Project No.: AABP103 / 003 / 002

August 2014

Proposed Solar Farm, Barry Docks, Wales

Reptile Survey

For

Associated British Ports

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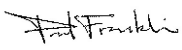
Approved By	Paul Franklin		Principal Ecologist

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Contents

1. Summary and Main Recommendations

1.1 Summary

1.1.1 Associated British Ports is proposing to construct a solar farm on a brownfield site in Barry Docks, South Wales. The proposals have yet to be finalised, however, the removal of habitats currently existing on the two adjacent sites is likely to be required. An extended Phase 1 habitat surveys was undertaken by Thomson Ecology in April 2014. The survey identified suitable habitat on sites for reptile species. Thomson Ecology were subsequently commissioned to undertake a survey to determine presence or likely absence of reptiles at the site. The location of the sites is shown in Figure 1 (comprising Site 1 and 2).

1.1.2 The brief was to undertake a reptile survey using visual search and artificial reptile survey refugia in suitable habitat on site, comprising of one visit to distribute the refugia and seven survey visits to check for presence of reptiles.

1.1.3 Six areas of habitat on site were identified as suitable for use by reptiles and were subject to the reptile survey. These areas (A to F) and the distribution of reptile refugia is shown on Figure 2. Low populations of slow worm were recorded in three of the six surveyed areas (reptile survey areas C, D and F). No reptiles were recorded in areas A, B and E. The survey results are shown on Figures 3a to 3c.

1.1.4 Reptiles are protected under the Wildlife and Countryside Act 1981. As it would be an offence to deliberately kill or injure slow worm this will need to be avoided during the development process.

1.2 Main Recommendations

1.2.1 It is recommended that a reptile mitigation method statement should be prepared which should be agreed with the Local Planning Authority. The mitigation method statement would be expected to include:

- Identification of a suitable receptor site for use by reptiles;
- Enhancement of the receptor site if necessary;
- Installation of reptile exclusion fencing around the areas found to support slow worm;
- A programme of capture and removal of slow worms from within the areas and translocation to the receptor site between March and September for a minimum of 60 days;
- Site clearance under an ecological watching brief; and
- A programme of habitat management and monitoring to ensure that reptile populations remain viable within the receptor site.

Client: Associated British Ports		Drawing Ref: AABP103/15519/1	
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Figure Title: Site Location		Drawn: AC	Checked: NS
		Date: 18/08/2014	Date: 18/08/2014

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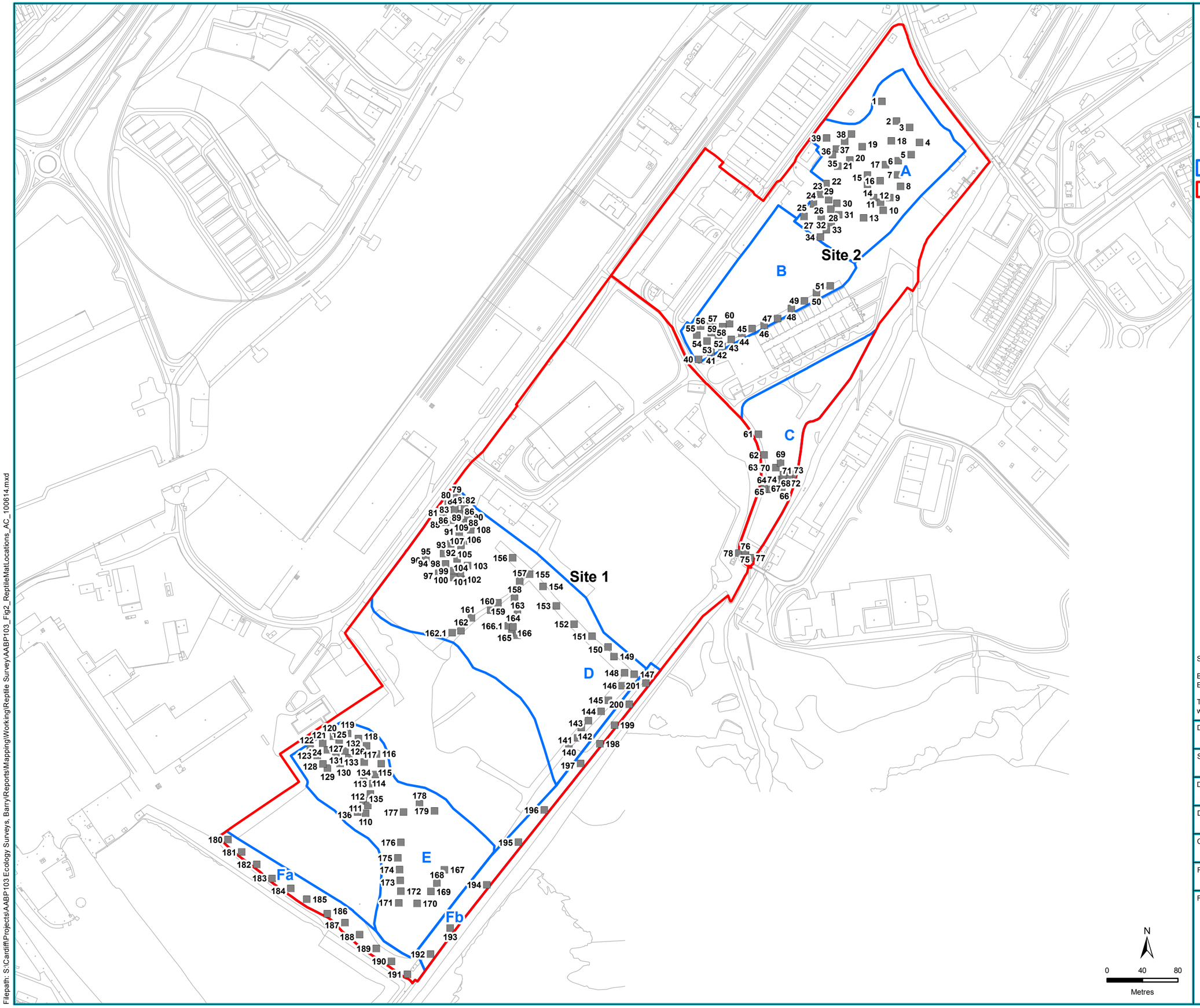

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Legend

- Reptile Refugia Location
- Reptile Survey Area (A to F)
- Site Boundary

Site Grid Reference: 312877 167176

Drawing Ref	AABP103/15520/1
Scale at A3	1:4,000
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Client	Associated British Ports
Figure Number	2
Figure Title	Reptile Refugia Locations

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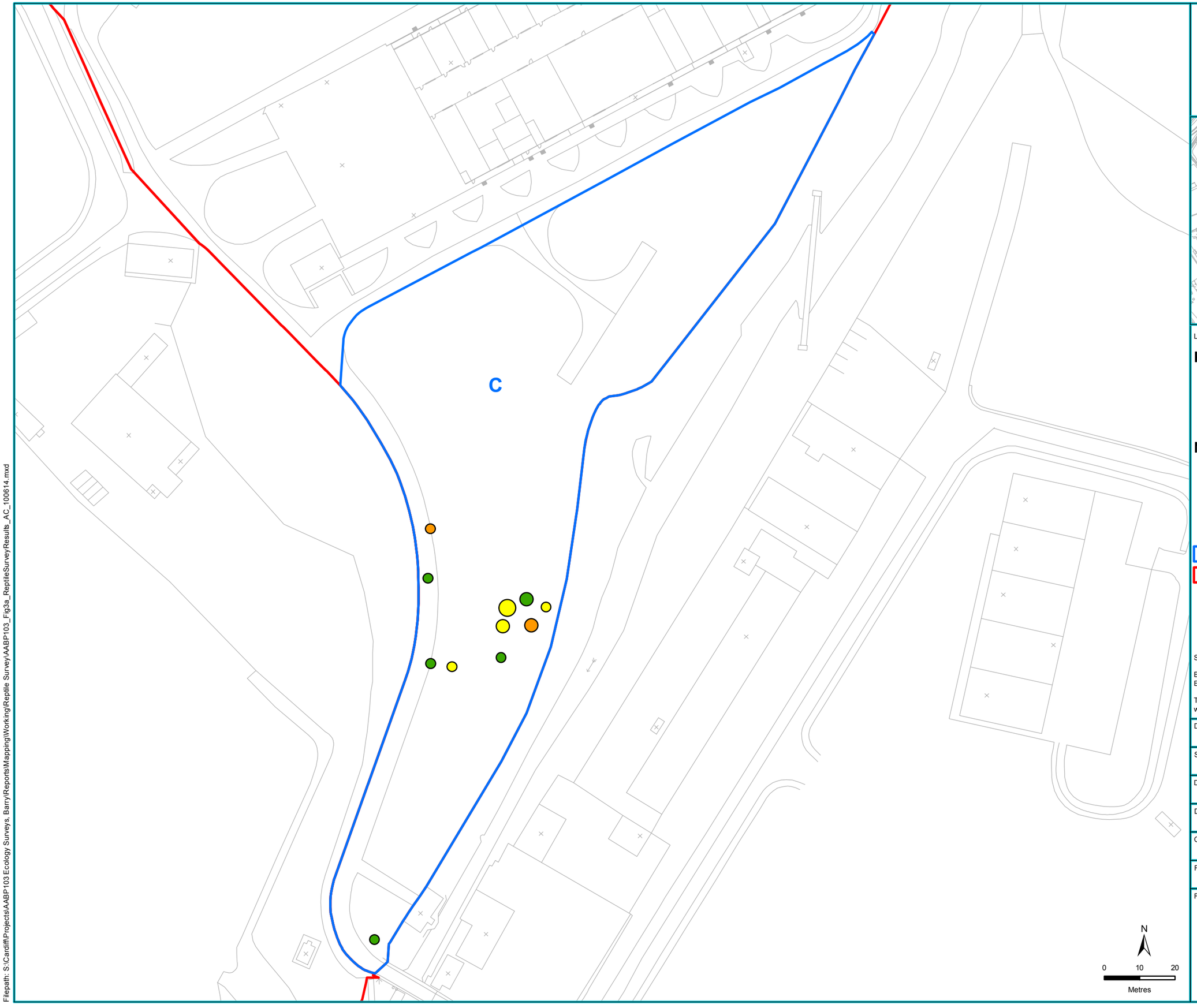

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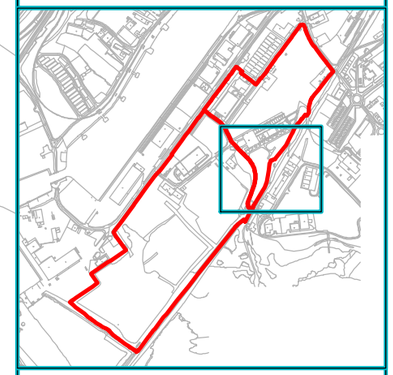

Legend

PeakCount

- 1
- 2
- 3

Number Of Days Recorded

- 1
- 2
- 3
- 7

Reptile Survey Area

Site Boundary

Site Grid Reference: 312877 167176

Drawing Ref	AABP103/15521/1
Scale at A3	1:1,000
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Date: 18/08/2014	Date: 18/08/2014
Client	Associated British Ports
Figure Number	3a
Figure Title	Reptile Survey Results

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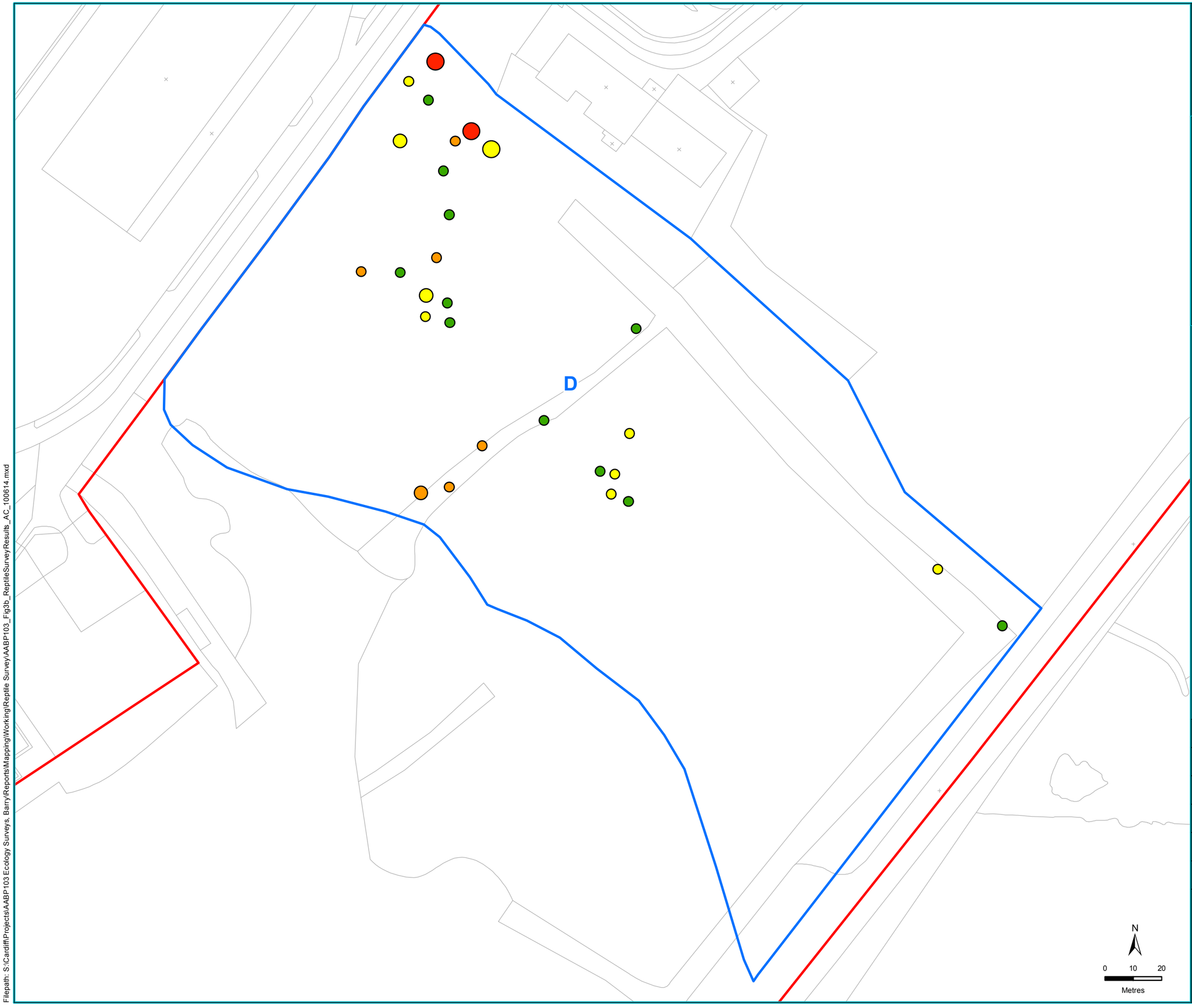

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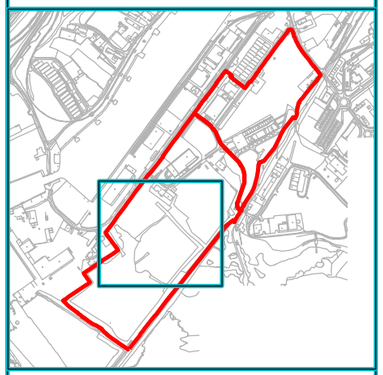

Legend

PeakCount

- 1
- 2
- 3

Number Of Days Recorded

- 1
- 2
- 3
- 7
- Reptile Survey Area
- Site Boundary

Site Grid Reference: 312877 167176

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Date: 18/08/2014	Date: 18/08/2014
Client	Associated British Ports
Figure Number	3b
Figure Title	Reptile Survey Results

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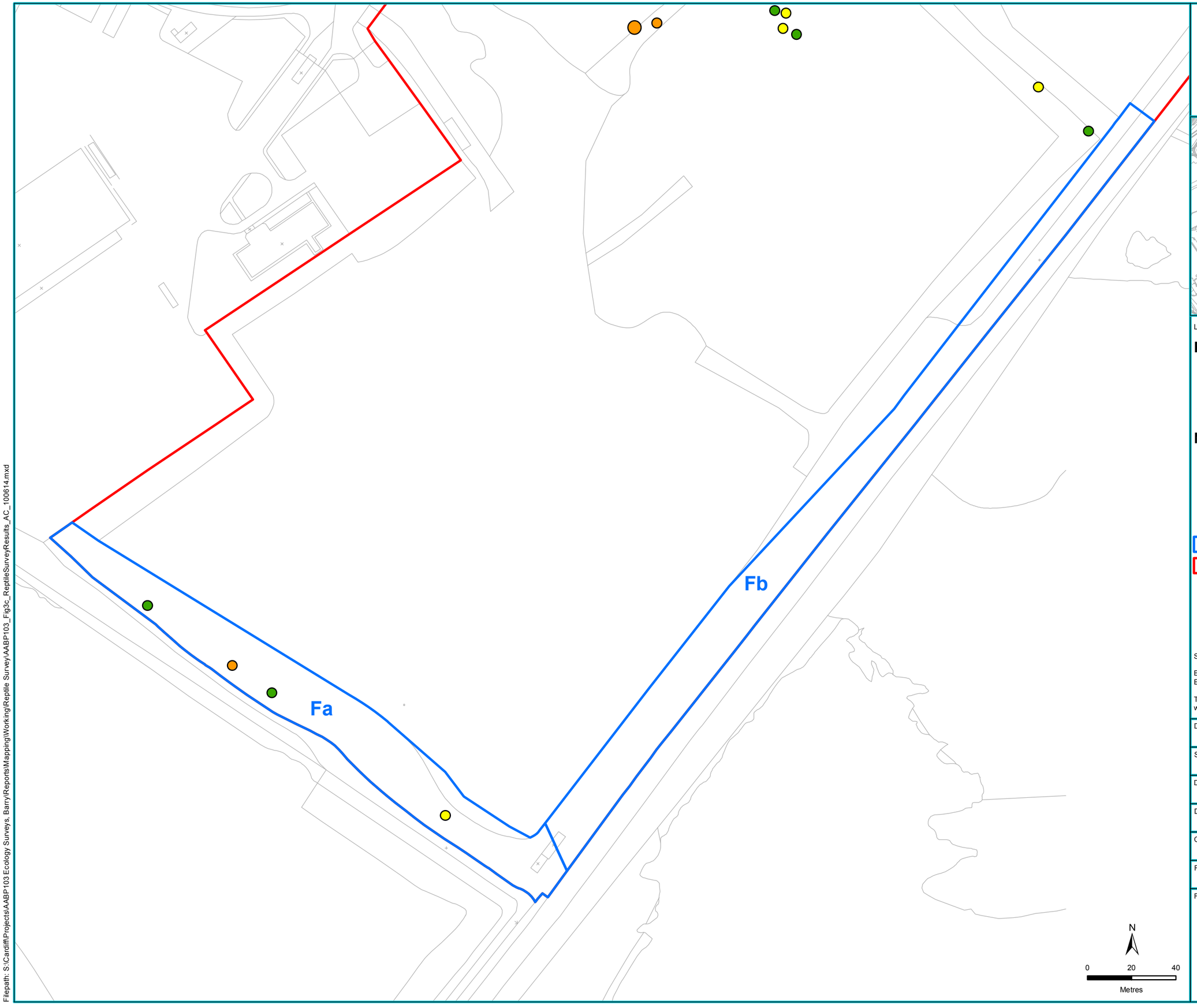

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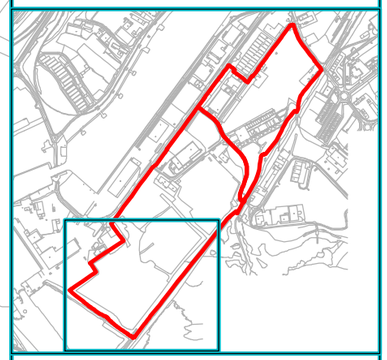

Legend

PeakCount

- 1
- 2
- 3

Number Of Days Recorded

- 1
- 2
- 3
- 7
- Reptile Survey Area
- Site Boundary

Site Grid Reference: 312877 167176

Drawing Ref	AABP103/15523/1
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Client	Associated British Ports
Figure Number	3c
Figure Title	Reptile Survey Results

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0 20 40

Metres

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2. Introduction

2.1 Development Background

2.1.1 Associated British Ports (ABP) propose to construct a solar farm on previously developed land at Barry Docks, there are no definitive plans to date, but the current proposal includes the clearance of all habitats and buildings on the sites to allow for construction of the solar farm.

2.1.2 The proposals described above are hereafter referred to collectively as 'the development'.

2.1.3 The development will be located on two adjacent areas within Barry Docks; Site 1 (central grid reference ST128671) is 21.44 ha and Site 2 (central grid reference ST132675) is 9.81 ha. Within this report the two areas have been combined and are considered within one survey area. The combined site, which is the total area affected by the development (see Figure 1), is hereafter referred to as 'the sites'.

2.2 Ecology Background

2.2.1 Thomson Ecology undertook a desk study and extended Phase 1 habitat survey of the sites (Thomson Ecology report reference AABP103/001/002) on 10th and 11th April 2014. The desk study recorded slow worm (*Anguis fragilis*) just under 0.8 km away from the site. The extended Phase 1 habitat survey recorded habitat on site suitable for reptile species.

2.2.2 A summary of the biology, conservation status and legal protection of reptiles is given in Appendix 1.

2.3 The Brief and Objectives

2.3.1 Thomson Ecology was commissioned by ABP Marine Environmental Research Limited on behalf of ABP on 30th April 2014 to undertake a reptile survey of the sites. The brief was to:

- Carry out a site visit to distribute artificial reptile survey refugia in suitable habitat at the sites at Barry Docks, Barry;
- Carry out seven reptile survey visits to undertake a visual search and check artificial refugia for the presence of reptiles under suitable weather conditions;
- Provide a report to include an introduction, methodology, results of the surveys, a discussion of any legal or planning policy issues regarding reptiles in relation to the development and our recommendations as to how these may be overcome; and
- Provide appropriate digitised mapping.

2.4 Limitations

2.4.1 The temperature exceeded the recommended optimum air temperature of 20°C on three occasions. This was not considered to be a significant limitation of the survey as comparable numbers of reptiles were recorded on these days as on days that were within guideline temperatures.

2.4.2 There were rain showers and thunder storms on two survey visits. This is not a survey limitation as often best results are recorded on days with sunny spells between showers.

2.4.3 Artificial refugia repeatedly went missing from reptile survey area Fb so after 3 deployments surveys were stopped in this area. This area is contiguous with reptile survey area Fa which supports low numbers of slow worm. It is probable that similar numbers of the same species would be present in area Fa.

3. Methodology

3.1 General Approach

3.1.1 Six seperate areas, hereafter referred to as 'reptile survey areas', were identified that supported suitable habitat for common reptile species. The size of each reptile survey area, the number of refugia distributed and the Phase 1 habitat types that were recorded are given in Table 1. Artificial refugia could not be distributed across the whole of the reptile survey areas as access was not possible due to dense scrub; artificial refugia were deployed in areas of ephemeral/short perennial and semi-improved neutral grassland and suitable areas of tall ruderal. The location of each reptile survey area and artificial refugia is shown on Figure 2. Refugia repeatedly went missing from reptile survey area Fb and so after three deployments no further surveys took place in this area.

Table 1: Size and characteristics of reptile survey areas.

Reptile Survey Area	Size (ha)	Number of Refugia (Refugia numbers)	Phase 1 habitats
A	2.14	39 (1-39)	Dense scrub, ephemeral/short perennial, tall ruderal
B	1.50	21 (40-60)	Dense scrub, semi-improved neutral grassland
C	1.23	18 (61-78)	Dense scrub, semi-improved neutral grassland, tall ruderal
D	4.28	60 (79-109, 140-166, plus 162a and 166a)	Dense scrub, semi-improved neutral grassland
E	2.58	40 (110-136, 167-179)	Ephemeral short perennial
Fa	0.59	11 (180-191)	Semi-improved neutral grassland
Fb	0.68	10 (192-201)	Semi-improved neutral grassland

3.1.2 The area on sites that was not included within a reptile survey area covers 18.34 ha and comprises hard standing, buildings, bare ground and some areas of dense scrub.

3.1.3 Two survey methods were used to determine the presence or likely absence of reptiles. These were a visual search for basking reptiles and the checking of artificial refugia deployed specifically to attract reptiles.

3.2 Visual Search

3.2.1 On seven occasions the reptile survey areas were walked around slowly looking for basking reptiles. Any reptiles seen were approached cautiously so as not to disturb them and to allow species identification. The number, species and location of any reptiles seen were recorded on a map of the survey area.

3.3 Refugia Search

3.3.1 On 1st May 2014, a total of 199 artificial refugia were placed in suitable locations throughout the six reptile survey areas.

3.3.2 The artificial refugia were comprised of 0.5m x 0.5m cuts of roofing felt. The refugia were positioned so that they were in contact with the ground and exposed to sunlight. Each artificial refuge location was recorded on a hand-held, GPS enabled, mobile mapper.

3.3.3 The artificial refugia were then left in place for one week before the survey commenced. Subsequently, on seven occasions all of the refugia were cautiously checked for reptiles, both on top and underneath. If any reptiles were found, the refuge identification number and the species and numbers of reptiles were recorded.

3.3.4 The air temperature in the shade and the temperature beneath a sample refuge in each reptile survey area were recorded on each survey visit.

3.3.5 The artificial refugia were collected up and removed from the site after the end of the survey.

3.4 Dates of Survey

3.4.1 Table 2 shows the time of visit, the date, air temperature and temperature under the refugia for each of the seven visits.

Table 2: Weather data during survey visits

Visit No.	Date	Reptile Survey Area	Time (start/finish)	Air Temp °C	Temp under Refugia °C	Conditions
1	12/05/2014	A	11:50 - 12:35	14.2	18	Dry, sunny, moderate wind force 4, cloud cover 25%
		B	12:40 - 13:00	16.2	22	
		C	13:05 - 13:30	16.2	20.2	
		D	13:40 - 15:20	16	18	
		E	14:20 - 14:50	16	18	
		F	15:20 - 15:40	16.2	18	
2	15/05/2014	A	08:20 - 09:00	14.5	15.5	Dry, sunny, light wind force 1, 0% cloud cover
		B	09:10 -09:30	15	18	
		C	09:35 - 09:55	14.5	15.5	
		D	10:00 - 11:45	16.8	21	
		E	12:50 - 13:20	16.8	21	
		F	12:00 - 12:30	16.8	21	
3	19/05/2014	A	11:10 -11:50	19	27	Light rain showers, one heavy thunder storm, light wind force 1, 100% cloud cover
		B	11:50 - 12:10	24	25	
		C	12:10 - 12:40	23	30	
		D	12:40 - 14:20	21	25	
		E	14:20 - 15:10	20	25	
		F	15:10 - 16:00	18	21	
4	22/05/2014	A	09:00 - 10:00	17.6	19.6	One or two light rain showers, light wind force 1, 100% cloud cover
		B	10:00 - 10:40	18.2	20.5	
		C	10:40 - 11:10	16.5	21.8	
		D	11:10 - 13:00	17.8	22.2	
		E	13:40 -14.20	17.2	21.8	
		F	13:00 - 13:40	16.4	21.1	
5	27/05/2014	A	16:20 - 17:00	17.0	18.7	Dry, sunny, light wind force 1, 20% cloud cover
		B	15:50 - 16:20	19.0	20.9	
		C	15:10 - 15:50	19.1	24.0	
		D	13:30 - 15.10	17.1	19.1	
		E	12:10 - 12:50	17.9	19.2	
		F	12:50 - 13:30	15.4	18.4	
6	30/05/2014	A	16-05 - 16:40	19.5	25.4	Dry, sunny, light wind force 1, 10% cloud cover
		B	15:45 - 16:05	19.1	24.5	
		C	15:20 - 15:45	18.4	23.6	
		D	13:30 - 15:20	21.8	28.8	
		E	12:30 - 13:00	20.6	27.2	
		F	13:00 -13:30	20.7	27.0	
7	05/05/2014	A	10:30 - 11:20	20.5	22.0	Dry, sunny, moderate wind force 3, 10% cloud cover
		B	12:00 - 12:45	21.2	30.0	
		C	11:20 - 12:00	24.2	29.9	
		D	12:45 - 15:00	23.3	30.0	
		E	15:45 - 16:30	22.2	28.1	
		F	15:00 - 15:45	19.5	28.9	

4. Results

4.1.1 Figures 3a to 3c show the location of reptile records, the number of days reptiles were recorded under that refuge and the peak count of reptiles under that refuge. The results are summarised below.

4.1.2 Slow worm was the only reptile species recorded during the survey. Slow worms were recorded during every survey visit in reptile survey areas C and D, and during three survey visits in reptile survey area F. No reptiles were recorded in reptile survey areas A, B and E on any visit.

4.1.3 The peak count of adult slow worms (maximum number recorded on any single visit) in reptile survey area C was three, recorded on the third and fifth survey visits. The peak count of adult slow worms in reptile survey area D was 13 recorded on the seventh survey visit, and in reptile survey area F the peak count was two recorded on the fifth survey visit.

4.1.4 Herpetofauna Groups of Britain and Ireland (HGBI 1998) guidelines determine a low population of slow worm to be less than 50 per hectare. It is estimated from the peak counts recorded that there are less than 50 slow worms per hectare and consequently the population size class is estimated as low.

4.1.5 The complete results for each survey visit are provided in Table 3 below.

Table 3: Reptile survey results showing number of slow worm observed in each area on each visit (peak counts given in bold).

Visit No.	Date	Area	Male	Female	Total Adults	Juvenile
1	12/05/2014	A	0	0	0	0
		B	0	0	0	0
		C	0	2	2	0
		D	3	3	6	1
		E	0	0	0	0
		F	0	0	0	0
2	15/05/2014	A	0	0	0	0
		B	0	0	0	0
		C	0	1	1	1
		D	2	10	12	1
		E	0	0	0	0
		F	0	0	0	0
3	19/05/2014	A	0	0	0	0
		B	0	0	0	0
		C	1	2	**3**	2
		D	0	4	4	0
		E	0	0	0	0
		F	0	0	0	0
4	22/05/2014	A	0	0	0	0
		B	0	0	0	0
		C	0	1	1	2
		D	7	3	10	2
		E	0	0	0	0
		F	1	1	2	0
5	27/05/2014	A	0	0	0	0
		B	0	0	0	0
		C	1	2	**3**	1
		D	3	6	9	1
		E	0	0	0	0
		F	1	1	**2**	2
6	30/05/2014	A	0	0	0	0
		B	0	0	0	0
		C	0	2	2	3
		D	1	11	12	7
		E	0	0	0	0
		F	0	0	0	0
7	05/05/2014	A	0	0	0	0
		B	0	0	0	0
		C	0	0	0	4
		D	6	7	**13**	4
		E	0	0	0	0
		F	0	1	1	0

5. Legal and Planning Policy Issues

5.1.1 The content of the legislation and planning policy section is the legislation and planning policy issues that we know are relevant based on this reptile survey.

5.1.2 As set out in Appendix 1, slow worm are afforded legal protection under the Wildlife and Countryside Act 1981 (as amended). Any actions that could result in the killing or injuring of reptiles would therefore result in an offence if this impact could have otherwise been reasonably avoided, such as through the implementation of a suitable mitigation programme.

5.1.3 All reptiles are also species of principal importance for the conservation of biodiversity in Wales under Section 42 of the Natural Environment and Rural Communities Act (NERC) 2006. As such, the Welsh Government and local planning authorities have a duty to protect these species from the adverse effects of development.

5.1.4 Without mitigation measures, the development may contravene wildlife legislation and policy with respect to reptiles because the clearance of the site could result in the killing or injury of reptiles. However, using established techniques it should be possible to:

- Avoid killing or injuring reptiles during the development process; and
- Adequately mitigate any adverse impact on reptiles at this site by maintaining the reptile populations at a favourable conservation status at the site.

5.1.5 The recommendations set out in Section 6 will be required to ensure that the proposed development is compliant with relevant policy and legislation.

6. Recommendations

6.1.1 It is recommended that a reptile mitigation strategy should be prepared which should be agreed with the Local Planning Authority. The mitigation strategy should include a working method statement covering the approach that will be taken to safeguard reptiles during the development process. The mitigation programme would be expected to include:

- Identification of a suitable receptor site for use by reptiles (to be identified on site where possible);
- Enhancement of the receptor site if necessary;
- Installation of reptile-proof fencing around the areas found to support slow worm;
- A programme of capture and removal of reptiles from within the areas and translocation to the receptor site between March and September for a minimum of 60 days;
- Site clearance under an ecological watching brief; and
- A programme of management and monitoring to ensure that the reptile populations remain viable within the receptor site.

7. Conclusion

7.1.1 Six areas on site were identified as suitable for use by reptiles. The reptile survey recorded an estimated low populations of slow worm in three of the reptile survey areas; reptile survey area C had a peak count of three adult slow worm, reptile survey area D had a peak count of 13 adult slow worm and reptile survey area F a peak count of two adult slow worm.

7.1.2 Slow worm are legally protected under the Wildlife and Countryside Act (1981), as amended, and as such without appropriate mitigation the development could result in causing an offence through killing or injuring slow worms. The preparation and implementation of a reptile mitigation strategy is recommended to ensure that reptiles are safeguarded throughout the development process.

8. References

8.1.1 Froglife, (1999). Froglife Advice Sheet 10: Reptile Survey. An Introduction to planning, conducting and interpreting surveys for snake and lizard conservation. Froglife, Peterborough.

8.1.2 HGBI (1998) Evaluating local mitigation/translocation programmes: Maintaining best practice and lawful standards. Froglife.

8.1.3 JNCC, (2004). Common Standards Monitoring Guidance for Reptiles and Amphibians. JNCC, Peterborough.

8.1.4 Riddell, A. (1997). Monitoring slow-worms and common lizards, with special reference to refugia materials, refugia occupancy and individual identification. Durrell Institute of Conservation and Ecology, Cantebury.

8.1.5 Riddell, A. (2000). The spatial ecology and ranging behaviour of the slow-worm Anguis fragilis. Durrell Institute of Conservation and Ecology

8.1.6 Thomson Ecology (2014). Desk Study and Extended Phase 1 Habitat Survey. Report reference AABP103-001-002.

9. Appendix 1 – Biology and Legislation of Reptiles

9.1 Introduction

9.1.1 A summary of the biology of British reptiles, the legislation that protects them and other mechanisms of highlighting species of conservation concern is provided below.

9.2 Biology

9.2.1 Five British reptile species can be found in Wales. These are the adder (*Vipera berus*), grass snake (*Natrix natrix*), common lizard (*Zootoca vivipara*), sand lizard (*Lacerta agilis*) and slow worm (*Anguis fragilis*). The other British species, the smooth snake (*Coronella austriaca*), is restricted to parts of southern England only. In addition, a few introduced species may be encountered occasionally, arising from escapes or illegal releases. A summary of each of the native species is given below, based on information provided in Arnold (1995), Beebee and Griffiths (2000) and Gent and Gibson (1998).

Adder

9.2.2 The adder has a distinctive zig-zag pattern running down the back. Adders emerge from hibernation from March onwards and bask in open areas, particularly in spring. The mean temperature of a basking adder is about 33°C. Adders do not feed before mating each year, with this occurring in April and May. The young are born in late August to September and hibernation commences in October. Many adders can use the same hole or burrow in which to hibernate. Adders are venomous and small mammals or birds make up most of their diet.

9.2.3 The adder has a widespread but patchy distribution throughout Britain. In Wales the adder is most common along the coast and on inland heaths and commons. They require undisturbed, open sunny areas in the vicinity of thick cover. South facing chalk or sandy slopes with mixed vegetation may be ideal, and adders may be found in heathland, moorland, coarse grassland and scrub.

Grass snake

9.2.4 The grass snake is the largest snake in Britain, easily identifiable by its green/olive body, dark streaks on the flanks and a distinct yellow and black collar behind the head. They emerge from hibernation in March and, during spring in particular, bask in open areas in order to raise their body temperature. Active grass snakes maintain temperatures of between 26 and 30°C. Eggs are laid in June and July with the young hatching in September. Their main food items are amphibians and fish, which they hunt when swimming or in vegetation.

9.2.5 Grass snakes are widespread in Wales, but appear to be commonest near the west coast and are rather rare in the central region. The grass snake is essentially an aquatic species, occurring mainly where there are good populations of amphibians. Open areas with direct sunshine in the vicinity of dense cover are also important, as are suitable egg laying sites.

Common lizard

9.2.6 The common lizard is the smaller of the two British lizards with the typical legged body form. Common lizards emerge from hibernation from January onwards. Common lizards do bask in open sunny areas and try to achieve an optimum operating temperature of around 30°C. The young are born from mid-July to mid-September and hibernation commences in October. The main food items of this species are invertebrates.

9.2.7 Common lizards have a widespread distribution across Wales and the rest of Britain. They prefer undisturbed ground, with dense but short vegetation and patches of bare ground or promontories that are fully exposed to the sun. South facing slopes are often favoured. They are found in a variety of open habitats including roadside verges, railway embankments, woodland clearings, rough grassland, scrub, heathland and coastal sand dunes.

Sand lizard

9.2.8 The sand lizard is the other British lizard with the typical legged body form. The sand lizard is generally more bulky with a blunt snout, and the males have vivid green flanks in the spring. Sand lizards emerge from hibernation from February onwards. They bask in open, sunny areas in spring but spend little time basking in the height of summer. They try to achieve a body temperature of between 27.5 and 32.5°C. Eggs are laid from the beginning of June to the end of August and hatch between 7 and 12 weeks later. Hibernation commences in early October. The main food items of this species are invertebrates.

9.2.9 The sand lizard has very specialised habitat requirements, occurring only on lowland sandy heathland and on coastal dunes densely vegetated with marram grass (*Ammophila arenaria*). The sand lizard was once common on coastal sites along the north Wales coast, but became extinct in Wales during the 1960s due to habitat loss and sea defence development. It has been re-introduced to a site in North Wales, where a breeding population have successfully established themselves. Further suitable sites are being sought.

Slow worm

9.2.10 The slow worm is a legless lizard that superficially resembles a snake. Slow worms emerge from hibernation from March onwards. When active, slow worms rarely bask in open areas and instead try to maintain a body temperature between 14.5 and 28°C mainly by contact with warm surfaces. The young are born from mid-August to mid-September and hibernation commences in October. The main food items of this species are invertebrates.

9.2.11 Slow worms have a widespread but rather patchy distribution across Wales. They require fairly thick vegetation interspersed with sunny areas for thermoregulation and underground or covered refuges. They are found in a wide variety of habitats including rough grassland, heathland, moorland, downland, hedgerows, scrub and woodland edge. Good populations can sometimes be found on railway embankments, motorway verges and allotments.

9.3 Site Designation

9.3.1 The most important sites for reptiles in the UK receive statutory protection under the following legislation:

- Wildlife and Countryside Act 1981, as amended;
- The Countryside and Rights of Way Act 2000 (which amends the Wildlife and Countryside Act); and
- Natural Environment and Rural Communities Act 2006 (which amends the Wildlife and Countryside Act).

9.3.2 Sites designated under the Wildlife and Countryside Act 1981 (WCA) are known as Sites of Special Scientific Interest (SSSIs). SSSIs received further protection under the Countryside and Rights of Way Act 2000 (CRoW) and the Natural Environment and Rural Communities Act 2006 (NERC).

9.3.3 Some SSSIs are designated for the populations of reptiles that they support. The criteria for selecting SSSIs on the basis of their reptile populations are provided in Guidelines for the Selection of Biological SSSIs (NCC, 1989):

- Sand Lizard – all important and established populations in Dorset and all established populations elsewhere;
- Other reptiles – best locality in a given area with outstanding assemblages of at least 3 species of the 4 other reptile species.

9.3.4 Sites that qualify as SSSIs are considered to be of at least national importance for the reptiles they support.

9.3.5 Sites designated for nature conservation at the county level may also include reptile populations as part of the site qualifying criteria, although the criteria used may vary from county to county. Such sites are protected through the planning system and there is generally a presumption against development that affects such sites in local authority development plans.

9.4 Species Protection

Legislation

9.4.1 Both within and outside designated sites, individual sand lizards are fully protected by the Conservation of Habitats and Species Regulations 2010 (which replaces the Conservation (Habitats &c) Regulations 1994). The Regulations make it an offence, with very few exceptions, to:

- Deliberately capture, injure or kill a smooth snake or sand lizard;
- Deliberately disturb a smooth snake or sand lizard in such a way as to be likely:
    i. to impair its ability to survive, to breed or reproduce, or to rear or nurture its young; or
    ii. to impair its ability to hibernate or migrate; or

iii. to affect significantly the local distribution or abundance of the species to which they belong.

- Damage or destroy a breeding site or resting place of a sand lizard;
- Keep, transport, sell or exchange, or offer for sale or exchange, any live or dead smooth snake or sand lizard, or any part of, or anything derived from a sand lizard.

9.4.2 In addition to the protection given to sand lizard under the Conservation of Habitats and Species Regulations 2010 already described, sand lizard are also partially protected in Wales under the Wildlife and Countryside Act, which adds the following offences (with certain exceptions):

- Disturbance while it is occupying a structure or place which it uses for shelter or protection; or
- Obstructing access to any structure or place used for shelter or protection.

9.4.3 If proposed work could cause killing, injury or disturbance to this species or damage to its habitat, appropriate mitigation which seeks to avoid these impacts should be devised and implemented under licence from Natural Resources Wales (NRW).

9.4.4 Grass snake, common lizard, slow worm and adder also receive some protection under the WCA, though are protected from intentional killing, injuring and selling only. If proposed work could result in the killing and/or injury of grass snake, common lizard, slow worm or adder, appropriate mitigation should be devised and implemented with agreement from the local planning authority or NRW. However, mitigation for these species is not subject to licensing by NRW.

Planning Policy

9.4.5 Planning Guidance, Technical Advice Note 5; Nature conservation and planning (TAN5) gives further direction with respect to land use and development. It states that protected species, including reptiles, should be a material planning consideration when local authorities are considering a development proposal that is deemed likely to result in disturbance or harm to the species or its habitat.

9.4.6 Natural Environment and Rural Communities Act (2006); furthermore this act places a duty on all public authorities to conserve biodiversity; conserve including preservation and enhancement.

9.5 Species of Principal Importance

9.5.1 All British reptiles are listed as Species of Principal Importance for the Conservation of Biodiversity in Wales under Section 42 of the NERC Act 2006. This places a duty on all government departments to have regard for the conservation of these species and on the Secretary of State to further, or promote others to further, the conservation of these species. In addition, every public authority, including local planning authorities, has a general duty to have regard for the purpose of conserving biodiversity. This duty does not extend specifically to the Section 42 list; however, guidance published by Defra indicates that the Section 42 species should be considered a priority when implementing the duty. Furthermore, TAN5 states that

species of principal importance for the conservation of biodiversity should be protected form the adverse effects of development.

9.6 References

9.6.1 Arnold, H.R (1995) Atlas of amphibian and reptiles in Britain. HMSO. London.

9.6.2 Beebee, T.J.C and Griffiths, R.A (2000) Amphibians and Reptiles. Harper Collins Publishers. London

9.6.3 Countryside Council for Wales (2005) Reptiles in Wales. Species Series.

9.6.4 Gent, A.H and Gibson, S.D eds (1998) Herpetofauna Workers Manual. Joint Nature Conservation Committee, Peterborough.

9.6.5 JNCC (1989) Guidelines for Selection of Biological SSSIs. Nature Conservancy Council, Peterborough.