PLANNING NOTES (SOFT LANDSCAPE):

1. SOILS: Subgrade / subsoil to be prepared in accordance with BS 8601:2013 and BS 4428:1989 and scarified or ripped to 300mm depth (excluding root protection areas of retained trees refer to Tree Protection Plan 20-94-04) prior to spreading topsoil to alleviate compaction and promote drainage. Imported and as saved topsoil to be in accordance with BS 3882: 2015 'Multipurpose Grade' with minimum soil organic matter contents 1% greater than the minima value (or as approved). Imported topsoil (and 'as saved' if requested) is to be laboratory tested to BS 3882:2015 and ameliorated as required to meet the required characteristics as detailed within Table 1 of BS 3882:2015 specification. Wildflower areas to be unimproved topsoil or low fertility topsoil to BS 3882:2015. Grass areas to be a minimum depth of 150mm, Shrub beds 450mm depth and forestry / transplants 300mm depth. Any weed / grass growth to be sprayed out with appropriate herbicide at least 10 days prior to cultivation. All areas to be cultivated to a minimum depth of 150mm removing weeds and rubbish / stones greater than 20mm in size. Incorporate proprietary non peat compost to BSI PAS 100 to 50mm depth evenly worked into soil during cultivation.

N.B Proposed services (electric, water, gas etc) in landscape areas should be installed as a minimum below the required topsoil depths and clearly identified in accordance with service / utility requirements.

2. BUILDING FOUNDATION DESIGN: All tree and shrub planting proposals are to be referred to by the structural engineer during building foundation design.

3. PLANT STOCK: Unless agreed otherwise all trees and shrubs are to be of UK provenance where plants have been propagated and/or grown on for a minimum of 5 years in the UK for trees and 2 years for shrubs. All plants are to comply with the requirements of all current British Standards including BS3936 'Specifications for Nursery Stock' and BS8545 'Trees from nursery to independence in the landscape' and be supplied in accordance with the Plant Schedule. Should planting be required outside of the planting season (November - March) any bare root or rootballed stock specified is to be replaced with containerised stock to an appropriate or similar specification to the approval of the landscape architect prior to ordering.

4. EXISTING TREES: Where trees are to be retained they should be subject to a full arboricultural inspection to assess condition and safety. Retained trees shall be protected from damage by erection of 2.3m weldmesh fencing on a scaffold framework in accordance BS 5837:2012 Figure 2 refer to Tree Protection Plan 20-93-04 and the Arboricultural Method Statement 2093/EH/AMS001. These barriers shall be maintained in position and in good condition until works are complete. Fencing to be located in accordance with Table D.1 at a radius of 12 times the stem diameter (single stem trees) or based on the combined stem diameter for multistem trees (trees with more than one stem arising below 1.5m above ground level) refer to Clause 4.6. Further precautions are to be taken as detailed within BS 5837:2012 6.2.4.

5. TREE SURGERY / REMOVAL: Tree surgery and tree removal to be carried out by an Arboricultural Association approved Tree surgeon in accordance with BS 3998:2010. Arisings to be removed to a licensed tip.

6. TREE PLANTING: All trees to be in accordance with BS 3936, BS8545 and The National Plant Specification – 'Rootballed Trees' recommendations. Trees to be planted in accordance with BS 4428:1989 and double staked (14-16cm girth trees) and tied in prepared pits. Semi mature trees to be underground guyed and securely anchored using Platipus Tree System. Tree pits in open field / un-compacted ground conditions to be 1000mm x 1000mm (at least 75mm greater than that of the root system) with pit depth to be based on the planting depth of the tree (distance from root flare to underside of rootball) in accordance with BS 8545:2012. Topsoils and subsoils to be excavated and stored separately for reuse. Tree pit to be backfilled with stored subsoil and topsoil at depths to replicate the existing soil horizons. Topsoil to be mixed enriched with 40L of peat free tree planting compost. Root balls to be encircled by Root Rain Metro or similar irrigation pipe. Well water after planting. The base of trees to planted in grass areas are to be covered with 75mm amenity grade bark mulch such as Melcourt 'Amenity' Bark Mulch (or similar approved by the landscape architect) to 1.0 metre diameter and kept weed free.

In locations close to footpaths and roadways linear root barriers Greenblue Urban, ReRoot or similar are to be installed in accordance with manufacturers instructions. Where proposed tree locations conflict with services, trees are to be relocated in accordance with the appropriate utilities guidance notes subject to client / local authority approval. Proprietary root barrier Greenblue Urban, ReRoot or similar to be installed in accordance with manufacturers instructions where relocation is not considered appropriate.

7. TREES IN PAVED AREAS: All trees to be in accordance with BS 3936, BS8545 and The National Plant Specification – 'Rootballed Trees' recommendations, to be planted and securely anchored using Arborguy anchor system or similar to suit tree size and ground conditions. Tree pits to incorporate Rootspace structure including root director and Root Rain Precinct irrigation system with cap as per the Greenblue Tree Planting Systems standard details selected to suit the tree size, species, soil conditions and hard surface. Well water after planting. Tree pit surface to be protected with terram layer, pea gravel, tree grille and vertical tree guard. Tree pits pits in poorly draining soils are to be positively drained, connecting into the surface water drainage system to engineers details. NB the treatment of the hard surfacing with road salt within paved areas where trees are planted is not permitted.

8. SHRUB & HERBACEOUS PLANTING: plants to be in accordance with BS 3936 and handled in accordance with NPS 'Handling & Establishment' guidelines and planted in accordance with BS 4428:1989. Nursery stock supplier to be approved by the Landscape Architect. All shrubs to have a minimum of three breaks, except Hedera with a minimum of two. Well water plants immediately after planting and prior to spreading of mulch. Planting areas to be covered with 75mm depth amenity grade bark mulch such as Melcourt 'Amenity' Bark Mulch (or similar approved by the landscape architect) and kept weed free.

9. PLANTING MARGINAL / AQUATIC PLANTS: Keep plants watered and in the shade until planted and do not allow to dry out. To be planted at 500mm centres of as scheduled in random groupings of 3-5 and 7-10 species depending on numbers of plants. Plant in a hole to suit the size and shape of roots/rootball removing packaging. Create a cleft at bottom of hole to improve rooting. Gently firm into hole to ensure good root hold into substrate. After planting water thoroughly and without damaging or displacing plants or soil. Lightly firm soil around plants and rake soil to remove depressions / hollows. Planted areas to be kept watered to ensure soil is sufficiently moist until the final lake water level is achieved.

10. HEDGE PLANTING: plants to be in accordance with BS 3936 and handled in accordance with the NPS 'Handling & Establishment' guidelines and planted in accordance with BS 4428:1989. Hedge plants to be pit planted in double staggered rows 350mm apart at 450mm centres (or as scheduled). In mixed species hedges; shrub species to be planted randomly throughout the length of hedge. Well water plants immediately after planting and prior to spreading of mulch. Planted areas to be covered with 75mm depth bark mulch and kept weed free. Where necessary plants to be protected from rabbits with rabbit fence and / or individual rabbit mesh guards securely staked.

11. NATIVE SHRUB PLANTING: plants to be in accordance with BS 3936 and planted in accordance with BS 4428:1989, subgrade to be cross ripped at 1.2m intervals prior to planting to alleviate compaction (excluding root protection areas). Transplants to be planted at 1 metre centres (or as scheduled) in random groupings of 3-5 and 7-10 shrub species depending on numbers of plants. Transplants to be root dipped with Alginure prior to planting. Planted areas to be protected from rabbits, with rabbit fence and / or individual mesh tree guards securely fixed to timber stake(s).

12. WILDFLOWER SEEDING: grass areas to be seeded in accordance with BS 4428:1989 during March, April or September. Unimproved or low fertility topsoil to be imported, cultivated and leveled to remove all minor hollows or ridges as required with any debris or stones greater than 20mm diameter removed to provide a fine weed free tilth . Do not apply fertiliser. Weeds to be eradicated by herbicide or repeated cultivation prior to sowing. Lightly rake areas after sowing and keep well watered. Areas to be kept free from unwanted plants and mown every 6 - 8 weeks during establishment year removing arisings. In subsequent years cut in early spring and autumn after setting seed (in accordance with manufacturers recommendations) removing arisings. Seed mixes to be supplied by Emorsgate Seeds and include the following sown in accordance with suppliers recommendations.

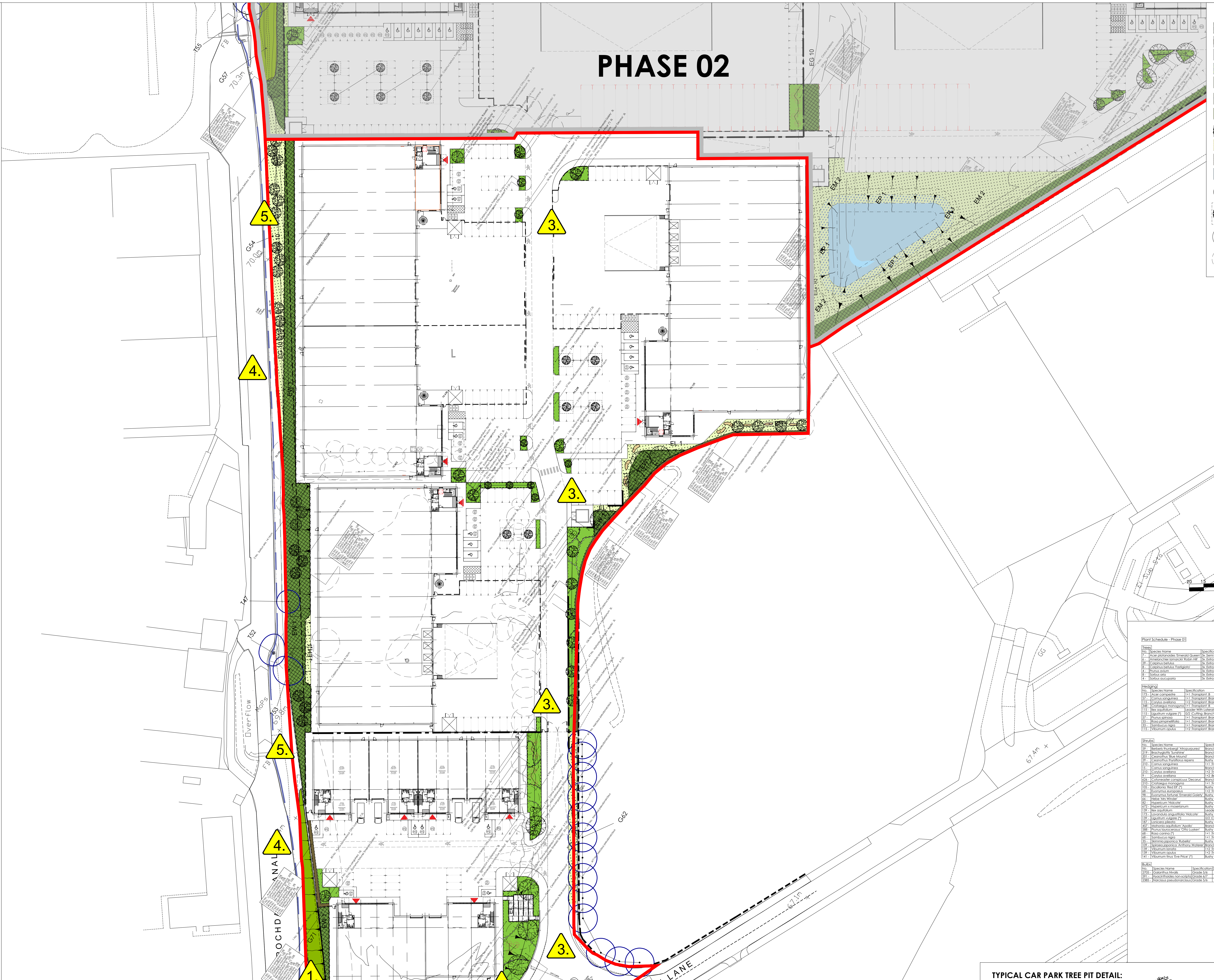
EL1	'Flowering Lawn Mixture' (sown at 4g/m2).
EG10	'Tussock Grass Mixture' to smaller areas within main site (sown at 10-15g/m2).
EM2	'Standard General Purpose Meadow Mixture' to general landscape areas (sown at 4g/m2) and to improve existing sward.
EH1	'Hedgerow mix' to hedges and shaded areas (sown at 4g/m2).
EW1	'Woodland Mixture' to shrub planting areas (sown at 4g/m2).
EP1	'Pond edge' to attenuation pond (sown at 4g/m2).

13. BULB PLANTING: each bulb to be planted at a depth of approximately twice its height; base in contact with bottom of hole. Backfilled with finely broken soil, lightly firmed to existing ground level. Bulbs should be firm and entire, not dried out; and free from pests, diseases and fungus.

14. MAINTENANCE: To be carried out at approximately monthly intervals during the defects liability / rectification period to include the following:

- a. Eradicate weeds by hand or appropriate chemical means.
- b. Cut out dead or / and damaged stock or branches, prune as required.
- c. Ensure all shrubs and trees are firmed in, securely staked and tied with guards where applicable.
- d. Collect litter, sweep and tidy site.
- e. Apply suitable non-residual herbicides, pesticides and water as required.
- f. Carry out mowing to wildflower areas as per Emorsgate Seeds Ltd aftercare First year & Established sward guidance.
- g. Hedges to plot frontages be maintained at a max height of 2.0m.
- h. Native shrub planting to be maintained free from perennial weeds, self set shrub and tree species.
- i. At final visit apply granular fertiliser to all planted areas and top up bark mulch depth to 75mm.

15. WATERING: all plant material (including turf) to be watered in dry periods until established during April through to September with a fine rose until the water penetrates the topsoil to at least 5cm depth and achieves field capacity. Frequency of watering regime to de determined by weather conditions, soil conditions and underlying geology, all plant beds to be watered to ensure soil is consistently moist to promote successful establishment. As a guide only it is suggested that during hot, dry periods, plants are to be watered every six to ten days. For individual trees it is suggested that 18 watering visits per year are carried out commencing late March (prior to budburst) and utilising a minimum of 50 litres of water per tree. Soil probe to be used to determine soil saturation to full depth of root ball.



LEGEND: SOFT LANDSCAPING

🟩	GROUND COVER: evergreen and decidous shrub ground cover planting with specimen shrubs.
🟫	DECIDUOUS HEDGE: shrub hedge planted in double or triple staggered rows as detailed.
⊙	SPECIMEN SHRUBS: specimen native shrub planting as detailed.
▨	MARGINAL AQUATIC PLANTING: marginal planting to edge of attentuation pond.
▨	WILDFLOWER MEADOW AREAS: to be seeded with wildflower seed mix as detailed; refer to notes.
▨	WILDFLOWER WETLAND AREAS: to be seeded with wildflower seed mix as detailed; refer to notes.
🟩	EXISTING TREES AND VEGETATION RETAINED : areas of trees and scrub identified in the tree survey to be retained.
▦	NATIVE SHRUB PLANTING: native shrub planting mix under planted with wildflower seed mix as detailed.
🟨	BULB PLANTING: native bulbs to be scattered within soil as detailed.
▨	ORNAMENTAL GRAVEL: pea gravel from local source; 50-75mm minimum depth; refer to notes.
🟦	WATER: standing water to base of proposed attenuation pond.
⊛	TREE PLANTING: tree planting with tree canopy spread illustrated at 25 years growth.
⊛	CAR PARK TREE PLANTING: trees to be planted within car park hard standing with Green Blue Urban tree planting system to suit tree species and hard surfacing.
○	EXISTING TREES: to be retained in accordance with BS 5837 'Trees in relation to Construction' 2012.
◌	TREES TO BE REMOVED

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Refer any query to office of origination.

rev	date:	amendments:	alt:
(-)			

cdm 2015; designers residual risk information

LEGEND: CDM RESIDUAL RISKS

1.	1. LEVEL CHANGES: changes in level across the site including ramped access, steps, slopes or ditches, restricting access with risk of operatives falling from height.
2.	2. RETAINING WALLS: within external soft and hard landscape; risk of operatives falling from height.
3.	3. PEDESTRIAN & VEHICULAR TRAFFIC: car park, road and pavement within or adjacent to working areas; risk of collision with operatives, risk of harm to pedestrians.
4.	5. WATER FEATURES: working adjacent to / in close proximity of canal water feature. Risk of drowning and waterborne diseases.
5.	6. PUBLIC FOOTPATH: pedestrians within or adjacent to working areas. Risk of injury to the general public.

It is assumed that works will be carried out by competent landscape subcontractor working, where appropriate to a risk assessment and method statement approved by the Principal Contractor.

Plant Schedule - Phase 01

Trees

No.	Species Name	Specification	Girth	Height	Density
7 -	Acer platanoides 'Emerald Queen'	3x :Semi mature :Clear Stem min. 200cm : :RB	20-25cm	500-550cm	Counted
6 -	Amelanchier lamarckii 'Robin Hill'	3x :Extra Heavy Standard :Clear Stem 175-200 :5 brks :RB :PG 1	14-16cm	425-600cm	Counted
29 -	Carpinus betulus	3x :Extra Heavy Standard :Clear Stem 175-200 :5 brks :RB :PG 1	14-16cm	400-450cm	Counted
8 -	Carpinus betulus 'Fastigiata'	3x :Extra Heavy Standard :Clear Stem 175-200 :5 brks :RB :PG 1	14-16cm	400-450cm	Counted
4 -	Prunus avium	3x :Extra Heavy Standard :Clear Stem 175-200 :5 brks :RB :PG 1	14-16cm	400-450cm	Counted
8 -	Sorbus aria	3x :Extra Heavy Standard :Clear Stem 175-200 :5 brks :RB :PG 1	14-16cm	400-450cm	Counted
4 -	Sorbus aucuparia	3x :Extra Heavy Standard :Clear Stem 175-200 :5 brks :RB :PG 1	14-16cm	400-450cm	Counted

Hedging

No.	Species Name	Specification	Girth	Height	Pot Size	Density
173 -	Acer campestre	1+1 :Transplant :B		60-80cm		0.45Ctr Double Staggered at 0.35m offset
57 -	Cornus sanguinea	1+1 :Transplant :Branched :2 brks :B		40-60cm		0.45Ctr Double Staggered at 0.35m offset
115 -	Corylus avellana	1+2 :Transplant :Branched :3 brks		60-80cm		0.45Ctr Double Staggered at 0.35m offset
348 -	Crataegus monogyna	1+1 :Transplant :B		60-80cm		0.45Ctr Double Staggered at 0.35m offset
115 -	Ilex aquifolium	Leader With Laterals		40-60cm	3L	0.45Ctr Double Staggered at 0.35m offset
115 -	Ligustrum vulgare (*)	0/2 :Cutting :Branched :3 brks :B		60-80cm		0.45Ctr Double Staggered at 0.35m offset
57 -	Prunus spinosa	1+1 :Transplant :Branched :2 brks :B		60-80cm		0.45Ctr Double Staggered at 0.35m offset
33 -	Rosa pimpinellifolia	1+1 :Transplant :Branched :3 brks :B		40-60cm		0.45Ctr Double Staggered at 0.35m offset
33 -	Sambucus nigra	1+1 :Transplant :Branched :3 brks :B		60-80cm		0.45Ctr Double Staggered at 0.35m offset
115 -	Viburnum opulus	1+2 :Transplant :Branched :3 brks :B		60-80cm		0.45Ctr Double Staggered at 0.35m offset

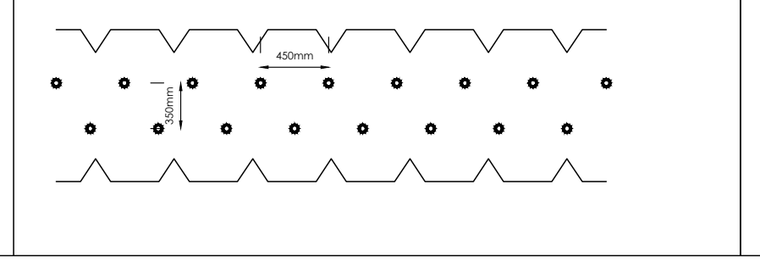
Shrubs

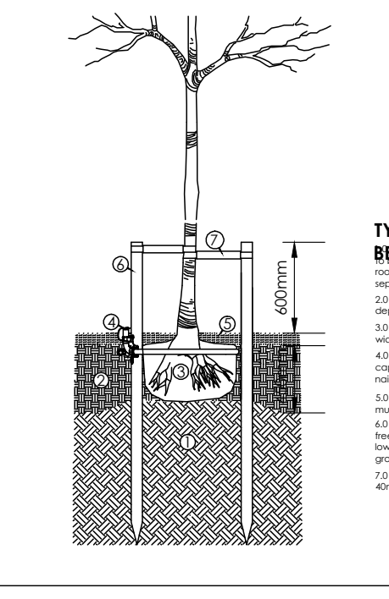
No.	Species Name	Specification	Diameter	Height	Pot Size	Density
59 -	Berberis thunbergii 'Atropurpurea'	Branched :5 brks :C :PG 8		30-40cm	3L	2/m²
219 -	Brachyglottis 'Sunshine'	Branched :4 brks :C :PG 8		30-40cm	3L	3/m²
201 -	Ceanothus 'Blue Mound'	Branched :5 brks :C :PG 8	30-40cm		3L	3/m²
29 -	Ceanothus thyrsiflorus repens	Bushy :5 brks :C :PG 8	30-40cm		3L	3/m²
210 -	Cornus sanguinea	1+1 :Transplant :Branched :2 brks :B		40-60cm		1/m²
15 -	Cornus sanguinea	Branched :5 brks		80-100cm	10L	Counted
210 -	Corylus avellana	1+2 :Transplant :Branched :3 brks		60-80cm		1/m²
9 -	Corylus avellana	1+2 :Branched :4 brks		80-100cm		Counted
626 -	Cotoneaster conspicuus 'Decorus'	Branched :3 brks :C :PG 8 / PG 13		30-40cm	3L	3/m²
210 -	Crataegus monogyna	1+1 :Transplant :B		60-80cm		1/m²
105 -	Escallonia 'Red Elf' (*)	Bushy :4 brks :C :PG 9		40-60cm	3L	3/m²
68 -	Euonymus europaeus	1+2 :Transplant :Branched :5 brks :B		60-80cm		1/m²
98 -	Euonymus fortunei 'Emerald Gaiety'	Bushy :7 brks :C :PG 8	20-30cm	20-30cm	3L	3/m²
66 -	Hebe 'Mrs Winder'	Bushy :5 brks :C :PG 9		30-40cm	3L	3/m²
82 -	Hypericum 'Hidcote'	Bushy :5 brks :C :PG 8		30-40cm	3L	3/m²
672 -	Hypericum x moserianum	Bushy :7 brks :C :PG 8		30-40cm	3L	4/m²
139 -	Ilex aquifolium	Leader With Laterals		40-60cm	3L	1/m²
173 -	Lavandula angustifolia 'Hidcote'	Bushy :5 brks :C :PG 10		20-30cm	3L	3/m²
139 -	Ligustrum vulgare (*)	0/2 :Cutting :Branched :3 brks :B		60-80cm		1/m²
187 -	Lonicera pileata	Bushy :6 brks :C :PG 2	30-40cm		3L	3/m²
457 -	Mahonia aquifolium 'Apollo'	Branched :2 brks :C :PG 8		20-30cm	3L	4/m²
588 -	Prunus laurocerasus 'Otto Luyken'	Bushy :5 brks :C :PG 8		40-60cm	5-7.5L	3/m²
68 -	Rosa canina (*)	1+1 :Transplant :Branched :3 brks :B		40-60cm		1/m²
68 -	Sambucus nigra	1+1 :Transplant :Branched :3 brks :B		60-80cm		1/m²
35 -	Skimmia japonica 'Rubella'	Bushy :4 brks :C :PG 8		30-40cm	5L	3/m²
109 -	Spiraea japonica 'Anthony Waterer'	Branched :6 brks :C :PG 6		30-40cm	3L	3/m²
139 -	Viburnum lanata	1+2 :Transplant :Branched :3 brks		60-80cm		1/m²
139 -	Viburnum opulus	1+2 :Transplant :Branched :3 brks :B		60-80cm		1/m²
141 -	Viburnum tinus 'Eve Price' (*)	Bushy :5 brks :C :PG 1		30-40cm	5L	2/m²

Bulbs

No.	Species Name	Specification	Diameter	Pot Size	Density
2705 -	Galanthus Nivalis	Grade 5/6			150/m²
591 -	Hyacinthoides non-scripta	Grade 6/7			100/m²
2385 -	Narcissus pseudonarcissus	Grade 5/6			100/m²

HEDGE PLANTING DETAIL - DOUBLE STAGGERED ROW:





TYPICAL TREE PIT DETAIL (SHRUB BED AREAS):

1.0 SOILS: subsoil / topsoil to be excavated to form tree pit, depth to be based on the planting depth of the tree (distance from root flare to underside of rootball), with soils retained and placed separately for backfilling pit .

2.0 TOPSOIL: multi-purpose imported or as dug topsoil to 450mm depth for shrub planting areas.

3.0 ROOT BALL / BARE ROOTS: tree pits sizes to be at least 75mm wider than the tree root system or rootball.

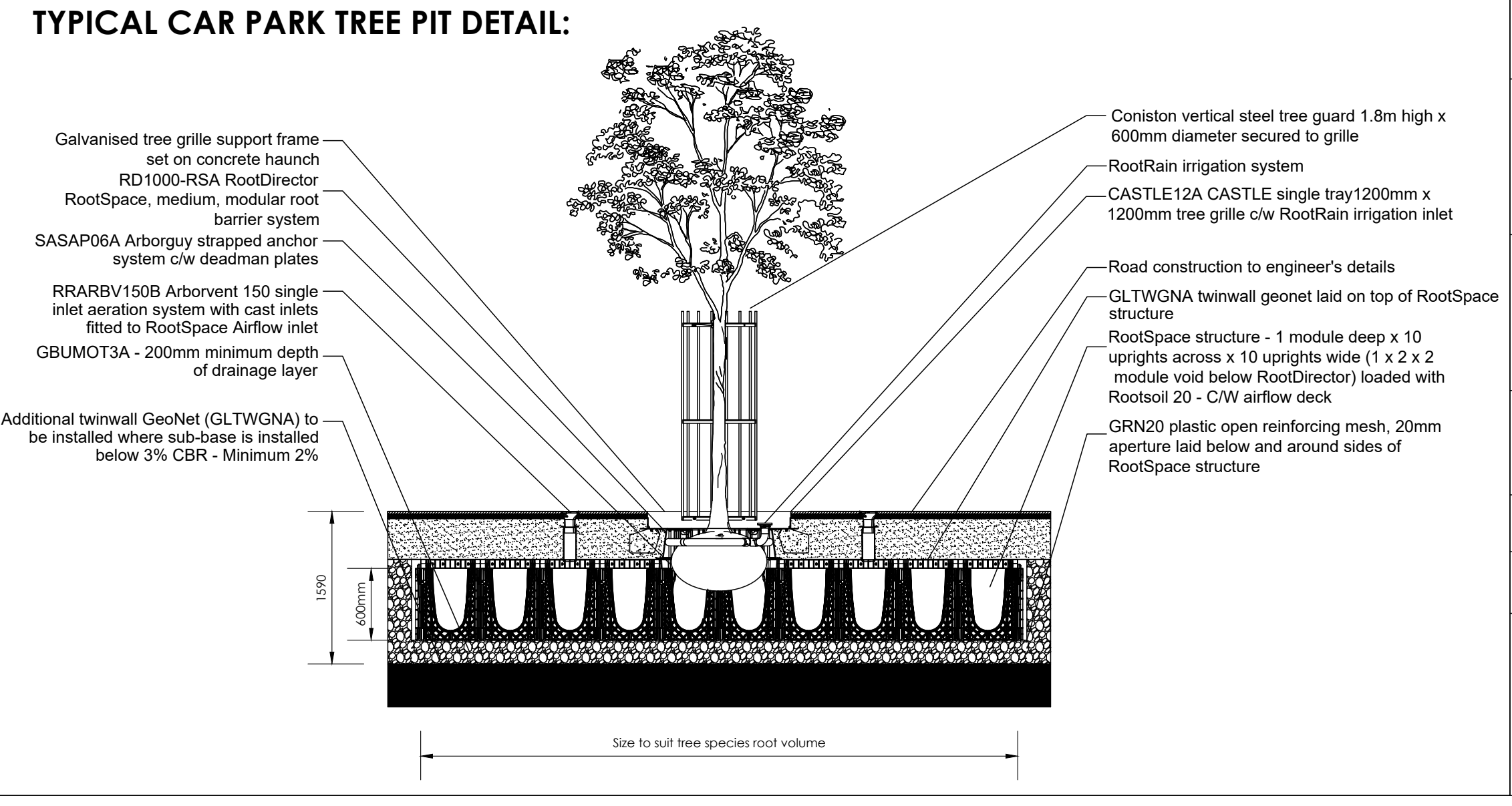
4.0 IRRIGATION: RR3A RootRain Metro irrigation system with plastic cap and fixing bracket. Secure to stake with 50mm galvanised nail. Ensure cap finishes slightly above finished surface level

5.0 MULCH LAYER: finished with Melcourt amenity grade bark mulch to a minimum depth of 75mm.

6.0 STAKES: softwood timber rounds, peeled chestnut, larch or oak, free from projections and large or edge knots and with pointed lower end; 75mm diameter, 2000mm height. 600mm above ground.

7.0 TIES: tree held to stakes with 35mm flexible webbing and 40mm spacer sleeves fixed to stake with galvanized clout nails.

TYPICAL CAR PARK TREE PIT DETAIL:


Galvanised tree grille support frame set on concrete haunch
RD1000-RSA RootDirector RootSpace, medium, modular root barrier system
SASAP06A Arborguy strapped anchor system c/w deadman plates
RRARBV150B Arborvent 150 single inlet aeration system with cast inlets fitted to RootSpace Airflow inlet
GBUMOT3A - 200mm minimum depth of drainage layer
Additional twinwall GeoNet (GLTWGNA) to be installed where sub-base is installed below 3% CBR - Minimum 2%
Coniston vertical steel tree guard 1.8m high x 600mm diameter secured to grille
RootRain irrigation system
CASTLE12A CASTLE single tray1200mm x 1200mm tree grille c/w RootRain irrigation inlet
Road construction to engineer's details
GLTWGNA twinwall geonet laid on top of RootSpace structure
RootSpace structure - 1 module deep x 10 uprights across x 10 uprights wide (1 x 2 x 2 module void below RootDirector) loaded with Rootsoil 20 - C/W airflow deck
GRN20 plastic open reinforcing mesh, 20mm aperture laid below and around sides of RootSpace structure
1590
600mm
Size to suit tree species root volume

client:
CANMOOR

project:
GRIMSHAW LANE,
MANCHESTER

title:
PLANTING PLAN (PHASE 1)

status:
PLANNING

date:	drawn:	number:
NOV'22	E.C.H	20-93-07
scale@A0:	**checked:**	**revision:**
1:500	T.G-W	(-)

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