

## **REFERRAL RESPONSE – TREES & LANDSCAPING**

**FILE NO:** DA 321/2020/1

**ADDRESS:** 19-27 Cross Street DOUBLE BAY 2028

**PROPOSAL:** Demolition of existing structure and construction of a shop top housing development

**FROM:** Nick Williams - Tree & Landscape Officer

**TO:** Mr W Perdigao

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### **I refer to the following documents received for this report:**

- Statement of Environmental Effects, prepared by GSA Planning, dated August 2020.
- Survey Plan No. 43400DT, drafted by LTS, dated 3/6/2016.
- Architectural Drawing No's DA\_01 – DA\_17, drawn by Luigi Rosselli, dated 27/8/2020.
- Stormwater Drainage Plan No's 18617\_DA\_C000, 18617\_DA\_C100 – 18617\_DA\_C102, 18617\_DA\_C200, 18617\_DA\_SE01 & SE02 drawn by Henry & Hymas, dated July 2020.
- Arboricultural Impact Assessment Report, written by Redgum, dated 27 July 2020
- Landscape Plan No's LP01-D612- LP05-D612, designed by Dangar Barin Smith, dated 26/8/2020.

A site inspection was carried out on. 15/12/2020.

### **Relevant Control:**

- Woollahra Local Environment Plan 2014
- Woollahra Development Control Plan 2015
- The comments and recommendations within this Referral Response have taken into consideration the guidelines established within Australian Standard AS 4373 – Pruning of amenity trees and Australian Standard AS 4970 – Protection of trees on development sites

### **COMMENTS**

The 2 Chinese Elm street trees located within the roadway of Cross Street (Trees 2 & 3) are sufficiently setback from the proposed development and are unlikely to be impacted by the proposed building or basement. Tree protection fencing and trunk protection is however required to prevent damage from trucks and cranes. Additionally, the requirement for a tree damage security deposit bond for trees 2 & 3 forms Condition C.2 of this referral response

and is recommended to form part of any development consent. \*There is the potential for hoarding to conflict with the branches of Trees 2 & 3. In this regard Condition C.3 of this referral response requires that a hoarding design plan is submitted that shows hoarding designed to accommodate the canopies of both trees.

The proposed removal of Tree 1, which is a 3 metre tall Chinese Elm located on the boundary of the Council footpath and the subject site, is unlikely to result in any detrimental loss of amenity. The proposed replacement street tree however is a palm tree and not entirely suitable for this location due to potential frond drop. In this regard a modification is required to the details of the development to ensure the replacement tree is an *Ulmus parvifolia* (Chinese Elm). Additionally, sufficient deep soil area shall be provided for the landscape plantings within the property- Refer to Condition C.3 of this referral response.

## RECOMMENDATIONS

Council's Tree and Landscape Officer has determined that the development proposal is satisfactory in terms of tree preservation and landscaping, subject to compliance with the following Conditions of Consent.

### CONDITIONS OF CONSENT

*Please note that the standard conditions of consent are generally modified by the Technical Services Department to suit a particular development application. Please ensure all Technical Services conditions of consent are cut and pasted from this document only, and not inserted as standard conditions using the automatically generated (F3) function*

#### A. General Conditions

##### A.1 Tree Preservation & Approved Landscaping Works

All landscape works shall be undertaken in accordance with the approved landscape plan, arborist report, tree management plan and transplant method statement as applicable.

a) The following trees shall be retained

- Trees on Council Land

Council Ref No.	Species	Location	Dimension (metres)	Tree Value
2	<i>Ulmus parvifolia</i> (Chinese Elm)	Cross Street. Refer to Appendix C of the submitted Redgum Tree Management Plan- <i>Site Plan A</i>	7 x 6 metres	\$ 10, 000
3	<i>Ulmus parvifolia</i> (Chinese Elm)	Cross Street. Refer to Appendix C of the submitted Redgum Tree Management Plan- <i>Site Plan A</i>	8 x 6 metres	\$ 10, 500

**Note:** The tree/s required to be retained should appear coloured green on the construction certificate plans.

b) The following trees may be removed:

Council	Species	Location	Dimension
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Ref No.			(metres)
1	<i>Ulmus parvifolia</i> (Chinese Elm)	Transvaal avenue frontage – boundary specimen. Refer to Appendix C of the submitted Redgum Tree Management Plan- <i>Site Plan A</i>	3 x 2 metres

**Note:** Tree/s to be removed shall appear coloured red on the construction certificate plans.

## A.2 Approved Plans and supporting documents

Reference	Description	Author/Drawn	Date(s)
LP01-D612- LP05-D612	Landscape Plan	Dangar Barin Smith	26/8/2020
6514	Arboricultural Impact Assessment Report & Tree Management Plan	Redgum Horticultural	27 July 2020

## B. Conditions which must be satisfied prior to the demolition of any building or construction

### B.1 Establishment of Tree Protection Zone (TPZ) Fence

Tree Protection Zones shall be established around all trees to be retained and in accordance with Section 4 of the *Australian Standard Protection of Trees on Development Sites* (AS 4970- 2009). Tree protection zones must also comply with the following requirements;

#### a) Tree Protection Zone areas

Council Ref No.	Species	Tree Location	Fence Radius from Centre of Trunk (Metres)
2	<i>Ulmus parvifolia</i> (Chinese Elm)	Cross Street. Refer to Appendix C of the submitted Redgum Tree Management Plan- <i>Site Plan A</i>	2 metres
3	<i>Ulmus parvifolia</i> (Chinese Elm)	Cross Street. Refer to Appendix C of the submitted Redgum Tree Management Plan- <i>Site Plan A</i>	2 metres

**Note:** Where this condition relates to street trees and the fence cannot be placed at the specified radius, the fencing shall be positioned so that the entire verge (nature strip) area in front of the subject property, excluding existing driveways, footpaths and bus stops is protected.

**Note:** Where this condition relates to trees on private property the radial distance of fencing shall be positioned only within the subject property.

#### b) Tree Protection Zones shall be fenced with a 1.8 metre high chainmesh or weldmesh fence and secured to restrict access. The fence shall be established prior to any materials being brought onto the site and before the commencement of works including demolition. The area within the fence shall be mulched and maintained to a depth of 75mm. The soil within the TPZ shall be kept in a moist condition for the duration of the construction works. Unless approved by the site arborist there shall be no access within the TPZ.

#### c) Trunk protection shall be installed around the trunks of the following trees:

<b>Council Ref No.</b>	<b>Species</b>	<b>Location</b>
2	<i>Ulmus parvifolia</i> (Chinese Elm)	Cross Street. Refer to Appendix C of the submitted Redgum Tree Management Plan- <i>Site Plan A</i>
3	<i>Ulmus parvifolia</i> (Chinese Elm)	Cross Street. Refer to Appendix C of the submitted Redgum Tree Management Plan- <i>Site Plan A</i>

Trunk protection shall consist of a padding material such as hessian or thick carpet underlay wrapped around the trunk. Hardwood planks (50mm x100mm or similar) shall be placed over the padding and around the trunk of the tree at 150mm centres. The planks shall be secured with 8 gauge wire at 300mm spacing. Trunk protection shall extend a minimum height of 2 metres or to the maximum possible length permitted by the first branches.

- d) A sign identifying the Tree Protection Zone shall be erected on each side of the protection fence indicating the existence of a TPZ. Signage must be visible from within the development site.
- e) No excavation, construction activity, grade changes, storage of materials, stockpiling, siting of works sheds, preparation of mixes or cleaning of tools is permitted within Tree Protection Zones, unless specified in Condition B.2 of this consent.
- f) Temporary access within the TPZ for pedestrian and machinery movements shall only be permitted with the approval of the site arborist or unless specified in this consent.
- g) The site foreman must be made aware of all tree protection requirements associated with these conditions of consent by the project arborist. Any subsequent site personnel and contractors to the site must be made aware of all tree protection requirements by the site foreman.
- h) The project arborist shall provide written certification of compliance with the above condition.

## **B.2 Demolition and Construction Management Plan**

The Demolition and Construction Management Plan shall be reviewed and certified by the Project Arborist that appropriate tree protection measures have been accounted for. The Demolition and Construction Management Plan shall be prepared in accordance with all tree protection measures specified within this consent. Considerations by the Project Arborist shall include but not be limited to:

- a) Drawings and method statement showing details and the location of hoarding and scaffold;
- b) The movement and positioning of heavy machinery, lifting cranes, pier drilling gantry etc;
- c) Site construction access, temporary crossings and movement corridors on the site defined;
- d) Contractors car parking;
- e) Phasing of construction works;
- f) The space needed for all foundation excavations and construction works;

- g) All changes in ground level;
- h) Space for site sheds and other temporary structures such as toilets;
- i) Space for sorting and storing materials (short or long term), spoil and fuel and the mixing of cement and concrete; and
- j) The effects of slope on the movement of potentially harmful liquid spillages towards or into tree protection areas

### B.3 Arborists Documentation and Compliance Checklist

The site arborist shall provide written certification that all tree protection measures and construction techniques relevant to this consent have been complied with. Documentation for each site visit shall include:

- A record of the condition of trees to be retained prior to and throughout development;
- Recommended actions to improve site conditions and rectification of non-compliance; and
- Recommendations for future works which may impact the trees

All compliance certification documents shall be kept on site by the Site Foreman.

As a minimum the following intervals of site inspections must be made:

Stage of arboricultural inspection	Action (Compliance documentation and photos shall be included)
Installation of tree protection fencing	Compliance with tree protection measures
Excavation to accommodate the proposed stormwater within 3 metres of Tree 2.	Small hand tools such as mattocks or using compressed air or water jetting only shall be used.  Roots with a diameter equal to or in excess of 50mm shall not be severed or damaged unless approved in writing by the project arborist.
Prior to the issue of a Final Occupation Certificate	Supervise the dismantling of tree protection measures

Inspections and compliance documentation shall be made by an arborist with AQF Level 5 qualifications.

Additional site visits shall be made when required by site arborist and/or site foreman for ongoing monitoring/supervisory work.

## C. Conditions which must be satisfied prior to the issue of any construction certificate

### C.1 Tree Management Plan

The *Construction Certificate* plans and specifications shall show the following information:

- a) Trees to be numbered in accordance with these conditions:
  - shaded green where required to be retained and protected
  - shaded red where authorised to be removed
  - shaded yellow where required to be transplanted
  - shaded blue where required to be pruned

- b) References to applicable tree management plan, arborists report or transplant method statement.

This plan shall be kept on site until the issue of the final occupation certificate.

## C.2 Payment of Security, Levies and Fees (S80A(6) & S94 of the Act, Section 608 of the Local Government Act 1993)

Description	Amount	Indexed	Council Fee Code
<b>LONG SERVICE LEVY</b> under Building and Construction Industry Long Service Payments Act 1986			
<b>Tree Damage Security Deposit –</b> Making good any damage caused to any public tree as a consequence of the doing of anything to which the consent relates.	\$ 20,500	No	T114
<b>INSPECTION FEES</b> under section 608 of the Local Government Act 1993			
Tree Inspection Fee	\$200.00	No	T95

## C.3 Modification of details of the development (section 4.17 (1) (g) of the Act)

The *approved plans* and the *Construction Certificate* plans and specification, required to be submitted to the *Certifying Authority* pursuant to clause 139 of the *Regulation*, must detail the following amendments:

- The submitted Landscape Plan must specify the proposed replacement street tree to be an *Ulmus parvifolia* (Chinese Elm) and not a *Livistona* palm tree. The tree must be planted in a 100 litre container size at the time of planting. The tree pit and surface materials must match the existing materials used within the Double Bay shopping precinct and comply with all relevant specifications outlined in Council's *Specifications for Roadworks, Drainage and Miscellaneous Works* relating to tree planting within footpaths;
- To ensure there is sufficient deep soil to sustain the future growth of the proposed landscape plantings, all landscape areas within the property must comply with soil depths outlined within Section 4P - Table 5 of the NSW Apartment Design Guide - *Minimum soil standards for plant types and sizes*;
- A Hoarding Design Plan must be submitted to Council's Tree Officer. The design plan must consider the location of branches from Council street trees referenced 2 & 3. Where the branches of these trees exist within the airspace of the proposed hoarding the hoarding must be shown to be discontinuous to accommodate the branches without the need to prune.

**Note:** The effect of this condition is that it requires design changes and/or further information to be provided with the *Construction Certificate* drawings and specifications to address specific issues identified during assessment under section 4.15 of the *Act*.

**Note:** Clause 146 of the *Regulation* prohibits the issue of any *Construction Certificate* subject to this condition unless the *Certifying Authority* is satisfied that the condition has been complied with.

**Note:** Clause 145 of the *Regulation* prohibits the issue of any *Construction Certificate* that is inconsistent with this consent.

**D. Conditions which must be satisfied prior to the commencement of any development work**

Nil

**E. Conditions which must be satisfied during any development work**

**E.1 Tree Preservation**

All persons must comply with Council's Development Control Plan (DCP) 2015, Chapter E.3 Tree Management other than where varied by this consent. The DCP applies to any tree with a height greater than 5 metres or a diameter spread of branches greater than 3 metres.

General Protection Requirements

- a) The TPZ must be maintained during all development work unless otherwise specified within these conditions of consent.
- b) Excavation must cease where tree roots with a diameter exceeding 50mm are exposed. The *principal contractor* must procure an inspection of the exposed tree roots by an arborist with a minimum AQF Level 5 qualification. Excavation must only recommence with the implementation of the recommendations of the arborist.
- c) Where there is damage to any part of a tree the *principal contractor* must procure an inspection of the tree by a qualified arborist immediately. The *principal contractor* must immediately implement treatment as directed by the arborist. The arborist is to supply a detailed report to the appointed certifier.

**Note:** Trees must be pruned in accordance with Australian Standard AS 4373 "Pruning of Amenity Trees" and WorkCover NSW Code of Practice Amenity Tree Industry.

**E.2 Replacement/Supplementary trees which must be planted**

Any replacement or supplementary tree shall be grown in accordance with Tree stock for landscape use (AS 2303:2018). The replacement tree shall be planted in a *deep soil landscaped area* and maintained in a healthy and vigorous condition. If the replacement tree is found to be faulty, damaged, dying or dead before it attains a size whereby it is protected by Council's Tree Preservation Order, it must be replaced with another of the same species which complies with the criteria outlined below.

Species/Type	Planting/Location	Container Size/Size of Tree (at planting)	Minimum Dimensions at Maturity (metres)
<i>Ulmus parvifolia</i> (Chinese Elm)	Council footpath on Transvaal avenue. As plotted on the submitted Landscape Plan	100 litre	8 x 6 metres

The project arborist shall document compliance with the above condition.

**E.3 Hand excavation within tree root zones**

Excavation undertaken within the specified radius from the trunks of the following trees shall be hand dug.

Council Ref No.	Species	Location	Radius from centre of trunk (metres)
2	<i>Ulmus parvifolia</i> (Chinese Elm)	Cross Street. Refer to Appendix C of the submitted Redgum Tree Management Plan- <i>Site Plan A</i>	3 metres

Small hand tools such as mattocks or using compressed air or water jetting only shall be used. Roots with a diameter equal to or in excess of 50mm shall not be severed or damaged unless approved in writing by the project arborist.

Mechanical excavation is permitted beyond this radius when root pruning by hand along the perimeter line is completed. Exposed roots to be retained shall be covered with mulch or a geotextile fabric and kept in a moist condition and prevented from drying out.

All root pruning must be undertaken in accordance with the Australian Standard 4373 “Pruning of Amenity Trees” and carried out by a qualified Arborist (minimum qualification of Australian Qualification Framework Level 5 or recognised equivalent).

The project arborist shall document compliance with the above condition.

**F. Conditions which must be satisfied prior to any occupation or use of the building (Part 4A of the Act and Part 8 Division 3 of the Regulation)**

**F.1 Amenity Landscaping**

The *owner* or *principal contractor* must install all approved amenity landscaping (screen planting, soil stabilisation planting, etc.) prior to any occupation or use of the site.

**Note:** This condition has been imposed to ensure that the environmental impacts of the development are mitigated by approved landscaping prior to any occupation of the development.

**G. Conditions which must be satisfied prior to the issue of any Subdivision Certificate**

Nil

**H. Conditions which must be satisfied prior to the issue of a Final Occupation Certificate (s109C(1)(c))**

**H.1 Landscaping**

The *principal contractor* or *owner* must provide to PCA a works-as-executed landscape plan and certification from a qualified landscape architect/designer, horticulturist and/or arborist as applicable to the effect that the works comply with this consent.

**Note:** This condition has been imposed to ensure that all Landscaping work is completed prior to the issue of the Final Occupation Certificate.



**I. Conditions which must be satisfied during the ongoing use of the development**

Nil

**J. Miscellaneous Conditions**

Nil

**K. Advisings**

**K.1 Pruning or Removing a Tree Growing on Private Property**

Woollahra Municipal Development Control Plan (DCP) 2015, Chapter E.3 Tree Management may require that an application be made to Council prior to pruning or removing any tree. The aim is to secure the amenity of trees and preserve the existing landscape within our urban environment.

Before you prune or remove a tree, make sure you read all relevant conditions.

You can obtain a copy of the DCP from Council's website [www.woollahra.nsw.gov.au](http://www.woollahra.nsw.gov.au) or you may contact Council on 9391-7000 for further advice.

A handwritten signature in black ink, appearing to read 'Nick Williams', with a stylized flourish at the end.

Nick Williams  
**Tree & Landscape Officer**