

**KINGSCLERE AVENUE HOUSING DEVELOPMENT
LEIGH PARK**

LANDSCAPE WORKS SPECIFICATION

APRIL 2016

**Prepared by HPS Landscape Design,
Portsmouth City Council**

Table Of Contents

1.0 Introduction

2.0 Site & Proposals Description

3.0 Implementation of the Works

4.0 Site Preparation

4.1 Groundworks

4.2 Site Clearance & Vegetation Protection

4.3 Soil Grading, Cultivation, Amelioration & Weed Removal

5.0 Planting Specification

5.1 Generally

5.2 Tree Planting

5.3 Ground Cover Shrub Beds

5.4 Grass/Wildflower Turfed Areas

5.5 Native Woodland Screen Planting

6.0 Maintenance Specification

6.1 General Maintenance Items

6.2 New Tree Planting

6.3 Ground Cover Shrubs Beds

6.4 Wildflower & Herb-rich Grassed Areas

6.5 Native Woodland Screen Planting

6.6 Maintenance Schedule

Appendix 1

Plant Schedules

1.0 Introduction

- 1.1 The following Specification has been drawn up by HPS Landscape Design Services to support the landscape proposals for the new works to the Kingsclere Avenue housing development scheme in Leigh Park. It has been drawn up with the intention to provide clear instructions for those who will maintain the landscape on behalf of Portsmouth City Council (PCC) once it has been implemented by the contractors. It sets out the necessary management of the new landscape.
- 1.2 Following initial implementation of the new landscape, the first 24 months maintenance will be the responsibility of the landscape sub-contractor as appointed by the main contractor, as part of the defects liability period. Following this, it is anticipated that Green & Clean will take on the maintenance of the landscaped spaces, on behalf of Portsmouth City Council.
- 1.3 Once adopted by PCC it is advised that landscape management of the scheme be reviewed once yearly to ensure best practice for the longevity of the scheme for the City of Portsmouth.

2.0 Site & Proposals Description

- 2.1 The current site is a large open space comprising amenity grass lawn with informal boundaries backing onto surrounding residences on the north, east and west boundaries, and Riders Junior school to the south. There are several existing mature trees around the edge of the site, and a belt of woodland shrubs along the south boundary with the school, which are to be retained and protected within the site curtilage, during the construction works.
- 2.2 Kingsclere Avenue lies to the west of the site, and a new access road will be created from this in order to serve the new housing development. The site is currently open to informal access and is well used by local dog-walkers and as a short cut between Kingsclere Avenue and Dunsbury Way to the east. A new shared-use footpath and cycle path will cross the site linking these roads, allowing continued access. A new play area is proposed in the heart of an area of open space in the centre of the site.
- 2.3 The landscape proposals are to provide a green structure to complement the built form of the 30 houses and 8 flats, providing a welcoming community with attractive frontages and more informal boundaries and open space. A diverse range of trees includes native Oaks and Field Maples complemented by Silver Birches and Rowans, with flowering Cherries and Juneberry providing green structure to the road edges and front gardens. The use of native trees will help provide a naturalistic setting and heart to the development, linked to the surrounding woodland strip to the south, and large Ash and Oak trees along the boundaries. Small belts of native woodland screen planting will bolster this naturalistic character and help frame the play area and central open space. Herb-rich grass lawns with wildflowers will be used in the public open space to provide an informal character. Shrub beds comprising ornamental species with some hardy ornamental grasses and flowering perennials will clothe the curtilage to the

flats as defensible space, and provide attractive frontages to the houses and flats. The diverse mix of plants will provide a seasonal palette of colours and textures. Small drifts of spring-flowering bulbs in the grass areas will add early seasonal colour.

3.0 Implementation of the Works

- 3.1 All works to the new landscape should be installed in accordance with the proposals plan 628044/LA/5401 accompanying this Specification.
- 3.2 All planting and turfing is to take place in Spring and Summer 2017, with any bare root native hedge stock to follow in the Winter 2017 season.

4.0 Site Preparation

4.1 Groundworks

General, including unforeseen hazards:

Notify Contract Administrator (CA) of any suspicious objects, old foundations, slabs and the like; obtain approval and break out where and to the extent stated.

Unforeseen contaminated material if found:

Leave undisturbed until CA notified and approval for removal works obtained. Remove and carry out remediation required by the Enforcing Authority if required. Protect ground wherever possible from disturbance by traffic or works. Utilise coverings to protect ground where necessary. Where excavating provide method statements for protection of staff & capping layer. Allow for washing facilities. No smoking / eating or hand to mouth activities on all sites. Avoid disturbance of existing ground where possible. Any making good required will be at contractor's own expense.

Bench marks:

Unrecorded bench marks and other survey information: Give notice when found. Do not remove or destroy.

Features to be retained:

General: Keep in place and protect the following: All surrounding property, structures and landscaping around works.

Services affected by groundworks:

Work carried out to or which affects new or existing services: Carry out in accordance with the Byelaws or Regulations of the relevant Statutory Authority.

Location of services:

Services affected by the Works: Locate and mark positions.

Mains services: Arrange with the appropriate authorities for location and marking of positions.

Standard: In accordance with National Joint Utilities Group (NJUG) 'Guidelines on the positioning and colour coding of underground utilities' apparatus'.

4.2 Site Clearance & Vegetation Protection

Remove rubbish, concrete, metal, glass, decayed vegetation and contaminated topsoil. Remove stones with any dimensions above 75mm. Any material containing toxins, pathogens or other extraneous substances harmful to plant, animal or human life to be removed.

Protection of Trees & Vegetation to be retained

All existing trees and vegetation is around the boundary - see CBA Tree Survey Report CBA10579v. All vegetation is to be retained unless advised by CBA Trees on grounds of poor condition. Comply with BS 5837:2012 Trees in relation to Building Sites for all issues to protect the trees to be retained.

4.3 Soil Grading, Cultivation, Amelioration & Weed Removal

At least two weeks prior to planting or seeding, spray off all planting beds and turfing areas with a proprietary residual herbicide to remove all weeds. Allow suitable recommended period for herbicide to take effect before clearing arisings and commencement of planting/turfing.

Imported topsoil will be required for the new lawn areas, tree and shrub planting beds (see Section 6.2). New topsoil should comply with BS 3882 and be free of all contaminants.

All planting and turfing areas are to be broken up and ameliorated with compost & fertiliser prior to planting and turfing, mixing into topsoil on site.

Ameliorate all planting areas with green compost, locally sourced to PAS 100 standard, such as Hampshire Pro-Grow from Hampshire Waste Services or similar approved. (Tel 01962 764000). Incorporate compost at rate of 1.5m³/100m² to the full depth of shrub and tree planting beds (500mm). Do not use any peat-based products. Incorporate slow-release fertiliser to 50g/m², using Vitex Q4 or similar approved fertiliser to all planting beds.

Ensure soil surface for whole site is graded to proposed levels for planting and turfing. Break up any compaction to a depth of 500mm minimum for whole site prior to planting. Remove visible roots and large stones with a diameter over 50mm.

Soil should be left in a moist, friable state for planting & turfing. Soil should not be waterlogged. Leave soil surface regular and even.

5.0 Planting Specification

5.1 Generally

All plant handling to be in accordance with HTA "Handling and Establishing Landscape Plants" Part I, II, and III (obtainable from the Horticultural Trades Association) and the CPSE publication: "Plant Handling". All planting to conform to National Planting Specification Guidelines.

Notice

Give notice before:

Setting out; applying fertilizer; delivery of plants/ trees; planting grasses/perennials/ground cover plants; planting trees into previously dug pits; watering; visiting site during maintenance period.

Period of notice: 2 working days

Plant/ tree stock

Condition: Materially undamaged, sturdy, healthy and vigorous.

Appearance: Of good shape and without elongated shoots.

Hardiness: Grown in a suitable environment and hardened off.

Health: Free from pests, diseases, discoloration, weeds and physiological disorders.

Budded or grafted plants: Bottom worked.

Root system and condition: Balanced with branch system.

- Standard: [The National Plant Specification].

Species: True to name.

Origin/ Provenance: [British provenance].

Definition: Origin and Provenance have the meaning given in the National Plant Specification.

Container grown plants/ trees

Growing medium: With adequate nutrients for plants to thrive until permanently planted.

Plants: Centred in containers, firmed and well watered.

Root growth: Substantially filling containers, but not root bound, and in a condition conducive to successful transplanting.

Hardiness: Grown in the open for at least two months before being supplied.

Containers: With holes adequate for drainage when placed on any substrate commonly used under irrigation systems.

Notify landscape architect for inspection of sample plants prior to planting. Includes trees, shrubs & ground covers, grasses, perennials; bulbs and bare root whips/woodland screen plants.

Labelling and information

General: Provide each plant/ tree or group of plants/ trees of a single species or cultivar with supplier's labelling for delivery to site, showing:

- Full botanical name.
- Total number.
- Number of bundles.
- Part bundles.

- Supplier's name.
- Employer's name and project reference.
- Plant specification, in accordance with scheduled National Plant Specification categories.

Treatment of tree wounds

Cutting: Keep wounds as small as possible.

- Cut cleanly back to sound wood using sharp, clean tools.
- Leave branch collars. Do not cut flush with stem or trunk.
- Set cuts so that water will not collect on cut area.
- Fungicide/ Sealant: Do not apply unless instructed.

Setting Out

The individual setting out of plants on site shall be the responsibility of the Contractor, and should follow closely the locations on the landscape plans supplied by the landscape architect. Contractor to ensure all plants are equally spaced within individual planting groups. Contractor to ensure that smaller plants are located to front of plant species groups. Contractor to check the locations of all underground services, existing and proposed, prior to excavation of tree pits or shrub beds, and identify any potential conflicts to the client. All arisings shall be removed from site and the Contractor shall at all times keep the site free from rubbish and debris. For the duration of the Works, the Contractor shall keep the site free from injurious weeds as listed in the Weeds Act 1959.

Substitutions

All plants shall be supplied at the same size and of the same species as specified in the planting schedule (Appendix 1). Any proposed replacement species or deviation from the planting schedules should be highlighted to and agreed with the landscape architect prior to installation.

Weather Conditions

The Contractor shall carry out the work while soil and weather conditions are suitable. Planting and seeding is not to take place during periods of frost or strong winds. In the instance of frozen or snow-covered soil, give notice before planting & provide additional root protection. Prevent planting pit sides and bases and backfill materials from freezing. The Contractor is to ensure that adequate watering and weed control is provided at the same time of planting.

Defects Period

Carry out the operations in section 7.0 Landscape Maintenance from the date of Practical Completion until Final Completion, 24 months later. Defects due to materials or workmanship not in accordance with this contract shall require replacements as below.

Failures of planting/Replacements

All plants/ trees/ grasses/ ground cover shrubs that have failed to thrive during this 24 month period shall be replaced with new specimens / equivalent plants/ trees/ shrubs to match the size of adjacent or nearby plants of same species or to match the original specification, whichever is the greater.

- Timing of making good: by the end of the year, in the following growing season in which failure is identified.
- Exclusions: Theft or malicious damage after completion.

5.2 Tree Planting

Planting Pits

Generally plant trees in pits of min. dimensions 1500mm x 1500mm x 1100mm deep. Adjust as suitable when planting within narrower beds, ensuring no less than 300mm distance from rootball to surrounding concrete haunch. Break up bottom of tree pit to a depth of 200mm and ensure ground is free-draining.

Backfill

Backfill the pits in layers as specified below (bottom up):

- 200mm depth layer of compacted inert free-draining gravel or pea shingle, wrapped in geotextile membrane (containing perforated drainage pipe)
- 400mm depth layer of clean, medium-course washed sand below rootball
- 500mm depth layer of clean topsoil as per BS 3882, free from weeds

Loosen edges of tree pit at time of planting by hand, using a fork to ensure good drainage. Pits should be excavated no greater than 48hrs prior to planting and de-watered as required.

Soil Ameliorants

Incorporate the following in the topsoil backfill:

- soil conditioner/ameliorant in the form of peat-free tree and shrub compost as specified in 4.3 at the rate of 40L per pit
- 200g of slow-release fertiliser such as Vitex or similar approved to each tree pit
- P4 Moisture Retention Polymer into the soil backfill as directed by supplier.

Backfill topsoil mix in layers of 150mm, firming each layer and loosening the pit sides to aid drainage.

Bark Mulch

The surface level of the pit should be 50mm above the surrounding ground. Trees shall be planted in the centre of the excavated pits. Tree pits to be mulched with a 75mm depth layer of pine bark fines, particle size 15-50mm to a min. diameter of 1500mm where appropriate. Finished level of mulch to be 30mm below adjacent shingle or grassed areas.

Irrigation/Aeration Pipe

Trees shall be planted with a proprietary flexible perforated irrigation/ aeration pipe with integral cap, such as Greenleaf Roottrain Metro Irrigation System or similar approved. Water immediately after planting, thoroughly and without damaging or displacing trees or soil.

Staking

All standard trees shall be double staked, and all multi-stem trees shall be triple staked, using an approved staking system, to secure trees plumb and in place. Avoid driving stakes through tree rootball. It is essential to ensure that the trees are securely staked and braced once planted. Staking system to be approved by landscape architect prior to installation.

Root Barriers

Tree pit root barriers are to be installed where required alongside service ducts or where directed. Confirm locations with landscape architect prior to carrying out. Use Greenleaf Urban Tree and Landscape Products or similar approved. Greenleaf T. 01424 717797. Reference Reroot 1000 ribbed root barrier. Install as per manufacturers instructions.

Tree Supplier

Trees are to be supplied by an approved nursery, contact landscape architect for details.

5.3 Ground-cover Shrubs, Grasses, and Perennials Planting

- Plant in pre-prepared topsoil depth of 500mm.
- Dig planting holes to be a depth of 200mm and a width of 150mm greater than the source pot size, ensuring the pit walls are loosened to ensure good drainage.
- Plant at densities of 3-5 plants/m² as scheduled on the plan and in the appendix. Use staggered grid or zig-zag pattern to ensure planting appears random/ natural.
- Plant at nursery level, allowing for mulch layer to 50mm depth in vicinity of each plant
- Backfill with ameliorated site topsoil as per 4.3.
- Water immediately after planting, thoroughly and without damaging or displacing plants or soil.
- Spread approved bark mulch layer 50mm depth to all plants

5.4 Grass Turfed Areas**Generally**

- Areas to be turfed are to be dug over or rotovated to ensure decompaction of any existing substrate, and then finely graded to bring a uniform and even grade at the correct finished level, removing all minor hollows and ridges.
- Light rolling may be required to consolidate any loose substrate.
- All stones and debris greater than 50mm in size are to be removed and disposed of off-site.
- Soil depth to be 150mm minimum for all grass areas.
- See section 4.3 for soil preparation prior to turfing.

- Finished levels of turfing areas is to be 30mm above adjoining paving and kerbs to allow for settlement.

Tilth

- Final preparation of the turfing areas shall be carried out as to create a fine tilth surface suitable for turfing.
- Prepared areas should be watered thoroughly to a depth of 75mm

Turf

- Wildflower grass turf for lawn areas in public open space where longer grasses are encouraged (away from play area and paths) is to be: "Wildflower Landscape Turf", ref. WFT-Landscape-34
- Herb-rich grass lawn for all other grass areas (private gardens, and public open space where low growing lawns are required) is to be: "Species-rich Lawn Turf" - ref. WFT-Species-Rich-26.
- Both supplied by www.wildflowerturf.co.uk, tel 01256 771222 or similar approved source.
- Follow suppliers instructions for detail turfing instructions. Turfing method should suit soil type, proposed usage, location and weather conditions during and after turfing.

Initial Establishment

- The Contractor is to ensure that all turfed areas are watered fully at the time of installation, and that sufficient subsequent watering is carried out to ensure healthy establishment of the wildflower grass sward.
- Leave works in a clean, tidy condition.

5.5 Native Woodland Screen Planting

Generally

- Areas to be planted are to be dug over or rotovated to ensure decompaction of any existing substrate, and then finely graded to bring a uniform and even grade at the correct finished level, removing all minor hollows and ridges.
- All stones and debris greater than 50mm in size are to be removed and disposed of off-site.
- Plant woodland screen plants in pre-prepared topsoil depth of 500mm, in a staggered grid, at 1000mm spacings.
- Randomly mix species in groupings of 7no. min per species
- All woodland screen plants to be protected with photodegradable spiral rabbit / strimmer guard, to be approved
- Plant woodland screen plants at nursery level.
- Backfill with ameliorated site topsoil as per 4.3
- Water immediately after planting, thoroughly and without damaging or displacing plants or soil.
- Immediately following planting, trim tops to encourage side growth
- Spread approved bark mulch layer 50mm depth around all screen plants

- Bare root plants must only be planted during the winter season from mid-November to mid-March (weather dependent) - if woodland screen plants are being planted at any other time, containerised stock must be used. If in doubt speak with landscape architect first.

5.6 Spring-flowering Bulbs

Generally

- Areas to be planted with bulbs are to be dug over or rotovated to ensure decompaction of any existing substrate, and then finely graded to bring a uniform and even grade at the correct finished level, removing all minor hollows and ridges.
- Soil depth to be 150mm minimum for all bulb-planting areas.
- Plant in random drifts of 25 bulbs per square metre, in minimum quantities of 10 per species.
- Bulbs to be plump, single sprout and free of mould.
- Plant in correct season according to suppliers recommendations.

6.0 Maintenance Specification

6.1 General Maintenance Items

Maintenance of the landscape areas shall be undertaken by a competent Landscape Contractor, preferably registered with the British Association of Landscape Industries (BALI).

Maintenance visits shall be undertaken at regular intervals during the growing season and at agreed intervals during the dormant season (min. 10 visits per year). At each visit the following operations shall be undertaken:

- (i) Regularly litter pick entire site on every second visit, to ensure that all planting and amenity areas are kept free of litter
- (ii) Undertake weeding of planted areas, minimum once every four weeks during April to August; once every eight weeks in remaining months September to March
- (iii) Undertake watering as required to ensure healthy growth / establishment of plant stock, minimum once every two weeks during April to August, and extended into any unusually dry periods during initial 3 years establishment of trees
- (iv) Remove litter and fallen leaves from grass areas and shrub beds
- (v) Undertake the landscape maintenance outlined in the following sections

Standards

All soft landscape areas to be maintained to BS7370-4:1993. The landscape maintenance is to be carried out to a high standard at all times. The Contractor should ensure that the Site is left in a tidy and safe state following the undertaking of works outlined in the specification. All arisings should be removed from site. Chipping or shredding not permitted on site.

Visits Log

Record sheets will be drawn up for recording maintenance visits, date, time, names of operatives, list of works carried out, duration of visit, inspection by PCC landscape architect and sign off. Landscape architect is to be contacted prior to making maintenance visits for fertiliser application, weeding and watering. Maintenance payments will only be made on completion and submission of record sheets / visit logs to landscape architect.

Chemical Use

The Contractor shall ensure that any chemical applications are undertaken by trained persons/operatives who have the appropriate NPTC certificates and in accordance with the manufacturers recommendations. The "Code of Practice" for the Safe Use of Pesticides for Non-Agricultural Purposes" will be observed where applicable. The use of any chemicals shall be noted on the record sheets as outlined above.

Weather Conditions

The Contractor shall programme and vary their visits to coincide with appropriate weather conditions for carrying out their operations, with particular regard for the use of chemicals. Avoid windy conditions for spraying of herbicide to avoid damage to surrounding vegetation.

Pests/diseases

The Contractor shall notify the Client to any significant pest or disease problem affecting the planted stock and shall provide a suitable strategy for treatment to be agreed with the Client. Should mammalian pests become a problem on site, then proposals for their control/eradication should be submitted to the client for approval.

Replacements

The Contractor should notify the Client of all trees and other plants found to be dead, dying, vandalised or suffering significantly from the current growing conditions. All failed/defective plants identified within the first five years of installation should be replaced by the contractor at the soonest available planting season to ensure a continued coverage of growth. Replacement plants should be of the same species and specification of the failed specimens, unless agreed with PCC Landscape Architect.

Watering

Ensure a suitable water supply is available to carry out the operations detailed in this document. In the event of water restrictions, eg. drought, the Contractor will be responsible for submitting proposals for an alternative source of water. Use potable mains water, wet full depth of topsoil (300mm for planting and grass areas, 500mm depth for tree pits). Do not damage or loosen plants. Watering will require a bowser vehicle driven along one side of the vegetation. Watering should be carried out during off-peak periods only.

6.2 New Tree Planting

Objectives

To ensure new tree planting is suitably cared for to enable its successful establishment, and to promote healthy growth and attractive form.

Prescriptions

Watering

Watering programme should be monitored to ensure that at times of water shortage, eg. drought, sufficient water is applied to meet the conditions, particularly during the first three years of establishment in the growing period particularly, but even during the first Winter's establishment if there are extended dry periods. Allow a minimum of once every two weeks watering in first two year's establishment during April to August, to be carefully reviewed with PCC landscape architect in following two years for healthy establishment. Watering to comprise 20 litres per tree pit.

Fertiliser

Apply a single dose of evenly spread 11:22:9 NPK, slow release fertiliser at a rate of 50g per tree from March to April. Spread evenly, carefully lifting mulch and replacing after applying fertiliser.

Pruning

Pruning should be carried out in accordance with good arboricultural practice to BS3998. For any large branches, always check for approval with PCC landscape architect before removing.

Long term Monitoring

- Refirm trees in ground after strong winds, frost heave or other disturbances.
- Regularly inspect staking systems. Replace or resecure loose or missing stakes and bracing straps. Adjust to suit stem growth, and to provide correct and uniform tension.
- Monitor and replace failed planting with new plants to the original size and specification between the next planting season. Ensure planting is conducted into well-prepared ground.
- Inspect trees for pests and diseases routinely.
- Maintain any mulch layer at the base of each tree by regular topping up to a depth of 75mm to a diameter of 1.2m from the trunk. Maintain a weed-free area around each tree trunk up to 1200mm diameter.

6.3 Ground Cover Shrubs/Perennials/Grasses

Objectives

To ensure new ground cover shrub bed planting is suitably cared for to enable its successful establishment, and to maintain healthy growth and shape of plants, and prevent beds from becoming overgrown and untidy.

Prescriptions

Watering

During and following the establishment of the planting ensure that sufficient water is applied to maintain healthy growth as required. Ensure that the topsoil is saturated to a depth of 500mm. Watering programme should be monitored to ensure that at times of water shortage, eg. drought, sufficient water is applied to meet the conditions, particularly during the first three years of establishment. It is

recommended that the ground covers are watered in tandem with the trees, to the same regularity during the initial establishment years. Watering to comprise 10litres/m² minimum for all shrubs beds.

Pruning

Allow all flower heads to remain until winter season. Once a year at end of winter before beginning of new flush of growth in Spring, remove dead-heads of flower stalks on taller herbaceous perennials only to 75mm off ground. Remove arisings from site.

Fertiliser

Apply a single dose of evenly spread 11:22:9 NPK, slow release fertiliser at a rate of 60g per m² from March to April.

Weeding

Keep all beds clear of weeds by hand weeding only. Dispose of arisings off-site. Ensure careful spraying of adjacent shingle areas, leaving a 1m margin up to the edge of the planting beds for hand weeding only in order to reduce accidental damage to surrounding grasses and ground cover shrub/perennial beds. Weeding is recommended once every 4 weeks during the growing period, ie. April to September, and once every 8 weeks during remaining months September through to March.

Mulching

Monitor mulch levels and re-mulch to original depth when required.

Long term Monitoring

- Refirm any plants in ground after strong winds, frost heave or other disturbances.
- Monitor and replace failed planting with new equivalent plants between October and March.
- Maintain plants free of pests and diseases routinely through the removal of herbaceous weeds by hand weeding only.
- Annually, check beds to assess whether thinning is required. When plantings are starting to overlap, it may be necessary to remove some individual plants to retain the character of the bed. Thinning should take place as required in a logical process over several stages to avoid any unattractive holes or gaps.

6.4 Wildflower & Herb-rich Grass Lawn Areas

Objectives

To ensure new grass lawn areas are suitably managed to maintain healthy, vigorous, attractive, naturalistic lawns, free from disease, fungal growth, discolouration, scorch or wilt. Drifts of Spring flowering bulbs to flourish within the lawn areas. Note the difference between wildflower grassed areas (where strimming or mowing is only encouraged once a year in the autumn) and lower-growing herb-rich lawns for regular mowing.

Prescriptions

Wildflower Grass lawn areas only - public amenity space around play area, on low mounds and on verges where agreed

- Once established, maintain to full natural height
- Mow/trim once a year only in autumn
- Remove arisings from all areas.
- Do not use mowers/trimmers within 100mm of tree stems, use nylon filament rotary cutters or other hand held machinery to avoid damage to bark, keeping 100mm from the stem of any tree.
- Take care around any obstructions, eg. street furniture.

Herb-rich Grass lawns only - private gardens, grass verges to roads & footpaths

- Once established, maintain to full natural height by mowing to keep a 90mm height sward.
- Remove arisings from all areas.
- Do not use mowers/trimmers within 100mm of tree stems, use nylon filament rotary cutters or other hand held machinery to avoid damage to bark, keeping 100mm from the stem of any tree.
- Take care around any obstructions, eg. street furniture.
- Mow around drifts of Spring-flowering bulbs to allow full flowering period, then mowing of these areas can be started to continue as normal
- Occasional fertiliser treatment to be agreed with landscape architect

Replacements

Where grass lawn areas have become worn or have failed to establish or there are bare patches, these areas should be replaced with appropriate grass turf of a similar mix to the original turf mix in the soonest available turving season.

Long term Monitoring

- Maintain annual mowing regimes as described above.
- Maintain replacements as above.
- Remove any stones brought to the surface exceeding 25mm in any dimension.

6.5 Native Woodland Screen Areas

Objectives

To ensure new native woodland screen areas are suitably managed to maintain a healthy, attractive, informal yet tidy character.

Prescriptions

Establishment

Allow plants to establish a natural informal form. Ensure plants remain upright and that protective guards are secured in place. Keep all plants clear of weeds by hand weeding once a year around the base to a 500mm diameter. Once a year at end of winter before beginning of new flush of growth in Spring, prune back to edges of screen planting areas to achieve tidy verges. Remove arisings from site.

Thinning

After 5-10 years establishment, consider careful thinning of poorer/weaker specimens to allow healthier plants to grow on to maturity.

6.6 Summary – Maintenance Schedule

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Watering*				2x	2x	2x	2x	2x	2x			
Weeding	1x		1x	1x	1x	1x	1x	1x	1x	1x	1x	
Grass Mowing (low-growing lawns only)			1x	1x	1x	1x	1x	1x	1x	1x	1x	
Pruning shrub beds**			1x									
Pruning edges to woodland screen areas***											1x	
Fertiliser			1x									
Mulch top-up	Once every 5 years or as necessary											
Pest/disease control	As necessary											

Clarification Notes

* Adjust watering depending on weather conditions. Avoid over-watering in excessively rainy conditions. Increase in times of excessive drought. Stop all watering of shrub beds and woodland screen planting after first three years establishment except in times of extended drought. Stop all watering of trees after five years of establishment.

** Pruning/dead-heading of all shrubs/ground covers/perennials occurs once a year only, in late winter before first flush of new growth. Grasses do not require pruning.

***Pruning of edges of native woodland screen planting is only to verges alongside footpaths and roads, and to maintain a tidy appearance around the public open space.

APPENDIX 1

PLANT SCHEDULE

TREE SCHEDULE - APRIL 2016

Qty	Code	Species name	Common name	Size/Specification
9	AC	Acer campestre	Field Maple	Multi-stem, 3.5m high, min. 3 stems, 80L min. size rootball or container grown
6	ALRH	Amelanchier lamarckii "Robin Hill"	Juneberry	Standard, 18-20cm girth, 4m high, Rootballed or Container Grown
19	BP	Betula pendula	Silver Birch	Multi-stem, 3.5m high, min. 3 stems, 80L min. size rootball or container grown
8	PSAR	Prunus subhirtella "Autumnalis Rosea"	Winter-flowering Cherry	Standard, 18-20cm girth, 4m high, Rootballed or Container Grown
6	PAP	Prunus avium "Plena"	Flowering Wild Cherry	Standard, 18-20cm girth, 4m high, Rootballed or Container Grown
7	QR	Quercus robur	English Oak	Standard, 18-20cm girth, 4m high, Rootballed or Container Grown
9	SASS	Sorbus aucuparia "Sheerwater Seedling"	Cultivar Rowan	Standard, 18-20cm girth, 4m high, Rootballed or Container Grown

Note: All trees to be planted in 500mm depth topsoil over 400mm depth clean medium grade sand over 200mm depth pea shingle gravel for sufficient drainage. Pits to be min. 1500mm square. All trees to be double staked - method to be approved. Samples of trees to be provided for approval prior to planting by PCC landscape architect.

MIXED NATIVE WOODLAND SCREEN PLANTING - APRIL 2016

Qty	%	Species name	Common name
tbc	10	Acer campestre	Field Maple
tbc	5	Carpinus betulus	Hornbeam
tbc	10	Cornus sanguinea	Red twig Dogwood
tbc	10	Corylus avellana	Hazel
tbc	10	Crataegus monogyna	Hawthorn
tbc	5	Fagus sylvatica	Beech
tbc	5	Frangula alnus	Alder Buckthorn
tbc	5	Ilex aquifolium	Holly
tbc	5	Ligustrum vulgare	Privet
tbc	2.5	Lonicera periclymenum	Honeysuckle
tbc	2.5	Malus sylvestris	Crab Apple
tbc	5	Prunus avium	Wild Cherry
tbc	5	Prunus spinosus	Blackthorn
tbc	2.5	Rosa canina	Dog Rose
tbc	5	Salix caprea	Goat Willow
tbc	2.5	Sambucus nigra	Elder
tbc	5	Sorbus aucuparia	Rowan
tbc	5	Viburnum opulus	Guelder Rose

Note: All plants to be 80-100cm high bare root 1+2 hedge stock or 3L container grown pots. All plants to be planted at 1000mm centres, in staggered grid. All plants to be protected with photodegradable spiral rabbit/trimmer guard, to be approved. Mix species in random effect. Plant species in groups of no less than 7 plants each. Total quantities to be confirmed in detail stage.

GROUND COVER SHRUBS, PERENNIALS & ORNAMENTAL GRASSES
- APRIL 2016

Qty	Species name	Common name	Specification
tbc	Anemanthele lessoniana	Pheasants Tail Grass	3L pot size, CG, 4/m2
tbc	Bergenia cordifolia "Purpurea"	Elephants Ears	3L pot size, CG, 5/m2
tbc	Cistus x argenteus "Silver Pink"	Rock Rose	3L pot size, CG, 4/m2
tbc	Convolvulus cneorum	Convolvulus	3L pot size, CG, 5/m2
tbc	Euphorbia characias "Wulfenii"	Spurge	3L pot size, CG, 4/m2
tbc	Geranium "Johnsons Blue"	Geranium	3L pot size, CG, 6/m2
tbc	Geum "Lady Stratheden"	Geum	3L pot size, CG, 6/m2
tbc	Hebe "Autumn Glory"	Hebe	3L pot size, CG, 4/m2
tbc	Helictotrichon sempervirens	Blue Oat Grass	3L pot size, CG, 6/m2
tbc	Hypericum x moserianum "Tricolor"	St Johns Wort	3L pot size, CG, 4/m2
tbc	Lavandula angustifolia "Hidcote"	English Lavender	3L pot size, CG, 5/m2
tbc	Lonicera pileata	Privet Honeysuckle	3L pot size, CG, 4/m2
tbc	Mahonia aquifolium "Apollo"	Oregon Grape	3L pot size, CG, 4/m2
tbc	Phormium tenax "Sundowner"	New Zealand Flax	10L pot size, CG, specimen
tbc	Photinia fraseri "Little Red Robin"	Photinia	3L pot size, CG, 3/m2
tbc	Prunus "Otto Luyken"	Otto Luyken Laurel	3L pot size, CG, 3/m2
tbc	Rosmarinus officinalis "Prostratus"	Creeping Rosemary	3L pot size, CG, 5/m2
tbc	Rudbeckia fulgida "Goldstrum"	Black Eyed Susan	3L pot size, CG, 6/m2
tbc	Santolina chamaecyparissus	Lavender Cotton	3L pot size, CG, 4/m2
tbc	Sedum "Autumn Joy"	Stone Crop	3L pot size, CG, 6/m2
tbc	Senecio "Sunshine"	Senecio	3L pot size, CG, 4/m2
tbc	Stipa tenuissima	Mexican Feather Grass	3L pot size, CG, 6/m2
tbc	Verbena x bonariensis	Verbena	3L pot size, CG, 5/m2
tbc	Viburnum davidii	David Viburnum	3L pot size, CG, 4/m2
	Viburnum tinus	Laurustinus	3L pot size, CG, 4/m2
tbc	Vinca major	Greater Periwinkle	3L pot size, CG, 5/m2

Note: All plants to be planted in 400mm depth clean topsoil, with compost & slow release fertiliser. Ensure good drainage beneath. All shrub beds to be mulched with ornamental bark mulch dressing, 75mm depth. Total quantities to be confirmed in detail stage.

SPRING FLOWERING BULBS - APRIL 2016

Qty	Species name	Common name	Specification
tbc	Narcissus spp.	Daffodil (mixed heights, colours white and yellow)	Grade 14/16, 25/m2
tbc	Crocus vernus	Crocus (mixed colours)	Grade 7/8, 25/m2
tbc	Galanthus nivalis	Snowdrop	Grade 7/8, 25/m2
tbc	Scilla sibirica "Spring Beauty"	Squill	Grade 7/8, 25/m2

Plant In random drifts of 25 bulbs per square metre, in minimum quantities of 10 per species. Bulbs to be plump, single sprout and free of mould. Plant in correct season according to specification.