



## Tree Care Consulting

*'Sustainable planning solutions'*

**ADVERTISED  
PLAN**

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

**Tree/s Location:** Goroke-Harrow Road, Charam, VIC 3318

**Completed for:** Chris Smith & Associates

**Inspection date:** 18 September 2023

**Date of report:** 21 September 2023

**Prepared by:** Jimmy Ross, Consulting Arborist

**Diploma of Arboriculture,** Fairfield Polytechnic (Level 5)

**Phone:** 0415 944 987

**Email:** [info@treecareconsulting.com.au](mailto:info@treecareconsulting.com.au)

**ACN:** 637 683 339

**ABN:** 14 637 683 33



## TABLE OF CONTENTS

1. OVERVIEW .....	1
2. METHODOLOGY .....	1
3. LEGAL STATUS .....	2
4. SITE LOCATION.....	4
5. TREE LOCATIONS .....	5
6. TREE DATA.....	6
7. OBSERVATIONS/DISCUSSION.....	11
7.2 Deadwood .....	11
7.3 Poorly Attached Stem Unions.....	11
7.4 Epicormic Growth .....	12
7.5 Reduced Structural Integrity in Trees Due To Decaying Wood .....	12
8. CONCLUSION.....	13
9. RECOMMENDATIONS .....	13
APPENDIX A. TPZ AND ENCROACHMENT EXAMPLES .....	14
APPENDIX B. PROPOSED PLANS.....	15
APPENDIX C. PHOTOS .....	16
APPENDIX D.....	20
Tree Descriptors .....	20
Age.....	20
Health.....	20
Structure.....	20
Hazard.....	21
Retention Value.....	21
Useful Life Expectancy - ULE .....	21
Tree Protection Zones .....	22
Structural Root Zone .....	22
Minor encroachments.....	23
Major encroachments.....	23
REFERENCES.....	23
TERMS AND LIMITATIONS OF THE REPORT .....	24

**ADVERTISED  
PLAN**

**This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright**

## 1. OVERVIEW

Jimmy Ross, level 5 Consulting Arborist from Tree Care Consulting has been engaged by Chris Smith & Associates Pty Ltd to undertake a Pre-Development Arboricultural Impact Assessment. 11 trees within the subject allotment and two trees within the road reserve has been assessed to ascertain the level of encroachment into calculated Tree Protection Zones (TPZs) of individual trees by the proposed plans to construct a mini solar farm and surrounding security fence. Only trees likely to be impacted by the proposed plans have been assessed (outside trees of groups/clusters).

## 2. METHODOLOGY

A ground-based Visual Tree Assessment (VTA) was performed by Jimmy Ross, level 5 Consulting Arborist from Tree Care Consulting. The VTA was taken from ground level to determine; health, structure, and Useful Life Expectancy (ULE) of each tree (See Appendix D). No advanced diagnostics (e.g., aerial inspection, exploratory excavation, trunk radar) were performed unless otherwise stated.

- Diameter tape was utilised to obtain Diameter at Breast Height (DBH) at 1.4 m above ground level.
- Tree Protection Zones (TPZ) and Structural Root Zones (SRZ) were calculated in accordance with AS – 4970 -2009 - *Protection of Trees on Development Sites*.
- Field data was recorded with Fulcrum collector app and was utilised to calculate TPZ and SRZ within this report.
- All photographs were taken at the time of the inspection and shall be used within this report for referencing or identification purposes.
- DJI mini 2 was utilised for onsite aerial photos.
- Google Earth, Vicplan and QGIS were utilised for aerial images.
- Forestry Pro2 was used to obtain tree heights.
- Tree widths have been estimated.
- Tree identification can be recognised through the tree location map.
- All measurements mentioned are from the centre of trees (unless specified otherwise).

**ADVERTISED  
PLAN**

**This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright**

### 3. LEGAL STATUS

#### ENVIRONMENTAL SIGNIFICANCE OVERLAY

##### Permit requirement

A permit is required to:

Remove, destroy or lop any vegetation, including dead vegetation. This does not apply:

- If a schedule to this overlay specifically states that a permit is not required.
- If the table to Clause 42.01-3 specifically states that a permit is not required.
- To the removal, destruction or lopping of native vegetation in accordance with a native vegetation precinct plan specified in the schedule to Clause 52.16.

#### SCHEDULE 2 TO THE ENVIRONMENTAL SIGNIFICANCE OVERLAY

##### Permit requirement

A permit is not required:

- to remove, destroy or lop vegetation in accordance with a Property Management Plan approved by the responsible authority and endorsed by Department of Sustainability and Environment.
- to remove, destroy or lop any dead vegetation, except dead eucalyptus trees with a trunk diameter greater than 40 centimetres at 1.3 metres above ground level.
- to remove, destroy or lop the minimum extent of native vegetation necessary for the maintenance of farm fences. The combined maximum width of clearing permitted either side of the fence is 4m.
- to remove, destroy or lop any live vegetation, unless the vegetation is:
  - a hollow bearing eucalypt tree.
  - Buloke with a trunk diameter of greater than 20 centimetres at 1.3 metre above ground level.
  - Buloke with a density of more than 1 tree per 10 hectares of development.
  - Stringybark with a trunk diameter of greater than 30 centimetres at 1.3 metre above ground level.

**ADVERTISED  
PLAN**

**This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright**

## 52.17 NATIVE VEGETATION

### Permit requirement

A permit is required to remove, destroy, or lop native vegetation, including dead native vegetation.

This does not apply:

- If the table to Clause 52.17-7 specifically states that a permit is not required
- If a native vegetation precinct plan corresponding to the land is incorporated into this scheme and listed in the schedule to Clause 52.16.
- To the removal, destruction or lopping of native vegetation specified in the schedule to this clause.

### 52.17-7 Table of exemptions

#### Emergency works

Native vegetation that is to be removed, destroyed, or lopped

- in an emergency by, or on behalf of, a public authority or municipal council to create an emergency access associated with emergency works; or
- where it presents an immediate risk of personal injury or damage to property. Only that part of the vegetation that presents the immediate risk may be removed, destroyed or lopped under this exemption.

#### Lopping and pruning for maintenance

Lopping or pruning native vegetation, for maintenance only, provided no more than 1/3 of the foliage of each individual plant is lopped or pruned.

This exemption does not apply to:

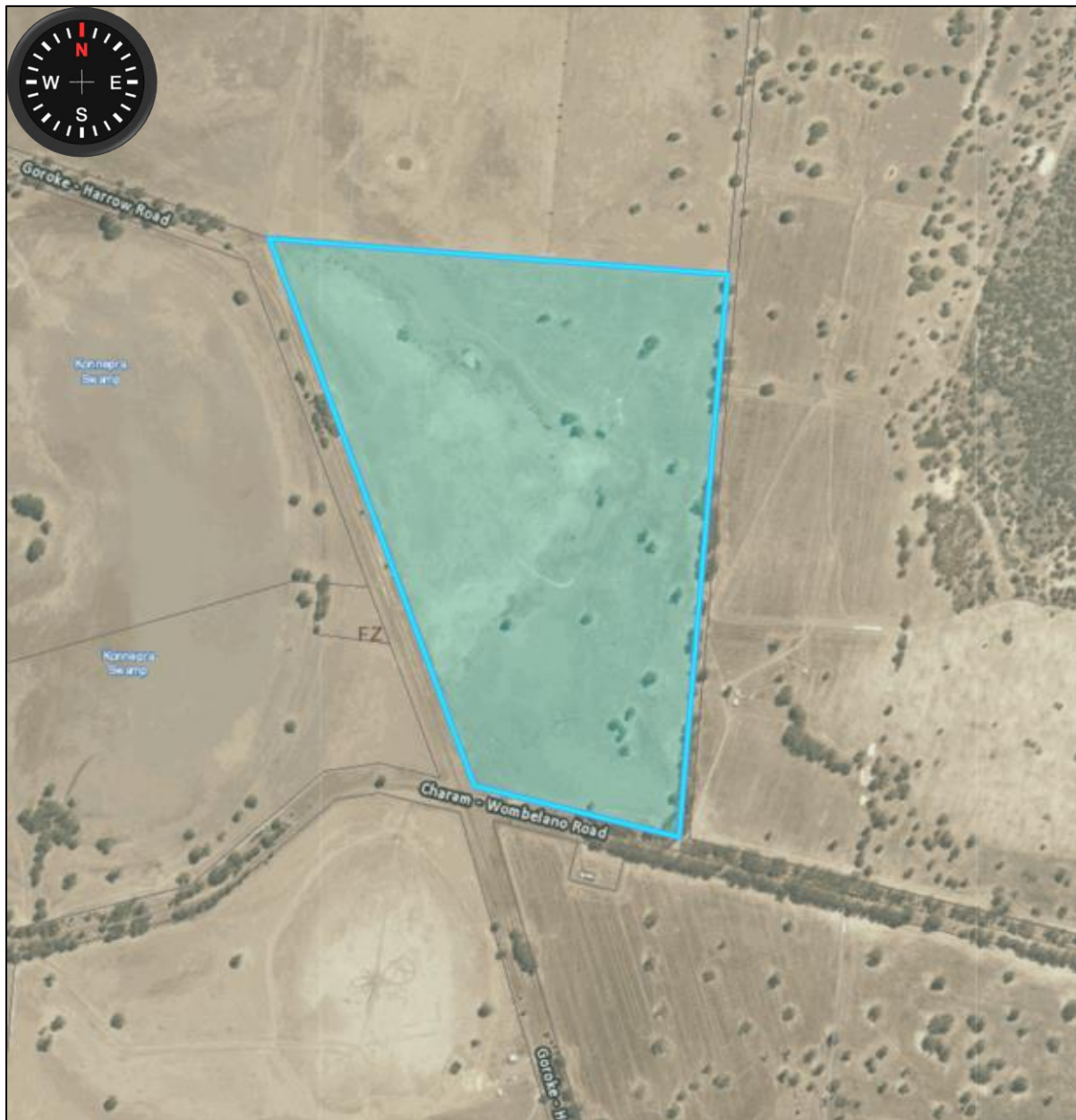
- the pruning or lopping of the trunk of a native tree; or
- native vegetation on a roadside or railway reservation.

## BUSHFIRE MANAGEMENT OVERLAY

**ADVERTISED  
PLAN**

**This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright**

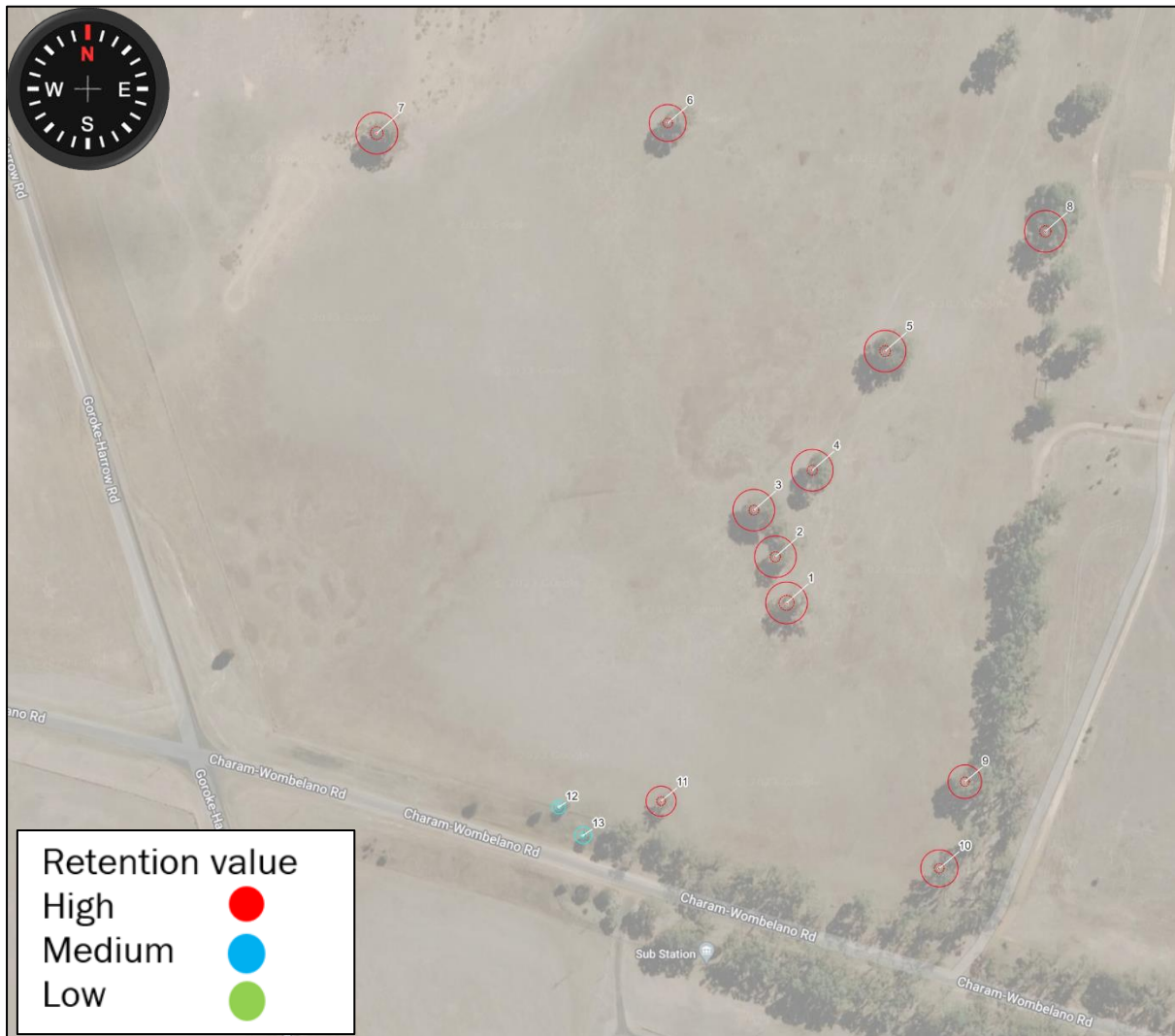
## 4. SITE LOCATION



**ADVERTISED  
PLAN**

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

## 5. TREE LOCATIONS



*Tree locations are indicative only. TPZ and SRZ calculated in accordance with AS – 4970 -2009 - Protection of Trees on Development Sites.*


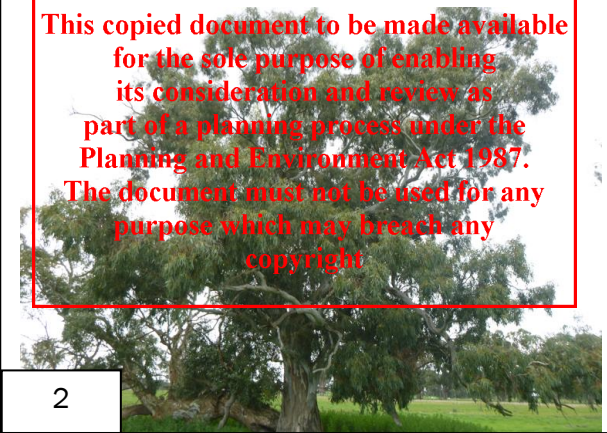

**ADVERTISED  
PLAN**

**This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright**

## 6. TREE DATA

Tree No.	Identification	Origin	Permit required for removal	Age	ULE	Health	Structure	Hazard	Height (m)	Width (m)	Retention Value	Recommended for retention	DBH (cm) * =multi-stem	TPZ (m)	SRZ (m)
1	<i>Eucalyptus camaldulensis</i> (River Red Gum)	Indigenous, Naturally Regenerated	Yes	M	L	F	P	H	30	30	H	Yes	320	15.0	5.4
2	<i>Eucalyptus camaldulensis</i> (River Red Gum)	Indigenous, Naturally Regenerated	Yes	M	L	F	P	H	21	15	H	Yes	130	15.0	3.7
3	<i>Eucalyptus camaldulensis</i> (River Red Gum)	Indigenous, Naturally Regenerated	Yes	M	L	F	G	H	22	24	H	Yes	125	15.0	3.6




  

 <p>1</p>	<p style="color: red; text-align: center;">This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright</p>  <p>2</p>	 <p>3</p>
<p><b>Observations</b> Cambial dieback on trunk. Co-dominant leaders, significant decaying wood beneath union. Severe structural damage to trunk. Wound at base of trunk. Significant decay within cavity. Decay in large limb. Epicormic growth throughout canopy. History of limb failures. Severe structural damage to branches. Significant deadwood in canopy greater than 25mm. Stub/s inhibiting wound closure.</p>	<p><b>Observations</b> History of limb failures. Failed limb on ground. Failed limb suspended in canopy. Wound at base of trunk. Significant decay within cavity. Epicormic growth throughout canopy. Minor deadwood greater than 25mm.</p>	<p><b>Observations</b> Epicormic growth throughout canopy. Minor deadwood greater than 25mm.</p>




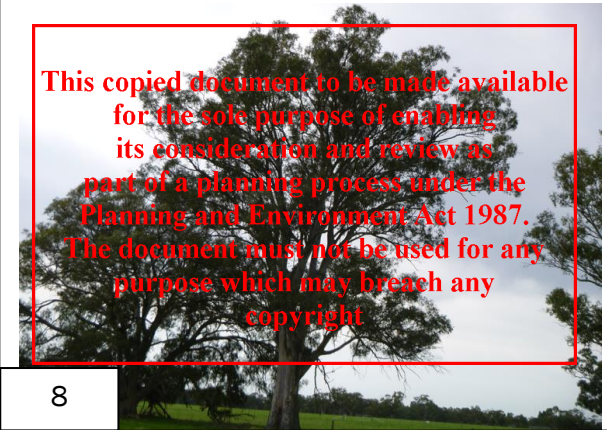

Tree No.	Identification	Origin	Permit required for removal	Age	ULE	Health	Structure	Hazard	Height (m)	Width (m)	Retention Value	Recommended for retention	DBH (cm) * = multi-stem	TPZ (m)	SRZ (m)
4	<i>Eucalyptus camaldulensis</i> (River Red Gum)	Indigenous, Naturally Regenerated	Yes	M	L	F	G	H	26	22	H	Yes	132	15.0	3.7
5	<i>Eucalyptus camaldulensis</i> (River Red Gum)	Indigenous, Naturally Regenerated	Yes	M	L	F	P	H	24	24	H	Yes	151	15.0	3.9
6	<i>Eucalyptus camaldulensis</i> (River Red Gum)	Indigenous, Naturally Regenerated	Yes	M	L	F	P	H	20	22	H	Yes	111	13.3	3.5

	 <p style="color: red; text-align: center;">This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright</p>	
<p><b>Observations</b> History of limb failures. Failed limb on ground. Epicormic growth throughout canopy. Large and small natural hollows present on branch/es. Minor deadwood greater than 25mm. Some cambial dieback/damage on branch/es. Severe structural damage to branches.</p>	<p><b>Observations</b> History of limb failures. Failed limb on ground. Epicormic growth throughout canopy. Large and small natural hollows present on branch/es. Minor deadwood greater than 25mm. Some cambial dieback/damage on branch/es. Severe structural damage to branches.</p>	<p><b>Observations</b> History of limb failures. Failed limb on ground. Epicormic growth throughout canopy. Large and small natural hollows present on branch/es. Minor deadwood greater than 25mm. Some cambial dieback/damage on branch/es. Severe structural damage to branches.</p>




Tree No.	Identification	Origin	Permit required for removal	Age	ULE	Health	Structure	Hazard	Height (m)	Width (m)	Retention Value	Recommended for retention	DBH (cm) * = multi-stem	TPZ (m)	SRZ (m)
7	<i>Eucalyptus camaldulensis</i> (River Red Gum)	Indigenous, Naturally Regenerated	Yes	M	L	F	P	H	23	15	H	Yes	223	15.0	4.6
8	<i>Eucalyptus camaldulensis</i> (River Red Gum)	Indigenous, Naturally Regenerated	Yes	M	L	F	P	H	28	22	H	Yes	162	15.0	4.1
9	<i>Eucalyptus camaldulensis</i> (River Red Gum)	Indigenous, Naturally Regenerated	Yes	M	L	F	G	H	13	15	H	Yes	101	12.1	3.3

	 <p style="color: red; text-align: center;">This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright</p>	
<p><b>Observations</b> Cambial dieback/damage on trunk. History of limb failures. Epicormic growth throughout canopy. Failed limb on ground. Large natural hollow present in trunk. Significant decay within cavity. Large and small natural hollows present on branch/es. Minor deadwood greater than 25mm. Severe structural damage to branches. Some cambial dieback/damage on branch/es.</p>	<p><b>Observations</b> History of limb failures. Failed limb on ground. Failed limb suspended in canopy. Epicormic growth throughout canopy. Some cambial dieback/damage on branch/es. Large and small natural hollows present on branch/es. Minor deadwood greater than 25mm. Severe structural damage to branches.</p>	<p><b>Observations</b> Severe structural damage to branches. Some cambial dieback/damage on branch/es. Some epicormic growth within canopy. Minor deadwood greater than 25mm.</p>

Tree No.	Identification	Origin	Permit required for removal	Age	ULE	Health	Structure	Hazard	Height (m)	Width (m)	Retention Value	Recommended for retention	DBH (cm) * = multi-stem	TPZ (m)	SRZ (m)
10	<i>Eucalyptus camaldulensis</i> (River Red Gum)	Indigenous, Naturally Regenerated	Yes	M	L	F	P	H	24	20	H	Yes	112	13.4	3.5
11	<i>Eucalyptus camaldulensis</i> (River Red Gum)	Indigenous, Naturally Regenerated	Yes	M	L	F	P	H	27	20	H	Yes	90	10.8	3.2
12	<i>Allocasuarina verticillata</i> (Drooping Sheoak)	Indigenous, Naturally Regenerated	Yes	M	L	G	P	L	17	6	M	Yes	40	4.8	2.3

10		11		12	
<p><b>Observations</b> Wound at base of trunk. Significant decay within cavity. Cambial dieback/damage on trunk. Severe structural damage to branches. Significant deadwood greater than 25mm. Some cambial dieback/damage on branch/es. Some epicormic growth within canopy.</p>		<p><b>Observations</b> History of limb failures. Failed limb on ground. Small natural hollow present in trunk. Severe structural damage to branches. Significant deadwood greater than 25mm. Some cambial dieback/damage on branch/es. Some epicormic growth within canopy.</p>		<p><b>Observations</b> Codominant leaders with included bark union. Significant deadwood less than 25mm.</p>	

Tree No.	Identification	Origin	Permit required for removal	Age	ULE	Health	Structure	Hazard	Height (m)	Width (m)	Retention Value	Recommended for retention	DBH (cm) * =multi-stem	TPZ (m)	SRZ (m)
13	<i>Eucalyptus camaldulensis</i> (River Red Gum)	Indigenous, Naturally Regenerated	Yes	SM	L	G	G	L	12	6	M	Yes	50	6	2.5



13

**Observations**

Structurally sound specimen.

**ADVERTISED PLAN**

**This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright**

## 7. OBSERVATIONS/DISCUSSION

At the time of inspection, this 771,716.70m<sup>2</sup> allotment has no existing dwellings or structures and is still utilised for livestock grazing. The subject allotment is sparsely vegetated with naturally regenerated, indigenous tree species.

All trees assessed within the subject allotment (Trees 1 – 11) are considered to be remnant specimens. Tree canopies appear healthy, however many natural hollows within their main stems and large limbs were noted which significantly reduces their structure integrity. A history of significant limb failures and deadwood greater than 25mm was also observed in many of the trees assessed.

Trees 12 and 13 are situated within the road reserve. Tree 12 has co-dominant stems with an included bark union. This tree is classified as poor structure however raises no immediate safety concerns. Tree 13 is a structurally sound specimen.

Plans provided by the client indicate a section of the subject allotment is proposed to become a fenced off solar farm. Access in the solar farm is proposed to enter near the south-western corner of the allotment from Charam-Wombelano Road. The entry/exit point is clear of all existing vegetation.

The proposed security fence is situated outside calculated TPZs of all assessed trees.

### 7.1 DEADWOOD

Deadwood within trees is a natural process for most tree species. Trees have small interior branches that may not receive enough sunlight. Smaller branches tend to be less useful to the growth of the tree and therefore, the tree sends more sap to the larger branches that support the tree. When the sap supply is cut off, as it eventually is, the smaller branches die.

When deadwood breaks off in a weather event, the heartwood of the tree is exposed. The area of the tree where a branch has broken off exposes the heartwood of the tree, which can allow insects to penetrate and create a home. Water can also accumulate which can result in fungus and other forms of decay.

### 7.2 POORLY ATTACHED STEM UNIONS

Stem attachments in trees that are separated by bark being included in their union are frequently found in urban and forest trees. Such attachments have a reputation of being structural flaws in tree crowns and they are commonly recorded as a defect by qualified arborists.

This copied document to be made available  
for the sole purpose of enabling  
its consideration and review as  
part of a planning process under the  
Planning and Environment Act 1987.  
This document must not be used for any  
purpose which may breach any  
copyright

**ADVERTISED  
PLAN**

Where only two branches arise from a junction in a tree, this is formally referred to as a bifurcation. It has been established that the 'diameter ratio' between the two branches that arise from a bifurcation in a tree has a substantial effect on its mechanical strength and failure mode. Failures often occur when the two branches are nearer to the same diameter, as there is no compressive yielding, and the bifurcation fails by a sudden splitting at its apex. Poorly attached stem unions are commonly found within trees but can be remedied by a qualified arborist through formative pruning at the juvenile/semi mature stage of a tree's development.

### 7.3 EPICORMIC GROWTH

Epicormic growth is an upright shoot emerging on the trunk or a branch above the soil or graft (if present) from an epicormic and/or advantageous bud. Epicormic growth is often associated with a physiological stress, over pruning, drought, a lightning strike or root damage.

Compared with the deeper attachment characteristics of branches that form during the tree's growth, epicormic branches form relatively weak unions with the trunk or other branches – they have shallower attachments. In certain circumstances, epicormic growth may increase the risk of branches breaking off that tree. In particular, when epicormic branches grow quickly and become too heavy for the trunk to support them, tree failure is more likely if:

- The union between the epicormic branch and the trunk or branch is cracked, cankered or decayed,
- The trunk below the epicormic branch is decayed or
- The load exceeds the tree's mechanical strength.

Windy conditions may precipitate any of these situations.

### 7.4 REDUCED STRUCTURAL INTEGRITY IN TREES DUE TO DECAYING WOOD

Decaying wood in trees can lead to a reduction in structural integrity, meaning the overall strength and stability of the tree can be compromised.

In trees, decay often occurs in the trunk, main branches, or branch unions. As decay progresses, it can compromise the connections between branches and the main trunk, weakening the union.

As wood decay advances, it can result in the formation of cavities or hollow spaces within the tree's trunk or branches. These cavities weaken the overall structure of the tree by reducing the amount of sound wood available to bear weight and withstand forces. If a cavity compromises a significant portion of the trunk or key support branches, the tree's stability can be severely compromised.

The combination of weakened wood and structural defects caused by decay increases the likelihood of tree failure. Factors such as external stresses (e.g., wind, storms), additional weight from foliage or fruit, or even natural aging can exacerbate the risk. A tree with reduced structural

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

**ADVERTISED PLAN**

integrity due to decaying wood may be more susceptible to uprooting, snapping, or splitting, potentially causing significant damage and posing a danger to people and property.

To manage the risk associated with reduced structural integrity in trees, regular tree inspections by certified arborists are crucial. Arborists can assess the extent of decay, identify areas of concern, and recommend appropriate measures, such as pruning or structural support systems, to mitigate the risk of failure. When a tree poses an imminent hazard and cannot be made safe, removal may be the most appropriate course of action to ensure safety.

## **8. CONCLUSION**

Most trees assessed within the subject allotment stand out as significant to the site. Multiple trees show characteristics of significant structural defects, resulting in poor structural ratings. Trees 1 – 10 (within subject allotment) have been classified as Hazardous trees due to structural defects and deadwood and all future construction activities should be kept well clear of these trees.

All trees assessed have zero encroachments into their calculated TPZs and are nominated for retention.

## **9. RECOMMENDATIONS**

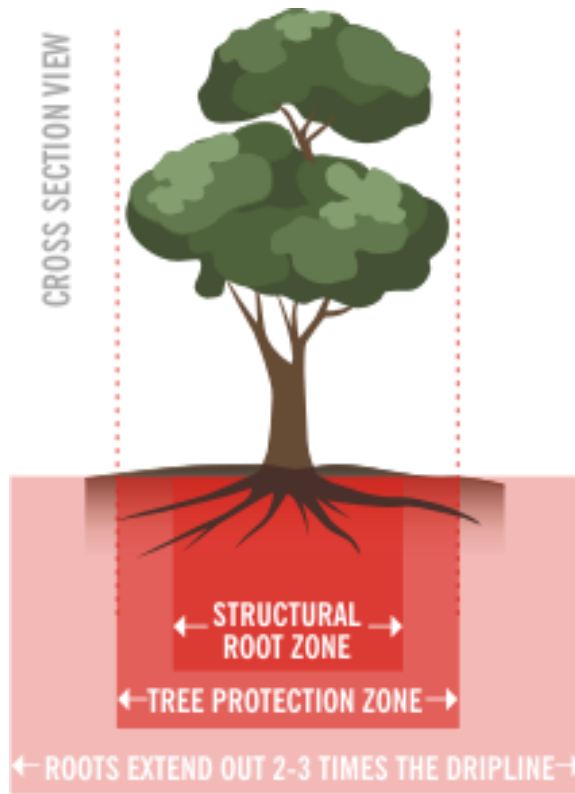
Retain Trees 1 - 13.

A Tree Protection Management Plan follows this report to ensure the protection of native vegetation which provide a schedule of works and includes ground protection, directional boring, TPZ fencing locations and direct supervision of the Project Arborist with any excavation works required within the TPZ of retained trees.

**ADVERTISED  
PLAN**

**This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright**

## APPENDIX A. TPZ AND ENCROACHMENT EXAMPLES



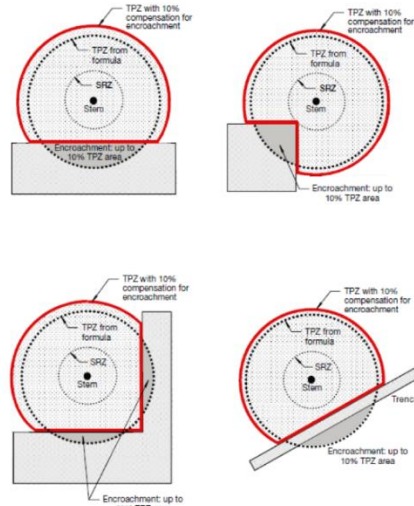
**ADVERTISED  
PLAN**

29

AS 4970—2009

### APPENDIX D ENCROACHMENT INTO TREE PROTECTION ZONE (Informative)

Encroachment into the tree protection zone (TPZ) is sometimes unavoidable. Figure D1 provides examples of TPZ encroachment by area, to assist in reducing the impact of such incursions.

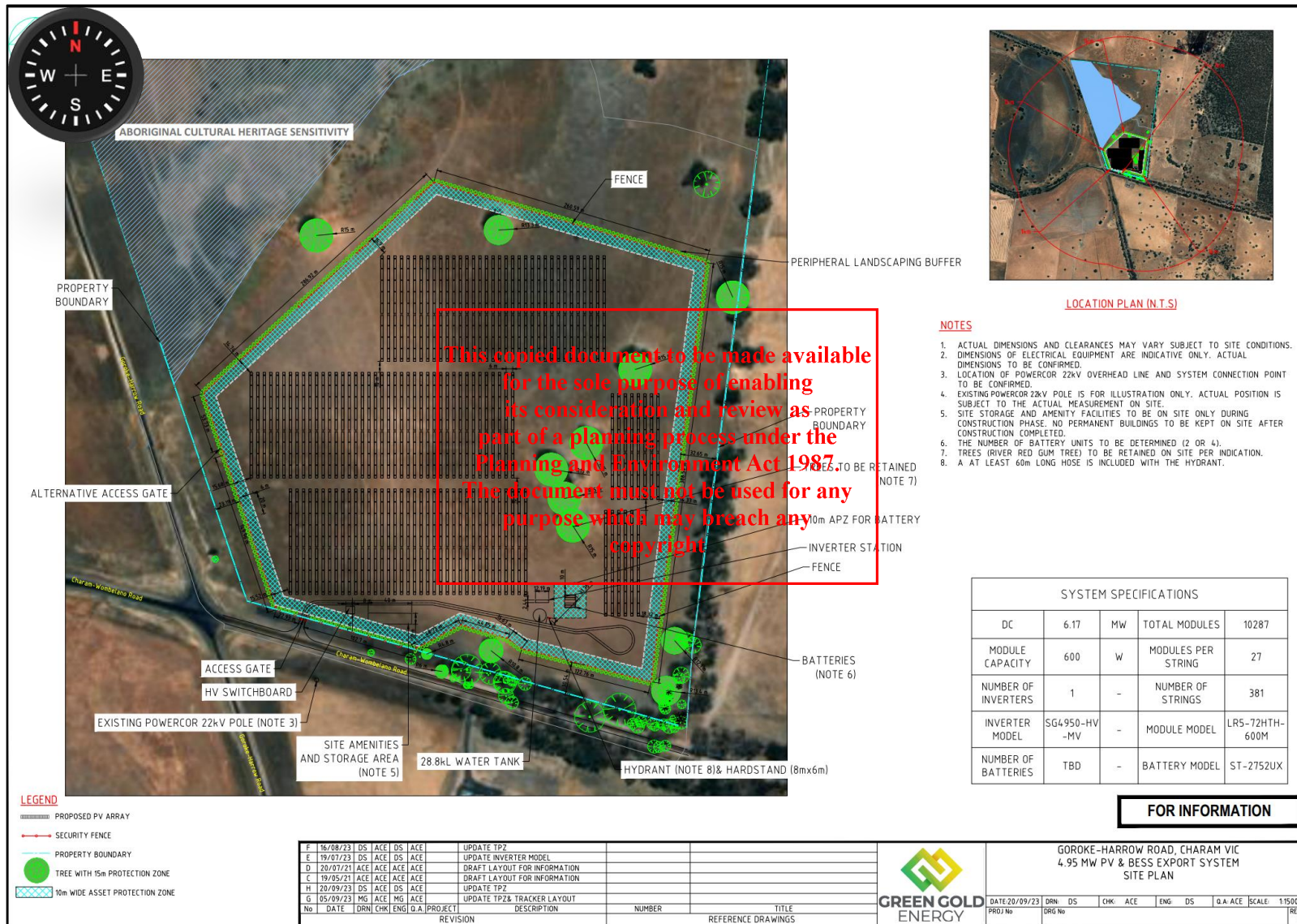


**This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright**

Extracted from Australian Standards 4970 – 2009



## APPENDIX B. PROPOSED PLANS



## APPENDIX C. PHOTOS





## ADVERTISED PLAN

Page 17 of 24

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright



## ADVERTISED PLAN

Page 18 of 24

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright



## ADVERTISED PLAN

Page 19 of 24

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

## APPENDIX D

### TREE DESCRIPTORS

#### AGE

**YOUNG** Juvenile or recently planted approximately 1-7 years.

**SEMI MATURE** Tree actively growing.

**MATURE TREE** has reached expected size in situation.

**OVER MATURE** Tree is over mature and has started to decline. (Senescent)

#### HEALTH

**GOOD** Foliage of tree is entire, with good colour, very little sign of pathogens and of good density. Growth indicators are good i.e. Extension growth of twigs and wound wood development. Minimal or no canopy die back (deadwood).

**FAIR** Tree is showing one or more of the following symptoms;

< 25% dead wood, minor canopy die back, foliage generally with good colour though some imperfections may be present. Minor pathogen damage present, with growth indicators such as leaf size, canopy density and twig extension growth typical for the species in this location.

**POOR** Tree is showing one or more of the following symptoms; tree decline; > 25% deadwood, canopy die back is observable, discoloured or distorted leaves. Pathogens present, stress symptoms are observable as reduced leaf size, extension growth and canopy density.

**DEAD OR DYING** Tree is in severe decline; > 55% deadwood, very little foliage, epicormic shoots, minimal extension growth.

#### STRUCTURE

**GOOD** Trunk and scaffold branches show good taper and attachment with minor or no structural defects. Tree is a good example of the species with a well-developed form showing no obvious root problems or pests and diseases.

**FAIR** Tree shows some minor structural defects or minor damage to trunk e.g. bark missing, there could be cavities present. Minimal damage to structural roots. Tree could be seen as typical for this species.

**POOR** There are major structural defects, damage to trunk or bark missing. Co-dominant stems could be present or poor structure with likely points of failure. Girdling or damaged roots obvious. Tree is structurally problematic.

**ADVERTISED  
PLAN**

This copied document to be made available for the sole purpose of enabling it to be considered and reviewed as part of a planning process under the Planning and Development Act 1987. The document must not be used for any purpose which may breach any copyright.

**HAZARDOUS TREE** is an immediate hazard with potential to fail, this should be rectified as soon as possible.

## HAZARD

**LOW;** Tree appears to be structurally sound, healthy with no signs of pests or disease, good vigour and is clear of any hazards.

**MEDIUM;** Tree displays signs of structural problems, evidence of pests or disease, signs of low vigour, deadwood, decay, may be growing into an area that could create a hazard.

**HIGH;** Tree is an immediate hazard with the potential to fail, this should be rectified as soon as possible.

## RETENTION VALUE

**LOW;** Trees that offer little in terms of contributing to the future landscape. Should be considered for removal.

**MEDIUM;** Trees with some beneficial attributes that may benefit the site. Could be considered for retention if possible.

**HIGH;** Trees with the potential to positively contribute to the site. Should be considered for retention if possible.

## USEFUL LIFE EXPECTANCY – ULE

**LONG ULE;** Trees that appears to be retainable with an acceptable level of risk for more than 40 years.

Structurally sound trees located in positions that can accommodate future growth.

Storm damaged or defective trees that could be made suitable for retention in the long term by remedial tree surgery.

Trees of special significance for historical, commemorative or rarity reasons that would warrant extraordinary efforts to secure their long-term retention.

**MEDIUM ULE;** Trees that appear to be retainable with an acceptable level of risk for 15 to 40years.

Trees that may only live between 15 and 40 years.

Trees that may live for more than 40 years but would be removed to allow the safe development of more suitable individuals.

Trees that may live for more than 40 years but would be removed during the course of normal management for safety and nuisance reasons.

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

Storm damage or defective trees that can be made suitable for retention in the medium term by remedial work.

**SHORT ULE;** Trees that appear to be retainable with an acceptable level of risk for 5 to 15 years.

Trees that may live for 5 to 15 years.

Trees that may live for more than 15 years but would be removed to allow the safe development of more suitable individuals.

Trees that may live for more than 15 years but would be removed during the course of normal management for safety and nuisance reasons.

Storm damaged or defective trees that require substantial remedial work to make safe and are only suitable for retention in the short term.

**REMOVE;** Trees with a high level of risk that would need removal within the next 5 years.

Dead trees.

Dying or suppressed and declining trees through disease or inhospitable conditions.

Dangerous trees through instability or recent loss of adjacent trees.

Dangerous trees through structural defects including cavities, decay, included bark, wounds or poor form.

Damaged trees that are considered unsafe to retain.

Trees that will become dangerous after removal of other trees for the above reasons.

## **Tree Protection Zones**

T.P.Z. applied is AS 4970-2009 'Protection of trees on development site'. AS 4970-2009 uses a multiplication method to determine the T.P.Z. based on T.P.Z. radius being 12 times stem diameter measured 1.4 metres above ground. (Unless stated otherwise)

T.P.Z. radius = DBH x 12

## **Structural Root Zone**

S.R.Z. applied is AS 4970-2009 'Protection of trees on development site'.

The SRZ is the area required for tree stability. A larger area is required to maintain a viable tree.

SRZ radius =  $(D \times 50) \times 0.42 \times 0.64$

**ADVERTISED  
PLAN**

**This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright**



## Minor encroachments

If the proposed encroachment is less than 10% of the area of the Tree Protection Zone and is outside the structural root zone (clause 3.3.5), detailed root investigations should not be required. The area lost to this encroachment should be compensated for elsewhere and contiguous with the Tree Protection Zone. Variations must be made by the project arborist considering relevant factors listed in clause 3.3.4 of the standard.

## Major encroachments

If the proposed encroachment is greater than 10% of the Tree Protection Zone or inside the structural root zone (clause 3.3.5), the project arborist must demonstrate that the tree(s) would remain viable. The area lost to this encroachment should be compensated for elsewhere and contiguous with the Tree Protection Zone. This may require root investigation by non-destructive methods and consideration of relevant factors listed in clause 3.3.4 of the standard

## REFERENCES

Environmental Significance Overlay

Schedule 2 to the Environmental Significance Overlay

52.17 Native Vegetation

**ADVERTISED  
PLAN**

**This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright**

## TERMS AND LIMITATIONS OF THE REPORT

Any legal information in the report has been provided to Tree Care Consulting by an external source and it is assumed to be correct. All references to property title and/or control of ownership of land are assumed to be correct as Tree Care Consulting has been advised.

Great care has been taken in sourcing information for this report so as it is correct. Tree Care Consulting cannot be responsible for information provided which is not directly under their control.

The Tree Care Consulting shall not be required to give testimony or attend court for any matter in relation to this report unless further contractual arrangements have been made.

This report is not to be altered in any way. It has been produced as a whole document and is intended for use as a whole document. Any changes or modifications are not to be undertaken. If this occurs the report shall be rendered invalid.

The content of this report is produced in the full and honest opinion of Tree Care Consulting. In no way is it biased or weighted.

No diagrams, pictures or other reference material in this report is said to be to scale or value unless stipulated. All measurements and values are made to the best of Tree Care Consulting ability at the time of the report being compiled. Care should be taken and clarification sought before using as final measurements for whatever reason.

This report is developed around the information provided by the client in the assignment section of the report. Only issues and locations covered in the assignment section are discussed in this report.

All details, information and advice contained in this report have been researched and reference. Where no reference is included, it is the authors learned opinion, experience, and observations.

No section of this report may be reproduced for any reason without the written permission of the Tree Care Consulting.

**ADVERTISED  
PLAN**

**This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright**