

Root Mapping Investigation



Tree Management Strategies
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Date: 13/09/2024
Address: Newport Surf Life Saving Club
Client: King & Wood Mallesons

Introduction

Tree Management Strategies is commissioned by King & Wood Mallesons to perform a root mapping investigation in response to contention 36 Arboriculture of the Second Respondent's Amended Statement of Facts and Contentions., (See Below).

Arboriculture

36. The Amended Application contains an Arboriculture Impact Assessment prepared by TMS dated 7 August 2024. The conclusion refers to the need for root mapping of 'Tree 1'. The root mapping is not included with the Amended Application.

Root Mapping Investigation

To ensure no structural roots are impacted by the proposed development, root mapping was carried out on the 12-9-24.

Trench locations were marked out using offset measurements based on the proposed sea wall location, refer to the Tree Impact Plan (Appendix 1) and (Figure 1). A 400mm deep trench was excavated using an air-spade to investigate the size and quantity of roots requiring removal, the excavation depth was guided by a solid layer of compacted fill located at a depth of 400mm, refer to (Figures 2 and 3). Tree 1 has a theoretical TPZ incursion of 6.94% by the proposed sea-wall construction. Numerous roots of under 20mm in diameter were observed. Eight roots of between 20-30mm in diameter were observed, refer to (Figure 2). No structural roots were observed.

Conclusion

I reconfirm the conclusion in the Arboricultural Impact Assessment prepared by TMS dated the 7-8-24.

The total combined incursion to Tree 1 of 15.73% by the proposed building and seawall location is deemed acceptable with project arborist supervision, and tree protection measures adhered to.

With the use of a no dig type paving/hardstand, the incursion to Tree 1 will be reduced to an acceptable level.

Figure 1: Trench Location

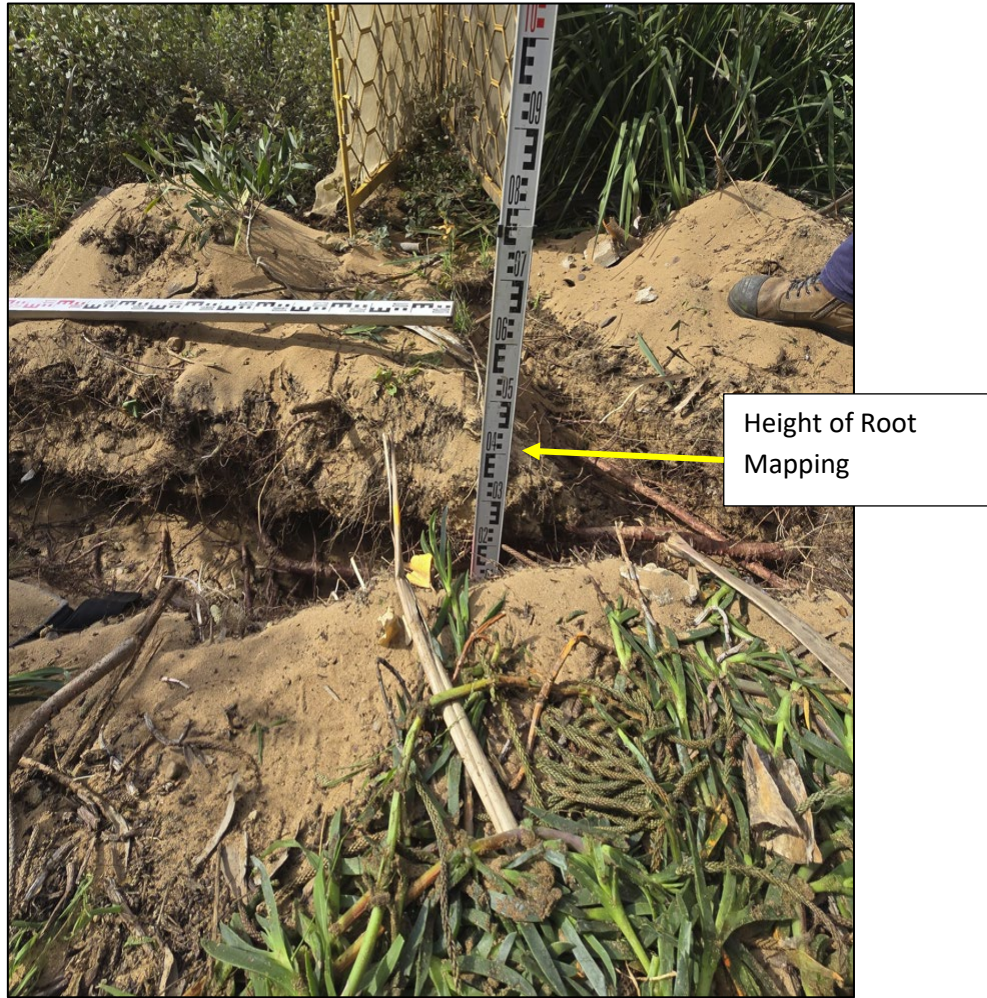


Figure 2: Roots Observed



Roots with a size of between 20 and 30mm were spray painted orange to highlight their location

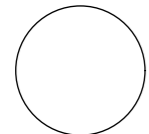
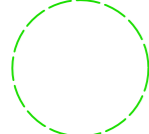
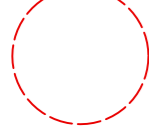
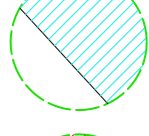
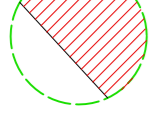
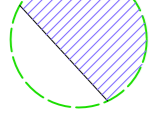
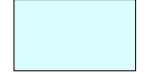

Figure 3: Trench Height






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Appendix 1

Legend

-  Canopy Line
-  TPZ - Tree Protection Zone
-  SRZ - Structural Root Zone
-  Seawall Incursion Zone
-  Building Incursion Zone
-  Paving/Hardstand Incursion Zone
Sensitive Construction
-  Paving Hardstand on Grade
-  Tree Protection Fence

Retention Value

-  High
-  Medium
-  Low

Incursion

T01

SRZ = No Incursion
 TPZ = 461.48sqm
 Building Incursion Zone 41.41sqm
 Incursion = 8.79%
 Seawall Incursion Zone 32.01sqm
 Incursion = 6.94%

T02

SRZ = No Incursion
 TPZ = 508.31sqm
 Seawall Incursion Zone 90.55sqm
 Incursion = 17.81%

T03

SRZ = No Incursion
 TPZ = 26.06sqm
Paving and Landscape Wall
 Incursion = 0.43sqm
 Incursion = 1.65%

