

# Appendix B

Previous Resource Consent Hearing Decision (LU-2017-107788-00, LL-2017-107789-00, CC-2017-07790-00, CO-2017-107791-00)

Wainui Beach - Gisborne. Proposed erosion protection works (rock revetment adjacent to Tuahine Crescent, and gabion baskets and rock rip rap below 21 Wairere Road).

# <u>Decision</u> following the hearing of an application for resource consent under the Resource Management Act 1991

**Proposal -** Gisborne District Council (the applicant) lodged an application to undertake coastal erosion protection works at Wainui Beach. This included a proposed rock revetment wall to replace part of an existing wall at Tuahine Crescent and to retain the gabion basket works at 21 Wairere Road, which were constructed under the emergency works provisions of the Resource Management Act 1991 (RMA).

Sand push-ups along a wide portion of Wainui Beach was also originally proposed. This component of the application was <u>withdrawn</u> and no longer forms part of the application.

#### **Summary of decisions**

The resource consent for the rock revetment – on land and in the coastal marine area (CMA) adjacent to Tuahine Road is **REFUSED**.

The resource consent for the retention of the gabion baskets adjacent to 21 Wairere Road is **GRANTED** 

No consent was sought to retain or remove the rock rip rap adjacent to 21 Wairere Road. On this basis there is no jurisdiction to grant or refuse consent, as no consent exists and none was sought.

However the applicant stated in the application, and in evidence, that they intended to remove the rock rip rap. If my interpretation that no consent has been sought is incorrect, consent is **GRANTED** to the removal of the rock rip rap.

The reasons are set out below.

Application number(s):	LU-2017-107788-00, LL-2017-107789-00, CC-2017- 07790-00, CO-2017-107791-00
Location	2 – 8 Tuahine Crescent and 21 Wairere Road and dune area within CMA at the respective coastal boundaries, Wainui Beach
Applicant:	Gisborne District Council
Hearing commenced:	8 February 2018 at 9.00am
Hearing panel:	Mr Greg Hill - Independent Hearings Commissioner.

<ul> <li>Mr Neil Daykin - Rivers, Drainage and Coasta Manager for the Council</li> <li>Dr Tom Shand - Senior Coastal Engineer with Tonkin &amp; Taylor</li> <li>Mr Rueben Hansen - Principal Environmental Planne with Tonkin &amp; Taylor</li> <li>For the Submitters:         <ul> <li>Mr Simon Cave</li> <li>Ms McIldowie</li> <li>Ms Fiona Cummings</li> </ul> </li> </ul>
<ul> <li>&amp; Taylor</li> <li>Mr Rueben Hansen - Principal Environmental Planne with Tonkin &amp; Taylor</li> <li>For the Submitters:         <ul> <li>Mr Simon Cave</li> <li>Ms McIldowie</li> </ul> </li> </ul>
with Tonkin & Taylor  For the Submitters:  Mr Simon Cave  Ms McIldowie
Mr Simon Cave     Ms McIldowie
Ms Fiona Cummings
Mr James Milton     Ma Filler Hayresteen
<ul> <li>Ms Ellen Howatson</li> <li>Dr Robin Briant - with witness Ms Nes Benacek</li> </ul>
Ms Nicola McCartney
Dr Allen Marx
Ms Laurie Lautmann with witness Ms Nes Benacek
Dr Amber Dunn
For Council:
Mr Reginald Proffit – Consents Manager for the Council
Mr Todd Whittaker - Independent Planning Consultan
Mr Paul Murphy - Team Leader Water and Coasta Resources
Dr Willem de Lange - Senior Lecturer Waikate University - co-convenor for the Earth Sciences Programme
Hearing Administration
Ms Maxine Paenga - Resource Consents     Administration Officer
Hearing adjourned 9 February 2018
Commissioners' site visit 6 and 7 February 2018
Hearing Closed: 14 February 2018

# Introduction

- 1. This decision is made on behalf of the Gisborne District Council ("the Council") by Independent Hearing Commissioner Mr Greg Hill, appointed and acting under delegated authority under sections 34 and 34A of the Resource Management Act 1991 ("the RMA").
- 2. This decision contains the findings from my deliberations on the application for resource consent and has been prepared in accordance with section 113 of the RMA.

3. The application was publicly notified. A total of 41 submissions were received; in support, partial support or opposition to the various components of the proposal.

# Summary of proposal and activity status

#### Rock Revetment - Tuahine Crescent

- 4. The applicant proposes a rock revetment at Tuahine Crescent designed to replace an existing section of the revetment structure, extending for approximately 40m along the area to the south and just north of the Tuahine Crescent beach access way. A 25 year consent term was sought for this structure.
- The existing revetment wall includes vertical railway irons driven into the sand to support a log wall structure with rocks positioned behind the log wall. It is proposed to remove this existing revetment in the area of the proposed new structure, but not beyond that.
- 6. As notified the profile of the proposed rock revetment wall extends approximately 3.5m further seaward of the existing log wall (although this profile will generally be below the existing beach level as measured February 2017) with the tow of the wall only exposed when beach levels reduces through natural coastal processes including storm events.
- 7. The height and bulk of the proposed revetment wall will be higher and deeper than the existing rock revetment profile. The height of the proposed revetment wall will be approximately 3m higher than the existing wall being up to 5.6 m RL, and would have a slope face with a 1.5:1 gradient and a crest width of 3m. The revetment wall has a design life of 50 years and has been designed for a 1% AEP storm event.
- 8. In its Reply, the applicant provided the following response due to concerns by the reporting officer and a number of submitters about the bulk and scale of the rock revetment <sup>1</sup>:

#### Introduction

# Amendment to Resource Consent application

Having heard the concerns raised by the submitters and the reporting officer regarding the scale of the proposed Tuahine Crescent seawall, the applicant wishes to amend its application in the following manner to further reduce the scale of the structure.

#### Option A

Drawing 1000724-03-Rev B, attached as Annexure A, demonstrates the amended geometry of the revised seawall and application. The rock size design remains based on a 1% AEP design event (i.e. 1% likelihood of being exceeded in any year, or a 30% likelihood of being exceeded over 25 years and 40% likelihood of being exceeded over 50 years) including allowance for 0.45 m sea level rise which could occur over 50 years. This allows the structure to be more easily

<sup>&</sup>lt;sup>1</sup> Reply Letter dated 13 February 2018 from Mr Daykin.

augmented (raised) and/or re-consented in future if the community at that time require this outcome.

The seawall crest will be consented to be constructed at RL 4.85 m. This crest elevation keeps wave overtopping during a 1% AEP design event at present day sea levels to within tolerable limits (i.e. before erosion of the backshore occurs) but does not allow for future sea level rise. Under the original application lodged, consent was sought to enable the crest height of the seawall to be increased following initial construction works to RL 5.6 m to allow for future sea level rise if deemed necessary. The revised application will mean that a new application or consent variation will be required in the future if a crest height increase is proposed to occur.

#### Option B (alternative reduced scale option)

In the event that you deem that amending the application to "Option A" above is not sufficient to alleviate concerns regarding the scale of the structure, then the applicant would accept a lower design life and design event as set out below.

- Design life: 25 years.
- Design event 2% AEP storm.
- Rock size: 2% AEP storm with 0.2 m SLR to 2042.
- Crest level: 2% AEP storm at present day sea levels.

The reduced design life and design storm event would result in a reduced crest height of RL 4.65 m and a reduced average extension of 0.4 m² seaward due to a slightly smaller rock size and structure thickness. This design provides for a 0.2 m of allowance for sea level rise over the next 25 years for rock size and no allowance for sea level rise in the seawall crest level. The design event has a 50% likelihood of being exceeded during a 25 year design life period. If this occurred, some damage to the rock (i.e. displacement onto the beach) may occur and some damage to the backshore may occur.

#### Option A versus Option B

The principal reasons for the applicant preferring Option A over Option B are set out below.

The crest of the seawall in Option B cannot be "topped up" to respond to future changes in sea level rise beyond 0.2 m (expected in the first 25 years), due to the smaller rock size not being considered stable for the future design wave. The implication of this is that the seawall would need to be deconstructed and reconstructed with larger rock in the future, should a seawall be deemed the most appropriate response for managing the coastal erosion risk at shoreline at the site as part of a future resource management process in approximately 25 years' time.

It is important to note that the 1% AEP extreme water level of RL 2.3 m shown on Drawing 1000724-03-Rev B represents a static water level comprised of storm tide plus wave set up (the increase in water level due to offshore wave breaking). During a design wave event, wave run up will occur above this static level and the crest height shown on the drawing is required to protect the backshore from this wave energy up to a certain level above which the energy is deemed insufficient to cause damage.

9. I accept that both options A and B would reduce the scale of the proposed revetment itself, however it is not clear that they would reduce the coastal process effects

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<sup>&</sup>lt;sup>2</sup> See Table 2 in Paragraph 8.4 of Dr Shand's evidence.

identified later in this decision. No evidence was presented on this or if the modified structure would have other effects that had not been assessed. For the reasons set out below, neither option A or B would in my view satisfy the relevant policy tests and would not meet the purpose of the RMA.

10. It was unclear whether the applicant had applied for or intended that the existing beach access over the existing wall would be reconstructed over the new revetment should consent be granted to the works. The applicant clarified at the hearing that they had sought to provide public access over the revetment, and offered a consent condition to ensure this occurred.

### Gabion Baskets - 21 Wairere Road

- 11. Consent was sought for the gabion basket works that were constructed under section 330 emergency works provisions of the RMA. The gabion basket extends along the frontage of 21 Wairere Road for approximately 15m.
- 12. The consent term sought for the gabion baskets was five years.
- 13. Consent was not sought for the rip rap (rocks) placed on top of the gabion baskets. At 3.1.3 Gabion basket 21 Wairere Road of the application document it states:

"Retrospective resource consent is sought for the erection and occupation of the gabion baskets in the CMA. It is proposed to remove the rocks above the gabion baskets".

14. It appears that consent has only been sought to authorise the "erection and occupation of the gabion baskets". Section 330A - Resource consents for emergency works states:

#### 330A- Resource consents for emergency works

- (2) Where such an activity, but for section 330 contravenes any of sections 9, 12, 13, 14, and 15 and the adverse effects of the activity continue, then the person (other than the occupier), authority .....who or which undertook the activity shall apply in writing to the appropriate consent authority for any <u>necessary resource consents</u> required in respect of the activity ...." (my emphasis)
- 15. A "necessary resource consent" would be one for the erection and occupation (if in the CMA) of the rock rip rap above gabion baskets. However none has been sought. Without a consent being sought the rocks would need to be removed as they would be an unauthorised work (as consent has only been sought to 'regularise' the gabion baskets as part of the emergency work).
- 16. In the applicant's Reply, Mr Hansen considered that the rock removal was not a permitted activity and required consent under *rule 8.5.7 (4) Removal of any work designed to mitigate the effects of coastal hazards* of the Tairawhiti Resource

Management Plan (Tairawhiti Plan)<sup>3</sup>. While I accept the rule, it appears no consent had been sought for the rock rip rap to remain or to be removed.

- 17. However, the applicant did request, and provided evidence on, the removal of the rock rip rap. This was also addressed by the Council's reporting officer and a number of the submitters. In case I am incorrect that no consent was sought to remove the rocks, I have granted consent in terms of *rule 8.5.7 (4)* as a discretionary activity. As I set out later, I agree it is appropriate to enable the rocks to be removed. I acknowledge this is not the outcome sought by a number of the submitters, but the expert evidence is that the structure is not effective as an erosions management structure.
- 18. A five year term was applied for the erection and occupation gabion basket located on esplanade reserve. A number of submitters sought a longer consent period. However as the application made was for a five year term, I am not able to extend that.
- 19. The following table describes the consent applications required with reference to the planning rules as contained in the Tairāwhiti Plan which updates the respective rule references described in the application documentation.

Tairāwhiti Plan Rule	Zone/Overlay s/Special Areas	Activity Status	Activity
DC1 1.6.1(16)	Coastal Marine Area (Significant Values Management Area)	Discretionary	The erection or placement of any structure in the Coastal Marine Area which has a predominant purpose of avoiding, remedying or mitigating the effects of natural coastal processes on human property or life is a discretionary activity.
DC1 1.6.3(5)	Coastal Marine Area (Significant values management Area)	Discretionary	Except as provided for in other rules of this Chapter, any occupation of space involving Crown land within the CMA of the Significant Values Management Area is a discretionary activity.
DC2 2.6.1(14)	Coastal Marine Area (General Management Area)	Discretionary	The erection or placement of any structure in the Coastal Marine Area which has a predominant purpose of avoiding, remedying or mitigating the effects of natural processes on human property or life is a discretionary activity.
DC2 2.6.3(5)	Coastal Marine Area (Significant values management Area)	Discretionary	Except as provided for in other rules of DC2.6, any occupation of space involving Crown land within the Coastal Marine Area is a discretionary activity.
DD 1.6.1(32)	Residential Zone	Non-Complying	Activities that are not provided for as permitted, controlled, restricted discretionary, or

<sup>&</sup>lt;sup>3</sup> The regional policy statement, regional plans and district plan have been amalgamated to form *The Tairāwhiti Resource Management Plan*. This Plan replaced and consolidated the previous set of seven district and regional plans and policy statement into one plan. It took effect on the 30 June 2017. The Tairāwhiti Resource Management Plan was not subject to the Schedule 1 process for plan changes but simply amalgamated the plans into a single

document.

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			discretionary activities. (Erosion Protection Works)	
DD	Amenity	Non-Complying	Activities that are not provided for as permitted,	
5.6.1(38)	Reserve Zone		controlled, restricted discretionary, or discretionary activities. (Erosion Protection Works)	
C9	Outstanding	Restricted	Land Disturbance	
9.1.6(41)	Landscape	Discretionary		
	Area Overlay			
C9	Protection	Restricted	Erection of new structures or alterations or	
9.1.6(46)	Management	Discretionary	additions to existing structures	
	Area Overlay			
C3.14.3(13	Coastal	Discretionary	Tree planting (subject to LO3A Rule C7.1.6.19),	
)	Environment		vegetation clearance, land disturbance, and	
	Overlay		structures within 200m of MHWS	
C8.5.7(1)	Coastal Hazard	Discretionary	The installation of alteration of works designed to	
	1		mitigate the effects of coastal erosion	
C8.5.7(3)	Coastal Hazard	Discretionary	Any activity, including earthworks, that will alter	
	1		natural dune landform	
C7.1.629	Land Overlay 3	Restricted	Land Disturbance	
		Discretionary		

- 20. As mentioned I have also made a determination under *rule 8.5.7 (4) Removal of any work designed to mitigate the effects of coastal hazards* of the Tairawhiti Plan to the removal of the rock rip rap.
- 21. The Table above has been taken from the section 42A report. There was no disagreement between the applicant and Council, and I accept it, and rule 8.5.7 (4) Removal of any work designed to mitigate the effects of coastal hazards addresses the consents sought.
- 22. The applicant has sought consent to the application as a non-complying activity. This is the most restrictive activity status applying to any single component of the proposed works. In this respect I note that the non-complying activity status only arises from a generic rule for any activity not otherwise identified within the Residential Zone and the Amenity Reserve Zone. However, as the proposed rock revetment wall and gabion basket are separate structures in separate locations on Wainui Beach and span across the CMA and land, it would be difficult to 'unbundle' the activity.
- 23. The proposal has been considered as a **non-complying** activity.

# Site and locality

24. The site and locality were fully described in the application documents, the Council officer's section 42A report and by a number of submitters. I agree with the descriptions provided. Rather than repeat all of that material I adopt those parts of

the application and section 42A report, and cross-refer to the material accordingly. I also agree with the descriptions of the area provided by submitters.

#### **Procedural matters**

- 25. Under sections 37 and 37A of the RMA, the time limit for the receipt of submissions is waived to accept the late submissions from Mr and Mrs Simon and Caroline Cave and Mr McLernon.
- 26. The reasons for accepting these submissions are that the matters raised in the submissions contribute to enabling an adequate assessment of the effects of the proposal. The late submissions did not result in any delay in hearing or making a decision on this application. Moreover the submission by Simon and Caroline Cave was provided to the council within the time limit, but due to an administrative issue it was not technically 'received' on time. The applicant did not oppose the acceptance of the late submissions.

# Relevant statutory provisions considered

- 27. As already set out above the proposal is a non-complying activity. Section 104D states (in summary) that a consent authority may grant a resource consent for a non-complying activity only if it is satisfied that <u>either</u>:
  - (a) the adverse effects of the activity on the environment will be minor; or
  - (b) the application is for an activity that will not be contrary to the objectives and policies of:
    - (i) the relevant plan, or
    - (ii) the relevant proposed plan, or
    - (iii) both the relevant plan and the relevant proposed plan.
- 28. If neither of the 'gateway tests' above can be met then the application must be refused.
- 29. Prior to my findings in relation to section 104D, I have considered the application in terms of the matters set out in section 104 which requires me to, subject to Part 2, to have regard to—
  - (a) any actual and potential effects on the environment of allowing the activity;
  - (b) any relevant provisions of—
    - (i) a national environmental standard:
    - (ii) other regulations:
    - (iii) a national policy statement:
    - (iv) a New Zealand coastal policy statement:
    - (v) a regional policy statement or proposed regional policy statement:
    - (vi) a plan or proposed plan; and
  - (c) any other matter the consent authority considers relevant and reasonably necessary to determine the application.

- 30. Despite section 104 considerations being "subject to part 2", the High Court in RJ Davidson Family Trust v Marlborough District Council [2017] NZHC 52 has held that recourse to Part 2 is only required, or relevant, where certain circumstances exist. Those circumstances include where there is "conflict between provisions" or where there is "invalidity, incomplete coverage, or uncertainty of meaning" in the relevant planning documents, which requires that Part 2 is considered to resolve the matter. Where there is an absence of those circumstances, there should be no need for the consent authority to have recourse to Part 2. Since this decision there have been a number of Environment and High Court Decisions which have taken a differing approach.
- 31. This is an important matter that I put to the expert planners (for the applicant and for the Council) at the beginning of the hearing; whether the provisions of the Tairāwhiti Plan were invalid, incomplete or uncertain vis-à-vis the NZCPS. Both planners generally considered the Tairāwhiti Plan had addressed the NZCPS matters. Mr Hansen offered that the NZCPS did 'discourage' hard protection structures, but that the Tairāwhiti Plan was more "enabling" about how hard protection structures were provided for, and focussed on the term "appropriate" structures.
- 32. Dr Dunn in her submission at the hearing said that "...here in Gisborne we still only have a "first-generation" "proposed" Coastal Environmental Plan that went to public notification in July 1997. That makes the "proposed" Coastal Plan over 20yrs old and it has never been made operative. And, this Coastal Plan does not take into account the requirements of the NZCPS 2010"<sup>4</sup>.
- 33. In response to Dr Dunn's submission, Mr Whittaker considered that much greater weight should be placed on the NZCPS. This was on the basis that the Tairāwhiti Plan could not have addressed or "given effect" to the NZCPS, and that there were very directive provisions in the NZCPS relating to the management of natural hazards; and that hard protection structure were to be discouraged but may be appropriate as a 'last resort' in some circumstances.
- 34. Mr Hansen accepted that the Tairāwhiti Plan had not specifically addressed the NZCPS. However, he maintained his view that there were generally no inconsistencies in the NZCPS and how the Tairāwhiti Plan addressed the provisions of erosion protection structures, and in particular 'hard protection' structures.
- 35. It is my finding, and addressed in more detail later, that the Tairāwhiti Plan provisions are, in some importance instances, inconsistent and in-complete vis-à-vis the NZCPS. On this basis I have placed more weight on the NZCPS and less on the Tairāwhiti Plan provisions. Furthermore, the contents of the Tairāwhiti Plan and the 2010 NZCPS were developed before the addition of section 6(h) the management of significant risks from natural hazards. As above, I find that the Tairāwhiti Plan has not addressed this matter, but that the NZCPS can be relied upon to assist in determining if and how relevant section 6(h) is to this application.

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<sup>&</sup>lt;sup>4</sup> Para 2.1 of Dr Dunn's evidence

# Relevant standards, policy statements and plan provisions considered

- 36. In accordance with section 104(1)(b)(i)-(vi) of the RMA, I have had regard to the relevant policy statements and plan provisions of the Tairāwhiti Plan. However as mentioned above, due to the out-dated nature of the contents of the Tairāwhiti Plan, I have placed greater weight on the NZCPS.
- 37. I have also considered the Wainui Beach Erosion Management Strategy August 2014 (WBEMS) to be relevant and reasonably necessary document to determine the application in accordance with section 104(1)(c) of the RMA. It was Mr Hansen's view that considerable weight could be placed on this strategy.
- 38. I have also addressed the Ministry for the Environment's ("MFE") December 2017 publication Coastal Hazards and Climate Change: Guidance for Local Government.

# Summary of evidence heard

#### Council Officers

- 39. The Council planning officer's section 42A report was circulated prior to the hearing. That report, authored by Mr Whittaker, with input from Mr Murphy and Dr de Lange, addressed the proposal in terms of the effects on the environment and the statutory policy framework. It was Mr Whittaker's professional opinion that:
  - Consent be granted for the retention of the gabion gaskets at 21 Wairere Rd. His reasoning was that this proposal is a more modest structure [compared to the Tuahine revetment] and is already having a positive benefit and its scale and location is such that any environmental effects of leaving the structure in situ would be minor. The scale of the structure and term of consent are such that the works are easier to reconcile with the planning instruments. He also considered that the removal of rocks above the gabion baskets and reinstatement of planting on the dune face is supported by the WBEMS.
  - That consent be refused to the Tuahine revetment in its notified form. It was
    Mr Whitaker's opinion that granting consent to the proposed rock revetment
    wall would be contrary to principle of sustainable management given the
    provisions of the NZCPS and the Tairāwhiti Plan. He considered that an
    alternative design with reduced design parameters which more closely
    supports, and is subservient to, other hazard management responses may be
    more appropriate.
- 40. Dr de Lange and Mr Whittaker each provided a written statement having heard the applicant and submitter evidence. In summary Dr de Lange did not consider that the removal of the rock rip rap at 21 Wairere Road would result in any adverse effects on physical processes at Wainui Beach, and stated that any decision for them to stay or go was not about whether they were acting as erosion mitigation.
- 41. With respect to the Tuahine Crescent revetment, he confirmed that he could not identify any adverse effects on physical processes associated directly with the

replacement of the existing post and log structure. However he considered that the proposed rock revetment would result in a structure that was more resistant to erosion than the flanking structures. It was his opinion that this could lead to "enhanced erosion" on the flanks of the proposed revetment if the remaining structure fails, and this would represent an increased hazard for properties adjacent to the structure.

- 42. Mr Whittaker's statement addressed the applicant's and submitters evidence. He outlined that he and Mr Hansen had a different opinion about the design of the proposed revetment and whether it was the most appropriate design option taking into account the national, regional and district planning instruments (addressed in more detail later in this decision). The essence of Mr Whittaker's opinion was that the revetment proposed was to "only provide an appropriate standard of coastal protection over a relatively short period"<sup>6</sup>. The consequences of the design chosen "elevates its purpose to being the primary response or management mechanism to coastal erosion for the Tuahine Crescent properties and that this is not consistent with the national and regional policy directives"<sup>7</sup>.
- 43. In terms of his statement, Mr Whittaker remained unconvinced that the specific design of the revetment should be granted. It was his opinion that consent for the gabion baskets could be granted.

# **Applicant**

- 44. Mr Daykin gave an overview of the project and the proposal. He addressed the development of the proposal, the consultation and meetings undertaken, the withdrawal of the sand push-up application and the WBEMS.
- 45. Dr Shand addressed in his evidence details and the site and its characteristics, the proposed works including those relating to the rock revetment and gabion baskets and the design conditions. With respect to the design conditions, he set out<sup>8</sup> "A design life of 50 years has been initially assumed for the rock revetment. This is an 'industry standard life based on the typical design life of geotextile and placed rock". In response to Mr Whittaker's concerns about the scale of the rock revetment he set out some options<sup>9</sup> to "further reducing the footprint of the revetment".
- 46. Dr Shand stated<sup>10</sup> "The proposed rock revetment provides an effective energy dissipating slope that will reduce wave action across the revetment slope, although some minor to moderate overtopping (< 10 l/s/m) may still occur during strong storm surges at high water levels, however, we expect the rate and severity of such activity

<sup>&</sup>lt;sup>5</sup> para 27 of Dr de Lange's Statement of Evidence

<sup>&</sup>lt;sup>6</sup> para 11 of Mr Whittaker's Statement of Evidence

<sup>&</sup>lt;sup>7</sup> para 13 of Mr Whittaker's Statement of Evidence

<sup>&</sup>lt;sup>8</sup> para 4.1 of Dr Shand's evidence

<sup>&</sup>lt;sup>9</sup> para 8.2 of Dr Shand's evidence

<sup>&</sup>lt;sup>10</sup> para 6.3 of Dr Shand's evidence

to be less than what currently occurs with the existing rock and rail wall". In essence, that the proposed rock revetment will achieve its purpose.

- 47. He also acknowledged that there were potential end effects. In this respect he stated<sup>11</sup>: "At its northern end, the proposed rock revetment will be recurved into the existing rock at 2 Tuahine Crescent. The length of remaining shoreline north of this point will likely continue to be protected by the existing rock and rail wall in the short-to medium-term. If this existing revetment were to be removed or were to fail, increased reflection and turbulence off the end of the proposed revetment could induce additional erosion (end effects) for 20-30m or for approximately 70% of the structure length".
- 48. Dr Shand acknowledged at the hearing that existing rail and log wall was failing and was at the end of its life. He also accepted, as set out in the application and Assessment of Environment Effects (AEE)<sup>12</sup> that "the revetment ends and transitions are indicative only and will be finalised during the detailed design phase". In the Reply stage of the hearing he considered that end effects would be unlikely to occur to the Murphy Road properties due to their distance from the end of the proposed revetment.
- 49. With respect to the gabion baskets, Dr Shand considered that they were generally a short-term coastal protection option. However, it was his opinion that the gabion baskets at the Wairere Road site were consistent with other existing structures along Wainui Beach and likely partially protected from marine action by sand accumulation prolonging their life. He also set out that the rocks above the gabion baskets would not assist in mitigating beach erosion, and that "The bank above the gabion baskets will flatten by slumping until a stable angle of repose is reached, some loss of land above the slope is therefore expected. Planting of the exposed dune face above the gabions is recommended using salt tolerant vegetation to stabilise the sand against wave run-up and overtopping of the gabion baskets"<sup>13</sup>.
- 50. Mr Hansen provided expert planning evidence. He addressed the statutory planning documents and provided an assessment of the proposal against those. This included the NZCPS, the provisions of the Tairāwhiti Plan. He provided a 'summary' of his interpretation of the policy intent of the NZCPS. This was:

#### **NZCPS**

In summary the objectives and policies identified in Annexure A [attached to his evidence] require that:

- Coastal hazards risks are managed by:
  - Setting new development back from the hazard;

<sup>&</sup>lt;sup>11</sup> para 6.6 of Dr Shand's evidence

<sup>&</sup>lt;sup>12</sup> section 3.14 Proposed alignment of the revetment

<sup>&</sup>lt;sup>13</sup> Para 6.11 of Dr Shand's evidence

- Using a range of responses, including managed retreat, for existing development; and
- Protecting or restoring natural defences to coastal hazards.
- The risk of coastal hazards affecting anthropocentric resources and activities is avoided and reduced over time;
- The use of hard protection structures is discouraged the use of alternatives to them, such as natural defences, is promoted;
- A careful consideration of the environmental and social costs of hard protection structures is made and, by inference, that these costs are weighed against their benefits.
- A range of management responses is developed and implemented; and
- In circumstances where hard protection structures are deemed necessary, then ensure these are located and designed to minimise adverse effects and are not located on public land if protecting private assets.
- 51. Mr Hansen also provided a summary of the policy intent of the coastal provisions of the Tairāwhiti Plan. This was<sup>14</sup>:

In summary, the objectives and policies identified in Annexure A require that:

- Provision is made for appropriate structures;
- Structures should not reduce the level of public access to the CMA;
- Structures should not be damaged by coastal processes or [coastal] events and should be designed to take into account the most up to date future sea level rise predicted by the Inter-Governmental Panel on Climate Change ("IPCC");
- The impact of coastal hazards on existing use and development is recognised and provision is made for coastal protection works to mitigate these impacts where the protection works can be shown to be the best method.
- 52. He set out<sup>15</sup> that he considered that the proposal accords with the objectives and policies of both the NZCPS and the Tairāwhiti Plan for the reasons he set out in his evidence. Mr Hansen confirmed this position in questions about the extent to which the Tairāwhiti Plan provisions had "given effect" to the NZCPS. It was his view that there was no inconsistency, but difference emphasis, between the different provisions.
- 53. He also set out the relevant provisions of the WBEMS. He considered that the Strategy should be accorded significant weight as it was 'on point' in relation to erosion management at Wainui Beach, specifically addressed the replacement of

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<sup>&</sup>lt;sup>14</sup> para 3.20 of Mr Hansen's evidence

<sup>&</sup>lt;sup>15</sup> para 3.8 and 3.21 of Mr Hansen's evidence

the revetment, and was a longer term and more strategic instrument than the Tairāwhiti Plan.

- 54. The applicant's right of reply addressed three key Issues:
  - 1. Engineering design parameters & geometry of revetment
  - 2. End effects and transition of revetment, and
  - 3. Public access
- 55. In relation to Engineering design parameters & geometry of revetment, the applicant provided four options for Tuahine Crescent (in order of preference).
  - I. Retain proposed rock size but lower structure height from 5.6m RL to 4.85m RL for current day 100yr Design Event. Can be raised/modified more readily in future as rock adequately sized for future.
  - II. Reduce rock size to 25yr SLR & 50yr design event which lowers structure height from 4.85m RL to 4.75m RL and shortens footprint by 0.4m. However, structure may need to be fully rebuilt to deal with any future SLR/climate change.
  - III. Geo Synthetic Containers (GSC's) with 1:1 slope
  - IV. Do Nothing
- 56. As set out above the applicant has confirmed that the application was modified to option AI (so that this became the proposed revetment).
- 57. End effects and the transition of revetment had been summarised in the evidence above, and I address this in more detail later in this decision. With respect to public access over the proposed rock, Mr Hansen clarified that application had been made to provide public access over the revetment and offered a consent condition to ensure this occurred.
- 58. A number of submitters requested an urgent partial review of the WBEMS, in relation to emergency response to erosion events. Mr Daykin set out in the Reply statement that he would "take a paper to Council in light of new guidelines including desire for emergency response" 16.

#### Submitters

- 59. The submitters who presented at the hearing are listed above. Submitters supported, conditionally supported or opposed the rock revetment adjacent to Tuahine Crescent.
- 60. The reasons expressed for opposing this part of the proposal was wide ranging and included:
  - Natural character and landscape values being adversely affected,
  - Potential impacts (end effects) of any new revetment on properties to the north
     in particular Dr Dunn, Dr Briant, Ms Lautmann and Ms Benacek
  - Potential adverse effects on public access to and along the beach

<sup>&</sup>lt;sup>16</sup> Para 8 of the Reply statement.

- Loss of amenity and recreational use of the beach,
- That the proposal is not supported by the statutory planning documents which seek to discourage hard engineering solutions to coastal hazards management,
- That the proposal is inconsistent with the WBEMS, and that long terms solutions such as 'managed or progressive retreat' need to be more seriously considered,
- Precedent effect and expectations of hard engineering as a solution if consent were granted, and
- Costs of any revetment walls should be borne by private users/benefactors.
- 61. Those supporting the proposal included reasons such as:
  - The need to protect the properties at 2 to 8 Tuahine crescent,
  - That the proposal is consistent with the WBEMS,
  - The existing rail irons are dangerous and need to be removed, and
  - The rock revetment wall will achieve appropriate mitigation and will also address existing issues with sand depletion at this end of the beach.
- 62. Dr Dunn, a coastal scientist, presented evidence in relation to her submission. She did not appear as an independent expert, but someone who has considerable 'expertise' in coastal science, and in particular this part of the coast. As set out in her statement her Master's thesis is titled "Coastal Erosion at Wainui Beach, Gisborne" and her PHD thesis is titled "Coastal Storm Activity along the Eastern North Island of NZ". She stated<sup>17</sup> that in relation to her PHD "The primary focus area was the Gisborne".
- 63. In relation to Dr Dunn's academic study, she found that there was "erosion of the bounding headlands (Tuaheni & Makorori Points) and accretion of the sandy embayment between. That is, the sandy beach has an accretionary trend" 18. It was her view that ".the most destructive shoreline changes or erosion at Wainui Beach come from storm events and have magnitudes far greater than the long-term trend".
- 64. Dr Dunn was also concerned about potential "end effects" to the properties north of the proposed rock revetment. It was her view that due to the difference is size, height, design (eg slope) and construction material of the proposed wall compared to the existing structures that end effects could occur. She stated<sup>20</sup> that "End effects are real; they are well documented the world over. I therefore urge you to shine a very bright light on this aspect to ensure that we don't 'protect Peter' and hurt Paul'".
- 65. In relation to the gabion baskets and the rock rip rap at 21 Wairere Road, submitters presented evidence supporting the proposal. They set out that the works already undertaken had been successful in mitigating coastal erosion, was hardly visible

<sup>&</sup>lt;sup>17</sup> Para 1.4 of Dr Dunn's evidence.

<sup>&</sup>lt;sup>18</sup> Para 3.2 of Dr Dunn's evidence

<sup>&</sup>lt;sup>19</sup> Para 3.3 of Dr Dunn's evidence

<sup>&</sup>lt;sup>20</sup> Para 5.4 of Dr Dunn's evidence

with the gabion baskets now covered with sand with vegetation growing over the rock rip rap. Submitters sought that consent be granted for the gabion baskets (some asking for a longer consent term) and that the rock rip rap be retained.

# **Principal issues in contention**

#### Gabion Basket

66. There were almost no issues in contention with respect to retaining the gabion baskets. The main issue related to whether the rock rip rap on top of the gabion baskets should be removed or retained. As already set out there is no proposal before me to retain the rocks; only a desire from the applicant to remove them.

#### **Rock Revetment**

- 67. There were major issues in contention with respect to the rock revetment. While the applicant had proposed (and modified) the revetment, the reporting officer and a number of submitters did not support it. A number of submitters sought that the revetment be refused consent due to the matters set out above under Submitter Summary of Evidence above.
- 68. Other submitters who supported the revetment sought consent be granted due to the matters set out above under Submitter Summary of Evidence.

# Main findings on the principal issues in contention and reasons

- 69. This section sets out my findings and reasons in relation to the applications. I have largely, but not completely, separated the Tuahine Crescent rock revetment and the Wairere Road gabion baskets. This is because while they 'share' the same policy framework, they are essentially different applications with different effects.
- 70. As I have set out earlier, I have placed more weight on the provisions of the NZCPS over the provisions in the Tairāwhiti Plan. The NZCPS 2010 has considerably more directive provisions (including in relation to natural hazards management) than the previous NZCPS which was relevant at the time the current coastal plan was developed, and which is still not operative.
- 71. I find that the coastal provisions of the Tairāwhiti Plan are somewhat outdated, and unlikely to give effect to the NZCPS. In terms of the coastal provisions of the Tairāwhiti Plan (in which I agree with Mr Hansen that they have a focus on enabling "appropriate" structures) I have considered them in the context of the NZCPS provisions i.e. what may be appropriate in that context.
- 72. I address the issue of natural hazards/erosion and natural character in some detail below. I find these are the key issues in terms of this application (both for the rock revetment and gabion baskets), and these matters which have resulted in the refusal of consent to the Tuahine Crescent revetment. Prior to addressing the matters regarding natural hazards/erosion and natural character, I address the issues of landscape, ecology, public access, recreational and amenity values of the beach and construction effects.

- 73. The issues of landscape, ecology, public access, recreational and amenity values of the beach and construction effects are all relevant to this proposal. However they are less so compared to natural hazards/erosion and natural character, and they have not been determinative of the decision. The reasons for this are:
  - That the area of the proposal is not identified as an outstanding natural landscape (and therefore section 6(b) matter of national importance in relation to landscape does not apply), and that while the revetment would have some adverse landscape and visual effects, those effects would not be significant. This is due to the plethora of 'built forms' in terms of seawalls (including the existing rail and log structure) wooden stairs and dwellings which has resulted in a highly modified environment.
  - That the applicant has addressed and agreed to maintain public access over the rock revetment; a major concern to a number of submitters. While the proposed revetment would extend beyond the footprint of the existing rail and log structure, the visually apparent width of the structure will vary with sand level as set out in Dr Shand's evidence<sup>21</sup>. In this respect I find the issues and policy directives of public access, a matter of national importance under section 6 (d) of the RMA, would have been satisfied by this proposal. In the same vein any effects on recreational and amenity values would not be significant.
  - There is unlikely to be any significant effect on ecological values, and no expert evidence was presented. Any ecological issues could have been addressed by conditions of consent; noting that the applicant agreed to include Blue Penguins (raised by Ms Howatson) to the Construction Management Plan as a condition of consent.
  - Construction effects would be able to be managed by appropriate conditions of consent - including the development and adherence to a Construction Management Plan.
- 74. Given the findings in relation to landscape, ecology, public access and recreational and amenity values of the beach and construction effects above, I accept that the proposal, in those respects, would not be contrary to or inconsistent with the relevant objectives of the NZCPS and the Tairāwhiti Plan. These provisions were set out in the AEE, Mr Whitaker's section 42A report and Mr Hansen's evidence, and I have not repeated them here. Moreover, any adverse effects arising from these matters could have been appropriately avoided, remedied or mitigated.

#### Natural hazards/erosion and natural character

- 75. Section 6(a) in relation to preserving natural character and section 6(h) the management of significant risks from natural hazards, are relevant "matters of national importance.
- 76. The relevant NZCPS provisions are:

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<sup>&</sup>lt;sup>21</sup> para 6.2 of Dr Shand's evidence

#### Objective 5

To ensure that coastal hazard risks taking account of climate change, are managed by:

- locating new development away from areas prone to such risks;
- considering responses, including managed retreat, for existing development in this situation; and
- protecting or restoring natural defences to coastal hazards.
- 77. Policies 25 and 27 are highly relevant to this proposal<sup>22</sup>. I have set them out those parts relevant to this proposal, in particular relating to the Tuahine Crescent revetment:

Policy 25 - Subdivision, use and development in areas of coastal hazard risk

In areas potentially affected by coastal hazards over at least the next 100 years:

- a. <u>avoid increasing the risk</u> of social, environmental and economic harm from coastal hazards;
- b. avoid redevelopment, or change in land use, that would increase the risk of adverse effects from coastal hazards;
- c. encourage redevelopment, or change in land use, where that would reduce the risk of adverse effects from coastal hazards, including managed retreat by relocation or removal of existing structures or their abandonment in extreme circumstances, and designing for relocatability or recoverability from hazard events;
- d. encourage the location of infrastructure away from areas of hazard risk where practicable;
- e. <u>discourage hard protection structures</u> and promote the use of alternatives to them, including natural defences;

Policy 27 - Strategies for protecting significant existing development from coastal hazards risk

- In areas of significant existing development likely to be affected by coastal hazards, the range of options for reducing coastal hazard risk that should be assessed includes:
  - a. <u>promoting and identifying long-term sustainable risk reduction approaches</u> including the relocation or removal of existing development or structures at risk;
  - b. identifying the consequences of potential strategic options relative to the option of "do-nothing":
  - c. recognising that <u>hard protection structures may be the only practical means to protect existing infrastructure of national or regional importance</u>, to sustain the potential of built physical resources to meet the reasonably foreseeable needs of future generations;
  - d. <u>recognising and considering the environmental and social costs of permitting hard protection structures to protect private property;</u> and
  - e. identifying and planning for transition mechanisms and timeframes for moving to more sustainable approaches.
- 2. In evaluating options under (1):

a. focus on approaches to risk management that <u>reduce the need for hard</u> protection structures and similar engineering interventions;

- b. take into account the nature of the coastal hazard risk and how it might change over at least a 100-year timeframe, including the expected effects of climate change; and
- c. evaluate the likely costs and benefits of any proposed coastal hazard risk reduction options.

12 It is noted that NZCPS Policy 24 relates to the Identification of coastal hazards. The Tairāwhiti Plan includes identified and mapped Coastal Hazards Risk Areas. The area adjacent to 2 to 8 Tuahine Crescents where the revetment is proposed (and further north) is part of the Extreme Coastal Hazards Risk Area.

- 3. Where hard protection structures are considered to be necessary, ensure that the form and location of any structures are designed to minimise adverse effects on the coastal environment.
- 4. <u>Hard protection structures, where considered necessary to protect private assets, should not be located on public land if there is no significant public or environmental benefit in doing so.</u>

(underlining is my emphasis)

- 78. I agree to a large extent with Mr Hansen's summary of the policy implications of the NZCPS as set out in his evidence. However I do not agree to the same extent that the proposal is consistent with them.
- 79. The NZCPS clearly discourages hard protection structures, but accepts at policy 27 1 c that "hard protection structures may be the only practical means to protect existing infrastructure of national or regional importance". Policy 27(2) states that evaluating options under (1): to ensure that where hard protection structures are considered necessary, that the form and location of any structures are designed to minimise adverse effects on the coastal environment. Policy 25(a) sets a high 'bar' by stating "avoid increasing the risk of social, environmental and economic harm from coastal hazards".
- 80. In this case the proposed revetment is essentially to protect private property at 2 to 8 Tuahine Crescent. While I can understand land owners wanting to have their properties protected, this form of protection is not 'supported' by the NZCPS. The NZPS accepts that hard protection structures may be the only practical means to protect existing infrastructure of national or regional importance. This proposal is not about protecting existing infrastructure of national or regional importance.
- 81. The applicant has advanced the revetment as a short to medium term 'fix' while the council and community devise a longer term sustainable strategy in relation to the existing development (and future development) at Wainui Beach. Mr Daykin acknowledged this at the hearing saying it was to "buy some time" to develop a longer term approach recognising that the Tuahine Crescent dwellings were in the Extreme Coastal Hazards Risk Area. However I note from Mr Daykin's opening statement that 28 properties are identified within the 'Extreme Risk Area' coastal hazard zone i.e. they are potentially at risk from erosion resulting from storms<sup>23</sup>.
- 82. A 25 year consent term for the CMA component of the revetment was sought. Given that the maximum consent period that can be granted under the RMA is 35 years; 25 years cannot be seen as 'temporary' or 'short to medium term'. This issue is reinforced by the five year consent term sought for the gabion baskets at Wairere Road.
- 83. With respect to the terms of consent and the scale of the proposed structure (even with the somewhat scaled back version proposed in Reply), I share the same concerns as Mr Whittaker, and a number of submitters, that the consequences of the design chosen "elevates its purpose to being the primary response or management mechanism to coastal erosion for the Tuahine Crescent properties

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<sup>&</sup>lt;sup>23</sup> Slide 8 of Mr Daykin's opening statement

and that this is not consistent with the national and regional policy directives<sup>24</sup>. As already set out, this is an issue the NZCPS discourages.

- 84. Moreover, the proposed revetment as <u>the</u> likely primary response or management mechanism to coastal erosion for the Tuahine Crescent is reinforced by the notified application and the proposal as modified at the hearing. The application as notified envisaged that the height of the revetment could be raised to 5.60 m RL (from 4.85 m RL) in the future to provide for a 50 year design life accounting for a sea level rise of 0.45 m<sup>25</sup>:
- 85. Option A of the amended application sought to retain the proposed rock size but accepted a lower structure height from 5.6m RL to 4.85m RL for current day 100yr Design Event. However it was stated this structure could be raised/modified more readily in future as the rock was adequately sized for future. The Reply also included that the crest of the seawall in Option B could not be "topped up" to respond to future changes in sea level rise beyond 0.2 m (expected in the first 25 years).
- 86. While I accept it is prudent to plan into the future, and this is supported by the NZCPS (Policy 25 envisages a 100 year time period), in this context it appears to 'cement in' a long term hard protection approach to coastal erosion.
- 87. Dr Shand was asked what would be the effect if "we did nothing" i.e. no intervention with the proposed rock revetment (leaving the existing post and log structure in place). He accepted Dr Dunn's view that the storm events, as opposed to a longer trend of erosion of the sandy beach, was prevalent. On this basis it said it was difficult to predict what may happen, but that the post and log structure, which was failing, could last between 5 and 20 years. However severe stormwater events could adversely affect the Tuahine dwellings. On this basis, the policy intent of the NZCPS, and the longer term strategy of the WBEMS (discussed in more detail below), it is difficult to justify a compelling need for the intervention as proposed.
- 88. The coastal experts (including Dr Dunn) agreed that the revetment would likely perform as a protection structure for the properties it was designed to protect. This was due to its design and construction. However the experts (and some submitters) were divided on whether "end effects", particularly to private properties to the north, would be created and to what extent. The experts' opinions on this have been set out in the summary of evidence.
- 89. I am not convinced by the applicant's evidence that there will not be end effects, even with the modified options provided in Reply. As set out in Dr Shand's evidence <sup>26</sup> and in the AEE<sup>27</sup> the proposed rock revetment at its northern end will be recurved into the existing rock at 2 Tuahine Crescent. Dr Shand opined that the length of remaining

<sup>&</sup>lt;sup>24</sup> para 13 of Mr Whittaker's Statement of Evidence

<sup>&</sup>lt;sup>25</sup> AEE 3.1.1 - Rock Revetment- Tuahine Cresent

<sup>&</sup>lt;sup>26</sup> para 6.6 of Dr Shand's evidence

<sup>&</sup>lt;sup>27</sup> AEE - 5.1.2.7 Effects on adjacent shorelines

shoreline north of this point will likely continue to be protected by the existing rock and rail wall in the short - to medium-term. However he did acknowledge that this structure was failing. He went on to say if the existing revetment was removed or were to fail, increased reflection and turbulence off the end of the proposed revetment could induce additional erosion (end effects) for 20-30m or for approximately 70% of the structure length.

- 90. Moreover, it was acknowledged in the AEE<sup>28</sup> that the revetment ends and transitions are indicative only and will be finalised during the detailed design.
- 91. Policy 25 a Subdivision, use and development in areas of coastal of the NZPS set out the requirement to <u>avoid increasing the risk</u> of social, environmental and economic harm from coastal hazards. Given the uncertainty in relation to the extent of any end effects, it cannot be determined that the revetment will <u>avoid</u> increasing the risk from coastal hazards to the council owned reserve (used for public access, use and enjoyment) and the adjacent private properties.
- 92. Policy 27(4) states that "Hard protection structures, where considered necessary to protect private assets, should not be located on public land if there is no significant public or environmental benefit in doing so". It is acknowledged that majority of the proposed revetment will be on privately owned land. However a part of revetment will be on public land, and given the purpose of the revetment, I find that there is no significant public or environmental benefit to that land or the public.
- 93. It is my findings for the reasons set out above the proposal would be inconsistent with the natural hazards provisions of the NZCPS, and the natural character provisions to the extent they relate to coastal processes (noting that policy 13 (2) Preservation of natural character sets out that natural character includes matters such as "natural elements, processes and patterns" and the natural movement of water and sediment).
- 94. I also find that it is unclear what the adverse "end effects" may be, as the detailed design work has not been undertaken and there is differences in the expert opinions on this matter. However the relevant policy is to <u>avoid</u> increasing the risk. On this basis I can only conclude that there may be adverse effects, but the extent is unknown.

#### Tairāwhiti Resource Management Plan

95. Mr Hansen also set out the relevant provisions of the Regional Policy Statement (RPS) and the coastal plan provisions. The relevant objective of the RPS is:

Objective B5.1.2

1. A pattern of human settlement that:

- Provides a high level of personal safety from natural hazards for its inhabitants.
- Avoids or mitigates the risk to property and infrastructure from natural hazards.

<sup>&</sup>lt;sup>28</sup> AEE - 3.14 Proposed alignment of the revetment

- Does not accelerate or worsen the effects of natural hazards upon the natural and physical environment.
- 96. This objective is addressed by policy B51.3 (as it related to this application):

To recognise the limitations of attempts to control natural processes by physical work and limit such attempts to appropriate situations where they are:

- a) needed to protect existing development and
- c) will not have significant adverse effects on the natural character of the coastal environment, or other adverse environmental effects;
- 97. The relevant objective in the coastal plan is:

Objectives C3.7.2

- 1. Provision is made for <u>appropriate</u> structures in the CMA provided that any adverse effects on the environment arising from the erection, reconstruction, placement, alteration, extension, removal or demolition of a structure are avoided as far as practicable. Where complete avoidance is not practicable, the adverse effects are mitigated and provision made for remedying those effects, to the extent practicable.
- 6. Avoidance of damage to structures from physical coastal processes or events.
- 7. Avoidance of adverse effects on the environment, including the adverse effect of preventing the natural migration of coastal systems such as dunes and wetlands which occurs as a result of dynamic coastal processes, as a result of the placement of structures where they may interfere in the dynamic processes of the coast and as a result of changes in the rate of coastal erosion or accretion caused by structures.
- 98. It is my finding that while aspects of these provisions are not entirely inconsistent with the NZPS, they do not give effect to them. There is a focus on enabling or providing for "appropriate" structures (including seawalls) to protect existing development, and that adverse effects are "avoided as far as practicable". That where complete avoidance is not practicable, the adverse effects are "mitigated" with provision made for remedying those effects, "to the extent practicable". It is for this reason that greater weight needs to be placed on the NZCPS.

# Wainui Beach Erosion Management Strategy (WBEMS)

- 99. The WBEMS 2014 was developed through a stakeholder engagement process and supported by a forum of key stakeholders formed by council to bring together multiple stakeholder perspectives and work through issues. This Strategy is a relevant matter to consider under section 104(1)(c) of the RMA.
- 100. It was Mr Hansen's opinion that considerable weight should be placed on the WBEMS as it was 'on point' as I have addressed earlier. I accept that the Strategy is 'on point' and has specifically addressed this (and other) sections of the beach as well as a proposed rock revetment. Section 6.2 Area 2 Tuahine Crescent of the Strategy addresses this area.
- 101. It is my finding, for the reasons set out below, the WBEMS is not entirely 'supportive' of the proposal, and clearly does not 'over ride' the provisions of the statutory planning documents, particularly the NZCPS.
- 102. Section 6.2.3 Strategy for Area 2 sets out the following options to be promoted for Area 2:

- Implementation of development controls to avoid exacerbation of the erosion risk and to reduce risk over time.
- Review of the existing hazard zones and refine policies and rules.
- Replacement of the existing rail and rock wall north of the groyne ending in the vicinity of the Tuahine Crescent beach access way with a more robust structure – though, as far as practicable, with a similar footprint to minimise adverse effects on beach values. The final extent of the wall will be established during consent level design to establish in more detail the backshore composition and localised erosion risk. The term of the consent for this structure should match the expiry date for the recently constructed revetment.
- Consider complete removal of the rock revetments from the coast once the existing consent for the recent rock revetment expires. Whether these works are replaced with appropriate structures or other action will depend on the understanding of hazards at that time.
- 103. The 3rd bullet clearly envisages a replacement of the existing rail and rock wall north of the groyne ending in the vicinity of the Tuahine Crescent beach access way with a more robust structure. However the replacement is one of a number of options to be promoted. The first two bullets appear, to me at least, not to have yet been promoted, and would clearly provide 'context' to the advancement of a proposal "for a more robust structure". The "review of the existing hazard zones and refine policies and rules" may be highly relevant given the statement of page 16 of WBEMS which states:

Despite the extreme hazard risk suggested by the existing hazard lines, abandonment of the properties in Tuahine Crescent is unlikely to be required unless there is a major landslide event that renders some of the properties unusable. Further detailed investigation of cliff erosion processes and landslide mechanisms in this area is needed to confirm or refine the existing hazard zones. This will better establish the long term prognosis for the properties.

- 104. It is also noted that the options seek any structure to have "a similar footprint to minimise adverse effects on beach values. The proposed structure as notified has a significantly larger footprint than the existing rail and log structure. This is largely due to the sloping nature of the revetment. I accept that the amended revetment (Option A) slightly reduces the footprint.
- 105. Section 7 Implementation (iv) of the Strategy also sets out the placement of the rock revetment as action, along with a number of others, including a review of the resource management plans and seeking consent for sand push ups. It also sets out that the council intends to "develop a detailed action plan to assist with its implementation of the Strategy"<sup>29</sup>. There was no evidence before me about whether this action plan had been formulated or how the Council and community were to undertaken an integrated approach to addressing coastal hazard/erosion management, noting that the Vision of the WBEMS is "Integrated management of Wainui Beach that conserves and enhances the environment for current and future generations"<sup>30</sup>.

<sup>&</sup>lt;sup>29</sup> WBEMS, Section 7 - Implementation, pg 29

<sup>&</sup>lt;sup>30</sup> WBEMS - pg 4

106. Having considered the WBEMS in the context of this application, I do not share the same view as Mr Hansen that the proposal is entirely consistent with it. While there are clearly elements of the WBEMS that 'support' the rock revetment, there are others that do not. The rock revetment appears to be one component of the identified actions, noting that sand push-up (extensively referenced in the Strategy as part of the 'integrated approach' to beach management) was withdrawn from the suite of consents sought. Also there was no evidence presented on the other 'actions' that make up the WBEMS.

# Ministry for the Environment's ("MFE") December 2017 publication Coastal Hazards and Climate Change: Guidance for Local Government

- 107. Mr Hansen addressed MFE's guidance document containing a new planning approach to past coastal hazard management practice in respect of how uncertainty and community engagement is used in the decision making process. This new approach is a dynamic adaptive pathway ("DAP"). The DAP is being promoted by MFE through the guidance document as a best practice approach to coastal hazard management.
- 108. Mr Hansen considered that the approach was one that should be applied in this situation and noted Mr Whittaker's suggestion that the revetment's design life should mirror the expiry date for the tipped rock seawall to the south of the concrete groyne, and that the revetment should be deconstructed in 2042. Mr Hansen's opinion was:

"that determining the outcome of a future resource management process some 25 years ahead of when it needs to be made is unusual and contradicts the sustainable management purpose of the RMA. Further, that course of action would also contradict the guidance document which seeks to keep various "pathways" open at critical and pre-defined junctures (decision points), not close the pathways off before your adaptive plan has even commenced its implementation phase"<sup>31</sup>.

109. The applicant applied for consent for 25 years, on the basis that the rock revetment was a short to medium solution to protect the private properties at Tuahine Crescent. As I understand it from the hearing, a 'longer' term solution was to be determined in accordance with the WBEMS, as addressed above. Accordingly while I find the DAP is MFE's best practice approach, it does not change the decision I have made in relation to the rock revetment. The reasons for this are those already set out.

#### Gabion Baskets and the rock Rip Rap

110. As has already been set out these works were undertaken pursuant to the emergency works provisions of the RMA. As requested, consent has been sought for this work, but only in relation to the gabion baskets. No consent has been sought for the retention of the rock rip rap. This issue has been fully canvassed above.

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<sup>&</sup>lt;sup>31</sup> Para 4.7 of Mr Hansen's evidence

# Gabion Baskets

- 111. As has been set out in the summary of evidence, the gabion baskets have achieved their purpose of stabilising the coastal erosion of this part of the beachfront. Sand has covered the baskets such that they are not visible (at the time of my site inspections). The applicant's and council's expert agree that the gabion are not affecting coastal processes, and that it is appropriate that they can remain in-situ.
- 112. The exert planners both opined that any adverse effects from the gabion baskets was minor, and that due to the small scale of the works and the limited consent term, that the proposal would not be inconsistent with the relevant objectives and policies of the statutory planning documents. A number of submitters set out why in their view the gabion baskets should remain.
- 113. I agree with the applicant, council officers and those submitters supporting the retention of the gabion basket. Based on the evidence before me I find this proposal, due to its scale and time frame, would not be inconsistent relevant objectives and policies, and any effects can be avoided, remedied or mitigated by conditions of consent.

#### Rock rip rap

- 114. The applicant sought to remove the rock rip rap; while a number of submitters sought to retain them. As set out earlier I have considered this aspect of the proposal as if consent had been sought.
- 115. Drs' Shand and de Lange both agree that the rocks are not performing any coastal erosion mitigation function, and have been installed without any geotextile matting. It is likely that in a storm event these rocks could be dislodged.
- 116. Mr Daykin set out in his opening statement that in relation the rocks:

T&T have assessed the rock to be:

- · Not a conventional revetment design
- Poorly constructed
- Uncertainty around extents of geotextile under the rocks
- Mix of rock sizes. Many too small that are then likely to be displaced on to the beach during storm events
- Poor transition between gabions and rock including rock on top of the gabions that increases risk of rock dislodgment and damage to the gabions
- No rail iron support for gabions
- H&S risks to beach users (walkers, cyclists, horses, SLSC vehicles etc.) from falling & dislodged rock on the beach
- GDC Engineer who oversaw works won't provide post construction certificate
- · Inconsistent with NZCPS & WBEMS

- 117. It was Dr Shand's view that the bank above the gabion baskets will flatten by slumping until a stable angle of repose is reached, and some loss of land above the slope was therefore expected. He recommended planting of the exposed dune face above the gabions to stabilise the sand against wave run-up and overtopping of the gabion baskets.
- 118. Given the experts view, and notwithstanding the wishes of a number of submitters to retain the rock, they are not performing the function of erosion protection or mitigation. On this basis it is appropriate to enable their removal. This would be consistent with the objectives and policies already set out, and any adverse effects will be avoided or mitigated by the conditions of consent.

# **Decision**

- 119. As already set out, the application is a non complying and must pass at least one of the two 'gateway tests". It is my finding that overall, the proposal is not contrary (as in repugnant to) the relevant objectives and policies especially those relating to landscape, ecology, public access and recreational and amenity values of the beach. On this basis it is not necessary to make a finding in relation to section 104D (a); whether the adverse effects are minor or not. The application satisfies section 104D, and a decision can be made pursuant to section 104B of the RMA.
- 120. I have addressed the provisions sections 104 and Part 2 of the RMA. It is my finding that the rock revetment is, overall, inconsistent with the natural hazards and related natural character provisions of the NZCPS, which discourages hard protection structures unless it is only practical means to protect existing infrastructure of national or regional importance. The proposal is in part inconsistent with the Tairāwhiti Plan provisions. The reasons for this have been set out above, noting that I have placed greater weight on the provisions of the NZCPS.
- 121. Moreover it has not been demonstrated that the adverse coastal process effects, particularly "end effects" have been avoided (or remedied or mitigated) given the NZCPS policy 25 direction to avoid increasing the risk of social, environmental and economic harm from coastal hazards.
- 122. For the reason set out, the resource consent for the rock revetment is refused.
- 123. Consent for the retention of the gabion baskets is granted. This is based on the scale and time frame of the proposal. On this basis it is not inconsistent with relevant objectives and policies, and any effects can be avoided, remedied or mitigated by conditions of consent.
- 124. The applicant sought to remove the rip rap and presented evidence as to why it was not effective as an erosion protection structure. For the avoidance of doubt, consent is **granted**, for the reasons set out above in this decision.
- 125. Conditions have been imposed in relation to the consents to retain the gabion baskets and the removal of the rock rip rap.

# **Conditions**

#### **General Conditions**

- 1. The proposed coastal erosion works authorised by this consent are limited to;
  - The gabion basket works along the coastal boundary of 21 Wairere Road, including retention of the existing gabion basket structure, and the removal of the rocks which have been placed on the dune face above the gabion basket.
- 2. The design of the gabion structures and construction works, and the removal of the rocks placed on the dune face above the gabion baskets, shall be undertaken in general accordance with the following documents and material;
  - The Resource Consent Application and AEE Report prepared by Tonkin and Taylor dated May 2017 (Ref 1000724)
  - The Resource Consent Engineering Report prepared by Tonkin and Taylor dated May 2017 (Ref 1000724)

unless otherwise amended by the following conditions of consent.

- The consent holder shall pay the Gisborne District Council any administration, inspection or monitoring charges fixed in accordance with S36(1) of the Resource Management Act 1991.
- 4. Where a conflict arises between any conditions of this consent and the application, the conditions of this consent will prevail.
- All works and structures relating to this resource consent shall be designed and constructed to conform to the best engineering practices and at all times maintained to a safe and serviceable standard.

#### **Term of Consent**

6. The consent for the gabion basket works shall expire 5 years from the date of its commencement (pursuant to section 116 of the RMA).

#### Construction Management Plan (CMP)

- 7. At least 2 weeks prior to the works commencing (noting the gabion baskets are already in place), the Consent Holder shall submit to the Consents Manager, Gisborne District Council, for certification, a Construction Management Plan (CMP) prepared by a suitably qualified and experienced person(s). The CMP shall outline the environmental management and monitoring measures in respect to the rock removal and shall address, but not be limited to the following;
  - Compliance with all consent conditions
  - Sediment and erosion control measures and water quality management
  - Management and stabilisation of works in relation to tide and weather conditions
  - Machinery and truck refuelling and maintenance
  - Contingency plans

- Stockpile management
- Waste management and disposal
- Vehicle and machinery access management within the coastal marine area
- Public notice information and signage
- · Public health and safety measures
- Vigilant attention to weather forecasting to prevent commencing work close to the arrival of coastal storms or extreme weather events, and undertaking construction in discrete stages

The rock removal activity shall not commence until the CMP has been certified by the Consents Manager, Gisborne District Council, and written confirmation from the Consents Manager, Gisborne District Council has been received. The consent authority will endeavour to have the certification process completed within 10 working days (excluding any periods where additional information is sought from the consent holder)

8. The Consent Holder may amend the CMP provided under condition 9, at any time by submitting the amended plan for approval to the Consents Manager, Gisborne District Council, for certification, following the same process outlined in Condition 9 above. Construction activities subject to the amendment shall not commence until the amendment has been certified by the Consents Manager, Gisborne District Council.

#### **Construction Methodology and Conditions**

- 9. The consent holder shall notify water.info@gdc.govt.nz of the intention to begin works at least 3 working days prior to the exercise of this consent. Where works are to be undertaken again having been discontinued for more than seven consecutive working days Council shall be re-notified.
- 10. All noise from construction shall comply with the following criteria for long term construction activities at the boundary of any residential site:

Time period	Average Maximum Noise Level (dBA)		se Level
	L <sub>95</sub>	L <sub>10</sub>	L <sub>MAX</sub>
Monday – Saturday 0600 – 1800 hours	60	75	90
Monday - Saturday at all other times	60	75	90

Sound levels shall be measured in accordance with New Zealand Standard NZS6801:1999 "Acoustics: Measurements of Environmental Sound" and assessed in accordance with NZS6802:1991 "Assessment of Environmental Sound".

11. All vibration from construction shall comply with the following vibration criteria:

The maximum weighted vibration level (Wb or Wd) arising from construction, when measured at or within the boundary of any site, or the notional boundary of any adjacent dwelling shall not exceed the following limits:

General vibration	Time Ma	Maximum Weighted Vibration Level (Wb or Wd)
	0600- 1800 hours Monday to Saturday	45mm/s²
Construction Vibration	Time Ma	Maximum Weighted Vibration Level (Wb or Wd)
	0600-1800 hrs Monday – Saturday	60mm/s2
	At all other times	15mm/s2

- 12. All vehicles involved in the exercise of this permit shall be inspected daily prior to entering the coastal marine area for leaks or other sources of contaminants. Evidence of this inspection shall be recorded in a log book and shall be made available to the consenting authority on request.
- 13. All waste material shall be removed from the coastal marine area and disposed of appropriately.
- 14. The sites and coastal marine area shall be left in a tidy condition upon completion of works.
- 15. The consent holder shall identify and submit a plan identifying stockpile areas to the consent authority prior to works occurring.
- 16. The consent holder shall arrange a site visit during operations to demonstrate compliance with all consent conditions. The site visit shall be attended by representatives of the Water and Coastal Resources Team, the contractor(s) and consent holder.
- 17. Machinery shall not be left unattended within the coastal marine area for any period longer than 3 hours.
- 18. All maintenance and refuelling activities shall be undertaken outside of the coastal marine area. Refuelling and maintenance to extraction and transport machinery must be carried out off to site to ensure that any contaminants (such as oil, diesel and petrol) used during the exercise of this consent cannot enter any watercourse.
- 19. Machinery operators shall be informed in writing and on-site by the consent holder or their agent of the responsibility to not modify any archaeological site that may

be uncovered as a result of works and the protocols to be followed in accordance with the documentation required by condition 9 above.

20. Spill kits, appropriate to the nature and scale of the operation, should be available on site to respond to an emergency spill. Machinery operators shall be trained and equipped to recognise and respond appropriately to a spill.

# **Finished Site Works and Planting Plan**

- 21. Prior to works commencing, the Consent Holder shall submit to the Consents Manager, Gisborne District Council, for certification, a Finished Site Works and Planting Plan which shall include;
  - (i) Details of landscape and stabilisation planting/works to be completed along the dune face and the proposed work areas and the timeframe for when the works shall be completed,
  - (ii) Measures to rehabilitate any areas within the CMA which have been affected by the construction works including all access routes to and along the CMA,
  - (ii) Details of ongoing maintenance of any landscape and stabilisation planting/works which shall be undertaken during the term of the consent.

For clarification, any stabilisation and rehabilitation works are not required to provide short or long-term protection from coastal hazards and/or storm events. The works are designed to ensure that the work area is left in a tidy condition with suitable planting and landscaping to maintain the dune face and amenity of the area under non-storm event conditions.

22. The Consent Holder shall be responsible for undertaking the approved planting and rehabilitation works within the agreed timeframes and thereafter shall maintain the site and works for the term of the consent.

#### **Recording and Notifications**

- 23. A photographic record of the proposed work sites shall be taken prior to, during the works and at completion showing work progress and control measures. These photos shall be provided regularly to the consent authority throughout the works.
- 24. The New Zealand Marine Safety Authority (MSA) is to be notified of the protection works.
- 25. The Hydrographic Office is to be notified of the protection.

#### **Review Condition**

26. The Gisborne District Council may serve notice on the permit holder pursuant to S128 Resource Management Act 1991 of its intention to review the conditions of the permit on a monthly basis from the date of issue of the consent for the following purposes:

- (i) To review the effectiveness of the conditions of the permit in avoiding or mitigating any adverse effects on the environment from which the consent holders activity and, if considered appropriate by the consent authority, to deal with such effects by way of further or amended conditions;
- (ii) To review the appropriateness of conditions in the light of relevant national standards, regulations and guidelines, and the Council's relevant regional plans;
- (iii) To impose additional, or modify existing, conditions of consent relating, but not necessarily limited to, the matters specified hereunder if necessary to deal with any adverse effect on the environment which may arise from the exercise of this permit and which it is appropriate to deal with at a later date:
  - to require the permit holder to adopt the best practicable option to remove or reduce any adverse effects on the environment;
  - to deal with any adverse effects upon the environment on which the exercise of this consent including water quality, coastal ecosystem health and impacts on coastal birds.

Greg Hill

Chairperson and Independent Hearings Commissioner

25 February 2018