Tree Assessment Report

162 to 166 Gouger Street, Adelaide 5000, South Australia

Master Plan
3 February 2025

Integrity, initiative, and innovation

Photograph of Honey Locust (*Gleditsia triacanthos*

Acknowledgement of Country

Neoxena Research acknowledges Aboriginal and Torres Strait Islander peoples as the Traditional Custodians of the land, water, and sky throughout Australia on which we do business. We recognise their strength, diversity, resilience, and deep connections to Country. We pay our respects to Elders of the past, present and future, as they hold the memories, knowledges, and spirit of Australia. Neoxena Research is committed to learning from Aboriginal and Torres Strait Islander peoples in the work we do.

Neoxena Research go one step ahead in delivering and identifying 'Healthy Country' outcomes across all environmental and ecological efforts in mission to support, restore and allow Traditional Owners to restore connection to the land, sea, waters, and self-determination.

Project name	Tree Assessment Report		
Document Title	Tree Assessment Report at 162-166 Gouger Street, Adelaide 5000, South Australia prepared for Master Plan		
Revision	Author	Signature	Date
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Executive Summary

Neoxena research have been engaged to review a four tree individuals which are located around the property boundary of 162-166 Gouger Street, Adelaide CBD, SA 5000, and the potential impacts of a proposed development based on details provided by Masterplan on 16 January 2025.

The assessment has been prepared Andre Ortiz, who possesses a Master of Ecological Sciences (University of South Australia, 2016) and a Bachelor of Ecological Science (University of South Australia, 2013), with specialised training and 10+ years of experience in native vegetation assessments, tree impact assessments, health evaluations, arboriculture AQF - level 5, and urban ecosystem services.

Professional credentials include training in Scattered Tree Assessment (SCAT), Bushland Assessment Method (BAM), and Rangelands Assessment Method (RAM) (2024) by the Native Vegetation Council of South Australia, and additional expertise training in tree condition assessments, native flora management, and conservation practices with universities or technical bodies.

Activities

In summary, this review included undertaking the following activities:

- Review of the available information i.e. (Spatial imagery, existing tree attribute a summary assessment undertaken till date, proposed development activities) provided by Masterplan on 16 January 2025.
- A site visit on 26 January 2025 to assess and collect relevant tree attribute data i.e. (health, genus/species, structure, value), including in measurements accordance with relevant Australian Standards AS4970-2009 Protection of trees on development sites (summarised in **Attachment 1**).
- Collect data to identify the legislative status of the tree individual or incidental fauna observations against relevant regulations i.e. Planning Development and Infrastructure 2016 Act (PDI Act), Native Vegetation 1991 Act (NV Act), National Parks and Wildlife 1972 Act (NPW Act), Environment Protection and Biodiversity 1993 Act (EPBC Act) and other relevant regulations.
- Assessing tree attribute data against indicative proposed development to identify a potential impact on the provided information on 16 January 2025.

Based on the review of the above information and method of assessment, in summary the following has been observed:

- On the available tree identification materials, of the four tree individuals assessed, two tree individuals are situated outside of the southern side boundary of the proposed development species were observed as a Chinese Nettle Tree's (*Celtis sinensis)* which are an exotic tree species, Indigenous to Central East-Asia (China, Korea, Japan). As for the two tree individuals situated outside of the western side proposed development boundary on Oakley Street have been observed as Honey Locust (*Gleditsia triacanthos*) which are also an exotic species, Indigenous to North America.
- The two Honey Locust tree individuals meet the definition of a '*Regulated Tree* in accordance with the PDI Act and performance outcomes associated with the tree, however, the two Chinese Nettle Tree individuals do not meet the definition of a regulated tree or any other environmental protections.
- Based on the development footprint, activities, the tree individual attribute data collected i.e. (Tree Protection Zone, Structural Protection Zone, and other tree measurements). It is unlikely that the development will impact the health or condition of the tree individuals assessed.
- No incidental observations recorded of fauna species utilising the tree individual at time of site visit. This included absence of fauna habitat features i.e. (nests, hollows, burrows, and cracks).

Considerations for any potential tree damage or health, with particular attention should made in regard to;

- That the proposed development is undertaken in accordance with the provided site plans, activities, and method as outlined.
- Any changes, alterations, or new scopes of works or footprint as part of the proposed development should be revised against the tree individual(s) to ensure that the tree individual health is not impacted on.
- Protection and avoidance where practicable of the root zone and crown in accordance with the recommendations and principles of AS4970-2009 Protection of trees on development sites, specifically in relation to proposed retaining wall with associated excavation posts, soil compaction method; and
- In the event that the is found to be native fauna utilising the tree individual at the time of construction, measures to ensure that stress is minimised to the fauna species utilising the tree individual at the time of construction i.e. (noise levels, dust generation, litter/waste management onsite and lighting impacts).
- If the tree is proposed to be removed, damaged, or impacted, engagement with a qualified fauna spotter may need to be sorted to minimise disturbance activities to native fauna utilising the tree (active bird nesting).

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1. Introduction

1.1 Background

Neoxena Research (**Neoxena**) has been requested to prepare a tree assessment report dated 20 January 2025 by Master Plan to produce a Tree Assessment report for 162 – 166 Gouger Street, Adelaide CBD SA, 5000.

This is in response to a Request for Further Information (RFI) by the State Planning Commission : Plan SA on 18 November 2024 and subsequent RFI on 15 January 2025. The RFI seeks to confirm if the trees adjacent the site are to be retained, and whether they are regulated or significant trees according to the current regulations. The RFI also requires confirmation as to whether the proposed development/activities will create damage or affect the health of any regulated or significant trees.

1.2 Purpose of this report

To provide confirmation of this RFI which includes undertaking a spatial, desktop and onsite assessment to collect relevant information to assess tree health, condition, tree protection zone, suggested conditions and alterations for potential approvals required for management of the tree in relation to proposed infrastructure. The site location of this property and Certificate of Titles (CTs) that are to be assessed include (CT 5604/494, CT 5604/493, CT 5604/492, CT 5604/495, and CT 5083/168) can be seen in **Figure 1.**

The proposed development includes 16 multi-storey mixed use building with infrastructure features i.e. (parking, ground floor hospitality) and landscaping design which is likely to improve the amenity value and streetscape of the area **Figure 2**.

1.2.1 Scope

The scope of this assessment is to:

- A report on tree outcomes and avoidance measures based on assessments.
- Provision of Tree Protection Zone (TPZ) mapping layers in accordance with Australian standards to identify any design considerations.
- Collation of tree attribute and assessment data, including a summary of findings within the survey area.
- Assess data against relevant legislation for any suggested approvals i.e.
    - *Tree Control Provisions under the 2016 Planning, Development, and Infrastructure Act i.e. (Significant and/or Regulated Trees).*
    - *1991 Native Vegetation Act & 2017 Regulations*

- *Specific local government protections, policies, or regulations of trees for the Adelaide City Council.*

– Summary of any micro-habitat or fauna features present on tree individual(s).

- Provide advice to avoid, minimise, retention measures, and mitigate potential impacts onto the tree individual(s) and health.

1.2.2 Limitations

Limitations as part of this assessment include:

- If timing of surveys is not within the optimal survey period for certain species or communities, then additional surveys may be required, and these would be costed as a variation to our fees.
- Alterations to assessment requirements i.e. (no. of trees, site footprint and activities) post survey would be subject to an additional assessment beyond what has been provided in Section 1.

1.2.3 Assumptions

Assumptions in preparation of this assessment exclude:

- Tree impact assessments to health, condition and in-relation to the proposed development are based on the provided details by Master Plan on 20 January 2025. This includes based upon proposed development plans as seen in **Figure 1 and Figure 2.**
- Any targeted threatened species survey program.
- EPBC Self-assessment or referral of the project to the DCCEEW.
- Native Vegetation Clearance Report, State Environmental Benefits (SEB) offset calculations

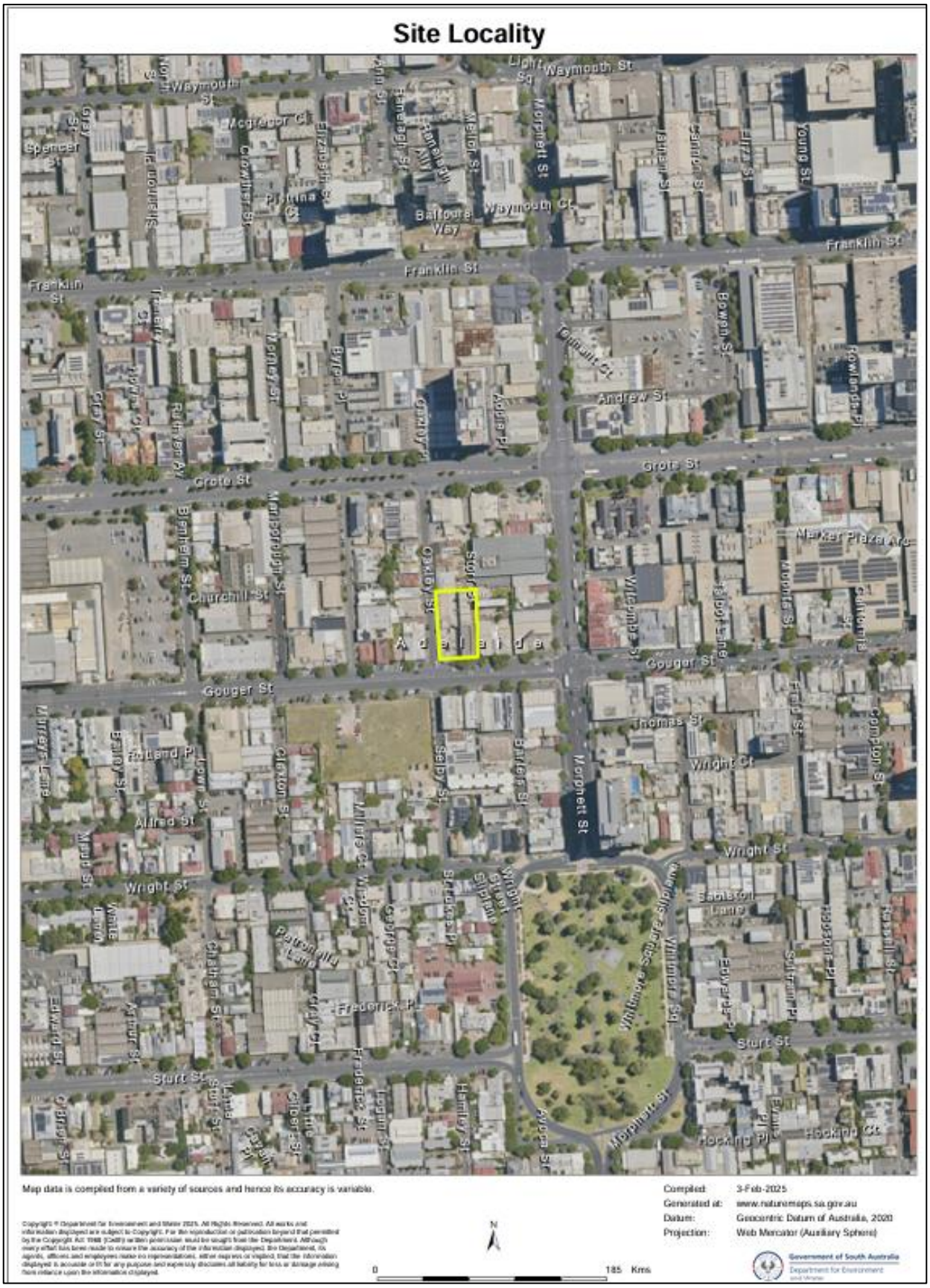

Figure 1: Site Locality (highlighted in illustrated yellow polygon), (NatureMaps 2025)

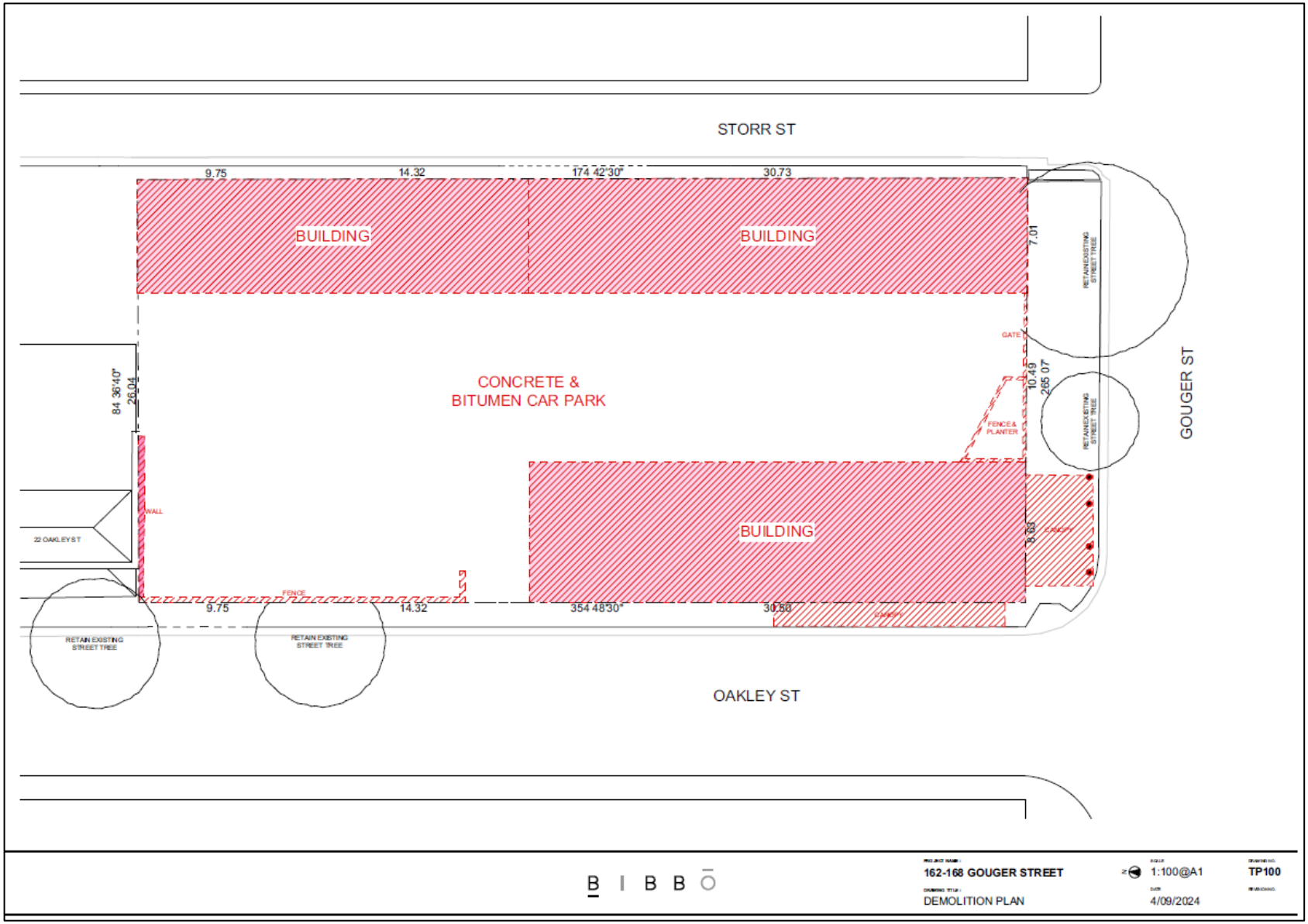

Figure 2: Site Plan Layout (Bibbo Architect 2024)

2. Method of Assessment

2.1 Overview

This report has been prepared by Andre Ortiz who possesses a Master of Ecological Sciences (University of South Australia, 2016) and a Bachelor of Ecological Science (University of South Australia, 2013), with specialised training and 10+ years of experience in native vegetation assessments, tree impact assessments, health evaluations, arboriculture equivalent AQF - level 5, and urban ecosystem services.

Professional credentials include training in Scattered Tree Assessment (SCAT), Bushland Assessment Method (BAM), and Rangelands Assessment Method (RAM) (2024) by the Native Vegetation Council of South Australia, and additional expertise training in tree condition assessments, native flora management, and conservation practices with universities or technical bodies.

In summary, this review included undertaking the following activities:

- Review of the available information i.e. (Spatial imagery, existing tree attribute a summary assessment undertaken till date, proposed development activities) provided by Masterplan on 20 January 2025.
- A site visit on 26 January 2025 to assess and collect relevant tree attribute data i.e. (health, genus/species, structure, value), including in measurements accordance with relevant Australian Standards AS4970-2009 Protection of trees on development sites.
- Undertake a site assessment and collect data as per methodology and criteria (**Section 2.2** and **Attachment 1**), to identify the legislative status of the tree individual or incidental fauna observations against relevant regulations i.e. *Planning Development and Infrastructure 2016 Act* (PDI Act) and 2017 Regulations (PDI Regs), Native Vegetation 1991 Act (NV Act), National Parks and Wildlife 1972 Act (NPW Act), Environment Protection and Biodiversity 1993 Act (EPBC Act) and other relevant regulations.

2.2 Field Assessment

A site inspection was undertaken on the 26 January 2025 which was carried out by 1 x appropriately qualified Principal Ecologist. With suitable experience in tree condition, attribute, and value assessments as described in **Section 2.1** above.

An outline of these attributes that were assessed are summarised below, or further detailed in **Attachment 1**:

- Tree Protection Zone (TPZ) measurements in accordance 'Australian Standard AS4970-2009 Protection of Trees on Development Sites'.

- Tree condition i.e. (health, structure, age, foliage cover, % of dieback)
- Useful Life Expectancy (ULE)
- Tree height, basal diameter, base diameter, and canopy cover
- GPS location of tree and map on Tree Plotter tree assessment mapping application.
- Photographs of tree individual(s) facing South and other significant tree attributes present.
- Trees on site will be assessed in accordance with Tree Controls in accordance with 2016 Planning, Development and Infrastructure Act and City of Adelaide relevant tree regulations.
- Conservation status of tree species under the 1993 Environment Protection & Biodiversity Act (EPBC Act) and 1972 National Parks and Wildlife Act (NPW Act).
- Identification of any "Declared" plants under the 2019 South Australian Landscapes Act on the tree individual(s) to support any potential management requirements.
- Recording of micro-habitat features potentially present i.e. (nests, hollows, cracks).
- Recordings of any fauna present utilising the tree i.e. (birds, reptiles, koalas) or secondary traces i.e. (feathers, scats, burrows, bones).

Legislative Status was identified for all trees controlled under the relevant legislation. Each tree's suitability for retention was determined by reviewing principles under the PDI Act 2016, NV Act 1991, NPW Act 1972, EPBC Act 1993 or relevant local government authority and applying these findings in the Tree Retention Rating (TRR) method, as described within **Attachment 1.** Mapping was performed using GIS and CAD software.

3. Tree & Environmental Assessment findings

3.1 Environment context

The tree individuals are situated within South Australia, in the Adelaide Central Business District (CBD), which has been developed and altered since European settlement. From undertaking spatial and initial site surroundings , the local area has been built upon with residential developments and supporting infrastructure. This has resulted in moderate to substantial amount of remnant native vegetation that has been cleared or disturbed i.e. (introduction of weeds species) into the local environment.

Relating to the local natural environment features, the landscape consists of sparse over storey vegetation including (Eucalyptus, Acacia, Pine and other ornamental tree species) with a mid and understorey comprising of ornamental gardening vegetation and/or park reserves i.e. (the Adelaide Park Land Reserve). Based on these findings the environment provides low to moderate environmental value.

3.2 Tree Health and attribute findings

Based on the findings and method assessment approach outlined in **Section 2** and **Attachment 1**. All four tree individuals were identified as exotic origin with the available materials. This included two mature-aged Chinese Nettle Trees (*Celtis sinensis*) species, which are known to be indigenous to Central East Asia **Figure 3 and 4**. This exotic species has now become a serious environmental weed in Australia (WA 2021), and subsequently listed an 'Exempt regulated tree species' pursuant to Minister Notice Regulation 3F(4)(b) under the *Planning, Development and Infrastructure Regulations 2017* (PDI Regs).

Figure 3: Tree 1 - Chinese Nettle Tree (Celtis sinensis) outside South-Eastern Side of proposed development

Figure 4: Tree 2 - Chinese nettle Tree (Celtis sinensis) outside South-Western side of proposed development

The second tree species that has been identified is a Honey Locust (*Gleditsia triacanthos*) tree species, which are the two tree individuals situated on the western side outside of the property adjacent Oakley Street **Figure 5 and 6.** Both Honey Locust tree individuals possessed a trunk circumference that met the definition of a 'Regulated Tree' under the PDI Act 2016 and Regs 2017.

All tree species present are further confirmed and documented in existing biological databases and Adelaide City Council tree mapping attribute data layers (DEW 2025; ACC; 2025)

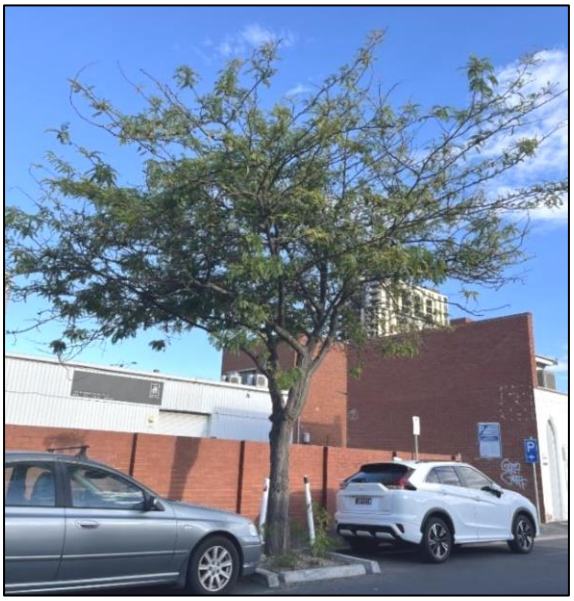

Figure 5: Tree 3 - Honey Locust Gleditsia triacanthos) outside the Eastern side of the Property.

Figure 3 Tree - Honey Locust (Gleditsia triacanthos) outside of the North-Eastern side of the property.

All tree species were found to be of exotic origin and found to be environmental weeds commonly found present in this area of the Adelaide CBD, as well as, possessing limited habitat features present i.e. (absence of nests, hollows, burrows, or cracks). This has presented the trees to be of **moderate to low environmental or amenity values.** From the findings relating to tree attributes, the tree is presented to have a **low to moderate tree retention rating** and should not function as part of a material constraint for the proposed development.

Summarised findings of the trees that were assessed is summarised in **Table 1.** For additional information, findings and details refer to **Attachment 2** (summary of tree attributes) and **Attachment 3** (Photo log of evidence from (26 January 2025) site visit.

Table 1: Summarised Tree Attribute Values Table

No.	Common Name / Species	Origin	TPZ	SRZ	Spread	Health	Env. Value	Amenity Value	Retention Rating	PDI Act
1	Chinese Nettle Tree (*Celtis sinensis*)	Exotic	6.0	2.8	7	Good-to Moderate	Low	Moderate	Moderate to Low	N/A
2	Chinese Nettle Tree (*Celtis sinensis*)	Exotic	2.6	2.0	3.5	Fair	Low	Low	Low	N/A
3	Honey Locust (*Gleditsia triacanthos*)	Exotic	3.8	2.2	4.5	Moderate	Low	Moderate to low	Moderate to Low	R
4	Honey Locust (*Gleditsia triacanthos*)	Exotic	4.5	2.3	4	Moderate to Poor	Low	Moderate to Low	Moderate to Low	R

Key Legend for PDI Act & Regs - Tree Regulation Classification : Significant (S), Regulated (R), Not Applicable (N/A)

3.3 Development impact assessment findings

The proposed development includes one 16-storey mixed-use apartment building with supporting infrastructure features and, landscaping design which is likely to improve the amenity value of the area. The proposed development does not involve the removal or intersect with the any key tree individual attributes i.e. (root structural components, branches, soil permeability/water drainage requirements or disturbance).

From assessment of the proposed development in relation to the relevant legislation for tree protection, the following has been summarised:

- The proposed development area falls under the PDI Act and Regs zone map layer (SAPPA 2024).
- Two Honey Locust (*Gleditsia triacanthos*) tree individuals meet the criteria as a 'Regulated Tree' under the PDI Act and PDI Regs.
- Two Chinese Nettle Tree (*Celtis sinensis*) are listed as 'Exempt regulated tree species' pursuant to Minister Notice Regulation 3F(4)(b) under the PDI Regs.
- The proposed development is located within the Native Vegetation Act Exempt protection layer (NatureMaps 2024), therefore not requiring referral or approval by the Native Vegetation Branch (NVB) or Council (NVC) in accordance with the NV Act and NV Regs.
- Both Honey Locust (*Gleditsia triacanthos*) and Chinese Nettle Tree (*Celtis sinensis*) are documented as being serious environmental weeds and are not listed threatened flora species under the NPW Act or EPBC Act, nor does it constitute as being part of a threatened ecological community (TEC) under these Acts.

- The tree individuals has not been found to meet any local environment or biodiversity regulatory requirements by the Adelaide City Council.

Based on the tree attributes summarised above and details collected, indicates that the proposed development is unlikely to impact upon the tree individual structural root health or cause damage to the tree. This is further illustrated in **Figure 4**, which shows the tree individual structural root and tree protection zone in relation to the proposed development.

The proposed development indicates that it would only encroach tree individual no.3 with only up to 12% of the tree canopy, meaning that it is unlikely the development would impact upon the structural integrity, health, or longevity of the tree individual. It is important to note that all trees, including the tree that show of existing trimming activities and have a grown form as a result , see **Attachment 3** photolog evidence.

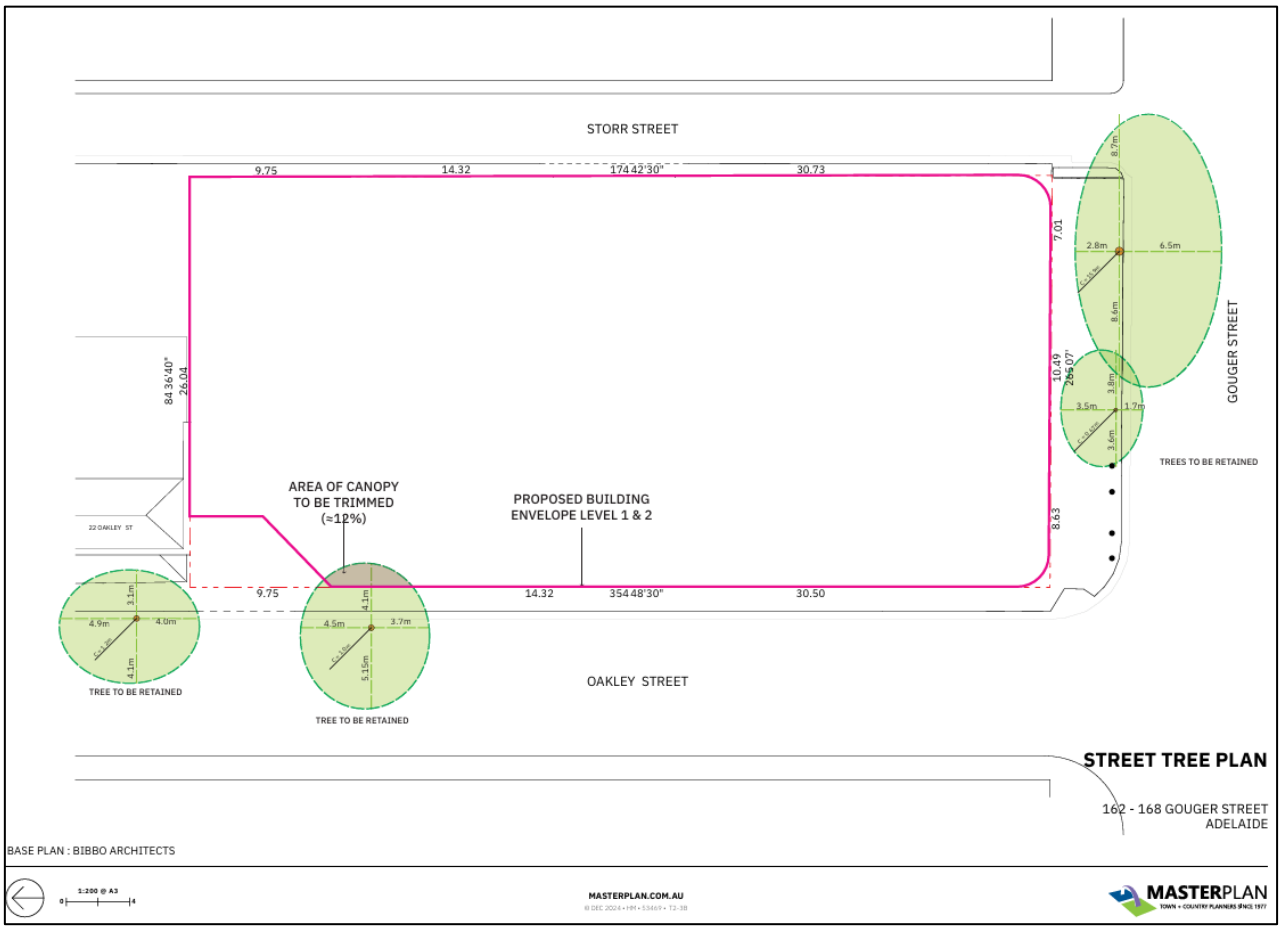

Figure 4: 162-166 Gouger Street, Adelaide - Street Tree Plan illustrating assessed tree measurements against proposed building boundary (Masterplan; Bibbo Architects 2025)

4. Recommendations and next steps

Based on the findings of this assessment, the following recommendations and next steps should be considered:

- That the proposed development is undertaken in accordance with the provided site plans, activities, and method as outlined.
- Changes, alterations, or new scopes of works or footprint as part of the proposed development should be revised against the tree individual(s) to ensure that the tree individual health is not impacted on.
- In the event that the is found to be native fauna utilising the tree individual at the time of construction, measures to ensure that stress is minimised to the fauna species utilising the tree individual at the time of construction i.e. (noise levels, dust generation, litter/waste management onsite and lighting impacts); and
- Protection and avoidance where practicable of the root zone and crown in accordance with the recommendations and principles of AS4970-2009 Protection of trees on development sites, specifically in relation to soil compaction method.

Yours Sincerely,

Andre Ortiz
Principal Consultant Ecologist & Botanist
Masters by Research (Urban Ecological Services) & Bachelor of Ecological Sciences,
AQF (lvl 5) Arboriculture Management

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Attachment 1

Tree Assessment Condition Criteria

Tree Assessment Form (TAF)

Record	Description
Tree	In botanical science, a tree woody plant that regularly renews its growth (perennial). Most plants classified as trees have a single self-supporting trunk containing woody tissues, and in most species the trunk produces secondary limbs, called branches. Trees are generally taller than 5 meters and will live for more than multiple seasons, with some species that live for hundreds or thousands of seasons.
Genus & Species	Botanical taxonomy of trees uses the binominal system of a genus and species, often there are subspecies and subgenus. When identifying tree species, identification techniques such as assessing key identifying features may include the tree's form, soil composition, climatic requirements, foliage, bark character, flower, stem, fruit, genetic testing and location are used. Identifying the correct tree species is critical in understanding ecological, environmental, cultural and social value of the tree and its interaction with key tree protection legislation. Genus is the broader classification of a species, for the case of trees may include families including families such as (*Acacia, Callistemon, Eucalyptus, \Melaleuca and Pinus)*. Species identifies the specific tree within the genus pool *e.g. Acacia pycnantha*, *Eucalyptus viminalis*, or *Melaleuca dentatus* and *Pinus radiata*. Trees can also be referred to by a 'Common Name', as well as their species name. Common Names are not preferable identify a species as they it is nonspecific when used, misrepresent a species or share the same or similar Common name to another species.
Height	Tree height is estimated at the time of assessment. Tree height is observed and recorded through triangulation and Pythagoras theorem. Tree heights can range from under 5m in height to over 20 m.
Spread	Tree crown spread is estimated by the at the time of assessment and recorded in the following ranges <5m, 5-10m, 10-15m, 15-20m, >20m.
Health	Tree health is assessed by identifying key literature on the relevant tree species biology and health condition assessments. As well as, using Neoxena Research - Tree health assessment matrix that is developed on international standards.
Structure	Tree structure is assessed by identifying key literature on the relevant tree species biology and health condition assessments. As well as using Neoxena Research - Tree Structure Assessment matrix that is developed on international standards.
Tree Risk Assessment	Tree Risk is assessed using Tree Risk Assessment methodology. The person conducting the assessment has been trained in the to undertake Arboriculture Tree Risk Assessment Qualification (TRAQ), Quantified Tree Risk Assessment (QTRA) and/or VALID Tree Risk Assessment (VALID). Refer to Section 3 within the report for additional information.
Legislative Status	Legislation status is identified through the interpretation of the Planning, Development and Infrastructure Act 2016 (PDI Act), Environment Protection & Biodiversity Act 1993 (EPBC Act), National Parks and Wildlife Act 1972 (NPW Act), Landscapes South Australia Act 2019 (LSA Act), the Native Vegetation Act 1991 (NV Act) and Regulations 2017 (NV Regs) and/or any other local government legislation that may apply i.e. (City of Tea Tree Gully).
Mitigation Hierarchy	Measures to avoid, minimize, mitigate or offset tree related impacts, improve tree condition, remove structural flaws, manage other conditions as appropriate may be recommended in the form of pruning and is listed in the Tree Assessment Findings (available on request). Tree pruning is recommended in accordance with AS4373-2007 Pruning amenity trees where practicable. Where measures to mitigate risk is not possible and the risk is unacceptable, then tree removal or further investigation is recommended

Useful Life Expectancy (ULE)

ULE Rating	Definition
Surpassed	The tree has surpassed its Useful Life Expectancy. Trees that achieve a surpassed ULE may do so due to poor health, structure or form. Additionally, trees that are poorly located such as under high voltage powerlines or too close to structures may also achieve a surpassed ULE. Trees that achieve this status will be recommended for removal as there are no reasonable options to retain them
< 10 years	The tree displays either or both Poor Health and/or Structure and is considered to have a short Useful Life Expectancy of less than ten years. Some short-lived species such as Acacia sp. may naturally achieve a short ULE.
10 years >	The tree displays Fair Health or Structure and Good Health or Structure and is considered to have a Useful Life Expectancy of ten years or more. Trees identified as having a ULE of >10, will require mitigation such as pruning, stem injections or soil amelioration to increase their ULE.
20 years >	The tree displays Good Health and Structure and is considered to have an extended Useful Life Expectancy of more than twenty years.

Maturity (Age)

Age Class	Definition
Senescent	The tree has surpassed its optimum growing period and is declining and/or reducing in size. May be considered as a veteran in relation to its ongoing management. Tree will have generally reached greater than 80% of its expected life expectancy.
Mature	A mature tree is one that has reached its expected overall size, although the tree's trunk is still expected to continue growing. Tree maturity is also assessed based on species; as some trees are much longer lived than others. Tree will have generally reached 20-80% of its expected life expectancy.
Semi-Mature	A tree which has established but has not yet reached maturity. Normally tree establishment practices such as watering will have ceased. Tree will generally not have reached 20% of its expected life expectancy.
Juvenile	A newly planted tree or one which is not yet established in the landscape. Tree establishment practices such as regular watering will still be in place. Tree will generally be a newly planted specimen up to five years old; this may be species dependent

Tree Health Assessment (THA)

Category	Description
Good	Tree displays normal vigour, uniform leaf colour, no or minor dieback (<5%), crown density (>90%). When a tree is deciduous, healthy axillary buds and typical internode length is used to determine its health. A tree with good health would show no sign of disease and no or minor pest infestation was identified. The tree has little to no pest and/or disease infestation.
Fair	Tree displays reduced vigour abnormal leaf colour, a moderate level of dieback (<15%), crown density (>70%) and in deciduous trees, reduced axillary buds and internode length. Minor pest and/or disease infestation potentially impacting on tree health. Trees with fair health have the potential to recover with reasonable remedial treatments.
Poor	Tree displays an advanced state of decline with low or no vigour, chlorotic or dull leaf colour, with high crown dieback (>15%), low crown density (<70%) and/or in deciduous trees, few or small axillary buds and shortened internode length. Pest and or disease infestation is evident and/or widespread. Trees with poor health are highly unlikely to recover with any remedial treatments; these trees have declined beyond the point of reversal.
Dead	The tree has died and has no opportunity for recovery.

Tree Structural Assessment (TSA)

Category	Description
Good	Little to no branch failure observed within the crown, well-formed unions, no included bark, good branch and trunk taper present, root buttressing and root plate are typical. Trees that are identified as having good health display expected condition for their age, species and location.
Fair	The tree may display one or more of the following a history of minor branch failure, included bark unions may be present however, are stable at this time, acceptable branch and trunk taper present, root buttressing and root plate are typical. Trees with fair structure will generally require reasonable remediation methods to ensure the tree's structure remains viable.
Poor	History of significant branch failure observed in the crown, poorly formed unions, unstable included bark unions present, branch and/or trunk taper is abnormal, root buttressing and/or root plate are atypical.
Failed	The structure of the tree has or is in the process of collapsing.

Tree Form Assessment (TFA)

Category	Description
Good	Form is typical of the species and has not been altered by structures, the environment or other trees.
Fair	The form has minor impacts from structures, the environment or adjacent trees which has altered its shape. There may be slight phototropic response noted or moderate pruning which has altered the tree's form.
Poor	The tree's form has been substantially impacted by structures, the environment, pruning or other trees. Phototropic response is evident and unlikely to be corrected
Atypical	Tree form is highly irregular due to structures or other trees impacting its ability to correctly mature. Extreme phototropic response is evident; or the tree has had a substantially failure resulting in its poor condition, or extensive pruning has altered the tree's form irreversibly.

<u>Tree Retention Rating</u>

The tree retention rating is assessed on a series of factors that are identified as part of the criteria in assessment of a tree individual. This includes the values associated with the tree i.e.:

- **Amenity / Aesthetic:** Amenity / Aesthetic values of a tree include provision of improved visual perspective in the immediate or surrounding landscape.
- **Environment/Ecological:** This refers to the environment and ecological benefits associated with the tree. Environmental benefits may include water retention, cooling effect, shade provision, air purification. Ecological benefits may include if it is a tree of conservation status, providing critical habitat for flora and fauna species i.e. (mature hollow bearing threated mammals)
- **Cultural, Historical and local community value:** This includes a tree individual or species belonging to cultural or historical significance to a relevant community, spirituality or culture i.e. (First Nations communities, Heritage listed tree, key identifying tree of a township).

The tree is also assessed against the physical attributes of the tree i.e.:

- **Health condition:** This includes but not limited to foliage cover/coloration, bark condition, age, ULE
- **Structural composition:** Tree height, number of trunks for the relevant species, canopy spread, and trunk circumference.

These elements are formulated into a matrix to provide a numbered rating on 'Tree Retention Ratings' or 'Modifier, which combine to provide an overall 'Tree Retention Rating' which is standardized, measurable and consistent with standards.

Tree Assessment Field Sheet (Example) **Assessor:**

Land area details								
Date Assessed								
Address								
Property Title								
Property Owner(s)								
Temperature								
Photograph	Y / N		Direction of Photograph (N,S,E,W)					
Tree Attributes								
Tree No.								
GPS Location								
Type	Scientific Name				Common Name			
Height								
Trunk measurement	DBH Dia.		DBH Circ.		DAB Dia.		DAB Circ.	
Spread	1st Meas.		2nd Meas.		3rd Meas.		4th Meas.	
ULE	Surpassed		<10yrs		>10yrs		>20yrs	
Maturity	Senescent		Mature		Semi-Mature		Juvenile	
Health	Good		Fair		Poor		Dead	
Structural	Good		Fair		Poor		Failed	
Form	Good		Fair		Poor		Atypical	
Ecological Value	Indigenous		Native		Exotic		Weed	
Amenity Value	Important		Moderate		Low		None	
Special Value*	Important		High		Moderate		Low	
Cultural Values								
DBH (s)								
Fauna Species Present								
Fauna Habitat Features	No. Hollows		No. Nests		No. Cracks		No. Burrows	
Additional Tree Attribute Field Observations								

Attachment 2

Tree Attribute Data Assessment

Attachment 2 – Summary Table of Tree Attributes

Tree Attribute	**Measurement & Identification**		**Tree no.1**
Property Location	162-166 Gouger Street, Adelaide CBD, South Australia		Brief Description The tree species is an exotic tree species, with its Indigenous origin belonging to Central East-Asian (China, Korea, Japan), photograph below. This species has now become a serious environmental weed in Australia (WA 2021), and subsequently listed an 'Exempt regulated tree species' pursuant to Minister Notice Regulation 3F(4)(b) under the *Planning, Development and Infrastructure Regulations 2017* (PDI Regs). The tree individual is located on the South-Eastern direction from outside the property situated between the adjacent footpath and Gouger St (road). Tree is found to have had moderate pruning on the North and Southern faces of the tree (likely for pedestrian and vehicle passage on either side historically by the local council). Based upon key tree attributes and surrounding constraints, the tree would be considered of good to moderate condition and provides moderate foliage cover. Refer to **Attachment 3** for further photographic log of Chinese Nettle Tree (*Celtis sinensis*). 
Date Assessed	26 January 2025		
Genus / Species	Common Name: Chinese Nettle		
	Scientific Name: *Celtis sinensis*		
Origin	Indigenous	Native -	
	Exotic - X	Weed	
Height	8 metres		
Trunk Circumference	159 cm		
Tree Protection Zone (TPZ)	6.0 metres		
Structural Root Zone (SRZ)	2.8 metres		
Tree Canopy Spread	7 metres 2.8m N – to 6.5m S / 8.7 to 8.8m W.		
Health	Good to moderate		
Structure	Fair		
Age	Mature		
Useful Life Expectancy (ULE)	10 > years		
Form	Fair		
Environmental Value	Moderate		
Amenity Value	Moderate		
Fauna Habitat/Species incidental observations	- No incidental observations were recorded of fauna species present. - No presence of any key fauna habitat micro-features were identified either i.e. (nests, hollows, cracks in bark or burrows). - Tree provides structural canopy cover it only provides moderate foliage, leaf litter, branch resting areas for birds and shade for sheltering.		
Tree Retention Rating	**Rating – Moderate to low** This tree has a moderate to low retention rating and should not function as part of a material constraint for the proposed development. The tree is in a healthy condition with strong route structure in place.		
Development Impact	The proposed development is not within the root protection zone, nor are there any intersections with the branches, trunks, root system or tree features from the proposed development into the subject land. It is therefore very unlikely the proposal would cause the death, structural failure, or impact onto the tree.		
Action	Ensure that proposed development footprint is conducted as per site plans and drawings. Any alterations, changes and modification in the proposed development footprint or activities should then trigger further assessment to ensure that tree health and structure is not impacted upon.		

Legislative Status	
Planning, Development, and Infrastructure Act 2016* (SA) & *Regulations 2017 (SA)	The tree individual trunk circumference is greater than 2m, however, is listed as an 'exempt regulated tree species' under Regulation 3F(4)(b) – 'Ministers notice' pursuant of the *Planning, Development, and Infrastructure Regulations 2017*.
***Native Vegetation Act 1991* (SA)**	The tree individual is situated within the exempt zone overlay under the Act.
***National Parks and Wildlife Act 1972* (SA)**	The tree individual itself is not listed as a threatened species under the Act, nor did the tree species show to support or have present any fauna species listed under Schedule 1 of the Act.
***Environment Protection and Biodiversity Conservation Act 1993* (Cth)**	The tree species is not a listed species under the EPBC Act.
Other Regulatory Considerations	The proponent should engage with the City of Adelaide as to any local government regulatory considerations.

Tree Attribute	Measurement & Identification		Tree no.2
Property Location	162-166 Gouger Street, Adelaide CBD, South Australia		Brief Description The tree species is an exotic tree species, with its Indigenous origin belonging to Central East-Asian (China, Korea, Japan) photograph below. This species has now become a serious environmental weed in Australia (WA 2021), and subsequently listed an 'Exempt regulated tree species' pursuant to Minister Notice Regulation 3F(4)(b) *under the Planning, Development and Infrastructure Regulations 2017* (PDI Regs). The tree individual is located on the South-Western direction from outside the property situated between the adjacent footpath and Gouger St (road). Tree is found to have had substantive pruning on the North and Southern faces of the tree (likely for pedestrian and vehicle passage on either side historically by the local council). Based upon key tree attributes and surrounding constraints, would be considered of moderate to low condition and provides limited foliage cover. Refer to **Attachment 3** for further photographic log of Chinese Nettle Tree (*Celtis sinensis*).
Date Assessed	26 January 2025		
Genus / Species	Common Name: Chinese Nettle Tree		
	Scientific Name: *Celtis sinensis*		
Origin	Indigenous	Native	
	Exotic - X	Weed	
Height	3.5 metres		
Trunk Circumference	67 cm		
Tree Protection Zone (TPZ)	2.6 metres		
Structural Root Zone (SRZ)	2.0 metres		
Tree Canopy Spread	3.5 metres		
Health	Fair		
Structure	Fair to poor		
Age	Mature		
Useful Life Expectancy (ULE)	10 < years		
Form	Fair		
Environmental Value	Low		
Amenity Value	Low		

Fauna Habitat/Species incidental observations	- No incidental observations were recorded of fauna species present. - No presence of any key fauna habitat micro-features were identified either i.e. (nests, hollows, cracks in bark or burrows). - Tree provides limited canopy cover and only provides limited foliage.
Tree Retention Rating	**Rating – Low** This tree has a low retention rating and should not function as part of a material constraint for the proposed development. The tree is in a healthy condition with strong route structure in place.
Development Impact	The proposed development is not within the root protection zone, nor are there any intersections with the branches, trunks, root system or tree features from the proposed development into the subject land. It is therefore very unlikely the proposal would cause the death, structural failure, or impact onto the tree.
Action	Ensure that proposed development footprint is conducted as per site plans and drawings. Any alterations, changes and modification in the proposed development footprint or activities should then trigger further assessment to ensure that tree health and structure is not impacted upon.

Legislative Status	
Planning, Development, and Infrastructure Act 2016 (SA) & Regulations (2017)	The tree individual does not qualify as a regulated tree with a circumference less than 1m to Regulations, and in addition is listed as an 'exempt regulated tree species' pursuant to of Regulation 3F(4)(b) – Ministers notice of the Planning, Development, and Infrastructure Regulations 2017.
***Native Vegetation Act 1991* (SA)**	The tree individual is situated within the exempt zone overlay under the Act.
***National Parks and Wildlife Act 1972* (SA)**	The tree individual itself is not listed as a threatened species under the Act, nor did the tree species show to support or have present any fauna species listed under Schedule 1 of the Act.
***Environment Protection and Biodiversity Conservation Act 1993* (Cth)**	The tree species is not a listed species under the EPBC Act.
Other Regulatory Considerations	The proponent should engage with the City of Adelaide as to any local government regulatory considerations.

Tree Attribute	Measurement & Identification		Tree no.3
Property Location	162-166 Gouger Street, Adelaide CBD, South Australia		
Date Assessed	26 January 2025		
Genus / Species	Common Name: Honey Locust		
	Scientific Name: *Gleditsia triacanthos*		
Origin	Indigenous	Native	
	Exotic - X	Weed	
Height	4.5 metres		
Trunk Circumference	100 cm		
Tree Protection Zone (TPZ)	3.8 metres		
Structural Root Zone (SRZ)	2.2 metres		
Tree Canopy Spread	4.5 metres		
Health	Moderate		
Structure	Fair		
Age	Mature		
Useful Life Expectancy (ULE)	10 > years		
Form	Fair		
Environmental Value	Low		
Amenity Value	Moderate to Low		

Brief Description

The tree species is an exotic tree species, with its Indigenous origin belonging to North America (photograph below). This species has now become an invasive weed in Australia (WA 2021). The tree individual is located on the North-Western direction from outside the property situated between the adjacent footpath and Oakley (road). Tree is found to have had substantive pruning on the Eastern and Western faces of the tree (likely for pedestrian and vehicle passage on either side historically by the local council). Based upon key tree attributes and surrounding constraints, would be considered of moderate to low condition and provides limited foliage cover. Refer to **Attachment 3** for further photographic log of Honey Locust (*Gleditsia triacanthos*).

Fauna Habitat/Species incidental observations	- No incidental observations were recorded of fauna species present. - No presence of any key fauna habitat micro-features were identified either i.e. (nests, hollows, cracks in bark or burrows). - Tree provides structural canopy cover it only provides moderate foliage, leaf litter, branch resting areas for birds and shade for sheltering.
Tree Retention Rating	**Rating – Moderate to low** This tree has a low to moderate retention rating and should not function as part of a material constraint for the proposed development. The tree is in a healthy condition with strong route structure in place.
Development Impact	The proposed development is not within the root protection zone, nor are there any intersections trunks, root system or tree features from the proposed development into the subject land, with only a minor intersection with branches on the eastern face of the tree (less than 15 % of pruning required). It is therefore very unlikely the proposal would cause the death, structural failure, or impact onto the tree.
Action	Ensure that proposed development footprint is conducted as per site plans and drawings. Any alterations, changes and modification in the proposed development footprint or activities should then trigger further assessment to ensure that tree health and structure is not impacted upon.

Legislative Status	
Planning, Development, and Infrastructure Act 2016 (SA) & Regulations (2017).	The tree individual qualifies as a regulated tree as its trunk circumference is greater than 1m but less than 2m pursuant to Regulations of the Planning, Development, and Infrastructure Regulations 2017 (SA).
***Native Vegetation Act 1991* (SA)**	The tree individual is situated within the exempt zone overlay under the Act.
***National Parks and Wildlife Act 1972* (SA)**	The tree individual itself is not listed as a threatened species under the Act, nor did the tree species show to support or have present any fauna species listed under Schedule 1 of the Act.
***Environment Protection and Biodiversity Conservation Act 1993* (Cth)**	The tree species is not a listed species under the EPBC Act.
Other Regulatory Considerations	The proponent should engage with the City of Adelaide as to any local government regulatory considerations.

Tree Attribute	**Measurement & Identification**		**Tree no.4**
Property Location	162-166 Gouger Street, Adelaide CBD, South Australia		
Date Assessed	26 January 2025		
Genus / Species	Common Name: Honey Locust		
	Scientific Name: *Gleditsia triacanthos*		
Origin	Indigenous	Native	
	Exotic - X	Weed	
Height	4.5 metres		
Trunk Circumference	120 cm		
Tree Protection Zone (TPZ)	4.5 metres		
Structural Root Zone (SRZ)	2.3 metres		
Tree Canopy Spread	4 metres		
Health	Moderate to poor		
Structure	Fair		
Age	Mature		
Useful Life Expectancy (ULE)	10 > years		
Form	Fair		
Environmental Value	Low		
Amenity Value	Moderate to Low		

Brief Description

The tree species is an exotic tree species, with its Indigenous origin belonging to North America, with its Indigenous origin (photograph below). This species has now become an invasive weed in Australia (WA 221). The tree individual is located on the North-Western direction from outside the property situated between the adjacent footpath and Oakley St (road). Tree is found to have had substantive pruning on the Eastern and Western faces of the tree (likely for pedestrian and vehicle passage on either side historically by the local council). Based upon key tree attributes and surrounding constraints, would be considered of moderate to low condition and provides limited foliage cover. **Refer to Attachment 3** for further photographic log of Honey Locust (*Gleditsia triacanthos*).

Fauna Habitat/Species incidental observations	- No incidental observations were recorded of fauna species present. - No presence of any key fauna habitat micro-features were identified either i.e. (nests, hollows, cracks in bark or burrows). - The tree provides structural canopy cover it only provides moderate foliage, leaf litter, limited resting areas for birds.
Tree Retention Rating	**Rating – Moderate to low** This tree has a low to moderate retention rating and should not function as part of a material constraint for the proposed development. The tree is in a healthy condition with strong route structure in place.
Development Impact	The proposed development is not within the root protection zone, nor are there any intersections with the branches, trunks, root system or tree features from the proposed development into the subject land. It is therefore very unlikely the proposal would cause the death, structural failure, or impact onto the tree.
Action	Ensure that proposed development footprint is conducted as per site plans and drawings. Any alterations, changes and modification in the proposed development footprint or activities should then trigger further assessment to ensure that tree health and structure is not impacted upon.

Legislative Status	
***Planning, Development, and Infrastructure Act 2016* (SA) & Regulations (2017)**	The tree individual qualifies as a regulated tree as its trunk circumference is greater than 1m but less than 2m pursuant to Regulations of the Planning, Development, and Infrastructure Regulations 2017 (SA).
***Native Vegetation Act 1991* (SA)**	The tree individual is situated within the exempt zone overlay under the Act.
***National Parks and Wildlife Act 1972* (SA)**	The tree individual itself is not listed as a threatened species under the Act, nor did the tree species show to support or have present any fauna species listed under Schedule 1 of the Act.
***Environment Protection and Biodiversity Conservation Act 1993* (Cth)**	The tree species is not a listed species under the EPBC Act.
Other Regulatory Considerations	The proponent should engage with the City of Adelaide as to any local government regulatory considerations.

Attachment 3

Photo log of site observations - 26 01 2025

Attachment 3 – Photo log of observations from 26th January 2025 site visit

Photo #	Image	Description
#1		Photograph of Tree no.1 Chinese Nettle Tree (*Celtis sinensis*). 1 in a Northern direction.

#2		Photograph of Tree no.1 Chinese Nettle Tree (*Celtis sinensis*) species in a North-Eastern Direction

#3		Photograph of Tree no.1 Chinese Nettle Tree (*Celtis sinensis*), with red-circles illustrating previous pruning activity likely undertaken by local council for adjacent footpath and road).

#4		Photograph of Tree no.1 Chinese Nettle Tree (*Celtis sinensis*), with red-circles illustrating previous pruning activity likely undertaken by local council for adjacent footpath and road).

#5		Photograph of Tree no.1 Chinese Nettle Tree (*Celtis sinensis*), with 1 metre ruler at the base of the trunk as size reference against the tree individual towards Eastern direction.

#6

Photograph of Tree no.1 Chinese Nettle Tree (*Celtis sinensis*), with red-circles illustrating key identifying fruit and leaf foliage features for the species present.

#7		Photograph of Tree no.2 Chinese Nettle Tree (*Celtis sinensis*) species in a North-Western Direction.

#8		Photograph of Tree no.2 Chinese Nettle Tree (*Celtis sinensis*) species in a Eastern Direction.

#9		Photograph of Tree no.2 Chinese Nettle Tree (*Celtis sinensis*), with 1 metre ruler at the base of the trunk as size reference against the tree individual towards Eastern direction.

#10		Photograph of Tree no.2 Chinese Nettle Tree (*Celtis sinensis*), with red-circles illustrating previous pruning activity likely undertaken by local council for adjacent footpath and road).

#11		Photograph of Tree no.3 Honey Locust (*Gleditsia triacanthos*). in a Northern direction.

#12		Photograph of Tree no.3 Honey Locust (*Gleditsia triacanthos*). in an Eastern direction.

#13		Photograph of Tree no.3 Honey Locust (*Gleditsia triacanthos*), with red-circles illustrating previous pruning activity likely undertaken by local council for adjacent footpath and road).

#14		Photograph of Tree no.3 Honey Locust (*Gleditsia triacanthos*), illustrating key identifying leaf foliage features for the species present.

#14		Photograph of Tree no.4 Honey Locust (*Gleditsia triacanthos*). in a Northern – Eastern direction.

#15		Photograph of Tree no.4 Honey Locust (*Gleditsia triacanthos*). in a Northern – Eastern direction.

#16		Photograph of Tree no.4 Honey Locust (*Gleditsia triacanthos*), with red-circles illustrating previous pruning activity likely undertaken by local council for adjacent footpath and road).

#17		Photograph of Tree no.4 Honey Locust (*Gleditsia triacanthos*), with red-circles illustrating previous pruning activity likely undertaken by local council for adjacent footpath and road).