



arboricultural impact assessment – 39 calvert parade, newport

10^h April 2025 prepared by Melanie Howden - Ass. Dip. Hort. (Haw. Ag. C.), SoA. Arb. MAIH, MIACA



Executive Summary

This report has been prepared to assess the condition and significance of a number of trees on and adjacent the site known as 39 Calvert Parade, Newport and assess the potential impacts of the proposed development on the identified trees. The report has been commissioned by the site owners and site instructions have been provided by Architecture Saville Isaacs Pty Ltd.

For the purposes of this report the property of 39 Calvert Parade, Newport will be referred to as the site.

The tree assessments have been carried out using the Visual Tree Assessment (VTA) method (Mattheck & Breloer 2010) and development impact assessments are based upon the Australian Standard, Protection of Trees on Development Sites AS 4970-2009.

The site is located on the eastern side of Calvert Parade and is a sloping allotment that falls to the street. The site is currently developed and contains a 2 storey brick dwelling with a garage located on a lower level beneath a terrace. The proposed development involves demolition of the existing built structures and construction of a 2 storey dwelling generally on the existing footprint with a lower level garage.

There are **20** trees considered in this report, based upon the proposed plans:

- **12** trees are to be retained (**8** trees on the site and **4** within the road reserve)
- **8** trees are proposed to be removed (**7** trees on site and **1** tree within the road reserve).

It should be noted that **6** trees, Tree No's, 3, 4, 5, 6, 7 & 19 are listed as regional priority weed in the Greater Sydney Regional Weed Management Plan prepared under the Biosecurity Act (NSW) 2015.

A qualitative breakdown of the trees to be retained and removed is shown in the tables below.

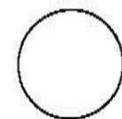
Details of the 12 Trees to be Retained on the Site & Within the Road Reserve (number of trees)							
Condition	Environmental / Landscape Significance						
	Declared Biosecurity Weed	Env. Pest (Exempt from DCP)	Low L/scape Sig.	Moderate L/scape Sig.	High L/scape Sig.	Very High L/scape Sig.	Threatened Species
SULE - 1		2		2	2	1	
SULE - 2		1	2	1			
SULE - 3		1					
SULE - 4							
Unstable							

Details of the 8 Trees to be Removed on the Site & Within the Road Reserve (number of trees)							
Condition	Environmental / Landscape Significance						
	Declared Biosecurity Weed	Env. Pest (Exempt from DCP)	Low L/scape Sig.	Moderate L/scape Sig.	High L/scape Sig.	Very High L/scape Sig.	Threatened Species
SULE - 1	6						
SULE - 2			2				
SULE - 3							
SULE - 4							
Unstable							

Provided that the specific and general tree protection measures are implemented, and the proposed works are carried out in a sensitive manner the proposed development works are unlikely to have a significant impact on the trees identified as being retained.

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scale at A3

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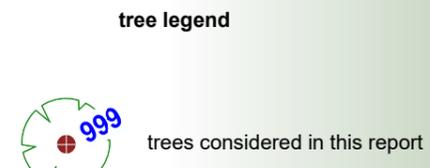
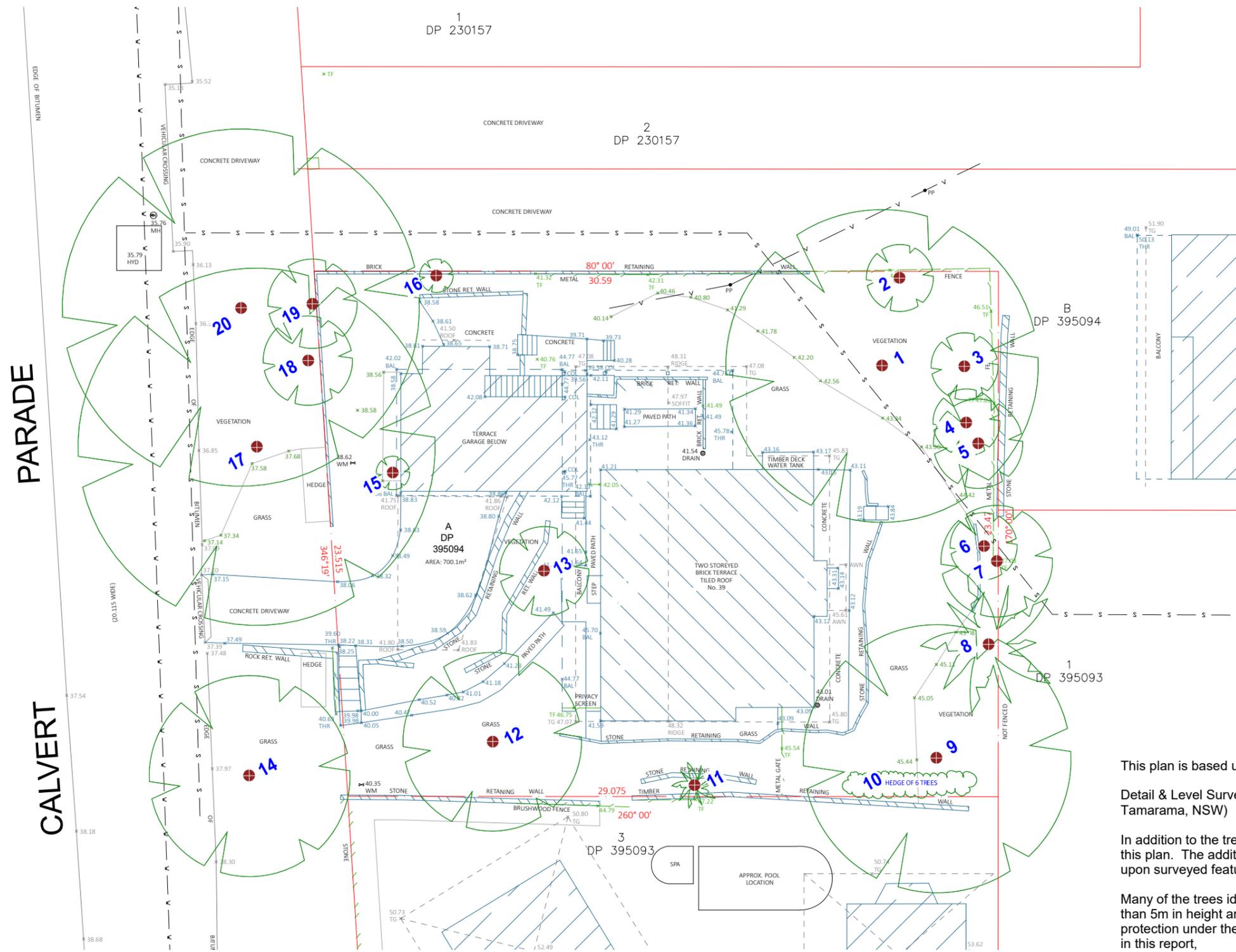
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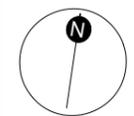


This plan is based upon:
Detail & Level Survey, Job Ref. 5015/24, Dated 21/10/2024, (ESA Surveys, Tamarama, NSW)

In addition to the trees identified on the survey 1 tree has been added to this plan. The additional tree is Tree No. 2 and its locations, whilst based upon surveyed features, is approximate.

Many of the trees identified on the survey are exotic species that are less than 5m in height and therefore are not prescribed trees and exempt from protection under the Pittwater DCP. These trees have not been considered in this report,

The tree canopy spreads on this plan have been adjusted from those on the survey to better reflect the actual canopy spreads however they remain as indicative graphics.



tree significance

significance in the environment

Trees need to be considered in the overall environment and are subject to specific legislation and planning instruments such as:

- Biodiversity Conservation Act (NSW) 2016
- Biosecurity Act (NSW) 2015, and
- Planning Instruments such as Local Environment Plans and Development Control Codes.

Biodiversity Conservation Act (NSW) 2016

The Biodiversity Conservation Act lists in its schedules a number of species, populations or ecological communities that are either endangered or vulnerable. The Act requires biodiversity offsets to be made if an activity or development is going to have a significant effect on species, populations or endangered ecological communities listed in the schedules of the Act. Where identified on or adjacent the site, threatened tree species are considered in this report and only mature remnant trees will be considered as components of threatened ecological communities.

Biosecurity Act (NSW) 2015

The purpose of the Biosecurity Act is to protect the NSW economy, environment and community from the negative impact of pests, diseases and weeds. In NSW, all plants are regulated with a general biosecurity duty to prevent, eliminate or minimise any biosecurity risk they may pose. In relation to weeds, the Act identifies weed species under 4 categories being: Weeds of National Significance; National Environmental Alert Weeds; Water Weeds and Native Plants Considered to be Weeds.

The Act makes provision of Regional Strategic Weed Management Plans to be prepared which may include additional weed species to be considered at a regional or local level. Where a tree is a species declared under the 4 main weed categories in the Act or where it is a species listed as a State or Regional Priority Weed in a Regional Strategic Management Plan, the tree should be a priority for removal.

Planning Instruments – Local Environment Plans & Development Control Codes

Local Environmental Plans typically list heritage items which can include individual trees and avenues of tree plantings. Heritage listings can also include the curtilage around a Heritage Item to include gardens settings and trees.

Development Control Codes often list trees that are exempt from protection under a Code and can be removed without consent. There are a number of environmental pest species that commonly cause problems in developed urban areas or readily spread into natural bushland areas. In urban areas, these species can have aggressive root systems and cause damage to built structures or services. Alternatively, some species can be problematic in natural bushland areas degrading habitats and reducing natural biodiversity. Many of these problematic species are recognised by Councils as pest species and are listed as being exempt from protection under Council's Development Control Plans (DCP).

significance in the landscape

Amenity is a term often found in Development Control Codes and other planning instruments. In relation to trees, Landscape Amenity typically refers to the prominence of a tree or the contribution a tree makes to the landscape. The landscape amenity or significance is something that can be viewed at various scales. In addition to this, trees can have cultural landscape significance which is often documented in a Council's Significant Tree Register.

Assessment of a tree's significance in the landscape is generally categorised as either:

- Very High Landscape Significance - prominent from a broad landscape perspective or listed in a Council's Significant Tree Register;
- High Landscape Significance - prominent from a neighbourhood perspective;
- Moderate Landscape Significance - prominent from adjacent areas surrounding the site;
- Low Landscape Significance - prominent from a site perspective only.

tree condition & life expectancy

condition

The assessment of a tree's condition is undertaken by visual inspection of the trees themselves, surrounding vegetation and the site conditions.

An assessment of each tree is undertaken taking into account the condition of the tree's roots, trunk, branches, foliage, previous pruning works, pests and disease, hollows, fauna scratchings and the surrounding environment that may influence the condition of the tree.

Safe Useful Life Expectancy (SULE)

The condition information is used to determine the Safe Useful Life Expectancy (SULE) of each tree and considers the age of the tree, the life span of the species, the health & condition of the tree, structural defects, estimated life expectancy, the location of the tree, local environmental conditions and safety aspects.

The SULE method takes into account whether a tree can be retained with an acceptable level of risk based on the information available at the time of inspection. A SULE assessment is not static as it relates to the tree's health and the surrounding conditions. Whilst it is recognised that changes to the tree's condition will affect the assessment, changes to the surrounding environment may result in changes to the SULE assessment.

Table 1 Safe Useful Life Expectancy (SULE), (Barrell, 2001)

Category	Description
1	Long -Life span greater than 40 years
2	Medium - Life span from 15 to 40 years
3	Short - Life span from 5 to 15 years
4	Should be removed within 5 years
5	Small, Young or Regularly Pruned, Trees that can readily be moved or replaced.

In addition to the categories listed above, trees that show signs of imminent structural failure are listed as 'Unstable'.

Unstable	Unstable in the ground or have significant trunk damage rendering them structurally hazardous.
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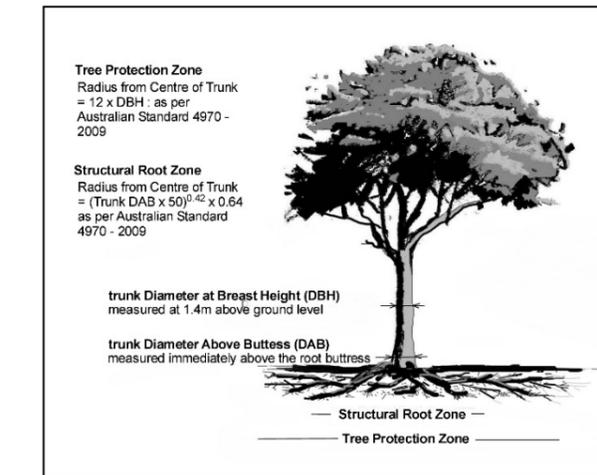
tree protection

tree protection zones

Where trees are intended to be retained, development footprints should be located away from trees so as to provide adequate clearances for a tree protection zone.

Disturbance within Tree Protection Zones can be detrimental to the tree's root system and in turn affect the stability, health and condition of the tree. In many cases damage to the root systems is the major cause of tree decline in urban areas.

Figure 3.1 Typical diagram of a Tree Protection Zone & Structural Root Zone of a tree based upon AS 4970 – 2009.



Based upon the Australian Standard for Protection of Trees on Development Sites, AS 4970 – 2009, the radius of the Tree Protection Zone (TPZ) is calculated as: TPZ = 12 x DBH with a minimum 2.0m radius and a maximum 15m radius.

Where trees are multi-trunk specimens assessment needs to be made based upon the number of trunks and the diameter of each trunk. Based upon the Australian Standard for Protection of Trees on Development Sites, AS 4970 – 2009, the DBH of multi-trunk trees is calculated by:

$$DBH = \sqrt{(DBH_1)^2 + (DBH_2)^2 + (DBH_3)^2}$$

development planning

development design & Tree Protection Zones

Where trees are intended to be retained, proposed developments must provide an adequate Tree Protection Zone around trees. This Tree Protection Zone is set aside for the tree's root zone and it is essential for the stability and longevity of the tree. Existing soil levels should be retained within the Tree Protection Zone.

developments within the Tree Protection Zone

Minor encroachments into Tree Protection Zones

Based upon AS 4970 – 2009 some development activity can occur within the vicinity of trees and minor encroachments can occur within the calculated Tree Protection Zone provided that:

- no more than 10% of the area (m²) of the Tree Protection Zone is removed (0.7 x TPZ radius on 1 side only);
- the encroachment does not extend into the Structural Root Zone, and
- the area (m²) to be removed is compensated for by increasing the distance of the Tree Protection Zone in other directions so that there is no net loss in area (m²) of the Tree Protection Zone

Major encroachments into Tree Protection Zones

Where the proposed development activity affects greater 10% of the area (m²) of the Tree Protection Zone, the activity is considered to be a major encroachment into the Tree Protection Zone.

Where major encroachments are to occur within the Tree Protection Zone of trees intended to be retained, it must be demonstrated that the works or activities will not have a significant impact on the health and condition of the tree. To demonstrate this detailed root mapping investigation by non-invasive methods may be necessary; and other factors such as the age class, health & vigour, trunk lean, disturbance tolerance of the species, and building design may need to be taken into account in the arboricultural assessment.

Where major encroachments are proposed to occur into the Tree Protection Zone the tree's Structural Root Zone should also be taken into account.

developments within the tree's Structural Root Zone

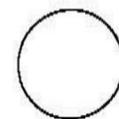
The Structural Root Zone is the area surrounding the tree where the severance of roots and excavation is likely to affect the structural stability of the tree and is likely to have a significant detrimental impact on the health & condition of the tree. Based upon AS 4970 – 2009 the radius of a tree's Structural Root Zone (SRZ) is determined by measuring the diameter of the trunk immediately above the root buttress (DAB) and calculated by: SRZ = (DAB x 50) 0.42 x 0.64.

Developments should not encroach into the tree's Structural Root Zone and existing soil levels must remain unchanged. Excavation should not occur within this area unless a detailed arboricultural assessment is undertaken and Specific Tree Protection Measures will be required.

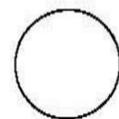
trees on adjacent land

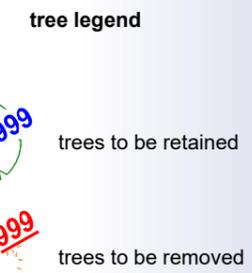
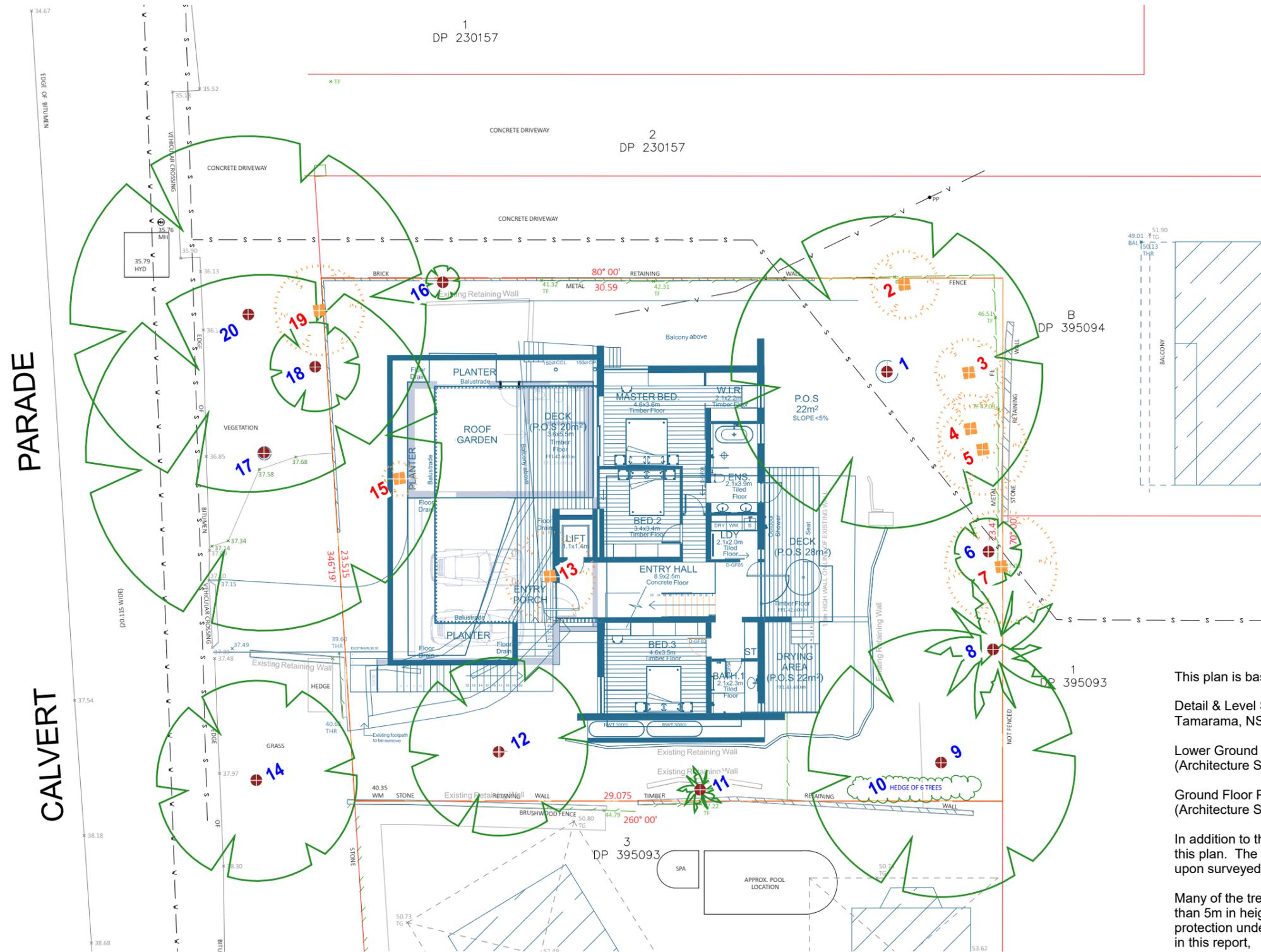
Trees located on adjoining land are assessed and categorised in accordance with their Environmental / Landscape significance, however unless the tree is listed as a State or Regional Priority Weed in a Regional Strategic Management Plan prepared under the Biosecurity Act (NSW), trees on the adjoining land must be considered and appropriately retained.

Tree No	Genus Species	Common Name	Height (m)	Canopy Spread (m)	DBH (mm)	DAB (mm)	Description	Environmental / Landscape Significance	Condition	Foliage Condition	% Canopy Dead Wood	Evidence of Pests, Disease, Cavity, Bracket Fungi	SULE	On / off site	TPZ Radius (m)	Area of TPZ (m ²)
1	<i>Araucaria heterophylla</i>	Norfolk Pine	24	14	940	1070	Mature single trunk tree with an upright pyramidal form; an upright trunk/s and balanced canopy and branch development. Lower limbs of the tree have been pruned to 10m.	Very High L/scape Sig.	The tree appears stable and its branch attachment appears sound. The tree is considered to be in good health and displays good vigour.	Excellent	<5%	None evident.	1	On site	11.30	401.20
2	<i>Olea europaea subsp cuspidata</i>	African Olive	5	3	90, 40	90	Semi-mature twin trunk tree with an upright elliptical form; an upright trunk/s and balanced canopy and branch development. No evidence of significant branch pruning.	Biosecurity Weed - listed in Regional Strategic Weed Mgmt. Plan	The tree appears stable and its branch attachment appears sound. The tree is considered to be in good health and displays good vigour.	Very Good	<5%	None evident.	1	On site	2.00	12.60
3	<i>Olea europaea subsp cuspidata</i>	African Olive	4	3	130	230	Mature twin trunk tree with an upright spreading form; an slight trunk lean to the north and majority of canopy and branch development is towards the north east. No evidence of significant branch pruning.	Biosecurity Weed - listed in Regional Strategic Weed Mgmt. Plan	The tree appears stable and its branch attachment appears sound. The tree is considered to be in good health and displays good vigour.	Very Good	10%	None evident.	1	On site	2.00	12.60
4	<i>Olea europaea subsp cuspidata</i>	African Olive	4	3	130	200	Semi-mature single trunk tree with an upright spreading form; an upright trunk/s and balanced canopy and branch development. No evidence of significant branch pruning.	Biosecurity Weed - listed in Regional Strategic Weed Mgmt. Plan	The tree appears stable and its branch attachment appears sound. The tree is considered to be in good health and displays good vigour.	Excellent	5%	None evident.	1	On site	2.00	12.60
5	<i>Olea europaea subsp cuspidata</i>	African Olive	4	4	170, 130	230	Semi-mature twin trunk tree with an upright spreading form; an upright trunk/s and majority of canopy and branch development is towards the south west. Appears that the central leader has been pruned/removed.	Biosecurity Weed - listed in Regional Strategic Weed Mgmt. Plan	The tree appears stable and its branch attachment appears sound. The tree is considered to be in good health and displays good vigour.	Excellent	5%	None evident.	1	On site	2.60	21.20



Tree No	Genus Species	Common Name	Height (m)	Canopy Spread (m)	DBH (mm)	DAB (mm)	Description	Environmental / Landscape Significance	Condition	Foliage Condition	% Canopy Dead Wood	Evidence of Pests, Disease, Cavity, Bracket Fungi	SULE	On / off site	TPZ Radius (m)	Area of TPZ (m2)
6	<i>Stenocarpus sinuatus</i>	Firewheel	9	3	120	180	Semi-mature single trunk tree with an upright elliptical form; an upright trunk/s and balanced canopy and branch development. No evidence of significant branch pruning.	Moderate L/scape Sig.	The tree appears stable and its branch attachment appears sound. The tree is considered to be in good health and displays good vigour.	Good	5%	The tree appears to be suppressed by the adjacent vegetation.	1	On site	2.00	12.60
7	<i>Olea europaea subsp cuspidata</i>	African Olive	6	5	100	140	Semi-mature single trunk tree with an upright spreading form; an upright trunk/s and majority of canopy and branch development is towards the south west. No evidence of significant branch pruning.	Biosecurity Weed - listed in Regional Strategic Weed Mgmt. Plan	The tree appears stable and its branch attachment appears sound. The tree is considered to be in good health and displays good vigour.	Excellent	<5%	None evident.	1	On adjacent allotment	2.00	12.60
8	<i>Howea forsteriana</i>	Kentia Palm	9	6	220	290	Mature single trunk tree with an elevated spreading form; an upright trunk/s and balanced canopy and branch development. No evidence of significant branch pruning.	Env. Pest Species - Exempt from Council DCP	The tree appears stable and its branch attachment appears sound. The tree is considered to be in good health and displays good vigour.	Excellent	<5%	None evident.	1	On site	1.10	3.80
9	<i>Erythrina crista-galli</i>	Cockscomb Coral Tree	9	12	600, 390	770	Mature multi trunk (at 1.5m) tree with an broad spreading form; an upright trunk/s and balanced canopy and branch development. Lower limbs of the tree have been pruned to 4m.	Env. Pest Species - Exempt from Council DCP	The tree appears stable and its branch attachment appears sound. The tree is considered to be in good health and displays good vigour.	Very Good	10%	None evident.	1	On site	8.60	232.40
10	<i>Syzygium sp. (Hedgerow of 6)</i>	Bush Cherry (horticultural hybrid)	2-6	2	90-120	100-130	Hedgerow of 6 semi-mature single trunk trees with upright columnar forms, upright trunk/s and balanced canopy and branch development. Appears that some of the central leaders has been pruned/removed at 2m.	Low L/scape Sig.	The trees appears stable and their branch attachment appears sound. The trees are considered to be in good health and displays good vigour.	Good	<5%	None evident.	2	On site	2.00	12.60
11	<i>Syagrus romanzoffianum</i>	Cocos Palm	5	2	110	140	Semi-mature single trunk tree with an elevated spreading form; an upright trunk/s and balanced canopy and branch development. No evidence of significant branch pruning.	Env. Pest Species - Exempt from Council DCP	The tree appears stable and its branch attachment appears sound. The tree is considered to be in good health and displays good vigour.	Good	<5%	None evident.	2	On site	0.50	0.80
12	<i>Araucaria heterophylla</i>	Norfolk Pine	6	8	360	450	Semi-mature single trunk tree with an upright spreading form; an upright trunk/s and balanced canopy and branch development. Appears that the central leader has been pruned/removed at 6m.	Moderate L/scape Sig.	The tree appears stable and its branch attachment appears sound. The tree is considered to be in good health and displays good vigour.	Excellent	<5%	None evident.	1	On site	4.30	58.10
13	<i>Ceratopetalum gummiferum</i>	Christmas Bush	5	4	80, 110	250	Mature twin trunk tree with an upright spreading form; an upright trunk/s and balanced canopy and branch development. Lower limbs of the tree have been pruned to 2m.	Low L/scape Sig.	The tree appears stable and its branch attachment appears sound. The tree is considered to be in good health and displays good vigour.	Very Good	5%	None evident.	2	On site	2.00	12.60
14	<i>Melaleuca armillaris</i>	Bracelet Honey-myrtle	9	9	220, 110, 160, 120, 130	390	Mature multi trunk tree with an broad spreading form; an upright trunk/s and majority of canopy and branch development is towards the north. No evidence of significant branch pruning.	Moderate L/scape Sig.	The tree appears stable and its branch attachment appears sound. The tree is considered to be in moderate health and displays good vigour.	Good	15%	Some twiggy deadwood present.	2	Within road reserve	4.10	52.80
15	<i>Cupressus sp.</i>	Cypress	5	1	40	60	Immature single trunk tree with an upright clumping form; an upright trunk/s and balanced canopy and branch development. No evidence of significant branch pruning.	Env. Pest Species - Exempt from Council DCP.	The tree appears stable and its branch attachment appears sound. The tree is considered to be in good health and displays good vigour.	Very Good	<5%	None evident.	2	On site	2.00	12.60
16	<i>Callistemon sp.</i>	Bottlebrush	8	1	50, 50	170	Semi-mature twin trunk tree with an upright elliptical form; an upright trunk/s and balanced canopy and branch development. Upper branches have been pruned to accommodate overhead wires. It appears that the central leader has been previously pruned at 4m.	Low L/scape Sig.	The tree appears stable and its branch attachment appears fair. The tree is considered to be in moderate health and displays fair vigour.	Fair	10%	None evident.	3	On site	2.00	12.60
17	<i>Lophostemon confertus</i>	Brushbox	12	16	480	680	Mature twin trunk tree with an upright spreading form; an upright trunk/s and majority of canopy and branch development is towards the east & west. Appears that the central leader has been pruned/removed at 3.5m to accommodate overhead power lines.	High L/scape Sig.	The tree appears stable and its branch attachment appears sound. The tree is considered to be in good health and displays good vigour.	Very Good	10%	None evident.	1	Within road reserve	5.80	105.70
18	<i>Pittosporum undulatum</i>	Sweet Pittosporum	6	4	140, 60	190	Mature twin trunk tree with an upright spreading form; an upright trunk/s and majority of canopy and branch development is towards the east & west. Lower limbs of the tree have been pruned to 3m.	Low L/scape Sig.	The tree appears stable and its branch attachment appears sound. The tree is considered to be in moderate health and displays fair vigour.	Good	20%	The tree appears to be suppressed by the adjacent vegetation.	2	Within road reserve	2.00	12.60
19	<i>Olea europaea subsp cuspidata</i>	African Olive	6	4	60, 110, 70, 20, 110	250	Semi-mature multi trunk tree with an upright spreading form; an upright trunk/s and balanced canopy and branch development. Upper branches have been pruned to accommodate overhead wires at 5m..	Biosecurity Weed - listed in Regional Strategic Weed Mgmt. Plan	The tree appears stable and its branch attachment appears sound. The tree is considered to be in good health and displays good vigour.	Good	5%	Monstera is growing on the trunk to 3m.	1	Within road reserve	2.20	15.20
20	<i>Lophostemon confertus</i>	Brushbox	11	16	350, 280	520	Mature twin trunk tree with a broad spreading form; an upright trunk/s and majority of canopy and branch development is towards the east & west. Appears that the central leader has been pruned/removed at 3.5m to accommodate overhead power lines.	High L/scape Sig.	The tree appears stable and its branch attachment appears fair. The tree is considered to be in good health and displays good vigour.	Very Good	10%	None evident.	1	Within road reserve	5.40	91.60





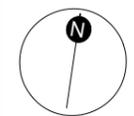
This plan is based upon:

- Detail & Level Survey, Job Ref. 5015/24, Dated 21/10/2024, (ESA Surveys, Tamarama, NSW)
- Lower Ground Plan, Dwg.No 101, Rev. A, Dated 25/03/2025 (Architecture Saville Isaacs, McMahons Point, NSW).
- Ground Floor Plan, Dwg.No 102, Rev. A, Dated 25/03/2025 (Architecture Saville Isaacs, McMahons Point, NSW).

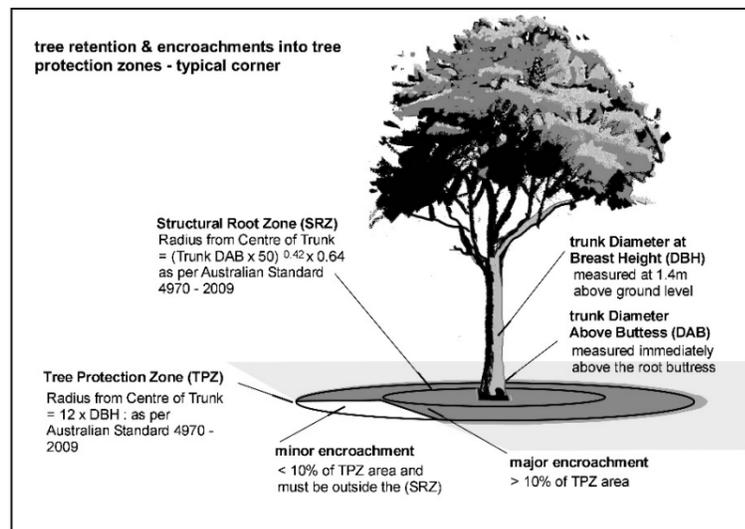
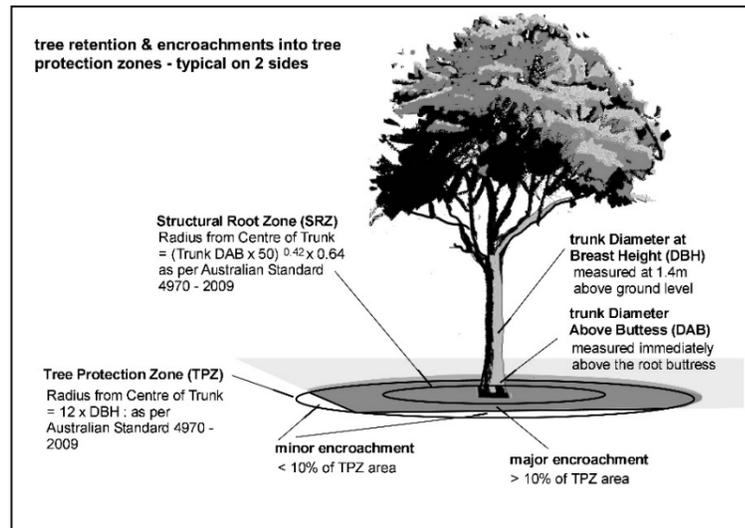
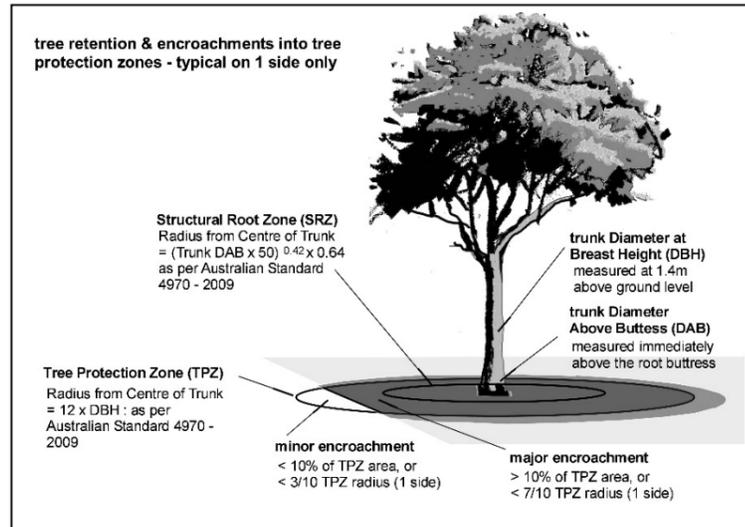
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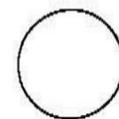


typical application of Australian Standard 4970-2009 - Protection of Trees on Development Sites



Impact of development on individual trees

Tree No	Genus Species	DBH (mm)	DAB (mm)	SULE	Env./L/scape Sig.	TPZ Radius (m)	Radius of 90% of TPZ area (7/10)	SRZ Radius (m)	Adjacent Works	Influence on Tree	Plan Status	On / off site
1	<i>Araucaria heterophylla</i>	940	1070	1	Very High L/scape Sig.	11.30	7.9	3.4	The existing retaining wall is within 4.7m (south) of the tree. The existing building footprint is within 5.5m (south west) of the tree. The existing brick retaining wall is within 7.9m (west) of the tree. The proposed building footprint is within 5.5m (west) of the tree.	The proposed building footprint is an elevated structure supported on piers and above ground beams within the tree's Tree Protection Zone.	Retained with Designed, Specific & General Tree Protection Measures	On site
2	<i>Olea europaea subsp cuspidata</i>	90, 40	90	1	Biosecurity Weed - listed in Regional Strategic Weed Mgmt. Plan	2.00	1.4	1.2	No proposed works apart from soft landscaping within the tree's TPZ.	No significant impact however, tree is exempt from protection under the provisions of the DCP and is a regional priority weed in the Greater Sydney Regional Weed Management Plan.	To be Removed	On site
3	<i>Olea europaea subsp cuspidata</i>	130	230	1	Biosecurity Weed - listed in Regional Strategic Weed Mgmt. Plan	2.00	1.4	1.8	No proposed works apart from soft landscaping within the tree's TPZ.	No significant impact however, tree is exempt from protection under the provisions of the DCP and is a regional priority weed in the Greater Sydney Regional Weed Management Plan.	To be Removed	On site
4	<i>Olea europaea subsp cuspidata</i>	130	200	1	Biosecurity Weed - listed in Regional Strategic Weed Mgmt. Plan	2.00	1.4	1.7	No proposed works apart from soft landscaping within the tree's TPZ.	No significant impact however, tree is exempt from protection under the provisions of the DCP and is a regional priority weed in the Greater Sydney Regional Weed Management Plan.	To be Removed	On site
5	<i>Olea europaea subsp cuspidata</i>	170, 130	230	1	Biosecurity Weed - listed in Regional Strategic Weed Mgmt. Plan	2.60	1.8	1.8	No proposed works apart from soft landscaping within the tree's TPZ.	No significant impact however, tree is exempt from protection under the provisions of the DCP and is a regional priority weed in the Greater Sydney Regional Weed Management Plan.	To be Removed	On site
6	<i>Stenocarpus sinuatus</i>	120	180	1	Moderate L/scape Sig.	2.00	1.4	1.6	No proposed works apart from soft landscaping within the tree's TPZ.	No significant impact with appropriate Tree Protection Measures.	Retained with General Tree Protection Measures	On site
7	<i>Olea europaea subsp cuspidata</i>	100	140	1	Biosecurity Weed - listed in Regional Strategic Weed Mgmt. Plan	2.00	1.4	1.4	The tree is located on the boundary line. No proposed works apart from soft landscaping within the tree's TPZ.	No significant impact however, tree is exempt from protection under the provisions of the DCP and is a regional priority weed in the Greater Sydney Regional Weed Management Plan	To be Removed	On the boundary line
8	<i>Howea forsteriana</i>	220	290	1	Env. Pest Species - Exempt from Council DCP	1.10	0.8	0.8	No proposed works apart from soft landscaping within the tree's TPZ.	No significant impact however, tree is exempt from protection under the provisions of the DCP.	Retained with General Tree Protection Measures	On site
9	<i>Erythrina crista-galli</i>	600, 390	770	1	Env. Pest Species - Exempt from Council DCP	8.60	6	3	The existing stone retaining wall is to be retained within 3.8m (north west) of the tree.	No significant impact however, tree is exempt from protection under the provisions of the DCP.	Retained	On site
10	<i>Syzygium sp.</i>	120	130	2	Low L/scape Sig.	2.00	1.4	1.4	No proposed works apart from soft landscaping within the tree's TPZ.	No significant impact with appropriate Tree Protection Measures.	Retained with General Tree Protection Measures	On site



Tree No	Genus Species	DBH (mm)	DAB (mm)	SULE	Env./ L/scape Sig.	TPZ Radius (m)	Radius of 90% of TPZ area (7/10)	SRZ Radius (m)	Adjacent Works	Influence on Tree	Plan Status	On / off site
11	<i>Syagrus romanzoffianum</i>	110	140	2	Env. Pest Species - Exempt from Council DCP	0.50	0.4	0.4	No proposed works apart from soft landscaping within the tree's TPZ.	No significant impact however, tree is exempt from protection under the provisions of the DCP.	Retained with General Tree Protection Measures	On site
12	<i>Araucaria heterophylla</i>	360	450	1	Moderate L/scape Sig.	4.30	3	2.4	The existing path is within 1.9m (north west) of the tree. The existing stone retaining wall is within 3.3m (north west) of the tree. The proposed external stair landing is within 2.8m (north) of the tree. The proposed lower floor garage bin storage is within 3.7m (north) of the tree.	No significant impact with appropriate Tree Protection Measures.	Retained with General Tree Protection Measures	On site
13	<i>Ceratopetalum gummiferum</i>	80, 110	250	2	Low L/scape Sig.	2.00	1.4	1.8	The proposed building footprint spatially conflicts with the location of the tree.	Not applicable	To be Removed	On site
14	<i>Melaleuca armillaris</i>	220, 110, 160, 120, 130	390	2	Moderate L/scape Sig.	4.10	2.9	2.2	No proposed works apart from soft landscaping within the tree's TPZ.	No significant impact with appropriate Tree Protection Measures.	Retained with General Tree Protection Measures	Within road reserve
15	<i>Cupressus sp.</i>	40	60	2	Low L/scape Sig.	2.00	1.4	1	The proposed building footprint spatially conflicts with the location of the tree.	Not applicable	To be Removed	On site
16	<i>Callistemon sp.</i>	50, 50	170	3	Low L/scape Sig.	2.00	1.4	1.6	The existing retaining wall is to be retained within 0.8m (south) of the tree.	No significant impact	Retained with General Tree Protection Measures	On site
17	<i>Lophostemon confertus</i>	480	680	1	High L/scape Sig.	5.80	4.1	2.8	The existing driveway is to remain within 6.0m (south) of the tree.	No significant impact with appropriate Tree Protection Measures.	Retained with General Tree Protection Measures	Within road reserve
18	<i>Pittosporum undulatum</i>	140, 60	190	2	Low L/scape Sig.	2.00	1.4	1.6	No proposed works apart from soft landscaping within the tree's TPZ.	No significant impact with appropriate Tree Protection Measures.	Retained with General Tree Protection Measures	Within road reserve
19	<i>Olea europaea subsp cuspidata</i>	60, 110, 70, 20, 110	250	1	Biosecurity Weed - listed in Regional Strategic Weed Mgmt. Plan	2.20	1.5	1.8	No proposed works apart from soft landscaping within the tree's TPZ.	No significant impact however, tree is exempt from protection under the provisions of the DCP and is a regional priority weed in the Greater Sydney Regional Weed Management Plan	To be Removed	Within road reserve
20	<i>Lophostemon confertus</i>	350, 280	520	1	High L/scape Sig.	5.40	3.8	2.5	No proposed works apart from soft landscaping within the tree's TPZ.	No significant impact with appropriate Tree Protection Measures.	Retained with General Tree Protection Measures	Within road reserve



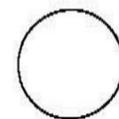
Photo 7.1 – Existing site frontage on Calvert Parade, Newport with Tree No. 17 (left)

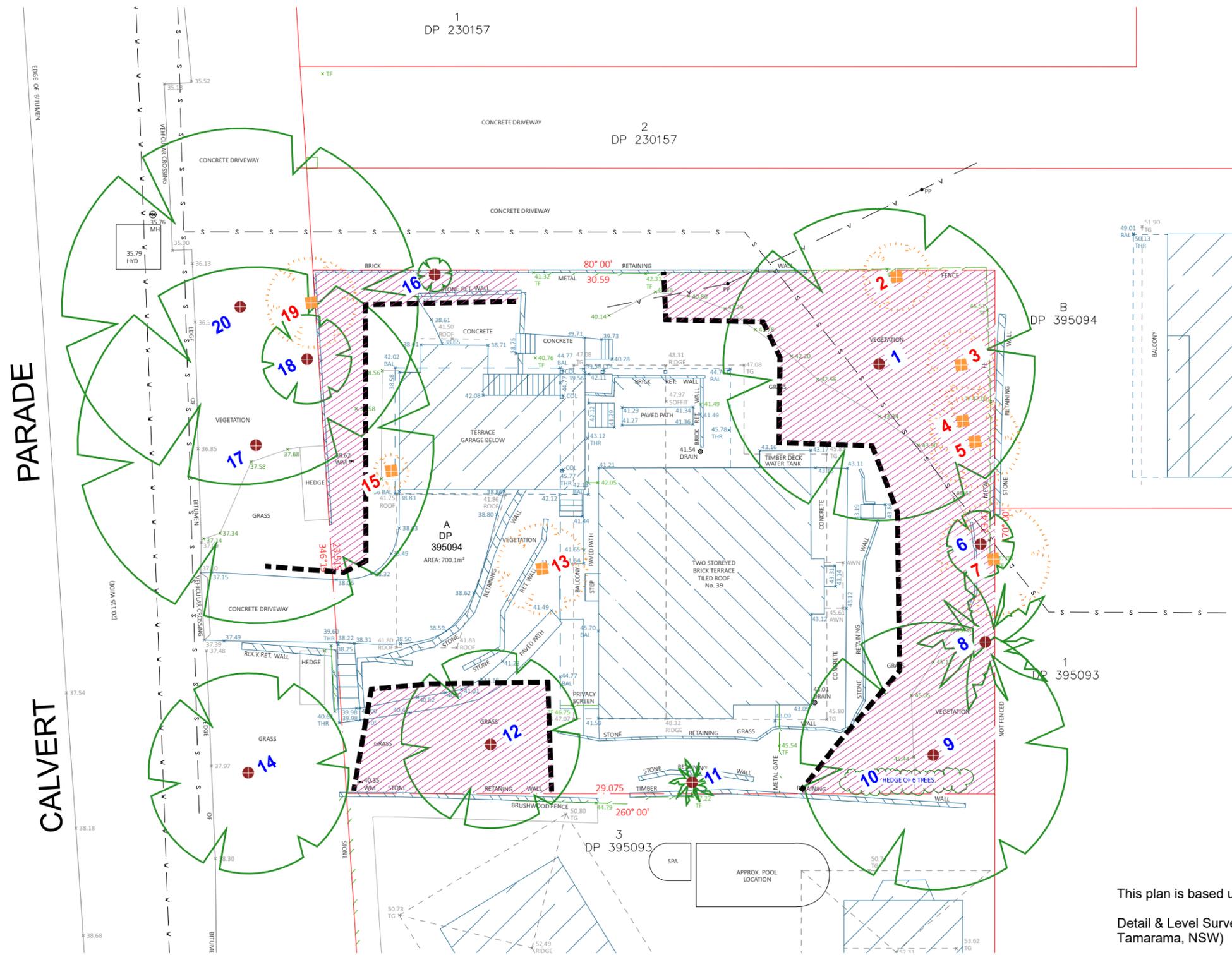


Photo 7.2 – The front portion of the allotment looking south west to Tree No. 12



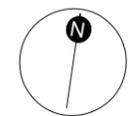
Photo 7.3 – The rear of the site looking north to Tree No. 1 (background)

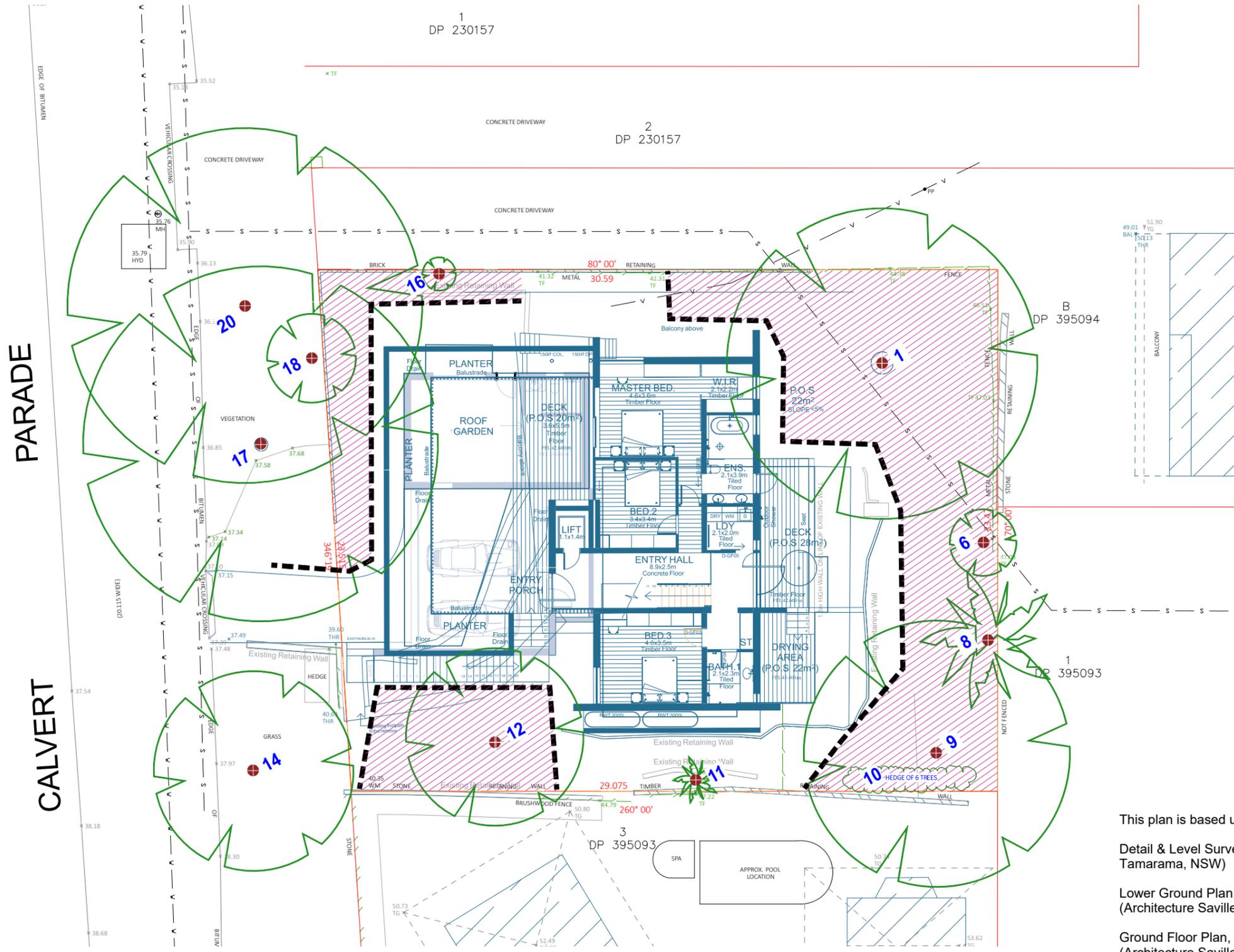




- tree legend**
- trees to be retained
 - trees to be removed
 - tree protection fencing (refer specifications sheet 10)
 - tree protection area (refer specifications sheet 10)

This plan is based upon:
 Detail & Level Survey, Job Ref. 5015/24, Dated 21/10/2024, (ESA Surveys, Tamarama, NSW)



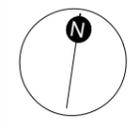


tree legend

-  trees to be retained
-  tree protection fencing (refer specifications sheet 10)
-  tree protection area (refer specifications sheet 10)

This plan is based upon:

- Detail & Level Survey, Job Ref. 5015/24, Dated 21/10/2024, (ESA Surveys, Tamarama, NSW)
- Lower Ground Plan, Dwg.No 101, Rev. A, Dated 25/03/2025 (Architecture Saville Isaacs, McMahons Point, NSW).
- Ground Floor Plan, Dwg.No 102, Rev. A, Dated 25/03/2025 (Architecture Saville Isaacs, McMahons Point, NSW).



Tree removal

Trees identified for removal shall be removed so that no damage occurs to the foliage, branching structure, trunk or root zone of trees identified as being retained or transplanted.

Tree removal shall also be carried out in accordance with the Guide to Managing Risk of Tree Trimming and Removal Work (Safe Work Australia).

Tree protection fencing

Prior to demolition, tree protection fencing and tree protection webbing shall be erected as shown on the Tree Protection Plans (refer sheet 13 & 14) in accordance with the specifications below.

distance away from tree
- as shown on tree protection plan, or
- as specified radius from trees

fencing material
chainmesh, weldmesh, plywood or paling fence

signage
tree protection signage fixed to fence

sediment control fencing
sediment control fencing required where building works are upslope or within 200mm of tree protection fencing

1.8m high

tree protection fencing - specifications

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Tree protection signage

Tree Protection Signage is to be installed on fencing and shall be installed at maximum 15m intervals and at changes in the fencing direction (refer specification below).

signage size
min size 420 x 290mm in colour

fixing
signs shall be fixed at a height of 1500mm above ground and a number of signs shall be fixed on the tree protection fencing so that a sign is visible from all directions

format of signage
format based upon Australia Standard - Safety Signs for the Occupational Environment AS 1319 - 1994

tree protection signage - specifications

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Tree Protection Areas

The project manager or building contractor shall ensure that at all times during site works no activities, stock piles, storage or disposal of materials shall take place within the fenced off areas and that all Tree Protection Fencing remain secure throughout the development work period.

All access within the tree protection fencing for temporary and permanent works associated with civil works and/or construction must be carried out under the instructions of an experienced and qualified project arborist.

access for minor works only under the direct supervision of the Project Arborist

tree protection fencing

no stockpiles

no materials

no debris

tree protection zone

access within Tree Protection Zones - specifications

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Branch pruning if required

Should branch pruning be required to provide access for vehicles/ pedestrians or overhead crane operations pruning must be carried out in accordance with Australian Standard AS 4373-2007 Pruning of Amenity.

Branch pruning will be restricted so that no more than 10% of the canopy foliage is being removed and branch pruning is to be carried out by an experienced and qualified arborist and in accordance with the specification below.

second topcut

initial undercut

final cut

branch collar

standard
branch pruning shall be undertaken in accordance with Australian Standard Pruning of Amenity Trees AS 4373 - 2007

application
crown reduction, crown thinning, deadwood removal etc. involving other branch pruning shall follow the same pruning principals at branch unions or branch collars

typical branch pruning - specifications

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Installation of services within tree protection zones

The installation of services such as drainage within the Tree Protection Zones must be carried out in accordance with the options below.

hand tools
Include the use of shovels, crowbars. (mattocks & axes shall not be used).

retention of tree roots
Excavation is to be conducted under the supervision of the project arborist. Tree root >30mm dia. shall be exposed, left intact and not severed or damaged

inspection of tree roots
Where tree roots spatially conflict with the fall line of the service, depending upon the number and size of the tree roots, the project arborist shall either:
- cleanly prune the tree roots and treat them with root hormone compound, or
- provide instructions to leave the tree roots intact and backfill the excavation and investigate alternate locations

within the tree protection zone

excavation for services using hand tools within Tree Protection Zones - specifications

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Minor landscape structures, within tree protection areas

Minor landscape works includes seating, pedestrian paths, other facilities and garden edging etc.

To ensure that significant tree roots are not damaged or disturbed, all works associated with minor landscape structures within the designated Tree Protection Areas are to be carried out under the supervision of the Project Arborist using hand tools and in accordance with the specification – Minor Landscape Works Using Hand Tools (refer below).

hand tools
include the use of shovels, crowbars. (mattocks & axes shall not be used).

retention of tree roots
tree roots < 30mm dia. shall remain intact and shall not be severed or damaged.

inspection of tree roots
excavation is to be conducted under the supervision of the project arborist. Where tree roots spatially conflict landscape construction design levels, depending upon the number and size of the tree roots, the project arborist shall either:
cleanly prune the tree roots and treat them with a root hormone compound, or provide instructions to leave the tree roots intact and investigate alternate locations, construction methods or design.

within the tree protection zone

minor landscape works using hand tools within Tree Protection Zones - specifications

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