Construction Environmental Management Plan: Biodiversity

Axis J9 – Phase 3





Draft Issue – Rev C

VERSATILE BY DESIGN, QUALITY IN CONSTRUCTION









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6 th March 2023	Emma Lancaster – Quod Helen Elliot – KAM	Draft	A Carr
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Page	Description	Name	Date
All	Draft Issue	A Carr	6 March 2023
Page 3, para 3	Updated	A Carr	20 th March 2023
Page 3, Para 5	Updated	A Carr	20 th March 2023
Page 3, section 5	TG Update	A Carr	31st March 2023
Page 2, paragraph 6	Updated	A Carr	31 st March 2023
Page 4, paragraph 1,2 & 3	Added	A Carr	
Page 5	Contents Updated	A Carr	31 st March 2023
Page 6	'General' heading changed to 'Purpose' and information updated Ecological Features Identified on and adjacent to site information added	A Carr	31st March 2023
Page 7	Risk Assessment of Potentially Damaging Construction Activities information added Table added	A Carr	31 st March 2023
Page 8	Information removed Mitigation Measures information added	A Carr	31 st March 2023
Page 9	Contamination of swale, ponds and ditches paragraph added	A Carr	31 st March 2023
	FAUNA paragraphs added		





	Badgers paragraph added		
Page 10	Great Crested Newts/Common Reptiles, Bats information added Dust and Noise paragraph removed	A Carr	31 st March 2023
Page 11	Contamination of water courses & storage of materials removed Title change Nesting Birds updated Badgers updated	A Carr	31 st March 2023
Page 12	Great crested newts updated Common reptile added	A Carr	31 st March 2023
Page 12	Specialist Ecologist Attendance removed	A Carr	31st March 2023
Page 12 & 13	Ecological Clerk of Works updated Use of Protective Fences, Barriers & Signs updated	A Carr	31 st March 2023
Site Setup Plan	Updated	A Carr	30 th May 2023

Please note this is a live document which contains links to external documents

Please press Ctrl+click, to access further information.











CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

This Construction Environmental Management Plan sets out the approach that will be adopted during the construction works to be carried out under planning permission reference 21/03177/F Land West of Howes Lane, Bicester. Oxon. Adjacent OX26 1RT.

The works are to construct 5 units within 3 buildings, associated parking, servicing, landscaping and associated works and will commence with site security, fencing and statutory / public advice safety signage, followed by cut and fill for the development, construction will be as follows:

A 3m high temporary topsoil acoustic bund will be formed along the Howes Lane boundary with 2m high Tree Protection Heras Fence (In accordance with Arboricultural Impact Assessment, Tyler Grange) hoarding erected to the North, East & West boundaries of the site, this will be debris netted, secured and signed in accordance with BS5837, the remaining boundaries will be secured with 2m high Heras Fence hoarding this will be debris netted and will prevent any unnecessary access of construction plant into adjoining ownerships, whilst prevent general public access into the site, this will be inspected daily and recorded on a weekly basis.

The works will comprise of cut, fill and plateauing the site, construction of the estate access road, pedestrian crossings and landscaping along with the construction of Units 1 to 5 which will progress as follows:

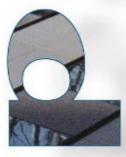
- Section 1 Form temporary topsoil acoustic bund.
- Section 2 Bulk earthworks, cut, fill and plateau to levels.
- Section 3 Temporary haul road and estate access road
- Section 4 Swales, bunds and soiling
- Section 5 Construction of the units
- Section 5 Remove temporary bund and complete landscaping

The construction will include concrete foundations, steel frame construction, wall & roof cladding, concrete ground floor slabs, concrete first floor slabs, curtain walling screens & windows, translucent wall light screens, vertical & horizontal clad elevations, feature rain screen areas, sectional overhead doors and steel fire exit doors. Plasterboard internal partitions, mechanical and electrical installations, floor finishes and all associated external works including drainage, block paving paths with concrete hard standings, tarmac carriageways, gas, water, electricity and BT services to each plot, together with perimeter fencing, water attenuation swales, bunds and landscaping.

The Construction Management Plan for Biodiversity has been written with consultation with the project Ecologist (Tyler Grange) to provide details to ensure the conservation and protection of existing habitats protected and priority species during the construction phrase and should be read in conjunction with the Construction Management Plan / Construction Method Statement.





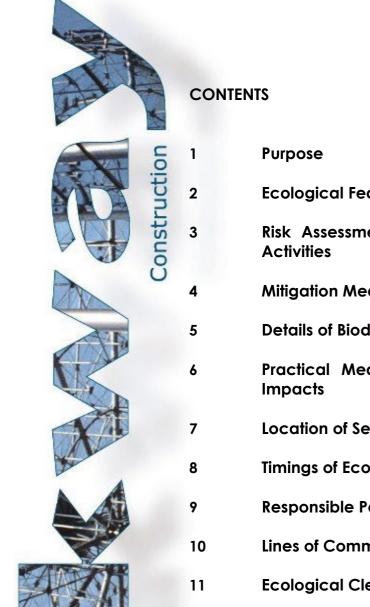




This CEMP aims to discharge condition 5. Full details of the condition are provided below as per the decision notice for the site:

Condition 5 **Construction Environmental Management Plan** of the planning application states:

"No development shall take place on any phase (including demolition, ground works, vegetation clearance) until a Construction Environmental Management Plan (CEMP: Biodiversity) has been submitted to and approved in writing by the Local Planning Authority. The approved CEMP: Biodiversity shall be adhered to and implemented throughout the construction period strictly in accordance with the approved details. "



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- Ecological Features Identified on and Adjacent to Site
- Risk Assessment of Potentially Damaging Construction
- **Mitigation Measures**
- **Details of Biodiversity Protection Zones**
 - Practical Measures to Avoid or Reduce Construction
- Location of Sensitive Works
- **Timings of Ecological Attendance**
- **Responsible Persons**
- Lines of Communication
- Ecological Clerk of Woks (ECoW)
 - Use of Protective Fences, Barriers & Signs

Purpose

This Construction Environmental Management Plan for Biodiversity has been prepared to provide full information to allow for discharge of planning condition 5 as well as:

- Ensure adequate protection, mitigation and compensation for protected and priority species and habitats;
- Ensure mitigation and compensation works are carried out and completed as approved (ES reference) and in line with current best practice guidelines; and
- Ensure adequate professional ecological expertise is available to assist those implementing the development to comply with statutory requirements and planning conditions.

Specific operations will be the subject of specialist considerations and site-specific detailed method statements relating to specialist activities will be submitted to Parkway Construction (MK) LTD for comments and approval prior to commencement of the works.

Measures to be considered are detailed in the sections of this document and this should be read along with the **Environmental Risk Assessment** (ERS) (please press Ctrl+click to take you to further documents) that identifies all areas to be considered, the ERS details how these risks should be managed, reduced or avoided during the course of construction.

2. Ecological Features Identified on and Adjacent to Site

The Ecological Assessment identified a number of ecological features which required protection and potential mitigation during the construction phase:

HABITATS:

- retained on-site trees;
- retained on-site hedgerow;
- retained and adjacent ditches; and
- newly created swale;
- offsite ponds

FAUNA (Potential for)

- nesting birds (multiple species);
- badgers Meles meles;
- great crested newt Triturus cristatus; and
- common reptiles (multiple species)

Ecological features of negligible importance or where no specific mitigation was required in the ES, they have not been included further in this report.









Construction

3. Risk Assessment of Potentially Damaging Construction Activities

The assessment of potentially damaging construction activities relating to proposed development and the ecological resources identified in section 2 are set out in the table below:

Ecological Features	Potentially Damaging Activities (in the absence of CEMP mitigation measures)	
Habitats		
Retained on- site trees	Direct loss of trees. Damage or degradation to tee including canopy and roots from machinery and through trenching. Damage could be significan during construction in in the short term if unmanaged Indirect damage or degradation from dust pollution during demolition and construction.	
Retained on- site hedgerow and field margins	Direct loss of small sections of hedgerow during the construction period. Damage through trenching.	
Retained and adjacent ditches	Damage or degradation from run off, dust pollut and machinery during construction in the short te	
Newly created swale		
Offsite ponds		
Fauna		
Nesting birds (multiple species)	Removal of habitat and destruction of nests, eggs and young during the breeding season, which could trigger the Wildlife and Countryside Act (WCA) 1981 (as amended).	
Badgers Meles meles		
Great crested newt Triturus cristatus	Killing/injury of individual GCN during demolition and construction which could cause an offence under the Habitat Regulations 2017 if unmanaged.	
	Loss of terrestrial habitat and loss and damage to aquatic habitats used by GCN.	



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Common reptiles (multiple species) Killing/injury of individual reptiles during site clearance and construction which could trigger schedule V of the WCA 1981 (as amended), which makes it and offence to deliberately kill or injure individual reptiles.

Direct loss of habitat including field margins, hedgerows and hibernacula features.

See Axis J9 - Phase 3 - Environmental Risk Assessments - March 2023 (please press Ctrl+click to take you to further documents) for a full assessment of environmental risks for this site.

4. Mitigation Measures

HABITATS

• Retained trees and hedgerows.

Implementation of the Arboricultural Impact Assessment (Tyler Grange) must be completed including erection of protective fencing demarcating retained areas and appropriate root protection zones as determined in the separately provided Tree Protection Plan and installed in accordance.

Appropriate working and material storage methods will be implemented throughout the construction period to ensure adjacent habitats are not adversely affected by the proposals.

Materials will be:

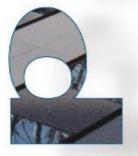
- Stored on firm, stone or concrete, level surfaces to avoid tipping or accidental spillage.
- Stored in the locations identified on the site setup plan.
- Securely fenced to exclude wildlife.
- Sheeted to protect them from the environment.
- Stored on pallets, above the ground to protect wildlife.
- Liquid materials will be stores in containers, bunded tanks or on bunded pallets.
- Spill kits will be available at all storage areas.
- Spill training will be undertaken for all site personnel.
- Forklift operatives will inspect below pallets prior to lifting or moving products.

Dust and Noise:

- All works will be undertaken using modern and efficient equipment in order to minimise the environmental impacts of every operation.
- All works will be planned and managed in accordance with The Control of Noise at Work Regulations 2005. Please see CMP/CMS for further details









Rainfall and associated surface water run-off during construction works can mobilise and transport pollutants such as sediment, oils, chemicals and other building materials into the water environment causing harm to plants and animals. Heavy rainfall can also flood excavations and other work areas which subsequently require draining or de-watering.

All works will be planned and managed in accordance with GPP5: Works and Maintenance in or Near Water recommendations. Also see Construction Management Plan / (CMS) and Environmental Risk Assessment (ERA) for further measures to minimise pollution / contamination.

FAUNA

• Nesting birds

There is very limited hedge facing works required during this phase of works, however any works necessary will avoid the bird breeding season (March to August inclusive) unless checking surveys have been undertaken by an appropriately qualified ecologist and the results have shown active nests to be absent immediately prior to work start.

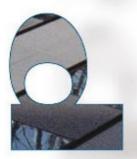
Where no active nests are identified in a survey area the vegetation removal and operations can be carried out under instruction of the ECoW and must be completed within 48hours of the initial check. Where this is not possible an additional check will be required.

Any brash generated from vegetation removal that is not used to create habitat piles will either be removed or chipped so as not to create suitable bird nesting sites.

Badgers

No evidence of badger has been identified on site; however, the species is known to be present in the area and therefore a precommencement check by a **suitably qualified ecologist** is required within the site and all surrounding land within 30m of the red line boundary, where access and views permit and to be completed no more than 3 months prior to commencement of works on site.

In the unlikely event any setts are discovered and impacts are unavoidable, a mitigation strategy for the retention and protection of the sett will be prepared and adhered to. This may result in a license being required from Natural England (NE).









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Cover all excavations or provide a means of escape (e.g. a roughened plank of wood placed as a ramp to the surface to any trenches or deep pits) within the site that are to be left open overnight. Trenches/pits to be inspected each morning by the site manager and the ECoW contacted immediately if a badger or other protected/priority species is found.

Any temporarily exposed open pipes (>150mm outside dimeter) will be blanked off at the end of each working day.

• Great Crested Newts

As per approach detailed in the ES GCN are known to be present within a pond 180m from the site however as works are predominantly limited to arable fields the need for EMSML has been scoped out. Instead the following measures will need to be implemented for an removal of hedgerow / scrub features on site:

- 1. Habitat manipulation;
- 2. Finger tip search (including dismantling of hibernacula if present);
- 3. Appropriate timing;
- 4. ECOW of sensitive work; and
- 5. Contingency protocol in event GCN found during works.

Common Reptiles

Hedgerow and field margins of potential value to common lizard and slow worms. Mitigation identical to great crested newts and includes the need for supervision if hedgerows and field margins are to be impacted as such **ECOW is required**.

• Bats

To negate any effects on Bats, construction works will be limited to daylight hours between April and October, i.e. no night time working will be undertaken. Careful consideration will also be given to ensure that no site security illuminations are directed towards or fall onto any retained trees or hedgerows.

All works will be planned and managed in accordance with The Wildlife & Countryside Act 1981

Refer to Tyler Grange Arboricultural Impact Assessment 10706_R11a_RA_CW (please press Ctrl+click to take you to further documents) for full details.

Please see the Axis J9-SSP-003 - Site Set Up Plan (please press Ctrl+click to take you to further documents) and CMP/CMS for construction compound and storage area details.









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Details of Biodiversity Protection Zones

- Highway and field drainage ditches
- Retained Tree.
- Retained hedges.
- Water Attenuation Swales.

Practical Measures to Avoid or Reduce Construction Impacts

- Form cut off trenches and lagoon to prevent silt laden rainwater runoff into adjacent drainage systems, swales and ditches.
- Erect and maintain tree protection fencing as detailed in the ERA and the AIA
- Erect and maintain tree protection signage as detailed in the ERA and the AIA
- Nominate the Project Manager as the biodiversity champion to the scheme.
- Ensure that all excavations are backfilled or covered over each night.
- Ensure all holes are securely fenced at night to prevent wildlife access.
- Install scaffold board or hessian escape routes out of any open excavation that cannot be fenced.
- Ensure standing water of any depth is fenced and adequate mammal escape routes are installed.
- Carry out sensitive works at the right time of year, see section 8 below.
- Ensure that no site illuminations are directed towards or fall onto any retained trees or hedgerows.

Location of Sensitive Works

Works in connection with existing water attenuation swales Works in connection with existing drainage ditches Works in connection with trees

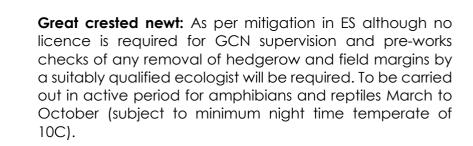
Works in connection with hedges, locations identified on TG Drawing 10706 P08 A Tree Protection Plan (please press Ctrl+click to take you to further documents)

8. Timings of Ecological Attendance

- **Nesting birds:** Hedge facing or removal will be avoided during bird nesting season (March to August inclusive). If not possible an ECOW will be required
- **Badgers:** At least 3month prior to start on site a Pre-Works Badger survey will be undertaken by a suitably qualified ecologist.







• **Common reptile** mitigation Identical as GCN supervision and to be carried out by suitably qualified ecologist.

. Responsible Persons

The management structure for this site is:

Construction Director – Allan Carr (07971 533328) Contracts Director – Matt Vicarage (07834 518872) Contracts Manager – James Higgins (07720 737846) Senior Project Manager – Gerald Naude (07790 698559) Project Manager – Jon Eames (07851 253718) Senior Quantity Surveyor – Chris Horsey (07593 441913) Safety Advisor – Wayne Hodgson – SML

10. Lines of Communication

The lines of communication should be directed through:

• Contracts Manager – James Higgins (07720 737846)

11. Ecological Clerk of Woks (ECoW)

No other ecological clerk of works is anticipated, beyond the specialist attendance noted above, various surveys and reports have been undertaken and their findings implemented throughout the design of this project.

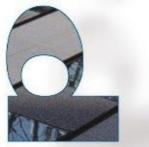
The site-based Project Manager will be the (ECoW) Jon Earnes will undertake a weekly pre-commencement check.

In the unlikely event that protected species are suspected on site a suitably qualified ecologist should be contacted for advice.

12. Use of Protective Fences, Barriers & Signs

A Heras fence hoarding will be erected to the site perimeter as shown on the attached site setup plan, **Axis J9-SSP-003 - Site Set Up Plan (please press Ctrl+click to take you to further documents)** site perimeter fencing will be regularly inspected and recorded weekly, it will be maintained throughout the contract and adapted as required to suit operations during the contract. As part of the weekly site perimeter inspection regime the safety signage and fencing will be inspected to ensure it is still visible.









No access will be allowed for plant, heavy machinery or storage outside of the fenced site confines.

Tree, and hedges along with root protection zones will be fenced in accordance with BS5837: 2012 requirements, they will be adequately signed and will be regularly inspected with a written record being completed weekly, as detailed in the CMP, ERA and the AIS. See Tyler Grange Arboricultural Impact Assessment 10706_R11a_RA_CW (please press Ctrl+click to take you to further documents) for detail.

The tree protection fencing is to protect the tree and/or hedge in its entirety which includes the root system, the trunk, bark, branches, tissue and surrounding soil from damage, compaction and contamination, see Tyler Grange Drawing 10706 P08 A Tree Protection Plan. (please press Ctrl+click to take you to further documents)

The tree protection fencing creates a barrier that forms a ridged framework to exclude construction activity from the appropriate degree of proximity to all retained trees, which is to remain ridged if hit by machinery on site.

Escape pipes with one-way flaps will be installed below the fencing in a number of locations to allow any mammals that could inadvertently gain access into the works, a safe means of escape.





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