

### 3. BASELINE CONDITIONS

3.1. An extended Phase 1 habitat survey was undertaken by FPCR Environment and Design Limited across the wider site in 2014. The habitats and dominant plant species were recorded, together with conspicuous faunal activity and evidence of the presence, or potential presence, of protected species.

3.2. Faunal surveys undertaken in 2014 and 2015 across the wider site by FPCR included surveys for bats, [REDACTED] Otter, Water Vole, Dormouse, birds, reptiles and Great Crested Newt.

3.3. Ecology Solutions has been instructed to update the surveys for the Redrow site. To date surveys relating to bats, Badgers, Dormice and birds have been undertaken.

#### 3.4. Habitats

3.4.1. The Redrow site consists largely of arable farmland, with field margins, mixed and broadleaved plantation, improved grassland, hedgerows and trees. A tributary of the Stour Brook runs from north-west to south-east across the site and is a tributary of the River Stour. Additionally, several ditches and ponds are present across the site.

#### 3.5. Species

3.5.1. Bat activity surveys completed in October 2018 across the Redrow site recorded a low level of activity. Areas shown to be of greater interest for bats are Great Field Plantation and hedgerow intersecting the south of the site. Species recorded during the activity survey include Common Pipistrelle *Pipistrellus pipistrellus*, Soprano Pipistrelle, Noctule Bat, Brown Long-eared Bat and Barbastelle. The results of the activity surveys completed by FPCR in 2014 and 2015 across the wider site showed a similar assemblage of bat species.

3.5.2. There are several trees across the Redrow site with bat potential, three of which were found to contain roosts during surveys completed by FPCR in 2015.

[REDACTED]

3.5.4. No signs of Otters or Water Voles were recorded in the existing waterbodies within the Redrow site, nor across the wider site, but these species are known to be present in the River Stour.

3.5.5. No evidence of Dormice was recorded by Ecology Solutions across the Redrow site in 2018. A partial Dormouse nest was recorded in a survey tube in the south-east of the wider site in 2015; no evidence was recorded in the Redrow site.

3.5.6. A number of common bird species were recorded during surveys undertaken by FPCR across the wider site in 2014 and 2015 and more recently by Ecology Solutions across the Redrow site in 2018 and 2019.

The most notable species in the context of the Redrow site are Skylark, Linnet, Yellowhammer, Swift *Apus apus*, Starling *Sturnus vulgaris*, Song Thrush *Turdus philomelos*, Mistle Thrush *Turdus viscivorus*, Dunnock *Prunella modularis*, House Sparrow *Passer domesticus*, Yellow Wagtail *Motacilla flava*, Bullfinch, Redwing *Turdus iliacus*, Fieldfare *Turdus pilaris* and Reed Bunting *Emberiza schoeniclus*.

- 3.5.7. Localised populations of Common Lizard and Grass Snake were recorded within the field margins of the Redrow site during surveys completed by FPCR in 2014. Additionally, a single Slow Worm was recorded in the east of the wider site, though none were recorded in the Redrow site.
- 3.5.8. No Great Crested Newts were recorded during earlier survey work across the wider site in 2015. Populations of both Common Toad and Smooth Newt *Lissotriton vulgaris* were recorded.
- 3.5.9. No notable invertebrate species have been recorded either within the Redrow site or across the wider site. The habitats present on the Redrow site are likely to support a range of common and widespread species, and there is no evidence to suggest that any notable species will be reliant on the site.

## 4. VISION AND CONSERVATION OBJECTIVES

- 4.1. This section sets out the vision and conservation objectives for the site strategy.

*The vision for the strategy is to provide a framework for mitigation, enhancement and management across the site such that demonstrable net gains for biodiversity are achieved.*

### 4.2. Defining the Conservation Objectives

- 4.2.1. Defining a set of objectives for biodiversity at the site is central to the effectiveness of this strategy, given that it is intended to provide a framework that will safeguard existing nature conservation interest and provide guidance on enhancement and future management.
- 4.2.2. Specific objectives for the conservation of particular species or groups and particular habitats of nature conservation interest are set out in the relevant sections to follow. The nature of these objectives has been guided by the principles set out in UK and European wildlife legislation, notably the Wildlife & Countryside Act 1981 (as amended) and the Conservation of Habitat and Species Regulations 2017. Furthermore, the formulation of these objectives has also been influenced by national and local biodiversity and conservation targets, as set out in the UK Post-2010 Biodiversity Framework and the Suffolk Biodiversity Action Plan (BAP).
- 4.2.3. The overarching objectives for nature conservation are as follows:

#### Objective 1

*To safeguard species important in the national and local context, and to maintain or enhance their conservation status as appropriate.*

#### Objective 2

*To ensure that the site continues to support a similar complement of species to that already existing.*

#### Objective 3

*To enhance the biodiversity of the site, where this is compatible with the above objectives.*

### 4.3. Achieving the Objectives

- 4.3.1. Information on the existing situation at the site and its environs with regard to any habitats of ecological interest and the presence of protected species has been collated as part of the preparation of this document and it is upon this foundation that the specific enhancements and management prescriptions to follow are based.

- 4.3.2. These initiatives fall into two broad categories:
- Conservation and enhancement measures for a particular area of nature conservation interest and general measures for the creation and management of proposed habitats; and
  - Species-specific or group-specific measures designed to conserve particular species of interest (such as bats and birds) and enhance the site for these.
- 4.3.3. Where appropriate, specific objectives are defined in the sections to follow.
- 4.3.4. The Landscape and Ecological Management Plan, and the various mitigation and enhancement measures described in the following sections, are illustrated on Plans ECO2a to ECO2d.
- 4.3.5. This document should be read in conjunction with the materials produced by Exterior Architecture on the landscape strategy for the site.

## 5. HABITATS

5.1. Mitigation and enhancement measures for habitats within the site are set out below.

### 5.2. Protection of Retained Habitats

5.2.1. Appropriate Heras fencing and signage will be installed around retained habitats for the duration of construction. Tree Root Protection Areas (RPAs) will be safeguarded through fencing complying with the British Standard. Site personnel will be briefed as to the presence of these retained areas. No storage of materials will be permitted within 10m of retained habitats, and vehicle movements within this area will be for essential works only.

5.2.2. These measures will be the responsibility of Redrow Homes and specifically the site manager.

### 5.3. Landscape Planting Mixes

5.3.1. New planting undertaken as part of the infrastructure of the site will include native species with an emphasis on trees and plants of known value to wildlife.

5.3.2. The planting schedule includes the provision of wet and dry grassland habitat, designed to encourage greater wildflower diversity, and the provision of swales and ponds as habitats containing taller vegetation. This habitat diversification will favour invertebrates and will in turn provide net gains for local wildlife.

5.3.3. Areas of amenity grassland within the infrastructure for the site will be seeded with a flowering lawn mix (see Table 5.1 below).

EL1 Flowering Lawn Mixture Species	% per Mix
<b>Wild Flowers</b>	
Lady's Bedstraw <i>Galium verum</i>	4%
Rough Hawkbit <i>Leontodon hispidus</i>	0.5%
Oxeye Daisy <i>Leucanthemum vulgare</i>	1%
Birdsfoot Trefoil <i>Lotus corniculatus</i>	3.7%
Cowslip <i>Primula veris</i>	3.0%
Selfheal <i>Prunella vulgaris</i>	4.0%
Meadow Buttercup <i>Ranunculus acris</i>	3.5%
Red Clover <i>Trifolium pratense</i>	0.1%
	<b>20%</b>
<b>Grasses</b>	
Common Bent <i>Agrostis capillaris</i>	8.0%
Crested Dog's-tail <i>Cynosurus cristatus</i>	40.0%
Slender Creeping Red Fescue <i>Festuca rubra ssp. litoralis</i>	28.0%
Smaller Cat's-tail <i>Phleum bertolonii</i>	4.0%
	<b>80%</b>

**Table 5.1.** Emorsgate Seeds EL1 Flowering Lawn Mixture species list.

5.3.4. Newly sown flowering lawns should be mown every 7-10 days during the growing season of the first year to a height of 40-60mm. Residual perennial weeds will be carefully dug out or spot treated.

- 5.3.5. After the first year the grass will be mown regularly to a height of 25-40mm. Management can be relaxed from late June for 4-8 weeks to allow for flowering (mowing may be suspended earlier to allow for Cowslip to flower). Heavy quantities of cuttings should be collected and removed from site.
- 5.3.6. Avenue trees (see table 5.2 below) will be planted along primary roads screening play areas and parkland. This will help to increase connectivity throughout the site.

<b>Avenue Tree Species</b>
Field Maple 'Elsrijk' <i>Acer campestre</i> 'Elsrijk'
Norway Maple 'Crimson King' <i>Acer platanoides</i> 'Crimson King'
Hornbeam 'Fastigiata' <i>Carpinus betulus</i> 'Fastigiata'
Cherry 'Accolade' <i>Prunus</i> 'Accolade'

**Table 5.2.** Avenue Tree species list.

#### 5.4. Green Spine / Linear Country Park

- 5.4.1. The Linear Country Park will be a core component of the new development. Green corridors throughout the new development will serve as conduits for wildlife, encouraging natural processes to permeate into the establishing community. They will include new areas of wildflower grassland, native tree and shrub planting, and new swales and attenuation basins as part of the drainage strategy.
- 5.4.2. The Northern Gateway Park will incorporate a large number of parkland trees (see Table 5.3 below), increasing the diversity and age range of tree species within site.

<b>Parkland Tree Species</b>
Field Maple <i>Acer campestre</i>
Norway Maple <i>Acer platanoides</i>
Indian Horse-chestnut <i>Aesculus indica</i>
Alder <i>Alnus glutinosa</i>
Silver Birch <i>Betula pendula</i>
Hornbeam <i>Carpinus betulus</i>
Hornbeam 'Fastigiata' <i>Carpinus betulus</i> 'Fastigiata'
Beech <i>Fagus sylvatica</i>
Copper Beech <i>Fagus sylvatica</i> 'Purpurea'
Holly <i>Ilex aquifolium</i>
Crab Apple 'Evereste' <i>Malus sylvestris</i> 'Evereste'
Crab Apple <i>Malus sylvestris</i>
Canadian Poplar <i>Populus x canadensis</i>
Bird Cherry <i>Prunus padus</i>
Blackthorn <i>Prunus spinosa</i>
Pin Oak <i>Quercus palustris</i>
Oak <i>Quercus robur</i>
Whitebeam 'Majestica' <i>Sorbus aria</i> 'Majestica'
Rowan <i>Sorbus aucuparia</i>
Wild Service-tree <i>Sorbus torminalis</i>
Bald Cypress <i>Taxodium distichum</i>
Small-leaved Lime <i>Tilia cordata</i>
Common Lime <i>Tilia x europaea</i>

**Table 5.3.** Parkland tree species list.

- 5.4.3. Watering will be required during periods of drought for no less than the first three years after planting to ensure satisfactory establishment.
- 5.4.4. Trees will be inspected every six months for the first two years to ensure that they are healthy, not diseased or damaged, or dead. After the first two years, trees can be inspected annually if found to be establishing well.
- 5.4.5. Any failed trees within the first five years will be replaced and maintained for a subsequent five years. Tree replacement will occur in early spring or late autumn.
- 5.4.6. Annual pruning will be completed between January and March. Emergency pruning will be undertaken immediately after a critical fault is identified.
- 5.4.7. New areas of extensive tree planting will be under-sown with Emorsgate Seeds woodland mix (see Table 5.4 below).

<b>EW1 Woodland Mixture Species</b>	<b>% per Mix</b>
<b>Wild Flowers</b>	
Garlic Mustard <i>Alliaria petiolata</i>	3%
Ramsons <i>Allium ursinum</i>	0.8%
Betony <i>Stachys officinalis</i>	1.6%
Rough Chervil <i>Chaerophyllum temulum</i>	1%
Foxglove <i>Digitalis purpurea</i>	0.2%
Meadowsweet <i>Filipendula ulmaria</i>	2%
Hedge Bedstraw <i>Galium album</i>	1%
Water Avens <i>Geum rivale</i>	1%
Wood Avens <i>Geum urbanum</i>	0.2%
Bluebell <i>Hyacinthoides non-scripta</i>	2.8%
Hairy St John's-wort <i>Hypericum hirsutum</i>	0.8%
Primrose <i>Primula vulgaris</i>	0.2%
Selfheal <i>Prunella vulgaris</i>	1.5%
Red Campion <i>Silene dioica</i>	2.7%
Ragged Robin <i>Lychnis flos-cuculi</i>	0.2%
Wood Sage <i>Teucrium scorodonia</i>	1%
	<b>20%</b>
<b>Grasses</b>	
Common Bent <i>Agrostis capillaris</i>	10%
Sweet Vernal Grass <i>Anthoxanthum odoratum</i>	2%
False Brome <i>Brachypodium sylvaticum</i>	7%
Crested Dog's-tail <i>Cynosurus cristatus</i>	28%
Tufted Hair-Grass <i>Deschampsia cespitosa</i>	1%
Slender Creeping Red Fescue <i>Festuca rubra</i> <i>ssp. litoralis</i>	20%
Wood Meadow-grass <i>Poa nemoralis</i>	12%
	<b>80%</b>

**Table 5.4.** Emorsgate Seeds EW1 Woodland Mixture species list.

- 5.4.8. In established woodland the woodland mix requires very little management.
- 5.4.9. In young or open woodland with higher light levels, the mix should be cut annually in mid-summer until the tree cover has established.

- 5.4.10. An 'edible spine' will be established within the linear country park focusing on edible and foraging plants (see Table 5.5 below).

<b>Edible Planting Species</b>
Wild Garlic <i>Allium ursinum</i>
Hazel <i>Corylus avellana</i>
Purple Coneflower <i>Echinacea purpurea</i>
Wild Strawberry <i>Fragaria vesca</i>
Crab Apple <i>Malus sylvestris</i>
Water Mint <i>Mentha aquatica</i>
Wild Marjoram <i>Origanum vulgare</i>
Blackthorn <i>Prunus spinosa</i>
Dog Rose <i>Rosa canina</i>
Elder <i>Sambucus nigra</i>
Rowan <i>Sorbus aucuparia</i>

**Table 5.5.** Edible Planting species list.

- 5.4.11. Significant new tree planting will be undertaken in this area with an emphasis on orchard tree species (see Table 5.6 below).

<b>Wild Orchard Tree Species</b>
Apple 'Annie Elizabeth' <i>Malus domestica</i> 'Annie Elizabeth'
Apple 'Red Falstaff' <i>Malus domestica</i> 'Red Falstaff'
Wild Cherry 'Amber Heart' <i>Prunus avium</i> 'Amber Heart'
Wild Cherry 'Knight Early Black' <i>Prunus avium</i> 'Knight Early Black'
Wild Cherry 'Penny' <i>Prunus avium</i> 'Penny'
Plum 'Avalon' <i>Prunus domestica</i> 'Avalon'
Plum 'Cambridge Gage' <i>Prunus domestica</i> 'Cambridge Gage'
Plum 'Denniston's Superb' <i>Prunus domestica</i> 'Denniston's Superb'
Bird Cherry <i>Prunus padus</i>

**Table 5.6.** Wild Orchard tree species list.

- 5.4.12. New habitats to be established as part of the Green Spine and Linear Country Park are shown on Plans ECO4a to ECO4d.
- 5.4.13. These features will offer new habitats for local wildlife, in particular birds, bats, small mammals and invertebrates.

## 5.5. Great Field Plantation

- 5.5.1. Great Field Plantation consists of a largely even-aged mixed plantation with some limited understorey species, some 7.1ha in area. The western compartment (approximately 1.9ha) includes several mature specimens. Species present include Oak *Quercus robur*, Austrian Pine *Pinus nigra*, Common Larch *Larix decidua*, Grand Fir *Abies grandis*, Beech *Fagus sylvatica*, Scots Pine *Pinus sylvatica*, Norway Spruce *Picea abies*, Sycamore *Acer pseudoplatanus*. Understorey species include Holly *Ilex aquifolium*, Hazel *Corylus avellana*, English Elm *Ulmus procera* and Elder *Sambucus nigra*. The eastern compartment (some 5.2ha) has a higher content of coniferous trees such as Common Larch, Grand Fir and Norway Spruce, which are more regularly spaced (it is understood the original intention was to produce Christmas trees).



- 5.5.2. Ground flora in both compartments consists of Ivy *Hedera helix*, Common Nettle *Urtica dioica*, Herb Robert *Geranium robertianum*, False Brome *Brachypodium sylvaticum*, Hemlock *Conium maculatum*, Wood Dock *Rumex sanguineus* and Dog's Mercury *Mercurialis perennis*, though this is more prevalent in the west of the woodland. The area is well-trodden with footpaths and shows signs of regular human disturbance from the presence of fires, dens and litter.
- 5.5.3. Overall, while Great Field Plantation does offer opportunities to wildlife, it is of limited intrinsic nature conservation interest. The understorey is virtually absent and the field layer is very impoverished, with little light penetrating to the woodland floor. The aims of management will therefore be to facilitate a gradual conversion to a more naturalistic woodland with greater structural diversity, focusing on native species as opposed to introduced conifers.

#### *Conversion of Even-aged Plantation to Uneven-aged System*

- 5.5.4. The principal advantage of the phased removal of conifers and the introduction of native broadleaves is that disruption to wildlife is minimised. A phased approach is therefore favoured over a clear-fell approach, which would have an adverse effect on protected and notable species, and is in any case unacceptable from a landscape and visual standpoint.
- 5.5.5. Three glades will be established in the woodland by felling conifer species. New understorey planting will be undertaken using native species. Existing broadleaved species will be encouraged to grow to maturity.
- 5.5.6. Felled timber will be cut into logs and set into 'loggeries' and more informal log piles to encourage saproxylic invertebrates. Felled trees will not be shredded or mulched.
- 5.5.7. New planting will exclusively be locally native species e.g. Oak; Hazel, Hornbeam; Field Maple, Holly, Guelder-rose; Hawthorn; Spindle, Honeysuckle, Dog Rose, Silver Birch, Cherry, Bird Cherry, Crab Apple and Rowan. The aim will be to encourage strong growth of these species to canopy and understorey layer as appropriate.

#### *Coppicing*

- 5.5.8. Existing Hazel stools will be coppiced on a 15-year rotation to encourage greater structural diversity, and layered to produce new coppice stools and expand the understorey. Cut wood will be used to diversify the habitat through establishment of wood piles.

#### *Ground Flora*

- 5.5.9. The effects of habitat management on the ground flora will be monitored. Though the intention will be to encourage natural regeneration, if this proves difficult consideration will be given to the introduction of plug-planted locally native species.

### *Wildlife Opportunities*

- 5.5.10. It is expected that the habitat enhancements will generate greater wildlife interest. Additional opportunities will be established by providing a series of bat, bird and invertebrate boxes (see following sections).

### *Public Use and Recreation*

- 5.5.11. Public use of the woodland will be monitored and management operations adapted where necessary. Generally it is envisaged that fencing will be avoided. [REDACTED]

[REDACTED] If fencing must be used it will be suitable for the area, e.g. natural woven Willow or Hazel hurdles.

## 5.6. Southern Plantation

- 5.6.1. The woodland in the south of the site is currently a mixed plantation, with a good proportion of native species, though largely even-aged. Long term management will encourage growth of native species and diversification of the habitat. Non-native conifers will be selectively felled to introduce habitat diversity, with timber retained as for Great Field Plantation.
- 5.6.2. An appropriate coppicing regime will be introduced on a 15-year rotation to encourage a vigorous understorey.
- 5.6.3. Bat and Dormouse ‘hop-overs’ will be established using trees approximately 6m in height at edges of new accesses. The species to be used are listed in Table 5.7 below.

<b>Bat Hop-over Tree Species</b>
Field Maple <i>Acer campestre</i>
Alder <i>Alnus glutinosa</i>
Hornbeam <i>Carpinus betulus</i>
Beech <i>Fagus sylvatica</i>
Bird Cherry <i>Prunus padus</i>
Blackthorn <i>Prunus spinosa</i>
Oak <i>Quercus robur</i>
Wild Service-tree <i>Sorbus torminalis</i>
Small-leaved Lime <i>Tilia cordata</i>

**Table 5.7.** Bat Hop-over tree species list.

## 5.7. Stour Brook Tributary

- 5.7.1. Generally the woodland along the watercourse is more semi-natural than that of the plantations, with mature broadleaved trees and a good understorey and field layer. At this stage it is considered that minimal intervention is necessary. Enhancements will focus on the provision of dead wood piles for habitat diversification.
- 5.7.2. The existing footbridge will be replaced to facilitate safe public access and recreation.

## 5.8. Hedgerows

- 5.8.1. The existing hedgerow network is a key green infrastructure asset and is to be retained and enhanced wherever possible.
- 5.8.2. Unless otherwise stated on the Hedgerow Removal Plan 5055-L-112 rev C (see Appendix 1), which accompanied the outline planning application, new gaps established will generally be maximum of 12m to allow for Dormouse dispersal. Gaps in existing hedgerows will be reinforced with native species. New hedgerow and shrub planting will comprise native species as listed in Table 5.8 below.

<b>Native Hedgerow and Shrub Species</b>
Field Maple <i>Acer campestre</i>
Dogwood <i>Cornus sanguinea</i>
Hazel <i>Corylus avellana</i>
Hawthorn <i>Crataegus monogyna</i>
Spindle <i>Euonymus europaeus</i>
Crab Apple <i>Malus sylvestris</i>
Wild Cherry <i>Prunus avium</i>
Blackthorn <i>Prunus spinosa</i>
Dog Rose <i>Rosa canina</i>
Elder <i>Sambucus nigra</i>
Gelder Rose <i>Viburnum opulus</i>

**Table 5.8.** Native Hedgerow and Shrub species list.

- 5.8.3. Hedgerows will continue to be managed. Management will aim to ensure continued good structure. Hedgerows will be cut on rotation, so that not all are cut in any one year. This will encourage greater availability of winter forage for birds. Hedgerows will be laid on rotation to encourage greater structural diversity.
- 5.8.4. Shrub and hedgerow planting will be inspected every three months to ensure that they are healthy, not diseased or damaged, or dead. Any failed species will be removed and replaced with the same species and size.
- 5.8.5. Pruning and dead-heading will be completed at the end of the plant flowering seasons (spring to autumn) as required.
- 5.8.6. Bat / Dormouse 'hop-overs' will be established using trees approximately 6m in height at the edges of new accesses. Where gaps in existing hedgerows are created as part of the development, dropped kerbs will be installed on either side of the road in that location to aid the movement of wildlife through the site.
- ## 5.9. Field Margins / Wildflower Grassland Meadow
- 5.9.1. The existing field margins are recognised to be of relatively higher botanical interest, particularly in the north of the site. These will be retained and subject to ongoing management in line with other grassland areas to maximise their botanical interest. There will be no storage of materials or tracking over of these areas, and no new tree planting. Where appropriate, discreet signage will be used to encourage members of the public to walk on designated paths.

- 5.9.2. New areas of wildflower grassland are to be established throughout the Green Spine North and the Linear Park. These areas are currently principally intensive arable and improved grassland respectively. In conjunction with the drainage strategy, areas of dry and wet grassland will be established (see Tables 5.9 and 5.10 below).
- 5.9.3. Liaison with Suffolk Wildlife Trust will be held to determine the feasibility of using seed sourced from local nature reserves and designated sites, to ensure locally native varieties. Should this not be practicable, approved seed mixes appropriate for the habitat and soil type will be used.
- 5.9.4. Newly established meadows will be cut on an annual basis as required, with the arisings removed. These would be retained as 'habitat piles' in suitable locations to encourage reptiles.

<b>EM6 Meadow Mixture for Chalk &amp; Limestone Soils Species</b>	<b>% per Mix</b>
<b>Wild Flowers</b>	
Yarrow <i>Achillea millefolium</i>	0.5%
Kidney Vetch <i>Anthyllis vulneraria</i>	0.5%
Common Knapweed <i>Centaurea nigra</i>	1.5%
Greater Knapweed <i>Centaurea scabiosa</i>	2%
Wild Basil <i>Clinopodium vulgare</i>	0.4%
Wild Carrot <i>Daucus carota</i>	1%
Lady's Bedstraw <i>Galium verum</i>	2%
Field Scabious <i>Knautia arvensis</i>	1.5%
Rough Hawkbit <i>Leontodon hispidus</i>	0.4%
Oxeye Daisy <i>Leucanthemum vulgare</i>	0.5%
Bird's-foot Trefoil <i>Lotus corniculatus</i>	0.6%
Sainfoin <i>Onobrychis vicifolia</i>	1.5%
Wild Marjoram <i>Origanum vulgare</i>	0.2%
Hoary Plantain <i>Plantago media</i>	0.7%
Salad Burnet <i>Sanguisorba minor</i>	2%
Cowslip <i>Primula veris</i>	1%
Selfheal <i>Prunella vulgaris</i>	1%
Meadow Buttercup <i>Ranunculus acris</i>	1%
Bulbous Buttercup <i>Ranunculus bulbosus</i>	1.5%
Small Scabious <i>Scabiosa columbaria</i>	0.2%
	<b>20%</b>
<b>Grasses</b>	
Quaking-grass <i>Briza media</i>	4%
Glaucous Sedge <i>Carex flacca</i>	0.2%
Crested Dog's-tail <i>Cynosurus cristatus</i>	32%
Sheep's-fescue <i>Festuca ovina</i>	24%
Slender Creeping Red Fescue <i>Festuca rubra ssp. litoralis</i>	12.6%
Crested Hair-grass <i>Koeleria macrantha</i>	2%
Smaller Cat's-tail <i>Phleum bertolonii</i>	4%
Yellow Oat-grass <i>Trisetum flavescens</i>	1.2%
	<b>80%</b>

**Table 5.9.** Emorsgate Seeds EM6 Meadow Mixture for Chalk and Limestone Soils species list.

<b>EM8 Meadow Mixture for Wetlands Species</b>	<b>% per Mix</b>
<b>Wild Flowers</b>	
Yarrow <i>Achillea millefolium</i>	0.2%

Sneezewort <i>Achillea ptarmica</i>	0.2%
Betony <i>Stachys officinalis</i>	1%
Common Knapweed <i>Centaurea nigra</i>	2.5%
Meadowsweet <i>Filipendula ulmaria</i>	2%
Lady's Bedstraw <i>Galium verum</i>	2%
Rough Hawkbit <i>Leontodon hispidus</i>	0.5%
Oxeye Daisy <i>Leucanthemum vulgare</i>	0.5%
Bird's-foot Trefoil <i>Lotus corniculatus</i>	0.7%
Greater Bird's-foot-trefoil <i>Lotus pedunculatus</i>	0.5%
Ribwort Plantain <i>Plantago lanceolata</i>	1%
Cowslip <i>Primula veris</i>	1%
Selfheal <i>Prunella vulgaris</i>	1.5%
Meadow Buttercup <i>Ranunculus acris</i>	2%
Yellow Rattle <i>Rhinanthus minor</i>	1.5%
Great Burnet <i>Sanguisorba officinalis</i>	1.5%
Pepper-saxifrage <i>Silaum silaus</i>	0.5%
Ragged Robin <i>Lychnis flos-cuculi</i>	0.4%
Devil's-bit Scabious <i>Succisa pratensis</i>	0.5%
	<b>20%</b>
<b>Grasses</b>	
Common Bent <i>Agrostis capillaris</i>	10%
Meadow Foxtail <i>Alopecurus pratensis</i>	1%
Sweet Vernal Grass <i>Anthoxanthum odoratum</i>	3%
Quaking-grass <i>Briza media</i>	2%
Crested Dog's-tail <i>Cynosurus cristatus</i>	32%
Tufted Hair-Grass <i>Deschampsia cespitosa</i>	1%
Slender Creeping Red Fescue <i>Festuca rubra ssp. litoralis</i>	24%
Meadow Barley <i>Hordeum brachyantherum</i>	1%
Meadow Fescue <i>Festuca pratensis</i>	6%
	<b>80%</b>

**Table 5.10.** Emorsgate Seeds EM8 Meadow Mixture for Wetlands species list.

- 5.9.5. Newly sown meadows will be mown regularly throughout the first year of establishment to a height of 40-60mm. This will control annual weeds and help maintain balance between faster growing grasses and slower developing wild flowers. Cuttings will be removed if dense. Residual perennial weeds will be carefully dug out or spot treated. In subsequent years, on poor shallow soils the grass will be cut once or twice at the end of the summer.
- 5.9.6. On deeper soils best results are usually obtained by traditional meadow management. This will include a cut to 50mm after flowering in July or August. The cuttings will be left to dry and shed seed for 1-7 days before being removed from the site. The grass can then be maintained at a height of 50mm through to spring.
- 5.9.7. Areas of tussocky grassland will be established using Emorsgate Seeds EG10 Tussock Grass Mixture (see Table 5.11 below) to create greater opportunities for reptiles and other wildlife.

<b>EG10 Tussock Grass Mixture Species</b>	<b>% per Mix</b>
Meadow Foxtail <i>Alopecurus pratensis</i>	2.5%
Crested Dog's-tail <i>Cynosurus cristatus</i>	25.0%
Cocksfoot <i>Dactylis glomerata</i>	20.0%
Tufted Hair-Grass <i>Deschampsia cespitosa</i>	2.5%
Strong-creeping Red Fescue	25.0%