

Land East of Barton-le-Clay, Central Bedfordshire Development Brief Technical Note – Ecology edp4205_r014a

1. Introduction

- 1.1 This technical note has been produced by The Environmental Dimension Partnership Ltd (EDP) on behalf of Taylor Wimpey UK Ltd to accompany the Development Brief for Land East of Barton-le-Clay ('the Site').
- 1.2 The Site is centred approximately at Ordnance Survey Grid Reference (OSGR) TL 088 315. The Local Planning Authority (LPA) is Central Bedfordshire Council. The location and extents of the Site are illustrated on the Ecological Enhancement and Management Plan provided as **Appendix EDP 1**).
- 1.3 This note should be read with reference to the Ecological Appraisal report (edp4295_r009a) which should be read in conjunction with this Technical Note.

2. Background and Policy

- 2.1 In June 2021 Taylor Wimpey UK Ltd ('the applicant') submitted an outline planning application for "up to 500 homes, a lower/primary school and provision of public open space with associated infrastructure and earthworks".
- 2.2 The Central Bedfordshire Local Plan 2015-2035 was adopted in July 2021 which removed the Site from the Green Belt and allocated it for housing. Local Plan Policy HQ9: 'Larger Sites, Development Briefs and Design Codes' and additional ecological policy requirements of relevance to ecological consideration of the Site require:
 - "Provision of appropriate mitigation/ compensation, to ensure potential indirect impacts, such as increased visitor pressure on the nearby Barton Hills NNR/SSSI are avoided or if this is not possible, mitigated"; and
 - Preparation of an 'Ecological Mitigation and Enhancement Plan, to demonstrate delivery of biodiversity net gain in accordance with National Policy'.
- 2.3 Furthermore, the Central Bedfordshire Local Plan 2015 – 2035 (adopted in July 2021) includes a number of policies that are considered of relevance to the application proposals. These are described in full within The Local Plan, an overview of those with relevance to ecology are summarised below:



- Policy EE1: Green Infrastructure required all major development to demonstrate a net gain in green infrastructure, lining, enhancing and extending existing green infrastructure assets and creating new ones;
- Policy EE2: Enhancing biodiversity stipulates that development proposals should provide a net gain in biodiversity through enhancement and creation of ecological networks through a range of measures outlined in the policy;
- Policy EE3: Nature Conservation seeks to ensure habitats and sites of important geological and geomorphological interest will be protected, maintained, and enhanced. Up to date, comprehensive ecological surveys are required to support and inform planning applications that would affect sites for nature conservation, protected species, or species of habitats of principal importance demonstrating development will deliver a net gain; and
- Policy EE4: Trees, Woodland and Hedgerows seeks to protect existing trees, woodland and hedgerows where possible and seek provision of new planting in development.

3. Ecological Baseline

- 3.1 No part of the Site is covered by any statutory designation and there are no internationally designated sites within 10km of the Site. However, there are seven nationally designated sites within the Site's potential Zone of Influence with the Barton Hills NNR/SSSI closest to the Site, located 950m to the south.
- 3.2 The majority of the Site comprises a single intensively managed arable field surrounded by a narrow improved grassland margin, with both habitats considered to be of negligible or low (Site level) ecological importance. However, habitats of Local level ecological importance are present along the Site boundaries including a network of hedgerows, scattered mature trees, a stream and a small block of broad-leaved semi-natural woodland. The extent of the habitats present within the Site are illustrated on the Extended Phase 1 Survey plan (provided as **Plan EDP 1**).
- 3.3 To establish the ecological baseline of the Site preliminary surveys comprising a desk study and Extended Phase 1 Habitat Survey were completed, with further detailed surveys for breeding birds, foraging/commuting and roosting bats, otter (*Lutra lutra*), water vole (*Arvicola amphibious*), badger (*Meles meles*), white-clawed crayfish (*Austropotamobisu pallipes*), great crested newt (*Triturus cristatus*) and common reptiles were undertaken by EDP during 2018 and with update surveys completed in 2020.
- 3.4 The on-site habitats support only small populations/typical assemblages of a number of protected/Priority Species (of Local-level nature conservation value or less) including breeding birds, foraging/commuting and roosting bat assemblage and otter.



4. Designated Sites Mitigation

- 4.1 The Impact Risk Zone (IRZ) around the Barton Hills NNR/SSSI overlaps with the Site on a small section of the southern boundary and as such has triggered Natural England's IRZ for 'any residential development of 100 units or more.'
- 4.2 Full discussion of the potential impacts of the development on the Barton Hills NNR/SSSI are provided in Section 5 of the Ecological Appraisal. Significant direct or indirect adverse impacts to statutory designations within the zone of influence of the Site are considered unlikely. However, from the outset EDP has sought to mitigate any potential impacts through provision of sufficient, well designed green open space and amenity features within the Site to reduce the potential for any increased visitor pressures on the nearby Barton Hills NNR/SSSI.
- 4.3 The mitigation measures are outlined in full within the Ecological Appraisal and Illustrated on the Ecological Enhancement and Management Plan. In summary, these include significant areas of high quality open public spaces, including a large open green space at the northern edge of the development which will provide areas for formal and informal recreation to serve existing and new residents.
- 4.4 The open space will provide alternative safe family-friendly recreational and play areas for new residents with a mixture of formal and informal paths. A shared footpath and cycleway will also run along the southern side of the Higham Road to the north to provide a safe route towards the town centre and an attractive alternative to encourage recreation to the north of the Site.
- 4.5 A combined children and youth activity area will be embedded into the landscape in the east of the Site providing a large play area and associated bike and scooter tracks. This area will provide an attractive alternative for recreation within the Site.

5. Ecological Mitigation and Enhancement

- 5.1 EDP has provided input throughout the iterative design process, so the landscape strategy illustrated on the Ecological Enhancement and Management Plan includes measures to retain, enhance and protect existing important ecological habitats as well as provision of new valuable habitats to enhance the existing network.
- 5.2 Full details of the measures designed to avoid, mitigate, or compensate for ecological impacts, as well as other measures designed to provide long-term ecological enhancements are provided in Sections 5 and 6 of the Ecological Appraisal and are summarised in turn below.

Construction Measures

- Protection of retained habitats within EPZs, including use of tree protection fencing;



- Briefing of site personnel;
- Pre-commencement walkover survey for badger and otter;
- Sensitive timing and methods of vegetation clearance with regards to the removal of arable crops, hedgerows and trees with regards to nesting and ground nesting birds, roosting bats, reptiles and amphibians;
- Sensitive lighting strategy adopted during construction with regards to foraging bats, otter and badger; and
- Adoption of standard pollution prevention guidance.

Detailed Design Measures

- New native tree and shrub planting with inclusion of flowering and fruiting species;
- Creation of wildflower grassland using a species mix which provides flowers through spring, summer and autumn;
- Enhancement of eastern and southern site boundary with new woodland, tree and shrub planting;
- Erection of bird and bat boxes on existing mature trees and/or on new structures within the development;
- Provision of natural hibernaculum/log piles associated with retained vegetation, to enhance opportunities for hedgehog, reptiles and amphibians; and
- Inclusion of a wildlife pond and SuDS that are designed to accommodate wildlife.

Restoration, Enhancement and Maintenance Measures

- Maintenance and long-term management of all new trees, wildflower grassland, shrubs, water bodies and hedgerows on site following best arboricultural advice; and
- Management of the stream and woodland habitats to improve structure and their value for wildlife.

6. Biodiversity Impact Assessment

- 6.1 To calculate biodiversity net gain, as informed by the *National Planning Policy Framework* (NPPF) a Biodiversity Impact Assessment (BIA) metric was undertaken using the Department for



Environment, Food and Rural Affairs (DEFRA) Biodiversity Metric 2.0 (version date: 19/12/2019), by an experienced ecologist.
















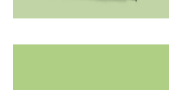








- 6.2 The assessment was undertaken based on the existing habitat information derived from the Extended Phase 1 Habitat survey and the Landscape Strategy, Full details of the Biodiversity Impact Assessment are provided within the Ecological Appraisal.
- 6.3 In summary, positive gains in biodiversity have been demonstrated by the BIA calculation that resulted in a net gain of +7.14 habitat units equating to a +10.63% gain. A loss of linear habitat (hedgerow) units of -2.31 is currently delivered, equating to a -19.96% loss.
- 6.4 Therefore, the scale and extent of new habitat proposed is considered to outweigh the losses anticipated to result from the development proposals. As such, the proposed development has the potential to deliver a net gain in biodiversity, using habitats as a proxy, and thereby exceeding planning policy requirements and delivering tangible benefits to local habitat networks and species populations.

7. Conclusions

- 7.1 EDP finds that the proposed development is capable of compliance with relevant local planning policy and is able to demonstrate delivery of biodiversity net gain in accordance with National Policy.
- 7.2 The details provided within the Ecological Appraisal, illustrated on the Ecological Mitigation and Enhancement Plan and summarised in this Technical Note are considered sufficient to satisfy Local Plan Policy HQ9 for ecology.



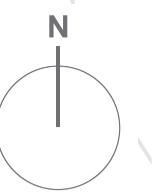
Appendix EDP 1
Ecological Mitigation and Enhancement Plan
(edp4205_d048b 18 August 2021 LT/TR)

-  Site Boundary
-  Amenity Grass
-  Meadow Grass
-  Proposed Specimen Tree
-  Proposed Hedgerow
-  Vegetation to be Retained
-  Water Feature
-  Attenuation Basin/Swale
-  Realigned Ditch
-  Swale
-  Area for Play
-  Multi-Use Games Area
-  Bike/Scooter Track
-  Allotments
-  Development Parcel
-  Private Gardens
-  School Grounds
-  Road
-  Footpath/Secondary Roads
-  Shared Surfaces
-  Public Right of Way
-  Primary GI Assets
 - 1: Undulating species enriched grassland with a mosaic of ponds, wetland, scrub and trees
 - 2: Existing woodland enhanced and managed to increase biodiversity
-  Primary GI Network
Connecting assets within the site and wider landscape
-  Secondary GI Network
Connecting across the site
- Secondary GI Assets
 - i existing hedges
 - ii existing trees incl. with bat roost potential
 - iii existing stream
 - iv existing ditch
 - v existing pond
 - vi proposed wetland areas
 - vii proposed swales
 - viii proposed trees and shrubs

Drainage feature to have permanent water level to create an attractive entrance feature and opportunities for wildlife.

Drainage basins will be integrated into the landscape through irregular edges, creating soft undulations across the wider area.

Hedgerow along Higham Road to be replanted along visibility splay to retain the rural character of the road.



Flowering and fruiting trees planted within wildflower grassland to provide enhanced foraging opportunities for invertebrates, with reference to Buglife B-line project.

Clusters of specimen trees and areas of scrub will be scattered throughout the northern section creating an attractive area of informal open space that is characteristic of parkland. Mown paths through meadow grass and open areas will create opportunities for informal recreation.

Bike and scooter tracks provided as a combined children and youth activity area. Tracks will be sensitively embedded into the landscape and will utilise drainage basins to create interest through landform.

Allotment provision with associated parking and vehicular access.

Existing vegetation including woodland along the eastern and southern boundaries to be retained and enhanced to soften and integrate the development in views from the adjacent agricultural landscape.

Habitat features incorporated into retained habitats to provide enhanced opportunities for local fauna. Including bird and bat roost boxes and refuge/foraging features for hedgehog, reptiles, amphibians and invertebrates such as log piles or compost heaps.

Indicative tree planting within school grounds. Boundary tree planting to be explored as part of the detailed school site reserved matters planning application.

Lateral tree planting to filter views from the Chilterns AONB escarpment.

Additional tree planting to strengthen linear green buffer, soften the development edge and filter views from the adjacent countryside and John Bunyan Trail.

Trees with the potential to support roosting bats are to be retained.

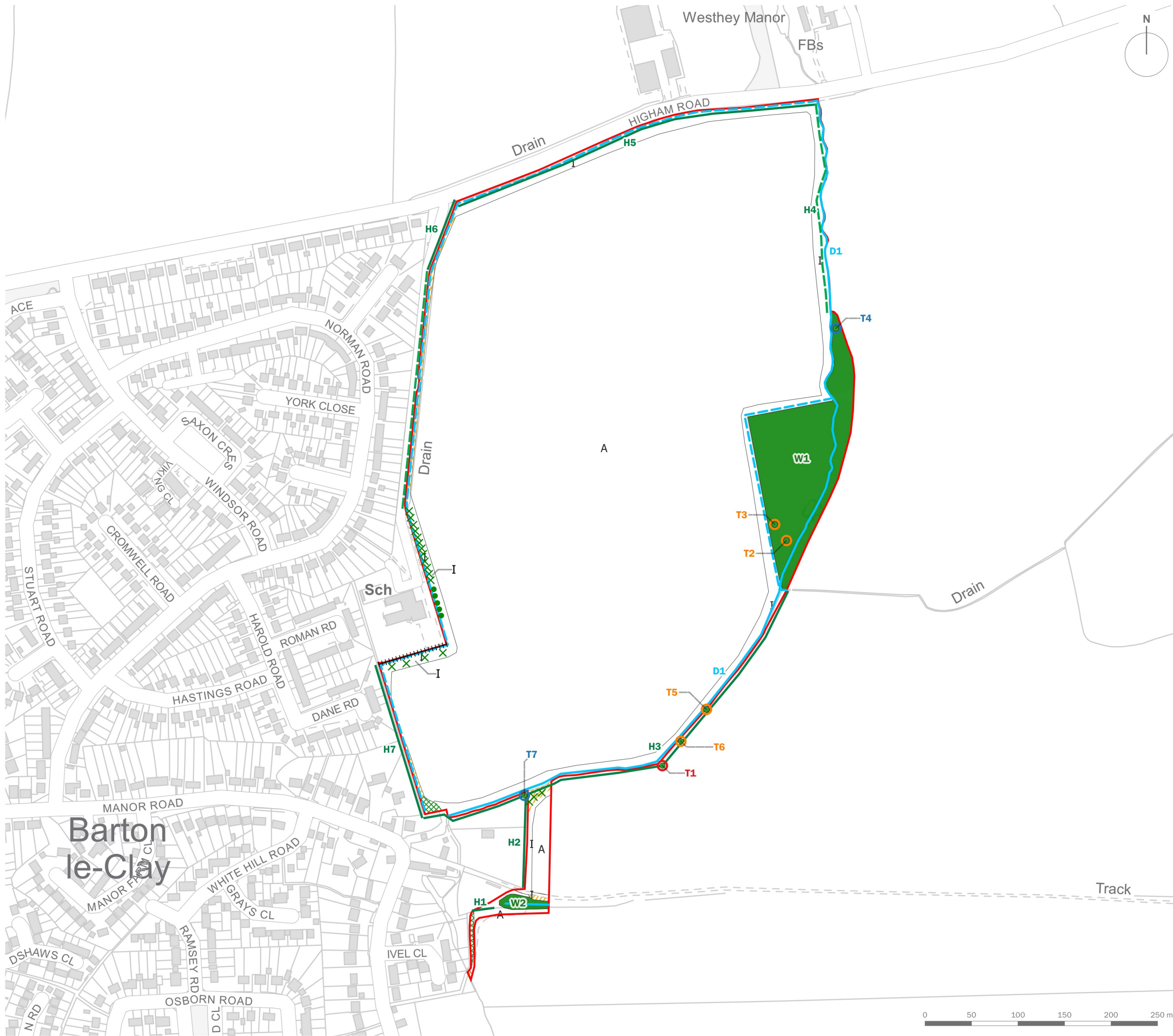
Views from within the development towards the Chilterns AONB escarpment have been preserved and enhanced through vistas.

Connection to Public Right of Way 'John Bunyan Trail'.

0 100m



Plan EDP 1
Extended Phase 1 Habitat Survey
(edp4205_d023d 27 July 2021 GY/ND)



- Site Boundary
- Broadleaved Semi-natural Woodland
- Dense Continuous Scrub
- A Arable
- I Improved Grassland
- Tall Ruderal
- Intact Hedgerow
- Defunct Hedgerow
- Wet Water Course
- Dry Water Course
- Fence
- Scattered Trees
- × Scattered Scrub
- Tree with Low Potential to Support Roosting Bats
- Tree with Medium Potential to Support Roosting Bats
- Tree with High Potential to Support Roosting Bats

client
Taylor Wimpey UK Ltd

project title
**Land East of Barton-le-Clay,
 Central Bedfordshire**

drawing title
Plan EDP 1: Extended Phase 1 Habitat Survey

date	27 JULY 2021	drawn by	GY
drawing number	edp4205_d023d	checked	ND
scale	1:4,000 @ A3	QA	JTF



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