

Project: Rheda Park Phase 2
Client: KCS Agriculture Ltd
Document no: 17



Eden Environment Ltd

*The below description of plant material and soft landscape operations is for the purpose of planning application **only**, and is not a substitute for the more detailed specification which would be required for the purpose of commercially tendering, implementing, establishing and maintaining a soft landscape contract.*

Individual Trees										Totals for each species
see planting plan for locations					RB = Rootballed BR = bare root and bagged C x = Container grown and size Px = Pot and diameter					
Latin and common name	Form or habit	Age	Height (cm)	Girth (cm)	Root protection and size	Number of breaks or branches	% of mix	Planting density / m ²		
Aesculus hippocastanum (Horse Chestnut)	Heavy Standard	3x	300 to 425	12 to 14	BR RB or C45	5 6 or 7	n/a	n/a		
Betula pendula (Birch)	Select Standard	2x	300 to 350	10 to 12	BR or C30	4 5 or 7	n/a	n/a		
Castanea sativa (Sweet Chestnut)	Heavy Standard	3x	300 to 425	12 to 14	BR RB or C45	5 6 or 7	n/a	n/a		
Fagus sylvatica Beech)	Heavy Standard	3x	300 to 425	12 to 14	BR RB or C45	5 6 or 7	n/a	n/a		
Ilex aquifolium (Holly)		n/a	80 -100	n/a	C2	n/a	n/a	n/a		
Pinus sylvestris (Scots Pine)		4X	125 - 150	n/a	RB	n/a	n/a	n/a		
Prunus avium (Wild Cherry)	Select Standard	2x	300 to 350	10 to 12	BR or C30	4 5 or 7	n/a	n/a		
Quercus petraea (Sessile Oak)	Heavy Standard	3x	300 to 425	12 to 14	BR RB or C45	5 6 or 7	n/a	n/a		
							n/a	n/a		
Total									13	

Individual Trees									Totals for each species
see planting plan for locations					RB = Rootballed BR = bare root and bagged C x = Container grown and size Px = Pot and diameter				
Latin and common name	Form or habit	Age	Height (cm)	Girth (cm)	Root protection and size	Number of breaks or branches	% of mix	Planting density / m ²	
Acer pseudoplatanus (Sycamore)	Select Standard	2x	300 to 350	10 to 12	BR or C30	4 5 or 7	n/a	n/a	
Aesculus hippocastanum (Horse Chestnut)	Heavy Standard	3x	300 to 425	12 to 14	BR RB or C45	5 6 or 7	n/a	n/a	
Amelanchier lamarckii (Snowy Mespilus)	Select Standard	2x	300 to 350	10 to 12	BR or C30	4 5 or 7	n/a	n/a	
Amelanchier alnifolia Obelisk (columnar Snowy Mespilus)	Select Standard	2x	300 to 350	10 to 12	BR or C30	4 5 or 7	n/a	n/a	
Betula pendula (Birch)	Select Standard	2x	300 to 350	10 to 12	BR or C30	4 5 or 7	n/a	n/a	
Carpinus betulus Frans Fontaine (columnar Hornbeam)	Select Standard	2x	300 to 350	10 to 12	BR or C30	4 5 or 7	n/a	n/a	
Castanea sativa (Sweet Chestnut)	Heavy Standard	3x	300 to 425	12 to 14	BR RB or C45	5 6 or 7	n/a	n/a	
Crataegus persimilis Prunifolia (Broadleaf Cockspur Thorn)	Select Standard	2x	300 to 350	10 to 12	BR or C30	4 5 or 7	n/a	n/a	
Fagus sylvatica(Beech)	Heavy Standard	3x	300 to 425	12 to 14	BR RB or C45	5 6 or 7	n/a	n/a	
Fagus sylvatica Dawk (Columnar Beech)	Select Standard	2x	300 to 350	10 to 12	BR or C30	4 5 or 7	n/a	n/a	
Ilex aquifolium (Holly)		n/a	80 -100	n/a	C2	n/a	n/a	n/a	
Malus sylvestris (Common Wild Crabapple)	Select Standard	2x	300 to 350	10 to 12	BR or C30	4 5 or 7	n/a	n/a	
Prunus avium (Wild Cherry)	Select Standard	2x	300 to 350	10 to 12	BR or C30	4 5 or 7	n/a	n/a	
Prunus padus (Bird Cherry)	Select Standard	2x	300 to 350	10 to 12	BR or C30	4 5 or 7	n/a	n/a	
Quercus petraea (Sessile Oak)	Heavy Standard	3x	300 to 425	12 to 14	BR RB or C45	5 6 or 7	n/a	n/a	
Sorbus aria Lutescens (Whitebeam)	Select Standard	2x	300 to 350	10 to 12	BR or C30	4 5 or 7	n/a	n/a	
Sorbus aucuparia (Rowan)	Select Standard	2x	300 to 350	10 to 12	BR or C30	4 5 or 7	n/a	n/a	
Sorbus aucuparia Streetwise (columnar Rowan)	Select Standard	2x	300 to 350	10 to 12	BR or C30	4 5 or 7	n/a	n/a	
							n/a	n/a	
Total									

see planting plan for locations					RB = Rootballed BR = bare root and bagged C x = Container grown and size Px = Pot and diameter				Totals for each species
Latin and common name	Form or habit	Age	Height (cm)	Girth (cm)	Root protection and size	Number of breaks or branches	% of mix	Planting density / m ²	
Ilex aquifolium (Holly)	clipped	4X	125 to 150	n/a	RB	n/a	n/a	n/a	
Taxus baccata (Yew)	clipped	4X	125 to 150	n/a	RB	n/a	n/a	n/a	
Total									

Shrub Beds																								Totals for each species
Plant in random groups of 9 - 13 RB = Rootballed BR = bare root and bagged C x = Container grown and size Px = Pot and diameter									Bed reference number															
									1 & 3	2	4	5	6	7	8	9, 10 & 11	12	13	14	15	16	17 & 18		
									Bed size(s) in m ²															
									20	50	55	25	58	35	11	44	23	26	45	14	8	70		
Latin and common name	Form or habit	Age	Height (cm)	Girth (cm)	Root protection and size	Number of breaks or branches	% of mix	Planting density / m ²																
TALLER FOR BACK OR CENTRE OF BEDS																						0		
Aucuba japonica Crotonifolia			60 - 80		C10	3 to 6	n/a	3									25		40			65		
Eleagnus x Ebbingei Limelight			60 - 80		C10	3 to 6	n/a	3					45	35								80		
Escallonia iveyi			60 - 80		C10	3 to 6	n/a	3													25	25		
Griselinia littoralis			60 - 80		C10	3 to 6	n/a	3		50		20		15		30						115		
Lonicera nitida			60 - 80		C10	3 to 6	n/a	3					35		35							70		
Mahonia media Winter Sun			60 - 80		C10	3 to 6	n/a	3									20				15	35		
Prunus lusitanica			60 - 80		C10	3 to 6	n/a	3				50					45					95		
MEDIUM																					0			
Euonymus fortunei Emerald Gaiety			40 - 60		C5	3 to 6	n/a	4						35								35		
Photinia fraseri robusta Compacta			40 - 60		C5	3 to 6	n/a	4		70												70		
Prunus laurocerasus Otto Luyken			40 - 60		C5	3 to 6	n/a	4			40	70	30			20		50		25		235		
Viburnum mariesii Plicatum			40 - 60		C5	3 to 6	n/a	4													45	45		
LOW GROUND COVER PLANTS																						0		
Cotoneaster procumbens Queen of Carpets			30 - 40		C2	3 to 5	n/a	5				45	65			60					75	245		
Euonymus fortunei Darts Blanket			30 - 40		C2	3 to 5	n/a	5	100				50		60							210		
Geranium Rozanne			20 - 30		C1	3 to 5	n/a	5													20	20		
Hedera colchica Dentata Variegata			20 - 30		C1	3 to 5	n/a	5		100					60			40				200		
Pachysandra terminalis			20 - 30		C1	3 to 5	n/a	5								55						55		
Rosa spinosissima			30 - 40		C2	3 to 5	n/a	5													95	95		
Saxifraga urbium			20 - 30		C1	3 to 5	n/a	5													20	20		
Percentages and bed totals									100	220	85	155	210	85	35	180	50	80	155	40	25	295	1715	

Native perimeter hedgerows A (55m) and N (325m) = 380 lin m.									Totals for each species
see planting plan for locations RB = Rootballed BR = bare root and bagged C x = Container grown and size Px = Pot and diameter									
Latin and common name	Form or habit	Age	Height (cm)	Girth (cm)	Root protection and size	Number of breaks or branches	% of mix	Plants / linear metre	
Corylus avellana	Transplant	1+1	n/a	40-60	BR		5%	5	
Crataegus monogyna (hawthorn)	Transplant	1+1	n/a	40-60	BR		50%	5	
Fagus sylvatica (beech)	Transplant	1+1	n/a	40-60	BR		10%	5	
Ilex aquifolium (holly)	-	-	n/a	40-60	3L		10%	5	
Lonicera periclymenum	-	-	-	20-30	2L		5%	5	
Prunus padus	Transplant	1+1	n/a	40-60	2L		5%	5	
Prunus spinosa (blackthorn)	Transplant	1+1	n/a	40-60	BR		5%	5	
Rosa canina	Transplant	1+1	n/a	40-60	BR		5%	5	
Viburnum opulus	Transplant	1+1	n/a	40-60	BR		5%	5	

Semi-native Hedges																						Totals for each species
RB = Rootballed BR = bare root and bagged C x = Container grown and size Px = Pot and diameter									Reference number													
									D	E	F	I										
									Lengths													
									20	12	25	35										
Latin and common name	Form or habit	Age	Height (cm)	Girth (cm)	Root protection and size	Number of breaks or branches	% of mix	Plants / linear metre														
Corylus avellana	Transplant	1+1	n/a	40-60	BR		5%	5	5.0	3.0	7.0	9.0								24		
Cotoneaster lacteus			60 - 80		C10		15%	5	15.0	9.0	19.0	27.0								70		
Crataegus monogyna (hawthorn)	Transplant	1+1	n/a	40-60	BR		35%	5	35.0	21.0	44.0	62.0								162		
Escallonia ivelyi			60 - 80		C10		10%	5	10.0	6.0	13.0	18.0								47		
Fagus sylvatica (beech)	Transplant	1+1	n/a	40-60	BR		10%	5	10.0	6.0	13.0	18.0								47		
Griselinia littoralis			60 - 80		C10		10%	5	10.0	6.0	13.0	18.0								47		
Ilex aquifolium (holly)	-	-	n/a	40-60	3L		5%	5	5.0	3.0	7.0	9.0								24		
Prunus padus	Transplant	1+1	n/a	40-60	2L		5%	5	5.0	3.0	7.0	9.0								24		
Viburnum opulus	Transplant	1+1	n/a	40-60	BR		5%	5	5.0	3.0	7.0	9.0								24		
Percentages and bed totals								100%		100	60	130	179	0	0	0	0	0	0	0	469	

Native hedges between dwellings																						Totals for each species	
RB = Rootballed BR = bare root and bagged C x = Container grown and size Px = Pot and diameter									Reference number														
									G	H	J	K	L	M	O	P	Q	R					
									Lengths														
Latin and common name	Form or habit	Age	Height (cm)	Girth (cm)	Root protection and size	Number of breaks or branches	% of mix	Plants / linear metre															
Corylus avellana	Transplant	1+1	n/a	40-60	BR		5%	5	7.0	4.0	4.0	5.0	4.0	2.0	2.0	3.0	4.0	3.0			38		
Crataegus monogyna (hawthorn)	Transplant	1+1	n/a	40-60	BR		50%	5	63.0	38.0	38.0	45.0	33.0	20.0	20.0	30.0	40.0	30.0			357		
Fagus sylvatica (beech)	Transplant	1+1	n/a	40-60	BR		10%	5	13.0	8.0	8.0	9.0	7.0	4.0	4.0	6.0	8.0	6.0			73		
Ilex aquifolium (holly)	-	-	n/a	40-60	3L		10%	5	13.0	8.0	8.0	9.0	7.0	4.0	4.0	6.0	8.0	6.0			73		
Lonicera periclymenum	-	-	-	20-30	2L		5%	5	7.0	4.0	4.0	5.0	4.0	2.0	2.0	3.0	4.0	3.0			38		
Prunus padus	Transplant	1+1	n/a	40-60	2L		5%	5	7.0	4.0	4.0	5.0	4.0	2.0	2.0	3.0	4.0	3.0			38		
Prunus spinosa (blackthorn)	Transplant	1+1	n/a	40-60	BR		5%	5	7.0	4.0	4.0	5.0	4.0	2.0	2.0	3.0	4.0	3.0			38		
Rosa canina	Transplant	1+1	n/a	40-60	BR		5%	5	7.0	4.0	4.0	5.0	4.0	2.0	2.0	3.0	4.0	3.0			38		
Vibrunum opulus	Transplant	1+1	n/a	40-60	BR		5%	5	7.0	4.0	4.0	5.0	4.0	2.0	2.0	3.0	4.0	3.0			38		
									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0		
									0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0		
Percentages and bed totals							100%		131	78	78	93	71	40	40	60	80	60	0	0	0	731	

Establishment regime

Generally

Avoid the use of herbicides and pesticides - rely on manual, natural or organic measures wherever possible.
Do not use peat-based products.
All plants shall follow the National Plant Specification
All plants shall be fully labelled with supplier details, full botanical name, numbers and specification.
Avoid the use of plastics for tree shelters etc.

Year 1 establishment (seeding and planting year)

GROUND PREPARATION
Clear ground of all visible weeds, roots and stones with a diameter greater than 50mm
Cultivate ground to full depth of topsoil
Ensure topsoil depths are as follows:
* for amenity grass 150mm deep after firming and settling
* for shrub areas 450mm deep after firming and settling
* for tree planting pits, 1m³ with bases of pits broken up to allow free drainage
* for hedge and hedgerow trenches, 500mm wide by 500mm deep, with base of trench broken up to allow free drainage
Ensure finished topsoil levels are as follows (after settlement and allowing for mulches):
* above adjoining hard surfaces: 25mm
* below dpc of adjoining buildings: not less than 150mm
* above adjacent to grass areas: 50mm
* adjoining soil areas: marry in
Allow fallow period before undertaking planting and seeding, and carry out final weed clear before those operations
Any imported topsoil shall be in accordance with BS 3882
Handle topsoil only in dry conditions.

SHRUB PLANTING
Carry out planting between November and March, inclusive
Ensure the surface is free of stones, weeds and litter.
Wet the soil to the full depth of topsoil, ensuring that surface is not unduly disturbed.
Incorporate soil ameliorant, conditioner and fertiliser in accordance with manufacturer's instructions, to a depth of 150mm
Ensure shrubs are in good condition, sturdy, healthy and vigorous without elongated shoots, and with balanced root and shoot systems.
Plant shrubs in positions and drifts as indicated on planting plan, at the correct densities, avoiding plants being set out in straight lines or grids.
Protect shrubs with shelters and stakes
Protect new shrub planting in areas vulnerable to short cuts with chestnut pale fencing
Immediately after planting, water thoroughly without displacing plant or growing medium. Refirm soil afterwards
Mulch around the base of shrubs

TREE PLANTING
Carry out planting between November and March, inclusive
Ensure the surface is free of stones, weeds and litter.
Wet the soil to the full depth of topsoil, ensuring that surface is not unduly disturbed.
Incorporate soil ameliorant, conditioner and fertiliser in accordance with manufacturer's instructions, to the full depth of the tree pit.
Ensure trees are in good condition, sturdy, healthy and vigorous without elongated shoots, and with balanced root and branch systems.
Prune any branches which are damaged
Plant trees in positions as shown on planting plan, modifying as necessary to avoid underground services, haunching, existing tree roots etc.
Support and protect trees with double stakes and ties, where possible using short stakes in preference to taller ones.
Protect new tree planting from grazing with stock proof fence
Immediately after planting, water thoroughly without displacing tree or growing medium. Refirm soil afterwards.
Mulch around the base of trees to a diameter of 1m.
Water regularly for first growing season, especially during drought periods.

HEDGE AND HEDGEROW PLANTING
Carry out planting between November and March, inclusive
Ensure the surface of the trench is free of stones, weeds and litter.
Wet the soil to the full depth of topsoil, ensuring that surface is not unduly disturbed.
Incorporate soil ameliorant, conditioner and fertiliser in accordance with manufacturer's instructions, to a depth of 150mm
Ensure shrubs are in good condition, sturdy, healthy and vigorous without elongated shoots, and with balanced root and shoot systems.
Plant in double staggered row at the correct density.
Protect hedgerow plants with shelters and stakes
Immediately after planting, water thoroughly without displacing plant or growing medium. Refirm soil afterwards.
Protect new hedging along garden frontages with chestnut pale fencing to the road-side of hedge
Protect hedgerows from cattle with stock proof fence
Mulch the full length and width of the hedge/row trench surface.

Water regularly for first growing season, especially during drought periods.

Suggested 5 year maintenance schedule

The below schedule is subject to amendment over the following 10 years to take account of unforeseeable circumstances (e.g. new plant health threats, new building development, changes of use etc.)

Yellow cells indicate the window of time in which to undertake the operation, not necessarily the number of operations required - see notes for each operation

[illegible]