Comphort Technical Services

Bob Amezdroz Diploma of Horticulture and Arboriculture
Wk. 0427012755

Tree assessment at, 212 Churchill Road, Prospect on 2024-08-23

The purpose of this report is to identify potential impacts these trees may have on development, neighbouring properties and persons using the area within the vicinity.

The opinions and recommendations are based on a visual inspection from the ground and no increment boring to identify if internal decay was present.

Report was requested by owner, to assess the condition of the trees.

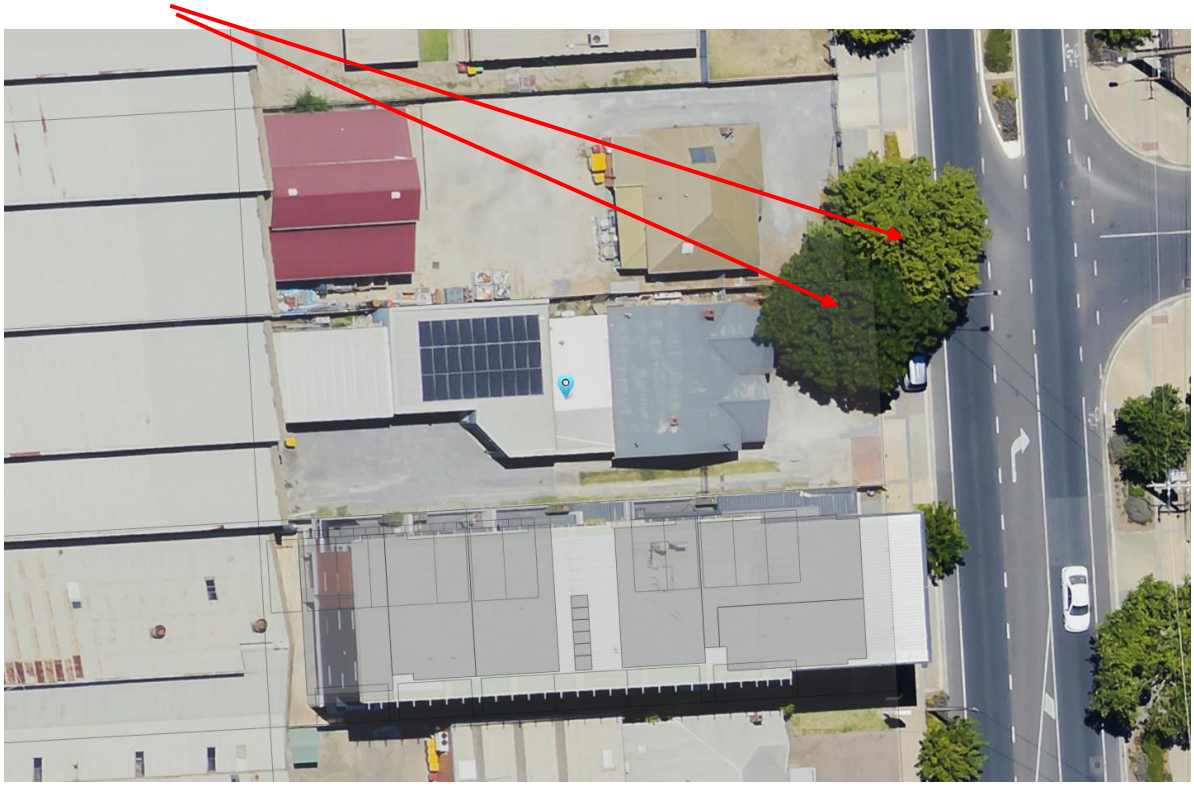
Brief

Comphort Technical Services was engaged to assess 1 Melia azedarach (White Cedar), 1 Platanus orientalis (Oriental Plane Tree) within property at 212 Churchill Road and front of 214 Churchill Road and provide information in relation to the following points:-

- *Assess the health and structure of the trees.*
- *Identify potential impacts and recommend mitigation strategies in accordance with the Native Vegetation Act of South Australia 1991and any amendments.*
- *The Planning, Development and Infrastructure Act 2016*
- *Identify potential impacts and recommend mitigation strategies in accordance with Australian Standard AS4970-2009 Protection of trees on development sites.*
- *Provide any additional relevant information*

Table of Contents

Location of trees



Tree species: *Melia azedarach (White Cedar)*

Height of tree: Approximately 8.8m

Circumference 1m above ground level: 1.2m/1.45m (2 leaders)

DBH (Diameter at Breast Height): 36cm/46cm (Combined = 58.4cm)

TPZ (Tree Protection Zone): 7m (Total area 154.3m^2)

SRZ (Structural Root Zone): 3.1m (Total area 30.9m^2)

Current condition: This Melia is in an average condition with multiple leaders off an old stump next to the fence.

Spread of the canopy: Approximately 10m

Age: Possibly 30 years old.

Useful Life expectancy: More than 10 years

Distance to boundary from centre of trunk: 0.5m

Presence of swollen areas: None.

Signs of girdling roots: None.

Signs of environmental damage: None.

Branch integrity: The majority of branches are in an average condition with minor deadwood branches throughout the canopy.
Integrity would be average.

Trunk integrity: The trunks are in a structurally sound condition with minor decay between the trunks. Integrity was good with sound testing indicating good sound timber within the trunk.

Trunk characteristics – narrow or open cracks, cavities present: None.

Overall trees appearance: Average foliage with a structurally sound heavy leaning trunks.

Presence of bark bleeding extent: None.

Any visible disease symptoms: None.

Presence of cankers: None.

Presence of dead wood, describe: There was minor deadwood branches throughout canopy.

Presence of fungi: None.

Presence of borer holes: None.

Condition of leaf material: Leafless at present (Deciduous).
Native wildlife habitat: None could be seen on the day of inspection.

Native vegetation: This species of Melia would be classified as Native Vegetation because of its age and location.

Any curious growth forms: Two main leaders with heavy lean towards the south.

Recommendations:

This tree isn't the most aesthetic looking Melia with its two leaders and heavy lean to the south but it is healthy and I cannot justify the removal of this tree for those reasons. The legislation below has to justify the removal of this tree.

PO 1.3 A tree damaging activity not in connection with other development satisfies (a) and (b):

(a) Tree damaging activity is only undertaken to:

(i) Remove a diseased tree where its life expectancy is short
(ii) Mitigate an unacceptable risk to public or private safety due to limb drop or the like
(iii) Rectify or prevent extensive damage to a building of the value as comprising any of the following:

A. A local heritage place
B. A state heritage place
C. A substantial building of value

and there is no reasonable alternative to rectify or prevent such damage other than to undertake a tree damaging activity

(iv) Reduce an unacceptable hazard associated with a tree within 20m of an existing residential, tourist accommodation or other habitable building from bushfire
(v) Treat disease or otherwise in the general interests of the health of the tree and/or
(vi) Maintain the aesthetic appearance and structural integrity of the tree

(b) In relation to a significant tree, tree-damaging activity is avoided unless all reasonable remedial treatments and measures have been determined to be ineffective.

The tree is not diseased or have a short life expectancy, it doesn't pose a risk at present to the public or private. It is not damaging any building or in a bushfire risk area. As the owner have proposed to build multi storey living units as the same as in 210 Chuchill Road and the development would not proceed unless the tree was removed.

Consequence

The potential consequence in the event of the tree (or an identified tree part) failing.

Catastrophic (1)	The tree is located in an area that attracts a high frequency of people and/or may cause in excess of $250,000 (AUD) damage to a fixed asset.
Major (2)	A potential failure may result in fatality or serious injury and/or may cause damage to fixed or mobile assets.
Moderate (3)	A potential failure may result in fatality or serious injury but is unlikely to and/or may cause damage to fixed or mobile assets but is unlikely to.
Minor (4)	The tree is located in an area that is unlikely to attract people or mobile assets with no fixed assets in the impact zone.
Inconsequential (5)	The tree is located in an area that is not typically accessed by people or mobile assets.

I expect the potential consequence to be Moderate (3).

Risk Rating

The risk rating of the tree as determined by the risk matrix and the recommended course of action.

Immediate	The tree must be isolated from people and action taken immediately to control the identified hazard. The arborist (or nominated person) shall not leave the area until the identified hazard has been controlled.
Severe	The tree must be isolated from people and action taken to control the identified hazard as soon as possible.
High	Action should be taken to mitigate the risk within one month.
Medium	Action should be taken to mitigate the risk within twelve months.
Low	Action should be taken to mitigate the risk at the custodian's discretion.

I expected the Risk Rating to be Low

- The Planning, Development and Infrastructure Act 2016 and amendments. This Act controls ‘tree damaging activity’ in relation to ‘significant’ trees by declaring it to be ‘Development.’ Trees 2m or greater in circumference measured 1m above natural ground level within the local council area are deemed as ‘significant trees’ Where trees have multiple stems they must have an average >625mm. ‘Tree damaging activity’ includes tree removal, damage to the root system, or pruning that will adversely affect the tree health. Council approval is required prior to any of these activities occurring. Breaches of the act are subject to fines of up to $120,000.

Tree species: Platanus orientalis (Oriental Plane Tree)

Height of tree: Approximately 12.5m

Circumference 1m above ground level: 1.85m (Regulated Tree)

Diameter at Breast Height (DBH): 56.5cm
Tree Protection Zone (TPZ): 6.8m (144.4m^2)

Structural Root Zone (SRZ): 2.7m (23.3m^2)

Incursion of new development in to the TPZ: As there was no detailed measurements of proposed development the incursion is not available.

Spread of the canopy: Approximately 12m

Distance to South Boundary from centre of tree trunk: 2.6m

Distance to Western Boundary from centre of tree trunk: 1.7m

Current condition: The tree is very healthy with minor deadwood throughout the canopy.

Age: Possibly 25 years old.

Useful Life expectancy: >20 years

Branch integrity: The majority of branches are in a good condition.
Integrity would be good.

Trunk integrity: The trunk is in a good condition with no signs of decay. Integrity was good.

Presence of swollen areas: None.

Signs of girdling roots: None.

Presence of bark bleeding extent: None.

Any visible disease symptoms: None.

Presence of cankers: None.

Presence of dead wood, describe: None.

Presence of fungi: None.

Signs of environmental damage: None.

Presence of borer holes: None.

Condition of leaf material: Deciduous at present.

Overall trees appearance: Healthy foliage with a balanced trunk.

Native wildlife habitat: None could be seen on the day of inspection.

Native vegetation: This species of Platanus would not be classified as Native Vegetation because of its age and location.

Any curious growth forms: None.

Trunk characteristics – narrow or open cracks, cavities present: None.

Recommendations:

As this tree is a council tree, council will have to approve any works within the TPZ of this tree.
At present the property at 212 Churchill Road has an incursion within the TPZ of this tree of 8.7% or 12.5m^2 and should have little or no effect on any proposed development at 212 Churchill Road, Prospect.

Tree Protection Zone

Under section 3.3 of AS4970-2009 it is recommended that encroachment into the TPZ of any tree is 10% or less provided the encroachment does not extend into the SRZ. If greater than 10% or within the SRZ, this would be considered a *Major encroachment,* and a project arborist would have to demonstrate that the tree/s could remain viable. This may require root investigation by non-destructive methods by a qualified arborist level 5 and or above on site; considerations of relevant factors including:

- the soil characteristics, topography, and drainage.
- the tree species and tolerance to root disturbance.
- the age and vigour of the tree.
- the preservation and protection of the root system resulting from higher watering and mulching.

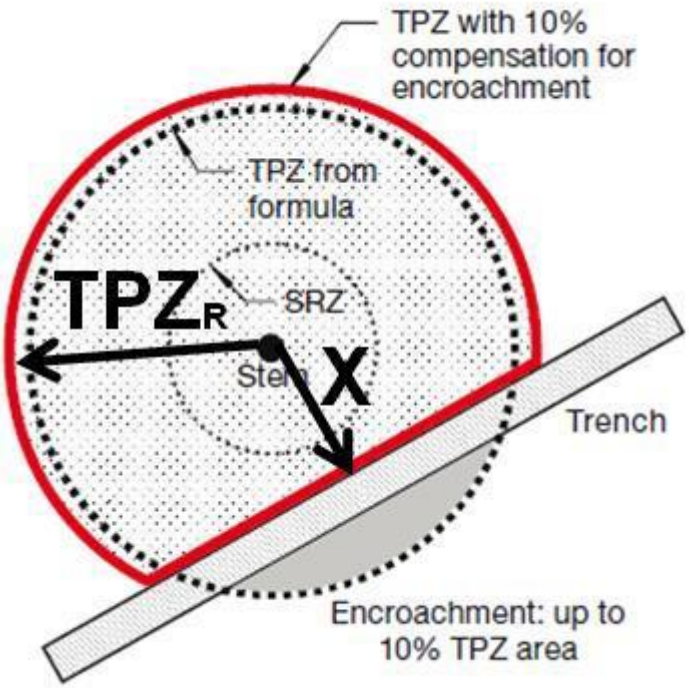
TPZ control measures:

Where practical, trench outside the TPZ. Impacting more than 10% of the TPZ can affect the long-term health of the tree.

Where cables must be laid within the TPZ, minimise the extent impacted and for significant encroachments, under bore using a directional drill bit at least 600-1000 mm beneath the ground surface, or if excavating, hand dig or use an air spade/knife.

Where possible, establish and work outside the TPZ. Fence off the TPZ to avoid physical damage to trees.

Where the control measures cannot be met, contact Environmental Services or an arborist to carry out a health and/or stability assessment of the tree.



Australian Standard: AS4970-2009 'Protection of Trees on Development Sites

A living tree is a dynamic organism that needs specific environment conditions to continue healthy stable growth. It is rarely possible to repair stressed and injured trees, so substantial injury needs to be avoided during all stages of development and construction.

For trees to be retained and their requirements met, procedures must be in place to protect trees at every stage of the development process. This should be taken into account at the earliest planning stage of any outdoor event or design of a development project where trees are involved.

Trees and their root systems may occupy a substantial part of any development site and because of their potential size, can have a major influence on planning the use of the site.

Existing trees of appropriate species and sound structure can significantly enhance new development by providing immediate benefits such as shade and storm water reduction as well as complementing new development.

Most trees will take many years and possibly decades to establish but can be injured or killed in a short period of time as their vulnerability is commonly not understood. This is especially so in relation to tree root systems which cannot be usually seen. Irreparable injury frequently occurs in the early stages of site preparation and remedial measures routinely fail.

Early identification and protection of important trees on development sites is essential from the outset and will minimize the problems of retaining inappropriate trees.

Successful long term retention of trees on development sites depends on an acceptance and acknowledgement of the constraints and benefits that existing trees generate. Protecting trees in accordance with the standard may influence design and construction costs and this should be considered in project budgets and contracts. The gains and benefits of retaining trees will accrue if the measures detailed in the standard are applied.

1. The TPZ is to be irrigated and kept moist for 4 weeks before site works commence and is to continue throughout the length of the project.

2. The existing boundary fence must remain in place and can form part of the TPZ fence. A 1.8m tall temporary chain mesh tree protection fence must be installed in the location as per AS4970-2009 (Figure 1) and AS4687 This will include signage as per As1319 (Figure 3). The tree protection fence must be installed prior to the commencement of any site works inclusive of demolition works. The fence cannot be moved without consulting the project arborist. The TPZ should be secured to restrict access.

3. Demolition works within the TPZ must be carried out by hand under the supervision of the project arborist.

4. All trench works within the TPZ must be excavated by hand or Hydro-vac (or similar non-destructive method) under supervision of project arborist.

5. If machinery is required within the TPZ, all machinery must work from ground protection such as rumble boards, so no part of a machine makes contact with the soil in the TPZ (Figure 2). The project arborist must approve the ground protection and certify the tree protection measures are correctly installed.

6. Other than where the ground protection is in place, no machinery access is permitted within the TPZ without written approval from the project arborist.

7. If scaffolding is required within the TPZ all scaffolding must be ground protected and approved by the project arborist.

8. The soil within the TPZ should remain undisturbed with no grade changes. If grade changes are required the works should follow the example on page 6 and must be supervised by the project arborist.

9. All services should be laid outside the TPZ, if services must be within the TPZ trenches must be dug by hand or Hydro-vac (or similar non-destructive method) under supervision of project arborist.

10. If the boundary fence/s are to be replaced within the TPZ, the existing fence/sand footings must be demolished by hand. The new fence/s within the TPZ must have the post excavations dug by hand or Hydro-vac (or similar non-destructive method) under supervision of project arborist. If a tree root deemed important is encountered during this process, a new offset hole will be required to be excavated.

11. Activities restricted within the TPZ

    Activities generally excluded from the TPZ include but are not limited to-

    a) Machine excavation including trenching;
    b) Excavation for silt fencing;
    c) Cultivation;
    d) Storage;
    e) Preparation of chemicals, including preparation of cement products;
    f) Parking of vehicles and plant;
    g) Refuelling;
    h) Dumping of waste;
    i) Wash down and cleaning equipment;
    j) Lighting of fires;
    k) Physical damage to the tree;
    l) Soil level changes;
    m) Temporary or permanent installation of utilities and signs.

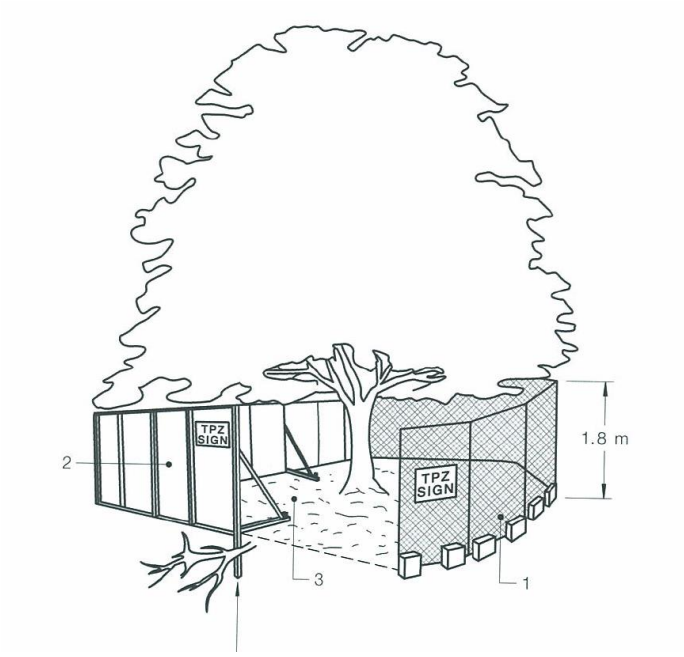


Figure 1 example of fencing

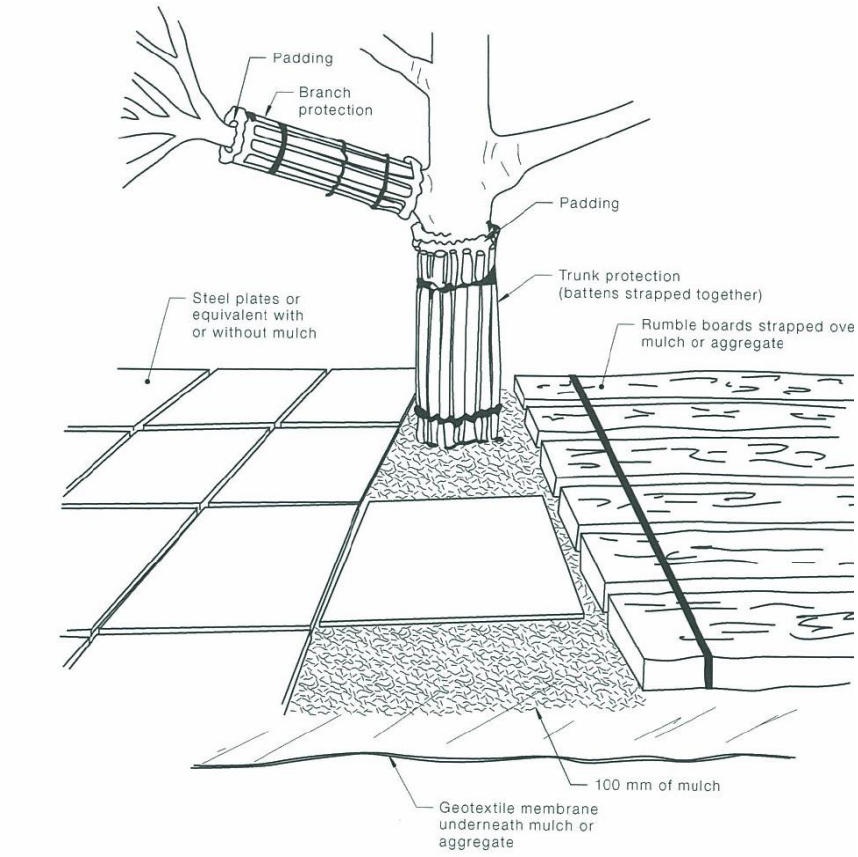


Figure 2 Root protection

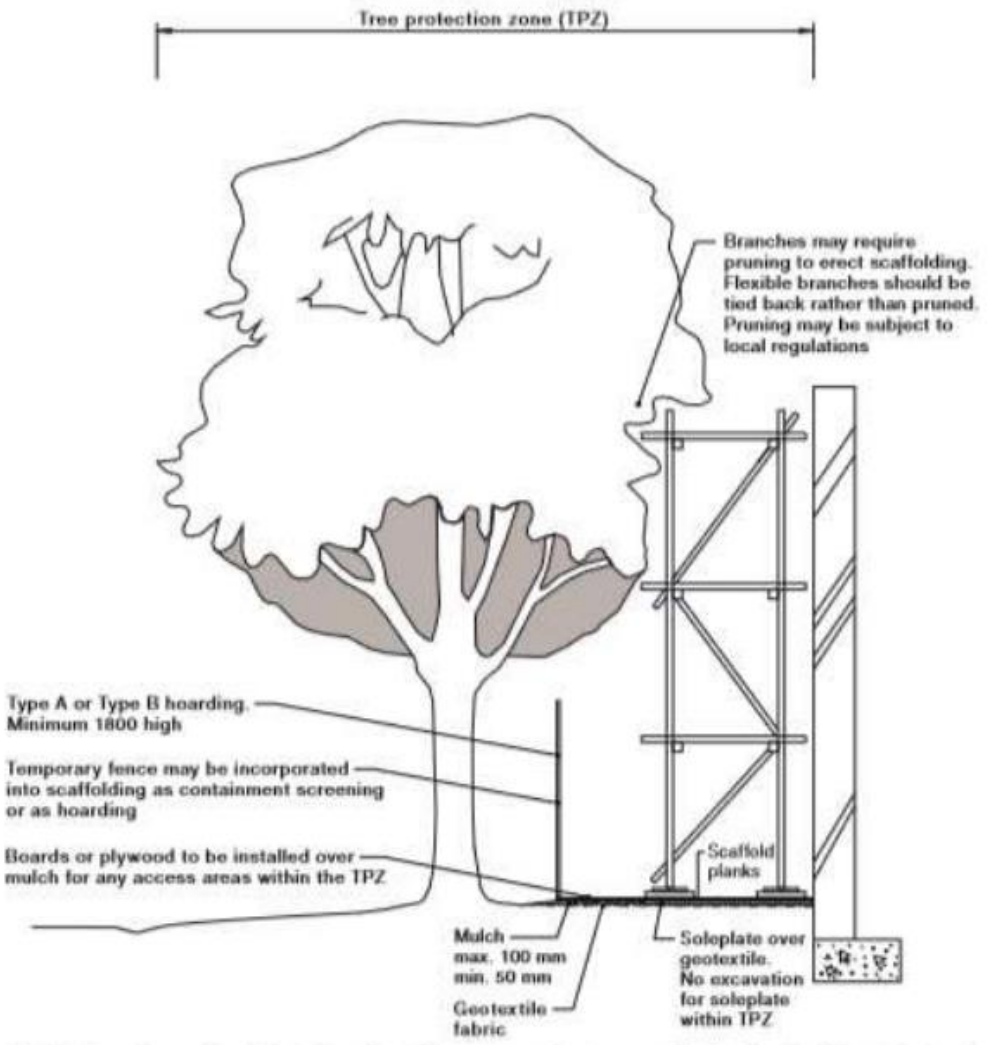


Figure 5: Scaffolding within the tree protection zone (TPZ)
Photo (Standards Australia 2009)

FIGURE C1 TREE PROTECTION ZONE SIGN

NOTE:

The tree protection sign must have the name and contact details for the project arborist.

Descriptors referred to the Tree Risk Assessment Form

Target number—many trees have multiple targets within the target zone; the target number is provided to list individual targets and to facilitate inclusion of this number in the Risk Categorization chart so that the target description does not need to be rewritten.
Target description—brief description such as "people near tree" "house," "play area," or "high-traffic street." Location of the target can be noted by checking one of the distance boxes to the right of the description.
Target zone—identify where the targets are in relation to the tree or tree part:
Target protection—note any significant factors that could protect the target
Within drip line—target is underneath the canopy of the tree.
Within 1 × Ht—target is within striking distance if the trunk or root system of the tree fails (1 times the height of the tree).
Within 1.5 × Ht—target is within striking distance if the trunk or root system of the tree fails and there are dead or brittle branches that could shatter and fly from the failed tree.
Occupancy rate—an estimated amount of time the target is within the target zone. Use corresponding numbered codes (1–4):
Crown and Branches
Vigor—an assessment of overall tree health; classify as low, normal, or high:
Chlorotic—yellowish-green to yellow.
Necrotic—dead foliage in part of or the entire crown
Codominant—branches of nearly equal diameter arising from a common junction and lacking a normal branch union.
Included bark—bark that becomes embedded in a union between branch and trunk, or between codominant stems, causing a weak structure.
Weak attachments—branches that are codominant or that have included bark or splits at or below the junctions. **Reduced**—pruning to decrease tree height or spread by cutting to lateral branches.
Crown cleaned—pruning of dead, dying, diseased, and broken branches from the tree crown.
Cavity/Nest hole—openings from the outside into the heart- wood area of the tree; record the percentage of the branch circumference that has missing wood.
Canker—localized diseased areas on the branch; often sunken or discoloured.
Gall—abnormal swellings of tissue caused by pests; may or may not be a defect.
Sapwood damage/decay—check box if there is mechanical or fungal damage in the sapwood that may weaken the branch, or decay of dead or dying branches
Load on defect—a consideration of how much loading is expected on the tree part of concern.
Likelihood of failure—the rating (*improbable*, *possible*, *probable*, or *imminent*) for the crown and branches of greatest concern.

Consultants Liability and Limitations:

All tree assessments are visual inspections and comment on the tree species, that can be seen, touched or inferred from the ground and covers what could reasonably be assessed and available to the assessor at the time of inspection.

The Tree Audit Register (TAR) and recommendations made in this report associated with the project are made in good faith on the basis of the information available to the consultant at the time of the inspection therefore the author accepts no liability for any recommendations made.

The inspection period to which the report applies is two months from the date of the report.

Achievement of objectives set out in such reports will depend among other things on the actions of the client, contractor(s), council, environment and the tree(s), over which the consultant has no control before, during and after the audit has been conducted.

Information contained in this report covers only the tree(s) that where examined and reflects the condition of the tree(s) at the time of inspection. There is no warranty or guarantee, expressed or implied; that problems or deficiencies of the subject tree(s) may not arise in the future.

Care has been taken to obtain all information from reliable sources. All data has been verified in so far as possible; however, the author can neither guarantee nor be responsible for the accuracy of information provided by others.

The author remains the sole beneficiary of this report until due payment is made to the author.

If you require any further clarification or information, please contact me on the number provided.

Bob Amezdroz
Comphort Technical Services
Consulting Arborist
Dip of Hort, Dip of Arboriculture
TRAQ qualified
Management of Veteran Trees (UK)
0427012755