

Guidelines on Audit of Tree Risk Assessment

**Greening, Landscape and Tree Management Section
Development Bureau**

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1. Background

An audit of tree risk assessment (TRA) is a systematic and independent examination of TRA reports (i.e. Form 1 for tree group inspection and Form 2 for individual tree risk assessment) completed following the requirements laid down in the Guidelines for Tree Risk Assessment and Management Arrangement (TRAM Guidelines)(9th Edition or its latest edition). According to paragraph 2.9 of the TRAM Guidelines, tree maintenance departments are required to set up a departmental audit checking mechanism to ensure that tree risk assessment is carried out properly and professionally, and that necessary mitigation measures are carried out promptly.

This guidance document sets out (a) the audit methodology adopted by the Greening, Landscape and Tree Management Section (GLTMS) of the Development Bureau for audit of TRAs undertaken by tree maintenance departments and (b) the qualification requirements for TRA auditors that tree maintenance departments have to follow for audit of TRAs undertaken by their in-house inspection staff, service providers and/or contractors.

It should be read in conjunction with the latest edition of the TRAM Guidelines.

2. Objectives

The key objective of a TRA audit is to identify non-compliance or areas for improvement through systematic and independent examination of TRA reports on the following:

- (a) Individual tree issues, where non-compliance with the requirements set out in the TRAM Guidelines is identified in a TRA on a particular tree; and
- (b) Whole system issues, where a trend is identified through the audit process that reveals a systemic issue in certain TRA procedures. An example of this could be poor pruning practices repeatedly used in mitigation that are linked to a particular service provider and/or contractor.

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3. Methodology

3.1 Audit by Tree Maintenance Departments

3.1.1 General

Each TRA audit cycle includes sampling reports randomly from the collection of reports generated during the corresponding TRAM cycle, followed by checking the reports with desktop review and field survey, and finally reporting and undertaking remedial actions. To ensure audit is undertaken systematically and professionally, tree maintenance departments should develop an audit method statement following the requirements provided in this guidance document and disseminate the method statement to all staff, service providers and/or contractors involved in the TRA for compliance.

Officers in charge of the management of the TRA are aware of the need for accuracy and consistency in the course of their work. As a proportion of the TRA may be contracted out, the responsible officers need to factor in quality checks through audit on their service providers and/or contractors as part of the overall management of the contracts. The audit methodology and qualification requirements for auditors should be included as contract provisions in contract documents for TRA services. Service providers and/or contractors should be made fully aware that audit of their work will be undertaken during the course of the contracts and that considerable importance will be put on audit to indicate the quality of their work.

3.1.2 Selection method and sample size

- (a) Unbiased sample: TRA reports should be selected randomly from a collection of reports identified according to a set of selection criteria to ensure transparency and impartiality.
- (b) Representative sample: at least 10% of the total population of tree group inspection reports (i.e. Form 1) and 10% of the total population of individual tree risk assessment reports (i.e. Form 2) should be selected and audited for each TRAM cycle. Tree maintenance departments are encouraged to maintain higher percentages of reports for audit, if practicable. An increase in this percentage is advised where persistent poor quality is observed so that areas for improvement are clearly identified and defined. An increase in the percentage is also advised when the normal number of TRA reports produced in a tree maintenance department is low and it is desirable and practicable to have a wider understanding of the TRA quality.

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3.1.3 Selection criteria

When deciding on the selection criteria, the following considerations should be taken into account:

- (a) The selected forms should span across all districts where TRAs have been conducted and include all categories of works (e.g. projects, slopes, venues, etc.) under the purview of the department for which TRA is necessary.
- (b) Particular attention should be paid on TRA reports which are (i) recommending no mitigation measures; (ii) involving high risk trees; (iii) involving trees of particular interest¹; or (iv) involving repeated public complaints.
- (c) Tree maintenance departments may deploy more than one service provider and/or contractor to complete their TRA services. Variabilities in quality can be expected between different service providers and/or contractors and the audit process should therefore allow adequate checking of all service providers and/or contractors. In addition, if different service providers and/or contractors have different capacities or volumes of the overall TRA services, then the audit process should reflect this so that the quality of their TRA services are reflected representatively. The consideration would allow departments to determine the performance of the TRA services across all their service providers and/or contractors and would enable informed decisions on rectifications and/or improvement actions.

3.1.4 Audit frequency

Contracts for TRA services will typically last for a number of months from commencement to completion. The audit frequency should be arranged such that more audits are undertaken in the initial months of the contract to allow implementing rectification and improvement as soon as possible for the benefit of the quality of the TRA services in the rest of the contract period.

3.1.5 Key review areas

In carrying out the desktop and field checking, particular attention should be paid to at least, but not be limited to, the following areas:

¹ Please refer to paragraph 2.6 of the latest edition of the Guidelines for Tree Risk Assessment and Management Arrangement.

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- (a) Form 1:
 - (i) Provide accurate information on species, physical data, tree status, triage colour, overall condition in Table A;
 - (ii) Provide accurate information on remedial action(s)/Form 2 assessment and anticipated completion date in Table A;
 - (iii) Provide accurate information on reference coordinates;
 - (iv) Provide clear close-up photo(s) for the defect(s) of tree(s) in Table A ;
 - (v) Provide a location map that indicates clear tree location(s) in Table A; and
 - (vi) Provide realistic estimated number of trees in Table B.

- (b) Form 2:
 - (i) Report factually what are observed on site;
 - (ii) Provide accurate target assessment;
 - (iii) Categorise tree risk accurately;
 - (iv) Recommend practicable mitigation measure(s) for all defects observed on site, its (their) anticipated completion date and residual risk(s); and
 - (v) Indicate clearly inspection limitation(s).

3.1.6 Recommendation and rectification

For each TRA report audited, the TRA auditor should document the audit findings, including any errors, inconsistencies or omissions observed, in an audit report. A sample of the audit report each for auditing Form 1 and Form 2 are attached at **Appendix A** for reference. Tree maintenance departments may derive their own audit reports to meet their particular operational needs. The audit report should be sent to the corresponding Inspection Officer to review and provide feedback within 10 working days and carry out any necessary remedial action(s) as soon as practicable to the satisfaction of the responsible tree maintenance departments.

Improvements to the TRA services following several rounds of TRA audits should be apparent over the course of a contract for TRA services. If the service provider and/or contractor is not responding to the department's audit recommendation(s), appropriate enforcement action(s) under the contract provision(s) should be considered.

3.2 Audit by the GLTMS

3.2.1 General

For each TRAM cycle that usually spans from November to May the next year, the GLTMS receives and documents all TRA reports submitted by tree maintenance departments. For auditing of each selected TRA report,

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both desktop review and field inspection are carried out.

3.2.2 Selection method and sample size

- (a) The GLTMS selects TRA reports randomly from the collection of reports identified according to a set of selection criteria to ensure transparency and impartiality.
- (b) The GLTMS audits 5% of Form 1 and 5% of Form 2 submitted by tree maintenance departments for each TRAM cycle.

3.2.3 Selection criteria

When deciding on the selection criteria, the same considerations in Section 3.1.3 above are taken into account.

3.2.4 Audit frequency

The GLTMS undertakes audits of departments' TRA reports normally from January to August each year. All tree maintenance departments are required to submit TRA reports to the GLTMS in the specified formats on or before the next 15th day of the month upon receipt of the reports submitted by their service providers and/or contractors or completion of the TRA and writing of the corresponding reports by in-house staff. On the 15th day of each month, tree maintenance departments are also required to provide a monthly update of TRA progress to the GLTMS for reference by using the form at **Appendix B**.

3.2.5 Key review areas

The key review areas highlighted in Section 3.1.5 above are also applicable to the audits undertaken by the GLTMS.

3.2.6 Recommendation and rectification

For each TRA report audited, the GLTMS will provide audit report (**Appendix A**) to relevant tree maintenance department if any irregularity was identified. Tree maintenance department is required to provide feedback to the GLTMS within 10 working days after receiving the GLTMS's audit report and carry out any necessary remedial action(s) as soon as practicable to the satisfaction of the GLTMS.

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4. Qualification Requirements for Auditors

4.1 A TRA auditor can be

- (a) an in-house government officer with arboricultural expertise²; or
- (b) an in-house government staff or a staff of service provider or contractor meeting the minimum qualification requirements for Inspection Officer as sets out in Appendix 3 of the TRAM Guidelines.

[Note: According to Appendix 3 of the TRAM Guidelines, Field Assistant Grade and Field Officer Grade staff in the Agriculture, Fisheries and Conservation Department and Amenities Assistant Grade and Leisure Services Manager Grade staff in the Leisure and Cultural Services Department who have completed the recognised vocational training offered by the respective departments are considered meeting the minimum requirements on the academic, professional and training qualifications for Inspection Officer.]

5. Enquiry

For any enquiry on this guidance document, please contact Assistant Secretary (Tree Management)¹ of the GLTMS.

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² Arboricultural expertise refers to expertise possessed by the Forestry Officer Grade, Landscape Architect Grade and Leisure Services Manager Grade staff in tree maintenance departments.