Transport for NSW

Beaches Link and Gore Hill Freeway Connection

Appendix W

Arboricultural impact assessment

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Technical working paper: Arboricultural impact assessment

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Prepared for

Transport for NSW

Prepared by

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Abbreviations and terms

Abbreviation	Description
Amenity tree	Trees (as defined in Willoughby Council's *Tree Preservation Order*) that do not classify for offset under the NSW Biodiversity Offsets Scheme, established under Part 6 of the *Biodiversity Conservation Act 2016*.
AQF	Australian Qualifications Framework
AS	Australian Standards
Associated infrastructure	Associated infrastructure refers to the supporting infrastructure which includes stormwater detention, air vents and construction site.
BL	Beaches Link
DBH	Diameter at Breast Height
Disturbance footprint	The aboveground area to be directly impacted by the project
ELA	Eco Logical Australia Pty Ltd
LGA	Local Government Area
m	Metre
mm	Millimetre
NO	Number
NSW	New South Wales
Operational ventilation systems	Includes tunnel air ventilation and emergency smoke exhaust systems.
SP	Species
SRZ	Structural Root Zone
STARS	IACA Significance of a Tree, Assessment Rating System
TPO	Tree Preservation Order
TPZ	Tree Protection Zone
ULE	Useful Life Expectancy
VTA	Visual Tree Assessment

Executive summary

An arboricultural impact assessment for the Beaches Link and Gore Hill Freeway Connection was conducted using field techniques, review of aerial photography and spatial data analysis. The assessment area included both amenity trees and trees within native vegetation communities (including native revegetation) within 15 metres of the project alignment.

Key results of the assessment are:

- 3009 trees would be directly impacted by construction and removed. Of these, 135 trees have high retention value, 1508 have medium retention value and 1366 have low retention value
- 500 trees have the potential to be impacted and would require careful management during construction to avoid or minimise impacts where possible
- Further arboricultural investigation of the construction footprint would be required in areas that were inaccessible at the time of this study and where the number of individual trees in a group were estimated.

Where amenity trees are removed due to the project, they would be replaced at a ratio equal to or greater than 1:1. The replacement trees would consist of local native provenance species from the vegetation community that once occurred in the locality (rather than plant exotic or non-local native trees) where available and subject to the urban design and landscape plan for the project. Where replacement trees cannot be accommodated within the operational footprint of the project, consultation would be carried out with the adjacent land owner and relevant local council (where appropriate) to determine if they can accommodate the replacement tree.

Native vegetation communities (including native revegetation) within the disturbance footprint impacted by the project would be offset according to provisions within the NSW Biodiversity Offset Scheme in accordance with the *Biodiversity Conservation Act 2016*. As such the residual number of trees requiring replacement planting is reduced. An estimate of the net number of trees requiring replacement are as follows:

- Of the 3009 directly impacted trees, 1065 were estimated to require replacement plantings, of which 76 are exempt species
- Of the 500 potentially impacted trees, 427 were estimated to require replacement plantings, of which 11 are exempt species.

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1 Introduction

This section provides an overview of the Beaches Link and Gore Hill Freeway Connection (the project), including its key features and location. It also outlines the Secretary's environmental assessment requirements addressed in this technical working paper.

1.1 Overview

The Greater Sydney Commission's *Greater Sydney Region Plan – A Metropolis of Three Cities* (Greater Sydney Commission, 2018) proposes a vision of three cities where most residents have convenient and easy access to jobs, education and health facilities and services. In addition to this plan, and to accommodate for Sydney's future growth the NSW Government is implementing the *Future Transport Strategy 2056* (Transport for NSW, 2018), that sets the 40 year vision, directions and outcomes framework for customer mobility in NSW. The Western Harbour Tunnel and Beaches Link program of works is proposed to provide additional road network capacity across Sydney Harbour and Middle Harbour and to improve transport connectivity with Sydney's Northern Beaches. The Western Harbour Tunnel and Beaches Link program of works include:

- The Western Harbour Tunnel and Warringah Freeway Upgrade project which comprises a new tolled motorway tunnel connection across Sydney Harbour, and an upgrade of the Warringah Freeway to integrate the new motorway infrastructure with the existing road network and to connect to the Beaches Link and Gore Hill Freeway Connection project
- The Beaches Link and Gore Hill Freeway Connection project which comprises a new tolled motorway tunnel connection across Middle Harbour from the Warringah Freeway and the Gore Hill Freeway to Balgowlah and Killarney Heights and including the surface upgrade of the Wakehurst Parkway from Seaforth to Frenchs Forest and upgrade and integration works to connect to the Gore Hill Freeway at Artarmon.

A combined delivery of the Western Harbour Tunnel and Beaches Link program of works would unlock a range of benefits for freight, public transport and private vehicle users. It would support faster travel times for journeys between the Northern Beaches and areas south, west and north-west of Sydney Harbour. Delivering the program of works would also improve the resilience of the motorway network, given that each project provides an alternative to heavily congested existing harbour crossings.

1.2 The project

Transport for NSW is seeking approval under Part 5, Division 5.2 of the *Environmental Planning and Assessment Act 1979* to construct and operate the Beaches Link and Gore Hill Freeway Connection project, which would comprise two components:

- Twin tolled motorway tunnels connecting the Warringah Freeway at Cammeray and the Gore Hill Freeway at Artarmon to the Burnt Bridge Creek Deviation at Balgowlah and the Wakehurst Parkway at Killarney Heights, and an upgrade of the Wakehurst Parkway (the Beaches Link)
- Connection and integration works along the existing Gore Hill Freeway and surrounding roads at Artarmon (the Gore Hill Freeway Connection).

A detailed description of these two components is provided in Section 1.4.

1.3 Project location

The project would be located within the North Sydney, Willoughby, Mosman and Northern Beaches local government areas, connecting Cammeray in the south with Killarney Heights, Frenchs Forest and Balgowlah in the north. The project would also connect to both the Gore Hill Freeway and Reserve Road in Artarmon in the west.

Commencing at the Warringah Freeway at Cammeray, the mainline tunnels would pass under Naremburn and Northbridge, then cross Middle Harbour between Northbridge and Seaforth. The mainline tunnels would then split under Seaforth into two ramp tunnels and continue north to the Wakehurst Parkway at Killarney Heights and north-east to Balgowlah, linking directly to the Burnt Bridge Creek Deviation to the south of the existing Kitchener Street bridge.

The mainline tunnels would also have on and off ramps from under Northbridge connecting to the Gore Hill Freeway and Reserve Road east of the existing Lane Cove Tunnel. Surface works would also be carried out at the Gore Hill Freeway in Artarmon, Burnt Bridge Creek Deviation at Balgowlah and along the Wakehurst Parkway between Seaforth and Frenchs Forest to connect the project to the existing arterial and local road networks.

1.4 Key features of the project

Key features of the Beaches Link component of the project are shown in Figure 1-1 and would include:

- Twin mainline tunnels about 5.6 kilometres long and each accommodating three lanes of traffic in each direction, together with entry and exit ramp tunnels to connections at the surface. The crossing of Middle Harbour between Northbridge and Seaforth would involve three lane, twin immersed tube tunnels
- Connection to the stub tunnels constructed at Cammeray as part of the Western Harbour Tunnel and Warringah Freeway Upgrade project
- Twin two lane ramp tunnels:
    - Eastbound and westbound connections between the mainline tunnel under Seaforth and the surface at the Burnt Bridge Creek Deviation, Balgowlah (about 1.2 kilometres in length)
    - Northbound and southbound connections between the mainline tunnel under Seaforth and the surface at the Wakehurst Parkway, Killarney Heights (about 2.8 kilometres in length)
    - Eastbound and westbound connections between the mainline tunnel under Northbridge and the surface at the Gore Hill Freeway and Reserve Road, Artarmon (about 2.1 kilometres in length).
- An access road connection at Balgowlah between the Burnt Bridge Creek Deviation and Sydney Road including the modification of the intersection at Maretimo Street and Sydney Road, Balgowlah
- Upgrade and integration works along the Wakehurst Parkway, at Seaforth, Killarney Heights and Frenchs Forest, through to Frenchs Forest Road East
- New open space and recreation facilities at Balgowlah
- New and upgraded pedestrian and cyclist infrastructure
- Ventilation outlets and motorway facilities at the Warringah Freeway in Cammeray, the Gore Hill Freeway in Artarmon, the Burnt Bridge Creek Deviation in Balgowlah and the Wakehurst Parkway in Killarney Heights

- Operational facilities, including a motorway control centre at the Gore Hill Freeway in Artarmon, and tunnel support facilities at the Gore Hill Freeway in Artarmon and the Wakehurst Parkway in Frenchs Forest
- Other operational infrastructure including groundwater and tunnel drainage management and treatment systems, surface drainage, signage, tolling infrastructure, fire and life safety systems, roadside furniture, lighting, emergency evacuation and emergency smoke extraction infrastructure, Closed Circuit Television (CCTV) and other traffic management systems.

Key features of the Gore Hill Freeway Connection component of the project are shown in Figure 1-2 and would include:

- Upgrade and reconfiguration of the Gore Hill Freeway between the T1 North Shore & Western Line and T9 Northern Line and the Pacific Highway
- Modifications to the Reserve Road and Hampden Road bridges
- Widening of Reserve Road between the Gore Hill Freeway and Dickson Avenue
- Modification of the Dickson Avenue and Reserve Road intersection to allow for the Beaches Link off ramp
- Upgrades to existing roads around the Gore Hill Freeway to integrate the project with the surrounding road network
- Upgrade of the Dickson Avenue and Pacific Highway intersection
- New and upgraded pedestrian and cyclist infrastructure
- Other operational infrastructure, including surface drainage and utility infrastructure, signage and lighting, CCTV and other traffic management systems.

A detailed description of the project is provided in Chapter 5 (Project description) of the environmental impact statement.

Subject to obtaining planning approval, construction of the project is anticipated to commence in 2023 and is expected to take around five to six years to complete.

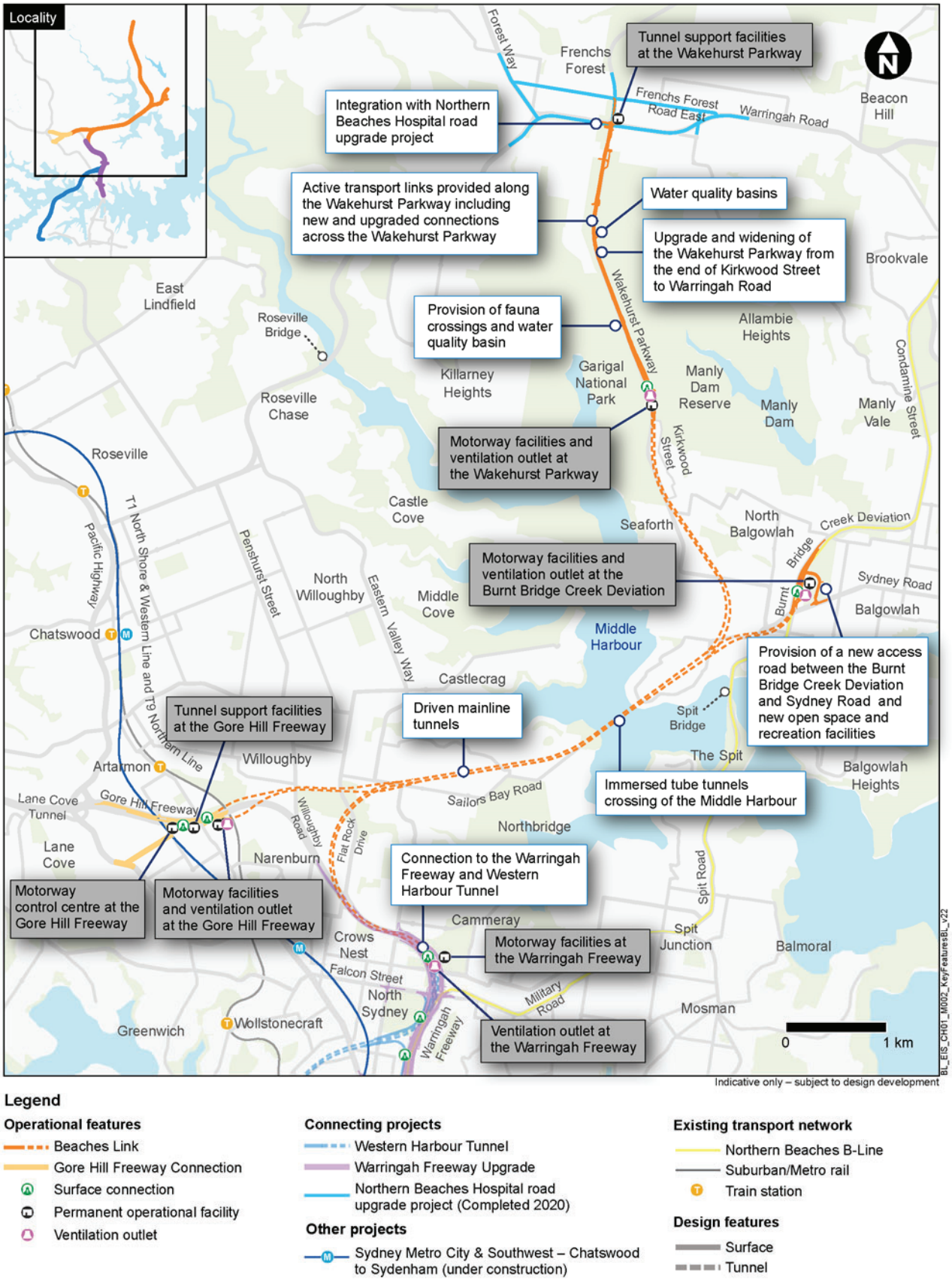

Figure 1-1 Key features of the Beaches Link component of the project

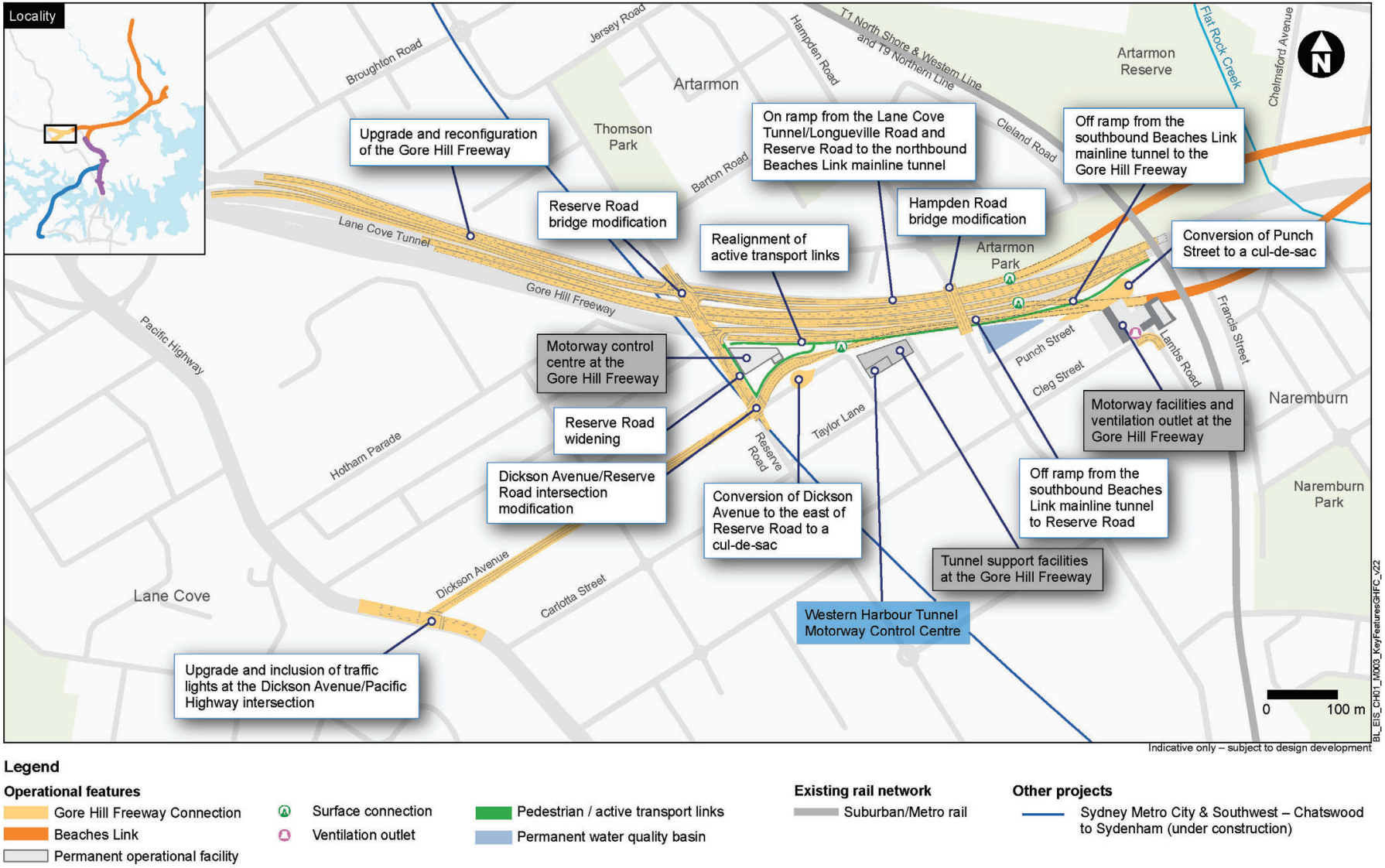

Figure 1-2 Key features of the Gore Hill Freeway component of the project

1.5 Key construction activities

The area required to construct the project is referred to as the construction footprint. The majority of the construction footprint would be located underground within the mainline and ramp tunnels. However, surface areas would also be required to support tunnelling activities and to construct the tunnel connections, tunnel portals, surface road upgrades and operational facilities.

Key construction activities would include:

- Early works and site establishment, with typical activities being property acquisition and condition surveys, utilities installation, protection, adjustments and relocations, installation of site fencing, environmental controls (including noise attenuation and erosion and sediment control), traffic management controls, vegetation clearing, earthworks, demolition of structures, building construction support sites including acoustic sheds and associated access decline acoustic enclosures (where required), construction of minor access roads and the provision of property access, temporary relocation of pedestrian and cycle paths and bus stops, temporary relocation of swing moorings and/or provision of alternative facilities (mooring or marina berth) within Middle Harbour
- Construction of the Beaches Link, with typical activities being excavation of tunnel construction access declines, construction of driven tunnels, cut and cover and trough structures, construction of surface upgrade works, construction of cofferdams, dredging and immersed tube tunnel piled support activities in preparation for the installation of immersed tube tunnels, casting and installation of immersed tube tunnels and civil finishing and tunnel fitout
- Construction of operational facilities comprising:
    - A motorway control centre at the Gore Hill Freeway in Artarmon
    - Tunnel support facilities at the Gore Hill Freeway in Artarmon and at the Wakehurst Parkway in Frenchs Forest
    - Motorway facilities and ventilation outlets at the Warringah Freeway in Cammeray (fitout only of the Beaches Link ventilation outlet at the Warringah Freeway (being constructed by the Western Harbour Tunnel and Warringah Freeway Upgrade project), the Gore Hill Freeway in Artarmon, the Burnt Bridge Creek Deviation in Balgowlah and the Wakehurst Parkway in Killarney Heights
    - A wastewater treatment plant at the Gore Hill Freeway in Artarmon
    - Installation of motorway tolling infrastructure
- Staged construction of the Gore Hill Freeway Connection at Artarmon and upgrade and integration works at Balgowlah and along the Wakehurst Parkway with typical activities being earthworks, bridgeworks, construction of retaining walls, stormwater drainage, pavement works and linemarking and the installation of roadside furniture, lighting, signage and noise barriers
- Testing of plant and equipment and commissioning of the project, backfill of access declines, removal of construction support sites, landscaping and rehabilitation of disturbed areas and removal of environmental and traffic controls.

Temporary construction support sites would be required as part of the project (refer to Figure 1-3), and would include tunnelling and tunnel support sites, civil surface sites, cofferdams, mooring sites, wharf and berthing facilities, laydown areas, parking and workforce amenities. Construction support sites would include:

- Cammeray Golf Course (BL1)
- Flat Rock Drive (BL2)
- Punch Street (BL3)
- Dickson Avenue (BL4)
- Barton Road (BL5)
- Gore Hill Freeway median (BL6)
- Middle Harbour south cofferdam (BL7)
- Middle Harbour north cofferdam (BL8)
- Spit West Reserve (BL9)
- Balgowlah Golf Course (BL10)
- Kitchener Street (BL11)
- Wakehurst Parkway south (BL12)
- Wakehurst Parkway east (BL13)
- Wakehurst Parkway north (BL14).

A detailed description of construction works for the project is provided in Chapter 6 (Construction work) of the environmental impact statement.

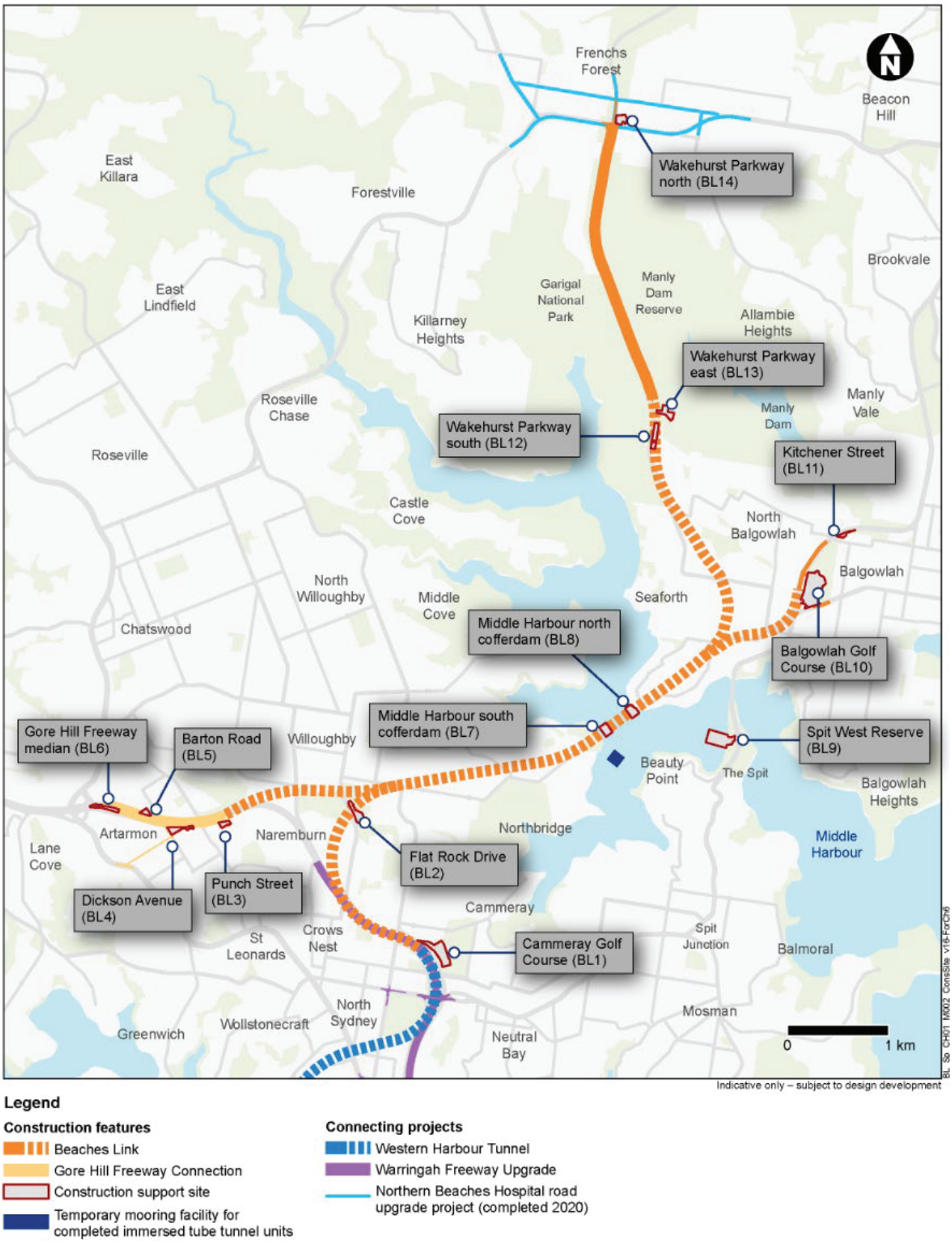

Figure 1-3 Overview of the construction support sites

1.6 Purpose of this report

This report has been prepared to support the environmental impact statement for the project and to address the environmental assessment requirements of the Secretary of the NSW Department of Planning, Industry and Environment.

The purpose of this report is to:

- Identify the trees within the project area (Figure 1-4) that are likely to be affected by the proposed works
- Assess the current overall condition of the subject trees
- Evaluate the significance of the subject trees
- Assess potential impacts to the subject trees
- Identify tree management measures that could assist with tree retention.

The study area is defined as the construction footprint plus a buffer of 15 metres.

The method and findings of this report are based on the *Australian Standard AS 4970-2009 Protection of trees on development sites*, the site inspections (subject to access availability) and analysis of aerial imagery. The identification of trees that would be subject to direct impact, potential impact or be retained was determined in consideration of the project design, layout of construction support sites and construction methodology. This report provides a preliminary assessment of trees that could be retained subject to further design development and construction planning.

The project has been divided into five 'assessment areas' for ease of description (Figure 1-4).

1.7 Secretary's environmental assessment requirements

The Secretary's environmental assessment requirements relating to this arboricultural assessment and where these requirements are addressed in this report are outlined in Table 1-1.

Table 1-1: Secretary's environmental assessment requirements – arboricultural impact assessment

Secretary's environmental assessment requirements	Where addressed
Place Making and Design (Key Issue 7)	
3. The proponent must assess the visual and landscape impact of the proposal, including ancillary infrastructure on: *(c) landscaping, green spaces and existing trees and tree canopy, including an assessment of likely magnitude of impacts to trees and need for removal to be undertaken by an arborist, including the provision of measures to minimise and offset impacts;*	Section 3 summarises results of the impact assessment and Section 4 identifies measures to minimise and offset impacts by replacement planting.

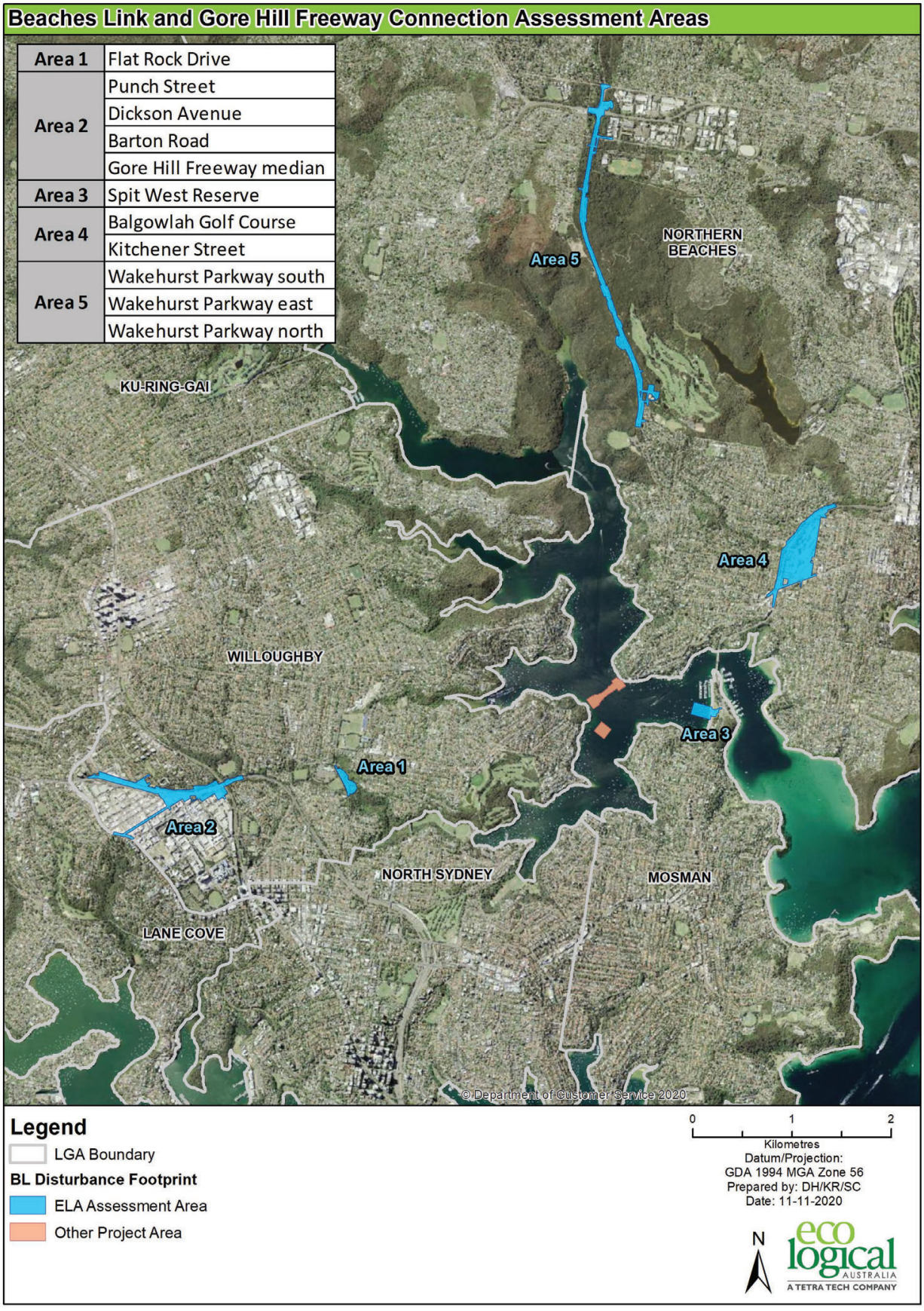

Figure 1-4: Beaches Link and Gore Hill Freeway Connection arboricultural assessment areas

2 Method

2.1 Visual tree assessment

The subject trees were assessed in accordance with a stage one visual tree assessment (VTA) as formulated by Mattheck and Breloer (1994), and practices consistent with modern arboriculture. The field assessment was carried out by experienced Australian Qualification Framework (AQF) level five consulting arborists (Elizabeth Hannon and David Bidwell).

The following limitations apply to this methodology:

- Trees were defined as those being at least four metres high with a diameter at breast height (DBH) of over 600 millimetres. This is consistent with the definition of a tree in Willoughby Council's *Tree Preservation Order* (TPO). Willoughby's TPO has the most conservative definition of a tree from a review of all TPOs in the study area
- Trees were inspected from ground level, without the use of any invasive or diagnostic tools or testing
- Trees within adjacent properties or restricted areas were not subject to a complete visual inspection. Where possible, trees in restricted areas were assessed from a distance
- No aerial inspections or root mapping were carried out
- Tree heights, canopy spread and diameter at breast height (DBH) were estimated, unless otherwise stated
- Tree identification was based on broad taxonomical features present and visible from ground level at the time of inspection.

2.2 Tree retention value

A tree retention assessment has been carried out in accordance with the Institute of Australian Consulting Arboriculturists (IACA) *Significance of a Tree, Assessment Rating System (STARS)* (IACA, 2010). The system uses a scale of high, medium and low significance in the landscape based on a combination of at least three environmental, cultural, physical and social values. Once the tree significance has been defined, this is combined with the useful life expectancy (ULE) (as determined by at least three criteria) to determine the retention value of the tree or group of trees. Details are provided in Annexure A.

Tree Retention Value = Significance + Useful Life Expectancy

Resultant categories of tree retention values are as follows:

- **Low retention value**: These trees are not considered important for retention, nor require special works or design modification to be implemented for their retention
- **Medium retention value**: These trees are moderately important for retention. Their removal should only be considered if adversely affecting the proposed building/works and all other alternatives have been considered and exhausted
- **High retention value**: These trees are considered important for retention and should be retained and protected. Design modification or relocation of infrastructure should be considered to accommodate the setbacks as prescribed by *Australian Standard AS4970-2009 Protection of trees on development sites*.

2.3 Assessing impacts to tree root systems

Impacts to tree root systems may occur from excavation, compacted fill, machine trenching, ground penetration or soil disturbance. Figure 2-1 provides a diagrammatic representation of the tree protection zone (TPZ) and structural root zone (SRZ).

2.3.1 Tree protection zone (TPZ)

The TPZ is the optimal combination of crown and root area (as defined by *Australian Standard AS4970-2009 Protection of trees on development sites*) that would require protection during the construction process so that the tree can remain viable. The TPZ is an area that is isolated from the work zone to ensure no disturbance or encroachment occurs into this zone. Tree sensitive construction measures must be implemented if works are to proceed within the TPZ.

The TPZ was calculated using the following formula:

TPZ = Diameter at Breast Height (DBH) x 12, where DBH is in metres.

A minimum TPZ of two metres was applied for trees that have a DBH less than 1.5 metres. An upper TPZ limit of 15 metres was applied.

2.3.2 Structural root zone (SRZ)

The SRZ is the area of the root system (as defined by *Australian Standard AS4970-2009 Protection of trees on development sites*) used for stability, mechanical support and anchorage of the tree. Severance of structural roots (diameter greater than 50 millimetres) within the SRZ may lead to the destabilisation and/or decline of the tree.

The indicative SRZ radius was determined using the following formula:

SRZ radius = $((D \times 50)^{0.42}) \times 0.64$, where DBH is in metres.

A SRZ of 1.5 metres was applied for trees that have a DBH less than 0.15 metres.

2.3.3 Trees in group

Trees were recorded as a ‘group’ if they had similar characteristics such as size, species and condition. The SRZ and TPZ for trees in group were calculated using the average DBH determined during field assessment. The number in a group was estimated if it was not possible to count the individual trees.

2.3.4 Calculating impacts

Impacts to trees were determined by spatial data analysis using a geographic information system. A TPZ buffer was generated for each tree point collected, where the radius of the buffer was equal to the calculated TPZ. The area of the TPZ buffer that intersects the disturbance footprint is the ‘impact zone’. The per cent of impact was then calculated using the following formula (illustrated in Figure 2-2):

TPZ impact (per cent) = (Impact Zone Area / TPZ buffer) * 100

The maximum potential TPZ was applied to determine the level of impact where trees were recorded as a group and situated within the buffer area.

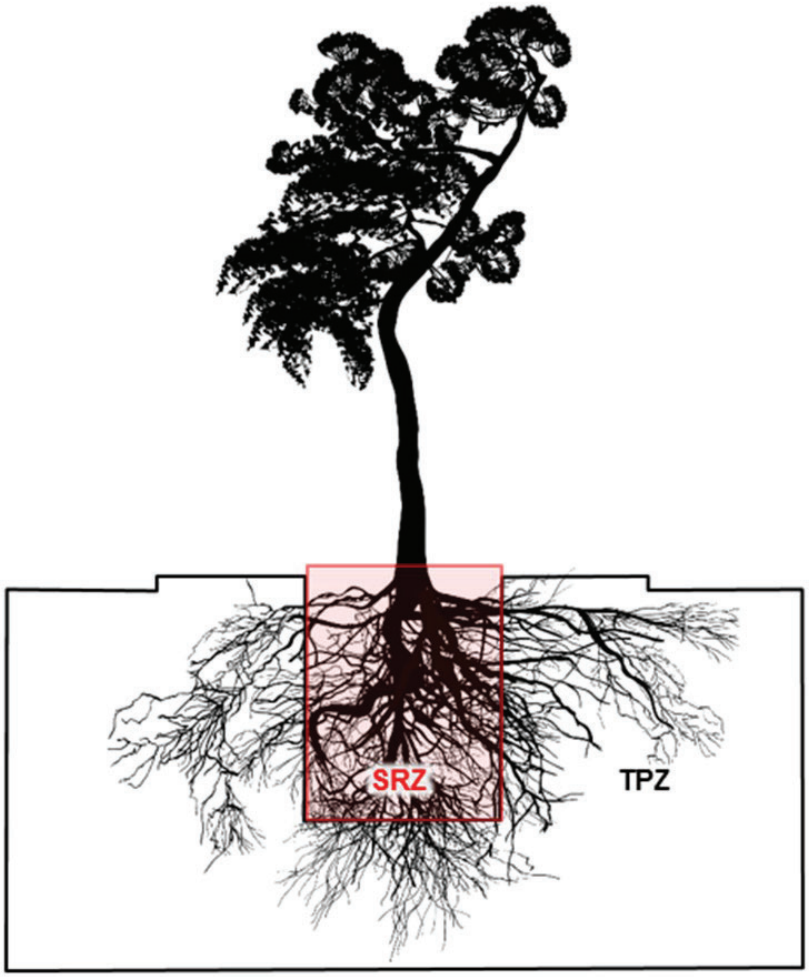

Figure 2-1: Indicative Tree Protection Zone and Structural Root Zone

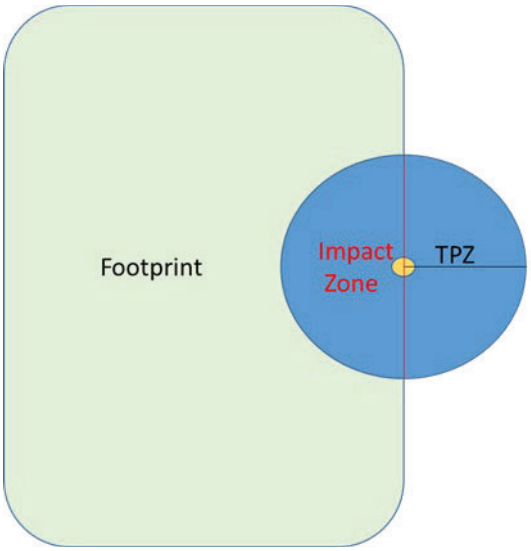

Figure 2-2: Calculating impacts

2.4 Categories of impacts

2.4.1 Trees to be retained

'Trees to be retained' were assessed as having minor encroachment (less than ten per cent) into the TPZ and no impact to the SRZ. Detailed root investigations are not required for these trees.

2.4.2 Potential impact

Trees categorised as having a 'potential impact' include:

- Trees which may not be impacted following completion of further design development
- Those assessed as having 10 to 20 per cent encroachment to the TPZ or inside the SRZ
- Trees identified by Transport for NSW as having an 'opportunity for retention'
- Trees that may be subject to canopy pruning.

The following design changes would be considered to retain these trees where practicable, considering the retention value of the tree, and the complexity and cost of the change:

- Road design
    - Minor adjustment of roadway batter line designs to avoid impact
    - Relocate services/pathways outside of TPZs
- Utilities design
    - Design utilities to be installed at a minimum depth of 1200 millimetres below ground to avoid impact to the root zones of trees
- Pedestrian and shared user paths
    - Design to be installed on or above grade, minimising/eliminating excavation within tree protection zones
    - Design using porous materials (eco-paving, porous asphalt, decomposed granite) to allow water and oxygen to reach the root zone
    - Design using tree sensitive techniques (pier and beam, suspended slabs).

Requirements for canopy pruning (refer to Section 2.5) should be considered during further design development to minimise impacts to trees where possible.

2.4.3 Direct impact

Trees categorised as 'direct impact' were assessed as having more than 20 per cent encroachment to the TPZ or inside the SRZ, and no opportunity for retention under the current project. This impact would be confirmed following completion of the project's further design development phase (post environmental impact assessment phase).

2.5 Trees that would require further investigation

2.5.1 Inaccessible trees

The maps appended to this report indicate areas (e.g. private property, along freeway) that were inaccessible or visible only from a distance. These areas would require further assessment when access becomes available.

2.5.2 Trees assessed as potential impact

Trees that were identified as subject to potential impact would require further detailed assessment prior to completion of further design development of the project (root and canopy investigation) via non-

destructive methods to determine the suitability for retention. This should be performed under supervision of the project arborist. If encroachment cannot be restricted to outside of the SRZ, these trees cannot be successfully retained and their loss should be offset by replacement planting. Further arboricultural investigation could involve pruning assessment and mitigation (see below).

2.5.3 Canopy pruning

While detailed assessment has not yet been carried out regarding the impacts of pruning for this project, the removal of live branches and foliage would impact a tree. These impacts can be summarised within the following categories:

- Reducing photosynthesis: Removing live branches and foliage would reduce the tree's ability to photosynthesis and produce energy. The energy produced by the leaves is the source of chemical energy for all living cells in the entire plant, and therefore, is essential for the normal functioning and survival of the tree
- Wounding: Pruning creates wounds which may act as entry points for pests, disease and decay causing pathogens. Poor pruning techniques and practices can increase the likelihood of disease and decay pathogens entering the tree
- Epicormic shoots: Epicormic shoots originate from latent or adventitious buds located in the cambium and concealed by the bark. Epicormic shoots are weakly attached to the parent branch or stem and pruning these may increase the overall risk associated with the tree
- Change in dynamics: Trees are self-optimising organisms and grow according to the forces (wind) and conditions that act upon them. Wind load stresses are absorbed by branches and dissipated throughout the tree by the swaying motion (mass damping). Removing large branches may affect the trees ability to reduce and suppress those forces.

A pruning assessment under the *Australian Standard AS 4373-2007 Pruning of amenity trees* would be required for trees categorised as having a 'potential impact'. The basis for the assessment correlates to the amount of live foliage that is likely to be removed:

- Minor pruning works: The removal of less than ten per cent live canopy volume would be considered acceptable providing the final cut location is to a branch collar and does not exceed 150 millimetres in diameter.
- Major pruning works: The removal of more than ten per cent live canopy volume (while feasible) would require approval by the project arborist.

3 Results of impact assessment

3.1 Detailed results

Detailed results of the arboricultural impact assessment are presented in map and table format in Annexure B to K**.** The maps show locations of trees assessed within the study area and their potential impacts. The tables provide details of tree data collected, including the numbers, species type, dimensions, health, retention value and potential impacts.

3.2 Summary of results

A summary of the results is provided in Table 3-1. As indicated in Section 2.1, these results do not include all trees within the construction footprint and buffer area due to some trees being inaccessible during field investigations. Further assessment would be needed for a more accurate determination of the trees to be impacted. The estimate is based on current knowledge for inaccessible areas.

Table 3-1: Summary of arboricultural results

Impact to TPZ	Number of trees in each assessment area					
	1	2	3	4	5	Total
Trees to be retained	127	119	33	750	770	1799
Potential impact	108	98	1	158	135	500
Direct impact	216	390	3	421	1979	3009
Total	**451**	**607**	**37**	**1329**	**2884**	**5308**

3.3 Retention value of potential and direct impact trees

Further information regarding the retention values of trees to be subject to potential or direct impact is given below. Table 3-2 summarises results for the number of trees subject to potential impact from the proposed works. Further investigation would be needed following completion of further design development to determine if these trees can be retained or would be removed.

Table 3-2: Summary of the number of trees subject to a potential impact

Retention value	Number of trees to be subject to potential impact in each assessment area					
	1	2	3	4	5	Total
Low	16	39	1	51	20	127
Medium	67	35		91	91	284
High	25	24		16	24	89
Total	**108**	**98**	**1**	**158**	**135**	**500**

Table 3-3 summarises results for the number of trees subject to a direct impact from the proposed works. These trees would be removed under the current proposal. Finalisation of these numbers would be subject to completion of the project's further design development (post environmental impact assessment phase).

Table 3-3: Summary of the number of trees to be subject to direct impact

Retention value	Number of trees to be subject to direct impact in each assessment area					
	1	2	3	4	5	Total
Low	89	225	3	119	930	1366
Medium	93	151		267	997	1508
High	34	14		35	52	135
Total	**216**	**390**	**3**	**421**	**1979**	**3009**

4 Tree management

4.1 Tree sensitive construction

Tree sensitive construction techniques may be used for minor works provided no structural roots are likely to be impacted and the project arborist can demonstrate that the tree remains viable. Mitigation measures to be considered during construction include:

- The area lost to encroachment should be compensated for elsewhere, contiguous with the TPZ
- The project arborist should be consulted for any works within the TPZ
- Tree protection must be installed.

Tree sensitive techniques can be used to install services within the TPZ. These include horizontal directional drilling, boring, and non-destructive excavation methods such as hydro-vacuum excavation (sucker truck), air spade and manual excavation. Removal of existing hard surfaces should be carried out manually to avoid root damage.

4.2 Hold points, inspection and certification

The approved tree protection plan must be available on site prior to the commencement of works, and throughout the entirety of the project. To ensure the tree protection plan is implemented, hold points have been specified in the schedule of works (Table 4-1). It is the responsibility of the construction contractor to complete each of the tasks. Once each stage is reached, the work would be inspected and certified by the project arborist and the next stage may commence. Alterations to this schedule may be required, however, this shall be through consultation with the project arborist.

Table 4-1: Tree management schedule

Pre-construction	Prior to site establishment indicate clearly (with spray paint on trunks) trees marked for removal only
	Tree protection (for trees that would be retained) shall be installed prior to site establishment, this would include mulching of areas within the TPZ
During construction	Scheduled inspection of trees by the project arborist should be carried out monthly during the construction period
	Inspection of trees by project arborist after all major construction has ceased, following the removal of tree protection measures
Post-construction	Final inspection of trees by project arborist

4.3 Protection for trees to be retained

The following tree protection measures would be required for any trees that fall within 15 metres of the construction footprint and are to be retained:

- Tree protection fencing must be established around the perimeter of the TPZ. If the protective fencing requires temporary removal, trunk, branch and ground protection must be installed and must comply with *Australian Standard AS 4970-2009 Protection of trees on development sites*.

Existing fencing and site hoarding may be used as tree protection fencing providing the tree(s) remain isolated from the construction zone

- If temporary access for machinery is required within the TPZ, ground protection measures would be installed. The purpose of ground protection is to prevent root damage and soil compaction within the TPZ. Ground protection may include a permeable membrane such as geotextile fabric beneath a layer of mulch, crushed rock or rumble boards
- Any additional construction activities within the TPZ of the subject trees must be assessed and approved by the project arborist,and must comply with *Australian Standard AS 4970-2009 Protection of trees on development sites*.

Tree protection guidelines described below must be implemented during the construction period if no tree-specific recommendations are detailed. Alternative protection measures may be developed in consultation with the project arborist.

4.3.1 Tree protection fencing

The TPZ is a restricted area delineated by temporary fencing, usually with a minimum height of 1.8 metres, or a permanent structure such as an existing wall or fence (see Figure 4-1).

Trees that are to be retained must have protective fencing erected around the TPZ to protect and isolate it from the construction works. Fencing must comply with the *Australian Standard AS 4687-2007 Temporary fencing and hoardings*.

Tree protection fencing must be installed prior to site establishment and remain intact until completion of works. Once erected, protective fencing must not be removed or altered without the approval of the project arborist.

If the protective fencing requires temporary removal, trunk, branch and ground protection must be installed and must comply with *Australian Standard AS 4970-2009 Protection of trees on development sites*.

Tree protection fencing shall be:

- Enclosed to the full extent of the TPZ
- Cyclone chain wire link fence or similar, with lockable access gates
- Certified and inspected by the project arborist
- Installed prior to the commencement of works in a given area
- Prominently signposted with 300 millimetres x 450 millimetres boards stating “NO ACCESS - TREE PROTECTION ZONE”.

4.3.2 Crown protection

Tree crowns/canopies may be injured or damaged by machinery such as excavators, drilling rigs, trucks, cranes, plant and vehicles. Where crown protection is required, it would usually be located at least one metre outside the perimeter of the crown.

Crown protection may include the installation of a physical barrier, pruning selected branches to establish clearance, or the tying/bracing of branches.

4.3.3 Trunk protection

Where provision of tree protection fencing is impractical or must be temporarily removed, trunk protection shall be installed for the nominated trees to avoid accidental mechanical damage.

The removal of bark or branches allows the potential ingress of micro-organisms which may cause decay. Furthermore, the removal of bark restricts the trees' ability to distribute water, mineral ions (solutes), and glucose.

Trunk protection shall consist of a layer of either carpet underfelt, geotextile fabric or similar wrapped around the trunk, followed by 1.8 metre lengths of softwood timbers aligned vertically and spaced evenly around the trunk (with around 50 millimetre gap between the timbers) (Figure 4-2).

The timbers must be secured using galvanised hoop strap (aluminium strapping). The timbers shall be wrapped around the trunk but not fixed to the tree, as this would cause injury/damage to the tree.

4.3.4 Ground protection

Tree roots are essential for the uptake/absorption of water, oxygen and mineral ions (solutes). It is essential to prevent the disturbance of the soil beneath the dripline and within the TPZ of trees that are to be retained. Soil compaction within the TPZ would adversely affect the ability of roots to function correctly.

If temporary access for machinery is required within the TPZ ground protection measures would be required. The purpose of ground protection is to prevent root damage and soil compaction within the TPZ. Ground protection may include a permeable membrane such as geotextile fabric beneath a layer of mulch, crushed rock or rumble boards.

If the grade is to be raised within the TPZ, the material should be coarser or more porous than the underlying material.

4.3.5 Root protection and root pruning

If incursions/excavation within the TPZ are unavoidable, exploratory excavation (under the supervision of the project arborist) using non-destructive methods may be considered to evaluate the extent of the root system affected, and determine whether the tree can remain viable.

If the project arborist identifies conflicting roots that requiring pruning, they must be pruned with a sharp implement such as secateurs, pruners, handsaws or a chainsaw back to undamaged tissue. The final cut must be a clean cut.

4.3.6 Underground utilities

All underground utilities should be routed outside of the TPZ. If underground utilities need to be installed within the TPZ, they should be installed using horizontal directional drilling or trenched by hydro-vacuum excavation (sucker-truck). The horizontal drilling/boring must be at minimum depth of 600 millimetres below grade. Trenching for services is to be regarded as 'excavation'.

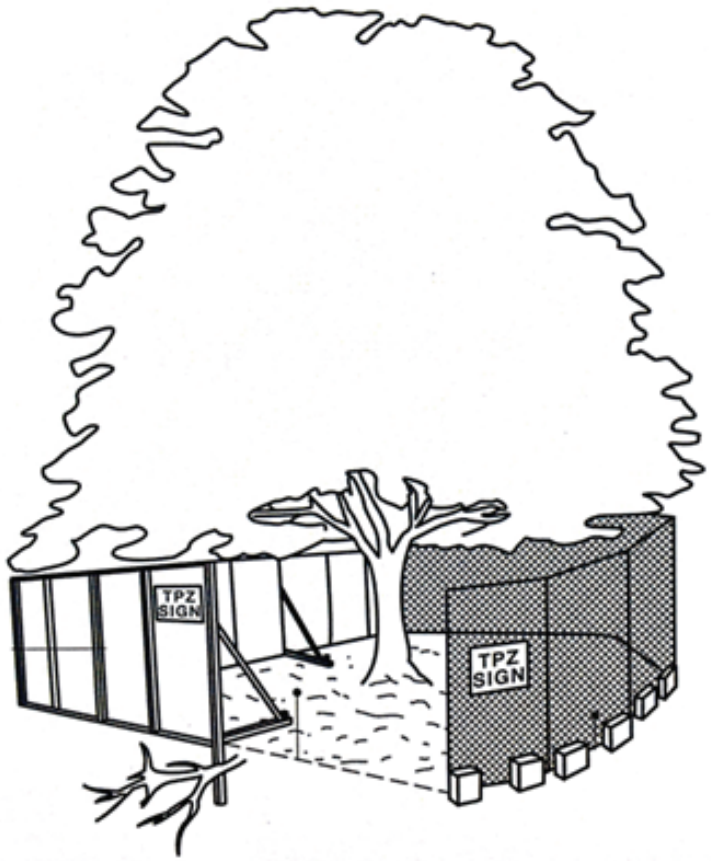

Figure 4-1: Tree protection fencing

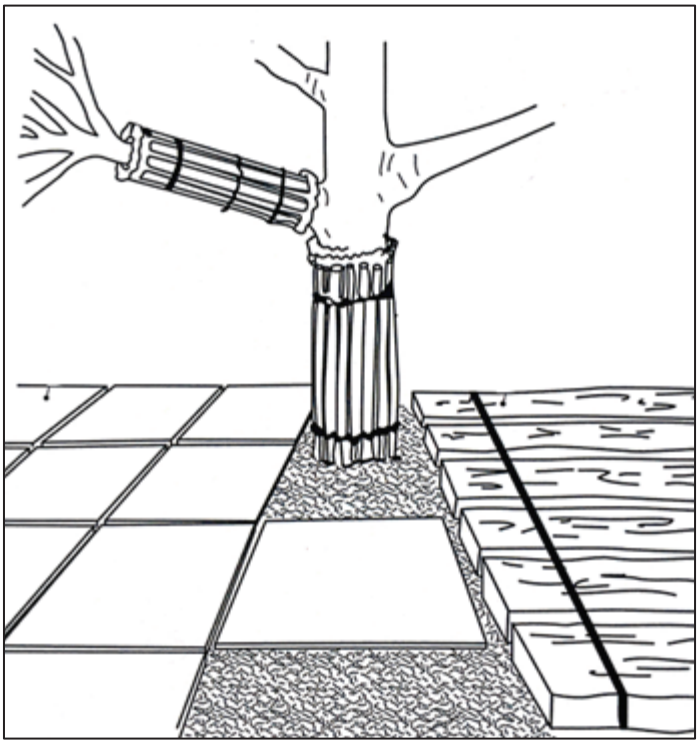

Figure 4-2: Trunk protection

4.4 Tree work

Tree work includes pruning and removal of trees:

- All tree work is to be carried out by an arborist with a minimum AQF level 3 qualification in Arboriculture
- All tree work must be in accordance with *Australian Standard AS 4373-2007 Pruning of amenity trees* and the *Code of Practice for the Amenity Tree Industry* (WorkCover NSW, 1998)
- Permission must be granted from the relevant consent authority, prior to removing or pruning of any of the subject trees.

4.5 Canopy pruning

There are several mitigation measures that could be implemented to reduce the impacts of canopy pruning. These measures are outlined in Table 4-2.

Table 4-2: Tree pruning mitigation measures

Canopy volume	Mitigation measures
Minor pruning (<10%)	• Removing multiple smaller branches, rather than large singular branches/portions of the tree would decrease the impacts of pruning and the sizes of the pruning wounds • All pruning work is to be carried out by an arborist with a minimum AQF level 3 qualification in Arboriculture in accordance with *Australian Standard AS 4373-2007 Pruning of amenity trees*.
Major pruning (>10%)	• A detailed assessment for major pruning works is to be carried out by an AQF level 5 arborist (project arborist) • Removing multiple smaller branches, rather than large singular branches/portions of the tree would decrease the impacts of pruning and the sizes of the pruning wounds • Implement supplementary water/nutrient program to improve the overall health of the tree and mitigate pruning impacts • Carry out staged pruning works to minimise the amount of live canopy removed at any one time, allowing the tree to recover between each stage (e.g. 30% total live canopy = three stages, two months apart, at 10% per stage).

4.6 Trees to be removed

4.6.1 Reuse

All native trees to be removed should be mulched and chipped for reuse on site in landscaping works.

4.6.2 Seed collection

Seasonal seed collection should be carried out where appropriate for reuse in landscaping and hydromulching.

4.6.3 Replacement planting

This assessment identified trees (including amenity trees and trees within native vegetation communities (including native revegetation) assessed in Appendix S (Technical working paper: Biodiversity development assessment report)) that would be removed due to the project subject to further design development and construction planning. To minimise the impact of tree removal, where amenity trees are removed as a result of the project, they would be replaced at a ratio equal to or greater than 1:1. The replacement trees would consist of local native provenance species from the vegetation community that once occurred in the locality (rather than plant exotic or non-local native trees) where available and subject to the urban design and landscape plan for the project. Where replacement trees cannot be accommodated within the operational footprint of the project, consultation would be carried out with the adjacent land owner and relevant local council (where appropriate) to determine if they can accommodate the replacement tree. Replacement planting should consider the Transport for NSW Vegetation Offset Guide (Transport for NSW, 2019).

Native vegetation communities (including native revegetation) within the disturbance footprint impacted by the project would be offset according to provisions within the NSW Biodiversity Offset Scheme, established under Part 6 of the *Biodiversity Conservation Act 2016* (refer to Appendix S (Technical working paper: Biodiversity development assessment report)). Therefore, replacement planting would not be required for trees within these communities.

As such, the residual number of trees requiring replacement planting is reduced. An estimate of the net number of trees requiring replacement planting are as follows:

- Of the 3009 directly impacted trees, 1065 were estimated to require replacement plantings, of which 76 are exempt species
- Of the 500 potentially impacted trees, 427 were estimated to require replacement plantings, of which 11 are exempt species.

Table 4-3 summarises the estimated number of direct impact trees requiring offset under the NSW Biodiversity Offset Scheme (refer to Appendix S (Technical working paper: Biodiversity development assessment report)), and residual number of trees requiring replacement plantings, including the number of trees identified as exempt species. Table 4-4 summarises the estimated number of potential impact trees requiring offset under the NSW Biodiversity Offset Scheme and residual number of trees requiring replacement plantings, including the number of trees identified as exempt species. Further information regarding requirements for individual trees is provided in the summary tree assessment tables for each assessment area included in the annexures. During further design development and construction planning, opportunities for the retention of trees would be further explored and confirmed.

Table 4-3: Summary of the estimated number of direct impact trees requiring offset under the NSW Biodiversity Offset Scheme or replacement planting

Assessment Area	Offset via NSW Biodiversity Offset Scheme	Replacement planting required	
		Exempt species	Non-exempt species
Area 1	206	0	10
Area 2	31	19	340
Area 3	0	0	3
Area 4	69	55	297
Area 5	1638	2	339
Total	**1944**	**76**	**989**

Table 4-4: Summary of the estimated number of potential impact trees requiring offset under the NSW Biodiversity Offset Scheme or replacement planting

Assessment Area	Offset via NSW Biodiversity Offset Scheme	Replacement planting required	
		Exempt species	Non-exempt species
Area 1	51	0	57
Area 2	3	1	94
Area 3	0	0	1
Area 4	17	10	131
Area 5	2	0	133
Total	**73**	**11**	**416**

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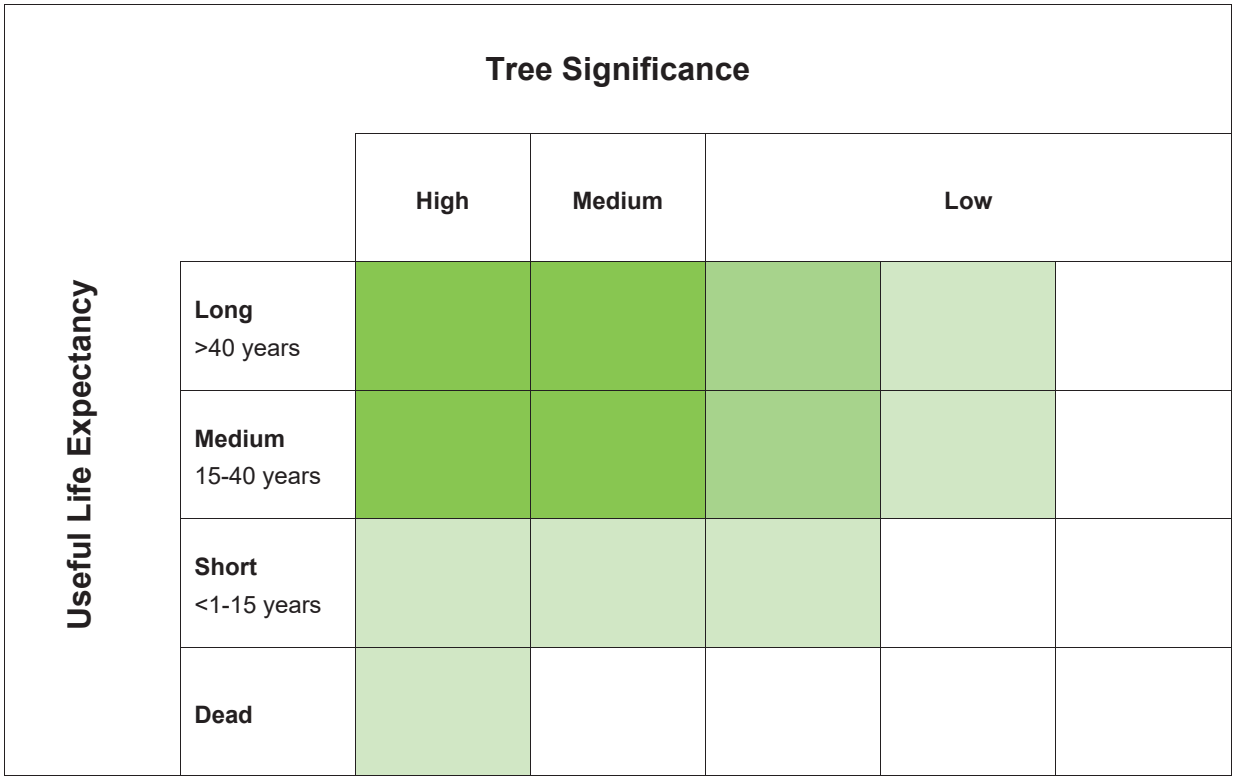
Annexure A STARS assessment matrix

Tree Significance - Assessment Criteria - STARS© (IACA, 2010)		
Low	**Medium**	**High**
The tree is in fair-poor condition and good or low vigour. The tree has form atypical of the species. The tree is not visible or is partly visible from the surrounding properties or obstructed by other vegetation or buildings. The tree provides a minor contribution or has a negative impact on the visual character and amenity of the local area. The tree is a young specimen which may or may not have reached dimensions to be protected by local Tree Preservation Orders or similar protection mechanisms and can easily be replaced with a suitable specimen. The tree's growth is severely restricted by above or below ground influences, unlikely to reach dimensions typical for the taxa in situ – tree is inappropriate to the site conditions. The tree is listed as exempt under the provisions of the local Council Tree Preservation Order or similar protection mechanisms. The tree has a wound or defect that has the potential to become structurally unsound. The tree is an environmental pest species due to its invasiveness or poisonous/allergenic properties. The tree is a declared noxious weed by legislation.	The tree is in fair-good condition. The tree has form typical or atypical of the species. The tree is a planted locally indigenous or a common species with its taxa commonly planted in the local area. The tree is visible from surrounding properties, although not visually prominent as partially obstructed by other vegetation or buildings when viewed from the street. The tree provides a fair contribution to the visual character and amenity of the local area. The tree's growth is moderately restricted by above or below ground influences, reducing its ability to reach dimensions typical for the taxa in situ.	The tree is in good condition and good vigour. The tree has a form typical for the species. The tree is a remnant or is a planted locally indigenous specimen and/or is rare or uncommon in the local area or of botanical interest or of substantial age. The tree is listed as a heritage item, threatened species or part of an endangered ecological community or listed on council's significant tree register. The tree is visually prominent and visible from a considerable distance when viewed from most directions within the landscape due to its size and scale and makes a positive contribution to the local amenity. The tree supports social and cultural sentiments or spiritual associations, reflected by the broader population or community group or has commemorative values. The tree's growth is unrestricted by above and below ground influences, supporting its ability to reach dimensions typical for the taxa in situ – tree is appropriate to the site conditions.



Legend for Matrix Assessment	
	Priority for retention (High): These trees are considered important for retention and should be retained and protected. Design modification or re-location of building/s should be considered to accommodate the setbacks as prescribed by the Australian Standard *AS4970-2009 Protection of trees on development sites*. Tree sensitive construction measures must be implemented if works are to proceed within the Tree
	Consider for retention (Medium): These trees may be retained and protected. These are considered less critical; however their retention should remain priority with the removal considered only if adversely affecting the proposed building/works and all other alternatives have been considered and exhausted.
	Consider for removal (Low): These trees are not considered important for retention, nor require special works or design modification to be implemented for their retention.
	Priority for removal (Low): These trees are considered hazardous, or in irreversible decline, or weeds and should be removed irrespective of development.

Annexure B Maps of arboricultural assessment – Assessment Area 1

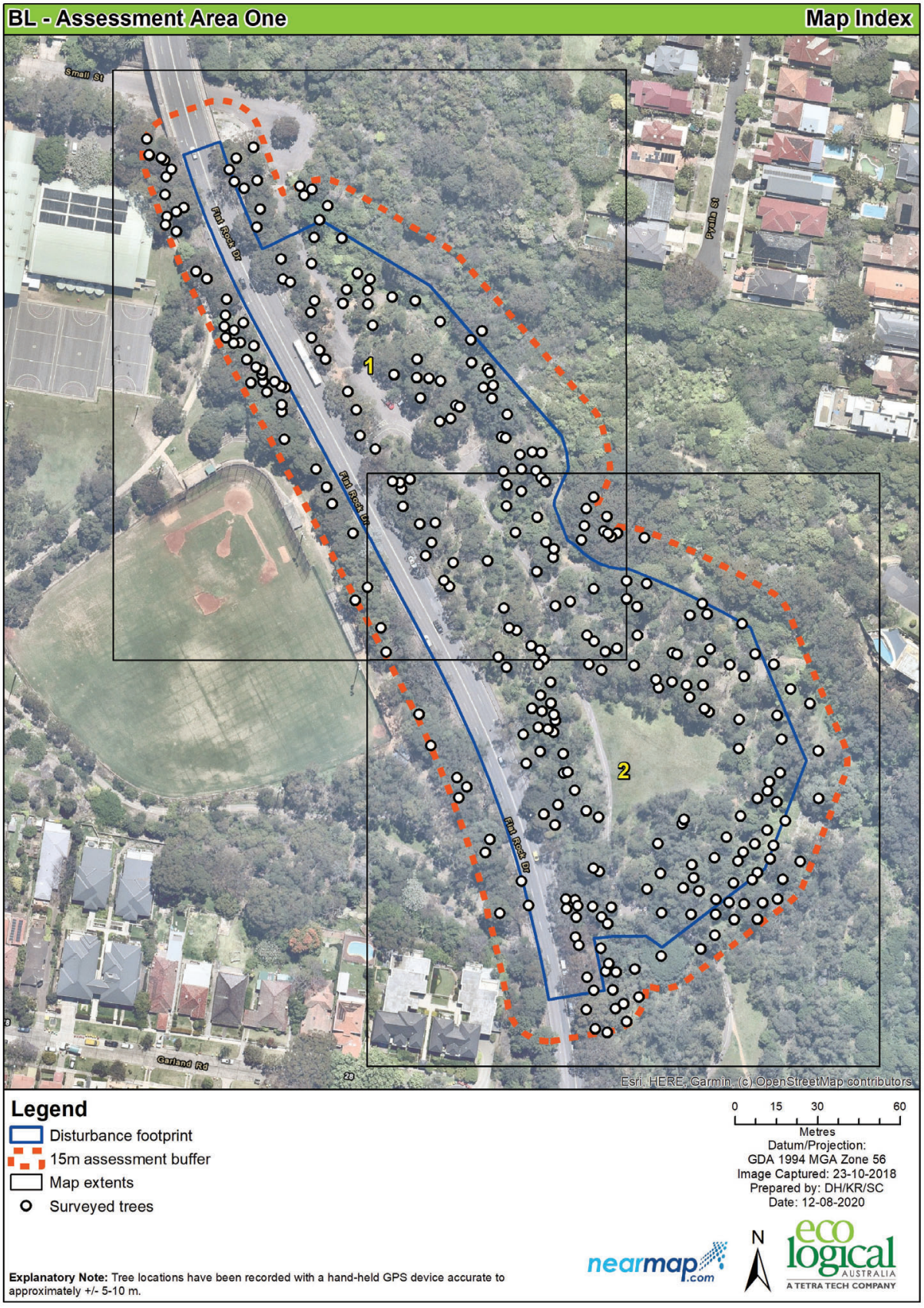


Figure A-1: Results for Assessment Area 1 - Overview

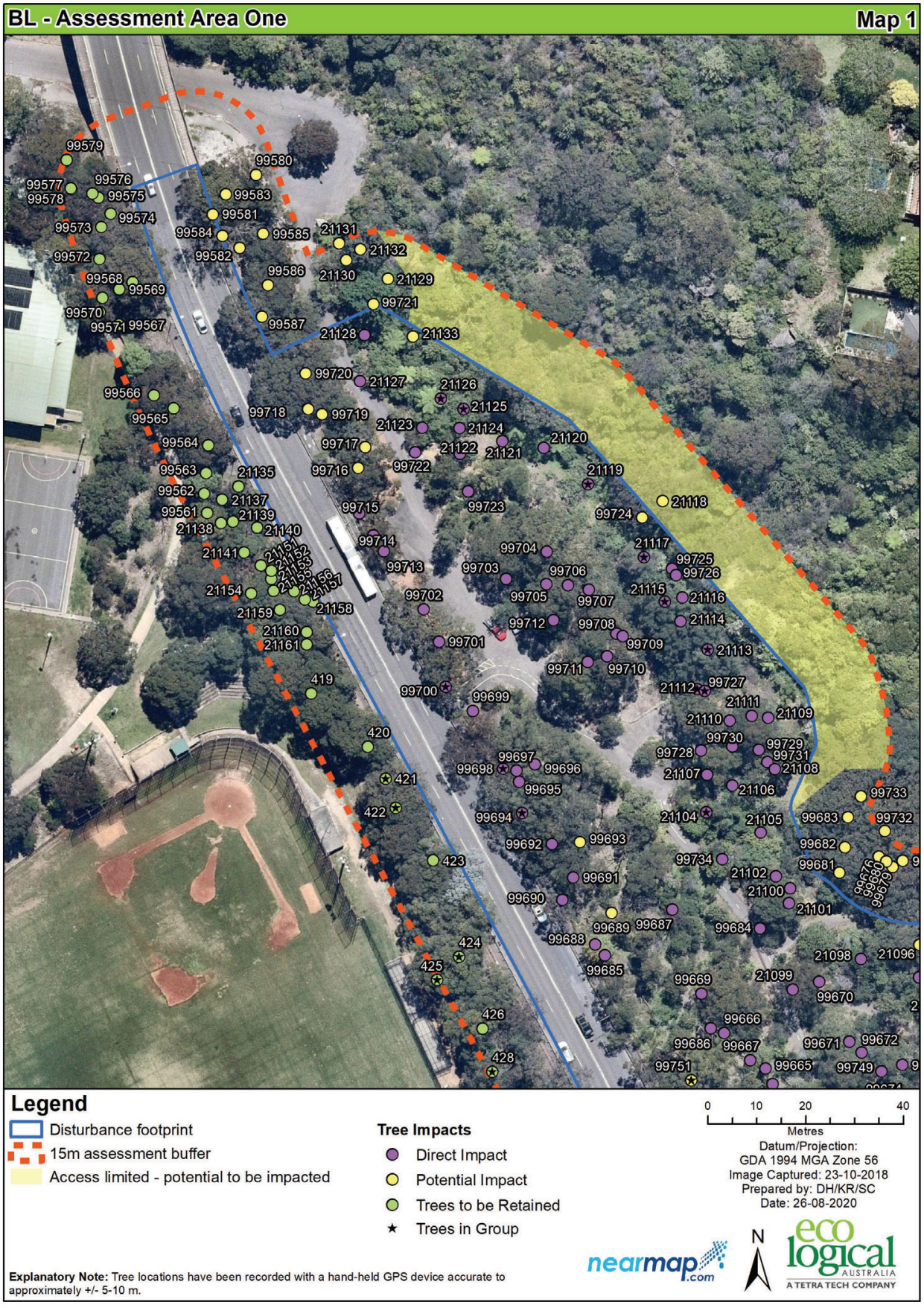


Figure A-2: Results for Assessment Area 1 – Map 1

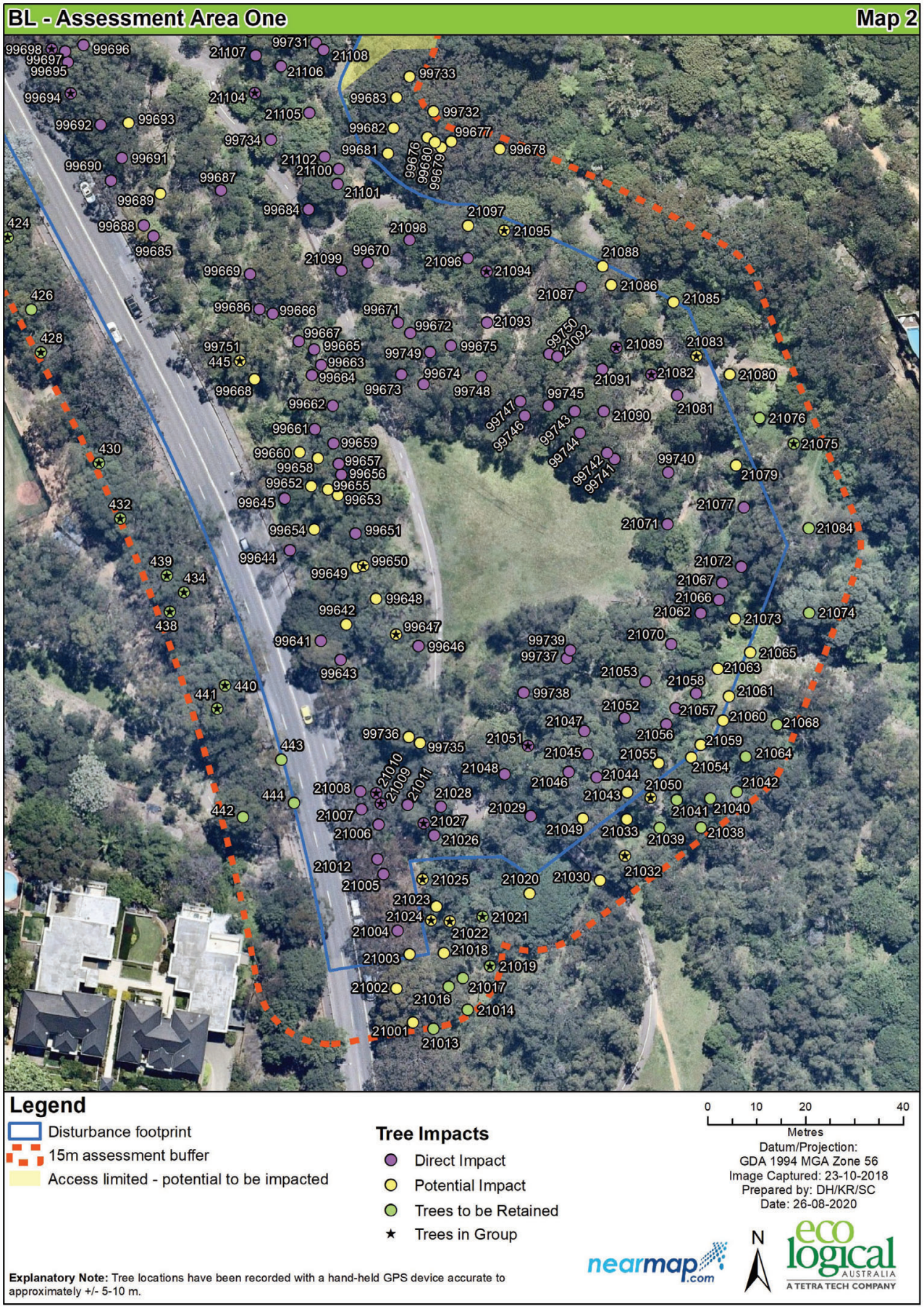


Figure A-3: Results for Assessment Area 1 – Map 2

Annexure C Table of results – Assessment Area 1

Table A-1: Table of results – Assessment Area 1

No.	Botanical Name	Trees in Group	Height (m)	Spread (m)	Health	Structure	ULE	Tree Significance	Retention Value	DBH (mm)	TPZ (m)	SRZ (m)	Impact	Offset/replacement	Area	Map	Easting	Northing
419	*Eucalyptus microcorys*	1	10	4	Good	Fair	Medium	Medium	Medium	450	5.4	2.4	Trees to be Retained		1	1	333838	6257192
420	*Corymbia maculata*	1	8	4	Fair	Fair	Short	Low	Low	400	4.8	2.3	Trees to be Retained		1	1	333850	6257181
421	*Eucalyptus paniculata*	5	6	3	Good	Fair	Medium	Medium	Medium	400	4.8	2.3	Trees to be Retained		1	1	333853	6257175
422	*Syncarpia glomulifera*	3	5	3	Fair	Fair	Medium	Medium	Medium	350	4.2	2.1	Trees to be Retained		1	1	333855	6257169
423	*Eucalyptus paniculata*	1	6	4	Fair	Poor	Short	Low	Low	350	4.2	2.1	Trees to be Retained		1	1	333863	6257158
424	*Eucalyptus paniculata*	2	7	3	Good	Fair	Medium	Medium	Medium	550	6.6	2.6	Trees to be Retained		1	1	333868	6257138
425	*Eucalyptus paniculata*	4	9	3	Fair	Fair	Medium	Medium	Medium	350	4.2	2.1	Trees to be Retained		1	1	333864	6257134
426	*Eucalyptus paniculata*	1	8	3	Good	Fair	Medium	Medium	Medium	400	4.8	2.3	Trees to be Retained		1	1	333873	6257124
428	*Syncarpia glomulifera*	6	5	3	Fair	Fair	Medium	Medium	Medium	400	4.8	2.3	Trees to be Retained		1	1	333875	6257115
21098	*Glochidion ferdinandi*	1	11	4	Fair	Fair	Medium (15-40 years)	Medium	Medium	400	4.8	2.3	Direct Impact	Biodiversity Offset Scheme	1	1	333950	6257138
21099	*Eucalyptus saligna*	1	7	6	Good	Good	Long (>40 years)	High	High	650	7.8	2.8	Direct Impact	Biodiversity Offset Scheme	1	1	333936	6257132
21100	*Eucalyptus pilularis*	1	9	3	Good	Good	Long (>40 years)	High	High	450	5.4	2.4	Direct Impact	Biodiversity Offset Scheme	1	1	333936	6257152
21101	*Syncarpia glomulifera*	1	6	4	Fair	Good	Medium (15-40 years)	Medium	Medium	230	2.8	1.8	Direct Impact	Biodiversity Offset Scheme	1	1	333936	6257149
21102	*Pittosporum undulatum*	1	10	5	Fair	Good	Medium (15-40 years)	Medium	Medium	350	4.2	2.1	Direct Impact	Biodiversity Offset Scheme	1	1	333933	6257155
21104	*Allocasuarina littoralis*	2	11	5	Fair	Good	Medium (15-40 years)	Medium	Medium	400	4.8	2.3	Direct Impact	Biodiversity Offset Scheme	1	1	333919	6257168
21105	*Angophora costata*	1	3	3	Good	Fair	Long (>40 years)	Medium	High	350	4.2	2.1	Direct Impact	Biodiversity Offset Scheme	1	1	333930	6257164
21106	*Eucalyptus punctata*	1	8	6	Good	Good	Medium (15-40 years)	Medium	Medium	500	6	2.5	Direct Impact	Biodiversity Offset Scheme	1	1	333924	6257173
21107	*Cupaniopsis anacardioides*	1	8	10	Good	Fair	Medium (15-40 years)	Low	Low	100	2	1.5	Direct Impact	Biodiversity Offset Scheme	1	1	333919	6257176
21108	*Angophora costata*	1	8	7	Good	Fair	Medium (15-40 years)	Medium	Medium	450	5.4	2.4	Direct Impact	Biodiversity Offset Scheme	1	1	333933	6257177
21109	*Eucalyptus saligna*	1	7	6	Good	Good	Long (>40 years)	High	High	600	7.2	2.7	Direct Impact	Biodiversity Offset Scheme	1	1	333931	6257187
21110	*Acacia sp.*	1	7	1	Good	Fair	Short (5-15 years)	Medium	Medium	260	3.1	1.9	Direct Impact	Biodiversity Offset Scheme	1	1	333924	6257187
21111	*Eucalyptus saligna*	1	16	7	Good	Good	Long (>40 years)	High	High	600	7.2	2.7	Direct Impact	Biodiversity Offset Scheme	1	1	333928	6257188
21112	*Allocasuarina littoralis*	20	16	10	Fair	Fair	Medium (15-40 years)	Low	Low	400	4.8	2.3	Direct Impact	Biodiversity Offset Scheme	1	1	333918	6257193
21113	*Allocasuarina littoralis*	10	9	4	Fair	Fair	Medium (15-40 years)	Low	Low	400	4.8	2.3	Direct Impact	Biodiversity Offset Scheme	1	1	333919	6257201

No.	Botanical Name	Trees in Group	Height (m)	Spread (m)	Health	Structure	ULE	Tree Significance	Retention Value	DBH (mm)	TPZ (m)	SRZ (m)	Impact	Offset/replacement	Area	Map	Easting	Northing
21114	*Allocasuarina littoralis*	1	9	9	Fair	Good	Medium (15-40 years)	Medium	Medium	450	5.4	2.4	Direct Impact	Biodiversity Offset Scheme	1	1	333913	6257207
21115	*Pittosporum undulatum*	2	10	3	Fair	Fair	Short (5-15 years)	Medium	Low	400	4.8	2.3	Direct Impact	Biodiversity Offset Scheme	1	1	333910	6257211
21116	*Allocasuarina littoralis*	1	17	5	Fair	Good	Medium (15-40 years)	Medium	Medium	500	6	2.5	Direct Impact	Biodiversity Offset Scheme	1	1	333914	6257212
21117	*Pittosporum undulatum*	4	12	8	Fair	Fair	Medium (15-40 years)	Low	Low	300	3.6	2	Direct Impact	Biodiversity Offset Scheme	1	1	333906	6257220
21118	*Pittosporum undulatum*	1	10	6	Fair	Fair	Medium (15-40 years)	Low	Low	300	3.6	2	Potential Impact	Replacement planting required	1	1	333910	6257231
21119	*Eucalyptus pilularis*	2	13	4	Good	Good	Long (>40 years)	Medium	Medium	400	4.8	2.3	Direct Impact	Biodiversity Offset Scheme	1	1	333895	6257235
21120	*Acacia sp.*	1	10	2	Fair	Fair	Short (5-15 years)	Low	Low	250	3	1.8	Direct Impact	Biodiversity Offset Scheme	1	1	333886	6257242
21121	*Eucalyptus pilularis*	1	10	8	Good	Good	Long (>40 years)	Medium	High	550	6.6	2.6	Direct Impact	Biodiversity Offset Scheme	1	1	333877	6257244
21122	*Eucalyptus pilularis*	1	6	4	Poor	Fair	Short (5-15 years)	Low	Low	260	3.1	1.9	Direct Impact	Biodiversity Offset Scheme	1	1	333868	6257241
21123	*Syncarpia glomulifera*	1	12	6	Poor	Good	Short (5-15 years)	Low	Low	160	2	1.5	Direct Impact	Biodiversity Offset Scheme	1	1	333861	6257246
21124	*Pittosporum undulatum*	1	4	2	Poor	Fair	Short (5-15 years)	Medium	Low	350	4.2	2.1	Direct Impact	Biodiversity Offset Scheme	1	1	333868	6257246
21125	*Cyathea cooperi*	2	12	10	Good	Good	Medium (15-40 years)	Medium	Medium	400	4.8	2.3	Direct Impact	Biodiversity Offset Scheme	1	1	333869	6257250
21126	*Pittosporum undulatum*	2	4	4	Fair	Fair	Short (5-15 years)	Medium	Medium	300	3.6	2	Direct Impact	Biodiversity Offset Scheme	1	1	333864	6257252
21127	*Syncarpia glomulifera*	1	7	4	Fair	Fair	Medium (15-40 years)	Medium	Medium	300	3.6	2	Direct Impact	Replacement planting required	1	1	333848	6257256
21128	*Pittosporum undulatum*	1	14	6	Good	Fair	Medium (15-40 years)	Medium	Medium	300	3.6	2	Direct Impact	Biodiversity Offset Scheme	1	1	333849	6257266
21129	*Quercus robur*	1	6	4	Good	Good	Medium (15-40 years)	High	High	650	7.8	2.8	Potential Impact	Replacement planting required	1	1	333854	6257277
21130	*Allocasuarina littoralis*	1	9	8	Fair	Fair	Short (5-15 years)	Low	Low	300	3.6	2	Potential Impact	Replacement planting required	1	1	333845	6257281
21131	*Banksia integrifolia*	1	13	6	Good	Fair	Medium (15-40 years)	Medium	Medium	300	3.6	2	Potential Impact	Replacement planting required	1	1	333844	6257284
21132	*Angophora costata*	1	12	7	Good	Good	Long (>40 years)	High	High	550	6.6	2.6	Potential Impact	Replacement planting required	1	1	333848	6257283
21133	*Pittosporum undulatum*	1	8	8	Good	Fair	Medium (15-40 years)	Medium	Medium	250	3	1.8	Potential Impact	Biodiversity Offset Scheme	1	1	333859	6257265
21135	*Eucalyptus sp.*	1	19	12	Good	Fair	Medium (15-40 years)	Medium	Medium	550	6.6	2.6	Trees to be Retained		1	1	333823	6257234
21137	*Syncarpia glomulifera*	1	9	11	Fair	Fair	Medium (15-40 years)	Medium	Medium	350	4.2	2.1	Trees to be Retained		1	1	333820	6257232
21138	*Angophora costata*	1	12	10	Fair	Fair	Long (>40 years)	Medium	Medium	300	3.6	2	Trees to be Retained		1	1	333820	6257227
21139	*Eucalyptus microcorys*	1	12	12	Fair	Fair	Medium (15-40 years)	Medium	Medium	400	4.8	2.3	Trees to be Retained		1	1	333822	6257227

No.	Botanical Name	Trees in Group	Height (m)	Spread (m)	Health	Structure	ULE	Tree Significance	Retention Value	DBH (mm)	TPZ (m)	SRZ (m)	Impact	Offset/replacement	Area	Map	Easting	Northing
21140	*Syncarpia glomulifera*	1	9	8	Fair	Fair	Medium (15-40 years)	Medium	Medium	250	3	1.8	Trees to be Retained		1	1	333827	6257226
21141	*Eucalyptus microcorys*	1	10	7	Fair	Fair	Medium (15-40 years)	Medium	Medium	300	3.6	2	Trees to be Retained		1	1	333824	6257221
21151	*Eucalyptus microcorys*	1	10	10	Fair	Good	Medium (15-40 years)	Medium	Medium	350	4.2	2.1	Trees to be Retained		1	1	333828	6257218
21152	*Eucalyptus microcorys*	1	9	2	Fair	Good	Medium (15-40 years)	Medium	Medium	300	3.6	2	Trees to be Retained		1	1	333830	6257217
21153	*Eucalyptus microcorys*	1	9	15	Fair	Good	Medium (15-40 years)	Medium	Medium	350	4.2	2.1	Trees to be Retained		1	1	333830	6257216
21154	*Eucalyptus microcorys*	1	10	8	Fair	Fair	Medium (15-40 years)	Medium	Medium	400	4.8	2.3	Trees to be Retained		1	1	333826	6257213
21155	*Eucalyptus microcorys*	1	4	3	Fair	Good	Medium (15-40 years)	Medium	Medium	450	5.4	2.4	Trees to be Retained		1	1	333830	6257213
21156	*Eucalyptus paniculata*	1	8	3	Fair	Fair	Medium (15-40 years)	Medium	Medium	250	3	1.8	Trees to be Retained		1	1	333834	6257213
21157	*Eucalyptus paniculata*	1	5	5	Good	Fair	Medium (15-40 years)	Medium	Medium	400	4.8	2.3	Trees to be Retained		1	1	333837	6257211
21158	*Eucalyptus paniculata*	1	8	5	Good	Fair	Medium (15-40 years)	Medium	Medium	300	3.6	2	Trees to be Retained		1	1	333838	6257211
21159	*Eucalyptus microcorys*	1	6	6	Fair	Fair	Medium (15-40 years)	Medium	Medium	500	6	2.5	Trees to be Retained		1	1	333832	6257209
21160	*Corymbia maculata*	1	13	5	Good	Fair	Medium (15-40 years)	Medium	Medium	550	6.6	2.6	Trees to be Retained		1	1	333837	6257205
21161	*Eucalyptus microcorys*	1	11	6	Good	Fair	Medium (15-40 years)	Medium	Medium	600	7.2	2.7	Trees to be Retained		1	1	333837	6257202
99561	*Eucalyptus microcorys*	1	8	8	Good	Fair	Medium	Medium	Medium	450	5.4	2.4	Trees to be Retained		1	1	333817	6257229
99562	*Eucalyptus sp.*	1	12	10	Poor	Poor	Short	Low	Low	400	4.8	2.3	Trees to be Retained		1	1	333816	6257233
99563	*Lophostemon confertus*	1	8	7	Good	Fair	Medium	Medium	Medium	400	4.8	2.3	Trees to be Retained		1	1	333817	6257237
99564	*Eucalyptus saligna*	1	16	12	Fair	Fair	Medium	Medium	Medium	700	8.4	2.8	Trees to be Retained		1	1	333817	6257243
99565	*Eucalyptus saligna*	1	14	17	Poor	Fair	Short	Low	Low	700	8.4	2.8	Trees to be Retained		1	1	333810	6257250
99566	*Eucalyptus saligna*	1	12	11	Good	Fair	Medium	Medium	Medium	800	9.6	3	Trees to be Retained		1	1	333806	6257253
99567	*Lophostemon confertus*	1	10	6	Good	Fair	Medium	Medium	Medium	350	4.2	2.1	Trees to be Retained		1	1	333799	6257268
99568	*Corymbia maculata*	1	16	15	Good	Good	Long	High	High	600	7.2	2.7	Trees to be Retained		1	1	333801	6257276
99569	*Eucalyptus microcorys*	1	8	6	Good	Fair	Medium	Medium	Medium	350	4.2	2.1	Trees to be Retained		1	1	333799	6257275
99570	*Eucalyptus saligna*	1	17	16	Good	Fair	Medium	Medium	Medium	600	7.2	2.7	Trees to be Retained		1	1	333795	6257273
99571	*Eucalyptus saligna*	1	16	15	Good	Fair	Medium	Medium	Medium	300	3.6	2	Trees to be Retained		1	1	333795	6257270
99572	*Eucalyptus saligna*	1	14	12	Good	Fair	Medium	Medium	Medium	500	6	2.5	Trees to be Retained		1	1	333795	6257281
99573	*Corymbia maculata*	1	10	11	Fair	Fair	Medium	Medium	Medium	450	5.4	2.4	Trees to be Retained		1	1	333795	6257288
99574	*Eucalyptus microcorys*	1	11	10	Fair	Fair	Short	Medium	Medium	350	4.2	2.1	Trees to be Retained		1	1	333797	6257290

No.	Botanical Name	Trees in Group	Height (m)	Spread (m)	Health	Structure	ULE	Tree Significance	Retention Value	DBH (mm)	TPZ (m)	SRZ (m)	Impact	Offset/replacement	Area	Map	Easting	Northing
99575	*Eucalyptus haemastoma*	1	16	12	Good	Good	Long	High	High	600	7.2	2.7	Trees to be Retained		1	1	333794	6257294
99576	*Acacia elata*	1	11	9	Poor	Fair	Short	Low	Low	300	3.6	2	Trees to be Retained		1	1	333793	6257294
99577	*Eucalyptus sp.*	1	15	12	Fair	Poor	Short	Medium	Medium	650	7.8	2.8	Trees to be Retained		1	1	333789	6257295
99578	*Eucalyptus saligna*	1	11	9	Fair	Fair	Medium	Medium	Medium	350	4.2	2.1	Trees to be Retained		1	1	333789	6257295
99579	*Eucalyptus sp.*	1	15	12	Fair	Fair	Medium	Medium	Medium	650	7.8	2.8	Trees to be Retained		1	1	333788	6257301
99580	*Angophora costata*	1	8	7	Fair	Fair	Medium	Medium	Medium	350	4.2	2.1	Potential Impact	Replacement planting required	1	1	333827	6257298
99581	*Corymbia maculata*	1	9	5	Good	Fair	Medium	Medium	Medium	550	6.6	2.6	Potential Impact	Replacement planting required	1	1	333818	6257290
99582	*Eucalyptus haemastoma*	1	9	7	Fair	Fair	Medium	Medium	Medium	350	4.2	2.1	Potential Impact	Replacement planting required	1	1	333823	6257283
99583	*Angophora costata*	1	12	7	Good	Fair	Medium	Medium	Medium	350	4.2	2.1	Potential Impact	Replacement planting required	1	1	333821	6257294
99584	*Eucalyptus sp.*	1	8	9	Poor	Fair	Short	Low	Medium	600	7.2	2.7	Potential Impact	Replacement planting required	1	1	333820	6257286
99585	*Angophora costata*	1	12	9	Fair	Poor	Medium	Medium	Low	350	4.2	2.1	Potential Impact	Replacement planting required	1	1	333828	6257286
99586	*Corymbia maculata*	1	15	16	Good	Fair	Long	Medium	Medium	400	4.8	2.3	Potential Impact	Replacement planting required	1	1	333829	6257276
99587	*Corymbia maculata*	1	15	16	Good	Good	Medium	High	High	550	6.6	2.6	Potential Impact	Replacement planting required	1	1	333828	6257269
99665	*Syncarpia glomulifera*	1	7	4	Fair	Poor	Short	Low	Low	250	3	1.8	Direct Impact	Biodiversity Offset Scheme	1	1	333931	6257115
99666	*Eucalyptus saligna*	1	12	8	Good	Fair	Medium	Medium	Medium	500	6	2.5	Direct Impact	Biodiversity Offset Scheme	1	1	333922	6257123
99667	*Syncarpia glomulifera*	1	12	5	Fair	Fair	Medium	Medium	Medium	350	4.2	2.1	Direct Impact	Biodiversity Offset Scheme	1	1	333928	6257117
99669	*Angophora costata*	1	9	5	Fair	Fair	Short	Low	Low	250	3	1.8	Direct Impact	Biodiversity Offset Scheme	1	1	333918	6257131
99670	*Eucalyptus saligna*	1	11	8	Good	Fair	Medium	Medium	Medium	400	4.8	2.3	Direct Impact	Biodiversity Offset Scheme	1	1	333942	6257133
99671	*Eucalyptus saligna*	1	11	8	Good	Fair	Medium	Medium	Medium	450	5.4	2.4	Direct Impact	Biodiversity Offset Scheme	1	1	333948	6257121
99672	*Eucalyptus saligna*	1	13	8	Good	Fair	Medium	Medium	Medium	400	4.8	2.3	Direct Impact	Biodiversity Offset Scheme	1	1	333950	6257119
99676	*Angophora costata*	1	15	14	Good	Good	Long	High	High	600	7.2	2.7	Potential Impact	Replacement planting required	1	1	333954	6257159

No.	Botanical Name	Trees in Group	Height (m)	Spread (m)	Health	Structure	ULE	Tree Significance	Retention Value	DBH (mm)	TPZ (m)	SRZ (m)	Impact	Offset/replacement	Area	Map	Easting	Northing
99677	*Angophora costata*	1	16	14	Good	Good	Long	High	High	600	7.2	2.7	Potential Impact	Replacement planting required	1	1	333959	6257158
99679	*Angophora costata*	1	15	9	Good	Good	Long	High	High	450	5.4	2.4	Potential Impact	Replacement planting required	1	1	333957	6257157
99680	*Angophora costata*	1	12	11	Good	Fair	Medium	Medium	Medium	300	3.6	2	Potential Impact	Replacement planting required	1	1	333955	6257158
99681	*Angophora costata*	1	12	11	Good	Fair	Medium	Medium	Medium	400	4.8	2.3	Potential Impact	Replacement planting required	1	1	333946	6257155
99682	*Angophora costata*	1	16	15	Good	Good	Long	High	High	400	4.8	2.3	Potential Impact	Replacement planting required	1	1	333947	6257161
99683	*Angophora costata*	1	15	12	Good	Good	Long	High	High	700	8.4	2.8	Potential Impact	Replacement planting required	1	1	333948	6257167
99684	*Eucalyptus saligna*	1	10	5	Good	Fair	Medium	Medium	Medium	350	4.2	2.1	Direct Impact	Biodiversity Offset Scheme	1	1	333930	6257144
99685	*Eucalyptus saligna*	1	7	3	Good	Fair	Medium	Medium	Medium	300	3.6	2	Direct Impact	Biodiversity Offset Scheme	1	1	333898	6257139
99686	*Eucalyptus saligna*	1	10	6	Poor	Poor	Short	Low	Low	400	4.8	2.3	Direct Impact	Biodiversity Offset Scheme	1	1	333920	6257124
99687	*Eucalyptus saligna*	1	12	4	Poor	Poor	Short	Low	Low	450	5.4	2.4	Direct Impact	Biodiversity Offset Scheme	1	1	333912	6257148
99688	*Grevillea robusta*	1	8	3	Poor	Poor	Short	Low	Low	250	3	1.8	Direct Impact	Biodiversity Offset Scheme - Exempt species (Willoughby City Council)	1	1	333896	6257141
99689	*Callitris rhomboidea*	1	4	3	Good	Poor	Short	Low	Low	100	2	1.5	Potential Impact	Biodiversity Offset Scheme	1	1	333899	6257147
99690	*Eucalyptus punctata*	1	11	8	Good	Fair	Medium	Medium	Medium	300	3.6	2	Direct Impact	Biodiversity Offset Scheme	1	1	333889	6257150
99691	*Eucalyptus saligna*	1	14	8	Good	Fair	Medium	Medium	Medium	400	4.8	2.3	Direct Impact	Biodiversity Offset Scheme	1	1	333892	6257155
99692	*Corymbia maculata*	1	6	6	Good	Fair	Medium	Medium	Medium	450	5.4	2.4	Direct Impact	Biodiversity Offset Scheme	1	1	333887	6257161
99693	*Angophora floribunda*	1	12	8	Good	Fair	Medium	Medium	Medium	400	4.8	2.3	Potential Impact	Biodiversity Offset Scheme	1	1	333893	6257162
99694	*Corymbia maculata*	5	11	3	Fair	Fair	Medium	Low	Low	150	2	1.5	Direct Impact	Biodiversity Offset Scheme	1	1	333881	6257168
99695	*Corymbia maculata*	1	12	5	Good	Fair	Medium	Medium	Medium	250	3	1.8	Direct Impact	Biodiversity Offset Scheme	1	1	333880	6257174
99696	*Corymbia maculata*	1	12	8	Good	Fair	Medium	Medium	Medium	300	3.6	2	Direct Impact	Biodiversity Offset Scheme	1	1	333884	6257178
99697	*Angophora costata*	1	10	6	Good	Fair	Medium	Medium	Medium	350	4.2	2.1	Direct Impact	Biodiversity Offset Scheme	1	1	333880	6257176
99698	*Corymbia maculata*	2	9	7	Good	Fair	Medium	Medium	Medium	250	3	1.8	Direct Impact	Biodiversity Offset Scheme	1	1	333877	6257177
99699	*Eucalyptus sp.*	1	12	10	Fair	Poor	Short	Low	Low	700	8.4	2.8	Direct Impact	Biodiversity Offset Scheme	1	1	333871	6257189

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99700	*Corymbia maculata*	4	9	4	Good	Fair	Medium	Medium	Medium	350	4.2	2.1	Direct Impact	Replacement planting required	1	1	333865	6257193
99701	*Corymbia maculata*	1	9	5	Good	Fair	Medium	Medium	Medium	350	4.2	2.1	Direct Impact	Replacement planting required	1	1	333864	6257203
99702	*Corymbia maculata*	1	7	6	Good	Fair	Medium	Medium	Medium	350	4.2	2.1	Direct Impact	Replacement planting required	1	1	333861	6257209
99703	*Eucalyptus saligna*	1	15	11	Good	Good	Long	High	High	500	6	2.5	Direct Impact	Biodiversity Offset Scheme	1	1	333878	6257216
99704	*Eucalyptus saligna*	1	20	17	Good	Good	Long	High	High	650	7.8	2.8	Direct Impact	Biodiversity Offset Scheme	1	1	333886	6257221
99705	*Eucalyptus saligna*	1	18	13	Good	Fair	Medium	Medium	Medium	400	4.8	2.3	Direct Impact	Biodiversity Offset Scheme	1	1	333886	6257214
99706	*Eucalyptus saligna*	1	20	12	Good	Good	High	High	High	500	6	2.5	Direct Impact	Biodiversity Offset Scheme	1	1	333890	6257214
99707	*Eucalyptus punctata*	1	5	5	Poor	Poor	Low	Low	Low	200	2.4	1.7	Direct Impact	Biodiversity Offset Scheme	1	1	333895	6257213
99708	*Eucalyptus saligna*	1	20	8	Good	Good	Long	High	High	400	4.8	2.3	Direct Impact	Biodiversity Offset Scheme	1	1	333900	6257204
99709	*Eucalyptus saligna*	1	20	8	Good	Good	Long	High	High	400	4.8	2.3	Direct Impact	Biodiversity Offset Scheme	1	1	333902	6257204
99710	*Eucalyptus saligna*	1	18	10	Good	Good	Long	High	High	450	5.4	2.4	Direct Impact	Biodiversity Offset Scheme	1	1	333898	6257200
99711	*Eucalyptus saligna*	1	15	6	Good	Fair	Medium	Medium	Medium	400	4.8	2.3	Direct Impact	Biodiversity Offset Scheme	1	1	333894	6257199
99712	*Eucalyptus saligna*	1	15	8	Fair	Poor	Short	Low	Low	400	4.8	2.3	Direct Impact	Biodiversity Offset Scheme	1	1	333887	6257207
99713	*Eucalyptus scoparia*	1	7	7	Fair	Fair	Short	Low	Low	350	4.2	2.1	Direct Impact	Replacement planting required	1	1	333853	6257221
99714	*Angophora costata*	1	6	5	Poor	Poor	Short	Low	Low	350	4.2	2.1	Direct Impact	Replacement planting required	1	1	333851	6257224
99715	*Eucalyptus saligna*	1	9	7	Fair	Fair	Medium	Medium	Medium	400	4.8	2.3	Direct Impact	Replacement planting required	1	1	333848	6257229
99716	*Angophora costata*	1	8	6	Poor	Fair	Short	Low	Low	350	4.2	2.1	Potential Impact	Replacement planting required	1	1	333848	6257238
99717	*Angophora costata*	1	7	4	Fair	Poor	Short	Low	Low	400	4.8	2.3	Potential Impact	Replacement planting required	1	1	333849	6257243
99718	*Corymbia maculata*	1	10	8	Good	Good	Long	High	High	800	9.6	3	Potential Impact	Replacement planting required	1	1	333837	6257250
99719	*Corymbia maculata*	1	11	7	Good	Fair	Medium	Medium	Medium	350	4.2	2.1	Potential Impact	Replacement planting required	1	1	333840	6257249
99720	*Angophora costata*	1	13	8	Good	Fair	Medium	Medium	Medium	350	4.2	2.1	Potential Impact	Replacement planting required	1	1	333837	6257258

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99721	*Quercus robur*	1	16	12	Good	Fair	Short	Low	Low	650	7.8	2.8	Potential Impact	Replacement planting required	1	1	333851	6257272
99722	*Eucalyptus saligna*	1	8	4	Poor	Poor	Short	Low	Low	150	2	1.5	Direct Impact	Biodiversity Offset Scheme	1	1	333859	6257241
99723	*Eucalyptus saligna*	1	13	6	Good	Fair	Medium	Medium	Medium	450	5.4	2.4	Direct Impact	Biodiversity Offset Scheme	1	1	333870	6257233
99724	*Angophora costata*	1	12	11	Good	Good	High	High	High	650	7.8	2.8	Potential Impact	Biodiversity Offset Scheme	1	1	333906	6257228
99725	*Casuarina glauca*	1	15	9	Good	Fair	Medium	Medium	Medium	600	7.2	2.7	Direct Impact	Biodiversity Offset Scheme	1	1	333912	6257218
99726	*Casuarina glauca*	1	15	7	Fair	Fair	Short	Low	Low	400	4.8	2.3	Direct Impact	Biodiversity Offset Scheme	1	1	333913	6257216
99727	*Casuarina glauca*	5	12	5	Fair	Poor	Short	Low	Low	150	2	1.5	Direct Impact	Biodiversity Offset Scheme	1	1	333917	6257193
99728	*Eucalyptus saligna*	1	16	11	Good	Fair	Medium	Medium	Medium	450	5.4	2.4	Direct Impact	Biodiversity Offset Scheme	1	1	333918	6257180
99729	*Eucalyptus saligna*	1	15	11	Good	Good	High	High	High	400	4.8	2.3	Direct Impact	Biodiversity Offset Scheme	1	1	333929	6257181
99730	*Eucalyptus punctata*	1	15	7	Good	Fair	Medium	Medium	Medium	400	4.8	2.3	Direct Impact	Biodiversity Offset Scheme	1	1	333924	6257181
99731	*Angophora costata*	1	9	4	Fair	Fair	Short	Low	Low	300	3.6	2	Direct Impact	Biodiversity Offset Scheme	1	1	333931	6257178
99732	*Angophora costata*	1	17	16	Good	Good	Long	High	High	750	9	2.9	Potential Impact	Replacement planting required	1	1	333955	6257164
99733	*Angophora costata*	1	15	12	Good	Good	Long	High	High	800	9.6	3	Potential Impact	Replacement planting required	1	1	333950	6257171
99734	*Glochidion ferdinandi*	1	5	3	Fair	Fair	Low	Low	Low	200	2.4	1.7	Direct Impact	Biodiversity Offset Scheme	1	1	333922	6257158
430	*Eucalyptus paniculata*	4	8	3	Fair	Fair	Medium	Medium	Medium	350	4.2	2.1	Trees to be Retained		1	2	333887	6257092
432	*Eucalyptus paniculata*	3	7	3	Fair	Good	Medium	Medium	Medium	350	4.2	2.1	Trees to be Retained		1	2	333891	6257081
434	*Corymbia maculata*	10	13	4	Fair	Fair	Short	Low	Low	350	4.2	2.1	Trees to be Retained		1	2	333904	6257066
438	*Eucalyptus saligna*	2	10	4	Fair	Fair	Medium	Medium	Medium	600	7.2	2.7	Trees to be Retained		1	2	333901	6257062
439	*Allocasuarina littoralis*	7	6	2	Fair	Poor	Short	Low	Low	250	3	1.8	Trees to be Retained		1	2	333901	6257069
440	*Eucalyptus paniculata*	4	9	3	Fair	Fair	Medium	Medium	Medium	400	4.8	2.3	Trees to be Retained		1	2	333913	6257047
441	*Eucalyptus saligna*	3	14	4	Fair	Fair	Medium	Medium	Medium	500	6	2.5	Trees to be Retained		1	2	333911	6257042
442	*Eucalyptus saligna*	1	14	4	Fair	Good	Medium	Medium	Medium	500	6	2.5	Trees to be Retained		1	2	333916	6257020
443	*Angophora costata*	1	9	4	Fair	Poor	Medium	Medium	Medium	450	5.4	2.4	Trees to be Retained		1	2	333924	6257032
444	*Eucalyptus sp.*	1	9	3	Poor	Fair	Short	Low	Medium	500	6	2.5	Trees to be Retained		1	2	333927	6257023
445	*Angophora costata*	4	8	3	Fair	Fair	Medium	Medium	Medium	400	4.8	2.3	Potential Impact	Biodiversity Offset Scheme	1	2	333916	6257113

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21001	*Corymbia maculata*	1	6	4	Good	Fair	Long (>40 years)	Medium	High	450	5.4	2.4	Potential Impact	Replacement planting required	1	2	333951	6256978
21002	*Corymbia maculata*	1	7	5	Good	Good	Long (>40 years)	High	High	900	10.8	3.2	Potential Impact	Replacement planting required	1	2	333948	6256985
21003	*Eucalyptus saligna*	1	7	4	Fair	Fair	Medium (15-40 years)	High	High	800	9.6	3	Potential Impact	Biodiversity Offset Scheme	1	2	333950	6256992
21004	*Eucalyptus scoparia*	1	13	4	Fair	Fair	Medium (15-40 years)	Medium	Medium	500	6	2.5	Direct Impact	Biodiversity Offset Scheme	1	2	333948	6256997
21005	*Eucalyptus tereticornis*	1	6	3	Fair	Good	Medium (15-40 years)	High	High	550	6.6	2.6	Direct Impact	Biodiversity Offset Scheme	1	2	333945	6257008
21006	*Corymbia maculata*	1	12	4	Fair	Good	Long (>40 years)	High	High	700	8.4	2.8	Direct Impact	Biodiversity Offset Scheme	1	2	333944	6257018
21007	*Corymbia citriodora*	1	6	4	Fair	Good	Long (>40 years)	High	High	450	5.4	2.4	Direct Impact	Biodiversity Offset Scheme	1	2	333941	6257021
21008	*Corymbia citriodora*	1	10	5	Good	Good	Long (>40 years)	High	High	450	5.4	2.4	Direct Impact	Biodiversity Offset Scheme	1	2	333940	6257025
21009	*Corymbia citriodora*	3	7	5	Good	Fair	Long (>40 years)	Medium	Medium	200	2.4	1.7	Direct Impact	Biodiversity Offset Scheme	1	2	333944	6257023
21010	*Corymbia citriodora*	4	8	6	Good	Fair	Medium (15-40 years)	Medium	Medium	400	4.8	2.3	Direct Impact	Biodiversity Offset Scheme	1	2	333944	6257025
21011	*Corymbia citriodora*	1	5	3	Fair	Fair	Long (>40 years)	Medium	Medium	300	3.6	2	Direct Impact	Biodiversity Offset Scheme	1	2	333950	6257022
21012	*Glochidion ferdinandi*	1	8	4	Poor	Fair	Short (5-15 years)	Medium	Low	180	2.2	1.6	Direct Impact	Biodiversity Offset Scheme	1	2	333944	6257011
21013	*Syncarpia glomulifera*	1	7	6	Fair	Good	Long (>40 years)	Medium	Medium	300	3.6	2	Trees to be Retained		1	2	333955	6256977
21014	*Angophora costata*	1	7	5	Fair	Good	Long (>40 years)	Medium	Medium	300	3.6	2	Trees to be Retained		1	2	333962	6256980
21016	*Eucalyptus pilularis*	1	11	10	Fair	Good	Long (>40 years)	Medium	High	300	3.6	2	Trees to be Retained		1	2	333958	6256985
21017	*Eucalyptus pilularis*	1	12	7	Good	Fair	Long (>40 years)	High	High	490	5.9	2.5	Trees to be Retained		1	2	333961	6256987
21018	*Eucalyptus pilularis*	1	11	8	Fair	Good	Long (>40 years)	High	High	550	6.6	2.6	Potential Impact	Replacement planting required	1	2	333957	6256992
21019	*Casuarina cunninghamiana*	4	4	4	Fair	Fair	Medium (15-40 years)	Medium	Medium	400	4.8	2.3	Trees to be Retained		1	2	333967	6256989
21020	*Ficus sp.*	1	4	3	Good	Good	Medium (15-40 years)	Medium	High	1300	15	3.7	Potential Impact	Replacement planting required	1	2	333975	6257004
21021	*Casuarina cunninghamiana*	3	4	2	Fair	Fair	Medium (15-40 years)	Medium	Medium	400	4.8	2.3	Trees to be Retained		1	2	333965	6256999
21022	*Casuarina cunninghamiana*	6	4	4	Fair	Fair	Medium (15-40 years)	Medium	Medium	500	6	2.5	Potential Impact	Replacement planting required	1	2	333959	6256998
21023	*Ficus sp.*	1	4	7	Fair	Good	Medium (15-40 years)	Medium	Medium	600	7.2	2.7	Potential Impact	Replacement planting required	1	2	333956	6257001
21024	*Casuarina cunninghamiana*	6	11	10	Fair	Fair	Medium (15-40 years)	Medium	Medium	500	6	2.5	Potential Impact	Replacement planting required	1	2	333955	6256999

No.	Botanical Name	Trees in Group	Height (m)	Spread (m)	Health	Structure	ULE	Tree Significance	Retention Value	DBH (mm)	TPZ (m)	SRZ (m)	Impact	Offset/replacement	Area	Map	Easting	Northing
21025	*Casuarina cunninghamiana*	3	3	3	Fair	Fair	Medium (15-40 years)	Medium	Medium	500	6	2.5	Potential Impact	Replacement planting required	1	2	333953	6257007
21026	*Ficus sp.*	1	12	12	Fair	Good	Medium (15-40 years)	Medium	Medium	450	5.4	2.4	Direct Impact	Biodiversity Offset Scheme	1	2	333955	6257016
21027	*Allocasuarina littoralis*	10	16	10	Fair	Fair	Medium (15-40 years)	Low	Low	400	4.8	2.3	Direct Impact	Biodiversity Offset Scheme	1	2	333953	6257018
21028	*Glochidion ferdinandi*	1	19	12	Good	Good	Medium (15-40 years)	Medium	Medium	200	2.4	1.7	Direct Impact	Biodiversity Offset Scheme	1	2	333957	6257022
21029	*Ficus rubiginosa*	1	18	18	Good	Good	Long (>40 years)	Medium	Medium	900	10.8	3.2	Direct Impact	Biodiversity Offset Scheme	1	2	333975	6257020
21030	*Elaeocarpus reticulatus*	1	6	5	Good	Fair	Medium (15-40 years)	Medium	Medium	200	2.4	1.7	Potential Impact	Replacement planting required	1	2	333989	6257007
21032	*Casuarina glauca*	3	18	6	Fair	Fair	Medium (15-40 years)	Medium	Medium	600	7.2	2.7	Potential Impact	Replacement planting required	1	2	333994	6257012
21033	*Angophora costata*	1	11	5	Fair	Good	Long (>40 years)	Medium	Medium	300	3.6	2	Potential Impact	Replacement planting required	1	2	333995	6257019
21038	*Eucalyptus pilularis*	1	7	4	Good	Good	Long (>40 years)	High	High	550	6.6	2.6	Trees to be Retained		1	2	334010	6257018
21039	*Acacia sp.*	1	7	3	Good	Good	Medium (15-40 years)	Medium	Medium	250	3	1.8	Trees to be Retained		1	2	334001	6257018
21040	*Acacia sp.*	1	11	4	Fair	Fair	Medium (15-40 years)	Medium	Medium	500	6	2.5	Trees to be Retained		1	2	334012	6257024
21041	*Eucalyptus pilularis*	1	19	8	Good	Good	Long (>40 years)	High	High	500	6	2.5	Trees to be Retained		1	2	334005	6257023
21042	*Eucalyptus pilularis*	1	20	12	Fair	Fair	Medium (15-40 years)	Medium	Medium	500	6	2.5	Trees to be Retained		1	2	334017	6257025
21043	*Eucalyptus pilularis*	1	12	5	Good	Good	Long (>40 years)	High	High	500	6	2.5	Potential Impact	Biodiversity Offset Scheme	1	2	333995	6257025
21044	*Eucalyptus pilularis*	1	13	9	Good	Good	Long (>40 years)	Medium	High	350	4.2	2.1	Direct Impact	Biodiversity Offset Scheme	1	2	333989	6257028
21045	*Eucalyptus pilularis*	1	10	6	Good	Fair	Long (>40 years)	High	High	600	7.2	2.7	Direct Impact	Biodiversity Offset Scheme	1	2	333987	6257033
21046	*Eucalyptus pilularis*	1	12	4	Fair	Fair	Medium (15-40 years)	Medium	Medium	350	4.2	2.1	Direct Impact	Biodiversity Offset Scheme	1	2	333983	6257029
21047	*Eucalyptus pilularis*	1	7	3	Good	Good	Long (>40 years)	High	High	850	10.2	3.1	Direct Impact	Biodiversity Offset Scheme	1	2	333986	6257037
21048	*Eucalyptus pilularis*	1	21	10	Fair	Fair	Medium (15-40 years)	High	High	400	4.8	2.3	Direct Impact	Biodiversity Offset Scheme	1	2	333970	6257029
21049	*Eucalyptus pilularis*	1	18	4	Good	Good	Long (>40 years)	Medium	High	350	4.2	2.1	Potential Impact	Biodiversity Offset Scheme	1	2	333986	6257019
21050	*Syncarpia glomulifera*	2	9	5	Good	Good	Medium (15-40 years)	High	High	400	4.8	2.3	Potential Impact	Replacement planting required	1	2	334000	6257024
21051	*Casuarina glauca*	3	17	9	Fair	Fair	Medium (15-40 years)	Medium	Medium	400	4.8	2.3	Direct Impact	Biodiversity Offset Scheme	1	2	333975	6257034
21052	*Eucalyptus pilularis*	1	12	5	Good	Good	Medium (15-40 years)	High	High	500	6	2.5	Direct Impact	Biodiversity Offset Scheme	1	2	333994	6257040
21053	*Eucalyptus pilularis*	1	23	11	Good	Good	Long (>40 years)	High	High	550	6.6	2.6	Direct Impact	Biodiversity Offset Scheme	1	2	333999	6257047

No.	Botanical Name	Trees in Group	Height (m)	Spread (m)	Health	Structure	ULE	Tree Significance	Retention Value	DBH (mm)	TPZ (m)	SRZ (m)	Impact	Offset/replacement	Area	Map	Easting	Northing
21054	*Ficus sp.*	1	19	8	Good	Fair	Medium (15-40 years)	Medium	Medium	400	4.8	2.3	Potential Impact	Biodiversity Offset Scheme	1	2	334008	6257032
21055	*Casuarina cunninghamiana*	1	19	8	Good	Good	Medium (15-40 years)	Medium	High	600	7.2	2.7	Potential Impact	Biodiversity Offset Scheme	1	2	334001	6257031
21056	*Eucalyptus pilularis*	1	17	15	Good	Good	Long (>40 years)	High	High	500	6	2.5	Direct Impact	Biodiversity Offset Scheme	1	2	334003	6257039
21057	*Celtis sinensis*	1	10	6	Fair	Fair	Medium (15-40 years)	Low	Low	200	2.4	1.7	Direct Impact	Biodiversity Offset Scheme - Exempt species (Willoughby City Council)	1	2	334005	6257042
21058	*Acacia decurrens*	1	10	7	Fair	Good	Medium (15-40 years)	Medium	Medium	300	3.6	2	Direct Impact	Biodiversity Offset Scheme	1	2	334009	6257045
21059	*Tristaniopsis laurina*	1	8	6	Good	Fair	Medium (15-40 years)	Medium	Medium	200	2.4	1.7	Potential Impact	Biodiversity Offset Scheme	1	2	334010	6257035
21060	*Tristaniopsis laurina*	1	11	10	Good	Fair	Medium (15-40 years)	Medium	Medium	300	3.6	2	Potential Impact	Biodiversity Offset Scheme	1	2	334014	6257040
21061	*Tristaniopsis laurina*	1	11	10	Fair	Fair	Medium (15-40 years)	Medium	Medium	180	2.2	1.6	Potential Impact	Biodiversity Offset Scheme	1	2	334016	6257044
21062	*Angophora costata*	1	4	3	Fair	Fair	Medium (15-40 years)	Medium	Medium	300	3.6	2	Direct Impact	Biodiversity Offset Scheme	1	2	334010	6257061
21063	*Tristaniopsis laurina*	1	8	3	Good	Good	Medium (15-40 years)	Medium	Medium	300	3.6	2	Potential Impact	Biodiversity Offset Scheme	1	2	334013	6257050
21064	*Eucalyptus pilularis*	1	6	4	Good	Good	Long (>40 years)	High	High	700	8.4	2.8	Trees to be Retained		1	2	334019	6257032
21065	*Eucalyptus pilularis*	1	21	8	Fair	Fair	Medium (15-40 years)	High	High	550	6.6	2.6	Potential Impact	Biodiversity Offset Scheme	1	2	334020	6257053
21066	*Eucalyptus pilularis*	1	20	7	Fair	Fair	Medium (15-40 years)	High	High	450	5.4	2.4	Direct Impact	Biodiversity Offset Scheme	1	2	334014	6257064
21067	*Eucalyptus pilularis*	1	18	6	Good	Good	Long (>40 years)	High	High	400	4.8	2.3	Direct Impact	Biodiversity Offset Scheme	1	2	334014	6257068
21068	*Eucalyptus pilularis*	1	19	6	Good	Good	Long (>40 years)	High	High	800	9.6	3	Trees to be Retained		1	2	334025	6257039
21070	*Acacia decurrens*	1	4	5	Fair	Fair	Medium (15-40 years)	Medium	Medium	300	3.6	2	Direct Impact	Biodiversity Offset Scheme	1	2	334004	6257055
21071	*Acacia decurrens*	1	10	6	Fair	Fair	Medium (15-40 years)	Medium	Medium	300	3.6	2	Direct Impact	Biodiversity Offset Scheme	1	2	334003	6257080
21072	*Melaleuca sp.*	1	18	12	Fair	Good	Medium (15-40 years)	Medium	Medium	300	3.6	2	Direct Impact	Biodiversity Offset Scheme	1	2	334018	6257071
21073	*Pittosporum undulatum*	1	18	12	Good	Good	Medium (15-40 years)	Medium	Medium	200	2.4	1.7	Potential Impact	Biodiversity Offset Scheme	1	2	334017	6257060
21074	*Eucalyptus pilularis*	1	5	7	Good	Good	Medium (15-40 years)	High	High	800	9.6	3	Trees to be Retained		1	2	334032	6257062
21075	*cyathea cooperi*	10	9	10	Good	Good	Medium (15-40 years)	Medium	Medium	400	4.8	2.3	Trees to be Retained		1	2	334029	6257096
21076	*Callitris columellaris*	1	13	7	Fair	Good	Medium (15-40 years)	Medium	Medium	300	3.6	2	Trees to be Retained		1	2	334022	6257101
21077	*Allocasuarina littoralis*	1	15	10	Fair	Fair	Short (5-15 years)	Low	Low	400	4.8	2.3	Direct Impact	Biodiversity Offset Scheme	1	2	334019	6257083
21079	*Eucalyptus pilularis*	1	9	6	Fair	Fair	Medium (15-40 years)	Medium	Medium	300	3.6	2	Potential Impact	Biodiversity Offset Scheme	1	2	334017	6257092
21080	*Eucalyptus pilularis*	1	6	3	Fair	Fair	Medium (15-40 years)	Medium	Medium	350	4.2	2.1	Potential Impact	Replacement planting required	1	2	334016	6257110

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21081	*Acacia decurrens*	1	15	6	Fair	Fair	Medium (15-40 years)	Medium	Medium	300	3.6	2	Direct Impact	Biodiversity Offset Scheme	1	2	334005	6257106
21082	*Syncarpia glomulifera*	2	6	4	Fair	Good	Medium (15-40 years)	Medium	Medium	450	5.4	2.4	Direct Impact	Biodiversity Offset Scheme	1	2	334000	6257110
21083	*Syncarpia glomulifera*	2	16	7	Good	Good	Medium (15-40 years)	Medium	Medium	400	4.8	2.3	Potential Impact	Biodiversity Offset Scheme	1	2	334009	6257114
21084	*Acacia falcata*	1	13	10	Good	Good	Medium (15-40 years)	Medium	Medium	500	6	2.5	Trees to be Retained		1	2	334032	6257079
21085	*Elaeocarpus reticulatus*	1	8	9	Fair	Fair	Medium (15-40 years)	Low	Low	100	2	1.5	Potential Impact	Biodiversity Offset Scheme	1	2	334004	6257125
21086	*Pittosporum undulatum*	1	4	4	Good	Fair	Medium (15-40 years)	Medium	Medium	300	3.6	2	Potential Impact	Biodiversity Offset Scheme	1	2	333992	6257129
21087	*Angophora costata*	1	9	8	Good	Good	Long (>40 years)	Medium	High	300	3.6	2	Direct Impact	Biodiversity Offset Scheme	1	2	333985	6257128
21088	*Angophora costata*	1	7	6	Good	Fair	Long (>40 years)	Medium	Medium	300	3.6	2	Potential Impact	Biodiversity Offset Scheme	1	2	333990	6257132
21089	*Syncarpia glomulifera*	2	20	10	Fair	Good	Medium (15-40 years)	Medium	Medium	400	4.8	2.3	Direct Impact	Biodiversity Offset Scheme	1	2	333993	6257116
21090	*Glochidion ferdinandi*	1	10	6	Good	Fair	Medium (15-40 years)	Medium	Medium	259	3.1	1.9	Direct Impact	Biodiversity Offset Scheme	1	2	333990	6257103
21091	*Angophora costata*	1	7	6	Good	Fair	Long (>40 years)	Medium	High	450	5.4	2.4	Direct Impact	Biodiversity Offset Scheme	1	2	333990	6257111
21092	*Eucalyptus pilularis*	1	10	3	Good	Good	Long (>40 years)	High	High	750	9	2.9	Direct Impact	Biodiversity Offset Scheme	1	2	333981	6257114
21093	*Glochidion ferdinandi*	1	12	3	Good	Good	Medium (15-40 years)	Medium	Medium	400	4.8	2.3	Direct Impact	Biodiversity Offset Scheme	1	2	333966	6257121
21094	*Casuarina cunninghamiana*	4	7	5	Fair	Good	Medium (15-40 years)	Medium	Medium	700	8.4	2.8	Direct Impact	Biodiversity Offset Scheme	1	2	333966	6257131
21095	*Pittosporum undulatum*	4	9	7	Fair	Fair	Medium (15-40 years)	Medium	Medium	300	3.6	2	Potential Impact	Biodiversity Offset Scheme	1	2	333970	6257140
21096	*Angophora costata*	1	8	5	Poor	Fair	Short (5-15 years)	Low	Low	300	3.6	2	Direct Impact	Biodiversity Offset Scheme	1	2	333962	6257134
21097	*Angophora costata*	1	10	5	Good	Fair	Long (>40 years)	Medium	Medium	350	4.2	2.1	Potential Impact	Biodiversity Offset Scheme	1	2	333962	6257141
99641	*Corymbia maculata*	1	14	10	Good	Fair	Medium	Medium	Medium	700	8.4	2.8	Direct Impact	Biodiversity Offset Scheme	1	2	333932	6257056
99642	*Eucalyptus elata*	1	14	8	Poor	Fair	Short	Low	Low	500	6	2.5	Potential Impact	Biodiversity Offset Scheme	1	2	333937	6257059
99643	*Eucalyptus elata*	1	15	9	Poor	Poor	Short	Low	Low	350	4.2	2.1	Direct Impact	Biodiversity Offset Scheme	1	2	333936	6257052
99644	*Eucalyptus elata*	1	15	11	Poor	Poor	Short	Low	Low	750	9	2.9	Direct Impact	Biodiversity Offset Scheme	1	2	333926	6257074
99645	*Eucalyptus elata*	1	14	11	Poor	Fair	Short	Low	Low	1200	14.4	3.6	Direct Impact	Biodiversity Offset Scheme	1	2	333925	6257085
99646	*Eucalyptus saligna*	1	13	7	Fair	Fair	Medium	Medium	Medium	500	6	2.5	Direct Impact	Biodiversity Offset Scheme	1	2	333952	6257055
99647	*Eucalyptus saligna*	3	12	3	Good	Fair	Medium	Medium	Medium	400	4.8	2.3	Potential Impact	Biodiversity Offset Scheme	1	2	333948	6257057
99648	*Eucalyptus saligna*	1	11	6	Good	Fair	Medium	Medium	Medium	400	4.8	2.3	Potential Impact	Biodiversity Offset Scheme	1	2	333943	6257064
99649	*Angophora costata*	1	12	5	Fair	Fair	Short	Low	Low	300	3.6	2	Potential Impact	Biodiversity Offset Scheme	1	2	333939	6257071
99650	*Corymbia maculata*	2	14	6	Good	Fair	Medium	Low	Low	150	2	1.5	Potential Impact	Biodiversity Offset Scheme	1	2	333941	6257071

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99651	*Eucalyptus saligna*	1	15	10	Good	Fair	Medium	Medium	Medium	450	5.4	2.4	Direct Impact	Biodiversity Offset Scheme	1	2	333939	6257078
99652	*Eucalyptus saligna*	1	15	10	Fair	Fair	Medium	Medium	Medium	350	4.2	2.1	Potential Impact	Biodiversity Offset Scheme	1	2	333930	6257087
99653	*Casuarina glauca*	1	11	6	Good	Fair	Short	Low	Low	350	4.2	2.1	Potential Impact	Biodiversity Offset Scheme	1	2	333936	6257086
99654	*Acacia sp.*	1	11	6	Fair	Poor	Short	Low	Low	150	2	1.5	Potential Impact	Biodiversity Offset Scheme	1	2	333931	6257079
99655	*Eucalyptus saligna*	1	15	6	Fair	Fair	Short	Low	Low	350	4.2	2.1	Potential Impact	Biodiversity Offset Scheme	1	2	333934	6257087
99656	*Eucalyptus saligna*	1	8	4	Fair	Fair	Short	Low	Low	200	2.4	1.7	Direct Impact	Biodiversity Offset Scheme	1	2	333936	6257090
99657	*Corymbia maculata*	1	9	5	Fair	Fair	Medium	Medium	Medium	350	4.2	2.1	Direct Impact	Biodiversity Offset Scheme	1	2	333936	6257092
99658	*Eucalyptus saligna*	1	12	5	Fair	Poor	Short	Low	Low	350	4.2	2.1	Potential Impact	Biodiversity Offset Scheme	1	2	333932	6257093
99659	*Angophora costata*	1	8	3	Fair	Fair	Medium	Medium	Medium	250	3	1.8	Direct Impact	Biodiversity Offset Scheme	1	2	333935	6257096
99660	*Eucalyptus saligna*	1	15	6	Good	Fair	Medium	Medium	Medium	450	5.4	2.4	Potential Impact	Biodiversity Offset Scheme	1	2	333928	6257094
99661	*Angophora costata*	1	10	5	Fair	Fair	Medium	Medium	Medium	250	3	1.8	Direct Impact	Biodiversity Offset Scheme	1	2	333931	6257099
99662	*Eucalyptus saligna*	1	12	8	Good	Fair	Medium	Medium	Medium	450	5.4	2.4	Direct Impact	Biodiversity Offset Scheme	1	2	333935	6257104
99663	*Angophora costata*	1	11	11	Fair	Poor	Short	Low	Low	350	4.2	2.1	Direct Impact	Biodiversity Offset Scheme	1	2	333932	6257112
99664	*Angophora costata*	1	15	7	Fair	Fair	Medium	Medium	Medium	300	3.6	2	Direct Impact	Biodiversity Offset Scheme	1	2	333930	6257110
99668	*Eucalyptus saligna*	1	14	12	Good	Good	Long	High	High	600	7.2	2.7	Potential Impact	Biodiversity Offset Scheme	1	2	333919	6257109
99673	*Eucalyptus saligna*	1	10	7	Poor	Fair	Short	Low	Low	350	4.2	2.1	Direct Impact	Biodiversity Offset Scheme	1	2	333949	6257110
99674	*Eucalyptus saligna*	1	11	7	Fair	Fair	Medium	Medium	Medium	350	4.2	2.1	Direct Impact	Biodiversity Offset Scheme	1	2	333953	6257108
99675	*Eucalyptus saligna*	1	15	11	Good	Good	Long	High	High	500	6	2.5	Direct Impact	Biodiversity Offset Scheme	1	2	333959	6257116
99678	*Angophora costata*	1	12	11	Good	Fair	Medium	Medium	Medium	350	4.2	2.1	Potential Impact	Replacement planting required	1	2	333969	6257156
99735	*Eucalyptus saligna*	1	15	5	Good	Good	Long	High	High	500	6	2.5	Potential Impact	Biodiversity Offset Scheme	1	2	333952	6257035
99736	*Eucalyptus saligna*	1	22	6	Good	Fair	Medium	Medium	Medium	400	4.8	2.3	Potential Impact	Biodiversity Offset Scheme	1	2	333950	6257036
99737	*Eucalyptus saligna*	1	18	10	Good	Good	Long	High	High	700	8.4	2.8	Direct Impact	Biodiversity Offset Scheme	1	2	333982	6257052
99738	*Casuarina glauca*	1	14	6	Good	Fair	Medium	Medium	Medium	550	6.6	2.6	Direct Impact	Biodiversity Offset Scheme	1	2	333974	6257045
99739	*Casuarina glauca*	1	19	11	Fair	Poor	Short	Low	Low	550	6.6	2.6	Direct Impact	Biodiversity Offset Scheme	1	2	333983	6257054
99740	*Eucalyptus saligna*	1	12	9	Fair	Poor	Short	Low	Low	400	4.8	2.3	Direct Impact	Biodiversity Offset Scheme	1	2	334003	6257090
99741	*Eucalyptus saligna*	1	16	9	Good	Fair	Medium	Medium	Medium	550	6.6	2.6	Direct Impact	Biodiversity Offset Scheme	1	2	333992	6257093

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99742	*Eucalyptus saligna*	1	17	11	Good	Fair	Medium	Medium	Medium	350	4.2	2.1	Direct Impact	Biodiversity Offset Scheme	1	2	333991	6257094
99743	*Eucalyptus saligna*	1	16	11	Good	Good	High	High	High	500	6	2.5	Direct Impact	Biodiversity Offset Scheme	1	2	333984	6257103
99744	*Eucalyptus saligna*	1	15	6	Good	Fair	Medium	Medium	Medium	400	4.8	2.3	Direct Impact	Biodiversity Offset Scheme	1	2	333985	6257098
99745	*Angophora costata*	1	15	6	Poor	Poor	Short	Low	Low	400	4.8	2.3	Direct Impact	Biodiversity Offset Scheme	1	2	333979	6257104
99746	*Eucalyptus saligna*	1	20	10	Fair	Fair	Medium	Medium	Medium	400	4.8	2.3	Direct Impact	Biodiversity Offset Scheme	1	2	333974	6257102
99747	*Corymbia maculata*	1	14	9	Good	Fair	Medium	Medium	Medium	450	5.4	2.4	Direct Impact	Biodiversity Offset Scheme	1	2	333973	6257105
99748	*Angophora costata*	1	11	5	Fair	Fair	Short	Low	Low	350	4.2	2.1	Direct Impact	Biodiversity Offset Scheme	1	2	333965	6257110
99749	*Eucalyptus saligna*	1	16	11	Good	Good	Long	High	High	550	6.6	2.6	Direct Impact	Biodiversity Offset Scheme	1	2	333955	6257115
99750	*Eucalyptus saligna*	1	15	11	Good	Good	Long	High	High	500	6	2.5	Direct Impact	Biodiversity Offset Scheme	1	2	333979	6257114
99751	*Angophora costata*	4	8	3	Fair	Fair	Medium	Medium	Medium	400	4.8	2.3	Potential Impact	Biodiversity Offset Scheme	1	2	333916	6257113

Annexure D Maps of arboricultural assessment – Assessment Area 2

Table A-2: Index to Assessment Area 2 maps

Map Index	Map Extent
Map 1	Gore Hill Freeway/Lane Cove Tunnel and Pacific Highway Interchange
Map 2	Gore Hill Freeway/Lane Cove Tunnel (Marden Street)
Map 3	Gore Hill Freeway (Reserve Road)
Map 4	Gore Hill Freeway (Reserve Road and Dickson Avenue)
Map 5	Gore Hill Freeway (Hampden Road and Cleg Street)
Map 6	Gore Hill Freeway (North Shore Rail Line Overpass)
Map 7	Gore Hill Freeway (Grandview Street)
Map 8	Dickson Avenue

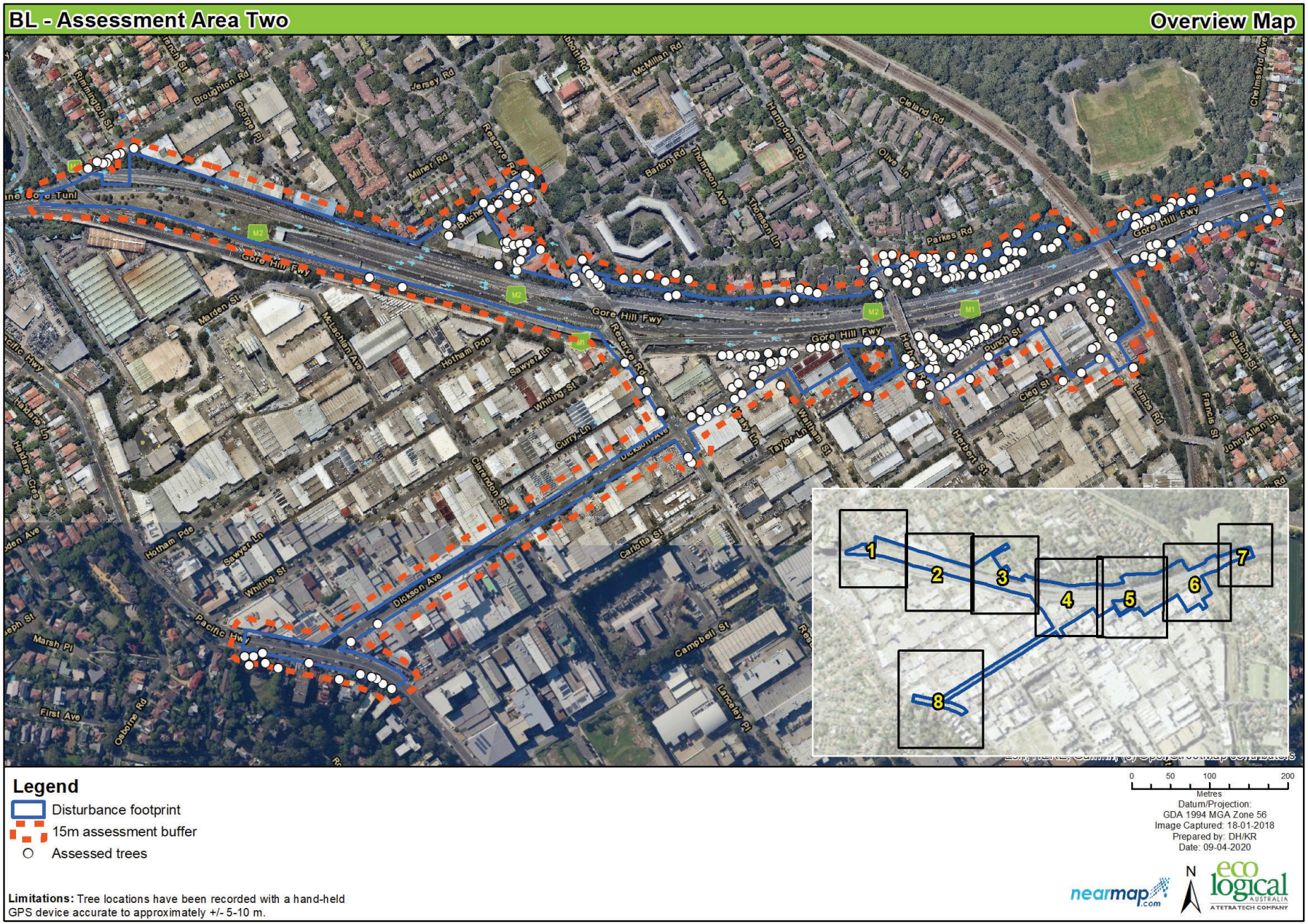

Figure A-2: Results for Assessment Area 2 – Overview

Figure A-3: Results for Assessment Area 2 – Map 1

Figure A-4: Results for Assessment Area 2 – Map 2

Figure A-5: Results for Assessment Area 2 – Map 3

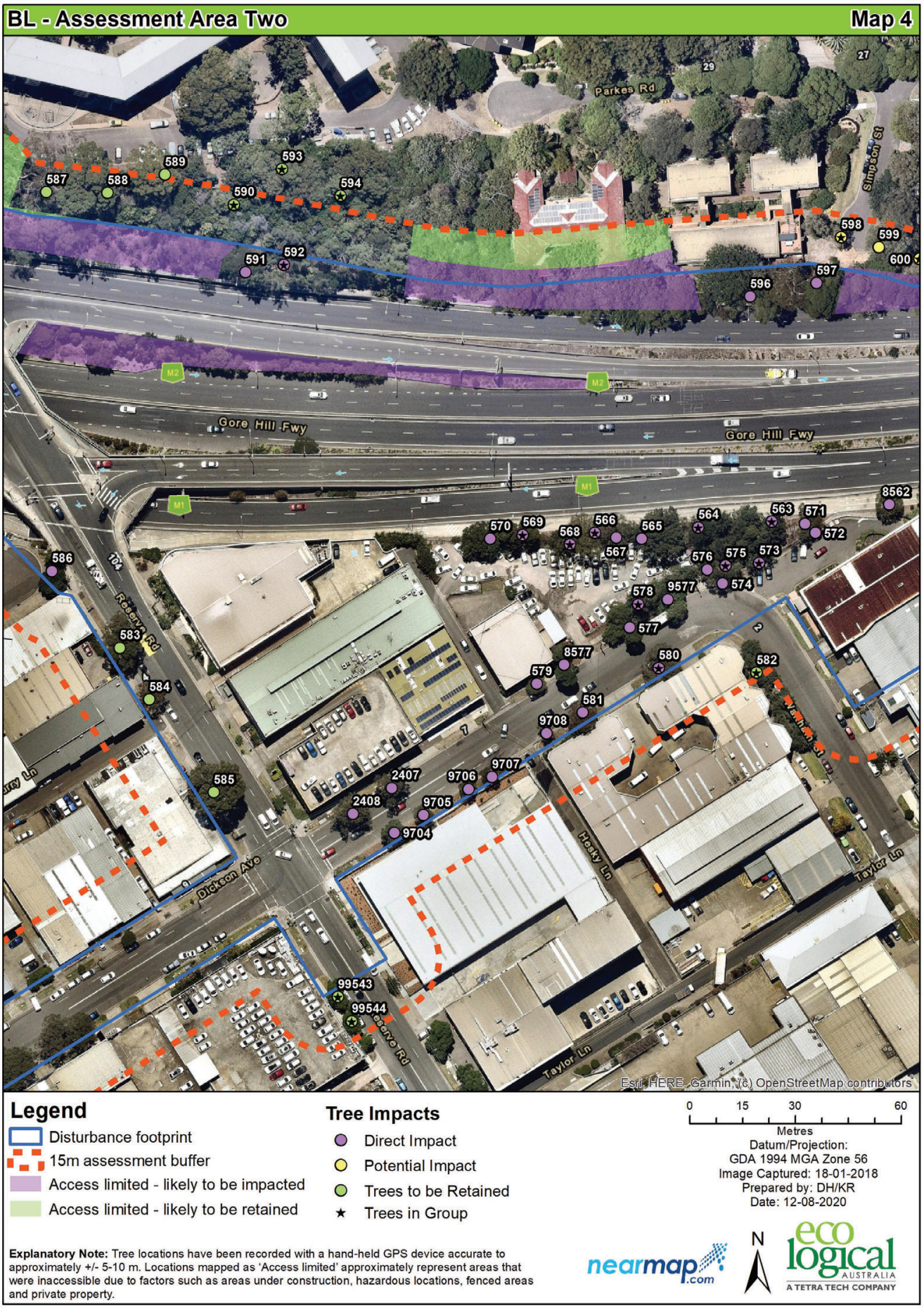

Figure A-6: Results for Assessment Area 3 – Map 4

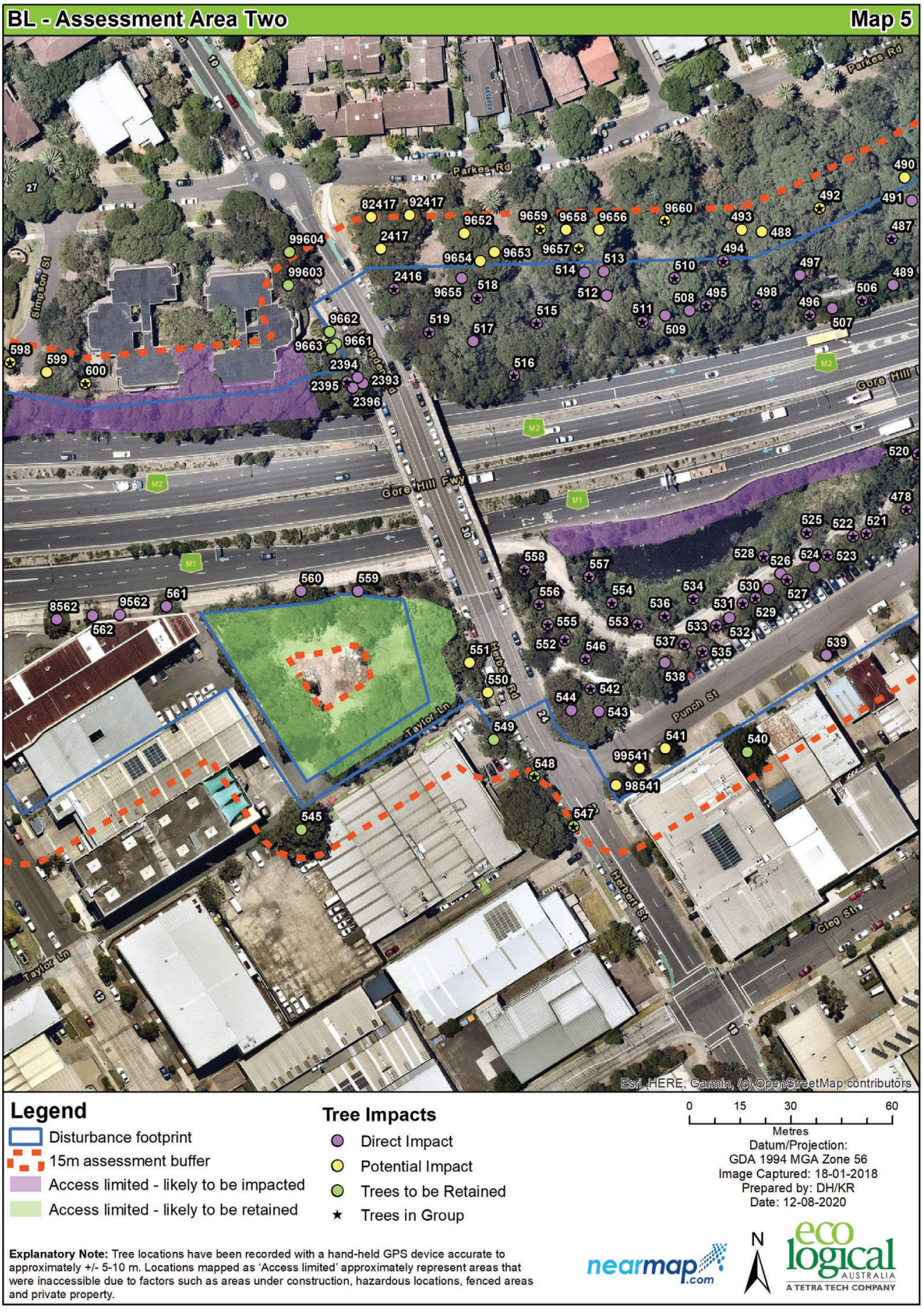

Figure A-7: Results for Assessment Area 2 – Map 5

Figure A-8: Results for Assessment Area 2 – Map 6

Figure A-9: Results for Assessment Area 2 – Map 7

Figure A-10: Results for Assessment Area 2 – Map 8

Annexure E Table of results – Assessment Area 2

Table A-3: Table of results – Assessment Area 2

No.	Botanical Name	Trees in Group	Height (m)	Spread (m)	Health	Structure	ULE	Tree Significance	Retention Value	DBH (mm)	TPZ (m)	SRZ (m)	Impact	Offset/replacement	Area	Map	Easting	Northing
641	*Eucalyptus saligna*	1	6	3	Fair	Fair	Short	Low	Low	300	3.6	2.0	Trees to be Retained		2	1	331410	6257237
642	*Angophora costata*	1	5	2	Good	Fair	Medium	Low	Low	200	2.4	1.7	Trees to be Retained		2	1	331404	6257235
643	*Eucalyptus saligna*	3	6	2	Fair	Fair	Medium	Low	Low	300	3.6	2.0	Trees to be Retained		2	1	331395	6257231
99542	*Lophostemon confertus*	1	6	3	Fair	Fair	Short	Low	Low	200	2.4	1.7	Trees to be Retained		2	1	331427	6257244
99752	*Casuarina cunninghamiana*	1	6	5	Fair	Fair	Medium	Medium	Low	200	2.4	1.7	Trees to be Retained		2	1	331392	6257225
997317	*Eucalyptus saligna*	1	7	5	Good	Fair	Medium	Medium	Medium	250	3.0	1.8	Trees to be Retained		2	1	331388	6257224
997318	*Acacia sp.*	1	6	5	Good	Fair	Medium	Medium	Medium	300	3.6	2.0	Trees to be Retained		2	1	331380	6257227
997319	*Casuarina cunninghamiana*	1	7	6	Fair	Poor	Short	Medium	Low	400	4.8	2.3	Trees to be Retained		2	1	331369	6257218
2449	*Melaleuca quinquenervia*	1	5	2	Poor	Fair	Medium	Low	Low	300	4.8	2.3	Trees to be Retained		2	2	331728	6257078
2450	*Jacaranda mimosifolia*	1	5	1	Poor	Fair	Short	Low	Low	200	9.0	2.9	Trees to be Retained		2	2	331771	6257066
612	*Eucalyptus microcorys*	1	16	5	Good	Fair	Medium	Medium	Medium	600	7.2	2.7	Trees to be Retained		2	3	331901	6257123
613	*Eucalyptus saligna*	1	16	5	Good	Fair	Medium	Low	Medium	500	6.0	2.5	Trees to be Retained		2	3	331907	6257118
614	*Eucalyptus saligna*	1	22	10	Good	Fair	Long	High	High	750	9.0	2.9	Trees to be Retained		2	3	331904	6257115
615	*Eucalyptus saligna*	2	20	11	Good	Good	Long	High	High	650	7.8	2.8	Trees to be Retained		2	3	331907	6257121
616	*Eucalyptus microcorys*	1	16	5	Fair	Poor	Short	Low	Low	550	6.6	2.6	Trees to be Retained		2	3	331905	6257124
617	*Corymbia maculata*	1	23	11	Good	Fair	Medium	High	High	750	9.0	2.9	Trees to be Retained		2	3	331914	6257120
618	*Allocasuarina littoralis*	1	18	8	Fair	Poor	Short	Low	Low	700	8.4	2.8	Trees to be Retained		2	3	331922	6257122
619	*Allocasuarina littoralis*	5	18	5	Fair	Fair	Medium	Medium	Medium	650	7.8	2.8	Trees to be Retained		2	3	331931	6257123
620	*Eucalyptus globulus 'bicostata'*	2	15	7	Good	Good	Medium	High	High	650	7.8	2.8	Direct Impact	Replacement planting required	2	3	331894	6257094
621	*Angophora floribunda*	3	15	4	Fair	Fair	Medium	Medium	Medium	550	6.6	2.6	Direct Impact	Replacement planting required	2	3	331917	6257088
622	*Ulmus parvifolia*	3	9	5	Good	Fair	Medium	Medium	Medium	550	6.6	2.6	Trees to be Retained		2	3	331948	6257114
623	*Castanospermum australe*	2	10	6	Good	Poor	Short	Medium	Low	600	7.2	2.7	Potential Impact	Replacement planting required	2	3	331831	6257132
624	*Liquidambar styraciflua*	1	13	10	Good	Poor	Short	Medium	Low	900	10.8	3.2	Trees to be Retained		2	3	331847	6257155
625	*Eucalyptus saligna*	1	18	11	Fair	Good	Medium	Medium	High	900	10.8	3.2	Trees to be Retained		2	3	331875	6257173

No.	Botanical Name	Trees in Group	Height (m)	Spread (m)	Health	Structure	ULE	Tree Significance	Retention Value	DBH (mm)	TPZ (m)	SRZ (m)	Impact	Offset/replacement	Area	Map	Easting	Northing
626	*Eucalyptus saligna*	1	18	9	Fair	Fair	Medium	Medium	Medium	700	8.4	2.8	Trees to be Retained		2	3	331885	6257166
627	*Corymbia maculata*	1	18	7	Good	Fair	Medium	Medium	Medium	500	6.0	2.5	Trees to be Retained		2	3	331894	6257173
628	*Eucalyptus saligna*	3	24	10	Good	Good	Long	High	High	700	8.4	2.8	Trees to be Retained		2	3	331907	6257185
629	*Cupressus sp.*	2	7	3	Good	Poor	Short	Low	Low	350	4.2	2.1	Trees to be Retained		2	3	331914	6257196
630	*Eucalyptus elata*	1	18	9	Fair	Fair	Medium	Medium	Medium	850	10.2	3.1	Trees to be Retained		2	3	331927	6257186
631	*Allocasuarina littoralis*	3	22	9	Good	Poor	Medium	Medium	Medium	750	9.0	2.9	Trees to be Retained		2	3	331935	6257205
632	*Eucalyptus microcorys*	1	21	6	Good	Fair	Medium	Medium	Medium	600	7.2	2.7	Trees to be Retained		2	3	331928	6257210
633	*Eucalyptus saligna*	1	14	4	Fair	Fair	Medium	Medium	Medium	400	4.8	2.3	Direct Impact	Replacement planting required	2	3	331925	6257112
634	*Eucalyptus botryoides*	1	5	2	Fair	Poor	Short	Low	Low	350	4.2	2.1	Direct Impact	Replacement planting required	2	3	331918	6257098
635	*Cinnamomum camphora*	3	4	2	Fair	Poor	Short	Low	Low	250	3.0	1.8	Direct Impact	Replacement planting required - Exempt species (Willoughby City Council)	2	3	331922	6257100
2409	*Eucalyptus sp.*	1	5	2	Fair	Fair	Medium	Medium	Medium	450	5.4	2.4	Direct Impact	Replacement planting required	2	3	332025	6257067
2410	*Eucalyptus sp.*	1	6	2	Fair	Fair	Medium	Low	Low	300	3.6	2.0	Direct Impact	Replacement planting required	2	3	332022	6257070
2411	*Allocasuarina littoralis*	2	7	3	Fair	Poor	Medium	Low	Low	350	4.2	2.1	Direct Impact	Replacement planting required	2	3	332017	6257076
2412	*Platanus ├ù acerifolia*	1	8	4	Good	Fair	Medium	Low	Low	400	4.8	2.3	Direct Impact	Replacement planting required	2	3	331993	6257072
2413	*Eucalyptus pilularis*	1	8	2	Fair	Fair	Medium	Medium	Medium	550	6.6	2.6	Direct Impact	Replacement planting required	2	3	331991	6257078
2414	*Eucalyptus microcorys*	1	18	7	Good	Fair	Medium	Medium	Medium	700	8.4	2.8	Trees to be Retained		2	3	332001	6257101
2415	*Callistemon salignus*	1	7	2	Fair	Fair	Medium	Low	Low	400	4.8	2.3	Direct Impact	Replacement planting required	2	3	332006	6257088
9651	*Pittosporum undulatum*	1	4	3	Poor	Poor	Short	Low	Low	200	2.4	1.7	Direct Impact	Replacement planting required	2	3	332011	6257083
9709	*Jacaranda mimosofolia*	1	8	4	Fair	Poor	Short	Low	Low	450	5.4	2.4	Trees to be Retained		2	3	331828	6257146
9710	*Eucalyptus saligna*	1	15	6	Good	Good	Long	High	High	800	9.6	3.0	Trees to be Retained		2	3	331932	6257180
9711	*Eucalyptus microcorys*	1	15	6	Fair	Fair	Medium	Medium	Medium	500	6.0	2.5	Trees to be Retained		2	3	331918	6257177
9725	*Eucalyptus microcorys*	1	15	6	Fair	Fair	Medium	Medium	Medium	500	6.0	2.5	Trees to be Retained		2	3	331918	6257181
563	*Allocasuarina littoralis*	3	6	3	Fair	Poor	Short	Low	Low	350	4.2	2.1	Direct Impact	Replacement planting required	2	4	332260	6256983
564	*Allocasuarina littoralis*	3	6	3	Fair	Poor	Short	Low	Low	400	4.8	2.3	Direct Impact	Replacement planting required	2	4	332239	6256982
565	*Allocasuarina littoralis*	1	11	6	Fair	Fair	Medium	Medium	Medium	750	9.0	2.9	Direct Impact	Replacement planting required	2	4	332223	6256978
566	*Eucalyptus saligna*	4	5	2	Fair	Poor	Short	Low	Low	350	4.2	2.1	Direct Impact	Replacement planting required	2	4	332210	6256980

No.	Botanical Name	Trees in Group	Height (m)	Spread (m)	Health	Structure	ULE	Tree Significance	Retention Value	DBH (mm)	TPZ (m)	SRZ (m)	Impact	Offset/replacement	Area	Map	Easting	Northing
567	*Allocasuarina littoralis*	1	7	3	Fair	Poor	Short	Low	Low	400	4.8	2.3	Direct Impact	Replacement planting required	2	4	332216	6256979
568	*Eucalyptus saligna*	2	6	3	Fair	Poor	Medium	Low	Low	400	4.8	2.3	Direct Impact	Replacement planting required	2	4	332203	6256977
569	*Eucalyptus microcorys*	3	8	3	Fair	Fair	Medium	Low	Medium	400	4.8	2.3	Direct Impact	Replacement planting required	2	4	332189	6256980
570	*Cinnamomum camphora*	1	8	6	Good	Poor	Medium	Low	Low	450	5.4	2.4	Direct Impact	Replacement planting required - Exempt species (Willoughby City Council)	2	4	332180	6256978
571	*Eucalyptus microcorys*	1	7	3	Fair	Fair	Short	Low	Low	350	4.2	2.1	Direct Impact	Replacement planting required	2	4	332269	6256983
572	*Angophora costata*	1	5	3	Fair	Fair	Medium	Low	Low	400	4.8	2.3	Direct Impact	Replacement planting required	2	4	332272	6256980
573	*Banksia integrifolia*	3	4	2	Fair	Poor	Short	Low	Low	300	3.6	2.0	Direct Impact	Replacement planting required	2	4	332256	6256972
574	*Banksia integrifolia*	1	4	2	Fair	Fair	Short	Low	Low	250	3.0	1.8	Direct Impact	Replacement planting required	2	4	332246	6256966
575	*Eucalyptus saligna*	2	5	2	Fair	Poor	Short	Low	Low	350	4.2	2.1	Direct Impact	Replacement planting required	2	4	332247	6256971
576	*Allocasuarina littoralis*	1	6	2	Fair	Poor	Short	Low	Low	400	4.8	2.3	Direct Impact	Replacement planting required	2	4	332242	6256970
577	*Lophostemon confertus*	1	7	4	Fair	Poor	Medium	Medium	Medium	600	7.2	2.7	Direct Impact	Replacement planting required	2	4	332220	6256953
578	*Allocasuarina littoralis*	2	10	2	Fair	Poor	Short	Medium	Low	450	5.4	2.4	Direct Impact	Replacement planting required	2	4	332222	6256960
579	*Tristaniopsis laurina*	1	4	2	Fair	Fair	Medium	Low	Low	250	3.0	1.8	Direct Impact	Replacement planting required	2	4	332193	6256937
580	*Eucalyptus nicholii*	2	8	3	Fair	Fair	Short	Low	Low	400	4.8	2.3	Direct Impact	Replacement planting required - Exempt species (Willoughby City Council)	2	4	332228	6256942
581	*Eucalyptus nicholii*	1	10	4	Fair	Fair	Medium	Medium	Medium	550	6.6	2.6	Direct Impact	Replacement planting required - Exempt species (Willoughby City Council)	2	4	332206	6256929
582	*Callistemon viminalis*	3	4	2	Good	Fair	Medium	Low	Medium	250	3.0	1.8	Trees to be Retained		2	4	332256	6256940
583	*Corymbia maculata*	1	15	5	Good	Fair	Medium	Medium	Medium	600	7.2	2.7	Trees to be Retained		2	4	332075	6256948
584	*Eucalyptus saligna*	1	8	3	Fair	Poor	Short	Low	Low	550	6.6	2.6	Trees to be Retained		2	4	332083	6256933
585	*Corymbia maculata*	1	12	6	Good	Fair	Medium	High	High	750	9.0	2.9	Trees to be Retained		2	4	332102	6256906
586	*Podocarpus elatus*	1	5	4	Good	Poor	Short	Medium	Low	500	6.0	2.5	Direct Impact	Replacement planting required	2	4	332056	6256969
587	*Eucalyptus scoparia*	1	12	7	Poor	Poor	Short	Medium	Low	1000	12.0	3.3	Trees to be Retained		2	4	332054	6257077
588	*Corymbia citriodora*	1	23	13	Good	Good	Long	High	High	750	9.0	2.9	Trees to be Retained		2	4	332072	6257077
589	*Corymbia citriodora*	1	15	7	Fair	Fair	Medium	Medium	Medium	650	7.8	2.8	Trees to be Retained		2	4	332088	6257082
590	*Syncarpia glomulifera*	2	11	5	Fair	Poor	Medium	Medium	Medium	450	5.4	2.4	Trees to be Retained		2	4	332107	6257073

No.	Botanical Name	Trees in Group	Height (m)	Spread (m)	Health	Structure	ULE	Tree Significance	Retention Value	DBH (mm)	TPZ (m)	SRZ (m)	Impact	Offset/replacement	Area	Map	Easting	Northing
591	*Syncarpia glomulifera*	1	10	3	Good	Poor	Medium	Medium	Low	400	4.8	2.3	Direct Impact	Replacement planting required	2	4	332111	6257054
592	*Ligustrum sinense*	10	4	2	Fair	Poor	Short	Low	Low	300	3.6	2.0	Direct Impact	Replacement planting required - Exempt species (Willoughby City Council)	2	4	332122	6257056
593	*Ligustrum sinense*	10	4	2	Fair	Poor	Short	Low	Low	250	3.0	1.8	Trees to be Retained		2	4	332121	6257083
594	*Eucalyptus pilularis*	3	11	3	Fair	Fair	Medium	Low	Low	500	6.0	2.5	Trees to be Retained		2	4	332138	6257076
596	*Eucalyptus scoparia*	1	15	6	Poor	Fair	Short	Medium	Low	650	7.8	2.8	Direct Impact	Replacement planting required	2	4	332254	6257047
597	*Eucalyptus saligna*	1	16	4	Good	Fair	Medium	Medium	Medium	500	6.0	2.5	Direct Impact	Replacement planting required	2	4	332273	6257051
598	*Eucalyptus microcorys*	3	11	3	Good	Poor	Short	Low	Low	300	3.6	2.0	Potential Impact	Replacement planting required	2	4	332280	6257064
599	*Lophostemon confertus*	1	9	5	Fair	Fair	Medium	Low	Low	450	5.4	2.4	Potential Impact	Replacement planting required	2	4	332290	6257061
2407	*Casuarina cunninghamiana*	1	11	5	Fair	Poor	Medium	Medium	Low	550	6.6	2.6	Direct Impact	Replacement planting required	2	4	332152	6256908
2408	*Casuarina cunninghamiana*	1	10	5	Good	Poor	Medium	Medium	Low	550	6.6	2.6	Direct Impact	Replacement planting required	2	4	332141	6256900
8562	*Eucalyptus saligna*	1	7	3	Fair	Fair	Medium	Low	Low	350	4.2	2.1	Direct Impact	Replacement planting required	2	4	332293	6256988
8577	*Lophostemon confertus*	1	7	4	Fair	Poor	Medium	Medium	Medium	600	7.2	2.7	Direct Impact	Replacement planting required	2	4	332201	6256943
9577	*Lophostemon confertus*	1	7	4	Fair	Poor	Medium	Medium	Medium	600	7.2	2.7	Direct Impact	Replacement planting required	2	4	332231	6256961
9704	*Eucalyptus sp.*	1	10	2	Good	Fair	Medium	Medium	Medium	200	2.4	1.7	Direct Impact	Replacement planting required	2	4	332153	6256895
9705	*Eucalyptus sp.*	1	10	2	Fair	Fair	Medium	Medium	Medium	200	2.4	1.7	Direct Impact	Replacement planting required	2	4	332161	6256900
9706	*Corymbia maculata*	1	8	3	Fair	Fair	Short	Low	Low	250	3.0	1.8	Direct Impact	Replacement planting required	2	4	332174	6256907
9707	*Corymbia maculata*	1	8	3	Fair	Fair	Short	Low	Low	250	3.0	1.8	Direct Impact	Replacement planting required	2	4	332181	6256911
9708	*Eucalyptus nicholii*	1	6	2	Fair	Poor	Short	Low	Low	300	3.6	2.0	Direct Impact	Replacement planting required - Exempt species (Willoughby City Council)	2	4	332196	6256923
99543	*Jacaranda mimosifolia*	2	4	3	Fair	Poor	Short	Low	Low	150	2.0	1.5	Trees to be Retained		2	4	332137	6256848
99544	*Brachychiton acerifolius*	2	5	2	Fair	Poor	Short	Low	Low	200	2.4	1.7	Trees to be Retained		2	4	332141	6256841
478	*Allocasuarina littoralis*	2	10	4	Good	Fair	Medium	Medium	Medium	700	8.4	2.8	Direct Impact	Replacement planting required	2	5	332545	6257021
487	*Eucalyptus saligna*	3	16	3	Good	Fair	Medium	Medium	Medium	500	6.0	2.5	Direct Impact	Replacement planting required	2	5	332540	6257101
488	*Eucalyptus saligna*	1	16	8	Good	Fair	Medium	High	Medium	750	9.0	2.9	Potential Impact	Replacement planting required	2	5	332502	6257103
489	*Angophora costata*	1	15	6	Good	Poor	Medium	Medium	Medium	600	7.2	2.7	Direct Impact	Replacement planting required	2	5	332541	6257087
490	*Eucalyptus saligna*	1	18	7	Fair	Fair	Medium	High	Medium	900	10.8	3.2	Potential Impact	Replacement planting required	2	5	332544	6257119

No.	Botanical Name	Trees in Group	Height (m)	Spread (m)	Health	Structure	ULE	Tree Significance	Retention Value	DBH (mm)	TPZ (m)	SRZ (m)	Impact	Offset/replacement	Area	Map	Easting	Northing
491	*Eucalyptus saligna*	1	15	6	Fair	Poor	Short	Medium	Medium	650	7.8	2.8	Direct Impact	Replacement planting required	2	5	332546	6257112
492	*Syncarpia glomulifera*	4	14	5	Good	Good	Medium	High	High	600	7.2	2.7	Potential Impact	Replacement planting required	2	5	332519	6257110
493	*Eucalyptus saligna*	1	15	8	Good	Fair	Medium	High	Medium	850	10.2	3.1	Potential Impact	Replacement planting required	2	5	332496	6257103
494	*Eucalyptus saligna*	2	18	3	Fair	Fair	Medium	Medium	Medium	450	5.4	2.4	Direct Impact	Biodiversity Offset Scheme	2	5	332490	6257094
495	*Eucalyptus saligna*	4	13	4	Fair	Fair	Medium	Low	Low	400	4.8	2.3	Direct Impact	Replacement planting required	2	5	332485	6257081
496	*Pittosporum undulatum*	10	4	2	Fair	Fair	Medium	Low	Low	300	3.6	2.0	Direct Impact	Replacement planting required	2	5	332516	6257078
497	*Syncarpia glomulifera*	1	10	3	Fair	Fair	Medium	Medium	Medium	400	4.8	2.3	Direct Impact	Replacement planting required	2	5	332513	6257090
498	*Syncarpia glomulifera*	3	6	3	Fair	Fair	Medium	Medium	Medium	250	3.0	1.8	Direct Impact	Replacement planting required	2	5	332500	6257081
506	*Allocasuarina littoralis*	5	5	3	Fair	Fair	Short	Low	Low	200	2.4	1.7	Direct Impact	Replacement planting required	2	5	332531	6257082
507	*Eucalyptus saligna*	1	5	3	Fair	Poor	Short	Low	Low	300	3.6	2.0	Direct Impact	Replacement planting required	2	5	332523	6257080
508	*Eucalyptus saligna*	1	16	4	Fair	Poor	Medium	Medium	Medium	550	6.6	2.6	Direct Impact	Replacement planting required	2	5	332480	6257079
509	*Eucalyptus microcorys*	1	9	3	Good	Fair	Medium	Low	Low	400	4.8	2.3	Direct Impact	Replacement planting required	2	5	332473	6257078
510	*Eucalyptus saligna*	3	18	7	Fair	Fair	Medium	Medium	Medium	750	9.0	2.9	Direct Impact	Biodiversity Offset Scheme	2	5	332476	6257089
511	*Eucalyptus microcorys*	6	9	4	Fair	Fair	Medium	Low	Low	450	5.4	2.4	Direct Impact	Replacement planting required	2	5	332467	6257076
512	*Eucalyptus microcorys*	1	15	6	Fair	Fair	Medium	Medium	Medium	550	6.6	2.6	Direct Impact	Biodiversity Offset Scheme	2	5	332456	6257084
513	*Pittosporum undulatum*	1	7	4	Poor	Poor	Short	Low	Low	350	4.2	2.1	Direct Impact	Biodiversity Offset Scheme	2	5	332455	6257091
514	*Syncarpia glomulifera*	1	16	10	Good	Good	Long	High	High	850	10.2	3.1	Direct Impact	Biodiversity Offset Scheme	2	5	332449	6257091
515	*Eucalyptus microcorys*	2	15	6	Good	Fair	Medium	Medium	Medium	550	6.6	2.6	Direct Impact	Biodiversity Offset Scheme	2	5	332435	6257076
516	*Eucalyptus saligna*	5	5	2	Fair	Fair	Medium	Low	Low	250	3.0	1.8	Direct Impact	Replacement planting required	2	5	332429	6257060
517	*Eucalyptus saligna*	1	15	7	Good	Fair	Medium	Medium	High	850	10.2	3.1	Direct Impact	Biodiversity Offset Scheme	2	5	332416	6257070
518	*Eucalyptus saligna*	2	9	3	Fair	Fair	Medium	Low	Low	400	4.8	2.3	Direct Impact	Biodiversity Offset Scheme	2	5	332418	6257083
519	*Eucalyptus saligna*	5	10	4	Fair	Fair	Medium	Medium	Medium	500	6.0	2.5	Direct Impact	Replacement planting required	2	5	332404	6257073
521	*Eucalyptus saligna*	7	6	2	Fair	Fair	Short	Low	Low	200	2.4	1.7	Direct Impact	Replacement planting required	2	5	332533	6257014
522	*Allocasuarina littoralis*	6	8	3	Fair	Fair	Short	Medium	Medium	300	3.6	2.0	Direct Impact	Replacement planting required	2	5	332529	6257013
523	*Eucalyptus saligna*	5	8	3	Fair	Fair	Medium	Low	Low	300	3.6	2.0	Direct Impact	Replacement planting required	2	5	332521	6257007
524	*Agonis flexuosa*	1	6	3	Fair	Poor	Short	Low	Low	450	5.4	2.4	Direct Impact	Replacement planting required	2	5	332517	6257004
525	*Allocasuarina littoralis*	2	6	2	Fair	Fair	Short	Low	Low	250	3.0	1.8	Direct Impact	Replacement planting required	2	5	332515	6257014

No.	Botanical Name	Trees in Group	Height (m)	Spread (m)	Health	Structure	ULE	Tree Significance	Retention Value	DBH (mm)	TPZ (m)	SRZ (m)	Impact	Offset/replacement	Area	Map	Easting	Northing
526	*Melaleuca quinquenervia*	1	5	3	Fair	Fair	Medium	Medium	Medium	400	4.8	2.3	Direct Impact	Replacement planting required	2	5	332507	6257002
527	*Eucalyptus saligna*	3	7	3	Fair	Fair	Medium	Low	Low	300	3.6	2.0	Direct Impact	Replacement planting required	2	5	332509	6257000
528	*Allocasuarina littoralis*	4	7	3	Fair	Fair	Medium	Medium	Medium	300	3.6	2.0	Direct Impact	Replacement planting required	2	5	332502	6257007
529	*Eucalyptus saligna*	2	5	3	Fair	Good	Medium	Medium	Medium	400	4.8	2.3	Direct Impact	Replacement planting required	2	5	332500	6256994
530	*Allocasuarina littoralis*	1	6	2	Fair	Fair	Short	Low	Low	300	3.6	2.0	Direct Impact	Replacement planting required	2	5	332504	6256997
531	*Allocasuarina littoralis*	5	6	3	Fair	Fair	Short	Low	Low	350	4.2	2.1	Direct Impact	Replacement planting required	2	5	332496	6256993
532	*Melaleuca quinquenervia*	1	5	3	Fair	Fair	Short	Medium	Medium	350	4.2	2.1	Direct Impact	Replacement planting required	2	5	332492	6256989
533	*Allocasuarina littoralis*	3	6	2	Fair	Fair	Medium	Low	Low	300	3.6	2.0	Direct Impact	Replacement planting required	2	5	332488	6256986
534	*Allocasuarina littoralis*	5	7	3	Fair	Poor	Medium	Low	Low	150	2.0	1.5	Direct Impact	Replacement planting required	2	5	332482	6256994
535	*Eucalyptus saligna*	2	5	2	Fair	Poor	Short	Medium	Medium	300	3.6	2.0	Direct Impact	Replacement planting required	2	5	332484	6256979
536	*Eucalyptus saligna*	5	7	3	Fair	Fair	Medium	Medium	Medium	350	4.2	2.1	Direct Impact	Replacement planting required	2	5	332473	6256989
537	*Melaleuca quinquenervia*	2	6	3	Good	Fair	Medium	Medium	Medium	400	4.8	2.3	Direct Impact	Replacement planting required	2	5	332479	6256981
538	*Allocasuarina littoralis*	1	11	5	Fair	Poor	Medium	Medium	Medium	550	6.6	2.6	Direct Impact	Replacement planting required	2	5	332473	6256975
539	*Eucalyptus sp.*	1	8	3	Poor	Poor	Short	Low	Low	250	3.0	1.8	Direct Impact	Replacement planting required	2	5	332521	6256978
540	*Ulmus parvifolia*	1	9	6	Fair	Fair	Medium	Medium	Medium	550	6.6	2.6	Trees to be Retained		2	5	332497	6256949
541	*Eucalyptus tereticornis*	1	8	3	Fair	Fair	Medium	Medium	Medium	400	4.8	2.3	Potential Impact	Replacement planting required	2	5	332473	6256950
542	*Angophora costata*	3	10	5	Fair	Good	Medium	Medium	Medium	450	5.4	2.4	Direct Impact	Replacement planting required	2	5	332451	6256968
543	*Allocasuarina littoralis*	1	12	6	Fair	Fair	Medium	Medium	Medium	600	7.2	2.7	Direct Impact	Replacement planting required	2	5	332454	6256961
544	*Angophora costata*	1	9	4	Poor	Fair	Short	Medium	Low	450	5.4	2.4	Direct Impact	Replacement planting required	2	5	332445	6256961
545	*Eucalyptus microcorys*	1	16	9	Good	Good	Medium	High	High	800	9.6	3.0	Trees to be Retained		2	5	332366	6256926
546	*Eucalyptus saligna*	3	6	3	Good	Fair	Medium	Medium	Medium	450	5.4	2.4	Direct Impact	Replacement planting required	2	5	332450	6256976
547	*Eucalyptus microcorys*	3	14	6	Good	Good	Long	High	High	700	8.4	2.8	Trees to be Retained		2	5	332446	6256927
548	*Banksia integrifolia*	4	6	2	Good	Fair	Medium	Low	Low	300	3.6	2.0	Trees to be Retained		2	5	332435	6256942
549	*Angophora costata*	1	8	5	Good	Fair	Medium	Medium	Medium	400	4.8	2.3	Trees to be Retained		2	5	332423	6256953
550	*Banksia integrifolia*	1	6	4	Fair	Fair	Medium	Medium	Medium	550	6.6	2.6	Potential Impact	Replacement planting required	2	5	332421	6256967
551	*Angophora costata*	1	9	4	Poor	Poor	Short	Low	Low	450	5.4	2.4	Potential Impact	Replacement planting required	2	5	332415	6256975
552	*Eucalyptus saligna*	5	6	3	Fair	Good	Medium	Medium	Medium	400	4.8	2.3	Direct Impact	Replacement planting required	2	5	332444	6256982

No.	Botanical Name	Trees in Group	Height (m)	Spread (m)	Health	Structure	ULE	Tree Significance	Retention Value	DBH (mm)	TPZ (m)	SRZ (m)	Impact	Offset/replacement	Area	Map	Easting	Northing
553	*Eucalyptus saligna*	4	10	3	Fair	Fair	Short	Low	Medium	350	4.2	2.1	Direct Impact	Replacement planting required	2	5	332465	6256987
554	*Allocasuarina littoralis*	6	8	2	Fair	Poor	Short	Low	Low	250	3.0	1.8	Direct Impact	Replacement planting required	2	5	332458	6256993
555	*Angophora costata*	4	7	3	Fair	Poor	Short	Low	Low	350	4.2	2.1	Direct Impact	Replacement planting required	2	5	332439	6256987
556	*Banksia integrifolia*	4	5	2	Fair	Fair	Short	Low	Low	250	3.0	1.8	Direct Impact	Replacement planting required	2	5	332436	6256993
557	*Allocasuarina littoralis*	5	7	2	Fair	Fair	Short	Low	Low	200	2.4	1.7	Direct Impact	Replacement planting required	2	5	332451	6257001
558	*Eucalyptus saligna*	4	6	3	Good	Fair	Medium	Medium	Medium	350	4.2	2.1	Direct Impact	Replacement planting required	2	5	332432	6257003
559	*Casuarina cunninghamiana*	1	6	3	Good	Fair	Short	Low	Low	300	3.6	2.0	Direct Impact	Replacement planting required	2	5	332383	6256997
560	*Eucalyptus saligna*	1	10	4	Fair	Fair	Medium	Medium	Medium	400	4.8	2.3	Direct Impact	Replacement planting required	2	5	332366	6256997
561	*Acacia longifolia*	1	7	3	Good	Poor	Short	Low	Low	400	4.8	2.3	Direct Impact	Replacement planting required	2	5	332326	6256992
562	*Eucalyptus saligna*	1	7	3	Fair	Fair	Medium	Low	Low	350	4.2	2.1	Direct Impact	Replacement planting required	2	5	332304	6256989
600	*Allocasuarina littoralis*	3	12	4	Good	Poor	Short	Low	Low	500	6.0	2.5	Potential Impact	Replacement planting required	2	5	332302	6257058
2393	*Angophora floribunda*	1	13	6	Fair	Fair	Medium	Medium	Medium	550	6.6	2.6	Direct Impact	Replacement planting required	2	5	332384	6257058
2394	*Angophora floribunda*	1	12	4	Fair	Fair	Medium	Medium	Medium	350	4.2	2.1	Direct Impact	Replacement planting required	2	5	332382	6257060
2395	*Angophora floribunda*	2	11	3	Fair	Fair	Medium	Medium	Medium	400	4.8	2.3	Direct Impact	Replacement planting required	2	5	332379	6257058
2396	*Angophora costata*	1	7	3	Fair	Fair	Medium	Medium	Medium	350	4.2	2.1	Direct Impact	Replacement planting required	2	5	332381	6257057
2416	*Eucalyptus saligna*	3	10	4	Fair	Fair	Medium	Low	Low	450	5.4	2.4	Direct Impact	Replacement planting required	2	5	332393	6257086
2417	*Eucalyptus saligna*	1	15	8	Fair	Poor	Medium	Medium	Medium	700	8.4	2.8	Potential Impact	Replacement planting required	2	5	332389	6257098
9562	*Eucalyptus saligna*	1	7	3	Fair	Fair	Medium	Low	Low	350	4.2	2.1	Direct Impact	Replacement planting required	2	5	332312	6256990
9652	*Eucalyptus microcorys*	1	12	5	Fair	Fair	Medium	Medium	Medium	650	7.8	2.8	Potential Impact	Replacement planting required	2	5	332414	6257102
9653	*Eucalyptus microcorys*	1	12	5	Fair	Fair	Medium	Medium	Medium	650	7.8	2.8	Potential Impact	Replacement planting required	2	5	332423	6257097
9654	*Eucalyptus microcorys*	1	12	5	Fair	Fair	Medium	Medium	Medium	650	7.8	2.8	Potential Impact	Replacement planting required	2	5	332419	6257094
9655	*Eucalyptus saligna*	1	10	5	Good	Good	Medium	Medium	Medium	700	8.4	2.8	Direct Impact	Replacement planting required	2	5	332413	6257089
9656	*Eucalyptus saligna*	1	14	6	Good	Good	Medium	Medium	Medium	800	9.6	3.0	Potential Impact	Replacement planting required	2	5	332454	6257103
9657	*Allocasaurina littoralis*	2	7	3	Fair	Fair	Short	Low	Low	250	3.0	1.8	Potential Impact	Replacement planting required	2	5	332448	6257098
9658	*Eucalyptus paniculata*	1	8	3	Poor	Poor	Short	Low	Low	500	6.0	2.5	Potential Impact	Replacement planting required	2	5	332444	6257103
9659	*Eucalyptus saligna*	2	10	6	Good	Good	Medium	Medium	Medium	600	7.2	2.7	Potential Impact	Replacement planting required	2	5	332436	6257104
9660	*Eucalyptus sp.*	8	10	3	Fair	Fair	Short	Low	Low	300	3.6	2.0	Potential Impact	Replacement planting required	2	5	332473	6257106

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9661	*Eucalyptus citridora*	1	10	6	Fair	Poor	Medium	Medium	Medium	550	6.6	2.6	Trees to be Retained		2	5	332376	6257070
9662	*Casaurina cunninghamiana*	1	10	6	Good	Poor	Medium	Medium	Medium	700	8.4	2.8	Trees to be Retained		2	5	332374	6257073
9663	*Eucalyptus citridora*	1	10	6	Fair	Fair	Medium	Medium	Medium	700	8.4	2.8	Trees to be Retained		2	5	332375	6257068
82417	*Eucalyptus saligna*	1	16	7	Good	Good	Medium	Medium	High	800	9.6	3.0	Potential Impact	Replacement planting required	2	5	332386	6257107
92417	*Eucalyptus saligna*	1	12	7	Good	Good	Medium	Medium	High	700	8.4	2.8	Potential Impact	Replacement planting required	2	5	332398	6257108
98541	*Eucalyptus tereticornis*	1	8	3	Fair	Fair	Medium	Medium	Medium	400	4.8	2.3	Potential Impact	Replacement planting required	2	5	332459	6256939
99541	*Eucalyptus tereticornis*	1	8	3	Fair	Fair	Medium	Medium	Medium	400	4.8	2.3	Potential Impact	Replacement planting required	2	5	332466	6256944
99603	*Eucalyptus sp.*	1	10	8	Fair	Fair	Medium	Medium	Medium	500	6.0	2.5	Trees to be Retained		2	5	332362	6257087
99604	*Casuarina glauca*	1	12	11	Good	Good	Medium	Medium	Medium	600	7.2	2.7	Trees to be Retained		2	5	332362	6257097
461	*Eucalyptus saligna*	3	12	3	Fair	Fair	Medium	Low	Low	400	4.8	2.3	Potential Impact	Replacement planting required	2	6	332756	6257175
462	*Eucalyptus saligna*	1	20	11	Good	Fair	Medium	High	High	2000	24.0	4.4	Potential Impact	Replacement planting required	2	6	332753	6257168
463	*Eucalyptus microcorys*	1	8	3	Fair	Poor	Short	Low	Low	400	4.8	2.3	Potential Impact	Replacement planting required	2	6	332745	6257164
464	*Allocasuarina littoralis*	1	9	2	Fair	Poor	Short	Low	Low	350	4.2	2.1	Potential Impact	Biodiversity Offset Scheme	2	6	332736	6257156
465	*Syncarpia glomulifera*	2	9	5	Good	Good	Medium	High	High	650	7.8	2.8	Potential Impact	Replacement planting required	2	6	332710	6257156
466	*Eucalyptus saligna*	2	15	5	Good	Fair	Medium	Medium	Medium	600	7.2	2.7	Trees to be Retained		2	6	332692	6257157
467	*Eucalyptus microcorys*	1	10	3	Fair	Good	Medium	Medium	Medium	500	6.0	2.5	Trees to be Retained		2	6	332697	6257159
473	*Eucalyptus saligna*	3	5	2	Fair	Poor	Short	Low	Low	300	3.6	2.0	Direct Impact	Biodiversity Offset Scheme	2	6	332729	6257119
474	*Allocasuarina littoralis*	1	7	3	Fair	Poor	Short	Low	Low	400	4.8	2.3	Direct Impact	Replacement planting required	2	6	332611	6257060
475	*Melaleuca quinquenervia*	2	10	3	Good	Fair	Medium	Medium	Medium	450	5.4	2.4	Direct Impact	Replacement planting required	2	6	332581	6257038
476	*Casuarina cunninghamiana*	1	10	6	Fair	Poor	Medium	Medium	Low	550	6.6	2.6	Direct Impact	Replacement planting required	2	6	332575	6257035
477	*Eucalyptus saligna*	7	7	2	Fair	Poor	Short	Low	Medium	350	4.2	2.1	Direct Impact	Replacement planting required	2	6	332561	6257029
479	*Syzygium paniculatum*	3	5	2	Fair	Poor	Short	Low	Low	350	4.2	2.1	Direct Impact	Replacement planting required	2	6	332587	6257023
480	*Acacia sp.*	1	10	3	Poor	Poor	Short	Low	Low	500	6.0	2.5	Direct Impact	Replacement planting required	2	6	332603	6257030
481	*Syzygium paniculatum*	4	4	2	Good	Poor	Short	Low	Low	250	3.0	1.8	Direct Impact	Replacement planting required	2	6	332623	6257040
482	*Shinus areira*	1	8	7	Good	Fair	Medium	Medium	Medium	950	11.4	3.2	Direct Impact	Replacement planting required	2	6	332582	6257021
483	*Corymbia maculata*	1	14	7	Good	Good	Long	High	High	600	7.2	2.7	Potential Impact	Replacement planting required	2	6	332554	6256996
484	*Eucalyptus saligna*	3	11	3	Good	Fair	Medium	Medium	Medium	450	5.4	2.4	Direct Impact	Replacement planting required	2	6	332615	6257140

No.	Botanical Name	Trees in Group	Height (m)	Spread (m)	Health	Structure	ULE	Tree Significance	Retention Value	DBH (mm)	TPZ (m)	SRZ (m)	Impact	Offset/replacement	Area	Map	Easting	Northing
485	*Eucalyptus saligna*	3	20	11	Good	Fair	Medium	High	High	700	8.4	2.8	Direct Impact	Replacement planting required	2	6	332555	6257111
486	*Syncarpia glomulifera*	4	12	6	Good	Fair	Long	High	High	450	5.4	2.4	Potential Impact	Replacement planting required	2	6	332557	6257135
499	*Allocasuarina littoralis*	5	12	3	Fair	Poor	Short	Low	Medium	500	6.0	2.5	Direct Impact	Replacement planting required	2	6	332556	6257096
500	*Angophora costata*	1	15	5	Good	Fair	Medium	Medium	Medium	500	6.0	2.5	Direct Impact	Replacement planting required	2	6	332549	6257091
501	*Allocasuarina littoralis*	10	9	3	Fair	Fair	Short	Low	Low	350	4.2	2.1	Direct Impact	Replacement planting required	2	6	332592	6257114
502	*Pittosporum undulatum*	10	6	3	Fair	Poor	Short	Low	Low	250	3.0	1.8	Direct Impact	Replacement planting required	2	6	332583	6257131
503	*Pittosporum undulatum*	8	6	3	Fair	Fair	Short	Low	Low	300	3.6	2.0	Direct Impact	Replacement planting required	2	6	332609	6257124
504	*Allocasuarina littoralis*	4	11	3	Fair	Fair	Short	Low	Low	300	3.6	2.0	Direct Impact	Replacement planting required	2	6	332602	6257116
505	*Pittosporum undulatum*	5	4	3	Fair	Fair	Short	Low	Low	300	3.6	2.0	Direct Impact	Replacement planting required	2	6	332565	6257111
520	*Allocasuarina littoralis*	8	9	4	Fair	Fair	Medium	Low	Medium	350	4.2	2.1	Direct Impact	Replacement planting required	2	6	332548	6257037
2397	*Eucalyptus saligna*	6	7	4	Fair	Fair	Medium	Medium	Medium	450	5.4	2.4	Direct Impact	Replacement planting required	2	6	332666	6257057
2398	*Angophora floribunda*	8	6	3	Fair	Fair	Medium	Low	Medium	400	4.8	2.3	Direct Impact	Replacement planting required	2	6	332677	6257046
2399	*Eucalyptus punctata*	1	15	5	Good	Fair	Medium	Medium	Medium	600	7.2	2.7	Direct Impact	Replacement planting required	2	6	332666	6257024
2400	*Eucalyptus sp.*	6	5	2	Fair	Fair	Medium	Medium	Medium	400	4.8	2.3	Direct Impact	Replacement planting required	2	6	332675	6257035
2401	*Pinus sp.*	1	8	3	Fair	Fair	Medium	Medium	Medium	500	6.0	2.5	Direct Impact	Replacement planting required	2	6	332677	6257008
2402	*Cinnamomum camphora*	1	7	4	Fair	Fair	Medium	Medium	Medium	550	6.6	2.6	Direct Impact	Replacement planting required - Exempt species (Willoughby City Council)	2	6	332681	6257002
2403	*Angophora floribunda*	5	7	3	Fair	Fair	Medium	Medium	Medium	350	4.2	2.1	Direct Impact	Replacement planting required	2	6	332655	6257082
2404	*Casuarina glauca*	10	5	1	Fair	Poor	Short	Low	Low	100	2.0	1.5	Direct Impact	Replacement planting required	2	6	332640	6257066
2405	*Casuarina glauca*	1	11	3	Fair	Fair	Medium	Medium	Medium	450	5.4	2.4	Direct Impact	Replacement planting required	2	6	332629	6257062
2406	*Pinus radiata*	1	22	12	Fair	Fair	Medium	High	Medium	1000	12.0	3.3	Direct Impact	Replacement planting required	2	6	332743	6257110
9664	*Exotic sp.*	1	5	2	Fair	Poor	Short	Low	Low	250	3.0	1.8	Direct Impact	Replacement planting required	2	6	332657	6257040
9665	*Casaurina sp.*	3	5	2	Fair	Fair	Medium	Low	Low	200	2.4	1.7	Direct Impact	Replacement planting required	2	6	332736	6257121
9666	*Quercus robur*	1	6	4	Fair	Fair	Medium	Medium	Medium	500	6.0	2.5	Direct Impact	Replacement planting required	2	6	332755	6257122
9667	*Casaurina sp.*	3	6	2	Fair	Fair	Short	Low	Low	100	2.0	1.5	Direct Impact	Biodiversity Offset Scheme	2	6	332721	6257106
9668	*Eucalyptus sp.*	5	4	2	Fair	Fair	Short	Low	Low	100	2.0	1.5	Direct Impact	Biodiversity Offset Scheme	2	6	332708	6257102
9669	*Syncarpia glomulifera*	1	8	3	Good	Good	Medium	Medium	Medium	300	3.6	2.0	Trees to be Retained		2	6	332730	6257098

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9670	*Leptospermum sp.*	1	4	2	Good	Fair	Short	Low	Low	100	2.0	1.5	Trees to be Retained		2	6	332731	6257104
9712	*Eucalyptus scoparia*	1	8	4	Fair	Fair	Short	LOw	Low	400	4.8	2.3	Trees to be Retained		2	6	332617	6256946
9713	*Eucalyptus sp.*	1	5	0	Fair	Fair	Medium	Medium	Medium	350	4.2	2.1	Trees to be Retained		2	6	332640	6256957
9714	*Eucalyptus scoparia*	1	8	4	Good	Fair	Medium	Medium	Medium	450	5.4	2.4	Trees to be Retained		2	6	332663	6256975
9715	*Eucalyptus punctata*	1	12	5	Good	Fair	Medium	Medium	Medium	550	6.6	2.6	Trees to be Retained		2	6	332707	6256963
92399	*Eucalyptus punctata*	1	12	3	Fair	Poor	Short	Low	Low	300	3.6	2.0	Direct Impact	Replacement planting required	2	6	332652	6257047
95464	*Allocasuarina littoralis*	1	9	2	Fair	Poor	Short	Low	Low	350	4.2	2.1	Potential Impact	Replacement planting required	2	6	332709	6257145
96464	*Allocasuarina littoralis*	1	9	2	Fair	Poor	Short	Low	Low	350	4.2	2.1	Potential Impact	Replacement planting required	2	6	332714	6257147
97464	*Allocasuarina littoralis*	1	9	2	Fair	Poor	Short	Low	Low	350	4.2	2.1	Potential Impact	Replacement planting required	2	6	332719	6257149
98464	*Allocasuarina littoralis*	1	9	2	Fair	Poor	Short	Low	Low	350	4.2	2.1	Potential Impact	Biodiversity Offset Scheme	2	6	332724	6257151
99464	*Allocasuarina littoralis*	1	9	2	Fair	Poor	Short	Low	Low	350	4.2	2.1	Potential Impact	Biodiversity Offset Scheme	2	6	332728	6257153
99554	*Unidentified native species*	1	4	3	Fair	Fair	Short	Medium	Medium	150	2.0	1.5	Potential Impact	Replacement planting required	2	6	332659	6256991
99555	*Unidentified native species*	1	4	4	Fair	Fair	Short	Medium	Medium	150	2.0	1.5	Potential Impact	Replacement planting required	2	6	332653	6256987
457	*Eucalyptus saligna*	3	15	4	Good	Fair	Medium	Medium	Medium	600	7.2	2.7	Potential Impact	Replacement planting required	2	7	332804	6257186
458	*Eucalyptus saligna*	5	9	4	Fair	Fair	Medium	Medium	Medium	450	5.4	2.4	Potential Impact	Replacement planting required	2	7	332852	6257200
459	*Eucalyptus saligna*	5	12	3	Good	Fair	Medium	Medium	Medium	450	5.4	2.4	Potential Impact	Replacement planting required	2	7	332781	6257179
460	*Eucalyptus saligna*	6	12	3	Good	Fair	Medium	Medium	Medium	500	6.0	2.5	Potential Impact	Replacement planting required	2	7	332768	6257175
468	*Eucalyptus saligna*	5	8	3	Good	Fair	Medium	Medium	Medium	450	5.4	2.4	Trees to be Retained		2	7	332894	6257161
469	*Syncarpia glomulifera*	10	7	3	Good	Fair	Medium	High	High	450	5.4	2.4	Potential Impact	Replacement planting required	2	7	332878	6257153
470	*Syncarpia glomulifera*	7	8	3	Good	Fair	Medium	High	High	450	5.4	2.4	Direct Impact	Biodiversity Offset Scheme	2	7	332848	6257155
471	*Syzygium paniculatum*	7	6	3	Good	Fair	Medium	Medium	Low	300	3.6	2.0	Potential Impact	Replacement planting required	2	7	332794	6257141
472	*Grevillea robusta*	1	10	4	Good	Poor	Short	Low	Low	400	4.8	2.3	Potential Impact	Replacement planting required - Exempt species (Willoughby City Council)	2	7	332803	6257144
99588	*Eucalyptus sp.*	1	5	3	Good	Fair	Medium	Medium	Medium	200	2.4	1.7	Trees to be Retained		2	8	331705	6256613
99589	*Eucalyptus sp.*	1	4	3	Fair	Poor	Short	Low	Low	200	2.4	1.7	Trees to be Retained		2	8	331740	6256635
99590	*Melaleuca quinquenervia*	1	10	9	Good	Good	Medium	High	High	1200	14.4	3.6	Trees to be Retained		2	8	331757	6256552
99591	*Jacaranda mimosifolia*	1	8	8	Good	Fair	Medium	Medium	Medium	500	6.0	2.5	Trees to be Retained		2	8	331746	6256559

No.	Botanical Name	Trees in Group	Height (m)	Spread (m)	Health	Structure	ULE	Tree Significance	Retention Value	DBH (mm)	TPZ (m)	SRZ (m)	Impact	Offset/replacement	Area	Map	Easting	Northing
99592	*Melaleuca quinquenervia*	1	8	5	Fair	Fair	Medium	Medium	Medium	900	10.8	3.2	Trees to be Retained		2	8	331738	6256565
99593	*Melaleuca quinquenervia*	1	4	4	Fair	Fair	Medium	Low	Low	200	2.4	1.7	Trees to be Retained		2	8	331731	6256568
99594	*Melaleuca quinquenervia*	1	8	5	Good	Fair	Medium	Medium	Medium	700	8.4	2.8	Trees to be Retained		2	8	331718	6256571
99595	*Casuarina cunninghamiana*	1	10	6	Poor	Poor	Short	Low	Low	400	4.8	2.3	Trees to be Retained		2	8	331690	6256564
99596	*Melaleuca quinquenervia*	1	8	6	Good	Good	Long	High	High	750	9.0	2.9	Trees to be Retained		2	8	331652	6256585
99597	*Lophostemon confertus*	1	8	7	Good	Good	Long	High	High	650	7.8	2.8	Trees to be Retained		2	8	331612	6256579
99598	*Chamaecyparis sp.*	1	9	8	Good	Fair	Medium	Medium	Medium	700	8.4	2.8	Trees to be Retained		2	8	331596	6256585
99599	*Melaleuca quinquenervia*	1	5	4	Fair	Fair	Medium	Medium	Medium	550	6.6	2.6	Trees to be Retained		2	8	331592	6256598
99600	*Angophora costata*	1	9	11	Good	Good	Long	High	High	700	8.4	2.8	Trees to be Retained		2	8	331575	6256582
99601	*Angophora costata*	1	11	11	Good	Good	Long	Medium	Medium	500	6.0	2.5	Trees to be Retained		2	8	331581	6256594
99602	*Angophora costata*	1	15	12	Fair	Good	Medium	Medium	Medium	600	7.2	2.7	Trees to be Retained		2	8	331569	6256594