City Plan Strategy & Development P/L
ABN 58 133 501 774

11 February 2021

Our Ref: [P-16261 (TC)]

Mr Chris Nguyen
Assessment Officer
Willoughby City Council
PO Box 57
CHATSWOOD NSW 2057
Christopher.Nguyen@willoughby.nsw.gov.au

Dear Mr Nguyen,

RE: ADDITIONAL INFORMATION REQUESTED BY SYDNEY NORTH PLANNING PANEL 9/02/2021 RELATING TO ARBORIST REPORT FOR DA2019/247 - PPSSNH-26
ADDRESS: CLUB WILLOUGHBY
26 CRABBES AVENUE & 243-255 PENSHURST STREET, WILLOUGHBY

This letter has been prepared by City Plan Strategy and Development (City Plan) on behalf of Hyecorp Property Group as the Applicant, relating to the above-mentioned development application for demolition of existing structures and construction of a new registered club, three seniors living apartments containing self-contained dwellings, a residential aged care facility, shop top housing, basement carparking and ancillary uses including a new park.

The application was referred to the Sydney North Planning Panel (SNPP) on 5 February 2021. On 9 February 2021, the Panel requested additional information regarding the drainage and potential impact(s) on existing trees/hedges within the vicinity of 13 - 17 Horsley Avenue, Willoughby and respective street trees. To address this, an addendum Arboricultural Report has been provided, prepared by Blues Bros Arboriculture (dated 10 February, 2021); and is attached in Appendix 1; which is to be read in conjunction with the Arboricultural Impact Assessment as prepared by Glenyss Laws, Revision A, dated 28/06/2019. (For the benefit of the SNPP Members, a new Arborist was engaged for this addendum report, because the initial Arborist is on leave and not in Sydney.)

This addendum report maps the trees and hedges within the vicinity of properties 13 - 17 Horsley Avenue, Willoughby; including their species, height, canopy and number of trees in the stand. The reports recognises that the easement is proposed to be constructed by way of a tunnel boring machine at depths of 0.9m - 1.5m below the existing grade, and advises:

> *"Tree roots naturally grow within the top 40cm of sites where the environment is supportive of life…Due to the proposed depth of boring, the size, species and condition of the trees, development impacts within the vicinity of 13-15 Horsley Avenue will be negligible.*
>
> *Excavation of soils required for the installation of the receiving pit to be located on Horsley Avenue will likely have a minor impact on the street tree, A13 (Crepe Myrtle). A Minor Impact is derived from the Australian Standard AS4970:2009 – Protection of trees on development sites. A minor impact occurs when a development requires work within an area encompassing less than 10% of the Tree Protection Zone and outside the structural root zone...*

Due to the minimal development impacts anticipated for trees within the scope of works, the Arborist supports the proposed use of directional boring to implement the drainage easement.

There is no Arboricultural reason to prevent the construction of drainage easement and associated receiving pits based on supplied information."

1. CONCLUSION

When considering the options as presented, combined with the original arborist information, boring methodology and this addendum Arborist report; it is considered that the proposed drainage works, regardless of which option is chosen will have little to no impact on the adjoining neighbours, including the existing trees and hedges within the vicinity of 13-17 Horsley Avenue, Willoughby. The methodology and depth proposed will result in minimal soil and plant disturbance. The pipe will not be visible and the ground levels in adjoining properties are not being altered. The proposal has been considered by two Arborists who concur the proposed methodology and location are suitable. Thus, the authority can be satisfied that, whichever option is used, the environmental impacts have been considered and are acceptable.

Yours Sincerely,

Tina Christy
Associate Director

APPENDIX 1 - ADDENDUM ARBORICULTURAL REPORT

(Prepared by Blues Bros Arboriculture, dated 10 February, 2021)

10th February 2021

Mr. Stephen Abolakian
Hyecorp Property Group,
Heritage House / Suite 1,
256 Victoria Avenue,
CHATSWOOD, NSW, 2067

Dear Stephen,

Arborist Statement:
"Club Willoughby" – 36 Crabbes Ave, North Willoughby

Blues Brothers Arboriculture has been engaged to provide commentary of development impacts for a proposed development encompassing the above address and surrounds.

The scope of works relates to potential impacts on neighbouring and street trees resulting from proposed underground boring operations to accommodate a drainage easement from the site to Horsley Avenue.

This statement shall be read in addition to the previously supplies Arboricultural Impact Assessment as prepared by Glenyss Laws; Revison B, dated 23/11/2020 .

The site was attended on an even date to identify neighbouring trees on properties 13-17 Horsley Avenue and respective street trees. A total of 24 trees were observed within the scope of works and meeting Willoughby Council's definition of a tree.

The trees were inspected on a high level only with the assessment including tree species, height, canopy spread and general health. Bases of the trees were not accessed or inspected. Tree data summary can be found in Appendix 1 and graphically represented in Appendix 2. A new numbering system was implemented for this statement; where trees were assigned an existing number, this number is included within Appendix 1.

The assessed trees were seen to be mostly mature and in good health overall. No obvious signs of defect was noted within the assessed trees.

The easement is proposed to be constructed by way of tunnel boring machine along one of three alignments at depths of 0.9m-1.5m below existing grade.

The architect's most desirable option proposes an alignment beneath the Western boundary of 15 Horsley Avenue with a depth of approximately 1.4m below grade. This option will require the construction of two pits, one within the site and the other within the roadway of 15 Horsley Avenue.

Development impacts associated to the neighbouring trees of 15 Horsley drive is likely to be negligible. Comments made by Glenyss Laws Consulting Arborist regarding directional boring as a construction technique is supported. Alternative options will likely require significant excavation of soils and therefore impacts to the environment and surrounding vegetation.

Tree roots naturally grow within the top 40cm of soils where the environment is supportive of life (i.e. contains water, nutrients and oxygen) and offers generally low levels of compaction.[1] Due to the proposed depth of boring, impacts to trees within the vicinity of 13-15 Horsley Avenue will be negligible.

Excavation of soils required for the installation of the receiving pit to be located on Horsley Avenue will likely have a *minor impact*[2] on the street tree, A13 (Crepe Myrtle). The pit is indicated to be located within the roadway of the street and will form part of a Council approved drainage upgrade to the area linking with existing assets on High Street. It is recommended that the pit be installed with the greatest permissible offset from the tree to further limit impacts and avoid the structural root zone.

Root development of tree A13 beneath the existing roadway is likely to be minimal based on heavy soil compaction necessary to support hot-mix asphalt paving.

Due to the minimal development impacts anticipated for trees within the scope of works, the Arborist supports the proposed use of directional boring to implement the drainage easement.

There is no Arboricultural reason to prevent the construction of drainage easement and associated receiving pits based on supplied information.

Kind regards,

Gordon Blues
Consulting Arborist (AQF 5)
0439991122

[1] Gilman, E.F. 1988. Tree root spread in relation to branch dripline and harvestable rootball. HortScience23:351-353.

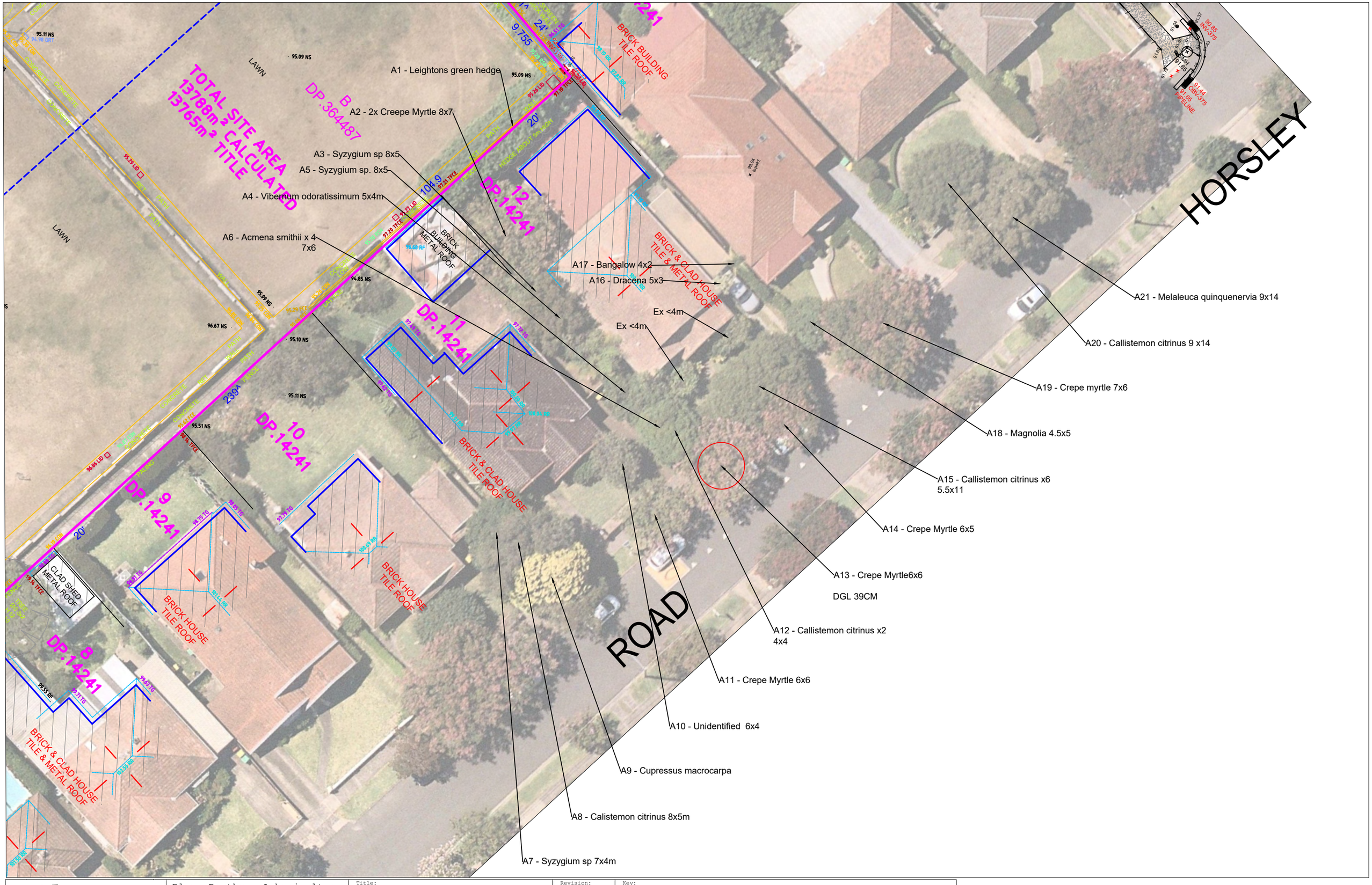
[2] A *Minor Impact* is derived from the Australian Standard AS4970:2009 – *Protection of trees on development sites.* A minor impact occurs when a development requires work within an area encompassing less than 10% of the Tree Protection Zone and outside the structural root zone.

Appendix 1: Tree Data Summary

The following spreadsheet includes values of the following:

- Tree Identification: Numbering preceded by an A indicates numbering assigned for this report. Where an existing tree number exists, this number is included beneath.
- Tree height
- Canopy diameter overall
- The number of trees in a stand: This relates to hedges and planted 'avenues' of trees. These stands are labelled singularly on the following appendix.
- DGL: A tree's Diameter at Ground Level. This measurement was taken only for tree A13 to calculate structural root zones (per AS4970:2009 – *Protection of trees on development sites*) necessary for the assessment of development impacts.

Tree ID	Species	Height (m)	Canopy dims n/s in metres	Trees in stand	DGL (cm)
A1 (T36)	*Cupressus leylandii* Leighton's Green	8	4	5	
A2	*Lagerstroemia indica* Crepe Myrtle	8	7		
A3	*Syzygium sp.* Lilli Pilli	8	5		
A4	*Vibernum odoratissimum* Sweet Vibernum	5	4		
A5	*Syzygium sp.* *Lilli Pilli*	8	5		
A6	*Acmena smithii* Common Lilli-Pilli	7	6	4	
A7	*Syzygium sp.* *Lilli Pilli*	7	4		
A8	*Callistemon citrinus* Crimson Bottlebrush	8	5		
A9	*Cupressus macrocarpa* Monterey Cypress 'golden pillar'	7	5		
A10	*Unidentified*	6	4		
A11	*Lagerstroemia indica* *Crepe Myrtle*	6	6		
A12	*Callistemon citrinus* *Crimson Bottlebrush*	4	4	2	
A13	*Lagerstroemia indica* *Crepe Myrtle*	6	6	1	39
A14	*Lagerstroemia indica* *Crepe Myrtle*	6	5		
A15	*Callistemon citrinus* *Crimson Bottlebrush*	5.5	11	5	
A16	*Dracena sp.*	5	3		
A17	*Archontophoenix cunninghamiana* Bangalow Palm	4	2		
A18	*Magnolia sp* Magnolia	4.5	5		
A19	*Lagerstroemia indica* *Crepe Myrtle*	7	6		
A20	*Callistemon citrinus* *Crimson Bottlebrush*	9	14		
A21	*Melaleuca quinquenervia* Broad-leafed Paperbark	9	15		



Blues Bros ARBORICULTURE

Blues Brothers Arboriculture
PO BOX 102,
BALGOWLAH NSW 2094

0439991122
www.bluesbros.com.au
gordon@bluesbros.com.au

Title: Tree Identification

Revision: 01

Project: A2 36 Crabbes Ave, North Willoughby.dwg

Plot Date: 10/02/2021

Key:

- Tree Protection Zone (TPZ)
- Structural Root Zone (SRZ)
- Canopy Spread
- Encroachment Area