

Mr Sean Gartner
Gartner Trovato Architects
47/90 Mona Vale Road
MONA VALE NSW 2103

10 September 2019

Dear Mr Gartner

**ARBORICULTURAL IMPACT ASSESSMENT
ADDITIONAL INFORMATION REQUEST
Subdivision—Lot 4, 7 Trentwood Park, Avalon.**



**TREE MANAGEMENT
CONSULTING ARBORICULTURISTS
HORTICULTURISTS
LANDSCAPE DESIGNERS
ABN 48 623 390 572**

I write regarding the letter (the letter) from Matthew Edmonds of Northern Beaches Council (Council), dated 28 August 2019, regarding Development Application DA2019/0393 for the subdivision of one lot into two at 7 Trentwood Park, Avalon (the site).

The letter outlines assessment comments from Council's Environmental Officer and seeks additional arboricultural information to address their concerns.

I have referred to the following documentation to assist me in addressing Council's request for additional information:

- Arboricultural Impact Assessment by Tree Wise Men Australia dated July 2017;
- Urban Forestry Australia Arboricultural Impact Assessment Addendum dated 30 January 2019;
- Architectural plans for proposed Lot 4, A.01(K) dated 10/09/2019, Project No.1711-Lot 4, by Gartner Trovato Architects.
- Stormwater Management Plan SW1DA, by Barrenjoey Consulting Engineers, dated 5 February 2019.

IMPACT ASSESSMENT—PROPOSED TREE REMOVAL

In response to comments made by Council regarding the proposed tree removal, I note:

- Five (5) prescribed trees (trees 86, 89, 60, 62 – a non-indigenous tree, and 69) will be removed to accommodate the driveway and indicative building footprints. There are two trees that are exempt from protection under Council's tree preservation controls. These two trees (trees 61 and 67) may be removed without authority approval so they should not be included in any tree removal count for this proposal.

- No 'A' (high) retention values trees will be removed. Of those 5 trees to be removed:
 - Trees 86, 60 and 62 are 'C' (low retention value) trees.
 - Trees 69 and 89 are 'B' (medium retention value) trees.
- Trees 66 and 87 are approved for removal by the Land and Environment Court as part of the originally approved 3 lot subdivision. It is unreasonable for Council to suggest the removal of these trees is an issue related to this Lot 4 proposal, despite these trees falling within the indicative building footprint. It is also noted these trees are not 'A' (high) retention value trees.

In regard to the request for additional information and assessment of impacts resulting from installation of stormwater infrastructure, I provide the following:

Lot 4 driveway

- I note the services on the driveway were approved for the 3 lot subdivision. The only new driveway section proposed is the extension at the rear of Lot 2 across Lot 2 into Lot 4.
- T86 is proposed to be removed for the Lot 4 driveway (T87 is already approved for removal under the approved 3 lot subdivision).
- The driveway is suspended from chainage RL60.750 and therefore any services under the drive (water, power, gas supply) have no effect on remaining trees.

Stormwater pipe from Lot 4

- A 150mm uPVC above ground pipe on a 1m wide Nepean pebble stabilising bed is proposed from the southeast corner of the dwelling and along the east 'handle' of Lot 4 to a pit at RL47.00. This pipe will be above ground and does not require any excavation into the Structural Root Zone of any tree.
- The 1m wide pebble bed will be on-ground, of pebble size between 10 – 40mm, no fines and freely draining, and will not introduce any adverse impact on the root zones of the trees it traverses.
- Concrete pipe anchor blocks at approximately 6m centres would be placed on the pebble bed to stabilise the above ground pipes (see Figure 1). No excavation is required to seat these anchors.
- The pipe from the proposed pit at approximately RL47.00 to the street will be below ground. There is an estimated 63m² of the notional Tree Protection Zone of Tree 3 potentially affected by trenching. This suggests approximately 17.2% of the tree's 366m² TPZ area will be encroached upon.
- However, the encroachment will be less than this as there is an existing carport reducing the TPZ area and the trenching will be a temporary encroachment as, following trenching and replacement of soil, the ground will be available for tree roots to regenerate back into this area.

- The tree is in good health and vigour and would be expected to tolerate this trenching, as the Lot 1 works within the TPZ are elevated to avoid tree root disturbance and loss.
- Under the provision that the tree is subject to arboricultural supervision of the works for the elevated driveways where they fall within its notional TPZ offset, I do not expect the tree to be adversely affected.

Replacement canopy trees

- Planting of two (2) canopy trees is proposed. Given Lot 4 is virtually covered in tree canopy, the only potential area for tree planting is in the northeast and northwest areas adjacent to the proposed building footprint.
- It is proposed to plant a 25 litre *Eucalyptus umbra* (Broad-leaved White Mahogany) in each location shown on the attached plan excerpt.

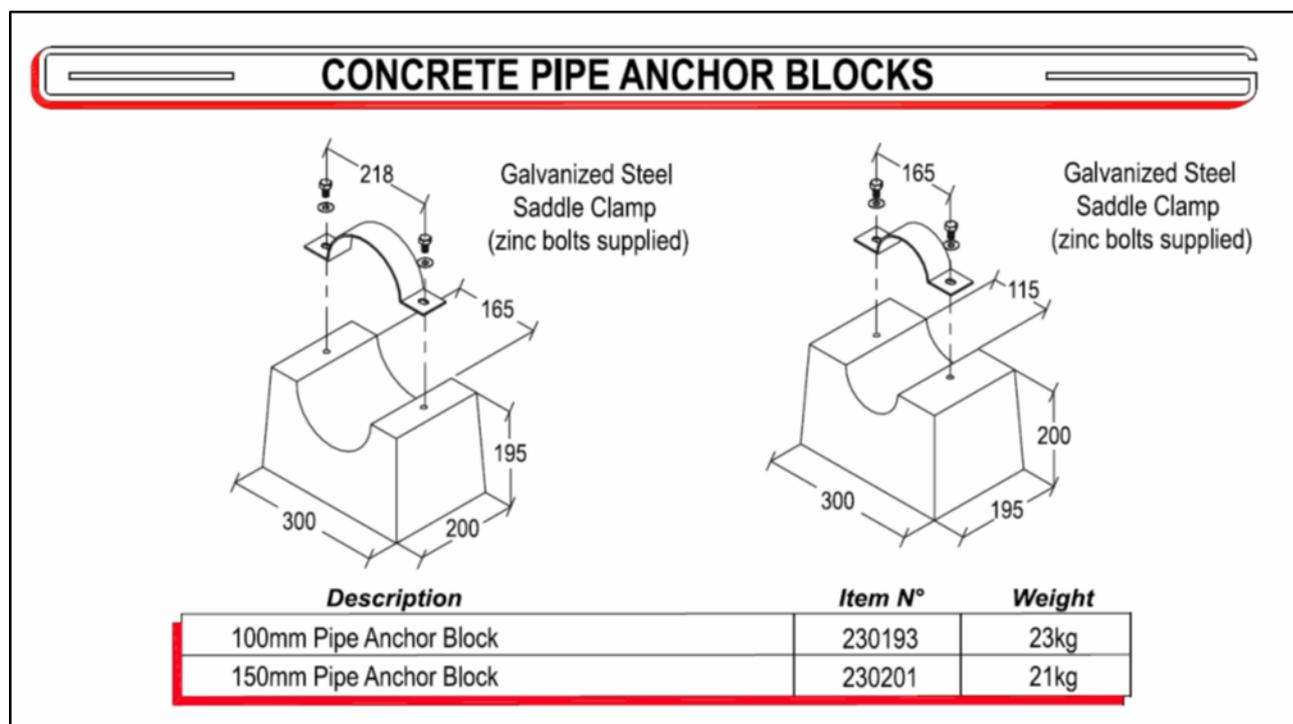


Figure 1 – illustrates the indicative type of concrete anchor proposed to be seated on the 1m wide pebble stabilising bed.

CONCLUSIONS

- Five (5) prescribed trees would be removed for the Lot 4 proposal. None of these trees is a “A” (high) retention value tree.
- Despite the very limited opportunity to plant replacement trees due to the current heavily treed area, two replacement canopy trees will be provided on the lot.
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- The proposed stormwater pipe from the dwelling to the pit in the Lot 4 drainage handle will be above ground, seated on a pebble bed designed to avoid any excavation, and will not impact upon any trees to be retained.
- The proposed trenching to the north of Tree 3 has a notionally moderate TPZ encroachment on paper, but, it is my opinion this trenching is supportable as the tree is vigorous, part of its notional TPZ is occupied by an existing structure (inhibiting roots into this area), and allows for tree roots to occupy the disturbed area following works.
- No 'A' retention value trees will be removed or are at risk of unacceptable TPZ encroachments.

RECOMMENDATIONS

- The tree protection requirements contained within Attachment C of the Tree Wise Men Report shall be adopted for the duration of works in Lot 4.
- This Addendum shall be read in conjunction with the Tree Wise Men Report and form part of any Consent for Lot 4.
- These trees shall be clearly marked for removal prior to any tree works being undertaken as part of any Consent for subdivision works on the site.
- Trees selected for planting shall be 25 litres and, where possible, trees that conform to AS-2303 Tree Stock for Landscape Use will be purchased.

Please contact the undersigned via email cat@urbanforestryaustralia.com.au or phone 0414 997 417 to discuss further if required.

Yours sincerely



Catriona Mackenzie

Consulting arboriculturist, horticulturist and landscape designer.

Tree Risk Assessment Qualified 2014 (TRAQ)

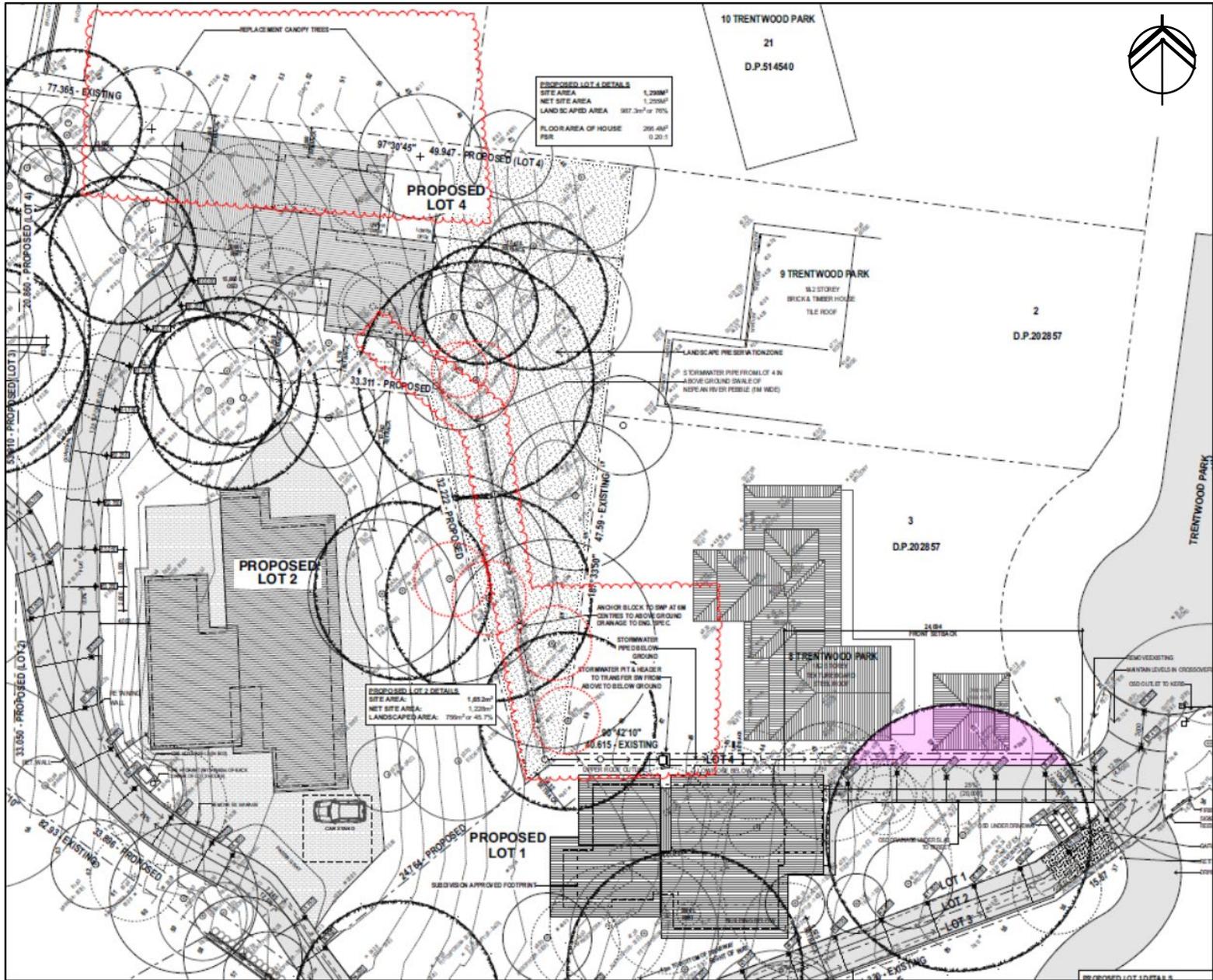
Cert. Hort. [Honours]

Dip Hort. (Arboriculture) [Distinction]

Assoc. Dip. Appl. Science. (Landscape) [Distinction]

Member of the International Society of Arboriculture (ISA)

Founding Member of the Institute of Australian Consulting Arboriculturists (IACA) ACM0052003



Excerpt of Plan DA-01 (K) 1711 Lot 4, dated 10/09/19. Please refer to full plan for details.
 Note notional encroachment of Tree 3 indicated by pink shaded area.
 Plan not to scale. Marked up by C. Mackenzie 10/09/19