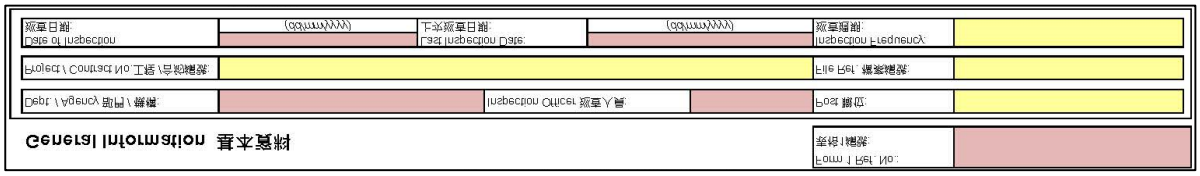
Appendix 5 - Explanatory Notes for Form 1: Tree Group Inspection

This Form is provided with the *Guidelines for Tree Risk Assessment and Management Arrangement (TRAM Guidelines)* (9th Edition) for tree group inspection. It intends to act as a template for Inspection Officers to collect and record tree information and facilitate a meaningful tree group inspection as well as identification of individual tree(s) under the Triage System for individual tree risk assessment (Form 2) or immediate remedial actions. For individual tree risk assessment, the Inspection Officers should refer to the guidelines for individual tree risk assessment (Form 2) in the TRAM Guidelines.

Box(es) and Space(s) are provided on the Form 1 for Inspection Officers to record/write descriptions and estimated measurements, or check box(es) for selected options, in field investigation. The Inspection Officers are also required to provide their observations, suggestions and/or recommendations on tree remedial actions in space under "Overall Remarks" when necessary. *It is not necessary to check every box or to fill in every space provided on this Form*. Only information relevant to the tree group inspection should be collected.

Section 1 – General Information

This Section intends to identify the responsible department, the Inspection Officer and a brief history of the tree group inspection.



Form 1 Ref. No.: Reference number of the Form 1 in the format:

[XXX]-[20XX]-[000]-[9999]-[0], where

XXX	20XX	000	9999	0
First 3 character of department's abbreviated name, i.e. AFC for AFCD, LAN for LandsD, etc.	*Year of TRAM Exercise, i.e. 2019/2020 TRAM Exercise, use 2019.*	*Project code or contract code assigned by departments. If no subdivided project or contract, please input "000"*	*Serial number of Form 1 report in one TRAM Exercise. For each project or contract in the dept., new set of serial number from 0001 to 9999 can be used.*	*Part number of the Form 1 report. If only one Inspection Officer conducted the Form 1 inspection in a tree group, use "1"; If more than one Inspection Officers and more Form 1 reports for one tree group, use "1" for the 1st report and "2" for the second report, and so on.*

Department/Agency: name of the responsible Department or Agency of the tree group inspection.

Inspection Officer: name of the Inspection Officer (in English CAPITAL letter as printed on HKID Card) who met the qualification requirements on academic / professional / training, and work experience as specified in 'Requirements for Inspection Officers' in Appendix 3 of the TRAM Guidelines. The qualifications of Inspection Officer should be vetted by relevant tree maintenance department and a name list of vetted Inspection Officers should be provided to GLTMS/TMCP for verification.

Post: post title of the Inspection Officer in the Department/Agency.

Project/Contract No.: project/contract reference number of the tree inspection works, where applicable.

File Ref.: File reference no. in the Department/Agency that keeps the tree inspection reports, where applicable.

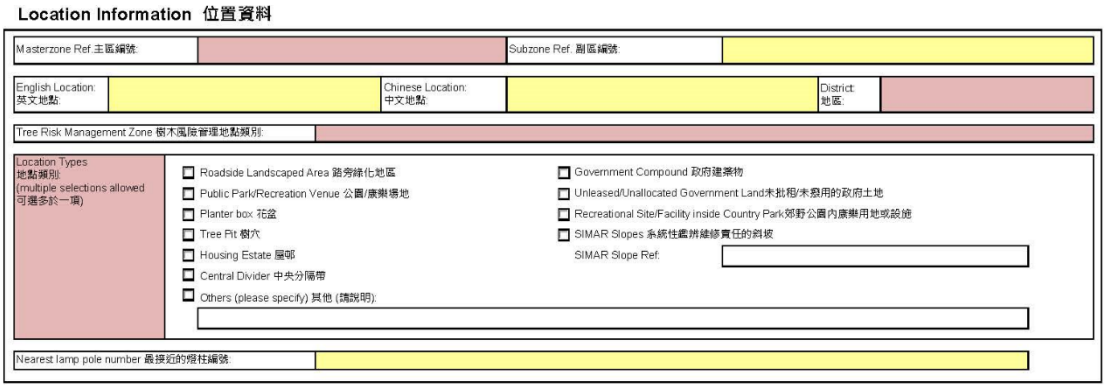
Date of Inspection: date of inspection in the format of dd/mm/yyyy. If the inspection lasts for more than one day, the commencement date of the inspection.

Last Inspection Date: date of last inspection of the subject tree group in the format of dd/mm/yyyy. If the inspection lasts for more than one day, the commencement date of the inspection. If it is the first time inspection of the subject tree group, please marked as 'first time inspection'.

Inspection Frequency: The frequency of inspection, i.e. once per 6 months marked as '6 months', once per year marked as '12 months', etc. Mark '***ad hoc'*** if the inspection is on need basis.

Section 2 – Location Information

This Section provides background information of the location of tree group to be inspected.



Masterzone Ref. & **Subzone Ref.**: provides Masterzone reference and Subzone reference, if applicable, of the tree group inspected. Fill in "NIL" in space provided after "Subzone" if no Subzone. Details of the zoning for Masterzone and Subzone are specified in the Tree Management Information System (TMIS) manual in the Cyber Manual for Greening (http://devb.host.ccgo.hksarg). The zoning is assigned by the responsible tree maintenance department.

Chinese Location and **English Location**: Chinese and English name of the tree group location, please refer the location/street name to the latest version of "*Hong Kong Guide*" published by the Lands Department.

District: use district categorisation in 18 District Councils.

Tree Risk Management Zone: the category of Tree Risk Management Zone (TRMZ) as specified in the TRAM Guidelines. Select 'Category I', 'Category II' or 'Category III' if the tree group falls into relevant Category zone. The Inspection Officer shall confine the tree group to be inspected in one TRMZ category, spilt the tree group if more than one TRMZ categories are involved.

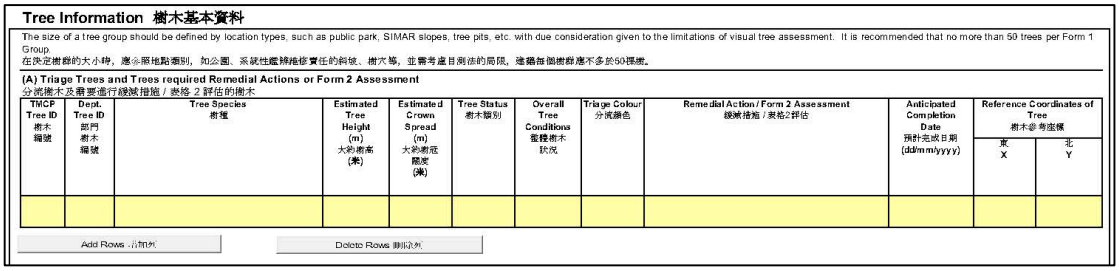
Location Type: check the box for "Location Type" as appropriate; mark SIMAR Slope reference number in the space provided if SIMAR Slope is identified. Provides location information in space in 'Others' if the subject tree group does not fall into the boxes provided. Check more than one box if the subject tree group falls into more than one location type.

Nearby Utility Post No.: The nearby public utility post number, such as Lamp pole number. Mark the utility on the location map with clear denoted reference number.

Section 3 – Tree Information

Inspection Officer shall define the size of a tree group by location types, such as public park, SIMAR slopes, landscaped area, etc. with due consideration given to the limitations of visual tree assessment. For easy recognition of tree conditions in a tree group under inspection, it is suggested that the tree group inspected shall not contain more than 50 trees.

Table (A): Triage Trees and Trees Require Remedial Actions or From 2 Assessment:



Tree Information 樹木基本資料

The size of a tree group should be defined by location types, such as public park, SIMAR slopes, tree pits, etc. with due consideration given to the limitations of visual tree assessment. It is recommended that no more than 50 trees per Form 1 Group.
在決定樹群的大小時，應參照地點類別，如公園、系統性緩辦維修責任的斜坡、樹穴等，並需考慮目測法的局限。建議每個樹群應不多於50棵樹。

(A) Triage Trees and Trees required Remedial Actions or Form 2 Assessment
分流樹木及需要進行緩減措施 / 表格 2 評估的樹木

TMCP Tree ID 樹木編號	Dept. Tree ID 部門樹木編號	Tree Species 樹種	Estimated Tree Height (m) 大約樹高 (米)	Estimated Crown Spread (m) 大約樹冠闊度 (米)	Tree Status 樹木類別	Overall Tree Conditions 整體樹木狀況	Triage Colour 分流顏色	Remedial Action / Form 2 Assessment 緩減措施 / 表格2評估	Anticipated Completion Date 預計完成日期 (dd/mm/yyyy)	Reference Coordinates of Tree 樹木參考座標	
										東 X	北 Y

Add Rows 添加列　　Delete Rows 刪除列

Triage Trees and Trees Require Remedial Actions or Form 2 Assessment:
Table (A) is designed for trees in the tree group inspected including:

1. Triage Trees, the five specific tree categories require Triage Classification including:
   - Dead trees
   - Trees confirmed with Brown Root Rot (BRR) disease infection
   - Old and Valuable Trees (OVTs)
   - Stonewall trees
   - Mature trees with an individual trunk(s) over 750mm DBH
2. Trees in the tree group that require remedial actions; and
3. Trees in the tree group that require Form 2 assessment.

Individual tree information is required in Table (A).

TMCP ID: A system generated ID to give a unique reference number to trees in the TMCP tree database. Inspection Officers are not required to fill in this TMCP ID.

Departmental Tree ID: the departmental identification number of each tree inspected. If the tree inspected has more than one tree ID, use the latest departmental tree ID.

Tree Species: use the scientific names and the preferred Chinese and English common name (i.e. the first name if more than one name) listed in the *Check List of Hong Kong Plants* (latest version) published by the AFCD.

Estimated Tree Height: estimate the total height of the tree inspected above ground level to top of tree crown, measured in meter (m). For better estimation, making use of clinometer / range pole.

Estimated Crown Spread: estimate the diameter of crown spread in meter (m). For asymmetric tree crown, the longest axis should be measured.

Tree Status: status of the tree inspected, namely

- **Old and Valuable Tree**
- **Stonewall Tree**
- **Mature Tree** (with an individual trunk(s) over 750mm DBH)
- **"Nil"** if no specific tree status

Overall Conditions: estimate the overall health and structural conditions of the tree inspected and select an appropriate condition in the following categories:

- **Normal**: tree health and structural conditions are similar to other healthy tree of the same species in the area, for example, leaf size and color, crown density, tree height and crown spread. The growth of the tree inspected is in general vigor in comparison to a healthy tree of the same species in the area and no significant defects were identified.

- **Fair**: Health and structural conditions of the tree inspected is considered not as vigor as a normal tree by comparison to a healthy tree of the same species in the area; plus, either one of the follows:
  (1) one or two health or structural defects were observed in crown, branches, trunk or root zone (i.e. old wounds, cavity with entire defensive wood, etc.),
  (2) minor dieback twigs (less than 5%), or

(3) sings of pest and/or disease etc., but no actual pest or disease could be identified.

and such health and structural problem(s) can be mitigated by pruning or other remedial actions.

- **Poor**: Health and structural conditions of the tree inspected are significantly poor than a normal tree of the same species in the area, plus either one of the follows:
  (1) more than 3 significant health or structural defects were observed on crown, branch, trunk or root zone, including large old wounds with signs of decay, large cavities with signs of decay, dead branches, hanging branches, etc.,
  (2) dieback twigs over 25% of total canopy,
  (3) minor pest and/or disease infestations are observed, but not detrimental to overall health and structural conditions of the tree inspected, or
  (4) Tree growth was considered adversely restricted by health or structural defects or other environmental conditions.

  These health and structural defects are likely to be mitigated by pruning or other remedial actions.

- **Very poor**: The tree is considered under a very poor condition if either one of the following is observed:
  (1) many (5 or more) significant health and structural defects are observed, including old wounds with significant decay, large cavity with significant decay, etc., where mitigation measures cannot stop deterioration of tree health from curing the defects,
  (2) fallen leaves or die back twigs over 50% of total canopy (except deciduous trees and semi-deciduous trees),
  (3) broken of main branches,
  (4) large portion of tear off tree barks in main trunk (over 50%), or
  (5) severe pest and/or disease infestation that existing pest and disease control measures are considered ineffective to the infestation, tree health conditions is continuously deteriorating.

  These health and structural defects are generally irrecoverable and detrimental to the tree.

- **Dead:** Dead tree.

Triage Colour: assess the tree under the Triage system in accordance to the TRAM Guidelines. Fill in the Triage colour category in the space provided. Please note that Triage classification may change in each assessment due to change of tree conditions and mitigations works done. If the tree is "Other Trees" in Zone I or trees in other zoning, no classification under the Triage system is necessary, please mark 'NIL'.

Remedial Actions/Form 2 Inspection: Fill in the remedial actions or individual tree risk assessment (Form 2) is considered necessary, leave the space empty if no further action is required. If this column is checked, please provide anticipated completion date, tree reference coordinates and reference number of tree photos showing the defects identified or spot of mitigation required in the following columns. Examples of remedial actions include:

- Remove the whole tree;
- Crown reduction to reduce crown load;
- Crown cleaning to remove dead/diseased branches/twigs;
- Crown lifting to remove lower branches;
- Structural pruning to modify tree form;
- Form 2 individual tree risk assessment; or
- Others: please specify in space provided or use separate information sheet.

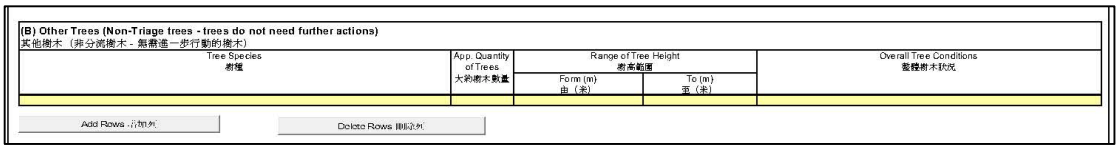
Anticipated Completion Date: the date that Inspection Officer anticipates the remedial actions or Form 2 assessment should be completed, in the format of dd/mm/yyyy. Consult tree works agent when necessary.

Tree Reference Coordinates: provides reference coordinates of the tree inspected at the tree center by x-axis and y-axis reading (HK1980 Grid Coordinates) up to 3 decimal places for reference in TMCP. The reference coordinates could be a reference location of the tree inspected measured by common GPS instruments or plotted on location plan with estimated reference co-ordinates.

Add Rows: check this box if more row is required.

Delete Rows: check this box to delete row.

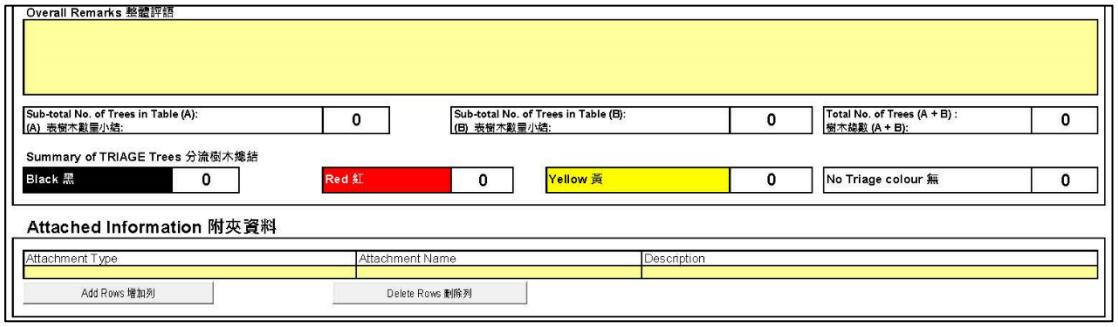
Table (B): Other Trees (Non-Triage Trees - trees do not need further actions)



Other Trees (Non-Triage Trees - trees do not need further actions): Table (B) is designed for "Other Trees" in the tree group that do not fall into Table (A): the five categories of Triage trees, trees do not need further actions or Form 2 assessment. **Only tree group information is required in Table (B).**

App. Quantity of Trees: Approximated quantity of trees, as far as practicable, in the same species in the tree group falls into the definition of "Other trees". For tree species cannot be identified during the tree group inspection, mark "unidentified" on the **Tree Species** column. Same tree species may appear in Table (A) and Table (B), please avoid duplicated counting.

Range of Height: the range of tree height in the same species of tree in Table (B). Please mark the tree height from the lowest to the highest in meter.



Overall Remarks: Inspection Officer may provide his/her observations, suggestions and recommendations on tree remedial actions in the space provided under the "Overall Remarks" when necessary. The overall remarks shall also include limitations and restrictions in the site, the need of further assessment on particular tree (individual tree risk assessment by Form 2) in the tree group assessed, as well as other information did not cover in the above-mentioned items.

Sub-total No. of Trees in Table (A): Total number of trees in Table (A).

Sub-total No. of Trees in Table (B): Total number of trees in Table (B).

Total No. of Trees: the total number of trees in the tree group inspected, i.e. total number of trees in Table (A) + Total number of trees in Table (B).

Summary of Triage Trees: give total number of trees of each Triage colour in the tree group inspected.

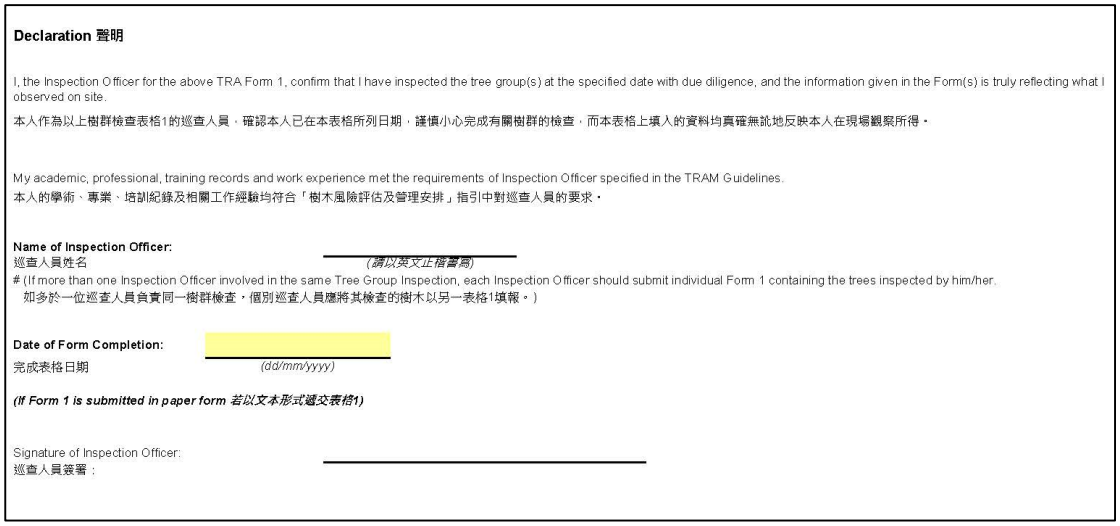
Attached Information: use this filed to attach photos, map, and other information.

Add Tree Group Photos: provide tree group photos taken on the inspection day. The picture of tree group inspected shall be taken from at least two different directions; individual tree photos should be provided for tree listed in Table (A) which was recommended for tree removal, remedial actions or further assessment (individual tree risk assessment (Form 2)). All photos provided shall follows the photographs requirements set out in Appendix 6 – Photo-taking Guidelines for Tree Risk Assessment specified in TRAM Guidelines. All photographs should be stamped with date and time of photo taken.

Add Map: add tree location map of the tree group assessed. The map shall show the location of the tree group, the relevant land status, major check points (i.e. Lamp pole number, SIMAR slope number, etc.). **All trees listed on Table (A) in the Form 1 report should be marked on the tree location map with the Departmental Tree ID.**

Add Other Information: add other information related to the inspection, i.e. future development project, land sales information, etc., that the Inspection Officer considers necessary further describe the site conditions and the tree group inspected.

Section 4 – Declaration



Declaration 聲明

I, the Inspection Officer for the above TRA Form 1, confirm that I have inspected the tree group(s) at the specified date with due diligence, and the information given in the Form(s) is truly reflecting what I observed on site.

本人作為以上樹群檢查表格1的巡查人員，確認本人已在本表格所列日期，謹慎小心完成有關樹群的檢查，而本表格上填入的資料均真確無訛地反映本人在現場觀察所得。

My academic, professional, training records and work experience met the requirements of Inspection Officer specified in the TRAM Guidelines.

本人的學術、專業、培訓紀錄及相關工作經驗均符合「樹木風險評估及管理安排」指引中對巡查人員的要求。

Name of Inspection Officer:

巡查人員姓名 _____ *(請以英文正楷書寫)*

(If more than one Inspection Officer involved in the same Tree Group Inspection, each Inspection Officer should submit individual Form 1 containing the trees inspected by him/her.
如多於一位巡查人員負責同一樹群檢查，個別巡查人員應將其檢查的樹木以另一表格1填報。)

Date of Form Completion:

完成表格日期 _____ *(dd/mm/yyyy)*

(If Form 1 is submitted in paper form 若以文本形式遞交表格1)

Signature of Inspection Officer:

巡查人員簽署： _____

Declaration: accountability statement to assure the Inspection Officer conducted this tree group inspection and completing the Form by his own. If more than one Inspection Officers involved in a tree group inspection, individual Inspection Officer should submit separate Form 1 containing the trees inspected by him/her in that tree group inspection.

Name of Inspection Officer: English name in Block CAPITAL letter of the Inspection Officer conducted the tree group inspection. This name should match with the name list of Inspection Officer provided by Departments to GLTMS/TMCP.

Date of Form Completion: Date of the Inspection Officer completed the Form 1 in the format of dd/mm/yyyy.

Signature of Inspection Officer: If the Inspection Officer cannot submit the Form 1 through electronic system, i.e. e-Form or TMCP, he/she might need to submit the Form on paper form, including but not be limited to hard copy, PDF, JPEG, or other digital copies. The Inspection Officer is hereby required to sign-off the paper form submitted at the space provided.

Reference:

Agriculture, Fisheries and Conservation Department, 2006, Nature Conservation Practice Note No. 2 - Measurement of Diameter at Breast Height (DBH), Agriculture, Fisheries and Conservation Department, Government of Hong Kong Special Administrative Region, China.

ANIS A300 (Part 9) – 2017 Tree Risk Assessment a. Tree Failure, Tree Care Industry Association, Inc., USA.

British Standards Institution, 2010, "BSI Standards Publication: Tree Work – Recommendations", British Standards Institution, UK.

Costello, L.P., Perry, E.J., Matheny, N.P., Henry, J.M., Geisel, P.M., 2003, 2003, Abiotic Disorders of Landscape Plants – A Diagnostic Guide, University of California, Agriculture and Natural Resources, USA.

Dunster, J. A., Smiley, E. T., Matheny, N. and Lilly, 2017, Tree Risk Assessment Manual, International Society of Arboriculture, USA.

Harris, R.W., Clark, J.R., & Matheny, N.P., 2004, "Arboriculture: Integrated Management of Landscape Trees, Shrubs, and Vines", 4th Edition, Prentice Hall, Upper Saddle River, NJ, USA.

Lonsdale, D., 2017, Principles of Tree Hazard Assessment and Management (7th ed.), Arboriculture Association, UK.

Shigo, A.L. 2008, A New Tree Biology and Dictionary (11th ed.), Shigo and Trees, Associated., USA.

Smiley, E. T., Matheny, N. and Lilly, S., 2011, "Best Management Practice: Tree Risk Assessment", International Society of Arboriculture, USA.

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