

The Complete Professional Arboricultural Consultancy February 2012 CBA7740 V1

Camden Council

## ARBORICULTURAL DEVELOPMENT STATEMENT

52-54 Mount Pleasant London

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### ARBORICULTURAL DEVELOPMENT STATEMENT (incorporating Arboricultural Implications Assessment and Method Statement in accordance with BS5837:2005)

| Client:                    | Camden Council                         |
|----------------------------|--|
| Site:                      | 52-54 Mount Pleasant, London, WC1X 0AL |
| Arboricultural Consultant: | James Fuller FDSc.Arb, ND Arb          |
| Date:                      | February 2012                          |

### **SUMMARY**

The proposal is for the refurbishment of the existing building and the construction of new buildings to the East and West of the courtyard at the site of 52-54 Mount Pleasant, London, WC1X 0AL. The Arboricultural Development Statement (ADS) will demonstrate the protection measures for the retained trees, and should be read in association with the Tree Protection Plan CBA7740.02 which identifies tree retention measures. It follows the initial tree survey, implications assessment and on-going discussions to minimise the impact upon the existing tree stock.

The emphasis of the report is predominantly that of preservation and tree protection. It identifies methodologies to provide protection for trees, to ensure their healthy and safe retention during and post development, as guided by BS5837:2005 and current best practice.

One off-site individual tree (tree 6) can be retained within the development as detailed within this report.

There are 2 (two) trees (trees 3 and 4) that will be lost to facilitate the development.

There are 3 (three) trees (trees 1, 2 and 5) that will be removed for sound arboricultural management regardless of any development proposals.

CBA Trees believes that the trees highlighted for retention within this report can be retained without undue stress on their long-term health.

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#### PART 1 ARBORICULTURAL IMPLICATIONS ASSESSMENT

#### 1.0 INTRODUCTION

- 1.1 There is a development proposal for the site of 52-54 Mount Pleasant, London, WC1X 0AL. The site is located within a heavily built up area of Central London. It is positioned on the northern corner of the A5200 (Grays Inn Road) and A5201 (Clerkenwell Road). Mount Pleasant Hostel is situated within the Hatton Garden Conservation Area.
- 1.2 The proposal is for the refurbishment of the existing building and the construction of new buildings to the East and West ends of the courtyard.
- 1.3 Document disclosure provided:
  - Topographical Site Survey provided by EC Harris
  - Structural information provided by EC Harris
- 1.4 The client provided the original site plans and locations of the trees, and these have been the basis for the production of subsequent plans. Whilst CBA Trees has had a limited input in defining the contents of the development plan, it broadly conforms to the requirements of Section 4.1.5 of BS5837:2005.
- 1.5 Our advice has been sought on the principles of the development in relation to the potential impact on the existing tree stock, to inform and to facilitate the development layout that is acceptable in arboricultural terms.

#### 2.0 CLIENT'S BRIEF

- 2.1 In line with our written quotation and verbal instructions, information has been compiled in accordance with BS5837:2005 *"Guide to Trees in Relation to Construction Recommendations"* and current best practice advice.
  - To undertake a Tree Survey, appended at CB1.
  - To produce an AutoCAD Tree Survey Plan that relies on the accuracy of the topographical survey provided by the client. (Plan CBA7740.01A appended with the Tree Survey Schedule at CB1).
  - To produce a schedule of Root Protection Areas in accordance with BS5837:2005 Table 2, appended at CB2.
  - To undertake an Arboricultural Implications Assessment (AIA) of the proposed development provided by the client to identify which trees will be lost, which can be retained and suggest mitigating build techniques in order to retain trees.
  - Attend a site meeting with Mike Melley of EC Harris & Alex Hutson Tree Officer for Camden Council to discuss the facilitation pruning requirements of the off-site London Plane Tree (tree 6).
  - Based on the above and further on-going discussions, to provide an Arboricultural Development Statement (ADS) detailing the methodologies for the retention of the tree stock where feasible, in relation to the approved development layout including a Tree Protection Plan CBA774.02 appended at CB3.
- 2.2 The advice provided is in support of the current planning application and has been formulated without discussion with the main construction contractors who at his stage have not been appointed. Once the main contractors are appointed, amendments to this

Method Statement may be required for construction purposes. All amendments will be assessed by the retained arboricultural consultant and approved in writing by Camden Council.

#### 3.0 DESCRIPTION OF THE SITE

3.1 The site is currently occupied with a 3 storey Edwardian structure. The building is a maze of corridors with unused courtyards located between the buildings. One of these unused courtyards is currently home to 5 (five) trees growing in concrete pots; these trees are all of lower quality. To the East of the site there is an off-site tree (tree 6) located within the gated confines of a separate private building.

#### 4.0 THE TREE STOCK

- 4.1 A tree survey was undertaken by CBA Trees on 20<sup>th</sup> October 2011. The tree survey exercise identified 6 (six) individual trees; a Tree Survey Schedule and Plan CBA7740.01A are appended at CB1.
- 4.2 CBA Trees was not instructed to investigate whether trees on or adjacent to the site are protected by a Tree Preservation Order or located within a Conservation Area. The client is advised to obtain written confirmation from Camden Council to establish the legal status of these trees prior to any works being undertaken, outside the remit of an approved planning application.
- 4.3 <u>Tree Categorisation Method</u>
  - **Category R** = Trees in such a condition that any value would be lost within 10 years, or should be removed for reasons of sound arboricultural management. There were 3 (three) 'R' grade trees on the site at the time of surveying - trees 1, 2 and 5.
  - Note: "Category R trees are those which would be lost in the short term for reasons connected with their physiological or structural condition. For this reason, they should not be a consideration in the planning process." Category A = Trees of high quality and value: in such a condition as to make a substantial contribution, (40 years or more is recommended). There were no individual 'A' grade trees on or adjacent to the site at the time of surveying. Category B = Trees of moderate quality and value, capable of making a significant contribution for in excess of 20 years. There was one individual 'B' grade tree adjacent to the site at the time of surveying (tree 6) which was given an interim grade and should therefore re-surveyed in line with the advice contained in the Tree Survey schedule at CB1. Category C = Trees of low quality and value which might remain for a minimum of 10 years, or young trees with stems of less than 150mm diameter. There were 2 (two) individual 'C' grade trees in total on the site at the time of surveying - trees 3 and 4.

#### Note:

"Trees under these categories are trees that should be a material consideration in the development process; the subcategories are intended to reflect arboricultural, landscape and cultural values respectively."

4.4 For a more details of the existing tree stock, refer to the Tree Survey Schedule (appended at CB1).

#### 5.0 PROPOSED TREE RETENTION AND TREE LOSS

- 5.1 In accordance with the recommendations contained within BS5837:2005 *"Trees in Relation to Construction"*, an experienced arboriculturist has assessed the requirements for tree protection and the Root Protection Area (RPA) (appended at CB2). The implications of the proposed development are detailed below, along with any mitigating measures to ensure the retention of these trees.
- 5.2 As part of the assessment, dimensions have been scaled from the proposed development drawing prepared and modified, to include the relevant Tree Survey data and the information as shown on Plan CBA7740.02, appended at CB3.
- 5.3 Trees 1, 2 and 5 are advised for removal for reasons of sound arboricultural management, regardless of any approved development.

#### 6.0 SUMMARY OF ARBORICULTURAL IMPLICATIONS

- 6.1 The following summary of implications, relates to only those trees which will require mitigation measures to allow for construction operations.
- 6.2 Trees 3 and 4 have been given a low 'C' grade when surveyed under the guidance set out in BS5837:2005 *"Trees in Relation to Construction; Recommendations"*. These trees are located underneath the footprint of the proposed development, and will therefore need to be removed to facilitate the construction of the extension. Mitigation planting has been proposed within the central new courtyard, to consist of 7 (seven) new trees as detailed within the landscape proposals.
- 6.3 Tree 6 is an off-site London Plane and has been given a moderate 'B' grade when surveyed under the guidance set out in BS5837:2005 "Trees in Relation to Construction Recommendations". It has been recognised that this tree is very important within the current street scene as it is the only tree that can be seen. It is therefore the wishes of Camden Council that the proposed development only implicates this tree if it is completely necessary.
- 6.4 Due to existing site features, lower ground levels within the site, boundary wall around the site, Mount Pleasant Road behind the boundary wall and the neighbouring buildings boundary wall, it is not thought that any roots from tree 6 will be growing within the proposed development area. The RPA has been amended to try and take into account the existing site features as shown on plan CBA7740.02.
- 6.5 The canopy of tree 6 overhangs the site and will require some facilitation pruning to allow for the building and working space. The amount of pruning was discussed during a meeting with Alex Hutson, Tree Officer for Camden Council on Friday 10<sup>th</sup> February. Alex was happy with the amount of facilitation pruning required. Facilitation pruning is detailed in Section 9.0 of this report and within the Tree Works Schedule (TWS) appended at CB4.
- 6.6 The use of narrower scaffolding will be utilised underneath the canopy of tree 6. This will involve a 1m wide scaffolding specification to reduce the impact of tree 6.

#### PART 2 ARBORICULTURAL/CONSTRUCTION METHOD STATEMENTS

#### 7.0 PRE-COMMENCEMENT SITE MEETING

7.1 A pre-commencement site meeting shall be held prior to any works commencing on site, to agree all approved processes with the arboricultural consultant, the construction personnel and Camden Council. This meeting could be used to formally agree the methods of work, position of site offices, material storage, compounds, parking and tree protection measures prior to commencement of the development and the associated clearance work.

#### 8.0 PRE-DEVELOPMENT TREE WORKS

- 8.1 All tree works will be undertaken prior to the commencement of site preparation and construction works.
- 8.2 <u>All permitted or approved tree work</u> should be carried out in accordance with the British Standard *"Recommendations for Tree Work"* BS3998:2010, by suitably qualified and experienced professional arborists. Under no circumstances shall site personnel undertake any tree pruning operations. All tree surgery works should be carried out prior to the development of the site, and erection of protective fencing.
- 8.3 With regard to the trees to be retained, if protected by a Tree Preservation Order or within a Conservation Area, prior approval from Camden Council will be required, if any works to these trees are proposed prior to full planning permission being granted detailing the approved tree works.
- 8.4 Consideration should be given to the timing of the proposed tree works to avoid the active growing period of trees. Therefore, all tree work should ideally be carried out during the dormant period from November through to February and then again from June to August. Consideration should also be given to nesting birds, and tree works should not normally be undertaken between March and May; however, care should be taken to inspect trees during the summer months for evidence of nesting birds.
- 8.5 Should additional tree works become apparent during the construction process; written consent will be required from Camden Council prior to these additional works being undertaken.
- 8.6 All tree works that are required to facilitate the development are detailed within the Tree Works Schedule appended at CB4.

#### 9.0 FACILITATION PRUNING

9.1 It has been recognised that tree 6 requires facilitation pruning to allow for the construction of the proposed development. The pictures below have been included to show the approximate locations the branches will be pruned back to as discussed on site with Alex Hutson Tree Officer for Camden Council.

9.2 Photograph 1: view of the lowest branch on the West of the tree and where it is to be pruned back to.



9.3 Photograph 2: view of the second branch to be pruned on the West side.



- 9.4 Photograph 3: view of the third branch to be pruned on the West side.

#### 10.0 AVOIDING DAMAGE TO STEMS AND BRANCHES

10.1 Care shall be taken when planning site operations, to ensure that wide or tall loads, or plant with booms, jibs and counterweights can operate without coming into contact with retained trees. Such contact could result in serious damage to them, and might make their safe retention impossible. Consequently, any transit or traverse of plant in close proximity to trees, will be conducted under the supervision of a banksman, in order to ensure adequate clearance from trees is maintained at all times.

#### 11.0 SITE MONITORING AND SUPERVISION

- 11.1 On-going arboricultural site monitoring for the duration of the proposed development in close proximity to tree 6 should be carried out by a qualified and experienced arboriculturist at pre-determined and agreed time intervals, and governed by the type, timing, location and intensity of site works.
- 11.2 It will take the form of regular inspections (to be agreed, but at least one visit per month during the construction phase of the development is advised), the aim of the visits is to maintain on-going liaison with all personnel involved in the site development, Camden Council and its Tree Officer.
- 11.3 Any defects requiring rectification shall be notified to the contractor/site manager and the client.
- 11.4 In addition, a site logbook for tree protection measures is kept to record all stages of the development from the erection of the protective fencing, right through to the completion of the project. This will be made available to therboricultural consultant and Camden Council if required, to show evidence of continuous site monitoring.

#### Example pro-forma

| Date     | Activity                            | Checked | Comments/<br>damage<br>noted | By whom | Signed | Action<br>taken |
|----------|-------------------------------------|---------|------------------------------|---------|--------|-----------------|
| 13/11/11 | Erection of protective<br>fencing   |         |                              |         |        |                 |
| 20/11/11 | Inspection of protective<br>fencing |         |                              |         |        |                 |

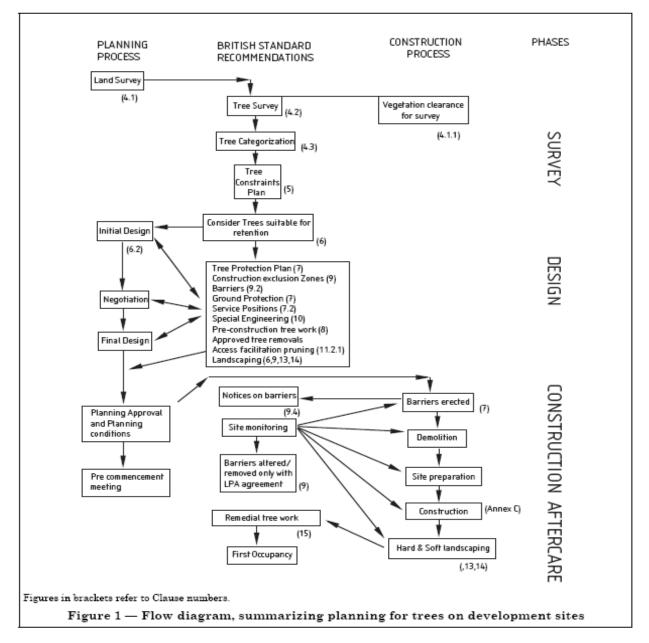
11.5 The Camden Council Tree Officer (or appropriate representative) will have agreed access to the site, and will report on any problem areas directly to the developer's retained arboriculturist, who will then visit the site and make recommendations to the developer on how best to rectify the situation and ensure the implementation.

#### 12.0 REPORT DAMAGE TO TREES AND TREE PROTECTION FENCING

- 12.1 Should any damage be caused to trees noted for retention, either by the above works or as the result of any other action, the damage should be reported to the site supervisor immediately. The site supervisor shall report up the chain of responsibility to the retained consultant arboriculturist, or in the absence of such an appointment, to an appropriately qualified arboriculturist, to enable remedial measures to be implemented as necessary and as agreed with Camden Council.
- 12.2 Should protective fencing become damaged so as to impair its function in protecting trees, all work shall cease in the vicinity of the damage, until the fence has been returned to standard.

#### 13.0 PHASING OF DEVELOPMENT

13.1 The process of the development should follow that of Figure 1 of BS5837:2005 in addition to any additional site-specific considerations and factors that need to occur, or be implemented in any one phase.



- 13.2 Existing trees on and adjacent to the site have been broadly assessed in accordance with BS 5837:2005 *"Trees in relation to Construction –Recommendations"*. At the survey and design stages, consideration has been given to the possible implications of development on existing trees, and how these effects can be minimised.
- 13.3 Compliance with this Method Statement will ensure that all retained trees on and adjacent to the site are maintained in a healthy and safe condition, both during and post construction.
- 13.4 There are several phases of development on this site, each phase will follow the above process to ensure that detrimental affects to retained trees and landscape areas are minimised.

#### 14.0 CONSTRUCTION WORK TIMINGS

14.1 This is for determination by Camden Council.

#### 15.0 CONCLUSIONS

- 15.1 The proposal is for the refurbishment of the existing building and the construction of new buildings to the East and West of the courtyard at the site of 52–54 Mount Pleasant, London, WC1X 0AL, have been assessed broadly in accordance with British Standard 5837:2005 *"Trees in Relation to Construction Recommendations"*.
- 15.2 It is our opinion that the trees identified for retention can be afforded due respect and provided adequate protection, ensuring their safe and healthy retention during the development process.
- 15.3 A total of one off-site individual tree (tree 6) can be retained within the development as detailed within this report. There are 2 (two) trees (trees 3 and 4) that will be lost to facilitate the development. There are 3 (three) trees (trees 1, 2 and 5) will be removed for sound arboricultural management regardless of any development proposals.
- 15.4 It is our opinion that the loss of the trees will not have a detrimental effect on the local visual amenity, or significantly alter the visual treed character of the local area, once a landscaping scheme that includes quality trees, selected to suit the site conditions and the space available, is implemented.
- 15.5 Provided the recommendations included within this report are strictly adhered to, CBA Trees believes the trees highlighted for retention within this report can be retained without undue stress on their long-term health.

#### 16.0 CONTACT LIST

- 16.1 It is suggested that points of contact and lines of communication are established prior to commencement of the works on site including:-
  - Arboricultural Consultant
  - Project Architect
  - Highways Engineer
  - Structural Engineer
  - Drainage Engineer
  - Landscape Architects
  - Camden Council's Tree Officer
  - Camden Council's Planning Case Officer
  - Site Supervisor and Foreman
- 16.2 It is advised that the site supervisor establishes their own listing of contact details at the pre-start site meeting, and displays this in their office for general use as necessary.

#### 17.0 BIBLIOGRAPHY

- British Standard 5837:2005 –
   "Trees in Relation to Construction Recommendations"
- British Standard 3998:2010 "Recommendations for Tree Work"
- National Joint Utilities Group Publication Volume 4 "Guidelines for the planning, installation and maintenance of utility services in proximity to trees"

- Wildlife and Countryside Act 1981
- Town and Country Planning Acts







### TREE SURVEY NOTES

This Tree Survey has been undertaken within the recommendations of British Standards 5837:2005 and current good arboricultural practice.

- > Each tree has been numbered and, where instructed, for future identification on site, has been tagged using small durable metal or plastic tags.
- > Due to variations of existing ground levels through the site, height dimensions are estimated and are given in metres. Accurate heights, measured with the aid of optical instruments can be provided where instructed.
- Trunk/stem diameters are measured in mm at 1.5 metres above ground level, or immediately above the root flare for multi-stemmed trees, using a standard measuring tape as defined by British Standards, unless otherwise stated.
- > Estimated branch spread is taken in metres from the centre of the trunk, at the four cardinal points of a compass, to achieve an accurate representation of the crown shape which will be recorded on the tree survey plan.
- > An assessment of a tree's age classification is made in terms of its maturity within the site's landscape and defined as:
  - Y=young treesMA=middle aged treesM=mature treesOM=over-mature treesV=veteran
- An assessment of a tree's physiological condition is defined as:
  - Good=fully functioning biological system showing average vitality i.e. normal bud growth, leaf size, crown density and wound<br/>closureFair=fully functioning biological system showing below average vitality i.e. reduced bud growth, smaller leaf size, lower crown<br/>density and reduced wound closurePoor=a biological system with limited functionality showing significantly below average vitality i.e. limited bud growth, small and<br/>chlorotic leaves, low crown density and limited wound closureDead=dead

> An assessment of a tree's structural condition is defined as:

| Good | = | no significant structural defects  |
|------|---|--|
| Fair | = | structural defects which could be alleviated through remedial tree surgery or management practices |
| Poor | = | structural defects which cannot be alleviated through tree surgery or management practices         |
| Dead | = | dead   |

> An assessment of a tree's future life expectancy is defined as: <10, 10-20, 20-40 or >40 years.

#### Categorisation of Trees

The category for each tree is assessed using the recommendations of BS5837:2005. The assessment has not considered any site-specific development proposals, but will have considered any changes on or off-site which may have an effect on the conditions surrounding the surveyed trees.

The trees have been classified into one of the following categories (and one or more sub-categories [this will however not increase the value of the tree]) and are indicated on the associated drawings by colours as indicated.

| Category R  | 1 – Mainly arboricultural values                | 2 – Mainly landscape values                                 | 3 – Mainly cultural values   | Identification colour on plan |
|---|---|---|------------------------------|-------------------------------|
| Trees in such a condition<br>that any value would be lost<br>within 10 years or should be<br>removed for reasons of<br>sound arboricultural<br>management |   |   |                              | DARK RED                      |
| Category A  |   |   |                              |                               |
| Trees of high quality and<br>value: in such a condition as<br>to make a substantial<br>contribution (40 years or<br>more is recommended)                  | good example of their species, rare or unusual, | of views in and out of the site, or softening effect to the | of significant conservation, | LIGHT GREEN                   |

| Category B   |   |  |   |          |
|--|---|--|---|----------|
| Trees of moderate quality<br>and value, capable of<br>making a significant<br>contribution for in excess of<br>20 years.                       | included in the A category, but are downgraded due to | Trees in numbers, that<br>collectively form a distinct<br>landscape feature but are<br>not individually an essential<br>component of a formal or<br>semi-formal feature. These<br>are likely to be trees situated<br>mainly within the site with<br>little visual impact on the<br>surrounding locality. |   | MID BLUE |
| Category C   |   |  |   |          |
| Trees of low quality and<br>value which might remain for<br>a minimum of 10 years or<br>young tress with stems of<br>less than 150mm diameter. | Trees not qualifying in higher categories             | Trees in groups or<br>woodlands without having<br>significant landscape value<br>or offering low or temporary<br>screening value   | Trees with very limited conservation or other cultural benefits | GREY     |

Clients are advised that Tree Surveys are a basic data collection exercise and record of tree condition at the time of survey. It will identify any visible signs of ill-health or major defects, advising a further detailed investigation where appropriate. This will most often take the form of a request for either "full ground level inspection" or "climbing inspection required". There may also be a further reference to the need for "decay detection equipment" to aid diagnosis. A tree survey does not include a comprehensive schedule or specification of remedial tree works, but may contain a guide to the work which might be undertaken by a prudent tree owner, purely for reasons of health and safety.

A Tree Survey should not be confused with a Tree Inspection or Arboricultural Implication Assessment, which are totally separate exercises.

|     |         | TREE SURVEY SCHEDULE |             |  |  |  |  |  |  |  |  |  |
|-----|---------|----------------------|-------------|--|--|--|--|--|--|--|--|--|
|     | Client: | Camden Council       | Site:       | 52-54 Mount Pleasant, London, WC1X 0AL |  |  |  |  |  |  |  |  |
| CBA | Date:   | 20 October 2011      | Consultant: | James Fuller FDSc Arb, ND Arb          |  |  |  |  |  |  |  |  |
|     | Tagged: | No                   | Weather:    | Sunny                                  |  |  |  |  |  |  |  |  |

Notes:-

1. It may be advised that some trees should have the ivy removed to enable a re-survey to be carried out. This would also alleviate the tree from becoming suppressed; carrying additional weight that increases the chance of windthrow due to a larger dense crown area; and only receiving restricted light. Unless otherwise stated, in order to prevent regrowth, it is only necessary to remove a 300mm section of ivy and clear around the base.

2. It may be advised that it was only possible to estimate the diameter of some trees because of ivy smothering, dense vegetation, or trees located off-site with no access.

3. The estimated remaining contribution in years, and the tree grading category have been calculated for the current situation and may alter where further investigation works are advised.

4. Some trees or groups may have been given an interim grade. The reason for the interim grading is addressed in the timescales given as this may have a bearing on health and safety and/or any development proposals.

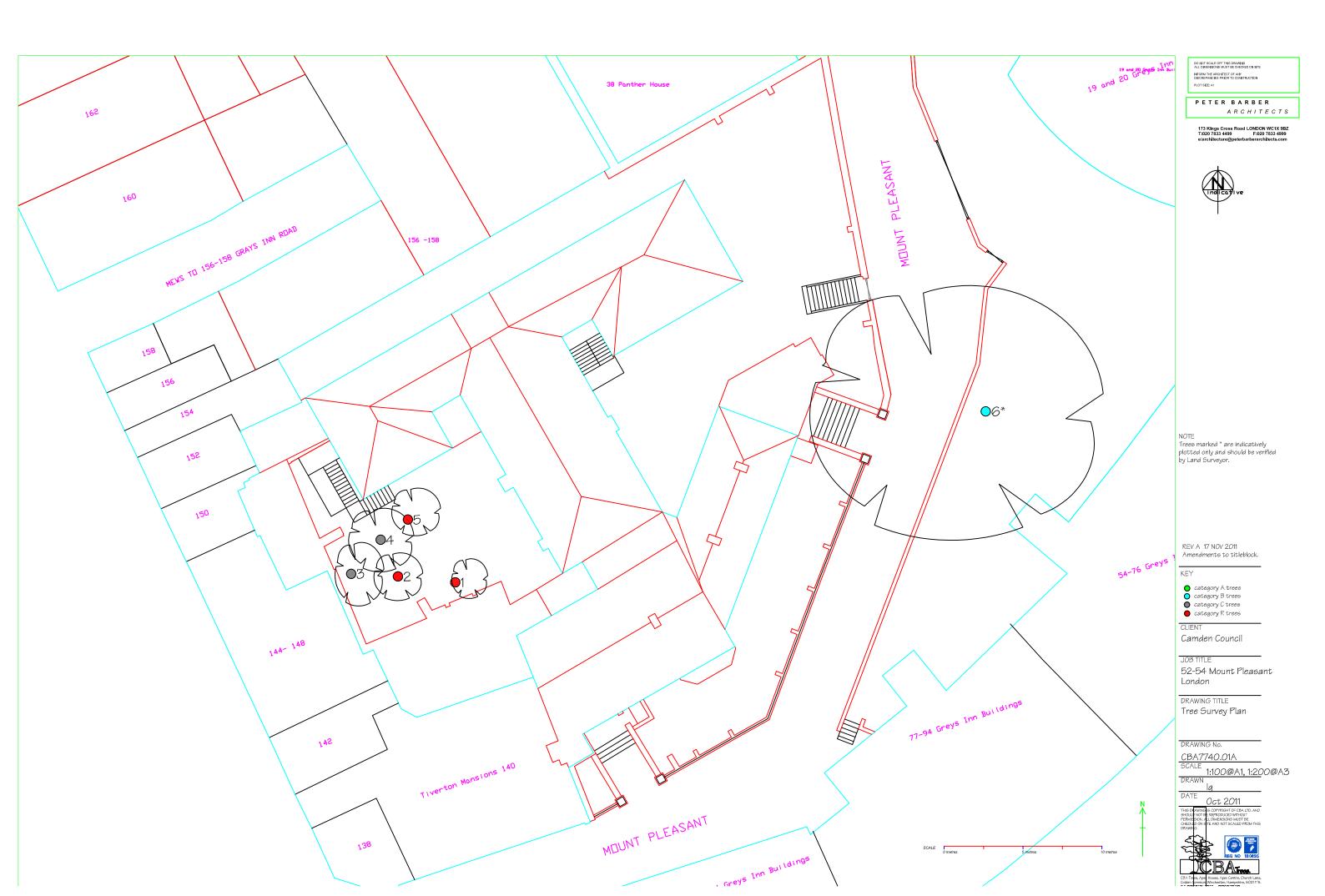
5. Tree Groups have been assessed with estimated and representative data.

6. This is not a Tree Works Schedule. Any preliminary management recommendations are listed in the interests of health and safety and should be carried out by a prudent tree owner.

7. Any management recommendations are suggested for reasons of health and safety only, regardless of development proposals at this stage. However, the defects requiring remedial tree surgery are by their very nature potential wildlife habitats, including protected species which needs consideration prior to any tree surgery works commencing.

| Tree<br>No |                                     | H't<br>(m) | Single/<br>Multi-<br>Stemmed<br>(S or MS) | Stem<br>Diam<br>(mm) | N   | Spr<br>(r |     | w   | N   | A<br>(i | Crown<br>GL<br>m)<br>S | w | Age | Physio-<br>logical<br>Condition | Structural<br>Condition<br>and<br>Relevant Comments   | Preliminary<br>Management<br>Recommendations | Est.<br>Rem.<br>Contrib.<br>(Yrs) | Cat |
|------------|-------------------------------------|------------|---|----------------------|-----|-----------|-----|-----|-----|---------|------------------------|---|-----|---------------------------------|---|--|-----------------------------------|-----|
| 1          | Pyracantha<br><i>Pyracantha spp</i> | 3          | MS  | 100                  | 1.5 | 2.0       | 1.0 | 0.0 | 1.5 | 1.5     | 2.0                    | - | Y   |                                 | Fair<br>Trifurcated at ground level<br>Growing in planter<br>Poor quality tree<br>Old pruning wounds<br>Low crown density | Advise removal                               | <10                               | R   |

| Tree<br>No | Species                                     | H't<br>(m) | Single/<br>Multi-<br>Stemmed<br>(S or MS) | Stem<br>Diam<br>(mm) | Ν   | Spr<br>(r<br>E | -          | w    | N   | A(<br>(r<br>I E | Crown<br>GL<br>n)<br>S | w   | Age | Physio-<br>logical<br>Condition | Structural<br>Condition<br>and<br>Relevant Comments   | Preliminary<br>Management<br>Recommendations | Est.<br>Rem.<br>Contrib.<br>(Yrs) | Cat           |
|------------|---|------------|---|----------------------|-----|----------------|------------|------|-----|-----------------|------------------------|-----|-----|---------------------------------|---|--|-----------------------------------|---------------|
| 2          | Eleagnus<br>Eleagnus spp                    | 7          | S   | 205                  | 1.5 | 1.5            | 1.5        | 1.5  | 3.0 | 3.0             | 3.0                    | 3.0 | Μ   |                                 | Poor<br>Growing in planter<br>Roots breaking planter<br>Old pruning wounds on trunk<br>Previously crown lifted<br>Previously crown reduced<br>Major dieback in crown<br>Previously topped at 7m above<br>ground level<br>Root growing out of planter into<br>surrounding area | Advise removal                               | <10                               | R             |
| 3          | Eleagnus<br><i>Eleagnus spp</i>             | 4          | S   | 140                  | 2.0 | 2.0            | 2.0        | 1.0  | 2.0 | 2.0             | 2.0                    | 1.5 | MA  | Fair                            |   | None required at time of<br>survey           | 10-20                             | C1            |
| 4          | Eleagnus<br><i>Eleagnus spp</i>             | 6          | S   | 145                  | 2.0 | 2.0            | 2.0        | 2.0  | 3.0 | 2.0             | 2.0                    | 3.0 | MA  |                                 | Fair<br>Growing in planter<br>Mahonia growing at base<br>Old pruning wounds on trunk<br>Minor deadwood in crown   | None required at time of<br>survey           | 10-20                             | C1            |
| 5          | Eleagnus<br><i>Eleagnus spp</i>             | 6          | MS  | 400                  | 2.0 | 2.0            | 1.0        | 1.0  | 3.0 | 3.0             | 3.0                    | 3.0 | MA  | Dead                            |   | Advise removal within 6 months               | <10                               | R             |
| 6          | London Plane<br><i>Platanus x hispanica</i> | 19         | S   | Est 850              | 8.0 | Est<br>7.0     | Est<br>8.0 | 11.0 | 2.0 | 4.0             | 6.0                    | 3.0 | Μ   |                                 | Fair<br>Off-site tree<br>Unable to verify health and<br>safety due to no access<br>Bifurcated at 2.5m above<br>ground level<br>Old pruning wounds in crown<br>occluding<br>Fused branches in crown  | Gain access and re-survey<br>within 1 month  | >40                               | B1<br>Interim |





|           |         | TREE ROOT PROTECTION AREA SCHEDULE |             |  |  |  |  |  |  |  |  |  |  |
|-----------|---------|------------------------------------|-------------|--|--|--|--|--|--|--|--|--|--|
| CPA       | Client: | Camden Council                     | Site:       | 52-54 Mount Pleasant, London, WC1X 0AL |  |  |  |  |  |  |  |  |  |
| DA Trees. | Date:   | 20 October 2011                    | Consultant: | James Fuller FDSc Arb, ND Arb          |  |  |  |  |  |  |  |  |  |

Notes:

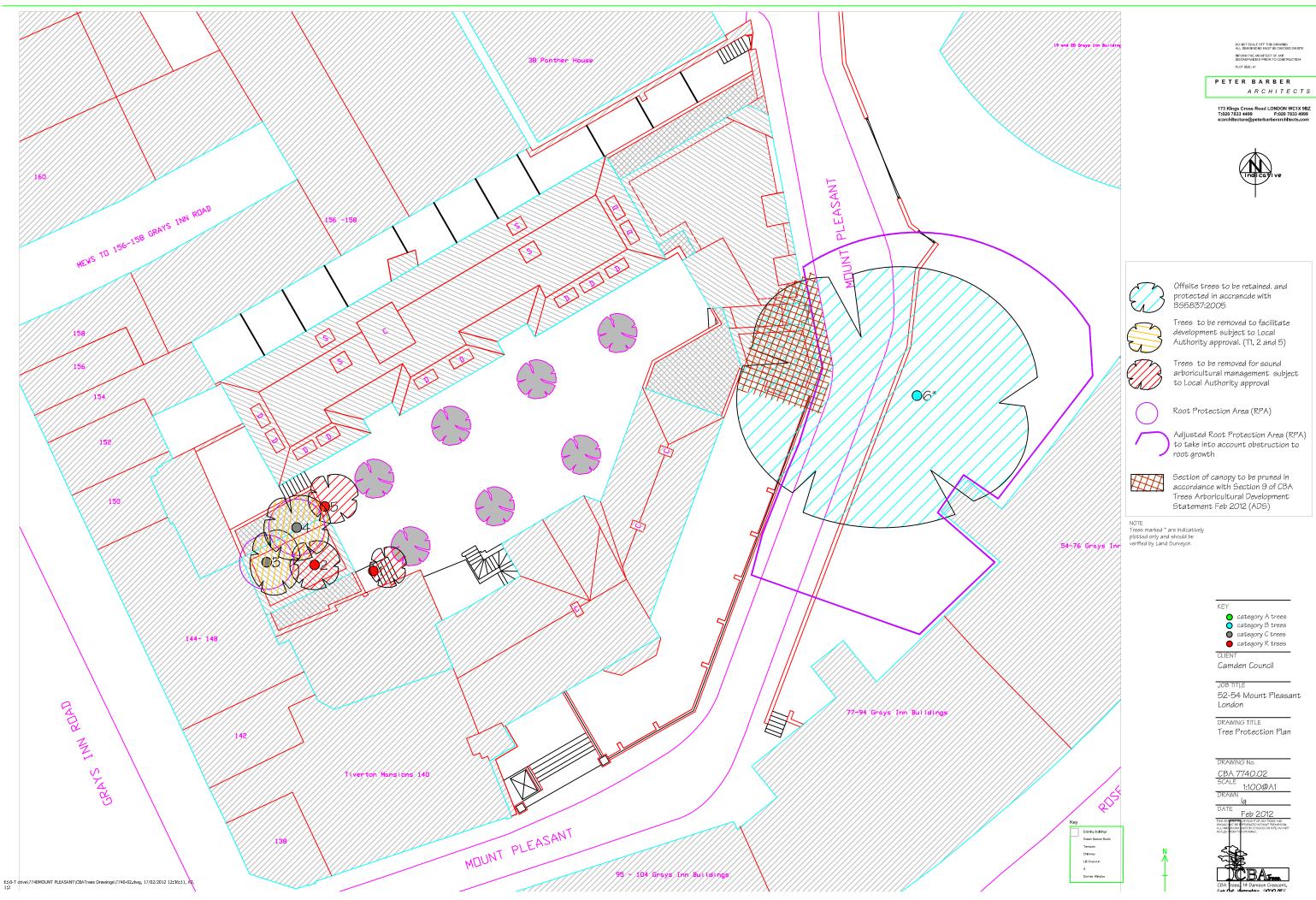
1. This is an assessment of the Root Protection Area (RPA) required, based on the individual tree data collected and Table 2 of BS5837:2005.

2. At this juncture this document is for your sole guidance and ongoing discussions purposes only and is not intended for general circulation, as it assumes that all but the 'R' trees will be retained, which clearly may not be the case.

3. For all single stem trees with a stem diameter greater than 1250mm, and multi-stem trees with a stem diameter greater than 1500mm, the calculated RPA has been capped at 707m2 in accordance with Section 5.2.3 of BS5837:2005.

| Tree No | Species      | Category   | Single/<br>Multi-Stemmed<br>(S or MS) | Stem<br>Diameter<br>(mm) | Initial Linear<br>Root Protection Distance<br>(Radius m) | Root Protection Area<br>(m2) |  |
|---------|--------------|------------|---------------------------------------|--------------------------|--|------------------------------|--|
| 1       | Pyracantha   | R          | MS                                    | 100                      | -  | -                            |  |
| 2       | Eleagnus     | R          | S                                     | 205                      | -  | -                            |  |
| 3       | Eleagnus     | C1         | S                                     | 140                      | 1.68   | 8.87                         |  |
| 4       | Eleagnus     | C1         | S                                     | 145                      | 1.74   | 9.51                         |  |
| 5       | Eleagnus     | R          | MS                                    | 400                      | -  | -                            |  |
| 6       | London Plane | B1 Interim | S                                     | 850                      | 10.20  | 326.89                       |  |







|         | TREE WORKS SCHEDULE |             |   |  |  |  |  |  |  |  |  |
|---------|---------------------|-------------|---|--|--|--|--|--|--|--|--|
| Client: | Camden Council      | Site:       | 52 – 54 Mount Pleasant, London WC1X 0AL                 |  |  |  |  |  |  |  |  |
| Date:   | February 2012       | Consultant: | James Fuller FdSc.Arb, BTEC Nat.Dip Arb,<br>TechArbor.A |  |  |  |  |  |  |  |  |

| Tree No. | Species      | Recommended Works   |
|----------|--------------|---|
| 1        | Pyracantha   | Remove  |
| 2        | Eleagnus     | Remove  |
| 3        | Eleagnus     | Remove  |
| 4        | Eleagnus     | Remove  |
| 5        | Eleagnus     | Remove  |
| 6        | London Plane | <ul> <li>Crown reduce on West side as detailed in the potographs 1, 2 &amp; 3 (Section 9)</li> <li>CBA Trees Arboricultural Development Statement (ADS) February 2012.</li> </ul> |

- All tree works are advised to be carried out between July and September or November and February. Tree works should also avoid the season for nesting birds.
- All tree works should be carried out in accordance with current best practice guidelines and BS3998 Tree Works. Only natural target pruning method to be used.
- We recommend the use of an Arboricultural Association Approved Contractor or an ISA Certified Arborist/Tree Worker suitably insured and experienced to carry out the tree works.





#### Tree Protection

All trees adjacent to unsupervised work areas have been protected by fencing.

This fencing must be respected at all times and no attempts shall be made to damage, bypass or ignore it.

In areas designated for supervised working, no works shall be undertaken without the supervisor being present or without him/her issuing a "carry on" chit.

#### Prohibitions Adjacent to Trees

Inside the exclusion area of the tree protection, the following prohibitions shall apply.

- No digging or scraping
- No storage of plant or materials
- No vehicular access
- No fire lighting
- No handling, discharge or spillage or any chemical substance
- No water-logging

In addition to the above, further precautions shall be taken near to trees.

- A 10m separation distance shall be observed between trees and any substance injurious to their health, including fuels, oil, bitumen, cement (including washings) builders' sand, concrete mixing and other chemicals.
- No fire shall be lit such that flames come within 5m of any foliage; this shall be taken to mean a fire separation distance to the leaved of 20m.

#### Avoiding Damage to Stem and Branches

Care shall be taken when planning site operations to ensure that wide or tall loads or plant with booms, jibs and counterweights, can operate without coming into contact with trees.

Consequently, any transit or traverse of plant in proximity to trees shall be conducted under the supervision of a spotter to ensure that adequate clearance is at all times maintained.

In some circumstances, it may be impossible to achieve this, necessitating the pruning of the tree.

If this is necessary, a specialist team shall be called in following referral to the project Arboriculturist.

No tree pruning shall be undertaken by demolition or construction personnel.

#### Asking for Help

If you see any damage to a tree or its protective fencing, or if you need a tree pruning for plant clearance, contact **CBA Trees** as follows:

Office Telephone: 01962 715407

### **REMEMBER:**

### ALL TREE DAMAGE IS AVOIDABLE –

SO AVOID IT!

### TREES AT\_\_\_\_\_

#### SUMMARY OF

#### **TREE PROTECTION MEASURES**

#### **Introduction**

This leaflet shall be issued to all site personnel as part of their induction briefing.

It describes in summary form the precautions that site personnel shall at all times follow, to ensure that the existing trees on the site come to no harm.

### The precautions described are neither arbitrary nor reducible and must be adhered to in full.

These precautions are necessary because unprotected trees are very vulnerable to damage during demolition and construction works.

Furthermore, many of the trees on the site are under **LEGAL PROTECTION** and damaging them can result in heavy fines.

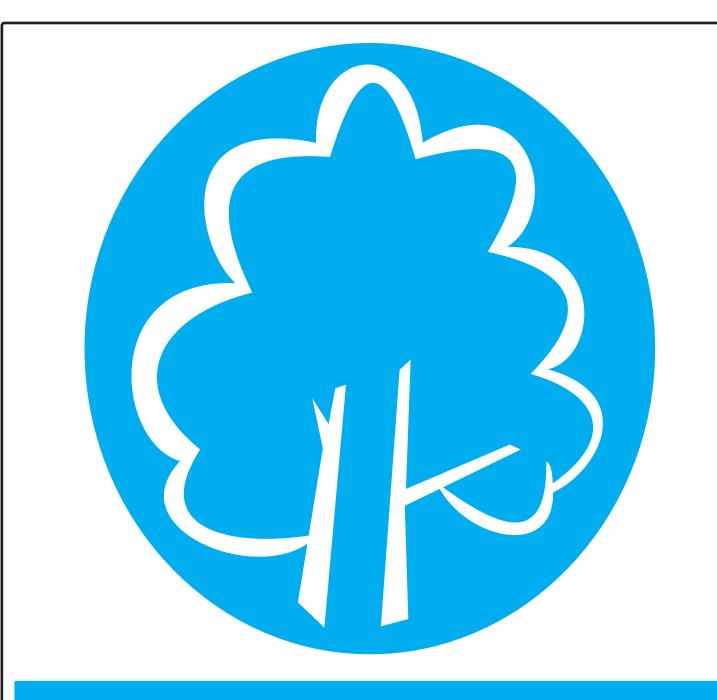
Two common misconceptions about trees:

**MYTH:** Trees have deep taproots and so shallow excavations will not harm the tree.

**FACT:** 90% of all tree's roots are found in the top 600mm of soil; all excavations near to trees are likely to cause root damage which can kill the tree.

**MYTH:** Trees will quickly heal over any bark wound, with no ill effect.

**FACT:** Bark wounds take years to heal and larger ones never do; missing bark can lead to disease and even the death of the tree.



PROTECTIVE FENCING. THIS FENCING MUST BE MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS AND DRAWINGS FOR THIS DEVELOPMENT.

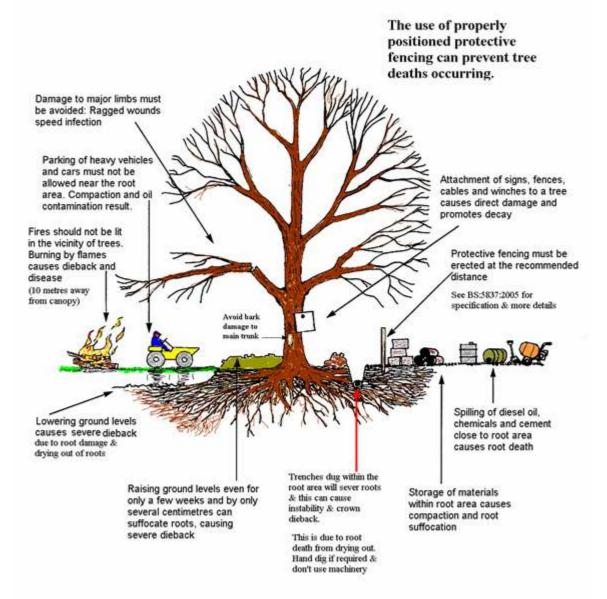


# TREE PROTECTION AREA KEEP OUT !

(TOWN & COUNTRY PLANNING ACT 1990) TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS AND/OR ARE THE SUBJECTS OF A TREE PRESERVATION ORDER. CONTRAVENTION OF A TREE PRESERVATION ORDER MAY LEAD TO CRIMINAL PROSECUTION

ANY INCURSION INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY

## **Common causes of Tree Death**

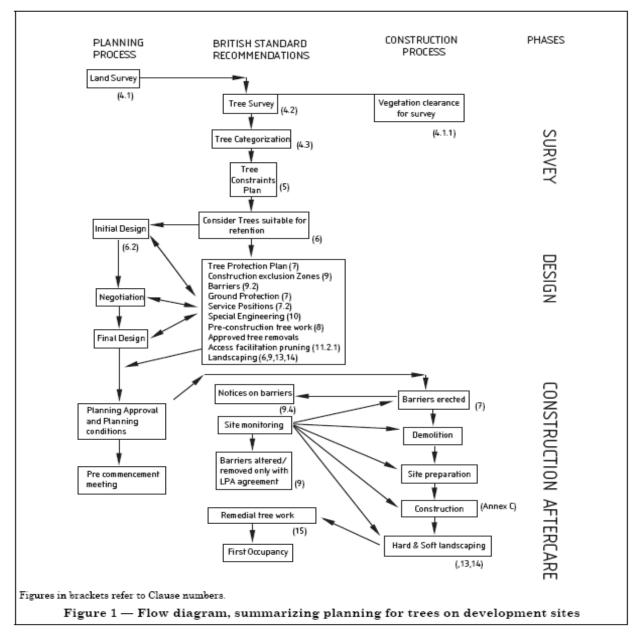


Please use copies of this as an on-site poster for personnel

(Source: Arboricultural Information Exchange website, 2005)







3.2.2 The layout of this standard follows the sequence of the flow diagram in Figure 1. Following the land survey (see 4.1) the existing trees on and adjacent to the site should be surveyed (see 4.2) and categorized (see 4.3). The constraints these trees pose should be plotted on a tree constraints plan (see Clause 5) and those selected for retention should be plotted on a tree protection plan as a result of the negotiations within the design process (see Clause 7). Areas for new landscaping should be identified at this time (see 6.2.2). The position of all excavations and any special engineering required can be specified in the form of arboricultural method statements. Once work is due to begin on site the arboriculturist should meet the site agent at a pre start meeting to ensure the correct erection of barriers and ground protection forming the construction exclusion zone (see Clause 9).





### QUALIFICATIONS OF JAMES FULLER ARBORICULTURAL CONSULTANT/SENIOR SURVEYOR CBA TREES

James joined CBA Trees in 2007 as a gap-year junior surveyor/arborist having attained the Foundation Degree in Arboriculture at Sparsholt College near Winchester.

During his first year with the practice, he gained experience in almost every field of our work, under the guidance and supervision of the more senior consultants. James has recently been appointed Consultant/Senior Surveyor, and is now professionally competent to undertake all elements of consultancy work, and in the main is working on large tree surveys and BS5837:2005 planning applications.

James services his growing portfolio of clients, undertaking site assessments, site monitoring, provision of advice to prominent development companies and preparation of Implications Assessments and Method Statements, and is a well respected member of our professional consultancy team.

As part of his professional development, James attained the Professional Tree Inspector's Certificate in November 2011.