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Christchurch City Council

Land Use Zonings for the Former Ferrymead Special Purpose (Ferrymead) Zone Section 32 Report

April 2015

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Heritage Park, the Special Provision (Ferrymead) rules apply. The Flood Management Area notation applies across the whole zone.

Areas A, B and C were intended as interim zoning provisions. It was envisioned suitable zone changes would occur over time. Rezoning of former Ferrymead SPZ land has occurred for a site to the west of Tunnel Road and rezoning for the remaining area has been investigated over a number of years.

1.3 Scope of Assessment

This report relates to all land within the former Ferrymead SPZ area, with the exception of the Ferrymead Heritage Park site which is addressed in a separate Section 32 report relating to the Scheduled Activities Chapter of the District Plan Review.

The land includes public reserve land and a number of privately owned properties used for recreational, rural and rural-residential uses. The private land holdings that this report relates to are listed in Table 1 below.

Table 1 Private property within Ferrymead SPZ

Address	Legal Description	Size	Owner
285 Bridle Path Road	Lot 1 DP 21369	1.11346 ha	P Wright
225 Bridle Path Road	Pt Lot 2 DP 860	2025m ²	MB & NA Rippin & AD Marsh
221 Bridle Path Road	Lot 2 DP 17397	1325m ²	CF & SF Freeman
201 Bridle Path Road	Lot 1 DP 17397	2.0272 ha	WM & SM Piercey
171 Bridle Path Road	Lot 2 DP 56837	6904m ²	TII & PM Smith
151 Bridle Path Road	Pt Lot 1 DP 5707	4.7447 ha	Heathcote Recreational Holding
131 Bridle Path Road	Pt RS 248A (TP 62631)	10.8963 ha	Heathcote Recreational Holding
129 Bridle Path Road	Lot 1 DP 5115	2023m ²	MC Peterson
61 Truscotts Road	Pt RS 19 (TP 66542)	5.1800 ha	DC & GJF Munnings
125 Scruttons Road	Pt Lot 2 DP 56681	7.6882 ha	VA Foxtton

The public land covered by this report is those sites listed in Table 2 below.

Table 2: Public land within the Ferrymead SPZ but not including the Ferrymead Heritage Park Scheduled Activity Site

Address	Legal Description	Size	Owner
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280 Tunnel Road	Lot 1 DP 73875	0.6474 ha	Christchurch City Council
250 Tunnel Road	Lot 1 DP 76441	2.002 ha	Christchurch City Council
n/a	Lot 1 DP 47292	0.553 ha	Christchurch Drainage Board
150 Tunnel Road	Lot 2 DP 76441	23.482 ha	Christchurch City Council
121 Scruttons Road	Sec 1 SO20271	10.45 ha	Christchurch City Council
89 Scruttons Road	Lot 2 DP 80124	1.1047 ha	Banks Peninsula DC
n/a	Pt RS 77 (BM 312)	0.306 ha	Lyttleton Borough Council
140 Ferrymead Park Drive	Lot 1 DP 42625	9.9582 ha	Heathcote County Council
68 Ferrymead Park Drive	Lot 6 DP 365075	6.4021 ha	Christchurch City Council
141 Ferrymead Park Drive	Lot 31 DP 814	1.4442 ha	Heathcote County Council
200 Tunnel Road	RS 32900 (S04535)	1.5681 ha	Forest and Bird
70 Ferrymead Park Drive	Lot 1 DP 28401	0.6191 ha	Her Majesty the Queen
70 Ferrymead Park Drive	RS 38893 (S09125)	0.0607 ha	Christchurch Drainage Board
81 Ferrymead Park Drive	Sec 1 SO 303513	16.923 ha	Christchurch City Council
269 Bridle Path Road	Lot 1 DP 29440	2.015 ha	Christchurch City Council
81 Ferrymead Park Drive	Pt Lot DP 846	1.9637 ha	Christchurch City Council
281 Bridle Path Road	Lot 3 DP 21139	0.3826 ha	Christchurch City Council
281 Bridle Path Road	RS 38196 (S04808)	0.4078 ha	Christchurch City Council
289 Bridle Path Road	RS 871 (10856, A10857)	0.1441 ha	Christchurch City Council
121 Ferrymead Park Drive	Pt Lot 5 DP 860	2.4542 ha	Heathcote County Council
269 Bridle Path Road	Pt Lot 1 DP 846	1.9637 ha	Christchurch City Council
269 Bridle Path	Lot 1 DP 29440	2.015 ha	Christchurch City Council

Road			
81 Ferrymead Park Drive	Lot 9 DP 814	0.698 ha	Heathcote County Council
141 Ferrymead Park Drive	Pt Lot 8 DP 814	0.3381 ha	Heathcote County Council
141 Ferrymead Park Drive	Pt Lot 8 DP 814	0.3649 ha	Christchurch City Council
141 Ferrymead Park Drive	Lot 7 DP 814	0.7461 ha	Christchurch City Council
70 Ferrymead Park Drive	Lot 2 DP 40605	0.2044 ha	Heathcote County Council

1.4 Research

The Council has undertaken considerable research and commissioned technical advice and assistance from various internal and external experts and utilised this, along with consultation and a workshop involving Council planning staff and Councillors to inform the development of the land use zonings for this location. Key research documents are listed in Table 3 below.

While many of the key research documents listed below were prepared prior to the 2010-2011 Canterbury earthquakes, these documents have been reviewed and updated as necessary to ensure they are still relevant following the earthquake events and continue to provide appropriate information for the Ferrymead SPZ.

Table 3 Key technical reports

Document Title	Author	Topic	Date	Notes
Geotechnical Investigation and Liquefaction Assessment to Support Plan Change 17 Ferrymead	Aurecon	Geotech and liquefaction	October 2013	
Assessment of Liquefaction Hazard	Geotech Consulting	Liquefaction	2010	
Liquefaction Report	Ian McCahon	Liquefaction	2000	
Christchurch sea level rise report 1999	Tonkin and Taylor	Sea level rise	1999	City wide study
Christchurch sea level rise report 2013	Tonkin and Taylor	Sea level rise	November 2013	City wide study
Modelling Coastal Inundation in Christchurch and	NIWA	Tsunami risk	October 2011	City wide study

Document Title	Author	Topic	Date	Notes
Kaiapoi from a South American Tsunami using topography from after the 2011 February earthquake				
Special Purpose Ferrymead Zone – Technical Input Regarding Surface and Groundwater Issues Modelling and Floodplain Filling Assessments	Pattle Delamore Partners Ltd (PDP)	Surface and Groundwater Issues	July 2014	
Transportation Assessment – 125 Scruttons Road and 201, 221 and 225 Bridle Path Road	Via Strada	Traffic effects	September 2009	
Bridle Path Road and Scruttons Road Preliminary Landscape Assessment in Relation to Potential Residential Development (Nov 2008)	Hannah Lewthwaite and Clinton Bowyer	Visual and landscape effects	November 2008	
Preliminary Site Inspection of 201 Bridle Path Road, Heathcote, Christchurch (Aug 2009)	Guy Knowles, Pattle Delamore Partners Ltd	Contamination	August 2009	Relates to 201 Bridle Path Road only
Environmental Health Officer's Report	Laurie Moore	Noise, light spill and glare, proximity of powerlines (electric fields and safety), electromagnetic radiation from radio mast,	Sept 2009	

Document Title	Author	Topic	Date	Notes
		contaminated land, petrol pipeline, railway designation and sewage/drinking water supply.		
Stormwater and Drainage Assessment	Ken Couling	Stormwater, liquefaction and affordability	November 2009; August 2010	
Waste Water and Water Supply Report 125 Scruttons Road; Waste Water and Water Supply Report 201, 221, 225 Bridle Path Road (2 reports)	Eoghan O'Neill	Water and wastewater servicing requirements	October 2009	
Ecological report	Andrew Crossland	Potential ecological values	March 2003	

The technical research undertaken has generally focused on the option of residential zoning for the private sites at 125 Scruttons Road and 201, 221 and 225 Bridle Path Road where landowners have advocated that the Council rezone the land for residential use over a number of years. The remaining private properties that this Section 32 assessment relates to are:

- 285 Bridle Path Road
- 171 Bridle Path Road
- 151 Bridle Path Road
- 131 Bridle Path Road
- 129 Bridle Path Road
- 61 Truscotts Road

The flood modelling and sea level rise work considered all land within the Ferrymead SPZ. However, the other technical reports did not consider these remaining properties. Notwithstanding the limited geographical focus of most of the technical work to date, the flood modelling and sea level rise studies confirm that flooding and shoreline retreat will affect the Ferrymead SPZ in a similar manner and it is the determining site constraint for the land use zonings adopted for the District Plan Review.

Table 4 Summary of site issues

Issue	125 Scruttons Road	201, 221 and 225 Bridle Path Road sites	Information source
Water supply	420m extension to water main required; capacity available	Water supply available at boundary; capacity available	O'Neill
Wastewater servicing	620m extension to	No capacity available	O'Neill

Issue	125 Scruttons Road	201, 221 and 225 Bridle Path Road sites	Information source
	sewage reticulation required; no capacity available therefore major pump station upgrade required	therefore major pump station upgrade required	
Sea level rise	Identified as being flooded during a 1% tidal flooding event using 2009 sea level predictions but identified as being permanently under water (i.e. affected by shoreline retreat) with recent 2013 sea level rise predictions by the year 2115	Identified as being flooded during a 1% tidal flooding event using 2009 sea level predictions; identified as being permanently under water (i.e. affected by shoreline retreat) with recent 2013 sea level rise predictions by the year 2115 – some small parts of this site may be less affected i.e. just flooded in the 1% AEP event.	Tonkin and Taylor
Tsunami risk	There appears to be a risk of tsunami triggered flooding on the site at high tide with probability for debris and sediment transport and damage to buildings and infrastructure	There appears to be a risk of tsunami triggered flooding on the site at high tide with probability for debris and sediment transport and damage to buildings and infrastructure	NIWA
Liquefaction and lateral spreading	High risk of subsidence from liquefaction (Most has TC3 equivalent classification); large vertical settlement for southern part of Scruttons Road site due to high water table and continuous layers of silt and sand, smaller settlements calculated for northern part of site; Lateral spreading possible alongside Avoca Valley Stream; Land remediation and specific engineered foundations would be required	High risk of subsidence from liquefaction (TC3 equivalent classification); large vertical settlement due to high water table and continuous layers of silt and sand; Land remediation and specific engineered foundations would be required	Aurecon
Other geotech issues	Risk around fill compressibility and consolidation	Risk around fill compressibility and consolidation	Aurecon

Issue	125 Scruttons Road	201, 221 and 225 Bridle Path Road sites	Information source
	settlement	settlement; Site is also potentially affected by mass movement from steep land to the immediate east if there is a loss of toe support in liquefied ground	
Contamination	On-site testing is required to determine contamination due to fill on site	No confirmed contamination from desk top study, but recommendation for on-site testing due to filling and potential asbestos	Moore; Pattle Delamere Partners (PDP) for 201 Bridle Path Road No information available for 221 and 225 Bridle Path Road
Stormwater and flooding	Site is within Flood Management Area (FMA) in operative plan; at least 1 metre of fill required across the site to ensure future buildings are clear of floodwaters; Filling will decrease the volume of floodwater storage and causes flooding effects elsewhere in the Avoca Valley catchment (including on Port Hills Road); Compensatory storage not viable due to limited depth to groundwater and floodplain geometry; Mitigation works assessed but flooding effects were unable to be mitigated with the options considered	Site is within FMA and has similar issues as the Scruttons Road site – causes flooding within the Heathcote Valley catchment; Compensatory storage not viable due to limited depth to groundwater and floodplain geometry; Mitigation works assessed but flooding effects were unable to be mitigated with the options considered	Couling; PDP
Ecology	No specific constraints to rezoning have been identified, but it is noted that the Ferrymead SPZ contains a little less than half the surviving saltmarsh and saltmeadow habitats found within the Avon-Heathcote estuary and environs; it comprises a core breeding ground	No specific constraints to rezoning have been identified, but it is noted that the Ferrymead SPZ contains a little less than half the surviving saltmarsh and saltmeadow habitats found within the Avon-Heathcote estuary and environs; it comprises a core breeding ground	Crossland ¹

¹ Two Ecological Heritage Sites are identified in the District Plan to the north of the Scruttons Road and Bridle Path Road properties within the Ferrymead SPZ. These notations are for the Avon Heathcote Estuary, which is noted for its “saline meadow” vegetation.

Issue	125 Scruttons Road	201, 221 and 225 Bridle Path Road sites	Information source
	for wetland birds and includes several important high tide and night roosting sites	for wetland birds and includes several important high tide and night roosting sites	
Landscape	Significant adverse landscape and visual change associated with rezoning for residential use when viewed from Tunnel Road – NB this was assessed prior to the rezoning of the land to the west of Tunnel Road which may potentially moderate this assessment	Minor landscape issues from zoning change, due to substantial screening vegetation along Bridle Path Road	Lewthwaite and Bowyer
Transport	Development would result in a large cul-de-sac network pattern providing poor connectivity to the rest of the road network and to existing public transport services; potential costly access improvements required to achieve this (railway crossing and Avoca Stream bridge upgrade needed); some concern over intensive residential use and associated traffic volumes on adjacent local road amenity; no alternative emergency access available; alternative transport connections / options haven't specifically been considered in the work to date	Minimal impact on the safe or efficient operation of the road network, and it enables residential land use at a scale which is compatible with the classification of the frontage road and is located where future residents would have adequate access to the public transport network to meet their travel needs supporting the viability of public transport	Via Strada
Residential amenity and connectivity	Site is severed and somewhat remote from other residential areas, due to location of adjacent to CCC horse grazing land, the State highway (Tunnel Road) and Business 4 land under development, the railway line and substation to the south	Site offers reasonable amenity as Bridle Path Road offers continuity of housing; established vegetation and proximity to playing grounds	On-site observation

Issue	125 Scruttons Road	201, 221 and 225 Bridle Path Road sites	Information source
	and high voltage power lines to the east		
Noise	Low noise amenity due to exposure of site to State highway and train noise	Minimal exposure to nuisance noise sources	Moore
Transmission lines	Requirement for 12-32 metre setback from the transmission corridor located on this site will affect development potential on approximately 30% of the site	No transmission lines affecting development potential	Moore

The key environmental effects and risk with residential zoning and further development of the Ferrymead SPZ relate to the low lying nature of the land and off-site flooding effects within the wider catchment. Flooding would affect both Council land within the Ferrymead SPZ and private and public land outside of this. The modelling work undertaken has applicability to all land within the Ferrymead SPZ, with the exception of a small area of elevated land in the south-east corner of the SPZ, within the Heathcote Recreational Holdings Ltd property.

The modelling work considered whether there was an opportunity to mitigate flooding effects through off-site engineering works. The specific mitigation options studied involved upgrades to the informal stopbank and increasing the capacity of both the Avoca Valley and Heathcote floodplain structures (i.e. outlet structures). Mitigation through compensatory storage was considered to be unachievable by PDP, due to high groundwater levels.

The key findings from the PDP modelling work predict that development within the Ferrymead SPZ would cause flooding as follows:

- an additional 30 mm of flooding around the Scruttons Road/Laing Crescent area and the mitigation options do not decrease this effect (2% AEP / 1:50 year event);
- flood levels for the Avoca Floodplain increase by 50 to 90 mm and the mitigation options can only partly decrease this flood effect to an increase of 40 to 80 mm (2% AEP / 1:50 year event);
- households around Martindales Road / Pawaho Place and the railway line would be flooded by an additional 40-70 mm of flooding and mitigation can only partly decrease this effect to 20-40 mm of additional flooding (0.5% AEP / 1:200 year event);
- flood effects arise at 220 Port Hills Rd and the Heathcote Valley Floodplain and do not decrease as a result of implementing the mitigation; and
- the public roads of Port Hills Road and Truscotts Road are affected by additional flooding.

1.5 Consultation

Consultation has been undertaken with a number of landowners in the Ferrymead SPZ. Meetings and phone calls have been held. Details of specific consultation undertaken in relation to the review of land use zonings for the Ferrymead SPZ is outlined below.

Address	Landowner	Date of Consultation	Type of Consultation
131 Bridle Path Road	Heathcote Recreational Holdings Limited	14/02/2014	Phone Call
		21/02/2014	Phone Call
		14/03/2014	Meeting
		15/04/2014	Meeting
121 Bridle Path Road/201 Bridle Path Road	Mr and Mrs Piercey	14/02/2014	Phone Call
		21/02/2014	Phone Call
		14/03/2014	Meeting
125 Scruttons Road	Ms Foxton and Mr McCulloch	19/6/2014	Meeting

Some landowners consulted were specifically interested in the potential for urban development and/or low density subdivision on their properties. Both Ms Foxton and the Piercey's were considering developments that they were seeking to facilitate through appropriate urban land use zonings and rules.

Heathcote Recreational Holdings would like to see the existing amenity of the area maintained. In particular they support the protection of the riding school and surrounding green area as well as continuation of the current temporary coffee shop.

2. Resource Management Issues

The main resource management issue for the Ferrymead SPZ is whether this land is suitable for residential land use, without undermining overall Plan policy intent. Recognition of this issue and the action to be taken is detailed in Table 5.

Table 5: Resource Management Issue

RESOURCE MANAGEMENT ISSUE: Avoid inappropriate development in the Ferrymead SPZ	
1.	SUMMARY OF ISSUE
a.	The land within the Ferrymead SPZ is subject to environmental constraints which affect the ability for effects associated with urban development to be adequately mitigated.
b.	The cost effectiveness of developing this land creates a risk to the landowners and potentially the Council in relation to flooding of Council land and roads, infrastructure servicing and flood mitigation works.
c.	The RPS does not support urban development within the Ferrymead SPZ as the land is flood prone and urban development is directed to occur in accordance with Map A of the RPS. Map A shows residential and business "greenfield priority areas" and "existing

urban areas” as the areas where new urban development is permitted. The Ferrymead SPZ area is not within these areas. The RPS does not support rural-residential development in this location either.

2. GENERAL DIRECTIONS

- a. Considerable technical investigation work has been undertaken to examine the effects associated with potential urban development in the Ferrymead SPZ area.
- b. The conclusions reached are that the land is not suitable for urban use, primarily due to flooding effects associated subdivision, use and development and the strategic policy direction in the RPS.

3. PROPOSED DIRECTION IN ADDRESSING THE ISSUE

- a. The recommended approach is to adopt a mixture of open space and rural zonings for this location.
- b. Given the nature of the rules applying to this land in the Operative Christchurch City Plan, this proposed direction, while removing the “potential” for possible future urban development, does not change the extent of actual development possible on this land from the existing situation.

3. Scale and Significance Evaluation

The level of detail undertaken for the evaluation of the proposed District Plan provisions has been determined by an assessment of the scale and significance of the implementation of the proposed District Plan provisions. The scale and significance assessment considers the environmental, economic, social and cultural effects of the provisions. In making this assessment regard has been had to the following, namely whether the provisions:

1. have regional or city wide significance;
2. impede the City's recovery;
3. adversely affect peoples health and safety;
4. result in a significant change to the character and amenity of local communities;
5. have effects on resources that are considered to be a matter of national importance in terms of Section 6 of the Act;
6. adversely effect those with particular interests including Maori (consideration needs to be given to whether there is certainty of effects based on the availability of information to assess benefits and costs);
7. limit options for future generations to remedy effects;
8. whether the effects have been considered implicitly or explicitly by higher order documents; and
9. whether the provisions include regulations or other interventions that will impose significant costs on individuals or communities.

The level of evaluation able to be undertaken through this Section 32 has been significantly influenced by the truncated process and timeframe for the District Plan Review. The Section 32 evaluation will continue to be updated through the consultation process and in particular in response to recommendation from the Minister for the Canterbury Earthquake Recovery and submissions from the community and stakeholders.

4. Strategic Objectives

The objectives that the Ferrymead zonings give effect to are those in the Strategic Directions chapter, including:

3.6.2 Objective - Development form and function

1. An integrated pattern of development and well-functioning urban form that:
 - a) provides certainty about where development can occur
 - b) avoids natural hazards or adequately remedies or mitigates the risks
 - c) consolidates development for urban activities
 - [...]
 - h) supports the role of the central city and suburban and town centres as community focal points for housing, commercial, service, community and transport activity
 - i) restores and enhances the role of the central city as the principal community focal point for greater Christchurch and supports the major role of Key Activity Centres (as identified in the Canterbury Regional Policy Statement) as community focal points for significant areas of Christchurch and for adjoining districts
 - j) recognises the landscape, recreational and environmental values of rural areas.

3.6.5 Objective - Natural hazards

1. The risk to people, property and infrastructure from natural hazards is avoided or reduced to acceptable levels.

The Strategic Directions chapter also includes policies which are relevant to the Ferrymead land use zonings.

3.6.2.3 Policy - Urban consolidation

1. Provide for urban activities only:
 - a. within the existing urban areas

3.6.2.6 Policy - Rural-Residential

2. Rural-residential development is restricted to the Banks Peninsula/Te Pātaka o Rakaihautu area of the district and is not provided for on the peri-urban/rural flat land and Port Hills/Nga Kohatu Whakarakaraka o Tamatea Pokai Whenua surrounding the Christchurch urban area.

Also relevant are the objectives in Chapter 6 (Recovery and Rebuilding of Greater Christchurch) and Chapter 11 (Natural Hazards) of the Canterbury Regional Policy Statement. This is discussed further later in this report.

5. Methods – Policies and Rules

Evaluation of the methods adopted to address the identified Resource Management issue has focused on the selection of land use zonings for the land in question.

The policies and zoning rules have been evaluated as a package as together they address the issue of future land use for the Ferrymead SPZ.

The proposed objectives, policies and rules for each of the identified zones set out actions to achieve the strategic objectives in general, by ensuring land use is suitable and reflects the site constraints in this location. The key zoned based provisions relevant to this assessment are set out below.

5.1 Rural Urban Fringe Zone

17.1.1 Objective - Christchurch rural flat land and Port Hills

- a. Subdivision, use and development:
 - i. in the Rural Urban Fringe Zone maintains rural character with a mix of compatible rural productive and rural-related activities, supports a consolidated urban form and protects options for future urban development beyond 2028 ;
 - ii. in the Rural Port Hills maintains the open character and natural appearance of the Port Hills reinforcing a distinct urban boundary;
 - iii. in the Rural Waimakariri Zone enhances the flood management, groundwater recharge functions and recreation values;
 - iv. in the Rural Quarry Zone, recognises areas of longstanding quarrying activity to access the remaining available aggregate resource and rehabilitate for subsequent re-use;
 - v. in the Rural Templeton Zone maintains the open character and visual amenity of the former Templeton Hospital site with a range of rural productive and rural-related activities; and
 - vi. avoids reverse sensitivity effects on the operation of rural productive activities, strategic infrastructure, natural hazard mitigation and quarrying activities.

17.1.1.1 Policy – Rural activities

- a. Ensure the range of activities located on rural land are limited to those that have a:
 - i. direct relationship with or are dependent on the natural resource, natural features or the rural activity; or
 - ii. functional necessity for a rural location.

17.1.1.2 Policy – General elements of rural character and amenity

- a. Ensure the nature, scale and intensity of subdivision, use and development achieves rural environments in all rural areas characterised by:
 - i. land in pasture, trees, crops or indigenous vegetation and with a degree of naturalness;
 - ii. a low density of buildings and structures with a high ratio of openness to built form;
 - iii. a general absence of urban scale or type of infrastructure, such as roads with full kerb and channel and streetlights; and
 - iv. an intensity of activities, including the number of people using the site, hours of operation and number of vehicle trips generated, that is compatible with the function of the zone in which it is located.

17.1.1.4 Policy – Scale and intensity of activities in rural zones

- a. Ensure activities located in rural zones:
 - i. are of a scale and intensity, including the built form, that is compatible with rural character and amenity values of the zone;
 - ii. will not trigger demand or expectation for any unplanned upgrade or extension to existing infrastructure, including the roading network;
 - iii. avoid, remedy or mitigate adverse effects on the natural environment; and
 - iv. support the ability for rural productive activities to continue to operate.

17.1.1.6 Policy – Rural Urban Fringe

- a. Ensure subdivision, use and development in the Rural Urban Fringe Zone:
 - i. enables continuation of rural production activities, strategic infrastructure, quarrying and recreation activities;
 - ii. avoids creating new sites less than 4 hectares for rural dwellings;
 - iii. enables use of existing sites less than 4 hectares for rural dwellings where it will not result in large lot/rural residential development;
 - iv. prioritises the use of existing sites or amalgamation of multiple small sites;
 - v. avoids the establishment of new plantation forestry and intensive farming activities;
 - vi. does not compromise the ability to access the high quality gravel resource necessary to meet the recovery and resilience needs of the District; and
 - vii. maximises the degree of openness maintaining rural character and avoiding an urban character

5.2 Open Space Zones

18.1.1 Objective 1 - Provision of open spaces and recreation facilities

- a. A network of open spaces and recreation facilities that:
 - i. provides a diversity in the type and size of open spaces and recreational facilities to meet the current and future recreational, cultural, health and wellbeing needs of the community;
 - ii. contributes to the earthquake recovery of Christchurch and revitalised communities where people enjoy a high quality urban environment and enhanced opportunities for recreation;
 - iii. is accessible and distributed to meet the demands generated by population growth, urban intensification and areas of identified deficiency;
 - iv. provides users with a pleasant and safe environment;
 - v. enables multifunctional uses;
 - vi. maintains and enhances amenity values, connectivity and public access, where appropriate; and
 - vii. recognises and provides for Ngāi Tahu's historic and contemporary relationship with the Christchurch District land and water resources, and reflects their cultural values.

18.1.2 Objective 2 – Natural open space, water bodies and their margins

- a. Conservation and enhancement of the inherent qualities of natural open spaces and water bodies and their margins where:
 - i. the natural character, biodiversity, health and life supporting capacity of water bodies and their margins are maintained and enhanced;

- ii. people are enabled to experience natural open spaces through a range of compatible recreation activities; and
- iii. accessibility of natural open spaces and water bodies for the enjoyment of their amenity, recreational, cultural and mahinga kai values is maintained and enhanced, where appropriate.

18.1.4 Policy 1 – The role of open space and recreation facilities

- a. Provide a network of public and private open spaces and recreation facilities that cater for a range of roles, functions and activities as follows:
 - i. **Open Space – Community Parks Zone** – enables formal and informal recreation activities, while complementing and enhancing neighbourhood amenity values, including:
 - A. Smaller public spaces with landscaping and seating located and designed to promote interaction within the local community;
 - B. Accessible neighbourhood parks with a predominance of open space and relatively flat topography capable of accommodating tree planting, landscaping, small scale public amenities, playground equipment and informal playing fields;
 - C. Larger parks accommodating minor sports facilities, public amenities, landscaping, large trees and potential capacity for multifunctional use; and
 - D. Heritage and urban parks having important scenic, botanical, educational, heritage, and recreational values and providing for entertainment.
 - ii. **Open Space - Natural Zone** – encompasses extensive natural, ecological, scenic and outdoor recreation areas which enable:
 - A. Conservation and protection of areas of significant biodiversity, landscape, cultural and historic values;
 - B. People to experience the natural open space environment through a range of compatible recreation and tourist activities;
 - C. Compatible rural activities and buildings appropriate to the location and proposed use.

The rules implementing the Rural Urban Fringe Zone policies provide for a range of activities but prevent a transition to urban activities. The rules provide for appropriate rural land uses and maintain reasonable use of privately owned land. The Open Space rules applicable to the Ferrymead SPZ will maintain the open space characteristics of this location.

6. Evaluation of Proposed Ferrymead Zonings

Based on analysis of the Resource Management issues set out in section 2, the following options have been considered in order to determine a suitable land use zoning for the Ferrymead SPZ:

Option 1: Rezone Ferrymead SPZ using a mixture of Rural and Open Space zonings, based on existing land use and ownership.

Option 2: Maintain a holding zoning similar to the Operative City Plan Special Purpose (Ferrymead) Zone.

Option 3: Allow for urban development within the Ferrymead SPZ.

Option 4: Identify area as a Future Urban Development area.

The options have been assessed in relation to the ability to satisfy the Strategic Direction objectives outlined above.

Table 6: Evaluation of Methods

ZONINGS FOR FERRYMEAD SPZ AREA IN THE PROPOSED DISTRICT PLAN	
Most appropriate provision	Effectiveness and Efficiency
<p>Option 1: Rezone Ferrymead SPZ using a mixture of Rural Urban Fringe and Open Space – Community Park and Open Space – Natural zonings</p>	<p>1. Effectiveness</p> <p>The mixture of Rural Urban Fringe, Open Space – Community Park and Open Space – Natural zonings provides an effective signal to landowners and the wider community of the expected land use for the Ferrymead SPZ now and into the future. The zonings are in accordance with the RPS intentions as this location is not identified as an existing or greenfield priority urban area.</p> <p>2. Efficiency</p> <p>Applying suitable zonings developed for wider areas of the city to the Ferrymead SPZ provides for efficient planning provisions, by removing the requirement for “special” zonings and rules for this location.</p> <p>Benefits</p> <p><i>Environmental</i></p> <p>Future permitted development will be of low intensity and rural or open space in nature, so will not concentrate residential dwellings within an area which is unsuitable for urban development. It will also protect other land from exacerbated flooding effects associated with filling that would be necessary to bring dwellings on the Ferrymead SPZ above flood levels.</p> <p><i>Economic</i></p> <p>Not developing the Ferrymead SPZ offers economic benefits to the City by avoiding infrastructure investment required to service and maintain urban development in this location.</p> <p><i>Social</i></p> <p>The retention of the area for open space and land for horse grazing provides for the recreational</p>

	<p>needs of the wider Christchurch area.</p> <p>Costs</p> <p><i>Economic and social</i></p> <p>The proposed zoning means that affected landowners with development aspirations are unable to achieve property gains through rezoning for urban use, so there is an opportunity cost with this. However there is no actual cost incurred by the affected landowners, as the permitted activities and subdivision potential (4 hectare lots) is generally unchanged and existing land uses can continue as permitted activities.</p>
<p>Options less or not as appropriate for achieving objectives and policies</p>	
<p>Option 2: Maintain a holding zoning similar to the Operative City Plan Special Purpose (Ferrymead) Zone</p>	<p>Benefits</p> <p>The current zoning is known and understood and would provide a more enabling framework in the event that future technologies or flood mitigation options arise, as it would maintain a “holding zoning” without confirming either way whether urban development was appropriate.</p> <p>Costs</p> <p>The option would incur plan change costs in the future and it could potentially encourage inappropriate subdivision, use and development to occur in the future.</p> <p>Efficiency and Effectiveness</p> <p>Less effective and efficient than rezoning as sufficient information is now available that confirms the land is unsuitable for urban development, so this option would delay confirmation of this.</p>
<p>Option 4: Identify as a Future Urban Development Area.</p>	<p>Benefits</p> <p>Would allow for a coordinated approach to development in the future.</p> <p>Costs</p> <p>Suggests that the land is appropriate for development, so could potentially allow inappropriate subdivision, use and development, along with flooding effects, to occur in the future.</p> <p>Efficiency and Effectiveness</p> <p>A Future Urban Development Area is used for areas set aside for urban development in the future, but which are at this stage unplanned.</p>

	<p>This option is not considered appropriate here, as sufficient information is available now that confirms the land is unsuitable for urban development, so this option would conflict with this and be inconsistent with the RPS.</p>
<p>Option 3: Allow for urban development within the Ferrymead SPZ</p>	<p>Benefits</p> <p>This option would provide an opportunity for economic gains through land development for landowners within the Ferrymead SPZ and would provide additional housing for the City.</p> <p>Costs</p> <p>Significant on-site flooding effects would arise if land were developed for urban uses on existing ground levels, and buildings would be flooded. Alternatively, if ground levels were raised to meet minimum flood level rules, significant additional flooding would arise on other land within the catchment. Considerable infrastructure upgrades (along with ongoing maintenance costs) would be necessary bringing costs to the developer and/or ratepayers.</p> <p>Efficiency and Effectiveness</p> <p>Less effective and efficient as it doesn't meet strategic objective for avoiding natural hazard risk and well-functioning urban form.</p>
<p>Risk of acting or not acting</p>	
<p>It is considered there is sufficient information on which to base the policies and rules without the risks being significantly over or understated.</p> <p>There is a significant risk in not acting as inappropriate zonings could be applied to the Ferrymead SPZ that do not send a clear signal that urban development is not appropriate in this location. By acting, inappropriate subdivision, use and development can be avoided.</p>	

Option 1 is deemed the best option for the proposed Replacement District Plan. Rezoning to Rural Urban Fringe and Open Space – Community Park and Open Space – Natural are appropriate zonings and allow suitable land uses to occur which reflect the significant site constraints. It allows the existing open space, recreational, rural and rural-residential uses to continue, whilst avoiding adverse environmental effects.

7. Policy considerations – Canterbury Regional Policy Statement

Chapter 6 Recovery and Rebuilding of Greater Christchurch

Urban development is to occur in accordance with Map A which shows residential and business “greenfield priority areas” and “existing urban areas” as the areas where new urban development is permitted. The Ferrymead SPZ area is not defined by either of these notations.

Policy 6.3.1(4) is relevant to the Section 32 assessment for land use zonings for the Ferrymead SPZ:

Ensure new urban activities only occur within existing urban areas or identified greenfield priority areas as shown on Map A, unless they are otherwise expressly provided for in the CRPS;

Development within the Ferrymead SPZ is not provided for anywhere else in the RPS, accordingly rezoning of the Ferrymead SPZ for any urban use is contrary to policy 6.3.1(4).

Chapter 11 Natural Hazards

The approach to natural hazards, in particular, for High Hazard Areas, in the RPS is also relevant to land use zonings for the Ferrymead SPZ.

The RPS defines High Hazard Areas as

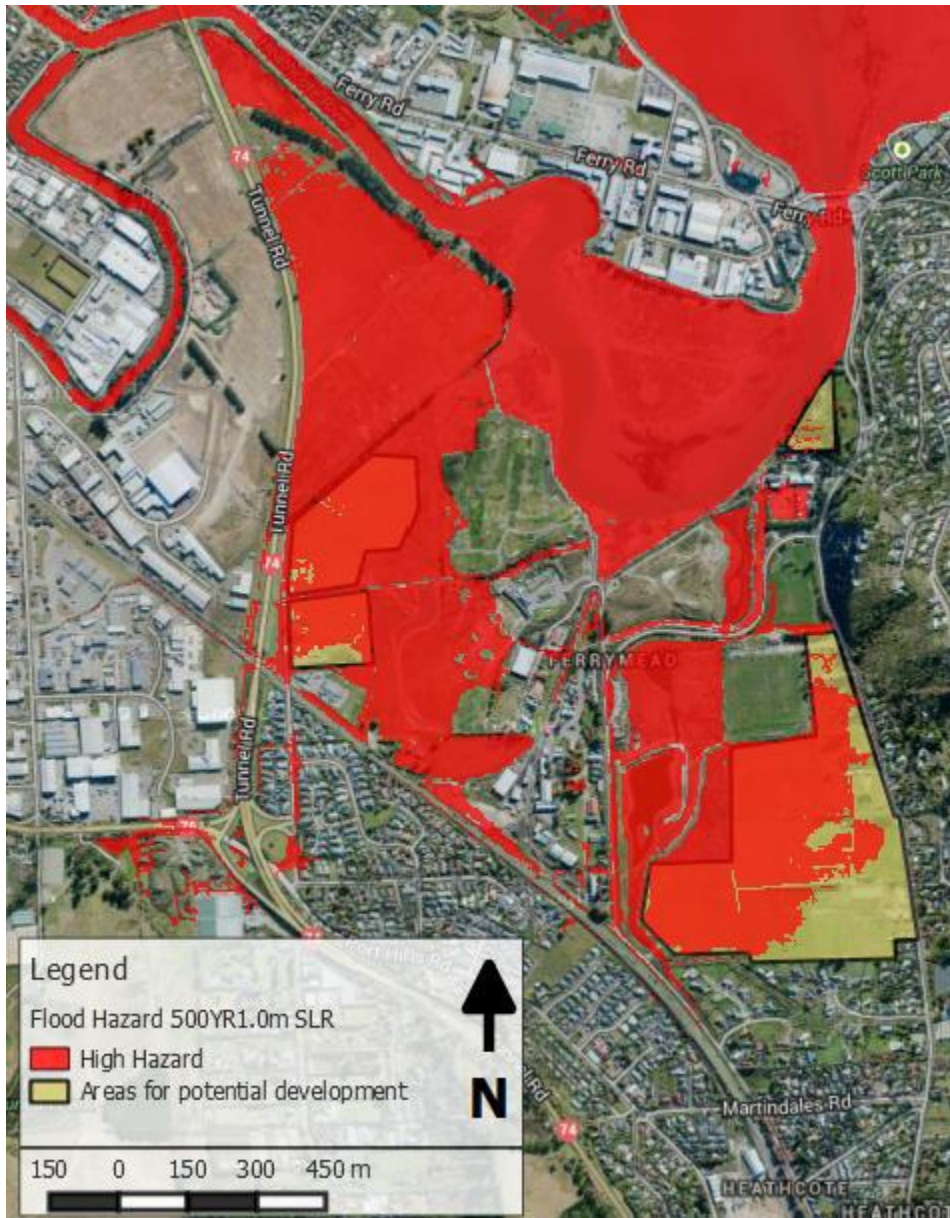
- 1. flood hazard areas subject to inundation events where the water depth (metres) x velocity (metres per second) is greater than or equal to 1, or where depths are greater than 1 metre, in a 0.2% AEP flood event;*
- 2. land subject to coastal erosion over the next 100 years; and*
- 3. land subject to sea water inundation (excluding tsunami) over the next 100 years.*

When determining high hazard areas, projections on the effects of climate change will be taken into account.

The technical work undertaken by PDP indicates that the Ferrymead SPZ will be subject to sea water inundation (criterion 3 above) in the 1.0 metre sea level rise (SLR) scenario.

The advice from PDP confirms majority of the Bridle Path Road and Scruttons Road sites and other land within the Ferrymead SPZ also meets the criteria for a high flood hazard area as the depth of flooding is more than 1 metre in the 0.2% (1:500 year event) using a 1.0 metre sea level rise allowance.

Figure 2 High Hazard Area with 1.0 m sea level rise



The relevant High Hazard Area RPS policy can only be satisfied by adopting a land use zoning regime that avoids further subdivision, use and development in this location.

Policy 11.3.1 – Avoidance of inappropriate development in high hazard areas

To avoid new subdivision, use and development (except as provided for in Policy 11.3.4) of land in high hazard areas, unless the subdivision, use or development:

(1) is not likely to result in loss of life or serious injuries in the event of a natural hazard occurrence; and

(2) is not likely to suffer significant damage or loss in the event of a natural hazard occurrence; and

(3) is not likely to require new or upgraded hazard mitigation works to mitigate or avoid the natural hazard; and

(4) is not likely to exacerbate the effects of the natural hazard; or

(5) is proposed to be located in an area zoned or identified in a district plan or Chapter 6 of the CRPS for urban residential, industrial or commercial use, at the date of notification of the CRPS, in which case the effects of the natural hazard must be mitigated.

There is a lesser hurdle to satisfy in terms of flood hazards for sites already zoned for urban use and the greenfield priority areas referred to above. For all other areas including the Ferrymead SPZ, items 1-4 must all be met. The constraint for the Ferrymead site is criterion (3) whereby there cannot be any new or upgraded mitigation works. In this case though, mitigation works have been considered and did not significantly reduce flooding effects. Accordingly, only rural and open space zonings are consistent with Policy 11.3.1 of the RPS.

8. Summary


The land within the Ferrymead SPZ is subject to a number of significant environmental constraints which limit the ability for effects associated with urban development to be adequately mitigated. Option 1, comprising Rural Urban Fringe and Open Space – Community Park and Open Space – Natural based on existing land use, is the most appropriate method for managing land use and development in this location. This approach is also consistent with the Council's Strategic Directions and the RPS.

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