



ARBORICULTURAL METHOD STATEMENT

PROPOSED DEVELOPMENT
AT
LAND BETWEEN
BEVINGTON BUSH, GARDENERS ROW
AND EDGAR STREET
LIVERPOOL

Author: C. Salisbury
Date: 5 August 2015
Ref: TRE/BBGRES



1.0 Discussion

- 1.1 The majority of the root system, of a tree, is in the surface 600mm of the soil, extending radically for distances frequently in excess of the trees height. Beyond the main structural roots (close to the base of the trunk), the root system rapidly sub-divides into smaller diameter roots: off this main system, a mass of fine roots develops.
- 1.2 The shape of the main structural roots develops in response to the need for the tree to have physical stability. Beyond these major roots, root growth and development is influenced by the availability of water and nutrients. Unless conditions are uniform around the tree, which would be unusual, the extent of the root system will be very irregular and difficult to predict. It will not generally show the symmetry seen in the branch system.
- 1.3 The parts of the root system, which are active in water and nutrient uptake, are very fine, typically less than 0.5mm diameter. They are short lived, developing in response to the needs of the tree, with the majority dying each winter. It is *essential* that conditions in the soil remain conducive to the healthy growth of these fine roots so that the water and nutrients necessary for healthy tree growth can be absorbed.
- 1.4 All parts of the root system, but especially the fine roots, are vulnerable to damage. Once they are damaged, water and nutrient uptake will be restricted until new roots have regenerated. Vigorous young trees will be capable of rapid regeneration but over mature trees will respond slowly, *if at all*.
- 1.5 In order to live and grow, roots need oxygen from the soil. Respiration by the roots and other soil organisms depletes this oxygen and increases carbon dioxide levels in the soil; a correct balance of these gases is normally maintained by diffusion between the soil and the atmosphere. Anything, which disturbs this balance, will affect the condition of the root system.
- 1.6 The factors that most commonly affect this diffusion adversely, and therefore damage roots, are the following: -
 - a) Compaction of the ground, which reduces the space between soil particles. This is particularly important on clay soils. A single passage by heavy equipment on clay soils or storage of heavy materials can cause significant damage.
 - b) Changing soil levels, even for a few weeks.
 - c) Covering the root area with impervious surfaces.
 - d) A rise in the level of the water table. Roots can tolerate submersion for short periods. But a permanent rise will deplete the soil of oxygen.
- 1.7 Serious damage is often caused during preliminary site works by stripping the topsoil. For this reason, such works should be avoided until protective fencing has been erected.

- 1.8 Excavations in the rooting area can severe roots. As the majority of roots are in the surface 600mm, even shallow excavations can cause damage.
- 1.9 Excavations for foundations, landscaping or service trenches are usually sufficiently deep to severe most of the roots, and it should therefore be assumed that all parts of the root system beyond the excavation would no longer serve the tree.
- 1.10 Excavation or soil stripping which severe or damage the roots may impair the stability of the tree and make it dangerous.

2.0 Method Statement

Before any form of development commences on the site the following works should be undertaken: -

2.1 Tree Works

Tree No.	Proposed Works
T1, T2, G1, G2, G3, G4, G5, G6 & G7	Fell
G8	Crown lift to 3m

2.2 Protective Fencing

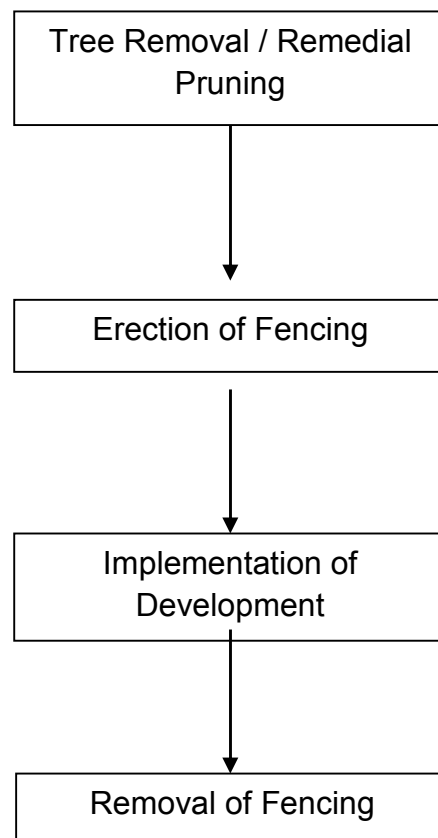
All fencing used on the site should fully comply with BS 5837:2012 (Trees in Relation to Construction – Recommendations).

- 2.2.1 The fencing should be strong and suitable for local conditions. It should also take into account the degree of construction activity on the site.
- 2.2.2 The fencing should be at least 2.3m in height and should be erected with both a vertical and horizontal scaffolding framework capable of withstanding impact, with vertical tubes spaced at a maximum of 3 m. This should support either weldmesh panels which should be securely fixed with wire or scaffold clamps.
- 2.2.3 Notices should also be erected on the fencing stating 'Protected Area - No operations within fenced area'.
- 2.2.4 The positioning of the protective fencing is also very important and should be erected in the proposed location identified in Appendix One. Once the fence has been erected it should never be crossed and particular care should be taken not to store any materials or soil within the protected area.

2.3 Additional Precautions Outside Fences Areas

- 2.3.1 Oil, bitumen, cement or other material likely to cause damage to the tree will not be stacked or discharged within 10m of the trees stem or within the protective area. Also materials in general will not be stacked or discharged within the exclusion zone.
- 2.3.2 Concrete mixing and washing will not be carried out within 10m of any retained trees.
- 2.3.3 Fires will not be lit beneath the foliage or in a position where the flames could extend to within 5m of the foliage, branches or trunk. If the fire is large then this may necessitate a distance of at least 20m.
- 2.3.4 Trees that are to be retained will not be used as anchorage for equipment.
- 2.3.5 Notice boards, telephone cables, or other services will not be attached to any part of the retained tree.
- 2.3.6 Care should be taken when using cranes or other equipment near the canopy of the retained trees. Also any trees to be felled in proximity to the retained trees should be done so with particular care.

2.4 Summary of Methodology for the Protection of the Trees



Appendix One

Tree Plan




THIS DRAWING IS COPYRIGHT PROTECTED AND MAY NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN AUTHORITY FROM THE OWNER.

NOTE:

- Do not scale from this drawing.
- Always work to noted dimensions.
- All dimensions are in millimetres unless otherwise stated.
- All setting out, levels and dimensions to be agreed on site.
- The dimensions of all materials must be checked on site before being laid out.
- This drawing must be read with the relevant specification clauses and detail drawings.
- Order of construction and setting out to be agreed on site.

- ADOPTED PATHS-TARMAC**
Subject to approval
- GRANITE**
To internal courtyard
Manufacture: Hampshire or equal and approved
Colour: Silver
Finish: Flamed
Dimensions: 500x100x55mm
- GRANITE**
To internal courtyard
Manufacture: Hampshire or equal and approved
Colour: Crystal Black
Finish: Bush-hammered
Dimensions: 500x100x55mm
- POROUS RESIN BOUND GRAVEL**
To internal courtyard
Manufacture: Adsigna or equal and approved
Colour: Stone Grey
Size: 10mm
- BESPOKE SEATING ELEMENT**
To internal courtyard
Manufacture: from granite and strips
Timber slats to top
- TIMBER BENCH**
3 person bench, without arms
1800x400x500x120mm
- MOVEABLE FURNITURE**
Tables and chairs to be stored within building when not in use
- CORTEN STEEL RAISED PLANTERS**
Minimum 400mm tall
- CORTEN STEEL RAISED PLANTERS WITH INCORPORATED TIMBER SEATING PLINTH**
Timber to match bespoke seating element
- CLOSE BOARD TIMBER FENCE**
To screen northern service yard
- CYCLE SHELTER AND HOOPS**
2xno. hoops cater for 24no. bikes
- CYCLE HOOPS**
8no. hoops cater for 16no. bikes
- TREE GRILLES**
2no. Corten steel grilles by Goosefoot Street
Furniture or equal and approved
- RETAINED EXISTING TREES**
- PROPOSED TREES**
Species as labelled
Refer to Plant Schedule
- LAWN**
- GRASSES PLANTING**
Within Lawn. Refer to Planting schedule and Softworks GA
- GROUND COVER PLANTING**
Minimum 100 height
Refer to Planting schedule
- ORNAMENTAL PERENNIAL AND EVERGREEN PLANTING**
To internal courtyard
Established material throughout
Refer to planting schedule

02	22/07/15	Design Amends	SF	DL
01	29/06/15	For Comment	RB	DL
Issue	Date	Status	Drawn	Apprvd.

**Planit Intelligent Environments LLP**
E: info@planit-ie.com W: planit-ie.com

MANCHESTER
2 Back Grafton St
Altrincham
WA14 1DY
T: 0161 928 9281

LONDON
18 Bowling Green Lane
London
EC1R 0BW
T: 0207 253 5678

Client Jamworks

Project Bevington Bush

Drg Title Bevington Bush
General Arrangemnt

Created on 30/04/2015 Created by RB Approved by DL

Scale 1:250 Size A1 Status FOR PLANNING


Drg No. PL1488.GA.001 Issue 02

METHOD STATEMENT PLAN

BEVINGTON BUSH LIVERPOOL

SCALE: 1:250 @A1 DATE: AUG 2015

DRAWING: BB/MS/01

**mulberry**
landscape architects

Appendix Two

Tree Protection Fencing

Tree Protection Fencing (BS5837: 2012)

