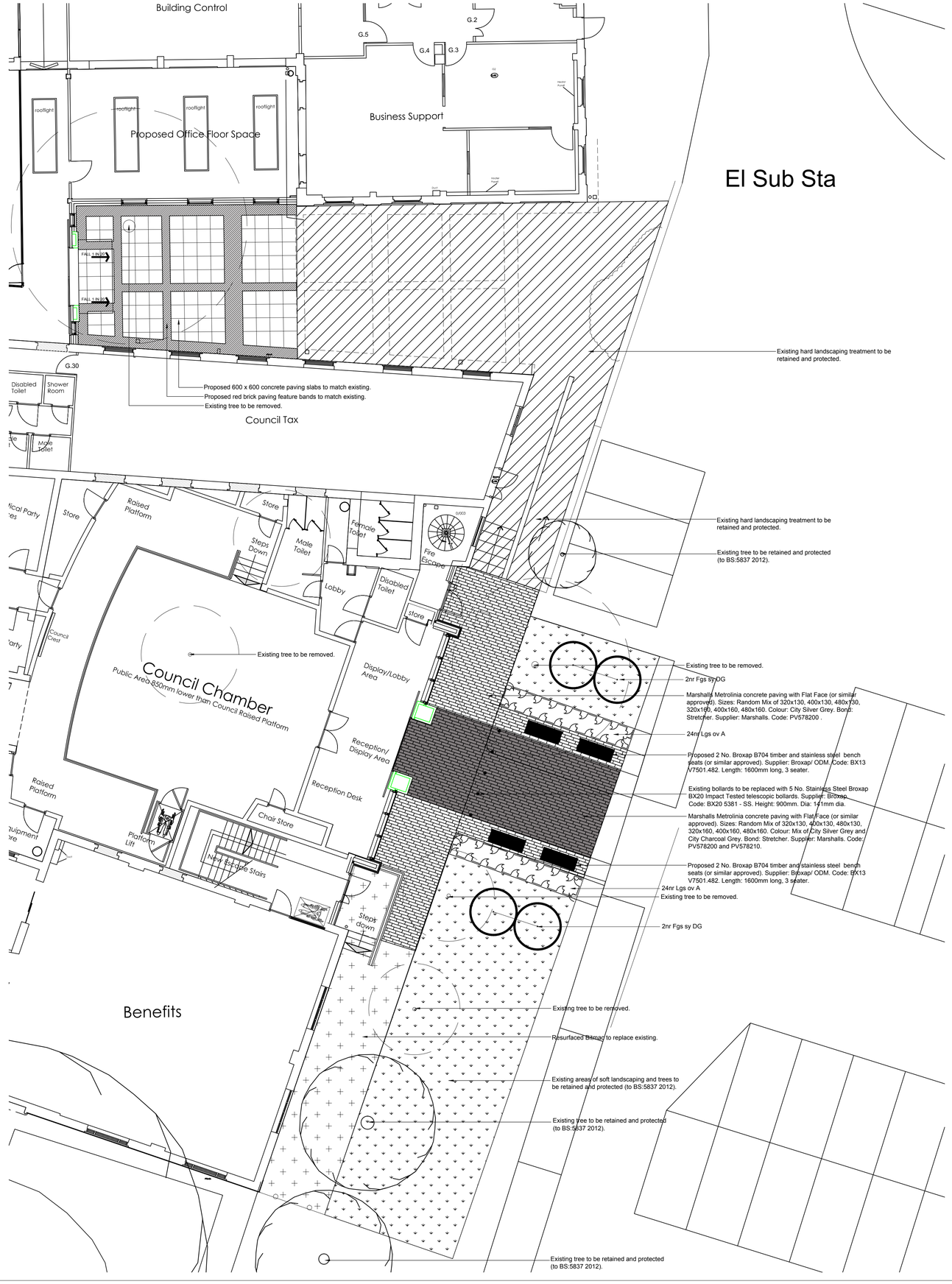


El Sub Sta

# PLANTING SCHEDULE

## Tree Planting

| Qty | Abb. Text | Species | Form | Age | Girth | Height | Clear Stem | Root |
|---|---|---|---|---|---|---|---|---|
| 4 | Fgs sy DG | Fagus sylvatica 'Dawyck Gold' | Feathered | 3x | 18-20cm | 450-650cm | | RB |
| | | | | | | | | |
| 4 | | | | | | | | |

## Hedge Planting (4 plants per lin.m)

| Qty | Abb. Text | Species | Container | Habit | Height | Root |
|---|---|---|---|---|---|---|
| 48 | Lgs ov A | Ligustrum ovalifolium 'Aureum' | 3L | Branched | 40-60cm | C |
| | | | | | | |
| 48 | | | | | | |

Marshalls Metrolinia concrete paving in City Silver Grey.

Stainless Steel Broxap BX20 Impact Tested telescopic bollards.

Marshalls Metrolinia concrete paving in City Charcoal Grey.

Existing paving treatment to be retained.

Marshalls Metrolinia concrete paving in City Silver Grey and City Charcoal Grey.

*Fagus sylvatica* 'Dawyck Gold'

Broxap B704 Seat.

*Ligustrum ovalifolium* 'Aureum' hedge

## KEY - Soft Landscape

Existing areas of soft landscaping to be retained and protected (to BS:5837 2012).

Existing trees to be retained and protected (to BS:5837 2012).

Existing trees to be removed.

Proposed fastigiate trees

Proposed shrub planting. 4 plants per m2 in double staggered rows.

## KEY - Hard Landscape

Marshalls Metrolinia concrete paving with Flat Face (or similar approved).
Sizes: Random Mix of 320x130, 400x130, 480x130, 320x160, 400x160, 480x160
Colour: Mix of City Silver Grey and City Charcoal Grey
Bond: Stretcher. Supplier: Marshalls. Code: PV578200 and PV578210

Marshalls Metrolinia concrete paving with Flat Face (or similar approved).
Sizes: Random Mix of 320x130, 400x130, 480x130, 320x160, 400x160, 480x160
Colour: City Silver Grey
Bond: Stretcher. Supplier: Marshalls. Code: PV578200

Existing hard landscaping treatment to be retained and protected.

Proposed 600 x 600 concrete paving slabs to match existing.

Proposed resurfacing of bitmac to replace existing.

Proposed red brick paving feature bands to match existing.

Proposed 4 No. Broxap B704 timber and stainless steel bench seats (or similar approved).
Supplier: Broxap/ ODM
Code: BX13 V7501.482
Length: 1600mm long, 3 seater.

Existing bollards to be replaced with 5 No. Stainless Steel Broxap BX20 Impact Tested telescopic bollards.
Supplier: Broxap.
Code: BX20 5381 - SS
Height: 900mm. Dia: 141mm dia.

## CLEARANCE SPECIFICATION

**REMOVAL OF EXISTING TREES TO BE REMOVED:**
**Method:**
- Carry out tree removal as per Drawing AAA5123_017, in accordance with BS 3998, Health & Safety Executive (HSE) 'Forestry and arboriculture safety leaflets' and Forestry Advisory Group Safety Guides.
- Removing small trees, shrubs, hedges and roots:
  - Identification: Clearly mark trees to be removed.
  - Small trees, shrubs and hedges: Cut down
  - Roots: Grub up and dispose of without undue disturbance of soil and adjacent areas
- Safety: Comply with HSE/ Arboriculture and Forestry Advisory Group Safety Guides.
- Felling large trees:
  - Definition: Girth over 600 mm.
  - Identification: Clearly mark trees to be removed.
  - Safety: Comply with HSE/ Arboriculture and Forestry Advisory Group Safety Guides.
  - Felling: As close to the ground as possible.
  - Stumps: Removal with Stump Grinder (or similar).
  - Work near retained trees: Take down trees carefully in small sections to avoid damage to adjacent trees that are to be retained, where tree canopies overlap and in confined spaces generally.

**REMOVAL OF WEED GROWTH AND SCRUBBY VEGETATION**
**Method:**
- Hand Weeding (beneath tree canopies):
  - General: Remove weeds entirely, including roots.
  - Disturbance: Remove the minimum quantity of soil, and disturb plants, bulbs and mulched surfaces as little as possible.
  - Completion: Rake area to a neat, clean condition.
  - Mulch: Reinstate to original depth (where appropriate).

## PLANTING SPECIFICATION

EXISTING TREES AND SHRUBS

Where existing trees & shrubs are to be retained they should be subject to a full arboricultural inspection for safety.

Any surgery required shall be in accordance with BS 3998 (2010) 'Tree Work - Recommendations', shall comply with any existing T.P.O requirements and shall require the prior approval of the Landscape Architect.

Avoid damage to branches, trunks and roots of trees. All existing trees & hedges to be retained are subject to BS 5837 (2012) 'Trees in relation to design, demolition and construction - Recommendations', and should be fully fenced off, prior to the commencement of any works, in accordance with Figure 2 (p20) at the full extent of the root protection area, as determined by section 4.6 (p10-11) and Annex D (p40).

No storage of materials, disposal of rubbish, site fires, spillage of oil and chemicals, ground compaction, excavation or changes in level shall be carried out within existing tree / hedge canopies.

PLANTING

All plants and planting to comply with the requirements of all current / relevant British Standard specifications including BS 3936: Part 1 (1992), Part 2 (1990) and Part 4 (1984) and BS 4043 (1989) where applicable, BS 4428 (1989) and the BALI / LI / Nursery Trade Tender Document (5th Edition 1986). All plants to be supplied in accordance with the plant schedule. Any plant material planted outside the recognised planting season (Nov-Feb), to be containerised stock and supplied at the sizes specified.

TREE PLANTING

A suitable method of foundation allowing for existing ground conditions is to be provided to accommodate the proposed tree planting. All trees are to be planted as shown ensuring a minimum of 5 metres from buildings and 3 metres from drainage and services. Where necessary, root barriers to be installed (supplier Greenleaf or similar approval), as recommended by structural engineer. Allow for the use of container grown stock during the period 1 April to 31 October, and field grown stock from 1 November to 31 March.

TOPSOIL REQUIREMENTS

To BS 3882 (2007) as qualified by full contract specification. All areas shall be cultivated to a minimum depth of 150mm. Full weed, rubbish and stones over 20mm gauge shall be removed. Earth to be rolled as required and raked in two directions. Applied to all newly planted areas (except wildflower / meadow planting), to manufacturer's recommendations where appropriate.

| | | |
|---|---|---|
| Shrub / structure planting beds | - | 450mm depth |
| Heavy standard tree pits | - | 1500mm dia. x 900mm depth |
| Grass areas (incl. rear gardens) | - | 150mm depth |

Where necessary increase tree pit dimensions to ensure that tree pits are at least 75mm deeper and 150mm wider than rootball. Break up bottom of pits to a depth of 150mm. Compacted glazed sides of pits should be roughened.

Full analysis of existing and imported topsoil required prior to use.

TOPSOIL IMPROVEMENTS

Applied to all newly planted areas, to manufacturers' recommendations where appropriate:

1) Incorporate 75mm depth of soil conditioner into topsoil during cultivation;
2) Incorporate Alginure (Seanure Soilbuilder) Soil Improver approx. 1.5KG/m3 to tree pit backfill and 75g/m2 to shrub beds;
3) Incorporate Enmag (6:20:10) granular fertilizer approx 400g/m3 to tree pit backfill and 100g/m2 to structural/ornamental beds;
4) Watering - supply minimum 54 litres/tree and 4.5 litres/shrub at planting;
5) Mulch - lightly fork over planted areas before applying a 75mm depth 50-100mm grade bark mulch. Ornamental Bark to consist of predominantly matured British Pine Bark with an even nominal particle size distribution of 5-35mm with 0% dust & fines & less than 5% wood content. The product shall be pest, disease & weed free & not have been treated with Methyl Bromide or any additives. The product shall have been tested in accordance with the requirements of BS 4790:1987, for fire resistance. NB - Watering to be carried out prior to application of bark mulch.

PLANT MATERIAL TREATMENT

NB All to be British grown stock and fully hardened off.

Root Dip - Proprietary Root Dip applied to all bare rooted stock (1) at time of lifting at nursery and (2) prior to planting.

Anti-Desiccant - Proprietary anti-desiccant to be applied to foliage of all containerised / rootballed material in leaf, specimen conifers and evergreens etc. (1) prior to transportation and (2) during any delay in planting.

Pruning - Allow for pruning of all deciduous trees and shrubs by 1/3rd following planting at Landscape Architects direction or as indicated in the planting schedule.

Tree Stakes & Ties - Stakes to be pressure treated, round, smooth and peeled Larch or Chestnut, not less than 100mm in diameter. Advanced nursery stock - double staked with cross bar.

TREE STAKES, TIES & GUARDS

Trees planted within grassed areas to be provided with appropriate conical strimmer guards. Stakes to be pressure impregnated softwood, round, peeled, straight, free of projections and pointed at one end. Minimum length and thickness to be determined as follows:

| | | | |
|---|---|---|---|
| Tree type | Min Dia. | Overall Height | Height exposed above ground |
| Ex / Hvy Std | 100mm | 1.8m | 0.6m |
| Tree type | No. stakes | No. ties | |
| Ex / Hvy Std | 2 | 1 | |

TURFED AREAS

Turf to BS 3969 from an approved source. When topsoil is reasonably dry and workable, grade to smooth, flowing contours removing all minor hollows and ridges. Cultivate soil to full depth and break up any compacted topsoil. Apply approved herbicide to control perennial weeds and allow period of time to elapse as recommended by manufacturer before final cultivation. Apply proprietary fertiliser. Reduce top 25mm topsoil to a fine tilth by further cultivation. Remove stones exceeding 50mm in any dimension. Lay turf with broken joints, well butted up, working from planks laid on previously laid turves, during appropriate season and weather conditions. Adjust levels by raking out or filling with fine soil under turves. Consolidate by lightly and evenly firming with wooden beaters as laying proceeds. Do not use rollers. Dress turf with fine topsoil and brush in to fill joints. Thoroughly water completed turf within 24 hours of laying.

TURFED AREAS: ESTABLISHMENT CUT

Water all grass areas to maintain healthy growth. When grass is 50mm high remove debris, litter and any stones later in dry conditions cut grass to between 25-30mm. Remove and dispose of all arisings.

GRASS SEEDED AREAS

Grass seeding generally to BS 4428. When topsoil is reasonably dry and workable grade to smooth flowing contours removing all hollows and ridges. Cultivate soil to full depth and break up any compacted topsoil. Apply approved herbicide to control perennial weeds and allow period of time to elapse as recommended by manufacturer before final cultivation. Apply proprietary pre-seeding fertilizer. Reduce top 25mm of topsoil to a fine tilth by further cultivation. Remove stones exceeding 50mm in any dimension. Sow approved grass seed mixture in accordance with suppliers recommendations during appropriate season and weather conditions, e.g. British Seed House Mix A2 (Quality Lawn) 50gms/m2. Lightly harrow or rake then roll and cross-roll with lightweight roller.

GRASS SEEDED AREAS: ESTABLISHMENT CUT

When grass is between 40-75mm high remove stones and debris exceeding 50mm in any dimension and roll with a lightweight roller. About 48 hours later cut grass to approximately 35mm high. Remove and dispose of all arisings.

PROTECTIVE FENCING

The contractor shall maintain fencing until all site works are completed. The contractor will then remove the fencing and reinstate the ground. The fencing will remain the property of the contractor.

Within the area so fenced, the existing ground level shall be neither raised nor lowered, all excavations shall then be carried out by hand.

The Local Planning Authority shall be advised in writing when the protective fencing has been erected so that it can be checked on site before development commences, and shall thereafter be maintained during the period of construction.

MAINTENANCE

Regular visits (minimum 20 No.) required during the defects liability period to maintain all planted areas in a weed and litter free condition using a combination of chemical spray and hand weeding to be agreed with the Landscape Architect. Maintenance to include watering, pruning, pest and disease control and re-mulching as required. Grass areas to be mowed at 2 week intervals during the growing season.

Structure planting areas shall be maintained as non competitive weed free environment by repeated applications of a glyphosate based herbicide. Persistent weeds and unwanted scrub shall be spot treated as necessary with an alternative herbicide to be agreed with the Landscape Architect.

Watering shall be carried out as necessary to maintain healthy growth or as required by the Landscape Architect.

NB: Final visit to be immediately prior to handing over and to include a fertilizer treatment of Enmag (6:20:10) at 100g/m2 and 25mm depth bark mulch top up to all planted areas.

BUFFER PLANTING: FEATHERED TREES AND WHIPS

Notch planting will not be permitted. All feathered trees and whips will be planted in prepared pits 600mm diameter x 600mm deep for feathered trees and 300mm diameter x 300mm deep for whips.

Each plant shall be placed upright in the centre of the pit with the roots spread evenly outwards and downwards without restriction, and backfilled with topsoil (to BS 3882: 2007), incorporating Fisons Tree Planting Compost at a rate of 10 litres/whip pit and 40 litres/feathered tree pit, well mixed with topsoil backfill in consolidated layers, shaking the trees to remove voids.

Incorporate Alginure 'Seanure Soilbuilder' Soil Improver at a rate of 100 gms/whip pit and 325 gms/feathered tree pit, well mixed with backfill.

Incorporate Fisons Ficote 70 (14:14:14) Controlled Release Fertilizer at a rate of 60 gms/whip pit and 510 gms/feathered tree pit, well mixed with backfill.

Supply water at a minimum 4.5 litres/whip and 18 litres/feathered tree prior to bark mulching.

Feathered trees shall be staked using 1.0m long Larch or Chestnut stakes, round, smooth, and peeled with 75mm diameter at the point and not less than 50mm at the butt end, driven at least 600mm into the ground. Trees will be secured to the stake using a single 'Tom Tie' or similar approved securely nailed at a point 50mm from the top of the stake to ensure no rubbing or excessive movement.

The plant shall be well firmed, with the soil level 10mm above nursery level to allow for settlement. Clear away surplus soil and after watering apply a minimum 75mm deep x 300mm diameter collar of 50-75mm grade coarse bark mulch. All tree species to be fitted with proprietary rabbit guards.

SAFETY PRECAUTIONS

The landscape sub-contractor is to take all safety precautions to prevent any injury to any persons. The landscape sub-contractor shall comply with the requirements of the Health & Safety at Work Act 1974 and current Construction, Design and Management Regulations.

All subject to Local Authority approval.

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1:20 - 0 | | 200mm | | 400mm | | 600mm | | 800mm | 1000 | 1200 | 1400 | 1600 | 1800 | 2000 | | | |
| 1:100- 0 | | 1m | | 2m | | 3m | | 4m | 5m | 6m | 7m | 8m | 9m | 10m | | | |
| 1:50 - 0 | | 1m | | | | 2m | | | 3m | | | 4m | | | | | 5m |
| 1:5 - 0 | | 100mm | | | | 200mm | | | 300mm | | | 400mm | | | | | 500mm |

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Project Campus East

Title Detailed Hard Landscape Proposals Sheet 1 of 1

| Status | Drawn By | PM/Checked by |
|---|---|---|
| Planning | BM | - |
| Job Ref | Scale @ A1 | Date Created |
| AAA5172 | 1:100 | Aug 2013 |

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