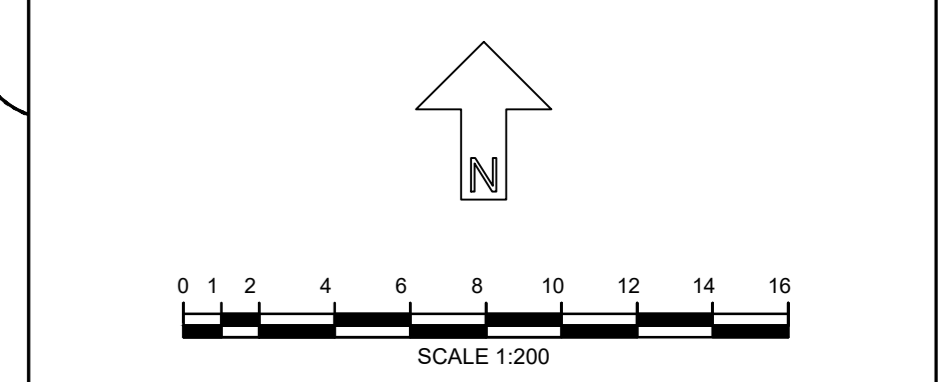


DO NOT SCALE
 ALL COORDINATES RELATED TO LOCAL GRID LOCATED TO OS NG BY BEST FIT TO DETAIL, EXTRACTED FROM OS DIGITAL DATA.
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- Planting Plan Key:**
- Site Boundary
 - Existing trees and hedgerows to be retained and protected during the works.
 - Existing trees and hedgerow to be removed.
 - Proposed ornamental planting on 400mm depth of topsoil with 75mm bark mulch.
 - Proposed native tree planting, tree pit and stake as detailed in the specification.
 - Proposed ornamental tree planting, tree pit and stake as detailed in the specification.
 - Proposed mixed native hedgerow planted in a double staggered row at 0.33m centres and 0.3 offset. Bare root transplants, each with a 60cm high Tubex shrub shelter, two cable ties and a timber stake.
 - Proposed single species formal hedge planted in a single row (3 or 5 no. plants per linear metre dependant on stock size). Container transplants.
 - Front gardens and verge to be turfed on 150mm topsoil.
 - Public open space and verges to be sown with Germinall AberSustain mix, or similar approved, to be sown at a rate of 40g/m2 on 150mm topsoil.
 - Public open space to be sown with Germinall Eco Species Rich Lawn mix, or similar approved, to be sown at a rate of 10g/m2 on 150mm topsoil.
 - Native tree / shrub planting to be planted as 60-80cm whip planting at 1m centres, for additional wildlife habitat.
 - Wildflower seeding Germinall RE3 River Floodplain / Water Meadow (MGB Grassland), to the existing water course to public open space to be sown at 5g/m2.
 - Gravel areas: Polar white gravel - 20mm chippings

- Boundary key:**
- 1.8m high screen wall/fence
 - 1.8m timber close boarded fence to side and rear



REV	DESCRIPTION	DATE
A	updated to "...Rev D"	25/11/22

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CLIENT: Castle Green Homes
 PROJECT: Land at Mold Road, Gwersyllt, Wrexham
 DRAWING TITLE: Planting Plan (Sheet 1 of 3)
 SCALE: 1:200 @ A0 DRAWING No: REV
 DRAWN BY: SC CHD BY: CN DATE: 01/06/2022 P.1626.22.04 A



FOR EASTERN PART OF SITE REFER TO PLANTING PLAN (SHEET 2 OF 3)

LANDSCAPE AND MAINTENANCE SPECIFICATION

All operations to comply with appropriate British Standards unless otherwise stated on drawings or in the specification.

GENERAL TREATMENT OF PLANTING AREAS

Ensure that planting areas are protected from consolidation by heavy construction plant.

For work near a retained tree: Refer to BS 5837 *Trees in relation to design, demolition & construction - Recommendations-* Section 9 (Appendix C).

Damage to Plants to be Retained: If a plant is to be retained is damaged, the plant is to be repaired or replaced by the contractor at their own expense. "Damaged" means:

- The destruction of a plant the breaking of branches or roots
- The debarking of trunks or limbs
- The contamination of root zone soil or plants from drift sprays, dust or contaminated storm water
- The damage by the placement of fill or building materials within the canopy perimeter or otherwise.

1) GROUND PREPARATION AND SOIL SPECIFICATION

Subsoil:
Before receiving topsoil, subsoil shall be loosened using appropriate equipment to a depth of 300mm. This shall be done when the subsoil is dry so as to encourage soil shattering. All stones and other objects larger than 50mm shall be removed from the prepared surface. The loosened subsoil shall be roughly levelled so that an even depth of topsoil can be achieved.

Topsoil (To Comply with British Standard 3882:2015 - Specification for Topsoil):
Imported topsoil shall be Multipurpose Grade as described in BS 3882:2015 and suitable for sustaining plant life. Stockpiling of soil shall be avoided whenever possible to minimise loss of physical quality, diffusion of oxygen and biological activity.

Any stockpiling shall not exceed 1.5 metres high and shall be sited so as to avoid risk of muddy water run-off into a watercourse, not exceeding 1.5 metres high.

The site of the stockpile will be prepared in advance by grading, removing rubbish and ensuring no fuel or chemicals were previously stored in area.

Topsoil shall be lightly consolidated in layers not exceeding 150mm using track laying machinery.

Soil shall not be handled in inappropriate conditions of weather and soil moisture i.e.

During or shortly after heavy precipitation

When soil is in a waterlogged condition

When the ground is frozen or covered by snow

When there are pools of water on the grounds surface.

Topsoil shall be laid to the following minimum depths:

- 150mm below new grass areas
 - 300mm to rear gardens
 - 400mm beneath new shrub areas.
- Finished levels, after settlement, shall be as follows:
- 25mm above adjacent paving from new grassed areas and non-mulched shrub beds
 - 75mm below adjacent paving and grass for mulched planting beds.
 - 150mm below damp proof courses.

2) GROUND CONDITIONING

40 litres of compost to be incorporated into the top 200mm of each square metre of topsoil for all ornamental shrub beds.

3) PLANT AND PLANTING SPECIFICATION

All plant stock, plant handling and planting to be undertaken in accordance with the following British Standard Specifications and Code of Practice:

BS 8545:2014 'Trees: from nursery to independence in the landscape

BS 3936: Part 1 1992 Nursery stock (Specification for trees and shrubs)

BS 3936: Part 4 1984 Nursery stock (Specification for forest trees)

BS 3936: Part 9 1987 Nursery stock (Specification for bulbs, corms and tubers)

BS 3936: Part 10 1990 Nursery stock (Specification for ground cover plants)

BS 4428: 1989 Recommendations for general landscaping operations.

BS 4043: 1989 Recommendations for transplanting root-balled trees. (withdrawn)

The Code of Practice for Plant Handling 1985. (Horticultural Trades Association).

Plant Stock:

Plant stock to be supplied in accordance with the size and description specified ion the plant schedule and position indicated on the most current revision of the planting plan. Plant stock shall be healthy, vigorous, free from pests and diseases and suitably hardened off for the proposed situation of planting and lifed at a time in accordance with good nursery practice. Stock shall have a well-formed fibrous root system and be free from perennial weeds. The form of trees shall be in accordance with BS 3936: Part 1:1992, Section 7, *Form of Trees*.

Plant Handling:

All plant materials shall be lifted, bundled, labelled, packaged, transported, temporarily stored and planted in accordance with the procedures and methods illustrated in the publication, *"Plant Handling"* (Horticultural; Trades Association) and relevant sections of BS 4043: 1989 *Transplanting Root-Balled Trees*.

Tree Planting:

Trees to be pit planted following supplier recommendations. Minimum pit size: Selected standard tree 600 x 600 x 600 and Heavy standard tree 900 x 900 x 700mm.

Pits to be prepared to base and sides of pit to be further scarified.

Trees to be double staked using two stakes (75mm dia.), driven into ground 400mm below bottom of pit. Trees to be centrally located and stem placed in an upright position. Pit to be backfilled with 200-400mm (dependant on depth of pit due to size of tree) of a mix of subsoil with a 70 to 80% mix of sharp sand. Then backfill remaining area of pit with 400mm of a 3:1 mix of an approved topsoil with compost. Backfill firmly to 50mm above previous ground level to allow for settlement.

Water each tree in same day of planting, 30 to 50 litres per tree dependant on size and soil conditions.

All works shall be carried out to the minimum standard according to BS 3936: 1992 Part 1 Nursery Stock. Specification for Trees and Shrubs. BS 4043: 1989 Recommendations for transplanting root-balled trees.

Staking:

Double stake all trees with two stakes, a crossbar, a spacer and webbing. Stakes to be round timber with chamfered tops. Position stake close to tree on windward side and drive vertically at least 400mm into bottom of pit before planting. Backfilling: consolidate material around stake. Height of stakes: cut to approximately 600mm above ground level, taking care not to damage the bark. Ties: Webbing with a spacer. Tying: secure tree firmly to crossbar with spacer and webbing.

Mulch:

All shrub beds shall be spread with a medium grade bark mulch to a settled depth of 75mm. Mulch to be free from fines, weeds, disease and contaminants.

Ornamental shrub planting:

To be set out carefully and evenly over indicated areas. Remove plants from pots and plastic containers, plant and water in thoroughly. Shrubs shall be individually pit planted in prepared pits sized to accommodate full spread of roots. Plants shall be evenly spaced over the planting area. Firm backfill by treading, ensuring the ground is not overly compacted and that the plant is positioned upright.

Native woodland mix and scrub mix planting

Bare root stock shall be planted between November and March. Plants to be planted in groups of 5, 7, or 9 of the same species. Plants shall be evenly spaced over the planting area. Ensure plants are planted to the correct depth to correspond to the soil mark on main stems. Undertake formative pruning if necessary. Each plant to be protected with a 60cm high tubex shrub shelter, with two cable ties and a timber stake.

New formal hedges

Consistent in species, cultivar and clone to ensure a uniform hedge. To be planted in a previous prepared planting bed 0.6metre wide and 0.3m deep. Container stock planted centrally in a single row at 3 per metre. Ensure plants are planted to the correct depth to correspond to the soil mark on main stems. Cut the tips of any wilted leading stems to encourage the roots of the cherry laurel to grow down and the plant to bush out in the first year. Sprinkle 100g per square metre of blood fish and bone fertilizer in the trench before laying each plant and backfill the trench with a 3:1 mix of an approved topsoil with compost and using your heal to firm the soil around each plant. Backfill the trench to 50mm above previous ground level creating a slightly domed shape with the highest point being at the centre of the trench to assist drainage and settlement. Planting bed to be covered with a medium grade bark mulch to a settled depth of 75mm.

Prune back to a height of 1 metre.

New mixed native hedgerows - Double staked

Bare root stock shall be planted between November and March. Consistent in species, cultivar and clone to ensure a uniform hedge. Plants to be planted in groups of 3, 5 or 7 of the same species. To be planted in a previous prepared planting bed 1metre wide. Planted to be centrally in a double row, 330mm between plants and 300mm between rows (6 no. plants per linear metre). Ensure plants are planted to the correct depth to correspond to the soil mark on main stems. Backfill the trench with a 3:1 mix of an approved topsoil with compost and using your heal to firm the soil around each plant. Backfill the trench to 50mm above previous ground level creating a slightly domed shape with the highest point being at the centre of the trench to assist drainage and settlement. Planting bed to be covered with a medium grade bark mulch to a settled depth of 75mm. Each plant to be protected with a 60cm high tubex shrub shelter, with two cable ties and a timber stake.

Prune back to a height of 2 metres.

Turfed Areas:

To be specified and laid in accordance with BS. 3936:1998 Recommendations for turf for general purposes. Turf to be Lindum Festival Turf (or similar approved). Hardwearing with a dense sward containing a mixture of 25% perennial ryegrass, 55% fescues and 20% smooth stalked meadow grass. This mix is easy to maintain and will recover well from general wear.

Turf to be laid in suitable weather conditions on a prepared bed with no weeds and a suitable slow release fertiliser applied to bed prior to laying. Turf to be watered regularly until it is well established.

Rear gardens:

Subsoil to be prepared to a depth of 300mm as per ground preparation and soil specification.

Topsoil to be supplied as per ground preparation and soil specification to a depth of 300mm, after gentle compaction and to be left bare in rear gardens.

Grass Seeding:

Public open spaces shall be Germinal WFG20 Eco Species Rich Lawn, or similar approved. Sowing to be taken between March and October.

Topsoil shall be cultivated to a fine tilth, be free from weeds, stones and other debris. Levels to be graded to form finished levels as indicated in section, "Topsoil".

Roll, fertilise at 50gms/sq m, 10-14 days prior to seeding, sow at rate of 40g/m2 and lightly rake. First cut to be undertaken when grass reaches 50mm.

Wildflower Seeding:

Seed mix shall be Germinal WFG20 Eco Species Rich Lawn, or similar approved. Sowing to be taken between March and October.

Topsoil shall be cultivated to a fine tilth, be free from weeds, stones and other debris. Sow at rate of 10 g/m2 and lightly rake. First cut to be undertaken 6 weeks after sowing or when reaches 70-100mm.

Seed mix shall be Germina/ RE3 River Floodplain / Water Meadow (MG8 Grassland), or similar approved within the proposed pond. Sowing to be taken between March and October.

Topsoil shall be cultivated to a fine tilth, be free from weeds, stones and other debris. Sow at rate of 5 g/m2 and lightly rake. First cut to be undertaken 6 weeks after sowing or when reaches 70-100mm.

4) MAINTENANCE AND MANAGEMENT

Plant stock and soft landscaped areas shall be maintained for a period of five years via the developers' agent or appointed Management Company during which time the following operations shall be carried out:

Regular visits:

Monthly maintenance visits to include the following operations:

- Hand weed planting beds
- Remove litter
- Sweep mulch spillage
- Re-firming plant stock to ensure the new planting is all planting to upright positions.
- Adjust stakes and ties as necessary
- Prune plant stock as required to encourage good form
- Check all plant stock and report signs of pests, disease, death and damage

Mulch:

Top up mulch levels (using matching material) surrounding trees and within beds to 75mm at the end of the maintenance period.

Watering:

Plant stock to receive the following quantities of water:

Trees: 150 to 250 litres per tree each month dependant on size, soil conditions and weather conditions between April and September.

Shrubs and transplants: 5 litres/plant on three occasions throughout growing season.

Watering to be undertaken during the first 24 months as needed to maintain plant health.

Grass Maintenance:

Grass shall be cut throughout the growing season to maintain a sward of approximately 38mm. Shall be edged, watered as necessary and clippings removed.

Wildflower Maintenance:

In the first year once the sward height is at least 10cm, cut to a sward length of 70mm after flowering, allowing the heads to go to seed and the seeds to drop into the soil so as they regrow the next year. The seeds can be firmid into the ground to promote regrowth. The clippings should be left to allow annuals to return also.

Cut to a sward length of 70mm annually after the flowers have set seed for the following years, leaving the clippings in situ to promote regrowth.

RE3 River Floodplain / Water Meadow (MG8 Grassland)

Autumn Sown: during the first year: first cut shall be early July, then monthly during August, September and October to maintain a sward of approximately 70mm.

Thereafter: shall be cut 2 times a year mid-July to early September to maintain a sward of approximately 70mm.

Spring Sown: during the first year: first cut shall be mid-September, then again during October to maintain a sward of approximately 70mm.

Thereafter: shall be cut 1 time a year mid-July to early September or as required leaving at least fortnight between cuts to maintain a sward of approximately 70mm.

The clippings shall be left in situ for 3 to 7 days to allow seed drop, then removed to prevent nutrient build up.

WFG20 Eco Species Rich Lawn Maintenance

First Cut: Mid-September. Cutting height approximately 70mm.

Thereafter: shall be cut 2 times a year mid-August to early October to maintain a sward of approximately 70mm.

The clippings shall be left in situ for 3 to 7 days to allow seed drop, then removed to prevent nutrient build up.

Native Scrub Planting Maintenance

Beating up: After year 2 any dead trees to be removed and replaced.An assessment to be undertaken at this time to ensure replacement species are ones which have proven so far successful in the rest of the planted area.

Thinning: After 10 years woodland to be thinned out by selective removal of 15-20% of establishing woodland.An assessment will be made to identify suitable trees for removal based on health,form and success of adaption to site conditions.

New Tree/Shrub Planting:

Weed control by hand to ensure planting area is weed free. Check stakes and guards are in place and replace where necessary. Prune, thin and remove suckers, seedlings, dead, damaged, or diseased branches annually between October and January to avoid the bird nesting season. Replace dead / dying stock in winter.

Plant replacements:

All dead, dying and vandalised plant stock shall be replaced, at the landscape contractor's expense, at the end of each growing season throughout the maintenance period.

Plant Schedule						
Trees	Number of Plants	Abbreviation	Species	Specification	Height	Crn Density
1	POE ELS	Four canopied	'Etrisk'	Selected Standard 4 brks 2x RB Clear Stem min. 200cm	300-300cm	10-12cm/Counted
7	ALN GLU	Alnus glutinosa	Heavy Standard 5 brks 3x RB Clear Stem min. 200cm	350-425cm	12-14cm/Counted	
4	AME BAL	Ameiropia 'Ballera'	Selected Standard 4 brks 2x RB Clear Stem 175-200cm	350-350cm	10-12cm/Counted	
8	BET PEN	Betula pendula	Heavy Standard 5 brks 3x RB Clear Stem 175-200cm	350-425cm	12-14cm/Counted	
6	BET JAC	Betula utilis jacquemontii	Selected Standard 5 brks 2x RB Clear Stem 175-200cm	300-300cm	10-12cm/Counted	
6	CAR FOM	Carpinus betulus 'Frans Fontaine'	Selected Standard 4 brks 2x RB Clear Stem 175-200cm	300-300cm	10-12cm/Counted	
9	CRA SCA	Crataegus laevigata 'Paul's Scarlet'	Selected Standard 4 brks 2x RB Clear Stem 175-200cm	300-300cm	10-12cm/Counted	
6	MAK REID	Malus 'Reid'	Selected Standard 4 brks 2x RB Clear Stem 175-200cm	300-300cm	10-12cm/Counted	
2	PRU AMA	Prunus 'Amanogawa'	Selected Standard 4 brks C Clear Stem 100-150cm	300-300cm	10-12cm/Counted	
6	PVR CHA	Prunus cerasifera 'Chanticleer'	Selected Standard 4 brks 2x RB Clear Stem 175-200cm	300-300cm	10-12cm/Counted	
3	QUE PET	Quercus petraea	Heavy Standard 5 brks 3x RB Clear Stem 175-200cm	350-425cm	12-14cm/Counted	
7	QUE ROB	Quercus robur	Heavy Standard 5 brks 3x RB Clear Stem 175-200cm	350-425cm	12-14cm/Counted	
17	SOR STR	Sorbus aucuparia 'Stressfree'	Selected Standard 4 brks 2x RB Clear Stem 175-200cm	300-300cm	10-12cm/Counted	
Total: 78						

Shrubs							
Number of Plants	Abbreviation	Species	Specification	Height	Diameter	Pot Size	
16	BRA SUN	Brachyglottis 'Sunshine'	Branched 4 brks C	30-40cm	3L	2mm ³ 7,0836m ³	
26	CRA REP	Crataegus riviniana repens	Bushy 3 brks C	30-40cm	3L	3mm ³ 24,144m ³	
21	CHO SUN	Choisya ternata 'Sunderland'	Bushy 4 brks C	30-40cm	3L	3mm ³ 6,7412m ³	
67	CIS PIN	Cistus 'Silver Pink'	Bushy 4 brks C	20-30cm	3L	3mm ³ 20,3577m ³	
17	COB PUR	Cornus maxima 'Purpleaurea'	Bushy 3 brks C	30-40cm	3L	3mm ³ 5,0005m ³	
13	COT PUR	Cotinus coggygria 'Royal Purple'	Branched 3 brks C	30-40cm	3L	3mm ³ 4,1961m ³	
7	ERI WHT	Erica carnea 'Strawberry White'	Bushy 3 C	30-40cm	3L	3mm ³ 7,2411m ³	
50	ERI WHI	Erica carnea 'Strawberry White'	Bushy 3 C	30-40cm	3L	3mm ³ 6,5022m ³	
53	EUD GAI	Euchymus fortunei 'Emerald Gaiety'	Bushy 7 brks C	20-30cm	20-30cm	3L	3mm ³ 16,1962m ³
60	FIC POP	Fuchsia 'Mrs Popple'	Bushy 5 brks C	30-40cm	3L	3mm ³ 16,7619m ³	
5	HEB ORM	Hebe 'Great Orme'	Bushy 3 brks C	30-40cm	3L	3mm ³ 1,3803m ³	
92	HEB WIN	Hebe 'Mrs Winler'	Bushy 3 brks C	30-40cm	3L	3mm ³ 29,0556m ³	
119	HEB GEM	Hebe 'White Gem'	Bushy 3 brks C	30-40cm	3L	3mm ³ 35,5156m ³	
16	HEB BAK	Hebe rakainiana	Bushy 3 brks C	20-30cm	3L	3mm ³ 24,0252m ³	
16	HYD WAV	Hydrangea macrophylla 'Blue Wave'	Branched 5 brks C	40-60cm	3L	2mm ³ 5,7121m ³	
6	HYD GRA	Hydrangea paniculata 'Grandiflora'	Branched 3 brks C	30-40cm	2L	2mm ³ 2,6352m ³	
92	HYD BUJ	Hydrangea serrata 'Bluebird'	Branched 5 brks C	40-60cm	3L	2mm ³ 13,4536m ³	
8	HYP CAL	Hypochaeris glabra	Bushy 5 brks C	30-40cm	3L	3mm ³ 1,8593m ³	
113	LAV HD	Lavandula angustifolia 'Hidcole'	Bushy 5 brks C	20-30cm	3L	3mm ³ 35,3248m ³	
14	LAV FED	Lavandula stoechas pedunculata	Bushy 5 brks C	15-20cm	4mm ³ 4,5291m ³		
45	LON PIL	Lonchocarpus pilosa	Bushy 5 brks C	30-40cm	3L	3mm ³ 14,2854m ³	
14	PHS FEA	Phlox 'Forest Flame'	Bushy 3 brks C	30-40cm	3L	3mm ³ 29,0556m ³	
17	POT ELL	Potentilla fulvous 'Elizabett'	Bushy 3 brks C	15-20cm	2L	4mm ³ 4,0075m ³	
24	PRU LUS	Prunus laetiflora	Bushy 4 brks C	30-40cm	3L	2mm ³ 1,8666m ³	
1	SPR RUB	Spiraea japonica 'Rubra'	Bushy 3 brks C	30-40cm	3L	3mm ³ 4,4706m ³	
29	SPI ARS	Spiraea Arguta	Branched 5 brks C	40-60cm	3L	3mm ³ 9,2317m ³	
1	SPI FIB	Spiraea japonica 'Little Princess'	Branched 4 brks C	40-60cm	3L	2mm ³ 1,7432m ³	
7	VIN ALB	Vinca minor 'Alba'	Several Shoots 3 brks C	20-30cm	3L	4mm ³ 1,7134m ³	
Total: 1107							

Formal Hedg						
Number/Abbreviation	Species	Specification	Height	Pot Size	Density	Length
365	HEB EDG	Hebe 'West Edge'	Bushy 7 brks C	57-58	3m	119,8036m
614	PHO ROB	Phlox x Cassel 'Red Robin'	Branched 3 brks C	20-30cm	2L	5m 114,5307m
464	PRU LAU	Prunus laurocerasus	Bushy 3 brks C	40-60cm	2L	5m 91,2524m
Total: 384,5866m						

Native Hedgcow Mix						
Number	Abbreviation	Species	Specification	Height	Pot Size	Density
213	COB AVE	Cornus avellana	1+2 Transplant - seed raised Branched 3 brks	300-30cm	3L	3mm ³ Double Staggered at 0.3m offset 10%
103	CRA WUN	Crataegus avellana	1+2 Transplant - seed raised B	30-30cm	3L	3mm ³ Double Staggered at 0.3m offset 20%
423	PRU SPN	Prunus spinosa	1+1 Transplant - seed raised Branched 2 brks	300-30cm	3L	3mm ³ Double Staggered at 0.3m offset 20%
419	ROB CAN	Rosa canina	1+1 Transplant - seed raised Branched 3 brks	300-30cm	3L	3mm ³ Double Staggered at 0.3m offset 20%
Total: 2113						

Mixed Native Scrub						
Number	Abbreviation	Species	Specification	Height	Pot Size	Density
18	COB AVE	Cornus avellana	1+2 Transplant - seed raised Branched 3 brks	300-30cm	3L	3mm ³ 14,1938m ³
103	CRA WUN	Crataegus monogyna	1+1 Transplant - seed raised B	30-30cm	3L	3mm ³ 17,0541m ³
52	ERI AUN	Erica australis	Bushy 3 brks C	40-60cm	3L	3mm ³ 13,3368m ³
34	HEB WIN	Hebe 'Mrs Winler'	Bushy 3 brks C	30-40cm	3L	3mm ³ 34,1938m ³
10	HEB WUN	Hebe 'White Gem'	Bushy 3 brks C	30-40cm	3L	3mm ³ 17,0541m ³
18	HEB WUN	Hebe 'White Gem'	Bushy 3 brks C	30-40cm	3L	3mm ³ 17,0541m ³
18</						