Haine Road, Ramsgate

Reptile Mitigation Strategy

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Client: BDB Design
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1. Introduction

1.1 Background

1.1.1 In January 2018, Seasons Ecology was instructed to provide a Reptile Mitigation Strategy in support of a planning application for a housing development at Haine Road, Ramsgate, Kent (Ordnance Survey grid reference TR356662).

1.1.2 Native Ecology undertook a Preliminary Ecological Appraisal of the proposed development site in September 2015[1]. The site, which is around 4.25ha in size, was identified as primarily comprising horse-grazed semi-improved grassland, with hedgerows, scattered trees, scrub, tall ruderals and small areas of unmanaged semi-improved grassland. The managed grassland remains heavily grazed. A single derelict bungalow and outbuilding were present in the south-east corner of the site, which have been demolished for health and safety reasons. The tall ruderals and unmanaged semi-improved grassland were identified as having potential to support reptiles.

1.1.3 The site lies on the western edge of Ramsgate and is bounded by Spratling Lane and residential housing to the north, beyond which lies agricultural grassland, by the A256 and an industrial estate to the east, beyond which lies residential housing, and a golf course lies to the south and west of the site.

1.1.4 A planning application is being prepared for submission to Thanet District Council, comprising an outline application for up to 100 residential houses with access and associated public open space, this will include a detailed application for construction of five houses on the land at St Stephens in the south-east corner of the site. St Stephens is where the residential dwelling described above was located, however this has already demolished on the advice of the council due to health and safety issues.

1.2 Objectives

1.2.1 The mitigation strategy outlines suitable protection and mitigation measures (including habitat manipulation and a translocation exercise) and compensation measures (in the form of habitat enhancement). It aims to demonstrate how impacts on individual reptiles will be avoided, favourable conservation status of reptile populations can be maintained and habitats can be enhanced for reptiles.

2. Reptile survey

2.1.1 Whilst it is preferable to have full survey data on protected species in advance of planning being determined, recent case law in October 2014[2] has suggested that this is not a requirement where the favourable conservation status of such species can be maintained within the proposals.

2.1.2 For the purpose of this mitigation strategy the presence of reptiles has been assumed. The site largely comprises heavily grazed pasture, which provides negligible opportunities for reptiles. The small areas of unmanaged grassland, tall ruderals, scrub and hedgerow provide

[1] Native Ecology (2015) *Preliminary Ecological Appraisal and Phase 1 Habitat Survey*. Ref no 0028_R01.

[2] Cheshire East Council v Secretary of State for Communities and Local Government, Rowland Homes Ltd [2014] EWHC 3536.

some opportunities for slow worm and common lizard in particular, with limited opportunities for adder or grass snake, making their presence less likely. Given the small extent and limited diversity of suitable habitat on site, the site is unlikely to support any large populations or to qualify as a Key Reptile Site. Given the site's connectivity to suitable habitats to the south, it is likely that any reptiles using the site do so in combination with adjoining suitable habitat.

2.1.3 Prior to implementation of this strategy, a presence/absence survey for reptiles will be undertaken in suitable weather conditions between April and September 2018 in accordance with the guidance from Froglife (1999)[3]. This will comprise use of artificial reptile refuges, direct observation and searches for other evidence of reptiles (such as sloughed skins). The survey aims to confirm the need for mitigation but is unlikely to result in any significant changes to this mitigation strategy.

3. Impact assessment

Short-term impacts

3.1.1 Based on the Phase 1 habitat survey (Native Ecology, 2015) and the proposed site layout (BDB Design, September 2017, ref. 2631-07) the proposed development will involve removal of around 0.24ha of suitable reptile habitat comprising unmanaged semi-improved grassland, tall ruderals and scattered scrub on the southern boundary of the site in the area known as St Stephens (Figure 1). In addition, around 0.14ha of potential refuge including scrub around and rubble from the demolished house at St Stephens (as it appears on recent Google Earth aerial photographs), around 0.08ha of scrub at the northern corner of the site and around 130m of hedgerow on the eastern boundary will be also removed as part of proposals. Removal of these habitats poses a high risk of killing or injuring individual reptiles, which would cause an offence under the Wildlife and Countryside Act 1981 (as amended).

Long-term impacts

3.1.2 The proposed development will result in the permanent loss of around 0.46ha of potential reptile habitat (Figure 1). Given the abundance of similar opportunities in the local area this is likely to have a significant impact on reptiles at Site level only, and is unlikely to be significant at a local, regional or national level.

3.1.3 Around 530m of hedgerow will be retained around the boundary of the site. Retained hedgerows are predominantly on the western and southern boundaries, with a shorter section retained on the northern boundary which will be isolated from the west and east by access to the development.

[3] Froglife (1999) *Froglife Advice Sheet 10: Reptile Survey.* Froglife. London.

4. Mitigation strategy

4.1.1 The following protection and enhancement measures will be implemented prior to and during construction works commencing on site.

4.2 Protection measures

Reptile fencing

4.2.1 The development site will be isolated from adjacent suitable habitat by the installation of temporary reptile-proof fencing (Figure 2). This will isolate the site from the receptor site thereby reducing the likelihood of reptiles re-colonising the site during the capture effort or later in works. Further reptile fencing will be installed to isolate suitable reptile habitats including the St Stephens area and scrub in the north of the site and focus the capture effort. A proposed layout for the reptile fencing is shown in Figure 2. The reptile fence will be protected with Heras fencing (or similar) to reduce the risk of damage by construction machinery.

4.2.2 Fence specification (with reference to DMRB, 2005[4]) will be a standard temporary reptile-proof fence design using UV-stable polythene membrane folded over and stapled to soft wood battens to create an overhang or return (the return facing outwards from the site), 600mm in height and dug 150mm deep with 100mm turned out to form a buried return (the return facing outwards from the site). Softwood posts 900mm in height and dug 300mm deep and spaced at 1.5m intervals to support the polythene membrane, with backfill compacted to remove gaps and fissures. A diagram for fence design is provided in Annex 1.

4.2.3 The reptile fencing will be maintained in good condition throughout the duration of the construction period and will be carefully removed under supervision during the reptile active season (between April and September) following completion of the development.

Artificial refuges

4.2.4 Artificial reptile refuges will be placed within the suitable reptile habitat numbering 40 in total (approximately 100 refuges per hectare) and will be evenly spread and left to settle. Reptile refuges will consist of roofing felt (0.5m^2).

Receptor site identification

4.2.5 The receptor site will be formed by the Ecological Buffer Zone to the south of the development (Figure 2). The Ecological Buffer Zone measures around 0.1ha in size and the receptor site is around half of this (0.05ha). This area is continuous with alternative, more suitable and more extensive, reptile habitat off site, being adjacent to a steep grassy embankment on the edge of the golf course which supports rough grassland. In keeping with Natural England's standing advice for reptile mitigation[5], the receptor site is as close as possible to the development site, supports similar habitats and is protected from future development.

[4] Design Manual for Roads and Bridges (DMRB) (May 2005) *Volume 10 Environmental Design and Management, Section 4 The Good Roads Guide – Nature Conservation, Part 7 Nature Conservation Advice in Relation to reptiles and Roads*. Produced by Cresswell Associates Ltd for the Highways Agency.

[5] https://www.gov.uk/guidance/reptiles-protection-surveys-and-licences

Capture and relocation

4.2.6 The capture and relocation exercise will be undertaken in suitable weather conditions between March and September. A minimum of 30 visits (HGBI, 1998[6]) will be undertaken in suitable weather conditions to check the refuges and relocate any reptiles found to the receptor site (Ecological Buffer Zone to the south of the site). After 30 days of captures plus five consecutive days with zero captures (which may be the last five days of the capture effort i.e. days 26 to 30) the capture and relocation exercise can stop. Should captures continue after 30 days then the relocation exercise must continue until such a time as five consecutive days of zero captures occurs.

Habitat manipulation

4.2.7 Areas of negligible suitability reptile habitat, namely the existing heavily-grazed semi-improved grassland should continue to be managed to maintain low suitability to reptiles.

4.2.8 Some habitat manipulation may be undertaken to focus capture efforts within or after the 30 days trapping, but this will be informed by capture rates and in consultation with the County Ecologist.

4.2.9 This would be undertaken in two stages:

- During winter (mid-October to March) above-ground woody vegetation should be cut to no less than 300mm to avoid harm to hibernating reptiles. This must be undertaken outside of the breeding bird season (April to September inclusive) to ensure the protection of breeding birds.
- During the reptile active season (April to mid-October) the remaining woody vegetation will be carefully removed as part of a destructive search and any grassland will be cut in a directional manner towards areas of retained habitat. Any grassland will be cut in two stages; one cut to around 150mm and the second cut as low as possible.

Hand searches and mechanical excavation (destructive search)

4.2.10 Following completion of the capture and relocation exercise, hand searches and expert supervision of mechanical excavation of the areas subject to capture and relocation and habitat manipulation will be undertaken. This will be carried out during the reptile active season to avoid any disturbance to hibernating reptiles (typically March to September, in suitable weather conditions).

4.2.11 All suitable refuge habitat on site that requires removal (rubble, hedgerow, scrub) will be carefully dismantled and searched for reptiles by an ecologist. This effort aims to clear any few remaining individuals from the site. Once the ecologist is satisfied with the level of search effort, a toothed digger will be used to remove the roots and top 100mm of topsoil with periodic checks being completed by an ecologist.

4.3 Consideration to other species

4.3.1 Any above-ground vegetation removal undertaken during the breeding bird season (March to October inclusive) must be proceeded by a nesting bird check carried out by an experienced ecologist. Should any active nests be identified, work should stop and a buffer zone created to protect the nest until the nest is confirmed empty by the ecologist.

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[6] Herpetofauna Groups of Britain & Ireland (HGBI) (1998) *Evaluating local mitigation/translocation programmes: maintaining Best Practice and lawful standards.* HGBI Advisory Notes for Amphibian & Reptile Groups (ARGs). Halesworth: HGBI, c/o Froglife.

4.4 Enhancement measures

4.4.1 Three artificial hibernacula will be created within the receptor site (Ecological Buffer Zone to the south of the development). The hibernacula will be created using rocks, logs, deadwood and rubble, with soil to loosely fill layers, capped with topsoil, turf or moss. The mounds will be 500 to 1000mm in height and minimum area 1500mm by 1500mm. The design of the hibernacula is show in Annex 2. The Ecological Buffer Zone will be sensitively managed to retain and enhance its value to wildlife through a once-yearly hay-cut and scrub management (aiming for around 5%).

4.4.2 The development retains hedgerow and tree lines along the southern, western and part of the northern boundary of the site. Three small greens (public open space) and one large green will be created, which provide opportunities for incorporating species-rich grassland and pond creation. Hedgerow and tree planting is planned around the eastern boundary of the site. Planting should incorporate native locally-appropriate species. New and retained habitats should be subject to a habitat management plan to ensure they establish successfully and provide value to wildlife and as an amenity feature for new residents. The public open space and gardens, especially along the southern boundary of the site, are likely to provide additional opportunities for wildlife, including reptiles, if managed appropriately, alongside other opportunities in the local area. New homeowners will be given advice on wildlife friendly gardening.

5. Figures

Figure 1: Impacts

Figure 2: Mitigation

Figure 3: Enhancement

Proposed Sketch Layout
Land at Haine Road, Ramsgate.

Key

- Development footprint
- Foraging/basking habitat lost (semi-improved grassland and tall ruderal habitat)
- Retained refuge (hedgerow)
- Refuge lost (hedgerow, scrub and rubble)
- Low suitability habitat (heavily grazed semi-improved grassland)

Seasons ECOLOGY

Site	Haine Road, Ramsgate
Title	Impacts
Figure ref	1
Report ref	SET1873_01
Date	February 2018
Scale	Indicative only

Key

- Development footprint
- Capture and exclusion area
- Temporary reptile proof fence
- Drift fence
- Ecological Buffer Zone
- Receptor site

Seasons ECOLOGY

Site	Haine Road, Ramsgate
Title	Mitigation
Figure ref	2
Report ref	SET1873_01
Date	February 2018
Scale	Indicative only

Key

- Development footprint
- Ecological buffer zone
- Hibernacula

Seasons ECOLOGY

Site	Haine Road, Ramsgate
Title	Enhancement
Figure ref	3
Report ref	SET1873_01
Date	February 2018
Scale	Indicative only

6. Annexes

Annex 1: Reptile Fence Design (DMRB, 2005)

Annex 2: Hibernaculum Design (DMRB, 2005)

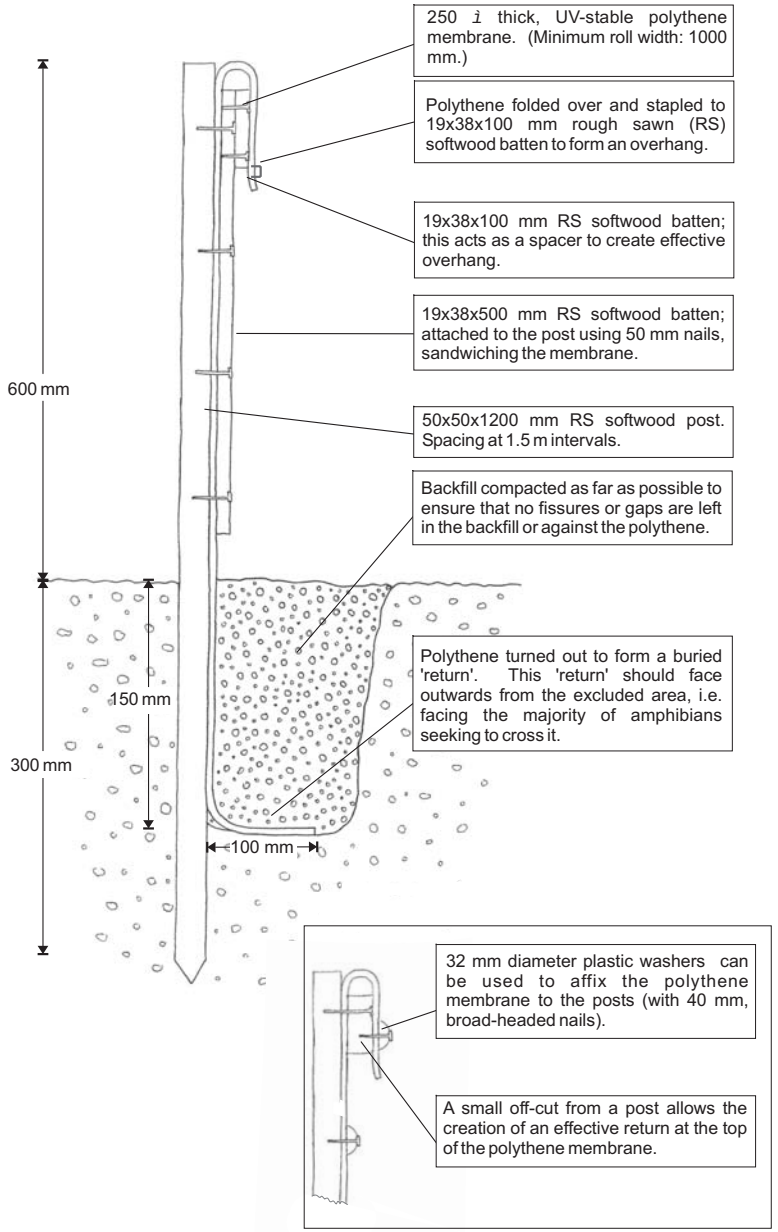
Temporary Reptile Fence

This is a standard temporary fence design which can be utilised in situations where it is necessary to create a reptile-proof barrier for periods usually not exceeding a single season. Although this design will effectively prevent the passage of reptiles in either direction, the 'returns' on the fence should face outwards, i.e. facing the direction from which the majority of any reptiles are expected to approach. It can be constructed from relatively inexpensive materials, but is easily damaged or vandalised, and will degrade over time. Fences of this type are less appropriate in windy situations where damage will be more frequent. Also if placed close to areas where plant operate regularly and/or earthworks are taking place, a membrane fence of this kind is usually best protected by a more robust fence, for example a wooden paling fence.

Care needs to be taken when undertaking the necessary maintenance works to ensure that vegetation does not grow over the fence. If undertaken mechanically, this can easily damage the membrane.

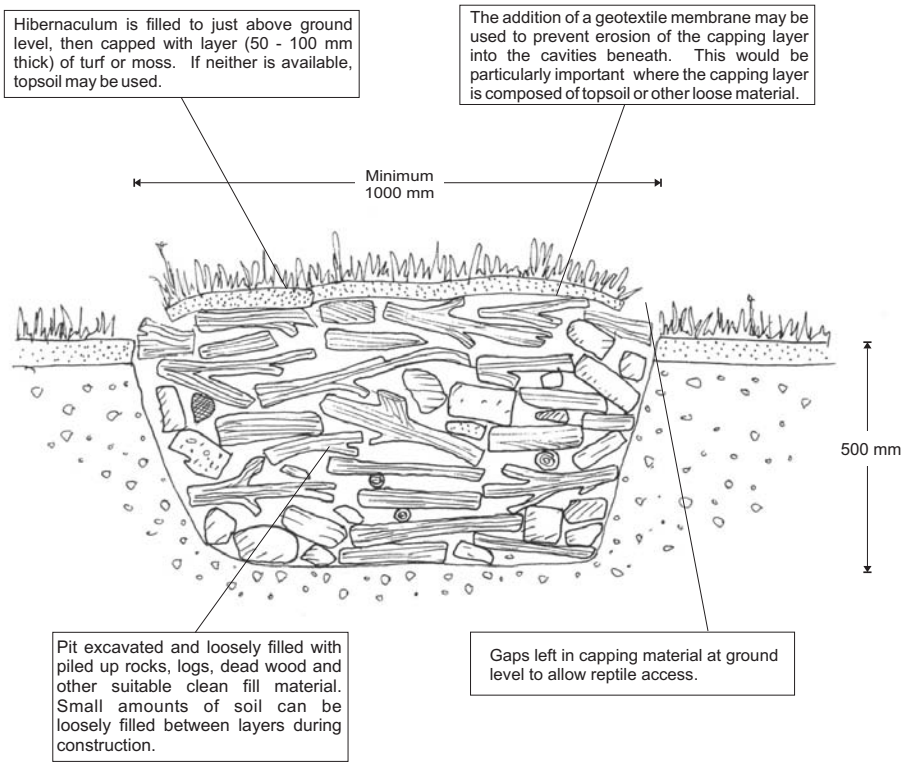
The use of a nail gun is recommended to attach the battens securely to the posts. Not only is this advantageous for speed, but prevents any loosening of the posts which can be associated with the repeated impacts of a hammer.

Some practitioners prefer the use of flexible plastic washers to hold the membrane in place, as an alternative to softwood battens. (An example of this is shown inset.) The result is similar in strength and durability to that of the previous design, but precludes the use of a nail gun, as the washers require a large headed nail and cannot withstand the force produced by the gun.



Hibernaculum on free-draining ground

Where ground conditions allow, the hibernaculum should be incorporated into a shallow pit. This design is more likely to remain frost-free, and will be less obtrusive and thus unlikely to be subject to interference.



Hibernaculum on impermeable ground

Where ground conditions are impermeable, then an 'above-ground' or mounded design should be utilised in order to prevent the hibernaculum from flooding. This design should also be used if it is not possible to excavate a pit for any other reason.