Landscape Maintenance & Management Plan
Wimpole Visitor Welcome Project
Wimpole Estate
1. **Introduction**

This plan sets out general principles and quality standards required for the installation of softworks and of the long term landscape management operations.

It should be read alongside drawings DC211/19 Landscape Feel: Phase One / DC211/21 Area Around Stable Block / DC211/34 Planting Plan and used by the maintenance team to produce detailed priced programme of work. It should also form the basis for periodic (annual) reviews and evaluation of actual maintenance works.

**Design Intension**

The design intention for the landscape at Wimpole is to provide appropriate setting for the new arrival arrangements and parking within the historic landscape setting. It will also restore current parking areas to parkland.

For the purposes of management and maintenance of the landscape the components are:

a) Tree planting, hedges, and grass areas

**1.2. Aims of the Management and Maintenance Plan**

This plan aims to ensure that the vision for the landscape at the site can be achieved through a long term, co-ordinated and informed approach to landscape management.
2. **Landscape Management Objectives**

2.1. **The Establishment Period**
A one year aftercare maintenance period will be built into the implementation contract to cover intensive post-installation maintenance requirements for the whole of the landscape works. During this period the contractor is responsible for all horticultural maintenance operations, including planting which has failed to flourish. At the end of the initial one year aftercare period any defects in soft landscape materials due to materials or workmanship will be rectified and future responsibility will be handed over to The National Trust.

Maintenance work associated with pruning of trees and shrubs to be actioned outside of the bird breeding season, March to September.

2.3. **Facilities**
The landscape maintenance contractor shall liaise with The National Trust directly regarding permissions for parking, storage, use of water and any other resources.

2.4. **Maintenance Objectives for Soft Landscape - Generally**
- apply good horticultural and ecological practice to all operations
- promote healthy growth and establishment of all plants, trees, and grass areas
- ensure consistent control of invasive weeds
- ensure development of optimum plant form, shape, and planting density
- provide protection against pests and diseases
- promote wildlife value and species diversity where appropriate
- ensure long term commitment to replacement of defective plant material

2.5. **Landscape components with specific management objectives**

2.5.1 **Grass**
- The aim is to establish a robust meadow sowed with a high percentage of wild flowers
- Chemicals will not be used
- Ensure patches that are not establishing are investigated and resown as soon as possible.

2.5.2 **Swales**
- The swales are used to minimise piped drainage, encourage evaporation of hydrocarbons and to develop a diverse range of grasses and wild flowers over time.

- The sward should not be allowed to grow taller than 300mm and any coarse or woody arisings need to be removed off site.

### 2.5.3 Trees
- Ensure that good horticultural practice is employed to encourage long term health and vitality of all trees

### 2.5.4 Hedges
- Hedges are to be developed as mixed native species. They will be pruned at time of planting and cut once in the first season. The aim is to marry with existing estate hedges – e.g. the hedge on Orwell Road.
3. **Maintenance Specification**

3.1. MAINTENANCE
The following specification items are to be addressed within the landscape and establishment maintenance contract. Included are performance specifications, quality standards and some operational descriptions. The landscape contractor will be required to apply his expertise in relating these to the Management Objectives above in producing the programmes of work.

3.2. Maintenance to accord with requirements of BS 7370:1991
Duration: Carry out the operations in the following clauses from completion of planting. Frequency of maintenance visits: Monthly during growing season or as necessary to establish a high quality landscape.

3.3. Grassed areas

3.3.1. Cuts: Grass will be cut annually a minimum of 8 times

3.3.2. Generally
  - Maintenance of grass in a manner appropriate to the intended use.
  - Maintenance of grass height between 75-125mm
  - Insurance that grass does not become compacted or waterlogged;
  - Maintenance of grass in a healthy vigorous condition.
  - Repair of grassed areas damaged by trampling, abrasion or scalping during mowing or strimming;
  - Regular removal of litter

3.3.3. Remedial works
  - Top dress and make good of gully erosion, slip and depressions;
  - Re-seeding of the above areas

3.3.4. Grass cutting
  - Remove litter, rubbish and debris from grass before mowing;
  - Cut to a neat even finish without rutting or compaction, particularly when ground conditions are soft;
  - Trim grass edges to paving and around the base of planting areas and street furniture
  - Sweep adjacent hard surface clear of cuttings and arisings

3.3.4. Herbicide – will not be permitted

3.4. Swales
  - Swales to be cut/strimmed a minimum of 4 times annually.
  - Regular removal of litter
3.5. Trees and Hedges

3.2.1. Watering
- All planting to receive watering if needed during establishment
- Ensure sufficient water is applied to maintain healthy growth; taking into account published meteorological data on rainfall for any given period, in particular in periods of Spring drought (April, May & June)
- Trees of girth size 12-14cm or over will need to be watered regularly in the first season, especially in dry periods when weekly watering is required. Irrigation pipes may be required depending on soil condition at time of planting: consult the landscape architect.

3.2.2. Weed control
- All planting areas shall be kept clear of weed growth. Achieve by a combination of mulching and hand-weeding/hoeing. Ensure that the methods used will cause a minimum of damage to adjacent planted areas.
- Tree and plant stems: Do not allow nylon filament rotary cutters or other mechanical tools closer than 200mm to the stem of any tree or plant. Carry out operations close to stems using hand tools
- Hand weeding: Hoe and loosen the soil throughout the planting areas, taking care to avoid disturbance of roots of planted material. Remove weeds entirely, including roots. Remove the minimum of soil and minimise disturbance to plants and mulched surfaces.

3.2.3. Mulch
- Depth required: top up mulch to a minimum thickness of 50mm across all planting for trees and hedges

3.2.4. Re-firming, check/tidy
- General: Trees & shrubs shall be maintained in a firm position in the ground and all stakes and ties shall be checked regularly.
- Particular timing of inspections: After strong winds, frost heave and other disturbances
- Replace missing rabbit protection
- Replace any significant failures

3.2.5. Tree stakes and ties
- Inspect all trees twice a year. Adjust fixing to suit stem growth and provide correct and uniform tension. If growth is sufficient for tree to be self-supporting, remove fixing and fill holes with lightly compacted soil.
Check stakes for looseness, breaks and decay and replace as necessary. Remove stakes and ties after 3 years establishment.

3.2.6. **Pruning generally**
- Pruning to be carried out in accordance with good horticultural and arboricultural practice.
- Standard: BS 7370.4, clauses 3.6.3 to 3.6.5
- Agreement: Before starting work agree which trees, and hedges are to be pruned;
- Appearance: Trim individual plant appropriate to species, location and season to leave a well balanced natural shape;
- Cutting: appropriate clean sharp tools. Clean cuts back to sound wood;
- Disease of fungus; give notice if detected;
- Do not use growth retardants, fungicides or sealant
- Disposal of arisings: remove off site.

3.2.7. **Pruning of trees**
- Tree work standards: to BS 3998 and Forestry and Arboriculture Training and Safety Council Safety Guidance;
- During pruning protect adjacent structures, plants or trees;
- Appearance: Trees to maintain a well-balanced natural appearance; remove any suckers or basal growth. Cut back level with source stem or root.
- Chain saw work: operatives must hold a certificate of Competence;
- Timing: Prune between leaf fall and mid winter

3.2.8. **Pruning of hedges**
- Cut back hedge plants by one third at time of planting

3.2.9. **Reinstatement**
- Remove dead plants as soon as possible and replace in the next scheduled round of replacement planting.
3.6 *Maintaining a safe, clean and secure environment*

3.5.1. **Litter/Dog Waste**
   - Collect litter as necessary to maintain a clean, litter-free environment.

3.5.2. **Hard surfaces**
   - undertake a regular and time-tabled cleaning regime including brushing.
4. **British Standards**

4.1. As well as the standards described above the soft landscape works should meet the following British Standards:

**Topsoil handling, stripping and storage**
- BS ISO 15799:2003 Soil quality - guidance on ecotoxicological characterization of soils and soil materials
- BS 3882:1994 Specification for topsoil
- BS 6031:1981 Code of practice for earthworks
- BS 7562-4:1992 Planning, design and installation of irrigation schemes guide to water resources
- BS 4428:1989 guide of practice for general landscape operations (excluding hard surfaces) AMD 6784
- BS 3882:1994 specification for topsoil and AMD 9938

**Quality of Trees and Shrubs**
- BS 3936-1:1992 Nursery stock specification for trees and shrubs
- BS 3936-5:1985 nursery stock specification for poplars and willows
- BS 3936-10:1990 nursery stock specification for ground cover plants

**Maintenance of gardens/ Landscapes**
- BS 7370-3:1991 grounds maintenance recommendations for maintenance of amenity and functional turf (other than sports turf)
- BS 3998:2010 recommendations for tree work and AMD 6549

**Horticulture**
- BS EN 12579:2000 Soil improvers and growing media - sampling
- BS EN 13037:2000 Soil improvers and growing media - determination of pH

**Turf**