Construction Impact Assessment and Management Plan

Cranbrook Senior School

Bellevue Hill

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Summary

This report has been requested by Cranbrook School to better understand the arboricultural implications associated with the Hordern Oval Precinct Redevelopment. This is a major redevelopment involving the demolition of the War Memorial Hall and Mansfield Buildings, as well as, the excavation of the Oval to provide the ongoing potential to fulfil the School's mission to become a world class school, encouraging the development of generations of students contribution to the betterment of society.

A total of sixty three (63) trees have been individually assessed for the purpose of this report. These are located within 15m of the proposed construction footprint. Additional trees not formally assessed include- the stand of mature Brush Box on the site's northern boundary, being over 20m from the proposed Construction Impact Zone (CIZ).

There are four (4) historically significant trees documented within this portion of the school grounds. It should be noted that one of these has entered a cycle of decline and is being recommended for removal irrespective of this development. The remaining historically significant Norfolk Island Pines and Kauri Pine have been documented as essential for retention and will be preserved.

The proposed development will require the removal of forty three (43) trees. Of these 5 have been recognised as high value trees and are required for removal to allow the proposed development. The Brush Box documented as Trees 16, 17, 18 and 19 are required for removal to allow vehicular access, while the Brush Box documented as Tree 38 is required for removal to allow an alternative fire exit and pedestrian access. The Port Jackson Fig tree documented as Tree 26 is required for removal to allow adjacent ground level changes to occur.

There are 3 trees located adjacent to the proposed excavation that will require ongoing arboricultural consideration to ensure their retention. These include the Phoenix palm documented as Tree 13, the historically significant Bunya Pine documented as Tree 39 and the mature Black Bean documented as Tree 36.

Preservation recommendations have been made based on *Australian Standard AS4970 for the Protection of Trees on Development Sites* and will be implemented accordingly. All tree pruning recommendations will be made based on *AS4373 for the Pruning of Amenity Trees* and will be undertaken where appropriate.

Background

The Schools Mission Statement makes an ongoing commitment to lead its students to discover and make the most of their talents. The proposed development extends this commitment and it is hoped will enable the School to continue to become a world leader in education.

The proposed works will better utilise the building footprints currently occupied by the War Memorial Hall and the Mansfield Buildings, as well as, the subterranean space under Hordern Oval.

Aims

The aims of this report are to;

- Review Council Policies for applicable conditions regarding the site and documented trees;
- Conduct a visual assessment of the documented trees and their growing environment;
- Provide a detailed list of Tree Preservation Recommendations aimed at preserving those trees documented for preservation.

There is no warranty or guarantee, expressed or implied that health, pests, disease, deficiencies, decay or any structural failures may occur at any time following documentation. Information contained in this report covers only the documented trees and reflects their health and condition at the time of inspection.

Methodology

A Visual Tree Assessment (VTA) was performed from ground level and consideration was given to the overall health of each tree, percentage of canopy, epicormic growth, deadwood and form for this species. The tree heights and canopy spreads have been estimated and where relevant the orientation of the canopy spread noted. The trunk diameters of each tree has been estimated at breast height of 1.4meters (DBH) and measured with a diameter tape where required to calculate Tree Protection Zones. The site was inspected by consulting arborist George Palmer in October, 2017.

Observations

The site area extends over a significant portion of the school grounds. Horden Oval occupies the northern extension of this, as well as, a significant portion of its western boundary. The stand of mature Brush Box trees on this western boundary adjacent to the sites New South Head Road frontage are set well back from the proposed works.

The Oval and existing building footprints have limited the arboricultural impacts of the proposed works to those trees located adjacent to these. These include some well established and mature trees that provide a significant arboricultural amenity contribution. Removal recommendations have not been made without due consideration and only trees required for removal have been recommended for removal.

Tree Data

A total of fifty seven (57) trees have been individually assessed for the purpose of this report. These range in significance from original plantings of *Araucaria heterophylla* and, *Agathis robusta* to Olive and Hackberry trees, that would be recommended for removal irrespective of the proposed development.

The site's most arboriculturally significant trees have been seen as essential for retention and the proposed construction set back to allow for this. There is one (1) tree of high environmental significance that is however required for removal. This is a mature *Ficus rubiginosa,* or Port Jackson Fig tree (Tree 26). Additional significant trees required for removal include the *Lophostemon confertus,* or Brush Box trees (16,17,18 and 19) located on the Rose Bay Avenue boundary. These are of moderate to high significance.

The embankment on the eastern side of Horden Oval has been planted out with ten (10) *Jacaranda mimosifolia trees,* with five (5) requiring removal (Trees 1,2,14, 15 and 17). These Jacarandas, proposed for removal are all poorly formed with multiple leaders and associated inclusions.

The Jacaranda trees 1, 2 and 3 are more recent plantings that have grown to a height of less than 7m and are supported on trunks of less than 50cm in diameter, while the remaining Jacarandas are all over 50cm in diameter and are clearly part of an earlier planting. Trees 1 and 2 are required for removal to allow for suitable access grades to be met for the adjacent driveway.

The Jacarandas documented as Trees 4 and 5 are larger although appear to be in fair health only. Both are again located outside the construction impact zone and are documented for preservation. Tree 6 is a co dominant Jacaranda that can be estimated to have been one of the earlier plantings given its size.

Tree 7 is a multi trunked *Agonis flexuosa,* or Western Australian Peppermint located under the canopy of Tree 6. It is located outside the CIZ but should be considered for removal to maintain horticultural continuity.

Tree 8 is a well established and mature *Lophostemon confertus,* or Brush box located adjacent to Rose Bay Avenue. The tree is structurally sound and part of the earlier planting works. It is documented for retention.

Tree 9 is a mature Jacaranda and is another significant example of the species. This tree has reached a height of over 14m and is supported on multiple leaders. Although poor structure has been noted, the tree retains a high retention value and has been documented for retention.

The *Ficus microcarpa var. Hillii,* or Hills Weeping Fig tree has been documented as Tree 10. This is one of the site's more significant trees. This tree is over 16m in height with an even broader canopy spread. This is supported on multiple leaders, all of which remain clear of decay or defects.

The *L. confertus,* or Brush box adjacent to Tree 10 has been documented as Tree 11. This tree has been partially suppressed by the Ficus. The tree remains in good health and condition and has been recommend for retention throughout the construction.

Tree 12 is another of the earlier Jacaranda plantings. This tree has grown to a height of approximately 12 m and is supported on a pair of co dominant trunks 45cm in diameter. These do not look to be included and should remain structurally sound, with some Ficus surface root development noted over this union.

The *Phoenix canariensis,* or canary Island Date palm on the upper embankment has been documented as Tree 13. This is a well established and mature example of the species, that will tolerate a broad range of construction impacts due to its fibrous root system and its ability to absorb soil moisture and nutrients from its entire length - rather than simply through its fine feeder roots. This tree is located adjacent to the proposed construction and has been documented for retention.

Trees 14 and 15 are well established but poorly structured Jacaranda trees located on the lower embankment. These have both developed with multiple leaders and inclusion. Both trees are clearly structurally compromised and would require significant remedial pruning. Both are located within the construction impact zone and are required for removal to allow this.

Tree 16 is another well established and mature *Lophostemon confertus,* or Brush Box tree located adjacent to the Rose Bay Avenue boundary line and is required for removal to allow appropriate vehicular access.

Trees 17 is a less well established Jacaranda that has developed on the upper embankment. The tree is supported on multiple leaders from its base. There is also a small Bottle Brush that has grown adjacent to its base. Neither is of any real arboricultural significance and both are required for removal. .

Trees 18 and 19 are both mature Brush Box trees located adjacent to Rose Bay Avenue and are similarly required for removal to allow underground vehicular access.

The semi mature Jacaranda, located within the bin storage area has been documented as Tree 20. This is a well established tree with multiple sections of visible surface decay below the tree's main canopy. This tree is again required for removal to allow construction.

Tree 20a is a semi mature *Brachychiton acerifolia,* or Illawarra flame tree. This tree is again located within the proposed construction footprint and is required for removal.

Trees 21 - 35 are all located on the embankment on the southern side of the War Memorial Hall and are required for removal. Tree 21 is another semi mature *Lophostemon confertus* that is in fair health. This tree has previously declined and been allowed to regrow.

Trees 22, 24 and 29 are all *Olea europea,* or African Olives. These are an exempt "weed" species under Woollahra Council's Tree Preservation Legislation and can be removed without further consideration.

Tree 23 is a semi mature *Melia azedarach,* or White Cedar. This tree will have self seeded in this location and is of limited arboricultural amenity and is required for removal.

Tree 26 is a mature *Celtis sinensis,* or Hackberry tree located on the embankment. This is a well recognised environmental weed species that should have been removed prior to becoming so well established. This tree is over 20m in height and is supported on a trunk of over 75cm in diameter.. These trees are exempt from Woollahra Council's Tree Preservation Legislation where the example is less than 10m in diameter.

The most significant of these is the *Ficus rubiginosa* documented as Tree 26. This is a well established and fully mature example of the species that is over 20m in height and supported on a trunk of over 90cm in diameter. The tree has an extended section of visible surface decay from its base. This decay runs for over 6m up the tree's trunk and will affect the tree's structural integrity. This decay has failed to compartmentalise and the tree is likely to continue to be affected by this. Epicormic shoots are a clear indication of stress and are evident throughout the tree, particularly on the tree's trunk and adjacent to this split.

Tree 27 is a semi mature *Banksia integrifolia,* or Coastal Banksia. This is a locally native tree species that will have been planted here within the previous twenty (20) years. The tree provides a limited amenity contribution and is required for removal.

Tree 28 is *Glochidion ferdinadii,* or Cheese tree. This is another locally native species that has been planted less than fifteen (15) years ago and provides a limited amenity contribution. It is required for removal.

Tree 30 is a small *Ficus microcarpa var. Hillii* or Hills Weeping Fig tree. This tree will have been planted within the previous fifteen (15) years and should be removed irrespective of the proposed development.

Tree 31 is the mature *Cypress sempervirens* located on the upper forecourt. While this tree is a well established and mature example of the species, it is out of context within this landscape setting and should not be considered for retention, irrespective of the proposed.

Tree 32 is a semi mature *Schefflera actinophylla* or Umbrella tree. This is another exempt environmental weed species that should be removed irrespective of the proposed development.

Tree 33 is a *Viburnum tinus.* This is an exotic shrub, less than 4m in height and should not be considered as a material constraint to this or any proposed development.

Tree 34 is a mature *Archontophoenix cunninghamiana,* or Bangalow palm and is a well established example of the species. This, and the remaining stand of less mature Bangalow palm trees located on the adjacent embankment have all been

recommended for removal. Consideration has been given to the relocation of these via transplantation. Both site constraints and limited planting space have impacted on this, and all have been documented for removal.

The adjacent *Rhaphiolepis indica,* or Indian hawthorn has been documented as Tree 35. This is another mature example of this species. The tree remains less than 6m in height with extensive decay noted on both of its co dominant leaders. It is required for removal.

Tree 36 is the *Castanospermum australe,* or Black Bean tree. This tree will likely have been one of the site's earlier plantings and has been affected by the adjacent building works. This has limited its access to adequate soil moisture and nutrient availability reducing its vigour. The tree is located outside the theoretical CIZ and will be preserved. Surrounding level changes will be made to allow the retention of the surrounding permeable soil surface.

Tree 37 is a mature *Camellia sasanqua* tree of less than 6m in height. While well established, the tree remains of limited retention value and is located within the CIZ and required for removal.

The adjacent *L. confertus,* or Brush box is another mature and well established example of the species. This tree has affected the adjacent retaining wall and slab in front of the canteen. It was hoped that construction of the canteen and Wall Memorial Hall footings will have affected the tree's root spread and development allowing for retention. Alternative fire access requirements have however extended the CIZ to within 1m of the tree's base. This is well within the tree Structural Root Zone (SRZ) as outlined and has lead to a requirement for the tree to be documented for removal.

The neighbouring *Agathis robusta,* or Queensland Kauri is an historically significant tree and essential for retention. The proposed works are over 8m from the tree's base. This is however within a 12m theoretical Tree Protection Zone and ongoing arboricultural consideration will need to be made.

Tree 40 is a mature *Stenocarpus sinuatus,* or Queensland Fire Wheel tree. Previous pruning has removed much of the tree's lower canopy. This has limited its practical amenity contribution. While the tree is located outside the CIZ and is documented for preservation.

The *Podocarpus elates,* or Plum Pine documented as Tree 41 is another well established and mature example of this species with broad canopy supported on a trunk of over 1m. Again, this tree is located well outside the CIZ and will be preserved.

Tree 43 is one of three historically significant *Araucaria heterophylla,* or Norfolk Island Pine trees. These were planted in the 1880's as part of the original landscape works following the original construction. This tree has however entered a documented cycle of decline and has been proposed for removal irrespective of the proposed works.

The remaining Norfolk Island Pines documented as Tree 44 and 45 retain their good health and have been documented as essential for retention. Both are located well outside the CIZ and will be preserved.

The stand of well established Brush Box trees adjacent to the properties northern boundary with New South Head Road are all located over 20m from the CIZ and will not require direct arboricultural consideration to ensure their retention.

Tree 45a is a well established and mature *Celtis sinensis,* or Hackberry tree located on the front verge. This tree is a well recognised environmental weed species and has been recommended for removal to limit the impact that its retention will have on our urban forest. The tree is however located well outside the CIZ and is not required for removal to allow the proposed construction to occur.

Tree 46 is the last of the Podocarpus trees on the New South Head Road verge. This tree is a well established and mature example of the species located well outside the CIZ and will not be affected by the proposed works.

Tree 47 is a co dominant and included *L. confertus.* The tree has an extensive section of visible decay noted and should not be considered for retention.

Tree 48 is a well established and mature *Brachychiton acerifolius,* or Illawarra Flame tree. These are a well suited species located within the CIZ and required for removal.

Trees 49, 50, 51, 52, 56 and 57 are all *Callistemon viminalis,* or Bottle Brush trees. These are all well established but less than 7m in height and provide a limited arboricultural amenity contribution and one that can readily be replaced. All have been recommended for removal to allow for the construction.

Trees 53, 54 and 55 are all *Castanospermum australe,* or Black Beans. These have all been heavily reduction pruned and are poorly structured semi mature examples of their species. They are required for removal.

Discussion

The proposed development will require the excavation of huge volumes of sand and soil. The execution and retention of this soil profile adjacent to the construction will be an exercise in itself. It is hoped that the edge of the documented construction remains the edge of the CIZ and that these works do not indirectly, or directly affect adjacent trees through compaction, the severing of larger diameter tree roots or via required pruning works.

As noted, the excavation and construction works are adjacent to Tree 13, 36 and 39. These are important for retention for a broad range of reasons. These trees will require ongoing arboricultural consideration to allow for their preservation. This will be the focus of tree management through the construction process and will involve the implementation of a range of tree preservation measures. These are based on guidelines outlined within Australian Standard AS4970 for the Protection of Trees on Development Sites.

Tree 13 is a well established *Phoenix canariensis,* or Canary Island Date Palm. These, and all monocotyledons are supported with a fibrous root system allowing them to absorb both soil moisture and nutrients from throughout their length, as opposed to the fine fibrous roots of the other dicotyledons documented. As such, this tree will cope with a broad range of potential construction impacts and should provide an appropriate edge to the development. The excavation will however require the piling rig to work within 2m of this tree's base. This is well within its theoretical TPZ and will require ongoing consideration. Work this close to the tree's base will require canopy pruning to allow access and will also lead to the removal of a portion of the tree's fibrous root network. The mature age and nature of the tree species will however limit the impact of this on its structural integrity. Compensatory watering and appropriate mulching will theoretically provide appropriate soil improvements therefore limiting the impact of this portion of the construction on this tree.

Vehicular access requirements have lead to the removal recommendation for Trees 16, 17 and 18. These are well established trees that provide a significant amenity contribution to the site and this recommendation has not been made without due consideration. The Jacarandas documented as Trees 1 and 2 have similarly been required for removal to allow this portion of the construction to occur. These are however part of more recent planting works and are less significant here.

Although both Trees 20 and 20a are located outside the direct CIZ, access and associated works will be required within several meters of these and a removal recommendation has been made.

All trees located on the embankment to the south of the War Memorial Hall are required for removal to allow the construction to occur. As previously noted, the most significant of these is Tree 26. This is a mature *Ficus rubiginosa*, or Port Jackson Fig tree that can be estimated to be over one hundred (100) years of age. The tree has however affectively split with a section of visible surface decay that extends for over 8m from the tree's base. This is a significant structural fault. The tree's mature age and limited vigour will mean that this is unlikely to adequately compartmentalise this, and decay will continue to spread. The continued spread of this decay will likely lead to the failure of the tree in time.

As noted, consideration has been given to the re location via transplantation of all of the Bangalow and odd Kentia palms located on this embankment. These along with the Bangalow palm documented as Tree 34 have however been documented for removal, due to site constraints and limited options for relocation.

The mature *Castanospermum australe,* or Black bean documented as Tree 36 is located within Camellia Court. While the bulk of the proposed construction is over 12m from the tree's base and outside its theoretical TPZ, level changes are proposed. These will need to consider the tree and its long term environmental requirements. The structure should be constructed in such a way as to avoid directly affecting larger diameter roots within 6m of the tree's base. Level changes should also maintain air and water flow to the soil surface. As noted, the tree is in fair condition only with limited access to soil moisture and nutrients, due to existing environmental constraints.

The mature Camellia documented as Tree 37 is a well established example of the species located adjacent to the War Memorial Hall. While this is outside the CIZ, the works required to sure up the adjacent soil profile will require construction impacts to come within 1m of the tree's base. As such, a recommendation for removal has been made.

Tree 38 is the mature *Lophostemon confertus* located between the historically significant Kauri Pine (Tree 39) and the War Memorial Hall. This tree was recommended for retention to both maintain amenity and to provide a practical edge between the construction and the Kauri Pine. The construction footprint has however been required to extend to within 1m of this tree's base. This is within the tree's structural root zone and will require its removal.

A removal recommendation has been made for the mature *Celtis sinensis,* or Hackberry tree documented as Tree 45a. This tree is located on the front verge and well outside the CIZ. This removal recommendation has been made to eliminate the affect that this tree has on the urban forest and to provide better continuity of planting on this verge. This is however outside the scope of this report and the scope of works and will be retained throughout the construction process.

Retention Value 1 High- Essential		Retention Value 2 Moderate		Retention Value 3 Low		Retention Value 4 Remove	
Retain	**Remove**	**Retain**	**Remove**	**Retain**	**Remove**	**Retain**	**Remove**
8,10,11, 12,13,36, 39,41,42, 43,44,45, 46	16,18,19 26, 38	3,4,5,6,7, 9,40,	1,2,14,15 ,21,27,31 ,34,37,48	45a	17,20, 20a, 22,23,24, 25,28,29, 30,32,33, 35,47,49, 50,51,52, 53,54,55, 56.		
Total: 13	**Total: 5**	**Total: 9**	**Total: 8**	**Total: 1**	**Total: 22**	**Total: 0**	**Total: 0**

Tree Protection Plan

This report will recommend the retention of Trees 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 36, 39, 40, 41, 42, 43, 44, 45, 45a and 46. These will be retained via the implementation of the following list of recommendations. These have been based on our national standard for the *Protection of Trees on Development Sites AS4970.*

Removal recommendations have been made for the following trees based their location in relation to the construction. Additional removal recommendations have been made based on poor species characteristics and structure. These include Trees 1,2 14, 15, 16,17, 18, 19, 20, 20a, 21, 22, 23, 24, 25, 26, 28, 27, 28, 29, 30,31, 32, 33, 34, 35, 37, 47,48, 49, 50, 51, 52, 53, 54, 55, 56,

All construction works should be done from within the construction impact zone to limit the indirect impacts of the development process. No works are to be undertaken outside those detailed here. All Tree Protection Zones will be fenced off, marked as a Tree Protection Zone (TPZ) and mulched in accordance with the following conditions.

Any roots located in the excavation process will be cut cleanly at the edge of the proposed construction to limit the spread of decay and their exposure to the air and atmosphere.

All trees documented for preservation will be preserved with the implementation of the following list of *Tree Preservation Recommendations.* These have been based on our *National Standard for the Protection of Trees on Development Sites AS4970* and should be implemented during the construction process, where applicable.

1.0 Appointment of Site Arborist
A site arborist shall be appointed prior to the commencement of work on site. The Site Arborist shall clearly mark out all trees to be removed and ensure that all trees documented for retention are preserved with the implementation of the

following tree protection measures. The Site Arborist shall have a minimum qualification equivalent to a NSW TAFE Certificate Level 5 or above in Arboriculture.

1.1 Inspection Points

Give 5 working days notice to allow inspections to be undertaken at the following stages;

Inspection Point	Inspection Personnel
Installation of Tree Protection Zones including Tree Protection Fencing, Silt Fencing and Signage	Site Arborist
Modification of the Tree Protection Zone	Site Arborist
Works within the Tree Protection Zone	Site Arborist
Completion of Construction Works	Site Arborist Site Supervisor.

1.2 Education

Contractors and site workers shall receive a copy of these specifications prior to the commencement of work. Contractors and site workers undertaking any works within a TPZ shall sign the site log to confirm that they have read and understand these specifications prior to their undertaking.

1.3 Tree Protection Zones

Where applicable, all trees to be retained through the construction process shall be protected from mechanical damage and the indirect impacts of the construction process with the installation of Tree Protection Zones. Unless otherwise stated, the following activities must not be carried out within a TPZ;

- modification of existing soil levels
- excavation or trenching
- cultivation of soil
- mechanical removal of vegetation
- movement of natural rock
- storage of materials, plant or equipment
- erection of site sheds
- affixing signage or hoarding to trees
- disposal of chemical waste or construction material
- any activity that may directly or indirectly affect the health of these or surrounding trees.

Note: If access to a TPZ is required as part of the approved development, prior authorisation is required by the Site Arborist.

1.4 Tree Protection Fencing

Tree Protection Fencing shall be installed at the perimeter of the TPZ. As a minimum the Tree Protection Fencing shall be 1.8 meters high temporary chain supported by steel stakes. This shall be fastened and supported to prevent sideways movement. The trees woody roots shall not be damaged during the installation of this Tree Protection Fencing.

This Tree Protection Fencing shall be erected prior to the commencement of works on site and shall be maintained for the duration of the construction process.

1.5 Signage

Tree Protection Signage shall be attached the the PTZ and displayed in a prominent location. These signs shall be repeated in 10m intervals or closer where the fence changes direction. These shall be a minimum of a 72 font size and each sign at-least 600 x 500mm.

1.6 Mulching

The area within the TPZ shall be mulched and maintained with 80mm of leaf litter mulch for the duration of the construction process. This mulch shall be spread by hand to limit the impact on underlying roots and shall be installed prior to the commencement of works on site.

The Site Arborist shall inspect and approve the TPZ including mulching. signage, Tree ProtectionFencing, Silt fencing and Signage prior to the commencement of works on site.

1.7 Site Management

Materials and waste storage, site sheds and temporary services shall not be located within the TPZ unless specified. Storage points shall be covered when not in use and be no greater than 2m in height.

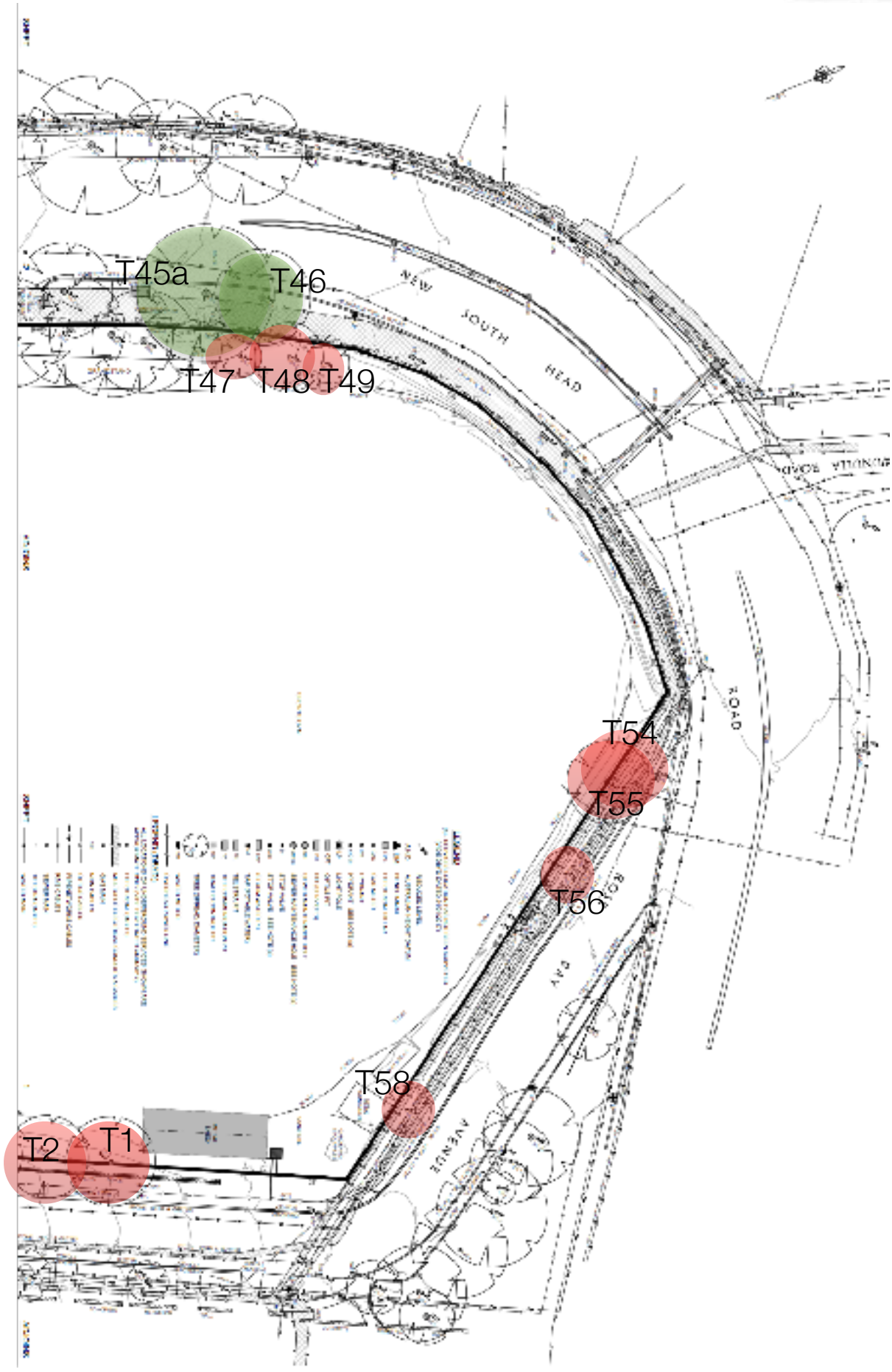
1.8 Works within the TPZ

The TPZ may need to be modified during the works to allow access between the protected tree and the proposed construction. The TPZ shall remain as specified and only those works detailed in the proposed construction undertaken.

1.9 Completion of Works within specified TPZ

Upon the completion of works within a TPZ the protective fencing shall be reinstated as specified. Where the construction of new structures does not allow for the reinstallation of fencing the TPZ shall be modified by the Site Arborist.

George Palmer
Diploma Horticulture- Arboriculture (Level 5)
Associate Diploma Horticulture- Landscape.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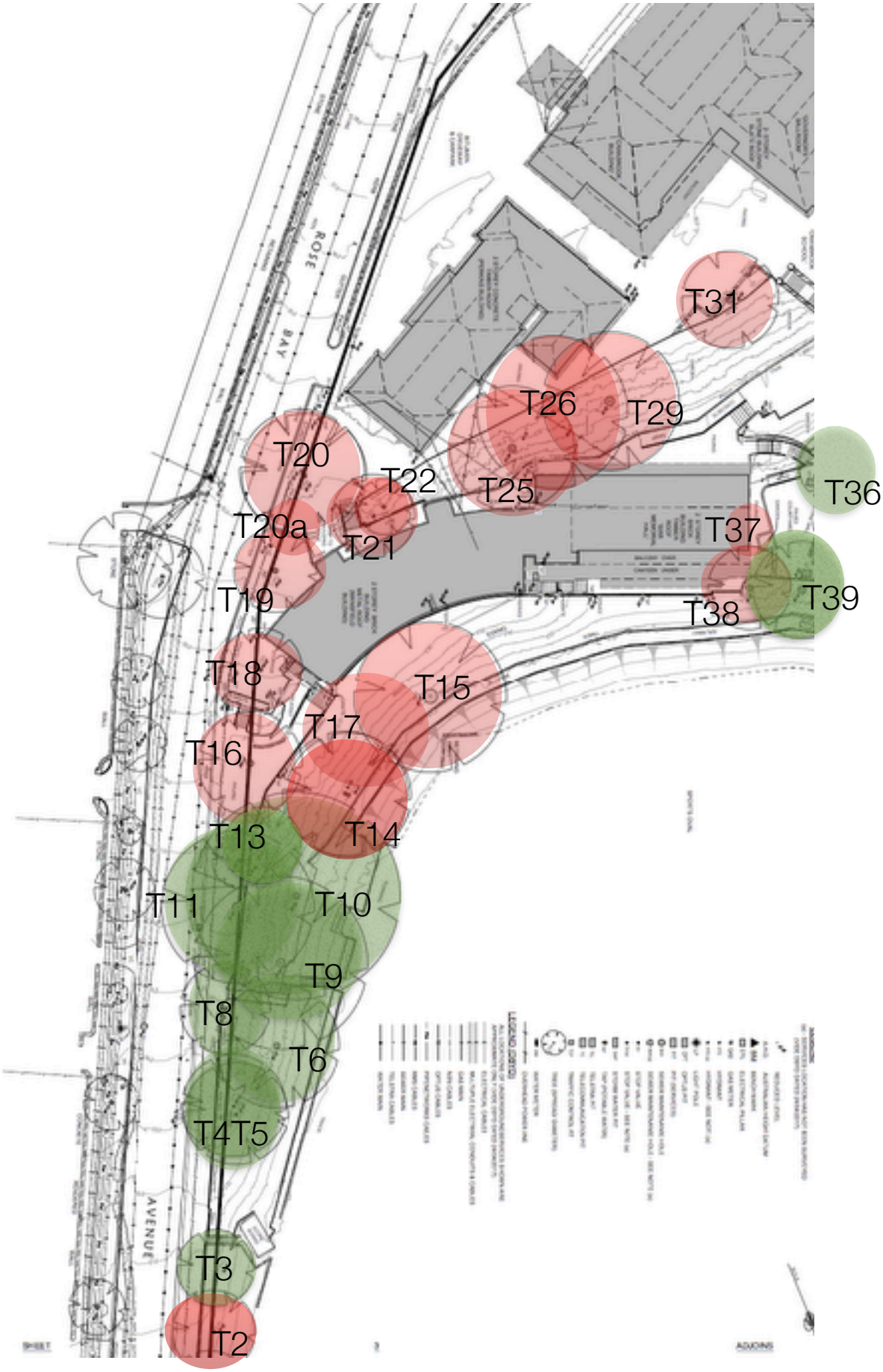
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NEW SOUTH HEAD ROAD
WOOLLEY ROAD

Tree Table for The Cranbrook Senior School.

T#	Species	Height and canopy spread	DBH	Age	Health	Crown Condition	Retention Value	SULE	Ecological Value	SRZ	TPZ	Tree AZ	Implications
T1	Jacaranda mimosifolia (Jacaranda)	6 x6	45cm	SM	Good	Good	Moderate	La	Low	2.5m	5.5	A2	Part of a stand of smaller Jacarandas on the lower embankment. Required for removal.
T2	Jacaranda mimosifolia (Jacaranda)	6 x 6	40cm	SM	Good	Good	Moderate	Lc	Low	2.5m	5.5m	A2	As above. Co-dominant at 1m. Part of a more recent (-20yrs) planting. Required for removal.
T3	Jacaranda mimosifolia (Jacaranda)	6 x 6	35cm	SM	Good	Good	Moderate	La	Low	2m	5m	A2	As above. A less well established example of the species. Lowe canopy pruning works are required.
T4	Jacaranda mimosifolia (Jacaranda)	10 x 6	42cm	M	Fair	Fair	Moderate	La	Moderate	2.8m	6m	A2	Partially suppressed by adjacent Jacaranda. Free of foliage and in fair health only.
T5	Jacaranda mimosifolia (Jacaranda)	12 x 7	50cm	M	Fair	Fair	Moderate to High	La	Moderate	2.5m	6m	A2	A well established tree overhanging the Oval and its neighbouring Jacaranda.
T6	Jacaranda mimosifolia (Jacaranda)	12 x 8	2 X 45cm	M	Good	Good	Moderate to High	La	Moderate	2.5m	6m	A2	Part of the stand of earlier Jacaranda plantings. Retain.
T7	Agonis flexuosa (Eest Australian Peppermint)	6 x 5	5 x 12cm	SM	Good	Good	Low	Sb	Low	2m	5m	Z1	A more recent planting, or older tree that has been cut and ground level and allowed to regrow.
T8	Lophostemon confertus (Brush Box)	10 x 7	52cm	SM	Good	Good	Moderate to High	La	Moderate	2.8m	6m	A2	A well established and mature example of the species located on Rose Bay Avenue. Retain

Tree Table for The Cranbrook Senior School.

T#	Species	Height and canopy spread	DBH	Age	Health	Crown Condition	Retention Value	SULE	Ecological Value	SRZ	TPZ	Tree AZ	Implications
T9	Jacaranda mimosifolia (Jacaranda)	14 x 16m	3 x 35cm	M	Good	Fair	Moderate	La	High	3m	8m	A2	A well established tree with a poor structure and inclusions.
T 10	Ficus microcarpa var. Hillii (Hille weeping Fig)	16 x 18	1.2m	M	Good	Good	High	La	High	3.5m	12m	A1	A very well established tree provides a significant amenity to the surrounding environment.
T 11	Lophostemon confertus (Brush Box)	10 x 6	43cm	M	Good	Good	Moderate	La	Moderate	2.5m	6m	A2	Well established and mature examples of their species. Partially suppressed by the adjacent Ficus.
T 12	Jacaranda mimosifolia (Jacaranda)	12 x 6	2 X 45cm	M	Good	Good	Moderate to High	La	Moderate	3m	6m	A1	Partially suppressed by the adjacent Ficus - that has shot surface roots over tree.
T 13	Phoenix canariensis (Canary Island Date Palm)	12 x 8	60cm	M	Good	Good	Moderate to High	La	Moderate	2m	6m	A2	A well established example of this species that is becoming increasingly rare in our urban forest.
T 14	Jacaranda mimosifolia (Jacaranda)	12 x 8	2 x 30cm	SM	Fair	Poor	Low	La	Moderate	2.5m	6m	Z5	A poorly formed tree with multiple leaders and inclusions noted.
T 15	Jacaranda mimosifolia (Jacaranda)	14 x 9	7 x 20cm	M	Good	Fair	Low	Ma	Moderate	2.5m	6m	Z5	A poorly formed tree with multiple leaders and inclusions noted.
T 16	Lophostemon confertus (Brush Box)	14 x 11	82cm	M	Good	Good	High	Ma	High	3m	10m	Z2	A well established and mature example of the species. Required for removal.

Tree Table for The Cranbrook Senior School.

T#	Species	Height and canopy spread	DBH	Age	Health	Crown Condition	Retention Value	SULE	Ecological Value	SRZ	TPZ	Tree AZ	Implications
T 17	Jacaranda mimosifolia (Jacaranda)	8 x 5	20 and 22cm	SM	Fair	Fair	Low	Sb	Low	2.5m	4m	Z2	Multiple trunk development with a bottle Brush growing at its base. Remove.
T 18	Lophostemon confertus (Brush Box)	10 x 6	55cm	M	Good	Good	High	La	Moderate	2.5m	6m	Z2	A well established and mature tree located within the CIZ and required for removal.
T 19	Lophostemon confertus (Brush Box)	10 x 4	54cm	M	Good	Good	High	La	Moderate	2.5m	6m	Z2	A well established and mature example of the species located adjacent to the proposed construction. Consider retention.
T 20	Jacaranda mimosifolia (Jacaranda)	8 x 9m	55cm	M	Good	Good	Moderate	Mb	Moderate	2.5m	6m	A2	A well established and mature tree located outside the CIZ and recommended for retention.
T 20a	Brachichiton mimosifolia (Illawarra Flame)	10 x 3	28cm	M	Good	Good	Moderate	La	Moderate	2m	4m	A2	A well established and semi mature example of the species required for removal
T 21	Lophostemon confertus (Brush Box)	9 x 4	56cm	M	Fair	Fair	Moderate	Sb	Low	2.5m	5m	Z4	Has declined previously and had large dead wood removed. Required for removal.
T 22	Olea europea (African Olive)	12 x 10	4 x 30cm	M	Good	Good	Low	Rb	Low	2.5m	5m	Z3	An exempt environmental weed species. Remove.
T 23	White Cedar	9 x 5	28cm	SM	Good	10	Low	Rb	Low	2m	4m	Z3	A self seeded species of limited amenity. Required for removal.
T 24	Olea europea (African Olive)	10 x 7	3 x 25cm	M	Good	Good	Low	Rb	Low	2m	4m	Z3	An exempt environmental weed species. Remove.

Tree Table for The Cranbrook Senior School.

T#	Species	Height and canopy spread	DBH	Age	Health	Crown Condition	Retention Value	SULE	Ecological Value	SRZ	TPZ	Tree AZ	Implications
T 25	Celtis sinensis (Hackberry)	22 x 12	78cm	M	Good	Good	Low	Rb	Low	3m	8m	Z3	A well established example of this exotic weed species. Exempt under 10m. Required for removal.
T 26	Ficus rubiginosa (Port Jackson Fig)	22 x 20	95cm	M	Good	Good	High	Rd	High	3.5m	12m	A2	A well established and mature example of the located centrally within the proposed construction footprint and required for removal.
T 27	Banksia integrifolia (Coastal Banksia)	6 x 5	35cm	SM	Good	Good	Moderate	La	Moderate	2.5m	6m	Z1	A semi mature example of the species located within the construction footprint and required for removal.
T28	Glochidion ferdinadii (Cheese Tree)	9 x 6	3 x 10cm	SM	Fair	Fair	Low	La	Low	2m	3m	Z1	A poorly structured example of this locally native tree species. Located within proposed construction footprint and required for removal.
T 29	Olea europea (African Olive)	8 x 8	4 x 20cm	M	Good	Good	Low	Sc	Low	2.5m	4m	Z3	An exempt environmental weed species. Remove.
T 30	Ficus microcarpa var. Hillii (Hille weeping Fig)	6 x 3	25cm	J	Good	Good	Low	Sc	Low	2m	4m	Z1	An ex indoor ornamental. Remove irrespective.
T 31	Cypress spp.	14 x 8	78cm	M	Good	Fair	Moderate	Sc	Low	3m	7m	Z11	A well established species out of context in this environmental setting.

Tree Table for The Cranbrook Senior School.

T#	Species	Height and canopy spread	DBH	Age	Health	Crown Condition	Retention Value	SULE	Ecological Value	SRZ	TPZ	Tree AZ	Implications
T 32	Schefflera (Umbrella tree)	8 x 3	35cm	SM	Good	Good	Low	Re	Low	2m	3m	Z3	An ex indoor ornamental. Remove irrespective.
T 33	Viburnum tinus (Viburnum)	4 x 4	20cm	J	Good	Good	Low	Ya	Low	2m	2m	Z1	An exempt environmental weed species. Remove.
T 34	Archontophoenix cunninghamiana (Bangalow Palm)	10 x 4	20cm	M	Good	Good	Moderate	La	Low	2.5m	4m	Z12	A well established example of the species…?
T 35	Indian hawthorn	6 x 4	2 x 20cm	M	Good	Good	Low	La	Low	2.5m	5m	Z12	A well established example of the species required for removal.
T 36	Castanospermum austral (Black Bean	14 x 7	90+	M	Fair	Good	High	La	High	3.5m	12m	A2	A well established and mature tree located outside the CIZ and recommended for retention.
T 37	Camellia sasanqua (Camellia)	6 x 4	2 x 20cm	M	Good	Good	Moderate	La	Low	2.5m	4m	Z12	A well established example of the species required for removal.
T 38	Lophostemon confertus (Brush Box)	14 x 8	82cm	M	Good	Good	High	La	High	3.5m	10m	A1	A well established example of the species located adjacent to the proposed development. Required for removal.
T 39	Agathis robusta (Queensland Kauri)	22 x 12	1.1m	M	Good	Good	Essential	La	High	3.5m	12m	A1	An historically significant tree. Retain.

Tree Table for The Cranbrook Senior School.

T#	Species	Height and canopy spread	DBH	Age	Health	Crown Condition	Retention Value	SULE	Ecological Value	SRZ	TPZ	Tree AZ	Implications
T 40	Stenocarpus sinuous (Queensland Fire wheel)	14 x 4	62cm	M	Good	Good	High	La	Moderate	3m	8m	A2	A well established example of the species located well outside the CIZ. Retain.
T 41	Podocarpus elatus (Illawarra Plum)	12 x 10m	78cm	M	Good	Good	High	La	High	3m	10m	A2	A well established and mature example of the species located outside the CIZ and recommended for retention.
T 42	Podocarpus elatus (Illawarra Plum)	14 x 11	1.1m	M	Good	Good	High	La	High	3.5m	12m	A2	A well established and mature example of the species located outside the CIZ and recommended for retention.
T 43	Araucaria heterophylla (Norfolk Island Pine)	26 x 10	1.3m	OM	Poor	Poor	Low	Sc	High	3.5m	12m	Z4	This tree has entered a cycle of decline and despite its historical significance and location outside the CIZ, removal is recommended.
T 44	Araucaria heterophylla (Norfolk Island Pine)	28 x 8	1.2m	FM	Good	Good	Essential	La	High	3.5m	12m	A1	The middle tree in a stand of historically significant Pines. Retain.
T 45	Araucaria heterophylla (Norfolk Island Pine)	30 x 10	1.4m	FM	Good	Good	Essential	La	High	3.5m	12m	A1	An historically significant example of the species located well outside the CIZ. Retain.
T 45a	Celtis sinensis (Hackberry)	20 x 20m	1m	M	Good	Good	Low	Sc	Low	3.5m	10m	Z11	An exempt environmental weed species. Remove.

Tree Table for The Cranbrook Senior School.

T#	Species	Height and canopy spread	DBH	Age	Health	Crown Condition	Retention Value	SULE	Ecological Value	SRZ	TPZ	Tree AZ	Implications
T 46	Podocarpus elatus (Illawarra Plum)	12 x 10	85cm	M	Good	Good	High	La	High	3m	8m	A2	A well established and mature of the species located outside the CIZ and recommend for retention.
T 47	Lophostemon confertus (Brush Box)	10 x 6	2 x 20cm	SM	Good	Fair	Low	Sc	Low	2m	4m	Z9	A poorly formed tree recommend for removal.
T 48	Brachychiton acerifolia (Illawarra flame)	12 x 4	46cm	M	Good	Good	Moderate	La	Moderate	2.5m	6m	Z9	A well established and mature example of the located centrally within the proposed construction footprint and required for removal.???
T 49	Callistemon viminalis (Bottle Brush)	6 x 5	28cm	SM	Good	Fair	Low	Sb	Low	2m	4m	Z2	Part of a stand of similar Bottle Brush trees located adjacent to the boundary.
T 50	Callistemon viminalis (Bottle Brush)	6 x 4	30cm	SM	Good	Fair	Low	Sb	Low	2m	4m	Z2	As above. Co dominant and limited amenity. Remove.
T 51	Callistemon viminalis (Bottle Brush)	6 x 4	30cm	SM	Good	Good	Low	Sb	Low	2m	4m	Z2	A semi mature example of the species required for removal.
T 52	Callistemon viminalis (Bottle Brush)	6 x 4	30cm	SM	Good	Fair	Low	Sb	Low	2m	4m	Z2	A semi mature example of the species located within the construction footprint and required for removal.
T 53	Castanospermum austral (Black Bean	8 x 7	50cm	SM	Good	Poor	Low	Sb	Low	2.5m	5m	Z5	This tree has affected the adjacent retaining wall and is poorly structured. Remove

Tree Table for The Cranbrook Senior School.

T#	Species	Height and canopy spread	DBH	Age	Health	Crown Condition	Retention Value	SULE	Ecological Value	SRZ	TPZ	Tree AZ	Implications
T 54	Castanospermum austral (Black Bean	8 x 6	50cm	SM	Good	Poor	Low	Sb	Low	2.5m	5m	Z5	Part of a stand of similar trees on this boundary. Required for removal.
T 55	Castanospermum austral (Black Bean	7 x 5	2 x 40cm	M	Good	Fair	Low	Sb	Low	3m	5m	Z5	Poorly formed following lopping. Required for removal.
T 56	Callistemon viminalis (Bottle Brush)	6 x 4	20cm	SM	Good	Good	Low	Sb	Low	2m	4m	Z1	A more recent planting, of limited value and required for removal.
T 57	Callistemon viminalis (Bottle Brush)	6 x 5	25cm	SM	Good	Good	Low	Sb	Low	2m	4m	Z1	A more recent planting, of limited value and required for removal.

Genus, Species, and Common name
The botanical and common name of each tree is identified and recorded. Occasionally the exact species name is unknown; sp. Is recorded to indicate this.
Height, Spread, Trunk Diameter, DBH and DRB
The Trees height and spread are recorded in meters.
The tree DBH is recorded in millimetres. DBH is an abbreviation of diameter (of the trunk) measured at breast height (or 1.4 meters from the base of the trunk). If more than one trunk is present the DBH is calculated in accordance with AS4970-2009 Protection of Trees on Development Sites.
If the tree has multiple trunks each trunk DBH will be recorded individually.
The tree DRB is recorded in millimetres. DRB is an abbreviation of Diameter (of the trunk) measured above the root buttress. It is required to calculate the SRZ in accordance with AS4970-2009 Protection of Trees on Development Sites when there is major encroachment within the TPZ, i.e. greater than 10% is encroached upon or if there is an encroachment within the SRZ.
Age
The age class of each tree is estimated as either:
J- Juvenile, a young sapling, easily replaced from nursery stock
SM- Semi mature, a tree that has not grown to mature size
M- Mature, a tree that has reached mature size and will slowly increase in size over time.
OM- Over mature, a tree that has been mature for a long period and is beginning to display signs of decline, e.g. large dead branches
S- Senescent, an over mature tree that is now in decline
Health
The Tree's health is recorded as a measurement of:

Tree Table for The Cranbrook Senior School.

G- Good, the does not appear stressed with no excessive dieback, insect infestation, decay, deadwood or epicormic shoots
Avg- Average health, the tree appears stressed and has some crown dieback, and/or areas or few epicormic shoots, and/0r some deadwood in the crown and some new growth at the branch tips. These trees may benefit from remediation of the growing environment to reduce stress and return it to good health.
F- Fair, the tree may have areas of crown die back, and/or many epicormic shoots, and/or reduced new growth at branch tips. These trees have been stressed fort a short period of time; remediation of the growing environment may improve the trees health.
P- Poor, the tree may have large areas of crown die back, and/or many epicormic shoots, and/or reduced new growth at branch tips. These trees have been stressed for a long time, remediation of the growing environment would not return the tree to good health.

Crown Condition

The crown condition of each tree is assessed and recorded as either:
G- Good Condition: the tree appears to have no visible indication of inherent structural effects.
Avg- Average Condition: the tree has minor structural defects which may be corrected with remedial works or pruning, allowing the tree to return to Good Condition.
F- Fair Condition: the tree has visible structural defects such as (but not limited to) dead branches, and/or an unbalanced crown, and/or leaning trunk and/or signs of decay. These trees do not demonstrate the typical form of their species, of have been damaged or have begun to deteriorate. Remedial works or pruning may return the tree to Average Condition.
P- Poor Condition: the tree has significant structural defects such as (but not limited to) very large dead branches, and/or extremely unbalanced crown, and/or subsiding trunk, and/or large areas of decay. These trees do not demonstrate the typical form of their species, or have been severely damaged or have deteriorated significantly. Remedial pruning would not return the tree to fair condition.

Tree Table for The Cranbrook Senior School.

RATING	HERITAGE VALUE	ECOLOGICAL VALUE	AMENITY VALUE
1. SIGNIFICANT	The subject tree is listed as a Heritage Item under the Local Environment Plan (LEP) with a local, state or national level of significance or is listed on Council's Significant Tree Register	The subject tree is scheduled as a Threatened Species as defined under the Threatened Species Conservation Act 1995 (NSW) or the Environmental Protection and Biodiversity Conservation Act 1999	The subject tree has a very large live crown size exceeding 300m² with normal to dense foliage cover, is located in a visually prominent position in the landscape, exhibits very good form and habit typical of the species
	The subject tree forms part of the curtilage of a Heritage Item (building /structure /artefact as defined under the LEP) and has a known or documented association with that item	The tree is a locally indigenous species, representative of the original vegetation of the area and is known as an important food, shelter or nesting tree for endangered or threatened fauna species	The subject tree makes a significant contribution to the amenity and visual character of the area by creating a sense of place or creating a sense of identity
	The subject tree is a Commemorative Planting having been planted by an important historical person (s) or to commemorate an important historical event	The subject tree is a Remnant Tree, being a tree in existence prior to development of the area	The tree is visually prominent in view from surrounding areas, being a landmark or visible from a considerable distance.
2. VERY HIGH	The tree has a strong historical association with a heritage item (building/structure/artefact/garden etc) within or adjacent the property and/or exemplifies a particular era or style of landscape design associated with the original development of the site.	The tree is a locally-indigenous species, representative of the original vegetation of the area and is a dominant or associated canopy species of an Endangered Ecological Community (EEC) formerly occurring in the area occupied by the site.	The subject tree has a very large live crown size exceeding 200m²; a crown density exceeding 70% (normal-dense), is a very good representative of the species in terms of its form and branching habit or is aesthetically distinctive and makes a positive contribution to the visual character and the amenity of the area
3. HIGH	The tree has a suspected historical association with a heritage item or landscape supported by anecdotal or visual evidence	The tree is a locally-indigenous species and representative of the original vegetation of the area and the tree is located within a defined Vegetation Link / Wildlife Corridor or has known wildlife habitat value	The subject tree has a large live crown size exceeding 100m²; The tree is a good representative of the species in terms of its form and branching habit with minor deviations from normal (e.g. crown distortion/suppression) with a crown density of at least 70% (normal); The subject tree is visible from the street and surrounding properties and makes a positive contribution to the visual character and the amenity of the area
4. MODERATE	The tree has no known or suspected historical association, but does not detract or diminish the value of the item and is sympathetic to the original era of planting.	The subject tree is a non-local native or exotic species that is protected under the provisions of this DCP.	The subject tree has a medium live crown size exceeding 40m²;The tree is a fair representative of the species, exhibiting moderate deviations from typical form (distortion/suppression etc) with a crown density of more than 50% (thinning to normal); and
			The tree is visible from surrounding properties, but is not visually prominent – view may be partially obscured by other vegetation or built forms. The tree makes a fair contribution to the visual character and amenity of the area.
5. LOW	The subject tree detracts from heritage values or diminishes the value of a heritage item	The subject tree is scheduled as exempt (not protected) under the provisions of this DCP due to its species, nuisance or position relative to buildings or other structures.	The subject tree has a small live crown size of less than 40m² and can be replaced within the short term (5-10 years) with new tree planting
6. VERY LOW	The subject tree is causing significant damage to a heritage Item.	The subject tree is listed as an Environment Weed Species in the Leichhardt Local Government Area, being invasive, or is a known nuisance species.	The subject tree is not visible from surrounding properties (visibility obscured) and makes a negligible contribution or has a negative impact on the amenity and visual character of the area. The tree is a poor representative of the species, showing significant deviations from the typical form and branching habit with a crown density of less than 50% (sparse).
7. INSIGNIFICANT	The tree is completely dead and has no visible habitat value	The tree is a declared Noxious Weed under the Noxious Weeds Act (NSW) 1993 within the relevant Local Government Area.	The tree is completely dead and represents a potential hazard.

Tree Table for The Cranbrook Senior School.

Significance

The landscape significance of a tree is an essential criterion to establish the importance that a particular tree may have on a site. When determining a trees significance within the landscape context, the following questions are asked. Significance is measured as high, medium, or low. High being a affirmative answer for 4 or more questions, Medium being 3 affirmative answers, and Low being 2 or less affirmative answers.

- Is the tree a local native remnant; an endangered species, a part of an endangered species community; or does the tree provide critical habitat for an endangered species?
- Is the tree botanical interest; listed as a heritage item under the federal state or Local regulations?
- Is the tree visually prominent in the locality?
- Is the tree well structured?
- Is the tree in good health and does it display signs of good vigour?
- Is the tree typically formed for the species?
- Is the tree located in a position that will accommodate future growth?

Amenity value

Amenity value is a subjective measurement based on the tree's contribution to the landscape, it may be based on the tree's visual form, however it also includes non visual attributes such as provision of shade for a seat, screening of poor views or for privacy, or if it has historical significance. The amenity value is recorded as:

H- High, the trees form is an excellent example of its species and it makes a great specimen and/or it has other attributes such as screening, or its historical significance. These trees are visually prominent and valuable to the community or public domain.

M- Medium, the tree may have an altered form and/or it has attributes that provide amenity to local residents only.

L-Low, the tree is not a good specimen and it does not provide substantial benefit to local residents or the community.

Ecological value

Ecological value is a measurement of the trees contribution to the environment. It is determined by the trees area of origin, its potential to provide habitat to native fauna and its potential to become an environmental pest. The ecological value is recorded as:

H- High, the tree is locally native or remnant and/or it has habitat for native fauna

M- Medium, the tree is native but not locally native

L- Low, the tree is not native and/or it may be a listed nuisance or weed species.

Ha- Habitat, is the tree valued by fauna for food (i.e. foliage, fruit, or sap) or shelter (i.e. nesting, roosting, dray, or hollow).

Form

The form, structure or shape of each tree is assessed and recorded as either one or a combination of several of the below terms may be used to describe the trees form; (U) Upright, (B) Broad, (C) Conical, (Sh) Shrub, (CS) Crown Shy (also referenced is the adjacent dominant tree canopy i.e. T4), (V) Vase, (D) Dome, (P) Palm, (S) Spreading, (L) Leaning or (BM) Basal Multi Trunked.

Crown form may also be assessed in accordance with the relationship with the neighbouring tree and recorded as either: S- Suppressed, the crown is located beneath another larger crown and is leaning away (Crown Shy); C- Co dominant, the crown is adjacent to another crown of similar size, their crown areas may appear joined; D- Dominant, the crown is above the lower crowns; E- Emergent, the crown emerges from a lower canopy formed by the other dominant or co dominant crowns.

Defects

The presence of one or a combination of several defects is recorded (W) Wound, (D) Decay, (F) Fungus, (B) Bulge, (FB) Fibre Buckling, (C) Cracks, (S) Split, (H) Hollow, (DB) Die back, (Epicormic Shoots, (DW) Dead wood, (I) Inclusion, (CA) Cavities, (PF) Previous Failure, (R) Root Damage, (P) Pruning wound, (PD) Pests and Diseases, (ST) Storm Damage.

Structural Root Zone (SRZ

Tree Table for The Cranbrook Senior School.

The SRZ is a radial area extending outwards from the centre of the trunk. This area contains the majority of the structural woody roots. This area is primarily responsible for stability. Root damage or root loss within this zone greatly increases the opportunity for decay fungi to ingress in to the heartwood, causing internal decay in addition to destabilising the trees structural integrity. The SRZ is calculated as follows (This calculation is derived from the Australian Standard $4970-2009 Protection of Trees on Development Sites):

$$\textbf{SRZ (Radius)} = (D \times 50)^{0.42} \times 0.6$$

Tree protection Zone (TPZ)

The TPZ is a circular area with a radius measured by multiplying the DBH by twelve, or a circular area the size of the trees drip line, whichever is greater. This area contains the majority of the essential structural and feeder roots responsible for stability, gaseous exchange and water and nutrient uptake. Excavation, back filling, compaction or other disturbance should not occur in this area. The TPZ is used to identify the minimum area required for the safe retention of a given tree. This calculation is derived from the Australian Standard 4970-2009 Protection of Trees on Development Sites. An incursion to 10% within the TPZ is potentially acceptable if no other option is available. A major encroachment (in excess of 10%) is required to be clearly justified by the project Arborist and compensated for elsewhere. Justification methodology mat vary depending on site or individual trees health, vigour and ability to withstand disturbance may require root investigation.

TreeAZ Categories (Version 10.04-ANZ)
CAUTION: TreeAZ assessments must be carried out by a competent person qualified and experienced in arboriculture. The following category descriptions are designed to be a brief field reference and are not intended to be self-explanatory. They must be read in conjunction with the most current explanations published at www.TreeAZ.com.
Category Z: Unimportant trees not worthy of being a material constraint
Local policy exemptions: Trees that are unsuitable for legal protection for local policy reasons including size, proximity and species
High risk of death or failure: Trees that are likely to be removed within 10 years because of acute health issues or severe structural failure
Excessive nuisance: Trees that are likely to be removed within 10 years because of unacceptable impact on people
Good management: Trees that are likely to be removed within 10 years through responsible management of the tree population
NOTE: Z trees with a high risk of death/failure (Z4, Z5 & Z6) or causing severe inconvenience (Z7 & Z8) at the time of assessment and need an urgent risk assessment can be designated as ZZ. ZZ trees are likely to be unsuitable for retention and at the bottom of the categorization hierarchy. In contrast, although Z trees are not worthy of influencing new designs, urgent removal is not essential and they could be retained in the short term, if appropriate.
Category A: Important trees suitable for retention for more than 10 years and worthy of being a material constraint
NOTE: Category A1 trees that are already large and exceptional, or have the potential to become so with minimal maintenance, can be designated as AA at the discretion of the assessor. Although all A and AA trees are sufficiently important to be material constraints, AA trees are at the top of the categorization hierarchy and should be given the most weight in any selection process.
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