Extended Phase 1 Habitat Survey

Parliament Hill School, Highgate Road,

London



Completed by:

Marishal Thompson Group Arboricultural & Ecological Consultants

Address	Parliament Hill School, Highgate Road, London, NW5 1RL		
Client	Astudio Ltd Ecologist Phillip May		
MT Ref	E1909131400	Director	Paul Thompson
Report Date	29 November 2013	ONOVEmber 2013 Quality Checked Jenny Singh	
Scope of Report	Extended Phase 1 Habitat Survey		

Learnington Spa • Borehamwood • Epsom • Thirsk • Newcastle • Bangor • Bristol

Marishal Thompson Group

t 08702 416180 f 08702 414339 planning@marishalthompson.co.uk www.marishalthompson.co.uk



Registered in England No. 2954257 Registered Office: Marishal Thompson & Co (Environmental) Ltd: 6G Greensfield Court, Alnwick, Northumberland, NE66 2DE



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Executive Summary

The Phase One Habitat Survey was undertaken by an experienced ecologist at Parliament Hill School, Highgate Road, London, NW5 1RL.

The site is a school complex with outside play areas and enclosed landscaped courtyards. The buildings on the site are of differing ages and heights with multi storey additions. There are a high number of mature individual trees on the site particularly along the frontage and southern boundaries. The site is located to the south east of a large urban park and with a large residential complexes to the south and east boundaries.

Along the southern boundary behind the Gym Building next to a shipping container a stand of Japanese Knotweed was discovered. Any works involving the disturbance of any part of this plant must follow guidance issued by the Environment Agency.

A number of recommendations are made:

- 1. A dedicated bat survey will be required to evaluate the activity and presence of bats within the site and the boundary. The buildings on the site have a number of features suitable to support roosting bats and the landscaped areas are of a value for foraging bats.
- Any site clearance should take place outside the bird nesting season (October February); if this is not possible then the site should be surveyed by a trained ecologist prior to works commencing. It should be noted that if nesting birds are found then work cannot commence until the young have fledged.
- 3. Bat and bird boxes should be included within the new development design and wherever possible wild flower seed mix (suitably sourced for the area) and native trees and shrubs used to landscape areas surrounding the new buildings. Assistance should be engaged from an ecologist in the design and location of bird/bat boxes.
- 4. No further survey effort is considered necessary unless changes are made to the development area to be affected over and above those indicated within this report.



1.0 Introduction

Marishal Thompson Group was commissioned by Astudio Ltd, to undertake an Extended Phase One Habitat Survey; the survey is required in relation to a planning application at Parliament Hill School, Highgate Road, London, NW5 1RL. The site is centred at Ordnance Survey Grid Reference TQ 282 860.



OS. Licence No.100043218

1.1 <u>Site Description</u>

A drawing of the development area is included within Appendix I and comprises of a school complex set within mature grounds with a series of additional buildings. The site is on a gentle slope from north to south and the buildings have been built in to the slopes throughout the site. The site has a series of mature shrub ornamental beds along the frontage access routes and internal path connecting the buildings, occasionally with single or groups of trees. The rear of the site has a large open playing field which has boundary tree planting and a large area of long grass with a small allotment area. The newest building in the centre courtyard area has a Biodiversity roof.

1.2 <u>Scope of Survey</u>

We have been instructed to undertake a Phase 1 Habitat Survey; this is not a survey for the purposes of The Wildlife and Countryside Act 1981 (Variation of Schedule 9 or Schedule 9) (England and Wales) Order which came into force on 6 April 2010 or National Vegetation Classification.

We have been advised that the buildings on site will be removed and altered along with some new buildings with associated landscaping.

The scope of the report is to assess the site and map all habitats present. In addition to this make recommendations based upon the findings of the survey in relation to European Protected or Notable Species and any phase 2 survey work required to satisfy planning requirements.

1.3 Limitations

The survey was undertaken during the sub-optimal time of year which reduces the efficiency of the vegetation surveying. However, conditions are still more than adequate to classify the habitats at the level required for the survey effort and carry out a risk assessment for potential protected and priority species that could be present on site.

2.0 Legislation, Policy and Conservation Status

2.1 Planning and Biodiversity

Local Authorities have a requirement to consider biodiversity and geological conservation issues when determining planning applications under the following:

- Natural Environment and Rural Communities (NERC) Act (2006)
- The Habitats Directive (EC directive 92/43/EEC)
- Environmental Impact Assessment (85/337/EEC as amended by directive 97/11/EC)
- Strategic Environmental Assessment (2001/42/EEC)
- The Environment Act (1995)

And also the following planning policies:

- National Planning Policy Framework (NPPF) (DCLG 2012)
- ODPM Circular 06/2005 (Defra Circular 01/2005)
- ODPM (March 2006) Planning for Biodiversity and Geological Conservation

2.2 Legalisation and Policy Documents

Relevant legislation (as amended) and policy documents that have been consulted are detailed below:

- Wildlife and Countryside Act 1981 (as amended)
- The Conservation (Natural Habitats, &c.) Species Regulations 2010
- The Countryside and Rights of Way Act 2000
- Natural Environment and Rural Communities Act 2006
- The Protection of Badgers Act 1992
- The Hedgerow Regulations 1997

- National Planning Policy Framework: Conserving and Enhancing the Natural Environment & Conserving and Enhancing the Historic Environment (NPPF)
- UK BAP
- Camden BAP

2.3 Species Legislation

2.3.1 <u>Bats</u>

All species of bat and their breeding sites or resting places (roosts) are protected under Regulation 41 of The Conservation of Habitats and Species Regulations 2010 and Section 9 of the Wildlife and Countryside Act 1981. It is an offence for anyone to:

- intentionally to kill, injure or handle a bat;
- possess a bat (whether live or dead);
- disturb a roosting bat, or sell or offer a bat for sale without a licence;
- It is also an offence to damage, destroy or obstruct access to any place used by bats for shelter, whether they are present or not

(Natural England 2013).

A roost is protected whether or not bats are present and any activity or works affecting a roost, even when bats are absent, is likely to be subject to the relevant licence procedure with Natural England.

2.3.2 Water vole (Arvicola amphibious)

The water vole has historically received limited protection through inclusion on Schedule 5 of the Wildlife & Countryside Act 1981 (as amended). On the 6th April 2008 legal protection of this species was extended as such it is now an offence to:

- intentionally kill, injure or take (capture) a water vole;
- possess or control a live or dead water vole, or any part of a water vole;
- intentionally or recklessly damage, destroy or obstruct access to any structure or place which water voles use for shelter or protection or disturb water voles while they are using such a place; or
- sell, offer for sale or advertise for live or dead water voles.

(Natural England, 2013)

2.3.3 Otter (Lutra lutra) Legislation and Planning / Conservation Context

Otters are currently increasing in number and distribution after a prolonged period of decline. They receive protection under both the Wildlife and Countryside Act 1981 (as amended) and The Conservation of Habitats and Species Regulations 2010. Otters and their resting places are fully protected, it is an offence to:

- deliberately, capture, injure or kill them;
- to damage, destroy or obstruct their breeding or resting places;
- or to disturb otters in their breeding or resting places.

(Natural England 2013)

There is, however, provision within the legislation to kill, take, disturb or possess otters or to use prohibited methods to kill or take under a licence in certain defined circumstances, if the issue cannot be resolved by any alternative means.

2.3.4 <u>Great Crested Newts (Triturus cristatus)</u>

Great Crested Newts (GCNs) are protected under Schedule 2 of the Habitats Regulations 1994 and Sections 9(1) and 9(4) of the WCA 1981 (as amended).

As such it is illegal to:

- Recklessly kill, injure, capture or disturb a GCN; or
- Obstruct access to, damage or destroy areas where they live or breed. (*Natural England 2013*)

The legislation applies to all stages of the life cycle including eggs, larvae and juveniles.

2.3.5 <u>Birds</u>

In the UK, the provisions of the Birds Directive are implemented through the Wildlife & Countryside Act 1981 (as amended), the Conservation (Natural Habitats, & c.) Regulations 1994 (as amended). All wild birds, their nests and eggs are protected it an offence to:

- kill, injure, or take any wild bird;
- take, damage or destroy the nest of any such bird whilst it is in use or being built; or
- take or destroying an egg of any such wild bird. (*Natural England 2013*)

The law covers all species of wild birds including common, pest or opportunistic species.

Special protection against disturbance during the breeding season is also afforded to those species listed on Schedule 1 of the Act.

2.3.6 <u>Reptiles</u>

Adders, slow worms, grass snakes and common lizards are protected against killing and injuring under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). This legislation makes it illegal to intentionally kill or injure a common reptile. As a result, reptiles must be removed from areas of development and relocated onto suitable release sites before any site works can commence.

Smooth snakes and sand lizards are also protected under schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and Schedule 2 of the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) making these a European Protected Species. This makes it illegal to carry out the following activities:

- Deliberately or recklessly disturb, capture or kill these animals;
- Deliberately or recklessly take or destroy eggs of these animals;
- Damage or destroy a breeding site or resting place of such a wild animal; or
- Keep, transport, sell or exchange, or offer for sale or exchange, any live or dead animal, or any part of, or anything derived from such a wild animal.

(Natural England 2013)

2.3.7 Badgers (Meles meles)

Badgers and their setts are fully protected under the Protection of Badgers Act 1992. This Act makes it an offence, *inter alia*, to:

- Wilfully kill, injure or take, or attempt to kill, injure or capture a badger; or
- Interfere with a badger sett by doing any of the following things, intending to do any of these things or be reckless as to whether one's actions would have any of these consequences:
- Damaging a badger sett or any part of it.
- Destroying a badger sett.
- Obstructing access to, or any entrance of, a badger sett.
- Disturbing a badger when it is occupying a badger sett. (*Natural England 2013*)



3.0 Methodology

3.1 Data Search

Records of protected species and non-statutory wildlife sites within a 1km radius of the application site were requested from the Greenspace Information for Greater London (GiGL) and the London Bat Group; additionally, the NBN Gateway database was also searched.

Locations of statutory designated sites were accessed via the government 'MAGIC' website (<u>www.magic.gov.uk</u>).

3.2 Extended Phase 1 Habitat Site Survey

To fulfil the brief, an Extended Phase 1 Habitat Survey was conducted following the methodology of the JNCC (1993) as amended by IEA (1995). Extended Phase 1 Habitat Survey is a standard technique for classifying British habitats. The aim is to provide records of habitats that are of significant ecological value.

Additional Target Notes

Additional target notes were made where applicable to record:

- Key habitat features.
- Ecological features not covered in sufficient detail in the Phase 1 Methodology.
- Important habitats too small to be mapped and to identify dominant species.
- Other features of ecological interest.

3.3 Protected Fauna and Flora Species

Potential signs/suitable habitats for the presence of European and Domestic protected species were recorded.

3.4 Ecological Value and Impact Assessment

Guidelines for ecological value and impact assessment within Volume 11 Section 2 of the Design Manual for Roads and Bridges (DMRB) (Department for Transport, 2009) have been used to place the ecological value of the site in context and assess the likely impacts of the proposed development.

The DMRB is considered by the author to offer a more workable methodology than other assessment methods currently available and is applicable to development situations other than roads and bridges.

Criteria used to assign value and assess likely impacts are provided in Appendix II.



4.0 Results : Desktop Survey

4.1 Data search

Biological records data was searched for and requested over a 1km radius from the Greenspace Information for Greater London (GiGL) and the London Bat Group; additionally, the NBN Gateway database was also searched.

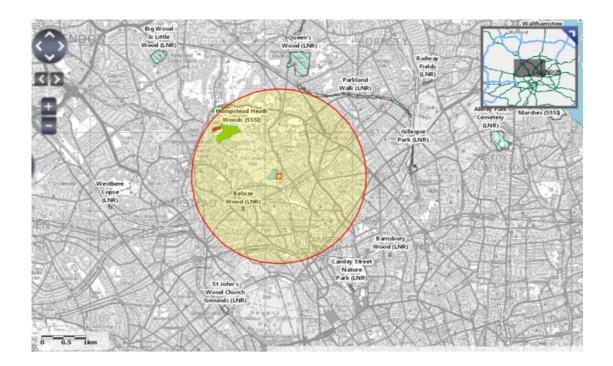
4.1.1 Protected Species Recorded within a 1km Radius

Species	Scientific Name	Grid Ref (SD)	Source	Date
Common	Pipistrellus			
Pipistrelle	pipistrellus	TQ287 867	LBG	2010
		TQ276 857	LBG	2010
		16 records, closest 162m SW	GiGL	1993-2006
Pipistrelle	Pipistrellus sp.	TQ274 859	LBG	2006
		TQ285 868	LBG	2005
		TQ274 861	LBG	2000
		26 records, closest 162 SW	GiGL	1985-2005
Soprano Pipistrelle	Pipistrellus pygmeaus	6 records, closest 280m SE	GiGL	1996-2002
Bat species	Vespertilionidae	835m SE	GiGL	2004
		864m NW	GiGL	1985
Mouse-eared Bat	Myotis sp.	977m W x 4	GiGL	2005
Daubentons Bat	Myotis daubentonii	20 records, closest 368m NW	GiGL	1993-2005
Natterers Bat	Myotis Nattereri	864m	GiGL	2001
		942m NW x 2	GiGL	1996-2001
Nyctalus	Nyctalus sp.	280m SE	GiGL	2002
Lesser Noctule	Nyctalus leisleri	280m SE	GiGL	2002
Noctule	Nyctalus noctula	19 records, closest 368m NW	GiGL	1985-2009

Table 1: Protected Species Desktop Records

4.1.2 Statutory Designated Nature Conservation Sites

Designated site information drawn from the Multi Agency Geographic Information for the Countryside site <u>www.magic.com</u> confirmed designated sites within the 2km search radius.



The following sites were found within the 2km search radius:

Local Nature Reserves:

- 1. Belsize Wood
- 2. Parkland Walk

Sites of Special Scientific Interest Units:

1. Hampstead Heath Woods (1 x Unfavourable Recovering, 1 x Unfavourable Declining)

Sites of Special Scientific Interest:

1. Hampstead Heath Woods

In addition, from the information provided by the Records Provider, the following Sites of Metropolitan Importance for Nature Conservation were identified:

- 1. Hampstead Heath
- 2. Highgate Cemetery
- 3. Waterlow Park

- 4. Kentish Town City Farm, Gospel Oak Railsides and Mortimer Terrace Nature Reserve
- 5. Dartmouth Park Hill and Reservoir
- 6. Junction Road Railway Cutting
- 7. Holly Lodge Gardens

5.0 Results : Field Survey - Plants and Habitats

5.1 Field Survey

The site was surveyed on 13th November 2013; all habitats were recorded and described in terms of dominant and characteristic plant species using Phase 1 Habitat Survey methodology (JNCC, 1993). A fauna and flora species list was compiled (see Appendix III).

The site was searched for field signs of badgers such as runs, latrines and feeding signs and assessed in terms of its suitability for other notable or protected species including bats, otter, water vole, reptiles, amphibians and birds. In addition observations were made to identify any primary UK Biodiversity Action Plan (BAP) species or habitats of local, regional and national importance.

Weather conditions during the survey were dry and bright with a light south westerly wind ambient day time temperatures for the day were approximately 9°c.

5.2 Plants and Habitats

Refer to Appendix I for Habitat Map and Appendix III for comprehensive species list and Target Notes.

The following habitats were recorded during the survey:

5.2.1 A3.1 Scattered Trees Broadleaved

The site has a number of mature trees throughout the grounds of the school, with the majority along the frontage of the site and parts of the southern boundary and a few in the central courtyard of the school. Along the frontage and main entrance to the school there is a line of semi mature lime *Tilia cordata*, along with specimens of London Plane *Platanus acerifolia*, Horse chestnut *Aesculus hippocastanum*, Cherry *Prunus sp.*, Birch *Betula utilis* and Maple *Acer platanoides*. The southern boundary is dominated by mature Italian poplar *Populus nigra Italia*, which have smaller trees planted in between, those present are Cherry *Prunus sp.*, Oak *Quercus robur*, Hornbeam *Carpinus betulus*, Holm Oak and Maple.

Around the western boundary is a line of scattered trees of the same species planted within the frontage, along the boundary fence and in the southern part these form small groups around a surfaced seating area. Towards the northern part of the boundary Holm Oak *Quercus ilex* forms the majority of the trees present.

Within the northern boundary there are a number of mature specimens of Holm Oak, English Oak, Cedar *Cedurus atlantica*, lime and semi mature and self-set seedlings of birch, willow, lime and sycamore. All trees on site are of amenity value and are of ecological value for supporting nesting birds and the larger trees for roosting bats.

5.2.2 C3.1 Tall Ruderal

Around the rear of buildings and within some of the smaller shrub beds common ruderal species are establishing, in particular along the southern boundary behind two temporary buildings Bramble *Rubus Sp.*, Ivy *Hedra helix*, Willowherb *Epilobium sp.*,Docks *Rumex sp.* Green Alkanet *Pentaglottis sp.*, Comfrey *Symphtum sp.* and Nettles *Urtica dioica* are established. These species are also throughout the western part of the site in places where regular mowing has stopped to allow long grass to form and as ground flora to some of the shrub beds throughout the northern part of the site.

Within the centre of the courtyard is a new curved single storey link building, which has a biodiversity roof. It was not possible to access this, however from ground level a similar species diversity could be seen along with some rank grasses.

Along part of the northern boundary, a large area of nettles has established between the playing field and the boundary trees. This has other common species present such as red dead nettle *Lamium purpureum*, herb Robert *Geranium robertianum*, cleavers *Galium aparine*, mouse ear Cerastium sp., wood evens *Geum urbanum* and creeping buttercup *Ranunculus repens*. Close to the northern boundary and top section of the large classroom building is a small Allotment area, however at the time of the survey only bare ground in raised beds and ruderal species along with some fruit bushes were present. The area has woven Willow *Salix sp.* forming its boundary.

These areas have an ecological value for foraging insects and some nesting opportunities and ground foraging for birds.

5.2.3 J1.2 Amenity Grassland

Throughout the site are small areas of mown lawns, in places these are on low rolling mounds around buildings. These areas contain the similar species to the playing field along with common small perennials species such as Buttercup *Ranunculus sp.* and Daisy *Bellis perennis*, The western part of the site is dominated by a large open playing field and an area of grass that has been allowed to grow long. This area has common rank species associated with its use and maintenance, with Ryegrass *Lolium sp.*, Meadow grasses *Poa sp.*, Cocksfoot *Dactylis glomerata.* The area of long grass in the north western part of the site has had limited management and has not yet formed a diverse structure to be classed as a different category of grassland. However, the presence of smaller perennials in this area does indicate that in the future this will have a greater ecological value.

The amenity grassland on the site is of limited ecological value with the exception of the area along the north western boundary which may have an ecological value for foraging ground birds.

5.2.4 J1.4 Introduced Shrubs

The site has a high diversity of ornamental shrubs throughout the site. Along the frontage of the site, along the rear of the tennis courts and the main access entrance have been maintained in well-formed beds. Within the centre courtyard of the school a series of small short length beds with some planted pots along the footpaths crossing the area. Along the southern part of the site some recent management has taken place and some shrubs have been removed leaving small areas of bare ground.

The Species that have been used for the majority of these areas are; Spotted Laurel *Aucuba japonica*, Laurel *Prunus rotundiflia*, Choisya, Hebe, Pyracantha, Phormium, Photinia, Ceanothus, Mahonia, Hydrangea, Symphoricarpus and Spirea. Within these beds throughout the site are single specimen plants such as Cycads *Cycas sp.* Castor Oil Plant *Fatsia japonica*, Mulberry *Morus sp.*, Berberis, Bamboo *Sasa palmata*, Pyracantha, Viburnum and Lilac *Syringa sp.*

To the rear of the Gym building, behind a storage container, is a stand of Japanese Knotweed. This is an invasive species and should be controlled on site or removed in line with current guidelines issued by the Environment Agency.

The mature shrubs throughout the site have an ecological value for nesting and foraging birds.

5.2.5 J2.4 Fence

A number of fences were present across the site; these were permanent features and are constructed using timber boards over wooden posts and timber panel construction over wooden posts. In addition to this there are metal chainlink security fences around the boundaries of the site. These along parts of the southern boundary are on top of small brick walls. In parts around the boundaries Ivy *Hedera helix*, Clematis and Parthenocissus sp. have established over the fences. Fences on site are of limited ecological value to nesting birds, due to the presence of climbers.

5.2.6 J3.6 Building

The buildings on site are of mixed age with the main building at the frontage of site being Victorian with 4 storeys and a steep pitched slate roof, 1970's rear extension with multiple storeys with flat roofs set in the slope of the land. Modern buildings on the site are a link building with render and timber finishes and a biodiverse roof and a large green metal clad building on the north eastern boundary. There are a series of timber and metal storage buildings around the site along with temporary portacabin style buildings. A site manager's house and private amenity area is located adjacent to the car park in the southern boundary. The northern western and southern buildings constructed in the 1970 – 80's are of low ecological value with the Victorian parts of the site providing features suitable to support nesting birds and roosting bats.

5.2.7 J4 Bare Ground / Tarmac

The frontage of the site is dominated by a mix of tarmac covered car parking and Tennis courts with small storage areas. Small areas of bare ground exposed earth and gravel is where shrubs have been removed. All of these areas are of negligible ecological value.

5.2.8 Adjacent Habitat

The site is bordered to the North by another school and to the south and across the frontage with Highgate road are multi storey residential properties. To the west is open amenity space. Further to the north and west is the city important Hampstead Heath Open Space which contains areas of sites of special scientific interest (SSSI's).



6.0 Results : Field Survey - Fauna

6.1 <u>Bats</u>

There are 103 desk based records of bats within 1km of site. The development site itself is considered to be of moderate value for foraging and of low bat roost potential. This is based upon information gained during the survey effort that would suggest that the main building along the frontage of the site contains a number of features that bats could use to roost. The sites natural features could be used by foraging and commuting bats. Therefore further dedicated bat surveys will be required in line with current guidelines.

6.2 <u>Water vole</u> (Arvicola amphibious) and Otter (Lutra lutra)

There are no records of Water vole within 1km of the site and no records of Otter. In addition, there was no habitat on the site considered suitable to sustain the species and no evidence of their presence was observed. No further survey effort is recommended.

6.3 <u>Great Crested Newt</u> (*Triturus cristatus*)

There were no records of Great Crested Newts within the 1km search area. The site is generally considered to be of low value for the species and Using Ordnance Survey Explorer Map 173 London North, A series of ponds are located to the north of the site within 500m, however these are located within the Hampstead heath complex and there is significantly higher value habitat between these ponds and the site, which would offer both breeding and terrestrial habitat that is not present on the site. Therefore the sites habitat is not considered suitable for the species and no further survey effort is required.

6.4 <u>Birds</u>

No specially protected Schedule 1 birds or potential breeding habitat were recorded during the Phase 1 Habitat Survey and no further survey effort is recommended. The site does contain a number of mature trees and shrubs around its boundary in particular, which contain evidence of nesting taking place. Therefore, if any development that takes place requires the removal of these areas or works to the shrubs or trees should do so outside the bird breeding season, (March to September inclusive). If works are to be undertaken within these timings then the area should first be inspected by a suitably qualified ecologist immediately prior to any works being undertaken. If nests are found to be present then these areas are to be left until the eggs have hatched and the young have fledged. This will ensure that there is no major impact on breeding birds which may occupy any of these features.

6.5 <u>Reptiles</u>

From the desk based study no reptile records were noted within the 1km search radius. The development area is considered to be of low suitability for reptiles. At present no further survey is recommended; however, if the proposed works on the site are altered and the long grass or ruderal areas along the western and part of the northern boundary are included then a further dedicated reptile survey is required.

6.6 <u>Badger</u> (Meles meles)

Biological records indicate no observations of badgers within 1km of the site; No evidence of use of the site by badgers was recorded during the field survey and no further survey effort is required.

6.7 Other fauna

No other fauna was observed during the survey.

6.8 <u>Connectivity to statutory and non-statutory designated sites</u>

Part of the western boundary of the site adjoins the open space which is connected to the Hampstead Heath complex. The proposed development does not pose any threat to connectivity of statutory and non-statutory sites in the region.



7.0 Ecological Value and Impact Assessment

The following section puts the value of the surveyed site into context and uses DMRB (DoT, 2008) criteria for assessing value and the potential magnitude of impact from the development proposals.

7.1 Ecological value

No UK BAP species were recorded during the Phase 1 Habitat Survey. Site habitats are species moderate in the wider ecological landscape. The site being affected by the development therefore is considered low in its potential to support protected, UK and local BAP and red data species and sensitive development may improve the site from this perspective.

Using DMRB criteria (Appendix II) the site is considered of moderate ecological value.

7.2 Impact Assessment

The proposed development will have a minor magnitude of impact upon the site and its ecological features.

Therefore a minor impact upon a site of moderate value constitutes an ecological impact of slight magnitude.

Considering the size of the site and the nature of the habitats involved the proposed development is considered to pose a slight impact on local biodiversity and <u>this should be offset</u> by biodiversity enhancement associated with landscaping and inclusion of bat and bird boxes within the building structure.



8.0 Recommendations & Conclusion

The Phase One Habitat Survey was undertaken by an experienced ecologist and the following recommendations are made:-

- **8.1** A dedicated bat survey will be required to evaluate the activity and presence of bats within the site and the boundary. The buildings on the site have a number of features suitable to support roosting bats and the landscaped areas are of a value for foraging bats.
- **8.2** Any site clearance should take place outside the bird nesting season (October February); if this is not possible then the site should be surveyed by a trained ecologist prior to works commencing. It should be noted that if nesting birds are found then work cannot commence until the young have fledged.
- **8.3** Bat and bird boxes should be included within the new development design and wherever possible wild flower seed mix (suitably sourced for the area) and native trees and shrubs used to landscape areas surrounding the new buildings. Assistance should be engaged from an ecologist in the design and location of bird/bat boxes.
- **8.4** No further survey effort is considered necessary unless changes are made to the development area to be affected over and above those indicated within this report.



9.0 References

Cheffings, C. and Farrell, L. (Editors) (2005). *The Vascular Plant Red Data List for Great Britain*. JNCC, Peterborough.

English Nature. (2001). *Great crested newt – Mitigation Guidelines.* English Nature, Peterborough.

Department for Transport. (2008). The Design Manual for Roads and Bridges. Vol 11 Environmental Assessment. HMSO, London.

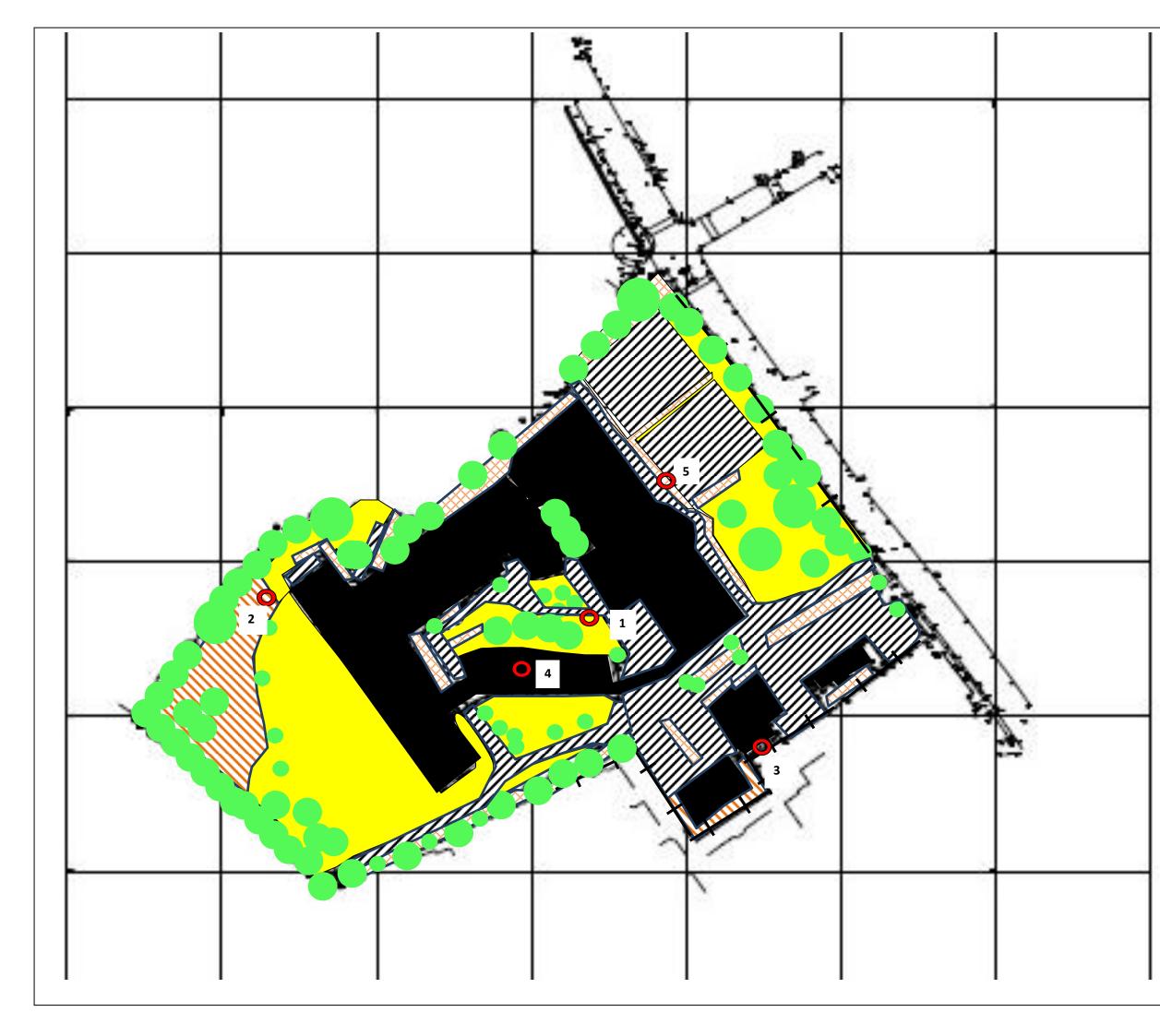
Gregory R D, Wilkinson N I, Noble D G, Robinson J A, Brown A F, Hughes J, Proctor D A, Gibbons D W and Galbraith C A. (2002) *The population status of birds in the United Kingdom, Channel Islands and the Isle of Man: an analysis of conversation concern 2002-2007.* British Birds *95:410-450*

JNCC. (1993). Handbook for the Phase 1 Habitat Survey. JNCC, Peterborough.

Stace, C. (1997). The New Flora of the British Isles (2nd Edition). Cambridge University Press, Cambridge.

Appendix I

Phase 1 Habitat Map





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- A3.1 Scattered Trees
- C3.1 Tall Ruderal
- J1.2 Amenity grassland
- J1.4 Introduced Shrubs
- J2.4 Fence



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- J3.6 Buildings
- J.5 Hardstanding Tarmac



Target Note (see Target Note table)

Phase 1 Habitat Plan Parliament Hill School, Highgate Road, London, NW5 1RL

Plan Ref MT.ECO.9599.v1

<u>Date</u> 29/11/2013



Marishal Thompson Group

6G Greensfield Court, Alnwick, Northumberland NE66 2DE

www.marishalthompson.co.uk

planning@marishalthompson.co.uk t: 08702 416 180 f: 08702 414 339

Appendix II

DMRB Assessment Criteria

Value (sensitivity)	Typical descriptors
Very High	 Very high importance and rarity, international scale and very limited potential for substitution.
High	High importance and rarity, national scale, and limited potential for substitution.
Medium	 High or medium importance and rarity, regional scale, limited potential for substitution.
Low (or Lower)	 Low or medium importance and rarity, local scale.
Negligible	 Very low importance and rarity, local scale.

Table 1. Environmental Value (Sensitivity) and Typical Descriptors

Table 2. Magnitude of Impact and Typical Descriptors

Magnitude of impact	Typical criteria descriptors	
Major	 Loss of resource and/or quality and integrity of resource; severe damage to key characteristics, features or elements (Adverse). 	
	 Large scale or major improvement of resource quality; extensive restoration or enhancement; major improvement of attribute quality (Beneficial). 	
Moderate	 Loss of resource, but not adversely affecting the integrity; partial loss of/damage to key characteristics, features or elements (Adverse). 	
	 Benefit to, or addition of, key characteristics, features or elements; improvement of attribute quality (Beneficial). 	
Minor	 Some measurable change in attributes, quality or vulnerability; minor loss of, or alteration to, one (maybe more) key characteristics, features or elements (Adverse). 	
	 Minor benefit to, or addition of, one (maybe more) key characteristics, features or elements; some beneficial impact on attribute or a reduced risk of negative impact occurring (Beneficial). 	
Negligible	 Very minor loss or detrimental alteration to one or more characteristics, features or elements (Adverse). 	
	 Very minor benefit to or positive addition of one or more characteristics, features or elements (Beneficial). 	
No change	 No loss or alteration of characteristics, features or elements; no observable impact in either direction. 	

		MAGNITUDE OF IMPACT (DEGREE OF CHANGE)				
		No change	Negligible	Minor	Moderate	Major
TY)	Very High	Neutral	Slight	Moderate or Large	Large or Very Large	Very Large
ENVIRONMENTAL VALUE (SENSITIVITY)	High	Neutral	Slight	Slight or Moderate	Moderate or Large	Large or Very Large
TALVALUE	Medium	Neutral	Neutral or Slight	Slight	Moderate	Moderate or Large
VIRONMEN	Low	Neutral	Neutral or Slight	Neutral or Slight	Slight	Slight or Moderate
ENV	Negligible	Neutral	Neutral	Neutral or Slight	Neutral or Slight	Slight

Table 3. Arriving at Significance of Effect Categories

Appendix III

Species List and Target Notes



Target Note	Common Name	Latin	Comment
	Horse Chestnut London Plane Lime Alder Liquidamber Manna Ash Honey locust Holm Oak Sycamore Scots Pine Alder Birch Ginkgo Rowan Whitebeam Willow Hazel Cherry Hawthorn Holly	Aesculus hippocastanum Platanus acerifolia Tilia cordata Alnus sp. Liquidamber styraciflua Fraxinus ornus Gleditisia triacanthos Quercus llex Acer pseudoplantanus Pinus Sylvatica Alnus cordata Betula pendula Betula papyrifera Ginkgo biloba Sorbus aucuparia Sorbus aria Salix spp Corylus avellana Prunus spp Crataegus monogyna Ilex sp.	Main tree species throughout the site.
	Laurel Ivy Maple Privet Blackthorn Hawthorn Sycamore Yew Elder Hazel	Luaus sp. Hedera helix Acer sp. Ligustrum vulgare Prunus spirea Crataegus sp. Acer Pseudoplantanus Taxus baccata Sambucus nigra Corylus avellana	
	Perennial Rye Grass Cocks Foot False Oat Grass Red fescue Bents Yarrow Daisy Dandelion Creeping Buttercup Black Medick White Clover Bramble Chickweed Sorrel St. Johns Wort Ground ivy Speedwell Hoary plantain Creeping thistle Spear thistle Nettle Ivy Greater Plantain Ragwort Red dead nettle Herb Robert Cleavers Mouse ear	Lolium perenne Dactylis glomerata Arrhenatherum elatius Festuca rubra Agrostis stolonifera Achillea millefolium Bellis perennis Taraxacum officinale Ranunculus repens Medicago lupulina , Trifolium alba Rubus spp Stellaria media Rumex acetosa Hypericum perforatum Glechoma hederacea Veronica arvensis Plantago media Cirsium arvense Cirsium vulgare Urtica dioica Hedera helix Plantago major Senecio sp Geranium robertianum Galium aparine Lamium purpureum Cerastium sp.	Dominant species present within Amenity Grassland and ruderal areas throughout the site.



	Wood evens Willowherb Docks Green Alkanet Comfrey.	Geum urbanum Epilobium sp Rumex sp. Pentaglottis sp. Symphtum sp	
	Mahonia Rosemary Laurel Hebe Birch Spirea Forsythia Lilac, Camellia Hydrangea Buddleja Clematis Dogwood Rose Yucca Spotted Laurel, Choisya, Pyracantha, Phormium, Photinia, Ceanothus, Hydrangea Spirea. Cycads Castor Oil Plant, Spanish Broom Viburnum Christmas Box	Mahonia aquifolium Rosmarinus officinalis Prunus laurocerasus Hebe sp. Betula pendula Syringa vulgaris Camellia sp. Hydrangea macrophylla Buddeliea sp. Clematis sp. Cornus alba Rosa sp. Yucca sp. Aucuba japonica Spartium junceum Sarcococca confusa	Dominant ornamental species in borders around site. Around the front and the base of the buildings are a series of thin ornamental beds.
1	Spider Plant Regal Pelargonium Cotton Lavender Helenium Rudbeckia Viburnum Choisya Bamboo Eleagnus	Chlorophytum comosum Euryops actaeus Sedum spathulium	Seasonal bedding that was present at the time and dominate lower flora present in the central court yard.
2	Allotment area	Malus sp. Pyrus sp. Prunus sp. Willow sp.	Within the area along the northern part of the site. there are small raised beds with small fruit trees along with frit shrubs have been planted
3	Japanese Knotweed		Along the southern boundary behind a shipping container to the rear of the Gym building.
4			This building has a biodiverse roof which was not able to be inspected.
5			Parts of the front shrub beds also have long thin sections of lawn.



BIRDS	Magpie	Pica pica	Seen on the site.
	Blackbird	Turdus merula	
	Wood pigeon	Columba palumbus	
	Robin	Erithacus rubecula	
	Wren	Troglodytes troglodytes	

Appendix IV

Background Data Search



Site Check Results x Site Check Report Report generated on Mon Nov 18 2013 You selected the location: Centroid Grid Ref: TQ283859 The following features have been found in your search area: Local Nature Reserves (England) - points Reference 1421538 Name **BELSIZE WOOD** Hectares 0.27 Hyperlink http://www.lnr.naturalengland.org.uk/special/lnr/lnr details.asp?themeid=1421538 Local Nature Reserves (England) Reference 1421538 Name BELSIZE WOOD Hectares 0.27 Hyperlink http://www.lnr.naturalengland.org.uk/special/lnr/lnr_details.asp?themeid=1421538 Reference 1009064 Name PARKLAND WALK Hectares 14.31 Hyperlink http://www.lnr.naturalengland.org.uk/special/lnr/lnr details.asp?themeid=1009064 Sites of Special Scientific Interest Units (England) - points Name HAMPSTEAD HEATH WOODS Reference 1064031 Site Unit Condition UNFAVOURABLE DECLINING Citation 1004944 Hectares 1.56 Hyperlink http://www.sssi.naturalengland.org.uk/special/sssi/unit_details.cfm?situnt_id=1004944 Name HAMPSTEAD HEATH WOODS Reference 1064032 Site Unit Condition UNFAVOURABLE RECOVERING Citation 1004945 Hectares 14.61 Hyperlink http://www.sssi.naturalengland.org.uk/special/sssi/unit details.cfm?situnt id=1004945 Sites of Special Scientific Interest Units (England) Name HAMPSTEAD HEATH WOODS Reference 1064031 Site Unit Condition UNFAVOURABLE DECLINING Citation 1004944 Hectares



1.56 Hyperlink http://www.sssi.naturalengland.org.uk/special/sssi/unit_details.cfm?situnt_id=1004944 Name HAMPSTEAD HEATH WOODS Reference 1064032 Site Unit Condition UNFAVOURABLE RECOVERING Citation 1004945 Hectares 14.61 Hyperlink http://www.sssi.naturalengland.org.uk/special/sssi/unit_details.cfm?situnt_id=1004945 Sites of Special Scientific Interest (England) - points Name HAMPSTEAD HEATH WOODS Reference 1000124 Natural England Contact EMILY DRESNER Natural England Phone Number 0845 600 3078 Hectares 16.17 Citation 1003451 Hyperlink http://www.sssi.naturalengland.org.uk/special/sssi/sssi details.cfm?sssi id=1003451 Sites of Special Scientific Interest (England) Name HAMPSTEAD HEATH WOODS Reference 1000124 Natural England Contact EMILY DRESNER Natural England Phone Number 0845 600 3078 Hectares 16.17 Citation 1003451 Hyperlink http://www.sssi.naturalengland.org.uk/special/sssi/sssi_details.cfm?sssi_id=1003451 Areas of Outstanding Natural Beauty (England) No Features found Environmentally Sensitive Areas (England) No Features found Moorland Line (England) No Features found National Nature Reserves (England) - points No Features found National Nature Reserves (England) No Features found National Nature Reserves (Scotland) - points No Features found National Nature Reserves (Scotland) No Features found National Nature Reserves (Wales) - points No Features found National Nature Reserves (Wales) No Features found National Parks (England) No Features found



National Parks: Lake District and Yorkshire Dales Variation Orders 2012 - subject to confirmation (England) No Features found Nitrate Vulnerable Zones (England) No Features found Ramsar Sites (England) - points No Features found Ramsar Sites (England) No Features found Ramsar Sites (Scotland) - points No Features found Ramsar Sites (Scotland) No Features found Ramsar Sites (Wales) - points No Features found Ramsar Sites (Wales) No Features found Sites of Special Scientific Interest (Scotland) - points No Features found Sites of Special Scientific Interest (Scotland) No Features found Sites of Special Scientific Interest (Wales) - points No Features found Sites of Special Scientific Interest (Wales) No Features found Special Areas of Conservation (England) - points No Features found Special Areas of Conservation (England) No Features found Special Areas of Conservation (Scotland) - points No Features found Special Areas of Conservation (Scotland) No Features found Special Areas of Conservation (Wales) - points No Features found Special Areas of Conservation (Wales) No Features found Special Protection Areas (England) - points No Features found Special Protection Areas (England) No Features found Special Protection Areas (Scotland) - points No Features found Special Protection Areas (Scotland) No Features found Special Protection Areas (Wales) - points No Features found Special Protection Areas (Wales) No Features found Biosphere Reserves (England) - points No Features found Biosphere Reserves (England) No Features found Biosphere Reserves (Scotland) - points No Features found Biosphere Reserves (Scotland) No Features found Biosphere Reserves (Wales) - points No Features found Biosphere Reserves (Wales) No Features found Less Favoured Areas (England) No Features found

Appendix V

Photographs



Plate 1: Main building

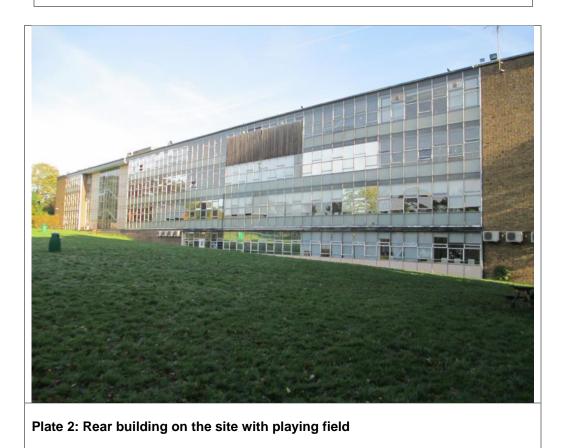






Plate 3: Central courtyard with seating and newly planted trees





Plate 5: Main entrance and frontage with new building to the north



Plate 6: Mature trees on frontage



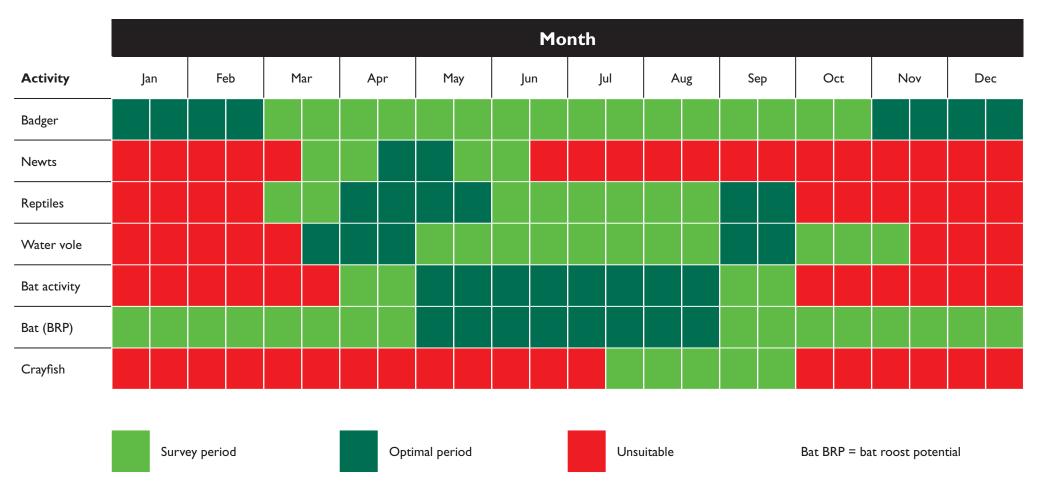


Plate 7: Tall grass area and tall ruderal beyound with Mature trees on boundary

Appendix VI

Ecology Survey Calendar

Ecological Survey Calendar



Many surveys are weather dependent and adverse weather may delay surveys.

