Western Bay of Plenty District Council

Change to the District Plan – First Review

Plan Change 74 Coastal Hazards

Section 32 Report

Prepared by: Tony Clow, Senior Policy Analyst Resource Management

Contents

1.0	Introduction	3
2.0	Resource Management Act 1991	7
3.0	Issue 1 – To proceed or not with a Plan Change	8
4.0	Issue 2 – Naming of the Coastal Hazards	. 11
5.0	Issue 3 – Coastal Erosion Area Maps	. 12
6.0	Issue 4 – Coastal Erosion Area Rules	. 16
7.0	Issue 5 – Coastal Erosion Area Access Yard	. 20
8.0	Issue 6 – Coastal Inundation Area Maps	. 23
9.0	Issue 7 – Coastal Inundation Area Rules	. 24

1.0 Introduction

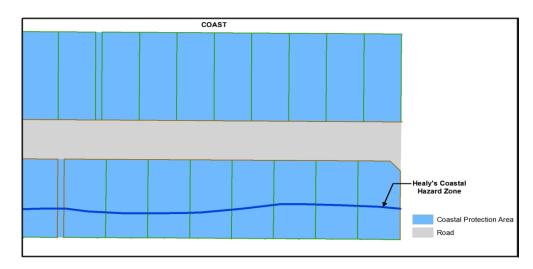
1.1. Purpose of the Plan Change

This Plan Change updates the District Plan Maps in response to a review of the 'Coastal Protection Areas' at Waihi Beach and Pukehina. This review has identified land susceptible to coastal erosion and/or coastal inundation (flooding) within these areas over the next 100 years. This Plan Change also reviews the rules within 'Section 8 – Natural Hazards' of the District Plan to ensure the risks that coastal hazards pose to people and buildings can be avoided or mitigated. This review of the rules also affects the Coastal Protection Areas along the rural open coastline (rural zoned land within 100m of MHWS) including Matakana Island and the land east of Pukehina.

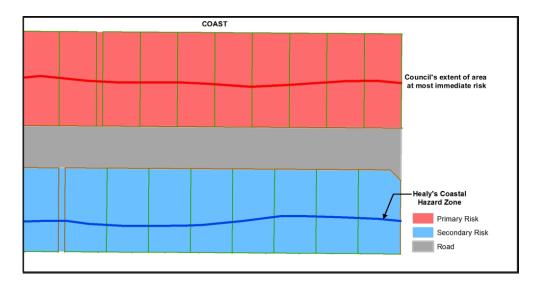
For clarity, it is <u>not</u> the purpose of this Plan Change to prevent coastal erosion or coastal inundation from occurring. Any preventative measures such as dune planting, dune re-nourishment or the construction of rock revetments cannot be implemented by the District Plan. Council can however implement or consider implementing these measures in other ways. It is also important to note that both dune re-nourishment and the construction of new rock revetments in the coastal marine area require resource consent from the Bay of Plenty Regional Council.

1.2. Coastal Protection Areas – History

The Coastal Protection Areas at Waihi Beach and Pukehina were first introduced through the 1994 notification of the Proposed District Plan which was made Operative in 2002. The Coastal Protection Areas identified properties susceptible to coastal erosion and inundation over a 100 year timeframe. They were based on a 1993 technical report commissioned by Council and prepared by Professor Terry Healy of the University of Waikato titled 'Coastal Erosion, Setback Determination, and Recommendations for Management of the Waihi-Bowentown and Pukehina Beach and Dunes'. The technical report produced a line showing the extent of what Healy called the 'Coastal Hazard Zone'. This was then 'right-aligned' by Council to the landward edge of property boundaries for the purpose of identifying the Coastal Protection Areas in the District Plan. This is illustrated below.



Controls on development to avoid or mitigate coastal hazard risk were later introduced through a variation to the Proposed District Plan in 1997. Submissions to this Variation opposed the same controls applying across the entire Coastal Protection Area and sought for less restrictive rules in areas of lower risk. In response, Council made a decision to separate the Coastal Protection Areas into 'Primary Risk' and 'Secondary Risk' so that such an approach could be taken. To do this, Council used Healy's methodology to produce a line showing the extent of the area at most immediate risk. Council then right-aligned this to the landward edge of property boundaries so that any property seaward of or intersected by this line became Primary Risk and the remaining properties became Secondary Risk. This is again illustrated below.



Primary Risk represented properties immediately susceptible to coastal erosion whereas Secondary Risk represented properties susceptible to both coastal erosion and coastal inundation over a 100 year timeframe. This was appealed but later confirmed by the Environment Court in 2002. The Coastal Protection Areas (Primary and Secondary Risk) were then carried over, without change, into the Proposed District Plan First Review which was notified in 2009 and made Operative in 2012.

1.3. Coastal Protection Areas – Reasons for Review

In 2014, Council decided to review the extent of the Coastal Protection Areas at Waihi Beach and Pukehina. This was to ensure that the identification of coastal hazards was kept up to date with latest scientific knowledge and best practice as well as the requirements of New Zealand Coastal Policy Statement (NZCPS) and Regional Policy Statement (RPS). Both the NZCPS and RPS require the identification of areas which are potentially at risk to coastal hazards over at least 100 years (including as a result of climate change). The District Plan must give effect to both documents. The requirements of the NZCPS and RPS as they relate to coastal hazards are further detailed in 1.4 below.

1.4. Relevant Legislation

New Zealand Coastal Policy Statement

Objective 5

This objective is to manage coastal hazard risks (taking account of climate change) by locating new development away from areas prone to such risks and considering responses including managed retreat for existing development in this situation and protecting or restoring natural defences to coastal hazards.

Policy 24

This policy requires the identification of areas in the coastal environment that are potentially affected by coastal hazards (including tsunami) over at least 100 years giving priority to the identification of areas at high risk of being affected. Coastal hazard risks are to be assessed having regard to national guidance and the best available information on the likely effects of climate change on the region or district.

Policy 25

For subdivision, use and development in areas identified as being potentially affected by coastal hazards over the next 100 years, this policy requires;

- avoiding increasing the risk of social, environmental and economic harm from coastal hazards
- avoiding redevelopment, or change in land use, that would increase the risk of adverse effects from coastal hazards
- encouraging 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
- encouraging the location of infrastructure away from areas of hazard risk where practicable
- discouraging hard protection structures and promoting the use of alternatives to them, including natural defences

Regional Policy Statement

Policy NH 11B

This requires incorporating the effects of climate change into coastal hazard assessments over a 100 year timeframe.

1.5. Coastal Protection Areas Review – Stage One

Tonkin & Taylor was commissioned by Council to undertake the review of the Coastal Protection Areas at Waihi Beach and Pukehina and commenced this in September 2014. This was broken into two stages. 'Stage One' was first of all to look at whether a re-assessment of the Coastal Protection Areas was necessary or not. The Stage One report titled 'Coastal Protection Area Review — Stage One' is available on Council's website at www.westernbay.govt.nz/planchange74. This determined that a re-assessment was necessary due to advancements over the last 20 years in scientific knowledge, techniques, methodology and observations of the factors used to determine the location of coastal hazards.

1.6. Coastal Protection Areas Review – Stage Two

'Stage Two' then re-assessed the extent of coastal hazards at Waihi Beach and Pukehina over a 100 year timeframe. The Stage Two technical report titled 'Coastal Protection Areas Re-assessment Stage Two' is available on Council's website at www.westernbay.govt.nz/planchange74. The key outcome of the re-assessment are the maps identifying land susceptible to coastal erosion and coastal inundation over both a 0-50 year and 50-100 year timeframe, as follows;

Hazard	Timeframes	Section
Coastal Erosion Hazard Zone (CEHZ)	2065 and 2115	Appendix A
Coastal Inundation Hazard Zone (CIHZ)	2065 and 2115	Appendix A

The Stage Two technical report contains the following key information explaining the reasons for the coastal hazard maps;

- Explanations of and data sources for the coastal processes influencing coastal erosion and inundation such as water levels, tides, storm surge, sea level rise, waves, shorelines and beach profiles on p3
- Previous assessment method used in 1993 by Terry Healy on p12
- Re-assessment method for the CEHZ on p13
- Re-assessment method for the CIHZ on p31
- Summary and conclusions on p36.

1.7. Consultation

Council first informed potentially affected landowners of the Coastal Protection Areas Review for Waihi Beach and Pukehina when it commenced in September 2014. This was done through a letter and the creation of a project webpage. It targeted landowners with properties within the existing Coastal Protection Areas (Primary and Secondary Risk) as well as those landowners with properties directly adjoining these. A number of e-mail updates were also sent to those landowners who requested this.

Potentially affected landowners were then sent a second letter in early May 2015 to advise them that the Stage Two technical report was available on the webpage and that public open days were to be held at Pukehina (16 May) and Waihi Beach (23 May). The webpage also provided maps with instructions to help landowners determine if their properties had been identified with a coastal hazard. The public open days started with a

presentation which summarised the reasons for the review, its outcomes, the effects on landowners, and an explanation of the upcoming District Plan Change process. This was followed by a time for general questions from the floor and then a time to meet the project team and ask any property specific questions.

The webpage was updated following the public open days to include a copy of the presentation along with detailed notes, answers to frequently asked questions, and other background information. Throughout the consultation process, landowners were encouraged to contact the project manager if they had any questions or wanted further information. A large number of phone calls, e-mails and letters were received from landowners and were responded to. Upon request, the project team also attended the Pukehina Beach Ratepayers Association monthly meeting on 13 July 2015.

1.8. District Plan Response

In response to the Stage Two technical report and consultation, Council needed to decide whether to proceed with a Plan Change, and if so, how to map the two identified coastal hazards at Waihi Beach and Pukehina in the District Plan, and what development controls to have in place for these coastal hazards and those along the rural open coastline. This Section 32 Report explains the reasons behind each proposal in this Plan Change.

2.0 Resource Management Act 1991

2.1. **Section 32**

Before a proposed plan change can be publicly notified the Council is required under section 32 ("s.32") of the Act to carry out an evaluation of alternatives, costs and benefits of the proposed review. Council's assessment of the proposed plan change requires the following:

- 1) An evaluation report required under this Act must—
 - (a) examine the extent to which the objectives of the proposal being evaluated are the most appropriate way to achieve the purpose of this Act; and
 - (b) examine whether the provisions in the proposal are the most appropriate way to achieve the objectives by—
 - (i) identifying other reasonably practicable options for achieving the objectives; and
 - (ii) assessing the efficiency and effectiveness of the provisions in achieving the objectives; and
 - (iii) summarising the reasons for deciding on the provisions; and
 - (c) contain a level of detail that corresponds to the scale and significance of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the proposal.
- (2) An assessment under subsection (1)(b)(ii) must—
 - (a) identify and assess the benefits and costs of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the provisions, including the opportunities for—
 (i) economic growth that are anticipated to be provided or reduced; and

- (ii) employment that are anticipated to be provided or reduced; and
- (b) if practicable, quantify the benefits and costs referred to in paragraph (a); and
- (c) assess the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the provisions.
- 3) If the proposal (an amending proposal) will amend a standard, statement, regulation, plan, or change that is already proposed or that already exists (an existing proposal), the examination under subsection (1)(b) must relate to—
 - (a) the provisions and objectives of the amending proposal; and
 - (b) the objectives of the existing proposal to the extent that those objectives—
 - (i) are relevant to the objectives of the amending proposal; and
 - (ii) would remain if the amending proposal were to take effect.
- 4) If the proposal will impose a greater prohibition or restriction on an activity to which a national environmental standard applies than the existing prohibitions or restrictions in that standard, the evaluation report must examine whether the prohibition or restriction is justified in the circumstances of each region or district in which the prohibition or restriction would have effect.

2.2. Section 74

In accordance with Section 74(2A) of the Act, Council must take into account any relevant planning document recognised by an iwi authority and lodged with Council. There are no hapu or iwi management plans lodged with Council that relate to Waihi Beach or Pukehina or the rural zoned land along the open coastline east of Pukehina. The 'Matakana and Rangiwaea Island Hapu Management Plan' has been taken into account with respect to the rural zoned land along the open coastline at Matakana Island.

3.0 Issue 1 – To proceed or not with a Plan Change

3.1. Explanation

The reasons for, and outcomes of, the review of the Coastal Protection Areas are explained in the introduction to this report. The options of proceeding or not with a Plan Change are considered below.

3.2. Option 1 – Proceed with a Plan Change

F a a c c c c c c c c c c c c c c c c c	dentification of coastal hazards in the District Plan is kept up to date with current best practice and scientific knowledge. District Plan will meet the requirements of the NZCPS by identifying all land at risk within 100 years. The Stage Two technical report shows that the District Plan no longer achieves this. District Plan will correctly inform andowners/buyers of which land is at risk. Allows controls on development (to avoid or nitigate coastal hazard risk) to be applied to all and at risk and removed from all land no longer
---	--

Costs	 For landowners, this may lead to increased costs of development to comply with rules or the loss of development potential. There may also be real or perceived impacts on property values and sales and the ability to get insurance.
Effectiveness/ Efficiency	 Effective as it allows Council to identify all land at risk and put rules in place to protect people and buildings from that risk. Efficient because planning a response against coastal hazards before they occur rather than when they occur will reduce planning difficulties and costs to landowners over the long term. The information available to Council shows a Plan Change is required. Proceeding now is efficient because the information is current.
Risks of Acting/ Not Acting if there is uncertain or insufficient information about the subject matter	■ The information available to Council is considered to be sufficient for identifying land at risk over the next 100 years. However, it is acknowledged that there is no certainty that coastal erosion and inundation will actually occur in the identified areas within the specific timeframes. Therefore, there is a risk that acting now will lead to unnecessary restrictions and costs on landowners if the identified coastal hazards do not eventuate.

3.3. Option 2 – Do not proceed with a Plan Change

Benefits	 Landowners will be not be affected any more than what they are at present.
Costs	 Identification of coastal hazards in the District Plan will not be kept up to date with current best practice and scientific knowledge. District Plan will not meet the requirements of the NZCPS to identify all land at risk within 100 years. The Stage Two technical report shows that the District Plan no longer achieves this. District Plan will not correctly inform landowners/buyers of which land is at risk. Will not allow controls on development (to avoid or mitigate coastal hazard risk) to be applied to all land at risk and removed from all land no longer at risk. Council will be seen as negligent for not responding to the new information it has available.
Effectiveness/ Efficiency	 Ineffective as it does not allow Council to identify all land at risk and put rules in place to protect people and buildings from that risk. Inefficient because planning a response against coastal hazards when they occur will increase difficulties and costs over the long term. The information available to Council shows a Plan Change is required. Not proceeding now is inefficient because it means a Plan Change is needed later whether initiated by Council or prompted by national or regional government.

	Further up-to-date technical reports may be		
	required if there is a significant delay.		
Risks of Acting/	■ The information available to Council is		
Not Acting if there is	considered to be sufficient for identifying land at		
uncertain or insufficient	risk over the next 100 years. However, it is		
information about the	acknowledged that there is no certainty that		
subject matter	coastal erosion and inundation will actually occur		
	in the identified areas within the specific		
	timeframes. The risk of not acting now is that		
	the coastal hazards will occur in this timeframe		
	and people and property will be unnecessarily		
	affected.		

3.4. Preferred Option

The preferred option is:

Option 1 – proceed with a Plan Change.

3.5. Reasons

Council now has up-to-date research available on the areas at Waihi Beach and Pukehina that are susceptible to coastal hazards over the next 100 years. Council would be negligent to overlook this research. Proceeding with the Plan Change allows Council to keep the District Plan updated and in line with the requirements of the NZCPS. It will also correctly inform landowners and buyers of which land is at risk and help them prepare for the possible impacts of coastal hazards.

It is acknowledged that many landowners are concerned about increased development costs and loss of development potential. These are a direct consequence from natural hazard rules in the District Plan. Development costs are increased in hazard areas because of having to obtain resource consent and meet design requirements. Some loss in development potential may occur for any new properties identified with a coastal hazard and made subject to natural hazard rules. There could also be a loss of development potential for any existing properties identified where an opportunity to subdivide or develop is removed; however the existing rules have already removed many of these opportunities. Aerial photos also show that many properties have been fully developed already or developed in a way which would make it difficult to subdivide or add more dwellings.

It is also acknowledged that many landowners are concerned about decreased property values or potential to sell and difficulties with getting insurance. Concerns about property values and sales are largely based on landowner perceptions however. No evidence has been provided to show that the identification of coastal hazards decreases the sale values of properties, and it is the market not the District Plan which will decide what people are willing to pay for such properties. In terms of getting insurance, this will depend on the insurance company and the property in question. The consultation period has shown that landowners have had varying experiences with getting insurance.

Ultimately, Council must take a longer term view on how coastal hazards may affect landowners. While overlooking a Plan Change at this stage may alleviate the concerns that existing landowners hold for the short term, it ignores the impacts that existing or future landowners may face in the long term which will be more significant. Waiting until coastal hazards start to pose an immediate threat to people and property is not an appropriate time to start planning for their effects. Taking action now will ensure new buildings are designed for the hazard (i.e. are relocatable or above flood levels). It will also ensure opportunities are maintained for relocating buildings in the future.

4.0 Issue 2 – Naming of the Coastal Hazards

4.1. Explanation

The Stage Two technical report identifies two coastal hazards at Waihi Beach and Pukehina over 0-50 year and 50-100 year timeframes as shown below.

Hazard	Timeframes
Coastal Erosion Hazard Zone (CEHZ)	2065 and 2115
Coastal Inundation Hazard Zone (CIHZ)	2065 and 2115

The District Plan also identifies an existing 'Coastal Protection Area – Open Coastline' for all rural zoned land within 100m of MHWS which includes Matakana Island and the land east of Pukehina. This only relates to coastal erosion and not coastal inundation.

Consideration needs to be given to how these hazards are named for the purposes of the District Plan.

4.2. Preferred Option

Rename the coastal hazards in the Stage Two technical report as follows;

Hazard	Level of Risk
Coastal Erosion Area	Primary and Secondary Risk
Coastal Inundation Area	

Rename the existing 'Coastal Protection Area Open Coastline' as 'Coastal Erosion Area – Rural'.

4.3. Reasons

General

The hazard names suggested clearly identify the relevant hazard and are consistent with how other hazards in the District Plan are named i.e. 'Floodable Area' and 'Stability Area'. The name Coastal Protection Area has

not been re-used because it does not clearly identify the hazards plus also implies that the District Plan is seeking to prevent coastal erosion and coastal inundation from occurring which is not the case.

Waihi Beach and Pukehina

For the 'Coastal Erosion Area', the terms 'Primary Risk' and 'Secondary Risk' are suggested rather than '2065' and '2115' because they make it clear that the separation is based on different levels of risk and plan users may not understand the reference to the numbers or will focus on the years rather than the level of risk. Different rules will also apply to the different areas of risk. For the 'Coastal Inundation Area', separate risk areas are not required as the same rules will apply across the entire hazard.

Rural zoned land - Matakana Island and east of Pukehina

The term 'Coastal Erosion Area – Rural' clarifies that this feature only relates to the rural open coastline.

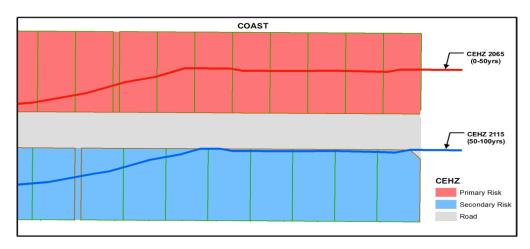
5.0 Issue 3 – Coastal Erosion Area Maps

5.1. Explanation

The Stage Two technical report identifies the CEHZ at Waihi Beach and Pukehina as lines on maps. Three options are considered for how to use these lines to identify the Coastal Erosion Areas (Primary and Secondary Risk) on the District Plan Maps. The land which is identified on the District Plan Maps will determine what land will be subject to the rules of Section 8 – Natural Hazards.

5.2. Option 1 - All properties (whether entirely or partially within a CEHZ in the Stage Two technical report) to be shown as Coastal Erosion Area in their entirety on the District Plan Maps.

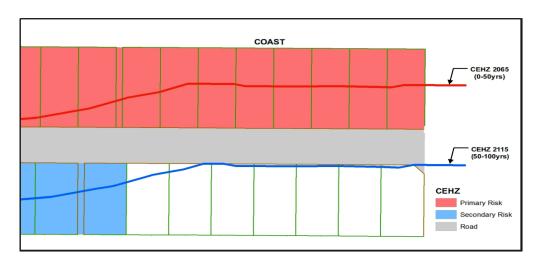
Note: This option is the status quo of right aligning lines to the landward edge of property boundaries as discussed in Section 1.2 of this report.



Benefits	 Identifies at least 100 years of land at risk to coastal erosion so meets the requirements of the NZCPS. Notifies landowners/buyers of risk in areas where this has been identified. District Plan rules can be put in place to deal with risk in those areas where there is risk. Rules will be easier for landowners to understand and for Council staff to administer if they apply to a whole property i.e. avoids possible confusion over what rules apply if a proposed dwelling crosses between Primary Risk, Secondary Risk, or areas not at risk.
Costs	 Not entirely accurate as it identifies 'extra' land not identified in the Stage Two technical report as being at risk. Incorrectly notifies landowners/buyers of risk in areas where this has not been identified. District Plan rules will affect a landowner's use of their property. District Plan rules that apply to 'extra' land will affect a landowner's use of their property unnecessarily. For any land identified at risk to a natural hazard, there may be real or perceived impacts on property values and sales and the ability to get insurance. Identifying 'extra' land in this case will create unnecessary concerns for landowners in this regard.
Effectiveness/ Efficiency	 Effective as it identifies the land which is at risk within 100 years and ensures that rules can be applied in those areas to deal with that risk. Not efficient as it identifies some land not at risk. This unnecessarily restricts the use of such land and/or could lead to extra costs to comply. It also could lead to real or perceived effects on property values and sales and the ability to get insurance. Council staff will also spend time on processing applications where there is no risk.

5.3. Option 2 – Same as for Option 1 but exclude properties which only have a 'minor' portion identified within a CEHZ in the Stage Two technical report.

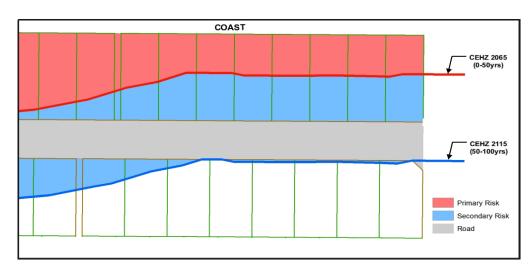
Note: This option was suggested by a number of landowners during the consultation period.



Benefits	 Avoids concerns for some landowners with respect to District Plan rules or any real or perceived impacts on property values and sales and the ability to get insurance.
Costs	 Identifies less than 100 years of land at risk to coastal erosion so fails to meet the requirements of the NZCPS. Not entirely accurate as it fails to identify some land identified in the Stage Two technical report as being at risk. Fails to notify some landowners/buyers that these areas are at risk. Would not allow District Plan rules in these areas so would fail to deal with the risk. Difficult to define what a 'minor' portion is. Issues of fairness will arise when a 'cut off point' excludes some properties but includes others.
Effectiveness/ Efficiency	 Not effective as it fails to identify all land which is at risk within 100 years and District Plan rules cannot be applied to deal with the risk in any excluded areas. Not efficient as overlooking this now will require changes to be made later.

5.4. Option 3 – Only those parts of properties identified as being within a CEHZ in the Stage Two technical report to be shown as Coastal Erosion Area on the District Plan Maps.

Note: This option was also suggested by a number of landowners during the consultation period. It is a significant change from the status quo.



Benefits	 Identifies 100 years of land at risk to coastal erosion so meets the requirements of the NZCPS. Entirely accurate with the Stage Two technical report. Correctly notifies landowners/buyers of the areas at risk. District Plan rules will only apply to those parts of properties at risk.
Costs	 Associated District Plan rules will affect a landowner's use of their property. Possible confusion over what rules apply if a proposed dwelling crosses between Primary Risk, Secondary Risk, or areas not at risk. For any land identified at risk to a natural hazard, there may be real or perceived impacts on property values and sales and the ability to get insurance.
Effectiveness/ Efficiency	 Effective as it identifies the land which is at risk within 100 years and ensures that rules can be applied in those areas to deal with that risk. Efficient as it only applies to areas at risk. Avoids unnecessary restrictions, costs, and time with respect to land not at risk. Avoids any further real or perceived effects on property values and sales and the ability to get insurance. Council avoids spending time on processing applications where there is no risk.

5.5. Preferred Option

The preferred option is:

Option 3 – Only those parts of properties identified as being within a CEHZ in the Stage Two technical report to be shown as Coastal Erosion Area on the District Plan Maps.

The proposed changes to the District Plan Maps are shown in Attachment A of this report.

5.6. Reasons

This is the most accurate way of identifying land susceptible to coastal erosion over the next 100 years as it is directly based on the Stage Two technical report. It also meets the requirements of the NZCPS. Landowners and buyers will be correctly informed of which land is at risk because it will not be over or under identified. It also means District Plan rules will apply to all land at risk, but not to any land which is not at risk. This is the fairest approach and is less restrictive than the status quo. It also goes some way towards recognising landowner concerns about effects on development potential, property values and sales and getting insurance by not mapping or restricting land unnecessarily.

6.0 Issue 4 – Coastal Erosion Area Rules

6.1. Explanation

Section 8 - Natural Hazards already has some controls in place for managing coastal erosion risk. Below is a summary of the land use and subdivision rules that apply in the existing Coastal Protection Areas. This is to help readers understand the options that follow and any suggested changes.

<u>Existing Coastal Protection Area - Primary Risk</u> (Equivalent to Proposed Coastal Erosion Area – Primary Risk)

One dwelling per title is provided for within this area subject to resource consent (discretionary activity). Council supports applications provided that the hazard risk is addressed i.e. buildings are designed to be relocatable and are set back from the toe of the foredune as far as possible. Any additional dwellings, minor dwellings, or any accommodation or education facilities are non-complying activities meaning they are not provided for. Resource consent can still be applied for however applications are not likely to be supported. Subdivision is a prohibited activity meaning resource consent cannot even be applied for.

<u>Existing Coastal Protection Area - Secondary Risk</u> (<u>Equivalent to Proposed Coastal Erosion Area - Secondary Risk</u>)

All buildings are provided for within this area subject to resource consent (restricted discretionary activity). Council supports applications provided that the hazard risk is addressed i.e. buildings are designed to be relocatable and are set back from the hazard as far as possible. Subdivision is a non-complying activity meaning it is not provided for. Resource consent can still be applied for however applications are not likely to be supported.

<u>Existing Coastal Protection Area - Open Coastline</u> (Renamed to Coastal Erosion Area - Rural)

All buildings are provided for within this area subject to resource consent (discretionary activity). Council supports applications provided that the hazard risk is addressed i.e. buildings are designed to be relocatable and are set back from the hazard as far as possible. Subdivision is a discretionary activity meaning it is provided for subject to hazard risk being addressed.

Review/Options

The existing rules succeed in ensuring that new buildings are 'hazard proofed'. However, the rules also allow resource consent applications to be made for subdivision and development which if approved can lead to other issues such as putting more people/buildings at risk or affecting the ability to relocate buildings.

In situations where beachfront dwellings need to be shifted further back from the toe of the foredune, there may not be sufficient space if there is another dwelling on the same property. In situations where the dwelling furthest from the road needs to be removed from the property altogether, this will be difficult if the dwelling closest to the road is not designed to be relocatable or is on a separate title (as this relies on the other landowner removing their dwelling first). The same applies for allowing minor dwellings and accommodation and education facilities for more than four people.

Option 1 looks at keeping the existing rules in place, while Options 2 and 3 look at changing the rules to prohibit subdivision and land use activities that may lead to intensification and relocation access issues. Options 4 and 5 are about allowing subdivision and conversions to cross lease titles to freehold titles where these issues can be avoided.

6.2. Option 1 – No changes to existing rules

Benefits	 Existing rules are familiar to all plan users. Existing rules already provide a level of protection for people and buildings against coastal erosion. Maintains landowners' expectations of development potential and avoids creating new or additional concerns regarding property values and sales and getting insurance.
Costs	 Existing rules provide for an increase in the number of people and buildings in areas at risk to coastal erosion. Multiple dwellings or buildings on a site can also affect the ability to relocate those buildings furthest away from the road and affect the ability to shift buildings back if the toe of the foredune moves inland. Will result in larger overall costs over the long term. Existing rules allowing resource consent applications for non-complying subdivision and

	land use are misleading and may lead to unnecessary costs as it is most likely that applications will be declined.
Effectiveness/ Efficiency	 Not fully effective. While the existing rules ensure individual buildings are set back from the hazard and designed to be relocatable, they also allow intensification which increases the number of people and buildings at risk and affects
	relocation. Inefficient as allowing intensification will lead to planning difficulties and greater costs for landowners later on.

6.3. Option 2 — Prohibit the following development in all coastal erosion areas

- additional dwellings
- minor dwellings
- accommodation facilities (for more than four people)
- education facilities (for more than four people)

Benefits	 Avoids intensification which leads to an increase in the number of people and buildings in areas at risk. Limits further relocation access issues associated with having multiple buildings on-site. Reduces costs for landowners over the long term. Prohibiting additional dwellings is consistent with the intention of the subdivision restrictions. Within the Primary Risk Area, it removes uncertainty over whether these buildings (currently non-complying) would be allowed or not.
Costs	 Will reduce development potential for those properties where such activities are currently provided for. There may also be real or perceived impacts on property values and sales.
Effectiveness/ Efficiency	 Effective as it avoids further intensification and relocation access issues. Efficient as it reduces planning difficulties and costs to landowners over the long term.

6.4. Option 3 — Prohibit subdivision of any titles which are entirely identified within a Coastal Erosion Area

Benefits	 Avoids creating new lots and therefore intensification which leads to an increase in the number of people and buildings in areas at risk. Prevents any further relocation access issues associated with having multiple buildings on-site. Reduces costs for landowners over the long term. Within the Secondary Risk Area, it removes uncertainty over whether a subdivision (currently non-complying) would be allowed or not.
----------	---

	 Makes subdivision rules consistent between all Coastal Erosion Areas, rather than being prohibited, non-complying or discretionary.
Costs	 Will reduce development potential for those properties where such activities are currently provided for (open coastline hazard area only). There may also be real or perceived impacts on property values and sales.
Effectiveness/ Efficiency	 Effective as it avoids further intensification and relocation access issues. Efficient as it reduces planning difficulties and costs to landowners over the long term.

6.5. Option 4 – Allow resource consent applications for subdivision of any title which is only partially identified within a Coastal Erosion Area subject to the following matters;

- There will be no increase in the number of titles in the Coastal Erosion Area
- Approved house sites are to be created outside of the Coastal Erosion Area
- New title boundaries and approved house sites will not affect the relocatability of any existing or new buildings on the property

Benefits	 Recognises that some titles may only have a very small portion of coastal erosion area identified and could possibly be subdivided without leading to intensification or creating relocation issues. Matters of discretion ensure applications can be declined where intensification or relocation access issues could result. Avoids unnecessary concerns relating to development potential and property values and sales.
Costs	■ None
Effectiveness/ Efficiency	 Effective and efficient as it could still allow subdivision in cases where this would not lead to intensification or relocation access issues.

6.6. Option 5 – Allow controlled activity subdivision for conversion of fully developed cross lease titles to freehold titles

Note: The conversion of cross lease title to freehold title falls within the definition of subdivision under the Resource Management Act so would default to prohibited in the Coastal Erosion Area - Primary Risk, noncomplying in the Coastal Erosion Area - Secondary Risk, and discretionary in the Coastal Erosion Area - Rural.

Benefits	Allows landowners to convert to a less
	complicated form of land tenure. Will not result in intensification because both
	Will flot result in interisineution because both
	titles must already be fully developed. This also
	relies on proposed rules prohibiting additional
	dwellings and minor dwellings.
	 Will not create any new relocatability issues.

	These will already exist as the dwellings will already be in place and in different ownership.
Costs	None
Effectiveness/ Efficiency	 Effective at allowing conversion of cross lease to freehold title without leading to intensification. More efficient form of land tenure for landowners.

6.7. Preferred Options

The preferred options are 2, 3, 4 and 5.

The proposed changes to Section 8 – Natural Hazards are shown in Attachment B of this report.

6.8. Reasons

The rule changes avoid intensification within areas at risk to coastal erosion over the next 100 years. This will lead to fewer people and buildings being put at risk and will reduce costs to landowners over the long term. The rule changes also prevent multiple dwellings on-site so will avoid any further access issues with relocating buildings off-site.

7.0 Issue 5 – Coastal Erosion Area Access Yard

7.1. Explanation

The District Plan Maps currently show a 6m wide 'access yard' at the back of Secondary Risk properties adjoining the landward side of Shaw, Loop and Broadway Roads. The reason for these access yards is to provide alternative legal vehicle access if ever those roads are inaccessible due to coastal erosion. In the case of the Shaw Road access yard, 10 Edinburgh Street is also included to provide access onto Edinburgh Street. Resource consent is required for any building/structure within an access yard so that Council can ensure that future access is not compromised.

The owner of 10 Edinburgh Street approached Council staff earlier this year with a request for the access yard to be removed from 'going through' the dwelling because of its implications on selling the property. Council staff met with the owner to discuss this request and to look at alternative options and in doing so highlighted other issues with the alignment of the access yard. One issue is that the current alignment goes through and is therefore already blocked by the dwelling on 10 Edinburgh Street. Other issues are that the access yard goes through part of the dwelling at 72 Shaw Road and 74 Shaw Road is overlooked so will have no alternative legal access if ever needed. Council staff drafted a possible re-alignment to resolve those issues. This is shown below.



Council staff then contacted and met with the owners of 72 and 74 Shaw Road to get their feedback. Both owners opposed the re-alignment because of a number of concerns relating to loss of development options, impacts on property values and sales, and whether the land is suitable for the construction of a road.

7.2. Option 1 – No change

Benefits	 Acknowledges the concerns of the landowners at 72 and 74 Shaw Road regarding loss of development options and impacts on property values and sales.
Costs	 The access yard will continue to go through the dwelling at 10 Edinburgh Street. This blocks the access yard for all those who may depend on it in the future. It also is causing concerns for the landowner regarding selling the property. The access yard will continue to go through part of the dwelling at 72 Shaw Road. This blocks part of the access yard and may also cause concerns about loss of development options and impacts on property values and sales. 74 Shaw Road is left with no alternative legal vehicle access if this is ever needed.
Effectiveness/ Efficiency	 Not effective as there is no clear access onto Edinburgh Street for any of the properties that may depend on this access yard if ever Shaw Road is lost to coastal erosion. Not efficient as it may lead to extra planning difficulties and costs to landowners in the future. May lead to arguments in the future over access.

7.3. Option 2 – Re-alignment

Benefits	 The access yard is largely removed from the dwelling at 10 Edinburgh Street. It is removed from the elevated part of the site desired for views. This clears the access yard for all those who may depend on it in the future. It also removes part of the concern for the landowner regarding selling the property. The access yard will no longer go through part of the dwelling at 72 Shaw Road. This clears that part of the access yard and may also resolve concerns about loss of development options and impacts on property values and sales. 74 Shaw Road is given alternative legal vehicle access if this is ever needed. The access yard is 3m either side of the property boundary so is a fair split between neighbours.
Costs	 The owner of 10 Edinburgh Street may still have concerns about the access yard going through part of the dwelling. Does not address the concerns of the landowners at 72 and 74 Shaw Road regarding loss of development options and impacts on property values and sales.
Effectiveness/ Efficiency	 Effective as it provides clear access onto Edinburgh Street for any of the properties that may depend on this access yard if ever Shaw Road is lost to coastal erosion. Efficient as it minimises planning difficulties and costs to landowners in the future. Will not lead to arguments in the future over access.

7.4. Preferred Option

The preferred option is Option 2 – the re-alignment.

Amend District Plan Map U04 as shown in Attachment A of this report.

7.5. Reasons

The re-alignment clears the access yard for those properties that may depend on it if ever Shaw Road is lost to coastal erosion. This provides a long term benefit for future landowners. It also resolves particular issues for each of the three properties. It largely removes the access yard from the dwelling at 10 Edinburgh and moves it to the non-elevated part of the site. It removes the access yard from the dwelling at 72 Shaw Road. It also allows 74 Shaw Road to have future legal access. The positioning of the access yard 3m on either side of the property boundary reduces the possible level of restriction on the properties at 72 and 74 Shaw Road.

8.0 Issue 6 – Coastal Inundation Area Maps

8.1. Explanation

The Stage Two technical report identifies the CIHZ at Waihi Beach and Pukehina as areas on maps. Just one option is considered for how to identify the Coastal Inundation Areas in the District Plan. That is to adopt the areas from the Stage Two technical Report. The land which is identified in the District Plan will be subject to the rules of Section 8 – Natural Hazards.

8.2. Option 1 – Show the areas as identified in the technical report.

Benefits	 Identifies 100 years of land at risk to coastal inundation so meets the requirements of the NZCPS. Entirely accurate with the Stage Two technical report. Correctly notifies landowners/buyers of the areas at risk. District Plan rules will only apply to those parts of properties at risk.
Costs	 Associated District Plan rules will affect a landowner's use of their property. Possible confusion over what rules apply if proposed dwelling crosses between an area of land identified and an area of land not identified. For any land identified at risk to a natural hazard, there may be real or perceived impacts on property values and sales and the ability to get insurance.
Effectiveness/ Efficiency	 Effective as it identifies the land which is at risk within 100 years and ensures that rules can be applied in those areas to deal with that risk. Efficient as it only applies to areas at risk. Avoids unnecessary restrictions, costs, and time with respect to land not at risk. Avoids any further real or perceived effects on property values and sales and the ability to get insurance. Council avoids spending time on processing applications where there is no risk.

8.3. Preferred Option

Option 1 – show the areas as identified in the Stage Two technical report.

The proposed changes to the District Plan Maps are shown in Attachment A of this report.

8.4. Reasons

Controls on development are needed to ensure that people and buildings are protected from coastal inundation. Putting in place the same controls that apply to floodable areas brings a consistent approach to the

management of all areas subject to flooding in the District. It also uses rules that have already been established and tested.

9.0 Issue 7 – Coastal Inundation Area Rules

9.1. Explanation

Section 8 - Natural Hazards does not contain any controls on development that are specifically to deal with the risks of coastal inundation. Now that a Coastal Inundation Area has been identified, rules need to be put in place to ensure effects from this hazard can be avoided or mitigated.

9.2. Option 1 – Do not introduce rules

Benefits	 Avoids increasing compliance costs for landowners in the short term. Maintains landowners' expectations of development potential and avoids creating new or additional concerns regarding property values and sales and getting insurance.
Costs	 Will not protect people and buildings from coastal inundation if and when this occurs. Landowners will have increased costs over the long term if buildings are damaged or need to be removed. Council would be negligent not to put controls in place knowing the hazard has been identified.
Effectiveness/ Efficiency	 Not effective as it does not protect people and buildings from coastal inundation. Not efficient as it will lead to planning difficulties and increased costs in the future.

9.3. Option 2 – Apply the same rules that are in place for the existing floodable areas in the District Plan as follows;

Require restricted discretionary resource consent for the following activities;

- Buildings/structures
- Earthworks over 5m³
- Closed board fences, retaining walls, raised gardens, concrete and block walls

Have regard to the following matters of discretion to address the hazard;

- Minimum floor levels for buildings/structures
- The extent to which any activity affects the function of flow paths or the capacity of ponding areas

Benefits	 Protects people and buildings from the effects of coastal inundation through imposition of minimum floor levels and maintaining natural features which assist with managing flood risk. Reduces costs to landowners over the long term. Does not restrict the number of dwellings or buildings on-site provided they are 'hazard proofed'. This gives certainty to landowners about development potential. Provides a consistent approach to the management of floodable areas in the District.
Costs	There will be extra compliance costs for landowners through having to obtain resource consent and meet the design requirements.
Effectiveness/ Efficiency	 Effective at protecting people and buildings from the coastal inundation. Efficient as it avoids larger costs for landowners over the long term.

9.4. Option 3 — Apply the same subdivision rules that are in place for the existing floodable areas in the District Plan

Benefits	 Protects people and buildings from the effects of coastal inundation through imposition of minimum floor levels and maintaining natural features which assist with managing flood risk. Reduces costs to landowners over the long term. Does not restrict the number of dwellings or buildings on-site provided they are 'hazard proofed'. This gives certainty to landowners about development potential. Provides a consistent approach to the management of floodable areas in the District.
Costs	 There will be extra compliance costs for landowners through having to obtain resource consent.
Effectiveness/ Efficiency	 Effective at protection people and buildings from the hazard. Efficient as it avoids larger costs for landowners over the long term.

9.5. Preferred Option

The preferred options are 2 and 3.

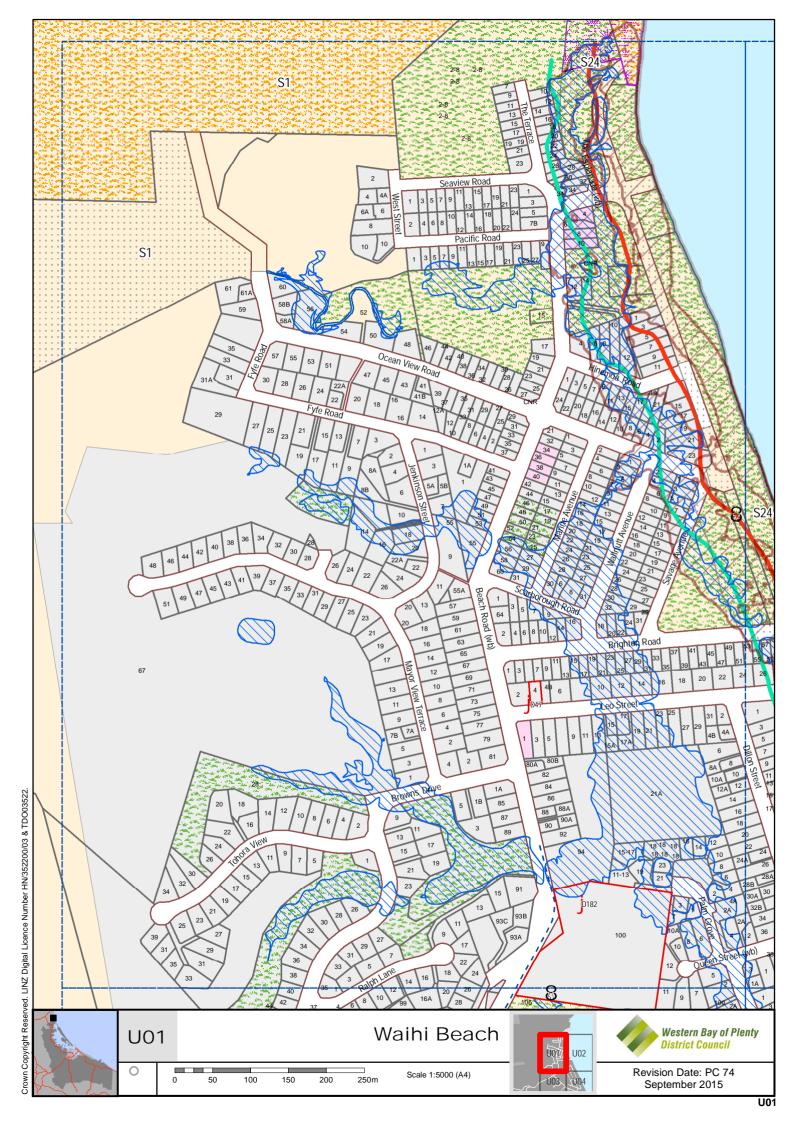
The proposed changes to Section 8 – Natural Hazards are shown in Attachment B of this report.

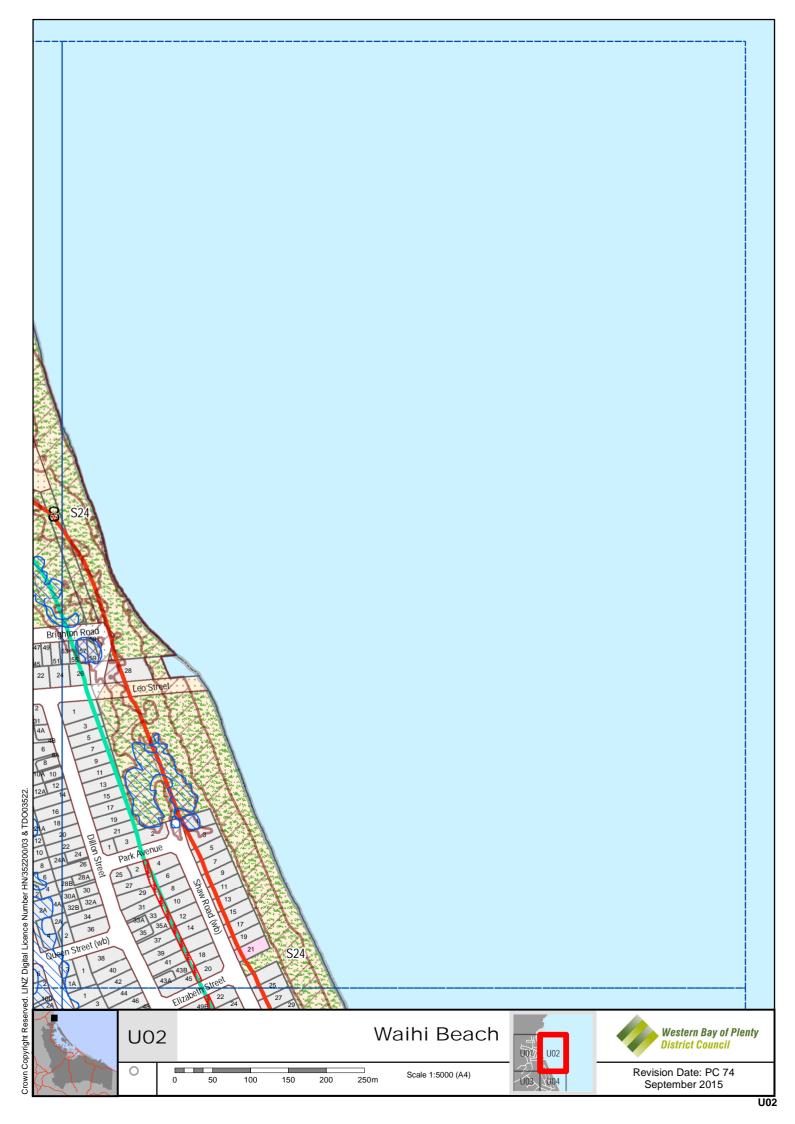
9.6. Reasons

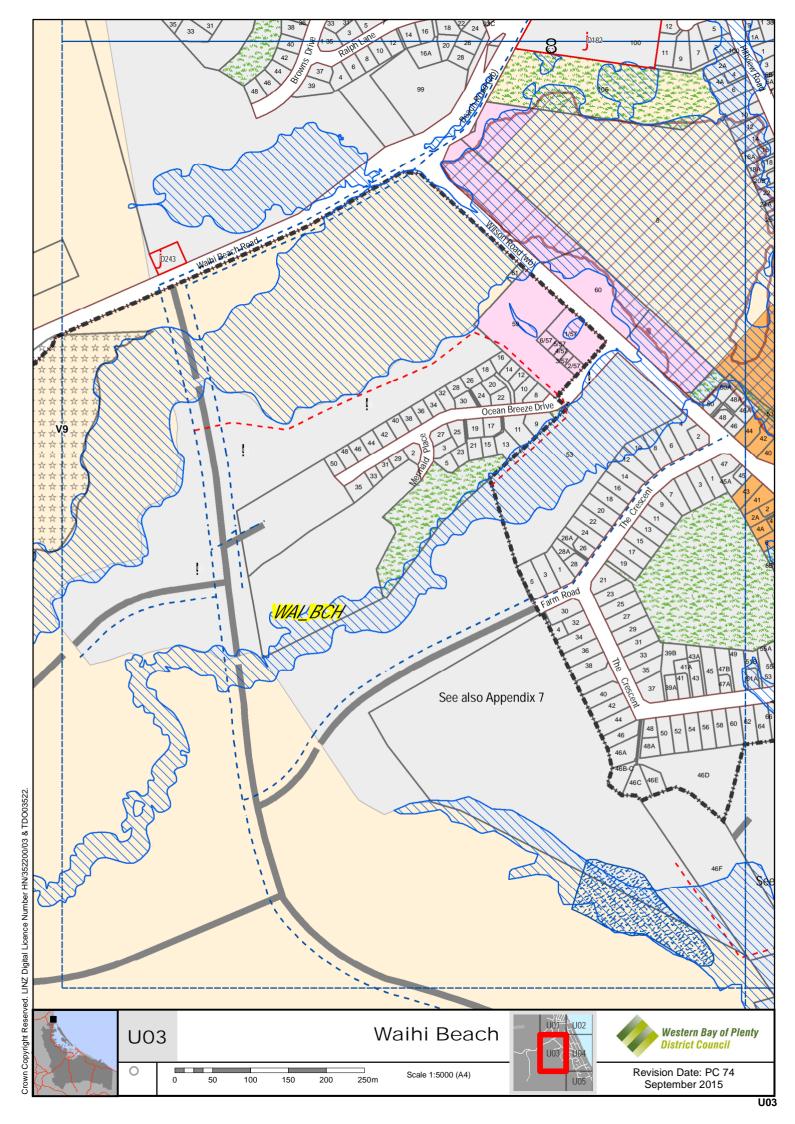
Controls on development are needed ensure that people and buildings are protected from coastal inundation. Putting in place the same controls that apply to floodable areas brings a consistent approach to the management of all areas subject to flooding in the District. It also uses rules that have already been tested.

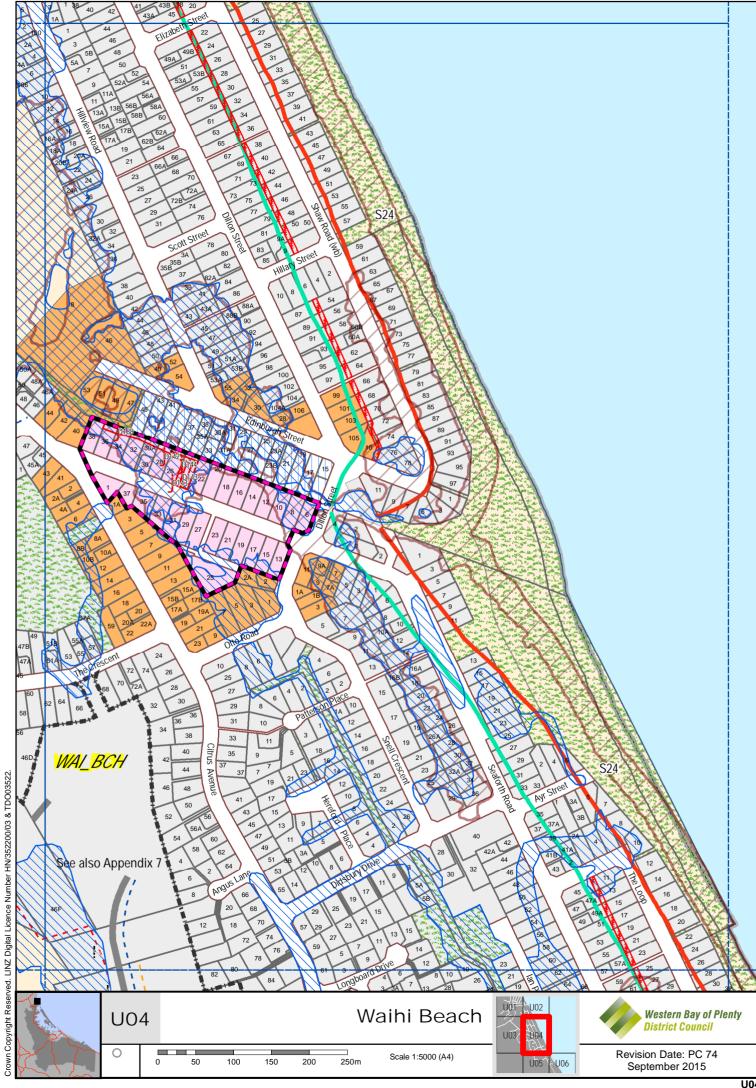
Attachment A

District Plan Maps / Legend

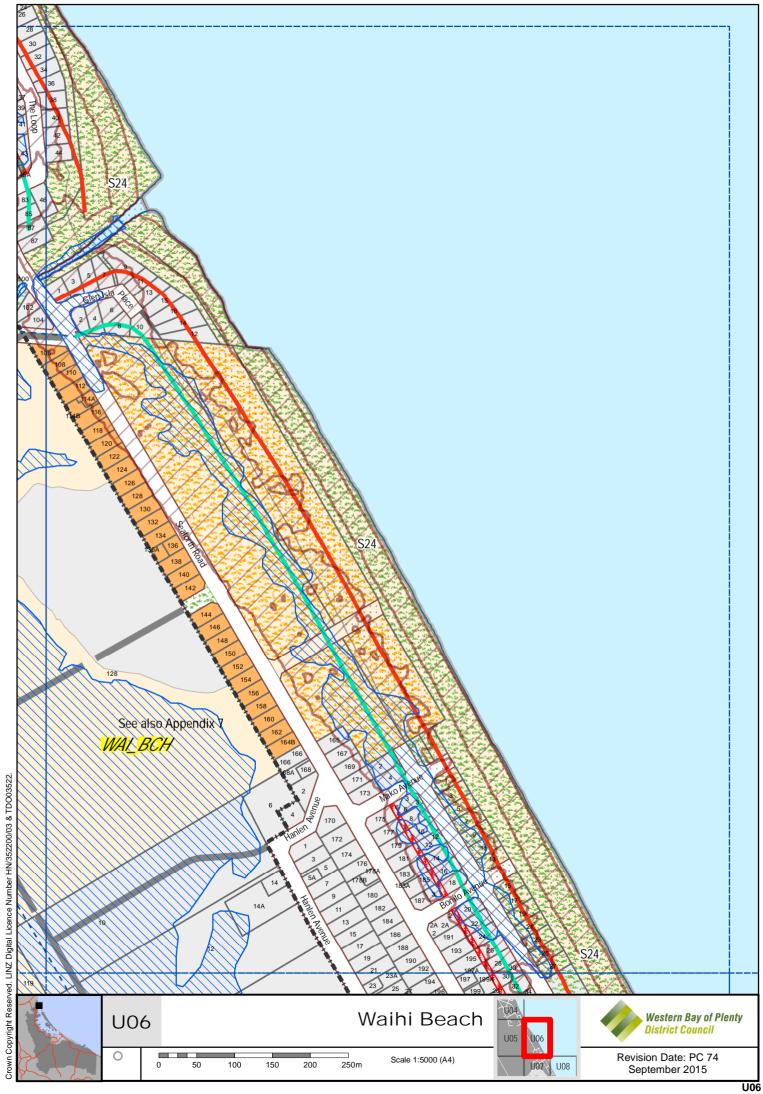


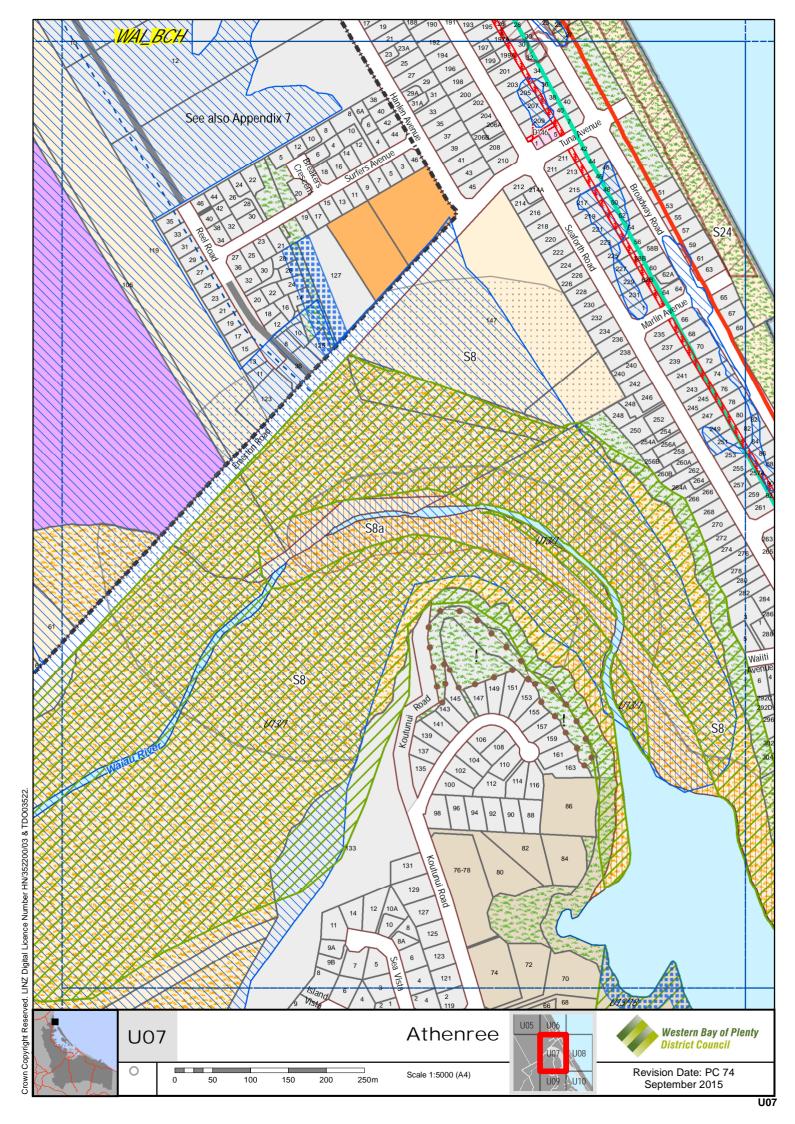


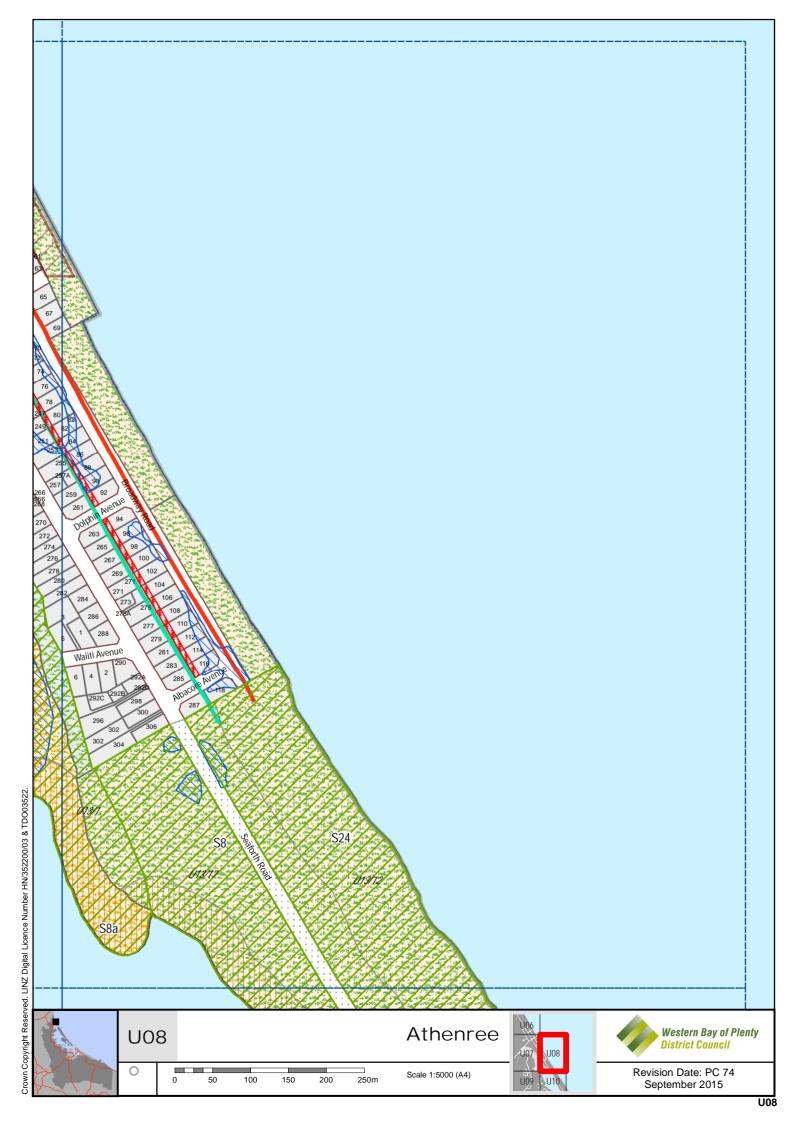


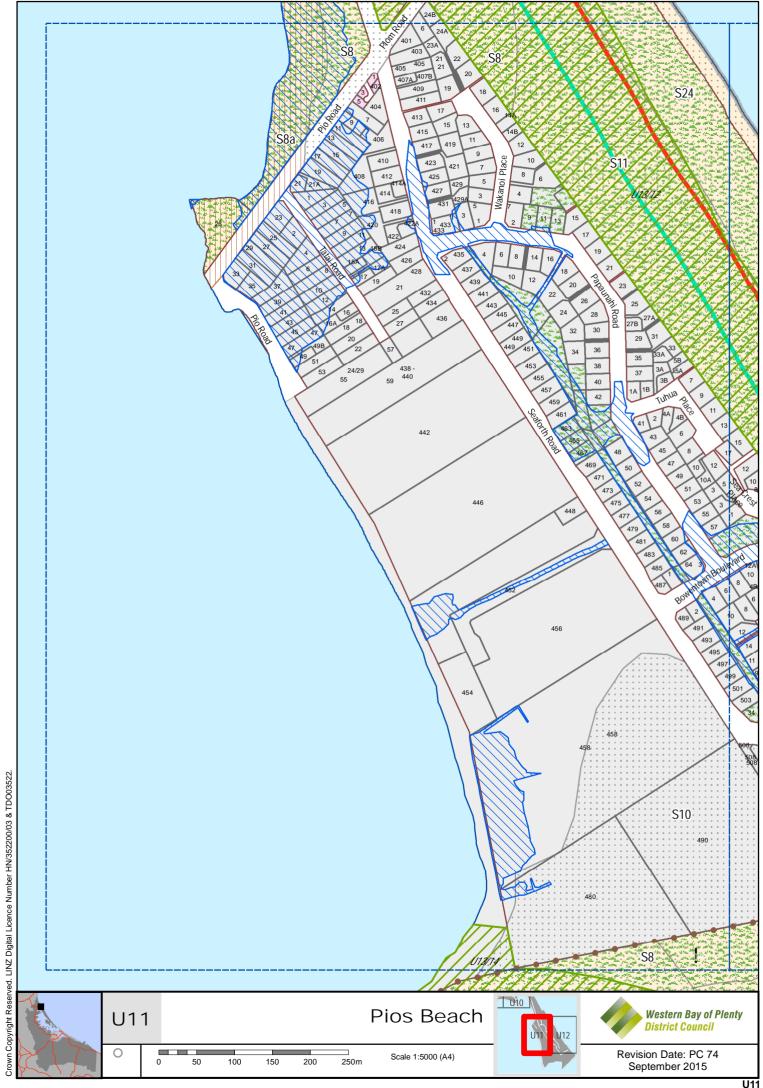


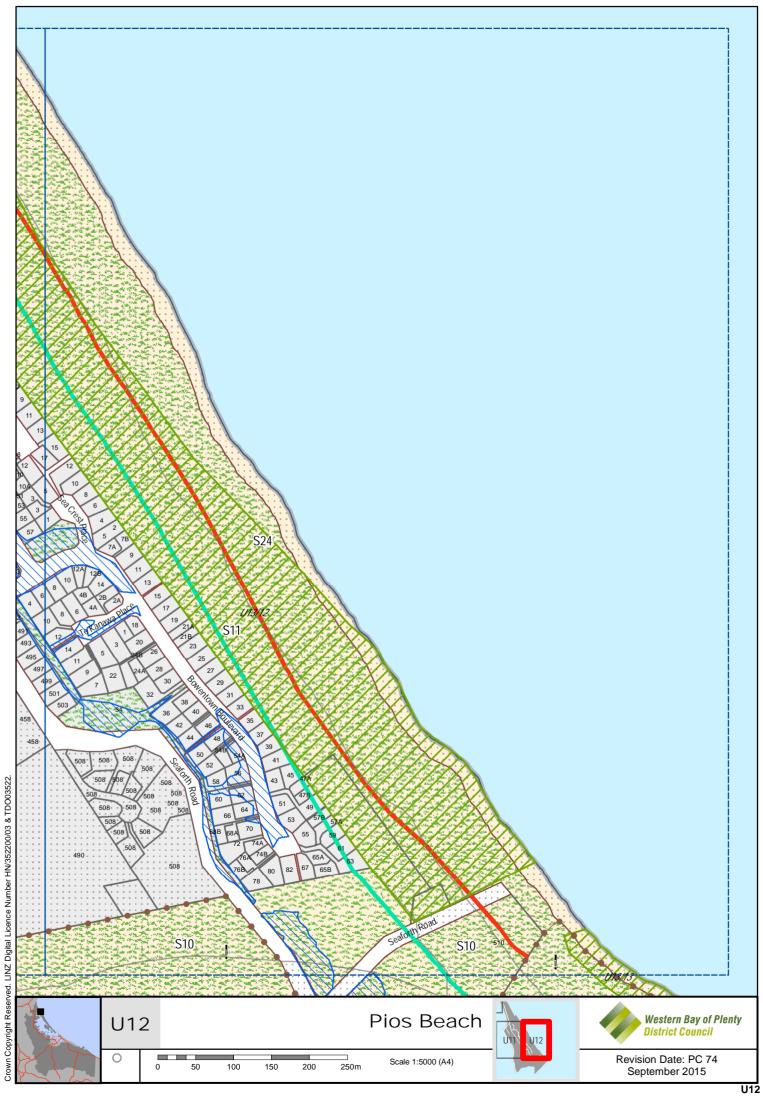


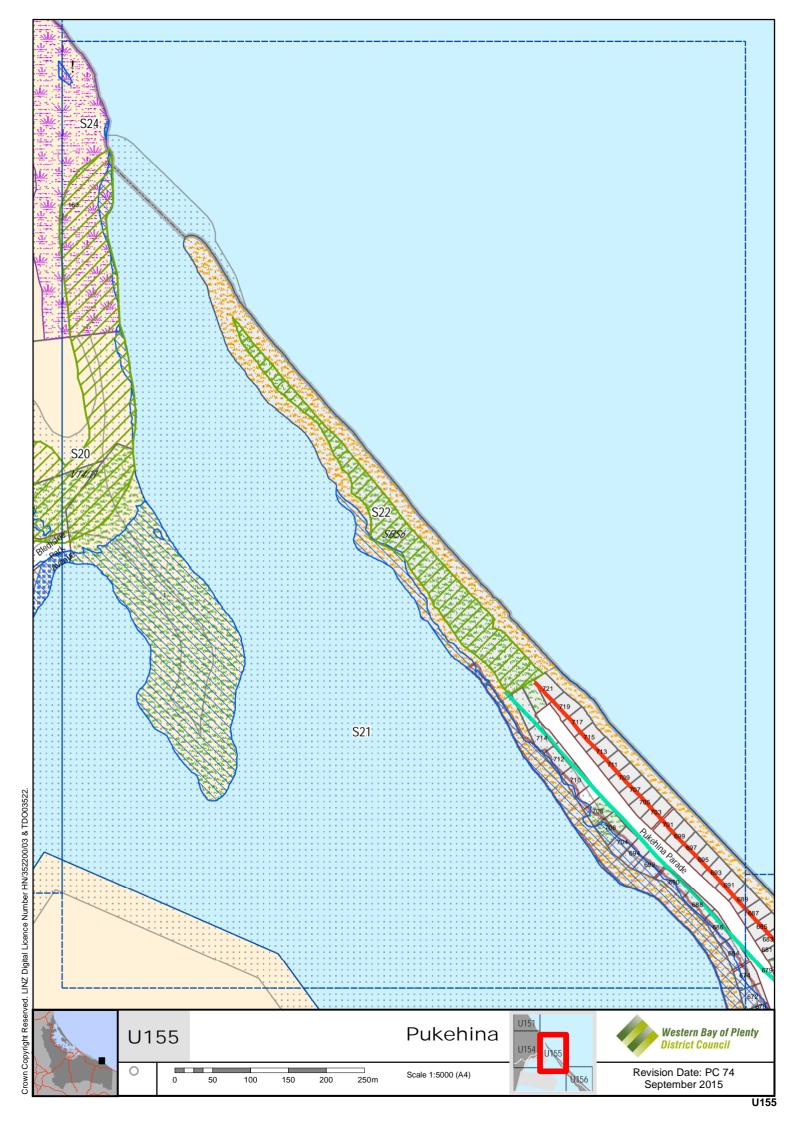


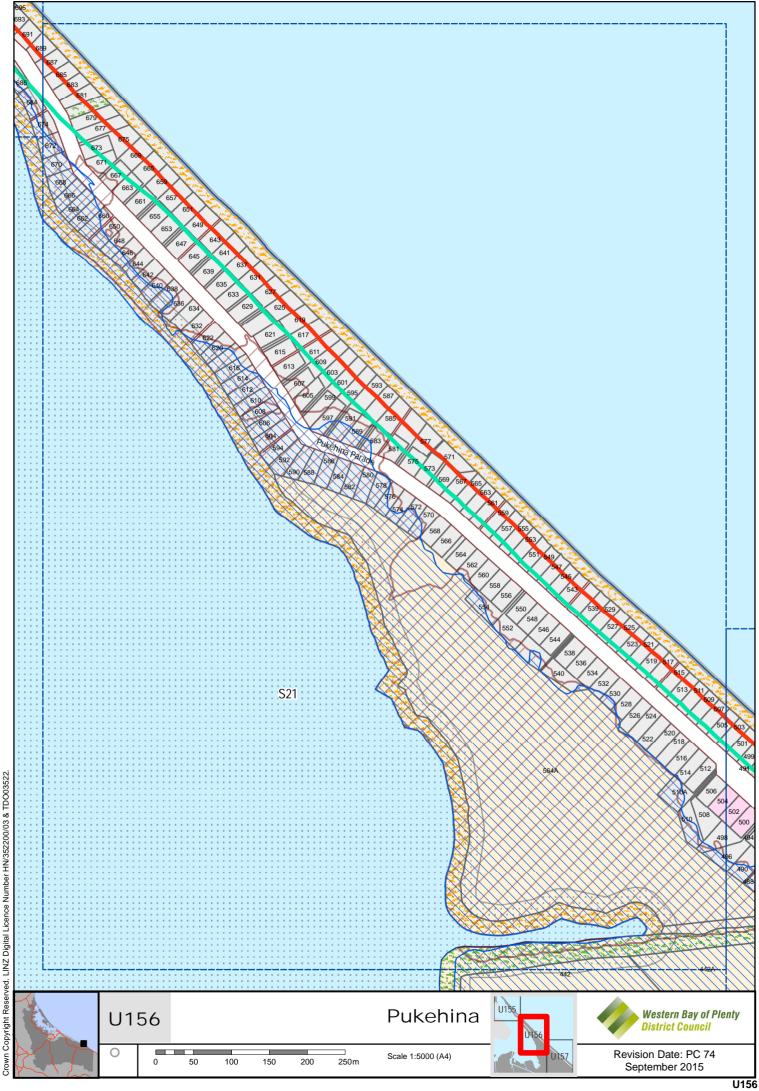


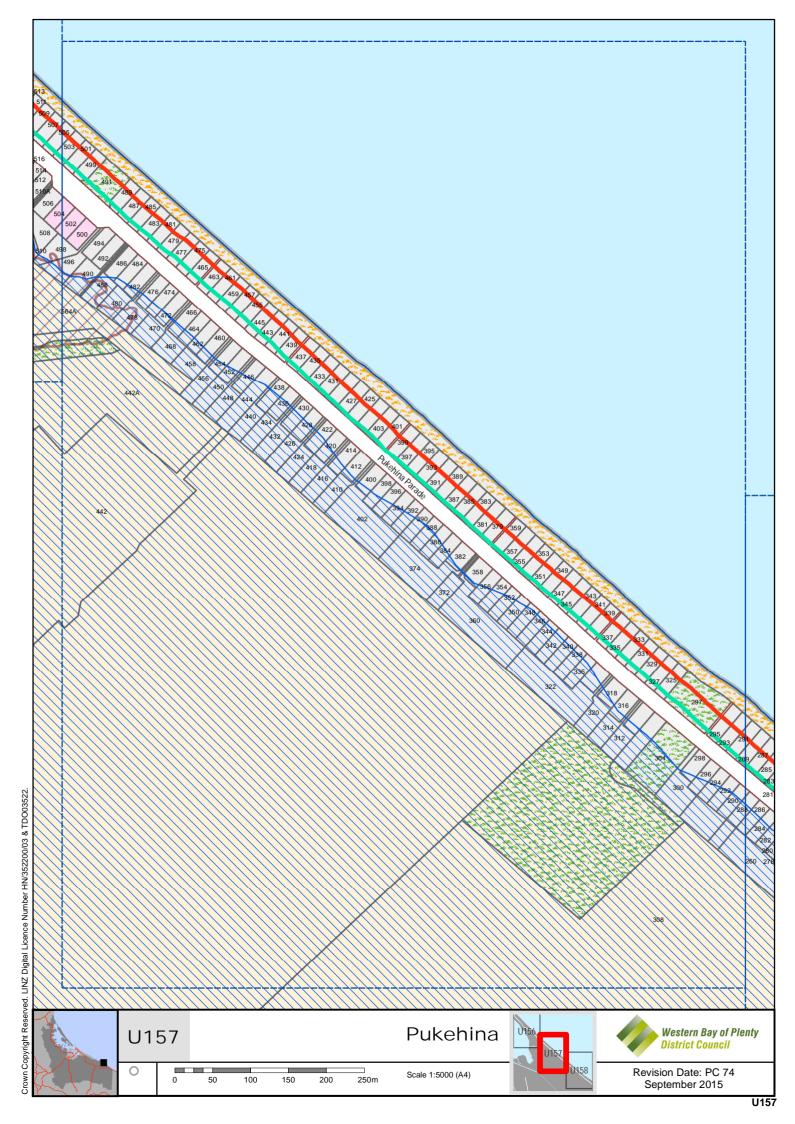


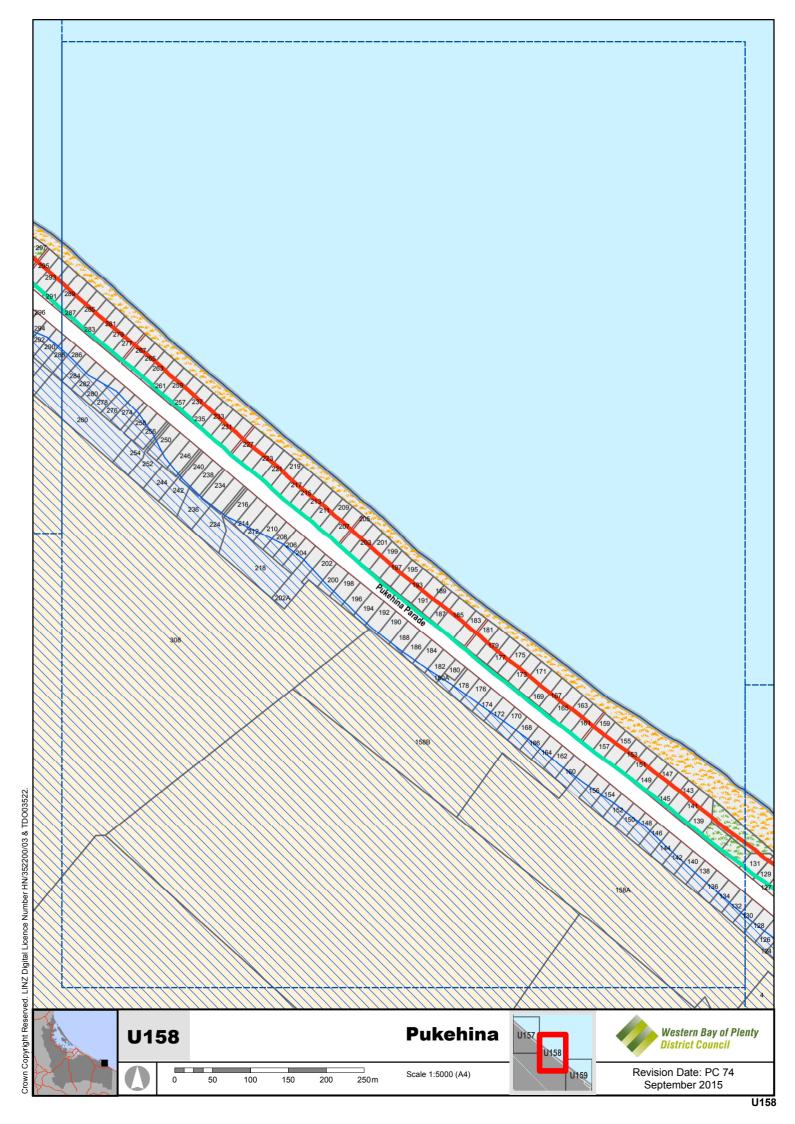


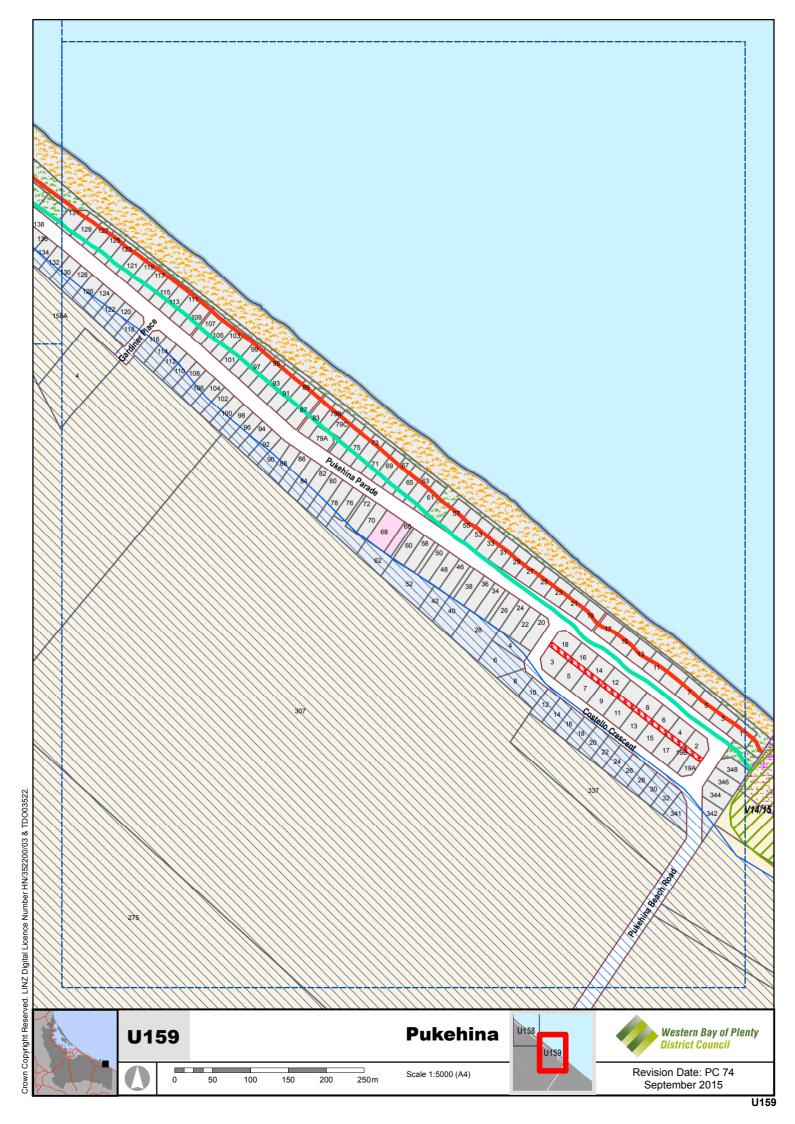


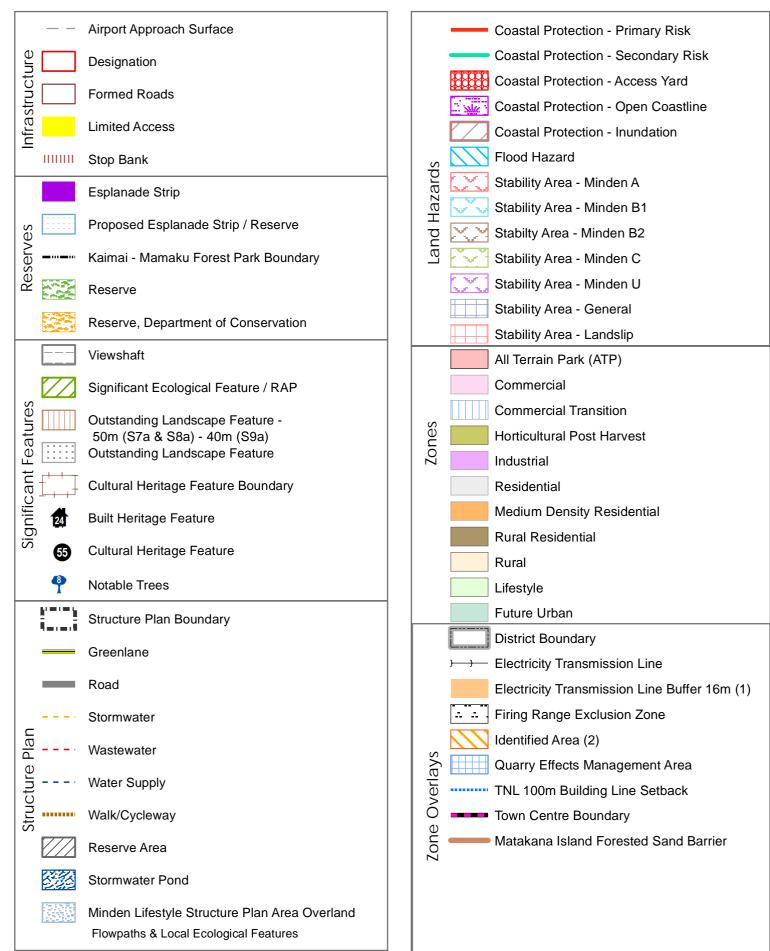












Bay of Plenty Regional Council should be consulted before undertaking any activity in the vicinty of Mean High Water Springs to establish the actual line of Mean High Water Springs Formed roads are indicated as white shading on the road land parcels. Unformed roads have the underlying zone indicated.

(1) Compliance with NZECP 34:2001 is required in this area for buildings/structures and earthworks.

The distance quoted is from the centreline of the transmission line.

(2) The identified areas include; the community service area at Rangiuru, the central hub site within the

All Terrain Park and buffer zones in Stage 2 Omokoroa and Binnie Road.

Attachment B

Section 8 Natural Hazards



Section Contents

Natural Hazards 2				
8.	Natural Hazards	2		
Expl	lanatory Statement	2		
8.1	Significant Issues	3		
8.2	Objectives and Policies	4		
8.3	Activity Lists	5		
8.4	Matters of Control	g		
8.5	Matters of Discretion	10		
8.6	Stability Requirements - The Minden Lifestyle Structure Plan Area	14		
8.7	Other Methods			



Natural Hazards

8. Natural Hazards

Explanatory Statement

The Western Bay of Plenty District is subject to a range of actual or potential natural hazards which will or may adversely affect human life, property or other aspects of the environment. The principal hazards affecting the *District* are coastal erosion and coastal inundation (temporary flooding from storm surge), tsunami, land instability, flooding, earthquake, and volcanic eruption.

While acknowledging the *Council's* statutory responsibilities, this section recognises the constraints imposed by the nature of some potential hazards affecting the Western Bay of Plenty District as well as the limitations of the level of existing information.

Areas considered most at risk from coastal erosion and coastal inundation are those already developed for urban purposes and which adjoin the open coastline (e.g. Waihi Beach (including Bowentown) and Pukehina). These stretches of coastline concerned have been the subject of a detailed study commissioned by Council. The study findings are reflected in that land identified on the District Planning Maps as being within the 'Coastal Protection Area' through the identification of 'Coastal Erosion Areas' and 'Coastal Inundation Areas'. The Coastal Erosion Areas have been divided into primary risk and secondary risk based on 0-50 year and 50-100 year risk timeframes. There is also a 'Coastal Erosion Area — Rural' in place for rural zoned areas adjoining the open coastline e.g. Matakana Island and east of Pukehina.

The Coastal Protection Area has been divided into two parts, the Primary Risk Area and the Secondary Risk Area. The Primary Risk Area includes all private properties within the Coastal Protection Area that are considered to be subject to an immediate threat from coastal hazards. The Secondary Risk Area includes all land in the remainder of the Coastal Protection Area. All private property within the Secondary Risk Area is likely to be affected by coastal hazards at some future time but within the next 100 years.

The main area of known land instability is in the Minden where there exists land with the potential to slip when saturated. These and other potentially unstable areas have been identified on the District Planning Maps.

Heavy rain is a common feature of the Bay of Plenty Region and this may increase with global climate change. Low-lying areas, especially those in proximity to watercourses are at risk from inundation, scour and sedimentation. Within established urban areas land known to be susceptible to flooding exists in parts of Waihi Beach, Katikati, Te Puke and Pukehina. Again, such land has been identified on the Planning Maps.



Land identified on the Planning Maps as being at risk from the foregoing hazards is subject to various controls on *development* either through District Plan rules or other methods outside the District Plan. In many cases because of the quality of existing information such identification is very 'broad brush' and where more detailed study of specific areas eliminates land from the identified potential hazard then otherwise complying *development* will be able to proceed through the resource or building consent processes without additional restriction (e.g. consent or Section 74 Building Act 2004 notices). Nevertheless there are some areas where *Council* has good information on the level of hazard risk and in these areas it is considered appropriate to control the intensification of *development*.

The Western Bay of Plenty adjoins the Taupo Volcanic Zone and is therefore considered to be subject to a high risk from earthquakes as well as at risk from volcanic eruptions originating from outside the *District*. Notwithstanding the limitations of addressing these potential natural hazards through the District Plan, much is achievable in terms of public education and preparedness through other methods such as emergency management plans.

8.1 Significant Issues

- The Western Bay of Plenty District is subject to a range of actual or potential natural hazards which will or may adversely affect human life, property or other aspects of the environment. The principal hazards affecting the *District* are coastal erosion, and coastal inundation, tsunami, land instability, flooding, earthquake, and volcanic eruption.
- 2. Areas actually or potentially under threat from such natural hazards as coastal erosion, coastal inundation, and land instability and flooding can be identified in advance. Specific areas more at risk than others from some hazards such as earthquakes and volcanic eruptions are more difficult to identify in advance and the potential effects of the hazards themselves so widespread and devastating that avoidance or control through the District Plan is not realistically possible.
- 3. Some areas now known to be at risk from actual or potential hazards have already been developed for urban purposes.
- 4. Some natural hazard avoidance, remedial, or mitigation measures have the potential to adversely impact on natural character and on significant ecological values existing within the coastal and other environments.



8.2 Objectives and Policies

8.2.1 Objectives

- 1. Minimisation of the threat of natural hazards to human life, <u>property</u> and the natural and physical environment.
- Protection of the existing natural character of the coastal environment and other natural features having recognised ecological, landscape or other significance to the *District*.

8.2.2 Policies

- Adopt the best practicable options (including the 'do nothing' option) in the management of areas actually or potentially at risk from natural hazards and where possible adopt avoidance rather than mitigation or remedial measures.
- Control or prevent the establishment of activities which have the
 potential to increase the extent to which natural hazards have or
 may have an adverse effect on human life or the natural or built
 environment.
- 3. Enable the *development* or redevelopment of land already subdivided or otherwise developed for urban purposes in areas now known to be at risk from natural hazards only where any likely adverse effects can be avoided or appropriately mitigated.
- Ensure that new subdivision, land use activities or other development is located and designed so as to avoid the need for further hazard protection works.
- 5. Ensure that where hazard protection works are necessary their form, location and design are such as to avoid or mitigate potential adverse environmental effects.
- 6. Enable natural ecosystems in currently undeveloped areas to migrate inland as a result of dynamic coastal processes (including sea level rise as predicted by recognised national or international agencies).
- 7. Encourage the conservation and enhancement of natural features such as sand dunes and *wetlands* which have the capacity to protect existing developed land.
- 8. Prevent the use of concrete and block work foundations, floors and walls in the Primary Risk Area Coastal Erosion Areas.



8.3 Activity Lists

The following rules apply to those activities which are located within Natural Hazard Features identified on the District Planning Maps.

Explanatory Note:

For the purpose of interpretation, the Coastal Protection Erosion Area – Rural Open Coastline means land adjoining the open coastline, zoned Rural and within 100m of *MHWS*, and this description shall take priority over the District Planning Maps with regard to location.

8.3.1 Permitted Activities

- (a) All Identified Natural Hazards
 - (a) (i) Buildings/Structures within an Approved Building Site Natural Hazards,
- (b) Stability Areas Minden
 - (b) (i) Buildings/Structures within Stability Area Minden C.
- (c) Floodable Areas (not including Coastal Inundation Areas)
 - (c) (i) Buildings/Structures where evidence establishes:
 - A building/structure will be located clear of the natural hazard (floodable area) irrespective of the extent of the natural hazard (floodable area) shown by the Planning Maps; or
 - A building/structure will not be affected by the natural hazard (floodable area)
 - (b) (ii) Support poles associated with electricity lines.
 - (b) (iii) Uninhabited farm *buildings* including, but not limited to, pump sheds, implement sheds and storage sheds, provided that an appropriate notice under s73 of the Building Act has been attached to the title.

Explanatory Note

Suitable evidence may include, but is not limited to, aerial photographs, site inspections from *Council* engineers, and engineering assessments from a suitably qualified person.



8.3.2 Controlled Activities

(a)	All Identified Natural	Н	lazard	S

- (i) <u>Updates to cross lease flat plans which incorporate</u> consented building developments
- (ii) Conversion of cross lease titles to freehold titles where each cross lease title has at least one lawfully established dwelling

(a)(b) Stability Areas – Minden

(i) Subdivision where all of the proposed privateways and building sites are within Stability Area - Minden C

8.3.3 Restricted Discretionary Activities

- (a) Coastal Protection Erosion Area Secondary Risk
 - (i) Buildings/Structures not within an Approved Building
 Site Natural Hazards
- (b) Floodable Areas and Coastal Inundation Areas
 - (i) Buildings/Structures not within an Approved Building
 Site Natural Hazards
 - (ii) Earthworks over 5m³
 - (iii) Closed board fences, retaining walls, raised gardens, concrete and block walls
- (c) Stability Areas Minden (A, B1, B2 & U)
 - (i) Buildings/Structures not within an Approved Building
 Site Natural Hazards
 - (ii) Subdivision, except if in accordance with 8.3.2 (a)
 - (iii) Filling, excavation and other *development*
 - (iv) Vegetation removal
 - (v) Disposal of stormwater and wastewater

8.3.4 Discretionary Activities

- (a) Coastal Protection Erosion Areas Primary Risk and Rural Open Coastline
 - (i) Buildings/Structures not within an Approved Building
 Site
 - (ii) Construction of new public roads



(iii) Reticulated Infrastructure Coastal and river protection works including groynes (iv) and sea walls Subdivision within the Coastal Protection Area - Open (∀) Coastline Buildings/Structures within the identified access yard (vi) (b) Coastal Erosion Area – Access Yard (Waihi Beach only) **Buildings/Structures** (b)(c) Floodable Areas and Coastal Inundation Areas (i) Subdivision (c)(d) Stability Areas - Landslip and General (i) Buildings/Structures not within an Approved Building Site - Natural Hazards (ii) Subdivision (iii) Construction of new roads Reticulated Infrastructure (iv)

8.3.5 Non-Complying Activities

- (a) Coastal Protection Area Primary Risk
 - (i) Minor dwellings
 - (ii) Additional dwellings
 - (iii) Education Facilities for no more than four persons
 - (iv) Accommodation Facilities for no more than four persons
- (b) Coastal Protection Area Secondary Risk
 - (i) Subdivision (excluding minor boundary adjustments)
- (a) Coastal Erosion Areas
 - Subdivision of titles which are partially identified within a Coastal Erosion Area, excluding;
 - Minor boundary adjustments
 - Updates to cross lease flat plans which incorporate consented building developments as provided for in Rule 8.3.2 (a) (i)



- Conversion of titles from cross lease to freehold as provided for in Rule 8.3.2 (a) (ii)

Explanatory Note:

For the purpose of this rule, minor boundary adjustments means an adjustment of boundary between two adjoining *lots* and which will not increase the risk or potential risk to existing *buildings* or future *buildings* from coastal erosion or inundation.

8.3.6 Prohibited Activities

- (a) Coastal Protection Erosion Areas
 - (i) <u>Minor dwellings</u>
 - (ii) Additional dwellings
 - (iii) <u>Education facilities for more than four persons</u>
 - (iv) Accommodation facilities for more than four persons
 - (v) Fixed (i.e. non-portable) solid waste management facilities including sanitary landfills and the disposal of *hazardous substances* (public or private) in the Primary and Secondary Risk Areas.
 - (vi) Subdivision of titles which are wholly identified within a Coastal Erosion Area, excluding;
 - Minor boundary adjustments
 - Updates to cross lease flat plans which incorporate consented building developments as provided for in Rule 8.3.2 (a) (i)
 - Conversion of titles from cross lease to freehold as provided for in Rule 8.3.2 (a) (ii)

Explanatory Note:

For the purpose of this rule, minor boundary adjustments means an adjustment of boundary between two adjoining *lots* and which will not increase the risk or potential risk to existing *buildings* or future *buildings* from coastal erosion.

(ii) Subdivision (excluding minor boundary adjustments) within the Primary Risk Area of the Coastal Protection Area. See Rule 8.3.5(b) for definition of minor boundary adjustment.



8.4 Matters of Control

8.4.1 Controlled Activities – Subdivision and Buildings within Stability Area - Minden C

Council reserves control over the following matters

- (a) Protecting each *lot* and surrounding *lots* from instability or erosion by:
 - (i) Managing *earthworks* within the site.
 - (ii) Controlling the location and formation of building sites, roads, accessways, tracks or *privateways* within the subdivision.
 - (iii) Controlling the location and type of wastewater and stormwater treatment and disposal systems.
 - (iv) Detailing requirements for the retention or planting of vegetation including species selection that will help stabilize any cut slope or fill batter.
 - (v) Requiring the collecting and piping of stormwater, or its management by way of soakage or discharge to ground or to natural waterways, including the collection of roof water, as appropriate. The preference is for collection and discharge of stormwater to the base of gulleys at a rate that mimics natural catchment flow rates.
 - (vii) Avoiding erosion or natural hazards or mitigating these hazards when they cannot be avoided;
- (b) Building sites should be set back from existing waterbodies and ephemeral flowpaths to the extent that any risks to buildings from instability and flooding are avoided.
- (c) For subdivision and *development* in the Minden Stability Areas regard shall be had to the stability information requirements in Rule 8.6.

8.4.2 Controlled Activities – Updates to cross lease flat plans and conversion of cross lease titles to freehold titles

Council reserves control over the following matters;

- (a) The relevant provisions of Section 12 Subdivision and Development.
- (a) The subdivision activity performance standards and matters of control which apply to controlled activity subdivisions within the applicable zone.



8.5 Matters of Discretion

8.5.1 Restricted Discretionary Activities

8.5.1.1 Coastal Protection Erosion Area – Secondary Risk

- (a) Extent to which the building/structure is relocatable, taking into account the design, location of the <u>building/structure</u> and access to remove the <u>building/structure</u>.
- (b) Types of building materials used, Avoidance of the use of concrete and block wall foundations, walls and flooring, except that for sheds and garages (used for non-habitable purposes) all of these are allowed other than concrete and block walls.
- (c) *Buildings/structures* should be located as far away from the hazard as possible.
- (d) Any new information or assessment undertaken by a suitably qualified person/s which confirms that the land is not in fact subject to the natural hazard concerned.
- (e) The potential environmental effects of or likely to result from the proposal.

8.5.1.2 Floodable Areas and Coastal Inundation Areas

- (a) The effect of the <u>proposal (including the design of any building/structure)</u> <u>proposed buildings/structures</u> on the capacity of ponding areas and <u>function of</u> overland flow paths.
- (b) The design of the building/structure.
- (b) The appropriate minimum finished floor level of the proposed building/structure.

Notes:

This is the combination of the flood level plus an additional freeboard height as stipulated in *Council's* Development Code.

Council can provide specific flood levels for all Coastal Inundation Areas and for some but not all of the Floodable Areas. Where specific flood levels are unknown, applicants may be required to engage a suitably qualified engineer to undertake a flood level assessment for the property.

For Waihi Beach <u>Floodable Areas</u> (Planning Maps A03 and U01-U04) this shall be based on the 2% AEP (inclusive of climate change).



and an additional freeboard height, as stipulated in *Council's* Development Code.

(d) Verifiable new information which demonstrates that the subject site is not in fact under threat from flooding the identified hazard.

8.5.1.3 Stability Areas – Minden A, B1, B2 & U

Council shall have regard to the following matters in addition to 8.4.1:

- (a) Subdivision shall be accompanied by a geotechnical report prepared by a suitably qualified person showing a building site capable of being approved and confirming as a minimum that:
 - (i) Earthworks required in forming each building site and access roads and/or privateways in the subdivision shall avoid or mitigate adverse effects on the stability of the land within the site and will have no adverse effects on the stability of adjacent land
 - (ii) Each building site will be required to be set back an appropriate distance, as recommended by a geotechnical engineer, from any terraces or steep slopes to the extent that there are no adverse effects on the stability of the land or any adjacent land.
 - (iii) Stormwater and wastewater systems can be constructed and operated within each lot with no adverse effects on the stability of the adjacent land.
 - (iv) For subdivision and *development* in the Minden Stability Areas regard shall be had to information requirements in Rule 8.6

8.5.2 Discretionary/Non Complying Activities

The matters in 8.4.1 and 8.5.1 and the following matters shall be used as a guide for assessing Discretionary Activities and Non-Complying Activities:

(a) Stability Areas

- (i) The design, location and materials of the building/structure
- (ii) The extent to which the proposal addresses any identified natural hazard.



- (iii) Any verifiable information which confirms that the property is in fact not under any threat from the hazard.
- (iv) For subdivision and *development* in the Minden Stability Areas regard shall be had to information requirements in Rule 8.6.

(b) Coastal Protection Erosion Areas — Primary Risk and Rural

- (i) Extent to which the building/structure is relocatable, taking into account Tthe design, location and materials of the building/structure and access to remove the building/structure.
- (ii) Avoidance of the use of concrete and block wall foundations, walls and flooring, except that for sheds and garages (used for non-habitable purposes) all of these are allowed other than concrete and block walls.
- (iii) The degree to which the ability of *buildings* or *structures* to be relocated is affected.
- (iv) The extent to which the proposal addresses any identified natural hazard and the degree to which the physical risk to buildings structures from coastal erosion can be avoided or mitigated.
- (ii)(v) Additions and alterations to existing *buildings* should be landward of the existing *building*.
- (iii)(vi) New buildings or significant redevelopment of existing buildings should be situated as far back from the toe of the foredunes as practicable. The most recent measurements of the toe of the foredune are available from Council.
- (vii) Imposition of consent conditions requiring that where the toe of the foredune comes within a distance of a building/structure which may put it at immediate risk (minimum of 8m), the building/structure is to be relocated a sufficient distance back from the toe of the foredune to mitigate that risk. The distances specified in the conditions will depend on the latest scientific information available to Council.
- (iv) The extent to which the proposal addresses any identified natural hazard.



- (viii) The impact that the proposal will have on the natural character of the coastal environment, recognising the ecological values of the dune area, and dune restoration.
- (ix) Registration of an encumbrance instrument on the title to address any of the matters above.
- (vi)

 Any verifiable information which confirms that the property is in fact not under any threat from the hazard.
- (vii)(x) Scientific information from a suitably qualified coastal expert which demonstrates that the land within the Secondary Risk Area of the Coastal Protection Erosion Area is not under any actual or potential risk from coastal erosion hazard. For the purpose of meeting this rule any assessment of coastal hazards shall include those standards outlined in the Bay of Plenty Regional Coastal Environment Plan.
- (viii) The degree to which the ability of buildings or structures to be relocated is affected.
- (ix) The degree to which the physical risk to buildings or structures from coastal erosion can be avoided and coastal inundation can be avoided or mitigated.

(c) Coastal Erosion Areas

For subdivision of titles which are partially identified within a Coastal Erosion Area:

- (i) There shall be no increase in the number of titles located (wholly or partially) within the Coastal Erosion Area.
- (ii) All approved buildings sites are to be located outside of the Coastal Erosion Area.
- (iii) The extent to which new title boundaries and new building sites affect the ability of any new or existing buildings/structures within the Coastal Erosion Area to be relocated.



8.6 Stability Requirements - The Minden Lifestyle Structure Plan Area

The Minden Lifestyle Structure Plan area is divided into five stability risk areas i.e. A, B1, B2, C and U Stability Areas (see Planning Maps). The following provisions set out a description of each stability area followed by the stability requirements applying to *development* in that area.

(a) Stability Area A

Description

'An area in which processes or factors have been identified which indicate that past or active erosion or mass movement is evident or is likely to occur and which presents or may present an identifiable hazard to *structures* within the delineated area'.

Area A may be summarised as land subject to or likely to be subject to instability.

Stability Assessment

Building, subdivision or other *development* including excavation, filling, removal of vegetation (excluding noxious plants), disposal of stormwater or domestic wastewater into or over the area delineated will not be permitted unless the following documentation is produced to the satisfaction of the *Council*.

Geomorphological and geological evidence and a 'stability analysis' demonstrating that the proposed *development* area will not be subject to instability or be inundated by debris from upslope, and how the proposed *development* will ensure that any *structure* will not become damaged by land slippage arising on or off the site.

A stability analysis shall include:

- (i) Topographical Survey (if not already available);
- (ii) Definition of the nature and continuity of the strata over the whole area of land involved and to a depth below which slipping is most unlikely, by means of test pits and/or continuous recovery core drilling;
- (iii) Definition of the density, effective stress shear strength parameters, residual shear strength parameters and the sensitivity of the soil in each stratum in which sliding is possible;
- (iv) Definition of ground water levels and piezometric pressures in the strata during extreme infiltration conditions;

12 July 2014 Section 8 - Natural Hazards



- Analysis of possible mechanisms of failure, relevant to the specific geomorphology of the site using effective stresses;
- (vi) A professional opinion as to the stability of the ground.

Even with a thorough stability analysis, complete avoidance of all risk cannot be obtained and no guarantee of safety expected.

(b) Stability Area B1

Description

'Area B1 is land where mass movement is evident or where the slope gradient is such that instability or erosion could occur, particularly if developed'.

Area B1 may be summarised as land potentially subject to instability.

Stability Assessment

Building, subdivision or other *development* including excavation, filling, removal of vegetation (excluding noxious plants), disposal of stormwater or domestic wastewater into or over the area delineated will not be permitted unless the following documentation is produced to the satisfaction of the *Council*.

Geomorphological and geological evidence and a 'stability analysis' as outlined in 8.6(a) demonstrating that the proposed *development* area will not be subject to instability or be inundated by debris from upslope, and how the proposed *development* will ensure that any *structure* will not become damaged by land slippage on or off the site.

Restrictions on and requirements for subdivision, *building* or other *development* are the same as for Area A but it shall be sufficient to demonstrate that the risks of instability and damage are at an acceptable level.

(c) Stability Area B2

Description

'Area B2 is land where the slope gradient is such that instability is not considered likely to occur, and no mass movement is evident, but is similar to land where instability and erosion has occurred elsewhere in the Western Bay of Plenty in similar materials due to cutting and/or filling and/or on site disposal of stormwater'.

The risk of instability or erosion is greater in areas delineated B1 than B2.



Area B2 may be summarised as land potentially subject to instability but less so if there is no onsite disposal of sewage or stormwater concentration, no significant vegetation removal, no significant cutting or filling.

Stability Assessment

Buildings, subdivision or other *development* such as excavation, filling, removal of vegetation (excluding noxious plants), disposal of stormwater or domestic wastewater into or over the area delineated will be allowed to proceed only if supported by the following documentation to the satisfaction of the *Council*.

A 'stability assessment' demonstrating that the proposed *development* will not result in the risks of instability or damage being at an unacceptable level.

A stability assessment shall include:

- (i) Topographical Survey (if not already available);
- (ii) (Definition of the nature and continuity of the strata over the whole area of land involved and to a depth below which slipping is most unlikely, by means of test pits and/or drilling, and/or auguring;
- (iii) Assessment of the density, relative strength and the sensitivity of the soil in each stratum in which sliding is possible;
- (iv) Assessment of ground water levels and piezometric pressures in the strata during extreme infiltration conditions;
- (v) A professional opinion as to the stability and instability of the ground.

A stability assessment is likely to be sufficient where there will be no significant interference with existing vegetation, no cutting or filling in excess of 0.5m in depth and no in ground disposal of stormwater runoff.

(d) Stability Area C

Description

'Area C is land not considered to be at risk from instability. A stability analysis or stability assessment would not generally be required'.



Council reserves control however over a number of matters relating to subdivision and *development* to ensure the protection of each *lot* and surrounding *lots* from any potential instability or erosion.

(e) Stability Area U

Description

'Area U is land that has not undergone geotechnical analysis and therefore the risk of instability is uncertain'.

Because of this unknown risk, all subdivision and *development* occurring within Area U requires Restricted Discretionary resource consent and applications must be accompanied by a specific stability analysis to determine the level of risk and appropriate mitigation measures.

8.7 Other Methods

8.7.1 **Building Act 2004**

Where as a result of stability investigations the land in question is found to be subject to or likely to be subject to slippage, but the building work itself will not accelerate or worsen the situation or affect other land, then *Council* may grant a building consent subject to the title being notated that the land is subject to or is likely to be subject to slippage pursuant to Section 72 of the Building Act 2004.

This will be used to exercise control over *buildings* within identified hazard prone areas. Such controls may include restrictions relating to building design and damage liability. Information on known site specific potential natural hazards will be recorded on *Council's* Geographic Information System and provided with all Project and Land Information Memoranda.

8.7.2 Coastal Protection Works

The *construction*, repair and *maintenance* of coastal protection structures such as sea walls and the implementation of 'dune care' programmes will be achieved pursuant to *Council's* powers under other legislation including the Reserves Act 1977 and the Local Government Act 1974.

Resource consents from the *Regional Council* are required for any coastal protection works within the coastal marine area (i.e. below *MHWS*).

8.7.3 Earthworks and Vegetation Removal

Consents to these activities are likely to be also required from the *Regional Council*.



8.7.4 Civil Defence

Civil Defence plays an important education role. This, along with the emergency management plans is aimed at mitigating potential hazards as well as preparedness for emergencies.