

## APPENDIX D: Tree and Landscape Scheme Guidance

A landscape scheme consists of both soft (planting) and hard (paving and boundary treatment) landscape elements and relates to the space around buildings. It is not simply a matter of adding a few trees and shrubs in the gaps left over after designing the building but is about the considered design, form and function of the whole site - how the site works, how people will use the spaces and how they will move around and through them. A good scheme will be appropriate to the scale and use of the development and locality, designed to ensure the development complements and fits with its surroundings and will not restrict the use of imaginative or novel designs. A poor scheme will fail to enhance either the development or locality and may result in major issues which either cannot be corrected or are expensive to correct.

Unlike buildings, which once erected have a fixed size and shape in space and time, plants continually change not only in size and shape but also in the different effects they produce throughout each year and as the scheme matures and the habit/form of the plants change.

It is a fact that **whilst the landscape scheme may only represent a small percentage of the total cost of a scheme it is often the most visual element and reflects the image of the development to both the users and general public.** A poorly designed and implemented scheme not only gives a bad impression but also increases maintenance costs and liabilities for the end users. Best practice techniques will be sought to maximise chances of survival. Whilst landscape schemes generally represent only a small percentage of the total scheme cost, a successful scheme on a difficult site will have a significant positive overall effect.

The selection of plant species requires careful consideration of a wide range of factors. These including the type of location, the proposed use of the site, orientation, microclimate, soil type, the desired effect and level of maintenance & management. The latter factor is often overlooked as is the potential of variation in uses of some sites.

Each plant species has different growth rates and ultimate sizes. These changes and effects have to be carefully considered not just at the planting stage but for 10, 20, 50 years plus. It must be realised that as a landscape scheme develops it can and does alter both the visual and physical characteristics of the whole site.

The choice of plant size to be used depends not only on the desired initial effect of the scheme but also the density at which they are planted, the growth rate of each species, their ultimate size and also the purchase cost. Likewise the density of planting depends on size of plants used, required desired effects, growth rate and ultimate size.

Different types of planting have different maintenance requirements, not only throughout the year but as the scheme develop and matures. The speed at which various types of planting matures differs considerably and therefore the maintenance and management requirements will change. These factors need to be taken into account at the design stage.

**The design of a landscape scheme therefore involves specialist technical knowledge and awareness of a wide variety of factors. The use or advice of appropriate professionals is essential to ensure success in both the short and long term and prevent the development of potential problems, and whilst the Council is able to offer advice the design of the scheme is the responsibility of the developer.**

### **Landscape Scheme**

The following details are considered essential on the proposed landscape drawings. **Existing site layout and features should be shown on the 'existing' site survey and other appropriate plans; only retained and proposed features should be shown on the 'proposed' landscape plans**

**Buildings** – location of retained and proposed new buildings including levels.

**Structures** - location of all retained and proposed hard features including walls, fences and other structures or 'furniture', including substations, pumping stations, storage areas (e.g. bins, cycle & trolley stores and their appropriate access), signs, lighting, gates, benches and bollards etc. These should be of a style and quality suitable to the nature of the development, integrated into the site layout and adjoining landscape.

**Hard surfaces including footpaths and car parks** - location of all retained and proposed hard surfacing with construction details (compaction, edging and surface finishes) and drainage falls. The use of permeable surfaces will be required especially for areas within tree protection zones. Tree planting in small planting beds within and or in paved areas & car parks will require appropriate root zones to be formed under and/or extending into the paved areas, supported by appropriate technical design details. Car parks generally will require the planting of semi-mature trees within and/or around the perimeter to break up the expanse of hard surfacing. Pedestrian, wheelchair and cyclist access and circulation around buildings should be adequately addressed.

**Levels** - contour details of existing and proposed ground levels at a minimum of 1.0 metre intervals. These may be shown on specific plans, including sections if necessary. Proposed contours must give a natural appearance and be safe and easy to maintain, with slopes that are neither too steep not too uniform. Typically gradients steeper than 1:6 will be unacceptable. Engineered slopes must be finished with concave bases and convex tops to create a more naturalistic appearance.

**Services** – existing and proposed service runs and their easements, annotated to indicate their type and depth. If exact locations of proposed services are unknown at application stage, indicative locations or zones must be estimated based on existing information such as outfall & connection points. Zones may be large enough to contain several service run options. Services should run under paved areas so as not to sterilise soft landscape design & implementation. The requirements of services and site landscaping (tree planting) must be fully co-ordinated at the design stage to avoid conflicts or future issues.

**Land drainage** – Details of measures such as land drains and soakaways to prevent standing water on soft landscape areas or running water on footpaths. Additional measures will be required where this or other drainage (shown as part of services above) is considered inadequate. SUDS must be integrated within the overall landscape scheme.

**Storage of materials and movement of plant during construction** - access points and routes of vehicle movement, location and movement of plant and sites for storage of materials, including soil, on areas to be planted should be shown. Such areas will be assessed for any impact such as compaction that will require associated decompaction/preparation.

**Ground preparation** – A detailed specification for preparation of any ground which will receive new planting. Adequate ground preparation is the key to good establishment and long term survival and can rarely be re-executed. Where soil has been imported as part of a development, a method statement detailing its history (i.e. storage, handling and placement) will be required. Where any excavation or work is to be undertaken in root protection areas, appropriate method statements will be required. Where any of the proposed soft landscape scheme is on reclaimed ground, details of site investigation and a specification for proposed amelioration will be required. Many sites within Cannock Chase District are known to have poor existing ground conditions. Compacted ground will need to be dealt with through the method of complete cultivation. Where planting is proposed on ground formerly built on, additional ground preparation will be required. The specification submitted should demonstrate that the applicant has adequately anticipated the extent and scale of the technical operations required.

**Existing vegetation** – location of all existing vegetation to be removed or retained. Details for protection of vegetation to be retained during construction works must be marked on the drawing. It will be in the applicant's interest to maintain as much existing vegetation as possible resulting in less new planting, particularly semi-mature trees. Appropriate consideration must be given to the growth characteristics and ultimate size of any retained vegetation, especially trees, as well as new planting. Buildings and hard surfaces must be located accordingly to cater for such growth without the need for constant cutting back. Not only does this increase the maintenance liability in terms of costs but it will not be considered a sustainable solution. A higher level of large planting stock will be required on bare sites or where vegetation has been lost. A schedule of proposed management works for the retained vegetation and habitat must be included to ensure its long term survival through appropriate management and replacement works

**Planting plan** – soft landscape works should be shown in the form of a planting plan. The planting plan should be accurate and to scale. It should show the extent of soft areas and clearly identify planting positions of trees, shrubs and other plants singly or in groups of the same species. All planting areas should be keyed to a planting schedule and large mixes, such as woodland and grasses, should be keyed separately. The plant schedule should include the full name of each plant, its size, its form (e.g. containerised, rootballed etc as per the National Plant Specification, published by the Horticultural Trades Association), and its density or centres at planting. Schemes should consider the following points though the scheme should respond to the site and its context:

- A significant amount of structural planting (i.e. zones of dense tree and shrub planting, usually native, to buffer neighbouring sites and internal boundaries, along the site frontage and roadsides).
- An appropriate use of native and/or ornamental species suitable for the sites end use
- A suitable choice of species for the site conditions (i.e. soil, microclimate, orientation and drainage)
- A simple mix containing a large number of plants of a small number of different species
- A significant proportion of trees as part of the creation of the Forest of Mercia and to maintain and increase the tree cover within the District.
- Medium to high planting densities to achieve fast and successful establishment as appropriate
- Specimen trees planted preferably within areas of shrubs or ground cover, rather than grass
- The use of hedges to define boundaries and or screen fences and walls

**Planting specification** - a specification of the planting methods including details of stakes, guys and shelters for trees. It should include plant lifting, handling, storage, planting, backfilling, firming in, mulching, shelters etc and be in line with best horticultural, arboricultural and urban forestry practice.

**Establishment Specification** – a specification for maintenance to achieve establishment over the 5 year planning condition period. It should include details on promoting healthy vigorous stock through, for example, weed control, fertiliser, pruning, and replacement of dead, dying or missing stock and be in line with best horticultural, arboricultural and urban forestry practice.

**Management Plans** – a document specifying the long term (20, 30, 40, 50 years+) aims and objectives for the landscape of the site. The regular yearly work to achieve these aims and objectives are covered within a Maintenance Plan/Schedule.













**Public Open Space** – an area to be adopted as Public Open Space will have additional site specific requirements. Failure of Public Open Space will ultimately be the responsibility of the Council so assessment will be more rigorous especially in relation to the following points:

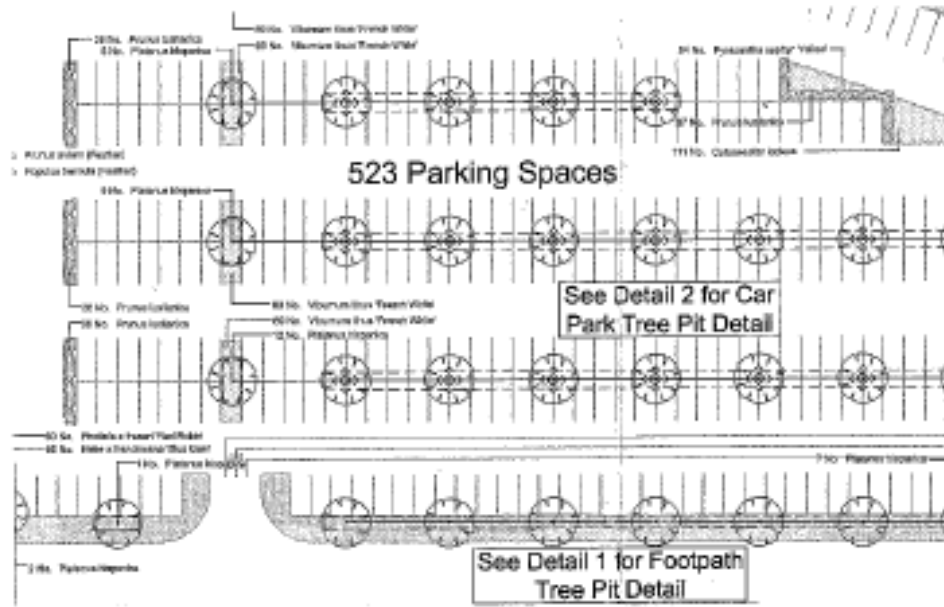
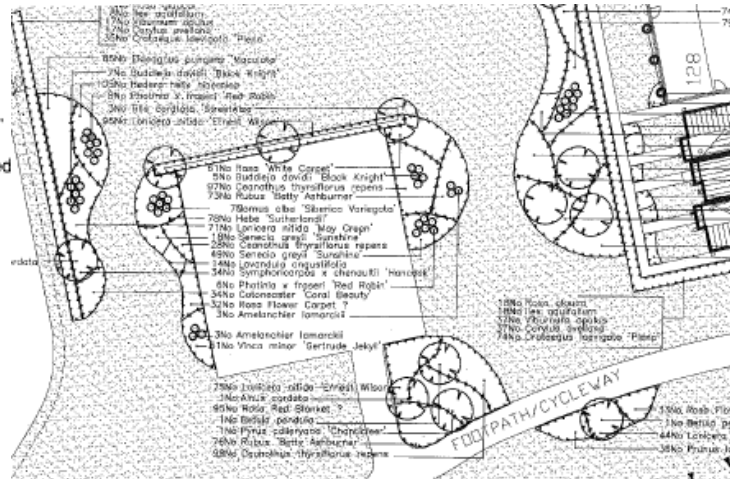
- **Footpaths** – paths to be adopted as ‘Highway’ should be annotated on the drawings. These will be assessed as part of the Highway approval process.

- Water features – existing and proposed water features, including dry balancing areas/SUDS. Creation of new /enhancement of existing water courses and ponds will be sought. Culverting should be avoided and bridges are likely to be required. All such features should look natural.
- Play areas – proposed play areas will need to be in accordance with the Council's Parks & Open Spaces policies/requirements. The details of equipment & safety surfacing will generally be dealt with separately to the landscape details, however the play area location, layout & integration within the development will be dealt with as part of the landscape scheme.
- Establishment Method Statement – areas of land to be adopted as Public Open Space will require a detailed Establishment Plan to ensure that a well established landscape is produced at the handover stage. The Establishment Plan should include full details of all operations necessary to ensure the satisfactory growth and establishment of the scheme including, but not limited to, weed control, pruning, litter picking, fence maintenance, grass cutting, yearly replacement of failed, damaged or vandalise stock, etc. It should cover a minimum period of 3 years (3 full growing seasons). The acceptance by the Council of Public Open Space will depend not just on the planting visible at the end of the period but also on completion of the approved maintenance operations throughout the establishment period (i.e. performance based criteria). This will be achieved via agreed quarterly joint site inspection. It will be the responsibility of the developer to rectify the situation over an agreed period of time whilst continuing with the maintenance.

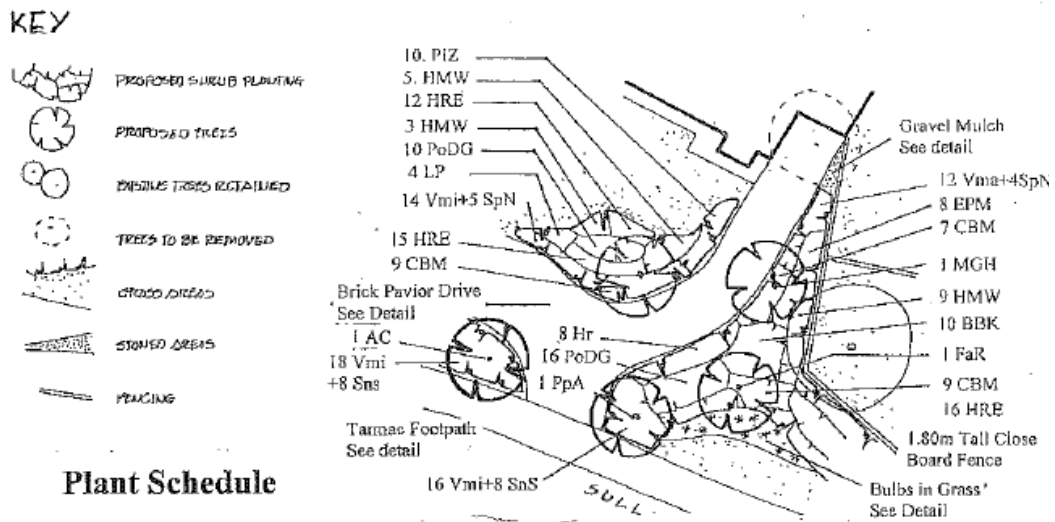
# Appendices

## LEGEND

-  Buildings
-  Existing Tree Belts
-  Existing Tree Planting
-  Existing Structure Planting
-  Existing Aquatic Vegetation
-  Existing Vegetation to be Removed
-  Proposed Advanced Stock Trees
-  Proposed Feathered Trees
-  Proposed Specimens
-  Proposed Amenity Planting
-  Proposed Structure Planting
-  Proposed Hedge



Examples of Tree and Landscaping Plans



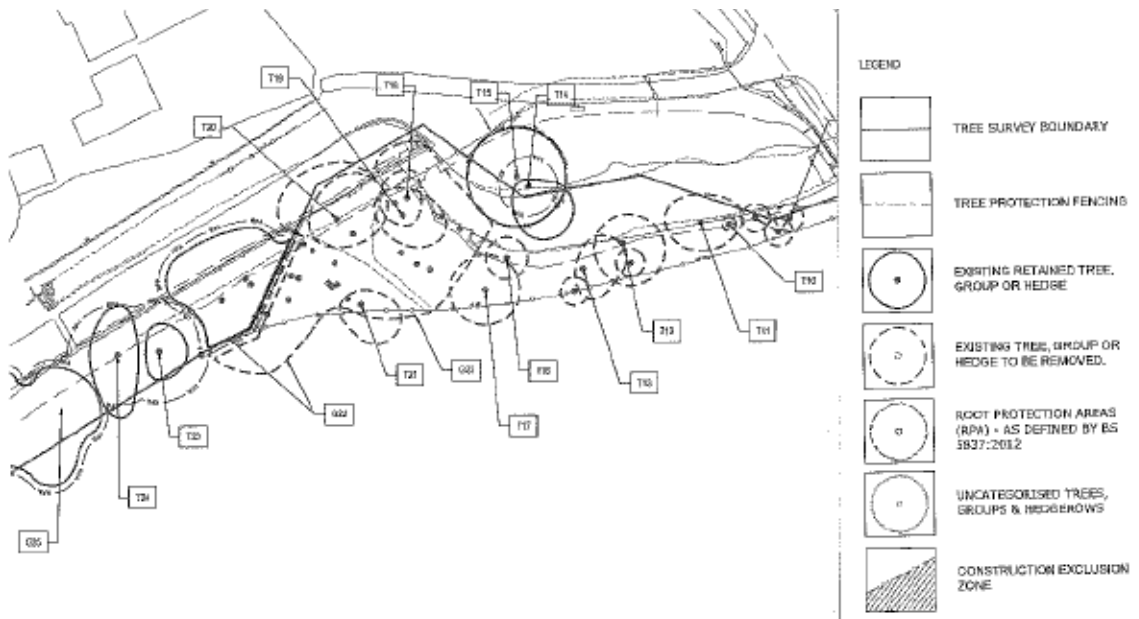
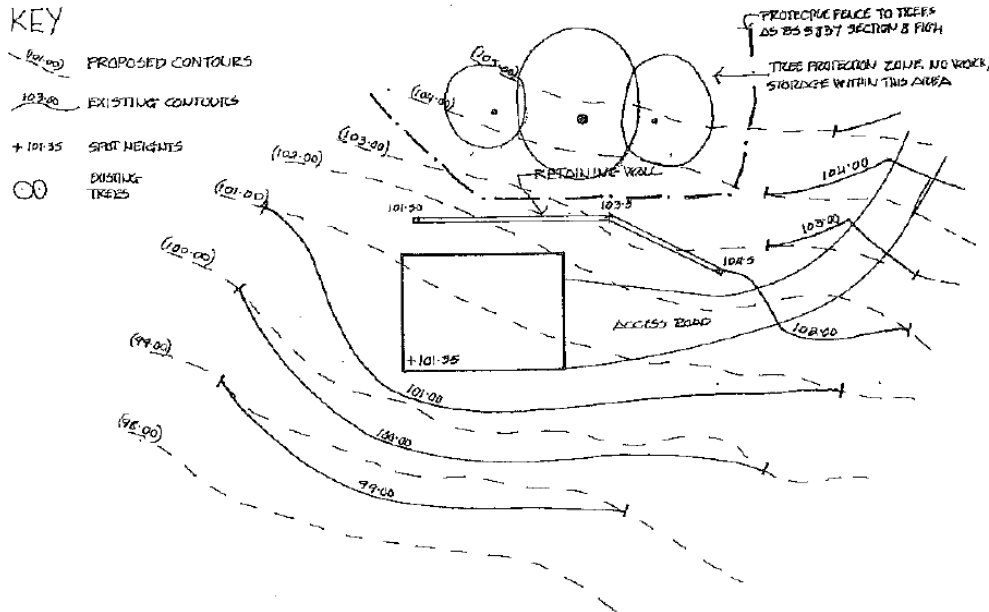
**Plant Schedule**

Key	Species	Size	Density	No.
<b>Trees</b>				
Ac	Acer campestre	14-16cms		1
FaR	Fraxinus angustifolia 'Raywood'	16-18cms		1
MGH	Malus 'Golden Hornet'	14-16cms		1
PpW	Prunus padus 'Watereri'	16-18cms		1
<b>Shrubs</b>				
BBK	Buddleia davidii 'Black Knight'	40-60cms 3L	1.5	10
CBM	Ceanothus 'Blue Mound'	30-40cms D 3L	2	25
Hr	Hebe Rakiensis	30-40cms 7.5L	2.5	8
HRE	Hebe 'Red Edge'	20-30cms D 3L	3	43
HMW	Hebe 'Mrs Winder'	40-60cms 5L	2	17
LP	Lonicera pileata	40-60cms 5L	2.5	4
PoGD	Physocarpus opulifolius 'Darts Gold'	30-40cms 3L	3	26
PIZ	Prunus laurocerasus 'Otto Luyken'	30-40cms 3L	2.5	10
SpN	Salix purpurea Nana	40-60cms 3L	2.5	4
SnS	Spiraea nipponica 'Snowmound'	40-60cms 3L	2.5	13
Vma	Vinca major	20-30cms iL	6	12
Vmi	Vinca minor	20-30cms iL	6	32
<b>Climbers</b>				
Cja	Clematis 'Jackmani'	60-80cms 2L		6
CmR	Clematis montana 'Rubens'	60-80cms 2L		4
<b>Bulbs</b>				
		<b>Grade</b>		
	Crocus tommasinianus	5/6	30	250
	Galanthus nivalis 'Lutescens'	5/6	20	100

D Diameter

**Examples of Tree and Landscaping Plans**

# Appendices



**Examples of Tree Protection and Levels Plans**



Appendices



Root box constructed under paving



Well prepared planting beds prior to adding soil



Well prepared planting beds prior to adding soil



Good quality landscape scheme



Good quality tree protection and staking

