Dewsbury Market

Ecological Assessment

Issue: Planning Issue
Rev: 01
Date: August 2024
Doc No: DMTP-BDP-00-ZZ-SU-Y-92001

Issue Status

Rev	Status	Prepared by	Reviewed by	Date
01	Planning Issue	BS	AN	06/08/2024

Contents

1.0 Introduction

1.1 Background

1.2.1 This Ecological Assessment has been prepared by BDP on behalf of Kirklees Council, to inform a planning application for the redevelopment of Dewsbury Market (hereinafter referred to as the "site").

1.2 Location

1.2.1 The site is located in Dewsbury (grid reference: SE 24614 21942) bound by Foundry Street, to the west, Whitehall Way along the north and west and Corporation Street to the south. Dewsbury Ring Road (A638) runs just beyond the perimeter to the north and east. The site is in an urban setting and the wider landscape is dominated by commercial and residential developments, and pockets of urban green space (ref. Figure 1).

Figure 1. The Dewsbury Market site

1.2.2 The site is within a statutory recognised Conservation Area, named Dewsbury, listed as being in ‘very bad’ condition.

1.3 Planning

1.3.1 Biodiversity is a material consideration to the planning process and consideration must be given to the protection, retention and improvement of existing biodiversity features. As the proposed Dewsbury Market development will have a significant impact on the existing habitats within the site, consideration should be given to potential protected and notable sites, habitats and species which may be present within and/or adjacent to the site by the planning authority when considering the development proposals.

1.3.2 This report will allow the Local Planning Authority (LPA) to assess the impact of the proposed development on any ecological features present within the site.

1.4 Objectives

1.4.1 The survey was commissioned to accompany the planning application for the proposed redevelopment of the site. The aim of the survey was to:

- Describe and map the habitats present on the site;
- Assess any potential impact on protected sites, habitats and/or species;
- Identify where further surveys may be required; and
- Provide recommendations to protect and enhance site ecology

2.0 Methodology

2.1 Desktop Study

2.1.1 A desktop study was carried out to obtain and review ecological information held by the Local Records Centre and other publicly accessible online sources. Ecological information for protected and notable sites and species within the site and a 2km radius thereof was provided by West Yorkshire Ecology Service, the biological records centre for the area.

2.1.2 In addition to the consultation process, a review of the local and national planning framework was carried out, including:

National Policy

- National Planning Policy Framework, December 2023
- Habitats and Species of Principal Importance, August 2010

Local Policy

- The Kirklees Local Plan, adopted 27 February 2019.
- The Kirklees Biodiversity Strategy, 2009

2.1.3 Particular attention was paid to local Policy[1] PLP 30, which states regards to Biodiversity and Development, development proposals will be required to:-

- avoid significant loss or harm to biodiversity in Kirklees through protection, mitigation and compensatory measures secured through the establishment of a legally binding agreement;
- minimise impact on biodiversity and provide net biodiversity gains through good design by incorporating biodiversity enhancements and habitat creation where opportunities exist;
- safeguard and enhance the function and connectivity of the Kirklees Wildlife Habitat Network at a local and wider landscape-scale unless the loss of the site and its functional role within the network can be fully maintained or compensated for in the long term;
- establish additional ecological links to the Kirklees Wildlife Habitat Network where opportunities exist; and
- incorporate biodiversity enhancement measures to reflect the priority habitats and species identified for the relevant Kirklees Biodiversity Opportunity Zone.

2.2 Site Survey

2.2.1 An initial site survey was undertaken on the 24 June 2021 repeated on the 29 July 2024, both in optimal conditions for ecological survey and an accurate assessment of the site could be made.

2.2.2 The site survey was undertaken by Anthony Nickson, MSc, BSc (Hons) and Bruce Shortland BSc (Hons). Both surveyors are experienced in habitat survey and protected species surveys, and both are full members of the Chartered Institute of Ecology and Environmental Management (MCIEEM).

Habitats

2.2.3 A UKHab survey was undertaken, all primary habitat types were recorded to at least Level 3 or above wherever possible in accordance with UKHab version 2.0. In addition, relevant secondary codes to accompany discrete primary habitat types were also identified. Applicable habitats have been assessed against the statutory biodiversity metric condition assessments (ref. Appendix D). Botanical nomenclature follows Streeter (2016).

Invasive plants

2.2.4 During the site survey particular attention was given to searching for invasive plant species listed under Schedule 9 of The Wildlife and Countryside Act 1981 (as amended).

Protected Species

2.2.5 Evidence of, and/or the potential for the presence of protected species was recorded during the site survey. Based on the desktop study and habitat types present on site, particular attention was paid to the following species:

Amphibians / Great Crested Newt

2.2.6 There are six species of native amphibians in the United Kingdom. All are protected under the Wildlife and Countryside Act 1981 (as amended), with some species also protected under the Conservation of Habitats and Species Regulations 2017 (as amended) . Great crested newt (GCN) (*Triturus cristatus*) are protected under Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended) and Schedule 5, Section 9 UK Law (Wildlife and Countryside Act 1981, as amended).

2.2.7 As such, it is an offence to deliberately or recklessly undertake the following acts:

- Capture, kill, disturb or injure GCN deliberately
- Damage or destroy a breeding or resting place
- Obstruct access to resting or sheltering places (deliberately or by not taking enough care)

Badger

2.2.8 Badger (*Meles meles*) and their setts are protected under UK Law (Wildlife and Countryside Act, 1981 as amended, and the Protection of Badgers Act 1992). As such, it is an offence to harm badgers or disturb or damage their setts.

2.2.9 The site walkover involved searching for evidence of badger activity. This included dung pits, latrines, snuffle holes, tracks, hair, prints, scratch marks and sett holes.

Bats

2.2.10 All British bat species and their roosts are protected under European Law (The Conservation of Habitats and Species Regulations 2017) and UK Law (Wildlife and Countryside Act 1981, as amended). As such it is an offence to undertake the following acts:

- Deliberately capture, injure or kill bats
- Damage or destroy a breeding or resting place
- Obstruct access to their resting or sheltering places
- Intentionally or recklessly disturb a bat while it’s in a structure or place of shelter or protection

2.2.11 As there are existing buildings and tress within the application site, particular attention was given to bats.

<u>Habitat Suitability</u>

2.2.12 Initially, a review of publicly accessible online mapping systems was undertaken to assess the habitats present on site and in the surrounding area. The review assessed the suitability of the habitats to support and provide connectivity for commuting and foraging bats.

Table 1. Guidelines for assessing the potential suitability of proposed development sites for bats based on flight-paths and foraging habitats

Suitability	Commuting and foraging habitats
None	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	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	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	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	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.

Preliminary Roost Assessment

2.2.13 In addition, a preliminary roost assessment (PRA) of the existing buildings and ground level tree assessment (GLTA) trees was undertaken. An external inspection and internal inspection (where accessible) of the buildings and trees was undertaken to search for, and to assess the potential for, a bat roost to be present.

2.2.14 The external inspection of the building included, for example, looking for gaps between any soffit boards and walls, gaps between window frames and the walls, and looking for bat droppings on the walls and window ledges. Following the external survey, an internal survey of accessible loft spaces was also carried out to search for evidence of a bat roost. This included looking for the following signs:

- live or dead bats
- bat droppings
- bat entry/exit points
- bat urine staining
- grease marks on any timbers
- feeding remains such as insect wings
- areas clear of cobwebs

2.2.15 The external inspections of the trees involved a visual examination of each tree from the ground using close-focusing binoculars to search the trunk and the canopy for potential roosting features (PRFs). A high-powered torch was used to inspect cavities or shaded areas of the tree. Features of trees commonly used by bats for roosting and shelter, and field signs that may indicate use of trees by bats, were also recorded. Potential roosting features that may be used by bats include:

- woodpecker holes;
- rot holes;
- hazard beams;
- other vertical or horizontal cracks and splits (such as frost cracks) in stems or branches;
- partially detached platey bark;
- knot holes arising from naturally shed branches, or branches previously pruned back to the branch collar;
- man-made holes (e.g. cavities that have developed from flush cuts) or cavities created by branches tearing out from parent stems;
- cankers (caused by localised bark death) in which cavities have developed;
- other hollows or cavities, including butt-rots;
- double-leaders forming compression forks with included bark and potential cavities;
- gaps between overlapping stems or branches;
- partially detached ivy with stem diameters in excess of 50mm;
- bat, bird or dormouse boxes.

2.2.16 The building and trees were then assessed in accordance with the guidelines for assessing the potential suitability of proposed development sites for bats (BCT, 2023).

Table 2. Guidelines for assessing the potential suitability of proposed development sites for bats based on roosting habitats in structures

Suitability	**Commuting 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).
Negligible	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.
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 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).
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditionsb 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).
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, conditionsb and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.

2.2.17 A pair of close focussing binoculars, a high-powered torch and an endoscope were used (where required) to search for evidence of bats, externally and internally.

2.2.18 Anthony Nickson designed the bat surveys and carried out the preliminary roost assessments. Anthony holds a Natural England Class 2 survey licence for bats and Bat Earned Recognition Class Licence (CL47) Accreditation Level 1 (Annex A), he is experienced in designing and undertaking bat surveys and mitigation schemes and has held numerous Natural England European Protected Species Mitigation licenses for bats. His qualifications and experience meet the criteria defined in the Technical Guidance Series Competencies for Species Survey: Bats (CIEEM, April 2013).

Bat Emergence / Re-entry Surveys

2.2.19 A single bat emergence / re-entry survey consisting of a dusk emergence survey or dawn re-entry survey was undertaken on the main market hall, toilet blocks, market office and market stores in 2021 and 2024 as these building were classified as having low suitability for roosting bats. The BERS surveys were undertaken to determine presence/absence of a bat roost within the buildings in accordance with the bat surveys for professional ecologist good practice guidelines (BCT, 2023).

2.2.20 For the BERS, surveyors were located strategically to ensure all potential bat access points on the buildings were accounted for, and the surveyors monitored the building to determine whether or not any bats emerged from, or entered, the buildings/trees. The surveyors used an Anabat Scout bat detector to record the echolocations of any bat activity in full spectrum so that the calls could later be identified to species or at least genus level using Anabat Insight (version 1.9.7-0) bat acoustic analysis software.

2.2.21 Due to antisocial behaviour being previously recorded at the site night time vision aids (NVA) were not employed. As the likely species to be found within the building would be the early emerging and late re-entering pipistrelle species not using NVAs was not seen as a significant limitation on the survey.

2.2.22 The dusk emergence surveys began at least 15 minutes before sunset and continued for 90 minutes following sunset. The dawn re-entry surveys began at least 90 minutes before sunrise and concluded 15 minutes after sunrise.

2.2.23 The BERS surveys were led by Anthony Nickson, Bruce Shortland and Richard Lowe, assisted by Aidan Pickering, Alex Cusick, Eleanor Lowe. John Lindsey, Lauren Dobson, Marie Pickering, Molly Meadows and Olivia Leversedge. All surveyors are experienced in undertaking dusk emergence surveys and familiar with the species of bats likely to be found in Yorkshire.

Birds

2.2.24 All birds, their nests and eggs are protected at the nest under UK Law (Wildlife and Countryside Act 1981, as amended). As such it is an offence to intentionally undertake the following acts:

- Kill, injure or take any wild bird
- Take, damage or destroy the nest of any wild bird whilst it is in use or being built
- Take or destroy the egg of any wild bird
- Intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or at a nest containing eggs or young, or disturb the dependent young of such a bird.

3.0 Results

3.1 Desktop Study

Protected Sites

3.1.1 West Yorkshire Ecology Service provided the following ecological information for the site and a 2km radius:

- Statutory and Non-Statutory Sites
- Protected and other Notable Species

3.1.2 See Appendix A for summary of ecological data search records.

3.1.3 The full list of protected and notable species identified from the data search was analysed, and the relevant issues have been detailed below. It should be noted that although the information provided by the local record centre is based on current records, it does not represent an exhaustive list of all records.

International/National Protected Sites

3.1.4 The desktop study confirmed that there are no sites with European or National statutory designations within a 2km radius of the site.

Regional/Local Protected Sites

3.1.5 The desktop study confirmed that there the following Local Nature Reserves (LNRs), Sites of Biological Importance (SBIs) Local Geological Sites (LGS) within a 2km radius of the Site. These are:

- Caulms Wood Quarry - Local Geological Site, approximately 330m north-east from the site.
- Sparrow Wood -statutory protected Local Nature Reserve approximately 1550m south from the site.
- Sparrow Wood - Local Wildlife Site; approximately 1550m south from the site.

Protected Species

Amphibians / Great Crested Newt

3.1.6 The local record centre provided two GCN records within the 2km search area. The nearest record is approximately 1284m north-west of the site dated from 2016. There are six records for palmate newt *Triturus helveticus* and six records of populations of Smooth Newt *Triturus vulgaris* located approximately 1333m west from the site.

3.1.7 A MAGiC data search showed there are no ponds within 500m of this urban site. There are no records for the species in the MAGiC Great Crested Newt Pond Surveys 2017 – 2019, or Great Crested Newt Class Survey Licence Returns (England) data within 2km.

Badger

3.1.8 The local record centre confirmed the absence of badger within a 2km radius of the site.

Bats

3.1.9 The local record centre identified ninety bat records within a 2km radius of the site, these are summarised in table:

Table 3: Summary of West Yorkshire Ecology's bat records

Bat Species	Roost Records	Non-Roost Records	Closest Record
Brown long-eared (*Plecotus auritus*)	1	4	Nearest record shown as roost (possible) approximately 1525m south from the site.
			Nearest record is shown from an aural bat detector approximately 1457m south from the site.
Common pipistrelle (*Pipistrellus pipistrellus*)	15	39	The nearest roost record is 377m east from the site.
			The nearest record is from a field observation approximately 275m east from the site.
Soprano pipistrelle (*Pipistrellus pygmaeus*)	3	3	Nearest record of roost is shown as 1512m south from the site.
			Nearest record of from field record is approximately 1086m north-west of the site.
Pipistrelle bat (*Pipistrellus* sp.)	1	4	The nearest record is from a roost 1210m north-west from the site.
			The nearest record is from a grounded bat 618m north from the site.
Vesper Bat species (*Vespertilionidae*)	10	6	The nearest record of a roost is from 1281m south-west from the site.
			The nearest record is from a building 819m north-west from the site.
Daubenton's bat (*Myotis daubentonii*)	0	1	Single record, Roost (bachelor) from 2005 1725 from site.
Noctule bat (*Nyctalus noctula*)	0	3	Field record from May 2014, 737m from site.

Birds

3.1.10 The local record centre provided ten bird records within 2km of the search area; including species which are known to nest in the type of habitats present within the site such as house sparrow (*Passer domesticus*), starling (*Sturnus vulgaris*), Swallow (*Hirundo rustica*) and swift (Apus apus).

3.1.11 There are no records of any Schedule 1 species provided.

Invasive non-native plant species

3.1.12 The local record centre provided records of Schedule 9 part 2 invasive non-native plants within the 2km search area.

- New Zealand Pigmyweed (*Crassula helmsii*), The nearest record is approximately 1333m north-west of the site.
- Montbretia (*Crocosmia x crocosmiiflora*).The nearest record is approximately 625m north-west of the site.
- Japanese knotweed (*Reynoutria japonica*) The nearest record is approximately 582m north-west of the site.
- Giant Hogweed (*Heracleum mantegazzianum*) The nearest record is approximately 795m north-west of the site.
- Himalayan Balsam (*Impatiens glandulifera*); The nearest record is approximately 1817m north-west of the site.

Other Species

3.1.13 The data search provided records for Otter (*Lutra lutra*) from the river Calder, which flows approximately 560 metres to the south of the site.

3.2 Site Survey

Habitat Description

3.2.1 The site is approximately 6.7ha and comprises sealed surface, building, bare ground and urban tree. Please see Appendix B for UK Hab Map.

u1b Developed land – sealed surface

Secondary codes: N/A	**Habitat area:** 0.4877 ha
Condition: N/A	**Corresponding Biodiversity Metric category:** Developed land; sealed surface

3.2.2 The dominant habitat within the site is tarmacadam covered sealed surface which covers the majority of the site. Areas of stone flags are also present. The market square is well maintained, and no vegetation is present within the hardstanding.

u1b5 Buildings

Secondary codes: 815	**Habitat area:** 0.5844 ha
Condition: N/A	**Corresponding Biodiversity Metric category:** Developed land; sealed surface

3.2.3 Within the site there are a number of buildings. The main structure is the large double story Edwardian market hall, and an adjoining single story semi-covered market to the north. Other buildings include numerous day trader stalls, public toilets, market offices and a single-story unit for stores and permanent traders.

3.2.4 The market hall (grid ref: SE2467021891) dates from 1904 and is located towards the southern boundary of the site (ref. plate 1). It consists of a cast iron frame with glass infill, a ridge and valley pitched roof, covered in slate on the east, west and southern aspects and the north facing aspect consists of a large glass skylight. To the north a slightly lower iron framed semi-covered market (grid ref: SE2466321926) provides further cover for traders (ref. plate 2). Internally the roof is vaulted showing exposed cast iron narrow structural roof area lined with timber between the purlins, and exposed cast iron roof trusses and iron frame.

3.2.5 Two single story toilet blocks (ref. plates 3 and 4), a male block (grid ref: SE2462721940) and female/disabled block (grid ref: SE 24641 21926) pitched roofs, slate tiled, concrete ridge tile faced with sandstone/gritstone. Windows are metal framed.

3.2.6 The market office (ref. plate 5) in the north-western corner of the site (grid ref: SE2457921956), is a dormer unit with store frontage on the ground floor and office space upstairs for council staff.

3.2.7 Timber Kiosk (grid ref: SE2457221977), under the broadleaved tree canopy on the northern boundary of Whitehall Way is a single-story small timber clad kiosk with glass reinforced plastic pitched roof , roller shutter door (ref, plate 6).

3.2.8 Market stores, and permanent traders units (grid ref: SE2459021990) a single story, stone clad unit with cavity wall and a pitched roof consisting of a ridge and valley structure (ref. plate 7).

3.2.9 Market stalls – rows of open fronted, timber framed trading stalls with corrugated metal roofs for day trader stalls.

3.2.10 A small single storey sub-station to the north-east of the site adjacent to the existing bin store.

u1 Scattered tree

Secondary codes: 32	**Habitat area:** 0.0489 ha
Condition: Poor	**Corresponding Biodiversity Metric category:** Urban tree

3.2.11 A row of three semi-mature urban trees are present along the north-western perimeter of the site east of the intersection of Foundry Street with Whitehall Way. These consist of a single whitebeam (*Sorbus spp*), and two ornamental cherry (*Prunus* spp). This report does not cover in detail the trees that are present within the site, this is covered in a separate tree survey report (BDP, 2021).

u1f Sparsely vegetated urban land

Secondary codes: 510	**Habitat area:** 0.0026 ha
Condition: Poor	**Corresponding Biodiversity Metric category:** Bare ground

3.2.12 The three trees are planted in a tree pit which is predominately bare ground surrounded by sealed surfaces.

Urban tree

3.2.13 A row of three semi-matureurban trees are present along the north-western perimeter of the site east of the intersection of Foundry Street with Whitehall Way. These consist of a single whitebeam (*Sorbus spp*), and two ornamental cherry (*Prunus* spp). This report does not cover in detail the trees that are present within the site, this is covered in a separate tree survey report (BDP, 2021).

Protected Species

Bats

3.2.14 Throughout the year, all British bat species (notably pipistrelle bats which have been recorded within 2km of the site) use buildings or trees to roost, they favour areas that tend to be dark, sheltered and undisturbed.

3.2.15 The existing market building, toilet blocks, market office blocks and adjacent unit, as well as the scattered trees within the site may provide roosting potential for bats, in particular, pipistrelle species which favour crevice roosting locations within buildings and trees such as behind barge boards/soffits and fascia's/hanging tiles and within vertical or horizontal cracks and splits.

Preliminary Roost Assessment

3.2.16 The existing market hall (ref. plate 1) is a single-floor triple-story height cast iron frame with glass infill with a ridge and valley pitched roof; the south side clad in slate and the north facing aspect glass. Air vents with louvre slats are present across the south facing pitches, mesh bird deterrent is installed at the potential points of entry. Internally the roof is clad with timber sarking. Bird deterrent netting is installed beneath the tie beams. Within the market hall are numerous flat roofed permanent trader kiosks that are timber clad with roller shutter frontage. There are small numbers of gaps visible around the structure between the slate tiles, lifted lead flashing and along the ridge tiles where pointing is missing. These provide opportunities for crevice dwelling bats to shelter in the structure. No visible signs of use by bats are present. The unit and associated internal buildings are viewed as having **low potential** for bats given the context of the structure in the surrounding area.

3.2.17 The smaller semi-covered market adjacent to the hall is a lower structure to the larger market hall but has painted ornate cast iron gable ends on the east and west face that are infilled with toughened glass or bird proof netting (ref. plate 8). The roof consists of a quadruple ridge and central valley design with south facing slate tiles and glass facing north aspect to fill the unit with a cool ambient light the ridges are capped with a concrete tile. Small gaps are occasionally present between tiles. Entrances to the market space are secured with roller shutters that provide negligible roosting opportunities for bats. Internally the covered hall is similar to the larger unit with exposed cast iron rafters and timber sarking under the pitched slate roof areas. The hall contains a range of day trader and permanent trader stalls of timber construction with corrugated metal roofs. The units have negligible features for bats in the context they are in. The market hall and associated internal buildings are viewed as having **low potential** for bats.

3.2.18 There are two toilet blocks in the centre of the site. These are single story, stone clad buildings with slate covered pitched roofs. Single glazed safety glass with tight fitting metal frames. The doors are well fitted and roller shutters cover the main toilet access areas. Internally the ground floor is a tiled municipal toilet with maintenance facilities, and very limited opportunities for roosting bats. The loft area is free from clutter, gable ends ventilation are covered by an intact fine wire mesh (ref. plate 9). Internally the roof is lined with bitumen felt and appears well sealed; in its current condition it possesses limited access / roosting opportunities for bats (ref. plate 10), as such it is viewed as having **low potential** for bats.

3.2.19 The market office (ref. plates 11-13), in the north-western corner of the site is a dormer unit with store frontage across the ground floor and additional office space on the first floor for council staff. The building has cavity walls and is faced with a gritstone/conglomerate stone blockwork typical of the area. Windows and doors are well fitted double glazed UPVC units with limited opportunities for bats. The roof is a slate tiled hipped roof with concrete ridge tiles and lead flashing is found around the valleys above the four south facing dormer windows, some missing mortar is present in the dry verge above the windows. Breather holes are present in the wall above the windows, which are sealed with wire mesh. There are six pitched roof windows across the northern aspect, and two on both the east and western aspect, all appear tightly fitted. Four breather vents are present in the ridge of the roof. There are occasional areas of lifting in the lead flashing providing potential access points for crevice dwelling bats. Internally the roof void is clear. The roof is lined with bitumen felt above the timber rafters, the roof is insulated with rockwool. No field signs are present to suggest a bat roost are present. The unit is viewed as having **low potential** for bats.

3.2.20 Timber Kiosk under the broadleaved tree canopy on the boundary of Whitehall Way is a single story small timber clad kiosk with glass reinforced plastic pitched roof, roller shutter door and a small roller shutter kiosk serving hatch. The unit is viewed as having **negligible potential** for bats.

3.2.21 To the east of the market office is the market store/ sandwich shop and a fish monger (ref. plates 14-15) a single story, stone clad unit with cavity walls. A slate tiled pitched roof with quadruple ridges and triple valley, Ridge tiles consist of concrete tiles with ventilation points across. There are small gaps present the units are viewed as having **low potential** for bats.

3.2.22 Market stalls – rows of open fronted, timber framed stalls with corrugated metal roofs for day trader stalls. Regular traders stalls are timber clad with tongue and groove timber walls, roller shutter doors and corrugated metal roofs. The units in the urban context are viewed as having **negligible potential** for roosting bats.

3.2.23 The small single storey flat roof sub-station to the north-east of the site has a bitumastic covering and stone external walls. The building is well sealed and has **negligible potential** for roosting bats.

3.2.24 Table 4 outlines the results of the PRF inspection survey of the three trees on site which could be impacted by the proposed development.

Table 4. Summary of the preliminary roost assessment of trees.

Tree Ref.	Species	DBH (cm)	Notes	Suitability to support roosting bats
T1	Cherry	42	Early mature tree, no features visible	Negligible
T2	Italian Alder	50	Early mature tree, no features visible	Negligible
T3	Cherry	39	Early mature tree, no features visible	Negligible

Bat Emergence / Re-entry Surveys

3.2.25 Following the external inspections of the buildings 2 no. BERS were carried out on each building classified as having low suitability to support a bat roost. A single BERS in 2021 repeated again in 2024. The results were as follows:

Table 5. Dusk survey at Dewsbury Market on 21 July 2021

Sunset Time	Surveyors	Start and end times	Equipment used	Weather
21:21	Anthony Nickson (AN) Bruce Shortland (BS) John Lindsey (JL) Lauren Dobson (LD) Molly Meadows (MM) Marie Pickering (MP) Aidan Pickering (AP)	21:06 – 22:51	7 no. Anabat Scout 1 no. Anabat Walkabout	20.0ºC (dusk temp) 18ºC (end temp) Dry (precipitation) 10% (cloud cover) 1-2 (Beaufort wind scale)

Notes

- No bats were observed emerging / re-entering the buildings on site during the survey.
- 22:20 - Noctule pass, commuting (AN/BS/LD/JL/AP)
- 22:45 - Common pipistrelle pass (BS/LD)

Indicative surveyor locations

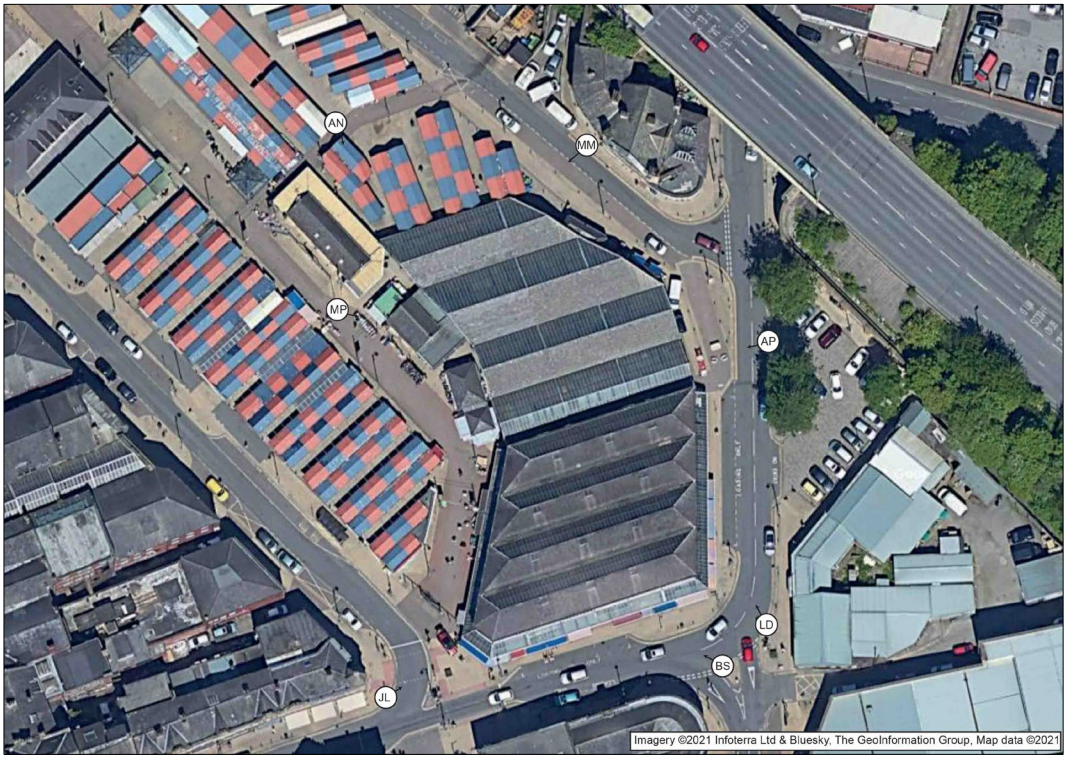


Table 6. Dawn survey at Dewbury Market on 22 July 2021

Sunrise Time	**Surveyors**	**Start and end times**	**Equipment used**	**Weather**
05:05	Bruce Shortland (BS) John Lindsey (JL) Lauren Dobson (LD) Molly Meadows (MM)	03:35 - 05:20	3no. Anabat Scout 1no. Anabat Walkabout	23.0 °C (previous dusk temp) 17°C (Survey start temp) 16 °C (end temp) Dry (precipitation) 10% (cloud cover) 1 (Beaufort wind scale)

Notes

- No bats were observed emerging / re-entering the buildings on site during the survey.
- 03:57 - Common pipistrelle distant call(BS)
- 04:08 - Noctule pass, commuting (BS/MM/JL/LD)
- 04:16 - Common pipistrelle pass (BS)
- Streetlights off at 04:40

Indicative surveyor locations

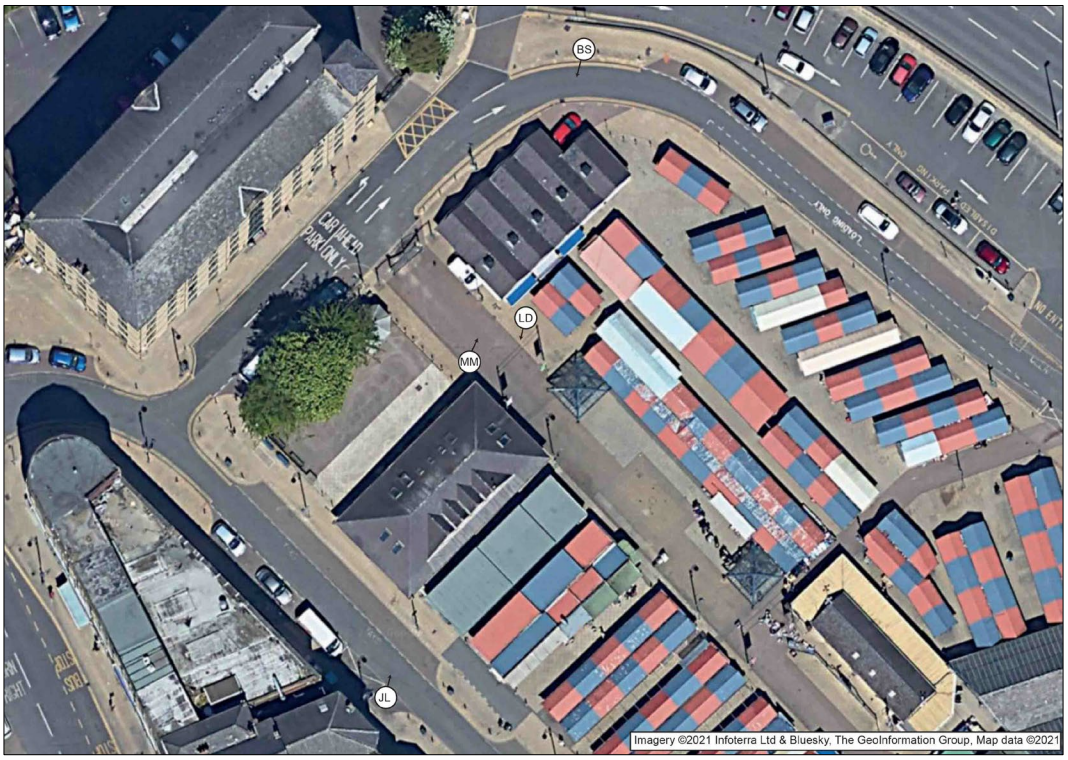


Table 7. Dusk survey at Dewbury Market on 29 July 2024

Sunset Time	**Surveyors**	**Start and end times**	**Equipment used**	**Weather**
21:08	Richard Lowe (RL) Olivia Leversedge (OL) Alex Cusick (AC) Eleanor Lowe (EL)	20:53 – 22:38	4 no. Anabat Scout	19°C (start temp) 16 °C (end temp) Dry (precipitation) <5% (cloud cover) 0 (Beaufort wind scale)

Notes

- No bats were observed emerging / re-entering the buildings on site during the survey.
- Single common pipistrelle heard/observed foraging along Whitehall Way in front of Machells Mill between 21:40 and 21:45.
- Common pipistrelle passes heard but not seen at 21:38 and 22:27.

Indicative surveyor locations

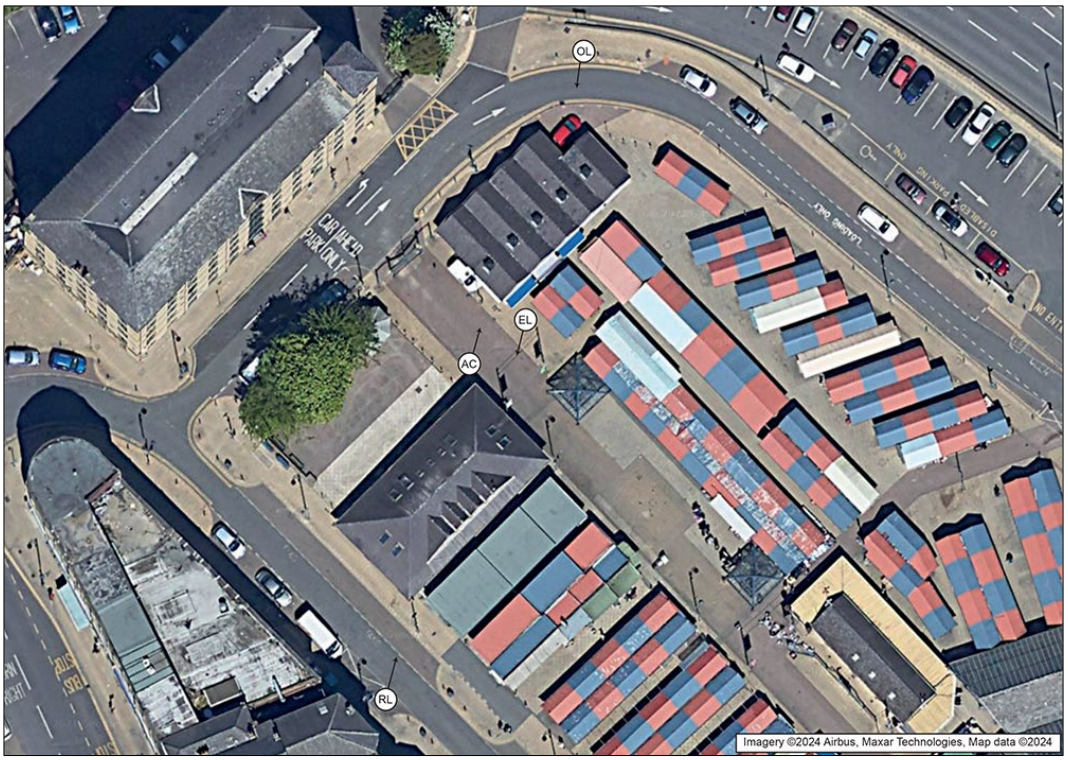


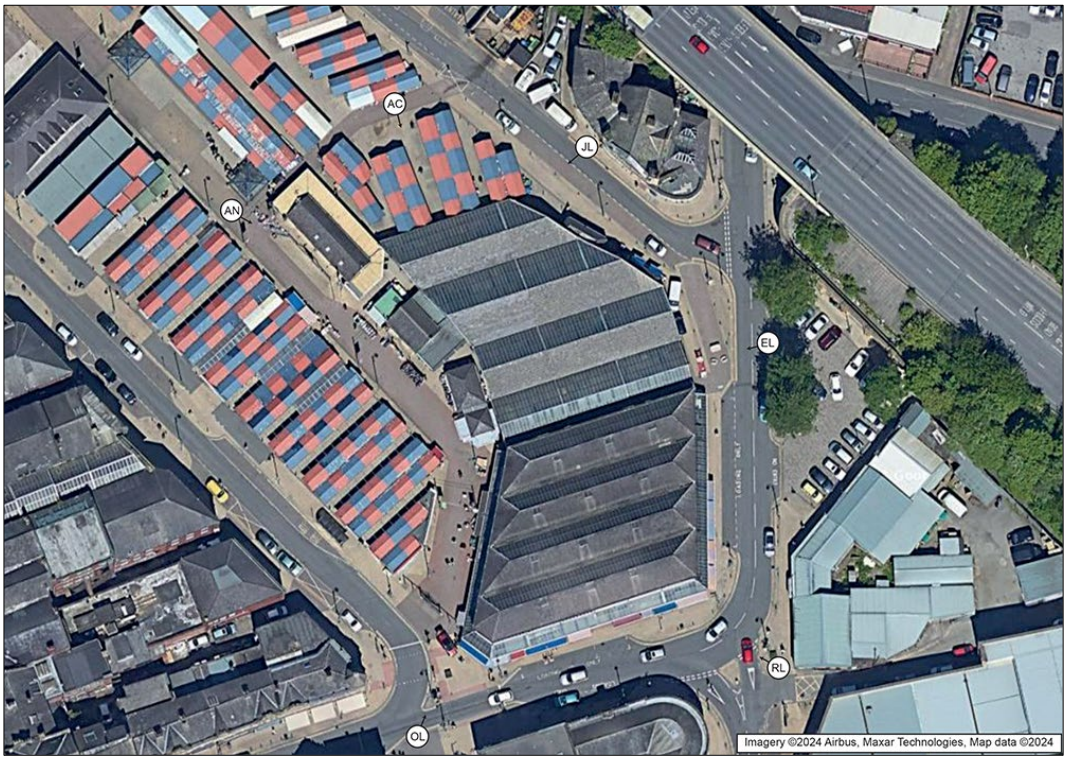
Table 8. Dawn survey at Dewsbury Market on 30 July 2024

Sunrise Time	**Surveyors**	**Start and end times**	**Equipment used**	**Weather**
05:17	Anthony Nickson (AN) Richard Lowe (RL) John Lindsey (JL) Olivia Leversedge (OL) Alex Cusick (AC) Eleanor Lowe (EL)	03:47 - 05:32	5 no. Anabat Scout 1 no. EM Touuch Pro	19.0 °C (previous dusk temp) 15.0ºC (dusk temp) 15ºC (end temp) Dry (precipitation) <5% (cloud cover) 0 (Beaufort wind scale)

Notes

- No bats were observed emerging / re-entering the buildings on site during the survey.
- Noctule bats were recorded at 04:40 and 04:47 commuting high above the site. The bat at 04:40 was observed flying from south to north over the site.

Indicative surveyor locations



Great Crested Newt

3.2.26 There are no suitable waterbodies for GCN within a 500m radius of the site (Source: MAGiC). The habitats on site comprise predominately hardstanding in an urban setting, which is a sub optimal habitat for this species. There are limited opportunities for refuge across the site given the built environment. The hardstanding and buildings provide negligible habitat for GCN and there are no suitable breeding ponds in the wider landscape.

Badger

3.2.27 The hard standing and buildings provide negligible foraging habitat for badger and no habitat is present within the site with suitability for sett construction. No evidence of badger activity was identified within the site.

Birds

3.2.28 Incidental birds recorded in the vicinity of the site, include, but are not limited to, dunnock (*Prunella modularis*), goldfinch (*Carduelis carduelis*), blackbird (*Turdus merula*), wren (*Troglodytes troglodytes*) swift (*Apus apus*), lesser black backed gull (*Larus fuscus*), black headed gull (*Chroicocephalus ridibundus*), magpie (*Pica pica*), feral pigeon (*Columba Livia domestica*) and carrion crow (*Corvus corone*).

3.2.29 The main market hall shows signs of occasional roosting by feral pigeon, but no signs of nesting. The buildings and scattered trees on site provide suitable habitat for nesting birds during the nesting season (March to September).

4.0 Evaluation

4.1 Desktop Study

International/National Protected Sites

4.1.1 There are no international/national protected sites within a 2km radius of the site.

Regional/Local Protected Sites

4.1.2 There is one statutory protected LNR of regional importance within 2km of the site. Sparrow Wood is approximately 1550m south from the site. Sparrow Wood is also recognised as a Local Wildlife Site. In addition to the site recognised for their ecological value; Caulms Wood Quarry approximately 330m north-east from the site is recognised for its local geological value.

4.1.3 The redevelopment of the site is considered to have a negligible impact on the status of these regional/local protected sites within the 2km radius of the site.

4.2 Site Survey

Habitats

4.2.1 The Phase 1 habitats within the site are common throughout the UK and no nationally rare or locally rare plant species were located during the site survey (Preston et al, 2002).

Non-native invasive plants

4.2.2 No plants recognised under Schedule 9 of the Wildlife and Countryside act (1981, as amended) as non-native invasive plant species are present within the site.

Protected Species

Bats

4.2.3 No bat roosts were identified during the preliminary roost assessment and/or nocturnal presence/absence surveys of the buildings and trees within the site.

4.2.4 Low levels of foraging and commuting activity were recorded around the site, from common pipistrelle bats and commuting noctule bats. There are opportunities to provide enhanced foraging and commuting habitat for foraging bats, in particular for the common pipistrelle which was the predominant bat species recorded within and around the immediate vicinity of the site. In the event that the scattered trees are lost they could be compensated for as part of the site masterplan. The lighting strategy for the development could also consider bat species.

Great Crested Newt

4.2.5 There are no suitable waterbodies for GCN within a 500m radius of the site and the habitats within the site are predominately unfavourable for GCN. The impact of the proposed redevelopment of the site on GCN is considered to be negligible. No further consideration for the species should be given going forward.

Badger

4.2.6 No records for badger were provided within the surrounding urban area around the site, habitat suitability for the species is of limited value and no field signs for badgers were recorded. The impact of the proposed redevelopment of the site on the local badger population is considered to be negligible. No further consideration for the species should be given going forward.

Birds

4.2.7 The buildings and trees within the site provide nesting suitable habitat for breeding birds during the nesting season.

5.0 Recommendations

Habitats

5.1.1 No habitats within the site are of biological importance. Biodiversity net gain is a consideration to the wider ecological value of Dewsbury Town Centre and Kirklees. Optimising planting schemes within the proposal will provide habitat for pollinators and other wildlife which is currently not available onsite.

Bats

5.1.2 Several of the buildings on site recorded low suitability to support roosting bats, no signs to indicate the use by bats were recorded internally within any structures. No bat roosts were identified during the subsequent presence/absence surveys and low levels of foraging and commuting activity around the site were recorded from common pipistrelle and noctule bats.

5.1.3 Negligible suitability to support a bat roost was identified within the three trees on site during the preliminary roost assessment. The survey information suggests that none of the trees currently supporting roosting bats.

5.1.4 As none of the buildings or trees within the site currently support a bat roost there should be no significant concerns or constraints in relation to roosting bats in the proposals.

5.1.5 It should be noted that bat absence is very difficult to prove definitively due to their mobility and size, and single or small numbers of bats are able to roost in extremely small space. If, during any works, a bat, or an accumulation of bat droppings (ref. plate 17) is discovered at any time, work is to temporarily cease whilst a bat ecologist is contacted for guidance and assistance. This can be BDP (0161 828 2200) who undertook the initial survey, any licensed bat worker, or the Bat Conservation Trust (BCT) helpline (0845 1300 228).

5.1.6 The scattered trees within the site which provides minimal opportunities for bats for foraging and any loss of trees should therefore be compensated for on a like-for-like basis.

Birds

5.1.7 All bird species are protected at their nest under the Wildlife and Countryside Act. Although limited on site, suitable nesting habitat (buildings and scattered trees) is present. It is recommended that site works that will impact any of these suitable habitats takes place outside the peak bird breeding season (March to September).

5.1.8 If site works to these habitats are to be undertaken within the nesting season, then an appropriately qualified ecologist will be required to undertake a site walkover to visually assess suitable habitat for active nests. If active nests are discovered, then site works around the active nest must cease until the nest is deemed inactive.

Biodiversity Enhancement

5.1.9 In line with the National Planning Policy Framework the planning system should contribute to and enhance the natural and local environment by incorporating the good practice principles for biodiversity net gain, to deliver environmental net gain wherever possible. In order to comply with National Planning Policy Framework the following ecological measures should be incorporated into the development:

- Using appropriate native tree species and other vegetation planting around the site will provide recognisable fruit and nectar sources for local birds, small mammals and invertebrates; trees will enhance the long-term biodiversity of the development.
- Areas of biodiverse planting should be provided within any designated soft landscaping to provide a source of food for local fauna while softening the hard landscaping within the site.
- The increased structural integrity of modern developments reduces the potential for birds and bats to utilise modern buildings for nesting and roosting therefore any new developments integrate a variety of bird and/or bat boxes.

External Lighting

5.1.10 The impact of light to biodiversity within the site, and in particular bats and flying invertebrates is present within the site prior to the areas redevelopment. The nocturnal value of the site could be enhanced through the implementation of a sensitive lighting strategy.

5.1.11 The scattered trees within the site are considered to be vulnerable to the effects of light pollution as these trees could provide suitable foraging and commuting habitat for the local bat populations that were recorded when on site. Any lighting specified near these features should use downward directed lighting with a tightly controlled distribution to limit unwanted backwards spill to minimise the impact of light spill in accordance with best practice guidelines[2].

5.1.12 As numerous flying insects are attracted to ultraviolet light the external lighting should use LED lighting sources which are UV filtered to limit the amount of UV light produced, this will minimise the attraction to insect from adjacent habitats and feeding areas and minimise unnatural behaviour stimulated by the lighting.

6.0 References

Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd Edition, The Bat Conservation Trust, 2016

Bat Surveys for Professional Ecologists: Good Practice Guidelines, 4th Edition, The Bat Conservation Trust, 2023

Collins Wildflower Guide 2nd Edition, Streeter, 2016

Countryside and Wildlife Act, 1981

EU Habitats Directive, 1994

Great Crested Newt Mitigation Guidelines, Natural England, August 2001

Guidance Note 08/23 Bats and Artificial Lighting, Institution of Lighting Professionals, 2023

Guidelines for Preliminary Ecological Appraisal, 2nd Edition, CIEEM, December 2017

Habitats and Species of Principal Importance, JNCC, August 2010

National Planning Policy Framework, Department for Communities and Local Government, December 2023

New Atlas of the British and Irish Flora. Oxford University Press, Preston, C.D., Pearman, D. & Dines, T. 2002

UK Habitat Classification Version 2.0, UKHab Ltd, 2023

Appendix A - Ecological Data Search

West Yorkshire Ecology Service
West Yorkshire Joint Services
Nepshaw Lane South
Morley
Leeds
LS27 0QP | LS27 7JQ (Sat Nav)
Tel: 0113 535 0158
Email: ecology@wyjs.org.uk

ECOLOGICAL RECORDS SEARCH

FOR

DEWSBURY MARKET

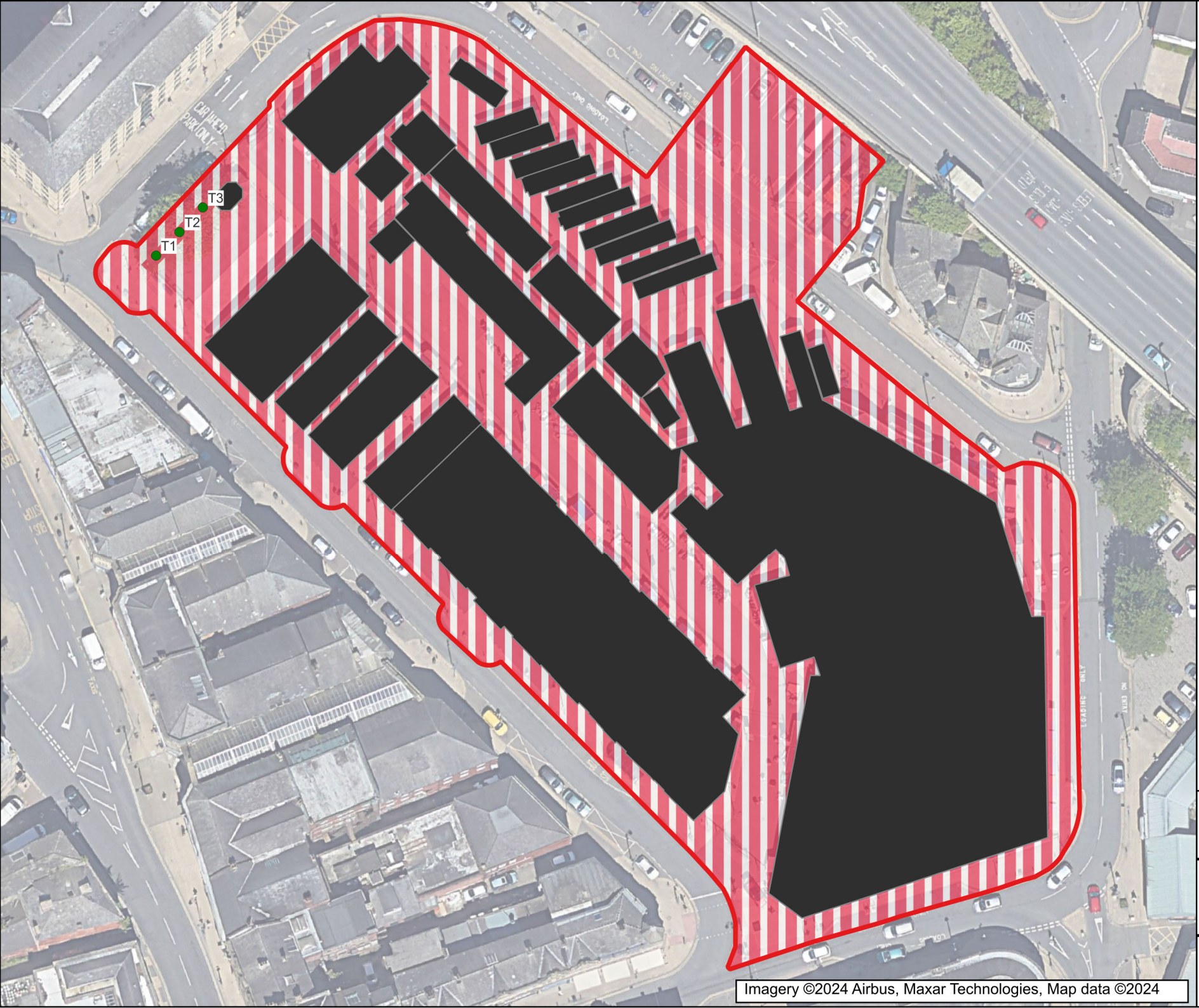
Ref No:- 20210525 K1435 MT

Date: 25/05/2021

Prepared For Anthony Nickson

Building Design Partnership Ltd.

Appendix B - UK Habitat Map



Legend

- Bare ground 0.0026 ha
- Sealed surface 0.4877 ha
- Urban tree 0.0489 ha
- Building 0.5844 ha

Project:
Dewsbury Market

Drawing Title:
UK Habitat Map

Date:
01/08/2024

Revision:
01

Appendix C - Photograph Plates

Plate 1. The covered market hall from the south-eastern corner of the site at the junction between Crackenedge Lane and Corporation Street.

Plate 2. View from Whitehall Way on the eastern side of the Site looking south-west towards the lower level market hall, and surrounding hard standing.

Plate 3. Ladies toilet block in the centre of the Site

Plate 4. **Gents toilet block .and adjacent permanent trader stalls.**

Plate 5. Northern aspect of the market office and permanent trader units.

Plate 6. Timber Kiosk at the northern site boundary.

Plate 7. The market stores building and permanent traders buildings by the north-eastern boundary.

Plate 8. Internal views of the smaller market hall adjacent to the main hall.

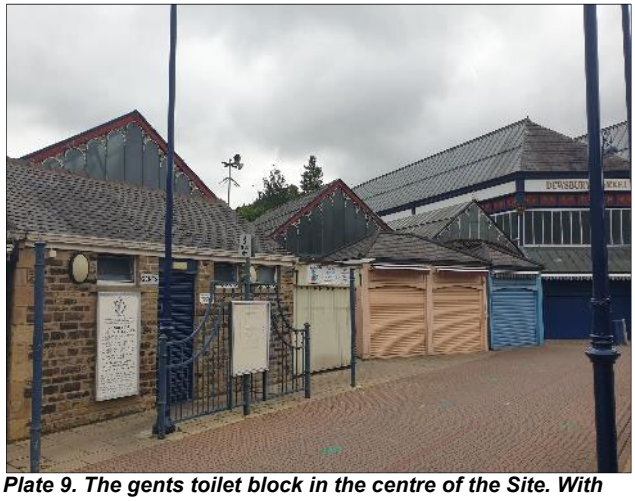


Plate 9. The gents toilet block in the centre of the Site. With adjacent trader stalls.

Plate 10. Internal view from one of the **two toilet blocks. Both of similar construction and status internally.**

Plate 11. External view of the existing market office in the north-eastern corner of the Site.

Plate 12.The market office; view within the internal loft void

Plate 13. The market office, Looking at the structure along its southern aspect.

Plate 14. The market store/ sandwich shop and a fish monger in the north-eastern corner of the site by Whitehall Way.

Plate 15. The market store/ sandwich shop and a fish monger at the north-eastern Site boundary

Plate 16. The market store/ sandwich shop and a fish monger in the north-eastern corner of the site by Whitehall Way.

Plate 17. Fully grown common pipistrelle bat and pipistrelle bat droppings

Appendix D - Statutory Biodiversity Metric Condition Assessment Sheets

Condition Sheet: INDIVIDUAL TREES Habitat Type

Habitat Types

Individual trees – Urban trees
Individual trees – Rural trees
Complete a condition sheet for each tree or block of trees.

Please see the separate Line of trees condition sheet for a line of rural trees. You should only use the Line of trees condition assessment and record that habitat type in rural locations.

Habitat Description

A row of three semi-mature urban trees are present along the north-western perimeter of the site east of the intersection of Foundry Street with Whitehall Way. These consist of a single whitebeam (Sorbus spp), and two ornamental cherry (Prunus spp). This report does not cover in detail the trees that are present within the site, this is covered in a separate tree survey report.

Individual trees (description applied to the urban or rural environment):
Young trees over 7.5 cm in diameter at breast height whose canopies are not touching.

Urban Perimeter / Linear Blocks and Groups (description applied to the urban environment only):
Groups or stands of trees (size requirement as defined above) within and around the perimeter of urban land. This includes those along urban streets, highways, railways and canals, and also former field boundary trees incorporated into developments. Canopies should predominantly overlap continuously. Groups of urban trees that don't match the descriptions for woodland may be assessed within this category.

On-site or off-site, site name and location	On-site Dewsbury Market	**Survey date and Surveyor name**	24 June 21 and 29 July 24 Anthony Nickson
Limitations (if applicable)	N/A	**Survey reference (if relating to a wider survey)**	N/A
Grid reference	SE 24565 21971	**Habitat parcel reference**	N/A

	Condition Assessment Criteria	**Criterion passed (Yes or No)**	**Notes (such as justification)**
A	The tree is a native species (or at least 70% within the block are native species).	No	Trees not native.
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Yes	Canopies continuous.
C	The tree is mature (or more than 50% within the block are mature)[1].	No	Trees all early mature.
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Yes	No obvious evidence of adverse impact on tree health from human activities and trees retained expected canopy.
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	No	Natural ecological niches not present.
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	No	Less than 20% of the tree canopy oversailing vegetation.
	Number of criteria passed	2	

Condition Assessment Result (out of 6 criteria)	**Condition Assessment Score**	**Score Achieved ×/✓**
Passes 5 or 6 criteria	Good (3)	
Passes 3 or 4 criteria	Moderate (2)	
Passes 2 or fewer criteria	Poor (1)	x
Note that 'Fairly Good and Fairly Poor' condition categories are not available for this broad habitat type.		

Suggested enhancement interventions to improve condition score[2]

N/A

Condition Sheet: URBAN Habitat Type			
Habitat Types			
Sparsely vegetated land - Ruderal/Ephemeral **Sparsely vegetated land - Tall forbs** **Urban - Allotments** **Urban - Biodiverse green roof** **Urban - Bioswale** **Urban - Cemeteries and churchyards** **Urban - Facade-bound green wall** **Urban - Ground based green wall** **Urban - Intensive green roof** **Urban - Open mosaic habitats on previously developed land** **Urban - Rain garden** **Urban - Sustainable drainage system (SuDS)** **Urban - Vacant or derelict land** **Urban - Bare ground**			
Habitat Description			
The three trees are planted in a tree pit which is predominately bare ground surrounded by sealed surfaces.			
See the Statutory Biodiversity Metric User Guide for green roofs and UK Habitat Classification (UKHab) for other habitats:			UKHab – UK Habitat Classification
On-site or off-site, site name and location	On-site Dewsbury Market	**Survey date and Surveyor name**	24 June 21 and 29 July 24 Anthony Nickson
Limitations (if applicable)	N/A	**Survey reference (if relating to a wider survey)**	N/A
Grid reference	SE 24565 21971	**Habitat parcel reference**	N/A

	Condition Assessment Criteria	**Criterion passed (Yes or No)**	**Notes (such as justification)**
Core Criteria - must be assessed for **all urban habitat types**:			
A	Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area.	No	Limited vegetation with negligible structure and value for invertebrates.
B	The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.	No	Limited vegetation with negligible structure and value for invertebrates.
C	Invasive non-native plant species (listed on Schedule 9 of WCA[1]) and others which are to the detriment of native wildlife (using professional judgement)[2] cover less than 5% of the total vegetated area[3]. **Note - to achieve Good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).**	Yes	No INNS present.
Additional Criterion - must be assessed for **Open mosaic habitat on previously developed land** only:			
D	The parcel shows spatial variation and forms a mosaic of bare substrate PLUS: - At least four early successional communities (a) to (i); Communities: (a) annuals; (b) mosses/liverworts; (c) lichens; (d) ruderals; (e) inundation species; (f) open grassland; (g) flower-rich grassland; (h) heathland, (i) pools.		
Additional Criteria - must be assessed for **Bioswale and SuDS** habitat types only:			
E1	Plant species are mostly native. If non-native species are present, they should not be detrimental to the habitat or native wildlife[4].		
E2	The vegetation is comprised of plant species suited to wetland or riparian situations.		
Additional Criterion - must be assessed for **Intensive green roofs** only:			
F	The roof has a minimum of 50% native and non-native wildflowers. 70% of the roof area is soil and vegetation (including water features).		
Additional Criterion - must be assessed for **Biodiverse green roofs** only:			
G	The roof has a varied depth of 80 – 150 mm; at least 50% is at 150 mm and is planted and seeded with wildflowers and sedums or is pre-prepared with sedums and wildflowers. **Note – to achieve Good condition some additional habitat, such as sand piles, stones, logs etc. are present.**		
	Essential criteria relevant for habitat type achieved (Yes or No)		Yes

		Number of criteria passed	1
Condition Assessment Result	**Condition Assessment Score**	**Score Achieved ×/✓**	
Results for habitats requiring assessment of **3 core criteria** only **(all listed urban habitats except Open mosaic habitat on previously developed land, Bioswale, SuDS and Green roofs)**:			
• Passes all 3 core criteria; AND • Meets the requirements for Good condition within criterion C.	Good (3)		
• Passes 2 of 3 core criteria; OR • Passes 3 of 3 core criteria but does not meet the requirements for Good condition within criterion C.	Moderate (2)		
• Passes 0 or 1 of 3 core criteria.	Poor (1)	x	
Results for **Green roofs** and **Open mosaic habitat on previously developed land** (requiring assessment of **4 criteria** only - core criteria plus additional criterion specified for habitat type):			
• Passes all 3 core criteria; AND • Meets the requirements for Good condition within criterion C; AND • Passes additional criterion relevant to specific habitat type (D, F or G).	Good (3)		
• Passes 2 or 3 of 4 criteria; OR • Passes 4 of 4 criteria but does not meet the requirements for Good condition within criterion C.	Moderate (2)		
• Passes 0 or 1 of 4 criteria.	Poor (1)		
Results for **Bioswale or SuDS** (requiring assessment of **5 criteria** - core criteria plus additional criteria specified for habitat type):			
• Passes all 3 core criteria; AND • Meets the requirements for Good condition within criterion C; AND • Passes all additional criteria relevant to specific habitat type (Group E)	Good (3)		
• Passes 3 or 4 of 5 criteria; OR • Passes 5 of 5 criteria but does not meet the requirements for Good condition within criterion C.	Moderate (2)		
• Passes 2 or fewer of 5 criteria.	Poor (1)		
Suggested enhancement interventions to improve condition score			
N/A			
Footnotes			
Footnote 1 – Wildlife and Countryside Act 1981 (as amended). **Footnote 2** – Sources of information about detrimental non-native species can be found on the GB Non-native Species Secretariat (GBNNSS) website:			
Home » NNSS (nonnativespecies.org)			
and Natural England Access to Evidence page should also be checked for up-to-date information:			
Horizon-scanning for invasive non-native plants in Great Britain - NECR053 (naturalengland.org.uk)			
For criterion C – For green roof habitat types only – buddleia *Buddleja davidii* should be assessed alongside Schedule 9 species. This species impairs the health of the local ecosystem and reduces the biodiversity potential of the roof. It is also a sign that a roof has not been planted and seeded correctly in subsequent years. **Footnote 3** – Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement. **Footnote 4** – Use professional judgement. Sources of information about non-native species that are not detrimental to native wildlife can be found on the GBNNSS website:			
Alternative plants » NNSS (nonnativespecies.org)			