

BASELINE ECOLOGICAL SITE AUDIT¹

112 LONDON ROAD, COWPLAIN, PO8 8HB
for
ROPLEY ESTATES LTD

RESULT INDICATOR OF THIS SURVEY

- **RED.** Do not proceed. Without major modification this project will have significant adverse ecological & biodiversity impacts. It will not be sustainable or compliant with current legislation and approved planning policy.
- **AMBER.** Caution. The proposals as conceived would have substantial negative impacts and cannot achieve a “No Net Loss” outcome unless changes are made to avoid, mitigate/restore or, as a last resort, compensate for the ecological impacts. With such changes, the project is considered feasible, however.
- **GREEN.** On present information, the proposals are expected to have no or only minor adverse impacts on ecology & biodiversity, and some gains. In terms of ecology, the project can proceed providing all the recommendations are met, enforced and monitored.

February 2016
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N.B. Information on legally protected, rare or vulnerable species may appear in ecological reports. In such cases it is recommended that appropriate caution be used when circulating copies.

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¹ Incorporates “Phase 1” habitat plan, walkover survey for protected and notable species and habitats, and appraisal in context of biodiversity and planning policies.

NB. THIS REPORT FORMAT IS DESIGNED TO COMPLY WITH STATUTORY AUTHORITY (e.g. Natural England) RELEVANT STANDING ADVICE. FURTHER STUDIES MAY BE REQUIRED WHERE THERE IS EVIDENCE OF PROTECTED SPECIES OR IF OTHER NOTABLE ECOLOGICAL FACTORS ARE FOUND.

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Baseline Site Ecological Audit

PROJECT DATA – BASELINE ECOLOGICAL SITE AUDIT	
Surveyor	Gemma Cone
Date of site risk assessment	15 February 2016
Site address	112 London Road, Cowplain, PO8 8HB
Project proposed	Residential development comprising 4 houses with gardens and parking.
Boundary as specified by client	YES
Site area (ha) & central OS Grid Ref.	Approximately 0.3 ha. The Central OS Grid Reference SU 6949 1175.
Survey date	15 February 2016

REPORT CONTROL	
General Report Information	
Ecologist Gemma Cone	
Date report issued	24 February 2016
Contract manager Natalie Loben	

Report Version Control

Version	Date	Author	Description
1.0	16 February 2016	Gemma Cone	Document created
2.0	24 February 2016	Gemma Cone	Document completed

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WORK NEEDED FOR COMPLIANCE AS REVEALED BY THE SURVEY

RESULT INDICATOR OF THIS SURVEY

- **GREEN.** On present information, the proposals are expected to have no or only minor adverse impacts on ecology & biodiversity, and some gains. In terms of ecology, the project can proceed providing all the recommendations are met, enforced and monitored.

Please note that, in determining the requirements listed below, Betts adopt an objective and independent view, taking account of current legislation and the official guidance published by, or used by, Local Planning Authorities and the Statutory Agencies whom they consult². The aim is always to inform the project's proponents within a framework of the published policies of European, national and local governments on ecology and biodiversity, as may be relevant to the circumstances of the case, but always proportionately and based in science.

IMPORTANT

In the two Tables below, ecological requirements listed should be contained as formal Conditions within any permission the Planning Authority may be minded to issue. It is essential to include a suitable mechanism for verification, monitoring and enforcement. We will be pleased to assist with suggested wording if needed.

REQUIRED FURTHER WORK (PROTECTED SPECIES & HABITATS)	
Is further work needed to eliminate doubt regarding presence of notable species or habitats, or for any regulatory compliance?	Yes
Work required if "yes":	Reason
To avoid the risk of infringement of regulations, conduct a pre-clearance search of all areas of the site (in particular the areas of bramble and log piles) using suitably qualified ecological scientists under a Betts Method Statement or one formally pre-agreed by us immediately prior to site stripping to move any vulnerable taxa to safety or allow other necessary precautions to be taken prior to the commencement of development activity.	To comply with legislation and current good practice.
If any existing hedgerows or trees are to be affected, undertake site clearance outside the bird nesting	Virtually all birds and their active nests excepting a few "pest" species" are

² The regulatory context includes the Wildlife & Countryside Act, Habitats & Species Regulations, Habitats Directive, Birds Directive, Berne Convention, Bonn Convention, Countryside & Rights of Way Act, Natural Environment and Rural Communities Act, Convention on Biological Diversity (Rio de Janeiro, Nagoya/Aichi – UK Post-2010 Biodiversity Framework), British Standards 42020: 2013 and 8583: 2015, Chartered Institute of Ecology & Environmental Management ecological impact assessment guidance, etc.

Baseline Site Ecological Audit

REQUIRED FURTHER WORK (PROTECTED SPECIES & HABITATS)	
season (usually taken as March to mid-August in this part of Britain) or, if this is unavoidable, ensure there is a pre-works inspection by a suitably qualified ecologist to identify whether any nests are present and advise on appropriate action to be taken.	protected by law in Britain and the EU.
Formally instruct contractors and site personnel on agreed policies, recommendations and requirements to maintain environmental quality and minimise impacts during the development, generally avoiding unnecessary disturbance and pollution. Please ensure any steep-sided excavations are covered/ filled/ provided with ramps to prevent any mammals becoming trapped.	For reasons of legal, planning and environmental policy compliance and current best practice.

REQUIRED FURTHER WORK FOR REGULATORY & GOOD PRACTICE COMPLIANCE	
Is further work recommended to observe ecological best practice and/or planning policy as recognised by the various statutory authorities at local, regional, national or European levels as may be applicable (enter the specific policies' references if required here)?	Yes
<u>Work required if "yes":</u>	<u>Reason</u>
If possible, use native planting (preferably of local origin) in all landscaping. Where exotic species are planted, always avoid invasive species and choose those with wildlife value such as for nectar or shelter. (A selection of species is available from us.)	For reasons of NPPF and environmental policy compliance and current best practice. To help assure No Net Loss of Biodiversity policy is upheld.
Embody Green Infrastructure protocols in landscaping and ensure the structure and associated works do not compromise ecological linkage. To follow government policy, ensure that the "carbon footprint" of all aspects of the project and its future operation is compliant with current best practice. This may include taking appropriate steps to avoid or reduce the use of fossil fuels, employing scientifically sound carbon offset/CO ₂ sequestration and instating renewable energy technologies. Ensure the measures agreed are quantified, independently verified and monitored.	For reasons of planning and environmental policy compliance and current best practice.
Although most of the trees on site have been removed, there are some saplings and the oak near the site entrance. These should be retained by designing around them. Protect trees in line with BS 5837, and do not remove ivy, mistletoe, standing dead wood, snags or rot unless there is a clear and material safety risk or presence of a serious pathogen. (Ask for advice on pathogens from a qualified silvicultural ecologist if in doubt). In line with best practice and compliance with	Compliance with British Standards, biodiversity No Net Loss, preservation of Ecosystem Services and reasons of planning and environmental policy compliance and current best practice.

REQUIRED FURTHER WORK FOR REGULATORY & GOOD PRACTICE COMPLIANCE	
government policy on biodiversity protection and enhancement, generally retain habitats and features of manifest ecological interest and wildlife value (seeking further advice from us if uncertain) within the proposals area. Enhance the wildlife habitat by adding more log piles, "wild" corners, compost areas and native planting; install eight bird, four bat and two invertebrate boxes of mixed designs and incorporate these into the project's landscape scheme. (We can provide specific recommendations for models and siting on request but they must be of good quality and durable. Bat and bird boxes must be inspected annually and replaced when needed (usually after ten years).)	
Design and incorporate a Sustainable Drainage System (SuDS) in in agreement with any requirement from the Environment Agency or other relevant authority.	To uphold sustainable drainage policy and related catchment protection.
In compliance with National Planning Policy Framework paragraph 125, avoid unnecessary negative impacts of new lighting at night, e.g. on bats, invertebrates, plants, astronomy. Minimise the hours when lighting is used, avoid "spillage" by using directional down-lighting, reduce brightness of necessary illumination and keep light from shining on bat roost entries, mammal holes, etc.	To comply with NPPF and current good practice.
Provide information to new residents to encourage wildlife, for example in their gardens or areas of open space, and an interest in natural history ³ . Assure that residents are aware of the need for responsible control of pets that may hunt or disturb fauna or damage flora.	To comply with current good practice.

³ We publish a book on wildlife gardening which may be helpful to new residents. Please ask for details.

RESULTS – WHAT WE FOUND

Objectives

- Conduct a baseline ecological survey and appraisal of the site and identify notable factors/features;
- Prepare a Phase 1 Habitat Map with Target Notes to recognised standards;
- Produce a summary of results;
- Provide appropriate recommendations for protected species, biodiversity protection/ enhancement, *etc.*

Methods and Limitations

The site was surveyed using appropriate methods generally following NCC (1990)⁴ for Phase 1 habitat survey, with procedures appropriately selected from Institute of Environmental Assessment (1995)⁵ and Jermy *et al.* (1995)⁶ for species and any specialist habitat appraisal as required, and/or the current guidance on survey methods and Ecological Impact Assessment from the (Chartered) Institute of Ecology and Environmental Management (*e.g.* CIEEM 2013, IEEM 2007 and updates⁷) with further reference to British Standards such as 42020⁸ and 8583 as appropriate.

It should be noted that, whilst the investigation of the site was appropriately intensive within the intended framework of the commission, and we feel it is unlikely that significant matters have been overlooked, a single visit will inevitably miss species not apparent on the date of survey by reason of seasonality, mobility, habits or chance. The month of February is outside the optimal survey period for many taxa of nature conservation interest in this part of the United Kingdom. It is acceptable for a baseline inspection as reported here, however, provided the stated limitations are recognised.

⁴ Nature Conservancy Council (1990). *Handbook for Phase 1 habitat survey – a technique for environmental audit*. Nature Conservancy Council, Peterborough, UK.

⁵ Institute of Environmental Assessment (1995). *Guidelines for Baseline Ecological Assessment*. E & FN Spon, London, UK.

⁶ Jermy, A.C., Long, D., Sands, M.J.S., Stork, N.E. and Winser, S. (Eds) (1995). *Biodiversity assessment: a guide to good practice*. Department of the Environment/HMSO, London, UK.

⁷ Chartered Institute of Ecology and Environmental Management (2013). *Guidelines for Preliminary Ecological Appraisal*. CIEEM, Winchester, UK. Institute of Ecology and Environmental Management (2007). *Guidelines for Ecological Impact Assessment in the United Kingdom*. IEEM, Winchester, UK.

⁸ British Standards Institute (2013). *British Standard 42020: 2013 Biodiversity. Code of practice for planning and development*. British Standards Institute, London, UK.

It should always be recalled that wildlife surveys of the kind required for planning and development or similar project purposes are seldom granted sufficient time or resources to examine non-vascular plants, invertebrates or fungi in great detail, yet these are the fundamental elements of ecosystems that provide the niches and habitats for larger fauna to exploit. In an ideal world, all surveys would include results of full sampling of vascular and non-vascular plants, micro- and macro-invertebrates and mycological status at individual, population and community levels. As that involves skills, time and expense well beyond what is available, we ask readers of our general survey reports to understand that we do consider the larger species we record in their wider ecosystem context and take into account the impacts of proposals at an ecosystem level when prescribing avoidance, mitigation, enhancement and/or compensation.

Results Table

ITEM	OBSERVATIONS
Habitats & Vegetation (NB. Please be aware that several designated habitat types and many plants enjoy legal protection in Britain.)	
General description	The site consists of a residential garden, a house (not within the development proposals) and a double garage in the town of Cowplain, approximately 10km north of Portsmouth. The surrounding land use is urban; commercial buildings and residential housing with gardens. The wider land use includes a Local Nature Reserve and a golf course to the east and arable farmland to the north and west. At the front of the house and bordering the main road is an area of scrub including bramble and ornamental shrubs, and a semi-mature pedunculate oak (<i>Quercus robur</i>) (Plate 1). The front lawn is species-poor amenity grassland with several ornamental shrubs and an ornamental hedge (Plate 2). It is our understanding that the front lawn and hedge will be removed and the area used for parking. The south-western boundary is dense scrub including bramble (<i>Rubus fruticosus</i> agg.), field rose (<i>Rosa arvensis</i>), garden privet (<i>Ligustrum ovalifolium</i>), hazel (<i>Corylus avellana</i>) and immature apple (<i>Malus domestica</i>) (Plate 3). A patch has been recently cleared and trees felled near the site entrance. The rear garden is predominately intensively managed and regularly mown amenity grassland, bordered on all sides by a fence or a wall (Plate 4). Grass and herb species on site include Yorkshire-fog (<i>Holcus lanatus</i>), cow parsley (<i>Anthriscus sylvestris</i>), daffodil (<i>Narcissus</i> sp.), cyclamen (<i>Cyclamen</i> sp.), primrose (<i>Primula vulgaris</i>), creeping buttercup (<i>Ranunculus repens</i>), cleavers (<i>Galium aparine</i>), daisy (<i>Bellis perennis</i>), and common nettle (<i>Urtica dioica</i>). The site has recently (within the last couple of years) had several trees felled that, judging by satellite images, the size of the remaining stumps and piles of woodchip and log piles, were mature broad-leaved trees. Areas of scrub dominated by bramble and hawthorn (<i>Crataegus monogyna</i>) remain, particularly in the east of the site (Plate 5).
Target Note (TN) 1 (for location of TNs please see plan below)	A double garage adjacent to the house that is to be demolished to make way for an access road (Plate 6). It is constructed of brick with a pebble dash exterior, a corrugated asbestos roof and metal doors. It has cracks in the glass window at the eastern aspect.
TN 2	A derelict swimming pool with extensive coverage of algae (Plate 7). A Habitat Suitability Index (HSI) for great crested newts was not considered necessary due to the poor water quality, the lack of any submerged vegetation and the lack of ponds within a 250m radius of the site.

Baseline Site Ecological Audit

ITEM	OBSERVATIONS
TN 3	Large piles of wood chip from the remains of mature trees felled on site (Plate 8).
Statutory designations (on/near)	A search using MAGIC (Multi Agency Geographic Map for the Countryside) revealed no statutory designations within 2km of the site.
Non-statutory designations (on/near)	A search using MAGIC revealed two statutory designations within 2km of the site; Hazleton Common LNR (Local Nature Reserve) 800m east of the site and Yeoll's Copse 1.2km north-west. There is no significant ecological connectivity from either of these reserves to the site and the small scale of the development suggests there will be no ecological impact on them.
Notable hedgerows, woodland or scrub	The only hedgerow on site is a small section along the southern boundary. However, this and the scrub on site do provide habitat and connectivity for birds and small mammals. The hedgerow in particular should be retained and enhanced within the landscape plan. Suitable management could improve its botanical diversity over time which would be advantageous. There is no notable woodland on site.
Ecologically notable trees (e.g. veteran, wildlife significant) ⁹	The only mature tree on site is the oak at the main entrance. This should be retained within the landscape plan if possible and protected from damage in line with BS 5837 (see recommendations above).
Ponds/water courses	There is an abandoned swimming pool on site (Target Note 2). There are no other ponds within 250m of the site visible on aerial maps.
Notable communities	None observed on site
Notable vascular plants	None observed on site
Notable bryophytes/algae	None observed on site
Notable lichens	None observed on site
Notable fungi	None observed on site
Other notable habitats/vegetation	None observed on site
Features that should be retained	The oak and the hedgerow and areas of scrub should be retained where possible.
Mammals (NB. Several species and their habitats have very strict protection in British/European law.)	

⁹ Please note that we do not check TPO status as this is a landscape/amenity planning classification.

Baseline Site Ecological Audit

ITEM	OBSERVATIONS
Badger	No field signs such as tracks, snuffle holes, guard hairs or setts were discovered on site, despite a thorough search. It is possible though that badgers commute across the site.
Otter	None observed and unlikely to occur.
Other mustelids	None observed on site and unlikely to be more than occasional visitors.
Bats	No obvious potential roost features for bats (<i>i.e.</i> woodpecker holes, rot-holes or transverse cracks/splits, lifting bark) were observed in the oak at the site entrance. A thorough inspection was undertaken of the garage (Target Note 1) due to be demolished, for any bat field signs or evidence of, or potential for, bat roosting such as faeces, feeding remains, oil staining, scratch marks, access points, loose claddings, cavities and hollows, <i>etc.</i> Methods followed those outlined in the Bat Conservation Trust's Bat Surveys: Good Practice Guidelines (2012). It was assessed as having negligible potential for bats due to the lack of field evidence and the light and draughty interior. The proximity of the LNRs and the adjacent large gardens mean it is likely that bats commute and forage across the area. It is recommended to avoid unnecessary negative impacts of new lighting at night by minimising the hours when lighting is used, avoiding "spillage" by using directional down-lighting and reducing brightness of security lighting.
Water vole	None observed on site and unlikely to occur due to lack of suitable habitat on site.
Common or hazel dormouse	None observed on site and unlikely to occur due to lack of suitable habitat on site; the hedgerows are unlikely to support dormouse and there is a lack of connectivity to suitable hedgerows, woodland or dense scrub.
Deer	None observed on site and unlikely to occur.
Hedgehog	None observed on site although may occasionally commute and forage across the site.
Shrews	None observed on site although may occasionally commute and forage across the site.
Others	Foxes and grey squirrels may occasionally use the site as well as brown rats/mice/voles. Fox faeces was discovered in the east of the site.

Baseline Site Ecological Audit

ITEM	OBSERVATIONS
Birds (NB. With the exception of eleven derogated pest or very common species, the Wildlife and Countryside Act (1981 and amendments) gives protection to all wild birds in Britain from killing, injuring or taking as well as taking, damaging or destroying nests in use or being built, and taking or destroying eggs. Many species are also protected by European and international statutes. ¹⁰)	
Red list	None observed on site.
Amber list	None observed on site.
Active nests	None observed on site.
Other	Robin (<i>Erithacus rubecula</i>) was observed on site.
Comments on ornithology	The trees, hedgerow and areas of scrub provide habitat for nesting and foraging birds.
Herpetofauna (NB. The grass snake, slow-worm, viviparous (common) lizard and adder (viper) are all protected from intentional killing and injury under Schedule 5, Section 9(1), of the Wildlife and Countryside Act as amended/reinforced by the CROW Act 2000. They are also protected under Schedule 5, Section 9(5) which prohibits selling, offering for sale, possessing or transporting for the purpose of sale, or advertising for sale, any live or dead animal, or any part of, or anything derived from the species. Other species and their habitats have stricter protection at national and European levels.)	
Adder	None observed and with the lack of suitable habitat and the exposed nature of the site it is highly unlikely that adders occur.
Grass snake	None observed and with the lack of suitable habitat and exposed nature of the site it is highly unlikely that grass snakes occur.
Slow-worm	None observed and with limited habitat on site it is unlikely to occur. However, as a precaution a pre-clearance search is recommended prior to works commencing.
Common lizard	None observed and with limited habitat on site it is unlikely to occur. However, as a precaution a pre-clearance search is recommended prior to works commencing.
Rarer reptiles	Not found in this area
Great crested newt	Due to the lack of ponds within a 500m radius of the site it is very unlikely that great crested newts occur. The derelict swimming pool is unsuitable habitat.
Natterjack toad	Not found in this area.
Other amphibia	Occasional occurrence in terrestrial phase possible but unlikely due to lack of ponds within 500m.

¹⁰ Please also see www.rspb.org.uk/wildlife/birdguide/status_explained.aspx and www.bto.org/sites/default/files/u38/downloads/home-news/2011-11/SUKB%202011%20final.pdf for red and amber lists etc., and explanations.

Baseline Site Ecological Audit

ITEM	OBSERVATIONS
<u>Fish</u> (NB. Various levels of legal protection.)	
Significant fishery	N/A. No suitable aquatic habitat present.
Bullhead	N/A. No suitable aquatic habitat present.
Shad	N/A. No suitable aquatic habitat present.
Lampreys	N/A. No suitable aquatic habitat present.
Salmonids	N/A. No suitable aquatic habitat present.
Other notable fish	N/A. No suitable aquatic habitat present.
<u>Macro-invertebrates</u> (NB. Several species enjoy legal protection.)	
Notable assemblage (terrestrial)	None observed on site.
Notable assemblage (aquatic)	None observed on site.
Crayfish	N/A. No suitable aquatic habitat present.
Roman snail	N/A. No suitable aquatic habitat present.
Lesser silver water-beetle	N/A. No suitable aquatic habitat present.
Stag beetle	None observed on site – no suitable habitat.
Mining bees	None observed on site.
Other notable spp or groups	None observed on site.
Notable invertebrate habitat	None observed on site.
<u>Invasive Alien Species (IAS) and pathogens</u> (There are an increasing number of these being listed by authorities. More and more are becoming subject to regulatory control within criminal law that carries significant sanctions.)	
IAS (plants) (Wildlife & Countryside Act Article14, Schedule 9.)	None observed on site, although out of season.

Baseline Site Ecological Audit

ITEM	OBSERVATIONS
Weeds Act natives (common ragwort, creeping and spear thistles, curled and broad-leaved docks)	None observed on site, although out of season.
Other exotic plants that may cause problems.	None observed on site.
Invasive animals (signal crayfish, killer shrimp, oak processionary moth, harlequin ladybird, zebra mussel, grey squirrel, etc.)	None observed on site.
<i>Phytophthora ramorum</i> and other serious plant diseases/pathogens (ash dieback, sudden oak death, etc.)	None observed on site.
<u>Policy¹¹</u>	
Are there any known conflicts with local planning biodiversity policy (if so, please describe)?	None known
Are there any known conflicts with national planning biodiversity policy (if so, please describe)?	None known
Are there any known conflicts with European or international biodiversity policy (if so, please describe)?	None known

¹¹ It is important that projects incorporate relevant elements of Green Infrastructure Planning (please see www.naturalengland.org.uk/ourwork/planningdevelopment/greeninfrastructure/default.aspx)
 “Green Infrastructure (GI) is a strategically planned and delivered network of high quality green spaces and other environmental features. It should be designed and managed as a multifunctional resource capable of delivering a wide range of environmental and quality of life benefits for local communities. Green Infrastructure includes parks, open spaces, playing fields, woodlands, allotments and private gardens.”

Ecosystem Services

ECOSYSTEM SERVICES	YES/NO	COMMENT/ACTION REQUIRED IF "YES"
Has the survey revealed, in the context of the proposed project, any significant adverse impacts on Ecosystem Services?	No	N/A

Geological Conservation

GEOLOGICAL CONSERVATION (Geodiversity is a material planning consideration)	YES/NO	ACTION REQUIRED IF “YES”
Are there any features of geological importance on the development site?	No	Not as far as known.
Are there any features of geological importance adjacent to the development site or that might be affected by the development (during or post construction)?	—	Not researched. Unlikely.

CONCLUSION

Providing the recommendations noted herein are fully implemented, there are no obvious residual ecological counter indications to the proposed project at this stage.

As discussed, the existing tree and hedgerow should be incorporated into the landscape design. The hedgerows, particularly the section along the southern boundary should be enhanced by planting native species and further hedgerows, shrubs and trees should be incorporated into the plans to ensure No Net Loss.

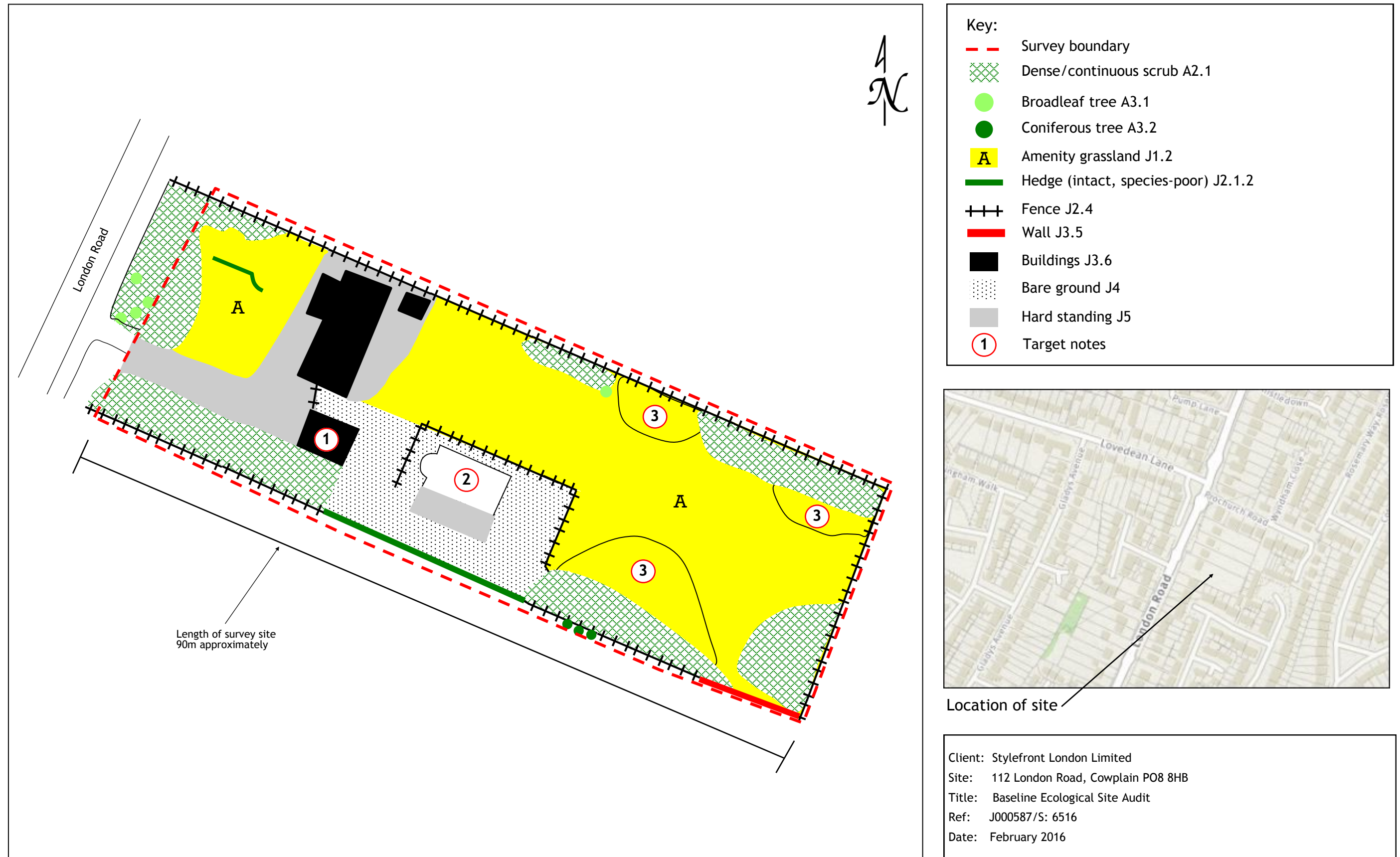
The recommended ecological protection and enhancements may be expected to deliver planning & biodiversity gains and assure there is No Net Loss to biodiversity, and no unacceptable adverse impact on Ecosystem Services. It follows that it is essential that the ecological recommendations of this report are securely incorporated as formal Conditions within any planning consent the Local Authority is minded to grant, and that their implementation and ongoing care are verified and monitored.

Note

Please note that there is complex and strict legislation protecting many species and habitats. For European Protected Species (including bats, great crested newt, dormouse, otter, *etc.*) there is no longer a clear defence against harm being caused as an incidental result of an otherwise lawful operation. Full details are available on the web sites of DEFRA and the various statutory authorities, some of which now have direct powers of enforcement. If you are in any doubt about the status of species or habitats on your site, please be sure to contact us before undertaking any site work. You should also make sure that you are aware of, and have allowed for, all national and local planning policies relating to wildlife and nature conservation before proceeding.

This baseline audit may not be sufficient on its own for planning application purposes where notable habitats/species are present or potentially present, especially European Protected Species (EPS) (see note at end).

Figure 1: Site plan



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Please note: this plan is intended only to indicate the approximate location of features and should therefore, not be treated as an accurate scale plan.

PHOTOGRAPHS

Photographs were taken on 15 January 2016



Plate 1: The area of scrub and trees along the western boundary at the site entrance.



Plate 2: The front lawn showing the section of species-poor hedge.



Plate 3: The area of dense scrub along the south-western boundary near the site entrance



Plate 4: A view of the rear garden from the south-eastern corner facing west



Plate 5: The east of the rear garden showing one of the areas of scrub



Plate 6: The rear of the garage block that is to be demolished to allow for an access road



Plate 7: The abandoned swimming pool in the rear garden



Plate 8: The large piles of wood chip on along the northern boundary of the site

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IMPORTANT

Please be aware that, because the natural environment is dynamic, ecological reports generally have a limited period of currency. Many statutory authorities now regard one year as the maximum time that should elapse before a report will need to be updated: occasionally it may be longer but it may also be less. Where a European Protected Species licence is to be applied for once planning permission has been granted, a walk-over of the site should be carried out **within three months** of an application being submitted to check that the habitats have not changed significantly since the survey was carried out.

Betts are a scientific practice. Any information relating to legal matters in this report is provided in good faith but does not purport in any way to give any advice on or interpretation of the law whatsoever. Professional legal advice should always be sought. Any designs, specifications, advice, suggestions, or comments written or verbal relating to construction or supervision of building-related work of any kind are provided for consideration only and under no circumstances are to be interpreted as provision of design, management or supervision *sensu* the Construction (Design and Management) Regulations 2007.

CAPABILITY AND QUALITY ASSURANCE

Founded in 1985 to provide high quality professional services to meet an increasing market demand in applied environmental sciences, the Practice stems from the original Betts family business which was established in 1760 for the refining and recycling of high value industrial wastes and mineral ores. Betts thus offer an unusual blend of technological and practical expertise in a range of environmental disciplines, allied particularly to the biological conservation legislation and biodiversity policies of recent years. Contracts undertaken cover a wide spectrum of projects at local, national and international levels in the construction, extractive, agricultural, leisure, energy and general industrial sectors. Scientific staff belong to appropriate professional institutes by whose codes of practice they abide. Due consideration of the British Standards on Biodiversity is included in relevant work and applied where appropriate.

Gemma Cone — BSc MRes GradCIEEM Ecologist

Gemma's academic and research background is in marine biology but her field skills and experience cover a wide range of terrestrial ecology and protected species work (including reptile, bat, badger, newt, otter and field surveys), as well as laboratory and office duties. Gemma completed the LEMUR traineeship with the Worcestershire Wildlife Consultancy which led to her employment as an assistant ecologist with that Consultancy. She is a botanist and chiropterist and has undertaken contracts for Betts as a field operative before joining the Practice as a member of staff in 2015. In her spare time, Gemma is a volunteer with the Worcestershire Wildlife Trust and the Worcestershire Biological Records Centre, assisting in practical habitat management and updating species records, respectively. She is a member of the Worcestershire Bat Group and holds a bat Class 1 Licence. She has also undergone training sessions in many areas of general ecology, including grasslands, woodlands and bats.

NB. Whilst all due and reasonable care is taken in the preparation of reports, Betts accept no responsibility whatsoever for any consequences of the release of this report to third parties. Clients are reminded that all work carried out by Betts is subject to our Terms of Trading which may be viewed at any time on our web site at www.bettsecology.com or can be provided on request. Please again be aware that site surveys inevitably miss species not apparent on the date of visit(s) by reason of seasonality, mobility, habits or chance. Results are indicative and given in good faith but they are not a guarantee of presence or absence of any particular taxa

Please note that this report is a baseline ecological site audit of factors and features that may be significant for regulatory compliance and biodiversity policies relating to change of use or other disturbance. Such reports may not, on their own, contain sufficient information for a planning application and may require further more detailed study to assure compliance.



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