REPORT

Holyhead Waterfront Development

Technical Report: Reptile Survey

Client: Conygar (Wales) PLC

Reference: PB8908-RHD-ZZ-XX-RP-Z-0007

Status: Draft/P02.01

Date: 17 September 2019

Royal HaskoningDHV

Enhancing Society Together

HASKONINGDHV UK LTD.

Honeycomb
Edmund Street
Liverpool
L3 9NG
United Kingdom
Industry & Buildings
VAT registration number: 792428892

+44 151 2362944 **T**
+44 151 2272561 **F**
info.liv@gb.rhdhv.com **E**
royalhaskoningdhv.com **W**

Document title:	Holyhead Waterfront Development
Document short title:	Technical Report: Reptile Survey
Reference:	PB8908-RHD-ZZ-XX-RP-Z-0007
Status:	P02.01/Draft
Date:	17 September 2019
Project name:	Holyhead Waterfront Development
Project number:	PB8908
Author(s):	Ben Hughes
Drafted by:	Ben Hughes
Checked by:	Claire Smith
Date / initials:	03/10/2019 CS
Approved by:	Gregor McNiven
Date / initials:	31/10/2019 GMcN

Classification
Internal use only

Royal HaskoningDHV

Table of Contents

Table of Tables

Table of Figures

Appendices

1 Introduction

1.1 Project Background

Conygar (Wales) PLC (herein “Conygar”) are seeking to develop Holyhead Waterfront in order to stimulate economic activity in the Holyhead area and reverse a decline in footfall. The development is for a mixed-use regeneration scheme (“the Waterfront Development”) which would include a new marina, the reclamation of land from the sea, new residential development, together with a hotel, commercial, leisure and retail uses and associated infrastructure.

Outline Planning Permission for the Waterfront Development has previously been granted by the Isle of Anglesey County Council (Application 19C1046A/EIA/ECON). Conygar are seeking to submit a Section 73 application for an extension of the life of the Outline Planning Permission in order to submit the reserved matters. To support the Section 73 application, the Holyhead Waterfront Regeneration Scheme Environmental Statement (herein “the 2010 ES”) (Axis, 2010) has been updated to reflect new legislation and baseline information. The updated ES (and this report) accompanies the Section 73 application. A reptile observation survey was undertaken on 12th August 2009 as part of the initial application for the Outline Planning Permission; however, due to the time elapsed, an up-to-date understanding of the status of reptile species within the proposed development area is required to support the ES update.

An updated presence / likely absence reptile survey was commissioned in 2019 (herein “the 2019 reptile survey”) to confirm the validity of the 2009 reptile observation survey and to identify any changes in the presence of reptiles and suitable habitat within the proposed development area since 2009. The proposed development area is denoted by the solid red line on

Figure 1. The terrestrial extent of the proposed development area stretches along the coast from the ferry terminal to the Great Breakwater and the inland perimeter is delineated by Beach Road and the Breakwater Country Park access road. The central National Grid Reference (NGR) for the proposed development area is SH 24071 83337.

The objectives of the 2019 reptile survey were:

- To confirm the validity of existing information and ascertain an up-to-date understanding of the usage of the site by reptiles;
- To identify the possible impacts that construction activities during the Waterfront Development may have on reptiles within the site;
- To ensure that mitigation measures identified following the 2009 reptile observation survey remain applicable; and,
- To identify any new measures that may be required during the construction phase in order to safeguard reptile species.

Other sensitive herpetofauna that may potentially be present within the proposed development area, namely great crested newts (*Triturus cristatus*), are reported separately and therefore are not included in this report.

1.2 Purpose of this Report

In September 2019, seven reptile survey visits were undertaken in the proposed development area, on non-consecutive days. This report, which forms an appendix to the updated ES, describes the methodology and results of the 2019 reptile survey and recommends mitigation measures to be considered during the construction phase.

1.3 Legislation

All reptile species are protected by international and / or UK law. Smooth snakes (*Coronella austriaca*) and sand lizards (*Lacerta agilis*) are European Protected Species (EPS), protected under Annex IV of the European Habitats Directive (transposed into UK law via the Conservation of Habitats and Species Regulations 2017), and are therefore afforded a higher level of protection. They are protected by all parts of Schedule 5, Section 9 of the Wildlife and Countryside Act 1981 (as amended), which prohibits deliberate capture, injuring, killing or disturbance of these species, or damage or destruction of a breeding or resting site.

The more widespread UK reptiles (slow worm (*Anguis fragilis*), common lizard (*Zootoca vivipara*), grass snake (*Natrix helvetica helvetica*) and adder (*Vipera berus*)) are Priority Species under the UK Post-2010 Biodiversity Framework and are listed as species of “principle importance” under Section 7 of the Environment (Wales) Act 2016. They are also afforded protection under Schedule 5, Section 9(1) and 9(5) of the Wildlife and Countryside Act, 1981 (as amended), which prohibits intentional killing and injuring of these species.

As such, evidence of the presence of any of these species within the proposed development area would require project consideration to ensure they are safeguarded during the construction process, as it is illegal to intentionally kill or injure even the more widespread species.

2 Baseline Conditions

2.1 Desk Study Results

A desk-based review of biological data from the Local Environmental Records Centre for North Wales ("Cofnod"), procured in July 2019, indicates that there has been a total of 25 recorded sightings of reptiles within 2km of the waterfront, of which 19 have been recorded since the 2010 ES was produced. None of the records were located within the proposed development area. Species that have been recorded within a 2km buffer from the proposed development area include:

- Slow worm – 8 records, 7 since 2010 (most recently in July 2018);
- Common lizard – 13 records, 9 since 2010 (most recently in May 2015); and,
- Adder – 4 records, 3 since 2010 (most recently in May 2015).

Cofnod data was also interrogated to identify any habitats designated for the protection of reptile species. While the proposed development area lies within 2km of Glannau Ynys Gybi / Holy Island Coast Special Area of Conservation (SAC) / Site of Special Scientific Interest (SSSI) and Tre Wilmot SSSI, none of these are designated for reptile features.

Although adders have been recorded within 2km of the proposed development area, they are a heathland species that were recorded west of the breakwater amongst coastal heathland in Glannau Ynys Gybi / Holy Island Coast SAC. The habitat within the study area is not considered likely to support adders. There are no records of grass snake within 2km of the study area, and Anglesey falls outside the native range of smooth snakes and sand lizards.

2.2 Previous Survey Results

The 2010 ES reported an incidental sighting of a single common lizard which was recorded during a habitat survey conducted by Argus Ecology in 2009. That individual was observed on the lane running along the western perimeter of Soldier's Point House, at the western end of the proposed development area. Habitat along this lane included outcropping rocks and stone walls with grass and tall herb vegetation. Following this sighting, a reptile observation survey was carried out by Argus Ecology on 12th August 2009 from a number of suitable vantage points within the western part of the proposed development area. The survey involved a series of careful observations of suitable basking locations, and inspection of potential refugia within the grounds of Porth-y-Felin House and Soldier's Point. No reptiles were recorded during the 2009 observation survey, although this was a single survey conducted over one day and as such is not considered to be comprehensive.

3 2019 Reptile Survey Methodology

3.1 Survey Area

Habitat surveys conducted in 2009 (Argus Ecology, 2010) and July 2019 (Royal HaskoningDHV, 2019) noted the habitats within the western half of the proposed development area (west of the marina boat yard) as providing suitable basking and foraging opportunities and refugia for common lizards and slow worms. The Phase 1 Habitat map produced in 2019 (**Figure 2**) recorded grassland adjacent to dense or continuous scrub and bracken around Porth-y-Felin House and Soldier's Point, and west of Porth-y-Felin in livestock fields. Such areas provide suitable habitat for basking, sheltering and hibernating reptiles. As such, the

western half of the proposed development area formed the 2019 reptile survey area, as shown in **Figure 3**. Habitat in the eastern half of the proposed development area, adjacent to Newry Beach and the marina, was assessed as being unsuitable for reptile activity and therefore was not surveyed.

The 2019 reptile survey focused on areas of rough grassland with a south-facing aspect, particularly those areas in close proximity to rock schists and outcrops, bare ground, debris, dry-stone walls and dense scrub. As such, the placement of artificial refugia mats (also known as artificial cover objects (ACOs)) for the survey followed the following criteria:

- ACOs were placed in locations offering basking potential and adjacent to / within vegetation or other refugia;
- ACOs were placed in locations that received direct solar radiation, at least for part of the day; and,
- ACOs were placed in locations that were unlikely to be heavily disturbed.

Seven survey visits were considered to be sufficient to detect reptile usage of habitats within the 2019 survey area, even where population densities are relatively low (Sewell *et al.*, 2012 and 2013).

The 2019 reptile survey comprised two elements:

1. Checking of ACOs placed within the survey area; and,
2. Walkover searches for basking reptiles and those under extant refugia within the survey area.

3.2 Artificial Refugia Searches

A total of 21 ACOs, made from roofing felt and approximately 50cm by 50cm in size, were placed in six locations on the 3rd September 2019. All ACO locations were within the grounds of Soldiers Point and Porth-y-Felin House, an area of 3.48ha, therefore the placement of the ACOs met the industry guidance of 5 – 10 ACOs per ha (Gent and Gibson, 2003). The ACOs were left in place for 13 days prior to the first survey visit in order to allow the mats to "bed down" before being checked. The locations of the ACOs are presented in **Figure 3**.

A description of each ACO location is provided in **Table 3.1**.below, and photographs of the six locations are provided in **Appendix A1** of this report.

Table 3.1 Description of the six general locations for the 2019 reptile survey

Location	Number of ACOs	Description
HH1	4	A rubble heap with artificial building debris and bramble / ruderal vegetation at the south façade of Porth-y-Felin House.
HH2	4	Adjacent to bare ground in poor semi-improved grassland adjacent to tall ruderals and dense blackberry (*Rubus fruticosus*) and bracken (*Pteridium aquilinum*) stands.
HH3	4	Poor semi-improved grassland with rocky schists and dense gorse (*Ulex* sp.) and blackberry stands.
HH4	3	Poor semi-improved grassland immediately adjacent to a dense gorse stand that extends along the south façade of Solder's Point House's northern perimeter wall.
HH5	3	Small area of bare ground within semi-improved grassland, surrounded by dense bracken stands.
HH6	3	Bare, concreted ground bordered by blackberry stands and stone walls.

ACOs were not placed in fields west of Porth-y-Felin and Soldiers Point due to livestock (horses) being present. Although the fields are considered to provide suitable habitat for reptiles, the presence of horses within the fields may have resulted in injury to surveyors, injury or disease to livestock and trampling of reptiles seeking refuge under the ACOs.

ACO checks during each survey visit were undertaken in accordance with industry guidance from Froglife (1999), Gent and Gibson (2003) and Sewell *et al.* (2013). When undertaking each survey visit, the ACOs were approached slowly to avoid disturbing any basking reptiles before they could be recorded. Once basking reptiles were recorded, the ACOs were swiftly lifted and reptiles taking refuge underneath were recorded before the mats were then replaced as found.

Each survey visit was conducted at different times of the day as reptiles are ectothermic and activity may vary depending on local weather conditions. For example, on warmer days reptiles may be more likely to be observed early in the morning or late in the afternoon, whilst on cooler days they are more likely to be observed during the hottest part of the day (midday / early afternoon). However, each survey visit was timed to avoid rainy spells or particularly windy spells. Dates, times and weather conditions of each survey visit are presented in **Table 3.2** below.

Table 3.2 Dates, times and weather conditions of reptile surveys at Holyhead Breakwater, September 2019

Date	Time of survey	Temperature	Wind	Weather conditions
16/09/19	1230 – 1400	15ºC	10 – 13 mph, NE	Patchy sunshine following a prolonged overcast spell, breezy
1809/19	1130 – 1230	17ºC	9 – 12 mph, NE	Fine, warm in the sunshine. Light breeze
20/09/19	0940 – 1130	18 – 20ºC	6 mph, ENE	Fine, warm
23/09/19	0915 – 1045	16ºC	16 – 17 mph, SW	Mostly overcast morning, following overnight rain
25/09/19	1330 – 1500	17ºC	9 – 10 mph, SSW	Overcast with occasional sun breaking through
27/09/19	1500 – 1630	16ºC	28 mph, W	Patchy sun following heavy rain in the morning
30/09/19	1315 – 1500	15ºC	11 – 13 mph, S	Overcast

3.3 Walkover Search

In tandem with each artificial refugia survey visit, walkover searches were undertaken following a set transect route in the survey area. The walkover searches involved inspection of potential basking areas and searches of extant refugia (both natural and artificial) such as crevices in stone walls and sheltered spots underneath logs, wooden boards and debris from the derelict buildings.

The transect route surveyed on each artificial refugia survey visit is presented on **Figure 3**. The transect followed the lane leading past Porth-y-Felin House and Soldier's Point, where common lizard had been observed in 2009, and returned along the road leading from the Breakwater Country Park. It also included searches of existing refugia within the grounds of Porth-y-Felin House and Soldier's Point House.

When reptiles were observed, the GPS position of the sighting was recorded along with a description of the activity observed (i.e. whether the reptile was basking, foraging or sheltering under refugia).

3.4 Survey Limitations

No major limitations which could significantly reduce confidence in the results were encountered during the course of the 2019 reptile survey. As described, the survey and all ACO checks and searches followed industry guidance (Gent and Gibson, 2003), which reinforces the validity of the results.

However, as outlined in **Section 3.1**, artificial refugia surveys were not undertaken in the livestock fields to the west of Porth-y-Felin and Soldier's Point, where suitable habitat to support reptiles is present. These areas were only assessed (and surveyed) by the walkover searches that were undertaken around the perimeter of the fields. No reptiles were observed during these searches but without ACOs being used it is difficult to determine presence or likely absence from this section of the study area, particularly for low-density populations or cryptic species such as slow worm. As such, for the purpose of the Waterfront Development these fields should be considered to have the potential to host low-density populations of common lizard and slow worm.

While every effort was made to undertake all survey visits during optimum weather conditions for observing reptile activity, time constraints for the survey meant that two of the seven survey visits were undertaken during non-optimal (overcast) weather conditions (on the 23rd September and the 30th September 2019). During these two visits reptile presence was likely to have been under-recorded due to the fact that individuals were unlikely to be basking on ACOs during overcast conditions.

Due to the nature of a presence / absence survey, it is possible that discrete low-density populations may have been overlooked during the survey period, even in areas where artificial refugia surveys were undertaken. However, industry guidance suggests that seven survey visits is appropriate for recording common lizards and slow worms in areas where detectability is relatively low (Sewell, 2013); therefore, as far as possible the 2019 survey was designed to be able to detect low-density populations. As such, the data should provide a fairly accurate understanding of the site's usage by reptiles.

Biological records from Cofnod are not necessarily comprehensive or accurate as they are reliant on records being provided by the public and local contributors. However, when combined with previous survey data from 2009 and the data from the 2019 survey, the records have contributed towards building an understanding of the usage of the proposed development area by reptiles.

4 2019 Reptile Survey Results

During the initial site visit on 3rd September 2019, two incidental sightings of common lizard were made. One was observed basking on a vegetated rubble heap adjacent to the south façade of Porth-y-Felin House (HH1) and another was disturbed in long grass close to a stand of gorse (*Ulex* sp.) along the south façade of the northern perimeter wall at Soldier's Point (HH4).

Table 4.1 lists the findings from the 2019 reptile survey.

Table 4.1 2019 reptile survey results

Date	Time of sighting	Location	Species	Number	Activity	Comments
16/09/19	1240	HH4	Common lizard	3	Refuge	Under ACO
16/09/19	1305	HH1	Common lizard	4	Basking	On ACOs
18/09/19	1145	HH1	Common lizard	1	Basking	On ACO

18/09/19	1155	Near HH2	Slow worm	1	Refuge	Found under wooden plank during walkover search of Porth-y-Felin grounds
20/09/19	0940	HH1	Common lizard	1	Basking	On ACO
20/09/19	0955	Near HH2	Slow worm	2	Refuge	Found under two wooden boards during walkover search of Porth-y-Felin grounds
25/09/19	1345	HH1	Common lizard	2	Basking	On ACO
25/09/19	1350	HH1	Common lizard	1	Refuge	Under ACO
25/09/19	1420	HH4	Common lizard	1	Basking	On ACO
27/09/19	1510	HH4	Common lizard	1	Basking	On ACO
27/09/19	1535	HH2	Slow worm	1	Refuge	Under ACO
27/09/19	1545	HH1	Common lizard	3	Basking	On ACO

The locations of all reptile sightings are presented in **Figure 4.**

A total of 21 reptiles were recorded during the seven survey visits, including 17 common lizards and 4 slow worms. Common lizards were recorded using ACOs at HH1 (on the vegetated rubble heap at the south façade of Porth-y-Felin House, see **Plate 4.1**) and at HH4 (at the edge of the gorse stand inside Soldier's Point House northern perimeter wall, see **Plate 4.2**). Slow worms were observed using ACOs as refugia at HH2 (see **Plate 4.3**) and were also found under extant refugia in the grounds of Porth-y-Felin House during the walkover searches near to HH2. All slow worm sightings during walkover searches were in one area, shown in **Plate 4.4**.

Reptile sightings were recorded on five of the seven survey visits (plus incidental sightings on the initial site visit). There were no reptile sightings on the fourth survey visit (23rd September 2019) and the final survey visit (30th September 2019), though weather conditions on both days were not conducive for observing reptile activity.

Plate 4.1: Location HH1, at the south facade of Porth-y-Felin House may be a hotspot for basking common lizard

Plate 4.2: Location HH4, at the northern perimeter wall of Soldier's Point, may also be a hotspot for common lizard

Plate 4.3: A slow worm was observed using an ACO as refugia at location HH2

Plate 4.4: Slow worms were also observed under the existing refugia seen here in the grounds of Porth-y-Felin House

5 Conclusions

The results of the 2019 reptile survey provide evidence that the proposed development area is used by both common lizards and slow worms for basking and refuge. Based on the presence of habitats offering suitable hibernating opportunities, the results also suggest that both species could hibernate in the area.

The results of the 2019 reptile survey suggest that there may be two particular "hotspots" for common lizard populations in the survey area, where population densities appear to be greater than in other locations. One is on a debris pile adjacent to the south façade of Porth-y-Felin House that has become overgrown with blackberry (*Rubus fruticosus*), knapweed (*Centaurea* sp.), ragwort (*Senecio* sp.)and grasses (HH1), and a second is along the north perimeter wall of Soldier's Point, where dense gorse and long grass provide shelter and areas of shorter grass and bare ground provide basking opportunities (HH4). All of the common lizard sightings during the 2019 survey were from these two locations, and the maximum number of individuals seen was four at HH1 and three at HH4 (both recorded on the 16th September 2019 survey visit). A number of juveniles were observed during the study, suggesting that the proposed development area hosts a breeding population.

Slow worms were recorded on three of the seven survey visits. On two separate walkover searches (specifically on the 18th and 20th September 2019) they were observed in the grounds of Porth-Y-Felin near to HH2, where they were noted to be using the discarded wooden boards within an area of grass and ruderal vegetation. One was also located underneath an ACO at HH2 on the 27th September 2019. Slow worms are a cryptic species and the fact that at least two individuals (on the 20th September 2019) were recorded suggests that the population across the proposed development area may extend outside of the grounds of Porth-y-Felin House. The presence of dense areas of scrub and less accessible or movable refugia across the entire proposed development area further suggests the site could be capable of supporting a higher density population of slow worms than the 2019 survey results suggest.

Froglife (1999) provides guidance on the criteria required for a site to be considered a Key Reptile Site. To qualify as a Key Reptile Site, a site must meet at least one of the following criteria:

1. It supports three or more reptile species;
2. It supports two snake species;
3. It supports an exceptional population of one species (for common lizard and slow worm this constitutes more than 20 adult individuals recorded in a single day);
4. It supports an assemblage of species scoring more than 4 points in the Froglife scoring system (see **Table 5.1**);
5. Does not satisfy the above criteria but is of particular regional importance due to local rarity.

Table 5.1: Key Reptile Site population scores (Froglife, 1999)

Species	Low population *Score 1*	Good population *Score 2*	Exceptional population *Score 3*
Common lizard	< 5	5 – 20	> 20
Slow worm	< 5	5 – 20	> 20
Grass snake	< 5	5 – 10	> 10
Adder	< 5	5 – 10	> 10
Figures refer to the maximum number of adults observed under refugia placed at a density of up to 10 ACOs per ha in one day			

Based on these criteria, the evidence from the 2019 reptile survey suggests that the survey area does not hold reptile populations sufficient to qualify as a Key Reptile Site.

Both species confirmed to be present within the proposed development area are afforded legal protection by the Wildlife and Countryside Act 1981 (as amended). As such, it is illegal for activities associated with the Waterfront Development to result in deliberate killing or injuring of these species. The construction activities associated with the Waterfront Development may result in the impacts listed below:

- Potential mortality or injury to reptiles from construction activities; and / or
- Habitat loss and displacement of reptiles to adjacent habitats (provided there is connectivity between habitats).

In order to minimise these impacts and ensure that the welfare of the reptiles present within the site is upheld, there are mitigation measures that can be implemented to ensure adherence to the legislation afforded to reptiles.

6 Recommendations

The findings from the 2019 reptile survey suggest that in the absence of mitigation there is potential for mortality or injury of common lizards and slow worms during construction activity in the western half of the proposed development area (i.e. within the grounds of Porth-y-Felin House and Soldier's Point and in the fields to the west). In the eastern half of the proposed development area the habitat is not considered to be suitable for supporting reptiles and consequently any impacts are likely to be negligible.

In order to ensure that the Waterfront Development construction does not contravene the Wildlife and Countryside Act 1981 (as amended), it is recommended that a Reptile Mitigation Plan is prepared (and subsequently implemented). The 2010 ES made the following recommendations for mitigating the potential impacts on reptile species:

"A reptile mitigation plan would need to be formulated, setting out methods for pitfall trapping of common lizard, capturing any slow-worm using shelters, and translocation outside the development site. Drift fencing would also be necessary to exclude reptiles from parts of the site which have been trapped out. Removal of vegetation and other features likely to be used by reptiles, such as stone walls, would need to be undertaken carefully and systematically following trapping. Vegetation removal can also be used as a means of concentrating reptiles into a smaller area. Methods employed would follow guidelines in Gent and Gibson (2003)".

The 2019 reptile survey has confirmed the presence of common lizards and slow worms and, as such, the recommendations made in the 2010 ES remain valid and applicable. Based on those recommendations, the following points should be considered:

1. Throughout the construction and operation of the Waterfront Development, some connectivity between potential reptile habitats should be maintained to ensure that the populations have the opportunity to move away from disturbed areas. This is the preferred approach to moving reptiles away from points of activity, though it would require that construction activities are undertaken between May and September, when reptiles are most likely to be active.
2. To encourage reptiles to move away from points of activity to connected or adjacent habitats, vegetation can be gradually removed or shortened to less than 15cm at the activity site, working outwards from the point at which the activity will be centred. This should not be undertaken during

hibernation periods (October to March). All arisings would need to be removed from the site immediately to prevent recolonization.

3. Where vegetation is removed or shortened, it should be maintained at a low height to prevent recolonization prior to construction activities being undertaken.
4. Should it not be feasible to undertake construction activities during the active season (May to September), it may be necessary to translocate reptiles to alternative, appropriate habitat prior to construction work taking place. Receptor sites should be identified in advance, agreed and secured, and appropriately managed to ensure that the new habitat is suitable for supporting the species being introduced. Capture and translocation activities should be conducted during periods when reptiles are likely to be most active (i.e. May to September), since outside of this period reptiles present within the area are less likely to be caught by traps.
5. The erection of exclusion fencing may be necessary to prevent reptiles from moving back into areas being cleared. These should be installed immediately following clearance, as verified by a trained ecologist.
6. Any mitigation measures, including capture and translocation of reptiles, should be conducted in the presence of a trained ecologist and in line with guidance from Gent and Gibson (2003). Full methodology should be presented in the Reptile Mitigation Plan.

7 References

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. and Gibson, S. (2003). Herpetofauna Workers' Manual. JNCC, Peterborough.

Sewell, D., Griffiths, R.A., Beebee, T.J.C., Foster, J. and Wilkinson, J.W. (2013). Survey protocols for the British herpetofauna, Version 1.0. Amphibian and Reptile Conservation, Bournemouth.

Sewell, D., Guillera-Arroita, G., Griffiths, R.A. and Beebee, T.J.C. (2012). When is a species declining? Optimisizing survey effort to detect population changes in reptiles. PLoS ONE 7(8): e43387.

8 Figures

Figure 1: Holyhead Waterfront Development Area

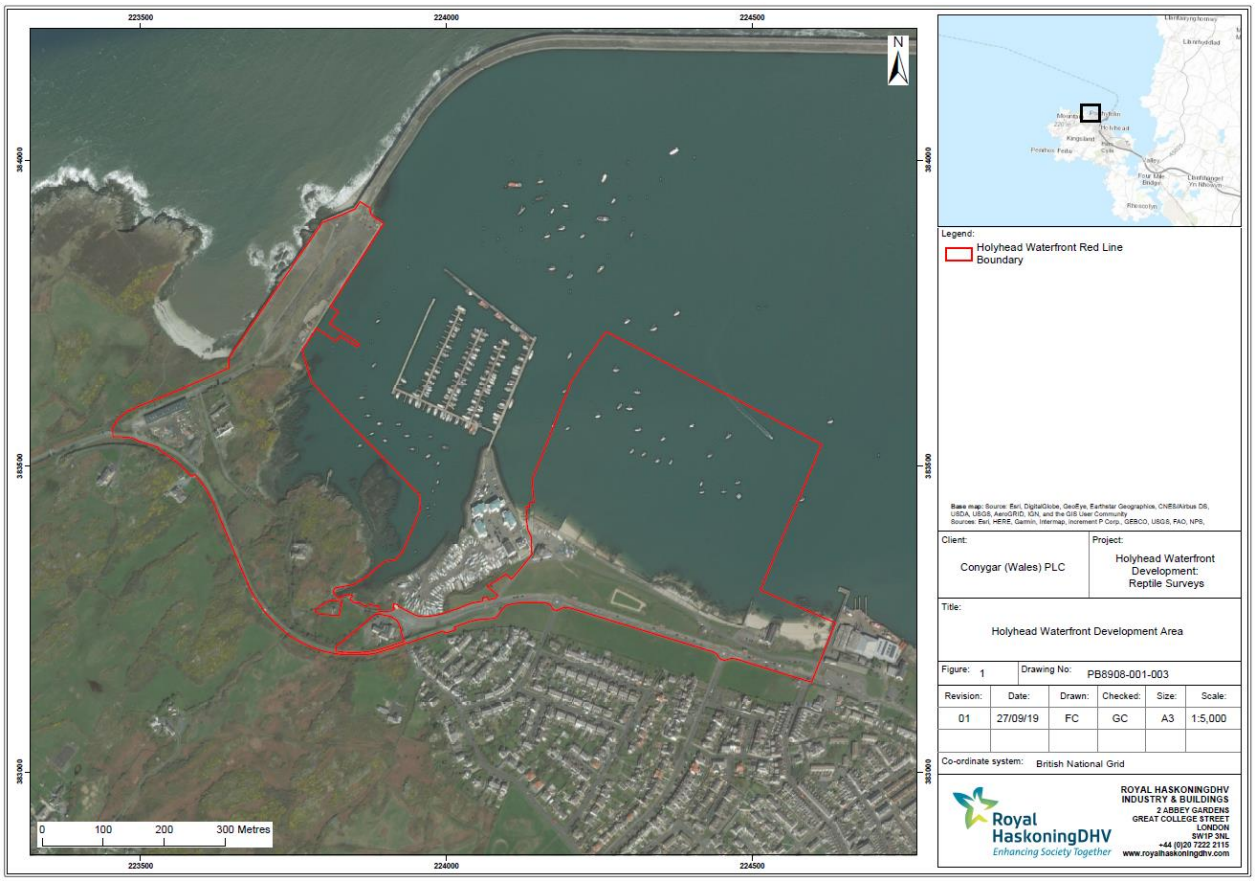


Figure 2: Phase 1 Habitat Map of the development area

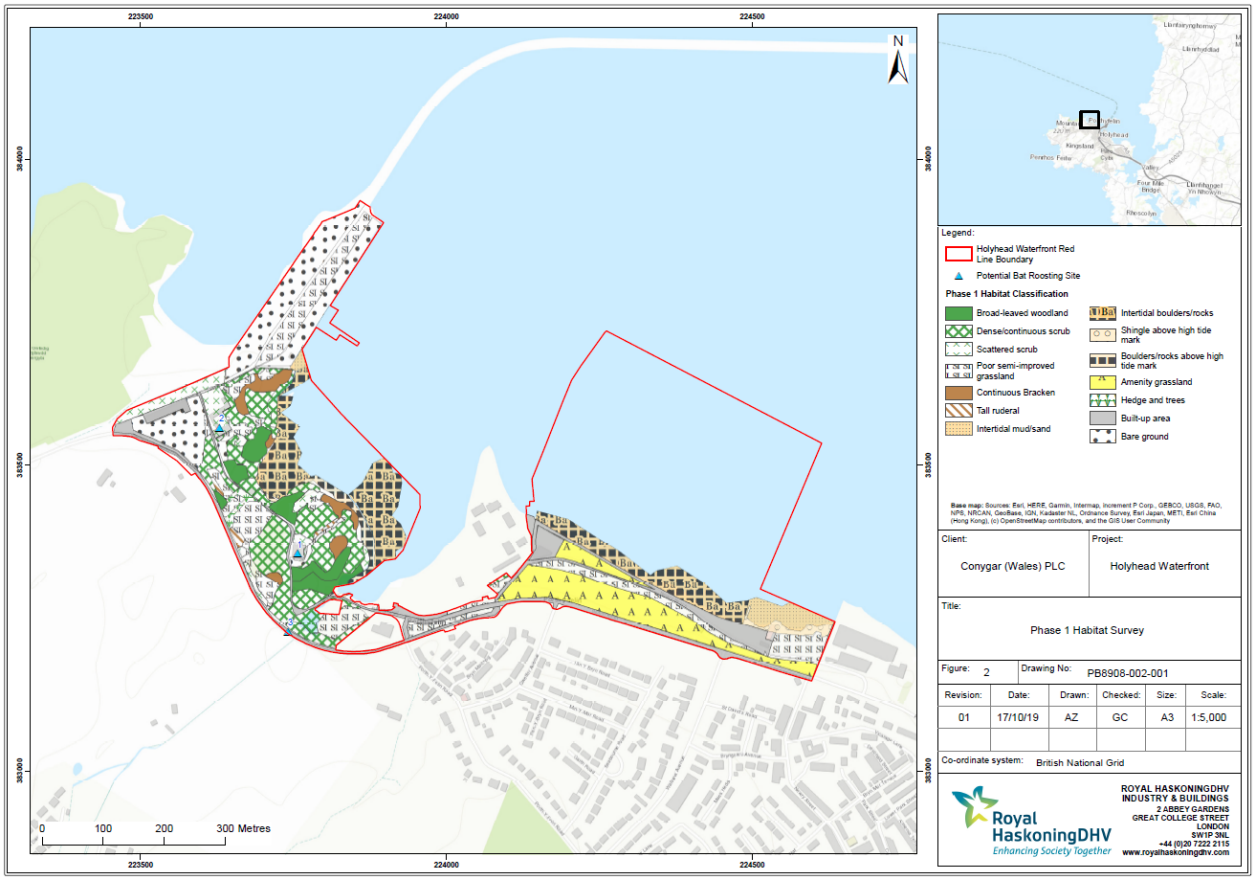


Figure 3: Holyhead Waterfront Reptile Survey Locations

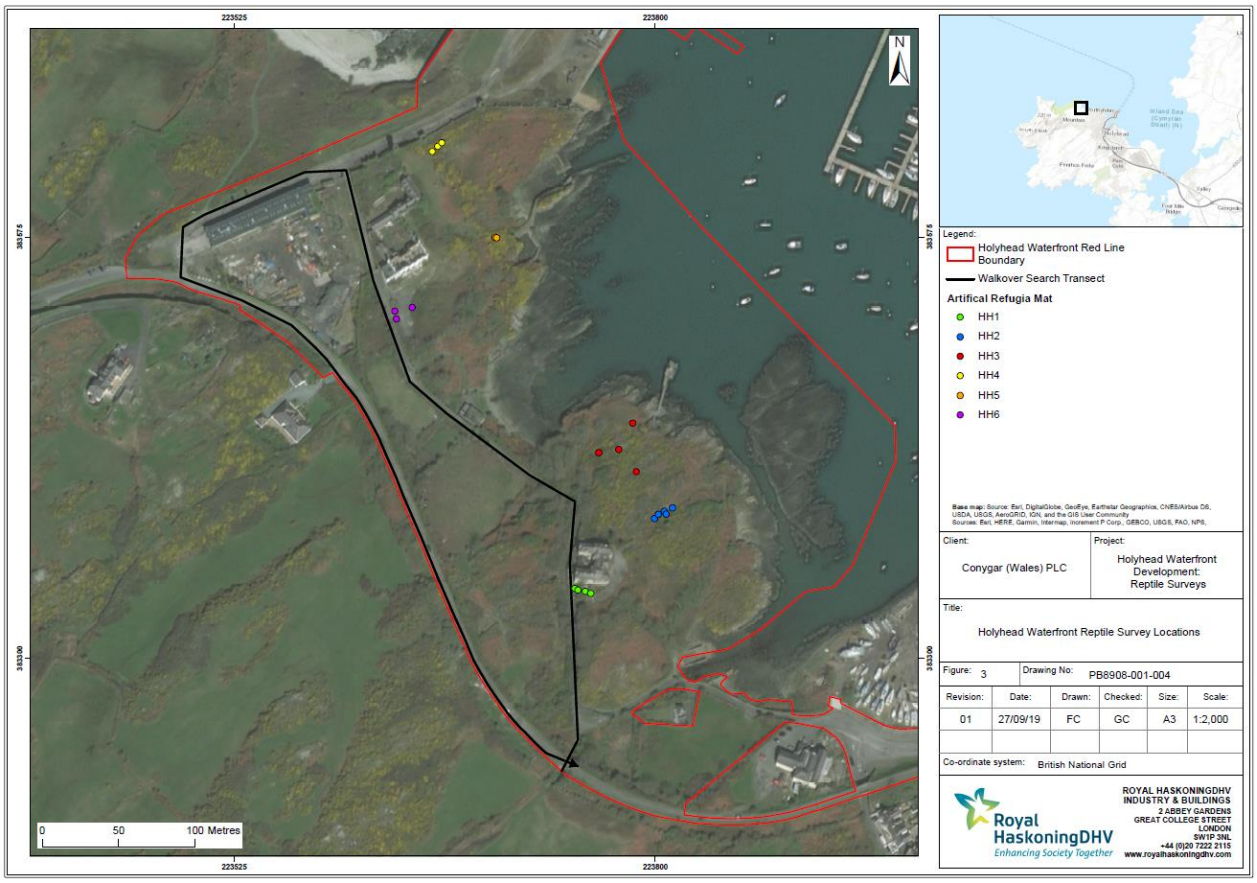
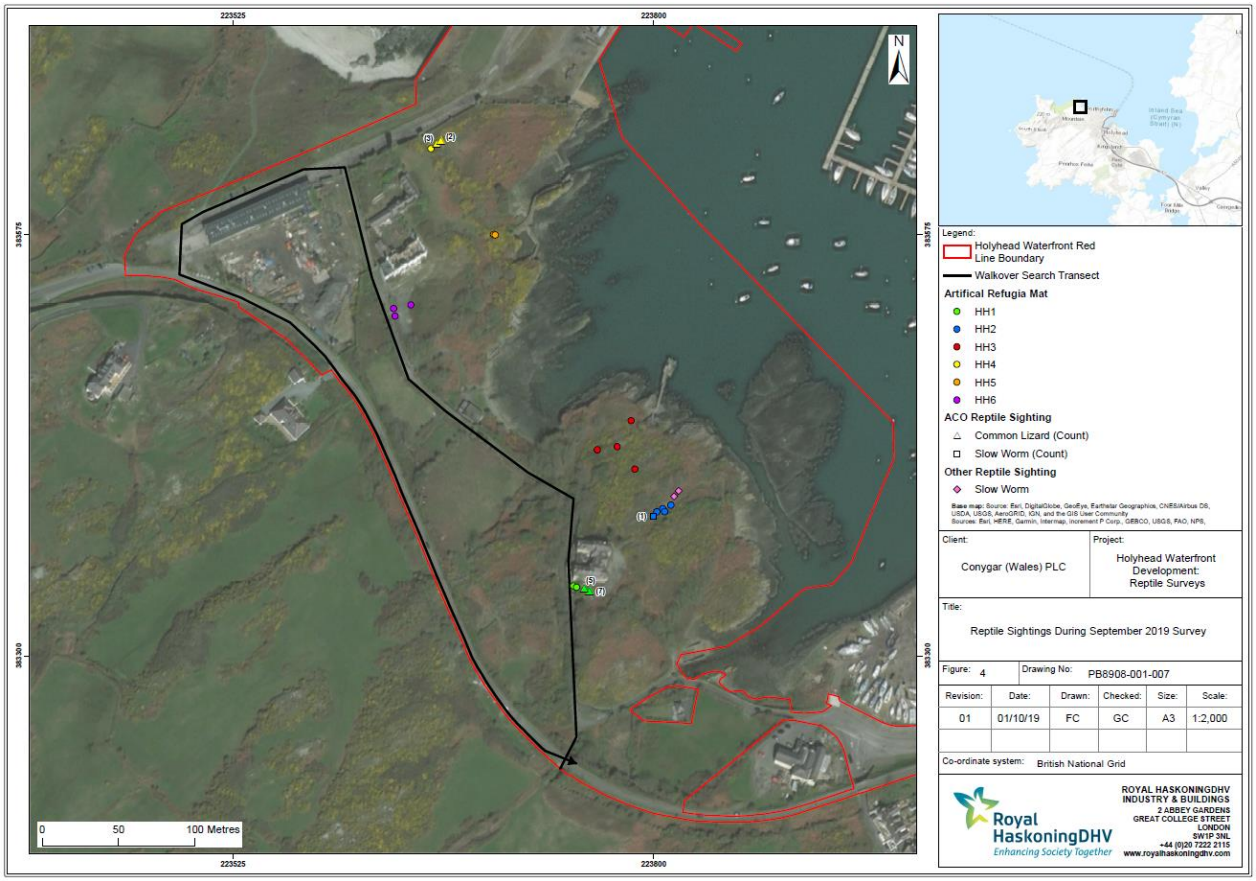


Figure 4: Reptile Sightings During the September 2019 Survey



A1 ACO location photo gallery

HH1

HH2

HH3

HH4

HH5

HH6

With its headquarters in Amersfoort, The Netherlands, Royal HaskoningDHV is an independent, international project management, engineering and consultancy service provider. Ranking globally in the top 10 of independently owned, nonlisted companies and top 40 overall, the Company's 6,000 staff provide services across the world from more than 100 offices in over 35 countries.

Our connections

Innovation is a collaborative process, which is why Royal HaskoningDHV works in association with clients, project partners, universities, government agencies, NGOs and many other organisations to develop and introduce new ways of living and working to enhance society together, now and in the future.

Memberships

Royal HaskoningDHV is a member of the recognised engineering and environmental bodies in those countries where it has a permanent office base.

All Royal HaskoningDHV consultants, architects and engineers are members of their individual branch organisations in their various countries.

Integrity

Royal HaskoningDHV is the first and only engineering consultancy with ETHIC Intelligence anti-corruption certificate since 2010.

ETHIC Intelligence
CERTIFICATE ANTI-CORRUPTION COMPLIANCE SYSTEM

royalhaskoningdhv.com

Royal HaskoningDHV
Enhancing Society Together