

TREE MANAGEMENT NOTES

1. General

- 1.1. These notes must be read in conjunction with the requirements outlined in Reference Document 04.
- 1.2. It is the responsibility of the developer to ensure that all territory assets are protected from damage.
- 1.3. No works other than those identified on the approved LMPP/TMP are to take place within the Tree Protection Zone (TPZ) of an existing tree. No construction activities such as storage, parking, stockpiling, site sheds, construction access, washdown, excavation etc. are accepted without approval.
- 1.4. Prior to construction all protection measures indicated on the approved LMPP/TMP MUST be implemented onsite. [The project team must notify Urban Treescapes (UTS) in writing once the protection measures have been installed and to organise an inspection (via TCCS_CPUTDDCoord@act.gov.au)].

2. Site Access – Refer Vehicle Access within TPZ also. This section of notes is applicable for all developments
- 2.1. Site access must be strictly through the access points identified on The LMPP traffic management plan. Access through unleased land that is not identified on the approved plan is strictly prohibited.

3. Storage of materials This section of notes is applicable for all developments

- 3.1. The storage of construction materials and the parking of vehicles or equipment on verges or adjacent public open spaces are not permitted without prior approval from TCCS.
- 3.1.1. Only storage and parking locations on unleased land identified on this LMPP are approved.

4. Site Accommodation

This section of notes is applicable for all developments

- 4.1. Site sheds, site amenities, storage sheds, skips, billboards, or containers are strictly prohibited from being placed on unleased land unless identified on the approved LMPP, and Public Unleased Land Permit.
- 4.1.1 Only site amenities on unleased land identified on the LMPP are approved.

5. Fencing

This section is applicable for all development sites adjacent to unleased land. Protection fencing must be identified on the LMPP/TMP to protect territory assets adjacent the development site.

- 5.1 Protection fencing
- 5.1.1 Fencing must be erected before commencement of any construction activities on site, this includes but is not limited to starting of demolition works, delivery of machinery or materials, stockpiling, storage etc.
- 5.1.2 Fencing must be erected in the location, alignments and material indicated on the approved LMPP/TMP and must stop access throughout construction.

- 5.1.3. Fencing must remain in place for the entirety of the project, and maintained in good, safe working order until operational acceptance is granted. Removal before OA is granted must be approved by TCCS in writing on leased or adjacent land.
- 5.1.4. Fencing must be rigid mesh temporary fence panels supported by steel posts and concrete bases. Support posts driven into the ground are STRICTLY prohibited.
- 5.1.5. All connecting fixtures/hardware must be securely mounted so fencing cannot be dismantled and removed by the public.
- 5.1.6. The use of alternative fencing materials must be discussed with, and approved by TCCS
- 5.1.7. Fencing must be setback from footpaths and civil infrastructure as per REF04 requirements.
- 5.1.8. Any deviation from these setbacks must be clearly noted on the LMPP for review by TCCS.

6. Canopy Protection

This section of notes is applicable where the existing canopy of a tree on unleased land is likely to be impacted by construction works. The following canopy protection requirements are mandatory

- 6.1. The developer is responsible to minimise any impacts on the tree canopies and protect all existing tree canopies from construction activities.
- 6.2. Where canopy impacts are identified, the following requirements are mandatory.
- 6.2.1. Identify any pruning requirements on the LMPP by notionally indicating on a photograph where the limbs may need to be pruned or tied back.
- 6.2.2. Where directed by TCCS, a suitably qualified arborist with a minimum Certificate 5 qualification must be engaged to identify the canopy impacts and propose the preferred tie back of limbs or extent of pruning required.
- 6.2.3. Where pruning is identified, refer to section 5 of these notes.
- 6.3. Branch Pruning of Territory Trees
- This section of notes is applicable wherever pruning is required to trees on unleased land. All pruning activities MUST be indicated on the approved LMPP
- 6.3.1 All pruning and tying of branches must be undertaken by suitably qualified arborists with a minimum Certificate 3 qualification as per best practice AS4373.
- 6.3.2 Where practical branches should be tied back clear of the work, and pruning should only be used as last resort.
- 6.3.3 A pruning report from the arborist must be completed and issued to TCCS Urban Treescapes (UTS) with the LMPP and LoDR for approval BEFORE pruning activities can commence.

- 6.3.4 Once the pruning report has been endorsed by TCCS Urban Treescapes, the project representative must notify TCCS UrbanTreescapes of when the pruning is planned to take place (via TCCS_CPUTDDCoord@act.gov.au).

7. Trunk/Branch Protection

This section is applicable where work is required within the tree protection zone of an existing tree. Trunk protection MUST be installed when work is required within the TPZ of a tree.

- 7.1. Protection battens must be put in place before commencing works and maintain in good condition throughout the work period. Protection battens can only be removed at the completion of works.
- 7.2. Trunk Protection (as per current AS4970 requirements)
- 7.2.1. Loosely wrap the trunk requiring protection in a thick layer of hessian.
- 7.2.2. Use minimum 2m lengths of timber for the trunk protection and install at base of trunk for full circumference of tree. Space battens so gaps between battens are no greater than 20mm. Battens must be untreated timber free of nails, screws or bolts.
- 7.2.3. Lash battens to tree using straps, rope or hessian webbing ensuring the battens are secure against the tree, but not too tight on the trunk. Battens must be lashed at the top, bottom and middle as a minimum.
- 7.3. Branch Protection (as per current AS4970 requirements)
- 7.3.1. Where low hanging branches greater than 100mm in diameter are likely to be impacted by the works they will require additional protection.
- 7.3.2. Loosely wrap the branches requiring protection in a thick layer of hessian.
- 7.3.3. Use timber cut to length to suit the branch requiring protection and install to full circumference of branch. Space battens so gaps between battens are no greater than 20mm. Battens must be untreated timber free of nails, screws of bolts.
- 7.3.4. Lash battens to tree using straps, rope or hessian webbing ensuring the battens are secure against the tree, but not too tight on the trunk. Battens must be lashed at the top, bottom and middle as a minimum.

8. Demolition within the TPZ - Refer also Canopy, Trunk/Branch, Root Protection notes

This section of notes is applicable where existing infrastructure is required to be demolished within the TPZ of an existing tree

- 8.1. Only the demolition works within TPZ areas as indicated on the approved LMPP . Any demolition work within TPZ areas, that is not indicated on the endorsed plan is not approved by Urban Treescapes and an updated LMPP must be provided to TCCS for re-endorsement before commencing the works where on unleased land.

- 8.2. Demolition of old pavement within TPZ –

- 8.2.1 All construction work is to be completed prior to excavation and removal of the existing pavement. This is to ensure the tree roots do not dry out before work is completed.
- 8.2.2 To minimise root damage, the removal of the existing pavement shall be carefully done in small staged sections and only to the depth of the existing material (surface layer and base layer), so as to not cause damage to tree roots.
- 8.2.3 No vehicles or machinery are to be allowed within the TPZ and vehicles and machinery must always stay outside this zone during the removal of the old pavement material.

9. Excavation within the Tree Protection Zone (TPZ)- Refer also notes section 5.2 and 8

This section of notes is applicable where excavation within the TPZ of a tree on unleased land is approved by TCCS. All excavations within the TPZ must be shown on the LMPP/TMP, otherwise if excavation is not shown on the LMPP/TMP the impact on the trees caused by the excavation is considered unapproved

- 9.1. The term “Excavation” in relation to this clause means any earth works greater than 50mm in depth from the existing surface level, including trenching for services.
- 9.2. Only the excavations identified on this LMPP are approved within the TPZ.
- 9.3. Excavation within the structural root zone (SRZ) of a tree as outlined in AS4970, is STRICTLY prohibited.
- 9.4. Excavation within the TPZ must be executed using either under-boring, hydro-excavation or hand digging techniques, unless an alternative method has been documented and endorsed by Urban Treescapes.
- 9.5. Where identified by UTS, excavation to expose roots may be required to be undertaken by low-pressure hydro-excavation using a fan shaped nozzle head that is kept 15cm from soil profile.
- 9.6. A suitably qualified arborist must be present when excavations through the TPZ of a tree are being executed.
- 9.7. No roots greater than 30mm in diameter are to be cut, Refer Section 5.2 of these notes.
- 9.8. If additional excavation within the TPZ is identified to be required through the construction period, the developer/contractor must seek approval for this excavation from TCCS BEFORE starting the works.

10. Tree Root Protection – Refer also notes section 5.2

This section is applicable where existing tree roots are found in excavation locations.

- 10.1. Most tree roots are found within the top 300mm depth of soil, so the following protection measures MUST be followed when roots are encountered

- 10.2.Maintain the good health of the trees that have had disturbance in their root zone by continual watering, at no time shall the disturbed area be allowed to dry out to the detriment of the trees health.
- 10.3.Where extensive root damage has been caused, the developer must seek advice from an arborist about measures to minimise the impact of the damage on the trees’ health (i.e. additional watering, fertilising etc.)
- 10.4.All exposed roots must be backfilled/covered with soil immediately.
- 10.4.1. Backfill around tree roots will be in accordance with AS 4970 to match finished Where site soil is unable to be re-used, soil to meet MITS-09A Soil requirements must be used unless otherwise approved.
- 10.4.2. Where roots cannot be covered immediately the roots must be protected from desiccation by lightly watering or covering with hessian which must be kept moist,
- 10.4.3. Where proposed works come in contact with tree roots, a layer of geotextile fabric must be placed over roots and underneath any new pavement or infrastructure (driveways and footpaths for example).

- 10.5. Root pruning
- 10.5.1. Cutting of roots should be the last resort and only undertaken if no other option is available and root cutting is approved by UTS.
- 10.5.1.1. Alternative construction methodology may be proposed by UTS, such as bridging over, or under- boring under a large root that would compromise ongoing tree health. Roots greater than 30mm in diameter must not be cut. If roots greater than 30mm in diameter are required to be cut, approval from UTS must be sought before cutting.
- 10.5.2. All roots shall be cut with suitable professional equipment and by suitably qualified arborists with a minimum Certificate 3 qualification.
- 10.5.3. Any roots that are required to be removed must be cut cleanly with clean and sharp arborist tools. Tree roots are not to be ripped, torn, or pulled away from the root mass.Any damage to the tree/ tree roots which causes the tree to decline, will require tree replacement at the developer’s expense.

11. Vehicle access within the TPZ

This section of notes is applicable where any vehicle movement is required through the TPZ of an existing tree. All access through the TPZ of an existing must be indicated on the approved LMPP/TMP.

- 11.1.Vehicle access through the TPZ of an existing tree is strictly prohibited unless indicated and approved, on the project LMPP/TMP
- 11.2.Vehicle access within the structural roots zone (Refer Current AS4970) is strictly prohibited.

- 11.3. Vehicle access through a low hanging canopy is strictly prohibited (less than 3.5m clearance from existing ground to the lowest major limb)
- 11.4. Clearly mark out the approved access route onsite so vehicles do not deviate from the approved route.
- 11.5. Access route stabilisation within the TPZ
- 11.5.1 Place a minimum 200mm layer of organic 25mm wood chip mulch on the area of the TPZ the vehicle route that passes through. The mulch layer is to be maintained at this thickness under areas of traffic for as long as access is required.
- 11.5.2 Place a protective board (Rumble board) over the mulch ensuring each board is securely connected to the next board (as required) with gaps no between boards no greater than 30mm.
- 11.5.3 Boards must be kept in place and in good condition for the duration of the access requirements.
- 11.5.4 Alternative stabilisation materials for the access route such as access for heavy vehicles, must be discussed and approved by TCCS.
- 1.5. Where vehicles are likely to conflict with branches, branch protection must be implemented. Refer notes section 3 for limb protection requirements
- 11.7. If pruning of a tree is required to facilitate access, this must be clearly identified on the TCCS approved LMPP. Refer notes section 5 for pruning requirements
- 11.8. Vehicle access through the TPZ of an existing tree must not be closer than 3m to the trunk of the tree (unless otherwise agreed with TCCS)

12. Rectification of unleased land

This section of notes is applicable to all developments

- 12.1. For all Works, other than minor works*, and unless otherwise approved by AA, a suitably qualified landscape architect or horticulturist shall be employed to ensure that work in the verge meets the Requirements. The architect/horticulturist shall also be present during any cultivation or restoration of the verge which affects plant material and shall provide certification, endorsed by the Coordinator, that all work, cultivation and restoration have been performed to industry standards.
- 12.1.1.* (i.e. minor in complexity and / or scope of works and confirmed as a minor works by AA)
- 12.2. At the finalisation of the development works, the territory assets in unleased land adjacent the development must be unaltered and in the same or better condition than before the development works commenced, unless adjustments to these assets have been approved by TCCS as part of the development approvals
- 12.3. Where territory assets on unleased land have been damaged by the development, these assets must be fully rectified at the cost of the developer to the requirements in the TCCS Municipal Infrastructure Technical Specifications, or the requirements in the Composite Verge Landscape Plan as approved by TCCS.

