



09 November 2023

Dear Fiona

Request for Information – Local Government Official Information and Meetings Act 1987

We refer to your official information request dated 30 October 2023 for:

The detailed costings which the Alliance prepared for the relocating of the Atkinson tree.

Answer: Please see Appendix 1 of the response. Appendix 1 of the response contains the email correspondence between Alliance and Hutt City Council and the Memo prepared by Alliance.

You have the right to seek an investigation and review by the Ombudsman of this decision. Information about how to make a complaint is available at www.ombudsman.parliament.nz or freephone 0800 802 602.

Please note that this response to your information request may be published on Hutt City Council's website. Please refer to the following link: www.huttcity.govt.nz/council/contactus/make_an_official_information_act_ request/proactive_releases

Yours sincerely

Lakna Siriwardena

Legal Operations Advisor

30 La ngs Road, Lower Hutt Pr vate Bag 31912, Lower Hutt 5040



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From:	<u>Natasha Garcia</u>			
То:	Lakna Siriwardena			
Subject:	FW: [EXTERNAL] Atkinson Tree			
Date:	Wednesday, 8 November 2023 1:12:35 pm			
Attachments:	achments: <u>ATT00001.png</u>			
	image002.png			
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	Atkinson Tree Removal Memo 7 Mar 2023.docx			

Memowt cost gs be ow

Nat Garcia

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Natasha Garcia Project Manager (Contractor)

Hutt City Council, 30 Laings Road, Hutt Central, Lower Hutt, Lower Hutt 5010 W: www.huttcity.govt.nz



Sent: Thursday, August 17, 2023 10:47 AM To: Natasha Garcia <Natasha.Garcia@huttcity.govt.nz>

Subject: FW: [EXTERNAL] Atkinson Tree

Kia ora Nat

Below is the estimate on relocating the tree on the beach and with the advised tree pit system.

Atkinson Tree - Budget Cost Estimate

Nb. This estimate includes for the removal and reinstatement of the existing Pohutukawa Tree

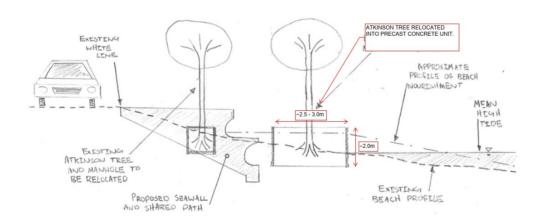
Scope of Work	Value
Design Fees	2,760.00
Preliminary & General	8,907.29
Relocate Existing Tree to New Tree Pit	11,213.44
Construct New Tree Pit	25,752.16
LIMB2 Margin	6,755.31
Sub-Total	55,388.20
Contingency Allowance (nominal 20%)	11,077.64
Base Estimate	66,465.84
Base Estimate Level of Accuracy Factor -10% (nominal)	59,819.26
Base Estimate Level of Accuracy +20% (nominal)	79,759.01

The approach looks at:

- 1. Relocation of the existing tree into a new precast concrete unit
- 2. If the existing tree dies, replacement with a brand new tree

Costing considerations are:

- 2.5m to 3m square concrete unit, 2m deep
- No rail etc required, and no allowance for cutaway needed.
- Costing for protection and risks. -10% / +20% to cover off levels of accuracy



A bit expensive, so let me know what HCC's direction on this.

Cheers Michael



Memorandum

То	Ted Grieve (Hutt City Council)				
From	Andrew Carline and Alistair Gordon	Date	22 March 2023		
Subject	Tupua Horo Nuku North – Atkinson Tree Options				
Reference	NKP-TAT-THN-MEM-CV-NS-000001				

Dear Ted,

As requested, this memo outlines the consideration of options to retain the amenity provided by the Atkinson Tree, York Bay, Options considered include:

- Retention of the Atkinson Tree at its current location in combination with road and shared path realignments
- · A range of options to facilitate replacement, and/or relocation

There are options available to attempt to retain the Atkinson Tree, or provide an alternative shade tree, but of those which are viable none of them are currently funded and are therefore not being pursued.

1. Context

1.1. Tree Location

The Atkinson Tree is located at approximately CH2485 (refer Figure 1) and is opposite a steep hill with a number of dwellings accessed from two vehicle crossings at 307A and 311 Great Harbour Way (refer Figure 2). The trunk of the tree is located on the beach below the toe of the existing sea wall and the drip line falls inside the top of the wall/existing edge of seal.

Commented [MF1]: Make more holistic to include options for relocated or replacement trees. Suggested sec ions:

1 - Retaining Atkinson tree in current location (the

2 - Providing alternative loca ion for relocated Atkinson Tree or a new shade tree.







Figure 1 - Atkinson Tree (right hand side)

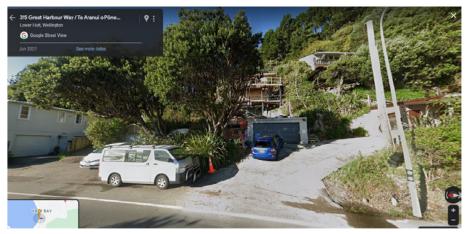


Figure 2 - Opposite the Atkinson Tree

1.2. Traffic Flows

Across the road from the tree, the current white edge line passes within 700mm of the base of what we have referred to in this memo as Crossing #2 (refer to Figure 3). As can be seen from Figure 4 and Figure 5, this driveway has a steep entry point which intersects with the roadway very close to the line of traffic. Reversing out of this driveway is a manoeuvre that will take place.

As can be seen from Figure 3 below, the line of southbound traffic approaches past an adjacent bus stop and due to the horizontal curve of the road will tend to track fairly closely to the existing painted edge line. Because of the short distance between the edges of the vehicle crossings and the edge of the carriageway as well as thick vegetation >1.5m high in close proximity to these, sight lines are limited and at the current posted speed of 50km/h, do not provide adequate stopping sight distance (SSD) for southbound traffic when vehicles are manoeuvring out of these properties (particularly number 311).







Figure 3 - Vehicle Entrance #1 (307A Great Harbour Way)



Figure 4 - Vehicle Entrance #2 (311 Great Harbour Way) - note blue car position



Figure 5 - Vehicle Entrance #2 (311 Great Harbour Way)





2. Retention of the Atkinson tree at the current location

2.1. Amending Pathway and Road Realignment

In order to allow the tree to remain in place whilst maintaining the path width of [2.5m¹] t would be necessary to push the pathway and therefore the road corridor eastwards towards the hillside by an absolute minimum of 1 m. Confirmation of the exact dimension will require survey confirmation of the distance from low-lying tree branches as well as the root zone of the tree. Refer to Figure 6 for a minimum required realignment of the path to avoid the tree.

From this image it can be seen that even a modest realignment would push the edge of the road corridor into the existing vehicle crossings, further exacerbating the sight distance problem that exists in that location.

Additionally, it should be noted from Figure 4 and Figure 5 that the entranceway at 311 Great Harbour Way is steep and transitions sharply onto the edge of the road. Even a modest shift of 1 m towards the driveway edge would result in a steeper transition to the roadside which would in turn cause vehicles to "bottom out" at the transition point. There is very little scope to alter the gradient of the driveway due to the short distance between the existing garage and the carriageway edge.

Due to the space constraints and safety considerations of the roadway, path and road realignment it was determined that this option would not be pursued.

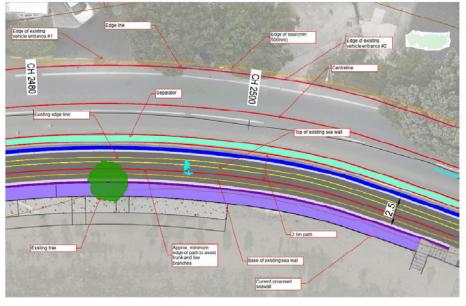


Figure 6 - Plan of Realigned Road and Path

Commented [AG2]: Other Foster review wording of the associated footnote defining effective path width. This was done in response to one of Molly's comments around the community not knowing the difference

Commented [MF3]: Is that the new ramp location? Just want to make sure it is.

Commented [AG4R3]: Yes it is. Will account for this in my sketch in Section 3.1. This part will be covered by sand after beach nourishment.

¹ For the purpose of this memo, the term 'path width' is referring to the effective path width or the clear pa h available to a user. This means space occupied by buffers, fall from height barrier on either side and shy spaces are excluded from the definition of path width. For example, a path with total width of 3.65 m that has 0.43 m of buffers and shy space on one side and 0.72 m of buffers and shy space on the o her will have a clear width for users of 2.5 m, otherwise referred to a as a 'pa h width' of 2.5 m.





2.2. Amending Seawall Location

Figure 6 shows that the extents of the proposed sea wall are significantly beyond the location of the tree, which is growing on the beach and below the level of the existing sea wall. Due to the height of the top of the wall above the tree (refer Figure 7), it would not be practicable to install a tree pit around the tree as this would extend well into the line of the foliage and would be very deep. This would endanger the wellbeing of the tree, reduce path amenity and be a hazard to path users.

It would therefore be necessary to terminate the new sea wall (and the path) either side of the tree, again creating issues with the effectiveness of the sea wall at that point as well as creating additional cost and lack of continuity of the pathway. Continuing the new sea wall along the face line of the existing wall would also not be poss ble as it would further infringe into the existing carriageway and make it impossible to retain two-way traffic flows and achieve minimum sight distance requirements.

Despite these constraints we have considered some alternative seawall alignments which would enable retention in more detail below.



Figure 7 - Atkinson Tree location below roadway

Commented [AG5]: This section is good and contributes to why other alterna ives below have been discarded. Just need to think about how it flows.

Commented [MD6R5]: As discussed – rearrange alternatives section to have community option first to flow on from this

Commented [AG7R5]: See text.

Commented [MD8]: Sentence here referencing that this is explained further in below section?

Commented [AG9R8]: See text

Commented [AG10]: I think we should considered removing as we have a conclusion further down!





ind tree trunk

2.3. Retained tree with a bridging structure and rock revetment

The community-led design included a bridging structure which would span across the root network with a rock revetment across the coastal edge of the bridge. Additional features suggested included integrating the boat ramp and adding curved stairs (refer to Figure 8).

Approximate the data with the

Figure 8 Community design for retaining the Atkinson tree at its current location using a bridging structure and rock revetment. Source: Fiona Christeller, dated 25-Nov 2021

The design would require localised reduction in the path width, noting that accompanying road realignment to mitigate the width reduction is not possible as outlined in Section 2.1. The path width would have to narrow locally to an effective width of 1.5 m essentially creating a 'one-way' pinch point at the tree. This is below best practice guidance for regional commuter or recreation paths which specifies a minumum effective width of 2.5 m.

To achieve the required resilience improvements to the road, a rock revetment in front of the bridging structure would have to be much larger than what is shown on Figure 8. Figure 9 below shows a typical cross section for the revetment propsoed at the north end of York Bay. While detailed design would be required to understand the exact extent at this location, it can be expected that it would be of similar scale. As a result, the magnitude of occupation of both the beach and coastal marine area would I kely exceed acceptable limits of the Project's Resource Consent.

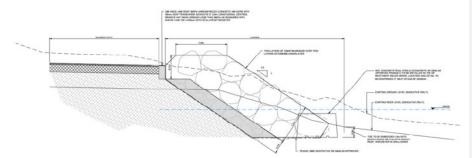


Figure 9 Typical rock revetment cross section at York Bay. Stage A 30% design. The design shown here is subject to change following completion of detailed design and construction.

This option also has substantial cost implications, similar to the large tree pit option considered in Section 3.1. This option will not be pursued by HCC due to a combination of path width reduction, consenting limits and cost not being included in the Project funding allocation.

Commented [MF11]: Under the heading of retaining the atkinson tree.

Commented [AG12R11]: Moved.

Commented [AG13]: Should we look to provide an appendix to this that clarifies the difference between effective and total. From reading community feedback, it is clear the distinction is being misinterpreted

Commented [MD14R13]: I would suggest maybe a definition in the intro or near the top as his is relevant to the whole document

Commented [AG15R13]: I have added a footnote on page no. 4 defining his. Let me know what you think



2.4. Path alignments between the tree and sea

During the development of the Landscape and Urban Design Plan (LUDP), the Alliance investigated two options which would reroute the path in some capacity around the outside of tree. These included:

- Splitting the path into two 1.5 m wide routes, one between the tree and road and the other taking the path and seawall around the outside of the tree.
- Taking the entire 2.5 m wide path route and seawall around the outside of the tree.

Both options were discounted as part of the LUDP process due to the scale of beach and coastal marine area (CMA) occupation resulting from taking the seawall around the outside of the tree, which would go beyond the limits of the Resource Consent. The LUDP has subsequently been certified by Greater Wellington Regional Council.

3. Alternatives to retention of the Atkinson Tree

While removal is the only option which maintains the safety, functionality and buildability of the path, the Alliance acknowledge the affinity the community have for the Atkinson tree and the amenity it provides. We have investigated alternatives for provision of either a relocated Atkinson tree or different tree all together.

3.1. Relocation into a large tree pit between the beach and seawall

This option would relocate the Atkinson Tree into a large concrete retaining structure which would act as a tree pit to house the relocated tree. The retaining structure would be positioned seaward of the proposed toe of the seawall and at level that would keep the tree at a similar height to what it is now (refer to Figure 10). This position would effectively re-position the tree seaward of where it sits now and allow for a 2.5 m path to pass safely between the tree and the existing road corridor. The tree pit would extend approximately 2.5 m below beach level to ensure stability in the event of significant scouring of the beach.

This option was presented to the community as part of the Community Options Sketches dated 16 February 2023.

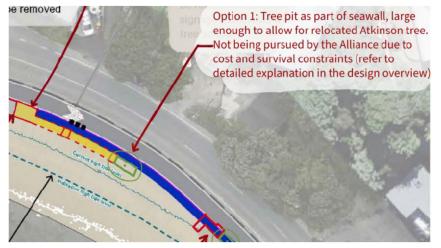


Figure 10 Loca ion of large tree pit option which would relocate the tree. Source image from Community Option Sketches dated 16-Feb 2023

This option was not pursued for the following reasons:



Commented [MF16]: does this fit under the heading of retaining the atkinson tree?

Commented [AG17R16]: Moved.



- The large tree pit structure would occupy more beach footprint that could otherwise be used by the community.
- The tree in its current condition may not survive the relocation despite the tree pit structure being adequately sized.
- The size and complexity of integrating the tree pit structure into the seawall design, and
 providing stability under scour conditiojs, makes this option the most expensive of the
 alternatives considered. Given the level of amenity, and tree survival risk, this option is not
 considered to provide value for money.

Ultimately, the cost of this option is high and is not currently funded within the project and therefore will not be pursued.

3.2. New tree into a smaller pit integrated with the seawall

This option would provide a new Pohutukawa tree in a small concrete planter box (approx. 600 mm x 600 mm). The planter box would positioned on the first step down of the seawall and be integrated with the mini-stairs proposed at the southern end of the beach in York Bay (refer to Figure 11). This would allow for a 2.5 m path to pass safely between the road and the tree and would not have any additional beach encroachment.

This option was presented to the community as part of the Community Options Sketches dated 16 February 2023.

This option would only provide for a new tree, as a relocated Atkinson tree would not be expected to fit in a planter box of this size. While this option is cheaper of the two, the growth of new tree would also be constrained by the planter box therefore limited in the shade it could achieve.

Due to the both the cost and limited amenity this option provides, it will not be pursued.

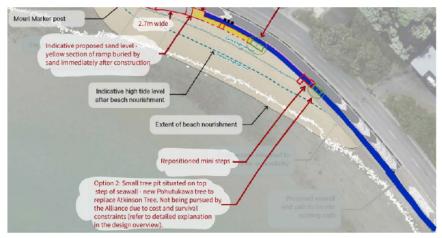


Figure 11 Small tree pit location integrated with he mini steps. Source: Community Op ion Sketches dated 16 Feb 2023

Commented [AG18]: @Mark Foster to review new wording here.

Commented [AG19]: This was basically Option C in our option assessment which costed this at \$30K





4. More cost effective, no guarantees approach

Concerns have been raised as to the likelihood of survival for a relocated Atkinson Tree. At the community meeting of 6 December 2022, we discussed also investigating more cost effective solutions with an even higher risk of tree mortality. Essentially these would be options that are more affordable than those detailed above but neither HCC nor the Alliance would be able to guarantee the trees survival. At the meeting it was noted that (colloquially) that they were 'all care and no responsibility' solutions. These are discussed further below.

4.1. Relocation within the beach

This option would see an all care and no responsibility approach to relocate the Atkinson tree approximately 3-4 m seaward and 10-15 m south so it sits within the beach but outside of the seawall and ramp footprint (refer to Figure 12). The presence of a small spring which feeds the tree at its current location was noted at the community meeting and it may be that the new location shift the tree away from the water source it currently enjoys...

The tree could be positioned in a shallow pre-cast manhole riser or similar structure which is entirely disconnected from the seawall. This would occupy beach space that otherwise would be available, however it may align with community desire to have shading on the beach itself. Further investigation would be required if the community supported this option.

There is a survivability risk to the tree both during the relocation works and at its new location further seaward. The new seaward position would pose a risk to the tree's health due to the increased the susceptibility to inundation by seawater during storm surges and long term sea level rise, or undermining due to beach level fluctuations.

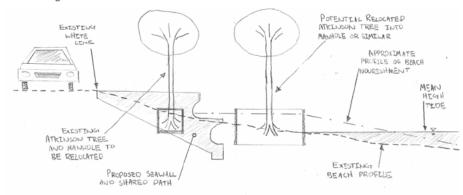


Figure 12 Indicative cross section showing relocation of the Atkinson tree wi hin the beach. Not to scale

This option is the most cost effective of all solutions but remains unfunded and therefore.is not planned to be pursued.

4.2. Relocation beyond the beach and project site

This option considered a similar all care and no respons bility approach for relocating the tree completely outside of the Projects working area e.g. in the grassy slope across the street. Consultation with the community to date has indicated a preference to retain the tree in its current location or relocate on or adjacent to the beach as set out by options in Section 2 through to Section 4.1

This option remains unfunded and therefore will not be pursued.

Commented [AG20]: We need put more thought into this before we commit a vague statement like this to paper.

Could get advice from Wade on what kind of size would be appropriate.

Commented [MD21R20]: I would remove any details of options until we are sure they would work/would be funded

Commented [AG22R20]: Good point. We need to strike a balance between keeping it light but also suggesting something that genuinely works. Given the proximity to MHWS I feel we should suggest something even if it is a wee bit conservative

Commented [MF23]: Update section - too technical. A hand sketch of the same will tell a better story for the intended audience.

Commented [AG24R23]: See updated image





5. Conclusion

The Alliance has considered a range of options to either retain or relocate the Atkinson tree adjacent to the beach in recognition of the strong historic, environmental, visual, and shade amenities the community currently enjoys.

Retention in its current location through path and road realignment cannot be achieved due to very tight space constraints from the road corridor on one side and coastal occupation limits set by the Project Resource Consent on the other side. Despite consideration of alternative methods of retention proposed by the community, the tree cannot be retained without fundamentally compromising the functionality, buildability and safety of both the road and pathway.

Relocation alternatives, which seek for provision of a beachside tree in a longer-term capacity, are possible but have not been pursued due to a lack of funding. It is also noted that due to the cost of implementation, and the risk of tree mortality, they are not considered to offer value for money.

The Alliance and HCC have also considered "all care and no responsibility" options to relocate the tree. These options are more cost effective but come with a higher risk of mortality. These options have not been pursued at this stage due to a lack of funding.

