

**Phase 2 - Corinthian Park, Cheltenham**

**Detailed Planting Scheme  
and  
Management Plan**

For Hinton Group  
by  
Davies Landscape Architects Ltd

DLA-1755-LPMP-01 Rev B  
October-2017

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- DLA-1755-L-06 Rev D                      Planting Proposals
- DLA-1755-L-07 Rev D                      Planting Proposals
- DLA-1755-L-08 Rev C                      Planting Proposals

**Appendix 2** - Davies Landscape Architects NBS Specification DLA-1755-Spec-01 Rev A for soiling and planting works only.

**Appendix 3** – 5 Year Maintenance Operations

**1. Introduction**

1.1 This appendix has been prepared to support a planning application for the development at Corinthian Park

1.2. This appendix is structured as follows:

- **Section 2:** Sets out details of species which shall include, plant mixes, planting densities and initial sizes of trees and shrubs;
- **Section 3:** Plant sources;
- **Section 4:** Plant implementation;
- **Section 5:** Timetable for implementation

**2. Details of Positions and Species Mix**

2.1. Location of plant species are indicated on Davies Landscape Architects drawings DLA-1755-L-06 Rev D, DLA-1755-L-07 Rev D and DLA-1755-L-08 Rev C.

2.2. The proposed species mix is outlined in Table 1 below.

Table 1: Species mix			
	Size	Spec	Density
<b>Trees</b>			
Acer campestre	14-16cm girth	Root balled	As shown
Acer campestre 'Streetwise'	18-20cm girth	Root balled	As shown
Acer x freemanii 'Autumn Blaze'	18-20cm girth	Root balled	As shown
Acre griseum	20-25cm girth	Container grown	As shown
Alnus incana 'Laciniata'	18-20cm girth	Root balled	As shown
Alnus glutinosa	18-20cm girth	Container grown	As shown
Amelanchier Ballerina	14-16cm girth - Standard	Container grown	As shown
Amelanchier canadensis	14-16cm girth - multi stem	Container grown	As shown
Amelanchier lamarckii	14-16cm girth - multi stem	Container grown	As shown
Betula pendula	18-20cm girth - multi stem	Container grown	As shown
Betula utilis 'Grayswood Ghost'	20-25cm girth - multi stem	Container grown	As shown
Carpinus betulus	18-20cm girth	Root balled	As shown
Carpinus betulus Boxhead	25-30cm girth - 3.0m clear stem	Root balled	As shown
Gingko biloba Emperor's Garden	20-25cm girth	Root balled	As shown
Malus profusion	14-16cm girth	Root balled	As shown
Pinus nigra	3.5m high	Container grown	As shown
Pinus pinea	4.5m high	Container grown	As shown
Pinus sylvestris	3.5m high	Container grown	As shown
Prunus avium 'Plena'	14-16cm girth	Root balled	As shown
Pyrus chaticleer	20-25cm girth	Root balled	As shown
Quercus ilex	18-20cm girth	Container grown	As shown
Quercus robur	16-18cm girth	Root balled	As shown
Tilia cordata 'Winter Orange'	25-30cm girth	Root balled	As shown
<b>Accent plants</b>			
Dicksonia Antarctica	2.2-2.5m high	50Lt	As shown
Drimys winteri	2.2-2.5m high	75Lt	As shown
Magnolia Stellata	2.2-2.5m high	100Lt	As shown
Philadelphus coronaries	1.5-1.8m high	25Lt	As shown
Photinia Red Robin	2.2-2.5m high	50lt	As shown
Viburnum burkwoodii 'Anne Russell'	1.8-2.0m high	25Lt	As shown
Cornus kousa	2.2-2.5m high	50Lt	As shown
<b>Hedge</b>			
Buxus microphylla 'Faulkner'	20-30cm high - hedge trough	1m trough	1 per lin m
Buxus sempervirens	40-60cm high - hedge trough	1m trough	1 per lin m
Fagus sylvatica	1.2-1.5m high	Bare root	5 per lin m double staggered rows
Griselinia littoralis	0.8-1.0m high	Root balled	3 per lin m double staggered rows
Taxus baccata	90-1.2m high	10Lt	3 per lin m double staggered rows
<b>Native hedge</b>			
Acer campestre	60-90cm high	Bare root	12.5%
Corylus avellana	60-90cm high	Bare root	40%
Crataegus monogyna	60-90cm high	Bare root	20%
Ilex aquifolium	60-90cm high	5Lt	10%
Lonicera periclymenum	60-90cm high	3lt	2.5%
Prunus spinose	60-90cm high	Bare root	10%
Viburnum opulus	60-90cm high	Bare root	5%
<b>Climbers</b>			
Cestrum parqui	1.5-1.8m high - on trellis	20Lt	As shown
Jasminum officinale	1.5-1.8m high - on trellis	20Lt	As shown
Trachelospermum jasminoides	1.5-1.8m high - on trellis	20Lt	As shown

<b>Ferns / grasses / herbaceous</b>			
Dryopteris blandfordii	N/A	5Lt	3 per sq.m.
Dryopteris Filix-Mas	N/A	3Lt	4 per sq.m.
Heuchera 'Fire Chief'	N/A	3Lt	4 per sq.m.
Heuchera 'Fireworks'	N/A	3Lt	4 per sq.m.
Hosta 'Paradise Island'	N/A	5Lt	3 per sq.m.
Hosta sieboldiana elegans	N/A	5Lt	3 per sq.m.
Miscanthus 'Morning Light'	N/A	3Lt	3 per sq.m.
Miscanthus sinensis 'Gold Bar'	N/A	3Lt	3 per sq.m.
Miscanthus 'Yakushima Dwarf'	N/A	3Lt	3 per sq.m.
Pennisetum alopecuroides 'Hameln'	N/A	3Lt	3 per sq.m.
Sasa veitchii	40-60cm	5Lt	3 per sq.m.
Stipa gigantea	N/A	5Lt	2 per sq.m.
<b>Shrubs</b>			
Berberis thunbergii 'Admiration'	20-30cm high	3Lt	4 per sq.m.
Bergenia 'Bressingham White'	10-15cm high	3Lt	5 per sq.m.
Ceanothus 'Blue Sapphire'	30-40cm high	3Lt	2 per sq.m.
Choisya ternata	50-60cm high	3Lt	2 per sq.m.
Choisya ternata 'Sundance'	50-60cm high	3Lt	2 per sq.m.
Cornus alba 'Sibirica'	60-90cm high	3Lt	2 per sq.m.
Cornus sanguinea	60-90cm high	3Lt	2 per sq.m.
Cornus sanguinea 'Winter Flame'	60-90cm high	3Lt	2 per sq.m.
Cornus stolonifera 'Flaviramea'	60-90cm high	3Lt	2 per sq.m.
Corylus avellana 'Purpurea'	60-90cm high	3Lt	1 per sq.m.
Escallonia Gold Ellen	30-40cm high	3Lt	3 per sq.m.
Euonymus 'Dart's Carpet'	20-30cm high	3Lt	3 per sq.m.
Euonymus Emerald 'n' Gold	20-30cm high	3Lt	4 per sq.m.
Euonymus Silver Queen	20-30cm high	3Lt	4 per sq.m.
Hebe 'Red Edge'	20-30cm high	3Lt	3 per sq.m.
Hebe 'Emerald Gem'	20-30cm high	3Lt	5 per sq.m.
Hedera helix 'Green Ripple'	15-20cm high	3Lt	4 per sq.m.
Ilex crenata 'Dark Green'	40-60cm high	5Lt	2 per sq.m.
Lonicera nitida 'Elegant'	30-40cm high	3Lt	3 per sq.m.
Lonicera nitida Maigrun	30-40cm high	3Lt	3 per sq.m.
Pachysandra 'Green Carpet'	10-15cm high	2Lt	5 per sq.m.
Prunus 'Otto Luyken'	30-40cm high	3Lt	2 per sq.m.
Rosa rugosa Alba	30-40cm high	Bare root	2 per sq.m.
Rosmarinus officinalis 'Prostratus'	30-40cm high	3Lt	2 per sq.m.
Skimmia japonica 'Fragrans'	30-40cm high	3Lt	3 per sq.m.
Skimmia japonica 'Rubella'	30-40cm high	3Lt	3 per sq.m.
Viburnum davidii	40-60cm high	5Lt	2 per sq.m.
Viburnum opulus 'Compactum'	40-60cm high	Bare root	2 per sq.m.
<b>Buffer planting</b>			Planted on a 0.5 or 1.0m grid
Acer campestre	60-90cm high	Bare root	10%
Alnus glutinosa	1.5-1.8m high fthd	Bare root	10%
Betula pubescens	1.5-1.8m high fthd	5Lt	5%
Corylus avellana	60-90cm high	Bare root	20%
Crataegus monogyna	60-90cm high	Bare root	12.5%
Cornus sanguinea	60-90cm high	Bare root	5%
Ilex aquifolium	60-90cm high	5Lt	15%
Lonicera periclymenum	60-90cm high	3Lt	2.5%
Prunus spinose	60-90cm high	Bare root	5%
Rosa canina	60-90cm high	Bare root	2.5%
Sorbus aria	1.5-1.8m high fthd	Bare root	3%
Sorbus torminalis	1.5-1.8m high fthd	Bare root	4%
Viburnum lantana	60-90cm high	3Lt	2%
Viburnum opulus	60-90cm high	Bare root	2.5%
<b>Grass Seed Mix</b>			
<b>Amenity grass sward British Seed House Mix A19</b>			
Corail Slender Creeping Red Fescue		30%	
Calliope Chewings Fescue		25%	
Abernile Perennial Ryegrass		20%	
Vesuvius Perennial Ryegrass		20%	
Highland Browntop Bent		5%	

## Plant Sources

- 3.1. Plant supply shall be obtained from a nursery that are members of the Horticultural Trades Association Nursery Certification Scheme and approved by the project and local authority landscape architect.
- 3.2. All planting stock shall be of local provenance or if unavailable national provenance. Origin and provenance have the meaning given in the National Plant Specification and grown in the UK.

## 3. Plant Implementation

- 3.1 Plant handling and planting operations shall be undertaken in accordance with Horticultural Trades Association "Handling and Establishing Landscape Plants" (Parts I-III).
- 3.2 Refer to Davies Landscape Architects NBS Specification for fully detailed planting specification and is provided at **Appendix 3** of this document.
- 3.3 Topsoil for the landscape planting works shall be obtained from site material and imported soils to make up any deficiency.
- 3.4 Imported topsoil shall be fertile with maximum 35% clay content and 5% minimum organic content, pH levels between 5.8 - 7.5 and free of perennial weeds, weed seeds and contamination in accordance with **Appendix 3** of this document. Existing soil to be ameliorated and/or screened, if necessary, to achieve this specification.
- 3.5 Imported topsoil shall be to BS3882: Multi-Purpose Grade, from an approved local source and to accord with the above specification and shall be analysed by Voelcker Consultants, Long Island House, Warple Way, London W3 0RG, To determine the following parameters:
  - particle size analysis and stone content;
  - pH and electrical conductivity values;
  - exchangeable sodium percentage;
  - major plant nutrients (N, P, K, Mg);
  - organic matter content;
  - C:N ratio;
  - heavy metals (As, Cd, Cr, Cu, Pb, Hg, Ni, Se, Zn);
  - soluble sulphate, elemental sulphur, acid volatile sulphide;
  - total cyanide and total (mono) phenols;
  - aromatic and aliphatic TPH.
  - spectated PAHs.

**4. Timetable for Implementation**

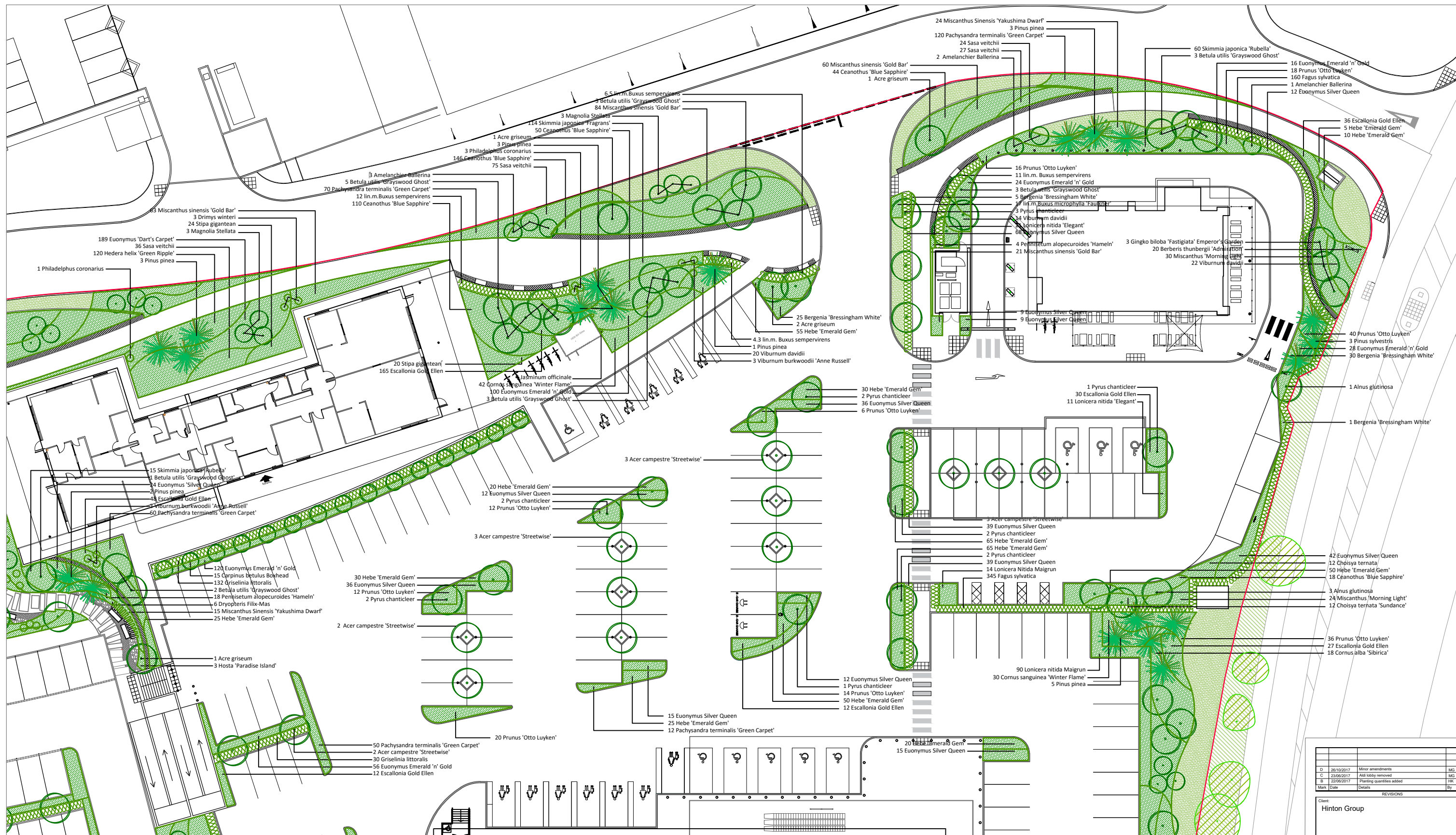
5.1. The Landscape implementation shall be undertaken by the end of the next available planting season following the completion of the works and during the following periods:

- Deciduous trees and shrubs: Late October to late March.
- Conifers and evergreens: September/ October or April/ May.
- Container grown plants: At any time if ground and weather conditions are favourable.

## **Appendix 1 – Landscape Drawings**

- DLA-1755-L-06 Rev D                      Planting Proposals
- DLA-1755-L-07 Rev D                      Planting Proposals
- DLA-1755-L-08 Rev C                      Planting Proposals

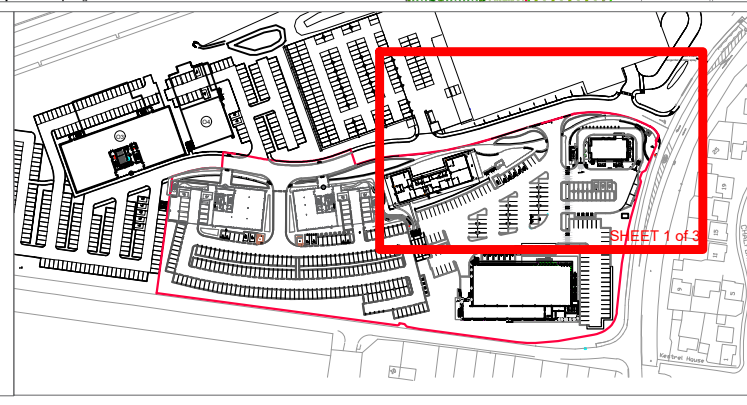




**Legend**

- Existing vegetation - boundary hedgerow and trees
- Proposed native buffer planting on a 0.5m Grid
- Proposed native buffer planting on a 1.0m Grid
- Proposed evergreen tree planting
- Proposed deciduous tree planting
- Proposed shrub planting
- Application boundary
- Proposed hedgerow
- Proposed grass sward
- Existing grass verge
- Gravel surface refer to hard proposals
- Pebble surface refer to hard proposals
- Cabions refer to hard proposals

**Plant species**



Mark	Date	Details	By
D	20/10/2017	Minor amendments	MG
C	23/06/2017	ASG lobby removed	MG
B	22/06/2017	Planting quantities added	HK

Client: Hinton Group

Project Title: Corinthian Park, Cheltenham Phase 2

Scale: 1:200 for the original size of 'A1'

Drawn by: MG Checked by: - Passed by: MG Date: 26.10.2017

Drawing Status: Planning

Drawing Originator: DAVIESLANDSCAPE ARCHITECTS

Address: Suite F1, Stroud House, Russell Street, Stroud, Gloucestershire, GL5 3AN

Phone: t. 01453 760380 Email: e. info@dlia.co.uk Website: w. www.d-lia.co.uk

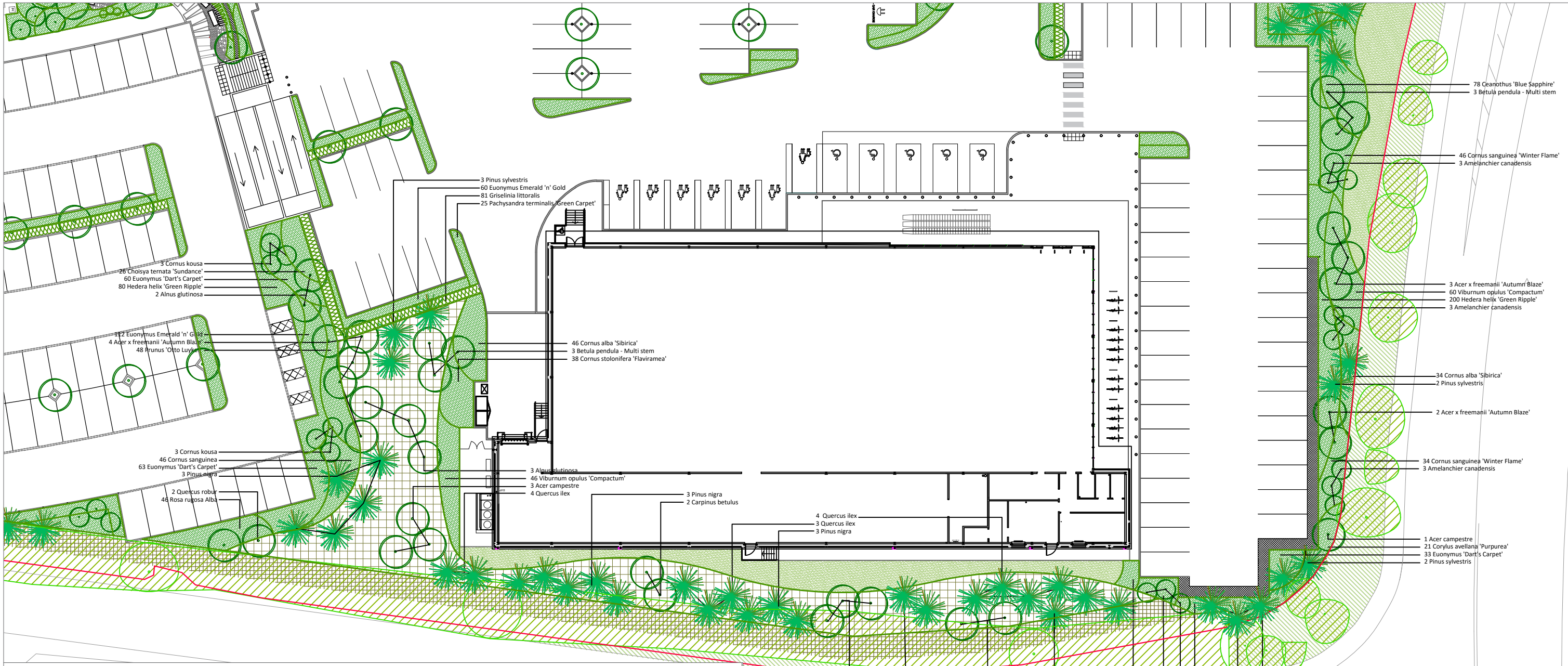
Drawing Title: Planting Proposals (sheet 1 of 3)

Job No.	Client	Origin	Volume	Level	Type	Discs	Number	Drawn
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DO NOT SCALE FROM THIS DRAWING

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PLANTING SCHEDULE	Size	Spec	Density
<b>Trees</b>			
Acer campestre	14-16cm girth	Root balled	As shown
Acer campestre 'Streetwise'	18-20cm girth	Root balled	As shown
Acer x freemanii 'Autumn Blaze'	18-20cm girth	Root balled	As shown
Acer gresium	20-25cm girth	Container grown	As shown
Alnus Incana 'Laciniata'	18-20cm girth	Root balled	As shown
Alnus glutinosa	18-20cm girth	Container grown	As shown
Amelanchier Ballerina	14-16cm girth - Standard	Container grown	As shown
Amelanchier canadensis	14-16cm girth - multi stem	Container grown	As shown
Amelanchier lamarckii	14-16cm girth - multi stem	Container grown	As shown
Betula pendula	18-20cm girth - multi stem	Container grown	As shown
Betula utilis 'Grayswood Ghost'	20-25cm girth - multi stem	Container grown	As shown
Carpinus betulus	18-20cm girth	Root balled	As shown
Carpinus betulus Boxhead	25-30cm girth - 3.0m clear stem	Root balled	As shown
Ginkgo biloba Emperor's Garden	20-25cm girth	Root balled	As shown
Malus profusum	14-16cm girth	Root balled	As shown
Pinus nigra	3.5m high	Container grown	As shown
Pinus pinea	4.5m high	Container grown	As shown
Pinus sylvestris	3.5m high	Container grown	As shown
Prunus avium 'Plena'	14-16cm girth	Root balled	As shown
Pyrus chantidee	20-25cm girth	Root balled	As shown
Quercus ilex	18-20cm girth	Container grown	As shown
Quercus robur	16-18cm girth	Root balled	As shown
Tilia cordata 'Winter Orange'	25-30cm girth	Root balled	As shown
<b>Accent plants</b>			
Dicksonia Antarctica	2.2-2.5m high	50Lt	As shown
Drimys winteri	2.2-2.5m high	75Lt	As shown
Magnolia stellata	2.2-2.5m high	100Lt	As shown
Philadelphus coronaries	1.5-1.8m high	25Lt	As shown
Photinia Red Robin	2.2-2.5m high	50Lt	As shown
Viburnum burkwoodii 'Anne Russell'	1.8-2.0m high	25Lt	As shown
Cornus kousa	2.2-2.5m high	50Lt	As shown
<b>Hedge</b>			
Buxus microphylla 'Faulkner'	20-30cm high - hedge trough	1m trough	1 per lin m
Buxus sempervirens	40-60cm high - hedge trough	1m trough	1 per lin m
Fagus sylvatica	1.2-1.5m high	Bare root	5 per lin m double staggered rows
Griselinia littoralis	0.8-1.0m high	Root balled	3 per lin m double staggered rows
Taxus baccata	90-1.2m high	10Lt	3 per lin m double staggered rows
<b>Native hedge</b>			
Acer campestre	60-90cm high	Bare root	12.5%
Corylus avellana	60-90cm high	Bare root	40%
Crataegus monogyna	60-90cm high	Bare root	20%
Ilex aquifolium	60-90cm high	5lt	10%
Lonicera periclymenum	60-90cm high	3lt	2.5%
Prunus spinosa	60-90cm high	Bare root	10%
Viburnum opulus	60-90cm high	Bare root	5%
<b>Climbers</b>			
Cestrum parqui	1.5-1.8m high - on trellis	20Lt	As shown
Jasminum officinale	1.5-1.8m high - on trellis	20Lt	As shown
Trachelospermum jasminoides	1.5-1.8m high - on trellis	20Lt	As shown

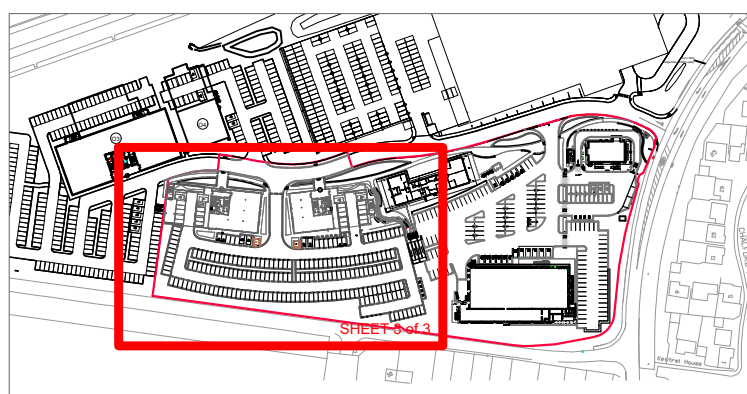
Ferns / grasses / herbaceous	Spec	Density
Dryopteris blandfordii	N/A	5lt 3 per sq.m.
Dryopteris Filix-Mas	N/A	3lt 4 per sq.m.
Heuchera 'Fire Chief'	N/A	3lt 4 per sq.m.
Heuchera 'Fireworks'	N/A	3lt 2 per sq.m.
Hosta 'Paradise Island'	N/A	5lt 3 per sq.m.
Hosta sieboldiana elegans	N/A	5lt 3 per sq.m.
Miscanthus 'Morning Light'	N/A	3lt 3 per sq.m.
Miscanthus sinensis 'Gold Bar'	N/A	3lt 3 per sq.m.
Miscanthus sinensis 'Takushima Dwarf'	N/A	3lt 3 per sq.m.
Pennisetum alopecuroides 'Hameln'	N/A	3lt 3 per sq.m.
Sasa veitchii	40-60cm	5lt 3 per sq.m.
Stipa gigantea	N/A	5lt 2 per sq.m.
<b>Shrubs</b>		
Berberis thunbergii 'Admiration'	20-30cm high	3lt 4 per sq.m.
Bergenia 'Bressingham White'	10-15cm high	3lt 5 per sq.m.
Ceanothus 'Blue Sapphire'	30-40cm high	3lt 2 per sq.m.
Choisya ternata	50-60cm high	3lt 2 per sq.m.
Choisya ternata 'Sundance'	50-60cm high	3lt 2 per sq.m.
Cornus alba 'Sibirica'	60-90cm high	3lt 2 per sq.m.
Cornus sanguinea	60-90cm high	3lt 2 per sq.m.
Cornus sanguinea 'Winter Flame'	60-90cm high	3lt 2 per sq.m.
Cornus stolonifera 'Flaviramea'	60-90cm high	3lt 2 per sq.m.
Corylus avellana 'Purpurea'	60-90cm high	3lt 1 per sq.m.
Escallonia Gold Ellen	30-40cm high	3lt 3 per sq.m.
Euonymus 'Dart's Carpet'	20-30cm high	3lt 3 per sq.m.
Euonymus Emerald 'n' Gold	20-30cm high	3lt 4 per sq.m.
Euonymus Silver Queen	20-30cm high	3lt 4 per sq.m.
Hebe 'Red Edge'	20-30cm high	3lt 3 per sq.m.
Hebe 'Emerald Gem'	20-30cm high	3lt 5 per sq.m.
Hedera helix 'Green Ripple'	15-20cm high	3lt 4 per sq.m.
Ilex crenata 'Dark Green'	40-60cm high	5lt 2 per sq.m.
Lonicera nitida 'Elegant'	30-40cm high	3lt 3 per sq.m.
Lonicera nitida Maigrun	30-40cm high	3lt 3 per sq.m.
Pachysandra terminalis 'Green Carpet'	10-15cm high	2lt 5 per sq.m.
Prunus 'Otto Luyken'	30-40cm high	3lt 2 per sq.m.
Rosa rugosa Alba	30-40cm high	Bare root 2 per sq.m.
Rosmarinus officinalis 'Prostratus'	30-40cm high	3lt 3 per sq.m.
Skimmia japonica 'Fragrans'	30-40cm high	3lt 3 per sq.m.
Skimmia japonica 'Rubella'	30-40cm high	3lt 3 per sq.m.
Viburnum davidii	40-60cm high	3lt 2 per sq.m.
Viburnum opulus 'Compactum'	40-60cm high	Bare root 2 per sq.m.
<b>Buffer planting</b>		
Acer campestre	60-90cm high	Bare root 10%
Alnus glutinosa	1.5-1.8m high fthd	Bare root 10%
Betula pubescens	1.5-1.8m high fthd	5lt 5%
Corylus avellana	60-90cm high	Bare root 20%
Crataegus monogyna	60-90cm high	Bare root 12.5%
Cornus sanguinea	60-90cm high	Bare root 5%
Ilex aquifolium	60-90cm high	5lt 15%
Lonicera periclymenum	60-90cm high	3lt 2.5%
Prunus spinosa	60-90cm high	Bare root 5%
Rosa canina	60-90cm high	Bare root 2.5%
Sorbus aria	1.5-1.8m high fthd	Bare root 3%
Sorbus torminalis	1.5-1.8m high fthd	Bare root 4%
Viburnum lantana	60-90cm high	3lt 2%
Viburnum opulus	60-90cm high	Bare root 2.5%

Plant species	Image
Hebe 'Red Edge'	
Hebe 'Emerald Gem'	
Hedera helix 'Green Ripple'	
Ilex crenata 'Dark Green'	
Lonicera nitida 'Elegant'	
Lonicera nitida Maigrun	
Pachysandra terminalis 'Green Carpet'	
Prunus 'Otto Luyken'	
Rosa rugosa Alba	
Rosmarinus officinalis 'Prostratus'	
Skimmia japonica 'Fragrans'	
Skimmia japonica 'Rubella'	
Viburnum davidii	
Viburnum opulus 'Compactum'	

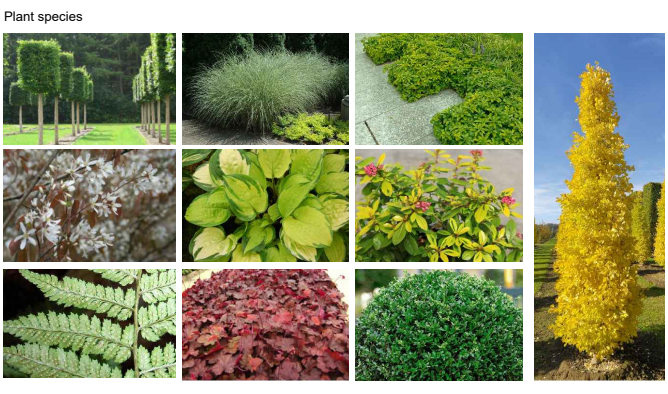
Legend	Description
	Existing vegetation - boundary hedges and trees
	Proposed native buffer planting on a 0.5m Grid
	Proposed native buffer planting on a 1.0m Grid
	Proposed evergreen tree planting. Trees planted within 3m of hard landscaping surface of underground services will be planted with root director barrier. Green Blue Urban Re-Root 2000 or Re-Root 600
	Proposed deciduous tree planting. Trees planted within 3m of hard landscaping surface of underground services will be planted with root director barrier. Green Blue Urban Re-Root 2000 or Re-Root 600
	Proposed shrub planting
	Application boundary
	Proposed hedgehog
	Proposed grass sward
	Existing grass verge
	Gravel surface refer to hard proposals
	Pebble surface refer to hard proposals
	Gabions refer to hard proposals



Client	Project Title
Hinton Group	Corinthian Park, Cheltenham Phase 2
Scale: 1:200	for the original size of A1
Drawn by: MG	Checked by: MG
Passed by: MG	Date: 26.10.2017
Drawing Status:	Planning
Drawing Originator:	DAVIESLANDSCAPE ARCHITECTS
Address:	Suite F1, Stroud House, Russell Street, Stroud, Gloucestershire, GL5 3AN
Phone:	01453 760380
Email:	info@da.com
Website:	www.da.com
Drawing Title:	Planting Proposals (Sheet 2 of 3)
Scale:	DO NOT SCALE FROM THIS DRAWING



- Legend**
- Existing vegetation - boundary hedgerow and trees
  - Proposed native buffer planting on a 0.5m Grid
  - Proposed native buffer planting on a 1.0m Grid
  - Proposed evergreen tree planting. Trees planted within 3m of hard landscaping surface of underground services will be planted with root director barrier. Green Blue Urban Re-Root 2000 or Re-Root 600
  - Proposed deciduous tree planting. Trees planted within 3m of hard landscaping surface of underground services will be planted with root director barrier. Green Blue Urban Re-Root 2000 or Re-Root 600
  - Proposed shrub planting
  - Application boundary
  - Proposed hedgerow
  - Proposed grass sward
  - Existing grass verge
  - Gravel surface refer to hard proposals
  - Pebble surface refer to hard proposals
  - Gabions refer to hard proposals



Mark	Date	Details	By
C	26/10/2017	Minor amendments	MG
B	22/06/2017	Planting schedule added	HK

Client: Hinton Group

Project Title: Corinthian Park, Cheltenham Phase 2

Scale: 1:200 for the original size of: A1

Drawn by: MG Checked by: Passed by: MG Date: 26.10.2017

Planning Drawing Originator: **DAVIESLANDSCAPE ARCHITECTS**  
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Drawing Title: Planting Proposals (Sheet 3 of 3)

DO NOT SCALE FROM THIS DRAWING

## **Appendix 2 – Landscape NBS Specification**

# **Corinthian Park - Phase 2**

**24 July 2017**

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Landscape specification

**Q28 Topsoiling**

200 GRADING SUBSOIL

- General: Grade to smooth flowing contours to achieve specified finished levels of topsoil.
- Areas of thicker topsoil: Excavate locally.

250 SUBSOIL SURFACE PREPARATION

- General: Excavate and/ or place fill to required profiles and levels, as section D20.
- Loosening:
  - Light and noncohesive subsoils: When ground conditions are reasonably dry, loosen thoroughly to a depth of 300 mm.
  - Stiff clay and cohesive subsoils: When ground conditions are reasonably dry, loosen thoroughly to a depth of 450 mm.
  - Rock and chalk subgrades: Lightly scarify to promote free drainage.
- Stones: Immediately before spreading topsoil, remove stones larger than 50 mm.
- Other items: Remove arisings, contaminants and debris .

260 INSPECTING FORMATIONS

- Give notice: Before spreading topsoil for planting beds .
- Notice period: 7 days.

300 TOPSOIL ANALYSIS

- Soil to be analysed: Imported topsoil.
- Soil analyst: Voelcker Consultants, Long Island House, Warple Way, London W3 0RG Tel (0) 208 7469550 .
- Samples: Collect in accordance with BS 3882, Annex A.
- Submit originals of:
  - Declaration of analysis of soil in accordance with BS 3882 figure 3.
  - Report detailing soil analyst's recommendations.

340 IMPORTED TOPSOIL (TO BS 3882)

- Quantity: Provide as necessary to make up any deficiency of topsoil existing on site and to complete the work.
- Grade: To BS 3882, Multipurpose.
- Source: Submit proposals.
- Submit: Declaration of analysis including information detailing each of the relevant parameters given in BS 3882, clause 6 and table 2.
- Additional analyses: As Clause 300.
- Other requirements: As Clause 300.

370 SAMPLE LOAD OF IMPORTED TOPSOIL

- General: Deliver to site a sample load of not less than 5 m<sup>3</sup>.
- Give notice: Allow inspection before making further deliveries to site. Retain for comparison with subsequent loads.
  - Notice period: 5 days days.

## Corinthian Park - Phase 2 Landscape specification

### 380 CONTAMINATION

- General: Do not use topsoil contaminated with subsoil, rubbish or other materials that are:
  - Corrosive, explosive or flammable.
  - Hazardous to human or animal life.
  - Detrimental to healthy plant growth.
- Subsoil: In areas to receive topsoil, do not use subsoil contaminated with the above materials.
- Give notice: If any evidence or symptoms of soil contamination are discovered on the site, or in topsoil to be imported.

### 390 TOPSOIL STORAGE HEAPS

- Location: Contractors to supply information .
- Height (maximum): 2.0 m.
- Width (maximum): 3.0 m m.
- Protection:
  - Do not place any other material on top of storage heaps.
  - Do not allow construction plant to pass over storage heaps.
  - Prevent compaction and contamination, by fencing and covering as appropriate.

### 410 HANDLING TOPSOIL

- Aggressive weeds: Give notice and obtain instructions before moving topsoil.
- Plant: Select and use plant to minimize disturbance, trafficking and compaction.
- Contamination: Do not mix topsoil with:
  - Subsoil, stone, hardcore, rubbish or material from demolition work.
  - Other grades of topsoil.
- Multiple handling: Keep to a minimum. Use topsoil immediately after stripping.
- Wet conditions: Handle topsoil in the driest condition possible. Do not handle during or after heavy rainfall or when it is wetter than the plastic limit as defined by BS 3882, Annex N2.

### 420 SPREADING TOPSOIL

- Temporary roads/surfacing: Remove before spreading topsoil.
- Layers:
  - Depth (maximum): 150 mm.
  - Gently firm each layer before spreading the next.
- Depths after firming and settlement (minimum): 600mm depth of CU soils within boulevard planting beds and topsoil as indicated on drawing DLA-1709-L-21, 450 mm to all shrub planting beds and 150mm to all grass areas.
- Crumb structure: Do not compact topsoil. Preserve a friable texture of separate visible crumbs wherever possible.

### 450 FINISHED LEVELS OF TOPSOIL AFTER SETTLEMENT

- Above adjoining paving or kerbs: 20 mm.
- Below dpc of adjoining buildings: Not less than 150 mm.
- Shrub areas: Higher than adjoining grass areas by 25 mm.
- Within root spread of existing trees: Unchanged.
- Adjoining soil areas: Marry in.
- Thickness of turf or mulch: Included.



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**Q30 Seeding/turfing**

**GENERAL INFORMATION/REQUIREMENTS**

115 SEEDED AND TURFED AREAS

- Growth and development: Healthy, vigorous grass sward, free from the visible effects of pests, weeds and disease.
- Appearance: A closely knit, continuous ground cover of even density, height and colour.

120 CLIMATIC CONDITIONS

- General: Carry out the work while soil and weather conditions are suitable.

145 WATERING

- Quantity: Wet full depth of topsoil.
- Application: Even and without displacing seed, seedlings or soil.
- Frequency: As necessary to ensure the establishment and continued thriving of all seeding/turfing.

150 WATER RESTRICTIONS

- Timing: If water supply is or is likely to be restricted by emergency legislation do not carry out seeding/turfing until instructed. If seeding/turfing has been carried out, obtain instructions on watering.

160 NOTICE

- Give notice before:
  - Setting out.
  - Applying herbicide.
  - Applying fertilizer.
  - Preparing seed bed.
  - Seeding or turfing.
  - Visiting site during maintenance period.
- Period of notice: 1 week.

170 SETTING OUT

- Boundaries of seeding/turfing areas: Mark clearly.

**PREPARATION**

205 PREPARATION MATERIALS

- General: Free from toxins, pathogens or other extraneous substances harmful to plant, animal or human life.
- Certification: Submit certificate giving supply source, content analysis, confirmation of suitability for purpose and confirmation of absence of harmful substances:
  - Certified materials: Composts .
  - Give notice before ordering or using.

210 HERBICIDE FOR ALL GRASSED AREAS

- Type: Suitable for suppressing perennial weeds.

231 PEAT

- Peat or products containing peat: Do not use.

## Corinthian Park - Phase 2 Landscape specification

### 250 CULTIVATION

- Compacted topsoil: Break up to full depth.
- Soil ameliorant/ Conditioner/ Fertilizer: Fully incorporate into topsoil to a depth of 100 mm .
- Tilth: Reduce top 100 mm of topsoil to a tilth suitable for blade grading, particle size 10 mm (maximum).
- Material brought to the surface: Remove stones and clay balls larger than 50 mm in any dimension, roots, tufts of grass, rubbish and debris.

### 260 GRADING

- Topsoil condition: Reasonably dry and workable.
- Contours: Smooth and flowing, with falls for adequate drainage. Remove minor hollows and ridges.
- Finished levels after settlement: 25 mm above adjoining paving, kerbs, manholes etc.
- Blade grading: May be used to adjust topsoil levels provided depth of topsoil is nowhere less than 100mm .
- Give notice: If required levels cannot be achieved by movement of existing soil.

### 270 FERTILIZER FOR FOR ALL GRASSED AREAS

- Types: Apply both:
  - Superphosphate with a minimum of 18% water soluble phosphoric acid.
  - A sulfate of ammonia with a minimum of 20% nitrogen.
- Application: Before final cultivation and three to five days before seeding/turfing.
- Coverage: Spread evenly, each type at 70 g/m<sup>2</sup>, in transverse directions.

### 280A FINAL CULTIVATION FOR LAWN AREAS

- Timing: After grading and fertilizing.
- Seed bed: Reduce to fine, firm tilth with good crumb structure.
  - Depth: 25 mm.
  - Surface preparation: Rake to a true, even surface, friable and lightly firmed but not over compacted.
  - Remove surface stones/earth clods exceeding:  
General areas: 10 mm .
- Adjacent levels: Extend cultivation into existing adjacent grassed areas sufficient to ensure full marrying in of levels.

### SEEDING

### 310 GRASS SEED FOR FOR ALL GRASSED AREAS

- Mixture: Germinal A19 .
- Rate of application: 40g .

### 319 QUALITY OF SEED FOR FOR ALL GRASSED AREAS

- Freshness: Produced for the current growing season.
- Certification: Blue label certified varieties to EC purity and germination regulations. When requested, submit an Official Seed Testing Station certificate of germination, purity and composition.
- Samples of mixtures: Submit when requested.

### 330 SOWING

- General: Establish good seed contact with the root zone to promote healthy, consistent growth.
- Method: To suit soil type, proposed usage of grassed area, location and weather conditions during and after sowing.

## Corinthian Park - Phase 2 Landscape specification

### 335 SOWING SEASON

- Grass seed generally: April to June or August to October.

### 340 PRE-EMERGENT HERBICIDE FOR FOR ALL GRASSED AREAS

- General: Where soil has not been allowed to lie fallow apply a suitable pre-emergent herbicide immediately after sowing.

### 352 EDGES TO SEEDED AREAS

- Location: Planting beds and around newly planted trees.
- Timing: After seeded areas are well established.
- Edges: Cut to clean straight lines or smooth curves. Soil drawn back to permit edging.
- Arisings: Remove.

### **PROTECTING/CUTTING TO PC**

### 530 FIRST CUT OF GRASSED AREAS

- Timing: When grass reaches 50 mm high and is reasonably dry.
- Preparation: Before cutting, remove debris, litter, and stones and earth clods larger than 25 mm in any dimension.
- Height of first cut: 25 .
- Arisings: Remove.

### 560 GRASS EDGING STRIPS FOR TREES WITHIN GRASS AREAS

- Manufacturer: Everedge.
  - Product reference: Coreten Steel Tree Ring 680cm diameter.
- Timing: After grass has become established.
- Installation: In true straight lines or flowing curves.
  - Installation height: Flush with turf.

### 590 CLEANLINESS

- Soil and arisings: Remove from hard surfaces.
- General: Leave the works in a clean, tidy condition at Completion and after any maintenance operations.

### **MAINTENANCE TO COMPLETION OF PC AND 12 MONTHS DEFECTS**

### 605A MAINTENANCE

- Duration: Carry out the operations in clauses 610 to 685 from completion of seeding/turfing until the end of the Defects Period.

### 610 FAILURES OF SEEDING/TURFING

- General: Grassed areas that have failed to thrive (unless due to theft or malicious damage), during the period stated in clause 605, will be regarded as defects due to materials or workmanship not in accordance with the Contract. Make good by recultivation and reseeding/returfing.
- Timing of making good: Submit proposals.

## Corinthian Park - Phase 2 Landscape specification

### 620 MAINTAINING GRASS AREAS

- Maximum height of growth at any time: 40mm .
- Preparation: Before each cut remove all litter and debris.
- Cutting: As and when necessary to a height of 20mm .
  - Arisings: Remove .
- Bulb planting areas: Do not cut until bulb foliage has died down.
- Trimming: At the time of each cut, trim all grass edges, including round the base of trees, manholes, etc. and remove arisings.
- Weed control: Keep the sward substantially free of broad leaved weeds by applying a suitable selective herbicide.
- Stones brought to the surface: Remove regularly.
- Areas of settlement: Make good.
- Watering: As clause 145 .

### 680 FERTILIZER FOR FOR ALL GRASSED AREAS

- March application: 15:10:10 Spring turf fertilizer at 35 g/m<sup>2</sup>.
- September application: 5:10:10 Autumn turf fertilizer at 50 g/m<sup>2</sup>.

## Corinthian Park - Phase 2 Landscape specification

### Q31 External planting

#### 110A PLANTING STOCK AND NURSERY VISIT

- Note  
The contractors shall allow within their tender transportation and necessary accommodation costs for the landscape architect to visit the nominated tree nursery supplying the "Box Headed Trees" to select the trees prior to lifting.

#### 112 SITE CLEARANCE GENERALLY

- General: Remove rubbish, concrete, metal, glass, decayed vegetation and contaminated topsoil.
- Stones: Remove those with largest dimension exceeding 50 mm.
- Contamination: Substances injurious to plant growth including subsoil, rubble, fuel, and lubricants.
- Vegetation: Clear scrub to ground level by flail mowing and remove arisings.
- Large roots: Grub up and dispose of without undue disturbance of soil and adjacent areas.
- Additional requirements: Remove remnants of old fence posts and mesh..

#### 118 SOIL CONDITIONS

- Soil for cultivating and planting: Moist, friable and (excepting aquatic/ marginal planting) not waterlogged.
- Frozen or snow covered soil: Give notice before planting. Provide additional root protection. Prevent planting pit sides and bases and backfill materials from freezing.

#### 120 CLIMATIC CONDITIONS

- General: Carry out the work while soil and weather conditions are suitable. Do not plant during periods of frost or strong winds.

#### 125 TIMES OF YEAR FOR PLANTING

- Deciduous trees and shrubs: Late October to late March.
- Conifers and evergreens: September/ October or April/ May.
- Herbaceous plants (including aquatic and marginal): September/ October or March/ April.
- Container grown plants: At any time if ground and weather conditions are favourable. Ensure that adequate watering and weed control is provided.
- Dried bulbs, corms and tubers: September/ October.
- Colchicum (crocus): July/ August.
- Green bulbs: After flowering in spring.
- Wildflower plugs: Late August to mid November or March/ April.
- Aquatic and marginal plants: May/ June or September/ October.

#### 130 MECHANICAL TOOLS

- Restrictions: Do not use within 100 mm of tree and plant stems.

#### 145 WATERING

- Quantity: Wet full depth of topsoil.
- Application: Even and without damaging or displacing plants or soil.
- Frequency: As necessary to ensure establishment and continued thriving of planting.

#### 150 WATER RESTRICTIONS

- General: If water supply is or is likely to be restricted by emergency legislation, do not carry out planting until instructed. If planting has been carried out, obtain instructions on watering.

## Corinthian Park - Phase 2 Landscape specification

- 160 NOTICE
- Give notice before:
    - Setting out.
    - Applying herbicide.
    - Applying fertilizer.
    - Delivery of plants/ trees.
    - Planting shrubs.
    - Planting trees into previously dug pits.
    - Watering.
    - Visiting site during maintenance period.
  - Period of notice: 7 days.
- 165 PREPARATION, PLANTING AND MULCHING MATERIALS
- General: Free from toxins, pathogens or other extraneous substances harmful to plant, animal or human life.
  - Certification: Submit a certificate giving supply source, content analysis, confirmation of suitability for purpose and confirmation of absence of harmful substances.
    - Certified materials: Manufactured planting media and Imported composts .
    - Give notice before ordering or using.
- 200 PLANTS/ TREES - GENERAL
- 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: To requirements of The National Plant Specification and balanced with branch system.
  - Species: True to name.
  - Origin/ Provenance: Grown in the United Kingdom for at least one growing season, unless otherwise approved.  
Origin and Provenance have the meaning given in the National Plant Specification.
- 215 PLANTS/ TREES - SPECIFICATION CRITERIA
- Name, forms, dimensions, provenance and other criteria: As scheduled and defined in the National Plant Specification.
- 225 BULBS/ CORMS/ TUBERS
- Condition: Firm, entire, not dried out or shrivelled.
  - Health: Free from pests, diseases and fungus.
  - Handling/ Storage: Remove from packaging immediately. If necessary, store for the minimum period of time in a well ventilated, dark, covered location at 18 - 21°C, away from vehicle exhausts and fruit.
- 235 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.

## Corinthian Park - Phase 2 Landscape specification

- 245 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.
  - Additional information: Submit on request: Country of origin.
- 246 LABELLING AND INFORMATION
- Standard: To BS 3936.
- 250 SUPPLY OF PLANTS/ TREES
- Suppliers: Members of the Horticultural Trades Association Nursery Certification Scheme.
- 255 PLANTS/ TREES RESERVED AT SUPPLIER'S PREMISES
- Types/ Species: As schedule.
  - Predelivery inspection: Give notice.
  - Labelling: Identify inspected plants/ trees as reserved for use on this project.
- 260 PLANT/ TREE SUBSTITUTION
- Plants/ trees unobtainable or known to be likely to be unobtainable at time of ordering: Submit alternatives, stating:
    - Price.
    - Difference from specified plants/ trees.
  - Further alternatives: Proposed substitutions may not be acceptable and submission of further alternatives may be required.
  - Approval: Obtain before making any substitution.
- 265 PLANT/ TREE HANDLING, STORAGE AND TRANSPORT
- Standard: To HTA 'Handling and establishing landscape plants' (obtainable from the Horticultural Trades Association) Part I, Part II and Part III, paragraphs 1.3.3 to 1.3.6, 3.0, and 4.0.
  - Frost: Protect plants/ trees from frost.
  - Handling: Handle plants/ trees with care. Protect from mechanical damage and do not subject to shock, e.g. by dropping from a vehicle.
  - Plant packaging: Coextruded polyethylene bags with black interior and white exterior.
  - Packaging of bulk quantities: Pallets or bins sealed with polyethylene and shrink wrapped.
- 270 PLANTING GENERALLY
- Standard: To HTA 'Handling and establishing landscape plants' (obtainable from the Horticultural Trades Association) Part III, paragraphs 6.2 to 6.6.
  - Appearance: Plant upright or well balanced with best side to front.
- 280 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.

Corinthian Park - Phase 2  
Landscape specification

290 SURPLUS MATERIAL

- General: Remove subsoil, stones, debris, wrapping material, canes, ties, temporary labelling, prunings and other arisings/ rubbish.

**PREPARATION OF PLANTING BEDS/ PLANTING MATERIALS**

300 HERBICIDE

- Locations: All shrub beds.
- General: Prevent weeds from seeding and perennial weeds from becoming established, by applying a suitable herbicide.
  - Delay cultivation as recommended by manufacturer.

305 WEED CONTROL

- Locations: All planting areas.
- General: Prevent weeds from seeding and perennial weeds from becoming established, by contractor's choice.

335A GENERAL FERTILIZER

- Locations: All shrub beds.
- Product reference: In accordance with soil report.
- Application: Spread evenly.
  - Timing: Immediately before cultivation.
  - Coverage: in accordance with soil report.

357A SOIL AMELIORANT/ CONDITIONER

- Locations: All shrub beds .
- Type: In accordance with soil report.
- Coverage: In accordance with soil report.
- Timing: Apply prior to cultivation.

365 TECHNICAL/ SPECIALIST IMPORTED GROWING MEDIUM FOR SEMI MATURE TREES

- Locations: Boulevard tree planting beds.
- Manufacturer/ Supplier:
  - Product reference: CU-Soils.

375 CULTIVATION

- Compacted topsoil: Break up to full depth.
- Cultivation: Loosen, aerate and break up soil into particles of 2-8 mm.
  - Depth: Top 350 mm of planting beds.
  - Timing: Within a few days before planting.
  - Weather and ground conditions: Suitably dry.
- Surface: Leave regular and even.
- Levels:
  - As required in sections D20 and Q28.
  - Within 25 mm of levels specified on drawings.
- Undesirable material brought to the surface: Remove, including weeds, roots, stones and clods larger than 50 mm in any dimension, tufts of grass and foreign matter.
- Soil within root spread of trees and shrubs to be retained: Do not dig or cultivate.



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Landscape specification

**PLANTING SHRUBS/ HERBACEOUS PLANTS/ BULBS**

- 401 PLANT LAYOUT - REGULAR/ FORMAL
- Spacing: As per drawing.
  - Density: A per drawing.
- 405 SHRUB PLANTING PITS
- Timing: Excavate 2 days (maximum) before planting.
  - Sizes: 150 mm wider than roots when fully spread and 300 mm deep.
  - Additional requirements: None.
  - Pit bottom improvement Break up to a depth of 150 mm, incorporating 25 g of approved slow release fertilizer per planting pit.
  - Backfilling material: As clause 476.
- 415 ANTIDESSICANT FOR CONIFERS/ EVERGREENS
- Manufacturer: Contractor's choice..
  - Product reference: Contractor's choice..
  - Application: Dip before delivering to site. Spray soon after planting.
  - Do not apply in wet or frosty weather.
- 435 CLIMBING PLANTS USED AS GROUND COVER
- Planting: Remove canes or other supports. Spread stems, pinning to ground where appropriate to ensure good contact for rooting and early establishment.
- 445 PLANTING BULBS/ CORMS/ TUBERS
- Depth: Top of bulb/ corm/ tuber at a depth of approximately twice its height, base in contact with bottom of hole.
  - Backfilling: Finely broken soil. Lightly firm to existing ground level.
  - Naturalized planting in existing grassed areas:
    - Scattering: Random. Plant bulbs/ corms/ tubers where they fall.
    - Planting: Neatly remove a plug of turf and replace after planting.
- 470 FORMAL HEDGES
- Shrubs for hedges: Consistent in species, cultivar and clone to ensure a uniform hedge.
  - Planting: In trenches large enough to take full spread of roots. Set out plants evenly.
- 471 NATURALIZED HEDGES
- Planting: In trenches large enough to take full spread of roots. Set out plants evenly.
- 472 FENCING SUPPORT FOR NEW HEDGES
- Type: Timber post and general pattern wire mesh.
  - Standard: To BS 1722-2.
  - Height: 600 mm.
  - Timing: Before planting hedge.
  - Support: Lightly secure hedge plants to fence wires at appropriate intervals.
- 476 BACKFILLING MATERIAL
- Composition: Previously prepared mixture of topsoil excavated from pit and additional topsoil as required, together with:
    - Ameliorant/ Conditioner: Mushroom compost.  
Coverage: 1 m<sup>3</sup> per 10 m<sup>3</sup> of topsoil.
    - Fertilizer: Slow release.  
Coverage: To suit soil report recommendations.

## Corinthian Park - Phase 2 Landscape specification

### 480 AFTER PLANTING

- Watering: Immediately after planting, thoroughly and without damaging or displacing plants or soil.
- Firming: Lightly firm soil around plants and fork and/ or rake soil, without damaging roots, to a fine tilth with gentle cambers and no hollows.
- Top dressing: Sanitized and stabilized compost as clause 358, 50 mm thick.

### 485 MULCHING PLANTING BEDS

- Material: Ornamental bark mulch.
  - Purity: Free of pests, disease, fungus and weeds.
- Preparation: Clear all weeds. Water soil thoroughly.
- Coverage: 75 mm thick.
- Finished level of mulch: 30 mm below adjacent grassed or paved areas.

## PLANTING TREES

### 500 ANTIDESSICANT FOR CONIFERS/ EVERGREENS

- Manufacturer: Contractors choice.
  - Product reference: Contract choice.
- Application: Dip in or thoroughly spray with antidesiccant before delivering to site. Apply again soon after planting.
  - Do not apply in wet or frosty weather.
  - Ensure full coverage of underside of foliage.

### 505 TREE PITS

- Sizes: 1000 mm diameter x 600 mm deep for extra heavy standard in accordance with drawing DLA-1709-L-22.
- Sloping ground: Maintain horizontal bases and vertical sides with no less than minimum depth throughout.
- Pit bottoms: With slightly raised centre. Break up to a depth of 200 mm.
- Pit sides: Scarify.
- Additional requirements: Incorporate approved slow release fertilizer at 40g per m<sup>2</sup>, worked into pit bottoms.
- Backfilling material: As clause 586.
- Accessories: Root barriers as clause 510 and double tree staking .

### 510 TREE PIT ROOT BARRIERS

- Locations: where trees are within 2m of underground service or hardsurface.
- Manufacturer: Greenleaf.
  - Product reference: Blue Green Urban ReRoot 300 and ReRoot 1000.
- Depth of top of root barrier below finished soil level: 25 mm.
- Installation: With sides vertical.

### 512 TREE PIT ACCESSORIES

- Locations: All tree pits.
- Manufacturer: Greenleaf.
  - Product reference: Rootrain Metro or similar.
- Type: Perforated plastics irrigation pipe system, 50 mm diameter, in circle above and around sides of rootball, with stainless steel caps.

### 525 SEMIMATURE TREES

- Standard: Prepare roots and transplant to BS 4043.
- Backfilling material: As clause 585.
- Support: Secured underground to BS 4043.
- Protection: None required.

## Corinthian Park - Phase 2 Landscape specification

### 535A STAKING TO TREES

- Stakes: Softwood, peeled chestnut, larch or oak, straight, free from projections and large or edge knots and with pointed lower end.
  - Preservative treatment: Not required.
- Nails: To BS 1202-1, galvanized, minimum 25 mm long and with 10 mm diameter heads.
- Minimum stake sizes: 75mm diam.

### 575 SHORT DOUBLE STAKING FOR FOR TREES WITHIN LANDSCAPED BEDS

- Staking: Drive stakes vertically at least 300 mm into bottom of pit on either side of tree position before planting. Consolidate material around stakes during backfilling.
- Height of stakes: Cut to approximately 600 mm above ground level.
- Cross bar: Wood, as stake.
  - Firmly fix on windward side of tree and as close as possible to stem.
- Ties: Adjustable cushioned ties.
- Tying: Secure tree firmly but not rigidly to cross bar.

### 586A BACKFILLING MATERIAL TO TREES WITHIN LANDSCAPE BEDS OR LAWNS

- Composition: Previously prepared mixture of topsoil excavated from pit and additional topsoil as required, together with:
  - Ameliorant/ Conditioner: Mushroom compost.  
Coverage: To soil report recommendations.
  - Fertilizer: Slow release.  
Coverage: To suit soil report recommendations.

### 590B MULCHING TREES WITH SOFT LANDSCAPING AREAS ONLY

- Material: Ornamental bark mulch.
  - Purity: Free of pests, disease, fungus and weeds.
- Preparation: Clear all weeds. Water soil thoroughly.
- Coverage: 75mm depth - In a circular area of 500 mm radius measured from the tree stem.

### 596A PROTECTION TO HEDGEROW PLANTS

- Manufacturer: Acorn.
  - Product reference: 60cm x 50mmdiam.
- Type: Spiral Shelters.
- Size/ Colour: Green Tint.
- Support: Internal cane fixed with a nylon tie.
- General: Ensure that protection methods do not impede natural movement of shrubs or restrict growth.

### 596B PROTECTION TO WHIP PLANTING

- Manufacturer: Acorn.
  - Product reference: 60cm x 50mmdiam.
- Type: Spiral Shelters.
- Size/ Colour: Green Tint.
- Support: Internal cane fixed with a nylon tie.
- General: Ensure that protection methods do not impede natural movement of shrubs or restrict growth.

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Landscape specification

**PROTECTING/ MAINTAINING TO PRACTICAL COMPLETION/ MAKING GOOD DEFECTS**

710 MAINTENANCE

- Duration: Carry out the operations in the following clauses from completion of planting until the end of the defects liability period 12 months from Practical completion for shrubs and 24 months for trees.
- Frequency of maintenance visits: Monthly during growing season.

720A FAILURES OF PLANTING PRIOR TO PRACTICAL COMPLETION

- General: Plants/ trees/ shrubs that have failed to thrive (unless due to theft or malicious damage after completion) during period stated in clause 710, will be regarded as defects due to materials or workmanship not in accordance with the Contract. Replace with equivalent plants/ trees/ shrubs.
- Replacements: To match size of adjacent or nearby plants of same species or match original specification, whichever is the greater.
- Timing of making good: within 7 days.

740 CLEANLINESS

- Soil and arisings: Remove from hard surfaces and grassed areas.
- General: Leave the works in a clean tidy condition at Completion and after any maintenance operations.

750 PLANTING MAINTENANCE GENERALLY

- Weed control: Maintain weed free area around each tree and shrub, minimum diameter the larger of 1 m or the surface of original planting pit.
  - Keep planting beds clear of weeds, by hoeing.
- Planted areas: Fork over beds as necessary to keep soil loose, with gentle cambers and no hollows. Take care not to reduce depth or effect of mulch.
- Precautions: Ensure that trees and shrubs are not damaged by use of mowers, nylon filament rotary cutters and similar powered tools.
- Staking: Check condition of stakes, ties, guys and guards. Replace broken or missing items. Adjust if necessary to allow for growth and prevent rubbing of bark. Cut back any damaged bark. Tie loose climbers back to support.
  - Frequency of checks: Every month.
- Firming up: Gently firm loosened soil around trees/ shrubs. Straighten leaning trees/ shrubs.
- Trees: Spray crown when in leaf during warm weather. Carry out in the evening.

755 PLANTING MAINTENANCE - FERTILIZER

- Time of year: March or April.
- Fertilizer: Slow release.
  - Manufacturer: Contractors choice.
  - Product reference: Contractors choice.
- Application: Evenly spread, carefully incorporating below mulch materials.
- Coverage: To suit soil report recommendations.

760 PLANTING MAINTENANCE - PRUNING

- General: Prune at appropriate times, to remove dead or dying and diseased wood and suckers, to promote healthy growth and natural shape.
  - Prune trees to favour a single central leading shoot.

765 PLANTING MAINTENANCE - WATERING

- General: As clauses 145 and 150.

## Corinthian Park - Phase 2 Landscape specification

### 780 MAINTENANCE INSTRUCTIONS

- General: Before end of the period stated in clause 710, submit printed instructions recommending procedures to be established by the Employer for maintenance of the planting work for one full year: Provide a schedule of any ongoing maintenance problems experienced during the defects liability period.

### 790 FINAL MULCHING

- Timing: At end of the period stated in clause 710.
- Watering: Ensure that soil is thoroughly moistened prior to remulching, applying water where necessary.
- Planting beds: Remulch as clause 485.  
Coverage: 75 mm thick.
- Trees: Remulch as clause 590.  
Coverage: 75 mm thick.

## **Appendix 3 - 5 Year Maintenance Operations**

## Maintenance Operations

Maintenance Schedule Years 1 to 5 Corinthian Park – Phase 2		
Features / habitat types	Action required	Timings
Advanced nursery stock trees	<p>Newly planted tree stock should be inspected for disease by a competent person and inform the Landowner or management company of any major deterioration in the condition of any landscape element.</p> <p>Tree Surgery / Crown reduction as instructed by a qualified arborist. The works and should only be carried out by qualified contractors with proof of adequate insurance cover.</p> <p>Pruning of epicormic or basal growth can normally be undertaken by unqualified personnel.</p> <p>Weed control by ensuring no weed growth within a 500mm diameter of each tree. A suitable herbicide should be used in compliance with manufacturer's instructions.</p> <p>Fertilize using suitable slow release fertilizer as per manufacturer's instructions.</p> <p>Inspect tree ties and stakes as scheduled and after strong winds. Replace loose, broken ties or decayed stakes to original specification.</p> <p>Semi mature trees - inspect tree guys as scheduled and after strong winds, tighten as necessary.</p> <p>Remove ties and stakes.</p> <p>Remove dead trees and replace as per original specification.</p>	<p>Annually – in late autumn</p> <p>Annually inspect and monitor condition of trees. - Sept</p> <p>Annually - Sept</p> <p>Annually - Apr &amp; Aug</p> <p>Till year 4– Apr &amp; Aug</p> <p>Every 3 months</p> <p>Every 3 months or after strong wind Till year 4</p> <p>5 years after planting.</p> <p>Annually till year 5</p>
Existing trees	<p>Existing tree stock should be inspected for disease and defects by a competent person and inform the Landowner or management company of any major deterioration in the condition.</p> <p>Tree Surgery / Crown reduction as instructed by a qualified arborist. The works and should only be carried out by qualified contractors with proof of adequate insurance cover.</p> <p>Felling of dead or dying trees to be carried out as instructed by qualified arborist. Fell trees away to avoid damage to adjacent vegetation.</p> <p>Obtain advice from an ecologist regarding possible presence of bats or nesting birds prior to undertaking any work to remove trees or tree limbs</p> <p>Timing of tree removal/and or pruning should aim to avoid the bird nesting season (March – August inclusive) unless otherwise advised by an ecologist.</p>	<p>Annually inspect and monitor condition of trees - Permission will be required to the trees covered by the TPO order.</p>

**Maintenance Schedule Years 1 to 5  
Corinthian Park – Phase 2**

Features / habitat types	Action required	Timings
Existing Hedges	<p>Vegetation forming the existing hedge to the southern boundary of Corinthian Park Phase 2 shall be inspected for disease and defects by a competent person and report to the Landowner or management company.</p> <p>With advice from ecologist, remove all dead / diseased plant material.</p> <p>Remove invasive species</p> <p>Coppice 20% of hazel stock on a 5-year rotational cycle.</p> <p>Gap up hedge with native stock to ensure Vegetation continuity within hedgerow.</p> <p>After new stock has established - Flail hedge to a height of 2.0m high – retaining all tree stock within hedge -</p>	<p>Annually inspect and monitor condition of trees - Permission will be required to the trees covered by the TPO order.</p> <p>November years 1 to 5</p> <p>November years 1 to 5</p> <p>November year 1 and then as required.</p> <p>Dec – Feb at year 4</p>
Road verges	<p>Maintain grass area in a manner appropriate to the intended use removing arisings from site.</p> <p>Grass height: Maintain within a range 30 and 75mm and shall be a vigorous sward, free from disease, fungal growth, discolouration, moss, excessive thatch, weeds, frost heave, worm casts and mole hills, scorch or wilt.</p> <p>Remove Litter and fallen leaves regularly to maintain a neat appearance.</p>	<p>Every 2 weeks during the growing season</p>
Shrub planting  Grasses and deciduous ferns	<p>Prune shrubs in accordance with best practise and appropriate to species, removing arisings.</p> <p>Prune previous years foliage to 10cm from ground level</p> <p>Remove weed growth and remove off site</p> <p>Top up bark mulch</p>	<p>Annually between March and April</p> <p>Annually between March and April</p> <p>Weekly in high profile areas and fortnightly in other shrub beds.</p> <p>Annually in March till year 4</p>
Buffer Planting Including feathered trees	<p>Newly planted should be regularly inspected for disease by a competent person and inform the Landowner or management company of any major deterioration in the condition of any landscape element.</p> <p>Gapping up if vegetation edge becomes broken, with stock identified on planting plans.</p> <p>Cutting back.</p> <p>Weed control - ensure minimal weed growth within a 500mm diameter of each transplant / feathered tree by strimming or an application of a suitable non-residual herbicide in compliance with manufacturer’s instructions.</p> <p>Fertilise using suitable slow release fertiliser as per manufacturer’s instructions.</p> <p>Grow tubes, adjust or replace to original specification.</p>	<p>Annually – in late autumn</p> <p>Annually Oct to Feb</p> <p>Annually Oct / Nov</p> <p>Annually - Apr &amp; Aug</p> <p>Till year 4– Apr &amp; Aug</p> <p>Annually up to year 3 between March and April</p>



**Maintenance Schedule Years 1 to 5  
Corinthian Park – Phase 2**

Features / habitat types	Action required	Timings
	<p>Inspect tree ties and tree stakes as scheduled and after strong winds. Replace loose, broken or decayed stakes to original specification. Adjust Strimmer guards, replace or refit to original specification.</p> <p>Replace stock losses to original specification.</p> <p>Remove grow tubes.</p> <p>Remove tree stakes and ties to feathered stock.</p> <p>Thinning of newly planted woodland in compliance with Standard: BS 7370-4 Clause 3.5.17.1 Select weaker plants for removal.</p> <p>Stack arising within planting area to create hibernaculums. Ensure no or minimum damage to adjacent plants during thinning and refill hole immediately with topsoil. Make good any damage of adjacent plants.</p> <p>Coppice 20% of the hazel stock - operating a 5-year rotational coppicing pattern.</p>	<p>Every 3 months</p> <p>Annually up to end of year 4 – Oct to Feb</p> <p>4 years after planting.</p> <p>4 years after planting</p> <p>At year 5</p> <p>At year 5</p>
Native hedge planting	<p>Weed control by ensuring no weed growth within the hedgerow with a suitable herbicide and used in compliance with manufacturer's instructions.</p> <p>Fertilise using suitable slow release fertilizer as per manufacturer's instructions.</p> <p>Prune hedge planting to reduce the height to 1.5m with vertical sides</p>	<p>Annually - March &amp; Aug</p> <p>Till year 4– Apr &amp; Aug</p> <p>Oct / Nov after year 2 and thereafter in alternate years.</p>
Formal hedges	<p>Weed control by ensuring no weed growth within the hedgerow with a suitable herbicide and used in compliance with manufacturer's instructions.</p> <p>Fertilise using suitable slow release fertilizer as per manufacturer's instructions.</p> <p>With hedge cutters prune formal hedges with vertical sides</p> <p>Buxus microphylla 'Faulkner' Buxus sempervirens Fagus sylvatica Griselinia littoralis Taxus baccata</p>	<p>Annually - Apr &amp; Aug</p> <p>Till year 4– Apr &amp; Aug</p> <p>Sept / Oct after year 2. To the following heights</p> <p>40cm high 90cm high 1.2m high 1.2m high 1.2m high</p>
Defects	<p>Remove and replace stock losses to original specification.</p>	<p>Annual – Oct till year 5</p>
Reviewing the maintenance and management plan	<p>Qualified personnel shall monitor / report and adjust the short term maintenance plan and timings twice a year.</p> <p>The long-term management plan including its objectives and deliverability should be reviewed every 5 years and should be adjusted as appropriate.</p>	<p>Twice per annum</p> <p>Every 5 years</p>