

**Woollahra
Municipal
Council**

**Annexure 8
DA Guide**

Trees Report

**Guide for preparing Arboricultural Assessment Reports,
Tree Management Reports, Transplant Method Statements
and Root Mapping Reports.**

October 2006



1. Introduction

We have prepared these guidelines to assist applicants and Arborists to understand our requirements for the preparation of Arboricultural Assessment Reports, Tree Management Reports, Transplant Method Statements and Root Mapping Reports.

Trees within the Municipality are covered by a Tree Preservation Order, 2006. This document, along with the relevant Development Control Plan for the subject site should be referred to when preparing plans and documentation.

2. Objective

To ensure the preservation of mature canopy trees and the existing green character (environment) of the Municipality where ever possible and appropriate to do so.

3. Arboricultural Assessment Reports.

3.1 Timing the preparation of an Arboricultural Assessment Report.

An Arboricultural Assessment Report should be prepared before design options are drawn up. Information provided in the report will enable conclusions to be formed on whether or not it is appropriate to remove a tree. This, in turn will determine any site constraints that need to be taken into account during the design phase of a proposed development.

3.2 Who should prepare an Arboricultural Assessment Report?

An Arboricultural Assessment Report is to be prepared by an Arborist with a minimum qualification of Australian Qualification Framework Level 4. All reports are to include the name of the Arborist who actually undertook the site inspection and carried out the assessment, their qualifications and contact details.

3.3 What should be included in an Arboricultural Assessment Report?

- a) Reports are to be submitted in an accepted academic format.
- b) All resource material, including calculation formulae, is to be clearly referenced using an accepted academic format (eg. Harvard).

The following information is the minimum required to be contained within such a report:

- c) Who commissioned the report.
- d) What was the brief for undertaking the report (scope of the report).
- e) The address of the site to which the report relates.
- f) The methods or techniques used in the collecting of information used to formulate the report.
- g) An abstract or summary of the report.
- h) The date the site inspection was undertaken.
- i) A plan of the site showing the location of all trees referred to in the report and giving them an individual identifying reference number. This reference number is to be used to identify the tree within the text of the report.

- j) Each tree is to be identified by both common name and botanical name. Its height, canopy spread and diameter at breast height (DBH taken at 1.4m above ground) is to be provided.
- k) A discussion of the data collected. This may include detailed information regarding wounds, cavities, cracks, splits, forking, root zones, pests and diseases etc.
- l) A discussion of ALL options available in the circumstances, including reasons as to why they are, or are not, being recommended.
- m) Required Tree Protection Zones calculated using the Matheny and Clarke adaptation of the British Standard, 1991.
- n) Where removal of a tree is recommended, supporting documentary evidence, such as photographs, is to be provided to illustrate/support findings. Please note that recommendations for removal are to be based on arboricultural findings only. Removals where the reason given is to permit the proposed development will not be accepted.
- o) Where reports contain reference to Resistograph™ testing of trees, copies of the charts must be included. Charts are to be provided in a clear and legible form, including scale.
- p) Where reference is made to other Arboricultural reports or diagnostic testing, full copies of those reports are to be included.

4. Construction Impact Statement

4.1 What is a Construction Impact Statement?

A Construction Impact Statement is an assessment of the effects that a proposed structure would have, were it built, on trees existing on a site or on immediately adjacent sites. The Statement details impacts such as percentage of root loss due to excavation, percentage of canopy loss and the impact of any necessary pruning to accommodate the propose structure. It should deal with both the immediate impacts of a proposal and the long term effects.

4.2 When is a Construction Impact Statement required?

This document would be required when any of the proposed works, including installation of stormwater systems, are to be located within the calculated Tree Protection Zone of a tree protected by the Tree Preservation Order.

Council may also identify the necessity for the submission of a Construction Impact Statement following preliminary assessment of your application. If you have used the PreDA process, the need for this document will, in most cases, have been identified at that time.

4.3 Who should prepare a Construction Impact Statement?

A Construction Impact Statement is to be prepared by an Arborist with a minimum qualification of Australian Qualification Framework Level 4. All statements are to include the name of the Arborist who actually undertook the site inspection and carried out the assessment, their qualifications and contact details.

4.4 What should be included in a Construction Impact Statement?

Construction Impact Statements must address all the likely effects of a proposed development on each tree, located both on the subject site and within immediately adjoining properties, where relevant.

As a minimum, Construction Impact Statements must address the following issues:

- a) The effect of any proposed excavation on the root systems of any relevant trees.
- b) Any potential effect on the canopy of trees. This may include a necessity to prune to accommodate the bulk and scale of a building or to provide construction access. A pruning specification detailing the works required is to be included.
- c) The predicted effects that any variations to overland flow patterns (water) may have on trees located on the site, or on immediately adjoining sites, where relevant. This may include assessment of the effects of sites where dewatering is proposed. In these cases, where reinjection is proposed, the location and effect of the reinjection points is to be addressed.

5. Tree Management Report

5.1 What is a Tree Management Report?

A Tree Management Report details the ways in which it is proposed to prevent damage to trees located on a construction site and, where relevant, on immediately adjoining properties. This document looks at matters relating to the construction of proposed structures, site management, the design and placement of tree protection measures and before, during and after construction care of identified trees.

5.2 When is a Tree Management Report required?

Tree Management Reports are required for sites where the proposed development

- a) is a residential flat building
- b) is a large scale development ie. multiple buildings or multiple functions on one site
- c) has restricted site access eg. battle axe blocks

Council may also identify the necessity for a Tree Management Report following preliminary assessment of your application. If you have used the PreDA process, the need for these documents will, in most cases, have been identified at that time

5.3 Who should prepare a Tree Management Report?

Tree Management Reports are to be prepared by an Arborist with a minimum qualification of Australian Qualification Framework Level 4. All Reports are to include the name of the Arborist who actually undertook the site inspection and carried out the assessment, their qualifications and contact details.

5.4 What should be included in a Tree Management Report?

Tree Management Reports are to include recommendations for methods to mitigate the potential damage to trees on the site and, where appropriate, on immediately adjoining properties.

This would include, but is not limited to, the following issues:

- a) Specifications for placement and design of Tree Protection Zones.
- b) Details of site management during construction including vehicle movement, site shed placement, location of work areas etc.
- c) Proposed construction methods to minimise damage to identified trees eg. use of pier and beam construction as opposed to strip footings.
- d) Schedules for before, during and post construction tree care.

6. Transplant Method Statement

6.1 What is a Transplant Method Statement?

A Transplant Method Statement details the manner in which a plant is to be relocated on a site. It details the proposed time line for such work and sets out a works schedule to indicate when and how each stage of the operation is to be carried out. A well prepared and executed Transplant Method Statement greatly assists with the success of such transplanting operations.

6.2 Who should prepare a Transplant Method Statement?

This document is to be prepared by an Arborist with a minimum qualification of Australian Qualification Framework Level 4. All reports are to include the name of the Arborist who actually undertook the site inspection and carried out the assessment, their qualifications and contact details.

6.3 When is a Transplant Method Statement required?

Where any tree, subject to the Tree Preservation Order, is proposed to be transplanted on the site, a Transplant Method Statement is to be submitted with the Development Application.

Council may also identify the necessity for the submission of a Transplant Method Statement following preliminary assessment of your application. If you have used the PreDA process, the need for these documents will, in most cases, have been identified at that time

6.4 What should be included in a Transplant Method Statement?

As a minimum, the following information should be included in a Transplant Method Statement:

- a) A site plan indicating the proposed new position of each plant to be transplanted in relation to the proposed development.
- b) Pre-transplantation works schedule.
- c) Specification for site preparation.
- d) Transplantation method.
- e) Plant storage details - if applicable.
- f) Post-transplantation maintenance schedule.

7. Root Mapping Report

7.1 What is a Root Mapping Report?

A Root Mapping Report provides information on the roots that are located along a particular line of excavation. This information is used to determine whether the siting of a proposed building or structure is appropriate. It is used to help calculate the level of root severance that would result from the proposed works and therefore the impact the proposed works may have on the structural stability of the tree and its likely capacity to survive such works.

Generally, this information is obtained by hand excavating a trench, down to a specified depth, along the line of proposed excavations. Any roots that transect that trench are then noted and details of their position along the trench, the depth at which they are found and their diameter is recorded.

7.2 Who should prepare a Root Mapping Report?

This document is to be prepared by an Arborist with a minimum qualification of Australian Qualification Framework Level 4. All reports are to include the name of the Arborist who actually undertook the site inspection and carried out the assessment, their qualifications and contact details.

7.3 When is a Root Mapping Report required?

Following preliminary assessment of your application, Council may identify the necessity for the submission of a Root Mapping Report. If you have used the PreDA process, the need for these documents will, in most cases, have been identified at that time.

7.4 What should be included in a Root Mapping Report?

The location of excavation lines should be determined by the Arborist undertaking the works in consultation with Council. A general guide however, is that they should be located along the lines where excavation would be necessary to construct the proposed development.

The trench is to be excavated to a depth as indicated by Council or to the maximum depth at which tree roots are likely to grow given the soil type and site conditions. All excavation is to be carried out by hand and in a manner that will minimise root damage. Mattocks and crow bars are not to be used for excavation. Small hand tools or an air knife should be used to excavate the required area.

As a minimum requirement, Root Mapping Reports should include the following information:

- a) A plan showing the location of all excavation lines in relation to the existing site conditions.
- b) Photographs of the completed excavation lines. The photographs are to include points of reference so that their location and orientation can be determined.
- c) A schedule of findings for each individual excavation line. This schedule is to include:
 - i) the total linear distance of the excavation line,
 - ii) the linear distance along the excavation that the root was located,

- iii) the depth at which the root was encountered and
- iv) the diameter of the root.
- d) Any visual variations in roots observed are to be noted eg. highly visible lenticels.
- e) A section, with X (depth) and Y (Length) axis indicated, of the completed trench and all findings. All material found within the trench is to be included eg. roots, pipes etc.

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