## Re the Options 1 (cutting a new road) and 2 (upgrading the existing road) for realignment of the disrupted road between Racecourse and Brooklands

My thought processes crystallize progressively slower. I pen these to you on this morning of the 9<sup>th</sup> June with apologies but a more cohesive picture is emerging.

It dawns upon me that every visitor who stands in front of the Bowl stage has reached that point by moving under towering trees, if only via Brooklands Park Drive. In every direction the range is from exotic giants to pure New Zealand regenerated forest.

The diversity of plant origin may be unrecognised or even unimportant to the individual but the sub-conscious response is common as I proved in Pukekura. Each may be facing an identifiable object but the surrounding skyline is a circle of tall greenery blocking out all familiar landmarks, even the mountain. Visitors to the city are unlikely to have a clue in which direction the relatively close CBD lays. They are captivated and sometimes in more senses than one, lost in a green world. Without realising it, they are experiencing similar emotions to a tramper deep in a forest – I must be careful finding my way out of here! Even without experiencing the enticement of entertainment most leave with a desire to return and explore further. That reaction is unique and valuable within a city. To blaze a highway into this world would be a travesty unless done subtly. The significance of every tree threatened should be calculated individually.

The practical merits of each option seem to me to be mainly centred on the comparative level of threat to the aged roadside puriri.

Supporters of the new road proposal justifiably express concern about the limited load-bearing capacity of the section of the existing road which lies in the close proximity of the tree. It is felt that mechanical efforts to improve it as required in the proposal of the Friends of Pukekura Park would inflict considerable damage to the roots.

However the canopy is uniform and healthy and shows no evidence of the set-back that would be expected from the activity of cutting and filling right up to its trunk which would have resulted from the original formation, compaction and sealing of the road about forty years ago. The tree is an enigma and I think I now know why.

Using gardening logic on site I feel confident that I could convince roading engineers that the reason why the tree exhibits no aerial symptoms of root

damage on the side against the road is because there are no roots there. Until the road was formed this tree spent several centuries perched on the edge of a vertical cliff. The few roots it did develop on that side would have been vertical down the cliff face by location, therefore exposed to dehydration and useless for anchorage, so would have developed as only rudimentary. Whatever level of cutting, filling and compaction occurred had little critical impact on this side of the tree.

In response to the unfavourable nature of the vertical bank below, it was obliged as a sapling to develop its anchorage and feeding roots in the solid sloping bank above to the north. For a tree over two meters in diameter these are both massive and expansive out to the 10 - 12 meter radius of the drip line.

Using the same gardener's logic, if we now consider the upper (northern) side of the tree where an orange peg within the drip line defines the line of the left hand batter of the cutting that would form the new road, it is obvious that the roots would be damaged by machinery. This may not in itself be critical but is a significant negative factor because the cutting would destroy the portion of the catchment on which this tree is now totally reliant for its vital groundwater requirements. It would drain them away and in the same stroke create a bare north-facing slope exposed directly to sun radiation creating even greater loss of groundwater.

Collateral casualties of cutting a new road would be 25 native trees ranging from 10 mature kohekohe to sapling kauri and rimu. There would also be unpredictable levels of wind damage to the puriri and many other neighbouring trees resulting from the removal of these trees.

Unfinished as at the 9<sup>th</sup> June.

The following was added on 15<sup>th</sup> June.

I believe that the cutting of the proposed new road would endanger the puriri and many other trees neighbouring it, to a greater degree than upgrading the existing one, even despite having to modify the road surface in the immediate vicinity of the tree.

Written by George Fuller for Friends of Pukekura Park Officials, David Medway and Elise Smith on the morning of the critical Council Meeting; but too late to be of use in support of retaining and upgrading the existing road.

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