

## Guidelines for Report Writing for Certified Arborists

1. Written reports are a vital part of a professional's activity and their quality has a significant impact on that person's status. As professionals, certified arborists are engaged to carry out tree inspection and assessment, tree appraisal, tree evaluation and tree preservation. These works should be accompanied by a report. A report should be objective, factual and honest.

### 2. Types of Reports

Arboriculture reports may vary in formats depending on the purpose and use of the report. Generally the Certified Arborist may adopt either the Booklet Report or Letter Report. The differences between these two formats are listed below.

<b>Booklet Report</b>	<b>Letter Report</b>
Designed to organize large amounts of details for example assessing large number of trees, detailed investigation and assessment etc	Designed for reports that require less detail for example assessing one to three trees.
Separate cover letter which should includes the following information: <ul style="list-style-type: none"> <li>• Name and address of client</li> <li>• Brief description of the assignment</li> <li>• Relevant date(s) when assignment was undertaken, work tasks were completed, report was written etc.</li> <li>• Name and location of site</li> <li>• Brief statement on the contents or conclusion(s) in the report</li> <li>• Signature of consultant/arborist responsible for the report</li> </ul>	No cover letter
Title page, which is the first physical page of a report.	No title page
Table of contents	No table of contents
Executive summary or abstract	Executive summary or abstract
Introduction (see text for explanations) <ul style="list-style-type: none"> <li>• Assignment</li> <li>• Background</li> <li>• Limits of Assignment</li> <li>• Purpose and Use of report</li> </ul>	Introduction (see text for explanations) <ul style="list-style-type: none"> <li>• Assignment</li> <li>• Background</li> <li>• Limits of Assignment</li> <li>• Purpose and Use of report</li> </ul>
Observations	Observations
Analysis or Testing	Analysis or Testing
Discussions	Discussions
Conclusion(s)	Conclusion(s)
Recommendation(s)	Recommendation(s)
Supporting information <ul style="list-style-type: none"> <li>• Appendix</li> <li>• Glossary</li> <li>• References</li> </ul>	Supporting information (optional) <ul style="list-style-type: none"> <li>• Appendix</li> <li>• Glossary</li> <li>• References</li> </ul>

### 3. Report Elements

There are seven elements that can be included in the report. The seven elements are:

1. Assignment
2. Observations
3. Analysis or testing
4. Discussion
5. Conclusion(s)
6. Recommendation(s)
7. Supporting information (optional)

However, do note that *report elements* are not necessarily the same as *report sections or headings*.

### 4. Introduction

The introduction helps the reader to understand the contents of the report. It includes all the information in the cover letter of a booklet report and in greater details plus any additional information.

Introduction should include the following important elements:

- The **background**
- The **assignment**
- The **limits of the assignment**
- The **purpose and use of the report**

#### 4.1 Background

Background deals with the facts, reasons and circumstances for the assignment. It should include information on the clients involved, the consultant(s), other experts (if any), history of the tree(s), site and conditions that lead to the assignment and significance/importance of the tree or site.

#### 4.2 Assignment

Assignment is the specific task or scope of services. It should be accurately worded so that the reader will have a clear understanding of what should be expected in the report. It may also protect the arborist from liability.

#### 4.3 Limits of Assignment

The report should clearly state what can be done and what cannot. The limits of assignment statements can further clarify the nature of the assignment. There are two components:

- Limits of Scope is a statement of things that are understood to be excluded from the assignment right from the very beginning.
- Limits of Investigation is a statement of the extent of or limitations on the analysis.

#### **4.4 Purpose and Use of the Report**

The purpose and use of the report should be made clear at the beginning of the report. The purpose of the report defines the assignment, goal or objectives while the use of the reports defines the functions or applications of the report.

### **5. Body of Report**

The body of the report describes the investigations and results. This is a generic, descriptive term for the various sections that includes this information whether it is a booklet or letter report. The elements included in the body of the report are:

- Observations
- Analysis or testing
- Discussion
- Conclusion(s)
- Recommendation(s)
- Supporting information (optional)

### **6. Observations**

Observations are meant for factual information and data. In this section the arborist should answer the following questions:

- (i) What did I do?
- (ii) What did I see?

All on-site observations, investigations and gathered facts are presented in a clear and concise manner. The date(s) of the site visit or inspection must be included. In this section there should not be any judgements (which are reserved for the Discussion section).

The following information shall be reported accurately:

- Site conditions (soil condition, topography, Tree Conservation Areas, type of vegetations, locality, permanent structural features etc.)
- Tree information (genus, specific epithet, size, vigour, form, lean, live crown ratio, crown density, specific locations of the tree e.g. turf area, footpath, flower beds etc.)
- Crown and upper branches (leaves, defects, condition etc.)
- Scaffolds and main branches (structural defects and integrity, condition etc.)
- Trunk (structural defects and integrity, condition etc.)
- Roots and root system (structural defects and integrity, condition etc.)

Relevant pictures, photographs, illustrations, drawings and site plans/maps should be included in the report either in the main body or as in the Appendix. They should be clearly labeled and captioned. The captions for photographs and pictures should include direction of view, clear description of what the reader need to see (this can be assisted by arrows, letters, markings) and the date the photographs or pictures were taken. The captions should also refer to the text page or paragraph that discusses the details of the photographs.

As far as possible, consider using larger photos for clarity and to show fine points more clearly, for example when illustrating the full image of the tree. Otherwise limit

the numbers of photos to two per page. Nowadays digital cameras are commonly used. As a guide, images should be taken at a resolution of 300 pixels per inch with printed size of 6" by 4".

## **7. Analysis or Testing**

Analysis and testing includes a description of any outside investigations, analyses and tests that were conducted by outside sources in addition to the arborist's work on site. This may include:

- Plant identification
- Soil and water analysis
- Pests and diseases identification
- Decay detection using PiCUS or Resistographs

These activities and results must be included in the report. If there are reports or analyses from external sources (for example the laboratory the samples were sent to), only extract the relevant information. The full reports or analyses from external sources should be included in the Appendix.

If necessary, the methodology may also be included. There should not be any judgement of the results.

## **8. Discussion**

The discussion section can stand on its own or combined with conclusion into one report section. Discussion of the observations and analysis is necessary to present rationale, make judgments, support conclusions and make recommendations. Evaluate the facts gathered during the investigations and do not introduce new facts or observations. The arborist may make references to expert opinions or studies done by others.

Discussions should include constraints, activities, impacts on the environment, ecosystem and surroundings. The Useful Life Expectancy of the tree(s) should be included in the discussion element especially in a development site where the boundaries are finite. This is a method of assessing the relative importance of trees and helps the making of informed judgements on which trees are the most important in planning decisions.

## **9. Conclusion(s)**

The judgements and opinions that resulted from the discussion and evaluation area are stated in the Conclusion section. In cases where there are several conclusions to be made, it would be better to combine the conclusion element with the discussion element. The format should be discussion A followed by conclusion A, discussion B followed by conclusion B and so on. A separate conclusion summary paragraph or list should also be added in such cases.

## 10. Recommendation(s)

The Recommendation section outlines any actions that need to be taken based on the conclusions. The recommendations should be designed in such a way to make them easy for the reader to follow. If there were many recommendations, then a list format would be the best. The list of tasks should be arranged in order of priority with a discussion to explain the rationale for the priorities. If necessary, illustrations and drawings should be included, for example, when recommending a tree protection zone.

## 11. Supporting Information

The Supporting Information is normally placed in the appendix of the report. This section would include any supporting materials that are required or make reference to during the investigations. Supporting information may include:

- Glossary of the terms used in the report.
- References
- Photographs, site maps, illustrations, tables, graphs, diagrams
- Excerpts
- Reports from external sources
- Curriculum vitae

## 12. Information on each page

The following information should be included in the footer of every report page:

- Page number
- Date
- Author/Certified Arborist (with certificate number and expiry date)
- Project name or number

## 13. Page Style and Writing Style

This refers to the layout of the report page. There are no hard and fast rules for page style. Ensure that page style is used consistently throughout the report so that the report is easy to read.

### Recommendations

Typeface	Times New Roman, Courier, Helvetica or Arial
Font size	10-12 points for main text 12-14 points for titles and headings [bigger than main text] 8-10 points for footers and headers [smaller than main text]
Margins	Left and right margins should be at least 2.5cm or 1 inch. If document is to be bound, increase the left margin. Top and bottom margins should be at least 2.5cm or 1 inch if no headers or footers are used.
Text Alignment	Text should be aligned to the left.
Spacing	The spacing between sentences should be two line spaces
Sentence length	Not more than 15-20 words in length
Paragraph length	Not more than 100-125 words