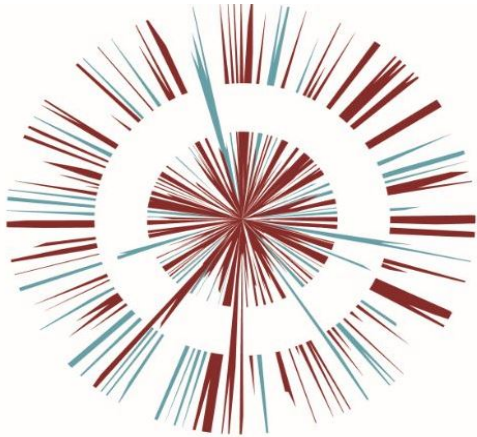




# OMEGA ZONE 8, ST HELENS

Omega St Helens Ltd / T.J. Morris Limited



Landscape Strategy  
OPP DOC. 14





# Omega Zone 8: Landscape Strategy

December 2019



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Prepared on behalf of Omega St Helens Ltd and T.J.Morris Limited

Date: December 2019  
Issue: First Draft  
Doc ref: POE rep001-nrw/151219.001 rev B

# Section 1: Context and approach.

The Omega Zone 8 site lies to the north west of Warrington Town centre, and to the immediate south of the M62 Trans Pennine motorway. It is overlooked to the northwest by Clock Face Country park and sits adjacent to Omega South mixed use development in Warrington; it occupies a low lying area of land as part of the Mersey Estuary.

The site is currently characterised by low-lying arable farmland interspersed with sporadic blocks of woodland, which form a component of the St Helens Bold Forest Area Action Plan.

The total site area is approximately 75.3 hectares, it is broadly flat with an imperceptible gradient running from west to east and north to south across its length and breadth. Larger stands of woodland, including Plain Plantation, Booths Wood and Duck Wood provide some visual relief in an otherwise agricultural landscape..

In ecological terms and given its primary use, the site is relatively impoverished, however the presence of woodland and ponds offer some increased and localised habitat diversity.

Detailed Ecological (2019) and Arboricultural Assessments (2019) have been prepared by The Ecology Practice, and these documents have provided the detail required to inform both the concept masterplanning process and the current detailed and outline applications of which this document forms part.

The Consultant design team lead by Architects, Chetwoods, have embraced the challenges and constraints prevailing on site, whilst at the same time addressing a number of issues considered key to the likely success of the development of Zone 8, and with the desire to mitigate landscape and ecological impacts seen as a key driver in this process. This masterplan will no doubt continue to evolve as a result of either more detailed understanding of the issues and or market demand.

The masterplan recognised that some impacts such as the loss of grassland and woodland cannot be appropriately mitigated on a development of this scale, but at the same time endeavoured to create a proposal that in the medium to long term will significantly enhance the biodiversity of the site and provide key ecological and recreational linkages with the wider landscape.

Critically, the landscape and ecological works proposed as part of this current application underpins this key driver, and advocates a number of strategic and physical landscape interventions required to deliver the masterplans principal aims both in ecological and landscape terms.

This outline design guidance document therefore sets out some of the key design principles that will form part of this stage of works in Zone 8, be they as part of either the detailed or the outline components of the current planning application.

The content at this stage cannot be exhaustive – certainly not for the wider site, as much will depend on market demand and subsequent reserved matters ;however it does set out to build upon the development team's aspirations for the development and the delivery of a landscape framework that will result in a lasting legacy; at the same time the document provides a structure against which forthcoming planning applications can be measured.

## Section 2: Landscape and Ecology strategy.

Throughout the design process, Ecological evidence has been used to underpin strategic planning, accepting at the same time that the earlier delivery of units on Omega South have set a tone for manufacturing and logistics in the area, with ready access to the major transport infrastructure of the M62 and M6 being a key advantage that the wider Omega site offers.

The masterplan strives to balance commercial viability and development flexibility with habitat creation in equal measure.

In this regard, Zone 8 provides the opportunity to introduce significant new areas of woodland and wetland (mitigating the loss of that lost to development) as part of an overall strategy for the wider Omega, by creating a strong western boundary landscape, built upon the retained woodland blocks of Plain Plantation, Booths Wood and Duck Wood (part) and introducing a matrix of varied habitat linking all three elements around a new and accessible mini country park, which serves not only an important ecological function but at the same time establishing a significant area of accessible open space that links with Clock Face to the north west and to Ladies walk and the wider network of footpaths toward Mersey Valley Golf Club. A new combined footpath and cycleway also offers a strategic car free link into the established employment zone of Omega South and longer commuter routes into Warrington as a result.

The landscape focus within the current application boundary is the western "Green Wedge", which captures much of the mitigation proposed across the wider masterplan and creates a landscape that provides a variety of habitat including woodland, ponds, hedgerow and grassland and is a focus in a substantial north south corridor that forms the western buffer to the development. Embracing Booths Wood and Local Nature Reserve as a key hub in this buffer zone.

A series of east west corridors, the most northern of which forms part of the current detailed application link the east and west landscape and habitat corridors and then further beyond into the wider Omega South landscape and ecological infrastructure. It is an express intention of this proposal to add to the significant works already completed on Omega south to encourage the spread of Great Crested Newt into the Zone 8 landscape, and in this, the east west linkages provide corridors through which these animals can pass.

A landscape corridor, linking Zone 8 with Omega south, provides a vehicle free cycle and footpath route that will form part of a wider network of footpath/cycleways throughout the wider Omega masterplan area, however this corridor also establishes a new physical component in ecological and engineering terms in that it will incorporate new native species hedgerow, and wild flora grass areas, at the same time as introducing swales and attenuation ponds (as part of the TJM development) that will; serve both drainage and habitat enhancement roles.

The current application also identifies those established trees and landscape features that are intended to be protected and retained as part of the wider strategy, these are identified on the attached drawings, and will be retained and protected during construction works in accordance with current British Standard guidance, BS 5837 2012. Trees in relation to design, demolition and construction-Recommendations.

The Landscape and Ecology Strategy for Zone 8 has several key components.

- Structural Landscape
- Wildlife Habitat and Links
- Recreation Routes
- Open Spaces
- Drainage
- Development Plots



## Section 2 a: Structural Landscape.

This term is a generalised description for all of the framework elements of the masterplan which contribute to the wider environment and together would form the setting for the more focused landscape treatment of individual development plots within the current outline application area for Zone 8 in due course.

The description refers in particular to the major areas of woodland retained and new woodland planting proposed but also includes the green corridors, areas of open space whether they be publicly accessible or restricted to encourage habitat enhancement and protection; together with the landscape of the principal vehicle access routes which over time would form strong linear components of the site infrastructure for the remainder of the (outline) development area. Their value in this instance is enhanced in landscape and ecological terms in the linkages they provide to the wider landscape which here includes Omega South, and Clock Face Country Park as examples.

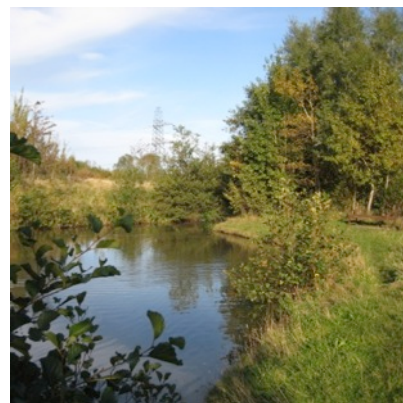
The structural elements are not always clearly defined entities in so far as they are physically and/or visually inter-related in pursuit of the overall strategy objectives. This is especially true of wildlife habitat creation and informal recreation which both form strong design themes running through the Omega landscape and the current application area.

Structure planting will be mostly of woodland and or scrub character using native species appropriate to the locality but will also consist of shrubby plants where tree planting is inappropriate or where particular habitat conditions are proposed for example where screening, and security considerations require a more selective approach to choice of species.

Proposed native hedgerow throughout the masterplan area forms an additional structural component, delivering connectivity of animal movement and habitat and screening and separation where this is important, such as along commuter routes alongside what would otherwise be very large scale built development areas.

Ornamental plant species will be introduced to structure planting in very limited situations where particular visual interest is required such as in highlighting "gateways" to individual development plots. Planting in highway corridors would be composed of largely informal arrangements of shrubs of native origin and trees in the form of mixed hedgerow and or hedgerow and verge.

More detail of the proposed list of species is contained within section 5.





## Section 2 b: Wildlife Habitat and Links.

In ecological terms the location of Omega Zone 8 is important as it lies at the hub of a number of established corridors linking through to the wider St Helens and Warrington landscapes.

The proposed masterplan design for Zone 8 aims to reinforce these links particularly in an east-west direction but also north – south.

The detailed application site introduces two of these links at an early stage in the development of the overall masterplan, with the aim of establishing early landscape interventions that will create these linkages, wildlife routes, enclosure and setting in equal measure.

The wider application site also incorporates proposed and potential multi-user green corridors that are referred to in the overall masterplan; some of which could also be termed recreation routes. These routes are very much in accordance with policies BFP INF1 and BFP INF6 of the Bold Forest Area Action Plan.

These comparatively generous routes which include woodland, hedgerow, wetland, and grassland habitats often with cycleways and footpaths providing an attractive and diverse environment through which both wildlife and people can move. Such routes are proposed to the southern boundary of the detailed application area and aspirational links suggested throughout the outline application area to encourage wider car free access.

As noted previously, many of these routes also incorporate sustainable urban drainage design in the form of swales, attenuation or detention basins, and managing peak flow at the same time as creating positive wildlife benefit and habitat enhancement through careful design and detailing.

To the south western boundary in the outline application area, a proportion of Duck Wood is retained and sits as the principle component in a mixed corridor that will incorporate the diverted stream, new areas of native edge mix planting, native hedgerow and grassland, before the diverted stream turns in an easterly direction where native woodland and edge mix blocks of planting form a defensible southern boundary to the application site.

In the “Green Wedge”, habitat creation has been targeted to benefit biodiversity action plan species including amphibians, bats, hare and hedgerow specie birds. This country park and woodland landscape would comprise locally indigenous species and a diversity of structure. Use of low fertility substrates in grassland areas would minimise maintenance requirements and maximise the opportunities for the development of diverse habitats. Species selection is based upon native species indigenous to the area as identified in Phase 1 survey and based on previous developments in the wider Omega landscape.

A key driver in the development of detailed and outline proposals for Zone 8 is to enhance site wide biodiversity, however a principal aim within this is to enhance the value of the area for amphibians and priority species such as Brown Hare which are already moving back into Omega South with the development of the Green Heart and other structural landscape and ecological interventions. Water and grasslands are therefore seen as key elements in the provision of ecological enhancement.





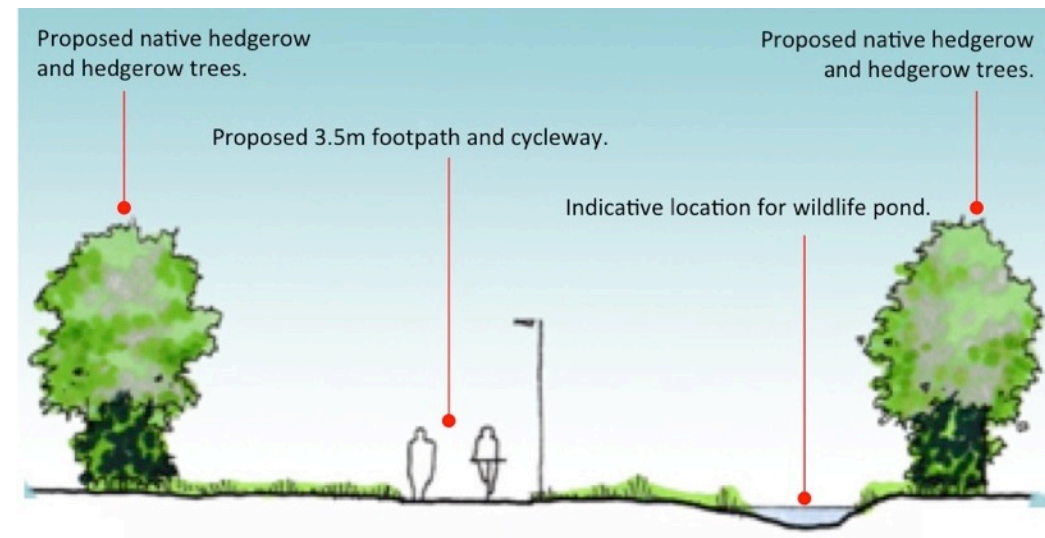
## Section 2 c: Recreation Routes .

In accordance with those proposals contained within the overall masterplan, a network of footpaths and cycleways associated with both the wildlife corridors and (ultimately) any forthcoming road infrastructure will provide connectivity and safe commuter routes throughout the development of Zone 8 and more widely with improved linkages to the established network serving the wider St Helens and Warrington suburbs.

In order that these routes can fulfil another of their intended functions as an informal community leisure facility they are enhanced by incorporation of soft landscape margins of varying width to form green corridors through the built development. A mere means of access is there refined into an attractive and safe walking or cycling environment for all user groups. These recreation corridors make an important contribution to the landscape structure of the overall development and also assist in establishing the valuable wildlife links we aim to achieve.

The essence of the design approach to the recreation routes is variety. The masterplan strategy aims to establish diversity of character and enhance biodiversity at the same time by means of different landscape treatments applied to different widths of corridor. The proposals for Zone 8 will begin to establish this character, recognising at the same time the impact that the scale and massing of development will have on visual amenity; planting mixes will be considered carefully to address this.

All routes within Zone 8 will be planted (principally with mixed native species hedgerow) for screening, security, or separation reasons; however, at all times, matters of personal security and visibility will be carefully considered. Others, such as the linkage between the development and the M62 pedestrian bridge will have occasional planting for interest or may be even more open in character in part with only grassland ground cover in the immediate vicinity; none, however, will be monotonously narrow passages between boundary fences with a minimum corridor width of 25m being adopted across the development masterplan.





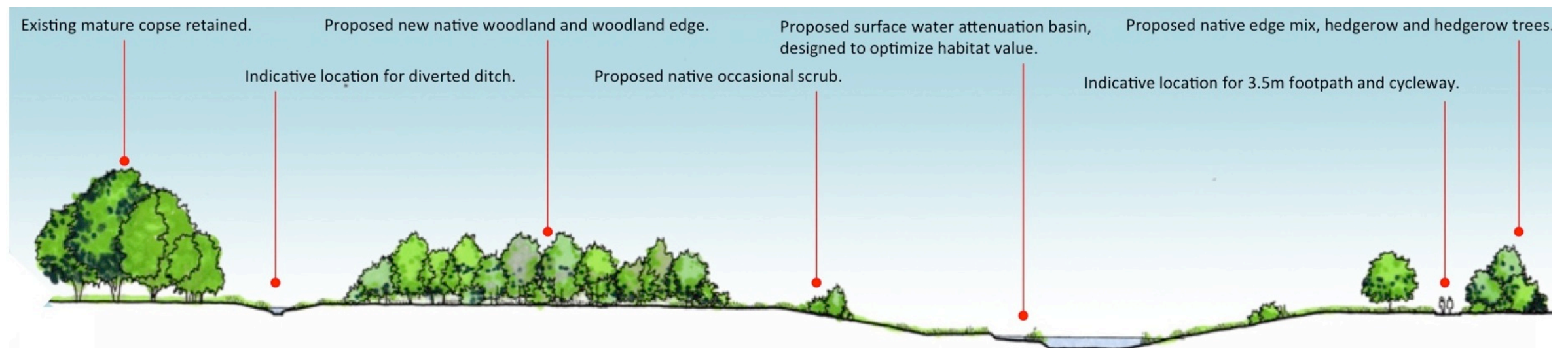
## Section 2 d: Open Spaces.

The largest and most accessible open space within the current application boundary will be the Green Wedge. Its importance is not only in the contribution it makes to the development masterplan, but the added physical link it will provide with Clock Face Country Park to the north of the M62 corridor. The amenity value of what would ordinarily be a simple green space will be enhanced instead by its diversity in terms of habitat creation, with native woodland, ponds, hedgerow, scrub and grassland all present.

A number of “off line” ponds are proposed here, which would be inoculated with locally appropriate species (potentially from local donor ponds) and planted to ensure a careful balance between light and shade, and puddled to ensure they retain a minimum water volume as rainfall and surface water run off dictates.

A secondary open space is proposed within the outline application area, and forms a key component within the western boundary buffer corridor landscape. Once again, this space creates opportunity for a diverse mix of habitat alongside surface water attenuation that would be so designed as to retain areas of permanent water.

A potential footpath and cycleway through this space would encourage safe access at the same time as offering car free permeability into the wider outline application site.





Creative use of run-off and the potential of long term retention of water on site will both create habitats and attenuate flows. Wherever practicable water will be retained on the surface in open ditches and swales with slack gradients and intermittent dams such that they form a series of linear pools in addition to connections between permanent water bodies.

Culverts and mammal tunnels will ensure that connectivity is preserved even where road infrastructure is proposed across the course of water flow.

The principles of sustainable urban drainage will be adopted for all run-offs, including that from areas of car parking and using the significant areas of tree planting and grass swales to reduce sediment load and pollution where practicable.

Attenuation and detention basins will be so designed as to robustly manage and store water at times of peak flow whilst also retaining water in the form of continuous ditches and or liner pools to create valuable meaningful habitat that will target Great Crested Newt and Water Voles, both seen as key species for this site. At times of peak flow, the action of "flushing" will be of further benefit by reducing the likelihood of fish colonisation of these features.





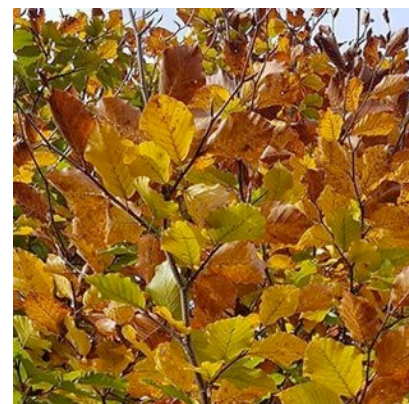
## Section 2 f: Development Plots.

Whilst it is understood that the balance of Zone 8 must at this stage remain flexible enough to respond to market demand, the ultimate landscape treatment of each plot is still regarded as a fundamental contributor to the wider landscape and ecological value of the development site.

However the current conceptual arrangement within the context of the overall masterplan recognises the importance of several key mature and veteran tree belts and woodland groupings within the landscape and which we would aim to retain as indicated on the outline proposals drawing.

Obviously, the internal landscape treatment of individual plots will largely depend upon individual site layout which will inevitably emerge from end user requirements, however the general aim remains to create an attractive and secure working environment appropriate to the plot and scale of development but which conforms to the objectives and standards and ethos of the overall masterplan.

- In the interest of environmental coherence certain basic principles are proposed for the design of external areas to development plots:
- Uniformity of boundary treatments
- Inclusion of tree and shrub planting
- Emphasis on native and locally occurring species
- Wherever practicable, the avoidance of large expanses of car parking/hard standing





## Section 2 g: Landscape Management and Protection.

### Landscape Management

Successful establishment of soft landscape infrastructure is a long term process which cannot be left to chance. It is recognised that adequate aftercare will be a critical factor in achieving the objective of high quality landscape provision and habitat creation and it is therefore proposed that Omega St Helens Ltd and its development partners will retain a continuing interest in at least the structural landscape by means of a rolling programme of maintenance; in time, responsibility may pass to The Land Trust who are at this moment adopting longer term maintenance strategies for significant landscape elements and open spaces within Omega south.

A management plan appropriate to the varying needs of each landscape element will be prepared as an integral part of any emerging scheme proposals within the various development zones. It will be progressively applied to phased completions and extend in the first instance for a minimum period of twelve months following practical completion of the initial works.

### Landscape Protection.

In line with the overall masterplan strategy, care will be taken to protect, preserve and enhance those features of significant landscape or ecological interest and value, such as established woodland, hedgerow, scrub and pond or wetland areas and which form a key component within the overall masterplan. As a minimum the recommendations set out in BS 5837:2012 will be rigorously applied.





## Section 3/3a : Appearance/ Structure Planting.

The landscape infrastructure currently proposed for Zone 8 is in many respects intended to be similar to that already implemented across Omega south (and suitably amended to reflect local species identified within the Phase 1 survey) and can be divided into the following three categories;

- Structure Planting
- Ornamental Planting
- Green Spaces and Corridors

### Structure Planting

Structure planting is primarily intended for new or retained and extended major planted areas to establish a landscape framework of substance and which compliments the scale of development at the same time as effecting suitable screening, shelter and habitat creation.

Depending on the ultimate scale of the built development within Zone 8, this style of planting may also be appropriate within individual development plots where space and other considerations permit.

Where space permits within the current application boundary, larger scale planting to the sides or rear of individual plots would further enhance the development setting and amenity value of the overall landscape.

Where woodland plantations are proposed, such as in the green wedge, these would typically consist of a 70/30 mix of trees and shrubs at an average density of 1.25 plants per m<sup>2</sup>. At least 10% of the tree species would be planted at feathered standard size the remainder as transplants.

Structure planting without trees, such as edge mix or in hedgerow creation will have a higher density of planting according to the ultimate species chosen, and will have a density of up to four plants per sq. metre. A similar density will be employed where ornamental species are used, such as at gateway points as previously described.





## Section 3b : Ornamental Planting.

Ornamental planting is usually defined as that which would be used for decorative effect. In Zone 8 this is most likely to be those areas on plot where a more intimate welcoming and pedestrian scale of planting is required. Elsewhere, ornamental planting would be used to highlight gateways and plot entry points, usually where lower growing and more manageable planting is required to respect sight lines and signage requirements.

The planting design of individual development plots is not prescribed at this stage, and would of course be subject to detailed design development and subsequent planning applications on a plot by plot basis.

Shrubs will be planted at a minimum density of 3 plants per metre sq. except where species dictate otherwise and specimen trees would be of at least standard tree size; however given the likely scale of the developments proposed throughout Zone 8 at least 40% of any on plot tree planting proposed shall be at extra heavy standard size.



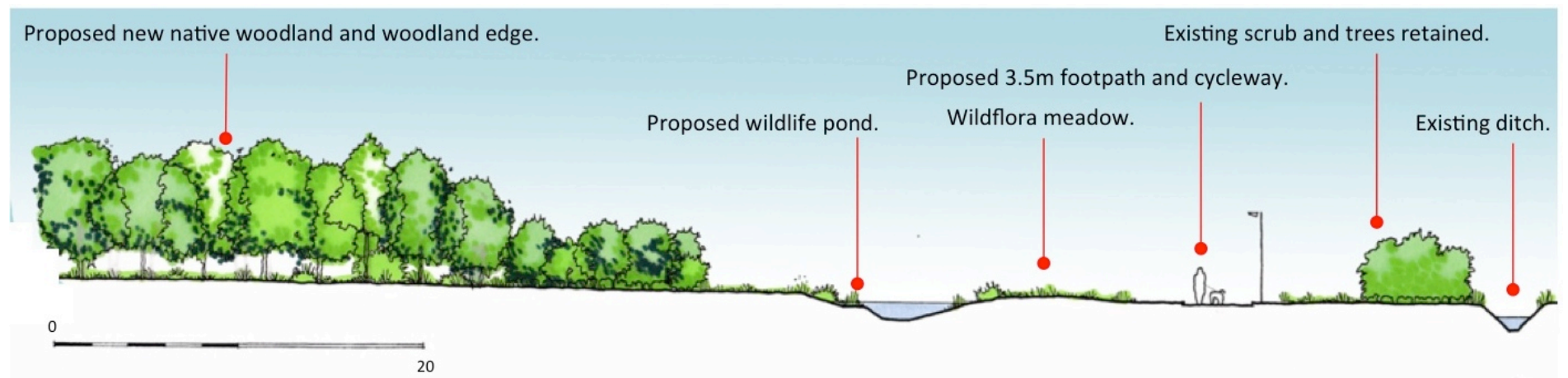


## Section 3c : Green Spaces and Corridors.

The new landscape for Zone 8 is fundamentally conceived as one, which is designed and managed to promote a framework of natural, and semi natural landscape and countryside and improved habitat diversity. Occasionally this would be complemented but not dominated by a more conventional urban environment with landscape treatments commensurate with this approach.

In support of their wildlife corridor function, the tree and shrub planting species used for the green corridors, pedestrian and cycleway routes will be chosen largely from the less "formal" range of plants described later in this section and those as being suitable for structure planting.

Modest grass verges will be required at some cycleway and footway edges to prevent overhanging shrubs or hedgerow from interfering with use and or sight lines. Where grass is used in amenity open space it may also require regular maintenance, as will grassed highway verges. In general terms however there is to be a presumption against the use of closely mown grass outside the boundaries of development plots and wildflora grass mixes will prevail with mixes suitable to each environment of intended habitat type including hedgerow, woodland and wetland.





## Section 4/4a : Habitat Creation / Native Woodland and Hedgerow .

### Habitat Creation

The Zone 8 masterplan promotes the development of a landscape framework that provides for improved habitat diversity throughout, and establishing an appropriate mitigation for inevitable habitat loss that will in time be of significantly greater value in terms of diversity.

The range of habitat types can be summarised as follows;

- Native woodland and hedgerow
- Grassland
- Wetland
- Scattered scrub / tall herb

### Native woodland and hedgerow

Woodland and hedgerow areas would be established on a minimum depth of 400mm of topsoil, either in situ (undisturbed) or carefully stripped and retained from either footpath or development plot works. Native tree and shrub / edge mix species are proposed for the detailed application site at this stage and would be used across the wider development masterplan as further detail becomes known.

Effective weed control (preferably by mechanical means) during the establishment period would guarantee rapid growth and early closure of the tree canopy. Once this has been achieved, conditions would be suitable for the introduction of woodland ground flora species; whereas woodland management will seek to ensure the creation of a deadwood and litter layer habitat, providing cover and food sources for a variety of species.





### Grassland

Wherever practicable, and most particularly along wildlife corridors throughout Zone 8 and beyond, grassland will be established on low fertility soils and substrates, primarily well-structured sub-soil with a dressing only of topsoil.

Simple, fine grass dominated wild flora mixes appropriate to a variety of locations and including a small percentage of robust species such as ox-eye daisy and birds-foot trefoil will be promoted. The open grassland associated with the green wedge will develop in part to facilitate the natural regeneration of local wildflower species to minimise maintenance requirements. The success or otherwise of this approach will be monitored through an on going programme of maintenance and may be bolstered in time by inoculation of donor species from nearby sites if required and or specific seed mixes designed for the purpose intended.

During the establishment period, maintenance will be designed to facilitate diverse grassland development with regular mowing during the first year and removal of arisings to prevent soil enrichment. In subsequent years hay meadow type management will be more appropriate where this does not conflict with any other landscape or ecological objectives.





### Wetland

As described elsewhere in this design and access statement, wetland habitat in the form of a network of ponds, pools, swales, detention and attenuation basins will also provide a significant proportion of the surface water drainage strategy for the Zone 8 development. These will be constructed out of compacted clays where required and subject to subsequent detailed engineering and landscape design.

Ecological design would seek to retain some water within the majority of both basins and swales throughout the year, though with sections drying up to create a series of independent pools and deterring colonisation by fish.

A series of "off line" ponds are also proposed throughout the wider Zone 8 masterplan, with several being delivered as part of the initial detailed application proposals.

Depth and marginal habitat will balance engineering function with ecological intent along ecological principles to create good ecotones and they would be inoculated preferably with non-competitive locally indigenous wetland species from local donor ponds.

These areas are designed will be designed so as to encourage amphibians and invertebrates, and fish would not be introduced.





## Section 4c : Scattered Scrub and Tall Herb.

### Scattered scrub / tall herb

Where practicable or desirable within the proposed masterplan, habitat mosaic would be created to encourage amphibians', bird and bat species. In these zones and subject to further detailed investigation and design, more fertile soils would be utilised to encourage the development of coarse grassland strips and verges which will also include hawthorn, elder and blackthorn scrub and occasionally small blocks of shelter woodland.





## Section 5 : Proposed Native Plant Lists.

### Native Hedgerow (transplants)

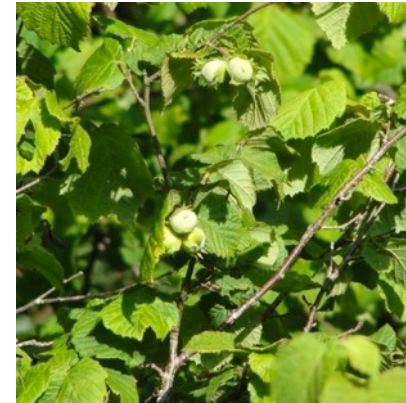
- *Acer campestre*
- *Corylus avellana*
- *Crataegus monogyna*
- *Ilex aquifolium*
- *Prunus spinosa*
- *Sambucus nigra*

### Occasional hedgerow trees

- *Acer campestre*
- *Prunus avium*
- *Quercus petraea*
- *Q. robur*

### Woodland edge / scrub species (transplants)

- *Acer campestre*
- *Corylus avellana*
- *Crataegus monogyna*
- *Ilex aquifolium*
- *Malus sylvestris*
- *Prunus spinosa*
- *Rosa canina*
- *Sambucus nigra*
- *Viburnum opulus*





## Section 5 : Proposed Native Plant Lists.

### Native Woodland (transplants, whips, feathered standards, standards)

- Acer campestre
- Alnus glutinosa
- Betula pendula
- Betula pubescens
- Crataegus monogyna
- Corylus avellana
- Fagus sylvatica
- Prunus avium
- Quercus petraea
- Q. robur
- Sorbus aucuparia
- Tilia platyphyllos
- Ulmus glabra

### Specimen trees (standard, ex heavy standard and semi mature as required)

- Acer campestre
- Prunus avium
- Quercus robur
- Tilia platyphyllos

### Ornamental Planting: Shrubs

The plant list for ornamental shrubs is potentially extensive and for this reason is not included at this stage and would be considered at the time of subsequent detailed plot or landscape design submissions.

However wherever practicable, species would be chosen and preferred that represent a native origin, and low maintenance characteristics.

Shrub planting will typically be categorised as follows;

- Tall Shrubs
- Medium Shrubs
- Low Shrubs
- Groundcover and or Climbers





