

Land off Elm Tree Grove Twynnyrodyn, Merthyr Tydfil

Grid Reference SO05969 05665

Reptile Receptor Site Management Plan

Planning Application No P/21/10358 Discharge Condition 27 (Part)
For Persimmon Homes

November 2022



TerrAqua Ecological Services Ltd

SE Wales Office

24 West Walk

Barry

Vale of Glamorgan

CF62 8BY

01446 748052

carmen@terraqua-ecological-services.co.uk

Mobile 07742149344

W Wales Office

Swyn yr Awel,

Bwlch y Groes,

Llandysul

Ceredigion

SA44 5JX

dyfrig@terraqua-ecological-services.co.uk

Mobile 07951023358

Survey Undertaken By:

Carmen Jones MSc MCIEEM and Dyfrig Jones BSc

Report Written By:

Carmen Jones

Report Verified By:

Dyfrig Jones

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Drawing **TQ Pers:Twyn, Rep Plan 11/2022 v1.**

1 Introduction

1.1 Client Details

The following document has been produced by TerraAqua Ecological Services Ltd on behalf of Persimmon Homes, Persimmon House, Llantrisant Business Park, Rhondda Cynon Taf following instructions to proceed by Mr Morgan Williams acting for Persimmon Homes.

2 Background

2.1 Rational

An extended Phase I Habitat Survey/Preliminary Ecological Assessment of a parcel of land located at Twynyrodyn, Merthyr Tydfil was undertaken by TerraAqua Ecological Services Ltd in January 2019 on behalf of Persimmon Homes. The survey was subsequently updated in 2021 and 2022. The Phase I Surveys identified habitats within the site boundary suitable for use by reptiles. Based on the identification of suitable habitats a reptile survey of the site was completed in 2019 and repeated in 2022 (**TerraAqua Ecological Services Ltd Reptile Survey Report. Land at Twynyrodyn, Merthyr Tydfil. TerraAqua Ecological Services. May 2022**). These surveys confirmed the presence of reptiles, specifically slow worm (*Anguis fragilis*) and common lizard (*Zootoca vivipara*.) within the site boundary.

The maximum number of slow worm recorded on any site visit was five (5). Based on a survey assessment for the evaluation of key reptile sites a score of three (3) individuals constitutes a good population. The maximum number of common lizard recorded was one (1) indicating a low population (Froglife, 2009).

Both Slow Worm and Common Lizard are species listed in Section 7 of the Environment (Wales) Act 2016 as a Species of Principle Importance for maintaining and enhancing Biodiversity in relation to Wales.

The above report concluded that a detailed reptile mitigation strategy should be produced to ensure the protection of reptiles both during and after construction. The report recommended that reptiles should be removed and excluded from the development footprint prior to any

clearance works commencing. If possible, the animals should be relocated within the site boundary or as close as possible to the site, to an area with suitable habitat and which is guaranteed free from any potential damage or disturbance. If relocation within the site is not possible an alternative safe site with appropriate habitat should be selected on advice from an approved ecologist.

Condition 27 of Approved **Planning Application No P/21/10358** states that “Prior to works commencing on site a reptile mitigation strategy, including full details of a suitable receptor site for the translocation of reptiles and associated enhancement measures, shall be submitted to and approved in writing by the local planning authority. All works shall be carried out in accordance with the approved details.”

“Reason - To protect the natural environment in accordance with Policies EnW1 and EnW2 of the Merthyr Tydfil County Borough Council Replacement Local Development Plan”.

In order to Discharge in part the above condition a mitigation strategy was subsequently produced detailing the proposed method of capture and translocation and selection of receptor site (**TerrAqua Ecological Services Ltd Biodiversity Enhancement Scheme and Reptile Mitigation Strategy. Land off Elm Tree Grove. TerrAqua Ecological Services November 2022**). The following document has been produced in combination with the above referenced document to fully discharge **Condition 27** and to part satisfy **Condition 23** of the above application.

The agreed receptor site lies immediately adjacent to and south of the proposed development area and includes habitats very similar to those currently present within the development zone Appendix II **Drawing TQ Pers:Twyn, Rep Plan 11/2022 v1**.

3 Purpose Aims and Objectives

The following document is designed to Discharge Planning Condition 27 and to ensure that the receptor site is suitable to receive translocated animals and to further ensure that the receptor site is managed appropriately in the long term for reptiles and to enhance biodiversity.

The aims and objectives are as follows:

- To provide suitable habitat for reptiles that are translocated to the site and to ensure that the pre translocation management increases the carrying capacity of the site, to support translocated reptiles and any existing reptiles using the receptor site.
- To create enhanced reptile habitats in the long term and ensure appropriate management of receptor area with specific regard to reptiles
- to create additional wildlife habitats and enhancements to biodiversity.

4 Responsibilities for Management

Initial habitat improvements and manipulation will be undertaken by a suitable contractor appointed by Persimmon Homes and undertaken under supervision of an appointed ecologist

All long-term maintenance and future management of the receptor site will be undertaken by a suitably qualified landscape management contractor on behalf of Persimmon Homes following completion of the development.

Periodically the landscape maintenance works shall be reviewed by a suitably qualified ecologist to ensure that the landscape management operations are being completed in accordance with the approved report.

5 Habitat Management

It is proposed that following appropriate consents from the landowner, Merthyr County Borough Council, reptiles are translocated from the development footprint to land immediately south of the site **Drawing TQ Pers:Twyn, Rep Plan 11/2022 v1**. This area will provide a suitable safe and long-term receptor area for reptiles affording similar habitats to those present within the development site. The habitats present within this area have direct links to the adjacent countryside south of the development all of which provide high quality habitats suitable for reptiles. In addition the close proximity to the southern boundary of the proposed

development site means that translocated reptiles will in time be able to easily recolonise suitable areas within the final development including newly created habitats around the attenuation basins and associated grasslands. The large receptor area covers an area of some 6.82ha. It is therefore intended that any animals captured will be released into these southern areas as shown in **Drawing TQ Pers:Twyn, Rep Plan 11/2022 v1**, where exclusion fencing will prevent them returning to the construction zone. Two initial release areas have been identified within the larger reptile receptor area as shown in the above drawing. Area (A) comprising 0.14ha of scrub/gorses adjacent to steep westerly facing bank and area (B) 0.09ha of flat rough grassland at the north western corner of the receptor site. Released reptiles will then be allowed to disperse naturally into the extensive adjacent habitats.

5.1 Pre-Translocation Management/Habitat Creation

The proposed release site is currently a mosaic of rough grassland and scrub. The habitats present are similar to those present around the periphery of the area from which reptiles will be translocated and forms an extension of the current site with no barriers to reptile movement meaning that there is no differentiation in the populations between the two areas.

Prior to the translocation commencing habitat and creation will be undertaken at the immediate release site to increase the amount of open habitats suitable for reptiles. The aims of this management will be to provide and maintain:

- A diverse vegetation structure.
- Sunlight at ground level - open areas within habitats.
- Continuity of sufficient and appropriate habitat over time.
- Connectivity of areas occupied and used by reptiles.
- Features for breeding/egg-laying where appropriate.
- Hibernation areas.

Release Area (A)

Dense scrub/gorse currently covers some 80% of the immediate release site at location (A). In order to increase the open areas available to reptiles some scrub will require removal from the **release site (A)** in order to create a mosaic of open habitats and scrub.



Plate 1 Current Habitat Release site (A)

Scrub will be hand cut with no more than 50% of the existing scrub within the defined release area removed. The selection of individual stands to be removed will be undertaken in consultation with the ecologist. Scrub/ young woodland removal will be undertaken in winter when reptiles are inactive and there is no danger to nesting birds.

In addition the scrub and grassland mix along the eastern boundary with the current path will be managed to create a scalloped edge with a mix of retained scrub and open grassland to improve structural diversity and increase basking opportunities for reptiles.



Plate 2 current habitats eastern path edge

Brash from the works will be loosely stacked within the release area (A) creating structural diversity within the site creating refuge areas for reptiles and habitat enhancements for other species including small mammals and invertebrates. Piles will be placed in a sunny location

and set within existing vegetation for example, areas of long grass or long grass and scattered scrub, so that there is cover immediately surrounding, or adjacent to, the pile.

To further enhance the release area two hibernacula will be constructed. These will be constructed from logs, tightly stacked and covered in soil. These will be positioned among existing vegetation affording immediate cover for reptiles. Each hibernacula will be a minimum of 2m x 1m with a height of 1m. The hibernacula will be set in a pre-dug pit of 40cm in depth.



Plate 3 Example of Hibernacula

Release Area (B)

Release site (B) is dominated by tussocky and rough garland with peripheral scrub and existing brash piles. These piles will be retained, and grassland left uncut prior to release.



Plate 4 Current Habitats Release Area (B)

In common with Area (A) a scalloped edge along the western edge of the existing path will be created by the removal of some scrub and young woodland to create structural diversity and increase suitable habitats for reptiles. Scrub will be hand cut with no more than 50% of the existing scrub removed. The selection of individual stands to be removed will be undertaken in consultation with the ecologist. Scrub/ young woodland removal will be undertaken in winter when reptiles are inactive and there is no danger to nesting birds.

Brash from the works will be added to the existing brash piles.



Plate 5 current habitats eastern path edge

Two hibernacula will be constructed within this grassland area in line with those to be constructed within Area (A).

Exclusion fencing will be placed along the northern boundary of the release areas until construction works have been completed and then immediately removed allowing reptiles to recolonise the newly created habitats around the attenuation basins and grassland immediately north of the release areas. The newly created attenuation basins and surrounding habitats will afford new habitats for reptiles and will be created by the planting of mix of native shrub and grassland mix to reinstate the peripheral habitats following the clearance and attenuation basin works.

5.2 Long Term Management

5.2.1 Release Area

The release site and wider reptile area will require management to retain a mosaic of open habitats and scrub to maintain and create habitats with high structural diversity.

The immediate receptor areas will be managed to retain the level of scrub cover and open grassland created/retained prior to release. The scrub will be controlled on a bi-annual basis with encroaching scrub removed using hand tools. Brash will be retained and placed on existing piles to enhance and preserve these refuge areas.

The open grassland areas will be mown annually between March and November with 25% of the grassland mown within any given year. The grassland will be cut in a manner which creates low mown areas cutting through areas of taller grasses creating swales through the vegetation and creating a diverse structure.

5.2.2 Management Wider Reptile Area

A large area to the south of the development and immediate release area currently consist of a mosaic of open rough grassland with a mix of tall herb, with peripheral scrub and young woodland. The principal grassland area lies towards the centre of the reptile area and covers an area of some 1.06ha.



Plate 6 central grassland area

Long Term management will include the cutting of swales through the grassland to create diversity of sward height and maintain a mix of low and medium height vegetation and encourage diversity in structure. No more than 10% of the open grassland will be permitted to return to scrub with an assessment of scrub levels on a bi annual basis and management practices adapted as necessary to retain the open grassland.

The open grassland areas will be mown annually between March and November with 25% of the grassland mown within any given year. The grassland will be cut in a manner which creates low mown areas cutting through areas of taller grasses creating swales through the vegetation and creating a diverse structure.

Peripheral habitats along the southern boundary of the site, beyond the existing path, will be managed to create a mosaic of rough grassland and scrub edge habitats. Initial management will include the removal of scrub and young woodland back to the existing tree line and cutting of grassland to create a scalloped edge with the young woodland, thereby increasing basking opportunities for reptiles while retaining important edge habitats.



Plate 7 southern habitats with young woodland beyond

The area of woodland at the southern extreme of the site is currently dense and predominantly of a single cohort. The management aims for this area will be the reduction of scrub and coppicing of woodland by approximately 20%. This reduction of scrub will be undertaken over a 5-year period with no more than 5% of the existing scrub/trees removed in any one year.

The location for management will be assessed annually by an appropriate ecologist and will be undertaken where it is considered to be of most benefit to reptiles.

All scrub/woodland removal will be undertaken during winter (November to February) using hand tools and under ecological supervision.

All brash will be retained and stacked to provide refuge for reptiles, invertebrates and small mammals.

6 **Monitoring**

The success of the translocation programme and habitat management will be monitored. This monitoring will comprise a one-day visual survey of the site during April and September respectively of each year. Commencing the year after the completion of the development and continuing for a period of three years.

Management Prescriptions Twynyrodyn Reptile Strategy

YEAR 1	Habitat	Prescription	Season
	Release Area Habitat Enhancements (Areas A & B)	Removal of scrub using hand tools to increase open grassland habitats (Area A). No more than 50% of existing scrub to be removed	November 2022-February 2023
		Removal of Brash and stacking within vegetated areas to create habitat piles for reptile refuga and small mammals	November 2022-February 2023
		Construction of two hibernacula (Area A0 and Area (B). To be constructed from logs and set in pre dug pit and covered with earth. To be located within existing vegetation	November 2022-February 2023
	Wider Reptile Area (South of Development)	Selection of Areas for scrub clearance and coppicing by ecologist along eastern and western path edges and creation of scalloped edges to increase structural diversity and reptile habitats.	November 2022-February 2023
Year 2	Wider Reptile Area (South of Development)	Removal of scrub and coppicing of young woodland at southern side of reptile area to create scalloped edge and increase structural diversity. areas to create open areas suitable for reptiles. Thinning of young woodland at southern edge of site. No more than 5% of total area to be cleared in any given year	November 2023-February 2024
		Removal of Brash and stacking within vegetated areas to create habitat piles for reptile refuga and small mammals	November 2023-February 2024
	All Areas	25% of the grassland mown within any given year. The grassland will be cut in a manner which creates low mown areas cutting through areas of taller grasses creating swales through the vegetation and creating a diverse structure.	March 2024 November 2024
Year 3	Release Areas	Control of encroaching scrub using hand tools to maintain open habitats	November 2024-February 2025

	Wider Reptile Area (South of Development)	Southern site extreme. Removal of scrub and coppicing of young woodland areas to create open areas suitable for reptiles. No more than 5% of total area to be cleared in any given year	November 2024-February 2025
	All Areas	25% of the grassland mown within any given year. The grassland will be cut in a manner which creates low mown areas cutting through areas of taller grasses creating swales through the vegetation and creating a diverse structure.	March 2025-November 2025
Year 4	Release Area	Control of encroaching scrub using hand tools to maintain open habitats	November 2025-February 2026
	Wider Reptile Area (South of Development)	Removal of scrub and coppicing of young woodland areas to create open areas suitable for reptiles Thinning of young woodland at southern edge of site. No more than 5% of total area to be cleared in any given year	November 2025-February 2026
	All Areas	25% of the grassland mown within any given year. The grassland will be cut in a manner which creates low mown areas cutting through areas of taller grasses creating swales through the vegetation and creating a diverse structure.	March 2026-November 2026
Year 5	Review of Management Plan	Assess success of scrub control and management on retaining grassland habitats suitable for reptiles	
Development Completion	Commencement of Monitoring one year after completion of Development	Reptiles to be monitored: one-day visual survey of the site during April and September respectively of each year. Commencing the year after the completion of the development and continuing for a period of three years.	April and September

References

Clements, D.K& Pryce, R.D. (2000). Criteria for the selection of wildlife sites in Gwent, Glamorgan and Carmarthenshire. Gwent Wildlife Trust.

Froglife, (1999). Reptile survey: an introduction to planning, conducting and interpreting surveys for snake and lizard conservation. Froglife advice sheet 10. Froglife. Halesworth

Gent, T. & Gibson, S. (1999). Herpetofauna workers manual. Joint Nature Conservation Committee

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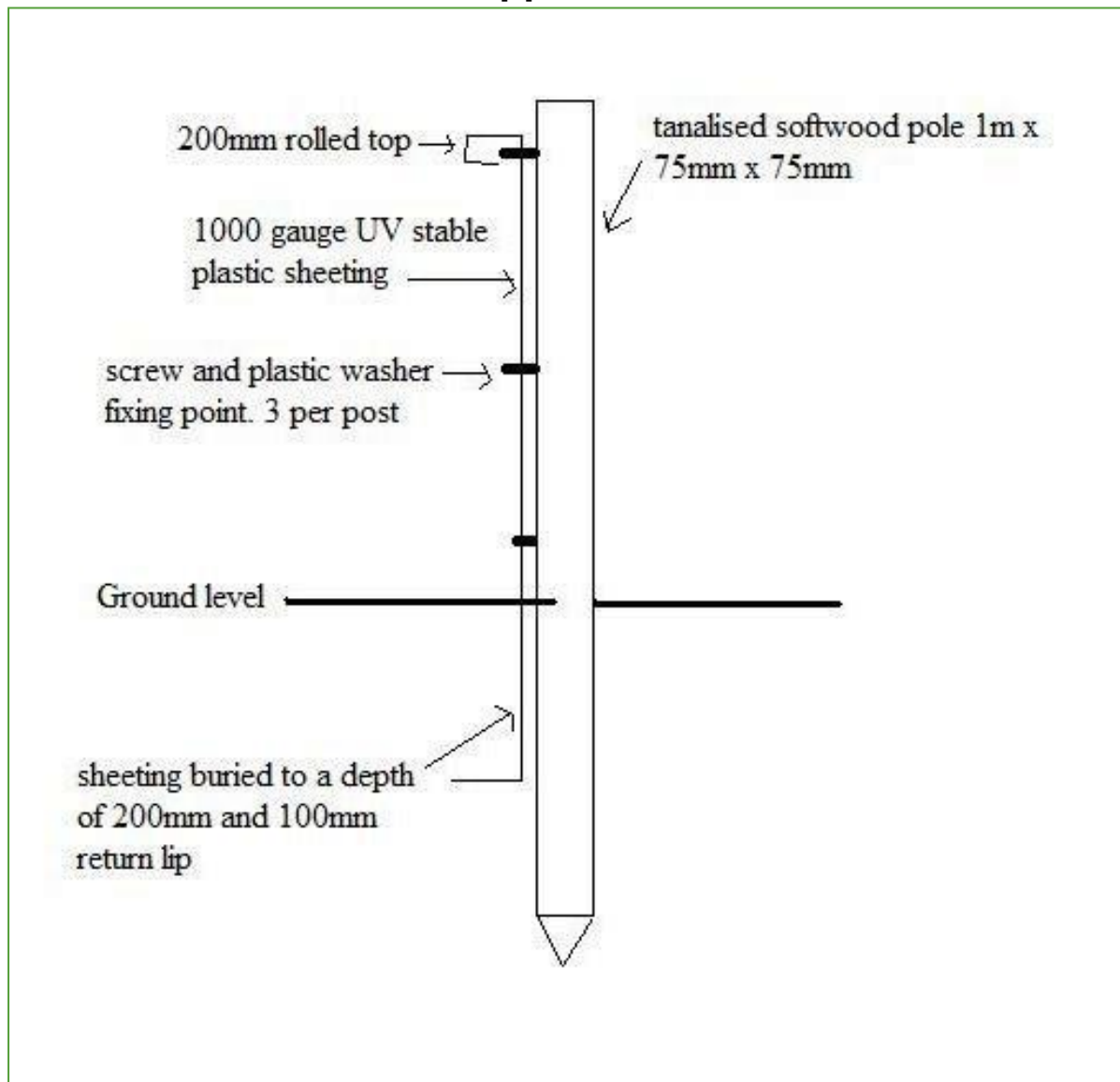
TerrAqua Ecological Services Ltd (2022) Land at Twynyrodyn, Merthyr Tydfil Reptile Survey Report for Persimmon Homes

TerrAqua Ecological Services Ltd (2022) Biodiversity Enhancement Scheme and Reptile Mitigation Strategy. Land off Elm Tree Grove for persimmon Homes

JNCC, (1998). Species Action Plans. UK BAP, English Nature, JNCC

South East Wales Biodiversity Records Centre (SEWBReC) Data search results January 2022. Twynyrodyn for TerrAqua Ecological Services Ltd **LERC Reference: 0212-748 Supplied through Aderyn**

Appendix I



Exclusion Fence Specification

Appendix II

Map Showing Planning Boundary, Reptile Area and Immediate Release Sites/

TerrAqua Ecological Services Ltd

Twynrodyn
for Persimmon Homes East Wales

Reptile Mitigation Plan

SCALE :
1 : 2500 @ A2

DATE :
11/14/2022



MAP FILENAME :
TQ/Pers: Twyn. Rep. Plan 11/2022. v1

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Legend

- Reptile Translocation Receptor Areas
- Areas of Reptile Habitat Management
- Open Grassland Management Area

Site Legend

- Application Site
- Reptile receptor site



Rev 5 - OS map extended and reptile receptor site hatch added	-16.08.22
Rev 4 - Boundary updated to include reptile receptor site	-15.08.22
Rev 3 - Boundary updated	-06.10.20
Rev 2 - Boundary updated	-22.09.20
Rev 1 - Boundary updated	-06.05.20

Twynrodyn Merthyr Tydfil

Drawing Title Site Location Plan	
Drawing No PH_SL-03	Drawing by: RJ
Scale 1:5000 @ A4	Checked by: Technical
Date 12.12.19	Status: Planning

Persimmon Homes East Wales

Persimmon House
Llantrisant Business Park
Llantrisant
Rhond da Cynon Taf
CF72 8 YP
Tel : 01443 223 853