

## Plant specification and schedule

Project: Reserved Matters Application for residential development at Harras Moor, Whitehaven

Client: Site Evolution Limited

Document no: 03

Revisions	Date	Notes
0	22.04.2021	original document
1	20.12.2021	updated following planners and consultee review
2	23.12.2021	numbers added
3	08.06.2022	revised numbers following layout amendments
4	11.07.2022	species adjusted for 2 visibility splays

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.

## Schedules and specification

Individual Trees										
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 <sup>2</sup>		
Acer pseudoplatanus (Sycamore)	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	5	
Alnus glutinosa (Common Alder)	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	4	
Amelanchier lamarckii (Snowy Mespilus)	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	17	
Amelanchier obelisk "Alnifolia"	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	7	
Betula pendula (Silver Birch)	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	10	
Betula utilis var Jaquemontii (white stemmed birch)	Feathered Tree	2x	n/a	150-175	BR	n/a	n/a	n/a	5	
Carpinus betulus 'Fastigiata' (Hornbeam)	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	18	
Corylus avellana (Hazel)	Feathered Tree	2x	n/a	150-175	BR	n/a	n/a	n/a	2	
Crataegus laevigata 'Plena'	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	4	
Crataegus persimilis Prunifolia (Broadleaf cockspur thorn)	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	5	
Ilex aquifolium (Holly)	-	-	60 - 90		C7	3 to 6	n/a	n/a	27	
Ilex Silver Queen clipped balls (clipped holly)	-	-	60 - 90		C7	3 to 6	n/a	n/a	2	
Pinus sylvestris (Scots Pine)	-	-	n/a	40-60	BR	n/a	n/a	n/a	5	
Prunus avium (Wild Cherry)	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	9	
Prunus padus (Bird cherry)	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	14	
Prunus Spire (Hillier's Spire) (fastigiata)	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	10	
Pyrus calleryana 'Chanticleer' (Callery pear 'Chanticleer')	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	3	
Quercus petraea (Sessile Oak)	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	2	
Salix cinerea (Grey Willow)	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	2	
Sorbus aria Lutescens (Whitebeam Lutescens)	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	10	
Sorbus aucuparia (Rowan)	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	16	
Sorbus aucuparia 'Streetwise' ( fastigiata Rowan)	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	9	
Sorbus intermedia (Swedish Whitebeam)	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	7	
Sorbus vilmorinii (Vilmorins Rowan)	Standard	2x	8 to 10	250-300	BR	n/a	n/a	n/a	5	
<b>Total</b>									<b>198</b>	







### Edge Shrub and Scrub mix specification

see planting plan for locations  
 See table below for numbers for each bed

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 <sup>2</sup> (where appropriate)
Buddleja davidii (Butterfly Bush)	Transplant	1+1	n/a	40-60	cell grown		10%	0.5
Cornus sanguinea (Common Dogwood)	Transplant	1+1	n/a	40-60	cell grown		10%	0.5
Corylus avellana (common hazel)	Transplant	1+1	n/a	40-60	cell grown		10%	0.5
Cotoneaster franchetii				40 - 45	3L		5%	0.5
Ilex aquifolium (holly)	-	-	n/a	40-60	3L		10%	0.5
Lonicera periclymenum (Honeysuckle)	-	-	n/a	20-30	1L		5%	0.5
Prunus spinosa (blackthorn)	Transplant	1+1	n/a	40-60	cell grown		10%	0.5
Rosa canina (Dog Rose)	Transplant	1+1	n/a	30-40	BR		10%	0.5
bramble)	Transplant	1+1	n/a	30-40	BR		10%	0.5
Salix caprea (goat willow)	Transplant	1+1	n/a	40-60	cell grown		10%	0.5
Sambucus nigra (Elder)	Transplant	1+1	n/a	40-60	cell grown		5%	0.5
Viburnum opulus (guelder rose)	Transplant	1+1	n/a	40-60	BR		5%	0.5

### Edge Shrub and Scrub mix Schedule

	Bed reference																							
	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12												
Buddleja davidii (Butterfly Bush)	8								15		8	6										37		
Cornus sanguinea (Common Dogwood)		10		10					15													35		
Corylus avellana (common hazel)	8			10	10				15		8	6										57		
Cotoneaster franchetii	8	10		10		5	5	4	15	10												67		
Ilex aquifolium (holly)			9	10	10	5	5	4	15	10	8	6										82		
Lonicera periclymenum (Honeysuckle)									15													15		
Prunus spinosa (blackthorn)				10	10				15													35		
Rosa canina (Dog Rose)		10	9	10		5	5	4	15													58		
Salix caprea (goat willow)				10					15													25		
Sambucus nigra (Elder)			9	10	10				15	10	8	6										68		
Viburnum opulus (guelder rose)		10		10					15	10												45		
	24	40	27	90	40	15	15	12	165	40	32	24	0	0	0	0	0	0	0	0	0	524		

### Bulbs

see planting plan for locations

Latin and common name	Form	Age	Girth (cm)	Height (cm)	Root or pot size	% of mix	Planting density / m <sup>2</sup>	Totals for each species
Galanthus nivalis (Snowdrop)					4 - 5 cm	n/a	n/a	500
Narcissi pseudonarcissus ( native Daffodil)					12 - 16 cm	n/a	n/a	500
						n/a	n/a	
						n/a	n/a	
<b>Total</b>								<b>1000</b>

### Wildflower grass

Local provenance wildlife seed from Cumbrian Wildflowers, Great Orton, Carlisle, in accordance with soil samples and their advice

### Wetland species

Local provenance plant plugs from Cumbrian Wildflowers, Great Orton, Carlisle, in accordance with soil samples and their advice

# Establishment regime

## Year 1 establishment ( seeding and planting year)

Carry out planting between November and March

Plant trees in prepared pits backfilled with topsoil, fertiliser and soil conditioner, in accordance with manufacturer’s recommendations. Do not use peat-based products.

Protect new hedging along garden frontages with chestnut pale fencing to the road-side of hedge

Protect shrubs with shelters and stakes

Support and protect trees with double stakes and ties

Protect hedgerows from cattle with stock proof fence

Provide shelter and prevent short-cuts for road-side hedges with geotextile fence line to a height of 750mm to windward side or side which is more vulnerable to traffic

Use chestnut pale fence in order to prevent short cuts across new planting

Sow grass seed or lay turf on prepared bed during correct climatic conditions, and mow as necessary to achieve thick sward no higher 75mm

Sow seed in Spring or early Autumn when the soil is warm, in correct climatic and weather conditions, and mow as necessary to achieve thick sward no higher 75mm

Lay turf on prepared bed during correct climatic conditions, and mow as necessary to achieve thick sward no higher 75mm

Sow wildflower seed on prepared bed from which any topsoil has been removed and allow to grow, flower and shed seed before any cut, in accordance with supplier’s instructions.

## Years 1 – 5, each year (maintenance)

Keep grass short around bases of trees with mowing and / or mulch mats, as appropriate

Inspect tree ties, stakes and shelters / guards; loosen and remove as necessary with all being removed by year 5.

Trim hedgerow annually during correct season to obtain a dense, semi-formal shaped hedgerow of the same height as adjacent existing hedgerows.

Trim hedges annually during correct season to obtain a dense, formal shaped hedge of 1.2m ultimate height.

Prune and lay hedgerows as necessary once a year to develop dense, evenly shaped hedgerow

Replace any trees or shrubs which are dead or failing to thrive in the winter of each year.

Mow amenity grass areas as required to ensure sward does not exceed 50mm.

Exact wildflower maintenance regime for wildflower areas to be determined in consultation with seed supplier.

Cut wildflower area only once a year, at end of summer / early autumn when flowering is over.

Leave grass and stems on ground for two weeks afterwards, to allow seed to fall, then remove the grass and stem, to prevent them from enriching the soil (which would allow common grasses to out-compete the wildflowers).

Water trees, hedgerows, hedges and shrubs if drought conditions occur.

Inspect and maintain all fencing, paying attention to stock proof fencing

Remove chestnut pale fencing once threat of shortcuts through beds or damage from vehicles is passed

## Suggested ongoing maintenance operations

*Amenity grass*: continue to keep grass short around bases of trees with regular mowing

*Wildflower grass*: continue to prevent common grass from out-competing wildflowers, following above techniques.

*Hedgerows*: regular trimming to ensure dense, neat shape, laying as required

*Hedges*: regular trimming to ensure dense, neat shape

*Shrubs*: regular trimming to remove damaged or diseased branches, maintain desired shape and size / height, and to avoid over-crowding

*Ground cover shrubs*: these species have been selected as low growing (lower than 600mm for visibility splay reasons), but should they unexpectedly grow taller, they will be pruned to below 600mm (ref, beds C11 and 12)

*Trees*: prune as necessary to maintain good shape and to avoid disease, overcrowding, or low canopies

*Shrub and scrub blocks*: thin as necessary to ensure views to water remains unobstructed in many places, while keeping an inhospitable dense cover of foliage (safety)

## ORCHARD

### Year 1 establishment (planting year)

Purchase unfeathered maidens (maiden whips) with good root system and sturdy stems.

Carry out planting between November and March.

Plant trees in prepared pits backfilled with topsoil, fertiliser and soil conditioner, in accordance with manufacturer’s recommendations.

Protect feathered maidens with shelters and stakes.

### Winter Year 1 formative pruning

Undertake pruning when tree is dormant (usually between November and early March).

Always use sharp secateurs to make pruning cuts, above, and sloping away from nearest bud.

In order to stimulate production of strong vigorous shoots (from which primary branches can be selected), prune branches to a bud which is approximately 75cm above ground level, leaving three or four healthy buds below the cut.

Should any fruit develop in this year, remove it as soon as it becomes visible, so that the tree’s energy is directed towards healthy tree growth.

### Winter Year 2 formative pruning

If a strong, central topmost shoot has developed, and is too vertical and dominant, prune to just above the next lowest wider-angled side branch.

Select the best three to five shoots to begin to form the main framework of branches.

The aim is to create a “goblet” shaped structure. Shorten these selected branches by half, with the cut being just above an outward facing bud – this will help encourage the goblet shape. If any branches are growing horizontally, prune to an upward-facing bud to further encourage a goblet shape.

Remove all remaining lower branches, with a cut close to the main stem.

If the tree is growing well, allow one or two fruit to develop. If growth is slow, remove the fruit as soon as it becomes visible.

### Winter Year 3 formative pruning

Shorten the previous year’s growth on main stems (primary branches) by approximately 1/3, with the cut being above a healthy outward-facing bud.

Leave a framework of 8 to 10 side branches which will form the permanent framework of the fruit tree.

Only remove side branches arising from the main stem if they are misplaced, or crossing each-other (risking rubbing and disease), or if they are growing inwards towards the centre of the tree.

Thin any crowded branches.

Should any strongly upright shoots be developing at the top of the tree, also remove these.

For fruit-forming in this and subsequent years, ensure the fruits are not crowded or rubbing against each-other, by removing as necessary to allow air, light and sunlight in to them, and to avoid rubbing.

### Guidance for winter pruning in subsequent years

Firstly, remove any branches that are crossing, rubbing, damaged, dead or diseased.

Then, in order to encourage the development of new branches and maintain a good shape, shorten previous year’s growth on each main (primary) branch by approximately one third, with the cut being just above a bud which faces in the desired direction (usually outward-facing).

Only remove young lateral branches if they are becoming crowded.

Remove any strong shoots which are growing towards the centre of the tree.

### Years 1 – 5, general maintenance of the orchard area, each year

Keep grass short around bases of trees with mowing, herbicides and / or mulch mats, as appropriate

Inspect tree ties, stakes and shelters / guards; loosen and remove as necessary with all being removed by year 5. .

Water trees if drought conditions occur.

Inspect and maintain stock proof fencing.

Replace any trees and shrubs which are dead or failing to thrive in the winter of each year.

### Guidance for ongoing maintenance operations in subsequent years

grass: keep grass short around bases of trees with regular mowing

Continue to water trees in times of drought.