

**ADVERTISED  
PLAN**

# PRELIMINARY ARBORICULTURAL ASSESSMENT



March 2024

Salesian College  
Mannix Campus Development  
Swanson Crescent Chadstone VIC 3148

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# 1 EXECUTIVE SUMMARY

- A building and carpark upgrade has been proposed on the Salesian College Mannix campus extending to the west of the current infrastructure, retaining the two sporting ovals through the centre of the campus. The carpark position is preferred to link with the only vehicle entry point to the west and reduce on site travel distance to the proposed buildings.
- Of the 62 assessed trees in the proposed development area (includes 1 group of same species planting against western wall of the building -max height of 5 m), there are 8 **High**, 16 **Moderate** and 20 **Low** retention rated trees, with 18 trees considered as **Very Low**. All 8 weed species assessed are considered as **Very Low** retention and recommended for removal.
- The site has had significant tree damage from a recent high wind event (Feb 2024), including the uprooting of a mature Red Ironbark (tree #597) within the western garden bed adjacent to the upper level carpark, and significant upper canopy failure in a mature Spotted Gum (tree #622) distorting the upper crown and reducing the retention value of the tree from **High** to **Moderate**.
- To assist in the protection of any retained trees during construction in the development process, Tree Protection Zones (TPZ) and Structural Root Zones (SRZ) are strongly advised to be adhered to with the appropriate Tree Protection Measures in place and harmful activities excluded from these areas. The SRZ is a no go zone for encroachment, with up to 10% TPZ incursion considered minor and allowable.
- Of the 8 **High** retention rated trees within the proposed development zone, 6 trees are within the proposed car park option to the west of the current carpark and driveway.
- To assist in tree retention, the proposed building or carpark development design can incorporate a greater TPZ encroachment by calculating the minor incursion threshold using 10 % of total TPZ area in metres and applying to one side of the TPZ, with allowance for additional TPZ elsewhere around the zone as compensation.
- Major incursion into the TPZ would require the application of specific Tree Protection Measures, root investigation or mapping, or tree sensitive design and construction methods which can facilitate some TPZ encroachment whilst still protecting the longer term viability of the tree.
- TPZ and SRZ measurements for all trees assessed are listed in *Table 6.4.2*.
- While the development design should strive to explore all options to avoid mature tree loss and any **High** retention tree loss is not preferred, it may be partially offset with the strategic planting of eventual large mature size Victorian natives as compensation, in accordance with *Monash Council Tree Conservation Policy Clause 22.05*.
- With the established mature treescape of the campus, overall landscape character of the site can be preserved with some tree removal required for a proposed development
- Of the 62 assessed trees impacted by a potential development, there are 18 trees considered Victorian Native in origin and subject to *Native Tree Clause 52.17*. However, as most likely from planted origins, will be exempt from any permit requirements.

## 2 INTRODUCTION

### 2.1 Background

Salesian College is a large Private school site with two campuses; Bosco and Mannix, separated by the Monash freeway, accessible via footbridge and short drive through local streets. The planting schedule is mostly a native one with mature Eucalypts, in particular Red Ironbark, River Red Gum and Yellow Gum species featuring heavily. An original Tree Audit was undertaken in September 2021, with a subsequent full site audit completed in July 2023, and site inspection following significant tree damage from localized wind storms in February 2024. Associated works for **High** Priority recommendations from audits have been completed.

A building and carpark development on the Mannix campus has been proposed.

### 2.2 Report brief

To assess 62 trees at Salesian College Mannix Campus potentially impacted by a building development and associated car park, provide retention ratings for impacted trees and management recommendations including Tree Protection Zone and Structural Root Zone measurements.

### 2.3 Assessment methods

Inspection of the trees was conducted on Tuesday 19<sup>th</sup> March 2024 from the ground, with visual tree assessment (using VTA methods) of the canopy, scaffolds and trunk. DBH (Diameter at Breast Height) was measured at 1.4m from ground level with a tape measure and folding calipers. Where the trunk is inaccessible or restricted by debris, physical access or owner permission for neighboring property, best estimates were used. Tree height and radial spread are estimates in metres. Use of assigned tree numbers from previous site have been used for continuity and locations with numbers are recorded, and logged on attached map. Digital photos were taken as supporting evidence. SRZ (Structural Root Zone) is calculated using the diameter at root flare measurement.

### 2.4 Limits

Recommendations in this report are made based on a visual assessment of the tree from ground level with no aerial inspection undertaken, considering tree species, determined target area and visible defects among other things. They are aimed to reduce the risk of failure where reasonably practicable, however not all tree defects are visible and absolute tree safety can never be guaranteed. Other factors like wind and extreme weather events can also impact tree failure likelihood. Trees that are retained, and properly managed have some level of residual risk. This will by necessity mean that over time there will be numerous near misses periodic property damage, particularly in association with storm events, and on rare occasions, someone may be harmed.

The assigned work priority is indicative of risk level, with trees assessed as at greater risk given a higher work priority. It is the responsibility of the tree manager to determine what risk is acceptable to them and how they will manage that risk.

Tree identification is best estimate with limited availability to key identification features including bud and fruit for some of the inspected trees.

Tree positions are best estimate via overhead mapping rather than GPS coordinates. Maps including TPZ and SRZ are to scale however tree position may vary slightly from GPS coordinates. TPZ and SRZ measurements apply from the centre of trunk

No recommended works were recorded other than the removal recommendations for **Very Low** retention rated trees.

## 2.5 Statutory Requirements

The property is located within the Monash Council and while the site is not subject to the Council Vegetation Protection Overlay, the Monash Council Tree Conservation Policy (Clause 22.05) needs to be considered as does the Native Tree Clause 52.17.

Native trees that are indigenous to the region and important for biodiversity may require the need to obtain a planning permit under Clause 52.17 of the local planning scheme. Exemptions from permit requirements include trees which have been planted.

Site specific discussion in relation to statutory Clauses is included in section 6.5 *Native Tree Clause 52.17 and Tree Conservation Policy Clause 22.05*.

## 3 TREE RETENTION

Retaining trees on development sites is a balance between development of the land and sustaining the amenity and landscape character of the land and immediate area. Prioritizing tree retention is an important part of the planning of the land for the short and long term. The assessment of the values that trees contribute to our urban areas is subjective and can be difficult to quantify.

Refer to Tree Retention Table in appendices for colour coded Matrix (9.1.4, Table 1) (Colour coded with Trees marked in position on Site Map)

**High** Retention trees refer to trees suited and positioned well on the site and in good condition. They may be significant in the landscape character of the area through size or species type with good structure and good ULE. Tree Age, rarity and cultural significance may also be considerable and retention is a priority. There are 8 trees considered of **High** retention for this project.

The **Moderate** retention value trees include more significant sized species which may have structural or health issues limiting life or poor position on the site but should be retained where possible.

Those trees rated **Low** retention are less desirable and while retention may still be preferred, they are of small size, not native or have a limited life span. On the Mannix campus site they include suppressed trees or species with a reduced ULE and should be considered for removal if required for development.

**Very Low** retention value are recommended for removal and relate to trees which may be poor in structure or dead, in a poor position, or are an undesirable species type. There are 18 trees considered **Very Low** for this assessment.

## 4 INSPECTION RESULTS

A building and carpark upgrade has been proposed on the Salesian College Mannix campus site, which has a mature treescape mostly located towards the edges of the site allowing two sporting ovals and main building through the centre of the campus. Vehicle site access is via secure gate entry from Swanson Cr to the west into the lower level carpark and roundabout, which has an exit to a u-shaped driveway to access the current upper level for the southern oval and current building entrance.

The proposed building position extends to the west of the site, into a significantly sloping current garden bed, which has a mix of mature species, natives and weed species (6.1.1 Proposed Plans and Concepts Drawings). This position is deemed preferable to reduce travel distance once on site, reduce the need for the extra site infrastructure and the increased project cost an alternate site position would require. All natives are considered planted in this garden area, with the weed species Desert Ash likely establishing from seed.

Previous full Salesian College tree audits have been completed on both Bosco and Mannix campuses, with 319 trees assessed on the Mannix campus side. The age profile of the campus is considered a mature one, containing 144 Mature, 145 Semi Mature and 30 Juvenile trees.

Of the 62 assessed trees (includes 1 group of same species planting against western wall of the building -max height of 5 m) in the proposed development area, there are 8 **High**, 16 **Moderate** and 20 **Low** retention rated trees with 18 trees considered as **Very Low**. All 8 weed species assessed are considered as Very Low retention and recommended for removal.

The site has significant tree damage from a recent high wind event (Feb 2024), including the uprooting of a mature Red Ironbark (tree #597) within the western garden bed adjacent to the upper level carpark, and significant upper canopy failure in the mature Spotted Gum (tree #622) along the western boundary, which has distorted the upper crown, reducing the retention value of the tree from **High** to **Moderate**.

There are a number of **High** retention rated trees within the proposed development zone, with the proposed car park option to the west of the current carpark and driveway containing 6 trees considered of **High** retention value. These trees have significant canopy size and large trunks, with the associated Tree Protection Zones extending across proposed development areas. TPZ encroachment can be determined using the area calculation where design requires intrusion into only one side of the protection area of these trees.

TPZ and SRZ calculations are specified in *Table 6.4.2*.

## 4.1 Tree Images

### 4.1.1 High Retention tree examples:



**Figure 1.** Tree #601 High Retention rated River Peppermint Gum in area proposed for new building.



**Figure 2.** Tree #634 Large High rated Eurabbie adjacent to area considered for development carpark.

### 4.1.2 Site plantings examples:



**Figure 3.** Victorian native trees in the proposed carpark area in direct planting rows indicating likely planted origins. Planted trees are exempt from any permit requirements from Native Tree Clause 52.17



**Figure 4.** Likely planted mature specimen with a steel pipe originating from tree base. Stake possibly used for stability while establishing from planting.

# 5 Site Map

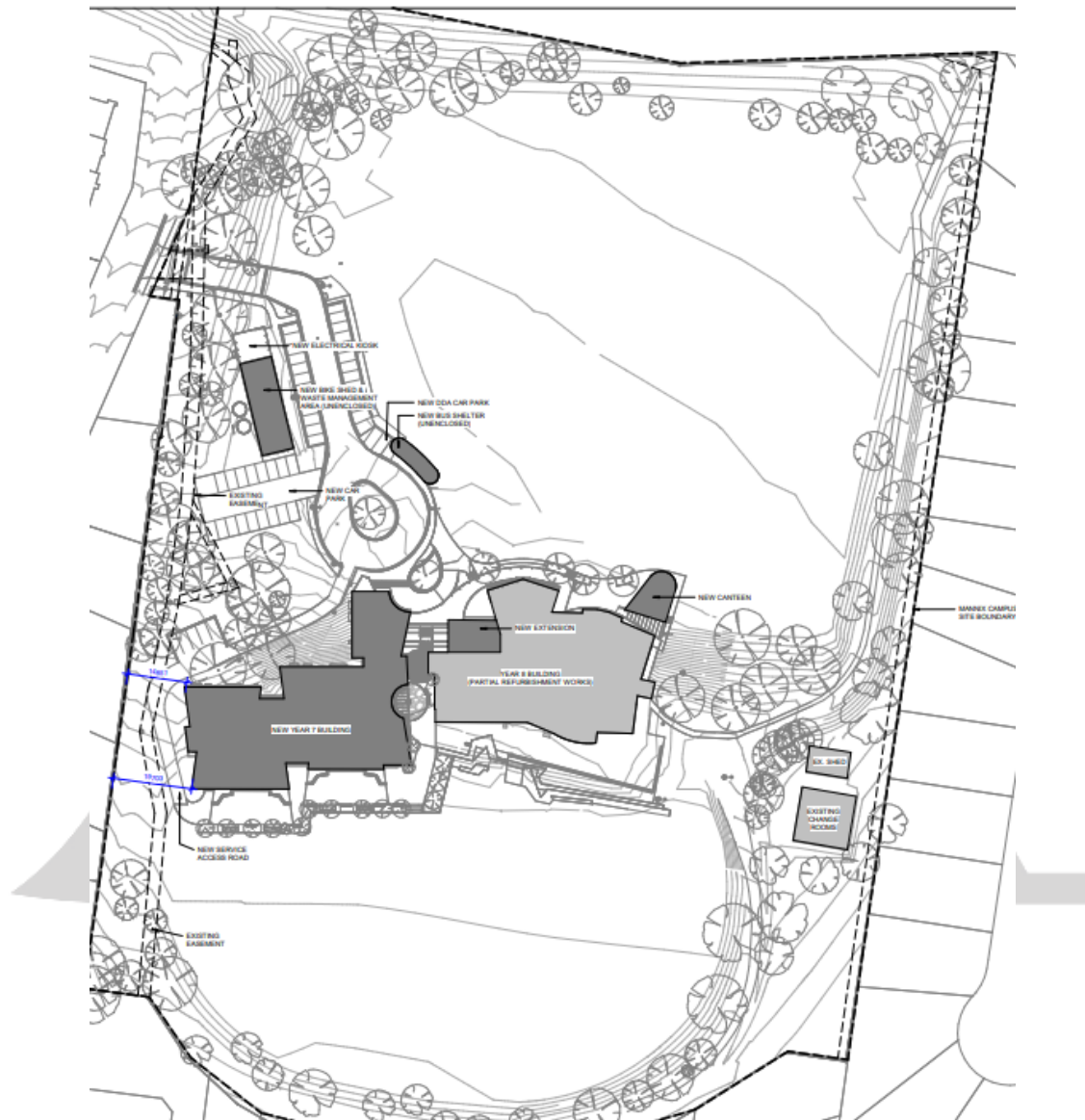




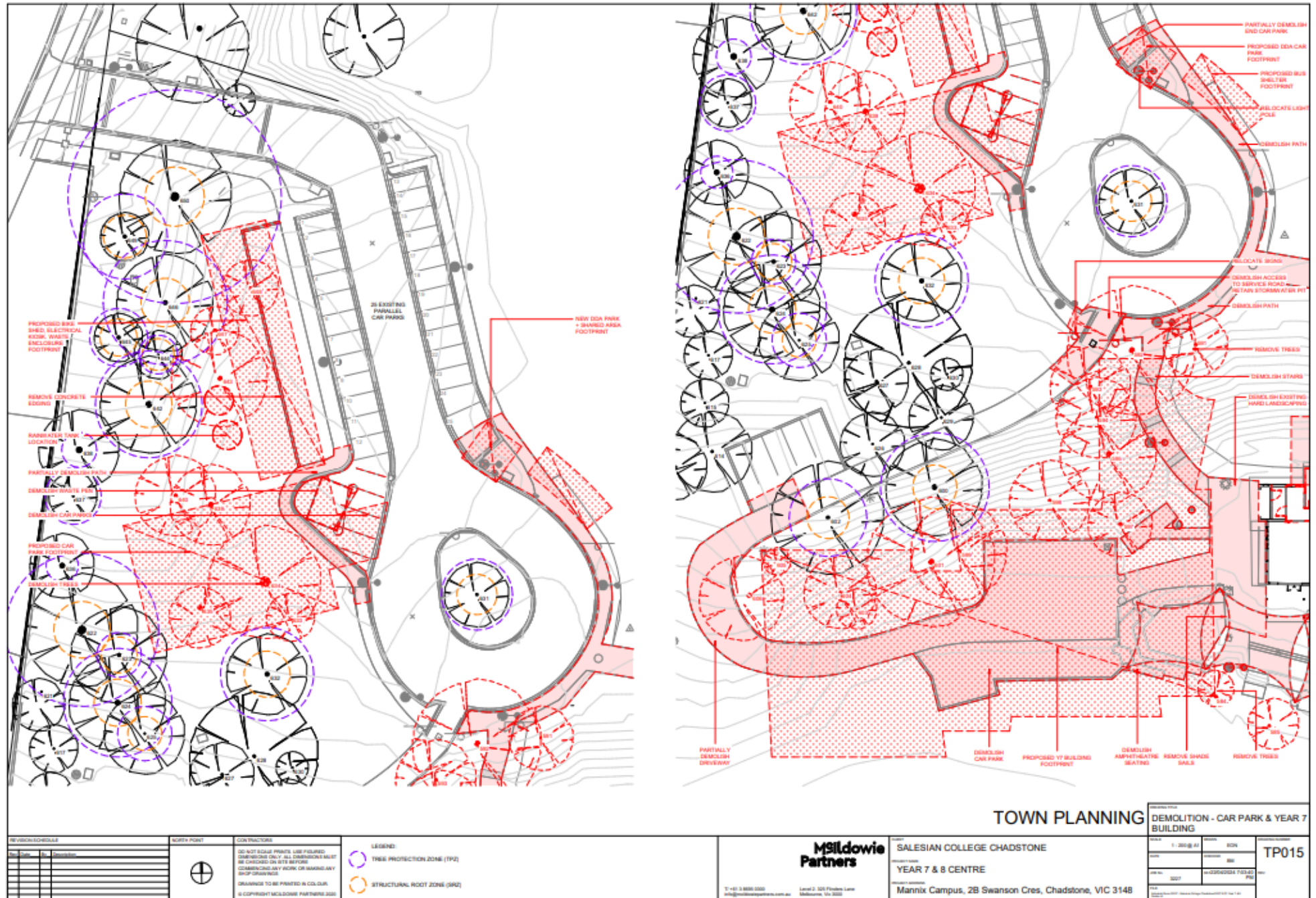
## 6 DISCUSSION

### 6.1 Proposed Plans and Concept Drawings

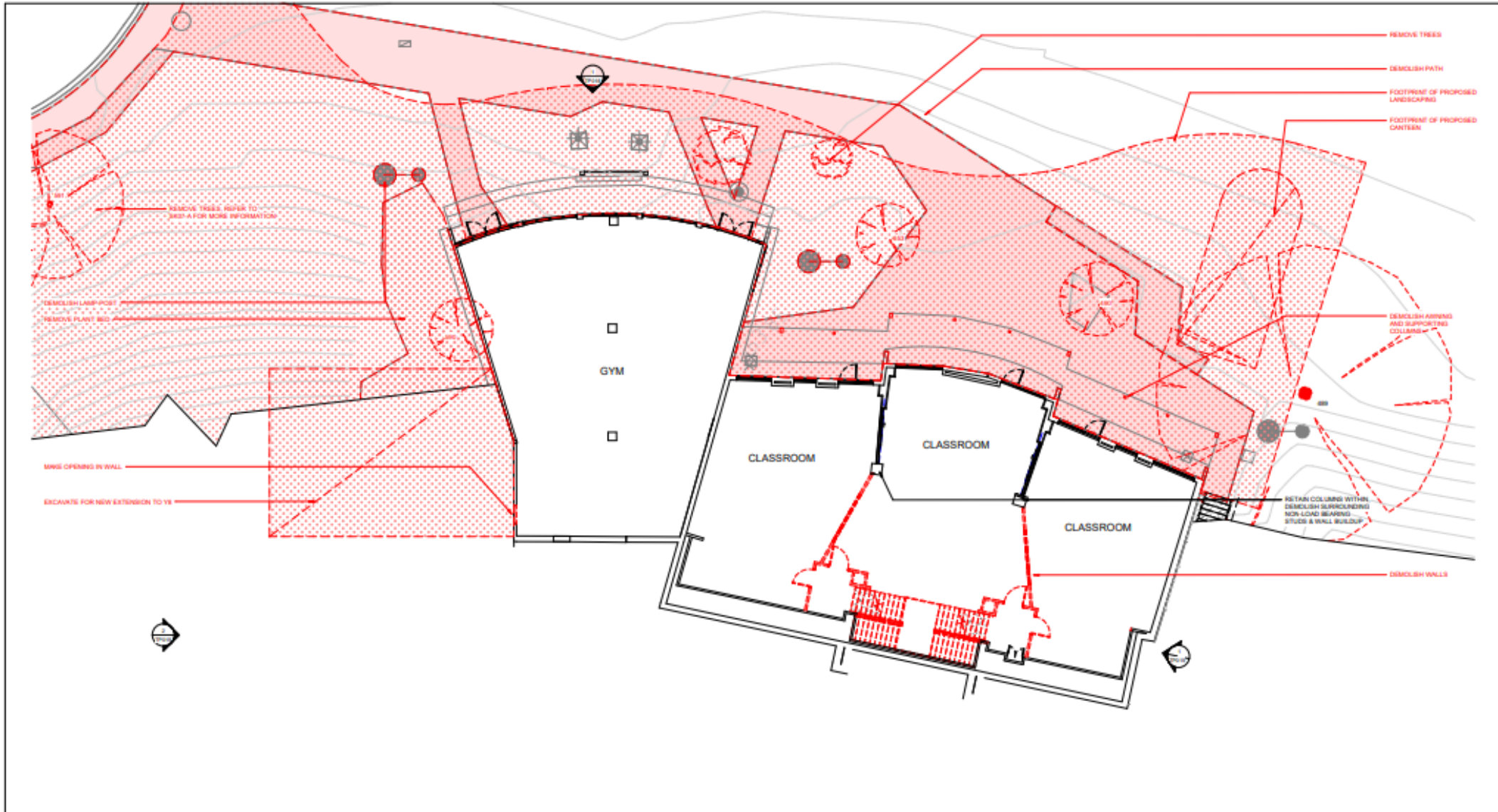
#### 6.1.1 Original development design concept



### 6.1.2 Proposed carpark area and western building extension (TPZ in purple)



### 6.1.3 Eastern side of proposed building development



## 6.2 Tree Detail

6.2.1 Table 1: Assessed Trees impacted by potential Mannix Campus Building Development (*refer to Site Map for locations*)

Tree Number	Botanical Name	Common Name	Origin	Tree Height (Estimated) [m]	Radial Canopy Width (m)	DBH [cm]	Tree Age	Health	Structure	Observations-Characteristics	Arboricultural rating	Observation Comments	Retention Rating	Recommended Works	Useful Life Expectancy	Tree Protection Zone (TPZ) [m]	Structural Root Zone (SRZ) [m]
489	Eucalyptus sideroxylon	Red Ironbark	Aust. Native	15	7	65	Mature	Fair	Fair	Deadwood, Previous crown failure or wounding	Moderate	Previous failure and pruning leaving asymmetrical crown bias. Swelling around main union.	Moderate		6-10 years	7.8	3.03
490	Eucalyptus sp.	Gum	Aust. Native	5	1	10	Juvenile	Poor	Poor	Deadwood, Multi trunk specimen	Low	Poor health and growing conditions	Very Low	Removal to ground level, Stump ground out	1-5 years	2	
491	Eucalyptus sideroxylon	Red Ironbark	Aust. Native	18	8	76	Mature	Fair	Fair	Co-dominant Trunk, Exposed Surface Roots	Moderate	Recent storm damage on southern side. Swelling around main union. Exposed roots in eroded soil conditions	Moderate		11-20 years	9.12	3.18
492	Pinus radiata	Monterey Pine	Exotic evergreen	6	1	10	Juvenile	Poor	Fair	Deadwood, Leaning trunk, Suppressed under larger specimen	Low	Suppressed with tip dieback. Limited ULE	Very Low	Removal to ground level, Stump ground out	1-5 years	2	1.49
493	Eucalyptus leucoxylon var. rosea	Yellow Gum	Vic. Native	8	3	15	Semi mature	Fair	Poor	Co-dominant Trunk, Previous crown failure or wounding	Low	Major stem failure leaving poor structure.	Very Low	Removal to ground level, Stump ground out	1-5 years	2	
584	Eucalyptus pauciflora	White Sallee	Vic. Native	5	3	19.85	Semi mature	Fair	Poor	Acute union/Included Bark, Leaning trunk, Trunk wound	Moderate	Lower trunk wound on tension side. Acute union. Sap exuding from lower trunk.	Low		1-5 years	2.38	2.18
585	Eucalyptus pauciflora	White Sallee	Vic. Native	5	2	24.92	Semi mature	Fair	Fair	Acute union/Included Bark, Co-dominant Trunk, Trunk wound	Moderate	Acute union and spreading crown over seating and oval area.	Low		6-10 years	2.99	2.15
590	Callistemon viminalis	Weeping Bottle Brush	Aust. Native	4	2	18	Semi mature	Fair	Fair	Small group of same species planting	Low	Small group of same species screening plants (8 trees).	Low		6-10 years	2.16	
591	Eucalyptus melliodora	Yellow Box	Vic. Native	10	5	33	Semi mature	Fair	Fair	Acute union/Included Bark, Co-dominant Trunk, Leaning trunk, Suppressed under larger specimen	Moderate	Leaning trunk and codominant stems with acute union.	Moderate		11-20 years	3.96	2.23
592	Eucalyptus sideroxylon	Red Ironbark	Aust. Native	16	6	76	Mature	Fair	Fair	High Target area	High	Large tree in high target position at entry stairs and overhanging driveway.	High		6-10 years	9.12	3.08
593	Eucalyptus melliodora	Yellow Box	Vic. Native	10	2	25	Semi mature	Fair	Fair	Deadwood	Moderate	Upright for adjacent to driveway.	Moderate		11-20 years	3	2.02
594	Fraxinus angustifolia subsp. Oxycarpa	Desert Ash	Exotic deciduous	10	3	30	Semi mature	Fair	Fair	Weed Species	None	Weed species in poor health. Remove.	Very Low	Removal to ground level, Stump ground out	1-5 years	3.6	2.13

Tree Number	Botanical Name	Common Name	Origin	Tree Height (Estimated) [m]	Radial Canopy Width (m)	DBH [cm]	Tree Age	Health	Structure	Observations-Characteristics	Arboricultural rating	Observation Comments	Retention Rating	Recommended Works	Useful Life Expectancy	Tree Protection Zone (TPZ) [m]	Structural Root Zone (SRZ) [m]
595	Eucalyptus viminalis	Manna Gum	Vic. Native	14	4	61	Mature	Fair	Fair	Broken/Hanging Limb, Deadwood, Exposed Surface Roots, Previous crown failure or wounding	Moderate	Impacted by adjacent tree failure leaving distorted crown. Exposed roots compensating for severe slope position.	Moderate		6-10 years	7.32	3.03
597	Eucalyptus sideroxylon	Red Ironbark	Aust. Native	13	4	33	Mature	Fair	Has failed		None	Fallen tree. Remove.	Very Low	Removal to ground level, Stump ground out	0 years	3.96	
598	Ficus macrophylla	Moreton Bay Fig	Aust. Native	8	5	42	Semi mature	Fair	Poor	Broken/Hanging Limb, Exposed Surface Roots	Low	Broken/Hanging Limb from recent storms. Species is known for large root system and size when mature.	Moderate		6-10 years	5.04	2.49
599	Eucalyptus nicholii	Narrow-leaved Black Peppermint	Aust. Native	10	4	37	Semi mature	Fair	Poor	High Target area, Leaning trunk, Suppressed under larger specimen, Unbalanced crown	Low	Suppressed with heavy lean over carpark area. Limited options to rectify bias.	Low		6-10 years	4.44	2.45
600	Eucalyptus elata	River Peppermint	Aust. Native	18	5	56	Mature	Fair	Fair	Deadwood, Previously pruned	Moderate	Previous upper scaffold dieback pruned creating trunk wound. Structure compromised.	Moderate		11-20 years	6.72	2.73
601	Eucalyptus elata	River Peppermint	Aust. Native	27	7	62	Mature	Fair	Fair	Acute union/Included Bark, Previous crown failure or wounding	High	Large tree with minor recent storm damage. Lower limb with included bark.	High		11-20 years	7.44	3.04
602	Fraxinus angustifolia subsp. Oxycarpa	Desert Ash	Exotic deciduous	13	4	40	Mature	Fair	Fair	Deadwood, Weed Species	None	Self-seeded weed species.	Very Low	Removal to ground level, Stump ground out	6-10 years	4.8	2.59
603	Allocasuarina verticillata	Droping She-Oak	Vic. Native	6	2	15.81	Semi mature	Fair	Fair	Acute union/Included Bark, Co-dominant Trunk	Moderate	Suppressed leaning towards driveway.	Low		6-10 years	2	1.79
604	Eucalyptus elata	River Peppermint	Aust. Native	7	3	19	Semi mature	Fair	Poor	Leaning trunk, Previous crown failure or wounding, Trunk wound	Low	Significant trunk wound compromising structure. Remove.	Very Low	Removal to ground level, Stump ground out	11-20 years	2.28	1.91
605	Corymbia ficifolia	Flowering Gum	Aust. Native	5	1	8	Juvenile	Fair	Fair		Moderate	Small tree.	Low		6-10 years	2	1.36
606	Eucalyptus melliodora	Yellow Box	Vic. Native	15	6	57	Mature	Fair	Fair	Multi trunk specimen	Moderate	Lower trunk lean self-corrected. Overhangs adjacent driveway.	Moderate		11-20 years	6.84	2.61
612	Prunus cerasifera	Cherry Plum	Exotic deciduous	6	1	24	Semi mature	Poor	Poor	Previous crown failure or wounding, Trunk decay, Trunk wound	None	Poor structure with lower trunk decay.	Very Low	Removal to ground level, Stump ground out	1-5 years	2.88	2.32
613	Fraxinus angustifolia subsp. Oxycarpa	Desert Ash	Exotic deciduous	6	3	42	Mature	Fair	Poor	Previously pruned, Trunk wound, Weed Species	None	Weed species previously lopped. Remove.	Very Low	Removal to ground level, Stump ground out	1-5 years	5.04	
614	Acacia dealbata	Silver Wattle	Vic. Native	9	4	37	Mature	Fair	Fair	Acute union/Included Bark, Co-dominant Trunk, Deadwood	Moderate	Acute main union and deadwood through. Minor borer presence.	Low		6-10 years	4.44	2.37
615	Eucalyptus botryoides	Southern Mahogany	Vic. Native	8	2	24	Semi mature	Fair	Fair	Deadwood, Suppressed under larger specimen	Moderate	Deadwood, suppressed with minor leaf skeletonizing.	Low		6-10 years	2.88	1.97

Tree Number	Botanical Name	Common Name	Origin	Tree Height (Estimated) [m]	Radial Canopy Width (m)	DBH [cm]	Tree Age	Health	Structure	Observations-Characteristics	Arboricultural rating	Observation Comments	Retention Rating	Recommended Works	Useful Life Expectancy	Tree Protection Zone (TPZ) [m]	Structural Root Zone (SRZ) [m]
616	Fraxinus angustifolia subsp. Oxycarpa	Desert Ash	Exotic deciduous	11	2	22	Semi mature	Fair	Fair	Suppressed under larger specimen, Weed Species	Low	Suppressed weed species impacting boundary neighbour.	Very Low	Removal to ground level, Stump ground out	1-5 years	2.64	2.32
617	Pittosporum undulatum	Sweet Pittosporum	Aust. Native	6	2	20.52	Semi mature	Fair	Poor	Co-dominant Trunk, Deadwood, Suppressed under larger specimen, Weed Species	None	Weed species. Remove.	Very Low		1-5 years	2.46	1.72
618	Callistemon viminalis	Weeping Bottle Brush	Aust. Native	6	2	13	Semi mature	Fair	Fair	Co-dominant Trunk, Leaning trunk, Suppressed under larger specimen	Low	Leaning Co-dominant Trunk with acute union. Foliage impacting neighbour.	Low		6-10 years	2	1.88
619	Pittosporum undulatum	Sweet Pittosporum	Aust. Native	6	3	23	Semi mature	Fair	Poor	Deadwood, Previously pruned, Weed Species	None	Self-seeded weed species.	Very Low	Removal to ground level, Stump ground out	1-5 years	2.76	2.2
620	Acacia podalyriifolia	Mt Morgan Wattle	Aust. Native	2	1	9	Juvenile	Poor	Poor	Deadwood, Leaning trunk, Trunk decay, Trunk wound	Low	Small tree in poor condition.	Very Low	Removal to ground level, Stump ground out	1-5 years	2	1.08
621	Pittosporum undulatum	Sweet Pittosporum	Aust. Native	6	2	20.25	Semi mature	Fair	Poor	Co-dominant Trunk, Leaning trunk, Suppressed under larger specimen, Weed Species	None	Suppressed weed species	Very Low	Removal to ground level, Stump ground out	1-5 years	2.43	2
622	Corymbia maculata	Spotted Gum	Aust. Native	24	9	79	Mature	Fair	Fair	Previous crown failure or wounding, Previously pruned	High	Recent large scale upper crown failure in high wind leaving distorted upper crown. Large tree.	Moderate		11-20 years	9.48	3.5
623	Corymbia maculata	Spotted Gum	Aust. Native	11	5	23	Semi mature	Fair	Fair	Deadwood, Suppressed under larger specimen	Moderate	Suppressed with upper crown bias. Helical trunk form.	Low		6-10 years	2.76	2.23
624	Corymbia maculata	Spotted Gum	Aust. Native	20	7	56	Mature	Fair	Fair	Broken/Hanging Limb, Suppressed under larger specimen	High	Minor crown asymmetry due to larger adjacent species. Minor hanging limb.	High		11-20 years	6.72	2.92
625	Quercus robur	English Oak	Exotic deciduous	5	4	28	Semi mature	Fair	Fair	Co-dominant Trunk	Moderate	Flat spreading crown	Low		1-5 years	3.36	2.1
626	Corymbia maculata	Spotted Gum	Aust. Native	14	4	30	Semi mature	Fair	Fair	Deadwood, High Target area	Moderate	Symmetrical crown with minor driveway overhang.	Moderate		11-20 years	3.6	2.34
627	Corymbia maculata	Spotted Gum	Aust. Native	14	2	26	Semi mature	Fair	Fair		Moderate	Upright form.	Moderate		11-20 years	3.12	2.13
628	Eucalyptus viminalis	Manna Gum	Vic. Native	13	4	49.25	Semi mature	Fair	Fair	Deadwood, Multi trunk specimen, Previous crown failure or wounding, Trunk wound	Moderate	Multiple trunk specimen with mid trunk failure and associated wound. Canopy bias towards driveway.	Low		6-10 years	5.91	2.97
629	Casuarina cunninghamiana	River She-oak	Aust. Native	7	3	19	Semi mature	Fair	Fair	Deadwood, Epicormic shoots	Moderate	Partially suppressed with minor driveway overhang.	Low		6-10 years	2.28	2.08
630	Casuarina cunninghamiana	River She-oak	Aust. Native	8	2	15	Semi mature	Poor	Poor	Deadwood, Trunk decay, Trunk wound	Low	Lower trunk wound and reduced foliage density. Limited ULE.	Very Low	Removal to ground level, Stump ground out	1-5 years	2	1.91
631	Ficus macrophylla	Moreton Bay Fig	Aust. Native	7	4	36.69	Semi mature	Fair	Fair	Exposed Surface Roots, High Target area	Low	High target position in driveway roundabout. Significant exposed roots. Large tree and extensive root system when mature.	Low		6-10 years	4.4	2.49

Tree Number	Botanical Name	Common Name	Origin	Tree Height (Estimated) [m]	Radial Canopy Width (m)	DBH [cm]	Tree Age	Health	Structure	Observations-Characteristics	Arboricultural rating	Observation Comments	Retention Rating	Recommended Works	Useful Life Expectancy	Tree Protection Zone (TPZ) [m]	Structural Root Zone (SRZ) [m]
632	Corymbia maculata	Spotted Gum	Aust. Native	26	6	48	Mature	Fair	Fair		High	Upright for with upper canopy bias.	High		11-20 years	5.76	2.85
633	Eucalyptus camaldulensis	River Red Gum	Vic. Native	9	3	22	Semi mature	Fair	Poor	Deadwood, Leaning trunk, Trunk wound, Unbalanced crown	Low	Basal trunk wound and significant trunk lean. Limited long-term prospects.	Low		6-10 years	2.64	2.25
634	Eucalyptus bicostata	Eurabbie	Vic. Native	24	9	107	Mature	Fair	Poor	Deadwood, Dominant tree, Previously pruned	High	significant tree with symmetrical crown and previous pruning management undertaken. Trunk wound and fungal bracket to monitor.	High		1-5 years	12.84	4.05
635	Corymbia maculata	Spotted Gum	Aust. Native	21	7	55	Mature	Fair	Fair	Previously pruned, Suppressed under larger specimen	High	Mature tree with upright form partly suppressed.	High		11-20 years	6.6	3.03
636	Coprosma repens	Mirror Bush	Exotic evergreen	5	3	15	Semi mature	Poor	Poor	Deadwood, Multi trunk specimen, Weed Species	None	Weed species. Trunk dieback.	Very Low	Removal to ground level, Stump ground out	1-5 years	2	
637	Pittosporum undulatum	Sweet Pittosporum	Aust. Native	9	4	29	Semi mature	Fair	Poor	Deadwood, Previously pruned, Weed Species	None	Weed species close to fence line.	Very Low	Removal to ground level, Stump ground out	1-5 years	3.48	2.25
638	Cotoneaster glaucophyllus var. serotinus	Cotoneaster	Exotic evergreen	5	3	18	Semi mature	Poor	Poor	Deadwood, Multi trunk specimen, Previous crown failure or wounding	None	Self-seeded weed species. Remove.	Very Low	Removal to ground level, Stump ground out	1-5 years	2.16	
639	Corymbia maculata	Spotted Gum	Aust. Native	18	6	55	Mature	Fair	Fair	Deadwood	High	Mature tree with upright form. Minor crown dieback.	High		11-20 years	6.6	2.83
640	Melaleuca styphelioides	Prickly Paperbark	Aust. Native	11	4	42	Mature	Fair	Fair	Acute union/Included Bark, Co-dominant Trunk	Moderate	Mature tree suppressed under larger specimen. Acute unions.	Moderate		6-10 years	5.04	2.39
642	Eucalyptus camaldulensis	River Red Gum	Vic. Native	15	6	55	Mature	Fair	Fair	Deadwood, Leaning trunk, Suppressed under larger specimen	Moderate	Leaning trunk with suppressed upper crown. Lower trunk bark fissures.	Moderate		11-20 years	6.6	2.88
643	Eucalyptus bicostata	Eurabbie	Vic. Native	12	5	52	Mature	Fair	Fair	Deadwood, Leaning trunk, Previously pruned, Unbalanced crown	Moderate	Suppressed with crown bias and heavy extended laterals. Leaning trunk.	Moderate		11-20 years	6.24	2.88
644	Eucalyptus camaldulensis	River Red Gum	Vic. Native	10	4	20	Semi mature	Fair	Fair	Deadwood, Suppressed under larger specimen	Moderate	Suppressed with deadwood.	Low		6-10 years	2.4	1.97
645	Melaleuca styphelioides	Prickly Paperbark	Aust. Native	9	4	30	Semi mature	Fair	Fair	Deadwood, Previous crown failure or wounding, Suppressed under larger specimen	Moderate	Suppressed with failure distorting upper crown.	Low		6-10 years	3.6	2.3
646	Eucalyptus camaldulensis	River Red Gum	Vic. Native	16	7	64	Mature	Fair	Fair	Deadwood, Previous crown failure or wounding, Previously Lopped	Moderate	Reduced foliage density and minor crown dieback. Recent upper crown failure and previous lopping leaving distorted crown.	Moderate		11-20 years	7.68	3.01
647	Corymbia maculata	Spotted Gum	Aust. Native	14	5	36	Mature	Fair	Fair		Moderate	Limited lower foliage with upper crown bias.	Moderate		11-20 years	4.32	2.65
648	Ficus elastica	Rubber Tree	Aust. Native	5	3	22	Semi mature	Fair	Fair	Acute union/Included Bark, Co-dominant Trunk, Exposed Surface Roots	Low	Large mature size with exposed roots when mature. Damage to roots from machinery. Inappropriate long-term species.	Low		6-10 years	2.64	2.1

Tree Number	Botanical Name	Common Name	Origin	Tree Height (Estimated) [m]	Radial Canopy Width (m)	DBH [cm]	Tree Age	Health	Structure	Observations-Characteristics	Arboricultural rating	Observation Comments	Retention Rating	Recommended Works	Useful Life Expectancy	Tree Protection Zone (TPZ) [m]	Structural Root Zone (SRZ) [m]
649	Melaleuca styphelioides	Prickly Paperbark	Aust. Native	10	5	43.86	Mature	Fair	Fair	Acute union/Included Bark, Co-dominant Trunk, Suppressed under larger specimen	Moderate	Suppressed with acute codominant main union. Rubbing trunks.	Low		6-10 years	5.26	2.65
650	Eucalyptus camaldulensis	River Red Gum	Vic. Native	25	10	110	Mature	Fair	Fair	Co-dominant Trunk, High Target area, Previously pruned	High	Large tree in high target position close to entry driveway. Previously pruned to manage crown spread.	High		11-20 years	13.2	3.66
653	Eucalyptus sideroxylon	Red Ironbark	Aust. Native	6	1	17	Juvenile	Fair	Fair	Leaning trunk	Moderate	Lower trunk lean self-corrected.	Low		6-10 years	2.04	1.72





### 6.3 Tree Protection Zones

The Tree Protection Zone (TPZ) is defined as the calculated area above and below ground at a given distance from the trunk to provide for the protection of the tree's roots and canopy during construction works. To assist in the protection of the Retained trees during construction in the development process, Tree Protection Zones are strongly advised to be adhered to with the appropriate Tree Protection Measures in place and harmful activities excluded from the area. The Australian Standard for Protection of Trees during development is twelve times the trunk diameter, with a maximum TPZ of 15m and a minimum of 2m.

A 10% incursion into the TPZ is considered minor and allowable, if deemed suitable by a suitably qualified Project Arborist to have minimal impact on the tree. Greater than 10% incursion is considered major encroachment and specific Tree Protection Measures would apply, including the need for tree sensitive construction or design methods and materials that can facilitate some TPZ encroachment whilst still protecting the longer term viability of the tree

The Structural Root Zone (SRZ) of a tree is defined as an area directly around the tree trunk which is essential for tree stability. Damage to the roots in this area will most likely cause the tree to become unstable in the ground, with potential for whole tree failure or uprooting.

In developmental and construction terms, the SRZ is an area to be avoided and protected at all costs, an absolute no-go zone for any form of root severance or excavation, unless the exact position of roots within this zone is known through root mapping or radar, or exploratory excavation using NDD (Non Destructive Digging) techniques is completed prior to works.

### 6.4 TPZ recommendations and Encroachment:

The recommended Tree Protection Zone and Structural Root Zone for all assessed trees are included in *table 6.4.2*.

The proposed building or carpark development design can incorporate and potentially retain trees with allowance of greater TPZ encroachment, by calculating the minor incursion threshold using 10 % of total TPZ area in metres and applying to one side of the TPZ. This increases the size of the minor incursion threshold on one portion of the TPZ , however is required to be compensated by allowing for additional TPZ elsewhere around the zone. This adjusted figure is a measurement from the centre of the trunk and is only to be employed where the TPZ is impacted on one side as per *figure 6.4.1* below.

#### 6.4.1 Encroachment into TPZ using an area calculation



Ref AS4970 – 2009 Protection of Trees on development sites

## 6.4.2 TPZ and SRZ measurements

\*Trees rated as **Very Low** are not included as they are recommended for removal, regardless of proposed development.

Tree Number	Common Name	Origin	DBH [cm]	Observation Comments	Priority of Works	Useful Life Expectancy	Tree Protection Zone (TPZ) [m]	Structural Root Zone (SRZ) [m]
489	Red Ironbark	Aust. Native	65	Previous failure and pruning leaving asymmetrical crown bias. Swelling around main union.	Moderate	6-10 years	<b>7.8</b>	<b>3.03</b>
491	Red Ironbark	Aust. Native	76	Recent storm damage on southern side. Swelling around main union. Exposed roots in eroded soil conditions	Moderate	11-20 years	<b>9.12</b>	<b>3.18</b>
584	White Sallee	Vic. Native	19.85	Lower trunk wound on tension side. Acute union. Sap exuding from lower trunk.	Low	1-5 years	<b>2.38</b>	<b>2.18</b>
585	White Sallee	Vic. Native	24.92	Acute union and spreading crown over seating and oval area.	Low	6-10 years	<b>2.99</b>	<b>2.15</b>
590	Weeping Bottle Brush	Aust. Native	18	Small group of same species screening plants (8 trees).	Low	6-10 years	<b>2.16</b>	
591	Yellow Box	Vic. Native	33	Leaning trunk and codominant stems with acute union.	Moderate	11-20 years	<b>3.96</b>	<b>2.23</b>
592	Red Ironbark	Aust. Native	76	Large tree in high target position at entry stairs and overhanging driveway.	High	6-10 years	<b>9.12</b>	<b>3.08</b>
593	Yellow Box	Vic. Native	25	Upright for adjacent to driveway.	Moderate	11-20 years	<b>3</b>	<b>2.02</b>
595	Manna Gum	Vic. Native	61	Impacted by adjacent tree failure leaving distorted crown. Exposed roots compensating for severe slope position.	Moderate	6-10 years	<b>7.32</b>	<b>3.03</b>
598	Moreton Bay Fig	Aust. Native	42	Broken/Hanging Limb from recent storms. Species is known for large root system and size when mature.	Moderate	6-10 years	<b>5.04</b>	<b>2.49</b>
599	Narrow-leaved Black Peppermint	Aust. Native	37	Suppressed with heavy lean over carpark area. Limited options to rectify bias.	Low	6-10 years	<b>4.44</b>	<b>2.45</b>
600	River Peppermint	Aust. Native	56	Previous upper scaffold dieback pruned creating trunk wound. Structure compromised.	Moderate	11-20 years	<b>6.72</b>	<b>2.73</b>
601	River Peppermint	Aust. Native	62	Large tree with minor recent storm damage. Lower limb with included bark.	High	11-20 years	<b>7.44</b>	<b>3.04</b>
603	Drooping She-Oak	Vic. Native	15.81	Suppressed leaning towards driveway.	Low	6-10 years	<b>2</b>	<b>1.79</b>
605	Flowering Gum	Aust. Native	8	Small tree.	Low	6-10 years	<b>2</b>	<b>1.36</b>
606	Yellow Box	Vic. Native	57	Lower trunk lean self-corrected. Overhangs adjacent driveway.	Moderate	11-20 years	<b>6.84</b>	<b>2.61</b>
614	Silver Wattle	Vic. Native	37	Acute main union and deadwood through. Minor borer presence.	Low	6-10 years	<b>4.44</b>	<b>2.37</b>
615	Southern Mahogany	Vic. Native	24	Deadwood, suppressed with minor leaf skeletonizing.	Low	6-10 years	<b>2.88</b>	<b>1.97</b>
618	Weeping Bottle Brush	Aust. Native	13	Leaning Co-dominant Trunk with acute union. Foliage impacting neighbour.	Low	6-10 years	<b>2</b>	<b>1.88</b>
622	Spotted Gum	Aust. Native	79	Recent large scale upper crown failure in high wind leaving distorted upper crown. Large tree.	Moderate	11-20 years	<b>9.48</b>	<b>3.5</b>
623	Spotted Gum	Aust. Native	23	Suppressed with upper crown bias. Helical trunk form.	Low	6-10 years	<b>2.76</b>	<b>2.23</b>
624	Spotted Gum	Aust. Native	56	Minor crown asymmetry due to larger adjacent species. Minor hanging limb.	High	11-20 years	<b>6.72</b>	<b>2.92</b>
625	English Oak	Exotic deciduous	28	Flat spreading crown	Low	1-5 years	<b>3.36</b>	<b>2.1</b>
626	Spotted Gum	Aust. Native	30	Symmetrical crown with minor driveway overhang.	Moderate	11-20 years	<b>3.6</b>	<b>2.34</b>
627	Spotted Gum	Aust. Native	26	Upright form.	Moderate	11-20 years	<b>3.12</b>	<b>2.13</b>
628	Manna Gum	Vic. Native	49.25	Multiple trunk specimen with mid trunk failure and associated wound. Canopy bias towards driveway.	Low	6-10 years	<b>5.91</b>	<b>2.97</b>
629	River She-oak	Aust. Native	19	Partially suppressed with minor driveway overhang.	Low	6-10 years	<b>2.28</b>	<b>2.08</b>
631	Moreton Bay Fig	Aust. Native	36.69	High target position in driveway roundabout. Significant exposed roots. Large tree and extensive root system when mature.	Low	6-10 years	<b>4.4</b>	<b>2.49</b>
632	Spotted Gum	Aust. Native	48	Upright for with upper canopy bias.	High	11-20 years	<b>5.76</b>	<b>2.85</b>
633	River Red Gum	Vic. Native	22	Basal trunk wound and significant trunk lean. Limited long-term prospects.	Low	6-10 years	<b>2.64</b>	<b>2.25</b>

Tree Number	Common Name	Origin	DBH [cm]	Observation Comments	Priority of Works	Useful Life Expectancy	Tree Protection Zone (TPZ) [m]	Structural Root Zone (SRZ) [m]
634	Eurabbie	Vic. Native	107	significant tree with symmetrical crown and previous pruning management undertaken. Trunk wound and fungal bracket to monitor.	High	1-5 years	<b>12.84</b>	<b>4.05</b>
635	Spotted Gum	Aust. Native	55	Mature tree with upright form partly suppressed.	High	11-20 years	<b>6.6</b>	<b>3.03</b>
639	Spotted Gum	Aust. Native	55	Mature tree with upright form. Minor crown dieback.	High	11-20 years	<b>6.6</b>	<b>2.83</b>
640	Prickly Paperbark	Aust. Native	42	Mature tree suppressed under larger specimen. Acute unions.	Moderate	6-10 years	<b>5.04</b>	<b>2.39</b>
642	River Red Gum	Vic. Native	55	Leaning trunk with suppressed upper crown. Lower trunk bark fissures.	Moderate	11-20 years	<b>6.6</b>	<b>2.88</b>
643	Eurabbie	Vic. Native	52	Suppressed with crown bias and heavy extended laterals. Leaning trunk.	Moderate	11-20 years	<b>6.24</b>	<b>2.88</b>
644	River Red Gum	Vic. Native	20	Suppressed with deadwood.	Low	6-10 years	<b>2.4</b>	<b>1.97</b>
645	Prickly Paperbark	Aust. Native	30	Suppressed with failure distorting upper crown.	Low	6-10 years	<b>3.6</b>	<b>2.3</b>
646	River Red Gum	Vic. Native	64	Reduced foliage density and minor crown dieback. Recent upper crown failure and previous lopping leaving distorted crown.	Moderate	11-20 years	<b>7.68</b>	<b>3.01</b>
647	Spotted Gum	Aust. Native	36	Limited lower foliage with upper crown bias.	Moderate	11-20 years	<b>4.32</b>	<b>2.65</b>
648	Rubber Tree	Aust. Native	22	Large mature size with exposed roots when mature. Damage to roots from machinery. Inappropriate long-term species.	Low	6-10 years	<b>2.64</b>	<b>2.1</b>
649	Prickly Paperbark	Aust. Native	43.86	Suppressed with acute codominant main union. Rubbing trunks.	Low	6-10 years	<b>5.26</b>	<b>2.65</b>
650	River Red Gum	Vic. Native	110	Large tree in high target position close to entry driveway. Previously pruned to manage crown spread.	High	11-20 years	<b>13.2</b>	<b>3.66</b>
653	Red Ironbark	Aust. Native	17	Lower trunk lean self-corrected.	Low	6-10 years	<b>2.04</b>	<b>1.72</b>

*\*2 metres is the minimum TPZ distance as per AS 4970 - 2009*

## 6.5 Native Tree Clause 52.17 and Tree Conservation Policy Clause 22.05

The Mannix Campus has a mature treescape with 289 semi mature or mature mostly native trees located towards the edges of the site.

The site is subject to Monash Council Tree Conservation Policy (Clause 22.05) which “seeks to maintain the Garden City Character by promoting the retention of mature trees, and encouraging the planting of new canopy trees throughout Monash. The policy stipulates a requirement that existing semi-mature and mature trees be retained wherever possible, and new trees be planted as part of any new development”.

Mannix Campus has two sporting fields which are to be retained and as the only vehicle site entry is via the western entrance, a development design on the western side of the site is preferred, which would require the loss of some of **High** retention rated trees. While the design should strive to explore all options to avoid mature tree loss and any **High** retention tree loss is not preferred, it may be partially offset with the strategic planting of Victorian natives which have an eventual significant mature size and associated canopy coverage as compensation, in accordance with Clause 22.05.

With the established mature treescape of the campus, overall landscape character of the site can be preserved with some tree removal required for a proposed development.

Any proposed carpark area can also use design alternatives which incorporate adjusted TPZ values calculated by area as discussed in 6.4 *TPZ recommendations and Encroachment*.

Of the 62 assessed trees impacted by a potential development, there are 18 trees considered Victorian Native in origin and subject to Native Tree Clause 52.17. If removal of any of these 18 trees is required, they will be

exempt from any tree removal permit requirements under the Clause, if either planted or grown as a result of direct seeding.

While it is difficult to ascertain the original establishment of the vegetation on site, it is considered a mostly planted site, other than the frequent self-seeded weed varieties, which includes Sweet Pittosporum and Desert Ash species. Historical aerial imagery shows garden bed plantings with progressive growth and there is anecdotal evidence of planting programs by priests at establishment of the campus as evidenced with areas of established tree plantings in rows, with adequate space and at relatively even intervals (4.1.2, figure 3).

The likely planted treescape will therefore be exempt from any Native Tree Clause 52.17 permit requirements.



## 7 CONCLUSION

A building and carpark upgrade has been proposed on the Salesian College Mannix campus extending to the west of the current infrastructure, retaining the two sporting ovals through the centre of the campus. The carpark position is preferred to link with the only vehicle entry point to the west and reduce on site travel distance to the proposed buildings.

Of the 62 assessed trees (includes 1 group of same species planting against western wall of the building -max height of 5 m) in the proposed development area, there are 8 **High**, 16 **Moderate** and 20 **Low** retention rated trees with 18 trees considered as **Very Low**. All 8 weed species assessed are considered as **Very Low** retention and recommended for removal.

The site has significant tree damage from a recent high wind event (Feb 2024), including the uprooting of a mature Red Ironbark within the western garden bed adjacent to the upper level carpark, and significant upper canopy failure in a mature Spotted Gum (tree #622) distorting the upper crown and reducing the retention value of the tree from **High** to **Moderate**.

To assist in the protection of the Retained trees during construction in the development process, Tree Protection Zones (TPZ) and Structural Root Zones (SRZ) are strongly advised to be adhered to with the appropriate Tree Protection Measures in place and harmful activities excluded from these areas. The SRZ is a no go zone for encroachment, with up to 10% TPZ incursion considered minor and allowable.

Of the 8 **High** retention rated trees within the proposed development zone, 6 trees are within the proposed car park option to the west of the current carpark and driveway. To assist in tree retention, the proposed building or carpark development design can incorporate a greater TPZ encroachment by calculating the minor incursion threshold using 10 % of total TPZ area in metres and applying to one side of the TPZ, with allowance for additional TPZ elsewhere around the zone as compensation.

Major incursion into the TPZ would require the application of specific Tree Protection Measures, root investigation or mapping, or tree sensitive design and construction methods which can facilitate some TPZ encroachment whilst still protecting the longer term viability of the tree.

TPZ and SRZ measurements for all trees assessed are listed in *Table 6.4.2*.

While the development design should strive to explore all options to avoid mature tree loss and any **High** retention tree loss is not preferred, it may be partially offset with the strategic planting of eventual large mature size Victorian natives as compensation, in accordance with *Monash Council Tree Conservation Policy Clause 22.05*. With the established mature treescape of the campus, overall landscape character of the site can be preserved with some tree removal required for a proposed development.

Of the 62 assessed trees impacted by a potential development, there are 18 trees considered Victorian Native in origin and subject to *Native Tree Clause 52.17*. However, as most likely from planted origins, will be exempt from any permit requirements.

## 8 REFERENCES

Harris, Clark & Matheny, 1999. Arboriculture 3 edition. Prentice Hall, New Jersey.

Costermans L 1994. Native Trees and shrubs of South-Eastern Australia. Reed New Holland, Australia.

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AS 4373 -2007 Pruning of Amenity Trees

MIS313 Tree health & maintenance - Arboriculture Australia Minimum Industry Standards- 2019

Lonsdale, D. (ed.) (2013). Ancient and other veteran trees: further guidance on management. The Tree Council, London 212pp

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Vic Flora website, <https://vicflora.rbg.vic.gov.au/flora>



## 9 APPENDIX 1 – TREE DESCRIPTORS

### 9.1 Tree Descriptors

#### 9.1.1 **Health:**

Assesses the factors determining overall tree vigor and health.

Category	Description
<i>Good</i>	Foliage of tree is entire, with good colour very little pathogen damage and of good density. Growth indicators are good ie. Extension growth of twigs and woundwood development. Minimal or no canopy dieback (deadwood).
<i>Fair</i>	Tree is showing one or more of the following symptoms; < 25% dead wood, minor canopy dieback, 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
<i>Poor</i>	Tree is showing one or more of the following symptoms; >25% deadwood, canopy dieback is observable, discoloured or distorted leaves. Pathogen is present, stress symptoms are obvious eg. Small leaf size or small twig extension; these could lead to decline of specimen.
<i>Dying (or dead)</i>	Tree is in severe decline, with > 55% deadwood, very little foliage that could be mostly be epicormic shoots, or no twig extension.

#### 9.1.2 **Structure:**

Assesses the tree components of roots, trunk, branch and canopy to determine overall tree structure and failure likelihood.

Category	Description
<i>Good</i>	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 pests or diseases.
<i>Fair</i>	Tree shows some minor structural defects or minor damage to trunk ie. bark missing, there could be cavities present. Minimal damage to structural roots, could be seen as typical for this sp.
<i>Poor</i>	There are major structural defects, damage to trunk or bark missing Co-dominant stems could be present, likely point of branch failure. Girdling or damaged roots obvious and structurally problematic.
<i>Very Poor</i>	Branch or stem failure imminent with significant structural defects including trunk hollow/cavity and fungal brackets, cracked limbs, overburdened extended laterals
<i>Has Failed</i>	Complete or partial tree failure, with limb loss resulting in trunk or branch scarring. Tree may have uprooted or trunk snapped

9.1.3 **Tree Age:**

Category	Description
<i>Juvenile</i>	Sapling tree, recently planted and <5 years
<i>SemiMature</i>	Tree with increasing growth rate and physical size yet to reach full maturity
<i>Mature</i>	Tree is reaching mature size for current growing conditions with incremental growth slowing
<i>Overmature</i>	Growth has slowed, reaching senescence and beginning to decline.

9.1.4 **Tree Retention Value:**

Assesses factors for determining tree suitability on a particular site, normally for tree retention for development purposes. Primary ranking category for trees on development sites.

Category	Description
<i>High</i>	The tree is suited and positioned well on the site and is in good condition. It is significant in the landscape character of the area through size or species type with good structure and good SULE. Tree Age, rarity and cultural significance may also be considerable. Retention is a priority.
<i>Moderate</i>	The tree is suited to the site and, if practical, designs should be altered to accommodate the tree. Could be replaced with standard nurse stock if construction design alternatives cannot reasonably accommodate. Large more significant species may have structural or health issue limiting life or poor position on the site.
<i>Low</i>	The tree is not worth retaining in the landscape. The tree may be of poor health, species or structure with limited SULE and not suitable for the site. Inappropriate size or position on the site may also be factors.
<i>Very Low</i>	Tree is dead/dying, considered a weed species or has poor position on the site with serious structural defects with imminent failure likely or has failed. Removal recommended

9.1.5 **Tree Retention Table:**

	Arboricultural/Landscape Significance Rating						
Estimated Life Expectancy	1	2	3	4	5	6	7
<b>40+ years</b>	High Retention Value			Moderate Retention		Low Retention	
<b>15-40 years</b>	High Retention Value		Moderate Retention		Low Retention		
<b>5-15 years</b>	High Retention Value		Moderate Retention		Low Retention		
<b>1-5 years</b>	High Retention Value		Moderate Retention		Low Retention		
<b>0 years</b>	High Retention Value		Moderate Retention		Low Retention		

Ref: modified from Couston, Mark & Howden, Melanie (2001) Footprint Green P/L Sydney Australia



### 9.1.6 Work Priorities

Assesses overall urgency for recommended works based on displayed characteristics relating to health and structure ratings. Often primary category for tree rankings for client purposes, in non-development sites.

Category	Description
<i>Urgent (Blue Stars on the Map)</i>	Works required to be done immediately. This normally involves storm damaged trees, or immediately dangerous trees with serious structural defects. Imminent danger present.
<i>High (Red Triangles on the Map)</i>	Works to be undertaken within 4 months. Typically involves tree removal with structural issues or poor health. Pruning works will be trees with particularly heavy canopies, extended laterals or large deadwood in high target areas, which if left unchecked can progress to an imminent failure threat.
<i>Moderate (Green Squares on the Map)</i>	Works to be undertaken within 12 months. Includes trees that are not yet mature, but will require corrective pruning to avoid future limb loss and provide improved directional growth to develop good branch structure. Also includes Mature trees which may have been pruned previously and require further works to continue to appropriate in situation.
<i>Low (Yellow Circles on the Map)</i>	Works that are required in the next 18 months. Typically involves saplings or smaller trees that could benefit from formative pruning, which will help establish the future branch structure of the plant. Often these trees can wait until they move up into a higher priority category before works are undertaken. Monitoring advised.
<i>None (Orange Circles on the Map)</i>	No work required. Typically, smaller saplings requiring establishment in situation before any works recommended. May be large trees recently pruned requiring only ongoing monitoring, with any future works to be determined during future reassessment. To be monitored and reassessed.

### 9.1.7 Arboricultural rating:

Assess tree value relating to the combination of tree condition factors, age, species type and significance to the landscape character of the area

Category	Description
High	Tree is of high quality and a particularly good specimen or example of the species and/or may be rare and have high conservation or cultural significance. It is of the highest importance to the landscape character of the area and with good management a likely long term feature of the landscape. Retention of these trees is highly desirable.
Moderate	The tree is fair to good specimen suited to the area with moderate range site suitability. May be a Juvenile or Semi Mature species with potential for good site suitability. May be a mature significant species with a structural or health issue limiting life or poor site position but with remedial arboricultural treatment can exist with moderate SULE. Retention of these trees is generally desirable.
Low	Unremarkable specimen, not considered significant, due to low amenity value or poor quality. This may be a small specimen, with poor health or structure and a short SULE, which can be easily replaced.
None	Tree of low quality which may be dead/dying with considerable defects or is a woody weed species of no desirable retention. Offers nothing to the landscape character of the area and of no amenity value. Removal recommended