

To: Minister for Canterbury Earthquake Recovery



SENSITIVE

**Initial red zoning of white residential land in the Port Hills**

Date	10 November 2011	Priority	Medium
Report No	M/11/0149	File Reference	M/11/0149

**Action Sought**

		Deadline
Hon Gerry Brownlee <i>Minister for Canterbury Earthquake Recovery</i>	Agree to request advice from EQC about payments likely to be made to owners of residential properties in the Port Hills white (unzoned) area that may be suitable for red zoning.	At your discretion

**Contact for Telephone Discussion (if required)**

Name	Position	Telephone	1st Contact
Diane Turner	General Manager, Strategy Planning and Policy	Withheld under section 9(2)(a)	<input checked="" type="checkbox"/> (a)
Henry Dowler	Senior Advisor, Strategy Planning and Policy		

**Minister's office comments**

<input type="checkbox"/> Noted <input type="checkbox"/> Seen <input type="checkbox"/> Approved <input type="checkbox"/> Needs change <input type="checkbox"/> Withdrawn <input type="checkbox"/> Not seen by Minister <input type="checkbox"/> Overtaken by events <input type="checkbox"/> Referred to	Comments
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## Initial red zoning of white residential land in the Port Hills

### Purpose

- 1 This report provides information on approximately 80 residential properties in the Port Hills white (unzoned) area that may be suitable for red zoning and seeks your agreement to your office requesting advice from EQC about payments likely to be made to the owners of these properties.
- 2 Further work would be required to investigate whether these properties are suitable for red zoning.

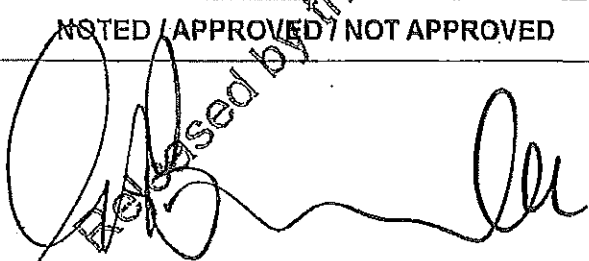
### Consultation

- 3 No other government departments or agencies have been consulted or informed in the course of developing this report. The Treasury and Department of Prime Minister and Cabinet would be consulted in the event that subsequent actions or information obtained lead to firm recommendations about red zoning of residential properties in the Port Hills white (unzoned) area.

### Recommendations

- 4 It is recommended that you:
  - 1 Agree to your office requesting advice from EQC about payments likely to be made to owners of a list of approximately 80 residential properties in the Port Hills white (unzoned) area that may be suitable for red zoning YES / NO

  
 Diane Turner  
 General Manager, Strategy Planning  
 and Policy

NOTED / APPROVED / NOT APPROVED

Hon Gerry Brownlee Minister for Canterbury Earthquake Recovery
Date: 12/11/2011

## Background

- 5 On 28 October 2011 you were briefed on geotechnical hazards in the Port Hills white (unzoned) area and related work being led by the Christchurch City Council (CCC) (briefing M/11/0133 refers).
- 6 On 9 November 2011, during a further, verbal update on progress with the Port Hills work being led by CCC, you requested a list of residential properties in the unzoned Port Hills area that may be suitable for immediate red zoning with a view to your office requesting advice from EQC about payments likely to be made to the owners of properties on the list (ie, for consideration along with other matters prior to finalising any red zoning decision).

## Comment

- 7 CERA inquiries have confirmed that within two weeks after the 13 June 2011 earthquakes:
  - the Port Hills Geotechnical Group (PHGG) had completed initial 'rapid assessments' to identify houses/house sites that PHGG considered to be "*certain candidates for retreat due to geotechnical risk factors such as cliff collapse, rock inundation or boulder roll*"
  - PHGG provided CCC with a list of approximately 80 Port Hills properties that PHGG's initial rapid assessment identified as "*unsuitable (unsafe) for residential use in future...*". The list and accompanying explanatory commentary prepared by PHGG is attached as Appendix A.
- 8 In submitting the list to CCC, PHGG indicated that further evaluation would be required before final recommendations for specific properties could be finalised. PHGG were also clear that further properties would probably be added to the list after more detailed site assessments and further, more detailed consideration of boulder roll risks. Conservatively, it appears that the number of properties on the final list could increase to around 100 or more properties.
- 9 The PHGG initial assessments indicate that the properties on the list are in a situation where protective works would not be practicable or cost-effective. The situation for these Port Hills properties could therefore be seen as similar to that of flat land areas where there was area-wide land damage and other factors (eg, not cost-effective or timely to remediate) meant that red zoning of the flat land was appropriate to provide owners with certainty.
- 10 The list in Appendix A could be used as the basis for discussions with EQC about payments likely to be made to the owners of the listed properties. Each property would, however, need a more detailed assessment before any final zoning recommendations can be made. CERA has initiated discussions with CCC/PHGG with a view to confirming arrangements that will ensure that detailed assessments are completed as quickly as possible (ie, ideally, concurrently with discussions between your office and EQC).
- 11 Information obtained by your office from EQC about payments likely to be made to owners of the listed residential properties, along with the outcome of more detailed geotechnical assessments would enable CERA to develop advice for Ministers about the zoning of the affected properties and likely financial implications.
- 12 Information collated by CERA in September 2011 on the listed properties indicates that residential improved properties (approximately 70) would have a combined capital value of almost \$63 million. The list also includes approximately 10 vacant residential sites with a combined capital value of almost \$4.5 million (noting that current red zone policy does not result in Crown purchase offers for vacant land).

### Financial implications

- 13 There are no financial implications arising from the recommendations in this paper. The purpose of requesting advice from EQC is to inform, in part, consideration of such implications if a future decision is taken to zone red some or all of the properties listed in Appendix A. Any subsequent paper is expected to have financial implications.

### Publicity

- 14 There are no publicity implications at this time.

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**APPENDIX A: List of properties initially identified by Port Hills Geotechnical Group (PHGG) as "certain candidates for retreat due to geotechnical risk factors such as cliff collapse, rock inundation or boulder roll".**

Address	PHGG comments
	Dangerously close to cliff edge since collapse on 13 June. Access now very difficult, cracks extend under house.
	Dangerously close to cliff edge since collapse on 13 June. Access partly lost. Cracks very close to house.
	Close to cliff edge since collapse on 13 June. House not yet directly affected but cannot guarantee that would not be affected by further retreat of cliff edge.
	House is dangerously close to cliff edge (less than 10m) since collapse on 13 June.
	Dangerously close to cliff edge since collapse on 13 June. Crack in back yard goes up to corner of house.
	Dangerously close to cliff edge since collapse on 13 June. Crack in back lawn runs just behind the house.
	All hit by multiple rocks during 22 Feb earthquake and have new rockfall following 13 June events. All are adjacent to the base of a low cliff. Could possibly be protected but at high cost.
	Empty section, previously abandoned due to debris flow problem. Currently acts to funnel rocks down to the road and park area across the road.
	These properties are dangerously close to cliff edge since recent collapses — amount of retreat witnessed from cliff edge means safety of house cannot be guaranteed.
	These properties are dangerously close to the cliff edge since the recent cliff face collapses and are considered to be at imminent risk if further events occur.
	All of these properties are dangerously close to the cliff edge following the recent cliff face collapses and their safety cannot be guaranteed after the amount of slope retreat witnessed in these latest events.

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Withheld under section 9(2)(a)

<p>All of these sections and properties are at high risk of further rockfall inundation from above.</p>	
<p>Empty section between <del>withheld</del> under section 9(2)(a) is at high risk of rockfall inundation from the steep slopes above.</p> <p>All of these sections and properties are at high risk of further rockfall inundation from above.</p>	
<p>All of these sections and properties are at high risk of further rockfall inundation from above.</p>	
<p>These properties are at a high risk of rockfall inundation from the steep slopes to the rear that cannot feasibly be remediated.</p>	
<p>Empty section to the rear of</p>	<p>is considered too dangerous.</p>
<p>This property is at high risk of rockfall inundation from the steep slopes to the rear of the section.</p>	
<p>This empty section is considered at high risk from rockfall inundation from the steep slopes above.</p>	

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Withheld under section 9(2)(a)

<p>All of these properties are dangerously close to the cliff edge following the recent cliff face collapses and their safety cannot be guaranteed after the amount of slope retreat witnessed in these latest events.</p>	
<p>Withheld under section 9(2)(a)</p>	<p>Dangerously close under cliff edge with boulders up to 2.5m diameter hitting house in every significant event. Very hard to assess how much more could fall but extensive potential source. Creating adequate storage buffer impossible in the space available and the slope setting.</p> <p>Dangerously close under cliff edge with boulders hitting house in every significant event. Very hard to assess how much more could fall but extensive potential source. Creating adequate storage buffer impossible in the space available and the slope setting.</p> <p>Complex of five separate houses owned by [redacted] now with three hit by talus, boulder roll and fly rock. Proximity to the base of the 50m high cliffs is such that inundation of any future protection will always be a significant possibility for three. Two houses far enough away to be safe.</p> <p>House built right to cliff edge on promontory with cracking of slab and dilation in underlying rock mass. No buffer against future events.</p> <p>Close to cliff edge since collapse on 13 June. Current house affected by bedrock dilation from two directions despite reasonable 10 — 20m buffer to cliff edge.</p> <p>Current house is dangerously close to cliff on a narrow promontory since Feb 22 and building damaged by bedrock movement in 13 June.</p> <p>House damaged by cliff top cracking to front of house and movement of fill under house. Now on relative promontory on cliff face with obvious toppling potential in the dilated columnar basalt immediately underlying.</p> <p>House damaged by cliff top cracking to front of house and movement of fill under house. Now on relative promontory on cliff face with obvious toppling potential in the dilated columnar basalt immediately underlying.</p> <p>House damaged by cliff top cracking to front of house and movement of fill under house. Now on relative promontory on cliff face with obvious toppling potential in the dilated columnar basalt immediately underlying.</p>

Released by the Minister of Canterbury Earthquake Recovery

Withheld under section 9(2)(a)

House damaged by cliff top cracking to front of house and movement of fill under house. Now on relative promontory on cliff face with obvious toppling potential in the dilated columnar basalt immediately underlying.
Land and house at base of 50m high cliff threatened by cliff collapse with insufficient room to provide an adequate storage buffer if new works ever built to protect house.
Land and house at base of 50m high cliff threatened by cliff collapse with insufficient room to provide an adequate storage buffer if new works ever built to protect house.
Land and house at base of 50m high cliff threatened by cliff collapse with insufficient room to provide an adequate storage buffer if new works ever built to protect house.
Land and house at base of 50m high cliff threatened by cliff collapse with insufficient room to provide an adequate storage buffer if new works ever built to protect house.
Land and house affected by slow landslide movement in both aftershocks and other times (water main reconnection, rain?).
Land and house affected by slow landslide movement in both aftershocks and other times (water main reconnection, rain?).
Land and house affected by slow landslide movement in both aftershocks and other times (water main reconnection, rain?).
Land and house affected by slow landslide movement in both aftershocks and other times (water main reconnection).
House has been impacted by 3 large boulders and is sited at the base of a gully that channels boulders directly towards it. Source area can be treated but site will remain a high risk.
These three houses at _____ are exposed to a very high risk of damage from rocks rolling or bouncing from slope above them and in our opinion cannot be adequately protected.

Minister of Canterbury Earthquake Recovery