

1.0 BNG FILE NOTE – CODICOTE PROJECT

1.1 BACKGROUND

Greengage Environmental Limited (Greengage) was commissioned by Howarth Contractors Ltd to undertake a Biodiversity Net Gain Assessment (BNGA) of an area of land known as 'The Codicote Development', located in Codicote, Welwyn AL6 9TU, hereafter referred to as 'the site'.

This document is a file note of the BNG and has been produced to inform a planning application for the site which seeks to demolish the former Big Cat Sanctuary Site on Codicote Road and construct approximately 109 new residential dwellings.

The site extends to approximately 4.02 hectares (ha) and is centred on Ordnance Survey National Grid Reference (OS NGR): TL 22313 10947, OS Co-ordinates 522313, 210947.

The site comprises land at 'The Codicote Development' on Codicote Road, Codicote, Hertfordshire. This includes urban habitats, which comprise a large main dwelling with an associated farm shop use, smaller residential bungalows, lodges and mobile homes; areas of incomplete construction comprising walls and foundations; hardstanding gravel roads and driveways; and barns, sheds, and other related storage. Due to the site's past use for the keeping of big cats, parts of the site also contain rows of open-air, square, brick-built enclosures, planted with non-native species, now also overgrown with native scrub species such as bramble *Rubus fruticosus* and nettle *Urtica dioica*. The site also consists of extensive green space, comprising areas of unmanaged scrub, deciduous and mixed woodlands, rough grassland, and individual trees, as well as managed grasslands in the form of modified grassland lawns, and small fenced pastures.

Although much of the site is undisturbed, some areas are subject to ongoing human activity, with occupied mobile homes, bungalows and lodges present within the site, and areas of disturbance associated with storage, household waste, and derelict structures. Vegetation across the site reflects limited management, with scrub and tall unmanaged grassland dominating outside the built footprint, alongside localised areas of bare ground and debris.

The site is located within a rural settlement-edge on the outskirts of Codicote, with surrounding land use comprising a mix of residential properties, roads, agricultural land, and semi-natural habitats. Danesbury Park Local Nature Reserve lies to the south-east of the site, while Singlers Marsh Local Nature Reserve lies to the south, associated with the River Mimram corridor, with the river running approximately 30 metres south of the site.

Beyond the immediate site, the wider landscape comprises a mosaic of farmland, woodland, river corridor habitats, and settlement typical of north Hertfordshire, with several locally designated sites forming a connected ecological network.

A BNGA has been carried out for the site to provide a qualitative measure of the change in biodiversity within the site pre- and post-development with a view to aiding an assessment of the proposals.

1.2 METHODOLOGY

A BNGA has been undertaken to demonstrate the values of the site both pre-development (baseline) and post-development to allow qualitative assessment. The assessment provides numerical and percentage changes in Biodiversity Units (BU). To align with best practice, this has been undertaken following the SBM User Guide¹.

The baseline value and figures for this updated assessment have been established by mapping the habitats on site following survey in January and May 2026.

A BNG baseline map (see Appendix A) has been created based on the data collected, with the area extents for each habitat type then measured using Quantum Geographical Information System (QGIS) software.

The habitats within the site are assigned a value of Biodiversity Units (BU), which are further divided into three categories: area-based Habitat Units (HU), linear Hedgerow units (HeU), and linear Watercourse Units (WU). For this site, only HU are applicable due to the absence of hedgerows and watercourses (including ditches) on-site.

1.3 PRE-DEVELOPMENT (BASELINE)

The baseline biodiversity value of the site has been calculated to be 17.91 HU.

The baseline habitats breakdown is provided in Table 1 below, and a map is provided in Figure A:1.

Table 1. Baseline Habitat Units

Broad Habitat	Habitat Type	Area (Hectares)	Distinctiveness	Condition	Habitat Units
Grassland	Modified grassland	0.0935	Low	Moderate	0.37
Grassland	Modified grassland	0.1664	Low	Moderate	0.67
Grassland	Modified grassland	0.3607	Low	Poor	0.72
Grassland	Modified grassland	0.0558	Low	Poor	0.11
Grassland	Other neutral grassland	0.1413	Medium	Moderate	1.13
Grassland	Other neutral grassland	0.0031	Medium	Poor	0.01
Grassland	Other neutral grassland	0.0459	Medium	Poor	0.18
Heathland and shrub	Bramble scrub	0.0236	Medium	Condition Assessment N/A	0.09

¹ Department of Food and Agriculture (2024) The Statutory Biodiversity Metric Draft User Guide.

Broad Habitat	Habitat Type	Area (Hectares)	Distinctiveness	Condition	Habitat Units
Heathland and shrub	Mixed scrub	0.203	Medium	Moderate	1.62
Heathland and shrub	Mixed scrub	0.5482	Medium	Poor	2.19
Sparsely vegetated land	Ruderal/Ephemeral	0.0115	Low	Poor	0.02
Urban	Bare ground	0.6087	Low	Poor	1.22
Urban	Developed land; sealed surface	0.6835	V.Low	N/A - Other	0.00
Woodland and forest	Other woodland; broadleaved	0.9739	Medium	Moderate	7.79
Woodland and forest	Other woodland; broadleaved	0.1563	Medium	Poor	0.63
Individual trees	Urban tree	0.285	Medium	Poor	1.14
				TOTAL	17.91

1.4 POST-DEVELOPMENT HABITATS

As detailed in the landscape plans, areas of other neutral grassland, bramble scrub, mixed scrub, other woodland; broadleaved and urban trees are to be retained. Areas of modified grassland and other neutral grassland are to be enhanced. Habitat creation includes modified grassland, other neutral grassland, mixed scrub, introduced shrub, vegetated gardens, other woodland; broadleaved and the planting of urban trees. The remaining area of the site will be developed land; sealed surface.

The post-development habitats breakdown is provided in Table 2 below, and a map is provided in Figure A:2.

Table 2. Post-development Habitat Units

Broad Habitat	Habitat Type	Area (Hectares)	Distinctiveness	Condition	Habitat Units
Retained					
Grassland	Other neutral grassland	0.1413	Medium	Moderate	1.13
Heathland and shrub	Bramble scrub	0.0236	Medium	N/A	0.09

Broad Habitat	Habitat Type	Area (Hectares)	Distinctiveness	Condition	Habitat Units
Heathland and shrub	Mixed scrub	0.0148	Medium	Moderate	0.12
Woodland and forest	Other woodland; broadleaved	0.8114	Medium	Moderate	6.49
Woodland and forest	Other woodland; broadleaved	0.1043	Medium	Poor	0.42
Individual trees	Urban tree	0.1181	Medium	Poor	0.47
Enhanced					
Grassland	Modified grassland	0.1664	Low	Moderate	1.13
Grassland	Modified grassland	0.0558	Low	Poor	0.35
Grassland	Other neutral grassland	0.0459	Medium	Poor	0.31
Created					
Grassland	Modified grassland	0.0484	Low	Moderate	0.17
Grassland	Modified grassland	0.0122	Low	Poor	0.02
Grassland	Other neutral grassland	0.2289	Medium	Moderate	1.53
Heathland and shrub	Mixed scrub	0.0361	Medium	Moderate	0.24
Urban	Developed land; sealed surface	1.5751	V.Low	N/A - Other	0.00
Urban	Introduced shrub	0.0478	Low	Condition Assessment N/A	0.09
Urban	Vegetated garden	0.7584	Low	Condition Assessment N/A	1.46
Woodland and forest	Other woodland; broadleaved	0.005	Medium	Moderate	0.02
Individual trees	Urban tree	0.0244	Medium	Poor	0.07

Broad Habitat	Habitat Type	Area (Hectares)	Distinctiveness	Condition	Habitat Units
Individual trees	Urban tree	0.228	Medium	Moderate	0.70
* Individual trees are not included in the total site area to avoid double counting				TOTAL	14.82

1.5 DISCUSSION

Under current proposals, an overall loss of 3.08 HU will be delivered.

This equates to a net loss of -17.22%, which is below the 10% requirement. Trading rules are also currently not met.

Through consultation with the client and the design team, options for future changes to the landscape proposals and/or offsite compensation have been discussed with regards to how to deliver the proposed development and achieve a 10% net gain and to meet trading rules. Future changes to meet these requirements could include:

- Woodland on site that is retained is enhanced to raise its condition assessment
- 20 more trees planted on site
- 0.52ha of mixed scrub planted on or offsite

The above is a suggested solution only and the exact changes and habitat enhancement/creation should be confirmed prior to any development commencing.

Given the scale of the development and the amount of enhancement and habitat creation, including any additional creation/enhancement required to achieve 10% net gain and to meet trading rules, the biodiversity enhancements are considered to likely be 'significant' in accordance with Gov.UK guidance². Therefore, detail relating to the proposed biodiversity compensation and enhancement actions in relation to habitat creation and management should be provided within a Habitat Management and Monitoring Plan (HMMP). The need for the HMMP, as opposed to a Landscape Ecological management Plan (LEMP) will be confirmed once the landscaping proposals have been finalised. The production of a HMMP (or LEMP if deemed suitable) could be a condition of planning.

Providing these recommendations are adhered to, the proposals stand to be compliant with legislation and current planning policy.

² <https://www.gov.uk/guidance/make-on-site-biodiversity-gains-as-a-developer#significant-on-site-enhancements>

APPENDIX A BASELINE AND POST-DEVELOPMENT HABITATS

CODICOTE DEVELOPMENT

Legend

Site Boundary

Trees

Habitats

g3c - Other neutral grassland

g4 - Modified grassland

h3d - Bramble scrub

h3h - Mixed scrub

u1b - Developed land; sealed surface

u1b5 - Buildings

u1b6 - Other developed land

u1f - Sparsely vegetated urban land

w1g - Other broadleaved woodland

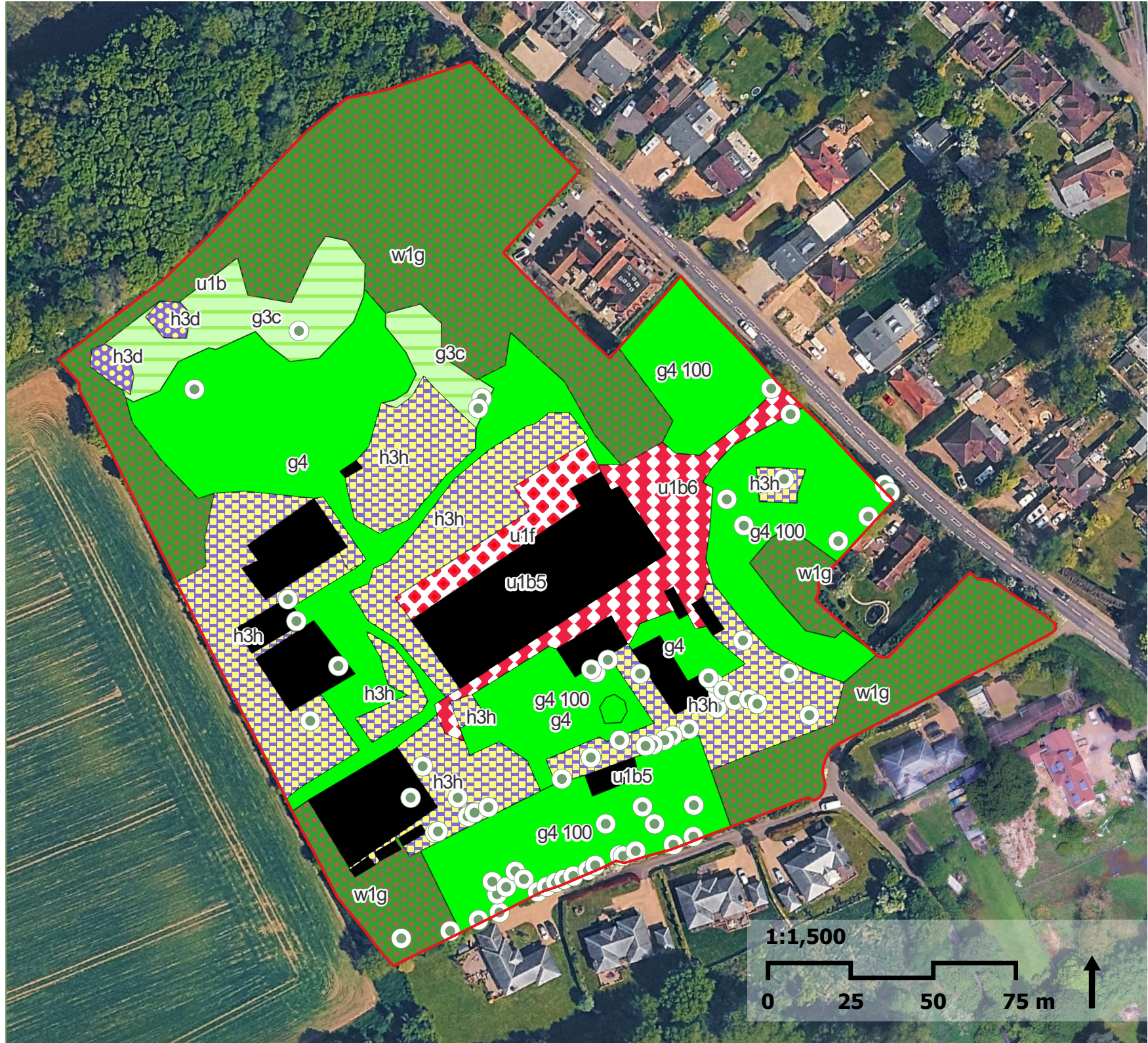
Secondary Codes:
100 - Grazed

Title: Figure A1 UKHab Map

Drawn by: FE
Date: 04/08/2026

Reviewed by: MH
Date: 04/08/2026

Project number: 553944
Sources: Google Satellite Imagery, ESRI World
Topo



1:1,500

0 25 50 75 m



APPENDIX B LANDSCAPE PLAN

Notes and Abbreviations	
B	Bare root (bagger)
C	Container (or pot) grown, followed by size of the container (or pot)
FORM	Shape of tree as supplied by the nursery
PTH	Feather
HABIT	Juvenile habit or plant shapes supplied by the nursery
QTY	Quantity
RB	Rootballed (balled and wrapped)
SIZE	Height or spread of juvenile plant
STD	(Clear stem) Standard
STOCK	Root condition/protection method eg Bare root
Trans	Transplant (or undercut seedling)
Turner	Twining climber attached to trellis frame, refer to specification
	Refer to specification for further information
	All plants to be completely hardened off
	Substitutions to be agreed with Landscape Architect

Informal grass footpath route, to create ride through existing trees and scrub cover (where safe to do so). Maintained through higher mowing management regime circa 2m wide.

Proposed Play Area - Details to be agreed.

Existing woodland and vegetation to be retained and managed to enhance existing areas with areas to be used as informal public open space

Proposed native shrub planting reinforced with tree planting to be implemented alongside edge of rear gardens to reinforce formal edge of built development.

Existing vegetation to be reduced to enable rear gardens. Additional tree and native planting to reinforce existing edge and mitigate potential views from publicly accessible areas to the south-west and west.

Combination of ornamental shrubs, accent shrubs and occasional feature trees to be planted at the end of main roadways and at junctions to provide a visual focal point and containment.

Maintenance access to southern boundary behind plots 70-79 and 95-109.

Street trees to be Extra Heavy Standard (EHS) sized trees planted in accordance with recommendations to BS5837 and NHBC Guidelines.
To be planted minimum 5m from buildings, and incorporating suitable root barrier system to control root ingress adjacent to areas of hardstanding.
Trees to be planted with short turf amenity grassland or low level ornamental shrubs below.

- Application Boundary

Existing Trees and Vegetation (Retained)

Proposed Roadways

Proposed Tree Planting

Proposed native shrub planting

Proposed ornamental planting (with specimen shrubs)

Existing trees / vegetation proposed for removal.

Proposed boundary walls

Proposed Dwellings / Structures

Proposed Parking, Footways, Access Paths and Secondary Roadways

Proposed Hedgerows

Proposed grass to rear garden areas

Proposed grass to plot frontages (with accent or specimen shrubs)

Existing Grassland Areas G1

Proposed grass to main entrance, with bulb or wildflower planting G2

Proposed gravel surfaced footpath within public open space area

This drawing may be scaled or cross referenced to the scale bar for planning application purposes ONLY. Do not scale for any other purpose, use figured dimensions only. Subject to site survey, confirmation of utilities (proposed and existing) and all necessary consents. This drawing is not for construction. All dimensions to be checked by user and any discrepancies, errors or omissions to be reported to the Architect before work commences. This drawing is to be read in conjunction with all other relevant materials.

Proposed footpath link between new development and Codicote Road

Ornamental planting to plots fronting access road to soften view of development from Codicote Road.

Feature tree planting to main access road to be Extra Heavy Standards of 18-20cm girth, height in excess of 5m with 2m clear access stem. All trees to be below ground anchored with watering point and drainage connection (tbc - based on permeability of existing ground conditions).

New native tree and shrub planting along boundary with no.44 Coldicot Road to replace existing removed to facilitate internal access road.

Proposed Plant Schedule

PLANTNAME	STOCK	SIZE	SPACING
Specimen Shrubs			
Choisya ternata 'Jadeo Pearl'	C10L	100-125cm	2/m2
Choisya ternata 'Sundance'	C10L	100-125cm	2/m2
Cotinus coccinea 'Royal Purple'	C10L	100-125cm	1/m2
Fatsia japonica	C10L	60-80cm	1/m2
Phormium 'Yellow Vase'	C10L	60-100cm	3/m2
Phormium tenax	C10L	60-100cm	1/m2
Photinia x fraseri 'Red Robin'	C10L	60-100cm	1/m2

PLANTNAME	STOCK	HEIGHT	HABIT
Climbers			
Clematis montana	C10L	100-150cm	
Hedera colchica 'Dentata Variegata'	C3L	60-80cm	Self-clinger
Jasminum officinale 'Grandiflorum'	C3L	60-80cm	Twinner
Wisteria floribunda	C3L	60-80cm	Twinner

PLANTNAME	STOCK	FORM	GIRTH/HEIGHT
Trees			
Acer campestre	B	STD	10-12cm
Aesculus hippocastanum	B	STD	8-10cm
Anus cordata	B	STD	10-12cm
Anus glutinosa	B	STD	10-12cm
Betula pendula	C25L	STD	8-10cm
Carpinus betulus 'Frans Fontaine'	B	STD	8-10cm
Carpinus betulus 'Frans Fontaine'	RB	STD	14-16cm
Fagus sylvatica	C25L	STD	8-10cm
Magnolia grandiflora	C75L	STD	8-10cm
Malus sylvestris	B	STD	180-210cm
Prunus avium 'Pena'	B	STD	10-12cm
Prunus avium 'Pena'	PH		180-210cm
Prunus domestica	B	STD	8-10cm
Prunus serotina	RB	MSTBM3	200-250cm
Quercus robur	C25L	STD	10-12cm
Quercus robur	C25L	STD	8-10cm
Sorbus aucuparia	B	STD	10-12cm
Tilia cordata 'Streetwise'	B	STD	10-12cm
Tilia cordata	RB	STD	14-16cm

PLANTNAME	STOCK	SIZE
Ornamental Hedges (Single Species)		
Fagus sylvatica	B Trans	60-80cm
Plants spaced @6m in a Double Staggered Row		
Photinia x fraseri 'Red Robin'	C3L	40-60cm
Plants spaced @2m in a Single Row		

PLANTNAME	PERCENT STOCK	SIZE
Native Hedge Mixes		
Crataegus monogyna (Hawthorn)	25%	B Trans 60-80cm
Prunus spinosa (Blackthorn)	25%	B Trans 60-80cm
Viburnum opulus (Guelder Rose)	10%	C3L 60-80cm
Tilia cordata (Lime)	5%	B Trans 60-80cm
Cornus sanguinea (Dog Wood)	5%	B Trans 60-80cm
Rosa canina (Dog Rose)	5%	B Trans 60-80cm
Sorbus aucuparia (Rowan)	5%	B Trans 60-80cm
Prunus cerasifera (Cherry Plum)	10%	B Trans 60-80cm
Sambucus nigra (Common Elder)	10%	B Trans 60-80cm

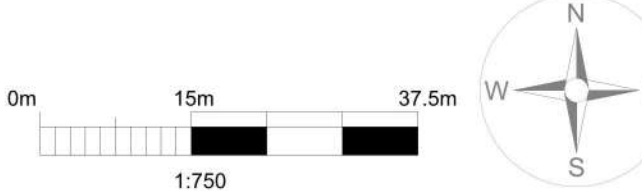
PLANTNAME	PERCENT STOCK	SIZE
Ornamental Hedges (Multiple Species)		
Viburnum tinus 'Eve Price'	50%	C3L 40-60cm
Ligustrum ovalifolium 'Aureum'	30%	C3L 40-60cm
Lonicera nitida 'Baggesens Gold'	20%	C3L 40-60cm
To be planted in species groups of approximately 10, planted @6m in a Double Staggered Row		

PLANTNAME	PERCENT STOCK	SIZE
Plant Mixes (Plot Frontages)		
NATIVES-RUB-MX1 - planted @1m centres		
Viburnum opulus	10%	B Trans 60-80cm
Viburnum lantana	10%	B Trans 60-80cm
Cornus sanguinea	10%	B Trans 60-80cm
Rhamnus frangula	10%	B Trans 60-80cm
Rhamnus catharticus	10%	B Trans 60-80cm
Ligustrum vulgare	10%	C3L 40-60cm
Ilex europaeus	10%	C3L 40-60cm
Sambucus nigra	10%	B Trans 60-80cm
Corylus avellana	10%	C3L 40-60cm
Ilex aquifolium	5%	C3L 40-60cm
Taxus baccata	5%	C3L 40-60cm
Individual varieties to be planted in groups of approximately 10.		

PLANTNAME	PERCENT STOCK	SIZE
NATIVES-RUB-MX2 - planted @1.5m centres		
Qytis scoparius	5%	B Trans 40-60cm
Rosa arvensis	10%	B Trans 40-60cm
Rosa rubiginosa	10%	B Trans 40-60cm
Ilex europaeus	5%	B Trans 40-60cm
Prunus spinosa	5%	B Trans 40-60cm
Corylus avellana	25%	B Trans 40-60cm
Ilex aquifolium	15%	B Trans 40-60cm
Crataegus monogyna	25%	B Trans 40-60cm
Individual varieties to be planted in groups of approximately 5-10.		

PLANTNAME	PERCENT STOCK	SIZE
PLOT-RUB-MX3 - planted @3m2		
Eunymus fortunei 'Emerald Gaiety'	20%	C10L 30-40cm
Euphorbia characias wulfenii	20%	C5L -
Lonicera nitida 'Baggesens Gold'	20%	C10L 40-60cm
Mahonia aquifolium 'Apollo'	20%	C10L 30-40cm
Phormium 'Sundowner'	10%	C10L 60-80cm
Prunus laurocerasus	10%	C10L 40-60cm
Individual varieties to be planted in groups of approximately 2-5		

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Arthian

Howarth Homes

Site:

Codicote Road, Welwyn

Drawing Title:

Illustrative Soft Landscape Proposals

Drawn By: IS/AC	Checked By: IS	Date: 31 / 07 / 2026	Scale: 1:750	Paper Size: A2 (594x420 mm)
Status: Final	Final Revision: v1.0	CAD Ref: 321775-ADW02-Draft v1.0 ILMP	Drawing No. / Client Ref: Figure L10	