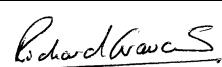
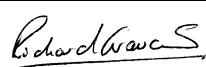




PROVIDING TRUSTED ECOLOGICAL ADVICE

**PINN RIVER SCHOOL PROJECT, PRELIMINARY ECOLOGICAL APPRAISAL
UPDATE**

Project	Prepared By	Approved by	Client	Status	Date
RGA211	A.R. Graves CECOL CEnv FCIEEM	A.R. Graves CECOL CEnv FCIEEM	WWA	Issued	NOV 22
					

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Contents

1. Summary	4
2. Introduction	5
3. Methods.....	6
Extended Phase 1 Survey.....	6
4. Results and Evaluation.....	7
Desktop Study	7
Phase 1 Survey.....	8
Protected Species.....	9
5. Recommendations.....	11
Sites	11
Habitats	11
Species.....	11
Protected Species and S.41 Species.....	11
General Precautions.....	12
Enhancement Opportunities	12
6. Conclusions.....	13
7. References	14
8. Appendices	15
Appendix A - Phase 1 Survey Plan.....	15
Figure 1 – Phase 1 Survey Plan	15
Appendix B – GiGL Desktop Summary	16

1. Summary

Richard Graves Associates (RGA) undertook an update, Preliminary Ecological Appraisal (PEA) of Grangewood School, Eastcote in the London Borough of Hillingdon, which was previously surveyed by other consultants in 2018 and 2020.

The update survey covered a larger area of the site than used for previous surveys including areas of woodland and the access route shared with Cotewood Junior School.

The current school site is to be reprovisioned with a new special needs and disabilities (SEND) school to meet current and future need. The majority of existing buildings and school grounds (excluding the woodland) will be demolished and cleared before the construction of the new school and associated landscaping.

The site is bordered on three sides by Ruislip Woods, which is a National Nature Reserve and Site of Special Scientific Interest. There are unlikely to be any operational effects on the designated site but Natural England will be consulted on appropriate measures to prevent any effects arising during construction.

The presence of bats which are fully protected were noted on site and survey details are presented in a separate report.

The report includes recommendations for the sensitive timing of works during construction and the inclusion of suitable enhancement provisions.

The report concludes that if its recommendations are followed there are no ecological issues that should prevent planning approval for the reprovisioning of the site.

2. Introduction

Instruction

Richard Graves Associates Ltd (RGA) were instructed by Wynne-Williams Associates on behalf of Kier, working for the Department of Education, to undertake an updated Preliminary Ecological Appraisal (PEA) of the existing Grangewood School in the London Borough of Hillingdon.

Location(s)

The site is located centred at Ordnance Survey (OS) grid reference TQ 09915 88835, to the west of Eastcote in the London Borough of Hillingdon. The existing school has a shared access point with Coteford Junior School which borders it to the south and borders with Ruislip Woods to the west, north and east.

Assessment

The assessment is a preliminary ecological appraisal (PEA) (Dean, 2017) which includes an assessment of evidence of and suitable features for protected species. Protected Species are those, which are fully or partially protected by legislation. The relevant legislation includes:

- The Conservation of Habitats and Species Regulations 2017 (as amended) (HMG, 2017)
- The Wildlife and Countryside Act 1981 (as amended) (HMG, 1981)
- The Protection of Badgers Act 1992 (HMG, 1992)

The assessment is an update of surveys undertaken by Ecology Link (Ecology Link, 2018) and Indigo Surveys (Indigo Surveys, 2020) with a survey area extended to include the whole of the the school boundary.

The site has been addressed with reference to proposals for the demolition of the existing special educational needs and disability (SEND) school and facilities and their replacement with a new SEND school and facilities.

3. Methods

Extended Phase 1 Survey

The Extended Phase 1 Survey is described in *Guidelines for Baseline Ecological Assessment* (IES / IEMA, 2005). This approach is based on: *A Handbook for Phase 1 Habitat Survey* (JNCC, 2010 (Rev 2013)), which includes classification of basic habitats and standard mapping, to which are added a desktop survey and a protected species walkover. The report includes the standard Phase 1 plan with target notes.

Desktop Study

Baseline data for protected sites and protected species is held for most parts of the country, some of this, in particular protected sites, is open source (freely available) and some, in particular, species information, may be supplied by local records centres for a charge. Given the location of the site in London the following sources have been used:

- Pre-existing Survey Reports
- Greenspace Information for Greater London (GiGL)
- Multi-agency Geographic Information for the Countryside (MAGIC) website

Protected Species Walkover and Phase 1 Survey

The site was visited for the Phase 1 by Richard Graves on the 24th August and 14th September 2022. Habitats were identified and are plotted on a map (Figure 1, Appendix A); botanical species were recorded and are noted in the text using nomenclature in accordance with (Stace, 2019). Features within the site suitable for or indicating evidence of protected species and species of nature conservation significance were recorded using a Global Positioning System (GPS) application (Peto, 2010).

Surveyor qualifications and experience

Richard Graves

Richard Graves BSc (Hons) MSc PGDip CEcol CEnv FCIEEM has over twenty-seven years' experience as a practising ecologist and has undertaken, commissioned and reviewed several hundred Extended Phase 1 and protected species surveys all over the UK. Richard is a fellow of the Chartered Institute of Ecology and Environmental Management (CIEEM) a chartered ecologist and a chartered environmentalist. Richard is also class licenced for great crested newt surveys, a class licenced bat surveyor and contributor to good practice guidelines for bat surveys.

Limitations

The PEA survey visit was undertaken within of the optimal time of year for Phase 1 surveys (March – October). Certain species of flora, which flower earlier or later in the year, may not have been apparent. Given the nature of the habitats present at the site these limitations are not considered to be significant.

4. Results and Evaluation

Desktop Study

The desktop studies included information received from GiGL and information from MAGIC maps. The original Phase 1 survey for the site (Ecology Link, 2018) included a 1 km radius desktop study provided by GiGL which was re-used in for the 2020 PEA (Indigo Surveys, 2020). For this update a new 2 km radius desktop survey has been obtained from GiGL (Ritchie, 2022). As the providers terms of use do not permit publication of the report a summary which may be published is included as Appendix B of this report. Local planning authorities with service level agreements with GiGL can access the report using reference: 23577dr.

The following sites, habitat and species information are summarised and evaluated below.

Statutorily Protected Sites

International Sites

There are no European Protected Sites, Special Area of Conservation (SAC) or Special Protection Areas (SPA) and Ramsar sites, within 10 km.

National Sites

There is one National Nature Reserves (NNR) which is also a Site of Special Scientific Interest (SSSI) within 2 km of the site. Ruislip Woods NNR is adjacent to the site on three sides. The site is within the Impact Risk Zone (IRZ) of Ruislip Woods SSSI. The citation on MAGIC states: "*LPA should consult Natural England on likely risks from the following: all planning applications.*"

There is one Local Nature Reserves (LNR) within 2 km, Ruislip LNR is approximately 785 m to the southwest.

Non-statutory Sites

Sites which are not of national significance but may contain features important for wildlife may be designated and given some protection under the planning system. In London they are referred to as Sites of Importance for Nature Conservation (SINCs). There are three tiers of SINC: Metropolitan Importance, Borough Importance (Grades I and II) and Local Importance.

Sixteen SINCs were recorded within the 2 km desktop search radius, the nearest of which is Ruislip Woods, adjacent to the school.

Habitats

The MAGIC data set includes Biodiversity Action Plan (BAP) priority habitats (HMG, 2006). The nearest BAP priority habitats are deciduous woodland within the boundary of the school.

Ancient Woodland

MAGIC records areas of ancient woodland within Ruislip Woods approximately 150 m from the wider school boundary.

Ponds

A search of the OS Base Map on MAGIC recorded two ponds within 500 m of the school, one, 156 m west within Ruislip Woods and one 152 m north on the boundary of Ruislip Woods and Fore Street Meadows. No ponds within 2 km have been surveyed as part of the Natural England 2017 – 2019 great crested newt (GCN) pond survey and there are no class licence returns for GCN within 1 km.

Species

The GiGL report (Ritchie, 2022) included 2,774 protected and notable species within 2 km. These included a record of *Triturus cristatus* great crested newt 727 m to the southeast and the following bat species *Eptesicus serotinus*, serotine, *Myotis daubentonii* Daubenton's, *Nyctalus leisleri* Leisler's, *Nyctalus noctula* noctule, *Pipistrellus nathusii* Nathusius' pipistrelle, *Pipistrellus pipistrellus* common pipistrelle, *Pipistrellus pygmaeus* soprano pipistrelle and *Plecotus auritus* brown long-eared.

None of the species recorded were from within or adjacent to the site.

The MAGIC database recorded one granted European Protected Species (EPS) licence within 2 km, a bat licence 762 m to the southeast.

Phase 1 Survey

Site Description

The site comprises of the existing main building and outbuildings of Grangewood School, hardstanding, hard and soft play areas and play structures bordering with Cotford Junior School to the south. Broadleaved semi-natural woodland forms the majority of the site within the boundary, bordering with Ruislip Woods.

Buildings and Hardstanding

The main school building was a mainly single storey structure, brick built with pitched pantile roofs and timber panelled gable ends. Hardstanding comprised a variety of hard surfaces which included: tarmac driveways and parking; paved footpaths around the building complex; playground and soft play areas.

Amenity Grassland

Amenity grassland areas were present around the central building. The managed sward included *Lolium perenne* perennial ryegrass, *Festuca rubra* red fescue, *Achillea*

millefolium yarrow, *Plantago lanceolata* ribwort, *Plantago major* broadleaved plantain *Poa annua* annual meadow-grass and *Dactylis glomerata* and cock's-foot.

Introduced Shrub

Woody shrubs surrounding the building included *Kerria japonica* bachelor's buttons, *Rhus typhina* stag's horn sumach and *Buddleia davidii* butterfly bush.

Broad-leaved Semi-Natural Woodland

The largest area of habitat on-site comprised of broadleaved semi-natural woodland, surrounding the school to the west, north and east, contiguous with Ruislip Wood and two smaller parcels southeast of the school building bisected by the school access roads. The woodland is dominated by *Quercus robur* pedunculate oak and *Carpinus betulus* hornbeam with a limited understorey of *Crataegus monogyna* hawthorn, *Ilex aquifolium* holly *Taxus baccata* yew and *Rubus fruticosus* agg. bramble.

The woodland does not appear to have been actively managed and now has a dense canopy which appears to limit the potential for a diverse understorey to become established.

Historic aerial images images available on Google Earth date back to 1945. At that time most of the area now occupied by Grangewood and Coteford schools and the area immediately north of the Grangewood School boundary was a mostly open field with some scattered trees and scrub. Parts of the woodland west of the site and a part of the woodland parcels associated with the school(s) access appear to have been woodland prior to 1945.

Protected Species

The survey recorded features suitable for and or evidence of the following protected species within the desktop information or sites and are considered in respect of the proposals:

- Bats
- Nesting birds

European Protected Species

European Protected Species are those listed on Schedule 2 of the Conservation of Habitats and Species Regulations (HMG, 2017). The species and their habitats are fully protected and any activity likely to have an impact on them may require an EPS mitigation licence in order to proceed legally.

Bats

A bat roost access point was recorded under the western facet of the main school building. The access had a smoothed, stained entrance with several droppings noted on the walls. The droppings were analysed for DNA, confirming the species as brown long-

eared. The roost access was not recorded during previous surveys by Ecology Link (Ecology Link, 2018) or Indigo Surveys (Indigo Surveys, 2020) and (Indigo Surveys, 2021). The presence of an active roost access supersedes the previous assessments of the main building as being of low bat roost potential. All other buildings and trees on site proposed for removal were considered to be of negligible bat roost potential.

Great Crested Newt

There are no aquatic habitats on site and there are no records of great crested newt within 500 m. The woodland habitat within the school boundary provides potentially suitable terrestrial habitat. The school buildings and hardstanding are unsuitable habitat. As the potentially suitable habitat will be retained the risk of disturbance to this species is considered to be very low.

No other habitats or features on-site were considered to be suitable to support any other European Protected Species.

Other Protected Species

Badger

No evidence of *Meles meles* badger activity was recorded within the site. The desktop report (Ritchie, 2022) did include badger records from within the 2 km search radius the locations of which are confidential. The woodland habitat within the school grounds does provide potential habitat for badgers but as it will be retained there are unlikely to be any impacts on this species resulting from implementing the proposals.

Nesting Birds

Trees and other vegetation on site have the potential to support nesting birds.

Other Species

No other protected species or evidence or suitable features for protected species was encountered during the surveys.

Species of Principal Importance

The school grounds included habitats suitable some foraging habitat and shelter for small mammals, birds (other than nesting as noted above) and invertebrates. However, none of the buildings to be removed or the area of proposed new construction provide particularly suitable habitats for any of these species.

5. Recommendations

The following section includes recommendations to inform construction and operation and avoid potential harm to protected species.

Sites

The site is adjacent to Ruislip Woods NNR / SSSI. Natural England will be consulted on the proposals. Potential impacts in relation to pollution may arise during construction. There are unlikely to be any effects resulting from the operation of a new school as a replacement for an existing school of a similar nature. Consequently, the Construction Environmental Management Plan (CEMP) should include measures to avoid surface water run-off and minimise emissions of dust during construction.

Habitats

Broadleaved Semi-natural Woodland

The majority of woodland within the Grangewood School site has regenerated naturally over the last 75 years without much apparent active management. Active management including thinning, pollarding and coppicing with the retention of dead wood and brash on site could increase the structural and floristic diversity of the woodland. Potential management options should be considered in the context of the Long-term Management Plan for Ruislip Woods to ensure that they are consistent with, and add to its objectives, where the site is adjacent to the NNR / SSSI.

Consideration of Lighting

In accordance with good practice (ILP / BCT, 2018) and planning guidance lighting impacts of new development should be considered. Lighting if used should not be directed towards the woodland, tree lines, hedges and other vegetation. Consequently, any lighting proposed for this part of the building should either not intersect with the woodland, or if it does should not exceed 0.1 lux.

Species

Protected Species and S.41 Species

Bats

Following the identification of the presence of an active bat roost within the main school building further surveys have been completed to assess the species present, levels of activity and the status of any roosts. The results and recommendations are included in a separate report (Cardy, 2022), which advises that a mitigation licence from Natural England will be required to allow the demolition of the main school building.

Nesting Birds

Other than removal of close mown amenity grassland any vegetation clearance, including tree removal should be avoided during the nesting season (March - August). If clearance is proposed outside of these times, it should be inspected immediately beforehand. If vegetation, on inspection, is found to contain an active nest the tree /

plant and a buffer of 3 m of surrounding the feature should be retained and clearly marked (with tape) and be left undisturbed until the nest is no longer active before clearance can be completed.

General Precautions

At the start of the works a 'tool-box talk' should be provided to the site manager and initial operatives detailing the more sensitive ecological features of the school, protected and invasive species present in the area. The toolbox talk will then be included as part of the site induction for new operatives.

All construction materials should be kept tidily and all spoil mounds securely fenced or regularly used or moved during the works.

Food should be securely stored and any food waste and litter should be disposed of securely (closable receptacles) and removed from site regularly (no overflowing).

Any excavations should be covered overnight or be provided with a means of escape and any open pipes should also be capped overnight.

Enhancement Opportunities

Potential development proposals at the site should consider opportunities for biodiversity gain as well as avoiding impact. Potential enhancements could include:

- Planting of new native trees, including fruiting species
- The retention of hardwood logs and brash felled on-site to form habitat piles
- The planting of native and nectar producing species to benefit bats and other wildlife
- The inclusion of new bat roosting and bird nesting provision and insect habitats

6. Conclusions

The proposed Pinn River School site, currently occupied by Grangewood School was subject to an update preliminary ecological appraisal in 2022 having been previously surveyed in 2018 and 2020. The current survey recorded the same habitats as the previous surveys, to which there had been no significant changes, and included the full extent of woodland within the schools' ownership.

The majority of the woodland habitat will be retained and there may be an opportunity to enhance it where proposals align with the long-term management plan for Ruislip Woods.

Recommendations have been made with respect to the appropriate precautions to be observed for any vegetation and site clearance and minimising pollution including artificial lighting. Potential enhancements are also proposed for consideration.

Specific recommendation with respect to bats are included in a separate report (Cardy, 2022).

If the recommendations noted above are followed there should be no material considerations with respect to ecology which should prevent the planning authority approving the proposals for the demolition of the existing school and reprovision on site.

7. References

Cardy, S. (2022). *Pinn River Bat Report*. Richard Graves Associates Ltd.

Dean, M. (2017). *Guidelines for Preliminary Ecological Appraisal (2nd Ed)*. Winchester: CIEEM.

Ecology Link. (2018). *Extended Phase 1 Habitat Survey Reporr, Grangewood School, Pinner, London*. Peterborough: Ecology Link.

HMG. (1981). The Wildlife and Countryside Act 1981. UK: HMSO.

HMG. (1992). The Protection of Badgers Act.

HMG. (2006). *The Natural Environment and Rural Communities Act*. London: HMSO.

HMG. (2017). *The Conservation of Habitats and Species Regulations*. London: HMSO.

IES / IEMA. (2005). *Guidelines for Baseline Ecological Survey*. E&F Spon: London.

ILP / BCT. (2018). *Bats and Artificial Lighting in the UK Guidance Note 08/18*. London: ILP / BCT.

Indigo Surveys. (2020). *Preliminary Ecological Appraisal Report, Grangewood School*. Indigo Surveys.

Indigo Surveys. (2021). *Nocturnal Bat Survey Report, Grangewood School*. Indigo Surveys.

JNCC. (2010 (Rev 2013)). *Handbook for Phase 1 Habitat Survey*. Peterborough: JNCC.

Ritchie, D. (2022). *An Ecological Datasearch Report for Grangewood School*. eCountability.

Stace, C. (2019). *New Flora of the British Isles 4th Edition*. Middewood Green: C & M Floristics.

8. Appendices

Appendix A - Phase 1 Survey Plan

Figure 1 - Phase 1 Survey Plan



0	03/11/2022	FIRST ISSUE	JMG	RG	RG
Rev	Revision Date	Purpose of revision	Drawn	Check'd	App'd
 Richard Graves Associates Ltd 49 London Road, Ipswich, IP1 2HF e-mail: richard@richardgravesassociates.com Phone: 020 3286 1419 Mobile: 07713 247636 Web: www.richardgravesassociates.com					
Project					Grangewood School Harrow
Drawing title					Phase 1 Habitat Survey
Scale	1:1250 @ A3	Drawn	03 Nov 2022	Rev	
Drawing number					22RG-28-10
This drawing is not to be used in whole or part other than for the intended purpose and project as defined on this drawing. Refer to the contract for full terms and conditions. Do not scale from this drawing.					0

Appendix B – GiGL Desktop Summary

THIS SUMMARY PAGE MAY BE PUBLISHED
THE FULL REPORT AND MAPS MAY NOT BE PUBLISHED IN THE PUBLIC DOMAIN

Ecological Data Search 23577dr - Summary Page

A 2000m ecological data search was carried out for site Grangewood School on behalf of Richard Graves Associates Ltd on 10 Oct 2022.

The following datasets were consulted for this report:

- Statutory sites ✓
- Non-statutory sites ✓
- Non-statutory sites (Proposed) ✓
- Protected species ✓
- London invasive species ✓
- Notable Thames Structures ✓
- Habitats ✓
- Open space ✓

Results

Statutory sites	2 statutory sites and 1 LNR
Non-statutory sites	
SINCs	16 SINCs
Proposed SINCs	None present within search area
Areas of Deficiency	Present within search area
Geological sites	None present within search area
Species	
Protected and notable species	2774 species records
London invasive species	238 species records
Notable Thames Structures	Not present within search area
Habitats	
BAP habitat suitability	Present within search area
Open space	Present within search area

The report is compiled using data held by GiGL at the time of the request. Note that GiGL does not currently hold comprehensive species data for all areas. Even where data is held, a lack of records for a species in a defined geographical area does not necessarily mean that the species does not occur there.

Permission

This data search report is valid until 10/10/2023 for the site named above.

Prepared by
10 Oct 2022