



**Ecological Consultants
Environmental and Rural Chartered Surveyors**

Preliminary Ecological Appraisal

**Land South of Wythenshawe Town Football Club,
Manchester, M23 9LL**



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ACCURACY OF REPORT

This report has been compiled based on the methodology as detailed and the professional experience of the surveyor. Whilst the report reflects the situation found as accurately as possible, all of the protected species this survey covers are wild and can move freely from site to site. Their presence or absence detailed in this report does not entirely preclude the possibility of a different past, current or future use of the site surveyed.

We would ask all clients acting upon the contents of this report to show due diligence when undertaking work on their site and/or in their interaction with protected species. If protected species are found during a work programme, and continuing the work programme could result in their disturbance, injury or death, either directly or indirectly an offence may be committed.

If in doubt, stop work and seek further professional advice.

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1. SUMMARY

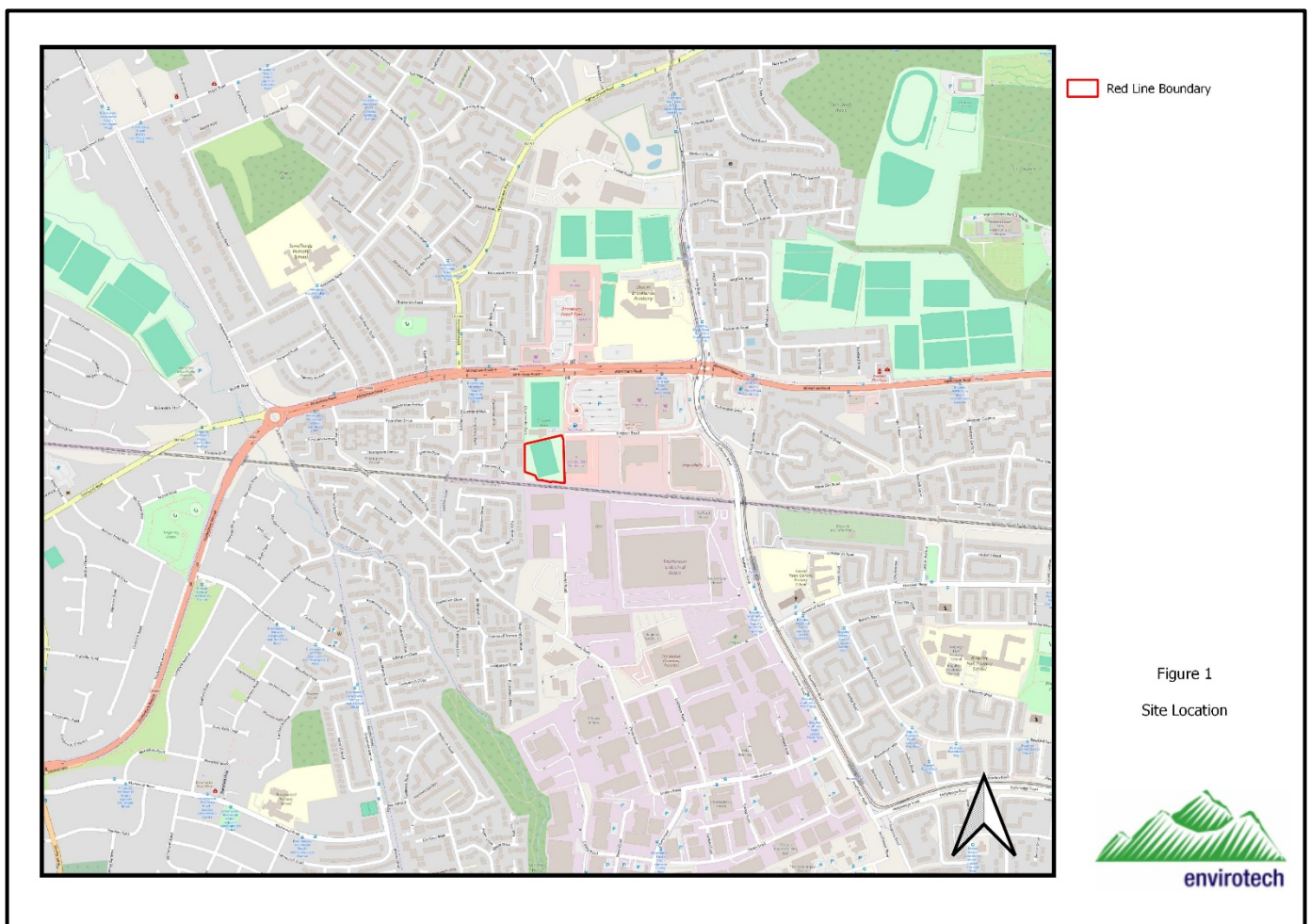
- 1.1.1 Envirotech NW Ltd were commissioned in February 2024 to carry out a Preliminary Ecological Appraisal of Land South of Wythenshawe Town Football Club, Manchester. It is proposed new sporting facilities and car parking is constructed on site.
- 1.1.2 A data search and desk study of the site and an area within 2km of the site were undertaken to establish the presence of protected species and notable habitats.
- 1.1.3 The site was then visited by a licenced ecologist from Envirotech NW Ltd on 14th March 2024. A full botanical survey of the site was initially undertaken and this was followed by surveys to establish the presence or absence of notable species at the site or in proximity such that they may be affected by the proposed development.
- 1.1.4 The plant species assemblages recorded at the site are all common in the local area and are considered to be of low ecological value, consisting of principally hardstanding and a managed pitch of grassland. Sympathetically landscaped open space is considered to offer habitat of similar ecological value.
- 1.1.5 Bounding the south of the site is a belt of trees comprising Sycamore, Downy Birch and Silver Birch. This habitat is likely self-seeded, given its urban location, proximity to a railway line and the dominance of non-native Sycamore. This does not constitute a HPI, although trees are of an evident wildlife value at the 'site level'.
- 1.1.6 A poor-quality building utilised as a pigeon coop is located in the south-east corner of the site. It is proposed this building is demolished. An assessment of the building's potential for use by roosting bats concluded that the reasonable probable absence of bats could be determined from the level of survey undertaken. We do not consider there to be a need for additional emergence activity surveys at this time.
- 1.1.7 Whilst bats, nesting birds and small mammals (such as hedgehog) are known to occur within the local area, there was no conclusive evidence of any specifically protected species regularly occurring on the site or the surrounding areas which would be negatively affected by site development following the mitigation proposed.
- 1.1.8 Whilst habitats on site are of a predominantly low ecological value, development of the site will lead to the substitution of green space for buildings and hardstanding. We would advise the site is managed sympathetically via retention of boundary woodland, enhancement of grass verges and planting of high-quality urban trees.

2. INTRODUCTION

2.1 Background

2.1.1 In February 2024 Envirotech NW Ltd were commissioned to carry out a Preliminary Ecological Appraisal of Land South of Wythenshawe Town Football Club, Manchester, central grid reference SJ 80154 89193 (Figure 1). A site investigation was undertaken and a report compiled which includes recommendations for any future actions and or mitigation required.

2.1.2 The survey was requested in connection with the proposed construction of new sporting facilities and car parking. Sporting facilities are likely to comprise a new five a side football pitch, in addition to paddle board and pickleball courts.



2.2 Objectives

2.2.1 The main objectives of the study were:

- The completion of a UKHabs Version 2 (UKHab Ltd (2023)) survey including the preparation of a vegetation and habitat map of the site and the immediate surrounding area.
- The survey and assessment of all habitats for statutorily protected species.
- An evaluation of the ecological significance of the site.
- The identification of any potential development constraints and the specification of the scope of mitigation and enhancement required in accordance with wildlife legislation, planning policy and other relevant guidance, and;
- The identification of any further surveys or precautionary assessments that may be required prior to the commencement of any development activities.

3. METHODOLOGY AND SOURCES OF INFORMATION

3.1 *Data Search*

- 3.1.1 A 1km data search of Greater Manchester Ecology Unit (GMEU) records, the Envirotech dataset, and the Multi-Agency Geographic Information for the Countryside (MAGIC) were searched to establish the presence of any records of statutorily protected, notable or rare species, and any designated sites of international, national, regional or local importance within a 2km radius of the site boundary.
- 3.1.2 The Envirotech dataset is compiled from extensive field surveys from the period 2004-present, as well as records obtained from third parties during this time.
- 3.1.3 Google Earth and Google Street View were consulted to establish the presence of any features of ecological importance within the local area.

3.2 *Vegetation and Habitats*

- 3.2.1 A vegetation and habitat map was produced for the site and the immediate surrounding area. The mapping is based on the UKHabs V2 survey and reporting methodology.
- 3.2.2 Searches were made for uncommon, rare and statutorily protected plant species, those species listed as protected in the Wildlife and Countryside Act (1981) and indicators of important and uncommon plant communities. All plant nomenclature follows Stace (2019).
- 3.2.3 Searches were carried out for the presence of invasive species, including those listed on Schedule 9 of the Wildlife and Countryside Act (1981), namely Japanese knotweed (*Fallopia japonica*), Himalayan balsam (*Impatiens glandulifera*) and giant hogweed (*Heracleum mantegazzianum*) on terrestrial habitat and aquatic species such as floating pennywort (*Hydrocotyle ranunculoides*), water hyacinth (*Eichhornia crassipes*) and New Zealand pygmyweed (*Crassula helmsii*).
- 3.2.4 The survey was also informed by questioning the landowner/site agent to ascertain the recent history of the site.
- 3.2.5 Habitats of Principal Importance (HPI) were cross referenced with Natural England's inventory against the site boundary and where found ground truthed.

3.3 *Timing and Personnel*

3.3.1 During the visit, weather conditions were suitable for the survey types undertaken, being conducted in early Spring.

3.3.2 The site and surrounding land were visited on 14th March 2024 by: -

- (BF) Mr Bradley Foster MEnv (Hons)
Natural England Bat Class Licence (Level 1 Agent)
Natural England Barn Owl Licence (Agent)
Natural England Great Crested Newt Licence (Level 1 Agent)

4. SPECIES SURVEY METHODOLOGY

4.1 *Amphibian*

- 4.1.1 Great crested newts (*Triturus cristatus*) are protected under Schedule 2 of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and Schedule 5 of the Wildlife & Countryside Act (1981).
- 4.1.2 Where relevant, water-bodies located within or adjacent to the study area were identified and where access was possible were assessed for their potential to support great crested newts.
- 4.1.3 The criteria used in the assessment are based on those contained in the Herpetofauna Workers Manual and Oldham et al, 2000, and in applying these criteria a precautionary approach was adopted. Following the criteria developed by Oldham et al (2000), the HSI tool developed for use with great crested newts and forming part of Natural England's Licensing process was used to determine the suitability of ponds for great crested newts.
- 4.1.4 Where possible, pond assessments were undertaken in order to determine which water-bodies, based on their potential to support great crested newts, should be subject to presence/absence surveys.
- 4.1.5 From a review of modern satellite imagery and OS maps, there are no ponds within a 250m radius of the site. The site is located in a principally urban area bound to the north by Altrincham Road. Industrial units and residential housing sit to the east and west respectively. Whilst the railway line to the south may provide potential ingress/egress points for more generalist amphibian species, the site was considered sufficiently low risk for use by GCN such that no further assessments were deemed necessary.

4.2 *Badger*

- 4.2.1 Badgers (*Meles meles*) and their setts are protected under the Protection of Badgers Act (1992). This legislation arises from animal welfare issues (rather than on the basis of nature conservation grounds) and protects badgers from being killed, injured or disturbed whilst occupying a sett.
- 4.2.2 A disturbance to badgers in their setts may occur as a result of construction operations. Natural England recommends that the use of heavy machinery in proximity of a sett entrance should be avoided, with a 'disturbance free-zone' being established.
- 4.2.3 The degree of disturbance attributed to construction activity is a function of the background level of activity badgers are accustomed to and that which will be attributed to a proposed activity. The "disturbance free zone" is therefore site specific.
- 4.2.4 The survey for badgers comprised an assessment of all suitable habitat within and outside the study area boundary (where this was possible) to a distance of 30m for indications of use by badgers.
- 4.2.5 Signs of badgers which were searched for included:
 - Setts - 'D' shaped entrances at least 25cms wide and wider than they are high with

large spoil mounds

- Discarded bedding at sett entrances (this includes grass and leaves)
- Scratching posts on shrubs and trees close to a sett entrance
- The presence of badger hairs which are coarse, up to 100mm long with a long black section and a white tip
- Dung pit latrines and footprints
- Habitual runs through vegetation and beneath fences
- Hedgehog carcasses

4.3 Bats

4.3.1 All British bat species are fully protected under Schedule 5 of the Wildlife and Countryside Act (1981), and are included on Schedule 2 of the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, as a Protected Species. Taken together, these pieces of legislation make it an offence to:

- Intentionally or recklessly kill, injure or capture bats;
- Deliberately or recklessly disturb bats (whether in a roost or not);
- Damage, destroy or obstruct access to bat roosts.

4.3.2 The Bat Conservation Trust Collins, J. (ed) (2023) issued guidelines on bat survey methodology, a key feature of their recommendation is for the undertaking of a pre-survey assessment – an initial desk-study and a walkover assessment of the survey area and its surrounding area to identify the relative value of the habitats present for bats and likely commuting routes. This is to be followed by a survey program that is appropriate to the likely level of bat activity within the survey area to be determined by and based on the experience of the surveyor.

4.3.3 The potential value of the survey area for foraging bats was assessed through consideration of two main factors: professional knowledge of bat ecology and foraging behaviour in combination with the geographical location, topography and habitats present within the survey area and surrounds.

4.3.4 Where relevant, all trees and structures on and within the survey area boundary were assessed for their potential to support roosting or hibernating bats. This comprised a close inspection of all trees and buildings on the site to allow an assessment of their potential to be used by bats to be made by a licensed surveyor.

4.3.5 Trees were all assessed in accordance with Collins, J. (ed) (2023) but categorised as 1* - 3 in accordance with Hundt (2012). Collins, J. (ed) (2023) does not provide roost classification criteria. The schedule of risk provided by Hundt (2012) is considered most appropriate in this case.

4.3.6 A small L-shaped building utilised as a pigeon coop is located in the very south-east of the site, which was checked for any recent or historic evidence of use by roosting bats.

Survey methods included a visual assessment of the building from the ground and ladders, using binoculars, a torch and endoscope by a licensed bat surveyor. Owing to the building being inaccessible at the time of the survey only an external inspection could be undertaken. This was not considered a significant constraint given the absence of any roof void and subsequent use of the building as a pigeon coop.

- 4.3.7 An assessment of the building's potential for use by roosting bats concluded that the reasonable probable absence of bats could be determined from the level of survey undertaken. We do not consider there to be a need for additional emergence activity surveys at this time.

4.4 *Birds*

- 4.4.1 All breeding birds, other than pest species, are protected under the Wildlife and Countryside Act of 1981 when building a nest, rearing young or sitting on eggs. Some bird species, such as barn owl (*Tyto alba*), are protected when near an active nest site. Several birds are listed as Species of Principal Importance (SPI).
- 4.4.2 Bird species and behaviour were noted during the field survey. All areas of the site were covered equally, in order to avoid the subjective survey of better quality 'bird habitat'. Where relevant, all birds displaying breeding behaviour were recorded.

4.5 *Invertebrates*

- 4.5.1 A general assessment was made of the study area's suitability for supporting invertebrates during the survey. The study area's lack of habitat diversity, species-poor composition and uniformity of vegetation structure (i.e., lack of variation in height and microtopography) resulted in our belief that a low diversity of invertebrates would be likely to occur across the site.
- 4.5.2 The extent of sampling was limited in that it could be confirmed that no SPI would be likely to be affected by the proposal.

4.6 *Reptiles*

- 4.6.1 All native reptiles are protected in Britain under the Wildlife and Countryside Act of 1981. It is an offence to intentionally kill, injure, sell or advertise to sell any of the six native species.
- 4.6.2 The survey for these species was based on assessing the habitat type and suitability of the site. This comprised an assessment of satellite imagery for the site and surrounding area as well as comparison of the results from the records searches with habitat types.

The general habitat at the site was evaluated in terms of its suitability to reptiles for foraging or breeding.

- 4.6.3 Habitat at the site was not considered sufficiently suitable for a full presence/absence survey to be warranted.

4.7 *Survey limitations*

- 4.7.1 The survey was undertaken in early spring. At this time of year plant species are less easily identified and the activity of some species is reduced.
- 4.7.2 However, due to the habitats present on site, there were no significant constraints in respect of identifying the botanical interest of the site.
- 4.7.3 The duration, extent and scope of the surveys were considered sufficient to plan appropriate mitigation and recommend additional precautionary survey work required prior to the commencement of work.
- 4.7.4 No significant survey limitations were encountered.

5. RESULTS

5.1 *Data Search*

- 5.1.1 GMEU and Envirotech hold no records of protected or notable species for the site. There are however records of protected or notable species within 2km (Figure 2). These are discussed in the relevant sections below.
- 5.1.2 The nearest non-statutory protected sites are small pockets of priority woodland, located within a 500m radius of the site. Black Carr Wood (ancient woodland) is also located 1.6km to the east (Figure 3).
- 5.1.3 The nearest statutory protected site is Wythenshawe Park Local Nature Reserve, located approximately 1km north-east of the site (Figure 4). This is isolated from the site by Altrincham Road and a mosaic of residential housing and open playing fields. Located within Wythenshawe Park Local nature Reserve is Nan Nook Wood; a Site of Biological Importance (SBI) (Figure 4b).





Figure 3

Mapped Habitats of
Principal Importance
and Non-statutory
Protected Sites

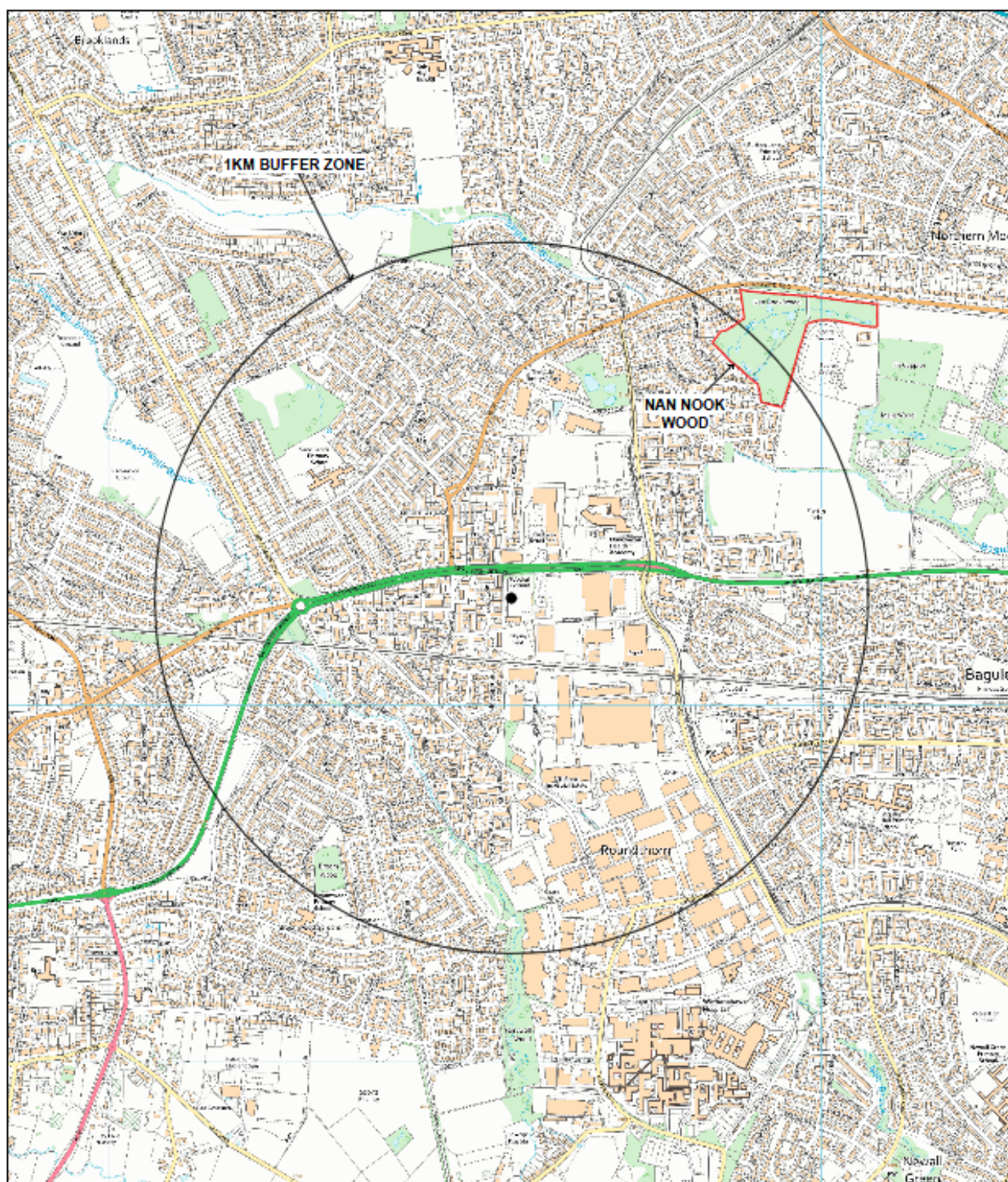




- 2km Search Radius
- Red Line Boundary
- Local Nature Reserves

Figure 4
Protected Sites
and Habitats





KEY
 SITE OF BIOLOGICAL IMPORTANCE
 SBI BOUNDARY

SCALE 1:10,000

GREATER MANCHESTER ECOLOGY UNIT
 ECOLOGICAL SEARCH - SJ 8013 8930
 WYTHENSHAW TOWN FC - MAP 1

THE MAP IS BASED UPON ORDNANCE SURVEY MATERIAL WITH
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Figure 4b- Nan Nook Wood SBI

6. UKHabs V2 SURVEY RESULTS

6.1 *Habitat Results*

6.1.1 The majority of the site comprises a managed football pitch fringed by hardstanding, unmanaged grassland, bramble scrub and a thin belt of deciduous woodland. The site is bound to the north by Wythenshawe Town Football Club, east by industrial units, south by railway line and west by a mixture of wooded garden-type habitat and residential housing.

6.1.2 See Figure 6 for the UK Habs V2 Plan and Table 1 for the descriptive Target Notes.

Target Note	Description	Comment
TN1	Hardstanding	In the north-east of the site is a rectangular wedge of hardstanding, currently used as a small area of car parking. Two portacabin-type containers are located by the boundary fence and are partially bound by ephemeral/short perennial vegetation. Species consist of Ribwort Plantain (<i>Plantago lanceolata</i>), Common Nipplewort (<i>Lapsana communis</i>), Dandelion (<i>Taraxacum officinale</i>), Groundsel (<i>Senecio vulgaris</i>), Mugwort (<i>Artemisia vulgaris</i>), Pineapple Mayweed (<i>Matricaria matricarioides</i>), Square-stalked Willowherb (<i>Epilobium tetragonum</i>), Ragwort (<i>Senecio jacobaea</i>), Hairy Bittercress (<i>Cardamine hirsuta</i>), London Rocket (<i>Sisymbrium irio</i>), Nettle (<i>Urtica dioica</i>) and Small flower Hawksbeard (<i>Crepis pulchra</i>). Vegetation cover in this area is small and fragmented (constituting an area of <5m ²) and has therefore been secondary coded.
TN2	Football Pitch	The majority of the site consists of a managed football pitch utilised by Wythenshawe Town FC. It's species composition is typical of a playing field environment, being dominated by rapidly growing grasses such as Perennial Ryegrass (<i>Lolium perenne</i>), Annual Meadow Grass (<i>Poa annua</i>) and Red Fescue (<i>Festuca rubra</i>). Herbaceous species scattered throughout the sward consist of Daisy (<i>Bellis perennis</i>), Dandelion (<i>Taraxacum officinale</i>), White Clover (<i>Trifolium repens</i>), Creeping Buttercup (<i>Ranunculus repens</i>), Meadow Buttercup (<i>Ranunculus acris</i>), Chickweed (<i>Stellaria media</i>), Ribwort Plantain and Common Plantain (<i>Plantago major</i>). Lesser celandine (<i>Ranunculus ficaria</i>) is occasional. The sward height is short and uniform at <5cm.
TN3	Boundary Fence	The site is surrounded by a metal security fence on all sides, the base of which is lined with some of the species discussed in TN1 above, in addition to occasional Sycamore (<i>Acer pseudoplatanus</i>) saplings (DBH <7.5cm).
TN4	Building	In the south-east of the site is an L-shaped building currently used as a pigeon coop. The building is constructed of a combination of upvc, box-shaped corrugated metal and timber cladding with pitched concrete tile roof.
TN5	Other Broadleaved Woodland	Along the southern boundary of the site is an intermittent fringe of deciduous woodland, which is located along the palisade fence of the adjacent railway line. This habitat is best described as a scattered belt of urban trees; however, trees are >5m high, with canopies overlapping. Species consist of Sycamore, Silver Birch (<i>Betula pendula</i>) and Downy Birch (<i>Betula pubescens</i>), beneath which are occasional Oak (<i>Quercus</i> sp.), Holly (<i>Ilex aquifolium</i>) and Hazel (<i>Corylus avellana</i>) saplings. Leaf litter and brash cover the woodland floor, with minimal groundflora in this area. Species are restricted to Nettle, Cow Parsley (<i>Anthriscus sylvestris</i>), Herb-Robert (<i>Geranium robertianum</i>), Spring Snowflake (<i>Leucojum vernum</i>) and occasional Wood Avens (<i>Geum urbanum</i>).

TN6	Wooded Garden	Bordering the south-west corner of the site is an area of wooded garden-type habitat separated by fencing. Trees consist of a mix of Sycamore, Oak, Elderberry (<i>Sambucus nigra</i>), Wych Elm (<i>Ulmus glabra</i>) and coniferous species. This area is located outside the site boundary and will not be directly impacted by the development proposal.
TN7	Other Neutral Grassland	In the south-west of the site is a 2-3m boundary line of unmanaged grassland. Grasses are coarse and tussocky, being dominated by Cocksfoot (<i>Dactylis glomerata</i>) and Yorkshire Fog (<i>Holcus lanatus</i>). Perennial forbs and ruderal vegetation are dominant throughout the sward, consisting of Hogweed (<i>Heracleum sphondylium</i>), Cow Parsley, Broad-leaved Dock (<i>Rumex obtusifolius</i>), London Rocket, encroaching Bramble (<i>Rubus fruticosus</i> agg) and many of the opportunistic species discussed in TN1.
TN8	Bramble Scrub	Bordering the strip of coarse grass is a dense thicket of Bramble scrub intermixed with Honeysuckle (<i>Lonicera periclymenum</i>) and occasional Ash (<i>Fraxinus excelsior</i>) saplings (DBH <7.5cm).
TN9	Boundary Vegetation	To the western boundary of the site, habitats are open and exposed, comprising an extension of the adjacent football pitch. Boundary vegetation is restricted to intermittent patches of Dogwood (<i>Cornus</i> sp.) and Sycamore saplings (DBH <7.5cm).

Table 1 Details of Target Notes.



- Red Line Boundary
- Target Note
- g3c (other neutral grassland)
- g4 (modified grassland)
- h3d (bramble scrub)
- u1b (developed land; sealed surface)
- w1g (other broadleaved woodland)

Figure 5
UK Habitat Survey





The site is accessed via a separate gateway, south of Wythenshawe Town FC.



The north-east of the site consists of a wedge of hardstanding, currently used as an area of car parking.

Ephemeral/short perennial species fringe two portacabin-type buildings, but this vegetation constitutes <10% of the hardstanding's total area.



The site is bound by a tall security fence, the base of which is lined with occasional ruderal vegetation.

Modified grassland runs up the boundary fence to the north, east and west of the site.



The core development area of the site currently consists of a managed football pitch.



Along the southern boundary of the site is an intermittent belt of other deciduous woodland.



Habitat here is best described as a scattered belt of urban trees, however, tree canopies overlap, with trees >5m in height.

These areas of habitat have therefore been mapped as 'other broad-leaved woodland'.



An area of wooded garden-type vegetation is located immediately south-west of the site (outside the development boundary).



A 2-3m wide verge of unmanaged grass in the south-west of the site.

Vegetation is dominated by tussocks of coarse grass, forbs and ruderal species.

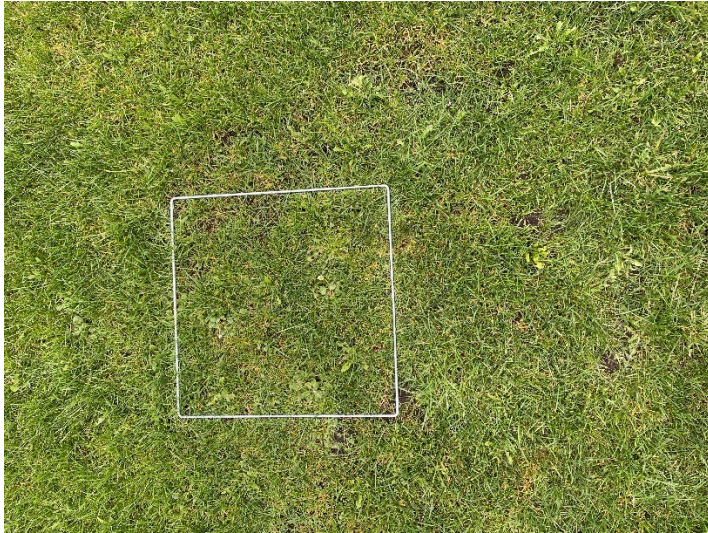


To the west of the site, boundary vegetation consists of occasional Sycamore saplings and Dogwood (DBH <7.5cm), with modified grassland dominant.



The football pitch's sward height is short and uniform throughout, being dominated by Perennial Ryegrass, Annual Meadow Grass and Red Fescue (*Festuca rubra*).





More than 75% of the sward consists of grass. Broad-leaved species scattered throughout the sward are typical of managed fields and commonly associated with high fertility.

The grassland possesses <9 species per m^2 (0.25m^2 quadrat shown for reference).

Table 2 *Photographs*

6.2 Vegetation

- 6.2.1 Details of the plant species found on site are included in the target notes. Species recorded are all commonly occurring and undoubtedly occur elsewhere in similar habitats in the local area.
- 6.2.2 The core development area of the site consists of modified grassland, which possesses a low species diversity and ecological value. Whilst the assemblage of species within it is higher than habitats such as improved pasture, its species assemblage is indicative of regular disturbance, mowing and re-seeding; comprising an ecological monotone in both structure and species composition. This habitat does not constitute a Habitat of Principal Importance (HPI).
- 6.2.3 The edges of the field are fringed with a combination of ephemeral/short perennial vegetation, bramble scrub and 'other neutral grassland'.
- 6.2.4 'Other neutral grassland' is widespread throughout the UK/region, being representative of road verges, railway lines and unkempt pastures, comprising an assemblage of neutral grasses that support few rare plants. This habitat does not constitute a HPI.
- 6.2.5 Bramble scrub and ephemeral/perennial vegetation groups consist of commonly occurring plants and injurious weeds typical of disturbed ground.
- 6.2.6 Bounding the south of the site is an intermittent fringe of deciduous woodland, which is located along the palisade fence of the adjacent railway line. This habitat is best described as a scattered belt of urban trees; however, trees are >5m high, with canopies overlapping. These areas have therefore been mapped as 'other broadleaved woodland', despite covering <200m² and possessing very little notable groundflora. This habitat is likely self-seeded, given its urban location, proximity to the railway line and the dominance of non-native Sycamore. This does not constitute a HPI, although trees are of an evident wildlife value at the 'site level'.
- 6.2.7 There are no hedgerows bounding the site, which is otherwise surrounded by security fencing.
- 6.2.8 There is no evidence of Japanese knotweed, giant hogweed or Himalayan balsam on the site. No other invasive or notable weed species listed on Schedule 9 (Section 14) of the

Wildlife and Countryside Act (1981) (as amended) was identified within the site or adjacent land.

6.3 Amphibian

- 6.3.1 There are no records for amphibians within a 1km radius of the site on the GMEU dataset.
- 6.3.2 The core development area has a low value to amphibians being open and exposed. Structural diversity at ground level across the site is very poor. There are no areas with log, rubble piles or compost heaps which would be particularly favourable to amphibians.
- 6.3.3 The 2-3m wide verge of coarse unmanaged grass and bramble scrub bounding the south-west of the site provides a high degree of cover and vegetative diversity, but these areas of the site are small and isolated to the north and east by an open field.
- 6.3.4 Amphibians would be unlikely to attempt to cross the site as it comprises an area that is mostly open with uniform length grass. Whilst not a physical barrier to the dispersal of amphibians, the site is regarded as being a potentially hostile environment to them.
- 6.3.5 The proposed development will not result in the permanent loss of or a substantial negative effect on any waterbodies or foraging areas linked to them. Boundary areas which may provide foraging or refuge sites (such as along the railway line), are to be retained.

6.4 Badger

- 6.4.1 There are no records of badger within a 1km radius of the site on the GMEU dataset.
- 6.4.2 Badger setts do not occur on site and a lack of feeding signs or runs across the site would suggest that they do not occur within 30m of site boundaries.
- 6.4.3 The proposed development will not impact on any existing badger runs or setts. The porosity of the surrounding fields to the passage of badgers will not be affected.

6.5 Bats

- 6.5.1 There are 10 records of bats within a 1km radius of the site on the GMEU dataset, with records relating to Common Pipistrelle (*Pipistrellus pipistrellus*), Pipistrelle sp., Noctule (*Nyctalus noctula*) and Myotis sp.
- 6.5.2 The foraging habitat on site is poor for bat species being open and exposed, constituting an ecological monotone of minimal value to insect prey. The core development area of the site offers negligible foraging opportunities for bats given its exposure and the likely impact of urban light spill.
- 6.5.3 Along the southern boundary of the site, the belt of woodland, adjoining garden trees and railway scrub provide a moderate degree of structure, diversity and

interconnectivity for foraging and commuting bats. Resultingly, this habitat has the potential to act as a sheltered thoroughfare for bats moving through the local area.

- 6.5.4 Whilst this area of the site is the most structurally diverse, it is not considered exceptional in the local area. More extensive areas of medium and high-quality habitat occur locally, including Wythenshawe Park 1km to the north-east and via Fairywell Wood 600m south-west of the site.
- 6.5.5 It is not considered there would be significant degradation of foraging habitat as a result of the proposal so long as the boundary woodland is retained and/or its loss is compensated for in any landscaping scheme.
- 6.5.6 All trees on site and around the site perimeter were assessed in accordance with Collins ed. (2016) and assigned a risk category. All of the trees within the development boundary were considered category 2 (low) or category 3 (negligible) risk. No indications of roosting or highly suitable roost sites were located within these trees. A mature Oak tree in the wooded garden-type habitat immediately south-west of the site did however contain a number of potential roost features for use by bats. These include limb breaks, knot holes and potential cavities in trunk hollows. This tree is located outside of the boundary and will not be directly impacted. Risk categories from Hundt (2012) and the requirement for mitigation for each tree category are shown on Figure 6. The location of this tree is shown below on Figure 7.



A mature Oak tree is located immediately south-west of the site in the adjoining wooded garden.

This tree was considered to possess potential roost features for use by bats.



Limb hollows and rot to the tree canopy.



Limb breaks, knot holes and rot to the upper trunk and branches.



Swelling to the trunk and epicormic growth.

Tear outs present at lower elevations.

Table 4- Category 1* tree located in close proximity of the site

Tree category and description	Stage 1 Initial survey requirements	Stage 2 Further measures to inform proposed mitigation	Stage 3 Likely mitigation
Known or confirmed roost	Follow SNCO guidance and these guidelines wherever possible, to establish the extent to which bats use the site. This is particularly important for roosts of high risk species and/or roosts of district or higher importance and above		The tree can be felled only under EPS licence following the installation of equivalent habitats as a replacement.
Category 1* Trees with multiple, highly suitable features capable of supporting larger roosts	Tree identified on a map and on the ground. Further assessment to provide a best expert judgement on the likely use of the roost, numbers and species of bat, by analysis of droppings or other field evidence. <i>A consultant ecologist is required</i>	Avoid disturbance to trees, where possible. Further dusk and pre-dawn survey to establish more accurately the presence, species, numbers of bats present and the type of roost, and to inform the requirements for mitigation if felling is required.	Felling would be undertaken taking reasonable avoidance measures ³ such as 'soft felling' to minimise the risk of harm to individual bats.
Category 1 Trees with definite bat potential, supporting fewer suitable features than category 1* trees or with potential for use by single bats	Tree identified on a map and on the ground. Further assessed to provide a best expert judgement on the potential use of suitable cavities, based on the habitat preferences of bats. <i>A consultant ecologist required</i>	Avoid disturbance to trees, where possible. More detailed, off the ground visual assessment. Further dusk and pre-dawn survey to establish the presence of bats, and if present, the species and numbers of bats and type of roost, to inform the requirements for mitigation if felling is required.	Trees with confirmed roosts following further survey are upgraded to Category 1* and felled under licence as above. Trees with no confirmed roosts may be downgraded to Category 2 dependent on survey findings
Category 2 Trees with no obvious potential, although the tree is of a size and age that elevated surveys may result in cracks or crevices being found; or the tree supports some features which may have limited potential to support bats.	None. <i>A consultant ecologist is unlikely to be required</i>	Avoid disturbance to trees, where possible. No further surveys.	Trees may be felled taking reasonable avoidance measures. Stop works and seek advice in the event bats are found, in order to comply with relevant legislation.
Category 3 Trees with no potential to support bats	None. <i>A consultant ecologist is not required unless new evidence is found</i>	None.	No mitigation for bats required.

Figure 6 Tree risk categories from Hundt (2012). Risk category of the mature Oak tree adjacent the site is demarcated in yellow.



- Red Line Boundary
- Bat Tree Risk

Figure 7
Tree Risk Categories



6.5.7 A daytime survey was conducted on the pigeon coop in the south-east corner of the site, the results of which are discussed in Tables 4 and 5 below.

6.5.8 Owing to the building being inaccessible at the time of the survey only an external inspection could be undertaken. This was not considered a significant constraint given the absence of any roof void and subsequent use of the building as a pigeon coop.

	Some of the building's gables are constructed from tightly fitting timber cladding. Roof verge caps are in order.
	The majority of the roof is hipped and covered with interlocking concrete tiles.
	The underside of the eaves are sealed with plastic soffits.

	The north-west hip of the roof appears to be retrofitted with a recycled line of tiles. Gaps were evident beneath some of the hip tiles, feeding from one side to the other. The underside of the hipped ridge appears sealed with expanding spray foam.
	Spray foam insulation, as seen from the end hip tiles.
	Adjoining the structure to the east and west are a series of open-faced stores roofed with corrugated metal.

Table 4- Images of the pigeon coop

Structural features present											
Building construction details	Gables	Barge Boards	Soffit Boards	Facia Boards	Flashing	Roof Void	Other features of note	Potential bat roosting sites	Internal features	Evidence	Risk Level (High, Medium, Low), Negligible
Detached, single-storey, cross-gabled pigeon coop beneath a hipped concrete tile roof	X	X	X	X	X	X	Gaps beneath the ridge tiles along the north-west hip of the roof	Some of these gaps would be accessible to bats, but these features are open to the other side. Provision of stable roost sites is unlikely.	Building could not be accessed and therefore an internal inspection was not possible. The building possesses no roof void	No recent or historic signs indicating use of the building by roosting bats were present. There is limited potential for use of the building by bats	Low

Table 5- Findings from the daytime survey of the pigeon coop

- 6.5.9 We consider the pigeon coop is unlikely to be used by a significant number of bats for roosting. The building possesses few roosting opportunities for use by bats given its construction type, condition and absence of any roof void.
- 6.5.10 The only potential roost feature noted were a series of gaps beneath the north-west hip of the roof. As with the overall design of the building, this hip appears to be retrofitted, the building constructed from a range of differing materials.
- 6.5.11 Gaps appear to feed from one side of the hip to the other, the area beneath sealed with spray insulation foam. Whilst some of these gaps may be accessible to bats, on balance, these features are unlikely to provide stable roost sites given their exposure and the imminent risk of water ingress. Factoring in the building's poor construction type, existing use and prefabricated material composition, we consider the building possesses a low potential for use by roosting bats.
- 6.5.12 It is highly unlikely that the building is essential for species survival. Given the absence of evidence indicating habitual use in or between years, precautionary mitigation would be best appropriate. At this stage we do not consider the need for emergence activity surveys. It is our understanding that the building will be demolished.
- 6.5.13 To conclude, we are of the opinion that bat species are highly unlikely to rely on the site for feeding but may occur in the local area. Roosting by bats is unlikely to occur on site within the pigeon coop, although bats may roost within the Category 1* tree beyond the site to the south-west.

6.6 Birds

- 6.6.1 There are six records of five species of bird within a 1km radius of the site on the GMEU dataset. These relate to Curlew (*Numenius Arquata*), Dunnock (*Prunella modularis*), House Sparrow (*Passer domesticus*), Peregrine (*Falco peregrinus*) and Song Thrush (*Turdus philomelos*).
- 6.6.2 There are no hedgerows bounding the site, the site surrounded by tall security fencing. This limits use of the site by small hedgerow birds such as Dunnock, Robin (*Erithacus rubecula*) and Wren (*Troglodytes troglodytes*).
- 6.6.3 There were no rot holes or cracks in any of the trees on site which would support tree hole nesting species such as woodpeckers.
- 6.6.4 There are limited opportunities for nesting and foraging birds within the core development area of the site given the dominance of managed grassland and hardstanding. However, garden birds and those typical of urban environments such as Starling (*Sturnus vulgaris*), Feral Pigeon (*Columba livia domestica*) and Peregrine will undoubtedly occur in the local area, including the peripheries of the site.
- 6.6.5 On balance, habitats on site are not considered to be of anything more than locally significant, with habitats well represented in the local area. The impact on nesting birds is therefore considered likely to be minor (pending the belt of woodland lining the south of the site is retained).

6.7 Invertebrates

- 6.7.1 There are no known records of notable invertebrates within a 1km radius of the site on the GMEU dataset.
- 6.7.2 The core development area of the site possesses a negligible value to invertebrates given the dominance of hardstanding and managed grassland- which is short and ubiquitous, possessing little ecological diversity.
- 6.7.3 Plants such as Dandelion, Broad-leaved Dock and Cow Parsley may offer occasional foraging opportunities for species of beetle and bee, but these are common and opportunistic species indicative of habitats comprising waste ground, playing fields and unkempt verges.
- 6.7.4 No deadwood or vegetation on site was recorded which would provide an important resource for invertebrates in the local area.
- 6.7.5 Given the poor-quality habitats contained within the site in comparison to the wider area, it is not considered the site is of any local significance for use by invertebrates.

6.8 Reptiles

- 6.8.1 There are no records for reptiles within 1km of the site.
- 6.8.2 The majority of the site has a very low value to reptiles being devoid of significant ground cover. There are no areas of the core development area which would be particularly favourable to reptiles.
- 6.8.3 The core development area of the site constitutes an ecological monotone of permanently short grass. Differences in gradient and habitat structure are generally poor across the site, resulting in the negligible provision of microhabitats.
- 6.8.4 Reptiles may occur along the boundary of the site and this provides linkage across the local landscape. It is however outside the site boundary and is unaffected by the proposal.
- 6.8.5 As a consequence, precautionary mitigation would be appropriate in respect of construction activities so as to ensure reasonable avoidance measures are taken to avoid the killing or injury of these species.

6.9 Other

- 6.9.1 The site may be crossed by species such as fox (*Vulpes vulpes*) and rabbit (*Oryctolagus cuniculus*) are known to occur locally.
- 6.9.2 The southern boundary of the site may provide suitable habitat for small mammals such as field vole (*Microtus agrestis*) and Hedgehog (*Erinaceus Europaeus*). There are nine records of hedgehog within a 1km radius of the site.

6.10 Statutory and Non-Statutory Sites

Direct Impacts:

- 6.10.1 There are no statutory or non-statutory sites which are connected to the site such that site development would directly affect the dispersal of species between them or directly impact upon their integrity.
- 6.10.2 The habitats on site do not represent or are linked to those found in any of the statutory or non-statutory sites locally.

Indirect Impacts:

- 6.10.3 There are no statutory or non-statutory sites which are connected to the site such that site development would indirectly affect the dispersal of species between them or indirectly impact upon their integrity.

7. MITIGATION/RECOMMENDATIONS

7.1 *Compensatory planting and habitat enhancement*

- 7.1.1 The roots of trees on the site and its boundaries should be adequately protected during work in accordance with industry standards. All trees should as far as possible be retained in the scheme. This includes the belt of trees lining the south of the site. Where lost, trees should be compensated for with high-quality landscape/boundary planting.
- 7.1.2 Any landscaping scheme should utilise plants which are native and wildlife friendly. Use of invasive non-native plants should be limited, so as to protect the ecological integrity of the adjacent woodland.
- 7.1.3 Provision of fruit and nut bearing trees such as Rowan, Cherry, Silver Birch, Apple and Sweet Chestnut throughout the site and would help link and layer retained habitats, provide valuable feeding opportunities for birds and complement the site's landscaping scheme. Trees could be planted along the site's access road, throughout the car park and in any areas of public open space.
- 7.1.4 Should any of the grass verges be retained, then these could be sewn with an SCM11 urban pollinator mix containing a 20/80 ratio of wildflowers to grasses. A good seed mix should be locally sourced and consist of species of British origin. This will produce prominent blooms in spring and early summer. Seed can be surface sewn in autumn or early spring at rates of 4g/m². These areas can be managed by annual cutting and removal of risings, improving soil condition.

7.2 *Amphibians*

- 7.2.1 There is no requirement for specific mitigation for these species. There are currently no suitable breeding sites on or near the site. However, as a precautionary measure, in the unlikely event that any signs of any amphibian activity is subsequently found, all site works should cease and further ecological advice should be sought with a view to a detailed method statement and programme of mitigation measures being prepared and implemented.
- 7.2.2 In order to further minimise impacts on amphibians the following precautionary points should also be followed.
 - All work must take place during daylight hours as amphibians are more likely to be commuting over night and this will ensure the risk to any amphibians commuting through the site will be minimised.
 - During the development, measures should be put in place to discourage amphibians from using the development area, the creation of any piles of earth, materials and rubble which could form potential artificial hibernacula and refuge should be avoided at all times. It is recommended that any spoil or rubble will be removed immediately

to skips, or on hard standing or short grass. This will ensure that no potential amphibian hibernation or resting sites are created.

- The storage of all loose materials must be palletised or similar so they are off the ground whenever possible.
- Should any trenches and excavations be required, an escape route for animals that enter the trench must be provided, especially if left open overnight. Ramps should be no greater than of 45 degrees in angle. Ideally, any holes should be securely covered. This will ensure amphibians are not trapped during work.
- All excavations left open overnight or longer should be checked for animals prior to the continuation of works or infilling. Back filling should be completed immediately after any excavations, ideally back filling as an on-going process to the work in hand.

7.3 Badger

7.3.1 Badger setts are known to occur within 2km of the site. These setts will be undisturbed by work but in order to minimise impacts on badgers passing over the site the following points should also be followed.

- All work must take place during daylight hours as badgers are more likely to be commuting over the site at night and this will ensure the risk to any badgers passing through the site will be minimised.
- Should any trenches and excavations be required, an escape route for animals that enter the trench must be provided, especially if left open overnight. Ramps should be no greater than of 45 degrees in angle. Ideally, any holes should be securely covered. This will ensure badgers are not trapped during work.
- All excavations left open overnight or longer should be checked for animals prior to the continuation of works or infilling. Back filling should be completed immediately after any excavations, ideally back filling as an on-going process to the work in hand.
- Boundary fences/walls should incorporate gaps at their base to facilitate the passage of badgers across the site.

7.4 Bats

7.4.1 Work at night should be restricted, new planting within the site should enhance structural diversity and light spill onto the boundary should be minimised.

7.4.2 Planting of native trees and shrubs will maintain the ecological functionality of the site for foraging bats. For example, any landscaping scheme should utilise plants which are native/naturalised and wildlife friendly, benefiting bats by attracting night flying insects to the site. Any introduced shrub habitat should contain species such as Cherry Evening primrose (*Oenothera biennis*), Honeysuckle (*Lonicera periclymenum*),

Soapwort (*Saponaria officinalis*) and Sweet rocket (*Hesperis matronalis*), providing bats with additional foraging opportunities.

7.4.3 A sensitive lighting scheme should be adopted on site, as the long-term impact of unnecessarily bright or recurrent artificial lighting on both bats and their prey is rarely ever positive. We recommend the following: -

- All construction and security lighting will be limited to those areas where it is an absolute necessity for the purposes of health and safety.
- Passive infrared sensors could be used on security lighting, which can then be activated for safety purposes only.
- All artificial lighting should be of a low intensity and face downward.
- Consider the use of LED luminaires, which shine with a lower intensity and higher dimming capability.
- Utilise shades of warm white, which appear more yellow/orange in appearance, over cold white light. Cold white light contains a greater degree of blue/UV light, which attracts insects that cannot be preyed upon by bats, which are hypersensitive to these wavelengths of light.

7.4.4 The category 1* tree located adjacent to the site to the south-west will not be directly impacted by works. However, care should be taken to ensure artificial lighting does not face this feature given its evident potential for use by roosting bats. Care should be taken not to illuminate the southern boundary of the site given its likely use by foraging and commuting bats.

7.4.5 New roosting provision for crevice dwelling bats could be incorporated into the buildings on site or bat boxes could be erected in retained trees

7.4.6 Overall, it is considered there is more than sufficient scope for mitigation and compensation at the site such that there will be no adverse impact on the favourable conservation status of bats affected by the proposal.

7.5 Birds

7.5.1 Nesting by birds within the core development area of the site is considered unlikely to occur. Birds may nest within the trees bounding the southern edge of the site.

7.5.2 Any vegetation to be trimmed or cleared should be checked for nesting birds before it is removed. Ideally this should occur outside the bird nesting period March- September.

7.5.3 If vegetation clearance is to occur in the March-September period a check for nesting birds should be conducted first by a suitably qualified individual.

7.5.4 New planting within the site should consist of native fruit and/or nut producing trees such as Rowan, Hawthorn and Cherry, providing valuable feeding opportunities for birds.

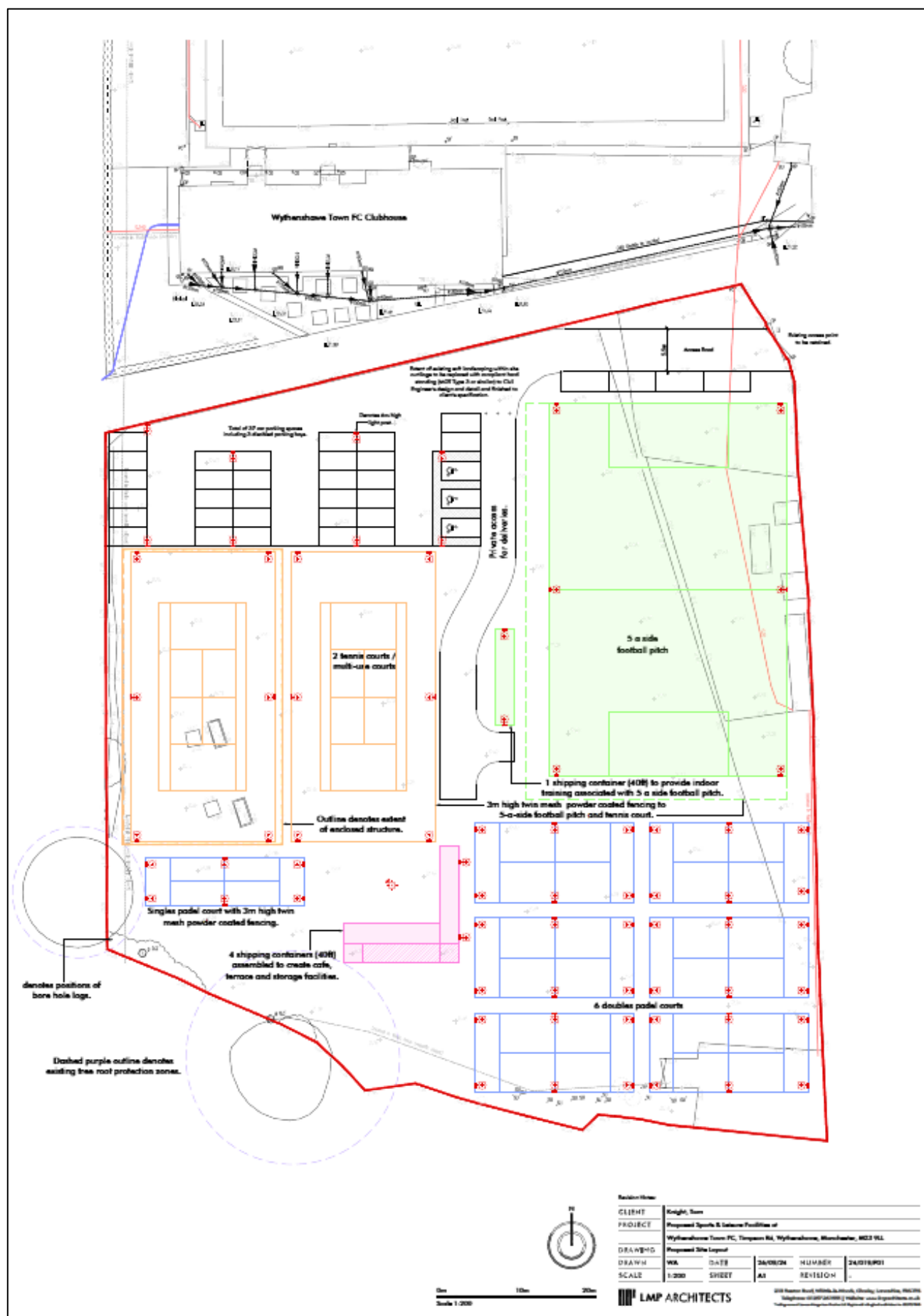
- 7.5.5 If nesting birds are found at the site all site works shall cease and further ecological advice shall be sought with a view to a detailed method statement and programme of mitigation measures being prepared and implemented.

7.6 Invertebrates

- 7.6.1 Landscaping should include use of native or wildlife friendly species including night flowering plants.
- 7.6.2 Loggeries and brash piles could be created along the peripheries of the site. Any cleared should be left on site.
- 7.6.3 Introduced shrubs/beds of low-level planters could include semi-evergreen perennial flowers such as Lavender (*Lavandula* sp.) and Mexican aster (*Cosmos bipinnatus*).

7.7 Reptiles

- 7.7.1 There is no requirement for specific mitigation for these species. However, as a precautionary measure, in the unlikely event that any signs of any reptile activity is subsequently found, all site works should cease and further ecological advice should be sought with a view to a detailed method statement and programme of mitigation measures being prepared and implemented.
- 7.7.2 The points in respect of not leaving open trenches without means of escape detailed for badgers are also applicable to these species.



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