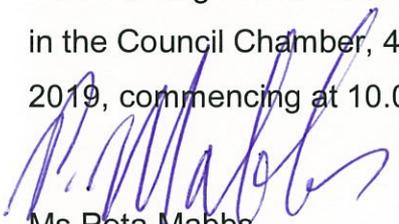


# TOWN OF BASSENDEAN

## NOTICE OF MEETING OF THE TOWN ASSETS COMMITTEE

Dear Committee Member

The meeting of the Town Assets Committee of the Town of Bassendean will be held in the Council Chamber, 48 Old Perth Road, Bassendean, on Wednesday 6 February 2019, commencing at 10.00am.



Ms Peta Mabbs  
**CHIEF EXECUTIVE OFFICER**

1 February 2019

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## A G E N D A

### 1.0 DECLARATION OF OPENING/ANNOUNCEMENT OF VISITORS

#### Acknowledgement of Traditional Owners

The Town of Bassendean acknowledges the past and present traditional owners of the land on which we gather to conduct this meeting, and pays its respects to their Elders, both past and present.

### 2.0 ATTENDANCES, APOLOGIES AND APPLICATIONS FOR LEAVE OF ABSENCE

### 3.0 DEPUTATIONS

Nil

#### **4.0 CONFIRMATION OF MINUTES**

##### **4.1 Town Assets Committee Meeting held on 7 August 2018**

###### **OFFICER RECOMMENDATION – ITEM 4.1**

That the minutes of the Town Assets Committee meeting held 7 August 2018, be confirmed as a true record.

#### **5.0 ANNOUNCEMENTS BY THE PRESIDING PERSON WITHOUT DISCUSSION**

#### **6.0 DECLARATIONS OF INTEREST**

#### **7.0 BUSINESS DEFERRED FROM PREVIOUS MEETING**

##### **7.1 Underground Power Policy**

###### **ATTACHMENTS**

**Attachment No. 1:** Draft Underground Power Policy

###### **BACKGROUND**

In December 2004 (OCM 9/12/04), Council resolved to undertake a survey in 2005 to evaluate community support for underground power.

The 2005 Community Survey separated the three different suburbs being Ashfield, Bassendean and Eden Hill with the following results obtained at the time of the survey:

- Ashfield - 53% prepared to pay half of the costs of installation, estimated to be around \$3,000. 31% are not prepared to pay for underground power and 16% don't know.
- Bassendean - 45% prepared to pay half of the costs of installation, estimated to be around \$3,000. 46% are not prepared to pay for underground power and 15% don't know.
- Eden Hill - Only 21% are prepared to pay half of the costs of installation, estimated to be around \$3,000. 65% are not prepared to pay for underground power and 9% do not know.

In 2010, the State Government announced Round 5 of the Underground Power program, which included a funding criteria for poor electricity supply services and a 15% subsidy for socio economic disadvantage suburbs. At this time, Ashfield was the 4th most disadvantaged local authority in Western Australia. As a result, ratepayers in disadvantaged suburbs would contribute 35% of the cost and of the State Government funded the balance. The State Government conducted an independent survey of the Ashfield ratepayers and the majority supported the undergrounding of power and supported contributing their share of the costs.

For Round 5 of the State Government Underground Power program, 89 expressions of interest applications were received and of these, only 15 were shortlisted.

The Town of Bassendean's Expression of Interest application for the undergrounding of power in Ashfield was successful, with the project being completed in 2012.

In 2015, the State Government's Round 6 Underground Power program, however the funding criteria had changed to competitive process between Local Governments with a minimum 50% ratepayer contribution, Western Power also determined the electricity network priorities and only 500 to 800 property allotments were permitted.

Council initially resolved to submit an expression of interest application for the suburb of Bassendean, Western Power determined that Eden Hill was a higher electricity network priority, as a result Council (OCM – 14/04/16) resolved to change the expression of interest application to Eden Hill.

The State Government conducted an independent survey of the Eden Hill Ratepayers; however, in this case less than 50% of ratepayers supported contributing their share of the costs. As a result, the Round 6 expression of interest application was not successful.

Almost 60 per cent of houses in the Perth metropolitan area now have underground power, with more than 1,000 kilometres of mostly residential streets having been undergrounded over the life of the State Underground Power Program. The State Government has committed \$49 million for about 18,000 properties to benefit from Round 6 Underground Power program.

For Round 6 of the State Government Underground Power program, 42 expressions of interest applications were received and of these, only 8 were successful.

Round 6 of the Underground Program commenced in 2017 and it is expected to be completed by the end of 2021.

In August 2018 the Towns Asset Committee considered the Underground Power Policy report and resolved (TAC - 6/08/18) that this item be deferred to the next meeting.

### COMMENT

The Draft Carbon Emissions Reduction Plan 2018-2023 presented to the 13 March 2018 Sustainability Committee included in Action Table 5: Street and Auxiliary Lighting, which stated the following:

- Continue to support WALGA and the EMRC in advocating to Western Power for energy efficient upgrades to street lighting.
- Investigate opportunities to retrofit street lighting infrastructure to reduce carbon emissions, energy consumption and costs to the Town.
- Ensure that any new decorative or feature lighting uses LED and/or Solar fixtures.
- Maintain current auxiliary and roadway lighting infrastructure and where applicable, retrofit with energy efficient lighting.

To achieve these planned actions, when the State Government announces future expression of interest grants, Council can submit applications to underground the Western Power overhead wires and for the street lights to be upgraded to Australian Standard AS/NZS 1158.6 – Lighting for Roads.

To assist with this process, the attached draft Underground Policy has been prepared for the Town's Asset Committee and Council's consideration.

It should be noted that past State Governments have altered the grant funding criteria and when the Underground Program is announced, very little time is provided for Local Governments to submit expression of interest applications.

Considering the last underground power survey was in 2005, it is suggested that once the Policy is adopted, priority underground program areas identified and funding is made available, that ratepayers be surveyed to seek the current level of ratepayer support to financially contributing to the cost of underground power.

### FINANCIAL CONSIDERATIONS

In 2007, Council (OCM -10/08/07) resolved in part to considers allocating \$50,000 per annum into a "reserve" account for properties adjacent to Town of Bassendean owned/vested land in order to fund an underground power program.

Council subsequently allocated an initial \$50,000 to the Underground Power Reserve Account and when the Ashfield Underground Project was completed the remaining Ratepayer funds were placed into this reserve account to be spent in Ashfield for streetscape improvements.

The estimated cost in 2017 for Round 6 rateable properties was \$5,600 or \$1,133 over 5 years as a payment plan.

#### OFFICER RECOMMENDATION – ITEM 7.1

That the Committee recommends that Council endorses the draft Underground Power Policy for the purpose of community consultation:

**Voting requirement: Simple majority**

## **7.2 Padbury Reserve - Playground**

### ATTACHMENTS

#### **Attachment No. 2:**

- Sandpit Swings Noughts & Crosses.
- Rocking Horse, Climbing Structure with slide, Picnic Shelter and Swings.

### BACKGROUND

As part of the 2018/2019 adopted Budget, Council allocated (1AP18030) \$10,000 to the Padbury Park Playground.

In August 2018, the Town Asset Committee considered the Padbury Reserve playground report and resolved (TAC - 8/08/18) that this item be deferred to the next meeting.

### COMMENT

In 2009, Council adopted a Play Spaces Implementation Plan. This document states for the 2018/2019 financial year that neighbourhood level play structures for 5 – 7 years of age children is to be provided at Padbury Square Reserve.

In the past, Recreation and Culture staff have selected age specific playground equipment within the budget allocation.

Attached to the report are photographs of the following structures at Padbury Reserve:

- Sandpit Swings Noughts & Crosses; and
- Rocking Horse, Climbing Structure with slide, Picnic Shelter and Swings.

Members of the Town Asset Committee have expressed an interest in Councillors having the opportunity to consult with the community regarding the allocated funding.

OFFICER RECOMMENDATION – ITEM 7.2

That the Committee recommends to Council that it Community Development conduct an on-site meeting with local residents on the nature and type of facilities they would like to see installed

**Voting requirement: Simple majority**

## **8.0** REPORTS

### **8.1** Urban Forest Strategy and Tree Planting Program for 2019

#### ATTACHMENTS

##### **Attachment No. 3:**

- Trees Requested by Residents and Reserve Planting
- Northmoor Road, Eden Hill - Information leaflet.
- 28 November 2018 Workshop Agenda and WALGA Street Trees Guidance Report

#### BACKGROUND

A number of meetings have occurred regarding the draft Urban Forest Strategy.

As part of the draft budget considerations increased funding was allocated for the planting of additional street trees as part of the 2019 winter planting program.

On 24 July 2018, Council resolved in part, the following:

- *Planting of trees be increased from 500 to 600 trees, with the location and species of the additional 100 trees to be determined by Council; and*
- *A Tree Reserve Fund be established and any unspent funds from the tree planting be placed in this Reserve Fund.*

In August 2018, an Officer's report was presented to the Town Asset Committee recommending that 100 "Eucalyptus todiana" trees be planted in Northmoor Road, Eden Hill during the 2018 winter planting season; and that the attached information leaflet be provided to all properties where new street trees were to be planted.

The Town's Asset Committee (TAC - 4/08/18) resolved that this item relating to the 100 additional trees be deferred to a future meeting.

Council (OCM – 15/08/18) received the August 2018 Town's Asset Committee Minutes and resolved in part to extend an invitation to the Managing Director of Arbor Carbon and the Director of the Forever Project to a future Councillor workshop to discuss their involvement in the recent Sustainable Urban Forest Management Symposium, to seek advice about the formulation of a brief for the Town's Urban Forest Strategy.

In accordance with OCM-15/08/18, a Councillors' Workshop was conducted on 29 November 2018 – See Workshop Agenda, and attachment. A presentation by the Managing Director Arbor Carbon and Director of the Forever Project and Urban Forest will be tabled at this meeting.

On 19 December 2018, a further meeting was conducted with the Mayor, Cr Hamilton, Cr Wilson, the Chief Executive Officer, Director Operational Services and Manager Asset Services, so that Councillors could discuss progressing the 2019 planting program.

At the conclusion of the meeting, the Town was requested to provide a brief to invite a suitably qualified and experienced consulting arborist to provide an estimated 3 different trees suitable for planting in the suburbs with underground power in Ashfield and Eden Hill.

#### COMMUNICATION & ENGAGEMENT

At the 19 December 2018 meeting with the Mayor, Cr Hamilton, Cr Wilson, it was suggested that for the underground power areas in Ashfield and Eden Hill, that residents could be invited to a community meeting, within a nearby park or open space area, include a BBQ, to promote the benefits of street trees, verge plantings, and discuss with those in attendance, the opportunities of a street verge activity program which could be supported by the Town.

To progress this suggestion, it is proposed that the Town engage AshfieldCAN and EdenHillCAN and ask that they identify in order of priority streets for planting.

The Town's Asset Committee can then consider the feedback from AshfieldCAN and EdenHillCAN and the availability of tree stock in order to determine what planting can be achieved in the 2019 plant program. To expedite the process responses can be forwarded to the Asset Committee by email for approval.

Pending the availability of trees, the community engagement strategy which would be led by a communications specialist engaged specifically for Tree Planting 2019 would consider as part of the strategy the following:

- Engage with Ashfield CAN and Eden Hill CAN to assist as part of the community engagement strategy;
- Promotion of the planned tree planting using multi-media over the months leading up to the winter planting season;
- Consult with residents to promote benefits of Street Trees;
- Planting Day with residents and Bar-b-que afterwards at a local park
- Celebrate the tree planting with photographs of residents planting street trees using multi-media following the planting.

To expedite the process, it is proposed that the Town's Asset Committee recommend to Council a list of streets in order of priority for tree planting and based off the Consulting Arborist recommended trees, the Town could source the available / suitable tree stock, engage with residents, promote the planting and arrange the planting days and Bar-b-ques.

As part of the community engagement process for the 2019 Tree Planting program, the Town would provide information at the Bassendean Memorial Library, 35 Old Perth Road Customer Service Centre and other requested "pop-up" locations.

Based upon 19 December 2018 discussions, the following draft narrative has been prepared to promote to the community the 2019 Street Tree Planting program:

### ***"Creating "Leafy and Liveable" Neighbourhoods***

*Areas where underground power is now available in Ashfield and Eden Hill have been selected as part of the Town's "Leafy and Liveable" Neighbourhoods program for 2019.*

*Areas where the Town succeeds in achieving future underground power projects, will also have the opportunity to participate in the Town's "Leafy and Liveable" Neighbourhoods program.*

*The program seeks to create "tree -lined" boulevards in neighbourhoods covering most of Ashfield and Eden Hill in order to significantly increase our Town's tree canopy.*

### ***Did you know?***

#### ***Street Trees:***

- *contribute to clean air by producing oxygen, reducing smog and intercepting airborne particles.*
- *reduce stress, slow heartbeats, lower blood pressure and relax brain wave patterns.*

- *are a natural air-conditioner - a tree canopy can be 6-8% cooler and reduces our demand and annual energy costs for heating and cooling.*
- *provide important habitats for numerous bird species, insects and other species.*
  - *absorb and block sound, reducing noise pollution by as much as 40 percent*
  - *reduces our exposure to UV radiation*
  - *encourage people to walk and jog, which encourages interaction with neighbours and improves the sense of community*
  - *enhance neighbourhood aesthetics and as a consequence are proven to increase the median property price of a house.*

### **The Plan**

*The Town will select suitable, healthy trees for each neighbourhood based upon considerations such as the suitability of the trees performance record in similar soil and environmental conditions, the mature growth of the tree and shade it will provide.*

*Over the 2019 winter months street trees will be planted along street verges to improve the aesthetics of the neighbourhood.*

*To ensure the street trees have a good start, the Town will water the trees for 2 years or until established. Please contact the Town to obtain more information.”*

### **COMMENT**

In regards to the meeting held on the 19 December 2018 and the request to provide a brief for the section of street trees to engage a suitably qualified and experienced consulting arborist to provide a list of suitable trees for the underground power areas of Ashfield and Eden Hill, Officers have reviewed Council's (OCM1-3/12/09) adopted tree selection criteria and Council's (OCM – 15/06/18) feedback that resolved in part the following:

*“Extends an invitation to the Members of the former Working Group to seek their feedback on adopting an objective in the Strategy that commits the Town to:*

- a) *A goal of 70% tree canopy on Town Road Reserves with significant form and scale to provide shade canopy over a large proportion of the road;*

- b) *Priority being placed on new plantings in those areas of the Town where the power lines have already been put underground, with the non-power line side of the streets in other areas of the Town being the second priority;*
- c) *Maintaining the uniformity of existing established avenues;*
- d) *Opening up the diversity of tree species that may be planted on other streets that are not already established Avenues;*
- e) *Developing biodiversity corridors with food and habitat for bird life;*
- f) *Finalising a street tree species list that:*
  - *at maturity grow high enough to provide significant form and scale to provide shade and canopy over a large portion of the road;*
  - *minimises impact on utility services;*
  - *are drought tolerant;*
  - *that have a strong performance record in similar areas;*
  - *are tolerant in paved areas where necessary;*
  - *are resistant to pests and diseases;*
  - *are long-lived;*
  - *have manageable limb shear risk;*
  - *meet the soil conditions of the site; and*
  - *are suited for planting on median islands and roundabouts.*

Taking into consideration the past Council (OCM1-3/12/09) resolution, the recent Council (OCM – 15/06/18) resolution and the 19 December 2018 feedback, the following draft Tree Selection brief for a consulting arborist has been prepared for the suburb of Ashfield and Eden Hill that have underground power:

“Consulting Arborist to:

1. Identify the existing established “Boulevard” style streetscapes in the suburbs of Ashfield and Eden Hill that have underground power and advise:
  - Street name that has historical, cultural or natural association with a particular street tree that requires to be maintained;
  - Tree species,
  - Number of additional trees to be planted to provide 70% shade and tree canopy over a large portion of the road reserve;
  - Plant Nurseries that have Tree Stock for Landscape Use in accordance with Australian Standard (AS2303:2015) for the number of trees identified.

2. Review existing streetscape plantings and recommend three (3) trees that achieve the following street tree criteria for the suburb of Ashfield and Eden Hill that have underground power:
  - o Form and scale of trees at maturity to provide 70% shade and tree canopy over a large portion of the road reserves;
  - o Trees have a strong performance record in similar geology and soil conditions;
  - o Root system suitable for planting adjacent to paved areas, building structures and within median islands and roundabouts and minimises impact on utility services;
  - o Enhance biodiversity with food and habitat for bird life;
  - o Trees are drought tolerant;
  - o Resistance to pest and diseases;
  - o Long Lived;
  - o Not prone to limb shear;
  - o Responsive to formative and if required structural pruning.

In regards to item 1 above, this is reasonably straight forward in regards to identifying the tree species, number of trees and if the number of trees will be available from the Nurseries in accordance with Australian Standard -AS2303:2015

In regards to item 2 above, whilst 3 trees can be identified, the issues that need to be resolved relate to which tree species will be selected to be planted adjacent to the individual properties, how many of each species need to be acquired and if the number of trees will be available from Nurseries in accordance with Australian Standard - AS2303:2015.

The above criteria, however, has been prepared to minimising the risk of planting trees that may not be suitable and have a high risk at maturity of causing damage to public or private assets.

Should the above criteria be adopted by Council or an alternative version, it is intended the Town will invite quotes to provide the list of trees and that a further report will be provided to the Town Asset Committee for consideration.

As an alternative, once the arborist has recommended the trees, the Town could expedite the above process by sourcing the available / suitable tree stock.

The Town will use the Australian Standard (AS2303:2015) for Tree Stock for Landscape Use, when inviting quotes for the supply and delivery for the Street Tree Planting Program. This document will be tabled at the meeting.

Considering the feedback provided by Managing Director Arbor Carbon and Director of the Forever Project and Urban Forest at the 29 November 2018 Councillor Workshop, it is recommended that Council use the funds allocated in the 2018/ 2019 budget to engage a suitable Multidisciplinary Consulting Firm to review the current draft Urban Forest Strategies and the Town of Bassendean Urban Heat Load assessments and for the appointed consultant to provide an updated Urban Forest Strategy and implementation Plan

#### OFFICER RECOMMENDATION – ITEM 8.1

That the Committee recommends to Council that it:

1. Adopts the Tree Selection brief for the consulting arborist to provide suitable trees for planting in the suburbs of Ashfield and Eden Hill outlined in the 6 February 2019 Town's Asset Committee Agenda;
2. Endorses the outline of the engagement approach for the 2019 Street Tree/Verge Planting program outlined in the 6 February 2019 Town's Asset Committee Agenda; and
3. Reconsiders the August 2018 (TAC - 4/08/18) resolution relating to the 100 additional trees to be planted and requests that residents have an option for the species of trees, from the arborist's recommendation, they would prefer be planted in Northmoor Road, Eden Hill during the 2019 winter planting season.

**Voting requirement: Simple majority**

## 8.2 Palmerston Square Reserve – Planning for community consultation

### ATTACHMENT

#### Attachment No. 4:

- Draft wording for Palmerston Reserve Sign.
- Draft wording for Palmerston Reserve “Your Say Bassendean”.

### BACKGROUND

In July 2017, Council (OCM – 9/07/17) resolved to:

1. *Receive the community feedback concerning the separated dog exercise areas at Anzac Terrace Reserve and Palmerston Square Reserve;*
2. *Note the issues associated with fenced dog exercise areas and the design considerations as provided in the Ordinary Council Agenda of 25 July 2017; and*
3. *List funds in the 2018-19 Long Term Financial Plan to prepare an Open Space Master Plan for Palmerston Square Reserve that further considers the possibility of a fenced dog exercise area and takes into consideration the space required to socialise dogs, whilst ensuring that pet owners continue to take responsibility for their dog and the fenced area does not adversely affect the reserve amenity.*

In June 2018, Council (OCM – 15/06/18) resolved in part to:

*“Requests the Town Assets Committee to undertake a community engagement with users of Palmerston Park to identify people who would be interested in participating in a Working Group of the Town Assets Committee in order to identify capital works improvements that could be made to the park that would increase the amenity of the park for local users, and approves the expenditure of up to \$500 by the Town Assets Committee for the creation of temporary signage; letterboxing flyers; and catering for community and working group meetings to facilitate this community engagement.”*

In regards to the OCM – 15/06/18 resolution, due to competing financial demands, Council did not allocate funding in the 2018/2019 Budget to facilitate community meetings or to produce any concept plans.

As a result, the Town Asset Committee (TAC -7/08/18) recommended and Council resolved (OCM – 15/08/18) to request officers to present draft signage for Council’s approval, seeking community feedback on improvements in Palmerston Park.

The estimated cost to have the draft wording printed onto two corflute (1 x 1 metre) sign plus installation and removal is approximately \$200. The Committee may wish to recommend that Council use Account 3913100 for the manufacture and installation of the signs.

#### COMMENT

As the 2018/2019 Budget does not include funding to create a Palmerston Park Concept Plan or Master Plan, the intention of the proposed signs to be erected on Palmerston Park are to promote the "Your Say Bassendean" website as part of a consultation process, to understand the community's aspirations to guide future budget allocations.

Attached to the agenda is a draft sign along with template information for the "Your Say Bassendean" website for the committee's consideration and feedback.

#### OFFICER RECOMMENDATION – ITEM 8.2

That the Committee recommends to Council that:

1. The draft Palmerston Park sign attached to the Town Asset Committee Agenda of 6 February 2019, be endorsed;
2. That the manufacture and installation of the Palmerston Park sign be installed using funds from the 2018/19 Budget - Account 3913100 at a cost of \$200 and the sign be installed for an advertising period of 6 weeks; and
3. Notes that the 2018/2019 Budget does not include funding to create a Palmerston Park Concept/Master Plan and that the proposed signs to be erected on Palmerston Park are to promote the "Your Say Bassendean" website, to allow for resident feedback, as part of a consultation process to understand the community's aspirations to guide possible future budget allocations.

**Voting requirement: Absolute majority**

**9.0                    MOTIONS OF WHICH PREVIOUS NOTICE HAS BEEN GIVEN**

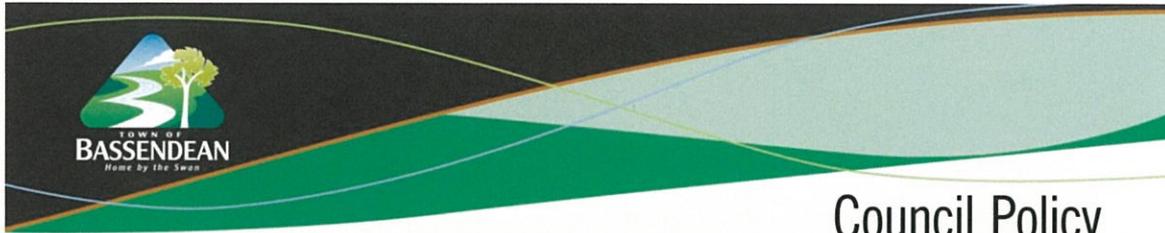
**10.0                    ANNOUNCEMENTS OF NOTICES OF MOTION FOR THE NEXT MEETING**

**11.0                    CONFIDENTIAL BUSINESS**

**12.0                    CLOSURE**

The next meeting of the Town Assets Committee will be held on 10 April 2019, commencing at 10.00am.

# **ATTACHMENT NO. 1**



## Council Policy DRAFT

# 1 Underground Power Policy

The Town of Bassendean desires a high level of amenity for its residents. This policy provides a mechanism for improving amenity by promoting and assisting with the undergrounding of power.

## Objectives

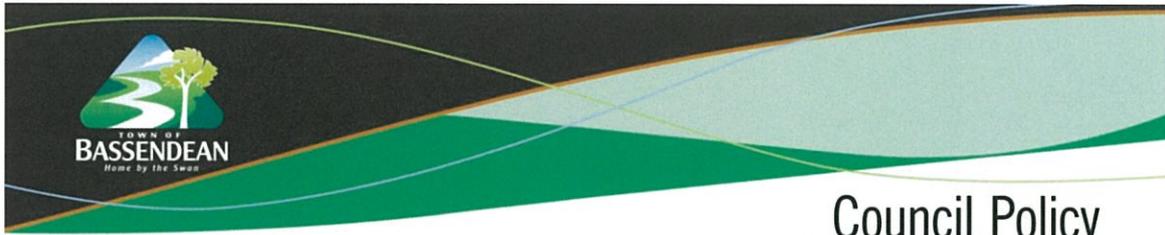
The objectives of this policy are to:

- Advocate to State Government for the installation of underground power in appropriate locations within the Town of Bassendean.
- Establish the ways in which costs associated with the installation of underground power shall be recovered from property owners

## Strategy

The Town of Bassendean will achieve these objectives through:

- Advocating to the State Government at every opportunity to achieve the undergrounding of overhead power distribution that currently exists in the Town of Bassendean.
- Partnering with relevant agencies on the planning and delivery of underground power.
- Identifying strategies for the funding of the underground power installation which minimise the cost to the Town and property owners.
- Developing a program to deliver the undergrounding of power to areas where overhead power currently exists in the shortest possible timeframe.
- Supporting a method of equally distributing costs for underground power projects as follows:
  - State Underground Power Project (SUPP) 50% funded by State/City and 50% funded by property owner: or
  - Local Government client funded underground power project 50% funded by City and 50% funded by property owner exclusive of any contribution by the State



**Detail**

**Application of this Policy**

A schedule of contributions required from benefitting property owners forms part of the procedures associated with this policy. The method of distributing this contribution by the property owner is included in the Underground Power Procedure.

The Town will seek update the Western Power street light network to the latest technologies including but not limited to light-emitting diode (LED) luminaries and smart control.

**Application**

Responsibility for the implementation of this policy rests with the Mayor, Councillors, Council delegates and Chief Executive Officer. The Chief Executive Officer (CEO) has the authority to administer the requirements of this policy. The CEO has on-delegated this authority to the Manager Asset Services.

The Policy is to be reviewed every five years.

<p><b>Policy Type:</b></p> <p><b>Link to Strategic Community Plan:</b></p>	<p><b>Policy Owner:</b> Director Operational Services</p> <p><b>First Adopted:</b></p> <p><b>Last Reviewed:</b></p> <p><b>Version 1</b></p> <p><b>Next Review due by:</b></p>
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# **ATTACHMENT NO. 2**



Removed 18.1.18 Due to VANDALISM  
& could NOT GET PARTS ANYMORE



-04-2013





REMOVED Spring was Broken.  
Due to WEAR & TEAR.



03/08/2018 11:59





03/08/2018 11:58



# **ATTACHMENT NO. 3**

## Trees Requested by Residents & Reserve Planting (May / June 2018)

ADDRESS	SUBURB	SPECIES
21 Chapman st.	<b>Ashfield</b>	Melaleuca viridiflora
24 Margaret st.	Ashfield	Euc. Leucoxydon rosea.
	<b>Bassendean</b>	
49 First ave	Bassendean	Euc macrandra
145 West rd	Bassendean	Agonis flexuosa
19-25 North rd	Bassendean	Euc rudis
55 Parker St	Bassendean	Agonis flexuosa
Brisdon st. new shed.	Bassendean	Callistemon viminialis
8 River st.	Bassendean	Euc. Todtiana.
U1&2 9 Broadway	Bassendean	Jacaranda
24 Scaddan st/ Ida st verge.	Bassendean	Jacaranda
79 North road	Bassendean	Euc rudis
16 Railway prd.	Bassendean	Agonis flexuosa
3/149 Kenny st.	Bassendean	Corymbia ficifolia
67 Kenny st	Bassendean	Corymbia ficifolia
18 Anzac trc	Bassendean	Melaleuca quinquenervia
9 Third ave	Bassendean	Euc macrandra
117 Second ave.	Bassendean	Euc todtiana
22 Hyland	Bassendean	Melaleuca raphiophylla
7 Lukin	Bassendean	Callistemon viminialis
58 Whitfield st.	Bassendean	Corymbia ficifolia
50 Parker	Bassendean	Agonis flexuosa
14 Third ave	Bassendean	Euc macrandra
145 West rd.	Bassendean	Agonis flexuosa
1/57 Fourth ave	Bassendean	Corymbia ficifolia
48 Watson rear of lot 153.	Bassendean	Agonis flexuosa
2 Clarke way	Bassendean	Callistemon viminialis
	<b>Eden Hill</b>	
2a Ida street.	Eden Hill	Jacaranda mimosifolia
6 Cumberland way	Eden Hill	Eucalyptus todtiana
27 Gallagher st	Eden Hill	Euc. Macrandra
11 Latham st	Eden Hill	Melaleuca viridiflora
14 Sylvia	Eden Hill	Corymbia ficifolia
3 Claughton way.	Eden Hill	Callistemon viminialis
16 Watson st	Eden Hill	Agonis flexuosa
6 Bradshaw	Eden Hill	Euc todtiana
5 Esther st.	Eden Hill	Euc todtiana
5/1 Freeland way	Eden Hill	Corymbia ficifolia
135 Walter rd east	Eden Hill	Melaleuca quinquenervia
8 Watkins st	Eden Hill	Euc macrandra

Eden Hill new estate

Gallagher st.	Eden Hill	Eucalyptus torquata
Christie way	Eden Hill	Callistemon viminalis Jacaranda mimosifolia Corymbia ficifolia

Planting Schedule for 2018-19

ADDRESS	SUBURB	SPECIES
	<b>Ashfield</b>	
Pearson Street		Agonis flexuosa
Coulson Street		Melaleuca quinquenervia
French Street		Eucalyptus todtiana
Hardy Road		Corymbia ficifolia
Maidos Street		Eucalyptus leucoxylon 'euky' dwarf
Haig Street - Coultoun Road		Corymbia ficifolia Red
Haig Street - Coultoun - Reid		Corymbia ficifolia
Fisher Street		Agonis flexuosa
Margaret Stree		Eucalyptus leucoxylon rosea
Dorothy Street		Eucalyptus lehmanni
Maley Street		Eucalyptus todtiana
Mons Street		Eucalyptus torquata
	<b>Eded Hill</b>	
Chedworth way		Eucalyptus leucoxylon rosea
Faulkner way		Agonis flexuosa - . Previously S.T.M.P stated Callistemon viminialis
Northmoor Road	New Budget Increase	Eucalyptus todtiana
<b>Total=</b>		620



## *New Street Tree - Planting for the future*

**Dear Resident**

### **Northmoor Road, Eden Hill**

To help beautify your street, the Town of Bassendean Council allocated funding in the current budget to provide infill planting in a number of streets in the Town of Bassendean.

New Street trees will be planted wherever possible to create an attractive themed streetscape.

The Town will water the newly planted street trees during their first two summers and it is the Town's responsibility to maintain new and existing street trees by carrying out pruning or other treatments as necessary.

The tree species are selected according to Council's adopted Street Tree Master Plan, which can be viewed online at <http://www.bassendean.wa.gov.au/documents/304/street-tree-master-plan> or you can contact Asset Services on 9377 9000 to enquire.

The Street Tree Master Plan states that future plantings for Northmoor Road will be:

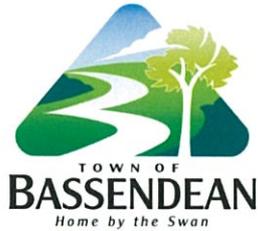
*Eucalyptus totdtiana*, commonly known as *Prickly Bark*, *Blackbutt*



In recent years the metropolitan area has been experiencing a drying climate and water restrictions have been imposed, Many street trees in the metro area are suffering from water stress. In the past, mature street trees relied on water sourced from the front gardens of residential properties but many of the verge areas adjacent to residential properties are no longer being watered. If you would like to adopt the street tree adjacent to you property and assist in the watering of the tree, please see the attached brochure.

Research findings have identified a number of economic, environmental and societal benefits in street tree plantings. The advantage of the trees in our suburbs are that they enhance neighbourhood aesthetics and as a consequence research has demonstrated an increase median property prices by 4.27%, trees capture carbon which is a vital tool in the global fight against climate change and in addition having a shady green street improves the walkability of neighbourhoods.

To achieve the above Council has requested officers place street tree/s on each street verge within the Town. Planting will proceed mid-August 2018. If you have a specific location, on the street verge adjacent to your property, where you are wanting the tree/s to be planted, please advise the Town through email [street.trees@bassendean.wa.gov.au](mailto:street.trees@bassendean.wa.gov.au) by 15 August 2018.



**A COUNCILLORS' INFORMATION WORKSHOP IS TO BE HELD ON  
WEDNESDAY 28 NOVEMBER 2018  
IN THE COUNCIL CHAMBER, 48 OLD PERTH ROAD, BASSENDEAN  
COMMENCING AT 6.00PM**

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## **AGENDA**

Cr Quinton will be the facilitator at this workshop.

### **1.0 ATTENDANCES & APOLOGIES**

#### Guests

Managing Director of Arbor Carbon – Paul Barber  
Director of The Forever Project- Chris Ferreira

#### Apologies

Cr McLennan – Leave of Absence

### **2.0 REPORTS**

#### **2.1 Urban Forest Strategy**

##### **Attachment No. 1:**

- WALGA Street Trees Guidance Report

#### Background

In 2015, the Town of Bassendean became a partner to the 2020 Vision (The 2020 Vision is a national campaign to increase urban green space in Australia by 20% by 2020) and Officers attended training and completed the 10 step program in preparation for developing an Urban Forest Strategy.

The Town of Bassendean's 2016 draft Urban Forest Strategy set out the Economic, Environmental and Social benefits, the current status with the Local Planning Scheme, potentially rezoning issues associated with Directions 2031 and the milestone approach required to achieve Town's future Urban Forest Strategy

At the February 2016, Ordinary Council Meeting (OCM-30/2/16) the following was resolved:

*"That the Town of Bassendean, via the Liveable Town Committee, establish a working group, comprised of local community members, relevant staff, Councillors and other interested and/or qualified persons to review the draft Town of Bassendean Urban Forest Strategy and the staff internal working group's Street Tree Master Plan recommendations".*

The first community Urban Forest Working Group (UFWG) meeting was held on the 25 May 2016 and after progressively revising the draft document, at the June 2017 UFWG meeting, a "Community Sub-Group" presented a revised index to indicate how each of the revised chapters were to be collated and the community subgroup progressively provided additional information to be included.

During this period, the Town engaged and Aston Consultants and in January 2017 received an Aerial Vegetation Mapping, Tree Canopy Analysis and Urban Heat Island Mapping report, this information was provided to the community UFWG.

Officers collated the information that the community Urban Forest Working Group requested in order to prepare the UFWG strategy. On 8 September 2017, the community representatives in the UFWG reviewed the draft revised Strategy via an overhead screen to allow the UFWG members to progressively review and amend as required.

The Town's Asset Committee were subsequently provided with the Town's draft Urban Forest Strategy, the Aerial Vegetation Mapping, Tree Canopy Analysis and Urban Heat Island Mapping report and the community UFWG's draft Urban Forest Strategy , via the Councillor portal at <http://www.bassendean.wa.gov.au/documents/> for the consideration.

At the June 2018 Town's Asset Committee, comment was received that the Community Working Groups draft of the Urban Forest Strategy had change the intent from a strategy to more of communication document and will need to be modified in order to provide clear Strategic direction for both the public and private realm.

The Town Assets Committee (TAC - 1/06/18) considered the Tree Canopy Analysis and the Urban Forest Working Group's draft revised Urban Forest Strategy document and Council (OCM-15/06/18) subsequently resolved, in part the following:

2. *Receives the report on the history of the draft Town of Bassendean Urban Forest Strategy and the community group's reworked Urban Forest Strategy;*
3. *Extends an invitation to the Members of the former Working Group to seek their feedback on adopting an objective in the Strategy that commits the Town to:*
  - a) *A goal of 70% tree canopy on Town Road Reserves with significant form and scale to provide shade canopy over a large proportion of the road;*
  - b) *Priority being placed on new plantings in those areas of the Town where the power lines have already been put underground, with the non-power line side of the streets in other areas of the Town being the second priority;*
  - c) *Maintaining the uniformity of existing established avenues;*
  - d) *Opening up the diversity of tree species that may be planted on other streets that are not already established Avenues;*
  - e) *Developing biodiversity corridors with food and habitat for bird life;*
  - f) *Finalising a street tree species list that:*
    - *at maturity grow high enough to provide significant form and scale to provide shade and canopy over a large portion of the road;*
    - *minimises impact on utility services;*
    - *are drought tolerant;*
    - *that have a strong performance record in similar areas;*
    - *are tolerant in paved areas where necessary;*
    - *are resistant to pests and diseases;*
    - *are long-lived;*
    - *have manageable limb shear risk;*
    - *meet the soil conditions of the site; and*
    - *are suited for planting on median islands and roundabouts.*
7. *Refers those parts of the Strategy that have planning implications or impact private property to the Design Bassendean Working Group for feedback;*

Please note that in regards to item 7 above, the draft revised Urban Forest Strategy prepared by the UFWG has been referred to the 8

August 2018 Design Bassendean Working Group and requested the group to:

- Review the Aerial Mapping Study which outlines the tree canopy in the public and private realm and draft revised Urban Forest Strategy prepared by community representatives and consider the planning implications or impact private property;
- Provide input into how the existing tree canopy on private land can be potentially protected or the tree canopy off set to ensure the current environmental benefits of the existing canopy can be retained; and
- Investigate a mechanism through the Local Planning Scheme to implement a regulatory tool which sets out the procedural framework governing the removal and the requirements to offset the loss of tree canopy consider the implications or impact private property.

Council considered the August 2018 Town's Asset Committee recommendation and resolved OCM – 15/08/18 to extend an invitation to the Managing Director of Arbor Carbon and the Director of the Forever Project to a future Councillor workshop to discuss their involvement in the recent Sustainable Urban Forest Management Symposium, to seek advice about the formulation of a brief for the Town's Urban Forest Strategy

As Council is aware, on 8 November 2018, the Western Australian Planning Commission, Department of Planning Lands & Heritage and WALGA launched the *Better Urban Forest Planning Guideline*, to assist Local Governments in the strategic planning of their urban canopy. The development of the guideline is aimed at supporting these efforts and promoting best practice in urban tree canopy management. The document provides information, tools and case studies and a toolbox of statutory and strategic planning instruments and guidance to promote the tree retention and planting. The Guideline is available via the Town's website at "Greening Bassendean" and also via the at [https://www.planning.wa.gov.au/dop\\_pub\\_pdf/Better Urban Forest Planning.pdf](https://www.planning.wa.gov.au/dop_pub_pdf/Better_Urban_Forest_Planning.pdf)

## FINANCIAL IMPLICATIONS

It is intended that once the Urban Forest Strategy is adopted which, the Town will invite quotes and engage suitable contractor that has a multidisciplinary skills to prepare a Urban Forest Management Plan and revised Street Tree Master Plan using the \$60,000 allocated in the 2018/2019 budget

The 2018/2019 budget Council resolved the following:

- OCM – 14/07/18 to included funds to increase from 500 to 600 trees, with the location of the additional 100 tree species to be

determined by Council. In regards to the additional 100 trees to be planted, in August 2018 Town's Asset Committee deferred a decision regarding the planting of the 100 street trees

- OCM – 15/07/18 that a Tree Reserve Fund be established and any unspent funds from the tree planting be placed in this Reserve Fund..

### COMMENT

The Town's Asset Committee has also advised that it would be useful to receive information at the workshop regarding the following:

- Tree species selection
- Best practice tree procurement

In 2009 Council (OCM1 – 3/12/09) adopted the following criteria for selecting street trees:

- "Boulevard" style streetscapes;
- Biodiversity Corridors;
- Historical, cultural or natural association;
- Form and scale;
- Impact on utility services;
- Drought tolerance;
- Performance record;
- Response to pruning;
- Planting tolerance in paved areas;
- Resistance to pest and diseases;
- Verge widths;
- Long lived; and
- Limb shear.

In addition when the Town is selecting trees new street trees, the consulting Arborist will consider the geology, soil conditions of this site, propose subsurface root management adjacent to roads or within with in road islands, to ensure that in the long term the selected street trees provide shade canopy and contribute to reducing the urban heat load.

The above tree selection criteria is used by the Town in consultation with an Arborist for the specific location in order to minimising future expenditure on tree related issues due to inappropriate or high risk, high maintenance species being planted.

In regards to tree species selection, in September 2018 the Western Australian Local Government Association (WALGA) released the attached final Street Trees Guidance Report. This document includes information relating to

- High level strategies
- Operational policies and plans

- Linking street tree policies into local planning
- Communicating street tree policies
- Using policies to deal with complaints
- Protecting Trees
- Species Selection Competition for verge space
- Liveable Neighbourhood
- Urban Forests

In regards to the procurement of trees, it is important that specifications outline the pot type (bag or airpot etc), soil quality, pathogen and disease free, tree not root bound, structural form, size of stock require, etc to be available to the Town commencing from a specified date to enable the planting to be undertaken at the commencement of the winter planting season.

### **3.0 CLOSURE**

# Street Trees Guidance Report



Photo courtesy of the City of Melville

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## **1. Introduction**

Local Governments are responsible for managing street trees. As land managers, service providers and government regulators, Local Government can play an important role in seeking to balance infrastructure and community needs with environmental conservation and sustainability.

The benefits of street trees are numerous and include environmental, amenity, health and social benefits. However, there can be constraints to planting street trees that occur in the planning phase, in the potential road safety impacts due to poor location or effect on sight lines, in the costs associated with planting and maintenance and in the potential of property and asset damage from falling branches or roots.

## **2. Purpose**

This document articulates the barriers that prevent Local Governments from investing into street trees, and the potential solutions to these barriers. This document has been designed as a practical guide to help Local Government's work through the issues surrounding street trees.

## **3. Background**

WALGA held a Local Government Street Trees workshop in 2014 to explore the issues that the sector faces when managing street trees. Four experts presented on some of the major aspects of dealing with street trees WALGA had identified street trees as a major issue for Local Governments and held this workshop to help Local Governments that were doing work in this area. The presentations given were about the urban heat island effect; planning and street trees; street trees from a Local Government perspective; and the role of street trees in water sensitive urban design.

Attendees at the workshop were asked to provide feedback about the issues Local Government faces in regards to street trees (RSVP list for the workshop is attached as Appendix 5). The following document:

- Outlines the issues that were identified by Local Government at the WALGA street tree workshop.
- Discusses these issues; and
- Provides possible solutions and examples.

Where possible, links have been provided to assist Local Governments.

## 4. Getting your community on board

Community plays an important role in establishing, protecting and maintaining street trees. However, some Local Governments struggle with community opposition or community apathy to street trees. This can occur for many reasons, including:

- changing demographic- overseas migrants, aging population (who may struggle with maintaining falling leaves, nuts and fruit) and working families seeking low maintenance gardens;
- Large numbers of rental properties – tenants less interested in maintaining gardens and verges;
- mess and tripping hazard created by falling leaves, nuts and fruit;
- damage to infrastructure caused by roots and branches;
- the perceived risk of falling branches;
- shaded pools and solar panels;
- blocked views;
- the perceived high cost of planting and maintenance; and
- The perceived risk of trees contributing to allergies.

### 4.1 Community Education of Street Tree Benefits

The first step that many Local Governments take to improve community engagement is to educate them on the benefits of street trees. This encourages positive views on street trees and minimises opposition. Most Local Governments include some form of community education/engagement in their street tree policies and plans. There are several different methods of delivering community education on street trees; the most common appears to be brochures or promotional information available on Local Government websites. Some examples of this promotional material can be seen below:

- City of Vincent:  
[http://www.vincent.wa.gov.au/Services/Parks\\_Reserves/Verges\\_Trees\\_Streetscapes](http://www.vincent.wa.gov.au/Services/Parks_Reserves/Verges_Trees_Streetscapes)
- City of South Perth: <http://www.southperth.wa.gov.au/Services/Street-Trees>
- Town of Cambridge:  
[http://www.cambridge.wa.gov.au/Neighbourhood/Useful\\_Property\\_Tips/Trees/Street\\_Trees](http://www.cambridge.wa.gov.au/Neighbourhood/Useful_Property_Tips/Trees/Street_Trees)

It is also important to educate the public on the correct way to care for street trees. Examples of brochures and websites that contain information on caring for street trees include the following:

- City of Stirling- Caring for your street tree:  
<http://www.stirling.wa.gov.au/Services/Roads-streets-and-verges/Adopt a Street Tree/How can I help care for my street tree.pdf>
- City of Mandurah- Street tree care and maintenance:  
[http://www.mandurah.wa.gov.au/HBItem\\_40776.PDF](http://www.mandurah.wa.gov.au/HBItem_40776.PDF)

Holding events and running programs to increase the profile of street trees can also be an important part of a street tree community education strategy. Examples of events and programs run by WA Local Governments include:

- City of Stirling Street Tree Planting Program:  
<http://www.stirling.wa.gov.au/Services/Roads-streets-and-verges/Adopt a Street Tree/Street Tree Planting Program FAQs.pdf>
- City of Vincent Adopt a Verge Program:  
[http://www.vincent.wa.gov.au/Services/Environment\\_Sustainability/Green\\_Initiatives/Adopt a Verge program](http://www.vincent.wa.gov.au/Services/Environment_Sustainability/Green_Initiatives/Adopt_a_Verge_program)
- Shire of Serpentine Jarrahdale Free Verge Plants Program:  
<http://www.sjshire.wa.gov.au/verge-plants-now-available/>

A template for communicating the benefits of street trees to the community is available in Appendix 1.

## 5. Use policies to set out your intentions

Most metropolitan Local Governments have some form of street tree policy. Street tree policies and management plans are important because they set out a Local Governments goals, aims, principles and values in relation to trees. Although policies are not law, where a policy exists, Local Governments are required to have regard to the policy in the decision making process. There is no consistent approach to street tree policies across the Local Government sector, but the following text outlines a suggested approach.

### 5.1 High level strategies

A number of Local Governments choose to have a high level strategy, such as an urban forest strategy, to outline their overall strategic objectives. These high level strategies should also link to the Council Strategic Plan and Vision. This high level document is then supplemented with an implementation plan to outline how the objectives will be achieved.

For example, the City of Belmont has identified that it will “*replace lost canopy to a coverage that exceeds that of the baseline year of 2001*” in their 2013 Urban Forest Strategy. The City is currently drafting their Canopy Plan to identify how they will achieve this goal.

Strategies can include the following:

- The use of Australian Standard for the protection of trees on development sites (AS 4970-2009)
- How trees should be incorporated into new developments
- Set paved area shading standards (i.e. 30-50% shade over paved areas within 15 years)
- Set minimum (uncompacted-friable) soil volume standards (i.e. 30m<sup>3</sup> of soil per tree)
- How the urban forest will be monitored and measured
- Community education and consultation strategy
- Adopting relevant water sensitive urban design techniques

Examples of high level strategies include:

- City of Belmont Urban Forest Strategy:  
<http://www.belmont.wa.gov.au/CouncillorPortal/CouncillorMinuteAndMeeting/Minutes%20and%20Agendas%20Documents/Attachment%2010%20-%20Item%2012.9%20refers%20Urban%20Forest%20Strategy.pdf>
- City of Wanneroo Street Tree Master Plan:  
[http://www.wanneroo.wa.gov.au/download/downloads/id/1036/street\\_tree\\_master\\_plan](http://www.wanneroo.wa.gov.au/download/downloads/id/1036/street_tree_master_plan).
- City of Armadale Urban Forest Strategy:  
[www.armadale.wa.gov.au/files/69c72273.../Urban\\_Forest\\_Strategy.pdf](http://www.armadale.wa.gov.au/files/69c72273.../Urban_Forest_Strategy.pdf)

- City of Perth Street Tree Framework:  
<http://www.perth.wa.gov.au/sites/default/files/documents/Street%20Tree%20Framework.pdf>
- City of Melbourne Urban Forest Strategy:  
[http://www.melbourne.vic.gov.au/Sustainability/UrbanForest/Documents/Urban\\_Forest\\_Strategy.pdf](http://www.melbourne.vic.gov.au/Sustainability/UrbanForest/Documents/Urban_Forest_Strategy.pdf)
- City of Vancouver Urban Forest Management Plan:  
[http://www.cityofvancouver.us/sites/default/files/fileattachments/public\\_works/page/1389/ufmp\\_final-web.pdf](http://www.cityofvancouver.us/sites/default/files/fileattachments/public_works/page/1389/ufmp_final-web.pdf)

Street tree policy and plan templates are available in Appendix 2.

## 5.2 Operational policies and plans

Once a high level strategy has been set, Local Governments can outline how they will achieve and maintain their goals in operational /implementation plans. These operational street tree policies usually include issues such as planting of new trees, maintenance of existing trees and circumstances which may warrant tree removal. Local Government street tree policies contain information such as:

- Minimum size of new street trees to be planted (e.g. 100L);
- When street tree planting will be carried out (e.g. winter);
- Location that street trees should be planted;
- Why street tree pruning is undertaken and who is responsible;
- Circumstances that may warrant street tree removal;
- Investment required;
- Tree species selection criteria;
- Design principles (e.g. hierarchy of streets);
- Street tree planning; and Information about development applications where street trees are involved (maintenance and bonding mechanisms for street trees in new developments)
- Heritage considerations
- Neighbourhood character

Examples of street tree policies and guidelines include:

- City of Melville Street Tree Policy:  
<http://www.melvillecity.com.au/index.php/component/alfrescocontent/?nodeid=55d10d4e-5746-4fea-be4c-8e97bc8cb3f2>
- City of Subiaco Street Tree Policy:

<http://www.subiaco.wa.gov.au/CityofSubiaco/media/City-of-Subiaco/Your-home/Trees-and-verges/Street-Tree-Policy-management-guidelines.pdf>.

- South Perth Street Tree Management Plan:  
[http://www.southperth.wa.gov.au/old/city\\_environment/environment\\_management/street\\_trees/StreetTreeManPlan.pdf](http://www.southperth.wa.gov.au/old/city_environment/environment_management/street_trees/StreetTreeManPlan.pdf)
- Shire of Northam Street Tree Management Plan:  
[http://www.northam.wa.gov.au/Assets/Documents/Content/engineering/Street-Tree-Management-Plan\\_Adopted-2011-06-15.pdf](http://www.northam.wa.gov.au/Assets/Documents/Content/engineering/Street-Tree-Management-Plan_Adopted-2011-06-15.pdf)
- City of Greater Geraldton Street Tree Management Specifications:  
<http://cgg.wa.gov.au/sites/default/files/Street%20Tree%20Management%20Specification%20CIV003.pdf>
- Street tree policy and plan templates are available in Appendix 2.

### 5.3 Linking street tree policies into local planning

Where possible, Local Government could consider linking street tree strategies with their Local Planning Scheme and planning policy framework to ensure that street tree strategies are considered in making planning decisions. For example, a Local Government that has included its Urban Forest Strategy within a District Structure Plan could consider its canopy targets during discussions about public open space contributions in new subdivision applications. Where possible, collaborating with developers, the community and other stakeholders to draft policies and strategies would be beneficial.

More information about planning is available at:

- Department of Sport and Recreation's Guide to the WA Planning System  
[http://www.dsr.wa.gov.au/docs/default-source/file-about-us/file-plan-for-the-future/guide-wa-planning-system-\(web\).pdf](http://www.dsr.wa.gov.au/docs/default-source/file-about-us/file-plan-for-the-future/guide-wa-planning-system-(web).pdf)
- Department of Planning's Introduction to the Western Australian Planning System  
[http://www.planning.wa.gov.au/dop\\_public\\_pdf/intro\\_to\\_planning\\_system.pdf](http://www.planning.wa.gov.au/dop_public_pdf/intro_to_planning_system.pdf)

Some Local Governments use their Local Planning Scheme to protect trees on private property, as the trees contribute to the overall green network and/or may have historical value. For example, the City of Armadale and the Shire of Serpentine-Jarrahdale have provisions that include a number of mechanisms that protect and preserve trees.

- City of Armadale Town Planning Scheme – See clauses 5C.9 and 11.8  
[http://www.armadale.wa.gov.au/Home/Services\\_and\\_Facilities/Planning/Town\\_Planning\\_Scheme\\_4](http://www.armadale.wa.gov.au/Home/Services_and_Facilities/Planning/Town_Planning_Scheme_4)
- Shire of Serpentine Jarrahdale Scheme Provision - Clause 7.13 Tree Preservation And Planting  
[http://online.planning.wa.gov.au/LPS/data/Local%20Planning%20Schemes/Serpentine-Jarrahdale%20-%20Shire%20of%20\(Scheme%202\)/Scheme%20Text.pdf](http://online.planning.wa.gov.au/LPS/data/Local%20Planning%20Schemes/Serpentine-Jarrahdale%20-%20Shire%20of%20(Scheme%202)/Scheme%20Text.pdf)

Some Local Governments also have adopted tree preservation policies on private property. For example:

- The Town of Claremont passed their tree preservation policy in 2010 to provide guidelines on how to preserve trees within the Town. Town of Claremont Tree Preservation EN306  
[http://www.claremont.wa.gov.au/Libraries/ContentDocs/Tree\\_Preservation\\_EN306.sflb.ashx](http://www.claremont.wa.gov.au/Libraries/ContentDocs/Tree_Preservation_EN306.sflb.ashx)
- Town of Bassendean Local Planning Policy No 13 - Trees on Development Sites  
[http://www.bassendean.wa.gov.au/7\\_info\\_feedback/pdfs/Local.Planning.Policy.No.13.Trees.on.Development.Sites.pdf](http://www.bassendean.wa.gov.au/7_info_feedback/pdfs/Local.Planning.Policy.No.13.Trees.on.Development.Sites.pdf)
- Shire of Serpentine-Jarrahdale - Local Planning Policy No 28 - Street Trees  
<http://www.sjshire.wa.gov.au/assets/Uploads/Planning/lpp-28-street-tree-policy.pdf>
- Town of Cottesloe Local Planning Policy – Street trees  
[http://www.cottesloe.wa.gov.au/d/Development/Planning\\_/Planning\\_Controls\\_Local\\_Planning\\_Scheme\\_Policies\\_Local\\_Laws\\_and\\_Design\\_Guidelines/Policies/XFM1S7U\\_GQNI7TQ0HHV5AD1M887ZWK9/Y0SYNMF5O1H70KN.pdf/Street\\_Trees.pdf](http://www.cottesloe.wa.gov.au/d/Development/Planning_/Planning_Controls_Local_Planning_Scheme_Policies_Local_Laws_and_Design_Guidelines/Policies/XFM1S7U_GQNI7TQ0HHV5AD1M887ZWK9/Y0SYNMF5O1H70KN.pdf/Street_Trees.pdf)
- Shire of Northam Local Planning Policy Manual - LPP 11 – Tree Preservation - Grevillea Street Subdivision Area  
[http://www.northam.wa.gov.au/Assets/Documents/Document-Centre/Northam-Shire-Policies/2013\\_LPP\\_111-3\\_-\\_Tree\\_Preservation\\_Policy\\_Grevillea\\_Street\\_Subdivision\\_Area\\_Combined.pdf](http://www.northam.wa.gov.au/Assets/Documents/Document-Centre/Northam-Shire-Policies/2013_LPP_111-3_-_Tree_Preservation_Policy_Grevillea_Street_Subdivision_Area_Combined.pdf)

The inclusion of these types of provisions with the Local Planning Scheme and/or the adoption of a Local Planning Policy clearly identifies Local Governments' intention when dealing with subdivision and development applications on private land, particularly around tree preservation and tree planting issues, which contributes towards any Urban Forest Strategy being developed or proposed.

#### 5.4 Communicating street tree policies

Local Governments may also find it helpful to consider to how they will communicate their street tree policies to their local community. There are a number of tools available, and your communications team will be able to advise you on the most suitable options. The following links give examples of effective infographics and other communication tools being used by others to communicate street tree policies.

- City of Melbourne street tree infographic:  
[http://www.melbourne.vic.gov.au/Sustainability/UrbanForest/Documents/Urban\\_Forest\\_infographic.pdf](http://www.melbourne.vic.gov.au/Sustainability/UrbanForest/Documents/Urban_Forest_infographic.pdf)
- City of Melbourne urban forest strategy video  
[https://www.youtube.com/watch?v=BpIUmxFCE8A&feature=player\\_embedded](https://www.youtube.com/watch?v=BpIUmxFCE8A&feature=player_embedded)

More information about community engagement is also discussed in Section 4.1 'Getting your community on board'.

## 5.5 Using policies to deal with complaints

Policies can also be set for dealing with complaints and tree removal requests. They should include a list of circumstances that may warrant tree removal and a list of circumstances under which trees will not be considered for removal.

Examples of circumstances that may warrant tree removal<sup>1, 2, 3</sup>:

- The tree is dead or diseased and is unlikely to recover
- The tree presents a safety hazard and has been assessed as structurally weak and dangerous by the Local Government or a suitably qualified arborist
- The tree has been irreparably damaged by a storm
- The tree interferes with suitable sight lines at intersections
- Where the tree has been assessed as impeding on a council approved development after all retention attempts have been exhausted
- The tree is causing significant deterioration of the pavement after all attempts have been made to contain and direct root growth

The following are examples of common complaints about street trees that prompt residents to request removal. These circumstances should NOT of themselves warrant tree removal<sup>2,3,4</sup>:

- The tree causes nuisance due to leaf, flower, fruit or nut shedding
- To tree obscures or potentially obscures views
- The tree causes allergy or health problems
- The tree is in the way of a non-essential crossover or verge paving options
- The tree shades private gardens, solar panels, pools. etc.

Examples of street tree policies which include information on how to deal with complaints from the public are:

- Town of Cambridge Management of Street Trees:  
[www.cambridge.wa.gov.au/.../5.1.3 - Management of Street Trees.pdf](http://www.cambridge.wa.gov.au/.../5.1.3 - Management of Street Trees.pdf)
- Shire of Murray- Street Tree Removal:  
[http://www.murray.wa.gov.au/sites/default/files/documents/TPG3%20Street%20Tree%20Removal\\_0.pdf](http://www.murray.wa.gov.au/sites/default/files/documents/TPG3%20Street%20Tree%20Removal_0.pdf)

Street trees are seen as high value assets by most Local Governments so tree removal is considered as a last resort. However, it is important to note that in some cases tree retention may not be desirable or feasible for reasons such as a tree's location or species.

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<sup>1</sup> Town of Cambridge (2014). *Town of Cambridge Policy Manual- Management of Street Trees*. Retrieved 22 September 2014 from <http://www.cambridge.wa.gov.au/Home>

<sup>2</sup> City of Stirling (2014). *Street Trees*. Retrieved 22 September 2014 from <http://www.stirling.wa.gov.au/streettrees>.

<sup>3</sup> Shire of Murray (2014). *TPG3 Street Tree Removal*. Retrieved 22 September 2014 from [http://www.murray.wa.gov.au/sites/default/files/documents/TPG3%20Street%20Tree%20Removal\\_0.pdf](http://www.murray.wa.gov.au/sites/default/files/documents/TPG3%20Street%20Tree%20Removal_0.pdf)

## 6 Protecting Trees

Tree protection is important due to the risks faced by street trees. Street trees can be accidentally damaged during construction works, as well as intentionally vandalised by members of the community.

### 6.1 Intentional damage

If there is community opposition to street trees, there is a potential for them to be damaged or removed by members of the public.

Some Local Governments refer to unauthorised pruning or removal of street trees on their websites or in street tree policies. Most state that unauthorised tree removal or pruning will result in prosecution under local public property laws. Penalties for unauthorised removal or damage to public trees can range from a warning to the recovery of costs for planting a replacement tree or a fine depending on the Local Government.

There are no examples of specific street tree local laws in Western Australia; however street trees are generally covered under a broader local law. For example, street trees in the City of Joondalup are covered under the Local Government and Public Property Local Law and in the City of Stirling, street trees are covered under the Thoroughfares and Public Places Local Law. An example of a Street Tree Local Law from the eastern states is the City of Frankston Tree Protection Local Law, which can be accessed here:

[http://www.frankston.vic.gov.au/Environment\\_and\\_Waste/Environment/Trees/Local\\_Laws\\_for\\_Trees](http://www.frankston.vic.gov.au/Environment_and_Waste/Environment/Trees/Local_Laws_for_Trees)

### 6.2 Accidental damage

Street trees can be killed or damaged by a wide variety of construction activities if careful planning doesn't take place before construction begins. There are many things that landowners, council maintenance staff, and developers can do to minimise the impact of construction on trees, so it is important to promote best practice. One of the more common tools used is the concept of Tree Protection Zones.

#### 6.2.1 Tree Protection Zones

A Tree Protection Zone (TPZ) is a method of protecting trees on development sites and should protect both roots and crown spread simultaneously. The TPZ is a restricted area usually delineated by protective fencing<sup>4</sup>.

There is an Australian Standard (AS 4970-2009) on the protection of trees on a development site which states that tree protection zones should be the first line of defence against tree damage during construction activities<sup>1</sup>.

Prior to development, at the feasibility and planning phase, a detailed site survey should be carried out in which the existing trees should be accurately plotted on the survey plan (as per AS 4970-2009). The quality and environmental value of the existing tree stock should be evaluated at this stage so that informed decisions can be made about which trees to retain and remove.

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<sup>4</sup> Standards Australia (2009). AS 4970-2009 Australian Standard: Protection of trees on development sites. Retrieved 4 September 2014 from <http://romseymagnolia.com.au/wp-content/uploads/documents/Protection-of-Trees-Dev-sites.pdf>.

TPZs should then be established around trees that are to be retained and protected. Fencing should be installed prior to site establishment and retained intact until completion of the works<sup>1</sup>. Signs identifying the TPZ should be placed around the edge of the protection zone and be visible from within the development site<sup>1</sup>.

The intention of a TPZ is to<sup>5</sup>:

- Provide a safe tree resource
- Provide adequate root space to sustain tree health, aesthetics and sustainability
- Minimise changes to the tree's growing environment; and
- Minimise physical damage and loss to the tree's root system, crown and trunk

To calculate the TPZ, the diameter of the tree is measured in centimetres (cm) at 1.5 metres (DBH)<sup>6</sup> above ground. Where a tree branches below 1.5 m, measure the smallest trunk diameter below the lowest branch. To establish the radial TPZ distance, multiply the diameter by 10. This distance should then be measured from the edge of the trunk of the tree to provide the circular protection area in all directions<sup>7</sup>. See figure 1.

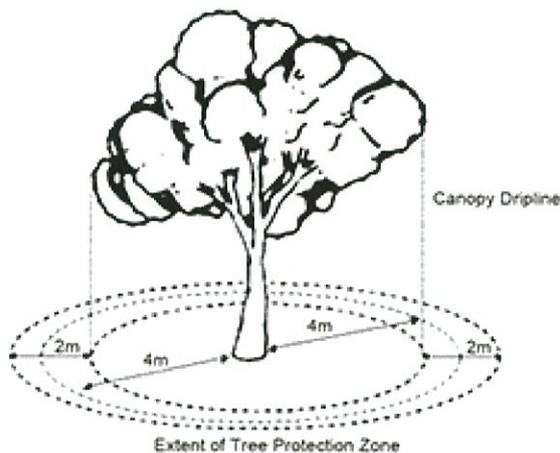


Figure 1: Tree Protection Zone Diagram<sup>8</sup>

<sup>5</sup> City of Boroondara (no date). *Tree Protection*. Retrieved 2 September 2014 from <http://www.boroondara.vic.gov.au/our-city/trees/tree-fact-sheets/tree-protection>.

<sup>6</sup> 1.5 m above ground is the standard height for measuring tree diameter. In forestry, this is known as 'diameter at breast height' or DBH.

<sup>7</sup> Queensland Arboricultural Association. *What is a Tree Protection Zone?* Retrieved 2 September 2014 from <http://www.qaa.net.au/calculations.php>.

<sup>8</sup> ACT Government (2013). *ACT Tree Register*. Retrieved 22 September 2014 from <http://www.tams.act.gov.au/parks-recreation/trees-and-forests/act-tree-register/responsibilities-after-registration>

The TPZ distances calculated using this method is intended to be a guide for the planning process and not an absolute rule. There will obviously be times when it is not possible to retain the optimum TPZ around each tree to be preserved<sup>2</sup>.

Development that requires less than 150mm of excavation and will have impact on a protected tree such as pathways or paving may be allowed within 3 meters of a protected tree<sup>12</sup>.

It was difficult to find information about the use of TPZs by WA councils; however, it was found that some LGs (e.g. City of Stirling and the Town of Bassendean) use TPZs to protect trees when residents and developers apply for building permits. The City of South Perth Street Verge Landscape Guidelines state that the TPZ for street trees will be assessed by the city as part of the verge landscaping application process<sup>9</sup>.

Most Local Governments use the Australian Standard for the protection of trees on development sites (AS 4970-2009). This Standard contains all the information needed to protect trees during construction activities, and is available from Standards Australia, <http://www.standards.org.au/Pages/default.aspx>.

- A TPZ calculator is available online from TreeTec, which aligns with the Australian Standard AS 4970-2009)  
[http://www.treetec.net.au/TPZ\\_SRZ\\_DBH\\_calculator.php](http://www.treetec.net.au/TPZ_SRZ_DBH_calculator.php)
- City of Melbourne Tree Protection Fact Sheet  
[http://www.melbourne.vic.gov.au/Sustainability/UrbanForest/Documents/Tree\\_protection\\_fact\\_sheet.doc](http://www.melbourne.vic.gov.au/Sustainability/UrbanForest/Documents/Tree_protection_fact_sheet.doc)

### 6.2.2 Valuation of Street Trees and Compensation for Tree Removal

Some Local Governments calculate the monetary value of a particular street tree to protect them from damage. For example, the City of Melbourne calculates the value of street trees that need to be removed due to development<sup>10</sup>. The City breaks the costs of removal of a public tree into four categories: removal costs, amenity value, ecological services value, and reinstatement costs<sup>5</sup>. Details of these costs are outlined as follows<sup>6</sup>:

- Removal costs- Accounting to the feeds incurred by Local Government for physically removing the tree
- Amenity value- Calculated using a formula which takes into account the following characteristics of a tree:
  - Basic value: determined by matching the trunk diameter at breast height with a standard base value

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<sup>9</sup> City of South Perth (no date). *Street Verge Landscape Guidelines*. Retrieved 4 September 2014 from <http://www.southperth.wa.gov.au/Documents/Services/Verges/Street-Verge-Landscape-Guidelines.pdf>.

<sup>10</sup> City of Melbourne (no date). *Tree Valuations in the City of Melbourne*. Retrieved 15 September 2014 from [www.melbourne.vic.gov.au/.../tree\\_valuation\\_fact\\_sheet\\_2013.doc](http://www.melbourne.vic.gov.au/.../tree_valuation_fact_sheet_2013.doc).

- Species factor: Takes into account a tree's natural life span and its rate of growth in a particular environment.
  - Aesthetics: The aesthetic value is determined by the impact on the landscape if the tree were removed.
  - Locality: The locality factor is determined by the tree's geographical situation.
  - Tree Condition: The tree condition value is determined by the corresponding total score of the assessment criteria.
- Ecological Services Value: The ecological benefit a tree provides is calculated with the i-Tree Valuation tool.
  - Reinstatement Costs: The level of reinstatement required takes into consideration the location, the significance, the biodiversity provision and the amenity of the tree.
  - City of Melbourne tree valuation worksheet  
[http://www.melbourne.vic.gov.au/Sustainability/UrbanForest/Documents/Tree\\_valuation\\_fact\\_sheet\\_2013.doc](http://www.melbourne.vic.gov.au/Sustainability/UrbanForest/Documents/Tree_valuation_fact_sheet_2013.doc)

In the City of Melbourne, the City's arborist assesses whether public trees can be removed for development. When approved, the associated cost of the tree (as calculated using the above valuation method) is paid to the Local Government or representative prior to removal.

The City of Fremantle uses the Draft Australian Standard DR 99307 Amenity trees- guide to valuation as a guide for determining the amount of compensation paid by a developer or resident for damaging a tree. The money received is then used to replace the tree elsewhere in the streetscape.

#### 6.2.2.1 *i-Tree tool*

i-Tree is a state-of-the-art, peer-reviewed software suite from the USDA Forest Service that provides urban and community forestry analysis and benefits assessment tools. It is used to quantify the value of trees across the world, including urban Australia (see the report [http://2020vision.com.au/media/7145/where\\_are\\_all\\_the\\_trees.pdf](http://2020vision.com.au/media/7145/where_are_all_the_trees.pdf)). The i-Tree suite includes the following urban forest analysis tools and utility programs:

- [i-Tree Eco](#) - gives a broad picture of the entire urban forest.
- [i-Tree Streets](#) – shows the benefits provided by a municipality's street trees.
- [i-Tree Hydro](#) (beta) - simulates the effects of changes in tree and impervious cover characteristics within a watershed on stream flow and water quality.
- [i-Tree Vue](#) - uses satellite-based imagery to assess a community's land cover
- [i-Tree Design](#) - uses Google Maps to see how tree selection, tree size, and placement around your home affects energy use and other benefits.
- [i-Tree Canopy](#) produces a statistically valid estimate of land cover types and estimates values for air pollution reduction and capturing atmospheric carbon.

More information about i-Tree is available at <http://www.itreetools.org/applications.php>

### 6.3 Other ways to protect trees

Some street trees have special significance due to certain characteristics. Individual trees as well as groups of trees may be highly valued by the community and warrant special protection. Reasons for including trees on significant tree registers include; visual/aesthetic, botanic/scientific, ecological and historical/cultural and social<sup>11</sup>.

Some Local Governments have their own Significant Tree Registers:

- Shire of Broome - <http://www.broome.wa.gov.au/council/pdf/policy/449.pdf>
- City of Mandurah - <http://www.mandurah.wa.gov.au/treeregister.htm>

A template for a significant street tree register is available in appendix 3

## 7 Maintenance

When planting street trees, it is important to consider the costs associated with their ongoing maintenance. Trees require the most maintenance while they are becoming established during the first two years after planting. During this time trees need additional watering during the summer months while the roots are maturing. Certain tree species planted in certain locations will also require pruning periodically so this also needs to be considered.

Local Governments can be responsible for funding street tree planting, and the watering and pruning of street trees in existing developments. In Western Australia, developers are often required to plant street trees and maintain them for two years in new developments. Where trees cannot be planted during the development stage, a landscaping bond for the trees is taken and once building is completed Local Governments plant street trees.

Good succession planning is also a vital part of a maintenance regime. Trees are living organisms that have definite lifespans<sup>12</sup>. Trees all eventually reach a senescent phase where they are likely to have more health and disease problems<sup>5</sup>. These may become safety concerns and require increasing management<sup>5</sup>. Although good management can prolong the life of old trees it is also important to plan for the future by steadily replacing trees<sup>5</sup>.

The City of Armadale includes provisions for succession planning in their Urban Forest Strategy. This is available within the City of Armadale Urban Forest Strategy - [http://www.armadale.wa.gov.au/files/597d2c0d-33ec-4264-a216-a32500e0f8fb/CoA Urban Forest Strategy - Final Report.pdf](http://www.armadale.wa.gov.au/files/597d2c0d-33ec-4264-a216-a32500e0f8fb/CoA_Urban_Forest_Strategy_-_Final_Report.pdf)

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<sup>11</sup> City of Mandurah (2010). Significant Tree Register. Retrieved 15 September 2014 from <http://www.mandurah.wa.gov.au/treeregister.htm>.

<sup>12</sup> Centennial Parklands (2002). Tree Master Plan. Retrieved 4 September 2014 from [http://www.centennialparklands.com.au/about/planning/tree\\_master\\_plan](http://www.centennialparklands.com.au/about/planning/tree_master_plan).

## 8 Species Selection

Street trees provide wildlife habitat and food sources, and therefore play a role in preserving biodiversity. Street trees enhance existing wildlife corridors and planting of indigenous and native species in streets near bushland areas can complement native revegetation in open space reserves.

However, Local Governments can find it difficult deciding which species to plant within their verges and public spaces, as there are many factors to consider. It is important to select trees that are hardy enough to survive the specific climatic conditions of an area to ensure they will require little maintenance. Other plant characteristics to consider when selecting tree species include projected height, size and growth habit of roots, types of leaves and flowers produced and life span. The impact of deciduous trees near aquatic environments needs careful consideration, as deoxygenating leaf litter can be washed into waterways.

Examples of Local Government Street Tree Species lists:

- City of Joondalup:  
<http://www.joondalup.wa.gov.au/live/streetscapes/streetreeguidelines.aspx>
- City of Nedlands: <http://www.nedlands.wa.gov.au/street-trees>
- Town of Claremont:  
[http://www.claremont.wa.gov.au/Libraries/ContentDocs/Claremont Street MasterPlan 2013.sflb.ashx](http://www.claremont.wa.gov.au/Libraries/ContentDocs/Claremont%20Street%20MasterPlan%202013.sflb.ashx)

Ultimately it is up to the individual Local Government on which species it chooses to plant.

There is no single source of information available to help Local Governments decide on species selection. The following documents were used by the Town of Bassendean, when they were deciding what palette of species to be used. These resources may be helpful to other Local Governments:

- Holliday, I. (2002). *A field guide to Australian Trees*. 3rd ed. Australia: Reed new Holland. 328
- French, M. (1997). *The special eucalypts of Perth and the South West*. Perth: F&N Publications
- Holliday, I. & Watson, G. (1980). *A gardener's guide to eucalypts*. Australia: Rigby Publishing
- Brooker, M. & Kleining, D. (1999). *Field guide to eucalypts Volume 1: south-eastern Australia*. 2nd ed. Australia: Bloomings Books.
- Brooker, M. & Kleining, D. (1999). *Field guide to eucalypts Volume 2: south western and southern Australia*. 3rd edition. Australia: Bloomings Books.
- Powell, R. (2009). *Leaf and branch: trees and tall shrubs of Perth*. Perth: Department of Environment and Conservation.
- Nicolle, D. (2013). *Native eucalypts of southern Australia*. Adelaide: D. Nicolle
- Rodd, T. (2001). *Botanica's trees and shrubs*. Australia: Random House Publishing
- Holliday, I. (2004). *Melaleucas: a field and garden guide*. 2nd ed. Australia: Reed New Holland.
- Coombes, A. (1992). *The eyewitness handbook of trees*. Australia: DK Audult.

A species list template is available in Appendix 5

## 9 Competition for verge space

Street trees are usually planted on verges where space is often limited. Verge space is shared by pedestrian and cyclist paths, parking and public infrastructure such as overhead power lines and underground services which can create conflict for space.

If the location of street trees is inappropriate they may interact with and cause damage to underground infrastructure or cause a safety hazard if they grow too close to above-ground power lines. Tree roots also have the potential to crack footpaths. This can be mitigated by use of root barriers when planting street trees<sup>13</sup>.

Using permeable pavements is another option for mitigating pavement damage from street trees. Permeable pavements allow stormwater to infiltrate through the paving surface and can be used as an alternative to conventional hard, impervious surfaces that typically surround trees in food paths, roadways and car parks<sup>14</sup>. When permeable pavements are correctly designed and installed they have the potential to minimise the incidence of pavement damage by tree roots and promote healthier and faster growing trees<sup>14</sup>.

More information on permeable pavements is available at [http://treenetmedia.com/up/pdf/2012/Trees%20as%20essential%20infrastructure Beecham.pdf](http://treenetmedia.com/up/pdf/2012/Trees%20as%20essential%20infrastructure%20Beecham.pdf).

### 9.1 Common Trenching

Traditionally during construction, gas lines are laid in one trench and utility wires are laid in an adjacent trench. With common trenching, all utilities are installed in a common trench, leaving more space for trees. However, common trenching and putting services and utilities under the road have proved extremely difficult to implement. This can be mitigated by requiring minimum verge reserves widths that can accommodate all services and street trees<sup>15</sup>. The Department of Planning is looking to address minimum verge widths through its review of the Liveable Neighbourhoods document.

### 9.2 Trenchless Technologies

The use of trenchless technologies (e.g. soil vacuuming, air spading, directional boring) should also be considered where possible. Trenchless technology offers methods by which underground utilities may be installed without damage to overlying pavement and may also reduce impacts on nearby trees.

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<sup>13</sup> Western Australian Planning Commission (2009a). Street Trees and Utility Planning Discussion Paper. Retrieved 10 March 2014 from <http://www.planning.wa.gov.au/publications/1123.asp>

<sup>14</sup> Beecham, S. (2012). The 13<sup>th</sup> National Street Tree Symposium 2012. Retrieved 27 February 2015 from [http://treenetmedia.com/up/pdf/2012/Trees%20as%20essential%20infrastructure Beecham.pdf](http://treenetmedia.com/up/pdf/2012/Trees%20as%20essential%20infrastructure%20Beecham.pdf)

<sup>15</sup> Western Australian Planning Commission (2009a). Street Trees and Utility Planning Discussion Paper. Retrieved 10 March 2014 from <http://www.planning.wa.gov.au/publications/1123.asp>

### 9.3 Liveable Neighbourhoods

Liveable Neighbourhoods is a WAPC adopted operational policy, and is to be considered in the design of urban development. Liveable Neighbourhoods applies to structure planning and subdivision for greenfield sites and for the redevelopment of large brownfield and urban infill sites<sup>16</sup>.

The Department of Planning is currently reviewing its Liveable Neighbourhoods policy. Although not yet endorsed, and therefore subject to change, the Department of Planning is signalling an increase in minimum verge widths to allow space for street trees. Requirement 4.1 of the draft document states "All streets accommodate space for utility services and landscaping in a minimum verge of 5 metres."<sup>17</sup> The recommended width for road reserves in Liveable Neighbourhoods is 15.4m, however many new subdivisions have been using 15m road reserves which leaves little space for trees. The Association will continue to advocate through the Liveable Neighbourhoods review for verge widths that accommodate street trees where practicable.

## 10 Useful information

The following links are other sources of information that Local Governments may find helpful.

### 10.1 Urban Forest Mapping

The Department of Planning in close collaboration with the CSIRO have produced a report on the Urban Forest of Perth and Peel. Through a combination of complex digital photography and mapping technology all trees three meters and above have been captured and combined into data sets on the urban tree canopy. This data is available spatially through the Association's Environmental Planning Tool.

Alternatively, contact the Department of Planning directly or download the report at <http://www.planning.wa.gov.au/publications/7216.asp>

### 10.2 WALGA's Environmental Planning Tool

The EPT is an online geographic information system (GIS) that provides easy access to spatial information. It is a useful tool that will assist Local Government land use planning. To subscribe to the Environmental Planning Tool, email the Environment Policy Manager by email [environment@walga.asn.au](mailto:environment@walga.asn.au) or phone 08 9213 2000.

### 10.3 National Urban Forest Alliance

The National Urban Forest Alliance exists to develop, partner trial, and implement systems, programs, communications, guidelines, landscaping and infrastructure to grow the Australian Urban Forest. While it is mainly based in the Eastern States, Local Governments may find the tools useful.

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<sup>16</sup> Department of Planning. 9 April 2013. Liveable Neighbourhoods. Retrieved 24 November from <http://www.planning.wa.gov.au/650.asp>

<sup>17</sup> Department of Planning. October 2014. Liveable Neighbourhoods Working Preliminary Draft. Unpublished.



- National Urban Forest Alliance - <http://www.nufa.com.au/Home>

#### 10.4 2020 Vision

This program is working to address the factors preventing green space development across metropolitan Australia. They aim to make Australian urban areas 20 percent greener by 2020. There are tools and resources available at their website

- 2020 Vision  
[http://2020vision.com.au/media/7145/where\\_are\\_all\\_the\\_trees.pdf](http://2020vision.com.au/media/7145/where_are_all_the_trees.pdf)

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Thank you to all the Local Governments who were willing to share their information and provide input into this document. There are many other Local Governments doing great work with regards to street trees, unfortunately we couldn't include an exhaustive list in this document. If your Local Government has done something great that you'd like to share please let us know.

## Appendix One: Template for communicating the benefits of street trees to the community<sup>18, 19, 20, 21</sup>

### STREET TREES INFORMATION PAGE ON LG WEBSITE TEMPLATE

1. Street verge responsibilities
  - What is the street verge?
  - Who owns and maintains the street verge?
2. Benefits of street trees
3. How do I get a street tree for my verge?
4. Street tree care and maintenance
  - Watering
  - Pruning
  - Removal
5. Tree species around the City/Town or Trees of Special Significance
6. Assistance for residents
7. Resources, e.g.
  - Street tree species guide
  - Street tree policy
  - Urban Forest Strategy

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<sup>18</sup> City of Vincent (no date). Verges, Trees & Streetscapes. Retrieved 14 November 2014 from [http://www.vincent.wa.gov.au/Services/Parks\\_Reserves/Verges\\_Trees\\_Streetscapes](http://www.vincent.wa.gov.au/Services/Parks_Reserves/Verges_Trees_Streetscapes)

<sup>19</sup> Town of Cambridge (2013). Maintaining Street Trees. Retrieved 14 November 2014 from [http://www.cambridge.wa.gov.au/Neighbourhood/Useful\\_Property\\_Tips/Trees/Street\\_Trees](http://www.cambridge.wa.gov.au/Neighbourhood/Useful_Property_Tips/Trees/Street_Trees)

<sup>20</sup> City of South Perth (no date). Street Trees. Retrieved 14 November 2014 from <http://www.southperth.wa.gov.au/Services/Street-Trees>

<sup>21</sup> City of Mandurah (2008). Street Tree Care & Maintenance. Retrieved 14 November 2014 from [www.mandurah.wa.gov.au/HBItem\\_40776.PDF](http://www.mandurah.wa.gov.au/HBItem_40776.PDF)

## Appendix Two: Street tree policy and plan templates<sup>22, 23</sup>

### URBAN FOREST FRAMEWORK TEMPLATE<sup>24</sup>

1. Preface
2. The Value of an Urban Forest Strategy – Strategy should acknowledge the requirement for policy, financial and resourcing considerations
- 2.1 Policy Context
3. “Urban Forest” and “Urban Forestry”
- 3.1 Benefits of the Urban Forest
4. The City’s Urban Forest Strategy
- 4.1 A Milestone Approach
- Milestone 1- Undertake mapping of LG’s Urban Forest
- Milestone 2- Urban forest strategy and initial canopy target
- Milestone 3- Development of Canopy Plan and formalised targets
- Milestone 4- Implement Canopy Plan
- Milestone 5- Review and Evaluate Progress

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<sup>22</sup> City of Stirling (2009). Street Trees Policy. Retrieved 14 November 2014 from <http://www.stirling.wa.gov.au/about-the-city/policies-and-local-laws/policy%20and%20local%20laws/street%20trees%20policy%20under%20review.pdf%23search=Street%20Trees%20Policy>

<sup>23</sup> Town of Cambridge (2014). Town of Cambridge Policy Manual- Management of Street Trees. Retrieved 14 November from [www.cambridge.wa.gov.au/.../5.1.3 - Management of Street Trees.pdf](http://www.cambridge.wa.gov.au/.../5.1.3 - Management of Street Trees.pdf)

<sup>24</sup> City of Belmont (2014). City of Belmont Urban Forest Strategy. Retrieved 14 November 2014 from <http://www.belmont.wa.gov.au/CouncillorPortal/CouncillorMinuteAndMeeting/Minutes%20and%20Agendas%20Documents/Attachment%2010%20-%20Item%2012.9%20refers%20Urban%20Forest%20Strategy.pdf>

## **STREET TREE POLICY TEMPLATE**

Objective

Scope

Definitions

Legislation/Local Law Requirements

Policy

- Street Tree Planting: include planting locations and tree spacing
- Street Tree Watering
- Pruning of Street Trees
- Unauthorised Street Tree Planting
- Street Tree Removal
- Property Developments
- Non Compliance

**Appendix Three: Significant Tree Register Template<sup>25</sup>**

Scientific Name	Common Name	Location	Significance	Height	Canopy Spread	Trunk Diameter	Plated	Approximate Age	Origin
<i>Eucalyptus rudis</i>	Flooded Gum	Road reserve Marina Quay Drive Erskine, Outside Function Centre	Outstanding visual/aesthetic significance	15m	15m	Left trunk: 800mm Right trunk: 600mm	Remnant speciman	Unknown	

<sup>25</sup> City of Mandurah (2014). Register of Trees. Retrieved 4 November from <http://www.mandurah.wa.gov.au/TreeRegister.htm>

**Appendix Four: Species List Template<sup>26</sup>**

Scientific Name	Common Name	Height Range (m)	Suitable for Coastal Areas	Not Suitable for Near Bushland Areas	Australian Native	Western Australian Native	Deciduous	Only for Very Large Verges	Only for Replacement in Existing Areas
<i>Agonis flexuosa</i>	WA Peppermint/ Willow Myrtle	6-10	√			√			
<i>Corymbia citrodora</i>	Lemon Scented Gum	40-50			√			√	√

<sup>26</sup> City of Joondalup (2009). Preferred Street Tree Species List. Retrieved 4 November 2014 from <http://www.joondalup.wa.gov.au/Live/Streetscapes/StreetTreeGuidelines/PreferredStreetTreeSpeciesList.aspx>



WALGA

### Appendix Five: Local Government Street Trees Workshop RSVP List

RSVP List for the Local Government Street Trees Workshop held on Thursday, 5 June 2014.

Name	Local Government	Position
Erin Harrison	Eastern Metropolitan Regional Council	Environmental Advisor
Ariadne Macleod	Eastern Metropolitan Regional Council	NRM Officer
Ian Hunter	City of Stirling	Manager Parks and Reserves
Matt Williams	City of Stirling	Technical Officer Parks
Graham Harris	City of Stirling	Technical Officer Tree Services
Ross Carville	City of Stirling	Planting Officer Tree Services
Gabriela Eiris	City of Stirling	Community Tree Officer Tree Services
Phil Koziol	City of Stirling	Supervisor Tree Services
James Henson	City of Rockingham	
Adam Johnston	City of Rockingham	
Jenni Harrison	City of Cockburn	Environmental Officer
Andy Jarman	City of Cockburn	
Michael Hamling	City of Joondalup	
John Newton	City of Joondalup	
Gavin Renyolds	City of Joondalup	
John Corbellini	City of Joondalup	
Stephanie Izzard	City of Joondalup	Urban Planner
Nick Brown	City of Joondalup	Landscape Design Officer
Louise Borrello	City of Joondalup	
Erin Jago	City of Joondalup	
Paul Bradford	City of Melville	
Nicholas Gillon	City of Melville	
Michelle Vaughan	City of Melville	
Dana Prince	City of Melville	
Craig Sanders	City of Melville	
Dave Puddy	City of Melville	
Pamela Walker	City of Canning	
Vic Bijl	City of Belmont	Arborist
Elizabeth Hobbs	Shire of Kalamunda	Landscape Design Officer

Jeremy Maher	City of Bayswater	Environmental Coordinator
Steve Cruickshank	Shire of Collie	Parks and Gardens Supervisor
Rod Strang	City of Bayswater	Parks and Gardens Manager
Penny Fletcher	City of Victoria Park	Parks and Technical Officer
Dion Johnson	City of Victoria Park	Acting Business Unit Manager
Todd Wooding	City of Victoria Park	Acting Streetscapes Supervisor
David MacDonald	Shire of Meekatharra	Community Development Officer
Trevor Pearman	Shire of Capel	
Adam Niclair	Shire of Capel	
Shane Faber	Shire of Capel	Operations Manager
Ross Farlekas	Town of Cambridge	Manager Infrastructure Parks
Mark Crowther	Town of Cambridge	
Lonja Dean	Shire of Kalamunda	Coordinator Community Facility Maintenance
Tamara Wikes-Jones	Shire of Kalamunda	
Alan Dolphin	City of Perth	Technical Officer- Arboriculture and Horticulture
David Hammer	City of Perth	Arboriculturist / Horticultural Advisor
Janine Ahola	City of Melville	Senior Landscape Architect
Cameron Tuck	City of Mandurah	Superintendent Cityparks
Mark Denning	City of Swan	Asset Management Planner
Keith Wragg	City of Swan	
Michael Leers	City of Fremantle	Coordinator Parks and Landscape
Jason Pitman	Perth NRM	Environment Program Assistant
Geoff Colgan	City of South Perth	Assistant Manager City Environment
Shane Bacskai	Shire of Augusta Margaret River	
Craig Yound	Shire of Augusta Margaret River	Manager Works
Russell Jones	Shire of Donnybrook Balingup	Works & Services Supervisor
Anne Cullen	Shire of Donnybrook Balingup	Parks & Gardens Team Leader
Debbie Brace	Shire of Donnybrook Balingup	Environmental Officer
Michelle Rolle	City of Subiaco	Parks & Gardens Team Leader
Dan Steven	Shire of Bridgetown	

# **ATTACHMENT NO. 4**

## Palmerston Square Reserve

### SIGNS



### Palmerston Square Reserve

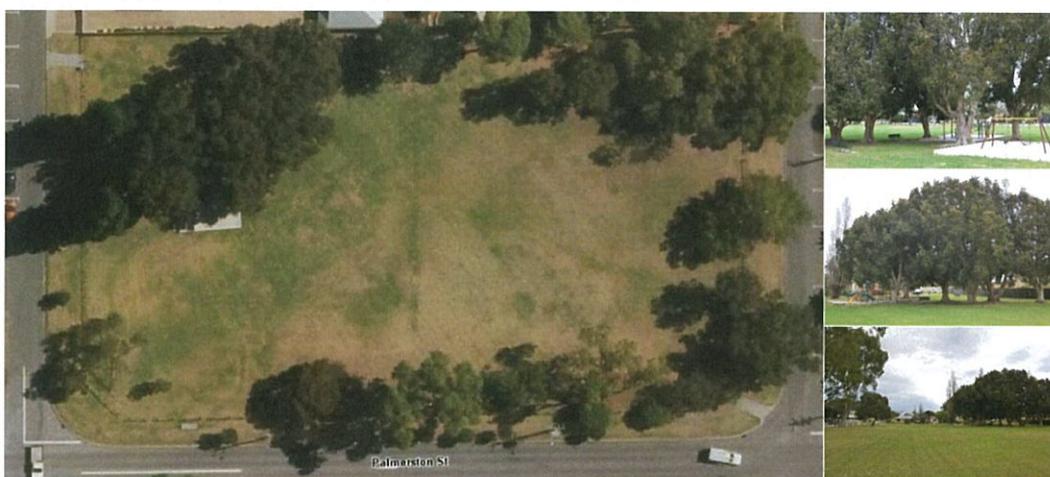
#### DO YOU WANT A SAY IN IMPROVING THIS RESERVE?

The Town of Bassendean Council are inviting residents' feedback on potential opportunities for improving Palmerston Square Reserve, allowing for a variety of recreational and community activities.

Feedback can be provided online at Your Say Bassendean [www.yoursay.bassendean.wa.gov.au](http://www.yoursay.bassendean.wa.gov.au), by post to PO Box 87, Bassendean, WA, 6934, or hard copy feedback may be dropped off at the Customer Service Centre at 35 Old Perth Rd, Bassendean between 8.30am and 5pm.

While no funding is currently allocated to creating a concept plan or to undertake works, we are interested in knowing the community's aspirations to guide the allocation of funding.

**YOUR SAY BASSENDEAN**



**Inviting ideas for improving Palmerston Square Reserve**

The Town would like to hear your ideas for improving Palmerston Square Reserve, that will allow for a variety of recreational and community activities. While we don't currently have a budget for improvements, we are interested in knowing the community's aspirations for this Reserve, to guide a funding allocation.

Please comment in the box below to let the Town know what you would like to see in Palmerston Square Reserve.

I would like to see: