

## WELLS FARM – LANDSCAPE STRATEGY

This landscape strategy is written to address Hertfordshire Ecology's letter dated 06/05/2021 in response to Planning Application 6/2020/3451/MAJ (Wells Farm, Northaw Road, East Cuffley EN6 4RD) and should be read in conjunction with the separate responses relating directly to ecology.

Landscape Architect Arthur Gelling CMLI of Gelling Landscape Studio, has been appointed to work with the project ecologist and add additional detail and clarification to the landscape proposals submitted for planning and, subject to Planning Approvals, deliver detailed designs for the landscape. Arthur Gelling is an experienced landscape architect with over 30 years working as lead landscape architect on a range of projects from major masterplanning and sports venues including the London Olympic Stadium, Masterplan for Barking Riverside, Battersea Power Station, and Houghton Regis North as well as many residential and green infrastructure projects at a range of scales.

The strategy outlined here builds on and updates the earlier strategy produced by King and Company.

For the purposes of this response, the Hertfordshire Ecology comments relating to landscape design are split into 4 paragraphs:

### Wild-flowers and grass seed mixes:

#### **Hertfordshire Ecology Comment L1:**

*Landscaping within the application site has been proposed; this includes creating wildflower grasslands within the gardens, as well as small meadow areas beneath trees along Northaw Road East. Whilst I support the intentions, these proposals are essentially inappropriate. Meadows don't exist beneath trees; a shaded mix is needed here. Garden areas cannot be expected to be managed in any way to maintain the species-rich lawn mixture which will be, in any event, impoverished structurally by regular mowing. These are primarily gardens, not wildflower grasslands, which, incidentally, cannot be subject to any future planning agreement to control future management which is what is expected to secure BNG.*

#### **Landscape Strategy Response:**

We note these comments which will be addressed as following:

Garden areas: It is accepted that private gardens cannot be guaranteed to be maintained by private owners in accordance with any landscape management plan, and that diversity and value of habitat can also not be guaranteed.

However, the potential for private lawns to sustain pollinators and other invertebrates in the longer term will be substantially more likely to be fulfilled if the plots' gardens are initially established with a florally diverse seed mix, compared to standard grass-only seeding or turf, regardless of their status in terms of Planning. This is a welcome approach. Private gardens will likely be supplemented with further ornamental flowering planting by the occupiers. This may further support invertebrates and contribute to a net ecological gain over the existing site which is primarily hardstanding.

With the biodiversity potential in mind, private lawns are proposed to generally be seeded with a short-growing floral lawn seed mix which incorporates mowing-tolerant, low-growing native flora such as Achillea (yarrow), Ranunculus (buttercup), Prunella (self heal), and could be supplemented with clovers and hop trefoils, daisy and the like. Shaded lawns within private gardens will be sown with a shade tolerant grass only mix, though this may be still supplemented with clovers and daisy subject to the local conditions.

Within common domain areas, maintenance will be carried out by contractor in accordance with a management specification designed to promote biodiversity. A shade-tolerant wild-flora/grass seed mix is proposed for shaded areas beneath trees.

All landscape work will be delivered according to a NBS specification (Sections Q28 for topsoil, subsoil and additives, Q30 for seeding and turfing).

Floral lawn specification (or similar and approved):

N14 Flowering Lawn Mixture (Naturescape) is 20% wildflower, 80% grasses and designed to permit regular summer mowing to a height of 50mm. Sowing rate 5g/sqm. UK native provenance is required for all seed. If seed with local provenance can be sourced, this will be specified in preference to the product described.

**Wildflowers:**

Achillea millefolium	Yarrow	4%
Anthyllis vulneraria	Kidney Vetch	4%
Galium verum	Lady's Bedstraw	12%
Hypochaeris radicata	Common Catsear	3%
Leontodon hispidus	Rough Hawkbit	4%
Leucanthemum vulgare	Oxeye Daisy	8%
Lotus corniculatus	Birdsfoot Trefoil	10%
Plantago lanceolata	Ribwort Plantain	8%
Primula veris	Cowslip	7%
Prunella vulgaris	Self Heal	16%
Ranunculus acris	Meadow Buttercup	12%
Rumex acetosa	Common Sorrel	12%

**Grasses:**

Agrostis capillaris	Common Bent	5%
Cynosurus cristatus	Crested Dogstail	15%
Festuca Trachyphylla	Hard Fescue	20%
Festuca rubra ssp. litoralis	Slender Creeping Red Fescue	20%
Festuca rubra ssp. rubra	Strong Creeping Red Fescue	20%
Poa pratensis	Smooth Stalked Meadow Grass	20%

Shade tolerant Wild-flora Specification for Common Domain Areas:

N9 Hedgerow Meadow Mixture (Naturescape) is 20% wildflower, 80% grasses and designed for hedgerows, and semi—shade conditions beneath trees. For areas without regular mowing and includes a broad spectrum of species in order to contend with a range of shade conditions as trees grow and to suit the prevailing conditions. UK native provenance is required for all seed. Again, if seed with local provenance can be sourced, this will be specified in preference to the product described.

Maintenance will be specified with 1 or 2 cuts per year – timed to optimised flowering, with an initial early cut in spring (where appropriate) and a main cut in early autumn to promote self-seeding. Early cut arisings to be removed immediately. Late cut arisings to be left for 1 week before collection and then removed to allow seed-heads to open.

**Wildflowers:**

Achillea millefolium	Yarrow	3%
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<i>Agrimonia eupatoria</i>	Common Agrimony	4%
<i>Alliaria petiolata</i>	Garlic Mustard	7%
<i>Centaurea nigra</i>	Common Knapweed	6%
<i>Digitalis purpurea</i>	Wild Foxglove	3%
<i>Filipendula ulmaria</i>	Meadowsweet	4%
<i>Galium mollugo</i>	Hedge Bedstraw	4%
<i>Geranium pyrenaicum</i>	Hedgerow Cranesbill	1%
<i>Geum urbanum</i>	Wood Avens	5%
<i>Hypericum perforatum</i>	Common St. John's Wort	2%
<i>Knautia arvensis</i>	Field Scabious	4%
<i>Lathyrus pratensis</i>	Meadow Vetchling	3%
<i>Leontodon autumnalis</i>	Autumn Hawkbit	2%
<i>Leucanthemum vulgare</i>	Oxeye Daisy	5%
<i>Malva moschata</i>	Musk Mallow	5%
<i>Malva sylvestris</i>	Common Mallow	4%
<i>Prunella vulgaris</i>	Self Heal	5%
<i>Silene alba</i>	White Champion	5%
<i>Silene dioica</i>	Red Champion	7%
<i>Silene vulgaris</i>	Bladder Champion	2%
<i>Stachys sylvatica</i>	Hedge Woundwort	6%
<i>Torilis japonica</i>	Upright Hedge Parsley	4%
<i>Verbascum nigrum</i>	Dark Mullein	3%
<i>Vicia cracca</i>	Tufted Vetch	5%
<i>Viciasylvatica</i>	Wood Vetch	1%
<b>Grasses:</b>		
<i>Agrostis capillaris</i>	Common Bent	3%
<i>Anthoxanthum odoratum</i> (N)	Sweet Vernal Grass	2.5%
<i>Cynosurus cristatus</i>	Crested Dogstail	11%
<i>Deschampsia cespitosa</i> (N)	Tufted Hairgrass	1.5%
<i>Festuca Trachyphylla</i>	Hard Fescue	14%
<i>Festuca rubra</i> ssp. <i>commutata</i>	Chewing's Fescue	12%
<i>Festuca rubra</i> ssp. <i>litoralis</i>	Slender Creeping Red Fescue	14%
<i>Festuca rubra</i> ssp. <i>rubra</i>	Strong Creeping Red Fescue	14%
<i>Poa nemoralis</i>	Wood Meadowgrass	14%
<i>Poa pratensis</i>	Smooth Stalked Meadow Grass	14%

SUDs areas:

**Hertfordshire Ecology Comment L2:**

*The obvious opportunity to enhance the site ecologically is to create a biodiverse area adjacent to the development. I note that SUDs basins are proposed to the west of the proposals, set within a further land parcel of open space. These areas should be subject to suitable wildflower planting and subsequent appropriate management.*

**Landscape Strategy Response:**

The landscape and habitat creation proposals are inevitably limited by the land available for this development. Proposals for off-site SUDs basins and swales will be seeded with a mixed grass and wildflower mix, selected according to anticipated frequency of inundation, but as the site lies outside the development boundary, management for biodiversity cannot be guaranteed and the areas should not be regarded as on-site habitat.

Heritage and orchards:

**Hertfordshire Ecology Comment L3:**

*Furthermore, as so much emphasis is placed upon the farm heritage and a design which is consistent with this, there is an obvious opportunity to plant a community orchard adjacent to the application site on the remaining open land area north of the SUDs. This will reflect the historic orchard previously present to the east of the site as shown on the historic maps, consistent with the stated design aims of the development. Consequently, I advise that these proposals should also form part of the LEMP.*

**Landscape Strategy Response:**

It is agreed that orchard trees of local heritage varieties would be an appropriate and characterful response, and will add to nectar, pollen and late summer food sources for invertebrates and birds in particular. This approach follows a precedent already proposed on another development by the same developer and design team at Dane End. Orchard trees are proposed near the site's frontage with Northhaw Road East.

Four or more trees will be selected from the following varieties (subject to availability):

Malus Bushey Grove	half-std/cordon	Rootball/Bare-root
Malus Brownlee's Russet	half-std/cordon	Rootball/Bare-root
Malus 'Hitchin Pippin	half-std/cordon	Rootball/Bare-root
Malus Hornead Permain	half-std/cordon	Rootball/Bare-root
Malus Lane's Prince Albert	half-std/cordon	Rootball/Bare-root
Malus Laxton's varieties (various)	half-std/cordon	Rootball/Bare-root
Malus New Hawthornden	half-std/cordon	Rootball/Bare-root
Malus River's Nonsuch	half-std/cordon	Rootball/Bare-root
Pyrus Beacon	half-std/cordon	Rootball/Bare-root
Pyrus Conference	half-std/cordon	Rootball/Bare-root
Pyrus Fertility	half-std/cordon	Rootball/Bare-root
Pyrus Magrate	half-std/cordon	Rootball/Bare-root

Pyrus Parrot	half-std/cordon	Rootball/Bare-root
Pyrus Princess	half-std/cordon	Rootball/Bare-root
Pyrus Saint Luke	half-std/cordon	Rootball/Bare-root
Pyrus Summer Beurre	half-std/cordon	Rootball/Bare-root

## Areas north of the site, and boundaries:

### Hertfordshire Ecology Comment L4:

*There is considerable opportunity to introduce further ecologically sympathetic landscaping and habitat creation to the north of the site within the adjacent empty land parcels described as private land - but with an enhanced external landscaped boundary. However, I suspect this area will also be subject to development proposals in due course given it lies within the proposed local plan Site allocation HS30.*

### Landscape Strategy Response:

The land available for this development is limited to the red-line area of the application boundary. The aspiration of “ecologically sympathetic landscaping and habitat creation” will be achieved through the establishment of hedge boundaries which will lie within the common domain for the development (i.e. will be managed according to a defined landscape and habitat management plan, and not individual householders).

It should be noted that the existing site is dominated by Previously Developed Land, and that the proposals will therefore increase the habitat within the site, through the trees and planting in communal areas and the areas given over to private gardens.

The strategies for reptiles, amphibians, bats and Great Crested Newt will be followed in full, with measures in place during and after construction, as stated. Refugia, boxes etc. will be installed and located in conjunction with the project ecologist. Proposals for lighting will also be developed in accordance with the Ecologist’s requirements for lighting for bats, with warm colour temperatures used throughout, no up-lighting of trees or other features, and all fittings selected to eliminate direct upward light.

Hedgerows will establish corridors to significantly enhance habitat and connectivity – especially for invertebrates, reptiles, amphibians and small mammals such as hedgehog, voles etc. which in turn promote predators such as kestrel, buzzard and owl species. Additionally, all garden fences will incorporate ground-level hedgehog holes to ensure connectivity between gardens for hedgehogs, reptiles, amphibians and invertebrates throughout the site.

Hedgerow species will be planted densely, and using a locally appropriate, wide-ranging mix of seed-raised woody species to promote species and intraspecies diversity within the hedgerows. Food plants for a range of butterflies and moths are also included. Hedge planting subject to rabbit or deer grazing will be fenced during establishment (in preference to tree-guards), subject to the local conditions.

The anticipated woody species list is as follows:

Acer campestre	Field maple	80-100	BR 1+1	Feathered	3-9	750	0.33	25%
Carpinus betulus	Hornbeam	100-125	BR 1+2	Feathered	3-9	750	0.33	25%
Cornus sanguinea	Dogwood	60-80	BR 1+1	Branched	1-3	750	0.03	2%
Corylus avellana	Hazel	60-80	BR 1+1	Branched	1-3	750	0.03	2%
Crataegus mongyna	Hawthorn	60-80	BR 1+1	Branched	2-5	750	0.20	15%
Euonymus europaeus	Spindle	60-80	BR 1+1	Bushy	1-3	750	0.03	2%
Frangula alnus	Alder buckthorn	60-80	BR 1+1	Branched	1-3	750	0.03	2%
Ilex aquifolium	Holly	40-60	C2	Ldr laterals	1-3	750	0.07	5%

Ligustrum vulgare	Wild privet	60-80	BR 1+1	Branched	1-3	750	0.07	5%
Lonicera periclymenum	Honeysuckle	60-80	C1	Ldr laterals	1-3	750	0.03	2%
Rhamnus cathartica	Buckthorn	60-80	BR 1+1	Branched	1-3	750	0.03	2%
Rosa arvensis	Field Rose	40-60	BR 1+0	Bushy	1-3	750	0.03	2%
Rosa canina	Dog Rose	40-60	BR 1+1	Bushy	1-3	750	0.03	2%
Rosa rubiginosa	Sweet briar	60-80	BR 1+1	Branched	1-3	750	0.03	2%
Taxus baccata	Yew	40-60	BR 2+2	Bushy	1-3	750	0.03	2%
Viburnum opulus	Guelder rose	60-80	BR 1+1	Bushy	1-3	750	0.07	5%

Hedgerow planting will incorporate a strip which is seeded with a 100% wildflower seed mix, with the intention of establishing a florally diverse margin, promoting pollinators and other invertebrates, and forage for animals which may otherwise graze the woody hedgerow plants. Omitting grasses from the margin will reduce competition for nutrients.

The hedgerow corridor seeding mix is proposed as N9F Hedgerow Mix Flowers Only (Naturescape) sown at a rate of 1.5g/sqm.

#### Wildflowers:

Achillea millefolium	Yarrow	3%
Agrimonia eupatoria	Common Agrimony	4%
Alliaria petiolata	Garlic Mustard	7%
Centaurea nigra	Common Knapweed	6%
Digitalis purpurea	Wild Foxglove	3%
Filipendula ulmaria	Meadowsweet	4%
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Geranium pyrenaicum	Hedgerow Cranesbill	1%
Geum urbanum	Wood Avens	5%
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Stachys sylvatica	Hedge Woundwort	6%
Torilis japonica	Upright Hedge Parsley	4%
Verbascum nigrum	Dark Mullein	3%
Vicia cracca	Tufted Vetch	5%
Vicia sylvatica	Wood Vetch	1%

## Amenity Planting - Generally:

### Landscape Strategy Response:

As stated in the original planning submission the intent is to ensure amenity planting contributes to the habitat value of the development, specifically by providing nectar- and pollen-rich flowering species to provide for pollinating invertebrates over the full season.

Throughout, amenity plant species will be selected from the RHS "Plants for Pollinators" lists – with general preference given to native species, and varieties of native species (but excluding double-flowering or low-nectar cultivars). Species lists will, however, specifically include reliable winter-flowering, non-native, nectar-rich plants such as Mahonia, Viburnum, Sarcococca, and non-native early spring bulbs (such as Galanthus, Crocus, Convallaria, Allium) specifically for winter foraging bumblebees, moths, butterflies, hover flies and the like.

Spring, summer and autumn flowering plants will include attractive and fragrant nectar-rich plants including Lavandula, Verbena, Aster and other compositae, and a range of a range of edible nectar-rich herbs including Origanum, Salvia, Foeniculum, Allium and Mentha.

Planting within the courtyard parking areas and the frontages of houses will be installed and maintained as part of the common domain to ensure longevity and continuity of function.

The existing hedge along the front of the development, though non-native will be retained to maintain continuity of cover for invertebrates and for birds.

Arthur Gelling CMLI

11/07/2021