

PLANNING NOTES (SOFT LANDSCAPE):

1. SOILS: Subgrade / subsoil to be prepared in accordance with BS 8801:2013 and BS 4428:1989 and scarified or ripped to 300mm depth (excluding root protection areas of retained trees refer to Tree Protection Plan) 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 882:2015. Grass areas to be a minimum depth of 150mm. Shrub & hedge beds 450mm depth. Any weed / grass growth to be sprayed out with appropriate herbicide at least 10 days before 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 BS PAS 100 to 50mm depth evenly worked into soil during cultivation.

NB 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 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 waisthigh barriers in a scaffold framework in accordance with BS 5837:2012 Figure 2. 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 4.8. 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 3996:2010. 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, double stacked (10-12cm - 14-16cm girth trees) and tied with webbing loops in prepared pits. Tree pits in open field / uncompacted ground conditions or shrub beds 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, incorporating Rootgrow professional (RGPro as supplied by Empathy) and Serrabran N Mag Pre-planter Fertiliser in accordance with manufacturers recommendations. Root balls to be encased by Root Ram 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.

Where trees are to be planted in heavily compacted ground, tree pits are to be excavated to achieve the an uncompacted growing volume with pits being approximately 4m x 4m x900mm backfilled with excavated subsoil and topsoil (as described above) mixed with 160L of peat free tree planting compost.

Generally all trees are to be planted as shown ensuring a minimum of 5 metres from buildings and 3 metres from drainage or services. 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. SHRUB 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. Shrubs to be pit planted incorporating Rootgrow professional in accordance with manufacturers recommendations and Agrilene 'Yellow' tablets evenly distributed around the plant at 200mm depth with 2 tablets for plants up to 3 ltrs, 3 tablets for plants up to 5 ltrs and 4 ltrs for plants up to 10lrs. 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 'Ornamental Bark Mulch' (or similar approved by the landscape architect) and kept weed free.

8. NATIVE TREE & SHRUB PLANTING: plants to be in accordance with BS 3936 and planted in accordance with BS 4428:1989. Shrub 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. With tree species at 2m centres randomly planted within the area. Bare root transplants to be root dipped with Broadleaf Root Dip prior to planting. Planted areas to be kept weed free and protected from rabbits, with rabbit fence and / or individual mesh tree guards securely fixed to timber stakes(s).

9. 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 till. 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. 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 Emorgate Seeds and include the following sown in accordance with suppliers recommendations.

EM2 'Standard General Purpose Meadow Mixture' to general landscape areas (sown at 4g/m2)

EH1 'Hedgerow mix' to woodland edges (sown at 4g/m2)

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

- Eradicate weeds by hand or appropriate chemical means.
- Cut out dead or / and damaged stock or branches, prune as required.
- Ensure all shrubs and trees are firmed in, securely staked and tied with guards where applicable.
- Collect litter, sweep and tidy site.
- Apply suitable non-residual herbicides, pesticides and water as required.
- Carry out mowing to grass areas when attained 100mm, cut to 35mm (50mm for shaded areas) approximately 2 week intervals during the growing season.
- Carry out mowing to wildflower areas as per Emorgate Seeds Ltd literature First year & Established sward guidance.
- All hedges to plot frontages be maintained to a max height of 2.0m.
- At final visit apply granular fertiliser to all planted areas and top up bark mulch depth to 75mm.

11. 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 be 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 16 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.

Plant Schedule					
Trees					
No.	Species Name	Specification	Girth	Height	Density
1	Species Name	Specification	Girth	Height	Density
2	Acer campestre	1+1: Transplant B	3x: 100cm	17m	
2	Amelanchier x grandiflora 'Robin Hill'	3x: Extra Heavy Standard 'Clear Stem 175-200.5 bks: RB: PG: 11-14-16cm	3x: 100cm	425-600cm	Counted
3	Carpinus betulus	1+1: Transplant B	3x: 100cm	80-100cm	Counted
9	Carpinus betulus	3x: Extra Heavy Standard 'Clear Stem 175-200.5 bks: RB: PG: 11-14-16cm	3x: 100cm	400-450cm	Counted
8	Carpinus betulus 'Fastigiata'	3x: Extra Heavy Standard 'Clear Stem 175-200.5 bks: RB: PG: 11-14-16cm	3x: 100cm	400-450cm	Counted
3	Carpinus betulus 'Fastigiata'	3x: Extra Heavy Standard 'Clear Stem 175-200.5 bks: RB: PG: 11-14-16cm	3x: 100cm	400-450cm	Counted
5	Pinus sylvestris	1+2: Transplant B	3x: 100cm	60-80cm	Counted
8	Sorbus aucuparia 'Cardinal Royal'	3x: Extra Heavy Standard 'Clear Stem 175-200.5 bks: RB: PG: 11-14-16cm	3x: 100cm	400-450cm	Counted
Hedging					
No.	Species Name	Specification	Girth	Diameter	Height
34	Acer campestre (*)	1+1: 3 bks: BR	40-60cm	40-60cm	1.7m
80	Cornus sanguinea	1+1: Transplant 'Branched 2 bks: B	40-60cm	40-60cm	1.7m
34	Cornus avelana (*)	1+1: 2/3 bks: BR	40-60cm	40-60cm	1.7m
68	Crataegus monogyna (*)	1+1: Transplant 'B	40-60cm	40-60cm	1.7m
53	Escalonia rubra macrantha (*)	Bushy 4 bks: C: PG 9	40-60cm	40-60cm	1.7m
17	Euonymus europaeus	1+2: Transplant 'Branched 5 bks: B	40-60cm	40-60cm	1.7m
17	Ilex aquifolium (*)	Bushy 2 bks	40-60cm	40-60cm	1.7m
112	Ligustrum vulgare (*)	0/2: Cutting 'Branched 3 bks: B	40-60cm	40-60cm	1.7m
17	Rosa pimpinellifolia	1+1: Transplant 'Branched 3 bks: B	40-60cm	40-60cm	1.7m
17	Sambucus nigra	1+1: Transplant 'Branched 3 bks: B	40-60cm	40-60cm	1.7m
80	Viburnum opulus	1+2: Transplant 'Branched 3 bks: B	40-60cm	40-60cm	1.7m
17	Viburnum opulus (*)	1+1: BR: 3 bks	40-60cm	40-60cm	1.7m
Shrubs					
No.	Species Name	Specification	Diameter	Height	Pot Size
74	Brachyglottis 'Sunshine'	Branched 4 bks: C: PG 8	40-60cm	40-60cm	1.7m
14	Cornus sanguinea	1+1: Transplant 'Branched 2 bks: B	40-60cm	40-60cm	1.7m
10	Cornus sanguinea	1+1: Transplant 'Branched 2 bks: B	40-60cm	40-60cm	1.7m
19	Cornus avelana	1+2: Transplant 'Branched 3 bks: B	40-60cm	40-60cm	1.7m
10	Cornus avelana	1+2: Transplant 'Branched 3 bks: B	40-60cm	40-60cm	1.7m
14	Crataegus monogyna	1+1: Transplant 'B	40-60cm	40-60cm	1.7m
10	Crataegus monogyna	1+1: Transplant 'B	40-60cm	40-60cm	1.7m
5	Euonymus europaeus	1+2: Transplant 'Branched 5 bks: B	40-60cm	40-60cm	1.7m
4	Euonymus europaeus	1+2: Transplant 'Branched 5 bks: B	40-60cm	40-60cm	1.7m
68	Hedera 'Mrs Winder'	Bushy 5 bks: C: PG 9	40-60cm	40-60cm	1.7m
39	Hypericum 'Hidcote'	Bushy 5 bks: C: PG 8	40-60cm	40-60cm	1.7m
14	Ilex aquifolium	Leader With Lateralis	40-60cm	40-60cm	1.7m
7	Ilex aquifolium	Leader With Lateralis	40-60cm	40-60cm	1.7m
28	Lavandula angustifolia 'Hidcote'	Bushy 5 bks: C: PG 10	40-60cm	40-60cm	1.7m
11	Ligustrum vulgare (*)	0/2: Cutting 'Branched 3 bks: B	40-60cm	40-60cm	1.7m
7	Ligustrum vulgare (*)	0/2: Cutting 'Branched 3 bks: B	40-60cm	40-60cm	1.7m
21	Lonicera pileata	Bushy 4 bks: C: PG 2	40-60cm	40-60cm	1.7m
115	Prunus laurocerasus 'Otto Luyken'	Bushy 5 bks: C: PG 8	40-60cm	40-60cm	1.7m
4	Rosa carolina (*)	1+1: Transplant 'Branched 3 bks: B	40-60cm	40-60cm	1.7m
4	Sambucus nigra	1+1: Transplant 'Branched 3 bks: B	40-60cm	40-60cm	1.7m
7	Viburnum lanata	1+2: Transplant 'Branched 3 bks: B	40-60cm	40-60cm	1.7m
7	Viburnum opulus	1+2: Transplant 'Branched 3 bks: B	40-60cm	40-60cm	1.7m

LEGEND: SOFT LANDSCAPING

- GROUND COVER: deciduous and evergreen shrub ground cover planting with specimen shrubs
- EVERGREEN HEDGE: evergreen shrub hedge as detailed
- SPECIMEN SHRUBS: specimen shrub planting as detailed
- WILDFLOWER MEADOW AREAS: to be seeded with Emorgate EM2 wildflower seed mix to open areas and EH1 to the woodland edge
- DECIDUOUS HEDGE: native tree and shrub species mix hedge as detailed
- NATIVE SHRUB PLANTING: native species planting mix at 500mm centres
- NATIVE TREE & SHRUB PLANTING: native species planting mix at 1m centres. Trees at 2m centres to Northern half of area seeded with Emorgate EH1
- ORNAMENTAL GRAVEL: pea gravel from local source; 50-75mm minimum depth, refer to notes
- TREE PLANTING: standard tree planting with canopy spread illustrated at 25 years growth
- EXISTING TREES: to be retained in accordance with BS 5837 'Trees in relation to Construction' 2012
- TREES TO BE REMOVED

NATIVE TREE & SHRUB MIX:
7 No. Acer campestre 7%
7 No. Cornus betulus 7%
14 No. Cornus sanguinea 15%
19 No. Corylus avellana 20%
14 No. Crataegus monogyna 15%
5 No. Euonymus europaeus 5%
14 No. Ilex aquifolium 3L 15%
11 No. Ligustrum vulgare (*) 11%
5 No. Pinus sylvestris 5%

VEGETATED RETAINING WALL SYSTEM:
to engineers details, hydresseded with Wildflower mix EH1

Double Staggered hedge:
62 No. Cornus sanguinea 25%
13 No. Euonymus europaeus 5%
86 No. Ligustrum vulgare (*) 35%
13 No. Rosa pimpinellifolia 5%
13 No. Sambucus nigra 5%
62 No. Viburnum opulus 25%

Double Staggered hedge:
18 No. Cornus sanguinea 25%
4 No. Euonymus europaeus 5%
26 No. Ligustrum vulgare (*) 35%
4 No. Rosa pimpinellifolia 5%
4 No. Sambucus nigra 5%
18 No. Viburnum opulus 25%

NATIVE SHRUB MIX:
10 No. Cornus sanguinea 15%
10 No. Corylus avellana 15%
10 No. Crataegus monogyna 15%
4 No. Euonymus europaeus 5%
7 No. Ilex aquifolium 3L 10%
7 No. Ligustrum vulgare (*) 10%
4 No. Rosa carolina (*) 5%
4 No. Sambucus nigra 5%
7 No. Viburnum lanata 10%
7 No. Viburnum opulus 10%

Double Staggered hedge:
34 No. Acer campestre (*) 20%
10 No. Cornus avelana (*) 20%
68 No. Crataegus monogyna (*) 40%
17 No. Ilex aquifolium (*) 3L 10%
7 No. Viburnum opulus (*) 10%

2 No. Carpinus betulus 'Fastigiata' 14-16cm
52 No. Prunus laurocerasus 'Otto Luyken' 5-7.5L

1 No. Carpinus betulus 'Fastigiata' 14-16cm

30 No. Hedera 'Mrs Winder' 3L

3 No. Sorbus aucuparia 'Cardinal Royal' 14-16cm

39 No. Hypericum 'Hidcote' 3L

41 No. Brachyglottis 'Sunshine' 3L

32 No. Escalonia rubra macrantha (*) 3L

5 No. Sorbus aucuparia 'Cardinal Royal' 14-16cm

218 No. Escalonia rubra macrantha (*) 3L

TYPICAL TREE PIT DETAIL:

- SOILS: subsoil and 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 to be imported and backfilled with topsoil to be replaced with imported subsoil to BS 8601:2013.
- SUBSOIL: as dug subsoil to be used to backfill the tree pit to depth to match the existing soil profile. NB where excavated subsoil and hardcore the existing backfill is to be replaced with imported subsoil to BS 8601:2013.
- ROOT BALL / BARE ROOTS: tree pit sizes to be at least 75mm wider than the tree root system or rootball.
- TOPSOIL: topsoil enriched as specified (refer to item 4.0 in the drawing notes) and used to backfill the upper part of the tree pit to match the existing soil profile.
- IRRIGATION: R33A RootRam Metro irrigation system with plastic caps and firing bracket. Secure to stake with 30mm galvanised nail. Ensure cap finishes slightly above finished surface level.
- MULCH LAYER: finished with Melcourt amenity grade bark mulch to a minimum depth of 75mm.
- STAKES: softwood timber rounds, peeled chestnut, larch or oak, free from projections and large or edge knots and with pointed lower ends. 75mm diameter to comply with the require clients ground.
- NETS: free fixed to stakes with 35mm flexible webbing and 40mm spaced cleaver heads to stake with galvanised coil nails.

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Refer only queries to office of originator.

rev	date	amendments	alt:
A	25.08.21	Layout amendments.	E.H
B	27.10.21	Northern boundary amended.	E.H
C	08.12.21	Levels amended, retaining walls added.	E.H
D	07.03.22	Planting & specification amended.	E.H
E	17.05.22	Retaining wall and planting amended.	E.H
F	24.05.22	Planting to Acom Road and rear of Unit amended.	E.H
G	16/01/23	Layout amended.	E.H
H	30/10/24	To co-ord with revised layout.	E.H
J	25/11/24	Layout amendments.	L.D

cdm 2015: designers residual risk information

In addition to the risks & hazards normally associated with the type of work detailed on this drawing the following residual risks should be noted:

Construction:

Standard Soft Landscape Works Only. No Additional identifiable Risks.

- Changes in level across the site including imposed access / steps.
- A 2m retaining wall between the retaining wall and the site.
- The proximity of adjacent pavements, estate roads & car parks.
- The proximity of adjacent buildings and associated buried services.

Maintenance:

Standard Soft Landscape Works Only. No Additional identifiable Risks.

Changes in level across the site including imposed access / steps.

- A 2m retaining wall between the retaining wall and the site.
- The proximity of adjacent pavements, estate roads & car parks.
- The proximity of adjacent buildings and associated buried services.

It is assumed that works will be carried out by competent contractor working where appropriate to an approved method statement.



client: KNOWSLEY (IMAGE BUSINESS PARK) LTD

project: SITE 2, IMAGE BUSINESS PARK KNOWSLEY

title: PLANTING PLAN

status: PLANNING

date: MAY 21
scale: A3
1:250

drawn: E.C.H.
checked: J

number: 21-59-03
revision: J

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