



PROPOSED DEVELOPMENT:

**LAND TO THE REAR OF 18-22 BRYNGOLEU, ABERFAN,
MERTHYR TYDFIL**

ECOLOGICAL ASSESSMENT

2023

ISSUE 1VA

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Land to the rear of 18-22 Bryngoleu, Aberfan, Merthyr Tydfil

Ecological Assessment

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NON-TECHNICAL SUMMARY

An ecological assessment was undertaken of land to the rear of 18-22 Bryngoleu, Aberfan, Merthyr Tydfil.

The work involved a phase 1 habitat survey to categorise the habitats present, an assessment of the site's ability to provide suitable habitats for protected species and recommendations for further survey and actions if considered necessary.

The habitats on and adjacent to the site comprise of semi-improved grassland, broad-leaved woodland and scrub.

The development is minor has been designed to have very little impact on the land and to avoid impacts on habitats and protected species. It is considered unlikely that the site will have an impact on ecology. The site already has an ongoing management plan for ecological benefit.

Mitigation and enhancement will be required and is outlined within the various habitat and species sections contained herein.

1 INTRODUCTION

1.1 OBJECTIVE

The objectives of this report are to:

- identify the habitats present on the site;
- identify the potential for protected species to be present on site;
- using the information gathered to determine whether there may be any impacts (both positive and negative) on protected species present;
- provide recommendations for further survey as necessary; and
- suggest outline mitigation and enhancement ideas and principles

1.2 METHODOLOGY

To achieve the objectives set out above, the following actions were taken:

- Field based assessments in respect of
 1. Habitats;
 2. Protected species, primarily:
 - i. Bats;
 - ii. Dormice;
 - iii. Otters;
 - iv. Amphibians (particularly great crested newt);
 - v. Badgers
 - vi. Reptiles; and
 - vii. Breeding birds

The impact assessment has been undertaken by ecological feature rather than by section i.e. each subject is discussed and assessed separately and summarised in conjunction with the others.

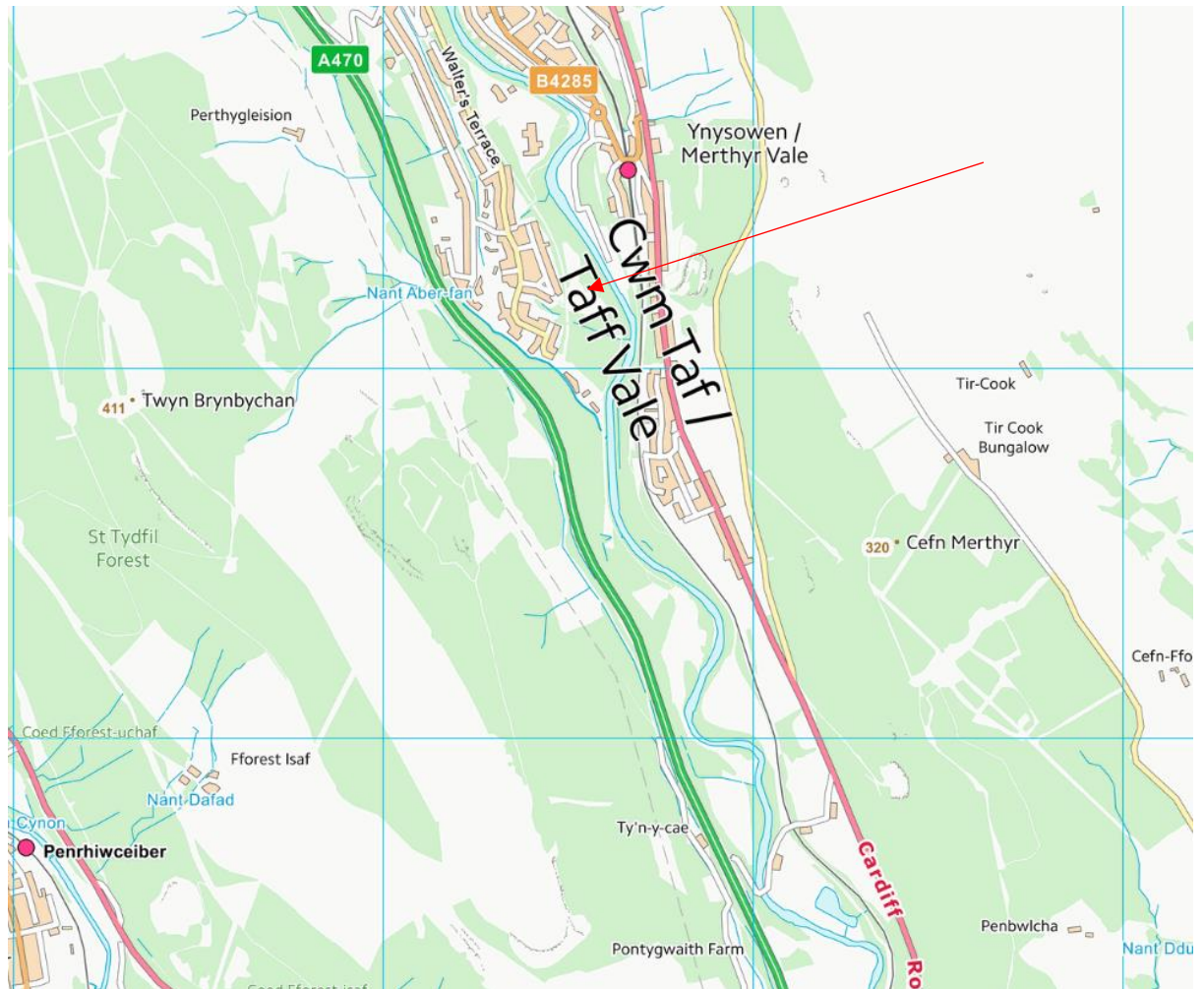
1.3 SITE DESCRIPTION

The red line development site boundary is located on land to the rear of 18-22 Bryngoleu, Aberfan, Merthyr Tydfil, informally known as "Patsy's Field"

The site comprises of an area of semi-improved grassland surrounded by broad-leaved woodland and scrub. There are no buildings present on the site currently.

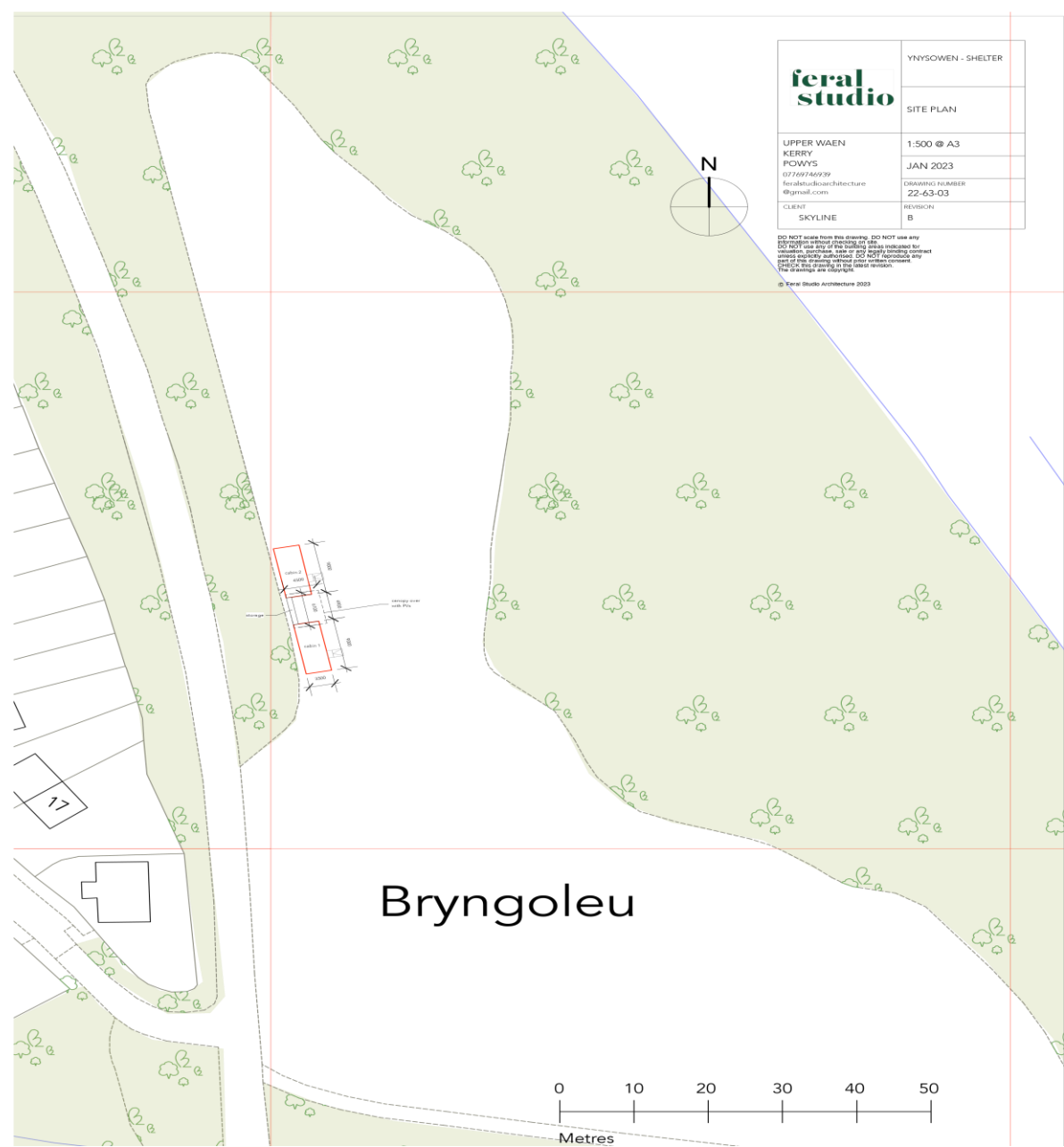
The Afon Taff Sinc lies immediately to the east of the site with a footpath to the west. There is good connectivity to the wider landscape that comprises of the river corridor and broad-leaved woodland.

Figure 1 – Location of site (arrowed red)



1.4 PROPOSED DEVELOPMENT

The proposed plans are for the erection of two wood cabins with an interconnecting canopy to serve as sheltered education and wellbeing spaces for the local community at land to the rear of 18- 22 Bryngoleu Aberfan Merthyr Tydfil. The cabins will be used as an outdoor classroom and wellbeing space for the local community. There will be electric present within the buildings with lights present on the interior. However, no external lighting is proposed. Internal lights will only be used during daylight hours. The cabins will be sited on screw pile foundations to minimise disturbance to habitats.



1.5 STUDY AREA

The field survey looked at the red line development area itself and up to 20m from the site boundaries wherever possible.

2 REGULATORY FRAMEWORK

2.1 INTERNATIONAL

European Union legislation requires that member states designate sites for the protection of habitats and species included in the annexes of both Council Directive 92/43/EC on the Conservation of Natural Habitats and of Wild Flora and Fauna (the Habitats Directive) and Council Directive 79/409/EEC on the Conservation of Wild Birds (the Birds Directive). This legislation is implemented in the UK by the Conservation of Habitats and Species Regulations 2017 (as amended) (“the Habitat Regulations”). This results in sites being designated as Special Areas of Conservation (SACs) and Special Protection Areas respectively (SPAs).

2.2 NATIONAL (UK)

The Wildlife and Countryside Act 1981 (as amended) allows sites to be designated as Sites of Special Scientific Interest (SSSI) for one or all of the following categories:

- Flora;
- Fauna;
- Habitat; and
- Geological importance.

European designated sites are automatically designated as SSSIs prior to their designation.

Other relevant legislation includes:

- The Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 (as amended);
- The Wildlife and Countryside Act 1981 (as amended);
- Countryside and Rights of Way Act 2000;
- Environment (Wales) Act 2016
- Wild Mammals (Protection) Act 1996;
- The Protection of Badgers Act 1992; and
- The Hedgerow Regulations 1997.

Section 40 of the Natural Environment and Rural Communities Act 2006 (as amended) requires all public bodies to have regard wherever possible to conserving biodiversity. Section 42 of the Act requires that a list of habitats and species of Principle Importance for the Conservation of Biological Diversity in Wales be produced; however, this has been replaced by Section 7 of the Environment (Wales) Act 2016 Priority Habitats and Species lists.

The Environment (Wales) Act 2016 requires that all public authorities, when carrying out their functions in Wales, seek to “maintain and enhance biodiversity” where it is within the proper exercise of their functions. In doing so, public authorities must also seek to “promote the resilience of ecosystems”.

This ensures that biodiversity is an integral part of the decisions that public authorities take in relation to Wales. It also links biodiversity with the long-term health and functioning of our ecosystems, therefore helping to align the biodiversity duty with the framework for sustainable natural resource management provided in the Act.

In Wales, this legislation replaces and enhances the Natural Environment and Rural Communities Act (2006) which sought to raise the profile of biodiversity and to make sure that it is considered in all local authority decisions by ensuring that “Every public authority must, in exercising its functions, have

regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity.”.

Other elements of NERC 2006 may still apply.

Biodiversity Action Plans (BAPs) are tools which are used to monitor, manage and enhance those habitats and species which are of significance to an area or organisation, The United Kingdom BAP lists a number of priority habitats and species which are of conservation concern.

2.3 NATIONAL (WALES)

Planning Policy Wales (Welsh Government, 2016) and Planning Policy Wales Technical Advice Note 5: Nature Conservation and Planning (Welsh Assembly Government, September 2009) set out the protection given to wildlife (sites, habitats and species) by the planning system operational in Wales.

2.4 LOCAL AND REGIONAL

The proposed development is wholly within the Merthyr Tydfil County Borough Council (MTCBC) area of responsibility. Therefore, all policies adopted by that Planning Authority will apply, including policies which may not be specific to nature conservation or the natural environment but that may apply or be relevant and should be considered during the planning process.

There are a number of habitats and species which are of a high priority to MTCBC. These have been determined following examination of the UK BAP and the Environment (Wales) Act Section 7 list of Priority Species and Habitats and those habitats and species determined to be locally important by the Local Biodiversity Partnership.

2.5 PLANNING FRAMEWORK

The proposed development will be undertaken wholly under the auspices of the Town and Country Planning Act 1990 (as amended).

2.6 PREVIOUS SURVEYS

There are no known previous surveys of this site.

2.7 CONSTRAINTS

The survey was undertaken at a time of year outside of the main season and as such, the full botanical diversity may not have been apparent.

3 PHASE 1 HABITAT SURVEY

3.1 SUMMARY

A number of habitats were recorded across and adjacent to the survey area. These included:

- Semi-Improved grassland
- Scrub/ruderal
- Broad-leaved woodland

The potential for a number of protected species was recorded, including habitats suitable for:

- Bats;
- Badgers;
- Breeding birds;
- Reptiles;
- Invertebrates;

The habitats are shown on **the phase 1 map located in the appendix.**

3.2 BACKGROUND

The Phase 1 habitat survey was carried out to assess the existing habitats, identify any protected habitats or species that may be present, determine the impact of the proposed works on them, and identify any mitigation measures that may be necessary.

The survey was undertaken in June 2023

Phase 1 habitat survey is a way of recording the basic habitat data to form a baseline level of knowledge of the ecology of a site and provide recommendations for future surveys if considered necessary.

3.3 METHODOLOGY

3.3.1 Field survey:

Experienced surveyors from BE Ecological Ltd carried out a habitat assessment and mapping exercise in June 2023 using the Phase 1 habitat survey technique. Nomenclature follows Stace (1997)¹. The survey was carried out by Beth Evans.

Features of note are assigned Target Notes (TN) and referenced accordingly and described at **Appendix E.**

A full species list is at **Appendix C.**

¹ Stace, C (1997). *New Flora of the British Isles* (2nd Ed.). Cambridge University Press

3.4 CONSTRAINTS

There were no constraints.

3.5 RESULTS

3.5.1 Habitats

The following habitats were found on the site and are mapped at Appendix C.

- Semi-Improved grassland
- Scrub/ruderal
- Broad-leaved woodland

Photos are located at **Appendix A**

3.5.1.1 *Semi-Improved grassland*

This habitat is found across the main body/middle of the site. The grassland is species poor and has a short sward. There are bare patches throughout it. Due to the low species diversity and short sward this habitat is of lower ecological value in its current form. None of this habitat will be removed as a result of the proposed development. There are no clearance works proposed and the only disturbance to the grassland is as a result of a number of screw pile foundations that the cabin will be sited upon.

Broad-leaved woodland

This habitat is of high ecological value and is found all along the boundaries of the site. This habitat will be retained in its entirety. There is no external lighting proposed and the cabin will not be used outside of daylight hours, therefore impacts on this habitat are extremely unlikely.

3.5.1.2 *Scrub*

This habitat is found on the interfaces of the site between the woodland and the grassland. This habitat is a high quality habitat due to its potential for protected species to reside within it.

As all of this habitat will remain, impacts as a result of the proposed development are considered very unlikely.

3.5.2 Protected species assessment

3.5.2.1 Bats

There are no structures on the site suitable for bat roosting. It is likely that bats will roost, commute and forage within and along the wooded boundaries of the site.

The woodland will be retained in its entirety. The only possible impact on roosting bats would be as a result of increased site lighting. However, it has been confirmed that there will be no external lighting and the cabin will be used in daylight hours only. Therefore, any light spill from the interior windows will not affect nocturnal species. As a result of this, there will be no impacts on roosting and foraging bats and therefore, this group will not be mentioned further in this report.

3.5.2.2 Amphibians & great crested newt

There are no waterbodies on the development site which could be used by this group for breeding purposes. The terrestrial habitat on the site could provide amphibians with suitable foraging and sheltering habitat, however, the sward of the grassland the cabin is to be erected on is extremely short. In addition to this, the cabin will be erected on screw pile foundations with the only ground disturbed being that where a number of screw footings are installed, one at each corner of the log cabin.

It is considered that amphibians are unlikely to pose an ecological constraint to the development and as such, will not be mentioned further in this report.

3.5.2.3 Dormouse

Despite there being suitable habitat for this species within scrub and woodland, none of this habitat is to be affected by the proposed development. As mentioned above, the only possible impact on dormice would be as a result of increased site lighting. However, it has been confirmed that there will be no external lighting and the cabin will be used in daylight hours only. Therefore, any light spill from the interior windows will not affect nocturnal species. As a result of this, there will be no impacts on dormice, this group will not be mentioned further in this report.

3.5.2.4 Badgers

The closest record of badger is from approximately 1500m from the site.

There is suitable habitat for foraging but due to the location, openness and nature of the site, the grassland is unlikely to be suitable for sett excavation due to disturbance as a result of the public and dogs. It is possible that badger will use the surrounding area the cabin is to be sited, however, this area will not be impacted. There was no sign of badger throughout the survey.

This species will not be mentioned further in this report.

3.5.2.5 Breeding birds

Birds heard and seen on and adjacent to the site include wood pigeon, chaff finch, robin and carrion crow. There is suitable habitat in the on-site scrub and the wooded boundary for nesting birds.

The habitats on the site are not considered to be suitable for ground nesting birds given the small overlooked nature of the site, the high levels of disturbance on the site (people and dogs), the availability of avian predator perches, the short sward of the grassland and the presence of predators.

All suitable breeding bird habitat will be retained in its entirety and will therefore not be mentioned further in this report.

3.5.2.6 Reptiles

The site offers some habitat for this species for foraging, basking, sheltering and hibernation purposes and it should be assumed that slow worm (*Anguis fragilis*), common lizard (*Lacerta vivipara*) and grass snake (*Natrix natrix*) use the site. It is likely that the population densities of these species are at perhaps lower levels given the amount of disturbance at the site (people and dog walkers) and due to the fact that the grass sward is so short. It is likely that small numbers of reptiles may be present on the interfaces between grassland habitat and longer vegetation.

The sward of the grassland the cabin is to be erected on is extremely short. In addition to this, the cabin will be erected on screw pile foundations with the only ground disturbed being that where a number of screw footings are installed, one at each corner of the log cabin.

As a result of the above, any impacts on reptiles are extremely unlikely and this group will not be mentioned further in this report.

3.5.2.7 Invertebrates

It is likely that common and widespread invertebrates will utilise the site.. It is possible that some Section 7 species will use the site. There is no removal of vegetation due to the cabin being erected on screw pile foundations. The cabin is very unlikely to impact invertebrate species. This group will not be mentioned further in this report.

3.5.2.8 Otter

Otter may use the site due to its close proximity to the River Taff. This is likely to be for commuting and foraging only. It is possible that otter will create holts or lie up within vegetation within the woodland close to the river, however, all suitable habitats will remain unaffected by the development. It is unlikely that otter will make use of the grassland due to it being highly disturbed by dog walkers.

There will be no external lighting as part of the proposals and there will be no light spill from windows as it has been confirmed that the cabin will not be used outside of daylight hours.

As such, this species will not be mentioned further in this report.

3.5.3 Other features

None.

4 CONCLUSION AND RECOMMENDATIONS

Overall the site is of a moderate ecological value at a local level due to the habitats present, and the species that may reside on the site. The area to be affected is of low ecological value. The building has been designed so that it does not impact important habitats and protected species.

It is recommended that the mitigation measures, outlined in the various sections above are incorporated as far as is possible into the design process for this development. and construction methodologies.

Habitat piles created from deadwood as a result of management will be used to create a number of habitat piles throughout the site, along with arisings from grass cuttings during management.

A wildflower meadow will be created within the wider site boundary.

The wildflower area will be seeded with Emorsgate EM2.

Preparation of ground

A seed bed will be created by first removing any weeds via manual cultivation. The bed will be dug to bury any surface vegetation, the area will then be raked and compacted to form a firm surface.

Sowing

The seeds will be sown either in autumn or spring. The seeds will be sown by hand at a rate of 4g/m². The seed will be sown on the surface and firmed down but not covered.

Year 1 management

Weeds will not be removed until mid to late summer, in order to provide shelter for seedlings. In late summer (early august), the weeds will be cut, removed and placed in compost piles around the wider site. Perennial weeds such as dock will be dug out by hand. The young meadow will then be strimmed short (50mm) through to the end of March the next year.

Management once established (years 2-5)

The grass cutting regime would be designed to allow wildflowers to seed the area for the following season. The wildflower strip will be cut twice per year for at least five years using hand tools once in March/April and again no earlier than 15th July in order to mimic hay meadow management. The cut following the 15th July will reduce the height of the meadow to approximately 50mm, arisings will be left in place on site to dry and seed for at least 3 days but no more than 7 before being removed from the area. Re-growth will be strimmed back to 50mm through to late autumn/winter and again in spring if required.

The following sparrow terrace or similar will be integrated into the log cabin on the western elevation
<https://www.nhbs.com/vivara-pro-woodstone-house-sparrow-nest-box>

The following bat box will be mounted on the western elevation
<https://www.nhbs.com/beaumaris-woodstone-bat-box>

There will be no lighting of retained habitats, there is no external lighting proposed for the site. Lighting will be inside the cabins only. There are no windows facing important bat features. In addition to the above, it has been confirmed that there will be no evening/night time use of the cabin. As a result impacts as a result of lighting are extremely unlikely.

5 REFERENCES

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APPENDIX A - PHOTOS

PHASE 1 HABITAT SURVEY PHOTOS

Plate 1- view of site



Plate 2- view of scrub/tall ruderal on western boundary



Plate 3- site looking north



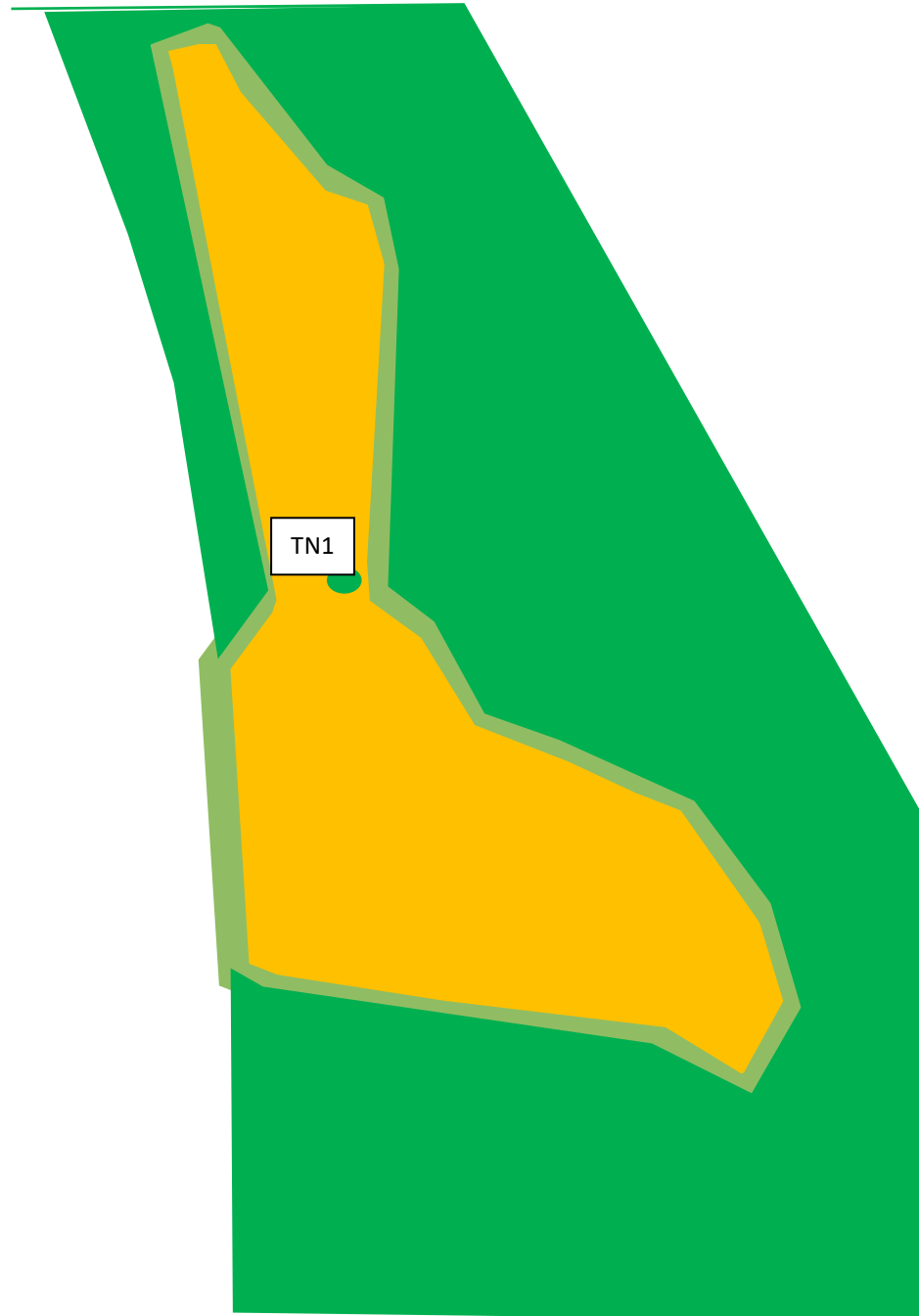
Site 4-south of site



APPENDIX B— SPECIES LIST

Oak, alder, hazel, birch, hawthorn, blackthorn, wild garlic, dryopterid ferns, bramble, willow, creeping buttercup, Yorkshire fog, crested dogtail, cocksfoot, perennial ryegrass, meadow sweet, black meddick, rosebay willowherb, daisy, soft rush, hard rush and bracken, creeping thistle, dandelion, self heal

PHASE 1 MAP



KEY

1= Target notes (appendix d)



Broad -leaved woodland



Semi- Improved grassland



Scrub/tall ruderal



Bare ground



Scattered tree

APPENDIX D– Target Notes

- 1- Fire pit close to willow stand