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PLANNING APPLICATION ASSESSMENT

SITE

Former Air Products Site
Station Road
Acrefair
Wrexham
LL14 3RJ

CLIENT

Clwyd Alyn
72 Ffordd William Morgan
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Denbighshire
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JOB No.

1078

DATE

December 2024

GRID REFERENCE

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1.0 INTRODUCTION

EDC has been instructed to undertake an updated baseline survey and impact assessment. The survey will address the biodiversity impacts in line with the DECCA framework, Planning Policy Wales-Edition 12, February 2024, Environment (Wales) Act 2016, (Section 6 Duty) and (Section 7) and the Welsh Assembly Government Technical Advice Note 5, 'Nature Conservation and Planning' and local development policy. This is to enable an assessment of impacts and mitigation to negate impact as a consideration, material to the determination of planning consent and active protected species and habitat legislation at the time of survey, and to produce biodiversity net gains based on the findings of the surveys.

The works include the construction of 159 affordable dwellings and associated infrastructure, public open space and biodiversity offset. The site is approximately 7.5 Ha in area and is sited at the junction of the Llangollen Road and King Street, Acrefair. Approximately 5 Ha was developed by Air products, 1 Ha was undeveloped grassland, the remaining areas are woodland over embankment, former coal sheds and the remnants of a railway cutting. Three previous surveys have been undertaken on site by Marches Ecology in 2021, Arbtech in 2022/23 and EDC in 2024.

2.0 SITE and SURVEY AREA

The site is approximately 7.5 Ha and was the former Air Products Factory which was demolished circa 2010. The site has a history of development dating back to circa 1860. Only the level area was redeveloped by Air Products. The buildings were demolished and the site was levelled to the area as shown on current aerial imagery. The site comprises of approximately 5 Ha of the former factory area, and two areas of woodland of which consists of 0.75 Ha of self-seeded woodland on a raised retained area of land to the north east of the site. The former factory area was the British Iron Works coke ovens and rail tracks constructed circa 1860. An undeveloped area of grassland approximately 1 Ha is to the south and alongside the eastern boundary. Two rail lines bisected the site the main line and an interconnecting line. The main line, including Acrefair Station was demolished in 1976, and ran along the southern boundary of the site. The interconnecting rail line feeding the coal mines was to the north west of the site, running approximately from the existing road entrance south to cross King Street. The site was redeveloped circa 1900's to form the Acrefair Engineering Works. Several large lagoons were formed and are recorded on site and adjacent to the site from the 1870's through to at least the 1960's. These reservoirs/lagoons have since been drained locally. The site was redeveloped, and the Air Products Site was developed on the previous works footprint. This factory was demolished circa 2010 with the site being levelled. Apart from the retaining wall to the woodland area and the railway cutting of the defunct main Wrexham to Barmouth railway line, all remnants of previous development have been removed.



Figure 1 – Survey Area

The northwestern boundary abuts the A539 Llangollen Road. The road continues to the southwest with a strip of self-seeded wooded embankment between the back of pavement and the site fencing/boundary. The western boundary is retained and runs parallel to the B5096 Kings street. This boundary staggers and cuts around a small area of development and runs along the old railway embankment forming the southwestern site boundary. The land beyond this section of the boundary is formed by a mix of formal gardens and a woodland strip. The southeastern boundary is along a public footpath which is also the boundary with an area of common land, formed by rank grassland, pockets of scrub and woodland. The northeastern boundary abuts a mix of woodland, formal gardens, and new development.

3.0 METHODS

Data Search

A data search for protected sites within 5 km, and protected species records within 1 km over the last 20 years was undertaken.

Survey

The survey was conducted on the 26 November 2024 by Ecological Consultant Tobias Hodnett.

8.1 GREAT CRESTED NEWT:

A walkover survey to identify any potential breeding pools and refugia sites within the survey area was conducted. This was followed up by a desktop survey to identify any local records for this species within 500 m of the site.

8.2 REPTILES:

A walkover to identify any potential basking/foraging areas for this species, and visual sightings was undertaken.

8.3 BADGER:

A search for field signs (paths, latrines, foraging, setts) indicating the presence of this species and, if discovered, an extended search up to 30 m beyond the survey boundary for the presence of a sett(s).

8.4 BATS:

A walkover to identify any evidence of use, any potential roost or foraging habitat within the survey area was undertaken. The walkover survey follows the Bat Conservation Trust guidance (2023)[1].

8.5 BIRDS:

An assessment of habitats suitability for nesting sites was undertaken.

8.6 INVERTEBRATES:

The site was assessed for the potential for invertebrate species presence but noting the flora species present.

8.7 HABITATS:

[1] Collins, J. (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition) The Bat Conservation Trust. London

The site was surveyed following the Joint Nature Conservation Committee (JNCC) methodology[2]. Habitat types across the site were surveyed and individual species found within the boundaries of the survey area were recorded.

[2] JNCC, (2010), Handbook for Phase 1 habitat survey – a technique for environmental audit, JNCC, Peterborough, ISBN 0 86139 636 7.

4.0 LIMITATIONS

The updated habitat survey was undertaken out with the optimal time of year to record vascular plant species; bat species; butterfly/moths; however, due to the heavily managed area of land recorded within the survey area this is not considered to be a significant limitation to the survey.

No further limitations were recorded that would be considered to vary the species and habitats as recorded during survey.

5.0 EXISTING DATA

AMPHIBIAN: **-**

There is a single field record for the protected species Great Crested Newt (*Triturus cristatus*) 475 m to the northeast of the development area.

REPTILES: -

There are no data records for this taxon group within 500 m of the site. A single recording for slow worm was captured during the 2021 surveys. The record is outside of the development zone.

MAMMAL: -

Badger *Meles meles* –

[redacted]

Bat *Chiroptera* –

There is a single record for Myotis species for the former air product site pre-demolition, circa 2000.

The following species are recorded at both local and at a county level: -

- Pipistrelle Pipistrellus *pipistrellus/pygmaeus*
- Brown Long-eared *Plecotus auritus*
- Lesser Horseshoe *Rhinolophus hipposideros*
- Greater Horseshoe *Rhinolophus ferrumequinum*
- Daubenton's *Myotis daubentonii*
- Whiskered/Brandt's *Myotis mystacinus/brandtii*
- Natterer's *Myotis nattereri*
- Noctule *Nyctalus noctula*
- Serotine *Eptesicus serotinus*

Hedgehog *Erinaceus europaeus* –

There ae several records to the north and south of the site, the nearest record is 25 m to the north west of the site.

BIRD: –

Approximately 87 species are recorded within 1 km of the site. Approximately 25 of these species could nest within the survey area, primarily the woodland blocks and areas of scrub and ruderal herb/rank grass.

INVERTEBRATE: -

There are two notable historic records for Cinnabar moth (*Tyria jacobaeae*) and one record for

White-letter Hairstreak (*Satyrium w-album*) from Tref-y-nant Wood (dated 2010). No other notable records of invertebrates are recorded within the Proposed Development boundary.

DESIGNATED SITES, and STATUTORY SITES: -

The River Dee Site of Special Scientific Interest (SSSI) is located at 1.2 km to southwest of the site.

No other European designated, and no UK designated sites are recorded within 500 m of the site.

NONE STATUTORY SITES:

The Ty Mawr Country Park is located at 1.2 km to southwest of the site.

HISTORICAL MAPPING:-

Figure 2 – 6 show the infrastructure present across the site since approx. 1847 and illustrate that the area of grassland to the east of the site has had no development present.

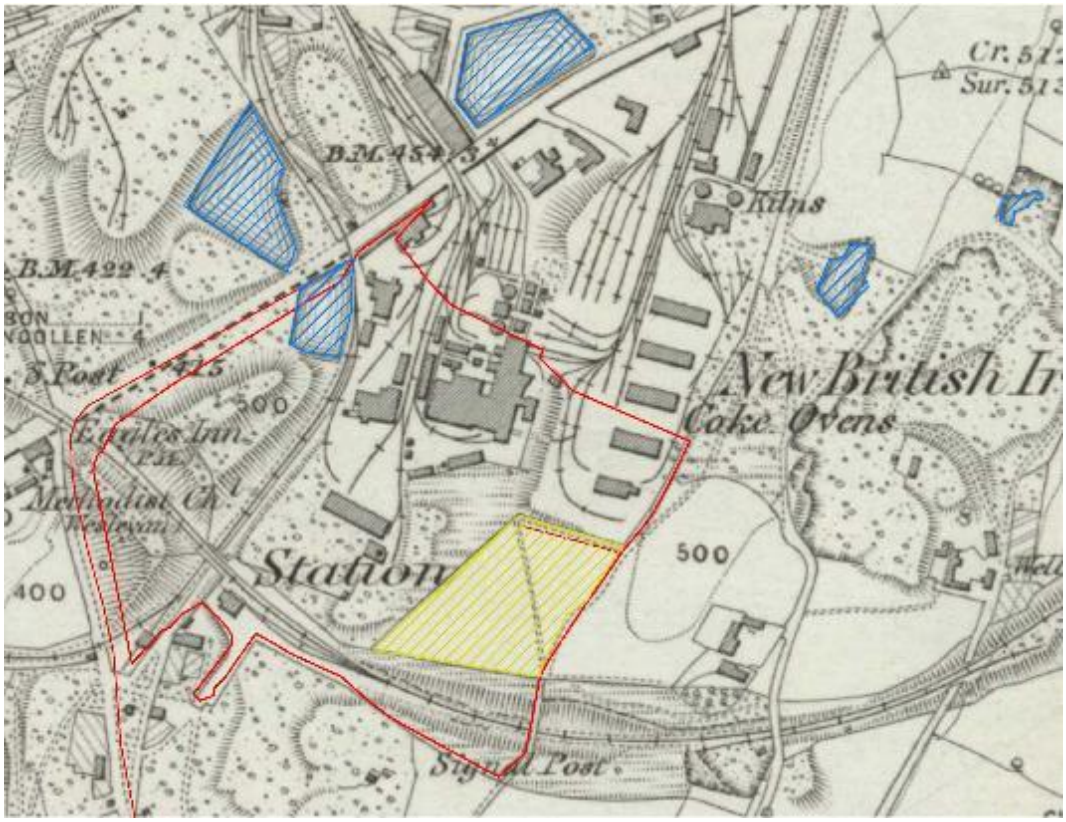


Figure 2 – OS mapping circa 1847, showing location of water bodies, undeveloped area, and site boundary.

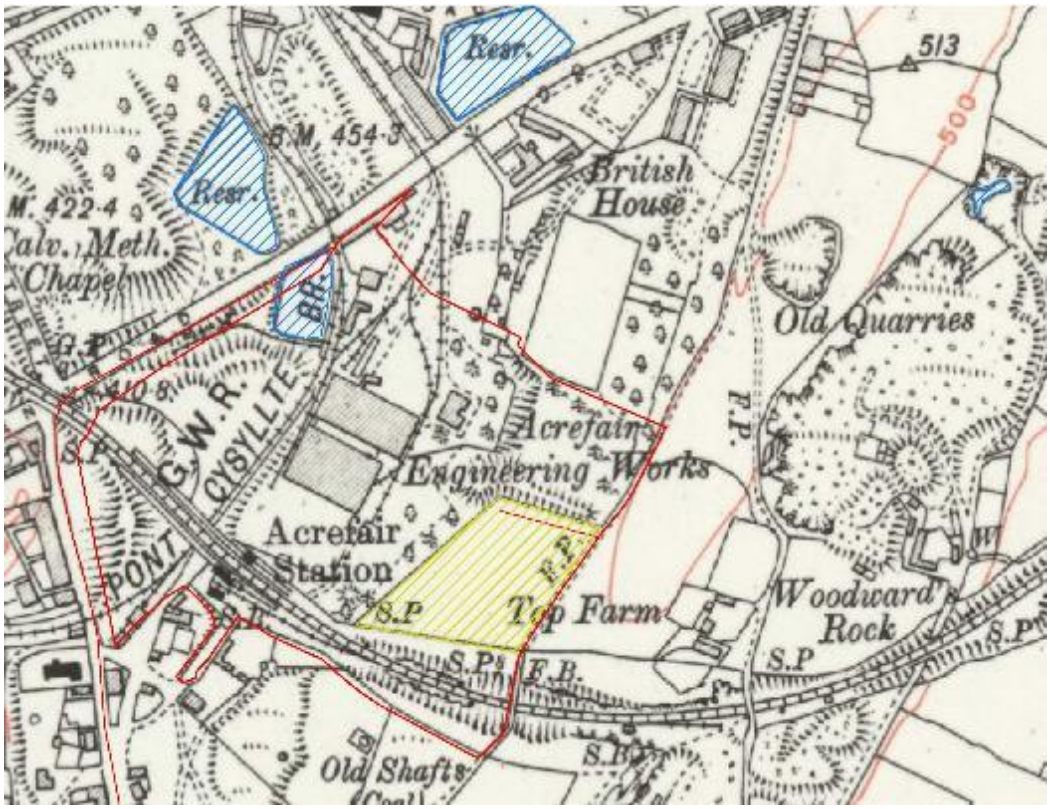


Figure 3 – OS mapping circa 1909, showing location of water bodies, undeveloped area, and site boundary.

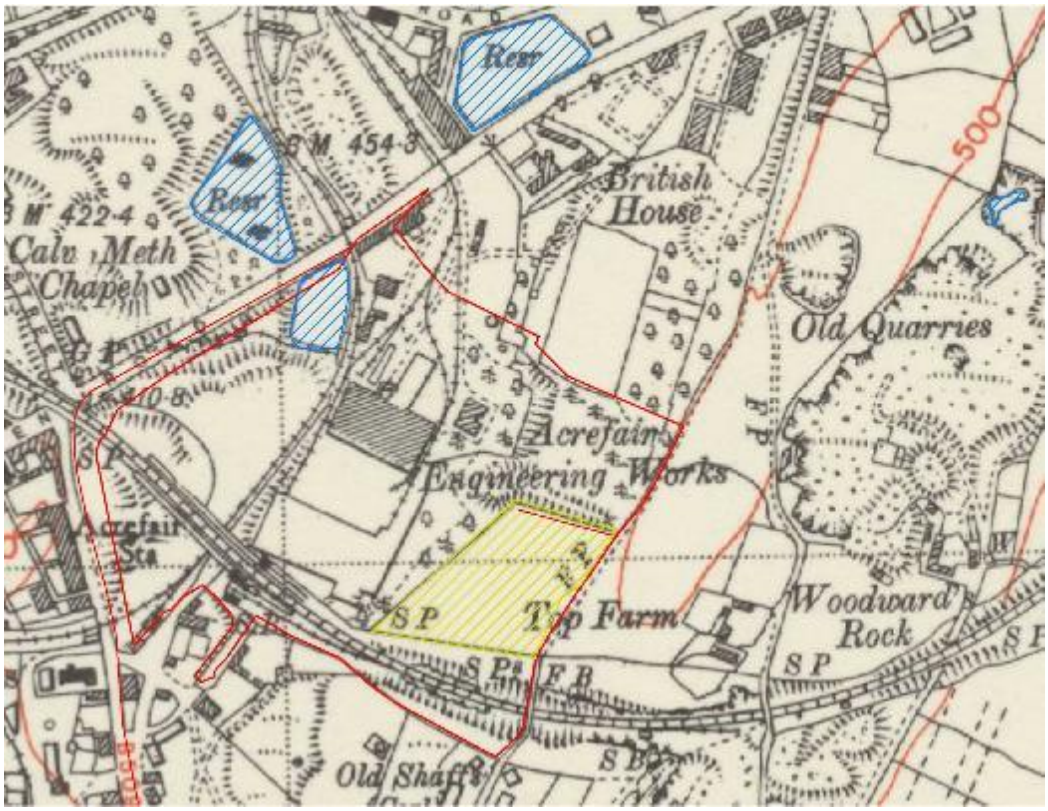


Figure 4 – OS mapping circa 1949, showing location of water bodies, undeveloped area, and site boundary.

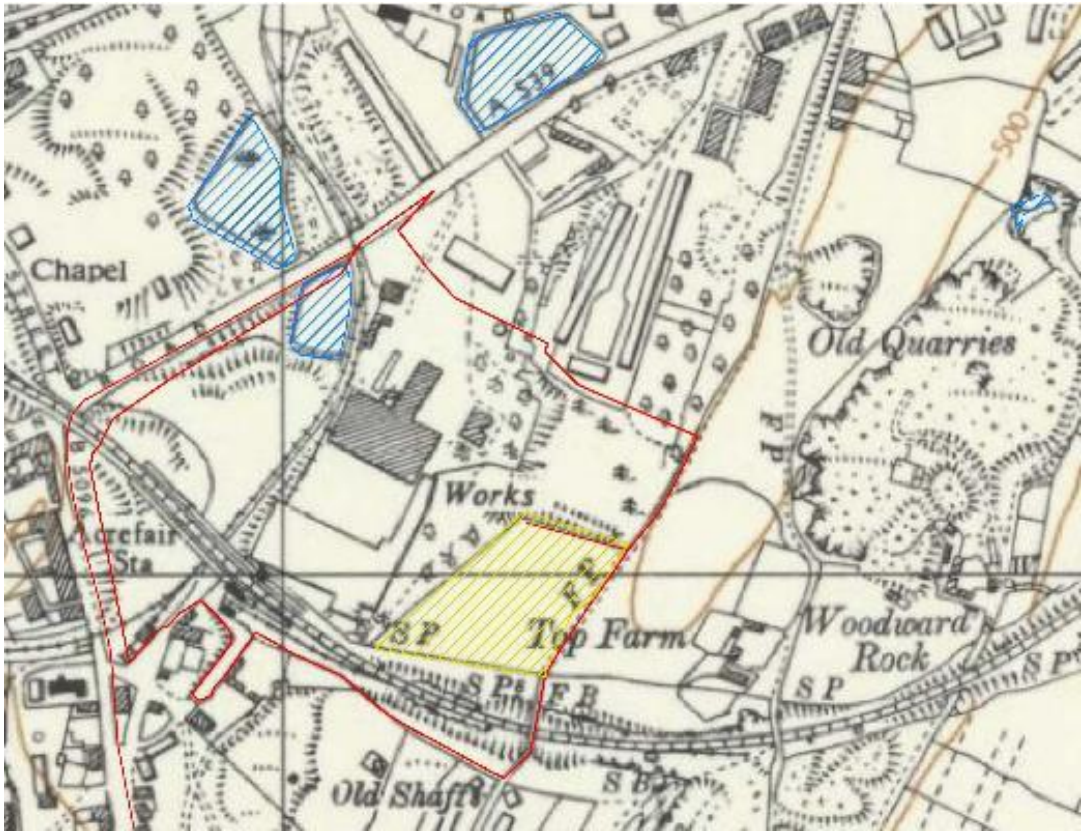


Figure 5 – OS mapping circa 1963, showing location of water bodies, undeveloped area, and site boundary.



Figure 6 – OS mapping circa 1985, showing, undeveloped area, and site boundary.

6.0 RESULTS

At the time of survey climatic conditions were dry and clear, with minimal breeze. Average temperature was 11 °C.

9.1 *GREAT CRESTED NEWT:*

There was a single eDNA record within a waterbody to the rear of Hampden Arms approximately 330 m to the northeast of the site. The historic mapping shows extensive water bodies within the site and adjacent to the site until circa 1963. Following the decommissioning and levelling of the site, materials were placed at the entrance to the old railway cutting and a boundary wall has been formed underneath the pedestrian high level footpath bridge. This area floods seasonally forming a linear water body. It has been noted on previous surveys that this area was dry, however during this seasons surveys this water body was present at an approximate depth of 1.5 m.

A follow up eDNA sampling was undertaken on the 18 April 2024 on the area of flooding on the railway cutting and forwarded to ADAS for analysis, the results of the test where negative for the protected species Great Crested Newt.

The latest guidance states the terrestrial range for this species is 1.6 km. No other water bodies with connectivity are recorded within this range.

9.2 REPTILES

The data search did not produce any records for this site or adjacent sites. Marches ecology survey in 2021 note a single record for Slow Worm. This was followed up by an extensive tray and tile survey undertaken by Arbtech in 2022of which no reptiles were present. The majority of the site is open with little vegetation for cover in the main proposed development area. The perimeter areas offer greater potential primarily along the southwestern boundary. The immediate adjacent habitats/gardens offer greater refugia for reptiles and it was within the old access track to the station where the slow worm record was recorded.

The tiles and trays were not removed from site and still remain in situ. Whilst undertaking the updated ecology surveys in April and November of 2024, these tiles and trays were rechecked and no reptiles were recorded.

9.3 *BADGER:*

[redacted]

[redacted]

9.4 *BATS:*

No recent records are available for the site, the general area does support numerous species locally, as would be expected. The majority of the site is open and devoid of trees/shrubs etc, reducing the potential for foraging cover for the smaller species of bats. The woodland perimeters and woodland blocks offer greater cover and potential for foraging bats. The seasonally retained water body within the former railway culvert has a higher potential for foraging by giving cover to the area with the tree lined embankments.

The majority of the tree stock is classed as immature, self-seeded stock consisting of Ash (*Fraxinus excelsior*), Sycamore (*Acer pseudoplatanus*), Elder (*Sambucus nigra*), Birch (*Betula spp.*), Oaks (*Quercus spp*,), and Willow (*Salix spp*.). The large woodland block records some semi-mature softwoods.

The site is devoid of structures other than the section of stone retaining wall. The wall does record voids between the coursing which were clean and open. The wall that faces northeast offers single species use and overwintering due to the lack of direct sunlight. This provides a stable structure suitable for hibernating, none breeding bats where exposure to solar gain is a critical factor.

9.5 *HEDGEHOG:*

The data search recorded this species in the proximity of the site. The nearest record was just outside of the boundary at the junction of Llangollen Road and King Street. It is assumed that this record was from a road kill due to its location. The boundaries directly onto King Street and the lower sections of Llangollen Road are formed by embankments and retaining walls. These structures exclude small mammals which do not have the ability to climb. The remaining boundaries are open and offer good connectivity to the wider habitats.

The immediate open development area offers little refugia for this species with the greater potential being to the rear of the gardens on the southwestern boundary.

9.6 *FOX:*

A single active earth has been recorded on the southwestern embankment abutting Kings Street within the woodland area to the southwest of the survey area.

9.7 BIRDS

The NBN data sets records 87 bird species within 1 km of the survey area. Of the species recorded the habitats within the site offer potential nesting sites for 25 species. The main proposed development zone which was the former factory footprint offers a reduced potential for nesting birds due to this area generally being devoid of suitable nesting habitats. The areas with greater nest potential are the scrub pockets and gorse blocks located on the perimeters of the site, and areas of transitional ruderal herb scrub towards the woodland blocks. The walk over survey recorded Song Thrush (*Turdus philomelos*), Wren (*Troglodytes troglodytes*), Dunnock (*Prunella modularis*), Blackbird (*Turdus merula*), Great Tit (*Parus major*) Blue Tit (*Cyanistes caeruleus*),

Meadow Pipit (*Anthus pratensis*), Gull (*Larinae spp*.), Snipe (*Gallinago gallinago*), Woodpigeon (*Columba palumbus*), Crow (*Corvus corone*), Magpie (*Pica pica*) and Robin (*Erithacus rubecula*).

As previously noted for bats, the site is devoid of structure other than the stone retaining wall. The wall recorded historic nest material in some of the voids and also offers potential for crevice nesting birds such as wren, wagtail, redpoll etc. The wall is orientated towards the northeast resulting in no solar gain, a beneficial factor for structures with potential nest sites.

9.8 *INVERTEBRATES*

The site currently has habitat which could conform to open mosaic on previously development land. This classification of habitat is important for invertebrate species. During the previous Marches 2021 survey they recorded Essex skipper (*Thymelicus lineola*) and small skipper (*Thymelicus sylvestris*), common blue (*Polyommatus icarus*) and small copper (*Lycaena phlaeas*) and six-spot burnet (*Zygaena filipendulae*). The site also provides suitable habitat for dingy skipper (*Erynnis tages*).

It has also been noted as per comms from Wrexham County Council Ecologist that both dingy skipper and grizzled skipper (*Pyrgus malvae*) have been recorded using the site.

9.9 HABITATS

The walk over survey recorded little variation in habitat from the habitats identified in Arbtech 2022/2023 surveys and Marches Ecology 2021 surveys. However, we disagree on the classification of the raised bank area located between the southwestern boundary of the woodland block and the northeastern boundary of the former railway cutting. The Marches Ecology report classified the majority of the site including this area as Ephemeral/ unimproved neutral grassland/tall ruderal/scattered scrub mosaic. It can clearly be seen form the historic mapping for the site that this area has never been developed and is shown as open grassland. The walk over survey does record that this area has received a topsoil strip during the remediation works. The southeastern boundary records stock piled soils which are assumed to be the former top soils from this area.

The previous surveys record a variation in plant diversity for this area as ‘some particularly rich areas of unimproved grassland’.

The classification of habitats and species recorded during the walk over survey are mapped on the habitat plan Figure 2.

Habitats recorded on site were:

- Unimproved neutral grassland;
- Semi-natural broad-leaved woodland;
- Dense/continuous scrub;
- Scattered scrub;
- Tall ruderal;
- Built up infrastructure;
- Bare Ground;
- Semi-improved grassland;
- Ephemeral short perennial;
- Spoil; and,

- Standing Water.



Figure 2 – Habitat Plan

7.0 RECOMMENDATIONS

10.1 GREAT CRESTED NEWT:

This species is not recorded within 1 km of the site, it is therefore considered that the proposed construction of residential buildings will have no impact on this species at a local or national level.

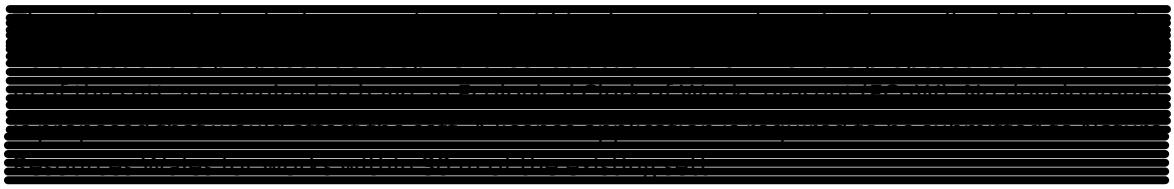
10.2 REPTILES:

A previous record a slow worm in 2021 was identified on the site.

The data search, the target 2022 reptile survey and the 2024 walk over surveys did not identify any presence of reptiles within the site boundary.

It is recommended that an updated reptile surveys is undertaken prior to construction. Reptile surveys are to be undertaken between April – September, with a preference to April-May and September months.

10.3 BADGER:



10.4 BATS:

It is recommended that Bat Activity surveys are carried out across the site. These should be undertaken between April and September.

At the time of the survey the potential for over wintering and single seasonal occupancy for individual bats is noted within the retained stone wall. It is therefore recommended that further assessment during the appropriate survey time restrictions are conducted to determine presence of species use.

10.6 INVERTEBRATES

Butterfly surveys for skipper species are recommended to be carried out between Mid-May and Mid-July.

Within the Proposed Development an area of the site of approx. 0.5 Ha will be created specifically for wildlife adjacent to the wildlife pond. This area will be manged to maintain the open mosaic land with the aim of providing habitat for invertebrate species.

10.7 BIRDS

Generally the guidance given within the UK with regards to the nesting season is set from March 1st to 31st July each year. Due to climatic changes this advice is considered to be out of date. Nesting birds are now recorded as early as January through to late September and in some cases outside of this period. Owls, Doves, Pigeon, regularly nest outside of this period. Brood numbers

have also seen an increase, such as in the case of Swallow and Sparrow where 4 broods per year is now common.

As a general rule, any tree, shrub or plant that retains leaves (evergreen) offers cover for nest sites and should be removed with care. A large percentage of British birds are ground nesting and choose to nest within bramble, nettle, tall ruderal plants etc. these areas provide important nest sites and should also be cleared with care.

10.7 HABITATS

The proposed works should have a limited impact on the habitats adjacent (self-seeded woodland blocks) to the buildings that are to be developed. All habitat under the Proposed Development are to be lost which include, unimproved grassland, tall ruderal, spoil, bare ground, built infrastructure, scrub, and a seasonal waterbody. The high value habitats unimproved grassland, scrub, standing water and open mosaic for invertebrates (spoil, tall ruderal and bare ground) are to be negated with the creation of new habitats. Theses include a seasonal water pond, a wildlife pond, swale, species rich hedgerows, standing trees, wildlife meadow, targeted invertebrates planting across the Proposed Development.

Due to the nature of the works, the medium to long term impacts is considered to be negligible.

8.0 CONCLUSION

No major impacts on protected species, biodiversity or habitats have been identified at this stage of the assessment process. It is recommended that some elements of further survey are undertaken. Generally, it is therefore the surveyor's opinion that the proposed development proposals are considered likely to have no long-term impact on the favourable conservation status of locally recorded protected species, or their ecological functionality if the works are carried out in accordance with good mitigation and management going forward.

Tobias Hodnett

edc

December 2024

APPENDICES

Site Photographs

Photo 1 – Looking southwest



Photo 2 – Retaining stone wall



Photo 3 – Looking northwest from the southern boundary



Photo 4 – Wetland ditch situated to the south of the site boundary



Photo 5 – Looking south from the northern boundary



Photo 6 – Looking east from the western boundary



Photo 7 – Looking west from the eastern boundary

