



RPS

Landscape and Ecology Management Report

Old Park Farm, WaterlooVille Phase 2 Development Parcel

29 November 2010

Our Ref: JSL1734.revA

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1 Summary

This report supplements the ecology reports, ecology mitigation plans, planting plans and schedules for this site by identifying the maintenance and management regimes necessary to achieve and maintain the landscape and ecology objectives for the scheme for a period of five years.

Planning permission for the development is accompanied by the following conditions that relate to landscape and ecology: -

Condition 7 (ii – k)

Landscaping including the arrangements to be made for the future maintenance of landscaped and others open areas.

Condition 25

No development shall take place within a phase until a schedule of landscape maintenance, for that phase, for a minimum period of five years shall be submitted to and approved by the Local Planning Authority and shall include the arrangements for its implementation.

The landscape and ecology management plan is presented in this report to discharge those relevant parts of the above conditions that relate to the application for the development of the Phase 2 residential development.

2 Landscape Objectives

- 2.1 The site is located on the western edge of the existing settlement of Waterloooville, on land previously used predominately for informal pasture and grazing. A series of farm buildings exist toward the south eastern corner of the site, with a track accessing the farm via Hambledon Road. Two electricity transmission lines set on pylons running north / south follow the western boundary of the site. The northern boundary is formed by the B2150 Hambledon Road, with the southern boundary consisting of the Old Park Farm Stream which meanders though the site from its culverted crossing under the Hambledon Road. The western edge of the site is formed by an informal field hedgerow, which varies in quality along its length, and to the east lies the Brambles Industrial Estate. Owing to the largely pastoral nature of the site the existing vegetation largely consists of field hedgerows with intermittent trees and occasional field trees. The course of the Old Park Farm stream is lined by more mature, principally oak trees.

- 2.2 The broad design objectives are as follows.

Landscape Integration: to provide an appropriate setting for the new development and open space network, responding to adjacent land uses where appropriate.

Landscape Amenity: to respond to the scale and character of the site and enhance the visitor experience.

3 Ecology Objectives

- 3.1 A series of ecological surveys and assessments have been carried out and mitigation works agreed that have informed the ecological objectives set for this management plan. The surveys, assessments and mitigation are summarised below for the key faunal groups or habitat and the source documents identified. This is followed by the objectives set as a result of that work and the conditions applied by the grant of outline planning permission. The surveys carried out are described below and also summarised in the Ecology Survey Report (RPS 2010) produced specifically for Phase 2 of the development

Bats

- 3.2 Use of the site by bats (tree roosts, feeding and commuting) was identified by a series of site surveys as part of the ES accompanying the outline application and in order to satisfy Conditions 18 and 30 of the Outline Planning Consent. Tree inspections, evening emergence surveys of trees and activity surveys were carried out in 2004 (RPS 2005), 2006 and 2007 (RPS 2008a, RPS 2008b). These surveys identified that a total of five trees have been confirmed to have been used by roosting bats and that there is a high level of activity along part of Old Park Farm stream (where it forms the southern boundary of the site) around the mature trees along the southern, eastern and western boundary of the site and one commuting flight line across the site. Works to the roosts under licence and accompanying mitigation actions (RPS 2008c) are soft felling of trees in the presence of a licenced bat ecologist, fixing of tree limbs containing cavities suitable for bat roosting onto retained trees, fixing of bat boxes on to retained trees, incorporation of bat bricks into houses within the development, the creation of unimproved grassland and wetlands interspersed with areas of scrub and small wooded copses to provide a mosaic of habitats that will be highly suitable for foraging bats, the strengthening of retained linear features in the open spaces on site and the creation of a new tree flightline through the development to provide an alternative commuting flight path for the bats from the west to the east of the site. A licence was granted by Natural England in August 2008 to carry out the relevant works (licence number EPSL 20387 B JM), with amendments made to cover changes to the rate of house building and house layout (licence number EPSM2010-1953 C). These works have been carried out for Phase 1 and infrastructure

- 3.3 This management plan applies the objective to achieve the above to those parts of the site that are relevant to the Phase 2 application, providing schedules of planting and maintenance to deliver the objective.

Reptiles

- 3.4 A small number of reptiles have been located within the site as a result of site surveys for the ES accompanying the outline application and in order to satisfy Condition 30 of the Outline Planning Consent (RPS, 2005, RPS 2008d). These surveys, carried out in 2004 and 2007, identified a small breeding population of Grass Snakes in the southwest corner of the site near the Old Park Farm stream and a small number of Common Lizards in the eastern side of the site, between the access track to the stables/kennel buildings and the woodland alongside Old Park Farm stream. In the medium to long term these small populations of reptiles will be maintained and enhanced through the maintenance of reptile habitat in the green buffer along the southern section of the Old Park Farm stream and through the creation of larger areas of reptile habitat within the

Western Open Space and along the new course of the Old Park Farm stream that is to be created. Within the Western Open Space the habitat suited to reptiles that will be created includes a mosaic of wet and dry grassland, wetland and scrub/wooded copses.

- 3.5 In the short term, to comply with the requirements of the Wildlife and Countryside Act 1981, as amended, and the planning conditions placed on the outline planning consent, a reptile mitigation strategy was prepared (RPS 2008e) and implemented in autumn 2008 and spring 2009. That sought to prevent any reptiles being killed during the works for the infrastructure and Phase 1 development by temporarily moving the reptiles into a holding area along the southern section of the Old Park Farm stream. This holding area was enhanced by allowing it to develop a more diverse structure through a cessation of cutting in the first two years (followed by rotational cutting every two years if it is to be in use for this longer period), the creation of a minimum of three piles of grass cuttings/compost heaps and the installation of a minimum of three hibernation sites. The implementation of the strategy moved the reptile population away from Phase 2 and avoided any risk of the recolonisation of Phase 2 before its development. On completion of Phase 2 of the development and the development of suitable habitat conditions within the Western Open Space, the reptiles will be allowed to move of their own accord into the Western Open Space by the removal of the southwest side of the fencing surrounding the holding area.

- 3.6 This management plan applies the objective to achieve the above to those parts of the site that are relevant to the Phase 2 application, providing schedules of planting and maintenance to deliver the objective.

Habitats

- 3.7 The habitats present on site have been identified and mapped as a result of site surveys for the ES accompanying the outline application and in order to satisfy Condition 30 of the Outline Planning Consent (RPS, 2005, RPS 2008f). These surveys, carried out in 2004, 2005 (hedgerows only) and 2007 identified the habitats as broadleaved semi-natural woodland, scattered scrub, semi-improved neutral grassland, species poor semi-improved grassland, poor semi-improved grassland, improved grassland, tall ruderal vegetation, open water, ephemeral/short perennial vegetation and hedgerows. The small areas of grassland of botanical value were classified within the NVC system as intermediate between MG5 and MG6 and as species-rich MG6 grassland.
- 3.8 Mitigation for the habitat losses will be delivered through a programme of native planting and subsequent management. Wetland features with adjacent wetland and floodplain species planting in the Western Open Space and along the new course of the Old Park Farm stream will mitigate for the loss of floodplain grassland along part of the Old Park Farm stream. The area of species rich grassland meadows created in the Western Open Space and along the new course of the Old Park Farm stream will be considerably larger than the area of grassland of botanical value that is lost. The planting of native shrubs and trees to create patches of scrub and small copses in the Western Open Space and along the corridor of the new course of the Old Park Farm stream will mitigate for the loss of the hedges and hedgerow trees to the footprint of the development. In addition the overall process of retaining and re-using existing topsoil from the site will mean that the natural seedbank will be retained and will have the opportunity to germinate and grow alongside any sown mixes obtained from local sources or native, local provenance commercial supplies.

3.9 This management plan applies the objective to achieve the above to those parts of the site that are relevant to the Phase 2 application, providing schedules of planting and maintenance to deliver the objective.

3.10 The overall biodiversity objective for the site is:

Biodiversity: To protect, manage and enhance the nature conservation value of the site.

3.11 For brevity in the schedules (Appendix 1) this is given as "Enhance biodiversity". The actions identified will provide a wide range of benefits to species including plants, invertebrates, amphibians, reptiles, birds and mammals, including those of principal importance for biodiversity in England and those in the Hampshire BAP such as Song Thrush, Linnet and Soprano Pipistrelle,

3.12 In addition to this overall objective there are more detailed, specific objectives deriving from the planning conditions that relate to specific faunal groups or habitats. These are:

- Bats: To maintain and enhance existing bat foraging habitats around the site.
- Bats: To create and maintain a new commuting flight path across the site.
- Bats: To maintain and create natural and artificial bat roosting features.
- Reptiles: To maintain and enhance existing reptile habitat along Old Park Farm stream, where it forms the southern boundary of the site.
- Reptiles: To create and maintain large areas of new reptile habitat in the Western Open Space.
- Habitats: To create and maintain new wetland and floodplain planting in the Western Open Space and along the new course of the Old Park Farm stream.
- Habitats: To create and maintain new species rich grassland meadows in the Western Open Space and along the new course of the Old Park Farm stream.
- Habitats: To create and maintain new patches of scrub and small copses in the Western Open Space and along the corridor of the new course of the Old Park Farm stream.

4 Zoning

- 4.1 For the purposes of function, landscape treatment and management the site can be divided into 2 zones (see Appendix 2). These are identified below.

Phase 2 Site Frontage

- 4.2 A linear open space which forms an extension to the informal parkland frontage set out within the north eastern part of the western open space landscape designs. Following on from the informal character established within the western open space this linear area has been laid out in an informal rural style.

Formal public open spaces

- 4.3 Within the development itself, formal open spaces will provide public areas for quiet recreation and general amenity for local residents, visitors and workers. Within the Phase 2 residential parcel three key areas exist, each of which provide a different function:-

- Focal space - a triangular space which has been designed to form a central focal point to the phase 2 and wider development. Located in a position along the main entrance road, a central tree will provide a point of seasonal interest, with a circular seat providing a stopping point for pedestrians.
- Linear public space – this route provides an important pedestrian connection to the existing public amenities along Hambledon Road. Located near to the proposed retail areas of the phase 2 development it will be well used by visitors and local residents alike.
- Incidental open space – this intimate space provides an incidental green space for pedestrians and drivers to enjoy as they pass through the development. For pedestrians passing through the site it will provide a garden style space for resting and quiet amenity.

- 4.4 The formal open spaces have been designed to include street tree planting, ornamental shrub and hedge planting and areas of mown amenity grass. Street furniture within these spaces includes cycle parking, raised planters, seating and litter bins.

Bat Flyway

- 4.5 Although not part of the public open space provision within this phase a publicly accessible route beside plots 127 & 128 and in front of plots 130 & 131 does contribute toward the bat flightline outlined within Section 3. Within this linear corridor a series of trees have been proposed to maintain bat flyway connectivity, the lighting strategy within this area will also be designed to sensitively illuminate this route.

5 Landscape Elements

5.1 The various landscape elements within each zone are summarised below, for further more detailed information regarding the planting types within each Landscape Element refer to JSL1734_501 to 503 and Appendix 5 (Tree and Shrub Palette).

5.2 Phase 2 site frontage

- Native hedgerows
- Parkland style tree planting
- Wildflower and grass meadows
- Bulb planting
- Footpath network

5.3 Formal public open space areas

- Street tree planting
- Ornamental shrub and hedge planting
- Mown amenity grass
- Cycle parking, seating and other items of street furniture
- Paved footpaths and other areas of hard standing

6 Workmanship and Protected Species Compliance

6.1 Where and to the extent that materials and workmanship are not fully specified they are to be:

(a) Suitable for the purposes of the stated objectives;

(b) In accordance with good horticultural practice or the current British Standard with particular reference to:

- BS 3998: Recommendations for tree work
- BS 4428: Code of practice for general landscape operations
- BS 7370: Grounds maintenance

Part 1: Recommendations for establishing and managing grounds maintenance organisations and for design considerations related to maintenance.

Part 2: Maintenance of hard areas.

Part 3: *Maintenance of amenity and functional turf (other than sports turf).*

Part 4: Maintenance of soft landscape (other than amenity turf).

6.2 Where the timing of and nature of operations are not fully specified, they are to be carried out in a manner which is compliant with legislation that protects native animal species from intentional or reckless killing, principally the Wildlife and Countryside Act 1981 as amended.

6.3 This will include:

- Prior to works to trees taking place consideration will be given to the potential for bat presence, with advice being sought from a suitably qualified ecologist.
- Prior to works to trees, hedges and shrubs taking place consideration will be given to the potential for nesting birds with advice being sought from a suitably qualified ecologist and/or works will take place outside the bird nesting season to avoid any destruction or damage to birds' nests.
- Where trees are subject to Tree Preservation Order, consent will also be sought as appropriate from the Local Planning Authority before work is commenced.

6.4 A suitably qualified ecologist will be identified through possession of corporate membership of an appropriate professional body such as IEEM or CIWEM and where relevant the possession of a species licence from Natural England. The need for a species licence is most likely to occur in relation to work on trees that are known to hold bat roosts or have the characteristics that mean they have the potential to contain a bat roost.

7 Responsibilities for Management

- 7.1 All maintenance and management of soft landscape areas will be undertaken by a suitably qualified landscape contractor on behalf of the Adopting Authority, following the end of the establishment period and satisfactory completion of any landscape defects or necessary reinstatement works.
- 7.2 All maintenance and management works that might affect a bat roost will be carried out to the specification of a licenced bat ecologist and, where required in law, carried out or directly supervised by a licenced bat ecologist working for, or contracted to, the Adopting Authority.

8 Source Documents

RPS (2005) *Old Park Farm, Waterlooville – Environmental Statement*. Planning Application Number 05/00500/OUT (WCC no. W194499) and HBC no.05/40000/000.

RPS (2008a) *Old Park Farm, Waterlooville: Assessment of Bat Roosts Report*. (Document reference JPP1411-R-001i). RPS, St Ives, Cambs.

RPS (2008b) *Old Park Farm, Waterlooville: Bat Activity Survey Report*. (Document reference JPP1535-R-007n). RPS, St Ives, Cambs.

RPS (2008c) *Old Park Farm, Waterlooville, Hampshire: Application for a Licence*. (Document reference WML-A13-2 v4). RPS, St Ives, Cambs.

RPS (2008d) *Old Park Farm, Waterlooville: Reptile Survey Report*. (Document reference JPP1535-R-006i). RPS, St Ives, Cambs

RPS (2008e) *Old Park Farm, Waterlooville: Reptile Mitigation Method Statement (Phase 1 of the Development)*. (Document reference JPP1535-R-008k). RPS, St Ives, Cambs.

RPS (2008f) *Old Park Farm, Waterlooville: Phase 1 Habitat Survey Report*. (Document reference JPP1535-R-004k). RPS, St Ives, Cambs.

RPS (2010) *Old Park Farm, Waterlooville, Phase 2 of Development: Ecology Survey Report*. (Document reference JPP1535-R-012). RPS, St Ives, Cambs.

APPENDICES

APPENDIX 1

Landscape and Habitat Maintenance Schedule

	<i>Landscape Element</i>	<i>Maintenance Objectives</i>	<i>Maintenance Requirements</i>	<i>Reference</i>
01	Street and parkland trees Schedule ref: A	- Enhance visual amenity - Reinforce site layout and legibility - Enhancement of the site's microclimate - Enhance biodiversity - Bats: Maintain and enhance existing bat foraging habitats around the site. - Screening to the built form, including means of enclosure and other structures.	- Maintain a well balanced crown, shape and character typical of the species, clear of any crossing or rubbing growth allowing a clear stem, 2m above ground level (retain if field tree feathered to ground) - Remove any dead, dying and damaged branches or growth obstructing pedestrian or vehicular routes (obtain advice from an ecologist regarding possible presence of bat roosts prior to undertaking work). - Check condition of stakes, ties and guys and replace broken or missing items until such a time as they become redundant. Adjust if necessary to allow for growth and prevent damage to bark. - Under take Pest and Disease Control using suitable pesticides or fungicides as advised, only if severe infestation occurs. - Maintain a weed free area at the base of all trees, 1m diameter mulch area for trees in grass or planting.	BS 3998: Recommendations for tree work The Arboricultural Association Standard Conditions of Contract and Specification for Tree Works Sept.
02	Multi-stem trees and specimen shrubs Schedule ref: D (iv)	- Enhance visual amenity - Enhancement of the sites microclimate - Enhance biodiversity, - Screening to the built form, including means of enclosure and other structures.	- Maintain a well balanced crown, shape and character typical of the multi-stem trees clear of any crossing or rubbing growth. - Remove any dead, dying and damaged branches (obtain advice from an ecologist regarding possible presence of bat roosts prior to undertaking work). - Check condition of stakes, ties and guys and replace broken or missing items until such a time as they become redundant. Adjust if necessary to allow for growth and prevent damage to bark. - Undertake Pest and Disease Control using suitable pesticides or fungicides as advised, only if severe infestation occurs. - Maintain a weed free area at the base of all trees, 1m diameter mulch area for trees in grass or planting.	BS 3998: Recommendations for tree work The Arboricultural Association Standard Conditions of Contract and Specification for Tree Works Sept.

	<i>Landscape Element</i>	<i>Maintenance Objectives</i>	<i>Maintenance Requirements</i>	<i>Reference</i>
03	Native hedgerow Schedule ref: B (ii)	- Enhance visual amenity - Enhance biodiversity, - Bats: Maintain and enhance existing bat foraging habitats around the site. - Integrate with surrounding landscape and character - Screening to the built form, including means of enclosure and other structures. - Define differing areas and routes	- Hedgerows that adjoin footpaths and which are therefore likely to cause obstruction if growth is left unchecked should be cut back annually outside the bird breeding season (March to August inclusive) to a neat and consistent finish to maintain a dense screen and all arisings removed off site. - All other native hedgerows on site are to be cut every 2-3 years (on rotation) to allow flowering and fruiting and the development of a structure of benefit to wildlife, outside the bird breeding season (March to August inclusive). Remove arisings off site. - Remove any dead, dying and damaged growth or growth obstructing pedestrian or vehicular routes outside of bird breeding season (March to August inclusive). - Check condition of stakes, ties, guys and shelters and replace broken or missing items until such a time as they become redundant. Adjust if necessary to allow for growth and prevent damage to bark. - Re-firm any plants that have been disturbed by adverse weather or interference. - Under take pest control with approved pesticides in accordance with manufacturer's instructions in approved locations only.	BS 4428: Code of practice for general landscape operations BS 7370-4: Grounds maintenance Recommendations for maintenance of soft landscape
04	Evergreen hedgerow Schedule ref: B (i)	- Enhance visual amenity - Enhance biodiversity - Integrate with surrounding landscape and character - Screening to the built form, including means of enclosure and other structures. - Define differing areas and routes	- Cut back twice per year outside bird breeding season (March to August inclusive) to a neat and consistent finish to maintain a dense screen and remove arising off site. - Clip ornamental hedges annually to form a neat, compact hedgerow. Maintain at approx height of 0.9 - 1.2m. - Remove any dead, dying and damaged growth or growth obstructing pedestrian or vehicular routes outside of bird breeding season (March to August inclusive). - Check condition of stakes, ties, guys and shelters and replace broken or missing items until such a time as they become redundant. Adjust if necessary to allow for growth and prevent damage to bark. - Re-firm any plants that have been disturbed by adverse weather or interference.	BS 4428: Code of practice for general landscape operations BS 7370-4: Grounds maintenance Recommendations for maintenance of soft landscape

	Landscape Element	Maintenance Objectives	Maintenance Requirements	Reference
	Evergreen hedges Continued:		Undertake pest control with approved pesticides in accordance with manufacturer's instructions in approved locations only. Do not use adjacent to play areas.	
05	Ornamental shrub and herbaceous planting (inc groundcover mixes) Schedule ref: Biii / C / D	- Enhance visual amenity - Create visual interest and articulation in the soft landscape - Integrate with surrounding landscape features and character. - Physical relief to areas of hard landscaping for water runoff and drainage. - Enhance the site's microclimate - Enhance biodiversity - Screening to the built form, including means of enclosure and other structures.	- Ensure all planted areas are kept free of weeds by the use of suitable herbicides; maintain levels of mulch and hand weeding in more prominent areas as required. - Fork over beds as necessary to eliminate any hollows or cambers, ensuring the depth of mulch is maintained. Redistribute mulch as necessary to maintain specified levels. - Check condition of stakes, ties and guys and replace broken or missing items until plant establish. Adjust if necessary to allow for growth and prevent damage to plants. - Cut back any damaged, dead or diseased branches to a healthy node or any growth obstructing adjacent areas of hard standing. - Remove any dead flowers/foilage at times appropriate to the species. - Reform any plants that have been disturbed by adverse weather or interference. - Under take pest control with approved pesticides in accordance with manufacturer's instructions in approved locations only. Do not use adjacent to play areas. - Prune annually shrubs using normal horticultural standards to form attractive natural habit.	BS 4428: Code of practice for general landscape operations BS 7370-4: Grounds maintenance Recommendations for maintenance of soft landscape
06	Bulb Planting Schedule ref: F	Enhance visual amenity	- Remove dead flower leaves/stalks from bulbs in grass after at least 6 weeks to prevent loss of vigour through defoliation and remove all arisings of site. - Reaffirm areas of bulb planting if they become disturbed. - Grass should be mown before the emergence of flowers or leaves of late emerging species.	

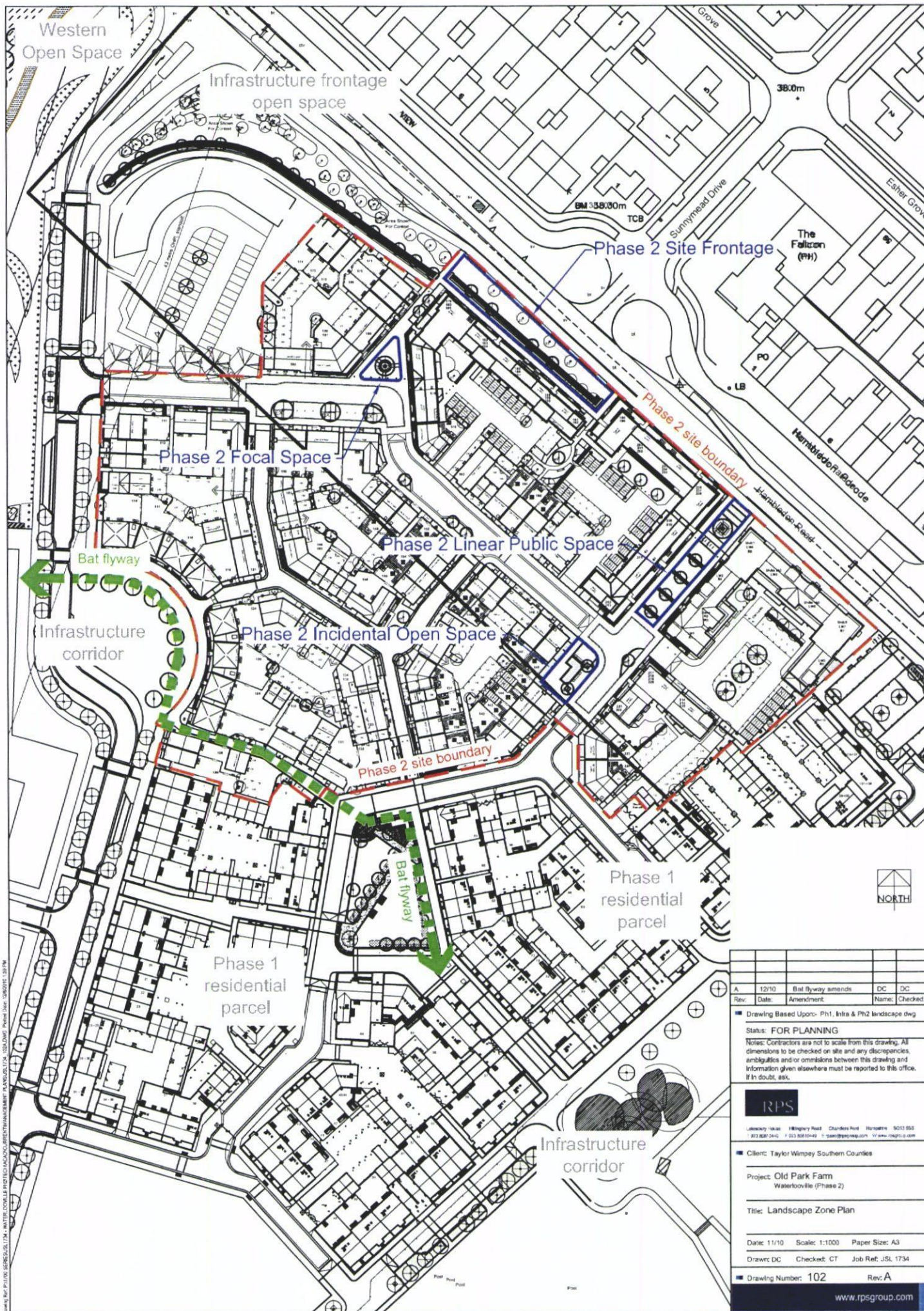
	<i>Landscape Element</i>	<i>Maintenance Objectives</i>	<i>Maintenance Requirements</i>	<i>Reference</i>
07	Amenity Grass Schedule ref: G	- Enhance visual amenity - Integrate with surrounding landscape and character - Provide easily accessible areas of short grass for the use of residents and employees, thereby reducing visitor pressure on species rich grassland in remainder of western open space	- Maintain all areas to a maximum height of 3cm during March / April and end of September / October or at times when grass exceeds 5cm. Remove all arisings off site or to an approved tip. - Cut a neat and consistent finish including edges, without rutting or scalping, ensuring adjacent areas of hard standing free are kept free of arisings. - Remove litter, rubbish and other debris from grassed areas prior to cutting. - Exercise extreme care when working in close proximity to existing/new trees and prevent damage to stems/trunks.	BS 7370-1: Grounds maintenance Recommendations for establishing and managing grounds maintenance organisations and for design considerations related to maintenance.
08	Hard Landscape	- Maintain all hard paved surfaces in a clean and safe state of use. - Keep all hard landscaped surfaces and items of street furniture clear of litter and graffiti. - Repair surfaces or street furniture items which are worn, damaged or vandalised.	- Keeping all hard surfaces, footways and parking areas reasonably weed free at all times using integrated physical / mechanical measures - Control moss and algae as necessary to maintain a clear route across all hard paved areas to avoid the risk of slipping in wet conditions. - Sweeping hard surfaces at regular intervals, at least 4 times per annum, to avoid a build up of grit and other debris. This will also assist with discouraging the growth of moss, algae and weeds. - Removal of snow and ice as directed by the adopting authority to maintain safe routes. - Keep all grass and paved areas free from fallen leaves at all times throughout the autumn/winter period. - Leave fallen leaves in planting areas where they will form a natural mulch and humus layer. Only remove if they are likely to smother smaller plants. - Remove litter from all hard and soft areas at regular intervals. Empty litter bins weekly. - Top up, level and roll to a firm finish any areas of worn or damaged gravel surfacing. Repair timber edgings where damaged. - Inspect and make good rabbit fencing and access gates where damaged or vandalised.	BS 4428: Code of practice for general landscape operations BS 7370: Grounds maintenance

	<i>Landscape Element</i>	<i>Maintenance Objectives</i>	<i>Maintenance Requirements</i>	<i>Reference</i>
	Hard landscape Continued:		- Repair, refix and replace where necessary items of street furniture which are damaged, worn or vandalised. - Maintain railings and gates in good working condition, oiling moving parts where necessary. - Provide routine monitoring to ensure that operations are undertaken as programmed and to take appropriate action to deal with damage and debris arising from storms, flood events and heavy snowfall.	
09	Pesticides, Insecticides and Fungicides	- Enhance biodiversity. - Limit use of pesticides, insecticides and fungicides, unless absolutely essential.	- Allow for only pest control by spraying with a suitable approved pesticide in cases of bad insect and pest infestation. - All spraying must be carried out in accordance with manufacturers written recommendations. - All damage that occurs, as a result of spraying, shall be made good at the Contractor's own cost. - No Insecticides, Fungicides or Pesticides shall be used except with the prior written approval of the managing authority. In such cases all pesticides shall be selected from the current list of approved chemicals and applied in strict accordance with the Control of Pesticide Regulations 1986 and other related Acts and Regulations. - The approval of the Environment Agency will be required when applying a pesticide to or within 3m of any watercourse. - Take appropriate action only if severe infestation occurs. If problem persists over a number of years, consider changing the plant species concerned to one less vulnerable to infestation.	Control of Pesticide Regulations 1986 Plant Protection Regs (2006) BASIS (the registration, standards and certification scheme for pesticides and fertilisers) BS 4428: Code of practice for general landscape operations BS 7370-4: Grounds maintenance Recommendations for maintenance of soft landscape

APPENDIX 2

Landscape Zone Plan

JSL1734_102

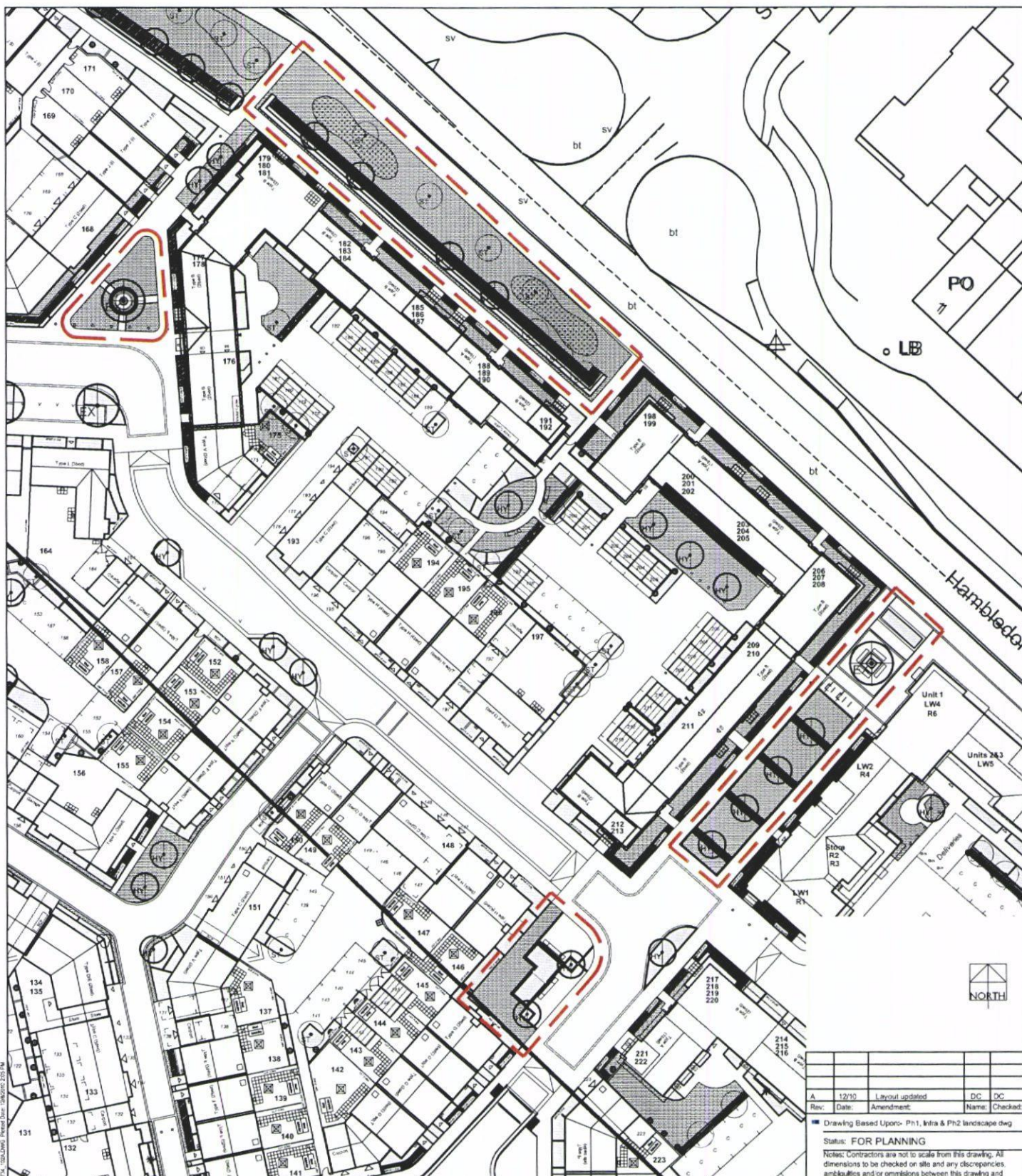


A	12/10	Bat flyway amends	DC	DC
Rev:	Date	Amendment	Name:	Checked:
■ Drawing Based Upon: Ph1, Intra & Ph2 landscape dwg Status: FOR PLANNING Notes: Contractors are not to scale from this drawing. All dimensions to be checked on site and any discrepancies, ambiguities and/or omissions between this drawing and information given elsewhere must be reported to this office. If in doubt, ask. RPS Literary Road, Highbury Park, Chertsey Road, Haverhill, 2013 950 01753 624124 / 01753 624143 / 01753 624144 / 01753 624145				
■ Client: Taylor Wimpey Southern Counties Project: Old Park Farm Waterlooville (Phase 2) Title: Landscape Zone Plan				
Date: 11/10 Scale: 1:1000 Paper Size: A3 Drawn: DC Checked: CT Job Ref: JSL 1734				
■ Drawing Number: 102 Rev: A www.rpsgroup.com				

APPENDIX 3

Landscape Management Plan

JSL1734_103



LEGEND

Extra Heavy Standard Tree

Heavy Standard Tree

Standard Tree

Specimen tree / shrub

Hedge Planting

	Ornamental shrub planting
	Specimen shrub (large stock)
	Specimen shrub (small stock)
	Climbing shrub in paved area
	Climbing shrub
	Bulb planting

	Amenity Grass
	Gravel Mulch
	Tree guard and grille within hard paved area.
	Bollards
	Bench & Table and Benches (refer to External Wks Drg)



A	12/10	Layout updated	DC	DC
Rev:	Date:	Amendment:	Name:	Check:

Notes: Contractors are not to scale from this drawing. All dimensions to be checked on site and any discrepancies, ambiguities and/or omissions between this drawing and information given elsewhere must be reported to this office. If in doubt, ask.



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Client: Taylor Wimpey Southern Counties

Project: Old Park Farm
Waterlooville (Phase 2)

Title: Landscape Management Plan

Date: 11/10 Scale: 1-500 Paper Size: A3

Drawn: DC	Checked: CT	Job Ref: JSL 1734
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Drawing Number: 103 Rev: A

APPENDIX 4

Bat Mitigation Plan



APPENDIX 5

Typical Tree & Plant Palette

(Refer to Landscape Designs JSL1734_501 to 503 for further information)

Tree and shrub palette

Client: Taylor Wimpey Southern Counties
Project: Old Park Farm, Waterloooville (Phase 2)
Dwg Ref: JSL1734_501 to 503
Doc Ref: JSL1734_550

Status: For Planning
Date: Dec 2010
Revision: A

Abbr	Botanical name	Common name	Girth / size	Stock type
A. Trees				
i. Extra heavy standard trees				
Ac Str	Acer campestre "Streetwise"	Field Maple	16-18cm	C / RB
Cor col	Corylus colurna	Turkish hazel	16-18cm	C / RB
Frax Ray	Fraxinus angustifolia 'Raywood'	Claret Ash	16-18cm	C / RB
Liq sty	Liquidambar styraciflua	Sweetgum	16-18cm	C / RB
Til GS	Tilia cordata "Greenspire"	Small - Leaved Lime	16-18cm	C / RB
ii. Heavy standard trees				
Ac cam	Acer campestre	Field Maple	14-16cm	C / RB
Carp bet	Carpinus betulus	Hornbeam	14-16cm	C / RB
Mal tri	Malus trilobata	Maple - Leaved Apple	14-16cm	C / RB
Mal tsc	Malus tschonoskii	Pillar Apple	14-16cm	C / RB
Pin syl	Pinus sylvestris (standard)	Scots Pine	3.0 - 3.5m	C
Pru Ple	Prunus avium 'Plena'	Wild Cherry	14-16cm	C / RB
Pyr Cha	Pyrus calleryana "Chanticleer"	Pear	14-16cm	C / RB
Rob Bes	Robinia pseudoacacia "Bessoniana"	Robinia	14-16cm	C / RB
Sorb auc SW	Sorbus aucuparia "Streetwise"	Rowan	14-16cm	C / RB
Sorb Lut	Sorbus aria "Lutescens"	Whitebeam	14-16cm	C / RB
iii. Standard trees				
Bet pen	Betula pendula	Silver birch	10-12cm	C / RB
Carp bet	Carpinus betulus	Hornbeam	10-12cm	C / RB
Crat IPS	Crataegus laevigata 'Paul's Scarlet'	Midland Hawthorn	10-12cm	C / RB
Mal Dis	Malus 'Discovery'	Apple	10-12cm	C / RB
Mal tri	Malus trilobata	Maple - Leaved Apple	10-12cm	C / RB
Mal tsc	Malus tschonoskii	Pillar Apple	10-12cm	C / RB
Que rob	Quercus robur	English Oak	10-12cm	C / RB
Rob Bes	Robinia pseudoacacia "Bessoniana"	Robinia	10-12cm	C / RB
Sorb auc	Sorbus aucuparia	Rowan	10-12cm	C / RB
iv. Specimen multi-stemmed trees / shrubs				
Ame cana	Amelanchier canadensis	Snowy Mespil	2.0 - 2.5m	C / RB
Cer sil	Cercis siliquastrum	Judas tree	2.0 - 2.5m	C / RB
Hyd que	Hydrangea quercifolia		10L	
B. Hedge species & Groundcover mix areas				
i. Evergreen hedges				
Evergreen Hedge 1 Cist xcor	Cistus corbariensis		3/m	3L C
Evergreen Hedge 2 Esc AB	Escallonia 'Apple Blossom'		3/m	3L C
Evergreen Hedge 3 Lon nit	Lonicera nitida		3/m	3L C
Evergreen Hedge 4 Prun OL	Prunus laurocerasus 'Otto Lyken'		3/m	3L C
Evergreen Hedge 5 Lon pil	Lonicera pileata		3/m	3L C
Evergreen Hedge 6 Lav Mun	Lavandula angustifolia 'Munstead'		3/m	3L
<i>Hedgerows planted at 3.00/m, in single row.</i>				
ii. Mixed native species hedge				
Corylus avellana			15%	60-90cm B
Ligustrum ovalifolium			35%	60-90cm B
Prunus Cerasifera			30%	3L B
Symphoricarpos rivularis			20%	60-90cm B
iii. Groundcover mix planting				
Cotoneaster dammeri			30%	2L C
Hedera helix 'Hibernica'			30%	2L C
Rosa 'Grouse'			20%	2L C
Symphoricarpos x chenaultii 'Hancock'			20%	2L C
<i>Groundcover shrubs planted at 4.00/m2, in single species groups of 20-50</i>				

Continued:-

Abbr	Botanical name	Girth / size	Stock type	Density
C. Ornamental shrub planted areas				
Alc moll	Alchemilla mollis	3L	C	5.00/m2
Cean trR	Ceanothus thyrsiflorus 'Ripens'	3L	C	
Chois tern	Choisya ternata	3L	C	
Cis xcor	Cistus corbariensis	3L	C	4.00/m2
Cis xpur	Cistus purpureus	3L	C	4.00/m2
Coton dam	Cotoneaster dammeri	3L	C	4.00/m2
Coton mic	Cotoneaster microphyllus	3L	C	5.00/m2
Croc Luc	Crocosmia 'Lucifer'	3L	C	5.00/m2
Esc AB	Escallonia 'Apple Blossom'	3L	C	3.00/m2
Euon fEnG	Euonymus fortunei 'Emerald 'n' Gold'	3L	C	4.00/m2
Euon fEG	Euonymus fortunei 'Emerald Gaiety'	3L	C	4.00/m2
Heb MB	Hebe 'Midsummer Beauty'	3L	C	3.00/m2
Heb rak	Hebe rakaiensis	3L	C	3.00/m2
Hed GR	Hedera helix 'Green Ripple'	3L	C	5.00/m2
Kni RS	Kniphofia 'Royal Standard'	3L	C	3.00/m2
Lon pil	Lonicera pileata	3L	C	4.00/m2
Penn co	Pennisetum compressum	3L	C	4.00/m2
Prun CB	Prunus laurocerasus 'Otto Luyken'	5L	C	3.00/m2
Pyr Red	Pyracantha 'Red Cushion'	3L	C	4.00/m2
Salv nO	Salvia nemorosa 'Ostfriesland'	2L	C	4.00/m2
Vib dav	Viburnum davidii	3L	C	3.00/m2
D. Specimen shrubs				
Hyd que	Hydrangea quercifolia	10L	C	
Vib EP	Viburnum tinus 'Eve Price'	10L	C	
E. Climbing shrubs				
Clem mR	Clematis montana	3L	C	
Hed Den	Hedera colchica "Dentata Variegata"	3L	C	
Hyd pet	Hydrangea petiolaris	3L	C	
Lon Hal	Lonicera japonica "Halliana"	3L	C	
Part hen	Parthenocissus henryana	3L	C	
Sol 'Alb'	Solanum jasminoides 'Album'	3L	C	
Vit coig	Vitis coignetiae	3L	C	
F. Bulbs				
Croc tommasinianus	'Ruby Giant'	5/7cm	BI	20/m2
Narcissus	'February Gold'	10/12cm	BI	10/m2
G. Grass areas				
i. 'Medallion' turf by Rolawn (or similar and approved)				

Notes:-

BR = Bare root

C = Container grown

BI = Bulb

RB = Root balled

B = bagged