



PRELIMINARY ECOLOGICAL APPRAISAL

**MORRISONS PETROL STATION,
HEYWOOD, GREATER MANCHESTER**

AUGUST 2025

Preliminary Ecological Appraisal

Morrisons Petrol Station, Heywood, Greater Manchester

A report for

Jennings Design Ltd,
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Horsforth,
Leeds,
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Report by



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1. INTRODUCTION

1.1 REASON FOR SURVEY

PENNINE Ecological have been commissioned to undertake a Preliminary Ecological Appraisal of the petrol station at Morrisons superstore, Heywood, Greater Manchester.

The proposal includes improvements to the petrol station with an extension to the existing shop and improvements to the car washing facilities.

The study includes the following elements:

- UK Habitat Classification Survey.
- Badger Survey and Evaluation.
- Preliminary Bat Roost Assessment.
- Breeding Bird Survey and Evaluation.
- Scoping for other protected or notable species potentially present within the site.

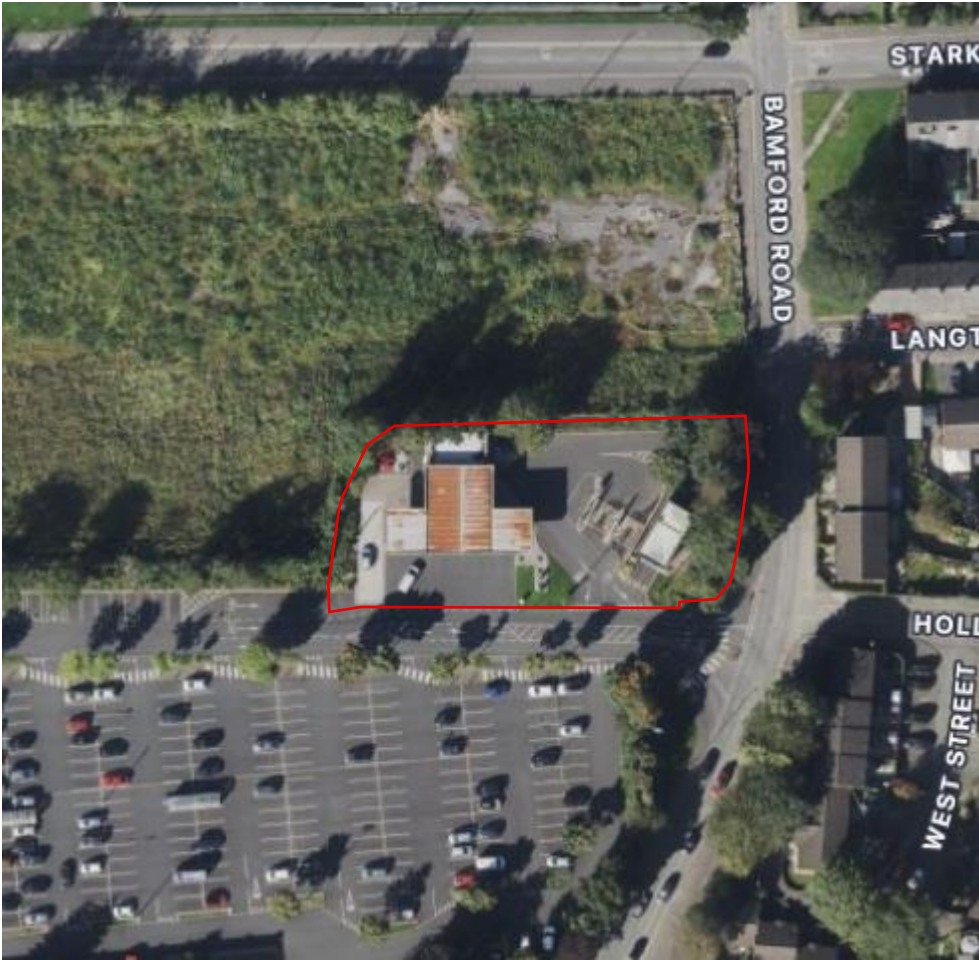
The study also includes a full evaluation of the ecological significance of the survey findings, and recommendations/precautions where appropriate.

1.2 SITE LOCATION

The site is located at the Morrisons superstore off Bamford Road, Heywood, Greater Manchester OL10 4TA. The grid reference is SD 8546 1099.

An aerial image of the area subject to survey and the red line survey area is shown below.

Figure 1.1: Surveyed area at Morrisons petrol station, Heywood.



2. METHODOLOGY

2.1 SURVEY METHODOLOGY

The methodologies where specific surveys were applied are outlined below. Surveys were undertaken on 19/08/2025.

2.1.1 Desk Based Study

The Multi Agency Geographical Information Centre¹ was referred to in respect of statutory sites, priority habitats, GCN licence returns, and European Protected Species Licences (EPSL) issued in respect of GCN and bats.

The Greater Manchester Local Record Centre (GMLRC) map app² was referred to in respect of non-statutory designated sites within 500m.

It should be noted that species records over 500m of the site are not reproduced here as they are considered to have no association with the site and are beyond the sphere of influence of the proposals. Records older than 10 years are also not included, unless they have ecological significance (e.g. historic bat roost or historic presence of GCN within a pond).

In addition, Pennine Ecological's dataset was referenced which contains extensive records of species and habitats generated from surveys undertaken since the company's formation in 1996

2.1.2 UK Habitat Classification Survey

A UK Habitat Classification (UKHabs) survey (UKHab Ltd, 2023) of the habitats within the red line boundary was undertaken.

Where applicable, a habitat condition score for each of the habitats was completed (Pennine Ecological, 2025).

2.1.3 Badger Survey

A badger survey was undertaken to identify evidence of badger utilising the site. Surveys were undertaken in accordance with 'Surveying Badgers', Harris et al., (1989) and 'Badger', Roper (2010).

2.1.4 Preliminary Bat Roost Assessment and Evaluation

A daytime survey was conducted in accordance with the methodology outlined in Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn) Collins, J. Bat Conservation Trust (2023).

The site contains three buildings which were inspected for suitable roosting features (e.g. missing/dislodged roof tiles, gaps in walls, gaps between soffits and fascia's). All trees within

¹ www.magic.gov.uk

² <https://gmlrc.org/mapapp/>

the site boundary were also inspected for suitable roosting features (e.g. knot holes, woodpecker holes and split limbs).

During the survey the surrounding habitat was evaluated in relation to bats as very often roost selection is closely correlated with the surrounding habitat.

2.1.5 Bird Survey and Evaluation

The site was assessed for its potential to support breeding birds. This included identifying any evidence of current or historic nesting within the site (i.e. within buildings, trees and shrubs).

2.1.6 Scoping of Other Protected and Notable Species

Consideration was given to other protected and notable species potentially present within the site. The following species / species groups have been scoped out for further assessment, with reasoning provided below:

- Great Crested Newts (GCN) – There are no ponds within 250m of the site. Given the absence of ponds within the site and locally, it is concluded with reasonable certainty that GCN are absent.
- Riparian Mammals – There are no watercourses or waterbodies on the site or within 100m from the site. There is considered to be no ecological or hydrological connectivity to the site for riparian mammal species. It is concluded with reasonable certainty that riparian mammals are absent from the site and locally.
- Reptiles – There are no known records of reptiles within 500m of the site. The site comprises of predominantly hard standing surfaces and buildings. The site is heavily disturbed as it is an active petrol station with continuous vehicle movements. It is concluded with reasonable certainty that reptiles are absent from the site and locally.
- Invertebrates – The site comprises of predominantly developed land with modified soft landscaping around the perimeter. Habitats on site are not typical of habitats which are capable of supporting notable invertebrate assemblages (Buglife, 2015). It is concluded with reasonable certainty that notable invertebrate assemblages are absent from the site.
- Other notable mammals – The site is not considered suitable to support any other notable mammal species.

These species are not discussed further within this report.

2.2 SURVEYOR EXPERIENCE

The surveyor and author of this report is Patrick Leatham. Patrick is a full member of the Chartered Institute of Ecology and Environmental Management (MCIEEM) and has over 13 years' experience in ecological survey and evaluation. Key skills include the following.

- Over 13 years completing Extended Phase 1 Habitat Survey / UKHabs Survey on both small planning applications and Nationally Significant Infrastructure Projects (NSIPs).
- Experienced bat surveyor and accredited agent on Stuart Macpherson licence (2021-10079-CL18-BAT).

- Experienced bird scoping and breeding bird check. Good knowledge of common and widespread birds.
- Extensive experience in great crested newt (GCN) survey, evaluation, licensing, and mitigation. Natural England Class Licence WML-CL08 held. Part of the Pennine Ecological survey team that undertook Great Crested Newt Surveys of over 40 ponds/slacks at Ainsdale Sand Dunes NNR/Sefton Coast SAC/SSSI for the Dynamic Dunescape (DuneLIFE) project / Natural England.
- Extensive experience undertaking terrestrial mammal surveys including badger (accredited agent on multiple badger sett closure licences).
- Riparian corridor and mammal surveys for numerous flood alleviation schemes across north west England.
- Ecological Evaluation and Impact Assessments in association with large scale infrastructure projects.
- Experienced Habitats Regulations Assessment (HRA). Undertaking over 20 HRA's to assess significant effects on internationally and nationally designated sites.

2.3 SURVEY CONSTRAINTS

The surveys were undertaken on 19/08/2025 in good weather conditions. Full access of the site was possible.

There are considered to be no survey constraints and an appropriate evaluation of the site has been completed.

3. RESULTS

3.1 RESULTS SUMMARY

- There are no statutory designated sites within the proposal site or within 2km of the site.
- There are no non-statutory designated sites within the proposal site or within 500m of the proposal site.
- The proposal site is the petrol station forecourt of the Morrisons superstore. The site is dominated by hard standing surfaces, with introduced shrub planting and tree planting around the sites west, north and east boundaries.
- No evidence of badger was recorded within the site and locally.
- The buildings and trees on site do not provide any suitable roosting features for bats. The site is heavily illuminated and is of limited value to foraging bats.
- No evidence of current or historic bird nesting was recorded within the site.
- No evidence or sightings of other protected / notable species was recorded within the site.

3.2 DESK BASED STUDY

3.2.1 Statutory Designated Sites

There are no statutorily designated sites on site or within 2km of the site.

3.2.2 Non-Statutory Designated Sites

There are no non-statutorily designated sites on site or within 500m of the site.

3.2.3 Protected and Notable Species

There are no protected or notable species records on site or within 500m of the site.

3.3 HABITATS

3.3.1 UKHabs Classification Survey

The following habitats were recorded within the survey area:

- g4 Modified grassland
- u1 (81) Ruderal / ephemeral
- u1 (847) Introduced shrub
- u1b5 Buildings

- u1b6 Other developed land
- w1g Other broadleaved woodland
- N/a Individual trees

The site is the petrol forecourt of the Morrisons superstore. The site is dominated by hard standing surfaces and the forecourt buildings.

Habitat is confined to the boundaries of the site with sections of introduced shrub and tree planting around the west, north and east perimeters.

An area of exotic tree planting is located in the eastern extent of the site, however this falls outside of the petrol station wooden fence boundary and is separate from the site.

A number of individual trees are located within the site and these are mainly confined to the northern boundary.

Habitat condition assessments were undertaken, where applicable, for each qualifying habitat (Pennine Ecological, 2025).

3.4 PROTECTED SPECIES

3.4.1 Badger

(i) Setts

The survey found no setts on site or within proximity of the site.

(ii) Foraging Signs and Pathways

No sign of badger activity was found on site or within proximity of the site. Therefore it can be concluded that the species is not using this area for foraging or commuting.

(iii) Boundary Search

All of the boundaries of the site were walked and examined for potential runs, pathways, and latrines. The search found no evidence to suggest badger activity along any of the site boundaries.

The absence of any activity signs indicates that badgers are not entering the site. The absence of latrines indicates a lack of territorial activity in the near vicinity of the site.

3.4.2 Bats

(i) Preliminary Roost Assessment

There are three buildings on site. Each building was inspected for bat roost potential;

Building 1 (B1) – Petrol station shop

The petrol station shop is a single storey brick (stretcher bond) building with a flat concrete roof. The building is in good structural condition and has no gaps which would be of use to bats.

The building has no bat roost potential (refer to Figure 3.1 below).

Building 2 (B2) – Petrol station forecourt

This building is adjoined to B1, however due to the difference in structural composition they have been assessed separately. Building 2 comprises a corrugated metal covering over the petrol pumps. There are lights integrated into the roof to illuminate the forecourt.

This building structure has no gaps which would be of use to bats.

The building has no bat roost potential (refer to Figure 3.1 below).

Building 3 (B3) – Car wash building

The main car wash building is a metal frame building with corrugated sheeting and glass panelling. There is a brick (stretcher bond) walled annex building which is the same construction as B1.

There are no gaps which would be of use to bats within B3.

This building has no bat roost potential (refer to Figure 3.1 below).

Trees

The majority of the trees are immature – semi-mature. The trees were fully inspected and no suitable gaps / cavities which could support bats were identified.

All trees on site were found to have no bat roost potential (refer to Figure 3.1 below).

(ii) Bat Habitat Suitability

The site is dominated by hard standing surfaces which are brightly illuminated. The majority of the site will be so heavily lit that foraging bats will be deterred from using the site and local surrounds. The habitat on site has no value for foraging bats.

To the north of the site, there is an area of scrub land. The line of trees along the northern boundary which are likely to provide very localised commuting routes for bats.

The habitats associated with the site and locally are considered to be of 'negligible' suitability for bats (refer to Figure 3.1 below).

Figure 3.1: Extract taken from Collins, BCT (2023); Good Practice Guidelines (4th Edition) - Table 4.1

Table 4.1. Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape, to be applied using professional judgement.		
Potential suitability	Description	
	Roosting habitats in structures	Potential flight-paths and foraging habitats
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels).	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/protection for flight-lines, or generate/shelter insect populations available to foraging bats).
Negligible ^a	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.	No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions ^b and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats ^c).	Habitat that could be used by small numbers of bats as flight-paths such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions ^b and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions ^b and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.
^a Negligible is defined as 'so small or unimportant as to be not worth considering, insignificant'. This category may be used where there are places that a bat could roost or forage (due to one attribute) but it is unlikely that they actually would (due to another attribute). ^b For example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance. ^c Evidence from the Netherlands shows mass swarming events of common pipistrelle bats in the autumn followed by mass hibernation in a diverse range of building types in urban environments (Korsten <i>et al.</i>, 2016 and Jansen <i>et al.</i>, 2022). Common pipistrelle swarming has been observed in the UK (Bell, 2022 and Tomlinson, 2020) and winter hibernation of numbers of this species has been detected at Seaton Delaval Hall in Northumberland (National Trust, 2018). This phenomenon requires some research in the UK, but ecologists should be aware of the potential for larger numbers of this species to be present during the autumn and winter in prominent buildings in the landscape, urban or otherwise.		

3.4.3 Birds

No evidence of current or historic bird nesting was identified within the site.

The introduced shrub beds are likely to provide some localised opportunities for birds. However these shrub beds are heavily disturbed by humans and susceptible to predation from domestic animals.

Overall the habitat associated with the site is considered to be of low suitability for birds.

4. ECOLOGICAL EVALUATION

The following section discusses the significance of the survey findings. It should be noted that this part of the evaluation relates to habitats and species and includes reference to the following statutory/non-statutory instruments.

- The Wildlife and Countryside Act 1981 (and later amendments), with particular reference to protected species listed in Schedules 1, 5 and 8 of the above act.
- Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.
- Section 41 Habitats and Species of Principal Importance in England. Natural Environment and Rural Communities (NERC) Act 2006.
- Reference to any relevant Red Data List/Book species and Nationally Scarce species not covered by the above or any other lists / schedules of species rarity or importance.

The evaluation is based on the commissioned surveys and desk study only.

The following statements are relevant in respect of the above.

4.1 DESK STUDY

4.1.1 Statutory Sites

There are no internationally or nationally statutory designated sites within the site boundary or within 2km of the site.

The Site of Special Scientific Interest (SSSI) Impact Risk Zones³ (IRZ's) has been reviewed (see Figure 4.1 below).

Figure 4.1: IRZ summary for Morrisons Petrol Station, Heywood



Impact Risk Zones for Sites of Special Scientific Interest

For local planning authorities to determine if a proposed development is likely to affect a terrestrial Site of Special Scientific Interest and when to consult Natural England.

Does the proposed development match any of the descriptions below?

- **Infrastructure:** Airports, helipads and other aviation proposals.
- **Minerals, Oil and Gas:** Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction.
- **Air Pollution:** Any industrial/agricultural development that could cause AIR POLLUTION (including: industrial processes, livestock & poultry units with a floorspace > 500m², slurry lagoons > 750m² & manure stores > 3500 tonnes).
- **Combustion:** General combustion processes >50MW energy input. Including: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/combustion.

It is considered that the proposal site does not match any of the descriptions outlined in the IRZ.

³ The Impact Risk Zones (IRZs) are a GIS tool developed by Natural England to make an initial assessment of the likely risk of impacts on SSSIs posed by developments.

4.1.2 Sites of Biological Interest / Non-statutory Sites

There are no known non-statutory designated sites within the site or within 500m of the site.

There will be no direct/indirect impacts to any designated sites anticipated from the development proposals.

4.1.3 Section 41 NERC Act 2006 Habitats and Species

There are no confirmed S41 habitats or species within the survey area.

4.1.4 Nationally Scarce/County Red Data List Species

There are no Nationally Scarce/County Red Data list plant species on the site

4.2 HABITATS

The existing habitats on site are of very low to medium distinctiveness (in accordance with the BNG metric calculation tool). The majority of the site comprises developed land. There are areas of introduced shrub and individual trees around the perimeter of the site.

The majority of the trees have been assessed as being in 'moderate' condition (Pennine Ecological, 2025).

The parcel of non-native woodland in the eastern section of the survey area is assessed as being in 'poor' habitat condition (Pennine Ecological, 2025).

The small section of g4 amenity grassland has been assessed as being in 'poor' habitat condition (Pennine Ecological, 2025).

No other habitats have been condition assessed.

Based on the size and condition of the habitats on site, the value of the current sites habitats cannot exceed 'site' ecological value.

Due to the scale and nature of the proposals, impacts are not anticipated beyond the land directly affected by the proposals.

4.3 PROTECTED SPECIES

4.3.1 Badger

No evidence of badger activity was found within the site or the wider area during the survey.

It is concluded that badger are absent on site and locally.

4.3.2 Bats

The buildings and trees on site were found to have no bat roost potential.

The sites habitats are considered to be of negligible suitability for bats.

Based on the size of the site and habitats present within the site, the value of the site for bats does not exceed 'site' ecological value.

Due to the scale and nature of the proposals, impacts to bats are not anticipated to extend beyond the land directly affected by the proposals.

4.3.3 Birds

No evidence of current or historic bird nesting was recorded within the site.

Generally the site is of limited value to birds due to the lack of nesting opportunities and the heightened disturbance levels from the petrol station.

Based on the sites size and habitats present, the site is not capable of supporting a bird assemblage that would exceed 'site' ecological value.

5. RECOMMENDATIONS

The following section outlines any mitigation or precautions required in respect of the survey findings.

5.1 DESK STUDY

5.1.1 Statutory Sites

No further assessments or precautions are required.

5.1.2 Non-Statutory Sites

No further assessments or precautions are required.

5.2 HABITATS

Appropriate habitat enhancement and creation measures will be required to compensate the loss of any habitat which is of low distinctiveness or higher. The compensation measures will need to ensure there is a measurable 10% net gain overall.

It is recommended that a Statutory Biodiversity Metric Calculation is completed to support this application.

5.3 PROTECTED SPECIES

5.3.1 Badger

There are no requirements for any further surveys or assessment.

5.3.2 Bats

There are no requirements for any further surveys or assessment.

5.3.3 Birds

No strategic bird surveys are required.

Any removal of suitable nesting habitat (i.e. removal of trees and shrubs) should take place outside of the breeding season, i.e., between September 1st and February 28th.

If the habitat removal is envisaged during the breeding season, prior to removal, checks should be made immediately prior to any clearance by a suitably experienced ecologist to establish any nesting or breeding activity. Should it be identified that birds are nesting or breeding then works should be paused until the young have naturally fledged the nest.

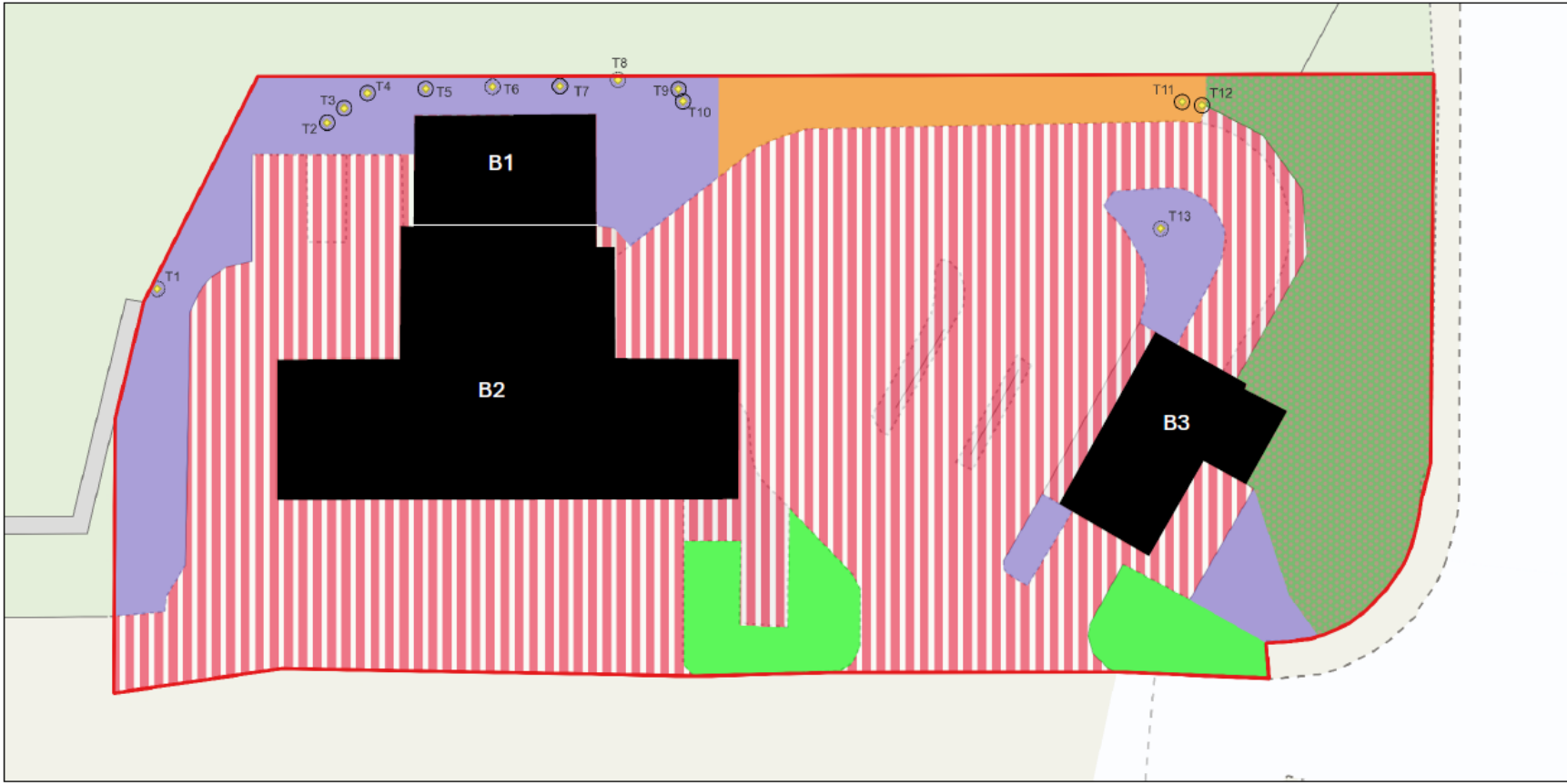
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- Natural England – MAGIC. Accessed various dates. <http://www.natureonthemap.naturalengland.org.uk/MagicMap.aspx> Latest access 26/08/2025

Appendix A - Figures



Site Ref: Morrisons Petrol Station, Heywood				
Figure 1: UKHabs Map		UKHabs Codes:		
Client: Jennings Design	Study Date: 19/08/2025	Scale: 1:210	 g4 – Modified grassland	 u1b6 – Other developed land
			 u1 (81) – Ruderal / ephemeral	 w1g – Other broadleaved woodland
			 u1 (847) – Introduced shrub	 N/a – Individual trees
			 u1b5 – Building	 Survey Area

Appendix B – Photographs



Photograph 1: View looking to western boundary with introduced shrub beds.



Photograph 3: Building 1, the petrol station shop. No bat roost potential.



Photograph 2: Overview of the site which is dominated by hard standing surfaces.



Photograph 4: Rear of B1 with no bat roost potential. Line of trees to rear which is predominantly immature specimens.



Photograph 5: View looking east along the northern boundary. Non-native woodland separated from site by wooden fence.



Photograph 7: Overview of the south east corner of the site.



Photograph 6: Building 3 with no bat roost potential.



Photograph 8: Section of landscape woodland along Bamford Road. Non-native species only.