Shire of Mundaring

POLICY

STREET TREES

Policy Ref: PS-08 File Ref: GV.OPP 1 13 June 2018 Adopted: C19.06.18 Date: Amended: Date: Reviewed: Date: **Procedure Ref: Delegation Ref:** Statute Ref: Planning and Development Act 2005 Local Planning Scheme No.4 Liveable Neighbourhoods (as amended) **Local Law Ref:** Activities on Thoroughfares and Trading in Thoroughfares and

Public Places Local Law (Thoroughfares Local Law)

PURPOSE

- To increase the tree canopy cover within the Shire's road reserves and mitigate the urban heat island effect, support biodiversity and enhance the character and amenity of local streets; and
- 2. To outline the Shire's expectations in relation to proposals requiring or impacting upon street trees within Shire managed road reserves.

1. Scope

This policy applies in instances where:

- 1.1 land is proposed to be subdivided and improvements are required to existing road reserves or new road reserves are proposed;
- 1.2 development applications on private land impact upon existing trees within the property or street trees within the verge; and
- 1.3 proposals made under the Shire's *Thoroughfares Local Law* involve modifications to the verge.

Shire employees, residents/owners, builders, developers and contractors should be guided by this policy. The policy will also inform the Shire's advice to relevant agencies regarding major roads under the control of Main Roads WA or the Department of Planning Lands and Heritage.

This policy should be read in conjunction with:

- Local Planning Scheme No.4 (as amended); and
- Activities on Thoroughfares and Trading in Thoroughfares and Public Places Local Law; and
- Local Government Property Local Law (Amended)

- Roadside Conservation Policy (EV-01); and
- Shire of Mundaring Street Tree Guidelines (TBD).

This local policy provides a local interpretation of Liveable Neighbourhoods and the Institute of Public Works Engineering Australia's Subdivision Engineering Guidelines and should inform any future iterations of these documents.

2. Background

Street trees offer important social, economic and environmental benefits to the community. They contribute to a pleasant walking environment, provide shade and enrich biodiversity.

Street trees play a role in countering an increasingly warmer and dryer climate. Street trees provide energy savings through their shading and cooling effects in summer and the wind-chill protection in winter. Street trees can reduce daytime temperatures by between 5°C and 20°C, making everyday activities more pleasurable and healthier (Killicoat et al., 2002; Burden, 2006).

Urbanisation and the corresponding increase in paving and asphalt surfaces can reduce water infiltration into the soil as well as increase stormwater runoff volumes and peak flow rates. Planting street trees in urban environments can significantly improve the overall water balance within a catchment and reduce costs associated with stormwater management.

Direct economic value has also been observed for house prices in Perth, Australia. A broad-leaved tree on the street verge increases the median property price by about AU\$16,889 on average (*The effect of street trees on property value in Perth, Western Australia (1 December 2012) Ram Pandita, Maksym Polyakovb, Sorada Tapsuwanc, Timothy Morand*). Although there are a variety of different ways to assign value to trees, urban street trees generate significant economic benefits for communities and local governments.

A defining character of the Shire of Mundaring and the hill's lifestyle is the prevalence of trees and the enjoyment of the shade created by an expansive tree canopy. The intent of this policy is to protect and increase street trees throughout the Shire's road reserves for the benefit of the current and future community.

3. Street Trees Required

3.1 All new subdivisions require public road reserves that provide sufficient space within the verge for street trees on both sides of the street wherever practical to do so. To achieve this, a minimum road reservation of 16 metres is preferred but the Shire may require a wider reservation subject to the current and future role and function of the road and having regard to any infrastructure corridors, traffic safety and vegetation considerations.

Where verge infrastructure is to be installed in established streets, existing street trees must be retained wherever possible and if necessary, alternative

- infrastructure alignments should be identified to avoid disturbing or damaging established street trees.
- 3.2 Where a landowner seeks the Shire's discretion to vary Planning or Infrastructure Service standards that may detract from the visual amenity of the streetscape, a condition requiring the planting of street trees may be required to lessen and soften the visual impact.
- 3.3 Planning proposals (structure plans, subdivisions, developments etc) are to be designed to maximise opportunities to retain existing trees as future street trees and incorporate new street tree planting.
- 3.4 Prior to supporting a planning proposal that may result in the removal of a street tree, 'reasonable design alternatives' must be examined.

For the purpose of this policy, a 'reasonable design alternative' may involve:

- Deletion of proposed second/additional crossovers to the development site or narrowing the crossover or road pavement width to the minimum widths permitted;
- b) The altering of the development design to relocate proposed crossovers which are in conflict with street trees;
- c) The tapering of driveway and/or crossovers to the satisfaction of the Shire to provide the required clearance from street trees;
- d) The provision of shared crossovers for adjoining sites and/or shared driveways with reciprocal right of access easements; and
- e) Allowing for reasonable planning variations, including setback variations, to facilitate tree preservation.
- 3.5 The Shire will consider the retention value of the tree, based on the following criteria:
 - The number of trees and the ability to achieve the minimum street tree provisions;
 - b) The heritage, scientific, social, cultural and/or aesthetic significance of the tree and the streetscape;
 - c) Environmental benefits and landscape amenity;
 - d) The location of the tree and its impact on the viability or functionality of the development (having explored all reasonable design alternatives);
 - e) Tree species and habitat values;
 - The location of the tree in relation to any conservation values or ecological corridors;
 - g) Potential safety risks associated with tree retention;
 - h) Tree condition including health, structure and life expectancy; and
 - i) The extent of supplementary works required to retain and protect the tree:
 - j) Impact on water quality management
- 3.6 In instances where removal of established mature trees from a private property or from the verge is sought, the Shire may require the planting of street trees at a ratio of 1: 2 (removed:replaced) and installation of nesting boxes to assist in offsetting the loss of amenity, biodiversity and habitat value.

- 3.7 The Shire may waive the requirement for new street trees and accept two years of weed control or other improvements within the road reserve adjacent the subject site as an alternative where:
 - planting additional street trees is not desirable or required; or
 - areas of native vegetation including mature trees are in good condition and are successfully retained on the verge post subdivision or development, in accordance with Australian Standards 4970-2009. A reduced number of additional verge trees could then be determined.

4. Quantity and Position

- 4.1 Table 1 specifies the required quantity and spacing of trees relative to the zoning of the land. The number of trees may be reduced depending on the anticipated canopy cover achieved by the preferred tree species in the particular locality and the existing and future verge treatment/improvements envisaged. Variations to Table 1 may be determined at development approval or subdivision clearance stage.
- 4.2 Street trees are to be provided and planted at the owners' expense and maintained for a minimum of two summers.
- 4.3 Street tree requirements for Grouped or Multiple Dwelling sites on a strata plan (built or survey) are to be based on the average lot size of the applicable residential density coding, not the number of lots/dwellings proposed.
- 4.4 In addition to the requirements of Table 1, street trees should be positioned so as to:
 - maintain clear sight lines for all road users;
 - avoid any conflict with existing or anticipated infrastructure corridors when the street trees mature;
 - optimise shade cover over footpaths and near and adjacent public seating, bus shelters and similar resting places;
 - enhance the visual rhythm of the streetscape (consistent spacing); and
 - ensure the future health of tree root zones.

5. Selection

- 5.1 Native street tree varieties are preferred in areas with predominately native vegetation. Non-invasive deciduous varieties in these locations may be entertained where it can be justified, in the opinion of the Shire that they will:
 - provide a continuation of the existing street trees; or
 - offer a legitimate reduction to the exposure of strategic bushfire risk by a qualified bushfire consultant;
 - facilitate residential solar access.
- 5.2 Street tree species should be selected from the Shire's Street Tree Guidelines unless sufficient information is provided to satisfy the Shire that

- an alternative species is more suitable for a particular area. Infill street trees in established streetscapes should generally match or complement the existing tree species.
- 5.3 Trees should generally be a minimum of 1.5m high, 75lt-100lt container grown nursery stock when planted, unless in the opinion of the Shire, smaller stock is acceptable given the particular species or circumstances.

6. Administration

- 6.1 An overall landscape plan which includes street trees will be required for all subdivisions and grouped or multiple dwelling development proposals.
- 6.2 Where street trees are required to be installed within pre-existing built-up areas (where services already exist within the road reserve), planting and maintaining street trees must be undertaken by the Shire on behalf and at the expense of landowners to fulfil the requirements of this policy.

The Shire may also consider undertaking street tree works on behalf of developers creating new subdivisions depending on the Shire's resources and capacity.

In these instances, a non-refundable bond payment equal to the total cost of purchasing, planting and maintaining street trees for a period of two (2) summers plus 25% is required. A cost breakdown is to be included as part of any Street Tree Plan.

- 6.3 Where a delay occurs between the creation of lots and the installation of street trees, the developer must provide written notification to prospective or current landowners advising where the street tree is to be located to avoid conflict with the future crossover.
- 6.4 Considering the importance of the public benefit gained from street trees, the Shire will not entertain any landowner requests seeking to remove or prevent the planting of a street tree within the verge adjacent to their property. Requests to relocate a street tree at the owner's cost will be considered on a case by case basis having regard to 4.4 above. Further, unauthorised removal or damage of street trees will be investigated and will result in the Shire taking enforcement action.
- 6.5 In the exceptional circumstance where a landowner personally undertakes work within the Shire's managed road reserve or engages contractors to undertake the works on their behalf, before commencing the work the landowner (or their agent) must indemnify the Shire against any public liability exposure and take full responsibility for managing risks associated with works undertaken in the road reserve. Public infrastructure (e.g. power and telephone lines, road markers, etc.) and existing street trees must be protected and any damage reported immediately to the appropriate agency so that repairs can occur. Any costs associated with damage relating directly to the verge improvements will be the responsibility of the applicant.

- 6.6 Approval of a Landscape Plan, whether in association with a development application or subdivision clearance, which involves the installation of street trees or similar improvements, constitutes a 'permit' for the purposes of the Shire's Thoroughfare Local Law and Local Government Property Local Law (Amended). Where verge works are not undertaken or maintained in accordance with an approval, enforcement may also be undertaken in accordance with the Shire's Local Laws.
- 6.7 When issuing or recommending approval for subdivision or development the Shire may apply conditions and advice notes which reflect the provisions of this policy.

Table 1

Zoning	Minimum Street Trees Required
R12.5 or higher	One tree per 10m or one tree per lot
	(whichever is greater) unless otherwise
	determined by the Shire.
R10 or lower	One tree per 10m unless otherwise
	determined by the Shire.
Town Centre	One tree per 7m unless otherwise
	determined by the Shire.
Local Centre	One tree per 10m or one tree per lot
	(whichever is greater), unless otherwise
	determined by the Shire.
Service Commercial	One tree per 10m or one tree per lot
	(whichever is greater), unless otherwise
	determined by the Shire.
Light Industrial	One tree per 10m or one tree per lot
	(whichever is greater) unless otherwise
	determined by the Shire.
Rural Residential	One tree per 15m unless otherwise
	determined by the Shire.
Rural Small Holdings	New subdivisions that involve the
	creation of new roads, one tree per 20m.
	Other instances, at the discretion of the
	Shire based on existing street tree
	pattern.
General Agriculture	At the discretion of the Shire based on
	existing street tree pattern.
Development zones	Quantity and spacing in accordance with
	equivalent zoning as indicated in the
	Structure Plan or Detailed Area Plan
	unless otherwise specified by the Shire.