engineer on site for total duration of works to reduce waste
Insulation	Roof cut for area and minimal waste to Partition walling
Packaging	Segregated skip for recycling
Timber	Segregated skip for recycling
MEP	Segregated skip for recycling
Canteen Waste	Waste segregation to match local council requirements
Oils	COSHH bin provided to be removed by specialist waste contractor
Asphalt	Segregated skip for recycling
Tiles/ceramics	Mixed waste skip – not possibly to be recycled
Inert	Segregated skip for recycling
Metals	Segregated skip for recycling
Gypsum	Take back scheme employed via supply chain
Plastics	Segregated skip for recycling
Floor coverings	Take back scheme employed via supply chain
Soils	Segregated skip for recycling
Hazardous material	Segregated for shipping to specialist waste contractor
Mixed waste	Mixed waste skip – not possibly to be recycled



Waste Compliance & Validation Summary

To ensure full compliance with waste regulations and maintain traceability, the following procedures will be implemented:

1. Waste Carrier Requirements

- All companies removing waste (including subcontractors) must be registered waste carriers.
- Copies of Waste Carrier Registration certificates must be obtained and uploaded to the project's waste management system.

2. Permits & Exemptions

- Any premises receiving or treating waste must hold a valid environmental permit or exemption.
- Documentation, including permitted waste types, must be collected and retained before use.

3. Validation Checks

- All carrier licenses and permits will be verified via the official government website.
- Evidence of validation will be stored alongside the relevant documentation.

4. Waste Documentation

- No waste will be removed from site without proper traceability.
- **Waste Transfer Notes** and **Hazardous Waste Consignment Notes** must be uploaded to the waste system:
 - Retention: 2 years for general waste, 3 years for hazardous waste.
 - Hazardous notes must include completed Part E.
- Duty of Care documentation will be available upon request.

Waste Control Measures

The following measures will be implemented to support high recycling rates and safe waste handling:

1. **Waste Segregation**
Waste will be separated into designated skips or containers to maximise recycling opportunities.
2. **Signage**
Clear and appropriate signage will be displayed on all waste containers to ensure correct usage.
3. **Hazardous Waste Management**
Hazardous waste will be stored in clearly labelled, separate containers to prevent cross-contamination and ensure safe disposal.



Surface Water Management, Drainage Protection & Pollution Control

The Cardonnel Court site directly borders a **SINC-designated watercourse**, making surface-water and pollution control one of the **highest-risk environmental obligations**. The drainage design includes **permeable paving, an attenuation tank, foul pumping, and a rising main**, requiring strict controls during construction.

BECT will therefore implement robust measures to protect water quality, drainage infrastructure, and the wider environment.

1. Protection of the SINC Watercourse

BECT will:

- Maintain a **minimum 7 m no-work buffer** along the stream boundary.
- Install **double silt fencing**, bunds and swales to intercept sediment and run-off.
- Prevent storage, excavation or plant movement within the buffer.
- Prohibit any plant entering or crossing the ditch.
- Inspect the buffer **daily** for erosion or breaches.

2. Managing Surface Water During Construction

BECT will:

- **Phase earthworks** to minimise exposed soil.
- Use temporary drainage channels to direct run-off to safe containment areas.
- Dewater excavations through **settlement tanks** and **silt socks**.
- Protect permeable paving areas with **geotextile sheeting**.
- Prevent silty water entering the attenuation tank excavation.
- Maintain site gradients so water flows **away from the SINC boundary**.

3. Protecting Drainage Infrastructure

BECT will:

- Keep Japanese Knotweed material and contaminated soils **out of drainage trenches**.
- Use **sealed manhole covers** to stop sediment entering the system.
- Inspect temporary chambers weekly.
- Keep all outfalls capped until permanent drainage is operational.
- Keep stockpiles clear of drainage easements.
- Prohibit concrete/tool washout near any drainage points.

4. Water & Ground Pollution Prevention

BECT will:

- Place **spill kits** at fuel stores, refuelling areas, and near the watercourse.
- Use **drip trays** beneath pumps, generators and static plant.
- Ban refuelling within **10 m** of the watercourse.
- Use impermeable **concrete washout trays**.
- Prefer **ready-mixed concrete** to avoid on-site mixing.
- Contain and log all spills in the **Pollution Register**.

5. Excavation & Pumped Water Controls

BECT will:

- Protect excavations within **20 m** of the stream using bunds or sandbags.
- Ensure all discharge water undergoes **three-stage treatment**:
1. Sump → 2. Settlement tank → 3. Silt sock/geotextile bag
- Test water clarity before discharge.
- Reduce open excavation areas by **phased digging**.

6. SuDS Protection

BECT will:

- Fence off SuDS systems (attenuation tank, permeable paving) until final build stages.
- Prevent heavy plant travelling over permeable sub-bases.
- Keep permeable areas covered during construction.
- Prevent Japanese Knotweed contamination of any SuDS elements.

7. Biosecurity Controls (Critical for Drainage)

BECT will:

- Fence and sign all Japanese Knotweed zones.
- Prevent run-off from JK areas entering the drainage system or watercourse.
- Pressure-wash plant leaving contaminated areas.
- Store JK-affected spoil separately and away from drainage routes.
- Ensure **JK Clerk of Works** supervises all high-risk tasks.

8. Monitoring & Weather Response

BECT will:

- Conduct **daily checks** of silt fencing, bunds and drainage controls.
- Review drainage protection weekly in SHEQ audits.
- Ensure the **Ecological Clerk of Works** monitors works within 20 m of the stream.
- Activate **heavy-rain protocols**, including:
 - Stopping earthworks
 - Reinforcing silt controls
 - Emptying settlement systems
 - Adding sandbags/barriers



Energy Management

The Cardonnel Court project includes sustainability and energy-efficiency principles within the design itself. BECT must therefore mirror these principles during the **construction phase** by adopting energy-efficient methods, technologies, and controls on site.

The goal is to **minimise energy consumption**, reduce carbon emissions and ensure efficient use of all temporary site utilities.

Energy-Efficient Site Establishment

BECT will:

- Use **energy-efficient welfare cabins** with LED lighting, low-energy heating and PIR sensors.
- Position cabins to **maximise natural daylight** to reduce artificial lighting demand.
- Install **thermostatic heating controls** and timed shutdowns for non-essential systems.
- Use well-insulated welfare units to reduce heating load.

2. Low-Energy Construction Lighting

BECT will:

- Use **LED floodlights and task lights** across the site.
 - Fit **motion sensors (PIR)** to prevent unnecessary lighting.
 - Install **hybrid/solar tower lights** to reduce diesel generator usage.
 - Set lighting on **timers** to avoid overnight energy waste.
- (These actions support the DAS commitment to efficient lighting and reduced power use.)

3. Efficient Use of Plant, Tools & Equipment

BECT will:

- Specify **fuel-efficient, modern plant**.
- Use **electric tools** (saws, pumps, cutters) where practical.
- Enforce **start/stop controls** and a **no-idling policy** to eliminate unnecessary running.

4. Power Supply & Generator Management

BECT will:

- Use **hybrid battery packs** to cut generator runtime.
- Select **correctly sized generators** to avoid inefficiency.
- Use **HVO-compatible generators** to reduce carbon impact.
- Balance electrical loads across the site to prevent spikes.
- Log all generator fuel consumption weekly.

5. Design-Based Energy Measures During Construction

BECT will:

- Support installation of **energy-efficient lighting systems**, as required in the design documents.
- Support enhanced **insulation and airtightness**, as the DAS states the building will exceed minimum standards.

6. Reducing Transport-Related Energy Use

BECT will:

- Encourage **car-sharing**.
- Promote use of **public transport**, which is readily accessible near the site.
- Provide secure **cycle storage** to support low-carbon commuting.

**7. Monitoring & Reporting**

BECT will:

- Maintain a **weekly energy log** (generators, cabins, tower lights, plant).
- Review energy performance in **weekly SHEQ meetings**.
- Take corrective action where unnecessary energy use is identified.
- Report all energy-saving measures to the PM and Ops Director.



Contaminated Land and Japanese Knotweed Controls

The Cardonnel Court site contains **multiple established Japanese Knotweed infestations (JK01a–JK05)** with rhizomes capable of spreading **3–7 metres beyond visible growth** and regenerating from fragments as small as **0.7 g**. BECT must therefore apply strict **contaminated land, biosecurity, and soil-movement controls** to comply with the Environmental Protection Act 1990 and NRW requirements.

Site-Wide Contaminated Land Controls

BECT will:

- Treat all JK zones as **controlled contaminated land** and follow the full Knotweed Management Plan.
- Prevent **any excavation, soil movement or disturbance** within JK zones or buffer areas unless authorised by the JK Clerk of Works (JKCoW).
- Install **exclusion fencing and warning signage** around all JK zones and 3–7 m rhizome risk areas.
- Maintain a **Contaminated Land Register** recording JK boundaries, restricted areas, approvals and soil-movement logs.

Soil Movement & Excavation Controls

To prevent rhizome spread via soil, plant, tools or water, BECT will:

- Prohibit soil movement from JK areas without **JKCoW approval**.
- Keep contaminated and clean spoil **fully segregated**, using labelled stockpiles.
- Store JK spoil in designated containment areas **away from drainage and the SINC watercourse**.
- Cover contaminated stockpiles with **geotextile sheeting** to stop wind, water or human disturbance.
- Maintain strict **bucket and equipment discipline**—dedicated buckets for JK zones and **no cross-use**.
- Pressure-wash **all tracks, buckets, tools and footwear** before leaving contaminated areas.

Biosecurity Measures

BECT will:

- Deliver **site-wide biosecurity inductions** for all operatives and subcontractors.
- Maintain a **Biosecurity Compliance Register**.
- Provide weekly toolbox talks covering **prohibited activities** such as cutting, mowing, strimming, chipping or disturbing JK canes/crowns.
- Ensure no workers, materials or plant **pass through JK zones** on the way to clean areas.
- Maintain JKCoW supervision for all at-risk activities (excavation, vegetation removal, tree works, drainage works, demolition).

Run-Off, Watercourse & SINC Protection

Because the watercourse forms part of a **SINC**, BECT will:

- Install **double silt fencing** to prevent contaminated sediment entering the stream.
- Ensure no JK-affected soil is stored or tracked where run-off may enter the SINC.
- Use bunds and geotextile-lined channels to intercept water leaving JK zones.
- Ban washing, hosing or jetting equipment in areas draining toward the ditch.

Waste Handling & Disposal

Japanese Knotweed is classed as **controlled waste** under the Environmental Protection Act 1990.

BECT will:

- Retain JK waste **on-site where possible** (preferred method).
- For unavoidable off-site disposal: use **licensed carriers**, sealed vehicles and full Duty of Care waste documentation.
- Treat contaminated PPE, tools or debris as controlled waste unless fully decontaminated.
- Keep all waste documentation ready for **SAB / NPTC inspection**.

Groundworks Sequencing

BECT will:

- Begin works in **knotweed-free areas first**, progressing toward infestation zones.
- Minimise excavation depth near JK boundaries and avoid unnecessary regrading.
- Prevent drainage trenches entering JK zones without **written JKCoW approval**.
- Protect drainage infrastructure from rhizome entry by avoiding open trenches near JK zones and capping exposed pipework when unattended.

Monitoring & Compliance

BECT will:

- Carry out **daily inspections** of JK zones.
- Schedule formal audits with the **JK Clerk of Works**.
- Log all findings, deviations and incidents in the **Environmental Register**.
- Report any breaches immediately to the Ops Director, SHE Lead and ECoW.

Post-Construction Controls

BECT will:

- Prevent any groundworks or landscaping within **7 m of JK areas** without approval.
- Keep exclusion zones in place until **two full growing seasons** with **zero regrowth** have passed.
- Support the client with long-term monitoring and potential follow-up herbicide treatment.



Protected Habitats and/or Species

BECT will protect all sensitive habitats and species on the Cardonnel Court site by implementing strict ecological controls based on the **Preliminary Ecological Assessment** and **Design & Access Statement**.

Protect the SINC Watercourse & Stream

- Maintain a **7m exclusion/buffer zone** with fencing and signage.
- No storage, refuelling, plant, or wash-out in this zone.
- Daily inspections to ensure no disturbance.

Protect Bats (Roosting, Foraging & Commuting)

- All boundary trees retained and fenced off.
- Create a **dark corridor** along boundaries by controlling all lighting.
- Use warm, low-lux LED lighting with shields/hoods.
- Avoid noisy works at dawn/dusk; ECoW to supervise sensitive zones.

Protect Nesting Birds

- No vegetation removal **March–August** unless checked by an Ecological Clerk of Works (ECoW).
- Any active nest gets a **15m no-work zone** until fledged.

Manage Reptiles (Low numbers expected)

- Use **phased vegetation clearance** and habitat manipulation.
- ECoW supervision for first cuts/initial soil strip.
- Stop-work procedure if reptiles are found.

Amphibians (GCN unlikely)

- Provide **escape ramps** in excavations.
- Check pits/water-collecting areas daily.

Badgers

- No signs found, but trenches/excavations will be covered or ramped to allow mammal escape.

Trees & Habitat Retention

- Install **BS 5837 tree protection fencing**.
- No excavation, storage, or plant movement within RPAs.

Ecological Monitoring & Compliance

- ECoW will carry out weekly checks during enabling works.
- Toolbox talks for all site operatives on wildlife protection measures.
- Maintain an **Ecology Compliance Log** on site.

Biodiversity Enhancements

- Install **bat boxes, bird boxes**, and plant **native species**.
- Maintain long-term dark corridors.



Heritage and Archaeology

Although no archaeological or heritage features exist **within the Cardonnel Court site**, BECT will still follow a **precautionary approach**, as required for responsible ground-disturbance. The Design & Access Statement confirms:

- **No heritage assets** are located on the site, and
- The nearest heritage feature — **Tennant Canal, Skewen Cutting & Tramroad Bridge (Scheduled Monument)** — is **outside the development boundary** and **not affected by the works**.

Because of this, the site is considered **low archaeological risk**, but the CEMP must still include controls for unexpected discoveries.

1. Precautionary Groundworks

- Brief all operatives on the **unexpected finds procedure** before excavation.
- Ensure excavators carry out initial stripping in **shallow, controlled layers**.
- Stop work immediately if any unusual material (brickwork, bones, pottery, structural remains, metalwork) is found.

2. Unexpected Finds Procedure

If a potential archaeological find is discovered, BECT will:

1. **Stop work** in the affected area.
2. **Secure and cordon off** the location.
3. Notify:
 - Site Manager
 - **BECT**, SHE Lead
 - Local Planning Authority
 - Archaeological advisor (e.g., GGAT)
4. Allow specialists to inspect.
5. **Restart only with written clearance**.

This aligns with LPA/SAB expectations and industry best practice.

3. Protection of Nearby Scheduled Monument (Off-Site)

Even though the Scheduled Monument is beyond the site boundary, BECT will:

- Avoid unnecessary vibration by limiting high-impact plant near the eastern boundary.
- Prevent materials, waste or run-off from leaving the site.
- Ensure construction traffic is **not routed** across or adjacent to the heritage feature.

4. Recording & Reporting

BECT will maintain a **Heritage & Archaeology Register**, recording:

- All incidents
- Any discoveries
- Photos and correspondence with relevant archaeological bodies
- Weekly environmental inspection updates

5. No Anticipated Impact

Because the site is a **previously developed brownfield plot** and no constraints were identified during planning, **no archaeological survey or heritage consent is required**, other than the precautionary watching-brief approach.



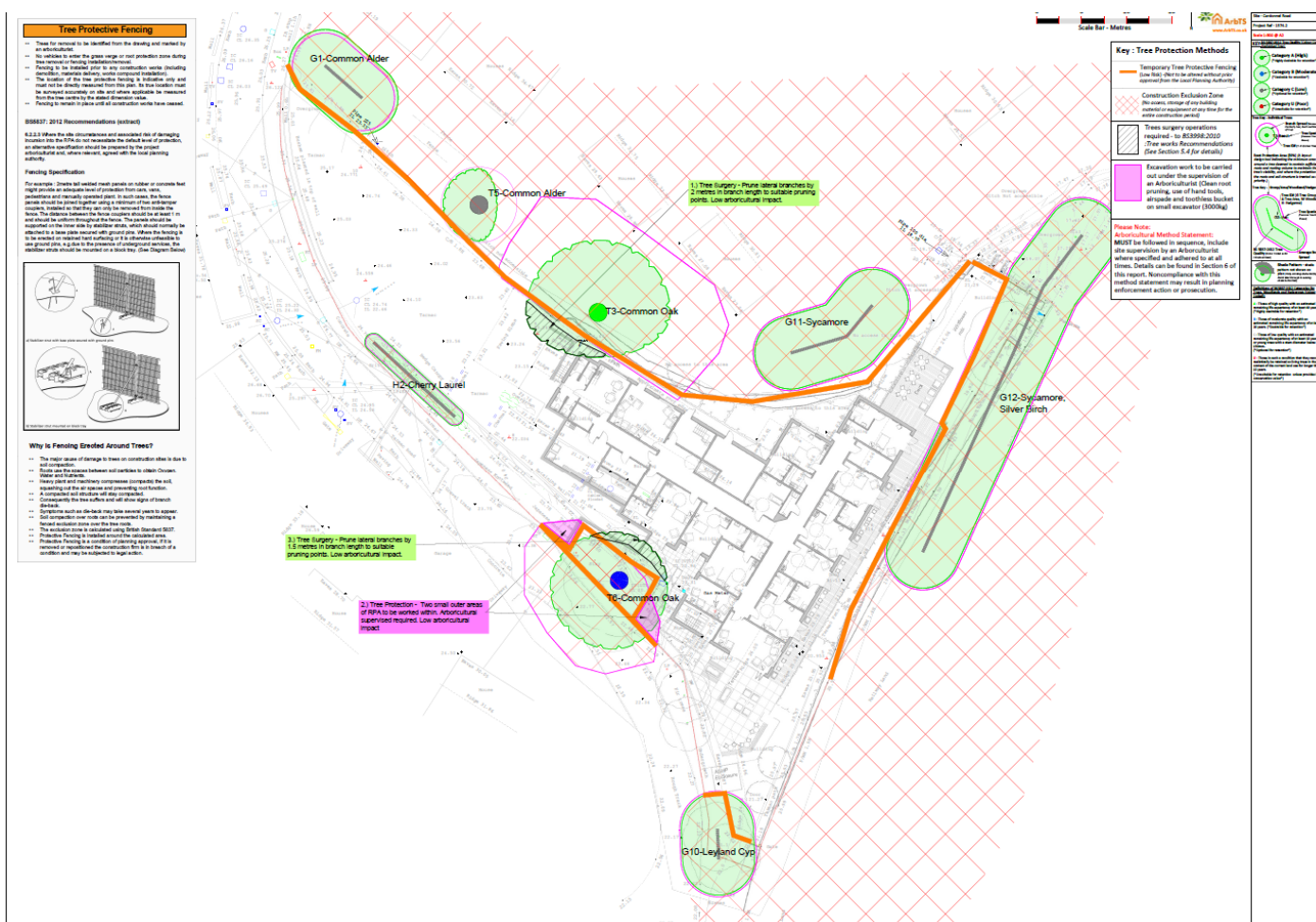
Approved Tree Protection Plan & Arboricultural Report

Prior to the commencement of any development (including demolition, groundworks, site clearance, or material storage), all retained boundary trees at Cardonnel Court shall be protected in full in accordance with the approved Arboricultural Report titled "*Arboricultural Report – Cardonnel Court, ArbTS_1574.2 (dated 29th August 2025)*" and specifically the Tree Protection Plan contained within Appendix 4.

All protective fencing shall be installed in the positions and to the specifications shown within Appendix 4 prior to any plant, machinery, materials or personnel accessing the site, and the installation shall be supervised and documented by the appointed Arboriculturist. Evidence of installation, including dated photographs and a brief confirmation report, shall be submitted to the Local Planning Authority within 10 working days.

The protective fencing shall define the full extent of all Root Protection Areas (RPAs) and shall be regarded as **sacrosanct construction exclusion zones** for the duration of the works. The fencing shall not be removed, repositioned, breached or altered without the prior written consent of the Local Planning Authority.

Appendix 4 as shown below:



Within the fenced RPAs, and beneath the canopy of retained trees, **no excavation, demolition, site traffic, vehicle access, materials or waste storage, service installation, drainage works, level changes, fires, or use of chemicals** shall take place at any time. Where works are exceptionally required within or adjacent to RPAs, they shall only be undertaken using hand tools or suitable ground protection systems and must be carried out under the direct supervision of the appointed Arboriculturist in accordance with the approved Arboricultural Method Statement.

All retained boundary trees shall be **retained in their entirety and not be removed, lopped, topped, pruned, damaged or otherwise disturbed** at any stage of the development, except for any minor works specifically identified within the approved Tree Protection Plan and undertaken in accordance with BS3998:2010.

Particular protection shall be afforded to the **streamside tree belt**, which forms part of an important ecological corridor associated with the adjacent watercourse. A minimum **7 metre stand-off distance** shall be maintained, and measures shall be implemented to prevent soil compaction, siltation, surface water runoff, cement washout, or any contamination reaching the woodland edge or watercourse.

An appointed Arboricultural Supervisor shall oversee all tree protection measures, including pre-commencement inspection, monitoring of fencing integrity, and supervision of any works within influencing distance of RPAs. Any breach, damage or unauthorised incursion shall be recorded and rectified immediately, with details provided to the Local Planning Authority where required.

The tree protection measures shall remain in place until all construction, external works and landscaping operations are complete. Upon completion, all areas affected by construction activities shall be appropriately reinstated, and any remedial measures identified by the Arboriculturist shall be implemented to ensure the long-term health and stability of retained trees.

Reason

To safeguard retained trees and their Root Protection Areas from damage, compaction and contamination during construction; to ensure full compliance with BS5837:2012; and to protect an important ecological corridor providing habitat connectivity for bats, birds and other wildlife, in accordance with Section 198 of the Town and Country Planning Act 1990 and best practice guidance for sustainable development.



Environmental Incident Management

This section outlines the procedures for identifying, preparing for, and responding to environmental incidents that may occur during project activities. It ensures that risks are managed proactively and that appropriate response mechanisms are in place to minimize environmental harm.

Emergency Preparedness

Environmental aspects and residual risks with the potential to cause emergency events to have been assessed during the environmental planning phase. The most significant risk identified is typically associated with **on-site waste management**.

Potentially Affected Receptors

Sensitive environmental and community receptors in the vicinity of the site have been identified and documented in the relevant sections of the EMP.

Hazardous Materials Commonly Stored On-Site:

- Fuels and oils (diesel, petrol) / COSHH-regulated chemical products / Gaseous products (e.g. acetylene) / Pollutants (e.g. cement, adhesives)

Spill Response Equipment:

- Spill kits for chemical and hydrocarbon containment / Drain covers for preventing discharge into water systems.

Spill Kit Locations (Typical):

- Fuel storage area / Chemical storage area / Site entrance / Site offices.

Spill response materials will be inspected weekly to ensure they are present, accessible, and in good condition. Emergency action notices will be displayed at key locations across the site. Staff training on emergency preparedness is covered in the EMP's training section. In the event of an unexpected discovery (archaeological, contamination, or protected species), the following **Incidental Find Procedure** must be followed:

1. **Stop Work:** Immediately halt all construction activities in the vicinity of the find to prevent disturbance.
2. **Secure the Area:** Cordon off and restrict access to the immediate area & **Notification:** Report the discovery immediately to the Site Manager and the relevant environmental consultant or specialist.
3. **Assessment:** A qualified specialist will inspect, photograph, and log the find to assess its significance.
4. **Regulatory Liaison:** Notify the appropriate authorities (e.g., Local Council Archaeologist, Police for human remains, or Natural Resources Wales for protected species).
5. **Mitigation & Documentation:** Work may only resume once an approved mitigation plan or written scheme of investigation is implemented. All actions, findings, and revised work methods must be recorded in the Site Environmental Log and Health & Safety File.



Response Process

Drills

Environmental emergency drills (e.g. spill response) will be conducted **every six months**. Each drill will be documented, including:

- Participants
- Observations
- Corrective actions

Records will be retained in the site's environmental file.

Incident Response Process

All environmental incidents will be managed in accordance with the site's incident management procedures. These include, but are not limited to:

- Spills of fuel, oil, or hazardous substances
- Impacts to protected species, habitats, or archaeological finds
- Breaches of environmental permits, consents, or enforcement notices
- Breaches of health and safety legislation

Notification Protocol:

- Immediate notification to the site's Environmental Manager or SHE Manager
- Contact relevant authorities and specialists (e.g. environmental regulators, water authorities, ecologists)

The Environmental Manager will coordinate with regulatory bodies.

Fire Management

Fire-fighting substances, particularly foam, can be harmful to the environment. In the event of a fire, and only where safe to do so, efforts will be made to **contain and prevent the release of fire-fighting materials** into the environment.

The **BECT** Senior SHE Manager will be notified of the incident as soon as practicably safe to do so. Once this contact has been made contact to the relevant parties will be established as listed below:

Natural Resources Wales Emergency contact number: **03000653000**.

The incident hotline for LCM Environmental is Tel: **01884 841 387**.

Local Water Authority emergency contact: **Dwr Cymru 0800 052 0145**



Piling Requirement Confirmation

"Piling is not currently specified; however, piling may be required depending on the results of further intrusive geotechnical investigation and structural optimisation. If piling is required, BECT will update the CEMP with vibration, noise and ground-contamination controls prior to works commencing."



Flood Evacuation and Flood Marshal Arrangements During Construction

Appointment of Flood Marshal

- The **BECT Site Manager** will be formally appointed as the **Flood Marshal** for the duration of the construction phase.
- The Flood Marshal will have overall responsibility for flood risk monitoring, decision-making and evacuation procedures during construction works.

Deputy Flood Marshal arrangements will be put in place to ensure continuous cover during absences.

Site-Specific Flood Risk Context

- The site is located adjacent to an **ordinary watercourse / ditch**, identified within the ecological assessment as part of a **Site of Importance for Nature Conservation (SINC)** corridor.
- The **soft landscape drawings** confirm the presence of **rain gardens, bioretention areas, wildflower floodplain planting and SuDS features** adjacent to the watercourse.
- Construction activities will therefore be controlled to protect:
 - Site operatives,
 - Newly installed SuDS infrastructure,
 - The ecological value of the ditch corridor and retained vegetation.

Flood Monitoring and Trigger Levels

The Flood Marshal will:

- Monitor **Met Office weather forecasts and rainfall warnings daily**, with increased vigilance during forecast heavy or prolonged rainfall.
- Undertake **visual inspections of the ditch/watercourse** and low points on site during wet weather.
- Suspend works immediately if:
 - Water levels rise towards working areas,
 - Overland flow becomes evident,
 - Newly formed SuDS features are at risk of overtopping or erosion.

Evacuation Procedures

In the event of a flood risk or flood event:

- All works in affected or at-risk areas will **cease immediately**.
- Operatives will evacuate via **pre-identified routes away from the ditch corridor and low-lying areas**.
- Evacuation routes and assembly points will be:
 - Clearly identified on the **CEMP site plan**,
 - Located on **higher ground**, away from the watercourse and SuDS features,
 - Kept clear of materials, plant and deliveries at all times.
- The Flood Marshal will conduct a **headcount** and confirm that all personnel are safely evacuated.

Protection of Plant, Materials and Pollutants

Under the direction of the Flood Marshal:

- Fuels, oils, chemicals, cementitious materials and loose construction materials will be:
 - Stored outside flood-prone areas,
 - Secured during wet weather events,
 - Removed to higher ground when flood risk is identified.
- Silt fencing, sediment traps and SuDS protection measures will be checked and maintained before and after rainfall events.
- No contaminated runoff will be allowed to discharge into the ditch or downstream habitats.

Integration with SuDS and Landscape Phasing

- Where **SuDS features (rain gardens, bioretention areas, attenuation features)** are constructed early in the programme, the Flood Marshal will ensure:
 - Temporary isolation from construction runoff,
 - Use of sacrificial or temporary sediment controls,
 - No trafficking or storage within SuDS footprints.
- Landscape and ecological constraints from the soft landscape and ecological reports will be observed, including:
 - Retention and protection of existing trees and ditch-side vegetation,
 - Phased planting following Japanese knotweed clearance,
 - Avoidance of unnecessary disturbance adjacent to the watercourse during storm conditions.
- Ground shaping and soft landscaping will maintain gentle falls to support drainage and flood resilience.

Training, Communication and Review

- Flood risk procedures and evacuation arrangements will be:
 - Included in site inductions,
 - Reinforced through toolbox talks, particularly during wetter months.
- Emergency contact details for the Flood Marshal, Site Manager and emergency services will be displayed in the site office.
- Following any flood incident or near miss, the Flood Marshal will:
 - Review the effectiveness of controls,
 - Update the CEMP and site plan if required,
- Brief the workforce on lessons learned.