

**RC14513 / COASTAL PROTECTION STRUCTURE AND ASSOCIATED ACTIVITIES
SUMMARY STATEMENT OF JONATHAN CLARKE (COASTAL ENGINEERING AND
PROCESSES – PEER REVIEW)**

This summary highlights the key matters addressed in my statement of evidence dated 25 July 2025 [and responds to additional matters raised in the evidence of submitters].

Key Matters

1. I was engaged to conduct a technical peer review of the proposed coastal protection works in front of Glen Isla Place, Waihi Beach. The review was limited to the coastal process and engineering aspects of the proposal undertaken by Mr Craig David of Davis Coastal Consultants.
2. In general, the work undertaken by Mr Davis was comprehensive and to a standard that is appropriate for an application of this type. All available datasets, previous reporting and relevant literature were considered at the time of the application.
3. The coastal process assessment by Davis Coastal Consultants submitted as part of the application provided a detailed analysis of decadal changes in beach topography, based on the aerial photography record, regular profile surveys and existing literature. The main points of relevance are;
 - (a) There is a lot of uncertainty in the future rates of erosion, but it is evident that the more seaward properties at the southern end of the proposed structure are potentially at risk of coastal erosion in the short-term (0-10 years).
 - (b) Due to the setback of properties closer to Three Mile Creek, it is highly unlikely these would be affected by coastal erosion in the short-term as a consequence of a setback of the wider coastline. However, due to the proximity of Three Mile Creek the dune system in this area is susceptible to much larger erosion setbacks and changes to dune contours, which could adversely affect the properties in the short-term. Currently these risks are largely mitigated by the Three Mile Creek training wall structure.
 - (c) It is noted that following the release of the coastal process assessment, a new erosion assessment was made publically available. Following a review the results of this report do not fundamentally change the risk profile or conclusions drawn.

- (d) The analysis of the historic Mean High Water Springs position is considered accurate and demonstrates the proposed structure is well outside the Coastal Marine Area (CMA).
 - (e) Extreme water levels and design wave heights were reviewed and found to be reasonable, in line with best practice, and use the latest guidance on sea level rise and vertical land movement.
4. A review of the design report prepared by Davis Coastal Consultants found the structure to be designed in line with industry standard guidance using well established empirical equations. Key findings are listed below;

~~(f)~~(a) Issues were raised about the crest permeability and potential for overtopping damage to the dune behind the structure once exposed. It was recommended that these were addressed with changes to the structure design.

~~(g)~~(b) Once exposed the seawall is considered to have minor adverse effects on the beach system, primarily small localised setbacks in the dune position at the southern end of the wall and at the point the dune face intersects the angled section of the northern end of the wall.

~~(h)~~(c) Concerns raised about the structure resulting in an increased flood risk were deemed to be unfounded and not fundamentally different to any effects resulting from natural erosion of the dune system.

~~(i)~~(d) There is the potential to setback the most seaward section of the wall closer to the property boundaries. The advantages and disadvantages of which from a coastal processes and engineering perspective are discussed in my report.

5. Following the submission of my review report I have discussed the findings with representatives of Glen Isla Protection Society and Mr Davis. Based on this Mr Davis has proposed responses to the matters raised that I anticipate will be included in his final evidence that will leave no matters unresolved.

Response to Submitter Evidence

- ~~6.~~ At the time of writing, I have not been provided with any other submitter evidence that relates to my area of technical expertise following the submission of my peer review report.

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