
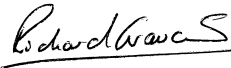




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*PROVIDING TRUSTED ECOLOGICAL ADVICE*

**TOWNLEY PRIMARY SCHOOL, PRELIMINARY ECOLOGICAL APPRAISAL**

Project	Prepared and	Checked and Approved by	Client	Status	Date
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## **1. Summary**

Richard Graves Associates were instructed by Wynne-Williams Associates on behalf of Jeakins Weir to undertake a preliminary ecological appraisal (PEA) of Townley Primary School, including a desktop study. The proposals include two new build extensions and external works to increase the external hard play areas.

The school does not include and is not within close proximity of any protected or local sites. The majority of the site comprises buildings, hardstanding and amenity grassland, with an area of semi-mature broadleaved woodland, hedges and scattered trees. The proposals will involve the loss of one sapling, some amenity grassland, an area of hard standing and three built structures comprising, two sheds and a temporary classroom.

No further surveys are recommended, unless more than a year has elapsed between the start of construction and the date of this report. The recommendations do include the protection of retained features, good construction practice in relation to wildlife and suitable enhancements tailored towards species previously recorded in the wider area.

The report concludes that there are no reasons in relation to ecology why the proposals should not be approved for planning and implemented.

## 2. Introduction

### *Instruction*

Richard Graves Associates (RGA) were instructed by Wynne-Williams Associates to undertake a preliminary ecological appraisal (PEA) of Townley Primary School.

### *Location*

The total site area comprises of approximately 1.3 hectares (ha) and is located at Crown Road, Christchurch, Wisbech, Cambridgeshire, PE14 9NA, Ordnance Survey (OS) grid reference: TL49209671. Townley School is located in Christchurch village on a site of approximately 1.3 hectares. Christchurch is situated 10 miles north of Ely and 7 miles southeast of March and is a low-density residential village with agricultural fields to north, east, south and west. The school site is immediately bordered by residential housing to the north, east and south with farm fields to the south.

**Figure 1.** Indicative Site Boundary © Google EarthPro 2023  
**Overall Site Red Line Boundary**  
**Development footprint Blue Line Boundary**



### *Assessment*

The assessment is a Preliminary Ecological Appraisal (PEA) (Dean, 2017) which includes a: desktop study, Phase 1 habitat mapping and an assessment of evidence of and suitable features for protected species and species of principal importance. Protected Species are those, which are fully or partially protected by legislation. The relevant legislation includes:

- The Conservation of Habitats and Species Regulations 2017 (HMG, 2017)
- The Wildlife and Countryside Act 1981 (as amended) (HMG, 1981)
- The Protection of Badgers Act 1992 (HMG, 1992)
- The Natural Environment and Rural Communities Act 2006 (HMG, 2006)

The site has been addressed with reference to proposals for a new build extension and internal refurbishment of the school.

### 3. Methods

#### **Preliminary Ecological Appraisal**

The PEA comprises of an Extended Phase 1 Survey as described in *Guidelines for Baseline Ecological Assessment* (Institute of Environmental Assessment, 1995). This approach is based on: *A Handbook for Phase 1 Habitat Survey* (JNCC, 2010), which includes classification of basic habitats and standard mapping, to which are added a desktop survey and a protected species walkover.

#### 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 Cambridgeshire the following records centre was used:

- Cambridge and Peterborough Environmental Records Centre (CPERC)

Desktop information from CPERC was obtained which include an area of the search radius to the east in Norfolk with data supplied by Norfolk Biodiversity Information Service (NBIS). In addition, the Multi-agency Geographic Information Centre (MAGIC) was consulted for European and international sites within 10 km and Biodiversity Action Plan (BAP) priority habitats within close proximity of the site and granted European Protected Species (EPS) within 1 km.

#### Protected Species Walkover and Phase 1 Survey

The site was visited for the Phase 1 by Dr Liat Wicks and Richard Graves on the 17<sup>th</sup> April 2023. Habitats were identified and are plotted on a map (Figure 3, Appendix A); botanical species were recorded and are noted in the text using nomenclature in accordance with (Stace, 2019) and 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). Photographs of features of the site are included in Appendix B.

The scattered trees within and/or in close proximity to the development footprint were subjected to a Ground Level Tree Assessment (GLTA) using close focusing binoculars, for their potential to support roosting bats and categorised accordingly based on the suitable features present.

#### Surveyor qualifications and experience

*Dr Liat Wicks*

Dr Liat Wicks BSc (Hons) MSc CEcol MCIEEM (Sonar Ecology, working on behalf of Richard Graves Associates Ltd). Liat is a full member of CIEEM and a Chartered Ecologist with over eighteen years' consultancy experience, specialising in bat survey, mitigation, and analysis. Liat is a level 2 Natural England licenced bat surveyor and holds class survey licences for barn owl and great crested newt. She has undertaken over 200 preliminary ecology appraisals and managed projects with a range of ecological constraints successfully. Liat was previously Head of Biodiversity for the Bat Conservation Trust and has held the position of County Ecologist.

*Richard Graves*

Richard Graves BSc (Hons) MSc PGDip CEcol CEnv FCIEEM has over twenty-nine years' experience as a practising ecologist and has undertaken, commissioned and reviewed several hundred Extended Phase 1, PEA 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 Phase 1 Survey was undertaken during April 2023 which is within the optimum season for Phase 1 Surveys (March – September). Certain species of flora, which flower earlier or later in the year, may not have been apparent. Given the nature of the habitats present and the extent of works areas proposed this limitation is not considered to be significant.



## 4. Results and Evaluation

### Desktop Study

The desktop studies requested from CPERC and NBIS included statutorily protected and locally designated sites, protected species and species of principal importance within 2 km. An additional search of MAGIC was completed for European sites within 10 km.

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

#### *Statutorily Protected Sites*

Statutorily protected sites include those of international importance (Ramsar sites), European Importance (Special Areas of Conservation (SAC) and Special Protection Areas (SPA) and national importance (National Nature Reserves (NNR) and Sites of Special Scientific Interest (SSSI)). European Sites are fully protected under the Conservation of Habitats and Species Regulations (HMG, 2017). National Nature Reserves are protected under the National Parks and Access to the Countryside Act (HMG, 1949) and SSSI are fully protected under the Wildlife and Countryside Act (HMG, 1981). All Ramsar sites are designated as SSSIs. There is one international site within 10 km of the school.

There is one SAC, SPA and Ramsar, Ouse Washes, located approximately 4.6 km southeast of the school. Potential impacts on European Protected Sites should usually be considered within 10 km. Consultation of Natural England by the planning authority, as to the need for an appropriate assessment is required for all planning applications within the Impact Risk Zone (IRZ) of the SAC, where gross external floor space exceeds 1,000 m<sup>2</sup>. However, there are unlikely to be any impacts resulting from the extensions and external playground proposals of an existing school within the area of existing settlement.

There is one SSSI within the search radius, which is also designated as above.

Local Nature Reserves are designated under the National Parks and Access to the Countryside Act (HMG, 1949) and managed for the benefit of nature conservation.

There is one Local Nature Reserve (LNR) within the search radius, Ring's End LNR, located approximately 9.3km northwest of the school.

#### *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 Cambridgeshire these include County Wildlife Sites (CWS) and Protected Road Verges (PRVs). In Norfolk these include Important bird, invertebrate and plant areas (IBA, IIA and IPAs). No CWS or Important Areas were recorded within the 2km search radius.

### *Priority Habitats Inventory*

Natural England's Priority Habitats' Inventory (PHI) is a spatial dataset that describes the geographic extent and location of priority habitats in England. The PHI has been developed to replace twenty-four separate Biodiversity Action Plan (BAP) priority habitat inventories. One priority habitat, Coastal and Floodplain Grazing Marsh, was located within 1 km, approximately 538m to the north, northeast of the School.

### Species

The MAGIC database recorded one granted Bat EPS licence for the destruction of a breeding site from within 1 km of the site.

- EPSM2009-1473 – Approximately 780m north of the site.
  - Species on the licence: Soprano pipistrelle *Pipistrellus pygmaeus*; brown long-eared *Plecotus auritus*; Natterers bat *Myotis nattereri*.
  - Site county of licence Cambridgeshire
  - Licence Start Date 15/01/2010
  - Licence End Date 14/01/2012

A total of 64 species records were provided by CPERC and 83 records from NBIS. CPERC notes that the following protected species and species of principal importance were recorded within the 2-kilometre search radius:

Table 1 – Desktop Protected Species Records Summary

Proper Name	Trivial Name	Nearest Record	Most Recent
European Protected Species (EPS)			
<i>Lutra lutra</i>	Otter	TL491986	2019
Protected Species WCA Schedules 1 and 5			
<i>Arvicola amphibius</i>	Water vole	TL503981	2019
<i>Natrix helvetica</i>	Grass Snake	TL49199643	2016

Records more than five years old are to be regarded as of historic interest only and are not included above. None of the species' records are from within or adjacent to the application site.

## Phase 1 Survey

### Site Description

The site is a school with buildings, hardstanding, an amenity playing field and play areas. A Forest School is present in the south/ southwestern boundary of the site.

### **Habitats**

The following habitats and features were recorded during the survey. For Target Note (TN) references please refer to Appendix A, Figure 3.

#### *Buildings*

Target Note 1 – The main school building is a single storey red brick structure with multiple pitched clay tiled roof areas and two felted flat roofed sections. The soffit boxes are in good condition and well-sealed. As part of the development proposals, a single storey extension is proposed at TN2 which will adjoin direction onto the existing main school building and requires no demolition or partial demolition of the structure.

Target Note 5 – is a swimming pool area with a corrugated metal housing.

Target Notes 6 and 7 are two wooden shed which are to be demolished/ removed to facilitate the development proposals. The shed at TN 6 is in a poor state of repair with cracks in the plywood cladding, and sections of the roof felt on the pitched roof degraded. Inside the shed was unlined with negligible bat roosting opportunities present. The shed at TN7 was locked at the time of the survey but is better condition than TN6. It has a shallow pitched and felted roof and wooden cladding to the exterior. Both the felt and the cladding are in good condition and tightly fitted with no visible gaps. This shed is considered to be of negligible roosting value for bats, given the lack of suitable features present.

Target Note 11 – a single storey temporary classroom portacabin structure located to the south/ southeast of the main school building. The roof of the building has a very slight pitch for water run-off and is felted. The felt is in good condition, but some small areas are lifted slightly due to recent storm damage. The walls are clad and well-sealed with UPVC windows. No roosting opportunities for bats were noted during the survey, and the structure is considered to be of negligible value for bats.

#### *Amenity Grassland*

Amenity grassland is present in the front lawned areas of the school (TN 3 and 4) and is the dominant habitat on site making up a large playing field to the west of the site (TN9). This habitat is a short mown, managed grass sward comprising *Lolium perenne* perennial rye-grass with herb species in the sward including common daisy *Bellis perennis*, dandelion *Taraxacum officinale* agg., germander speedwell *Veronica chamaedrys*, mouse ear hawkweed *Pilosella officinarum* and common yarrow *Achillea millefolium*. This habitat is of very low ecological value.

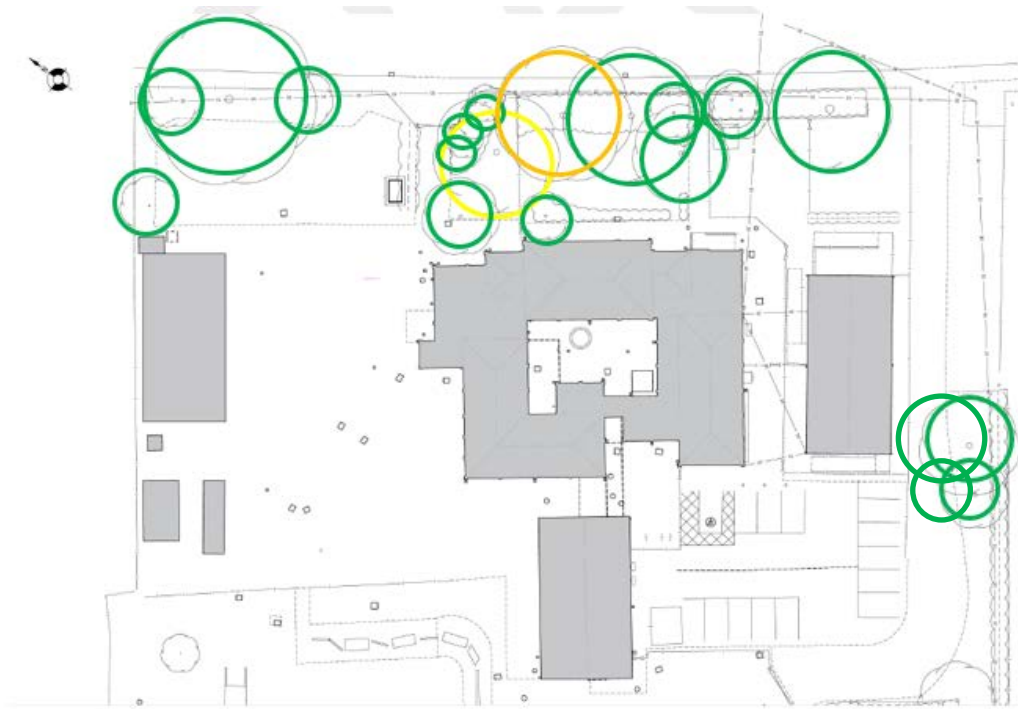
### Scattered Trees, Shrubs and Ornamental Planting

Scattered semi mature and mature trees are present towards the boundaries of the site, with species including pussy willow *Salix caprea*, privet *Ligustrum ovalifolium*, Norway maple *Acer platanoides*, weeping willow *Salix babylonica*, silver birch *Betula pendula*, weeping willow, hybrid hawthorn *Crataegus monogyna*, apple *Malus domestica*, elder *Sambucus nigra*, ash *Fraxinus excelsior*, pedunculate oak *Quercus robur*, beech *Fagus sylvatica*, cypress *Cupressaceae spp.* and holly *Ilex aquifolium*.

Ornamental planting is present in dedicated beds to the small amenity grassed areas to the front of the school. Species include red flowering currant *Ribes Sanguineum*, and Italian arum *Alium italicum*.

The following trees in proximity to the development were assessed for bat roosting potential. Figure 2 below shows the assessment of the trees. Two trees near to the development footprint had bat roosting potential; one silver birch *Betula pendula* had a hole in the main stem is assessed as having low bat roosting potential, and a willow tree with more than one split or hole is assessed as having moderate roosting potential.

**Figure 2.** Assessment of nearby trees for roosting bat potential.



Green = Negligible roosting potential; Yellow = Low roosting potential; Orange = Moderate roosting potential; Red = High roosting potential.

One small tree is proposed for removal as part of the redevelopment, identified as sapling silver birch, T10 on tree removal plans, which was of negligible bat roosting potential.

### *Broadleaved woodland*

An area of broadleaved woodland is present at TN10 to the south/southeast of the site. A forest school is located within the wooded area within which, a very small sunken tub pond of less than 1m diameter is present (see Figure 3 for location), with wire mesh covering the top. Froglets (common frog *Rana temporaria*) were observed in and around the small waterbody at the time of the survey.

The forest floor has ground cover of species including cow parsley *Anthriscus sylvestris*, lesser celandine *Ficaria verna*, lords and ladies *Arum maculatum*, chickweed *Stellaria media* and white comfrey *Symphytum officinale*, with semi mature and mature tree species comprising oak, silver birch, elder and Norway maple. Some dead wood habitat is present within this habitat.

## **Protected Species**

The survey recorded features within and near to the site suitable for the following protected species:

- Bats – foraging and commuting corridors; treelines, woodland (outside the development footprint)
- Breeding birds (tree / scrub nesting) – outside the development footprint

Further species were recorded in the desktop study area and a small tub pond was recorded on site but outside the development footprint, so their potential presence is addressed.

### 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*

Although two trees outside the development footprint were found to have features suitable to support roosting bats (Figure 2), no trees are proposed for removal to facilitate the school extensions and therefore impacts to bats are considered negligible. Two wooden sheds (TN6 &7) and a temporary classroom at TN11 are to be removed as part of the development proposals. These structures do not have suitable features to support roosting bats. Bats are therefore not considered a constraint to development.

#### *Triturus cristatus Great Crested Newt (GCN)*

A single tub pond was recorded in the wider site (outside the development footprint). It has been constructed by the school as part of the forest school. It is very small and shallow and lacking in aquatic vegetation and is considered to be of negligible suitability for GCN. No desktop records of GCN were recorded in the CPERC search and there are no records of GCN licences or surveyed ponds within 2 km of the school. Consequently, the presence of GCN within the school pond is considered to be unlikely, and as the pond lies outside the development footprint this is not considered a constraint to the current proposals.

### Other Protected Species

#### *Nesting Birds*

All nesting birds are protected from disturbance under the Wildlife and Countryside Act. The nesting season is considered to be between March and August, although birds nesting at other times are also protected.

Scattered trees and scrub in the wider site provide potential habitats for nesting and foraging birds.

## 5. Recommendations

The following section includes general recommendations for the protection of wildlife and biodiversity prior to, and during, construction works, recommendations for minimising and mitigating impacts and includes potential mitigation and enhancement opportunities for the site.

### **Assessment of the Development Footprint**

The majority of development footprint lies within an area of existing hardstanding forming the current playground. There are no habitats or features of ecological value within this area, and as such there are no perceived impacts to the development of the single storey extension at location TN2.

There is an area of amenity grassland at TN8 which is currently part of the playing field, housing an outdoor trim trail. The play facilities are unsafe in their current state and therefore not used by the school. This small area of amenity grassland will be removed to facilitate a new section of hardstanding play area for the school. Amenity grassland in this location is of negligible ecological value and, as such, no negative impacts of habitat loss are perceived in relation to the proposed development.

### Habitats

#### *Trees*

One silver birch sapling is to be removed as part of the development proposals.

Retention of mature trees should be considered in any future development proposals. Mature trees to be retained within the site should be protected during construction in accordance with the current British Standard.

#### *Consideration of Lighting*

In accordance with good practice (ILP / BCT, 2018) and planning guidance (Ministry of Housing Communities and Local Government, 2021) lighting impacts during construction and operation of the new school building extension should be considered. It is understood that no new lighting is proposed for the extension. However, as guidance, lighting if used should be directed away from vegetation, trees and wildlife corridors.

### Species

#### **European Protected Species**

##### *Bats*

If the current proposals are implemented there should be no impacts on bats, no further surveys are recommended.



## **Other Protected Species**

### *Nesting Birds*

All birds are protected under the Wildlife and Countryside Act (HMG, 1981). Any clearance of scrub and trees within the site should be timed to avoid the bird nesting season (March to August). Where it is not possible to do so, vegetation should be inspected by a suitably qualified ecologist to confirm that nesting birds are not affected, or, comply with their further advice if they are.

### **General Provisions**

Should more than one-year elapse before a start on site a pre-construction survey should be completed immediately prior to the start of development works on the site to confirm that the situation on site is as reported here (April 2023).

In accordance with good practice, retained habitats, including mature trees, should be appropriately delineated and protected from construction activity. Compounds and stockpiles should be securely fenced to prevent wildlife accessing them. Materials should not be stored on or near the root protection area of trees as soil compaction can damage tree health. Excavations should be left covered overnight or provided with a means of escape for wildlife. Water butts should be left covered over night to prevent wildlife drowning while attempting to drink.

### **Enhancement**

As the proposals are unlikely to result in any loss of features of ecological interest there is no requirement for mitigation, but it is appropriate to consider opportunities for enhancement. One tree bird nesting box and one bat box should be placed on retained trees, ideally within the woodland on site.

Any new planting scheme should include native trees, shrubs and bulbs and the project ecologist consulted as part of the landscape design plans.

## **6. Conclusion**

The Townley Primary School site was surveyed by Richard Graves Associates in April 2023 and assessed with respect to proposals to extend the main building in one location and extend the area of hardstanding playground.

Desktop information identified that no protected sites or local wildlife sites would be affected by any of the proposals. Other than suitable habitats for nesting birds, and two trees with some potential for roosting bats (outside the development footprint), no evidence of protected species or habitats for protected species in the areas affected by the proposals was recorded during the survey.

The school does include habitats that are of higher ecological value, including a forest school but these will not be affected by the current proposals.

The report makes recommendations for the retention and protection of features of ecological value and suitable enhancement including new and replacement planting of increased species diversity as part of the new landscaping proposals.

If the recommendations are followed there are no reasons with respect to ecology why the site should not be successfully redeveloped in accordance with the proposals.

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## **8. Appendices**

### **Appendix A - Figure 3 Phase 1 Survey Plan**



- Legend**
- Site boundary
  - Proposed development footprint
  - Areas of proposed development
  - A1.1.1 Broadleaved woodland - semi-natural
  - A3.1 Broadleaved parkland/scattered trees
  - G1 Small tub pond
  - J1.2 Cultivated/disturbed land - amenity grassland
  - J2.1.2 Intact hedge - species-poor
  - J2.4 Fence
  - J3.6 Buildings
  - J5 Hard standing
  - Buildings to be demolished/removed
  - Target note

0	27/04/2023	First issue	JMG	LW	RG
Rev	Revision Date	Purpose of revision	Drawn	Check'd	App'd

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Project Townley Primary School

Drawing title 
**Figure 3**  
 Phase 1 Habitat Survey

Scale As shown @ A3 Drawn 27 April 2023

Drawing number Rev  
23RG-11-01 0

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.

## Appendix B - Site Photos

School extension location - TN2



Main School Building - sealed soffits



Sheds to be removed - TN 6&7



Temporary classroom to be removed



**Amenity grassland area to be removed - TN8**



**Areas of amenity grassland, scattered trees and ornamental shrubs - TN 3 &4**



**Large playing field - TN 9**



**Forest School within wooded area and tub pond- TN10**

