

Preliminary Ecological Appraisal

**Glyndwr University, Regent Street,
Wrexham**

Day Architectural Ltd



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OXF10388/04**

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1 Executive Summary

1.1 The Project and Commissioned Work

RPS Planning and Development Ltd (RPS) was instructed by Day Architectural Ltd to carry out a preliminary ecological appraisal comprising of an extended Phase 1 habitat survey of land operated by Glyndwr University on Regent Street in Wrexham.

Proposals for the site include the demolition of several of the existing buildings along with internal refurbishments of others.

The survey followed best practice methodology and was carried out in May 2017 by experienced ecologists.

1.2 Findings and Recommendations

No notable habitats were recorded in the site but some of the buildings were considered to provide potential habitat for roosting bats and nesting birds. On this basis, the following recommendations have been made.

Table 1: Summary of recommendations

Notable Ecological Feature	Consideration	Further Surveys Required ¹	Mitigation, Compensation and Enhancement	Optimal Timings
Roosting bats	Potential for roosting bats to be present within two of the buildings within the site	No as long as proposals remain as reported OR A single dusk emergence or dawn re-entry survey if plans change	To be confirmed following results of recommended survey, if required	May – August (September)
Nesting birds	Potential for nesting birds to be encountered during demolition	No	All demolition to be conducted outside of nesting season OR an ecologist to inspect areas to be cleared where this is not possible	October – February (nesting bird season March to September)

¹ Please note that all further surveys should be completed before a planning application is submitted / works commence on site

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2 Introduction and Background

2.1 Purpose and Scope of this Report

RPS Planning and Development Ltd (RPS) were commissioned to carry out a preliminary ecological appraisal of land operated by Glyndwr University at Regent Street, Wrexham to inform planning prior to proposed demolition or refurbishment of buildings within the site.

This appraisal was based on a review of the development proposals provided by the client, desk study data (third party information) and a survey of the site. This report pertains to these results only; recommendations included within this report are the professional opinion of an experienced ecologist, based on their personal interpretation of legislation and planning policy.

The study area was defined as shown in the enclosed site plan (Figure 1) and Phase 1 Habitat plan plus a buffer zone extended to include the Zone of Influence (see below) of the proposals (hereafter referred to as the “site”).

2.2 Proposed Site Plans

Current proposals for the site include the internal refurbishment of the main, existing art school within the site and demolition of the other outbuildings, to be replaced by newer facilities.

2.3 Zone of Influence

The term Zone of Influence was used to describe the geographic extent of potential impacts of a proposed development. The Zone was determined by the nature of the development and also in relation to individual species, depending on their habitat requirements, mobility and distances indicated in any best practice guidelines.

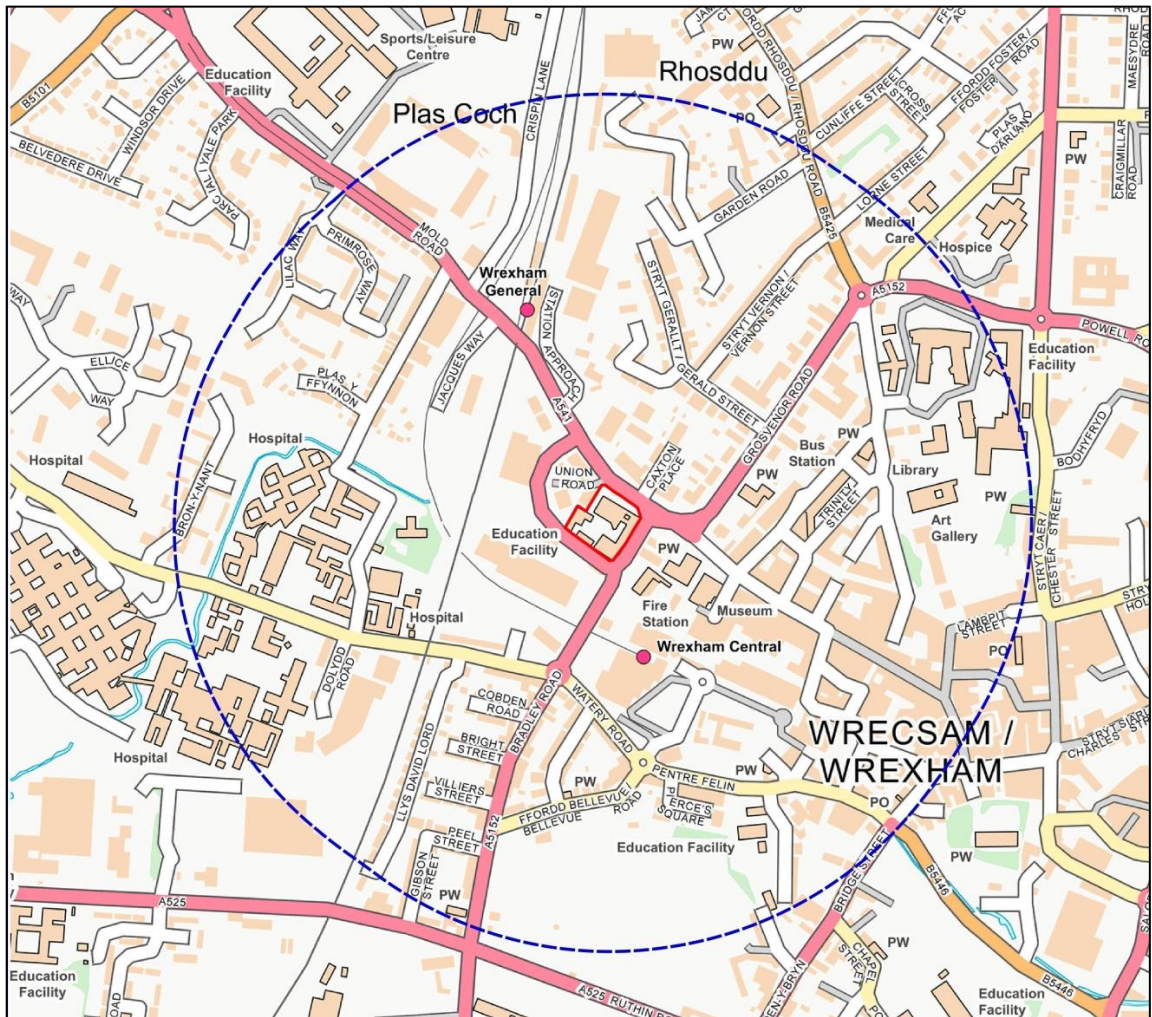
For this site, the Zone of Influence was considered to be land on and immediately adjacent to the site and, specifically in respect of great crested newts *Triturus cristatus*, land within 500m of the site boundary as illustrated on the location plan.

2.4 Site Context and Location

The site comprises approximately 0.5ha of land situated in the centre of Wrexham, central grid reference SJ 33063 50512. The site comprises the art school facilities and buildings associated with Glyndwr University and the adjacent land use is entirely urban (including residential, commercial and industrial development to all directions. The location in a local context is illustrated on Figure 1 below.

Aerial imaging available via Google Earth Pro was also reviewed to assess the site in relation to its context in the wider landscape. As illustrated on Figure 2, the site sits within a generally uniform urban landscape in the centre of Wrexham and consequently, it is not connected to any other adjacent habitat.

Figure 1: Site location plan (red line denotes site location and dotted blue line illustrates the zone of influence)



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Figure 2: Aerial image of the site and local landscape



Image reproduced from Google Earth Pro.

2.5 Legislation and Planning Policy

2.5.1 General

Articles of British wildlife and countryside legislation, policy guidance and both Local and National Biodiversity Action Plans (BAPs) were referred to throughout this report. Their context and application was explained in the relevant sections of this report. The relevant articles of legislation were:

- The National Planning Policy Framework (NPPF, 2012);
- ODPM Circular 06/2005 (retained as Technical Guidance on NPPF 2012);
- Local planning policies (Wrexham City Council);
- The Conservation of Habitats and Species Regulations 2010 (as amended);
- The Wildlife and Countryside Act 1981 (as amended);
- EC Council Directive on the Conservation of Wild Birds 79/409/EEC;
- National Parks and Access to the Countryside Act 1949;
- The Protection of Badgers Act 1992;
- The Countryside and Rights of Way Act 2000;
- The Hedgerow Regulations 1997;
- The Natural Environment and Rural Communities Act 2006;
- Local Biodiversity Action Plan for Wrexham

Under the National Planning Policy Framework 2012 the presence of any protected species was a material planning consideration. The Framework states that impacts arising from development proposals must be avoided where possible or adequately mitigated/ compensated for and that opportunities for ecological enhancement should be sought.

3 Methodology

3.1 Desk Based Assessment

Data regarding statutory and non-statutory designated sites, plus any records of protected or notable species and habitats was obtained from the local ecological records centre and online resources, details of which were provided in Table 2 below.

Table 2: Consulted resources

Consultee/ resource	Data sought	Search radius from boundary
COFNOD – North Wales Environmental Information Service	Site designations, protected/notable species records	2km
www.magic.gov.uk ²	Statutory Site Designations	2km
	NERC 2006 Habitats of Principal Importance	1km

3.2 Extended Phase 1 Habitat Survey

An extended Phase 1 habitat survey of the site was carried out on 10th May 2017. Habitats were described and mapped following standard Phase 1 habitat survey methodology (JNCC, 2010), which categorises habitat type through the identification of individual plant species, botanical community and habitat conditions.

Nomenclature follows Stace (Stace, 2010) for vascular plant species and uses the DAFOR scale for relative abundance (D = dominant, A = abundant, F = frequent, O = occasional and R = rare/infrequent).

The habitat survey was carried out by Joseph Dance BSc Hons GradCIEEM and Michelle Cullimore-Pike MSc BSc Hons. Both have been professional ecologists for over three years and are appropriately experienced to carry out this type of survey.

3.3 Protected / Notable Species Scoping

The habitats on site were assessed for their suitability to support any legally protected or notable species that may present constraints to the proposed redevelopment. This includes invasive non-native plant species such as Japanese knotweed *Fallopia japonica*, giant hogweed *Heracleum mantegazzianum* and Himalayan balsam *Impatiens glandulifera*.

Any incidental sightings of individual species or field signs such as footprints, latrines or feeding remains identified during the survey were noted.

In the case of bats, specific quantitative assessment methodologies have been adopted industry wide and details of these were provided below.

3.3.1 Bats

Daytime Bat Assessment

All buildings and trees present on or immediately adjacent to the site were visually inspected and all potentially suitable entry / exit points for bats such as holes and crevices were noted, together with any evidence of bat presence such as droppings or feeding remains.

For reference, individual buildings were numbered B01 – B06a Following standard best practice methodology (Collins, J., 2016), each building and tree was then classified either as confirmed roost or high, medium, low or negligible potential, which informs the need for and survey effort of any nocturnal survey required.

² Multi Agency Geographic Information for the Countryside Interactive GIS Map.

3.3.2 Appraisal Methodology

The overall ecological appraisal was based on the standard best practice methodology provided by the Guidelines for Preliminary Ecological Appraisal (CIEEM, 2013). The assessment identifies sites, habitats, species and other ecological features that were of value based on factors such as legal protection, statutory or local site designations such as Sites of Special Scientific Interest (SSSI) or Local Wildlife Sites (LWS) or inclusion on Red Data Book Lists or Biodiversity Action Plans. Ecological value was considered in the context of international, national, regional or local scale and potential constraints to development were identified on that basis, with recommendations for further more detailed surveys made as appropriate, for example to fully investigate botanical value or to confirm presence / likely absence of a protected species.

The assessment also refers to planning policy guidance (e.g. NPPF) where relevant to relate the value of the site and potential impacts of development to the planning process, identifying constraints and opportunities for ecological enhancement in line with both national and local policy.

3.4 Limitations

3.4.1 Desk Based Assessment

The desk study data was third party controlled data, purchased for the purposes of this report only. RPS cannot vouch for its accuracy and cannot be held liable for any error(s) in these data.

3.4.2 Survey

It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no investigation could ensure the complete characterisation and prediction of the natural environment.

The protected/notable species assessment provides a preliminary view of the likelihood of these species occurring on the site, based on the suitability of the habitat, known distribution of the species in the local area provided in response to our enquiries and any direct evidence on the site. It should not be taken as providing a full and definitive survey of any protected/notable species group.

The entirety of the land within 30m of the site's boundaries could not be accessed due to private ownership so a visual inspection was made of this land, where views permitted.

Daytime Bat Survey

Access to the roof voids within the building was not possible so the assessments of all buildings were made externally.

3.4.3 Accurate Lifespan of Ecological Data

The majority of ecological data remain valid for only short periods due to the inherently transient nature of the subject. The survey results contained in this report were considered accurate for 2 years.

4 Results

4.1 Desk Based Assessment

One statutorily designated site was recorded within the search area identified in Section 3.1, details of which were provided in Table 3 below.

Table 3: Non-Statutory designated sites

Site name	Designation	Location	Brief description
Gatewen Marsh	SSSI ³	1km to NW	Southern mesotrophic mire

Two non-statutory sites were identified, details of which were provided in Table 4 below.

Table 4: Non-Statutory designated sites

Site name	Designation	Location	Brief description
Erddig Estate (site ref: W317)	LWS ⁴	1.1km to S	Woodlands, semi-improved neutral grasslands and marshes
Berse Drelincourt (site ref: W335)	LWS	1.3km to W	Small area with mosaic of semi-natural habitats

The closest NERC (2006) Habitat of Principal Importance was Broad-leaved Woodland, located over 1km from the site.

Protected species records were received from COFNOD. A summary of the records considered most relevant to the site and/or proposed development were provided in Table 5.

³ Site of special scientific interest.

⁴ Local Wildlife Site

Table 5: Summary of protected and notable species records

Species latin name	Species	Most recent record	Closest record to site	Total no. of records	National conservation status	Wrexham LBAP
Mammals						
<i>Pipistrellus pipistrellus</i>	Common pipistrelle	2015	700m to NNE	10	Fully protected EPS	
<i>Pipistrellus sp.</i>	Pipistrelle bat	2015	700m to NNE	4	Fully protected EPS	
<i>Pipistrellus pygmaeus</i>	Soprano pipistrelle	2016	700m to NNE	3	Fully protected EPS, NERC 2006	
<i>Nyctalus noctula</i>	Noctule bat	2016	1km to ESE	3	Fully protected EPS, NERC 2006	
<i>Chiroptera sp.</i>	Unidentified bat sp.	2002	1km to SSW	8	Fully protected EPS ⁵	
<i>Myotis sp.</i>	Myotis bat	2016	1.8km to S	1	Fully protected EPS, NERC 2006	
<i>Plecotus auritus</i>	Brown long-eared bat	1999	1.9km to WSW	1	Fully protected EPS, NERC 2006	

⁵ European Protected Species (EPS), protected by the Conservation of Habitats and Species Regulations 2010 (as amended)

4.2 Habitat Survey Results

The site was dominated by buildings and hardstanding/concrete paving. All buildings within the site were assessed for their potential to support roosting bats and a description of each is given in Section 4.3 of this report.

The only vegetation within the site was noted in the far north-east corner and comprised several silver birch *Betula pendula* and lime *Tilia sp.* trees with a small bed of ornamental shrubs; these areas would be retained in the developed site so will not be considered further in this report. The extent of each habitat type recorded within the site is illustrated at Appendix C. Figures 3 and 4 below provide some representative views of the site.

Figure 3: General site view



Figure 4: General site view



4.3 Preliminary Protected / Notable Species Assessment

4.3.1 White-clawed Crayfish, Water Vole and Otter

The site contained no suitable habitat for the above species, the surrounding area also lacked suitable habitat to support populations and therefore they will not be adversely impacted by the proposed works and will not be discussed further in this report.

4.3.2 Great Crested Newt (GCN)

No standing bodies of water with the potential to support breeding GCN were recorded within 500m of the site and the terrestrial habitats within the site (e.g. buildings, hardstanding) for this species were considered to be completely unsuitable. Given the absence of potential breeding habitat around the site and unsuitable terrestrial habitat both within and surrounding the site for some distance, the likelihood of GCN presence within the site is considered to be **Negligible** and this species would not be adversely impacted by the proposals. There is no recommendation for further surveys or mitigation and this species will not be considered further in this report.

4.3.3 Reptiles

The buildings and hardstanding within the site were considered to be completely unsuitable to support all species of reptile and the site is also completely isolated from more suitable reptile habitat in adjacent land. Consequently, the likelihood of reptile presence within the site is considered to be **Negligible** and there would be no adverse impacts on this species group as a result of the proposals. There is no recommendation for further surveys or mitigation and this species group will not be considered further in this report.

4.3.4 Birds

The buildings within the site were considered to provide potential nesting habitat for a narrow range of species (not any Schedule 1 species) and an active blue tit *Cyanistes caeruleus* nest was recorded in a cavity behind a drain pipe on the frontage of Building B01 (see Figure 5 below).

Figure 5: Location of blue tit nest



An active collared dove *Streptopelia decaocto* nest was also recorded behind the turn of a drainpipe on Building 4 (to be retained) within the site; see Figure 6.

Figure 6: Collared dove nest



The site offered very little habitat suitable for foraging birds.

4.3.5 Badgers

No badger setts were recorded on site, and the flat nature of the site, being dominated by hardstanding and buildings was considered to be entirely unsuitable for sett excavation. Similarly, the site offered no habitat with the potential to support foraging/commuting badgers and the surrounding landscape was also considered to be similarly unsuitable.

4.3.6 Bats

Seven buildings (labelled B01 – B06a) were recorded in the site and all were assessed for their potential to support roosting bats.

Building 1 (B01)

A large, two-storey listed building with a hip-pitched roof in current use as an art school for Glyndwr University. The frontage of the building was constructed of sandstone but every other elevation comprised red brick with a sandstone base and sandstone lintels around windows and door frames. No eaves were present on the northern elevation but exposed eaves were noted on all other elevations; the mortar underneath the eaves was well sealed to the exposed rafter tails and each eave was lined by fascia boarding. The slate tiles across the roof were largely in very good condition but some mortar was missing around the ridge tiles and especially along the verge tiles. A loft void was present within the building but it could not be accessed for inspection. Figures 7 and 8 below provide photographs of the northern and southern elevations of the building. Figure 9 provides a view of one of the slipped ridge tiles.

Figure 7: Building B01 (northern elevation)



Figure 8: Building B01 (southern elevation)



Figure 9: Building B01 (slipped ridge tile)



No evidence of roosting bats was recorded externally at this building.

Building 2 (B02)

A single storey red-brick building with a double-pitch felt roof in current use as an art workshop. A loft was present but it could not be accessed during the survey. The brickwork around the building was in very good condition and all seals with the felt roofline were also in very good condition. No features that could be utilised by roosting bats were recorded anywhere around the building. Figures 10 and 11 below provide photographs of this building.

Figure 10: Building B02



Figure 11: Building B02 (roof)



Building 3 (B03)

A two-storey red-brick building with a pitched slate tile roof and a flat felt roof extension. No eaves, fascia boards or soffit boxes were noted anywhere around the building and the tiles of the pitched section were noted to be in very good condition, with no obvious potential roost locations noted. A loft void was present but it could not be accessed to survey. Figure 12 below provides a general view of this building.

Figure 12: Building B03



Building 4 (B04)

A single-storey external, active workshop constructed of breeze block with a corrugated plastic and metal roof. All of the brickwork was in good condition, thus offering no potential roost features, and no loft void was present. The roof offered no potential for roosting bats given the construct.

Building 5 (B05)

A single-storey external, active workshop constructed of red-brick with a pitched slate tile roof. Plastic soffit and fascias encompassed the eaves of the building and all tiles were noted to be in very good condition, with no potential entry points noted. Internal access was not possible so it could not be confirmed if a loft void was present but the presence of skylights on one of the pitches indicated that a loft space may not be present. The whole building (brickwork, tiles) was in very good condition and no obvious features that could support roosting bats was noted anywhere around the building. Figures 13 and 14 below provide views of the building.

Figure 13: Building B05



Figure 14: Building B05



Building 6 (B06 and B06a)

A two-storey red-brick building in use as office and university facilities. It comprised a large two-storey section with a hipped slate tile roof and a rectangular single-storey section which had a pitched felt roof (B06a). The eaves of the main two-storey section were sealed with decorative barge boards. The mortar around the verge tiles on the second-storey section was missing in some places and several ridge tiles had slightly lifted. The building itself was, however, in very good condition and no other features that could support roosting bats was noted anywhere on this building or on the single storey extension (B06a). Figures 15, 16 and 17 below provide general views of B06, B06a and a section of missing mortar on the verge tiles of the southern gable end of B06. No internal access was possible.

Figure 15: Building B06



Figure 16: Building B06a



Figure 17: Building B06



Bat Foraging Habitat

The site was dominated by buildings and hardstanding; features which were considered to provide very little value for foraging and commuting bats. In addition, the site is not connected to the surrounding landscape through suitable wildlife corridors (i.e. trees/hedgerows). On this basis, the site was assessed as providing **Very Low** value for foraging/commuting bats.

5 Evaluation

5.1 Habitats and Botanical Value

5.1.1 Designated Conservation Sites (Statutory and Non-Statutory)

All of the statutory and non-statutory sites identified by desk study are considered to be sufficiently distant from the site to avoid any adverse impacts as a result of the proposed works and there is no recommendation for further mitigation or consideration to this regard.

The site offers very little botanical value and this would remain unaffected in the developed site as the limited vegetation present would be retained.

5.2 Protected and Notable Species

5.2.1 Bats

Roosting

Building 1

Building 1 contained the following features which were considered to provide potential roosting opportunities for roosting bats:

- Enclosed loft void (heated), including potential access points through lifted tiles
- Gaps in ridge tiles/mortar
- Gaps underneath ridge tiles on hip joins

On the whole, however, very few individual features were recorded on the building which roosting bats could utilise. The building itself was also in very good condition and the surrounding habitat was considered to be of **Very Low** value to foraging and commuting bats, further decreasing the likelihood of bat use. Based on the small number of features which could be used by roosting bats and poor quality of the surrounding habitat, the building was assessed as providing **Low** potential to support roosting bats. At present, therefore, there is potential for bats to be roosting in Building 1. **Any demolition/external or internal roof works to this building, therefore, has the potential to damage/destroy a bat roost and/or kill/injure a bat or disturb a bat whilst using a place of shelter.** Any of these consequences would result in a breach of current legislation and be liable to prosecution.

However, as this is a listed building, the proposals will not require any external works or any works to the loft space. The only activity within this building will be internal refurbishments so even if roosting bats are present they would not be impacted by the proposed works. Should plans change and any external work be required, further consideration with regards to roosting bats must be sought; see Section 6.

Buildings, 2, 4, 5 and 6a

These buildings offered no potential to support roosting bats given the absence of suitable features and general unfavourable construct. These buildings are proposed for demolition and there would be no constraints with regards to roosting bats to this end and there is no recommendation for further survey, licensing or mitigation prior to the demolition of these buildings.

Buildings 3 and 6

Both of these buildings contained tiled roofs with enclosed loft voids and several features were recorded around the buildings (i.e. lifted ridge tiles, missing mortar) that could support small numbers of roosting bats. Based on this, and taking into account the **Very Low** value of the surrounding habitat for foraging and commuting bats, these buildings were assessed as providing **Low** roosting potential. At present, therefore, there is potential for bats to be roosting in Buildings 3 and 6. **Any demolition/external or internal roof works to these buildings, therefore, has the potential to damage/destroy a bat roost and/or kill/injure a bat or disturb a**

bat whilst using a place of shelter. Any of these consequences would result in a breach of current legislation and be liable to prosecution.

However, the current proposals for the site include the retention of these buildings, with only internal refurbishments scheduled where necessary. Should plans change and any external work be required, further consideration with regards to roosting bats must be sought; see Section 6.

Foraging Habitat

The proposals would not affect any suitable bat foraging habitat and there is no recommendation for further surveys or mitigation to this regard.

5.2.2 Nesting Birds

The buildings within the site were noted to support nesting activity during the initial Phase 1 survey so it is possible that any works to the buildings within the site during the nesting season (March – September) have the potential to encounter active nests. Nesting birds, their nests, eggs and dependent young are fully protected under the Wildlife and Countryside Act 1981, which prohibits their damage or destruction. Recommendations have, therefore, been made in Section 6 of this report to mitigate for this potential impact through the timing of site clearance works.

6 Recommendations

6.1 Further Investigations Required

6.1.1 Bats

Under current proposals, no buildings with the potential to support roosting bats would be affected. Should plans change and **any** external roof/loft work be required to B01, B03 or B06. Should plans change and such works be required, the following surveys may be required. RPS should be consulted in this instance.

In line with the most recent best-practice guidelines for a building with **Low** potential to support roosting bats, **one** dusk emergence or dawn re-entry survey must be conducted on Building B01, B03 or B06 in optimal season between May and August/September. A sufficient number of surveyors must be used to ensure all sightlines around the buildings are covered.

6.2 Mitigation

6.2.1 Nesting Birds

The demolition of some of the buildings (B02, B04 – B05 and B06a) within the site should be timetabled outside of the nesting season (which runs March – September inclusively) to avoid any active bird nests which may be present. Where this is not possible, the works should be preceded by a check by an ecologist to determine if any active nests are present. If an active nest is recorded, all works in the area will need to stop and a suitable 'no-work' buffer zone implemented around the nest until all chicks have fledged. RPS can provide further advice in this instance.

6.2.2 Bats

Roosting Bats

The results of the bat surveys recommended in section 6.1 to determine presence / likely absence of roosting / foraging bats will inform any need for additional mitigation measures in respect to bats.

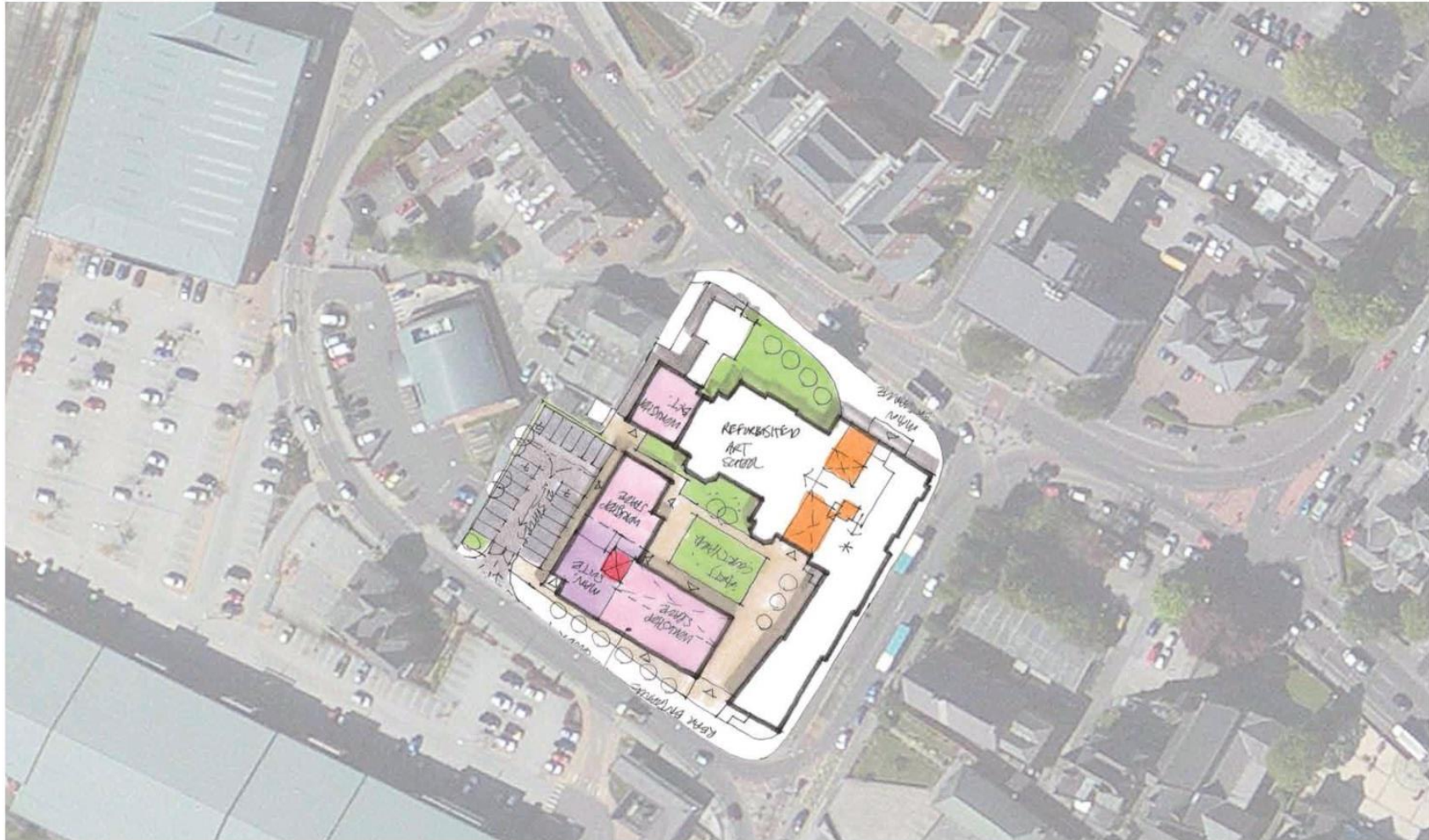
6.3 Enhancements

It is recommended that native planting is used within any landscape scheme for the developed site.

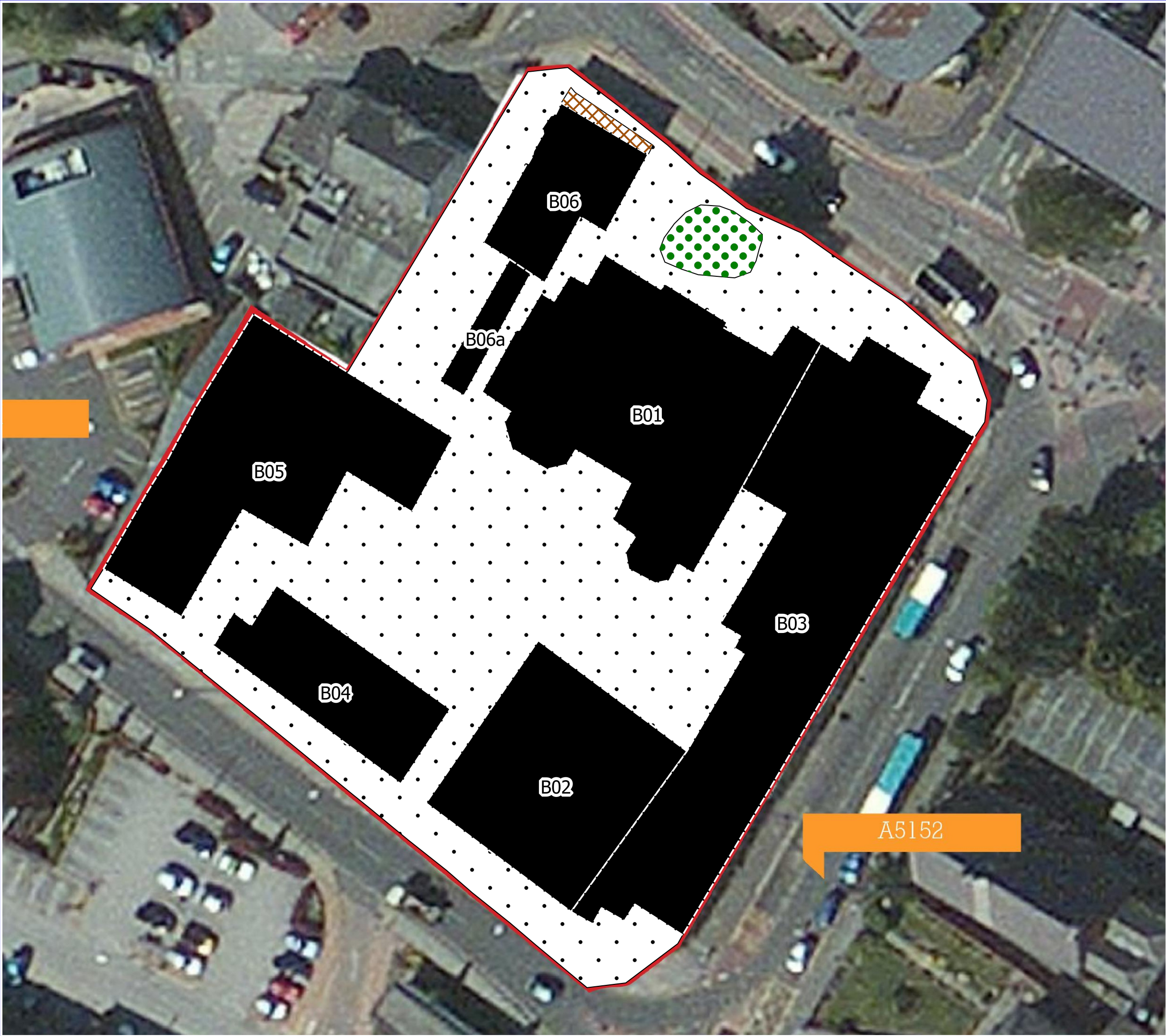
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Potential Site Options
Potential Proposed Site Layout
Arts School



12 | Site Reviews - Wrexham Glyndwr University



Legend

- Phase 1 Habitat - Area
- A3.1 - Broad-leaved scattered trees
 - J1.4 - Introduced shrub
 - J3.6 - Buildings
 - J4 - Bare ground

Rev	Date	Description	Checked	Authorised
Issue / Revision				
Original Scale			Drawn	
1:400 @ A3			22.06.2017	
Project title				
OXF10388 Glyndwr University: Regent Street				
Drawing title				
Appendix C: Phase 1 Habitat Plan				
Client				
Day Architectural Ltd.				
RPS St Paul's House, Enterprise Way, Jubilee Business Park, Stores Road, Derby DE21 4BB T +44(0) 1332 387650 W rpsgroup.com Contains OS data © Crown copyright and database right 2017				
Drawing Number				Rev
OXF10388_04 (Regent Street)				0