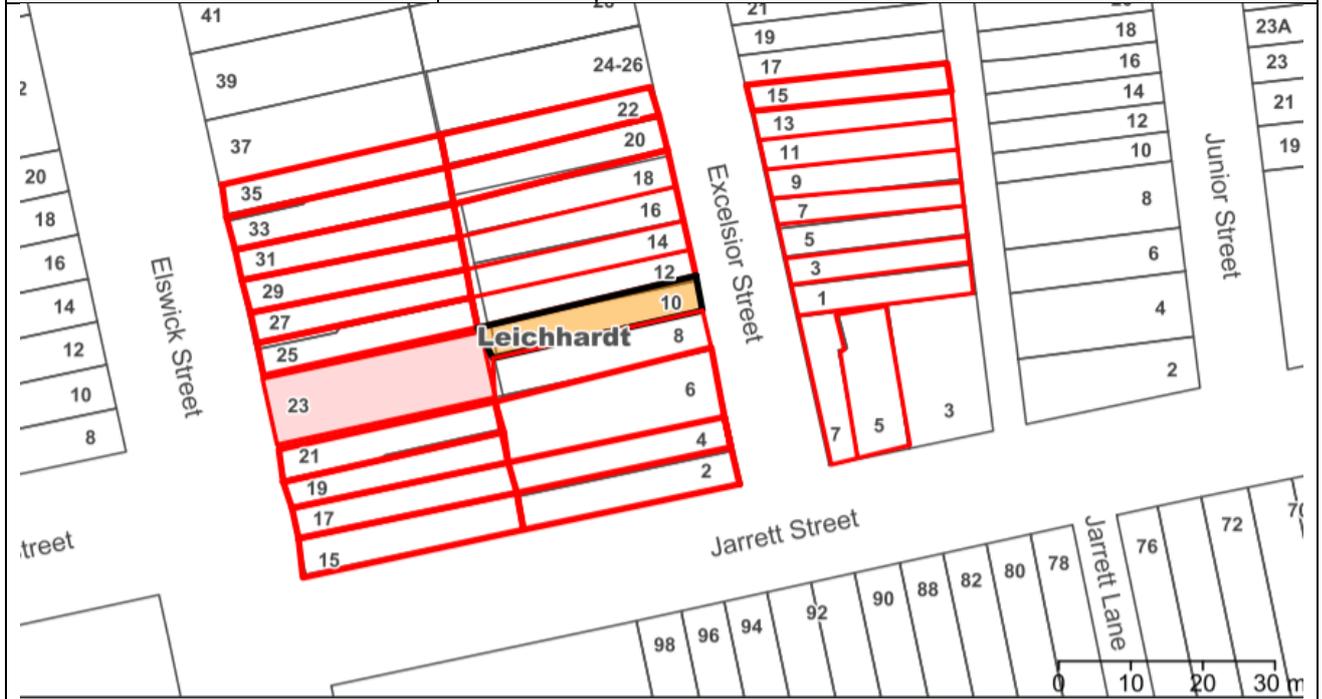


INNER WEST

DEVELOPMENT ASSESSMENT REPORT

Application No.	DA/2020/0270
Address	10 Excelsior Street LEICHHARDT NSW 2040
Proposal	Alterations & additions including an attic addition, with dormer window, rebuilding of existing shed, & demolition.
Date of Lodgement	18 April 2020
Applicant	Ms Lucy Humphrey
Owner	Doctor Robyn E Laube Mr Patrick A Effeney
Number of Submissions	Initial: 1
Value of works	\$250,000.00
Reason for determination at Planning Panel	Clause 4.6 variation exceeds 10%
Main Issues	Floor Space Ratio Site Coverage Dormer Design Visual Privacy
Recommendation	Approval with Conditions
Attachment A	Recommended conditions of consent.
Attachment B	Plans of proposed development –
Attachment C	Clause 4.6 Exception to Development Standards
Attachment D	Arborist Report



LOCALITY MAP

Subject Site		Objectors		↑ N
Notified Area		Supporters		

Note: Due to scale of map, not all objectors could be shown.

1. Executive Summary

This report is an assessment of the application submitted to Council for alterations and additions including an attic addition with dormer window, rebuilding of existing shed, and demolition at 10 Excelsior Street, Leichhardt.

The application was notified to surrounding properties and 1 submission was received in response to the initial notification.

The main issues that have arisen from the application include:

- Floor Space Ratio
- Site Coverage
- Dormer Design

The non-compliances are acceptable given the existing building footprint, and the lack of impact upon the amenity of neighbouring properties, subject to conditions, and therefore the application is recommended for approval.

2. Proposal

The application requests approval for alterations and addition to an existing attached dwelling.

The works will retain the dwelling's footprint and include the reconfiguration of ground floor living spaces, a reconstruction of the rear shed (which currently extends across the rear boundary), converting paved rear courtyard to permeable landscaped area, and a renovation of the existing first floor to eliminate drainage issue by joining the existing unused attic with the previous 1st floor addition. External changes effecting the streetscape of the attached dwelling include new fenestration at ground level and construction of a dormer window to the previous attic.

The completed project will provide a dwelling with 4 bedrooms, combined kitchen, living, dining area, a bathroom, ensuite and powder room.

3. Site Description

The subject site is located on the western side of Excelsior Street, approximately 25m north of the corner with Jarrett Street. The site consists of a single allotment which is generally rectangular in shape with a total area of 127.9 sqm and is legally described as Lot 1 in DP 907256.

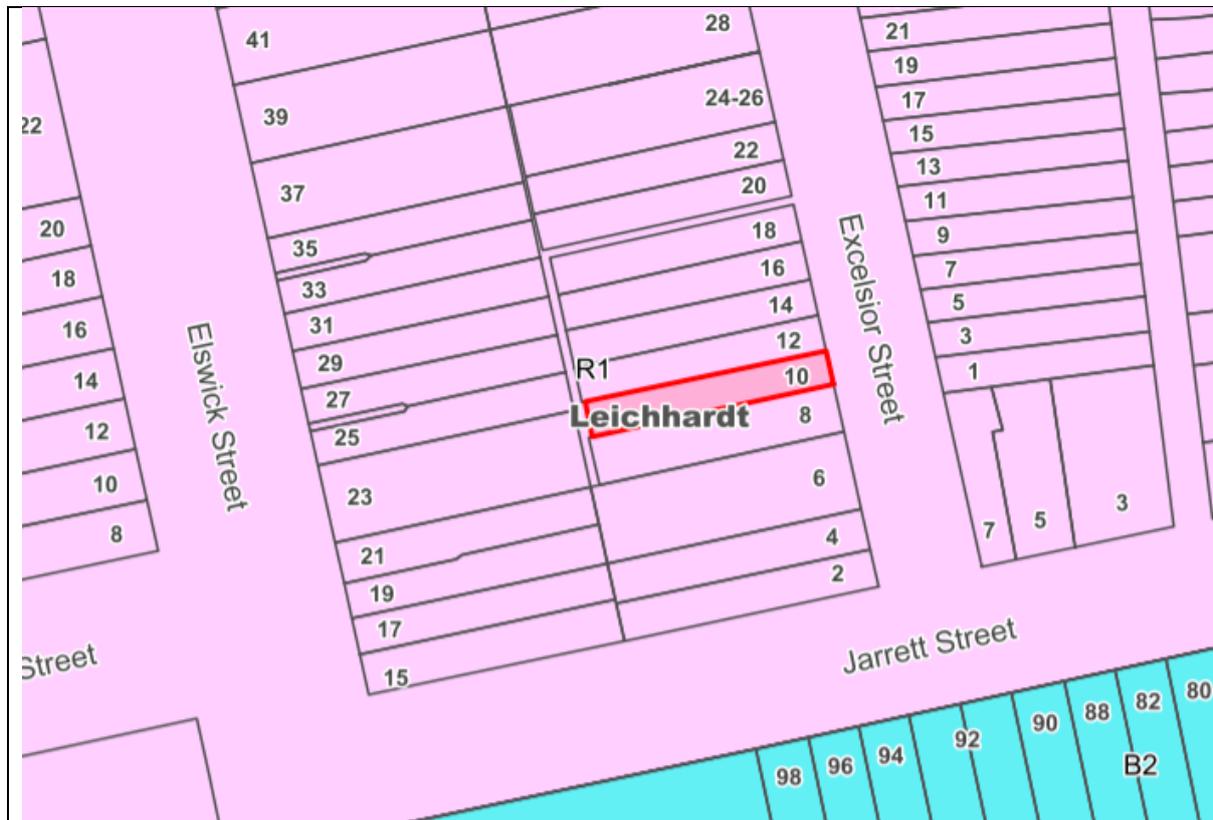
The site has a frontage to Excelsior Street of 4.395m and no secondary frontage. The site is not affected by any known easements. There is a right of way to the rear of the subject site which does not form part of the subject site as per survey and review of the DP.

The site supports a two-storey dwelling. The adjoining properties support single storey dwellings. The streetscape is characterised by single and two storey dwellings.

The following trees are located on the site and within the vicinity:

- 1 Jacaranda along the southern boundary, to the west of the dwelling for the subject site.

- 1 Elm tree located to the rear of 8 Excelsior being 80cm from the fence between 8 and 10
- An English elm located at the rear of 12 Excelsior near the fence between 10 and 12.



4. Background

4(a) Site history

There is no relevant development history for the subject site or surrounding properties.

4(b) Application history

Amended plans for improved front dormer design and removal of rear balcony provided 30/7/2020

5. Assessment

The following is a summary of the assessment of the application in accordance with Section 4.15 of the *Environmental Planning and Assessment Act 1979*.

5(a) Environmental Planning Instruments

The application has been assessed against the relevant Environmental Planning Instruments listed below:

- *State Environmental Planning Policy No. 55—Remediation of Land*
- *State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004*
- *State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017*

- *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005*
- *Leichhardt Local Environmental Plan 2013*

The following provides further discussion of the relevant issues:

5(a)(i) State Environmental Planning Policy No 55—Remediation of Land

State Environmental Planning Policy No. 55 - Remediation of Land (SEPP 55) provides planning guidelines for remediation of contaminated land. LDCP 2013 provides controls and guidelines for remediation works. *SEPP 55* requires the consent authority to be satisfied that “the site is, or can be made, suitable for the proposed use” prior to the granting of consent.

The site has not been used in the past for activities which could have potentially contaminated the site. It is considered that the site will not require remediation in accordance with *SEPP 55*.

5(a)(ii) State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004

A BASIX Certificate was submitted with the application and will be referenced in any consent granted.

5(a)(iii) State Environmental Planning Policy (Vegetation in Non-Rural Areas) (Vegetation SEPP)

Vegetation SEPP concerns the protection/removal of vegetation identified under the SEPP and gives effect to the local tree preservation provisions of Council’s DCP.

The application recommends the retention of the of vegetation from within the site and on Council land.

Overall, the proposal is considered acceptable with regard to the *Vegetation SEPP* and Councils DCP subject to the imposition of conditions, which have been included in the recommendation of this report.

5(a)(iv) Leichhardt Local Environment Plan 2013 (LLEP 2013)

The application was assessed against the following relevant clauses of *the Leichhardt Local Environmental Plan 2013*:

- Clause 1.2 - Aims of the Plan
- Clause 2.3 - Zone objectives and Land Use Table
- Clause 2.7 - Demolition
- Clause 4.3A - Landscaped areas for residential accommodation in Zone R1
- Clause 4.4 – Floor Space Ratio
- Clause 4.5 - Calculation of floor space ratio and site area
- Clause 4.6 - Exceptions to development standards
- Clause 6.1 - Acid Sulfate Soils
- Clause 6.2 - Earthworks
- Clause 6.4 - Stormwater management

Clause 6.8 - Development in areas subject to aircraft noise

(xii) Clause 2.3 - Land Use Table and Zone Objectives

The site is zoned R1 under the *LLEP 2011*. The *LLEP 2013* defines the development as:

attached dwelling means a building containing 3 or more dwellings, where—

- (a) each dwelling is attached to another dwelling by a common wall, and
- (b) each of the dwellings is on its own lot of land, and
- (c) none of the dwellings is located above any part of another dwelling

The development is permitted with consent within the zone. The development is consistent with the objectives of the R1 zone.

The following table provides an assessment of the application against the development standards:

Standard	Proposal	non compliance	Complies
Floor Space Ratio Maximum permissible: 0.8:1 or 102.32 m ²	1.05:1 or 134.5 m ²	32.18m ² or 31.46%	No
Landscape Area Minimum permissible: 15% or 19.18 m ²	15.33% or 19.61m ²	N/A	Yes
Site Coverage Maximum permissible: 60% or 76.74 m ²	69.98% or 89.5m ²	12.76m ² or 16.63%	No

(xiii) Clause 4.6 Exceptions to Development Standards

Site Coverage for residential accommodation in Zone R1

As outlined in table above, the proposal results in a breach of the following development standard/s:

- Clause 4.3A (3)(b) – Site Coverage for residential accommodation in Zone R1

The applicant seeks a variation to the Site Coverage development standard under Clause 4.6 Exceptions to Development Standards of the applicable local environmental plan by 16.63% or 12.76 sqm.

Clause 4.6 allows Council to vary development standards in certain circumstances and provides an appropriate degree of flexibility to achieve better design outcomes.

In order to demonstrate whether compliance is unreasonable or unnecessary in this instance, the proposed exception to the development standard has been assessed against the objectives and provisions of Clause 4.6 of the Leichhardt LEP 2013 below.

A written request has been submitted to Council in accordance with Clause 4.6(3) of the Leichhardt LEP 2013 justifying the proposed contravention of the development standard which is summarised as follows:

- The existing building setbacks on all sides are to be retained
- No change to the existing footprint for main dwelling
- The shed structure needs to be modified in order not to encroach the side boundary on two sides.
- Rear courtyard proposed to increase landscaped area to comply with LEP
- Proposed additions are not visible from the public domain
- No impact to trees on subject or neighbouring sites from proposal
- There are no adverse privacy, overshadowing or other impacts as a result of these works

The applicant's written rationale adequately demonstrates compliance with the development standard is unnecessary in the circumstances of the case, and that there are sufficient environmental planning grounds to justify contravening the development standard.

Objectives of the R1-General Residential zone:

- To provide for the housing needs of the community.
- To improve opportunities to work from home.
- To provide housing that is compatible with the character, style, orientation and pattern of surrounding buildings, streetscapes, works and landscaped areas.
- To provide landscaped areas for the use and enjoyment of existing and future residents.
- To protect and enhance the amenity of existing and future residents and the neighbourhood

It is considered the development is in the public interest because it is consistent with the objectives of the R1 zone, in accordance with Clause 4.6(4)(a)(ii) of the Leichhardt LEP 2013 (outline above) for the following reasons:

- The proposal will increase the amenity of housing in the community.
- The alteration retains the existing character of the neighbourhood.
- The proposal will increase the provision of permeable landscaped areas for the use and enjoyment of residents.
- The proposal does not result in any adverse amenity impacts.

The objectives of the Site coverage development standard for residential accommodation in Zone R1 development standard are as follows—

- (a) to provide landscaped areas that are suitable for substantial tree planting and for the use and enjoyment of residents,

- (b) to maintain and encourage a landscaped corridor between adjoining properties,
- (c) to ensure that development promotes the desired future character of the neighbourhood,
- (d) to encourage ecologically sustainable development by maximising the retention and absorption of surface drainage water on site and by minimising obstruction to the underground flow of water,
- (e) to control site density,
- (f) to limit building footprints to ensure that adequate provision is made for landscaped areas and private open space

It is considered the development is in the public interest because it is consistent with the above objectives for Site Coverage, in accordance with Clause 4.6(4)(a)(ii) of the Leichhardt LEP 2013 for the following reasons:

- The proposal is compatible with the desired future character of the area in relation to building bulk, form and scale.
- The siting of the building is within the existing building footprint for ground and first floors and it can be reasonably assumed development can occur.
- The proposal subject to conditions does not result in any adverse amenity impacts to the surrounding properties

The concurrence of the Planning Secretary may be assumed for matters dealt with by Local Planning Panels.

The proposal thereby accords with the objective in Clause 4.6(1)(b) and requirements of Clause 4.6(3)(b) of the Leichhardt LEP 2013. For the reasons outlined above, there are sufficient planning grounds to justify the departure from Site Coverage for residential accommodation in Zone R1 development standard and it is recommended the Clause 4.6 exception be granted.

Floor Space Ratio

As outlined above, the proposal results in a breach of the following development standards:

- Clause 4.4 – Floor Space Ratio

The application seeks a variation to the Floor Space Ratio development standard under Clause 4.6 Exceptions to Development Standards of the Leichhardt LEP 2013 by 31.46% or 32.186 sqm.

A written request has been submitted to Council in accordance with Clause 4.6(3) of the Leichhardt LEP 2013 justifying the proposed contravention of the development standard which is summarised as follows:

- The existing building setbacks on all sides are to be retained
- No change to the existing footprint for main dwelling
- The additional floor space come from the utilisation of existing attic space, with a modified roof form behind the existing ridgeline.

- Rear courtyard proposed to increase landscaped area to comply with LEP
- Proposed 1st floor additions are not visible from the public domain with the exception of the front dormer window.
- The modifications to roof form does not create any significant overshadowing impacts or loss of solar access to any private outdoor spaces.

The applicant's written rationale adequately demonstrates compliance with the development standard is unnecessary in the circumstances of the case, and that there are sufficient environmental planning grounds to justify contravening the development standard.

It is considered the development is in the public interest because it is consistent with the objectives of the R1 zone (set out above), in accordance with Clause 4.6(4)(a)(ii) of the Leichhardt LEP 2013 for the following reasons:

- The proposal will increase the amenity of housing in the community.
- The alteration retains the existing character of the neighbourhood.
- The proposal will increase the provision of permeable landscaped areas for the use and enjoyment of residents.
- The proposal does not result in any adverse amenity impacts.

The objectives of the Floor Space Ratio development standard are as follows—

(a) to ensure that residential accommodation—

(i) is compatible with the desired future character of the area in relation to building bulk, form and scale, and

(ii) provides a suitable balance between landscaped areas and the built form, and

(iii) minimises the impact of the bulk and scale of buildings,

(b) to ensure that non-residential development is compatible with the desired future character of the area in relation to building bulk, form and scale.

It is considered the development is in the public interest because it is consistent with the objectives of the Floor Space Ratio development standard, in accordance with Clause 4.6(4)(a)(ii) of the Leichhardt LEP 2013 for the following reasons:

- the proposal will provide a suitable balance between landscaped areas and the built form as the proposal complies with the landscaping control as set out in the Leichhardt LEP 2013. Given this, a reduction in gross floor area would not result in an increase in landscape area
- The proposal includes no change to the setbacks for to the existing attached dwelling.

The proposal thereby accords with the objective in Clause 4.6(1)(b) and requirements of Clause 4.6(3)(b) of the Leichhardt LEP 2013. For the reasons outlined above, there are sufficient planning grounds to justify the departure from Floor Space Ratio development standard and it is recommended the Clause 4.6 exception be granted.

(xiv) Clause 6.8 - Development in areas subject to aircraft noise

The proposal is for alterations and additions to an existing residential unit within the ANEF 20-25 Contour, the additions will increase the number of bedrooms. Therefore, it is considered that the requirements of Development in areas subject to aircraft noise are applicable in this instance. It is recommended that a condition has be included in the development consent to ensure that the proposal will meet the relevant requirements of Table 3.3 (Indoor Design Sound Levels for Determination of Aircraft Noise Reduction) in AS 2021:2015

5(b) Draft Environmental Planning Instruments

The application has been assessed against the following Draft Environmental Planning Instruments listed below:

- Draft SEPP Environment
- Draft Inner West Local Environmental Plan 2020 (*Draft IWLEP 2020*)

5(b)(i) Draft Environmental Planning Instruments

The NSW government has been working towards developing a new State Environmental Planning Policy (SEPP) for the protection and management of the natural environment. The Explanation of Intended Effect (EIE) for the Environment SEPP was on exhibition from 31 October 2017 until 31 January 2018. This consolidated SEPP proposes to provide a single set of planning provisions for catchments, waterways, bushland and protected areas. Changes proposed include consolidating seven existing SEPPs including Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005. The proposal is consistent with the provisions of the draft Environment SEPP.

5(b)(ii) Draft Inner West Local Environmental Plan 2020 (Draft IWLEP 2020)

The Draft IWLEP 2020 was placed on public exhibition commencing on 16 March 2020 and accordingly is a matter for consideration in the assessment of the application under *Section 4.15(1)(a)(ii) of the Environmental Planning and Assessment Act 1979*.

The amended provisions contained in the Draft IWLEP 2020 are not especially relevant to the assessment of the application. Accordingly, the development is considered acceptable having regard to the provisions of the Draft IWLEP 2020.

5(c) Development Control Plans

The application has been assessed and the following provides a summary of the relevant provisions of Leichhardt Development Control Plan 2013.

LDCP2013	Compliance
Part A: Introductions	
Section 3 – Notification of Applications	Yes
Part B: Connections	
B1.1 Connections – Objectives	Yes
B2.1 Planning for Active Living	Yes
B3.1 Social Impact Assessment	Yes
B3.2 Events and Activities in the Public Domain (Special Events)	N/A
Part C	
C1.0 General Provisions	Yes
C1.1 Site and Context Analysis	Yes
C1.2 Demolition	Yes subject to conditions
C1.3 Alterations and additions	Yes
C1.4 Heritage Conservation Areas and Heritage Items	N/A
C1.5 Corner Sites	N/A
C1.6 Subdivision	N/A
C1.7 Site Facilities	Yes
C1.8 Contamination	Yes
C1.9 Safety by Design	Yes
C1.10 Equity of Access and Mobility	N/A - Class 1a private residence
C1.11 Parking	Yes
C1.12 Landscaping	Yes
C1.13 Open Space Design Within the Public Domain	N/A
C1.14 Tree Management	Yes subject to conditions
C1.15 Signs and Outdoor Advertising	N/A
C1.16 Structures in or over the Public Domain: Balconies, Verandahs and Awnings	N/A
C1.17 Minor Architectural Details	Yes
C1.18 Laneways	N/A
C1.19 Rock Faces, Rocky Outcrops, Cliff Faces, Steep Slopes and Rock Walls	N/A
C1.20 Foreshore Land	N/A
C1.21 Green Roofs and Green Living Walls	N/A
Part C: Place – Section 2 Urban Character	
C2.2.3.1 <i>Excelsior Estate Distinctive Neighbourhood</i>	Yes – see discussion
Part C: Place – Section 3 – Residential Provisions	
C3.1 Residential General Provisions	Yes
C3.2 Site Layout and Building Design	Yes – Existing BLZ and height maintained.
C3.3 Elevation and Materials	Yes
C3.4 Dormer Windows	Yes – see discussion

C3.5 Front Gardens and Dwelling Entries	Yes
C3.6 Fences	Yes
C3.7 Environmental Performance	Yes
C3.8 Private Open Space	Yes
C3.9 Solar Access	Yes – see discussion
C3.10 Views	N/A
C3.11 Visual Privacy	Yes – see discussion
C3.12 Acoustic Privacy	Yes
C3.13 Conversion of Existing Non-Residential Buildings	N/A
C3.14 Adaptable Housing	N/A
Part C: Place – Section 4 – Non-Residential Provisions	N/A
Part E: Water	
Section 1 – Sustainable Water and Risk Management	
E1.1 Approvals Process and Reports Required With Development Applications	N/A
E1.1.1 Water Management Statement	Yes
E1.1.2 Integrated Water Cycle Plan	N/A
E1.1.3 Stormwater Drainage Concept Plan	Yes – subject to conditions
E1.1.4 Flood Risk Management Report	N/A
E1.1.5 Foreshore Risk Management Report	N/A
E1.2 Water Management	
E1.2.1 Water Conservation	N/A
E1.2.2 Managing Stormwater within the Site	Yes
E1.2.3 On-Site Detention of Stormwater	N/A
E1.2.4 Stormwater Treatment	N/A
E1.2.5 Water Disposal	N/A
E1.2.6 Building in the vicinity of a Public Drainage System	N/A
E1.2.7 Wastewater Management	N/A
E1.3 Hazard Management	N/A
E1.3.1 Flood Risk Management	N/A
E1.3.2 Foreshore Risk Management	N/A

The following provides discussion of the relevant issues:

C2.2.3.1 Excelsior Estate Distinctive Neighbourhood (The Core Sub Area)

The proposal is consistent with the built form and character of the neighbourhood. The design retains the single storey presentation to the street with no increase in the existing height of the 1st floor rear addition. The proposal is considered to be in keeping with the Excelsior Estate Distinctive Neighbourhood and therefore acceptable in this instance.

3.4 Dormer Windows

The proposed design includes the addition of a new dormer window. The dwelling is part of an existing pair. Dormer windows are common in the existing streetscape. Therefore, a dormer may be consistent with the neighbourhood if appropriately appointed and designed. The proposed design exceeds the dimension to be in keeping with the architectural style of the neighbourhood and alters the primary roof form beyond the acceptable 25%. The dormer proportions are required to have greater vertical proportions, as the existing roof form limits an increase in height to the design of the dormer and to allow greater retention of the existing

roof form the proposed dormer must be reduced in width. Limiting the dormer to a maximum width of 1.1m will allow for an acceptable dormer design.

It is recommended that the new dormer be accepted with the following condition:

Design Change

Prior to the issue of a Construction Certificate, the Certifying Authority must be provided with amended plans demonstrating the following:

The Proposed dormer shall not exceed 1.1m in width as measured from external cladding.

3.9 Solar Access

The subdivision pattern along Excelsior Street is for lot orientated east west. The subject lot and neighbouring lots currently do not achieve compliance with solar access controls for 2 hours of solar access to main living rooms and for 50% of the private open space. As the existing situation has not achieved this any new additions must not further reduce existing solar access. All new shadows as at the 21st June are cast over the roof of the dwelling and rear shed for 8 Excelsior Street creating no further impact on solar access to glazing or POS. Therefore, the proposal is acceptable with regards to solar access.

3.11 Visual Privacy

The proposal includes 2 new rear facing windows to the upper floor. These windows are associated with a walk-in-robe and bathroom. These rear windows are setback over 10m from the rear boundary limiting overlooking to rear. While the windows provide angled views to the neighbouring private open space at No 8 and 12 Excelsior Street the overlooking is considered negligible due to their location and associated use. Therefore, the new windows in this instance are acceptable with regards to the controls and objectives established for maintenance of visual privacy.

5(d) The Likely Impacts

The assessment of the Development Application demonstrates that, subject to the recommended conditions, the proposal will have minimal impact in the locality.

5(e) The suitability of the site for the development

Provided that any adverse effects on adjoining properties are minimised, this site is considered suitable to accommodate the proposed development.

5(f) Any submissions

The application was notified in accordance with Leichhardt Development Control Plan 2013 for a period of 21 days to surrounding properties. 1 submission was received in response to the initial notification.

The following issues raised in submissions have been discussed in this report:

- Privacy implications from the new rear upper floor balcony and doors – see Section 5(c)

In addition to the above issues, the submissions raised the following concerns which are discussed under the respective headings below:

Issue: The rear facing balcony and additional 1st floor glazing will impact the privacy of our rear yard at 23 Elswick St

Comment: The rear balcony in question was deleted with applicants amended plans. The location and associated use of windows are acceptable as discussed above.

5(g) The Public Interest

The public interest is best served by the consistent application of the requirements of the relevant Environmental Planning Instruments, and by Council ensuring that any adverse effects on the surrounding area and the environment are appropriately managed.

The proposal is not contrary to the public interest.

6 Referrals

6(a) Internal

The application was referred to the following internal sections/officers and issues raised in those referrals have been discussed in section 5 above.

- Development Engernerring.

6(b) External

The application did not require referral to any external referral bodies:

7. Section 7.11 Contributions/7.12 Levy

Section 7.11 contributions/7.12 levies are not payable for the proposal.

8. Conclusion

The proposal generally complies with the aims, objectives and design parameters contained in *Leichhardt Local Environmental Plan 2013* and *Leichhardt Development Control Plan 2013*.

The development will not result in any significant impacts on the amenity of the adjoining premises/properties and the streetscape and is considered to be in the public interest.

The application is considered suitable for approval subject to the imposition of appropriate conditions.

9. Recommendation

- A. The applicant has made a written request pursuant to Clause 4.6 of the *Leichhardt Local Environmental Plan 2013* to vary Clause 4.3A(3)(b) Site Coverage and 4.4 Floor Space Ratio of the *Leichhardt Local Environmental Plan 2013*. After considering the requests, and assuming the concurrence of the Secretary has been given, the Panel is satisfied that compliance with the standard is unnecessary in the circumstance of the case and that there are sufficient environmental grounds to support the variation. The proposed development will be in the public interest because the exceedance is not inconsistent with the objectives of the standard and of the zone in which the development is to be carried out.
- B. That the Inner West Local Planning Panel exercising the functions of the Council as the consent authority, pursuant to s4.16 of the *Environmental Planning and Assessment Act 1979*, grant consent to Development Application No. DA/2020/0270 for Alterations & additions including an attic addition, with dormer window, rebuilding of existing shed, & demolition. at 10 Excelsior Street LEICHHARDT NSW 2040 subject to the conditions listed in Attachment A below.

Attachment A – Recommended conditions of consent

CONDITIONS OF CONSENT

DOCUMENTS RELATED TO THE CONSENT

1. Documents related to the consent

The development must be carried out in accordance with plans and documents listed below:

Dwg No, Issue No and Revision	Plan Name	Date Issued	Prepared by
001, DA-1	Site Plan	13/08/2020	Lucy Humphrey Studio
008, DA-1	Ground Floor and Attic Plan	13/08/2020	Lucy Humphrey Studio
009, DA-1	Proposed Roof Plan	13/08/2020	Lucy Humphrey Studio
010, DA-01	Proposed Sections AA, BB & CC	13/08/2020	Lucy Humphrey Studio
011, DA-01	Proposed East and North Elevations	13/08/2020	Lucy Humphrey Studio
012, DA-01	Proposed West and South Elevations	13/08/2020	Lucy Humphrey Studio
014, DA-01	Materials & Finishes Schedule	13/08/2020	Lucy Humphrey Studio
Supporting Documentation			
	BASIX Certificate #A366608	23/02/2020	Lucy Humphrey
20141	Arboricultural Impact Assessment	02/04/2020	Jim McArdle

As amended by the conditions of consent.

DESIGN CHANGE

2. Design Change

Prior to the issue of a Construction Certificate, the Certifying Authority must be provided with amended plans demonstrating the following:

- a. *The Proposed dormer shall not exceed 1.1m in width as measured from the external cladding.*
- b. The material of the refurbished rear courtyard must be consistent with a landscaped area, being capable of growing plants, grass and trees.

FEES

3. Security Deposit - Custom

Prior to the commencement of demolition works or prior to the issue of a Construction Certificate, the Certifying Authority must be provided with written evidence that a security deposit and inspection fee has been paid to Council to cover the cost of making good any damage caused to any Council property or the physical environment as a consequence of carrying out the works and as surety for the proper completion of any road, footpath and drainage works required by this consent.

Security Deposit:	\$2,152.50
Inspection Fee:	\$230.65

Payment will be accepted in the form of cash, bank cheque, EFTPOS/credit card (to a maximum of \$10,000) or bank guarantee. Bank Guarantees must not have an expiry date.

The inspection fee is required for the Council to determine the condition of the adjacent road reserve and footpath prior to and on completion of the works being carried out.

Should any of Council's property and/or the physical environment sustain damage during the course of the demolition or construction works, or if the works put Council's assets or the environment at risk, or if any road, footpath or drainage works required by this consent are not completed satisfactorily, Council may carry out any works necessary to repair the damage, remove the risk or complete the works. Council may utilise part or all of the security deposit to restore any damages, and Council may recover, in any court of competent jurisdiction, any costs to Council for such restorations.

A request for release of the security may be made to the Council after all construction work has been completed and a final Occupation Certificate issued.

The amount nominated is only current for the financial year in which the consent was issued and is revised each financial year. The amount payable must be consistent with Council's Fees and Charges in force at the date of payment.

4. Long Service Levy

Prior to the issue of a Construction Certificate, written evidence must be provided to the Certifying Authority that the long service levy in accordance with Section 34 of the *Building and Construction Industry Long Service Payments Act 1986* has been paid at the prescribed rate of 0.35% of the total cost of the work to either the Long Service Payments Corporation or Council for any work costing \$25,000 or more.

GENERAL CONDITIONS

5. Boundary Alignment Levels

Alignment levels for the site at all pedestrian and vehicular access locations must match the existing back of footpath levels at the boundary.

6. Waste Management Plan

Prior to the commencement of any works (including any demolition works), the Certifying Authority is required to be provided with a Recycling and Waste Management Plan (RWMP) in accordance with the relevant Development Control Plan.

7. Erosion and Sediment Control

Prior to the issue of a commencement of any works (including any demolition works), the Certifying Authority must be provided with an erosion and sediment control plan and specification. Sediment control devices must be installed and maintained in proper working order to prevent sediment discharge from the construction site.

8. Standard Street Tree Protection

Prior to the commencement of any work, the Certifying Authority must be provided with details of the methods of protection of all street trees adjacent to the site during demolition and construction.

9. Works Outside the Property Boundary

This development consent does not authorise works outside the property boundaries on adjoining lands.

PRIOR TO ANY DEMOLITION**10. Hoardings**

The person acting on this consent must ensure the site is secured with temporary fencing prior to any works commencing.

If the work involves the erection or demolition of a building and is likely to cause pedestrian or vehicular traffic on public roads or Council controlled lands to be obstructed or rendered inconvenient, or building involves the enclosure of public property, a hoarding or fence must be erected between the work site and the public property. An awning is to be erected, sufficient to prevent any substance from, or in connection with, the work falling onto public property.

Separate approval is required from the Council under the *Roads Act 1993* to erect a hoarding or temporary fence or awning on public property.

11. Dilapidation Report

Prior to any works commencing (including demolition), the Certifying Authority and owners of identified properties, must be provided with a colour copy of a dilapidation report prepared by a suitably qualified person. The report is required to include colour photographs of all the adjoining properties to the Certifying Authority's satisfaction. In the event that the consent of the adjoining property owner cannot be obtained to undertake the report, copies of the letter/s that have been sent via registered mail and any responses received must be forwarded to the Certifying Authority before work commences.

12. Advising Neighbors Prior to Excavation

At least 7 days before excavating below the level of the base of the footings of a building on an adjoining allotment of land, give notice of intention to do so to the owner of the adjoining allotment of land and furnish particulars of the excavation to the owner of the building being erected or demolished.

13. Construction Fencing

Prior to the commencement of any works (including demolition), the site must be enclosed with suitable fencing to prohibit unauthorised access. The fencing must be erected as a barrier between the public place and any neighbouring property.

PRIOR TO CONSTRUCTION CERTIFICATE**14. Dilapidation Report – Pre-Development – Minor**

Prior to the issue of a Construction Certificate or any demolition, the Certifying Authority must be provided with a dilapidation report including colour photos showing the existing condition of the footpath and roadway adjacent to the site.

15. Stormwater Drainage System – Minor Developments (OSD is not required)

Prior to the issue of a Construction Certificate, the Certifying Authority must be provided with stormwater drainage design plans certified by a suitably qualified Civil Engineer that the design of the site drainage system complies with the following specific requirements:

- a. Stormwater runoff from all roof areas within the property being collected in a system of gutters, pits and pipeline and be discharged, together with overflow pipelines from any rainwater tank(s), by gravity to the kerb and gutter of a public road;
- b. Comply with Council's Stormwater Drainage Code, Australian Rainfall and Runoff (A.R.R.), Australian Standard AS3500.3-2018 'Stormwater Drainage' and Council's DCP;
- c. Pipe and channel drainage systems must be designed to cater for the twenty (20) year Average Recurrence Interval (ARI) storm in the case of low and medium residential developments. In all cases, the major event surface flow paths must be designed to cater for the one hundred (100) year ARI Storm;
- d. Charged or pump-out stormwater drainage systems are not permitted including for roof drainage;
- e. To provide for adequate site drainage all roof and surface stormwater from the site and any catchment external to the site that presently drains to it, must be collected in a system of pits and pipelines/channels and major storm event surface flow paths and being discharged to a stormwater drainage system in accordance with the requirements of Council's DCP. Please note any stormwater outlets through sandstone kerbs must be carefully core drilled;
- f. The design plans must detail the existing and proposed site drainage layout, size, class and grade of pipelines, pit types, roof gutter and downpipe sizes;
- g. The stormwater system must not be influenced by backwater effects or hydraulically controlled by the receiving system;
- h. As there is no overland flow/flood path available from the rear courtyard to the Excelsior Street frontage, the design of the sag pit and piped drainage system is to meet the following criteria:
 1. Capture and convey the 100 year Average Recurrence Interval flow from the contributing catchment assuming 80% blockage of the inlet and 50% blockage of the pipe;

2. The maximum water level over the sag pit shall not be less than 150mm below the floor level or damp course of the building; and
3. The design shall make provision for the natural flow of stormwater runoff from uphill/upstream properties/lands.
 - i. A minimum 150mm step up shall be provided between all external finished surfaces and adjacent internal floor areas;
 - j. The design must make provision for the natural flow of stormwater runoff from uphill/upstream properties/lands;
 - k. No nuisance or concentration of flows to other properties;
 - l. The stormwater system must not be influenced by backwater effects or hydraulically controlled by the receiving system;
 - m. The design plans must specify that any components of the existing system to be retained must be certified during construction to be in good condition and of adequate capacity to convey the additional runoff generated by the development and be replaced or upgraded if required;
 - n. An inspection opening or stormwater pit must be installed inside the property, adjacent to the boundary, for all stormwater outlets;
 - o. Only a single point of discharge is permitted to the kerb and gutter, per frontage of the site;
 - p. New pipelines within the footpath area that are to discharge to the kerb and gutter must be hot dipped galvanised steel hollow section with a minimum wall thickness of 4.0mm and a maximum section height and width of 100mm or sewer grade uPVC pipe with a maximum diameter of 100mm;
 - q. All redundant pipelines within footpath area must be removed and footpath/kerb reinstated;
 - r. The setback of the outlet pipe from the street tree must comply with the requirements of Council's Tree Assessment Officer.

16. Party Walls

Prior to the issue of a Construction Certificate, the Certifying Authority must be provided with Architectural Plans accompanied by a Structural Certificate which verifies that the architectural plans do not rely on the Party Wall for lateral or vertical support and that additions are independently supported. A copy of the Certificate & plans must be provided to all owners of the party walls.

17. Structural Certificate for retained elements of the building

Prior to the issue of a Construction Certificate, the Certifying Authority is required to be provided with a Structural Certificate prepared by a practising structural engineer, certifying the structural adequacy of the property and its ability to withstand the proposed additional, or altered structural loads during all stages of construction. The certificate must also include all details of the methodology to be employed in construction phases to achieve the above

requirements without result in demolition of elements marked on the approved plans for retention.

18. Sydney Water – Tap In

Prior to the issue of a Construction Certificate, the Certifying Authority is required to ensure approval has been granted through Sydney Water's online 'Tap In' program to determine whether the development will affect Sydney Water's sewer and water mains, stormwater drains and/or easements, and if further requirements need to be met.

Note: Please refer to the web site <http://www.sydneywater.com.au/tapin/index.htm> for details on the process or telephone 13 20 92

19. Acoustic Report – Aircraft Noise

Prior to the issue of a Construction Certificate, the Certifying Authority must be provided with amended plans detailing the recommendations of an acoustic report prepared by a suitably qualified Acoustic Engineer demonstrating compliance of the development with the relevant provisions of Australian Standard AS 2021:2015 Acoustics – Aircraft noise intrusion – Building siting and construction.

DURING DEMOLITION AND CONSTRUCTION

20. Construction Hours – Class 1 and 10

Unless otherwise approved by Council, excavation, demolition, construction or subdivision work are only permitted between the hours of 7:00am to 5:00pm, Mondays to Saturdays (inclusive) with no works permitted on, Sundays or Public Holidays.

21. Survey Prior to Footings

Upon excavation of the footings and before the pouring of the concrete, the Certifying Authority must be provided with a certificate of survey from a registered land surveyor to verify that the structure will not encroach over the allotment boundaries.

22. Tree Protections

During construction work the recommendations of the Arboricultural Impact Assessment prepared by Jim McArdle Ref#20141 are practiced to ensure the retention and protection of the onsite and neighbouring trees. The Certifying Authority shall ensure the recommendations are complied with.

PRIOR TO OCCUPATION CERTIFICATE**23. No Encroachments**

Prior to the issue of an Occupation Certificate, the Principal Certifier must ensure that any encroachments on to Council road or footpath resulting from the building works have been removed, including opening doors, gates and garage doors with the exception of any awnings or balconies approved by Council.

24. No Weep Holes

Prior to the issue of an Occupation Certificate, the Principal Certifier must be provided with evidence that any weep holes to Council road or footpath resulting from the building works have been removed.

25. Aircraft Noise –Alterations and Additions

Prior to the issue of any Occupation Certificate, the Principal Certifier must be provided with a report prepared and submitted by an accredited Acoustics Consultant certifying that the final construction meets AS2021-2015 with regard to the noise attenuation measures referred to in the "Before the Issue of a Construction Certificate" Section of this Determination. Such report must include external and internal noise levels to ensure that the external noise levels during the test are representative of the typical maximum levels that may occur at this development.

Where it is found that internal noise levels are greater than the required dB(A) rating due to faulty workmanship or the like, necessary corrective measures must be carried out and a further certificate being prepared and submitted to the Principal Certifier in accordance with this condition.

ADVISORY NOTES**Permits**

Where it is proposed to occupy or carry out works on public roads or Council controlled lands, the person acting on this consent must obtain all applicable Permits from Council in accordance with Section 68 (Approvals) of the *Local Government Act 1993* and/or Section 138 of the *Roads Act 1993*. Permits are required for the following activities:

- a. Work zone (designated parking for construction vehicles). Note that a minimum of 2 months should be allowed for the processing of a Work Zone application;
- b. A concrete pump across the roadway/footpath;
- c. Mobile crane or any standing plant;
- d. Skip Bins;

- e. Scaffolding/Hoardings (fencing on public land);
- f. Public domain works including vehicle crossing, kerb & guttering, footpath, stormwater, etc.;
- g. Awning or street veranda over the footpath;
- h. Partial or full road closure; and
- i. Installation or replacement of private stormwater drain, utility service or water supply.

If required contact Council's Road Access team to ensure the correct Permit applications are made for the various activities. Applications for such Permits must be submitted and approved by Council prior to the commencement of the works associated with such activity.

Insurances

Any person acting on this consent or any contractors carrying out works on public roads or Council controlled lands is required to take out Public Liability Insurance with a minimum cover of twenty (20) million dollars in relation to the occupation of, and approved works within those lands. The Policy is to note, and provide protection for Inner West Council, as an interested party and a copy of the Policy must be submitted to Council prior to commencement of the works. The Policy must be valid for the entire period that the works are being undertaken on public property.

Prescribed Conditions

This consent is subject to the prescribed conditions of consent within clause 98-98E of the *Environmental Planning and Assessment Regulations 2000*.

Notification of commencement of works

At least 7 days before any demolition work commences:

- a. the Council must be notified of the following particulars:
 - i. the name, address, telephone contact details and licence number of the person responsible for carrying out the work; and
 - ii. the date the work is due to commence and the expected completion date; and
- b. a written notice must be placed in the letter box of each directly adjoining property identified advising of the date the work is due to commence.

Storage of Materials on public property

The placing of any materials on Council's footpath or roadway is prohibited, without the prior consent of Council.

Toilet Facilities

The following facilities must be provided on the site:

- a. Toilet facilities in accordance with WorkCover NSW requirements, at a ratio of one toilet per every 20 employees; and
- b. A garbage receptacle for food scraps and papers, with a tight fitting lid.

Facilities must be located so that they will not cause a nuisance.

Infrastructure

The developer must liaise with the Sydney Water Corporation, Ausgrid, AGL and Telstra concerning the provision of water and sewerage, electricity, natural gas and telephones respectively to the property. Any adjustment or augmentation of any public utility services including Gas, Water, Sewer, Electricity, Street lighting and Telecommunications required as a result of the development must be undertaken before occupation of the site.

Other Approvals may be needed

Approvals under other acts and regulations may be required to carry out the development. It is the responsibility of property owners to ensure that they comply with all relevant legislation. Council takes no responsibility for informing applicants of any separate approvals required.

Failure to comply with conditions

Failure to comply with the relevant provisions of *the Environmental Planning and Assessment Act 1979* and/or the conditions of this consent may result in the serving of penalty notices or legal action.

Other works

Works or activities other than those approved by this Development Consent will require the submission of a new Development Application or an application to modify the consent under Section 4.55 of the *Environmental Planning and Assessment Act 1979*.

Obtaining Relevant Certification

This development consent does not remove the need to obtain any other statutory consent or approval necessary under any other Act, such as (if necessary):

- a. Application for any activity under that Act, including any erection of a hoarding;

- b. Application for a Construction Certificate under the *Environmental Planning and Assessment Act 1979*;
- c. Application for an Occupation Certificate under the *Environmental Planning and Assessment Act 1979*;
- d. Application for a Subdivision Certificate under the *Environmental Planning and Assessment Act 1979* if land (including stratum) subdivision of the development site is proposed;
- e. Application for Strata Title Subdivision if strata title subdivision of the development is proposed;
- f. Development Application for demolition if demolition is not approved by this consent;
or
- g. Development Application for subdivision if consent for subdivision is not granted by this consent.

National Construction Code (Building Code of Australia)

A complete assessment of the application under the provisions of the National Construction Code (Building Code of Australia) has not been carried out. All building works approved by this consent must be carried out in accordance with the requirements of the National Construction Code.

Notification of commencement of works

Residential building work within the meaning of the *Home Building Act 1989* must not be carried out unless the PCA (not being the council) has given the Council written notice of the following information:

- a. In the case of work for which a principal contractor is required to be appointed:
 - i. The name and licence number of the principal contractor; and
 - ii. The name of the insurer by which the work is insured under Part 6 of that Act.
- b. In the case of work to be done by an owner-builder:
 - i. The name of the owner-builder; and
 - ii. If the owner-builder is required to hold an owner-builder permit under that Act, the number of the owner-builder permit.

Dividing Fences Act

The person acting on this consent must comply with the requirements of the *Dividing Fences Act 1991* in respect to the alterations and additions to the boundary fences.

Permits from Council under Other Acts

Where it is proposed to occupy or carry out works on public roads or Council controlled lands, the person acting on this consent must obtain all applicable Permits from Council in accordance with Section 68 (Approvals) of the *Local Government Act 1993* and/or Section 138 of the *Roads Act 1993*. Permits are required for the following activities:

- a. Work zone (designated parking for construction vehicles). Note that a minimum of 2 months should be allowed for the processing of a Work Zone application;
- b. A concrete pump across the roadway/footpath;
- c. Mobile crane or any standing plant;
- d. Skip bins;
- e. Scaffolding/Hoardings (fencing on public land);
- f. Public domain works including vehicle crossing, kerb & guttering, footpath, stormwater, etc.;
- g. Awning or street verandah over footpath;
- h. Partial or full road closure; and
- i. Installation or replacement of private stormwater drain, utility service or water supply.

Contact Council's Road Access team to ensure the correct Permit applications are made for the various activities. A lease fee is payable for all occupations.

Noise

Noise arising from the works must be controlled in accordance with the requirements of the *Protection of the Environment Operations Act 1997* and guidelines contained in the New South Wales Environment Protection Authority Environmental Noise Control Manual.

Amenity Impacts General

The use of the premises must not give rise to an environmental health nuisance to the adjoining or nearby premises and environment. There are to be no emissions or discharges from the premises, which will give rise to a public nuisance or result in an offence under the *Protection of the Environment Operations Act 1997* and Regulations. The use of the premises and the operation of plant and equipment must not give rise to the transmission of a vibration nuisance or damage other premises.

Lead-based Paint

Buildings built or painted prior to the 1970's may have surfaces coated with lead-based paints. Recent evidence indicates that lead is harmful to people at levels previously thought safe. Children particularly have been found to be susceptible to lead poisoning and cases of acute child lead poisonings in Sydney have been attributed to home renovation activities involving the removal of lead based paints. Precautions should therefore be taken if painted surfaces

are to be removed or sanded as part of the proposed building alterations, particularly where children or pregnant women may be exposed, and work areas should be thoroughly cleaned prior to occupation of the room or building.

Dial before you dig

Contact "Dial Prior to You Dig" prior to commencing any building activity on the site.

Useful Contacts

BASIX Information 1300 650 908 weekdays 2:00pm - 5:00pm
www.basix.nsw.gov.au

Department of Fair Trading 13 32 20
www.fairtrading.nsw.gov.au

Enquiries relating to Owner Builder Permits and Home Warranty Insurance.

Dial Prior to You Dig 1100
www.dialprior.toyoudig.com.au

Landcom 9841 8660

To purchase copies of Volume One of "Soils and Construction"

Long Service Corporation Payments 131441
www.lspc.nsw.gov.au

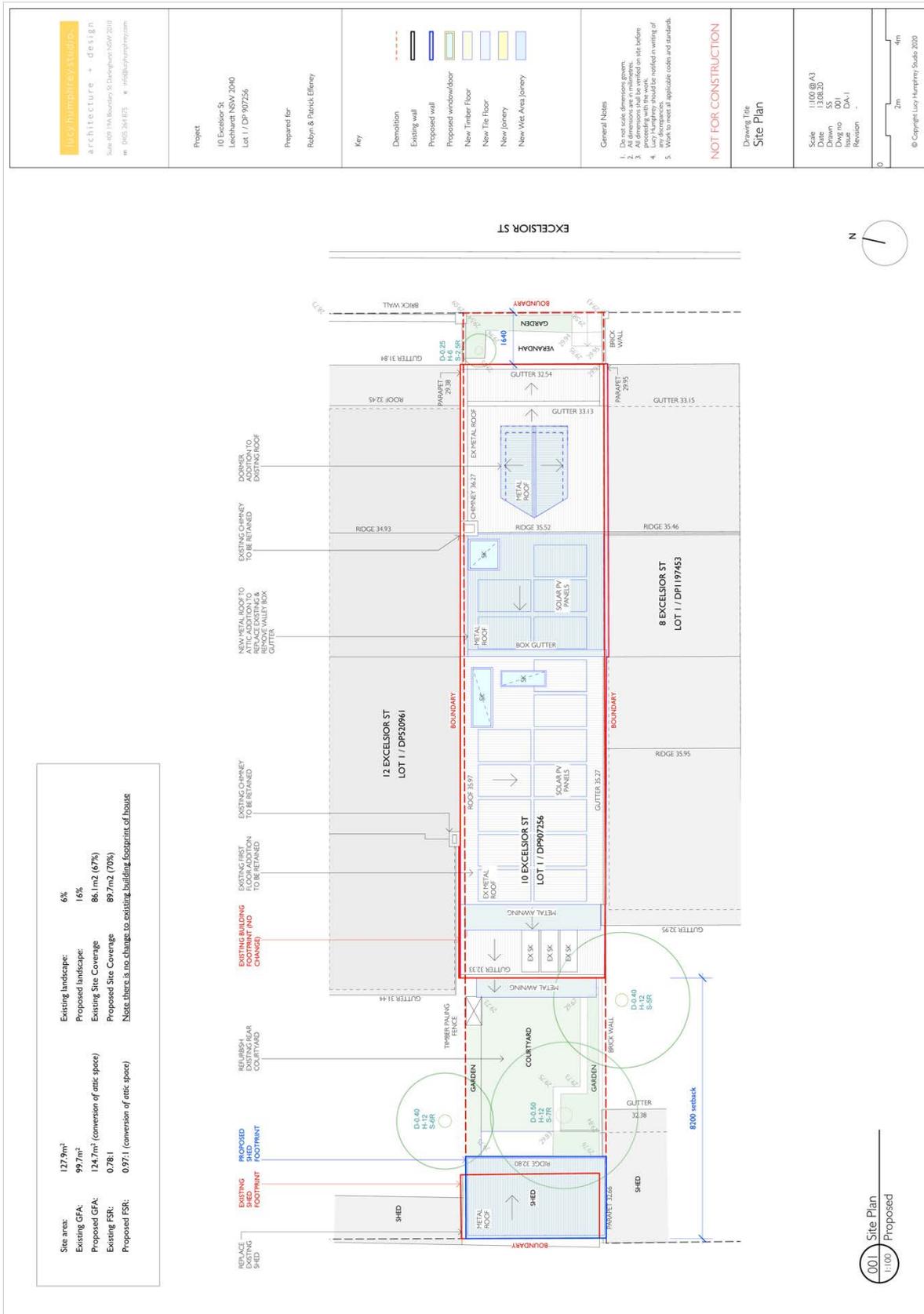
NSW Food Authority 1300 552 406
www.foodnotify.nsw.gov.au

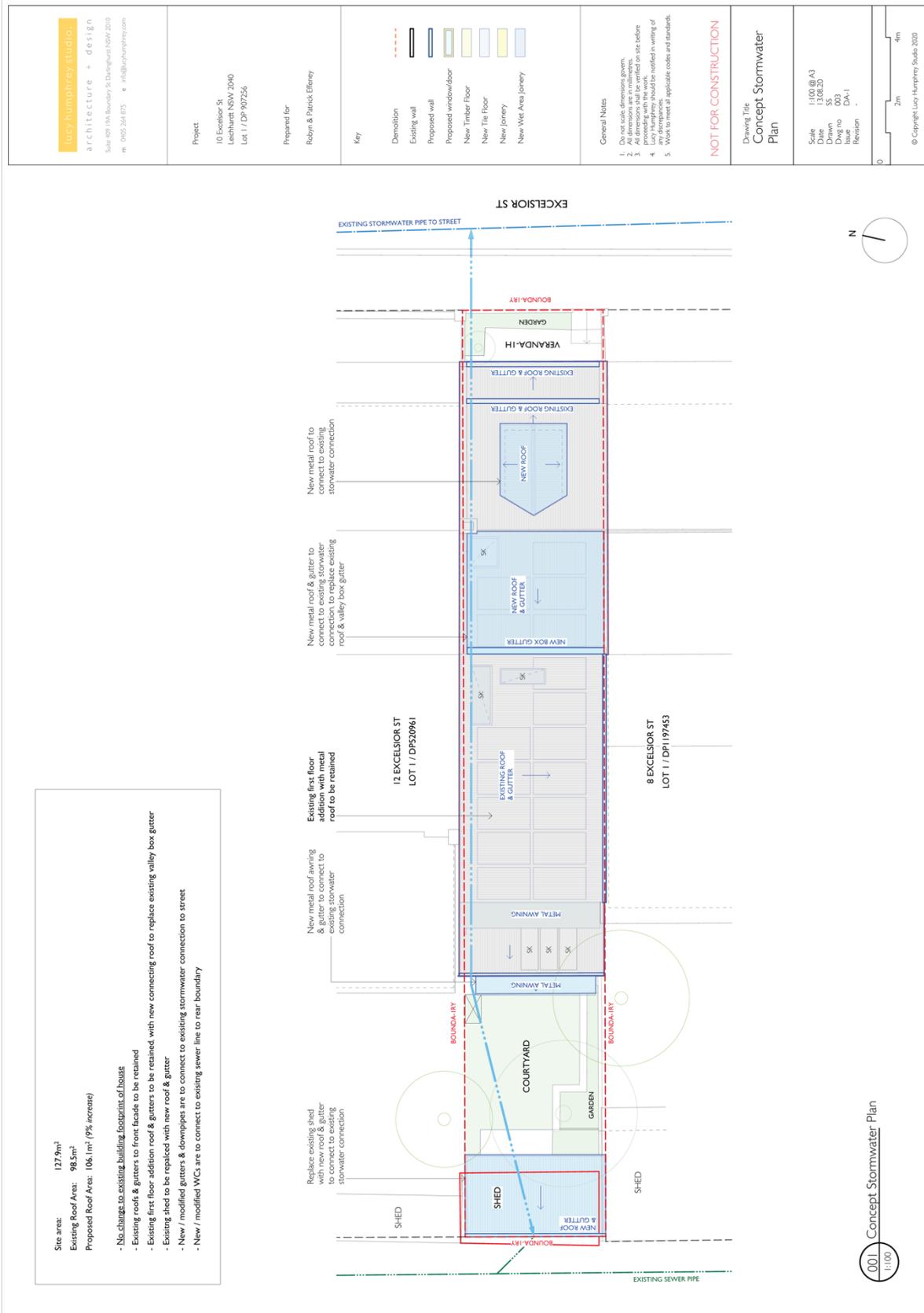
NSW Government www.nsw.gov.au/fibro
www.diysafe.nsw.gov.au

Information on asbestos and safe work practices.

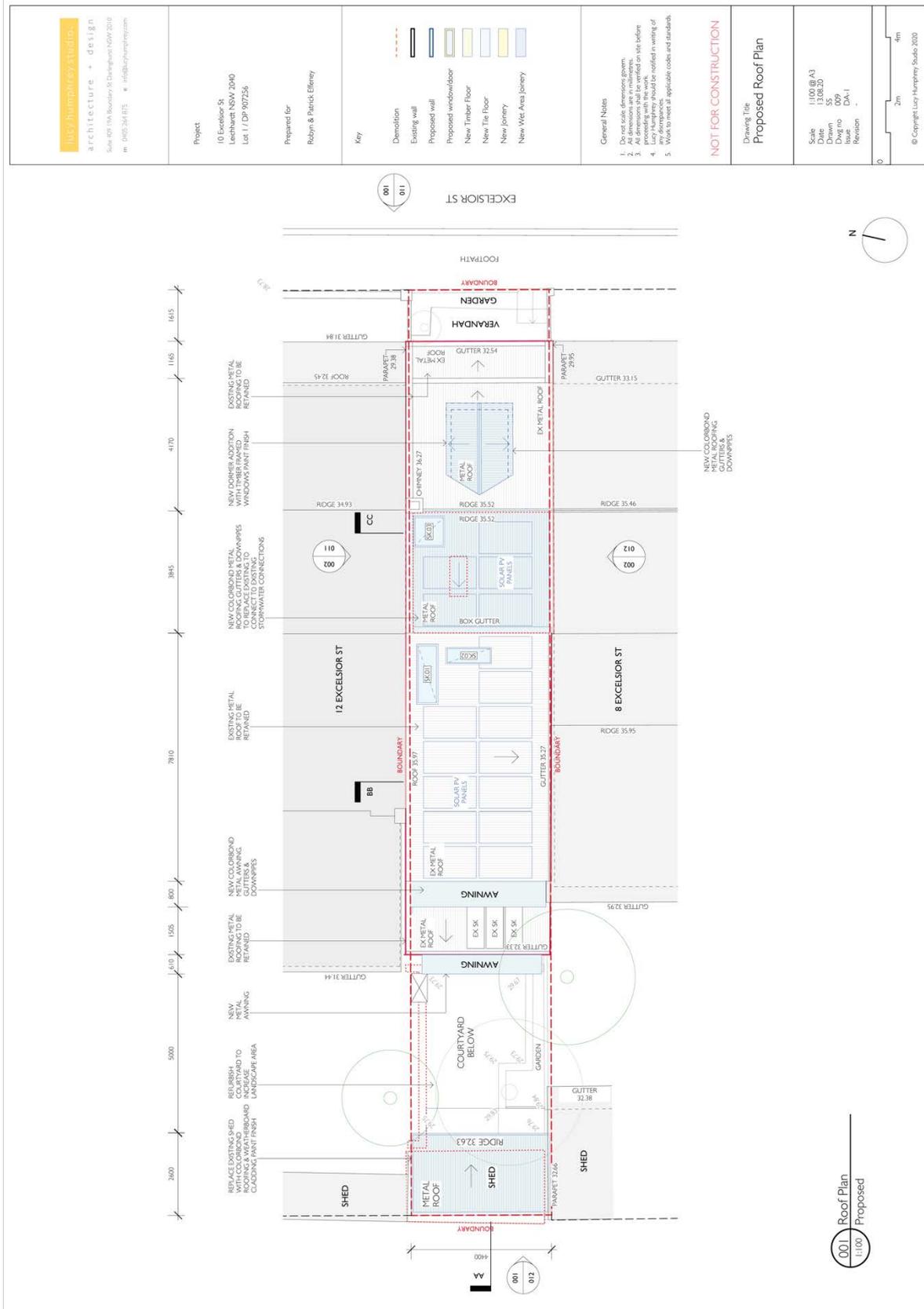


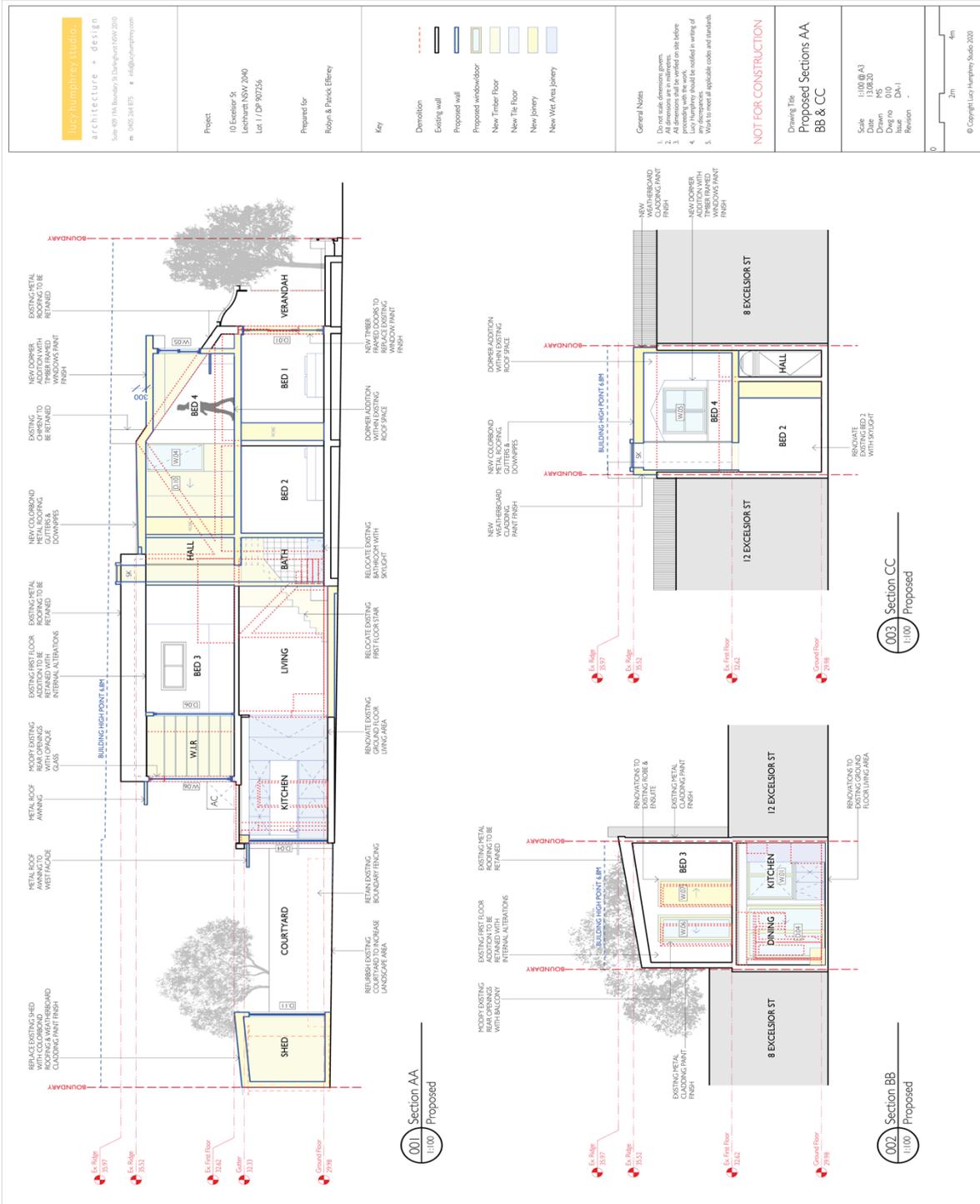
Attachment B – Plans of proposed development











Materials & Finishes



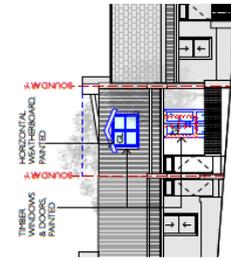
ROOFING
COLORBOND CUSTOM ORB
SHALE GREY



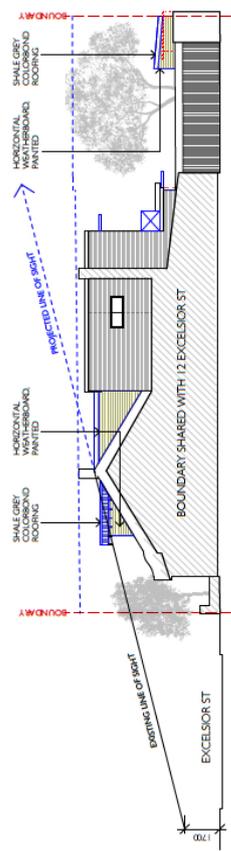
CLADDING
HORIZONTAL WEATHERBOARD
PAINTED TO MATCH EXISTING



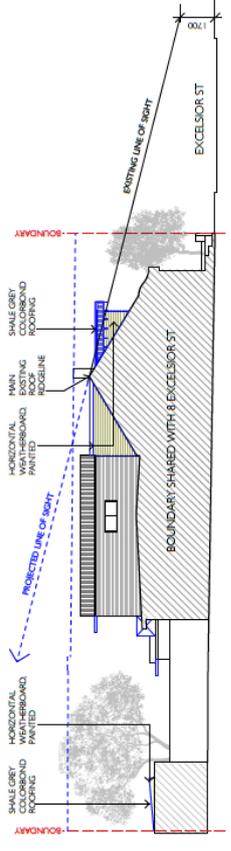
WINDOWS & DOORS
TIMBER FRAMED
WHITE PAINT FINISH



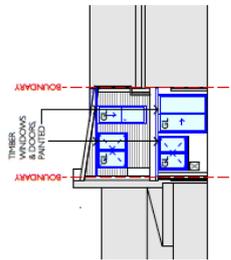
001 East Elevation
1:200 Materials & Finishes



002 North Elevation
1:200 Materials & Finishes + Site Line Diagram



004 South Elevation
1:200 Materials & Finishes + Site Line Diagram



003 West Elevation
1:200 Materials & Finishes

NOT FOR CONSTRUCTION

Drawing Title
Materials & Finishes
Schedule

Scale 1:200 (B)-13
Date 13/09/20
Drawn H.S.
Checked D.A.-I
Revision -

0 4m 8m

© Copyright Luy Humphrey Sudds 2020

MATERIALS & FINISHES

ROOFING
COLORBOND CUSTOM ORB
SHALE GREY

CLADDING
HORIZONTAL WEATHERBOARD
PAINTED TO MATCH EXISTING

WINDOWS & DOORS
TIMBER FRAMED
WHITE PAINT FINISH

001 East Elevation
1:200 Materials & Finishes

002 North Elevation
1:200 Materials & Finishes + Site Line Diagram

003 West Elevation
1:200 Materials & Finishes

004 South Elevation
1:200 Materials & Finishes + Site Line Diagram

NOT FOR CONSTRUCTION

Drawing Title
Materials & Finishes
Schedule

Scale 1:200 (B)-13
Date 13/09/20
Drawn H.S.
Checked D.A.-I
Revision -

0 4m 8m

© Copyright Luy Humphrey Sudds 2020

Attachment C- Clause 4.6 Exception to Development Standards

controls set out in the DCP. It has been determined through this assessment that the proposed works will have no adverse environmental or amenity impacts on the existing site or its neighbours. The site is therefore deemed to be suitable for development.

(d) any submissions made in accordance with this Act or the regulations

This Development Application will be notified by Council in accordance with its notification policy. Any submissions made will be duly responded to by the applicant should Council wish it to do so. The proposal has been discussed with various Duty Planners prior to the DA submission.

(e) the public interest

The proposal will not result in any adverse social or environmental impacts to the existing site, surrounding sites or streetscape, and will have no detrimental impact on any public amenity. Therefore, this proposal is deemed to be within the public interest.

2.4 Site Waste & Recycling Management

The existing dwelling is serviced by Council's waste collection services with garbage storage and collection areas located to the front verandah facing Excelsior Street. The proposed works will not affect the existing garbage collection services. The proposal promotes waste minimisation by incorporating the following measures:

- Changes to existing floor layouts have been minimised to reduce the amount of demolition required
- All demolished materials will be salvaged and recycled where possible (including recycled bricks)
- Any building materials that can be salvaged during demolition will be recycled off-site where possible, such as salvaged timber framing, bricks and windows
- The proposed minor changes detailed in this DA will not impact on existing site waste and recycling management

2.5 Clause 4.6 Exception to a Development Standard

Exception to Development Standard: LEP Clause 4.4 – Floor Space Area

This section makes a written request for an exception to a development standard under LEP Clause 4.6 Exceptions to Development Standards. As required, this proposal seeks consent for a minor non-compliance with the Leichhardt LEP 2013 Clause 4.4 Floor Space Ratio.

The site is located in land zone R1 Residential, with a maximum floor space ratio of 0.8:1. The proposed floor space area is 124.7m² with a floor space ratio of 0.97:1, where the existing dwelling footprint is to be retained, the landscaped area is to be increased, and the additional floor area is the result of utilising the existing attic roof space only. The non-compliance is deemed acceptable in this case as the proposal demonstrates the following:

(3)(a) that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case

The proposal includes a minor extension of the existing first floor into the attic space with a dormer window, with the primary reason being to alter the roof form at the back of the existing ridge line to remove a steep valley gutter which is causing significant stormwater and flooding issues for the interior of the dwelling. The design works within the existing building constraints, retains the building footprint, and retains the bulk of the existing ground floor and first floor addition in order to have minimal impacts. The proposal also includes a refurbishment of the rear courtyard to increase the landscaped area on site to comply with the LEP.

(b) that there are sufficient environmental planning grounds to justify contravening the development standard

The environmental planning grounds to support this minor non-compliance are as follows:

- The existing building setbacks on all sides are to be retained
- The existing building footprint is to be retained
- The additional floor space comes from a utilisation of the existing attic floor space, with a modified roof form proposed behind the existing ridgeline to improve stormwater management and reduce water and flooding issues for the site and adjacent property
- The rear courtyard will be refurbished to increase the landscaped area to comply with the LEP
- The proposed attic additions are effectively not visible from the public domain (aside from the dormer window)
- The modification to the roof form does not create any significant overshadowing impacts or loss of solar access to any private outdoor space areas

The proposed attic addition therefore does not have any adverse impacts and satisfies the aims and objectives of this control.

(4) (a) the consent authority is satisfied that:***(ii) the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out***

The objectives for the Leichhardt LEP 2013 Clause 4.4 Floor Space Area are described below:

(1) The objectives of this clause are as follows—***(a) to ensure that residential accommodation—***

- (i) is compatible with the desired future character of the area in relation to building bulk, form and scale, and*
- (ii) provides a suitable balance between landscaped areas and the built form, and*
- (iii) minimises the impact of the bulk and scale of buildings,*

(b) to ensure that non-residential development is compatible with the desired future character of the area in relation to building bulk, form and scale.

The proposed development is consistent with these objectives as follows:

(a) the proposal is compatible with the desired future character of the area in relation to building bulk, form and scale, where the existing first floor addition is retained and the proposed additions connecting the existing first floor and existing attic roof are effectively not visible from the public domain. In this way the utilisation of the attic floorspace, which is leading to a floor area above the allowable FSR for this site, is not having any material impact of the street facing façade or overall building appearance which remains a single storey street frontage cottage in the Excelsior Estate Distinctive Neighbourhood Sub Core area.

(ii) the proposal provides a suitable balance between landscaped areas and the built form, where the existing dwelling footprint will be retained, there are no changes to any site setbacks, and the rear private space of the courtyard will be refurbished to increase the landscaped area on the site to comply with the LEP.

(iii) the proposed use of the attic space with a connection to the existing first floor will have no perceived effect on the bulk and scale of the existing building.

The proposed works are set at and below the existing ridgeline, are effectively not visible from the public domain, and will not increase the building footprint. As demonstrated in the Shadow Studies Analysis there are also no significant overshadowing effects or changes to the existing solar access conditions as a result of utilising the attic space or modifying this section of the roof.

(b) there is no non-residential development proposed, and the existing residential use of the building will continue.

The proposed development of the existing attic space, which leads to an increase in the floor area of the dwelling, will therefore not compromise or negatively impact on the public interest because it is consistent with the objectives of this standard. The proposal involves minor alterations and additions to the existing dwelling, with minimal changes to the existing building in order to minimise impacts.

Where the building footprint and existing setbacks are to be retained, and there are no adverse overshadowing impacts, a deviation from the FSR control is deemed reasonable in this instance. There is no perceived increase to the bulk or scale of the building and the additions are not visible from the street. In addition, the landscaped area will be increased to comply with the LEP. As the proposal can be demonstrated to satisfy the objectives of Clause 4.4 and works within the existing site constraints, a minor non-compliance with the floor space area in the proposed works is deemed to be acceptable in this case.

2.6 Clause 4.6 Exception to a Development Standard

Exception to Development Standard: LEP Clause 4.3A – Landscaped areas for residential accommodation in Zone R1 (Site Coverage)

This section makes a written request for an exception to a development standard under LEP Clause 4.6 Exceptions to Development Standards. As required, this proposal seeks consent for a minor non-compliance with the Leichhardt LEP 2013 Clause 4.3A Landscaped areas for residential accommodation in Zone R1. **It is noted that the proposal will increase the landscaped area of the site to comply with Clause 4.3A**, but the Site Coverage remains non compliant, as per the existing site calculations.

The site is located in land zone R1 Residential, with a minimum landscaped area requirement of 15% where the lot size is equal to or less than 235 square metres, and a maximum site coverage of 60% of the site area. The existing landscaped area is only 6% and will be increased through the proposed refurbishment of the rear courtyard to 16%, to comply with this LEP clause.

The existing site coverage is 86.1m² or 67%, and the proposed site coverage is 89.7m² or 70%, which remains non compliant with this LEP clause. The change in site coverage is due to the existing shed being rebuilt, as the existing shed structure encroaches the site boundary on two sites. The proposal retains the existing dwelling footprint with no increase to the size of the existing ground floor. The non-compliance with part 3)b) of this clause, relating to site coverage only, is deemed acceptable in this case as the proposal demonstrates the following:

(3)(a) that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case

The proposal includes a minor extension of the existing first floor into the attic space with a dormer window, with the primary reason being to alter the roof form at the back of the existing ridgeline to remove a steep valley gutter which is

causing significant stormwater and flooding issues for the interior of the dwelling. Externally, the existing shed will be rebuilt to be fully within the site boundaries, where it currently encroaches the boundary on two sides. The design works within the existing site constraints, retains the existing dwelling footprint, and refurbishes the rear courtyard to increase the landscaped area to comply with the LEP. The site coverage is also consistent with the adjoining properties along Excelsior Street where there is a common pattern of >60% site coverage due to the consistent size and setbacks of the dwellings with sheds fronting the rear boundaries, as shown in the below Google Earth aerial street view. In this case as the dwelling is consistent with the neighbouring dwellings and the existing site coverage is non compliant, a minor alteration due to rebuilding the rear shed within the site boundaries is argued to be acceptable in this case.



Aerial view showing subject site at 10 Excelsior Street

(b) that there are sufficient environmental planning grounds to justify contravening the development standard

The environmental planning grounds to support this minor non-compliance are as follows:

- The existing building setbacks on all sides are to be retained
- The existing building footprint of the main dwelling is to be retained
- The shed structure needs to be modified in order not to encroach the site boundary on two sides
- The rear courtyard is being refurbished to increase the landscaped area on the site to comply with the LEP
- The proposed additions are not visible from the public domain
- An Arborist's Report has been supplied to outline that there are no impacts to any trees on the site or neighbouring lots
- There are no adverse privacy, overshadowing or other impacts as a result of these works

The minor proposed change to the existing site coverage area, which is currently not compliant, does not have any adverse impacts and satisfies the aims and objectives of this control.

(4) (a) the consent authority is satisfied that:

(ii) the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out

The objectives for the Leichhardt LEP 2013 Clause 4.3A are described below:

- (a) to provide landscaped areas that are suitable for substantial tree planting and for the use and enjoyment of residents,*
- (b) to maintain and encourage a landscaped corridor between adjoining properties,*
- (c) to ensure that development promotes the desired future character of the neighbourhood,*
- (d) to encourage ecologically sustainable development by maximising the retention and absorption of surface drainage water on site and by minimising obstruction to the underground flow of water,*
- (e) to control site density,*
- (f) to limit building footprints to ensure that adequate provision is made for landscaped areas and private open space.*

The proposed development is consistent with these objectives as follows:

- (a)** The proposal will increase the landscaped area to comply with the LEP requirement of minimum 15%, to refurbish and improve the landscaped area of the rear courtyard, with no impact on any trees.

- (b)** The proposal will not reduce the landscaped corridor between the adjoining properties or modify the rear building setbacks of the existing dwelling.

- (c)** The proposed changes in the rear courtyard will have no impact on the streetscape and are not visible from the public domain, and do not involve the removal of any trees.

- (d)** The proposal will increase the potential for the retention and absorption of stormwater on site by increased the permeable landscaped area of the rear courtyard.

- (e)** The proposal will not result in any material increase in the perceived bulk, form or density of the site as the additions are largely internal, with no increase to the existing building footprint of the house.

- (f)** The proposal will not increase the existing dwelling footprint and will increase and improve the amount of landscaped area on site, which complies with Clause 4.3A of the LEP.

The proposed development of the rear courtyard and rebuilding of the shed, which leads to a minor increase in the existing non compliance of the Site Coverage (from 67% to 70%), will therefore not compromise or negatively impact on the public interest because it is consistent with the objectives of this standard. In addition, the proposal involves a refurbishment of the rear courtyard in order to increase the landscaped area on site to comply with part 3)a) of this clause.

Where the building footprint and existing dwelling setbacks are to be retained, a deviation from the Site Coverage control is deemed reasonable in this instance. There will be no perceived increase to the bulk or scale of the building and the additions are not visible from the street. In addition, the landscaped area will be increased to comply with the LEP. As the proposal can be demonstrated to satisfy the objectives of Clause 4.3A and works within the existing site constraints, a minor non-compliance with the site coverage area is deemed to be acceptable in this case.

Attachment D – Arborist Report



16/75 Pacific Highway Waitara NSW 2077
12/19 Reliance Drive Tuggerah NSW 2259
(02) 4351 3322
info@mcardlearborist.com.au
www.mcardlearborist.com.au

REPORT: **Arboricultural Impact Assessment**
Our Ref: 20141

REPORT COMMISSIONED FOR:

Lucy Humphrey Studio
Ms. Lucy Humphrey
c/o Mr and Mrs. Effeney

10 Excelsior Street
Leichhardt NSW 2040

lucy@lucyhumphrey.com
0405 264 875

2nd of April

PREPARED BY:

Jim McArdle
Consulting Arborist
B.Ed.Sc (ACU) DipArb AQF 5; QTRA.
TCAA President
ABN 87 145 760 461



Arborist Impact Assessment

TABLE OF CONTENTS

1.0 ABSTRACT.....3

2.0 INTRODUCTION4

3.0 AIMS.....5

4.0 METHODOLOGY6

5.0 PLANNING GUIDELINES AND SPECIFIC LEGISLATION7

6.0 ANALYSIS OF MAPPING CONTROLS.....8

7.0 THE SITE.....9

8.0 TREE SURVEY TABLE..... 10

9.0 FINDINGS 11

10.0 TREE MANAGEMENT PLAN 12

11.0 DISCUSSION..... 13

12.0 HOLDING POINTS 15

13.0 RECOMMENDATIONS 16

14.0 CONCLUSION 16

15.0 GLOSSARY..... 17

16.0 BIBLIOGRAPHY..... 18

APPENDIX A TREE USEFUL LIFE EXPECTANCY - TULE..... 19

APPENDIX A1 TREE A-Z CATEGORIES 20

APPENDIX B HEALTH & STRUCTURAL CONDITION OF TREE-VISUAL..... 21

APPENDIX C RETENTION VALUES 22

APPENDIX D TREE PROTECTION 24

DISCLAIMER 27

Arborist Impact Assessment

1.0 ABSTRACT

1.1 An Arboricultural Impact Assessment report was commissioned by Ms. Lucy Humphrey on behalf of the clients, Mr. and Mrs. Patrick and Robyn Effeney, in relation to the proposed additions and alterations on site at 10 Excelsior Street, Leichhardt NSW 2040.

1.2 A Ground Visual Tree Assessment (VTA) was conducted to assess the potential impacts of the proposed development on four (4) trees of **LOW** to **MODERATE-HIGH** retention value in the surrounding area of the proposed development.

1.3 The proposed development will have anticipated impacts of **less than 10%** on all four (4) trees. No trees will be removed and anticipated pruning will be less than 5%.

1.4 As a result of the assessment, four (4) trees require **retention** and **protection**. Tree Protection Systems must be installed around the trees prior to the commencement of the development.

REFERENCES

Site Plan (Drawing No. 001), Lucy Humphrey Studio, dated 27/02/2020.
Leichhardt Local Environmental Plan 2013.

Arborist Impact Assessment

2.0 INTRODUCTION

2.1 An Arboricultural Impact Assessment report was commissioned by Ms. Lucy Humphrey on behalf of the clients, Mr. and Mrs. Patrick and Robyn Effeney, in relation to the proposed additions and alterations on site at 10 Excelsior Street, Leichhardt NSW 2040. Four (4) trees in the surrounding area of the proposed development were assessed by Mr. Jim McArdle B.Ed. Sc ACU, Dip Arb AQF L5 Ryde, QTRA, TRA Assessor and TCAA President, who attended the site on the 24th of March, 2020.

2.2 The retention value of four (4) trees were assessed on site as follows:

- One (1) tree, a mature *Jacaranda spp.* (Jacaranda), has **MODERATE-HIGH** retention value and is numbered: 1.
- Two (2) trees have **LOW-MODERATE** retention value and are numbered: 2 & 3. These trees belong on neighbouring property at 8 & 12 Excelsior Street.
- One (1) tree has **LOW** retention value and is numbered: 4.

2.3 The proposed development will have anticipated impacts of **less than 10%** on all four (4) trees. As a result of the assessment, four (4) trees require **retention and protection**. Tree Protection Systems must be installed around the trees prior to the commencement of the development. This includes:

- The installation of **tree trunk and branch protection** around two (2) trees numbered: 1 & 4.
- The distribution of a 100mm depth layer of **clean, certified *Eucalyptus spp.* mulch ground cover protection** over the Tree Protection Zone (TPZ) of the retained trees.
- **AQF Level 5 arborist supervision** for all works carried out in the TPZ of the four (4) trees.
- **Tree sensitive construction measures** for two (2) trees numbered: 1 & 3.

2.5 **Root mapping investigations** are required to locate and identify tree roots that may potentially be located within the proposed development area.

2.6 McArdle Arboricultural Consultancy Pty Ltd prepared the report. The Arboricultural Impact Assessment report is developed to assess the trees at the above address for health and status. Mr. Jim McArdle B.Ed. Sc ACU, Dip Arb AQF L5 Ryde, QTRA, Tree Risk Management Assessor and TCAA President, conducted the evaluation using Visual Tree Assessment (VTA) according to Claus Mattheck and Breloer's (1994) method for biological and lower level mechanical functions. The systems are in accordance with industry best practice and impact assessments are based upon the *Australian Standard® AS 4970-2009 - Protection of Trees on Development Sites*.

Arborist Impact Assessment

3.0 AIMS

The aim of the report is to:

3.1 To assess the potential impacts of the proposed development at 10 Excelsior Street, Leichhardt NSW 2040 on four (4) trees, according to the methodologies presented in this report.

3.2 To give recommendations for management and protection during the proposed development. Protection measures will be referenced from *Australian Standard® AS 4970-2009 – Protection of Trees on Development Sites* and *AS 4373 2007 Pruning of Amenity Trees*.

Arborist Impact Assessment

4.0 METHODOLOGY

4.1 A Ground Visual Tree Assessment (VTA) method was employed in this Arboricultural Impact Assessment report. The VTA system is a method used to identify visible signs on trees that indicate health and potential hazards, and it is based on the theory of tree biology, physiology, tree architecture and structure.

4.2 The collection of data is performed in the field by an AQF Level 5 arborist. The assessment summarises the species, height, diameter, health and structural condition, hazards, and retention categories assigned to each tree.

4.3 Testing on site may include mallet sounding, non-invasive testing for hollows, probing cavities, and checking for white ant infestation. Invasive tests will determine the depth of decay around cavities. All testing is ground-based and options may include further investigation.

4.4 The planning guidelines and specific legislation for this site have been studied from desktop research.

4.5 Impact assessment data was recorded in a Tree Survey Table using various assessment methods from the appendices listed below and setbacks are calculated according to *Australian Standard® AS 4970-2009 – Protection of Trees on Development Sites*.

Appendix A: Tree Useful Life Expectancy (TULE) 2014. Gives extra assessment life expectancy categories. *Adapted from Jeremy Barrell 2014.*

Appendix B: Health & Structural Condition of Tree Assessment. This describes the vigour and vitality of the tree. *Mattheck (1994) The Body Language of Trees.*

Appendix C: Retention Values. Some trees have special restrictions including cultural, scientific, historical or threatened categories, and may be reviewed as part of this report or further reporting. *Morton (2006) Determining Landscape Significance Ratings. TREE A-Z J.Barrell (2010)*

Appendix D: Tree Protection. Details of Tree Protection Zones and minimum setback, distances for each numbered tree, according to *Australian Standard® AS 4970-2009 – Protection of Trees on Development Sites*.

4.6 Limitations include the assessment from the ground.

Arborist Impact Assessment

5.0 PLANNING GUIDELINES AND SPECIFIC LEGISLATION

5.1 Tree management measures are in place for Inner West Council under the provisions of the trees and vegetation preservation for properties covered under Leichhardt Local Environmental Plan 2013.

5.2 According to the NSW Planning Portal, the site has **R1: General Residential** land zoning and **Class 5** acid sulfate soils.

5.3 A search of local and state heritage registers, tree registers and determination of landscape significance were carried out for tree identified in the survey; however, no trees of heritage significance were identified at this site.

5.4 SIGNIFICANCE IN THE ENVIRONMENT

Trees are subject to the following legislation:

Biodiversity Conservation Act NSW (BIO Act 2016): Provides provisions for conserving biodiversity.

Threatened Species Conservation Act NSW (1995 TCS Act): Provides provisions for conserving threatened species, populations and ecological communities of animals and plants, as well as managing key threatening processes.

Environmental Protection and Biodiversity Conservation Act NSW (EPBC Act 1999): Provides provisions to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places.

Biosecurity Act NSW (BIO Act 2015): Refers to the protection of native plant communities, reducing the risk to human's health and the risk to agricultural production from invasive weeds.

NSW Bushfire Brigade 10/50 Legislation is not enforced for this site.

5.5 SIGNIFICANCE IN THE LANDSCAPE

Trees are generally categorised as either:

- Significant in the landscape, based on a broad landscape perspective, and has heritage or important ecological value. **SIGNIFICANT** retention value.
- Significant in the landscape; based on an adjacent area surrounding the site. **HIGH** retention value.
- Significant in the landscape; based on a neighbourhood perspective. Retained due to its status but may have some conditions or health issues. **MODERATE-HIGH** retention value.
- Good and worthy of preservation; retained due to its status, but may have minor conditions or health issues. **MODERATE** retention value.
- Worthy of preservation; retained due to its status, but may have major conditions or health issues. **LOW-MODERATE** retention value.
- Retain if Possible. **LOW** retention value.
- Exempt from retention. **VERY LOW** retention value.

REFERENCES

Retention Values Tables based on Melanie Howden and Andrew Morton.

Tree Useful Life Expectancy TULE, A-Z Adapted from Jeremy Barrell for use by TCAA consultant arborists. Tree Contractor's Association of Australia TCAA.

Arborist Impact Assessment

6.0 ANALYSIS OF MAPPING CONTROLS

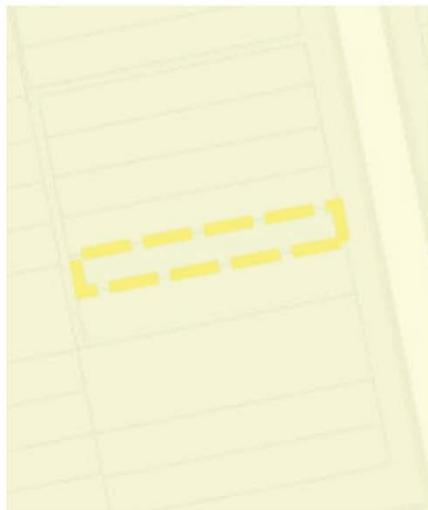


Figure 1: Acid Sulfate Soils.
Class 5 (pale yellow).

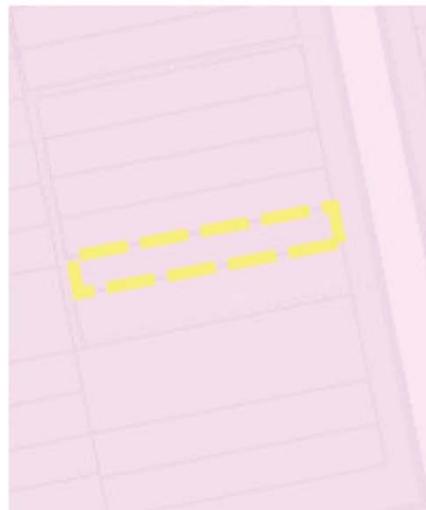


Figure 2: Land Zoning.
R1: General Residential (pink).

Arborist Impact Assessment

7.0 THE SITE

7.1 The site is at 10 Excelsior Street, Leichhardt NSW 2040. The site is mainly composed of sandy soils¹ and is located on land that slopes to gently to the north-west.

7.2 The collection of survey data was limited, and an inspection was conducted on the 24th of March, 2020.

7.3 SCALED SITE MAP



Figure 3: A scale site map of 10 Excelsior Street, Leichhardt NSW 2040. The yellow lines give the approximate location of the site's perimeter.

¹ <https://www.environment.nsw.gov.au/eSpade2WebApp#>

Arborist Impact Assessment

8.0 TREE SURVEY TABLE

Table 1: Tree Survey Table. This table lists the results of the ground VTA for this site.

Tree No.	Location	Scientific & Common Names	Crown Spread (m)	Height (m)	Diam (cm)	TPZ SRZ (m)	Tree Condition (Health & Structure)	TULE A-Z	Retention Value	Works
1	10 Excelsior Street, along the southern boundary, to the west of the dwelling.	<i>Jacaranda spp.</i> Jacaranda	N 7 E 6 S 7 W 7	12	38 57	4.6 2.6	Mature, good condition, with a sparse foliage crown, and a lean to the north.	2a A2	Moderate-High	Retain and protect.
2	8 Excelsior Street, 80cm from the fence between 8 & 10 Excelsior Street.	<i>Ulmus spp.</i> Elm	10	12	45 50	5.4 2.5	Mature, heavily pruned, with an unbalanced canopy to the south-west, and one stem cut at 2m height (200mm diameter).	2a A2	Low-Moderate	Retain and protect.
3	12 Excelsior Street, along the fence between 10 & 12 Excelsior Street.	<i>Ulmus procera</i> English Elm	14	10	35/30 45	5.5 2.4	Semi-mature, moderate condition, heavily pruned, with epicormics, and a suppressed canopy.	2a A2	Low-Moderate	Retain and protect.
4	10 Excelsior Street, along the street.	<i>Citrus spp.</i> Lemon Tree	6	5	20	2.4 1.7	Immature, good condition, crown lifted.	2a A2	Low	Retain and protect.

Arborist Impact Assessment

9.0 FINDINGS



Plate 1: Tree 1, a *Jacaranda spp.* (Jacaranda) tree, which requires **retention** and **protection**.



Plate 2: Tree 2, an *Ulmus spp.* (Ulmus) tree, which requires **retention** and **protection**.



Plate 3: Tree 4, a *Citrus spp.* (Lemon) Tree, which requires **retention** and **protection**.

Arborist Impact Assessment

10.0 TREE MANAGEMENT PLAN

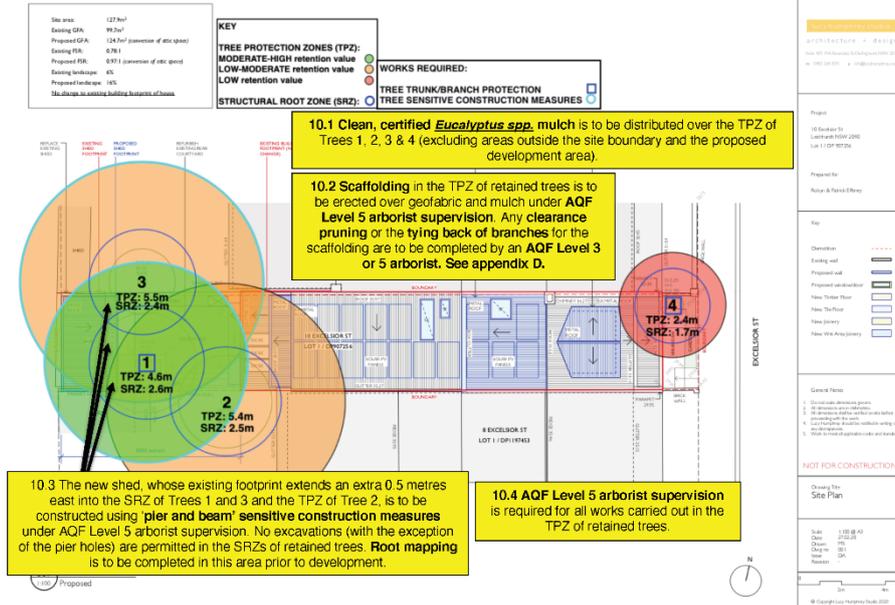


Figure 4: Tree Management Plan for 10 Excelsior Street, Leichhardt NSW 2040.

Arborist Impact Assessment

11.0 DISCUSSION

11.1 The potential impacts on four (4) trees of **LOW to MODERATE-HIGH** retention value were assessed in the surrounding area of the proposed development at 10 Excelsior Street, Leichhardt NSW 2040.

11.2 The proposed development will have anticipated impacts of **less than 10%** on all four (4) trees. The trees have pre-existing impacts from the footprint of the current dwelling, which will have minimal proposed changes. Minor impacts are anticipated to arise from the construction of a new shed over the footprint of the current shed. This footprint has a proposed extension of 0.5 metres east into the Structural Root Zone (SRZ) of Trees 1 & 3 and into the Tree Protection Zone (TPZ) of Tree 2; which will have **minor anticipated impacts of 0.6 to 3.01% with minor pruning** if tree protection measures and tree sensitive construction measures are adhered to.

11.3 As a result of the assessment, four (4) trees require **retention** and **protection**. This will preserve amenity value and align with Inner West Council's established canopy target of 40% for R1: General Residential zones².

11.4 Tree Protection Systems must be installed around the trees prior to the commencement of the development. This includes:

- The installation of **tree trunk and branch protection** around two (2) trees numbered: 1 & 4.
- The distribution of a 100mm depth layer of **clean, certified *Eucalyptus spp.* mulch ground cover protection** over the Tree Protection Zone (TPZ) of the retained trees.
- **AQF Level 5 arborist supervision** for all works carried out in the TPZ of the four (4) trees.
- **Tree sensitive construction measures** for two (2) trees numbered: 1 & 3. The current shed is to be demolished and the newly proposed shed is to be constructed using '**pier and beam**' to bridge the shed over the SRZ of Trees 1 & 3 and the TPZ of Tree 2. No excavations (with the exception of the pier holes) are to occur in the SRZ of the tree. **This is to be completed under AQF Level 5 arborist supervision.**

11.5 **Root mapping investigations** are required for trees numbered: 1, 2 & 3, to locate and identify tree roots that may potentially be located within the proposed area of the shed. This will assist with locating suitable excavation points for the piers.

11.6 Scaffolding erected in the TPZ of retained trees is to be erected over geofabric and mulch under AQF Level 5 arborist supervision. Any clearance pruning or the tying back of branches for the scaffolding are to be completed by an AQF Level 3 arborist.

² Inner West Council Tree Management Development Control Plan (Draft).

Arborist Impact Assessment

11.7 If pruning is required, this is to be completed by AQF Level 3 licensed arborists and in accordance with *Australian Standard® AS 4743-2007 – Pruning of Amenity Trees* and *SafeWork NSW Guide to Managing Risks Tree Trimming Removal*. A registered current member of Tree Contractors Association Australia (TCAA) or Arboriculture Australia (AA) must complete the works.

Table 2: Tree Impacts Table. This table summarises the numbered trees, the calculated impacts of the proposed development on these trees, and the works required to protect them during development.

Tree No.	Name	Retention Value	Impact (%)	Works Required
1	<i>Jacaranda spp.</i> Jacaranda	Moderate-High	3.01	Retain and protect , with tree trunk/branch protection , a 100mm depth layer of clean, certified <i>Eucalyptus spp.</i> mulch, tree sensitive construction measures , and AQF Level 5 arborist supervision for all works carried out in the TPZ.
2	<i>Ulmus spp.</i> Elm	Low-Moderate	0.60	Retain and protect , with a 100mm depth layer of clean, certified <i>Eucalyptus spp.</i> mulch, and AQF Level 5 arborist supervision for all works carried out in the TPZ. Pruning 3% for construction clearance.
3	<i>Ulmus procera</i> English Elm	Low-Moderate	2.10	Retain and protect , with a 100mm depth layer of clean, certified <i>Eucalyptus spp.</i> mulch, tree sensitive construction measures , and AQF Level 5 arborist supervision for all works carried out in the TPZ.
4	<i>Citrus spp.</i> Lemon Tree	Low	-	Retain and protect , with tree trunk/branch protection , a 100mm depth layer of clean, certified <i>Eucalyptus spp.</i> mulch, and AQF Level 5 arborist supervision for all works carried out in the TPZ.

Table 3: Arborist requirements during the stages of this development.

DEVELOPMENT STAGE	ACTIVITY	RESPONSIBILITY	SUPPLY
Pre-Construction	Root Mapping. Certification of Tree Protection.	AQF Level 5 Arborist.	AIA Report Certification of Tree Protection
Construction	Pruning to As4373 2007 of smaller branches less than 50mm diameter and to branch collars.	AQF Level 3 Arborist.	Pruning tree 2 for clearances of 3%
Construction and Ongoing	Bi-Monthly Certification of Tree Protection.	AQF Level 5 Arborist.	Certificate of Tree Protection
Post-Construction	Certification of Replenishment. Certification of Tree Protection prior to Occupation Certificate.	AQF Level 5 Arborist.	Certificate of Tree Protection

Arborist Impact Assessment

12.0 HOLDING POINTS

12.1 **Retain** and **protect** four (4) trees numbered: 1, 2, 3 & 4. This is to be completed as prescribed in the Tree Management Plan (Figure 4) and the Tree Impacts Table (Table 2), in accordance with *Australian Standard® AS 4970-2009 – Protection of Trees on Development Sites*. Tree Protection Systems are to be installed prior to demolition, construction, or landscaping and certified by an AQF Level 5 arborist.

12.2 If pruning is required, this is to be completed by AQF Level 3 or 5 licensed arborists and in accordance with *Australian Standard® AS 4743-2007 – Pruning of Amenity Trees* and *SafeWork NSW Guide to Managing Risks Tree Trimming Removal*. A registered current member of Tree Contractors Association Australia (TCAA) or Arboriculture Australia (AA) must complete the works.

12.3 All work carried out in the TPZs of retained trees are to be supervised by an AQF Level 5 arborist; and no prohibited activities listed in Appendix D, I – IV, are to occur in the TPZs. This will be held compliant and certified by an AQF Level 5 arborist prior to any demolition, construction, or landscaping.

12.4 **Root mapping investigations** are required for trees numbered: 1, 2 & 3, to locate and identify tree roots that may potentially be located within the proposed area of the shed. This will assist with locating suitable excavation points for the piers and must be completed prior to development by an AQF level 5 arborist.

Arborist Impact Assessment

13.0 RECOMMENDATIONS

13.1 Retain and protect four (4) trees numbered: 1, 2, 3 & 4, as prescribed in the Tree Management Plan (Figure 4) and the Tree Impacts Table (Table 2). This is to be completed in accordance with *Australian Standard® AS 4970-2009 - Protection of Trees on Development Sites*.

13.2 Holding points 12.1 to 12.4 will be held compliant by an AQF Level 5 arborist.

14.0 CONCLUSION

Four (4) trees were assessed in the surrounding area of the proposed development at 10 Excelsior Street, Leichhardt NSW 2040. As a result of the assessment, all four (4) trees are to be retained and protected.

Arborist Impact Assessment

15.0 GLOSSARY

Borer: larvae beetles, moths or wasps that cause damage within the phloem/cambium, sapwood and heartwood of the tree. Borers generally attack weakened trees or stressed trees.

Cambium: The layer of cells between the exterior bark and the inner wood which control cell division, hence stem, branch and shoot expansion.

Cavity: A void, initiated by a wound within the trunk, branches or roots. These voids are referred to as hollows.

Co-dominant: Stems or branches equal in size and relative importance.

Crown: The width of the foliage in the upper canopy of the assessed tree to the four cardinal points.

Crown lifting: The removal of the lower branches of the tree.

Crown thinning: The portion of the tree consisting of branches and leaves and any part of the stem from which branches arise.

Drip line: Where the canopy releases water shed from the foliage during precipitation.

DBH/Diameter: Diameter of trunk at 14meters in height of assessed tree.

Dead wooding: The removal dead branches from a tree.

Dieback: Tree deterioration where the branches and leaves die.

Flush cut: A cut that damages or removes the branch collar or removes the branch and stem tissue and is inconsistent with the branch attachment as indicated by the bark branch ridge.

Genus/ Species: Identified using its scientific name. Where the species name is not known, species is used. The common name for trees may vary considerably in each area of geographical differences and so will not be used in the field survey.

Height: Height has been estimated to + / - 2 meters.

Maturity: Tree age, Assessed as over mature (last 1/3 of life expectancy), mature (1/3 to 2/3 life expectancy) and semi mature (less than 1/3 life expectancy).

Remedial (restorative) pruning: includes: Removing damaged, deadwood; trimming diseased or infested branches. Trimming branches back to undamaged tissue in order to induce the production of shoots from latent or adventitious buds, from which a new crown will be established.

SRZ- Structural Root Zone: An area within the trees root zone in which roots stabilize the tree. Roots cut in this zone can cause instability and lead to anchorage loss.

Structural Integrity: Describes the internal supporting timber. (Substantial to frail)

Target: risk targets are people, property or activities that could injure, damage or disrupted.

Tree Numbering: All trees listed in the tree survey have been numbered and plotted.

TULE- Tree Useful Life Expectancy: An estimation of the trees useful life expectancy using appropriate industry methods with an inspection regime.

Vigour: This is an indication of the tree health. Trees have either been assessed as Good Vigour, Normal Vigour or Low Vigour.

Arborist Impact Assessment

16.0 BIBLIOGRAPHY

- Australian Standard® AS 4970-2009. *Protection of Trees on Development Sites* Sydney: Standards Australia.
- Australian Standard® AS 4373-2007. *Pruning of Amenity Trees*. Sydney: Standards Australia.
- Barrel, J (2012). Balancing tree benefits against tree security: The duty holder's dilemma, *Arboricultural journal*. *The International Journal of Urban Forestry*, 34:1,29-44.
- Barrell, J. (1993-95) 'Pre-planning Tree Surveys: Safe Useful Life Expectancy (SULE) is the Natural Progression' *Arboricultural Journal* V.
- CSIRO Boland et al *Forest Trees of Australia*; Nelson University Press. *Australia*: 1984
- Hadlington P.W. & Johnston I A. *Australian Trees*. *Australia*: NSW University press: 1983.
- Hadlington P.W & Johnston I A. *Australian Insects*. *Australia*: NSW University press: 1983.
- Inner West Council. *Tree Management Development Control Plan (Draft)*.
- Matheny, N.P. & Clarke, J.R. *Trees and Development a Technical Guide to Preservation of Trees During Land Development*. Savoy, Illinois. ISA: 1998.
- Mattheck, C *Updated Field Guide for Visual Tree Assessment*, Karlsruhe Research Centre: 2007
- Mattheck Dr.; Claus R & Breloer Helge. *The Body Language of Trees - A Handbook for Failure Analysis 6th Edition*: London. England. The Stationery Office: 1995.
- E. Thomas Smiley, Nelda Matheny, and Sharon Lilly (2011) *Tree Risk Assessment & Principles*. ISA Printed USA.
- Watson et al (2014) *Up by the Roots*. ISA USA.

WEBSITES

- <https://www.planningportal.nsw.gov.au/spatialviewer/#/find-a-property/address>
- <https://www.rfs.nsw.gov.au/plan-and-prepare/1050-vegetation-clearing/tool#tool>
- <http://maps.au.nearmap.com>
- www.safeworkaustralia.gov.au
- <https://www.environment.nsw.gov.au/eSpade2WebApp#>
- <https://www.legislation.nsw.gov.au/#/view/EPI/2013/758/full>

Arborist Impact Assessment

APPENDIX A TREE USEFUL LIFE EXPECTANCY - TULE

Adapted from Jeremy Barrell (SULE) 2014 for TCAA Consultant Arborists

	1 Long TULE Trees that appeared to be retainable at the time of assessment for more than 40 years with low level of risk.	2 Medium TULE Trees that appeared to be retainable at the time of assessment for 15 to 40 years with and with low to medium level risk.	3 Short TULE Trees that appeared to be retainable at the time of assessment for 5 to 15 years with medium to high level of risk.	4 Remove Trees that should be removed within the next 5 years High to Very high level of risk.	5. No Potential for Retention REMOVE IMMEDIATELY Trees that must be removed immediately. Very high to Extreme level of risk.	6 Small, Young or Regularly clipped Trees that can be easily transplanted or replaced.
A	Structurally sound trees located in positions that can accommodate future growth.	Trees that may only live for between 15 and 40 more years.	Trees that may only live for between 5 and 15 more years.	Dead, dying, suppressed or declining trees through disease or inhospitable conditions.	Dead, dying or declining trees diseased or inhospitable conditions.	Small trees less than 5 metres in height.
B	Trees that could be made suitable for retention in the long term by Intervention Works.	Trees that may live for more than 40 years, but would need to be removed for safety or nuisance reasons.	Trees that may live for more than 15 years, but would need to be removed for safety or nuisance reasons.	Dangerous trees through instability or recent loss of adjacent trees.	Dangerous trees through instability or recent loss of adjacent trees.	Young trees less than 15 years old but over 5 metres in height.
C	Trees of special significance for historical, commemorative or rarity reasons that would warrant extraordinary efforts to secure their long-term retention.	Trees that may live for more than 40 years, but should be removed to prevent interference with more suitable individuals or to provide space for new planting.	Trees that may live for more than 15 years, but should be removed to prevent interference with more suitable individuals or to provide space for new planting.	Dangerous trees through structural defects including cavities, decay, included bark, wounds or poor form.	Dangerous trees through structural defects including cavities, decay, included bark, wounds or poor form.	Trees that have been regularly pruned to artificially control growth.
D		Trees that could be made suitable for retention in the medium term by Intervention Works.	Trees that require substantial Intervention Works, and are only suitable for retention in the short-term.	Damaged trees that are clearly not safe to retain.	Damaged trees that are clearly not safe to retain and must be removed immediately.	
E				Trees that may live for more than 5 years, but should be removed to prevent interference with more suitable individuals or to provide space for new planting.	High Toxicity Allegan trees, asthmatic and poisonous trees and must be removed immediately.	
F				Trees that may cause damage to existing structures within 5 years.	OTHER with legitimate explanation to be removed immediately.	
G				Trees that will become dangerous after removal of other trees for reasons given in 1A-1F.		
INSPEC- TION FREQU- ENCY	Inspection frequency 1-5 Years by competent inspector unless event monitored.	Inspection frequency 1-5 Years by competent inspector unless event monitored.	Inspection frequency 1-3 years by competent inspector unless event monitored.	Inspection frequency to 1 year by competent inspector unless event monitored.	1-7 days by competent inspector and event monitored.	Inspection frequency Biannually by competent inspector.

Arborist Impact Assessment

APPENDIX A1 TREE A-Z CATEGORIES

TreeAZ Categories (Version 10.04-ANZ)

CAUTION: TreeAZ assessments must be carried out by a competent person qualified and experienced in arboriculture. The following category descriptions are designed to be a brief field reference and are not intended to be self-explanatory. They must be read in conjunction with the most current explanations published at www.TreeAZ.com.

Category Z: Unimportant trees not worthy of being a material constraint

Local policy exemptions: Trees that are unsuitable for legal protection for local policy reasons including size, proximity and species

- Z1 Young or insignificant small trees, i.e. below the local size threshold for legal protection, etc
- Z2 Too close to a building, i.e. exempt from legal protection because of proximity, etc
- Z3 Species that cannot be protected for other reasons, i.e. scheduled noxious weeds, out of character in a setting of acknowledged importance, etc

High risk of death or failure: Trees that are likely to be removed within 10 years because of acute health issues or severe structural failure

- Z4 Dead, dying, diseased or declining
- Z5 Severe damage and/or structural defects where a high risk of failure cannot be satisfactorily reduced by reasonable remedial care, i.e. cavities, decay, included bark, wounds, excessive imbalance, overgrown and vulnerable to adverse weather conditions, etc
- Z6 Instability, i.e. poor anchorage, increased exposure, etc
- Excessive nuisance:** Trees that are likely to be removed within 10 years because of unacceptable impact on people
- Z7 Excessive, severe and intolerable inconvenience to the extent that a locally recognized court or tribunal would be likely to authorize removal, i.e. dominance, debris, interference, etc
- Z8 Excessive, severe and intolerable damage to property to the extent that a locally recognized court or tribunal would be likely to authorize removal, i.e. severe structural damage to surfacing and buildings, etc

Good management: Trees that are likely to be removed within 10 years through responsible management of the tree population

- Z9 Severe damage and/or structural defects where a high risk of failure can be temporarily reduced by reasonable remedial care, i.e. cavities, decay, included bark, wounds, excessive imbalance, vulnerable to adverse weather conditions, etc
- Z10 Poor condition or location with a low potential for recovery or improvement, i.e. dominated by adjacent trees or buildings, poor architectural framework, etc
- Z11 Removal would benefit better adjacent trees, i.e. relieve physical interference, suppression, etc
- Z12 Unacceptably expensive to retain, i.e. severe defects requiring excessive levels of maintenance, etc

NOTE: Z trees with a high risk of death/failure (Z4, Z5 & Z6) or causing severe inconvenience (Z7 & Z8) at the time of assessment and need an urgent risk assessment can be designated as ZZ. ZZ trees are likely to be unsuitable for retention and at the bottom of the categorization hierarchy. In contrast, although Z trees are not worthy of influencing new designs, urgent removal is not essential and they could be retained in the short term, if appropriate.

Category A: Important trees suitable for retention for more than 10 years and worthy of being a material constraint

- A1 No significant defects and could be retained with minimal remedial care
- A2 Minor defects that could be addressed by remedial care and/or work to adjacent trees
- A3 Special significance for historical, cultural, commemorative or rarity reasons that would warrant extraordinary efforts to retain for more than 10 years
- A4 Trees that may be worthy of legal protection for ecological reasons (Advisory requiring specialist assessment)

NOTE: Category A1 trees that are already large and exceptional, or have the potential to become so with minimal maintenance, can be designated as AA at the discretion of the assessor. Although all A and AA trees are sufficiently important to be material constraints, AA trees are at the top of the categorization hierarchy and should be given the most weight in any selection process.

TreeAZ is designed by Barrell Tree Consultancy (www.barrelltreecare.co.uk) and is reproduced with their permission

Arborist Impact Assessment

APPENDIX B HEALTH & STRUCTURAL CONDITION OF TREE-VISUAL

KEY	Health & Structural Condition of Tree
1.	Maturity: J - Juvenile; IM - Immature; SM - Semi-Mature; M - Mature
2.	Excellent condition
3.	Good condition but poor development 3b Moderate
4.	Dieback is more than 20%. 4b Epicormics
5.	Sparse foliage crown 5b Unbalanced Canopy
6.	Physical damage
7.	Insect damage 7b Borers
8.	Fungal attack
9.	Cavity
10.	Termite damage inclusions
11.	Lean
12.	Heavily pruned 12b Dying
13.	Damage to roots 13b Encroachment
14.	Parasitic vine present
15.	Damage by climbing plant
16.	Inclusions
17.	Habitat tree
18.	Endangered species

Mattheck The Body Language of Trees 1994 adapted; Hornsby Shire Council

Arborist Impact Assessment

APPENDIX C RETENTION VALUES

DETERMINING LANDSCAPE SIGNIFICANCE RATINGS			
RATING	HERITAGE VALUE	ECOLOGICAL VALUE	MORTON, A (2006) AMENITY VALUE
1. SIGNIFICANT	The subject tree is listed as a Heritage Item under the Local Environment Plan (LEP) with a local, state or national level of significance or is listed on Council's Significant Tree Register.	The subject tree is scheduled as a Threatened Species as defined under the Threatened Species Conservation Act 1995 (NSW) or the Environmental Protection and Biodiversity Conservation Act 1999.	The subject tree has a very large live crown size exceeding 300m ² with normal to dense foliage cover, is located in a visually prominent position in the landscape, exhibits very good form and habit typical of the species.
	The subject tree forms part of the curtilage of a Heritage Item (building/structure/artefact as defined under the LEP) and has a known or documented association with that item.	The tree is a locally indigenous species, representative of the original vegetation of the area and is known as an important food, shelter or nesting tree for endangered or threatened fauna species.	The subject tree makes a significant contribution to the amenity and visual character of the area by creating a sense of place or creating a sense of identity.
	The subject tree is a Commemorative Planting having been planted by an important historical person (s) or to commemorate an important historical event.	The subject tree is a Remnant Tree, being a tree in existence prior to development of the area.	The tree is visually prominent in view from surrounding areas, being a landmark or visible from a considerable distance.
2. VERY HIGH	The tree has a strong historical association with a heritage item (building/structure/artefact/garden etc.) within or adjacent to the property and/or exemplifies a particular era or style of landscape design associated with the original development of the site.	The tree is a locally indigenous species, representative of the original vegetation of the area and is a dominant or associated canopy species of an Endangered Ecological Community (EEC) formerly occurring in the area occupied by the site.	The subject tree has a very large live crown size exceeding 200m ² , a crown density exceeding 70% (normal-dense), is a very good representative of the species in terms of its form and branching habit or is aesthetically distinctive and makes a positive contribution to the visual character and the amenity of the area.
3. HIGH	The tree has a suspected historical association with a heritage item or landscape supported by anecdotal or visual evidence.	The tree is a locally indigenous species and representative of the original vegetation of the area and the tree is located within a defined Vegetation Link/Wildlife Corridor or has known wildlife habitat value .	The subject tree has a large live crown size exceeding 100m ² ; The tree is a good representative of the species in terms of its form and branching habit with minor deviations from normal (e.g. Crown distortion/suppression) with a crown density of at least 70% (normal); The subject tree is visible from the street and surrounding properties and makes a positive contribution to the visual character and the amenity of the area.
4. MODERATE	The tree has no known or suspected historical association, but does not detract or diminish the value of the item and is sympathetic to the original era of planting.	The subject tree is a non-local native or exotic species that is protected under the provisions of this DCP.	The subject tree has a medium live crown size exceeding 40m ² ; The tree is a fair representative of the species, exhibiting moderate deviations from typical form (distortion/suppression etc.) with a crown density of more than 50% (thinning to normal); and The tree is visible from surrounding properties, but is not visually prominent – view may be partially obscured by other vegetation or built forms. The tree makes a fair contribution to the visual character and amenity of the area.
5. LOW	The subject tree detracts from heritage values or diminishes the value of a heritage item.	The subject tree is scheduled as exempt (not protected) under the provisions of this DCP due to its species, nuisance or position relative to building or other structures.	The subject tree has a small live crown size of less than 40m ² and can be replaced within the short term (5-10 years) with new tree planting.
6. VERY LOW	The subject tree is causing significant damage to a heritage item.	The subject tree is listed as an Environment Weed Species in the relevant Local Government Area, being invasive, or is a known nuisance species.	The subject tree is not visible from surrounding properties (visibility obscured) and makes a negligible contribution or has a negative impact on the amenity and visual character of the area. The tree is a poor representative of the species, showing significant deviations from the typical form and branching habit with a crown density of less than 50% (sparse).
7. INSIGNIFICANT	The tree is completely dead and has no visible habitat value.	The tree is a declared Noxious Weed under the Noxious Weeds Act (NSW) 1993 within the relevant Local Government Area.	The tree is completely dead and represents a potential hazard.

Arborist Impact Assessment

APPENDIX C Continued

RETENTION VALUES: MORTON, A 2006 Determining landscape significance ratings.	
RETENTION VALUE	RECOMMENDED ACTION
High	<ul style="list-style-type: none"> • These trees considered worthy of preservation; as such careful consideration should be given to their retention as a priority. • Proposed site design and placement of buildings and infrastructure should consider the Tree Protection Zones as discussed in the following section to minimise any adverse impact. • In addition to Tree Protection Zones, the extent of the canopy (canopy dripline) should also be considered, particularly in relation to a high-rise development. Significant pruning of the trees to accommodate the building envelope or temporary scaffolding is generally not acceptable.
Moderate	<ul style="list-style-type: none"> • The retention of these trees is desirable. • These trees should be retained as part of any proposed development if possible, however these trees are considered less critical for retention. • If these trees must be removed, replacement planting should be considered in accordance with Council's Tree Replacement Policy to compensate for loss of amenity.
Low	<ul style="list-style-type: none"> • These trees are not considered to be worthy of any special measures to ensure their preservation, due to current health, condition or suitability. They do not have any special ecological, heritage or amenity value, or these values are substantially diminished due to their SULE. • These trees should not be considered as a constraint to the future development of the site.
Very Low	<ul style="list-style-type: none"> • These trees are considered potentially hazardous or very poor specimens, or may be environmental or noxious weeds. • The removal of these trees is therefore recommended regardless of the implications of any proposed development.

Arborist Impact Assessment

APPENDIX D TREE PROTECTION

Extract from *Australian Standard® AS 4970-2009 – Protection of Trees on Development Sites.*

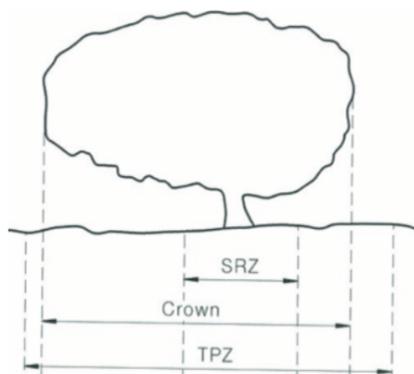


Figure 5: The Structural Root Zone (SRZ), Tree Protection Zone (TPZ), and crown spread of a tree.

D.1 STRUCTURAL ROOT ZONE (SRZ)

The SRZ is the area considered essential for tree stability. Temporary tree protection fencing shall be erected around the perimeter of all tree protection zones.

D.2 OTHER TREE PROTECTION MEASURES

When tree protection fencing cannot be installed due to restricted access (e.g. tree located along the side of an access way or requires temporary removal) other tree protection measures should be used, including those set out below:

D.3 PROTECTIVE FENCING

It shall be installed prior to any demolition or construction. Chain wire mesh panel of 1.8 to 2 metres, cyclone fencing, or star pickets at 2m intervals, connected by a continuous highly-visible barrier/hazard mesh at a height of 1.8 metres is to be used. Alternatively, plywood or wooden paling fence panels may be used. This fencing material also prevents building material and soil from entering the TPZ. Mulch must be installed across the surface of the TPZ. Bracing is permissible within the TPZ and care must be taken to avoid damaging the roots. This fencing will remain in place until all the construction work has been completed.

D.4 TREE PROTECTION ZONES

Signage must be attached to the fence at regular 10 metre intervals. Signage shall read **“TREE PROTECTION ZONE. NO ENTRY EXCEPT TO AUTHORISED PERSONNEL. FINES APPLY.”**

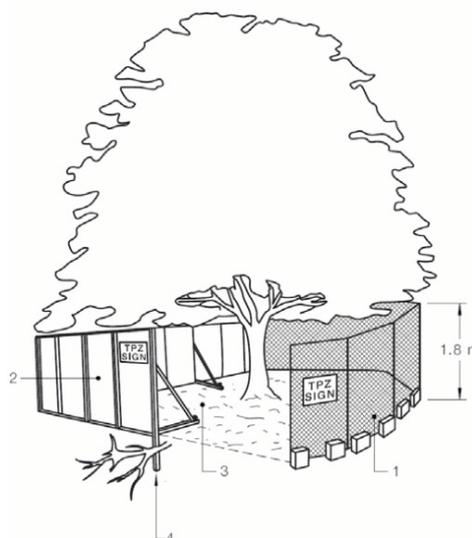


Figure 6: Tree Protection Fencing.

D.5 GROUND PROTECTION

If temporary access for machinery is required within the TPZ, ground protection measures will be required to prevent compaction in the root zone. Measures may include permeable membranes, such as geotextile fabric beneath a 50-100mm depth layer of mulch or crushed rock below rumble boards.

D.6 INSTALLING UNDERGROUND SERVICES WITHIN TPZ

All services should be routed outside the TPZ. If underground services must be routed within the TPZ, they should be installed by directional drilling or in manually-excavated trenches. The directional drilling bore should be at least 600mm deep. The project arborist should assess the likely impacts of boring and bore pits on the retained trees. For manually-excavated trenches, the project arborist should advise on the roots to be retained and monitor the works. Manual excavation may include the use of pneumatic and hydraulic tools.

Arborist Impact Assessment

D.7 TRUNK AND BRANCH PROTECTION

For tree trunk and branch protection, for tree 2 may be installed use boards and padding that will prevent damage to bark. Boards are to be strapped to trees, not nailed or screwed. Rumble boards should be a suitable thickness to prevent soil compaction and root damage. See fig 7 where the scaffolding is supported by the boards on ground.

D.8 EXCAVATION REQUIRED for the insertion of support posts for tree protection fencing should not involve the severance of any roots greater than 20mm in diameter without the prior approval of the project arborist.

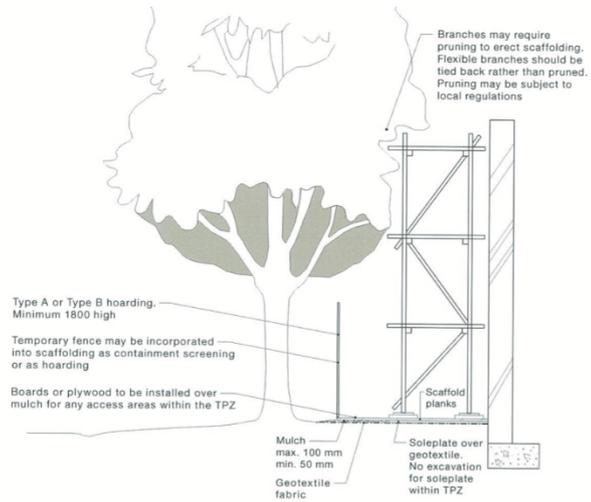


Figure 7: Appropriate measures for the erection of scaffolding.

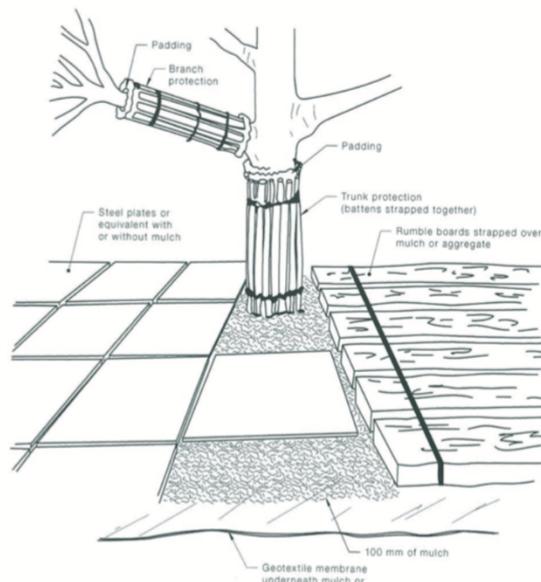


Figure 8: Tree trunk/branch protection and ground cover protection.

Arborist Impact Assessment

APPENDIX D Continued

PROHIBITIONS

- I The following activities shall not be carried out within any Tree Protection Zone:
- a. Disposal of chemicals and liquids (including concrete and mortar slurry, solvents, paint, fuel or oil);
 - b. Stockpiling, storage or mixing of materials;
 - c. Refuelling, parking, storing, washing and repairing tools, equipment, machinery and vehicles;
 - d. Disposal of building materials and waste;
- II The following activities shall not be carried out within any Tree Protection Zone unless under the supervision of the Project Arborist:
- a. Increasing or decreasing soil levels (including cut and fill);
 - b. Soil cultivation, excavation or trenching;
 - c. Placing offices or sheds;
 - d. Erection of scaffolding or hoardings; and/or
 - e. Any other act that may adversely affect the vitality or structural condition of the tree.
- III All work undertaken within or above a Tree Protection Zone shall be supervised by the Project Arborist.
- IV Excavation within the Tree Protection Zone of any tree to be retained shall:
- a. Be undertaken using non-destructive methods (e.g. an Air-spade or by hand) to ensure no roots greater than 40mm in diameter are damaged, pruned or removed.
 - b. All care shall be taken to preserve and avoid damaging roots; excavation should not occur within the Structural Root Zone.

ROOT Mapping

This will utilise either non-destructive digging techniques by hand under AQF 5 Arborist supervision or Hydraulic vacuum extraction at a lowered pressure of less than 3000 psi. The depth should be to allow for the designed foundation, pier or encroachment to be presented within the context of the site.

Arborist Impact Assessment

DISCLAIMER

McArdle Arboricultural Consultancy Pty Ltd does not assume responsibility for liability associated with the tree on or adjacent to this project site, their future demise and/or any damage, which may result therefrom.

McArdle Arboricultural Consultancy Pty Ltd takes care to obtain all information from reliable sources. All data has been verified insofar as possible; however, the consultant can neither guarantee nor be responsible for the accuracy of information provided by others.

McArdle Arboricultural Consultancy Pty Ltd cannot be held responsible for any consequences as a result of work carried out outside specifications, not in compliance with Australian Standards or by inappropriately qualified staff.

Sketches, diagrams, graphs, and photographs in this report, being intended as visual aids, are not necessarily to scale.

LIMITS OF OBSERVATION

McArdle Arboricultural Consultancy Pty Ltd makes every effort to accurately identify current tree health and safety issues. Results may or may not correlate to actual tree structural integrity. There are many factors that may contribute to limb or total tree failure. Not all these symptoms are visible. There can be hidden defects that may result in a failure even though it would seem that other, more obvious defects would be the likely cause of failure. All standing trees have an element of unpredictable risk.



Consulting Arborist
Jim McArdle

B.Ed. Sc ACU, Dip Arb AQF L5 Arborist,
QTRA, Tree Risk Management Assessor,
Tree Contractors Association of Australia President