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## Chapter B Regional Policy Statement

*Amend **B5 title** as follows:*

### **Chapter B Regional policy statement**

#### **B1 Ngā take matua ā-rohe - Issues of regional significance...**

#### **B5 Ngā rawa tuku iho me te āhua – Historic heritage and special character**

#### **B6 Mana Whenua**

...

*Amend the title and headers in **B5** as follows:*

B5 Ngā rawa tuku iho me te āhua - Historic heritage and special character

#### **B5. Ngā rawa tuku iho me te āhua – Historic heritage and special character**

...

*Amend **B7.2.2 Policies** as follows:*

#### **B7.2. Indigenous biodiversity...**

##### **B7.2.1. Objectives**

(1) Areas of significant...

##### **B7.2.2. Policies**

(1) Identify and evaluate...

(3) Identify and evaluate areas of significant indigenous vegetation, and the significant habitats of indigenous fauna, in the coastal marine area considering the following factors in terms of the descriptors contained in Schedule 4 Significant Ecological Areas – Marine Schedule:

a) recognised international or national significance;...

(4) Include an area of indigenous vegetation or a habitat of indigenous fauna in the coastal marine area in the Schedule 4 Significant Ecological Areas – Marine Schedule if the area or habitat is significant.

...

Amend as a consequential change, text in **Chapter B8 Toitū te taiwhenua- Coastal environment** as follows:

### B8.6 Explanation and principal reasons for adoption

The coastal environment includes...

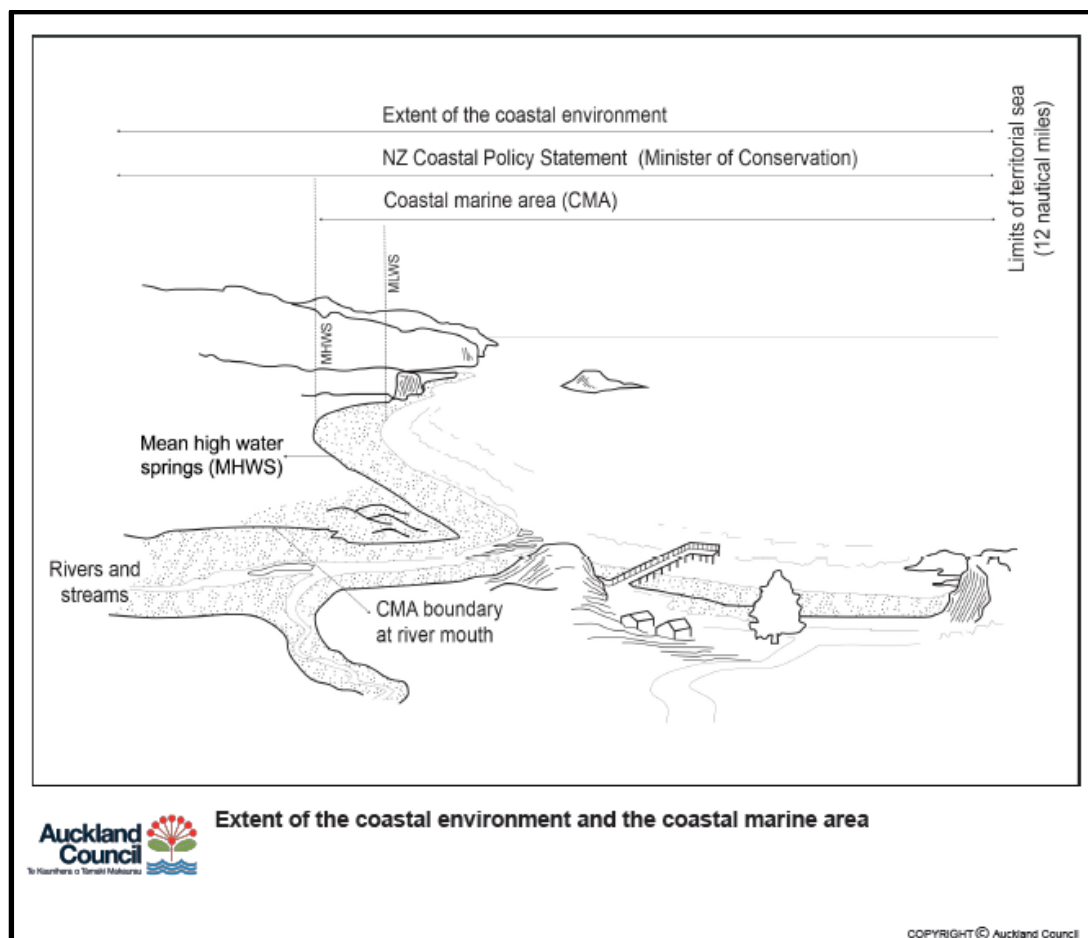
In addition to the objectives and policies in this section, the values of the coastal environment are recognised and provided for in the objectives and policies of the regional policy statement relating to:

- natural heritage (section B4)
- historic heritage and special character (section B5)
- natural resources (section B7)
- Mana Whenua (section B6)

...

Insert amended diagram in **Chapter B8 Toitū te taiwhenua- Coastal environment** as follows:

**Figure 1: Extent of the coastal environment**



*Amend as a consequential change, text in **Chapter B11 Monitoring and environmental results anticipated** as follows:*

### **B11.1. Background**

Environmental results...

**Table B11.4 Historic heritage and special character (B5)**

Reference	Objective	Indicators
B5.2.1(1)	.....	.....

## Chapter D Overlays

Amend **section title** as follows:

### Chapter D Overlays

#### Natural Resources

...

#### Historic heritage and special character

...

Amend **D12 Waitakere Ranges Heritage Area Overlay** section as follows:

#### D12.1.1.3. Rural Bush Living (Ranges)

The Rural Bush Living...

The area is identified in Figures D12.10.7 – D12.10.14 Overlay Subdivision Plans 7a – 7g – Rural Bush Living (Ranges). Its zone is the Rural – Waitākere Ranges Zone.

#### D12.1.1.4. Ōrātia (Ranges)

The Ōrātia (Ranges) area...

The area is identified in Figure D12.10.15 Overlay Subdivision Plan 8 – Ōrātia (Ranges). Its zone is the Rural – Waitākere Ranges Zone.

#### D12.1.1.5. Titirangi – Laingholm (North, South and West)

Titirangi – Laingholm North is located...

The area is identified in Figure D12.10.16 Overlay Subdivision Plan 9 – Titirangi – Laingholm North, Figure D12.10.17 Overlay Subdivision Plan 10 – Titirangi – Laingholm South, Figure D12.10.18 Overlay Subdivision Plan 11 – Titirangi – Laingholm West. Its zone is Residential – Large Lot Zone.

...

Amend **D12 Waitakere Ranges Heritage Area Overlay** section as follows:

**Table D12.4.2 Activity table - Subdivision of sites in the subdivision scheduled areas/sites**

Activity		Activity status
Subdivision of sites within scheduled areas		
	...	

(A11)	Subdivision in Figures 12.10.7 – D12.10.14 Overlay Subdivision Plans 7a – 7g – Rural Bush Living (Ranges) that comply with Standard D12.6.3.3	D
(A12)	Subdivision in Figures 12.10.7 – D12.10.14 Overlay Subdivision Plans 7a – 7g – Rural Bush Living (Ranges) that does not comply with Standard D12.6.3.3	NC
(A13)	Subdivision in Figure D12.10.15 Overlay Subdivision Plan 8 – Oratia (Ranges)	NC
(A14)	Subdivision in Figure D12.10.16 Overlay Subdivision Plan 9 – Titirangi – Laingholm (North) that complies with Standard D12.6.3.4	D
(A15)	Subdivision in Figure D12.10.16 Overlay Subdivision Plan 9 – Titirangi – Laingholm (North) that does not comply with Standard D12.6.3.4	NC
(A16)	Subdivision in Figure D12.10.17 Overlay Subdivision Plan 10 – Titirangi – Laingholm (South) that complies with Standard D12.6.3.5	D
(A17)	Subdivision in Figure D12.10.17 Overlay Subdivision Plan 10 – Titirangi – Laingholm (South) that does not comply with Standard D12.6.3.5	NC
(A18)	Subdivision in Figure D12.10.18 Overlay Subdivision Plan 11 – Titirangi – Laingholm (West) complying with Standard D12.6.3.6	D
(A19)	Subdivision in Figure D12.10.18 Overlay Subdivision Plan 11 – Titirangi – Laingholm (West) that does not comply with Standard D12.6.3.6	NC
<b>Subdivision of scheduled sites</b>		
	...	

...

#### **D12.6.3.4. Subdivision within Figure D12.10.16 Overlay Subdivision Plan 9 – Titirangi – Laingholm (North)**

...

#### **D12.6.3.5. Subdivision within Figure D12.10.17 Overlay Subdivision Plan 10 – Titirangi – Laingholm (South)**

...

#### **D12.6.4.19. Subdivision of any site within the area bounded by Holdens Road, Forest Hill Road, Pine Avenue and Parrs Cross Road**

(1) *[deleted]*

...

#### **D12.6.4.23. Subdivision at 7-11 Christian Road, Henderson Valley (Part Allot 124 PSH OF Waipareira)**

(1) Subdivision must be undertaken in accordance with Figure D12.10.19 Overlay Subdivision Plan 12 – 7-11 Christian Road, Henderson Valley.

(2) Sites identified in the Figure D12.10.19 Overlay Subdivision Plan 12 – 7-11 Christian Road, Henderson Valley...

(3) Sites identified in Figure D12.10.19 Overlay Subdivision Plan 12 – 7-11 Christian Road, Henderson Valley...

(4) Sites identified in the Figure D12.10.19 Overlay Subdivision Plan 12 – 7-11 Christian Road, Henderson Valley...

...

(6) Subdivision to provide a through road between Christian and Tram Valley Roads as identified in Figure D12.10.19 Overlay Subdivision Plan 12 – 7-11 Christian Road, Henderson Valley.

(7) Vehicle access from the new sites must be through the new internal roads as identified in Figure D12.10.19 Overlay Subdivision Plan 12 – 7-11 Christian Road, Henderson Valley.

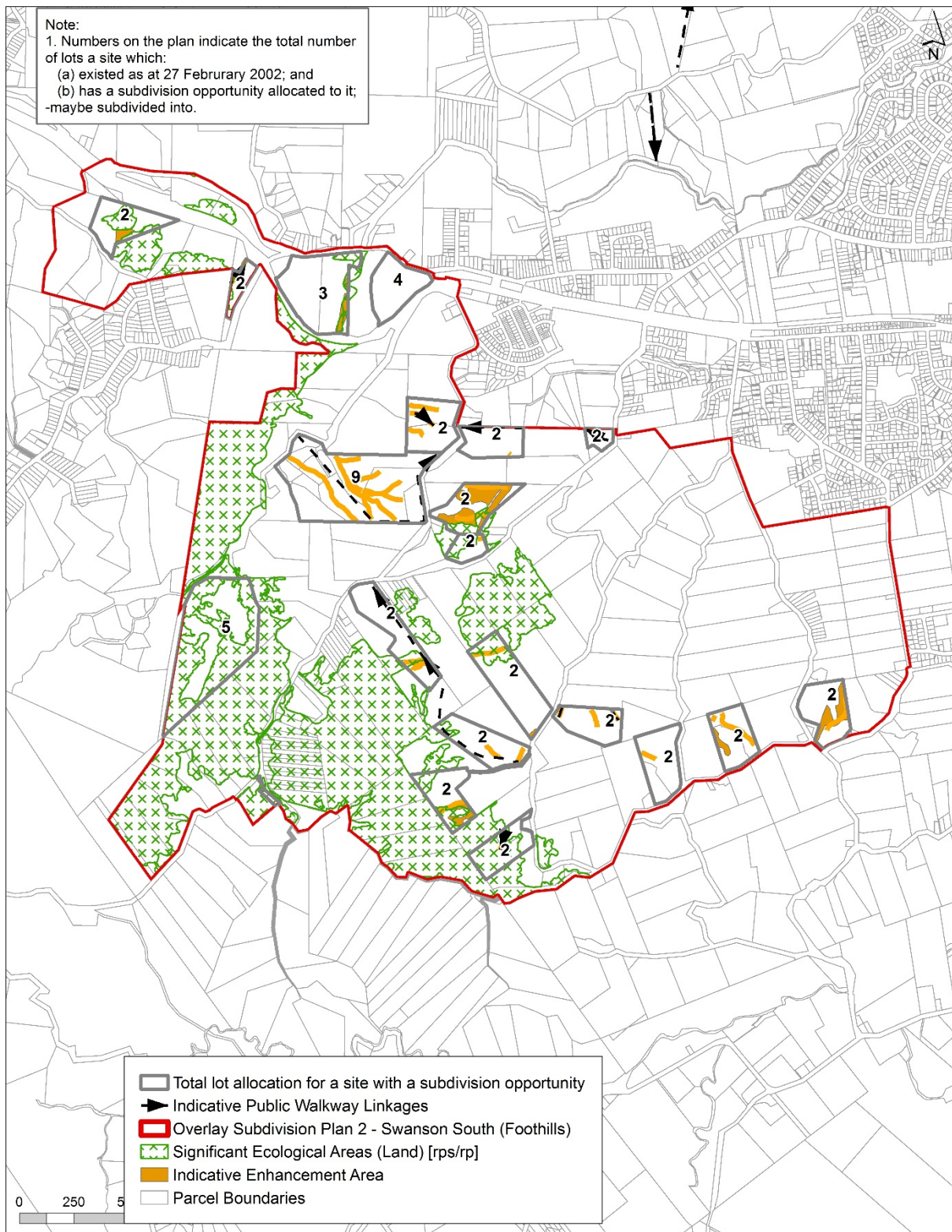
(8) The drainage and green network identified in Figure D12.10.19 Overlay Subdivision Plan 12 – 7-11 Christian Road, Henderson Valley...

(9) The area identified for a 10m wide planted covenant in the Figure D12.10.19 Overlay Subdivision Plan 12 – 7-11 Christian Road, Henderson Valley...

(10) The 'no build' area identified in Figure D12.10.19 Overlay Subdivision Plan 12– 7-11 Christian Road, Henderson Valley...

...

Insert amended **Figure D12.10.2: Overlay Subdivision Plan 2 – Swanson South (Foothills)**



...

Delete **Figure D12.10.10** and renumber remaining Figures, as follows:

Figure D12.10.9 Overlay Subdivision Plan 7c – Bush Living (Ranges)

Figure D12.10.10 *[deleted]*

Figure D12.10.11 Overlay Subdivision Plan 7d – Bush Living (Ranges)

Figure D12.10.12 Overlay Subdivision Plan 7e – Bush Living (Ranges)

Figure D12.10.13 Overlay Subdivision Plan 7f – Bush Living (Ranges)

Figure D12.10.14 Overlay Subdivision Plan 7g – Bush Living (Ranges)

Figure D12.10.15 Overlay Subdivision Plan 8 - Ōrātia (Ranges)

Figure D12.10.16 Overlay Subdivision Plan 9 – Titirangi – Laingholm (North)

Figure D12.10.17 Overlay Subdivision Plan 10 – Titirangi – Laingholm (South)

Figure D12.10.18 Overlay Subdivision Plan 11 – Titirangi – Laingholm (West)

Figure D12.10.19 Overlay Subdivision Plan 12 – 7 – 11 Christian Road,  
Henderson Valley

...

Amend **D14 Volcanic Viewshafts and Height Sensitive Areas Overlay** section as follows:

## **D14.6. Standards**

All activities ...

### **D14.6.1. Height**

(1) In applying these standards, height must be measured using the rolling height method except if using standards D14.6.3(1)(a)(i), D14.6.3(1)(a)(ii) and D14.6.3(1)(c) where maximum height is restricted by another method.

(2)...

### **D14.6.3. Buildings on sites that have a contiguous boundary with a site with a volcanic feature mapped as an outstanding natural feature**

(1) Buildings on sites that have a contiguous boundary with a site with a volcanic feature mapped as an outstanding natural feature must not exceed a height of:

- (a) the height sensitive area maximum of 9m except where the lesser height of the following applies;
  - (i) the average height above sea level (RL) of the highest points of the nearest two buildings (not including accessory buildings) on adjoining sites where those sites also have contiguous boundary with the volcanic feature; or
  - (ii) *[deleted]*
  - (iii) where D14.6.3(1)(a)(i) cannot be applied, the average height above sea level (RL) of the site boundary which is contiguous with the volcanic feature. Average height will be calculated using the average of measurements of height above sea level (RL), taken along the contiguous boundary at 1m intervals.

...

Amend **D17 Historic Heritage Overlay** section as follows:

**Table D17.4.1 Activity table – Activities affecting Category A, A\* and B scheduled historic heritage places [rcp – where reference is made in Chapter F to these rules applying]**

		Primary feature Category A places	Primary feature Category A* places	Activities within the scheduled extent of place of Category A and A* places	Primary feature Category B places	Activities within the scheduled extent of place of Category B places	Features identified as exclusions
<b>Development</b>							
<b>Demolition or destruction</b>							
...							
(A2)	Demolition or destruction of 30% cent or more, but less than 70%, by volume or footprint (whichever is the greater) of any feature  <i>Note: Demolition or destruction of less than 30%, by volume or footprint (whichever is greater) of any feature, is considered under 'Modification and Restoration' – Activity (A9), in this table (D17.4.4)</i>	....	....	.....	....	....	.....
...							
<b>Maintenance and repair</b>							
...							
(A8)	Pest plant removal, biosecurity tree works	....	....	....	....	....	....
...							

...

#### D17.4.3 Activity table – Activities in Historic Heritage Areas [dp]

		Contributing sites/features	Non-contributing sites/features	Features identified as exclusions
<b>Development...</b>				
<b>Demolition or destruction</b>				
(A27)	Demolition or destruction of 30 per cent or more by volume or footprint (whichever is the greater) of any feature  <i>Note: Demolition or destruction of less than 30%, by volume or footprint (whichever is greater) of any feature; is considered under 'Modifications and Restorations' – Activity (A33), in this table (D17.4.3)</i>	....	.....	.....
<b>Maintenance and repair</b>				
....	....	.....	....	.....
(A32)	Pest plant removal, biosecurity tree works	.....	.....	.....
...				
<b>Signs, and temporary buildings, structures and signs</b>				
(A35)	Temporary buildings, structures and signs, including buildings, structures and signs accessory to a temporary activity	....	....	.....
(A36)	.....	....	....	....

...

#### D17.6.4. Pest plant removal, biosecurity measures, tree works

...

#### D17.6.6 Temporary buildings and structures and signs including those accessory to a temporary activity

(1) Temporary buildings...

(b) the building, structure or sign being attached, painted, fixed or projected on to any existing building, structure or feature within the scheduled historic heritage place, other than a building, structure or feature identified in the exclusions column in Schedule 14.1 Schedule of Historic Heritage; or

...

*Amend as a consequential change, text in **Chapter D17 Historic Heritage Overlay** as follows:*

**D17.8.2. Assessment criteria**

The Council will consider .....

(1).....

(a) .....

(b) whether the proposed works will maintain or enhance the heritage values of the place, including by:

- (i) avoiding or minimising the loss of fabric that contributes to the significance of the place;
- (ii) removing features that compromise the heritage values of the place;
- (iii) avoiding significant adverse effects on the place, having regard to the matters set out in B5 Historic heritage and special character;

(c) ...

Insert amended figures in **D19 Auckland War Memorial Museum Viewshaft Overlay** as follows:

**Figure D19.6.1.1 Height limit surface**

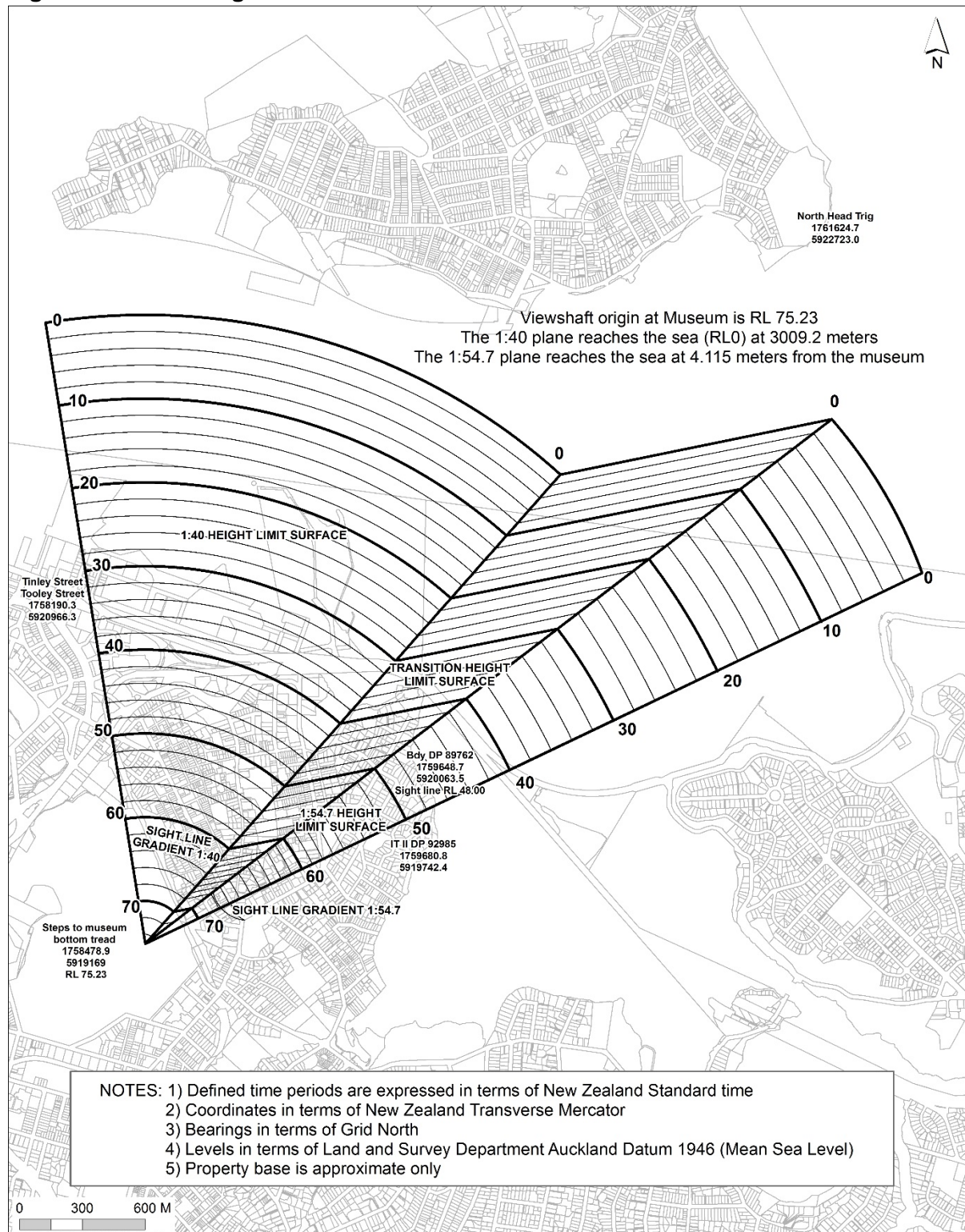
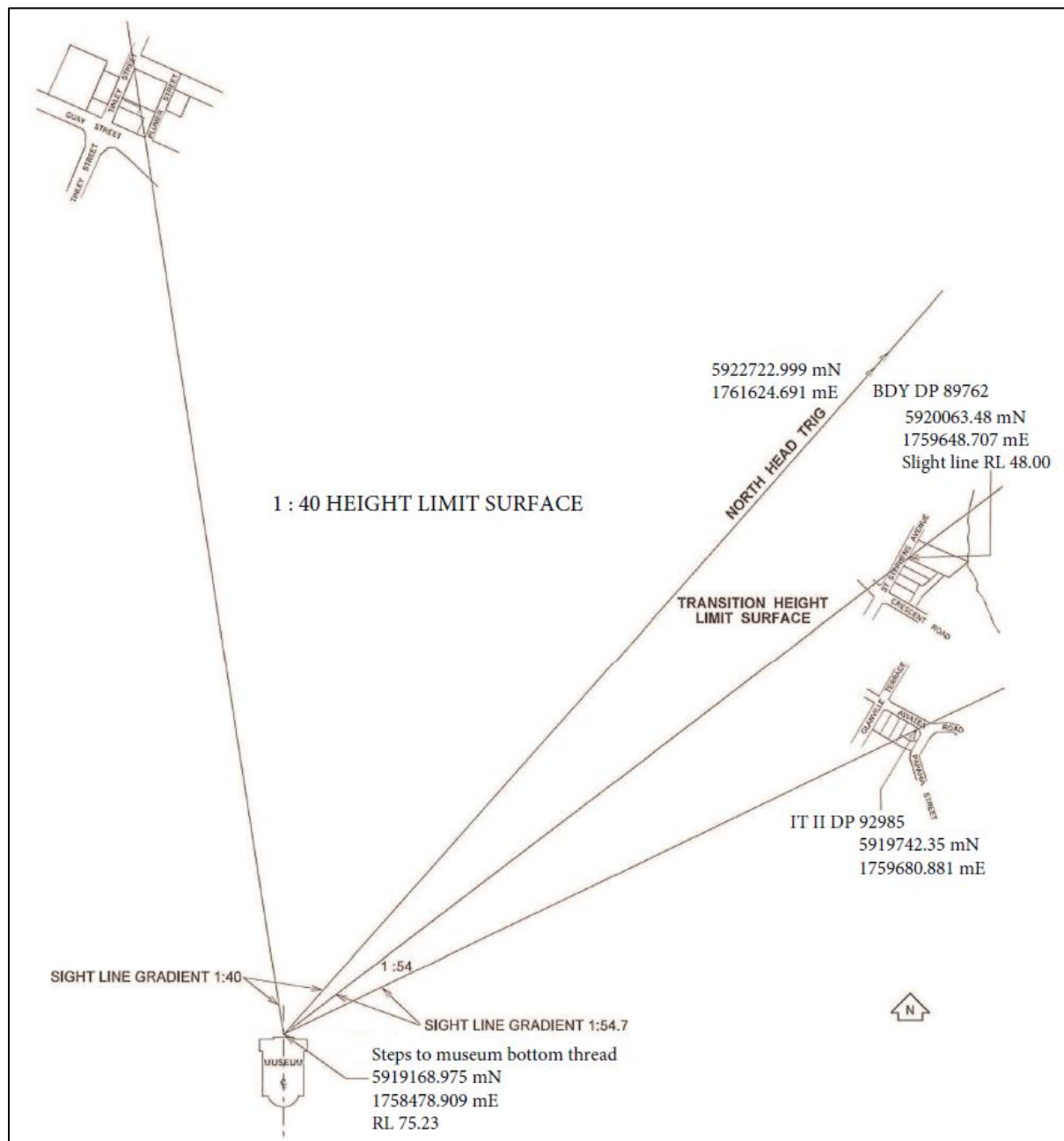




Figure D19.6.1.3 Height limit surface - 3



## Chapter E Auckland-wide

Amend **E7 Taking, using, damming and diversion of water and drilling** section as follows:

**Table E7.4.1 Activity Table**

Activity	Activity status		
	All zones	High- Use Stream Management Areas Overlay	Wetland Management Areas Overlay
...			
<b>Take and use of groundwater</b>			
...			
(A24)	Take and use of geothermal water for bathing use not otherwise provided for	D	D
...			

**E7.6.1.4. Take and use of groundwater up to 20m<sup>3</sup>/day when averaged over any consecutive 20-day period and no more than 5000m<sup>3</sup>/year**

Amend **E11 Land disturbance – Regional** section as follows:

### E11.4 Activity table

The following tables...

Amend **E12 Land disturbance – District** section as follows:

**Table E12.4.1 Activity table – all zones and roads**

Note 1...

In addition to the objectives and policies above, the rules in Table E12.4.2, notification, standards, matters and assessment criteria implement the objectives and policies in the following chapters:

- D10 Outstanding Natural Features Overlay and Outstanding Natural Landscapes Overlay;
- D11 Outstanding Natural Character and High Natural Character Overlay;
- D17 Historic Heritage Overlay;
- D18 Special Character Areas– Residential and Business Overlay; and
- D21 Sites and Places of Significance to Mana Whenua Overlay.

Table E12.4.2 Activity table – overlays (except Outstanding Natural Features Overlay)

Activity		Activity status				
		Outstanding Natural Character Overlay	Outstanding Natural Landscapes Overlay	High Natural Character Overlay and Outstanding Natural Landscapes Overlay	Historic Heritage Overlay	Sites and Places of Significant to Mana Whenua Overlay
		Special Character Areas Overlay – Residential: Isthmus C				
		Fences, service connections, effluent disposal systems, swimming pools, garden amenities, gardening, planting of any vegetation, burial of marine mammals, bridle paths, cycle and walking tracks but excluding ancillary farming earthworks and ancillary forestry earthworks				
(A16)	Earthworks for maintenance and repair	P	P	P	P	
(A17)	Earthworks for the installation of fences, walking tracks and burial of marine mammals	P	P	P <sup>2</sup>	RD	
(A18)	Earthworks for interments in a burial ground, cemetery or urupā (within the burial plot for that interment)	P	P	P	P	
(A19)	Earthworks for gardening or planting	P	P	P	P	
		Driveways, parking areas and, sports fields and major recreational facilities				
(A20)	Earthworks for operation, maintenance, resurfacing and repair	P	P	P	P	
		Cultivation				
(A21)	Up to 500m <sup>2</sup>	RD	P	RD	D	
(A22)	Greater than 500m <sup>2</sup> up to 2500m <sup>2</sup>	RD	P	RD	D	
(A23)	Greater than 2500m <sup>2</sup>	RD	P	D	D	
		Irrigation or land drainage				
(A24)	Works below the natural ground level	RD	P	D	D	
		Farming				
(A25)	Ancillary farming earthworks for maintenance of tracks	P	P	P <sup>2</sup>	P	
		Forestry				
(A26)	Ancillary forestry earthworks	P	P	P <sup>2</sup>	P	

Activity		Activity status					
		Outstanding Natural Character Overlay	Outstanding Natural Landscapes Overlay	High Natural Character Overlay and Outstanding Natural Landscapes Overlay	Historic Heritage Overlay	Sites and Places of Significant to Mana Whenua Overlay	Special Character Areas Overlay – Residential: Isthmus C
	for maintenance						
<b>Temporary activities</b>							
(A27)	Earthworks associated with the installation of the temporary activity	P	P	P <sup>2</sup>	RD		
<b>Land disturbance not otherwise listed in this table <sup>3</sup></b>							
(A28)	Up to 5m <sup>2</sup>	P	P	P <sup>2</sup>	D		
(A29)	Greater than 5m <sup>2</sup> up to 50m <sup>2</sup>	RD	P	RD	D		
(A30)	Greater than 50m <sup>2</sup>	RD	RD	RD	D		
(A31)	Up to 5m <sup>3</sup>	P	P	P <sup>2</sup>	D		
(A32)	Greater than 5m <sup>3</sup> up to 250m <sup>3</sup>	RD	P	RD	D		D
(A33)	Greater than 250m <sup>3</sup>	RD	RD	RD	D		D

...

Amend **E15 Vegetation management and biodiversity** section as follows:

**Table E15.4.1 Activity table - Auckland-wide vegetation and biodiversity management rules**

Activity		Activity status
<b>Use</b>		
All zones outside the RUB and all riparian and coastal areas (as described below)		
(A1)	Biosecurity tree works	P
(A2)	Dead wood removal	P
(A3)	Vegetation pruning, alteration or removal for customary use	P
(A4)	Emergency tree works	P

(A5)	Forestry and farming activities as existing at 30 September 2013	P
(A6)	Pest plant removal	P
(A7)	Conservation planting	P
(A8)	Vegetation alteration or removal for routine maintenance within 3m of existing buildings	P
(A9)	Vegetation alteration or removal for routine operation, maintenance and repair of existing tracks, lawns, gardens, fences, shelterbelts and other lawfully established activities	P
All zones outside the RUB		
(A10)	Vegetation alteration or removal, including cumulative removal on a site over a 10-year period, of greater than 250m <sup>2</sup> of indigenous vegetation that: (a) is contiguous vegetation on a site or sites existing on 30 September 2013; and (b) is outside the rural urban boundary	RD
Riparian areas (as described below)		
(A11)	Vegetation alteration or removal within a Wetland Management Areas Overlay	D
(A12)	Vegetation alteration or removal of any vegetation within a Natural Stream Management Areas Overlay	RD
(A13)	Vegetation alteration or removal within 50m of the shore of a lake within a Natural Lake Management Areas Overlay	RD
(A14)	Vegetation alteration or removal within 30m of the shore of a lake within an Urban Lake Management Areas Overlay	RD
(A15)	Vegetation alteration or removal within 20m of rural lakes	RD
(A16)	Vegetation alteration or removal within 20m of rural streams, other than those in Rural – Rural Production Zone and Rural – Mixed Rural Zone	RD
(A17)	Vegetation alteration or removal within 10m of rural streams in the Rural – Rural Production Zone and Rural – Mixed Rural Zone	RD
(A18)	Vegetation alteration or removal within 20m of a natural wetland, in the bed of a river or stream (permanent or intermittent), or lake	RD
(A19)	Vegetation alteration or removal within 10m of urban streams	RD
Coastal areas (as described below)		
(A20)	Vegetation alteration or removal of greater than 25m <sup>2</sup> of	RD

	contiguous vegetation, or tree alteration or tree removal of any indigenous tree over 3m in height, within 50m of mean high water springs in the Rural –Rural Production Zone, Rural – Mixed Rural Zone, Rural –Rural Coastal Zone, Rural –Rural Conservation Zone, Rural – Waitakere Ranges Zone and Rural – Countryside Living Zone or Future Urban Zone	
(A21)	Vegetation alteration or removal of greater than 25m <sup>2</sup> of contiguous vegetation or tree alteration or tree removal of any indigenous tree over 3m in height within 20m of mean high water springs in all zones other than in a Rural – Rural Production Zone, Rural – Mixed Rural Zone, Rural – Rural Coastal Zone, Rural – Rural Conservation Zone, Rural – Waitakere Ranges Zone and Rural –Countryside Living Zone or Future Urban Zone	RD
(A22)	Vegetation alteration or removal of greater than 25m <sup>2</sup> of contiguous vegetation, or tree alteration or tree removal of any indigenous tree over 3m in height, that is within: (a) a horizontal distance of 20m from the top of any cliff with; (b) a slope angle steeper than 1 in 3 (18 degrees); and (c) within 150m of mean high water springs	RD
All other zones and areas not covered above		
(A22A)	Vegetation alteration or removal	P
All areas		
(A23)	Permitted activities in Table E15.4.1 that do not comply with one or more of the standards in E15.6.	RD

...

## E15.6. Standards

All activities listed as a permitted, controlled or restricted discretionary activity in Table E15.4.1 or Table E15.4.2 must comply with the following standards...

### E15.6.4. Vegetation alteration or removal for routine operation, maintenance and repair of existing tracks, lawns, gardens, fences, shelterbelts and other lawfully established activities

E15.6.4. Vegetation alteration or removal for routine operation, maintenance and repair of existing tracks, lawns, gardens, fences, shelterbelts and other lawfully established activities in riparian areas, coastal areas, all zones outside the RUB and in overlays identified in Table E15.4.2 [other than the significant ecological areas in the in coastal marine area – SEA-M]

(1).....

(2) .....

(3).....

(4) .....

(5) [deleted]

...

#### **E15.6.8 Vegetation alteration or removal undertaken within the 100-year ARI floodplain**

(1) Vegetation alteration or removal must ensure that erosion control measures associated with vegetation removal and replanting, such as mulch or bark, are not able to be swept off-site in a flood event.

#### **E15.6.9 Tree trimming within Significant Ecological Areas**

(1) The maximum branch diameter must not exceed 50mm.

(2) No more than 10 per cent of live growth of the tree is removed in any one calendar year.

(3) Trimming must meet accepted modern arboricultural practice.

(4) The trimming must retain the natural shape, form and branch habit of the tree.

...

#### **E15.8.2. Assessment criteria**

The Council will ...

(1) all restricted discretionary activities:

(a) ecological values:

(i).....

(ii) .....

(iii) the extent to which the proposal for vegetation alteration or removal has taken into account relevant objectives and policies in Chapter B7.2 Indigenous biodiversity, B4. Natural heritage, Chapter E15 Vegetation Management and biodiversity, E18 Natural character of the coastal environment and E19 Natural features and natural landscapes in the coastal environment.

(b) ...

...

*Amend **E16 Trees in open space zones** section as follows:*

#### **E16.4. Activity table**

Table E16.4.1 Activity .....

- The rules that apply to network utilities and electricity generation are located in Section E26 Infrastructure.

- All activities must obtain the approval of the Tree Asset Manager for the Council, or the appropriate landowner, in respect of trees in open space zones.

These rules ...

...

*Amend **E24 Lighting** section as follows:*

#### **E24.6. Standards**

All activities listed as permitted in Table E24.4.1 Activity table must comply with the following standards.

##### **E24.6.1. General standards**

...

(8) The exterior lighting on any property adjacent to land on which there is a dwelling must be selected, located, aimed, adjusted and/or screened to ensure that glare resulting from the lighting does not exceed the pre-curfew or curfew limits outlined in Table E24.6.1.5 Pre-curfew luminous intensity limits or Table E24.6.1.6 Curfew luminous intensity limits.

...

*Amend **E25 Noise and vibration** section as follows:*

#### **E25.6. Standards**

...

##### **E25.6.10. Noise levels for noise sensitive spaces in the Business – City Centre Zone, Business – Metropolitan Centre Zone, Business – Town Centre Zone, Business – Local Centre Zone, Business – Neighbourhood Centre Zone, Business – Mixed Use Zone, Business – Heavy Industry Zone or the Business – Light Industry Zone**

(1) Noise sensitive spaces must be designed and/or insulated so that the internal noise levels do not exceed the levels in Table E25.6.10.1 Noise levels for noise sensitive spaces in the Business – City Centre Zone, Business – Metropolitan Centre Zone, Business – Town Centre Zone, Business – Local Centre Zone, Business – Neighbourhood Centre Zone, Business – Mixed Use Zone, Business – Heavy Industry Zone or the Business – Light Industry Zone below:

**Table E25.6.10.1 Noise levels for noise sensitive spaces in the Business – City Centre Zone, Business – Metropolitan Centre Zone, Business – Town Centre Zone, Business – Local Centre Zone, Business – Neighbourhood Centre Zone, Business – Mixed Use Zone, Business – Heavy Industry Zone or the Business – Light Industry Zone**

Unit affected	Time	Level
Bedrooms and sleeping areas ....	....	....
Bedrooms and sleeping areas in the Business – City Centre Zone, Business – Metropolitan Centre Zone, Business – Town Centre Zone, Business – Mixed Use Zone, Business – Heavy Industry Zone or the Business – Light Industry Zone	....	...
Other ....	....	....

(2) The levels in Table E25.6.10.1 Noise levels for noise sensitive spaces in the Business – City Centre Zone, Business – Metropolitan Centre Zone, Business – Town Centre Zone, Business – Local Centre Zone, Business – Neighbourhood Centre Zone, Business – Mixed Use Zone, Business – Heavy Industry Zone or the Business – Light Industry Zone above must be met based on the maximum level of noise permitted by the zone or precinct standards or any adjacent zone or precinct standards.

(3) Where a new room is constructed that is subject to Standard E250.6.10(1) (internal acoustic insulation requirement) and the noise levels in Table E256.10.1 Noise levels for noise sensitive spaces in the Business – City Centre Zone, Business – Metropolitan Centre Zone, Business – Town Centre Zone, Business – Local Centre Zone, Business – Neighbourhood Centre Zone, Business – Mixed Use Zone, Business – Heavy Industry Zone or the Business – Light Industry Zone (internal design noise level) can only be complied with when doors or windows to those rooms are closed, those rooms must, as a minimum:

(a) be constructed to ensure compliance with the noise limits in Table E25.6.10.1 Noise levels for noise sensitive spaces in the Business – City Centre Zone, Business – Metropolitan Centre Zone, Business – Town Centre Zone, Business – Local Centre Zone, Business – Neighbourhood Centre Zone, Business – Mixed Use Zone, Business – Heavy Industry Zone or the Business – Light Industry Zone; and

(b) for residential dwellings...

...

#### **E25.6.27. Construction noise levels in all zones except the Business – City Centre Zone and the Business – Metropolitan Centre Zone...**

(1) Noise from construction .....

**Table E25.6.27.1 Construction noise levels for activities sensitive to noise in all zones except the Business – City Centre Zone and the Business – Metropolitan Centre Zone**

Time of week	Time Period	Maximum noise level (dBA)	
		L <sub>eq</sub>	L <sub>max</sub>
Weekdays	....	....	....
	....	....	....
	6:00pm - 8:00pm	70	85
	....	....	....
Saturdays	....	....	....
	....	....	....
	6:00pm - 8:00pm	45	75
	....	....	....
Sundays and public holidays	.....	....	....
	.....	.....	....
	....	....	....
	....	....	....

(2) Noise from ...

(3) For a project involving a total duration of construction work that is less than 15 calendar days, the noise levels in Table E25.6.27.1 Construction noise levels for activities sensitive to noise in all zones except the Business – City Centre Zone and the Business – Metropolitan Centre Zone and Table E25.6.27.2 Construction noise levels for noise affecting any other activity above shall be increased by 5dB in all cases.

(4) For a project involving a total duration of construction work that is more than 20 weeks the noise limits in Table E25.6.27.1 Construction noise levels for activities sensitive to noise in all zones except the Business – City Centre Zone and the Business – Metropolitan Centre Zone and Table E25.6.27.2 Construction noise levels for noise affecting any other activity above shall be decreased by 5dB in all cases.

...

Amend **E26 Infrastructure** section as follows:

**Table E26.2.3.1 Activity table - Network utilities and electricity generation – All zones and roads**

Activity		Open space zones and the Special Purpose – Cemetery Zone	Centres zones, Business – Mixed Use Zone, Special Purpose – Airports and Airfields Zone, Special Purpose – Major Recreation Facility Zone, Special Purpose – Healthcare Facility and Hospital Zone, Business – Business Park Zone and Special Purpose – Education Zone	Industrial zones and the Business – General Business Zone	Residential zones, Special Purpose – Māori Purpose Zone and Special Purpose – School Zone	Coastal – Marina Zone (land) and Coastal – Minor Port Zone (land)	Rural zones, Future Urban Zone and Special Purpose – Quarry Zone	Roads, unformed roads and the Strategic Transport Corridor Zone
<b>General</b>								
(A1)	...							
<b>Infringement of standards</b>								
(A65)	Any activity that does not comply with Standard E26.2.5.2(6) and E26.2.5.1(6)	....	....	....	....	....	....	....
(A66)	Any activity that does not comply with Standard E26.2.5.2(7) and E26.2.5.1(7)	....	....	....	....	....	....	....

...

**Table E26.4.3.1 Activity table - Network utilities and electricity generation – Trees in roads and open space zones and the Notable Trees Overlay**

Activity		Auckland wide-rules Trees		Overlay rules
		Trees in roads [dp]	Open space zones [dp]	Notable trees [dp]
<b>Operation, maintenance, renewal, repair, construction and removal of network utilities and electricity generation facilities and, minor infrastructure upgrading</b>				
(A79)	...			
(A91)	Tree alteration or removal of any tree less than 4m in height and/or less than 400mm in girth	....	....	....
(A92)	Tree alteration or removal of any tree greater than 4m in height and/or greater than 400mm in girth	....	....	....
(A93)	...			

...

## **E26.2.5. Standards**

### **E26.2.5.1. Activities within roads and unformed roads in Table E26.2.3.1 Activity table**

All activities listed as permitted in Table E26.2.3.1 Activity table must comply with the following permitted activity standards.

(1) Temporary network utilities:

...

(6) Electricity transmission and distribution (Electric and magnetic fields):

(a) network utilities that emit electric and magnetic field emissions must comply with the International Commission on Non-ionising Radiation Protection Guidelines for limiting exposure to time varying electric and magnetic fields (1Hz – 100kHz) (Health Physics, 2010, 99(6); 818- 836) and recommendations from the World Health Organisation monograph Environmental Health Criteria (No 238, June 2007).

(7) Radio Frequency Fields (RF fields):

(a) network utilities should not result in radio-frequency fields produced by the network utility exceeding the maximum exposure level of the general public in the New Zealand Standard for Radiofrequency Fields Part 1: Maximum Exposure Levels 3 kHz to 300GHz (NZS 2772.1: 1999) measured at all places reasonably accessible to the general public.

...

### **E26.2.5.3. Specific activities within zones in Table E26.2.3.1**

#### *Minor infrastructure upgrading*

(1) Minor infrastructure upgrading of network utilities must comply with the following controls (where relevant):

(j) the replacement of an existing antenna with a new antenna provided that:

(i) the new antenna does not exceed the maximum dimension of the existing antenna by more than 20 per cent; and

(ii) .....

...

#### *Telecommunication antennas attached to buildings*

(6) Antennas attached to buildings ...

(7) Standards E26.2.5.3(8) - (10) apply ...

...

## E26.4.5. Standards

### *Trees in roads and open space zones*

#### **E26.4.5.1. Trees in roads and open space zones - tree trimming or alteration**

(1) Tree trimming or alteration of trees in streets and open space zones must comply with the following standards:

...

(e) All works must be carried out in accordance with best arboricultural practice.

...

### *Notable trees*

#### **E26.4.5.3. Notable trees - tree trimming or alteration**

(1) Tree trimming or alteration of notable trees must meet the following standards:

(a).....

(b) must not result in the removal of more than 20 per cent of live growth of the tree in any one calendar year;

(c) the trimming must retain the natural shape, form and branch habit of the tree; and

(d) the works must meet best arboricultural practice.

...

### *Infrastructure*

#### **E26.5.3 Activity table**

...

Amend **E27 Transport** section as follows:

**Table E27.4.1 Activity table**

Activity		Activity status
(A1)	...	
(A6)	Use of an existing vehicle crossing where a Vehicle Access Restriction applies under Standard E27.6.4.1(1) to service the establishment of a new activity, a change of activity type, the expansion or intensification of an existing activity or where a building(s) is constructed, or additions to buildings that are not permitted activities in <ul style="list-style-type: none"> <li>Table H8.4.1 Activity table;</li> <li>Table H9.4.1 Activity table; or</li> <li>Table H10.4.1 Activity table;</li> <li></li> </ul>	....
(A7)	...	

...

**Table E27.6.1.1 New development thresholds**

Activity			New development
(T1)	....		....
(T8)	Retail	Drive through	333 m <sup>2</sup> GFA
(T8A)		Retail activities (non-drive through)	1667m <sup>2</sup> GFA
(T9)	....		

....

**Table E27.6.2.3 Parking rates - area 1**

Activity		Applies to zones and locations specified in Standard E27.6.2(4)	
		Minimum rate	Maximum rate
(T18)	...		
(T21)	Entertainment facilities and community facilities Provided that, for places of worship, the "facility" shall be the primary place of assembly (ancillary spaces such as prayer rooms, meeting rooms and lobby spaces which do not have a separate use from the primary place of assembly shall be disregarded)	....	....
(T22)	...		

...

**Table E27.6.2.4 Parking rates - area 2**

Activity				Applies to zones and locations specified in Standard E27.6.2(5)	
				Minimum rate	Maximum rate
(T37)	...				
(T62)	Entertainment facilities and community facilities provided that, for places of worship, the 'facility' shall be the primary place of assembly (ancillary spaces such as prayer rooms, meeting rooms and lobby spaces which do not have a separate use from the primary place of assembly shall be disregarded)			....	....
(T63)	...				

...

#### **E27.6.4. Access**

##### **E27.6.4.1. Vehicle Access Restrictions**

(1) Vehicle Access Restrictions.....

(b) a Key Retail Frontage Control as shown on the planning maps;  
infringing this standard is a non-complying activity unless the application involves:

(i) the use of an existing vehicle crossing to service the establishment of a new activity, a change of activity type, the expansion or intensification of an existing activity or where a building(s) is constructed, or additions to buildings that are not permitted activities in:

- Table H8.4.1 Activity table;
- Table H9.4.1 Activity table; or
- Table H10.4.1 Activity table;

...

(2) Standard E27.6.4.1(3) below applies in any of the following circumstances:

(a) ...

(d) a building(s) is constructed, or additions to buildings that are not permitted activities in:

- Table H8.4.1 Activity table;
- Table H9.4.1 Activity table;
- Table H10.4.1 Activity table;
- Table H11.4.1 Activity table;
- Table H12.4.1 Activity table;

- Table H13.4.1 Activity table;
- Table H14.4.1 Activity table; or
- Table H15.4.1 Activity table

except that this does not apply in the case of a dwelling where the reconstruction, alteration or addition does not increase the number of dwellings on a site.

### (3) Vehicle Access Restrictions...

...

**Table E27.6.4.3.2 Vehicle crossing and vehicle access widths**

Location of site frontage		Number of parking spaces served	Minimum width of crossing at site boundary	Maximum width of crossing at site boundary	Minimum formed access width	
(T149)	Residential zone	Serves 1 or 2 parking spaces	2.75m	3.0m		2.5m provided it is contained within a corridor clear of buildings or parts of a building with a minimum width of 3m
(T150)		Serves 3 to 9 parking spaces	3.0m (one way)	3.5m (one way)		3.0m provided it is contained within a corridor clear of buildings or parts of a building with a minimum width of 3.5m
(T151)		Serves 10 or more parking spaces	5.5m (two-way) This may be narrowed to 2.75m if there are clear sight lines along the entire access and passing bays at 50m intervals can be provided	6.0m (two-way)		5.5m (providing for two-way movements)
(T152)	....					

...

#### **E27.6.4.4. Gradient of vehicle access**

The gradient of the access must not be steeper than specified in Table E27.6.4.4.1:

**Table E27.6.4.4.1 Gradient of vehicle access**

Access type		Maximum gradient
(T156A)	Vehicle access serving one residential rear site	1 in 4 (25 per cent)
(T157)	Vehicle access serving any other residential activities (including rear sites)	1 in 5 (20 per cent)
(T158)	Vehicle access used by heavy vehicles	1 in 8 (12.5 per cent)
(T159)	Vehicle access serving all other activities	1 in 6 (16.7 per cent)

Note 1....

...

## **E27.8. Assessment – restricted discretionary activities**

### **E27.8.1. Matters of discretion**

The Council will.....

(1) park-and-ride...

(9) any activity or development which infringes the standards for design of parking and loading areas or access under Standards E27.6.3, E27.6.4.2, E27.6.4.3 and E27.6.4.4:

...

### **E27.8.2. Assessment criteria**

The Council will .....

(1) park-and-ride and public transport facility...

(8) any activity or development which infringes the standards for design of parking and loading areas or access under Standards E27.6.3, E27.6.4.2, E27.6.4.3 and E27.6.4.4.

...

*Amend **E31 Hazardous Substances** section as follows:*

**Table E31.4.3 Activity table – Hazardous facilities that store or use the listed hazardous substances**

Activity			Activity status	
	Class	Sub-class (combined quantities)	P	RD
<b>Business – Light Industry Zone; Business – Heavy Industry Zone; Coastal – Defence Zone, Special Purpose – Airports and Airfields Zone and Special Purpose – Quarry Zone</b>				
...				

...

*Amend E38 Subdivision – Urban section as follows:*

### **E38.3. Policies ...**

(25) Avoid reducing the width of esplanade reserve or strip, or the waiving of the requirement to provide an esplanade reserve or strip, except where any of the following apply:

...

(e): any scheduled historic heritage places and sites and places of significance to Mana Whenua will not be adversely affected.

...

(26) Require esplanade reserves rather than esplanade strips unless any of the following apply:

...

### **E38.8.2.6. Subdivision of sites identified in the Special Character Areas Overlay – Residential and Business**

(1).....

(2) Proposed sites identified in the Special Character Areas Overlay – Residential and Business that are not listed in Table E38.8.2.6.1 must comply with the relevant minimum net site area for that site's zone in Table E38.8.2.3.1 Minimum net site area for subdivisions involving parent sites of less than 1 hectare.

**Table E38.8.2.6.1 Special Character Areas Overlay – Residential and Business subdivision controls**

Special Character Areas Overlay – Residential and Business – Sub area	Minimum net site area
.....	.....
North Shore Area A*	450m <sup>2</sup>
North Shore Area B*	500m <sup>2</sup>
North Shore Area C*	600m <sup>2</sup>

\*The maps showing North Shore Area A, North Shore Area B, and North Shore Area C can be found in Schedule 15 Special Character Schedule, Statements and Maps.

...

*Amend E39 Subdivision – Rural section as follows:*

### **E39.3. Policies**

.....

(22) Avoid reducing the width of esplanade reserves or strips, or the waiving of the requirement to provide an esplanade reserve or strip, except where any of the following apply

.....

(23) Require esplanade reserves rather than esplanade strips unless any of the following apply

.....

#### **E39.4. Activity table**

Tables E39.4.1 to E39.4.5 specify the activity status of subdividing land pursuant to section 11 of the Resource Management Act 1991 within the following zones:

- Rural – Rural Production Zone,
- Rural - Mixed Rural Zone,
- Rural – Rural Coastal Zone,
- Rural – Rural Conservation Zone
- Rural – Countryside Living Zone;
- Rural – Waitākere Foothills Zone
- Rural – Waitākere Ranges Zone;
- Future Urban Zone; and
- Special Purpose – Quarry Zone.

For subdivision within the National Grid Corridor Overlay...

...

## Chapter H Zones

*Amend H2 Residential – Rural and Coastal Settlement Zone section as follows:*

### H2.6.6. Height in relation to boundary

Purpose...

(4) A gable end, dormer or roof may project beyond the recession plane where that portion beyond the recession plane is:

(a)...

(b) no greater than 2.5m cumulatively in length measured along the edge of the roof as shown in Figure H2.6.6.2 Exceptions for gable ends and dormers and roof projections below.

#### Figure H2.6.6.2: Exceptions for gable ends and dormers and roof projections

...

*Amend H3 Residential – Single House Zone section as follows:*

### H3.5. Notification

(1) Any application for resource consent.....

(a) *[deleted]*

(b) development which does not comply with H3.6.12 (1a) Front, side and rear fences and walls.

...

### H3.6.7. Height in relation to boundary

Purpose...

(5) A gable end, dormer or roof may project beyond the recession plane where that portion beyond the recession plane is:

(a)...

(b) no greater than 2.5m cumulatively in length measured along the edge of the roof as shown in Figure H3.6.7.2 Exceptions for gable ends and dormers and roof projections below.

#### Figure H3.6.7.2: Exceptions for gable ends and dormers and roof projections

...

*Amend H4 Residential – Mixed Housing Suburban Zone section as follows:*

#### **H4.6.5 Height in relation to boundary**

...

(5) A gable end, dormer or roof may project beyond the recession plane where that portion beyond the recession plane is:

(a) .....

(b) no greater than 2.5m cumulatively in length measured along the edge of the roof as shown in Figure H4.6.5.2 Exceptions for gable ends, dormers and roof projections below.

#### **Figure H4.6.5.2 Exceptions for gable ends, dormers and roof projections**

...

#### **H4.6.6. Alternative height in relation to boundary**

Purpose...

(6) A gable end, dormer or roof may project beyond the recession plane where that portion beyond the recession plane is:

(a)...

(b) no greater than 2.5m cumulatively in length measured along the edge of the roof as shown in Figure H4.6.6.2 Exceptions for gable ends and dormers and roof projections below.

#### **Figure H4.6.6.2: Exceptions for gable ends and dormers and roof projections**

...

*Amend H5 Residential – Mixed Housing Urban Zone section as follows:*

#### **H5.6.5. Height in relation to boundary**

Purpose...

(5) A gable end, dormer or roof may project beyond the recession plane where that portion beyond the recession plane is:

(a)...

(b) no greater than 2.5m cumulatively in length measured along the edge of the roof as shown in Figure H5.6.5.2 Exceptions for gable ends and dormers and roof projections below.

#### **Figure H5.6.5.2: Exceptions for gable ends and dormers and roof projections**

...

#### **H5.6.6 Alternative height in relation to boundary**

...

- (6) A gable end, dormer or roof may project beyond the recession plane where that portion beyond the recession plane is:
- (a) ....
  - (b) no greater than 2.5m cumulatively in length measured along the edge of the roof as shown in Figure H5.6.6.2 Exceptions for gable ends, dormers and roof projections below.

**Figure H5.6.6.2 Exceptions for gable ends, dormers and roof projections**

...

*Amend H6 Residential – Terrace Housing and Apartment Buildings Zone section as follows:*

**H6.6.6. Height in relation to boundary**

Purpose...

- (5) A gable end, dormer or roof may project beyond the recession plane where that portion beyond the recession plane is:
- (a)...
  - (b) no greater than 2.5m cumulatively in length measured along the edge of the roof as shown in Figure H6.6.6.2 Exceptions for gable ends and dormers and roof projections below.

**Figure H6.6.6.2: Exceptions for gable ends and dormers and roof projections**

...

**H6.6.7. Alternative height in relation to boundary within the Residential- Terrace Housing and Apartment Buildings Zone**

- (7) A gable end, dormer or roof may project beyond the recession plane where that portion beyond the recession plan is:
- (a) ...
  - (b) no greater than 2.5m cumulatively in length measured along the edge of the roof as shown in Figure H6.6.7.3 Exceptions for gable ends, dormers and roof projections below.

**Figure H6.6.7.3 Exceptions for gable ends, dormers and roof projections**

...

Amend **H7 – Open Space Zones** section as follows:

## H7.9. Activity table

...

### H7.9.1 Activity Table – Open Space Zones

Activity		Activity Status				
		Conservation Zone	Informal Recreation Zone	Sport and Active Recreation Zone	Civic Spaces Zone	Community Zone
<b>Use</b>						
(A1)	...					
<b>Development</b>						
(A31)	...					
(A39)	New buildings that do not comply with one or more standards	D	D	D	D	D
(A40)	...					

...

### H7.11.3. Yards

Purpose:

- to provide a reasonable standard of visual amenity between open space zones when viewed from the street and a buffer between open space zones and neighbouring residential and special purpose zones; and
- to ensure buildings are adequately setback from streams and the coastal edge to maintain water quality and provide protection from natural hazards.

...

*In the following zones, insert the text on 'derivation of wind environment control graph' after each Wind environment control figure:*

<b>H8 Business – City Centre Zone</b>	<b>Figure H8.6.28.1 Wind environment control</b>
<b>H9 Business – Metropolitan Centre Zone</b>	<b>Figure H9.6.9.1 Wind environment control</b>
<b>H10 Business – Town Centre Zone</b>	<b>Figure H10.6.9.1 Wind environment control</b>
<b>H11 Business – Local Centre Zone</b>	<b>Figure H11.6.7.1 Wind environment control</b>
<b>H12 Business – Neighbourhood</b>	<b>Figure H12.6.7.1 Wind environment control</b>

<b>Centre zone</b>	
<b>H13 Business – Mixed Use Zone</b>	<b>Figure H13.6.8.1 Wind environment control</b>
<b>H14 Business – General Business Zone</b>	<b>Figure H14.6.6.1 Wind environment control</b>
<b>H15 Business – Business Park Zone</b>	<b>Figure H15.6.6.1 Wind environment control</b>

Derivation of the wind environment control graph:

The curves on the graph delineating the boundaries between the acceptable categories (A-D) and unacceptable (E) categories of wind performance are described by the Weibull expression:

$$P(>V) = e^{-(v/c)^k}$$

where V is a selected value on the horizontal axis, and P is the corresponding value of the vertical axis:

and where:

$P(>V)$  = Probability of a wind speed V being exceeded;

e = The Napierian base 2.7182818285

v = the velocity selected;

k = the constant 1.5; and

c = a variable dependent on the boundary being defined:

A/B, c = 1.548

B/C, c = 2.322

C/D, c = 3.017

D/E, c = 3.715

...

Amend **H8 Business – City Centre Zone** section as follows:

#### H8.6.11. Bonus floor area ratio

Purpose...

**Table H8.6.11.1 Bonus floor area**

Bonus feature	Activity type	Bonus floor area available per m <sup>2</sup> of feature provided							Maximum floor area ratio limit to bonuses on a site							
See Map H8.11.8 Bonus areas and Map H8.11.7 Site intensity		1a	1b 1c	2	3	4	5	6	1a	1b	1c	2	3	4	5	6
...																
Activities																
Dwellings	RD	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2:1	2:1	2:1	2:1	2:1	1:1	1:1	1:1
Home occupations	RD	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2:1	2:1	2:1	2:1	2:1	1:1	1:1	1:1
Visitor accommodation	RD	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2:1	2:1	2:1	2:1	2:1	1:1	1:1	1:1
Camping grounds	RD	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2:1	2:1	2:1	2:1	2:1	1:1	1:1	1:1
Boarding houses	RD	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2:1	2:1	2:1	2:1	2:1	1:1	1:1	1:1
Student accommodation	RD	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2:1	2:1	2:1	2:1	2:1	1:1	1:1	1:1
Integrated residential development	RD	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2:1	2:1	2:1	2:1	2:1	1:1	1:1	1:1
Retirement village	RD	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2:1	2:1	2:1	2:1	2:1	1:1	1:1	1:1
Supported residential care	RD	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2m <sup>2</sup>	2:1	2:1	2:1	2:1	2:1	1:1	1:1	1:1
...																

...

#### H8.6.26. Verandahs

Purpose: provide pedestrians with weather protection on main streets.

(1) A new ...

**Table H8.6.26.1 Minimum width**

Location	Minimum width
.....	.....
All other frontages identified on the plan	3m or setback no further than 700mm in plan from the edge of the road carriageway, whichever is the lesser

...

### **H8.6.28. Wind**

Purpose: mitigate the adverse wind effects generated by high-rise buildings.

(1) A new building must not cause:

(a) .....

(c) an existing wind speed which exceeds the controls of Standard H8.6.28(1)(a) or Standard H8.6.28(1)(b) above to increase.

...

### **H8.8.2. Assessment criteria**

The Council will consider.....

(1) new buildings and external alterations and additions to buildings not otherwise provided for:

...

(d) design and layout of dwellings, visitor accommodation and boarding houses:

(i) the extent to which dwellings are located, proportioned and orientated within a site to maximise the amenity of future residents by:

- clearly defining communal, semi-communal and private areas within a development;
- maximising passive solar access while balancing the need for buildings to front the street; and
- providing for natural cross-ventilation by window openings facing different directions.

...

(10) infringement of outlook space standard:

(a) ...

(c) privacy, outlook, daylight access and ventilation for visitor accommodation:

(i) the criteria for dwellings in H8.8.2(10)(a) and H8.8.2(10)(b) above apply, except that a lesser dimension of outlook separation to a minimum of 6.0m from bedrooms or principle living areas may be acceptable in some cases where the intent of criteria H8.8.2(10)(a) and H8.8.2(10)(b) above are satisfied and, with the exception of Crown

land, where certainty can be provided, through a registered covenant in favour of the Council or another equally restrictive mechanism, that the building or area within a building is not to be used for accommodation other than visitor accommodation and is to be managed as a single entity in perpetuity;

...

*Amend H10 Business – Town Centre Zone section as follows:*

#### **H10.6.1. Building height**

Purpose...

**Table H10.6.1.1 Total building height shown in the Height Variation Control on the planning maps**

Occupiable building height	Height for roof form	Total building height shown on Height Variation Control on the planning maps
Same as on the planning maps	NA	Less than or equal to 11m
11m	....	....

...

*Amend H13 Business – Mixed Use Zone as follows:*

#### **H13.6.1. Building height**

Purpose...

**Table H13.6.1.2 Total building height shown in the Height Variation Control on the planning maps**

Occupiable building height	Height for roof form	Total building height shown on Height Variation Control on the planning maps
Same as on the planning maps	NA	Less than or equal to 11m
11m	....	....

...

*Amend H15 Business – Business Park Zone section as follows:*

#### **H15.6.4. Landscaping and maximum impervious area**

Purpose.....

(1) Landscaped areas which in total comprise at least 20 per cent of a site must be provided.

(2) .....

(4) The maximum impervious area in the zone is 80 per cent of the site.

...

*Amend H19 Rural zones section as follows:*

#### **H19.10.3. Minimum yard setback requirements**

Purpose: to ensure adequate and appropriate separation distance between buildings and site boundaries to minimise:

- adverse effects of buildings on the character and amenity values enjoyed by occupiers of adjoining properties;
- opportunities for reverse sensitivity effects to arise; and,
- to ensure buildings are adequately setback from streams and the coastal edge to maintain water quality and provide protection from natural hazards.

...

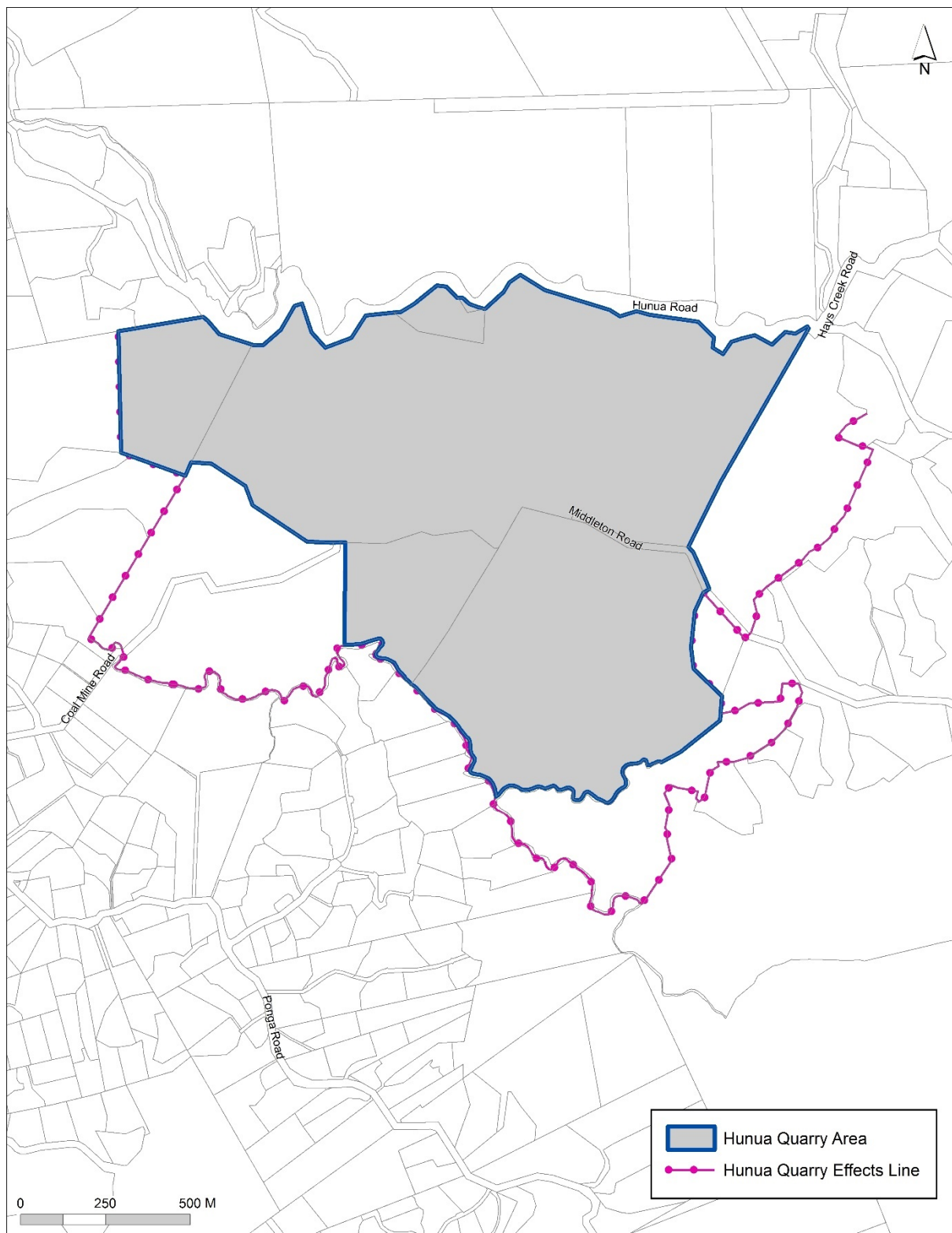
*Amend H20 Rural - Waitākere Foothills Zone section as follows:*

**Table H20.4.1 Activity Table**

Activity		Activity status
...		
<b>Use</b>		
<b>Rural</b>		
...		
(A15) [rp/dp]	Disposal of non-residential waste or composting that does not comply with Standard H20.6.1.(1) and (2)	D
...		

**Amend H28 Special Purpose – Quarry Zone as follows:**

**Insert revised *Figure H28.6.2.1.1 Hunua quarry effects line***



## Chapter I Precincts

### Auckland-wide

*Amend I101 Motorsport precinct as follows:*

#### **I101.6. Standards**

...

##### **I101.6.2.1. All motorsport activities**

(1) Between 1 October in one year and 31 May in the following year no motorised activities will occur on one week in every three weeks (except for weekday practices as detailed below).

(2) Between 1 June and 30 September no motorised activities will occur on one week in every two weeks (except for weekday practices as detailed below).

...

##### **I101.6.2.2. Lighting**

(1).....

(2) Hours of operation for floodlights must be no later than 8.00pm daily except where agreed by Council for special national or international events for a maximum of six days per year.

...

##### **I101.6.2.4. Auckland Speedway Riders Club motorsport activities**

In addition to Standards I101.6.2.1 and I101.6.2.2, these activities must comply with all of the following:

(1)...

(2) Race meetings may occur between:

(a) noon and 6pm on Sundays; or

(b) 4pm and 9pm of Fridays

(3) *[deleted]*

(4) Practice Sessions...

(5) All vehicles...

(6) Auckland Speedway...

(7) Auckland Speedway Riders Club may specify on the programme submitted to Power Sports Association who will submit to Auckland Council, a twilight meeting between 4pm and 9pm on a Wednesday, Thursday or Friday following a race to be used in the event of a rainout of a Sunday meeting. A meeting will not be considered rained out if it has continued for more than one hour.

...

*Amend I103 Waitematā Navigation Channel Precinct as follows:*

### **I103.3. Policies [rcp]**

The Coastal – General Coastal Marine Zone, Auckland-wide and overlay policies apply in this precinct in addition to those specified above, with the exception F2.4.3(3) Dredging Policy of F2 Coastal – General Coastal Marine Zone.

...

## City Centre

*Amend I208 Port Precinct as follows:*

### **I208.6. Standards**

#### **I208.6.1. Land and water standards**

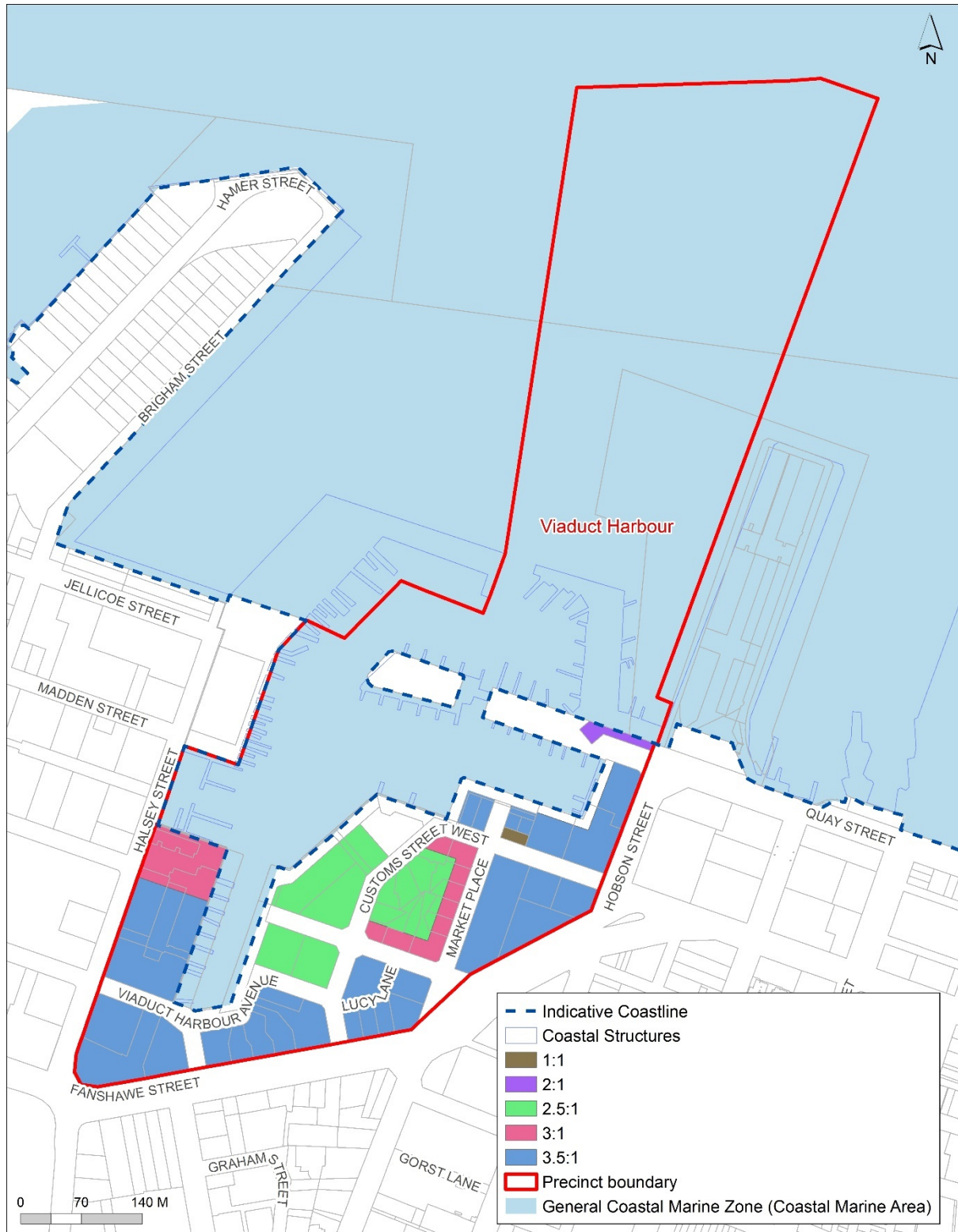
The land and water use standards ...

The Auckland-wide Lighting rules E24 and Noise rules E25.6.2 - E25.6.29 and E25.6.31 - E25.6.33; do not apply to land and the coastal marine area in the Port Precinct.

...

Amend I211 Viaduct Harbour Precinct as follows:

#### I211.10.4 Viaduct Harbour: Precinct plan 4 - Site intensity controls



Amend **I214 Wynyard Precinct** as follows:

**Table I214.4.1. Activity table – Land use**

[The regional coastal plan [rcp] provisions are not operative until the Minister of Conservation has formally approved the regional coastal plan part of the Auckland Unitary Plan.]

Activity		Sub-precinct A and Sub-precinct B	Sub-precinct C	Sub-precinct D	Sub-precinct E and Sub-precinct G	Sub-precinct F	Coastal marine area [rcp]
...							
(A23)	Office activity that exceeds the maximum office activity gross floor area in I214.6.2(1) below, subject to compliance with the maximum office activity gross floor area in I214.6.2(2) below #		NC	RD	RD	RD	NA
...							

...

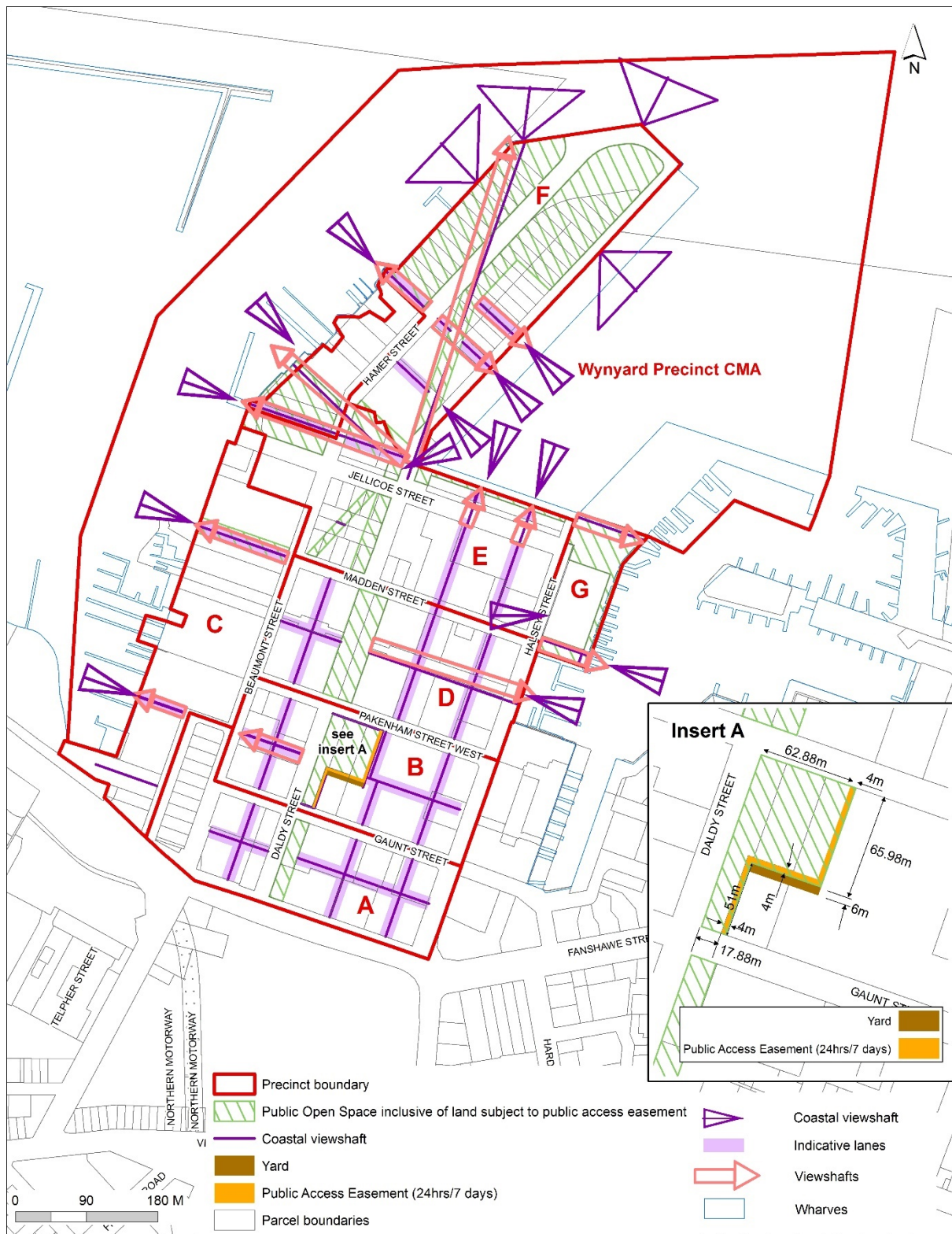
**Table I214.6.2.2 Maximum office Gross Floor Area 2**

Sub- precinct	Maximum additional gross floor area	Maximum restricted discretionary office activity ratio per site	Total office gross floor area – permitted + restricted discretionary
A.....			
D	14,000m <sup>2</sup>	1.32:1	48,000m <sup>2</sup>
E	8,500m <sup>2</sup>	1.27:1	43,500m <sup>2</sup>
F	5,000m <sup>2</sup>	1.18:1	18,000m <sup>2</sup>

...

## I214.10.6 Wynyard: Precinct plan 6 - Indicative lanes and viewshafts

Insert amended plan 6 as follows:



**Central**

*Amend I318 Monte Cecilia Precinct as follows:*

**I318.3. Policies**

- (1) Ensure activities are compatible with the Monte Cecilia Statement of Significance and Pah Farm Conservation Plan.

...

*Amend I319 MOTAT Precinct as follows:*

**I319.6.2 Lighting**

(1)...

- (5) The added illuminance from the use of any artificial lighting on any site must not exceed either one of the following;

- (a) The limits in Table I319.6.2.2 when measured at the boundary of any residentially zoned site containing an established dwelling. The illuminance limit will apply horizontally and vertically at any point on the boundary and at any height; or

- (b) The vertical illuminance limits in Table I319.6.2.3 when measured at the windows of habitable rooms of an established dwelling within a residential zone.

...

- (7) Any exterior lighting must be selected, located, aimed, adjusted and/or screened to ensure that glare resulting from the lighting does not exceed 10,000 cd for pre-curfew times and 1,000 cd for curfew times at the windows of habitable rooms of an established dwelling within a residential zone and at the boundary of any residentially zoned site where a dwelling does not yet exist.

...

**I319.8.2 Assessment criteria**

The Council will.....

- (1) The effects of non-compliance with a noise and/or lighting standard on the amenity values of surrounding properties and safety of transport networks:

...

(f) the extent to which the amount of light falling into habitable rooms of established dwellings within a residential zone during the hours of darkness is minimised to control effects on indoor amenity and sleep disturbance.

...

Amend **I323 Observatory Precinct** as follows:

### I323.10.1. Observatory Precinct: Precinct plan 1 – Maximum building height

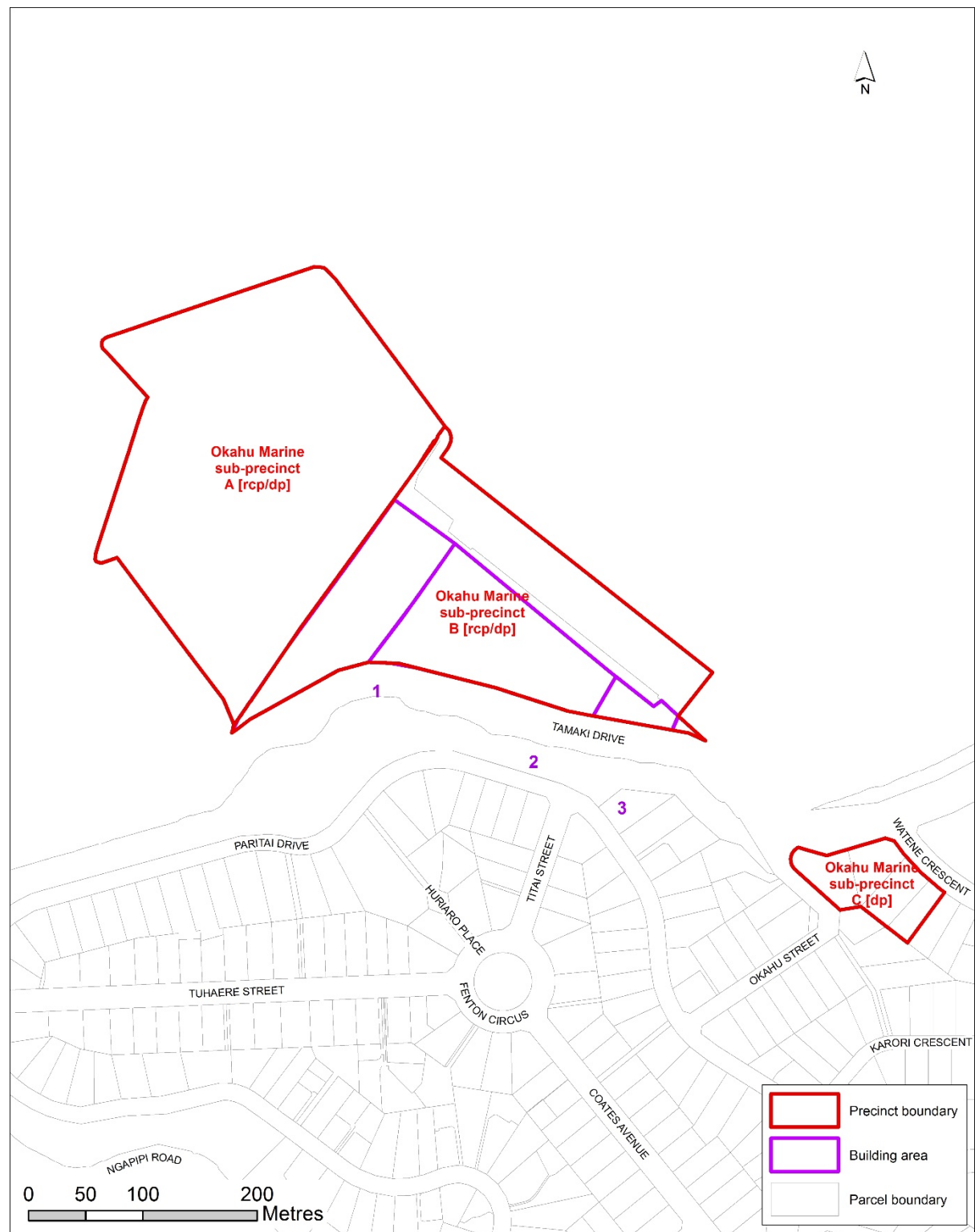
Amend legend to read Area A max height 9 metres above existing ground level. Not 3 metres.



Amend I325 Ōkahu Marine Precinct as follows:

**I325.10.1. Ōkahu Marine Precinct: Precinct plan 1- building areas within sub-precinct B**

*Insert amend Precinct plan 1*



...

*Amend I332 Tamaki Precinct as follows:*

**I332.7. Assessment – controlled activities.**

There are no controlled activities in this precinct

...

*Amend I334 Wairaka Precinct as follows:*

**I334.8. Assessment – restricted discretionary activities**

**I334.8.1. Matters of discretion**

The Council will .....

...

(3) Connections of any road to the Precinct with a public road:

...

**I334.8.2. Assessment criteria**

The Council will consider the relevant assessment criteria below for restricted discretionary activities, in addition to the assessment criteria specified for the relevant restricted discretionary activities in the zones, Auckland-wide or overlay provisions:

...

(2) Parking buildings and structures

(a) Ground contours...

(g) Design of parking and access

(i) the extent to which parking buildings avoid fronting Carrington Road or Oakley Creek or avoid having direct access from Laurel Street, Renton Road, Rhodes Avenue (or any extension of those streets), or the western road shown on the Precinct plan;

(ii) ...

(3) Connection of any road to the Precinct with a public road:

(a) Traffic...

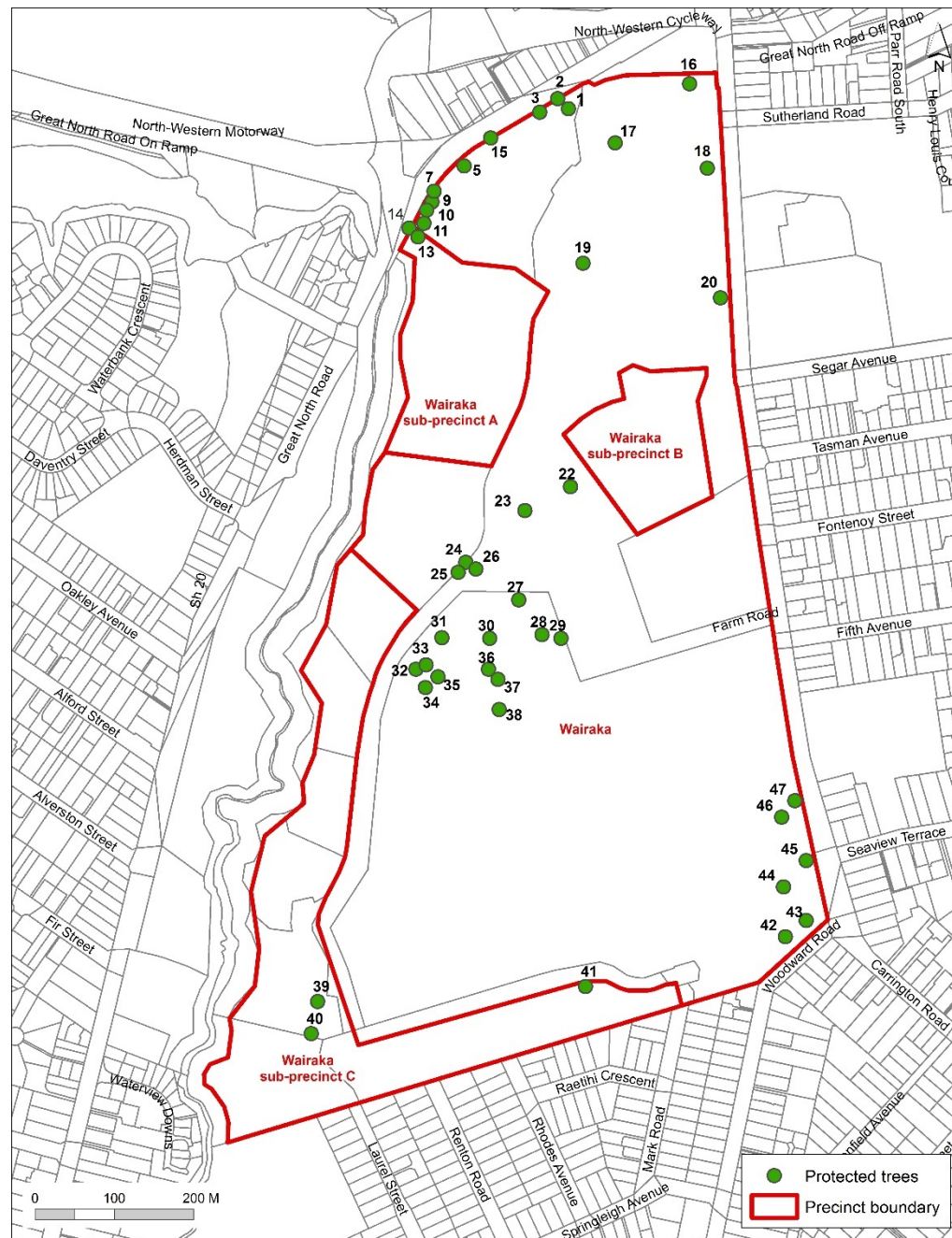
(c) benefits of road connections (excluding benefits related to diversion of traffic from Carrington Road):

(i) the extent of any positive benefits arising from the proposed connection (excluding benefits related to diversion of traffic from Carrington Road) and ensure the provision of walkway and cycleway access is not restricted.

...

## I334.10.2 Wairaka: Precinct plan 2 – Protected Trees

*Insert amended I334.10.2 Wairaka: Precinct plan 2 – Protected Trees diagram*



**South**

*Amend I402 Auckland Airport Precinct as follows:*

## **I402.6. Standards**

The Auckland-wide...

### **I402.6.1. Retail**

(1) .....

(2) Retail (where the goods being sold have been manufactured within the tenancy) in Gateway Sub-precinct area C and D must not exceed the lesser of 25 per cent of the gross floor area set aside for manufacturing or 250m<sup>2</sup>.

...

## **I402.8. Assessment – restricted discretionary activities**

### **I402.8.1. Matters of discretion**

The council will.....

(1) any buildings, structures, works or subdivision within Gateway Sub-precinct area A – F which is not in accordance with I402.10.1 Auckland Airport: Precinct plan 1 and/or not complying with Standard I402.6.20 Subdivision:

(a) .....

(2)...

...

### **I402.8.2. Assessment criteria**

The council will .....

(1) any building, structure, works or subdivision within Gateway Sub-precinct area A – F not in accordance with I402.10.1 Auckland Airport: Precinct plan 1 and/or not complying with Standard I402.6.19 Subdivision:

(a) .....

Amend **I403 Beachlands 1 Precinct** as follows:

### **I403.3. Policies [rp/dp]**

#### *General*

(1)...

#### *Landscaping along Whitford–Maraetai Road*

(25) .....

(26) Require planting of the landscape buffer area with native and exotic species in accordance with I403.10.3 Beachlands 1: Landscape buffer area planting plan and planting schedule.

(27) Protect views from Whitford-Maraetai Road to the Hauraki Gulf by means of the view corridor through the landscape buffer area identified in I403.10.3 Beachlands 1: Landscape buffer area planting plan and planting schedule.

#### *Jack Lachlan Drive*

...

### **I403.4. Activity table**

The provisions in any relevant overlays, Auckland-wide provisions and the zone apply in this precinct unless otherwise specified below...

**Table I403.4.1 Activity table**

Activity		Activity status
<b>Use</b>		
(A1)	...	
(A4)	Any activity requiring wastewater servicing that is not connected to a public reticulated wastewater system	NC
...		
<b>Development</b>		
...		
(A17)	New buildings and any modifications to a building other than those listed above	P
...		

...

### **I403.6. Standards**

...

#### **I403.6.2. Yards**

(1) A building or parts of a building must be set back from the relevant boundary to the minimum depth listed in Table I403.6.2.1 Yards below.

**Table I403.6.2.1 Yards**

Yard	Minimum depth
Front and Corner Sites	
Front	<p>6m except as follows:</p> <p>8m for</p> <ul style="list-style-type: none"> <li>- sites adjoining Jack Lachlan Drive that are subject to standard I403.6.14</li> <li>- yards adjoining a stormwater management area or public open space.</li> </ul> <p>3m for</p> <ul style="list-style-type: none"> <li>- one yard only on a corner site</li> <li>- sites that adjoin a stormwater management area or public open space or a street.</li> </ul>
...	

...

#### **I403.6.14. Landscape buffer area**

(1) A landscape buffer area must be developed along Whitford–Maraetai Road as shown in the precinct plan I403.10.1 Beachlands 1: Precinct plan 1. The buffer area must:

(a).....

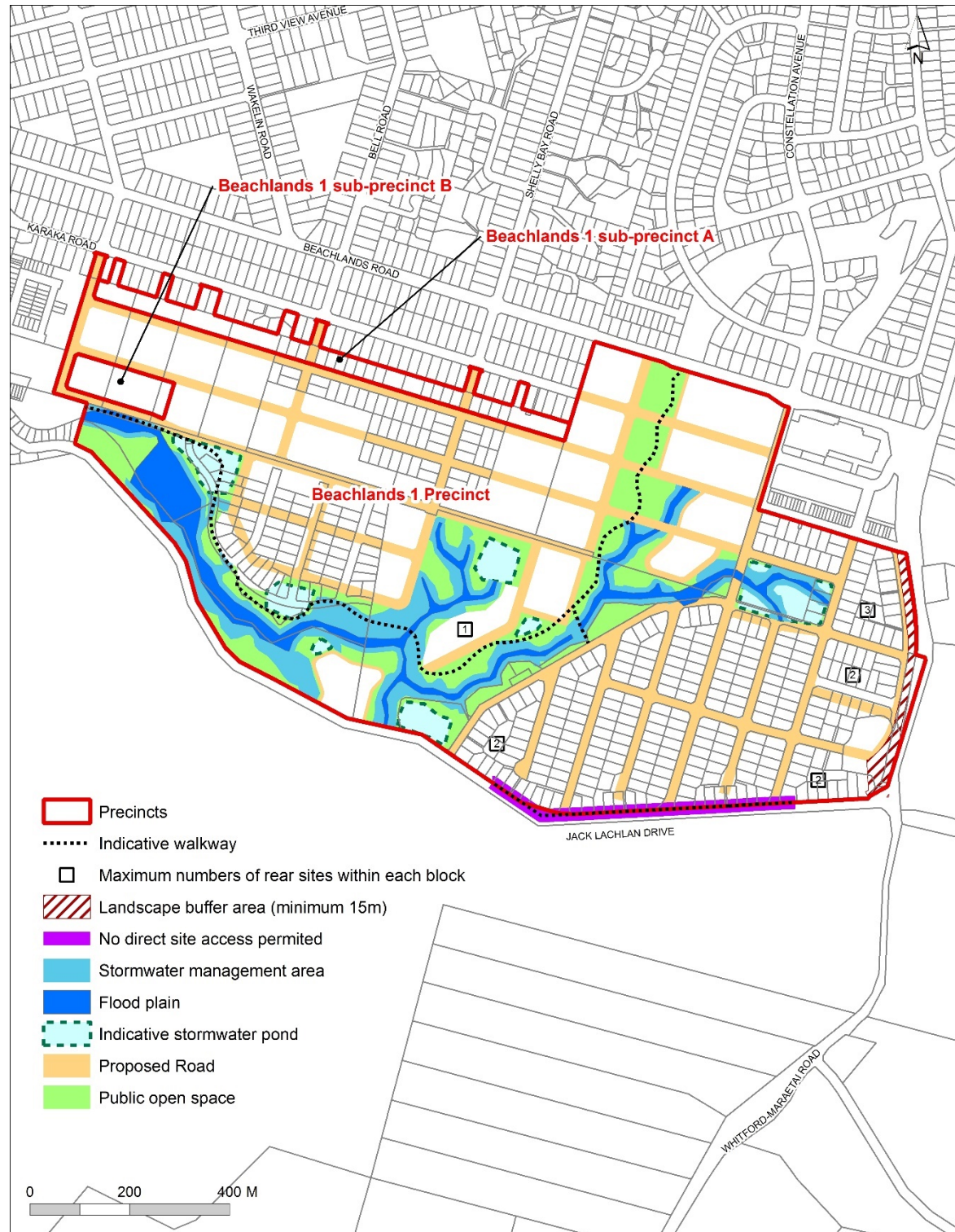
(c) be planted in accordance with the landscape plan for the buffer area and the planting schedule contained in I403.10.3 Beachlands 1: Landscape buffer area planting plan and planting schedule, prior to the issuing by the council of the s. 224(c) certificate under the Resource Management Act 1991 in relation to the subdivision referred to in Standard I403.6.14.1(a) above.

...

## I403.10. Precinct plans

### I403.10.1. Beachlands 1: Precinct plan 1

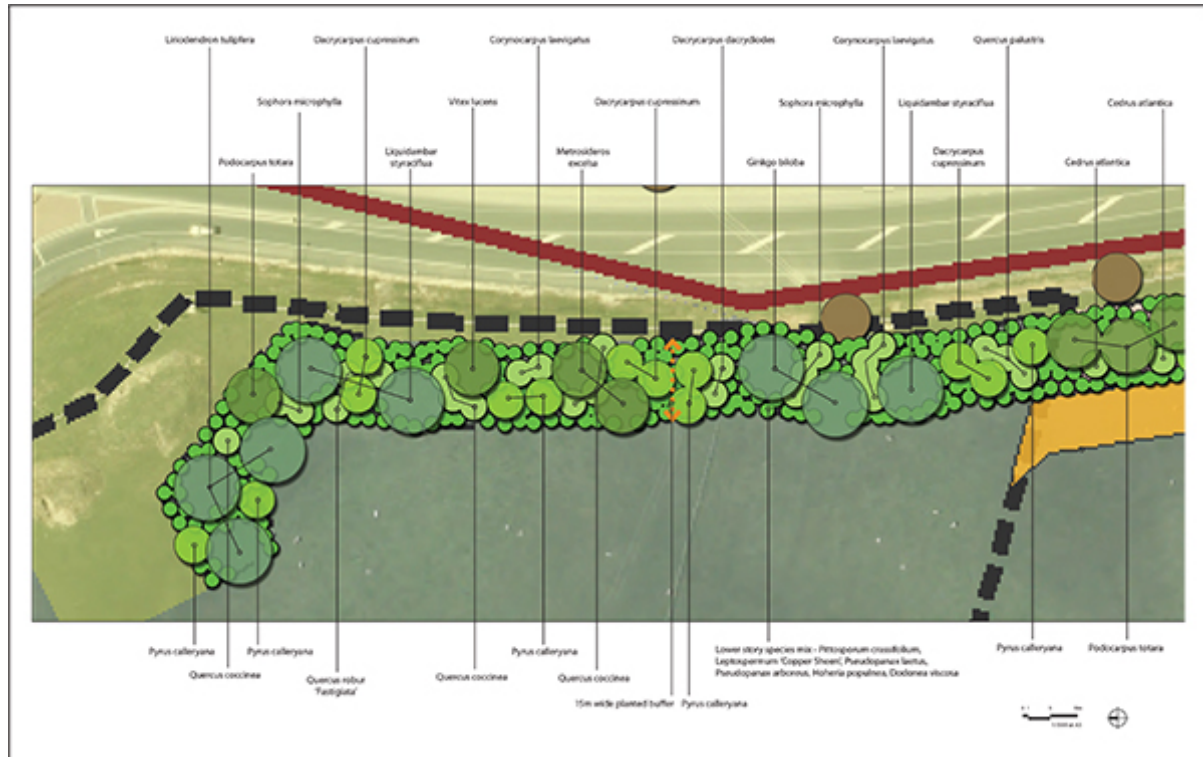
*Insert amended Precinct plan 1.*



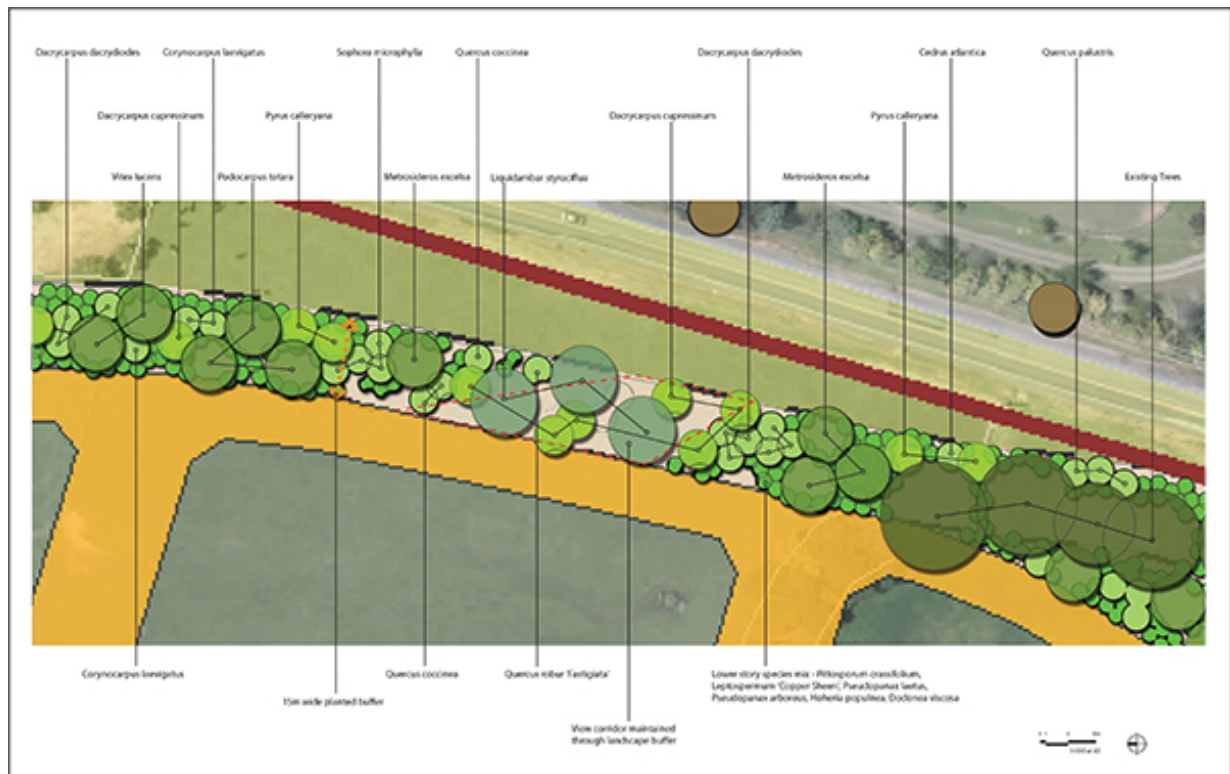
...

### I403.10.3 Beachlands 1: Landscape buffer area planting plan and planting schedule

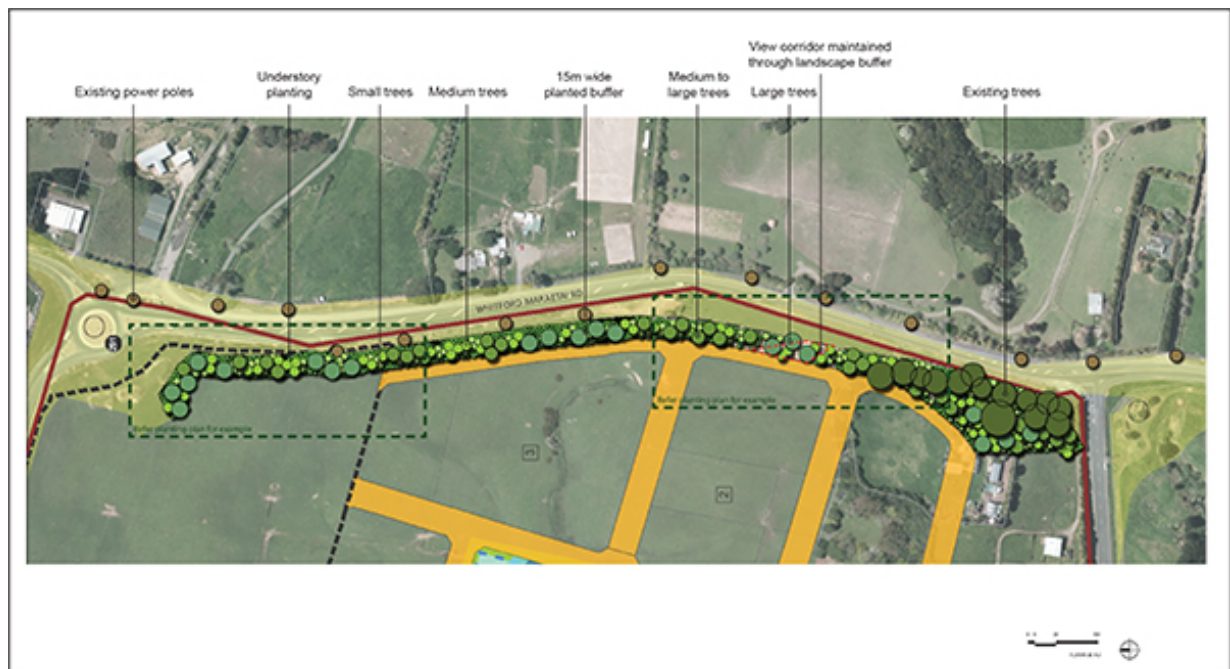
I403.10.3. Beachlands 1: Figure 1



I403.10.3. Beachlands 1: Figure 2



I403.10.3. Beachlands 1: Figure 3



I403.10.3. Beachlands 1: Table 1

Code	Botanic name	Common name	Min PB size	Min height when planted (mm)	Spacing (mm)	Percentage/ number
<b>Medium to large trees</b>						<b>100%/130</b>
DAC cup	Dacrycarpus cupressinum	Rimu	PB95	2500	As shown	10%/13
DAC dac	Dacrycarpus dacrydiodes	Kahikatea	PB95	2500	As shown	10%/13
GIN bil	Ginkgo biloba	Ginkgo	PB95	2500	As shown	10%/13
LIR tul	Liriodendron tulipifera	Tulip tree	PB95	2500	As shown	10%/13
LIQ sty	Liquidambar styraciflua	American sweet gum	PB95	2500	As shown	20%/26
MET exc	Metrosideros excelsa	Pohutukawa	PB95	2500	As shown	20%/26
POD tot	Podocarpus totara	Totara	PB95	2500	As shown	10%/13
VIT luc	Vitex lucens	Puriri	PB95	2500	As shown	10%/13
<b>Small to medium trees</b>						<b>100%/220</b>
CED atl	Cedrus atlantica	Atlas cedar	PB50	2000	As shown	10%/22
COR lae	Corynocarpus laevigatus	Karaka	PB50	2000	As shown	20%/44
PYR cal	Pyrus calleryana	Callery pear	PB50	2000	As shown	20%/44

Code	Botanic name	Common name	Min PB size	Min height when planted (mm)	Spacing (mm)	Percentage/ number
SOP mic	Sophora microphylla	Kowhai	PB50	2000	As shown	20%/44
QUE coc	Quercus coccinea	Scarlet oak	PB50	2000	As shown	10%/22
QUE pal	Quercus palustris	Pin oak	PB50	2000	As shown	10%/22
QUE rob	Quercus robur 'Fastigiata'	Fastigate oak	PB50	2000	As shown	10%/22
<b>Understory Planting</b>						<b>100%/500</b>
DOD vis	Dodonea viscosa	Akeake	PB28	1500	As shown	20%/100
HOH pol	Hoheria populnea	Lacebark	PB28	1500	As shown	20%/100
LEP cop	Leptospermum 'Copper Sheen'	Manuka hybrid	PB28	1500	As shown	15%/75
PIT cra	Pittosporum crassifolium	Kara	PB28	1500	As shown	15%/75
PSE arb	Pseudopanax aboreus	Five finger	PB28	1500	As shown	15%/75
PSE lae	Pseudopanax laetus		PB28	1500	As shown	15%/75

...

Amend **I404 Beachlands 2 Precinct** as follows:

#### I404.4. Activity table

...

**Table I404.4.1 Activity table**

Activity		Activity status		
		Sub-precinct A	Sub-precinct B	Sub-precinct C
<b>Use</b>				
...				
<b>Commerce</b>				
(A10)	Trade suppliers	P	RD	RD
...				

...

#### I404.8. Assessment – restricted discretionary activities I404.8.1. Matters of discretion

The Council will .....

- (1) drive-through restaurants in Sub-precinct C, food and beverage in Sub-precinct B, and trade suppliers and retail in Sub-precinct B and C:
  - (a) delay to the creation ...

...

#### I404.8.2. Assessment criteria

The Council will.....

- (1) drive-through restaurants in Sub-precinct C, food and beverage in Sub-precinct B, and trade suppliers and retail in Sub-precinct B and C:
  - (a) the extent to which the ...

...

Amend **I408 Clevedon Precinct** as follows:

#### I408.4. Activity table [rp/dp]

The provisions ...

**Table I408.4.1 Activity Table**

Activity		Activity Status (Sub-precinct)				
		A	B	C	D	E
<b>Use and development</b>						
Activities						
(A1)	...					
(A8)	[deleted]					
...						
<b>Subdivision</b>						
(A22)						
(A23)	[deleted]					
(A24)	Subdivision that does not comply with I408.6.2 Wastewater	NC				

...

Amend **I409 Clevedon Waterways Precinct** as follows:

#### **I409.4. Activity table**

The provisions...

**Table I409.4.1 Activity Status in Sub-precinct A**

Activity		Activity status
Residential		
(A1)	....	....
(A2)	Stand alone dwellings	P
(A2A)	Attached dwellings	P
...		
(A10)	New buildings	The same activity status and standards as applies to the land use activity that the new building is designed to accommodate

...

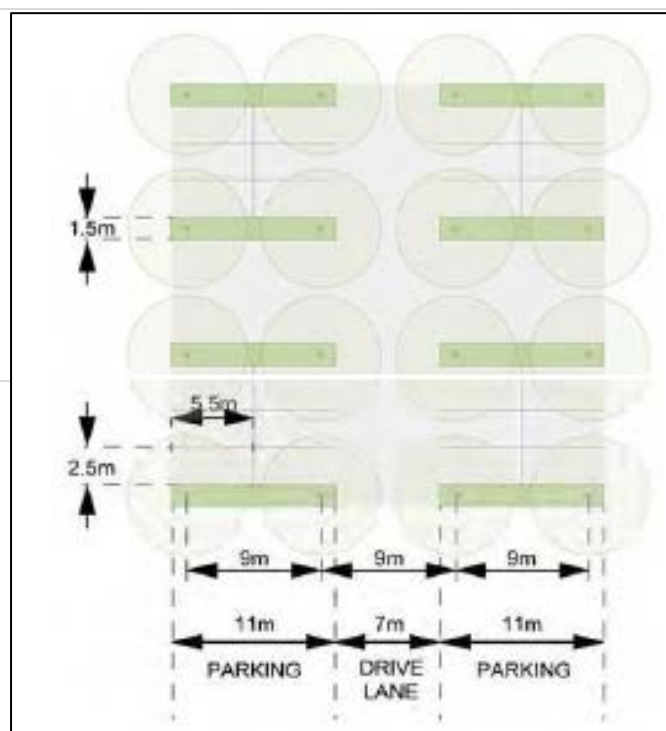
#### **I409.6. Standards**

##### **I409.6.11. Minimum lot size Sub-precinct A**

(3) *[deleted]*

Amend **I410 Drury South Industrial Precinct** as follows:

**Figure I410.6.2.1 Carpark design**



Amend **I410.11.1 Drury South Industrial Appendix** as follows:

Reformat Appendix I410.11.1 to reflect Auckland Unitary Plan formatting (i.e. heading format, subheading format, heading and subheading numbering as well as diagram numbering and format).

Insert Attachment 5 into Appendix I410.11.1

(Reformatted Appendix I410.11.1 attached as Appendix One to this Decision).

Amend **I412 Flat Bush Precinct** as follows:

## **I412.6. Standards**

...

### **I412.6.1.1. Density**

(1) The following density requirements shall apply within the Flat Bush Sub-precincts:

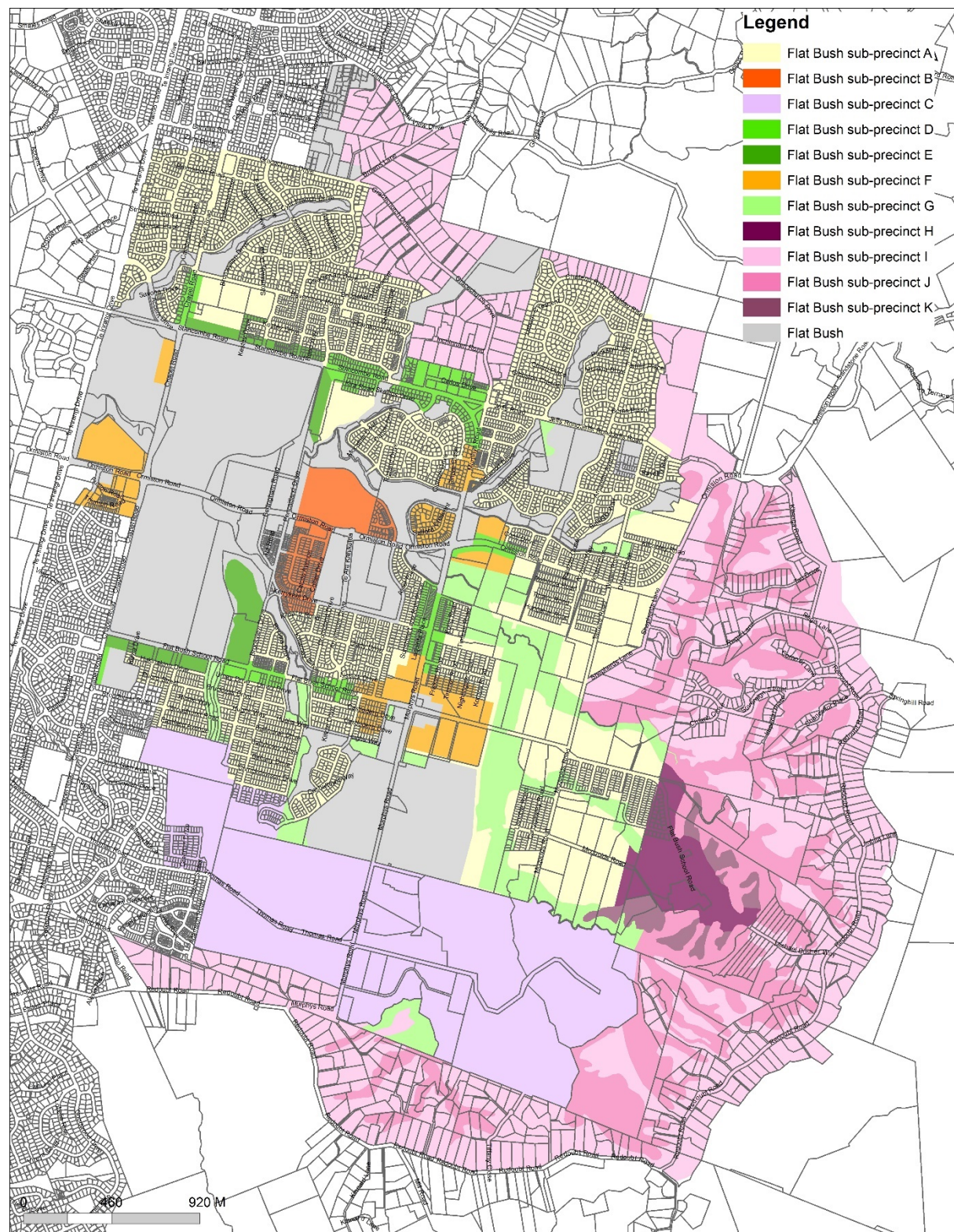
**Table I412.6.1.1.1 Density requirements**

	A	B	D	E	F	G	H	I	J	K
Minimum density (sqm net site area per dwelling)	425	300	425	250	425	NA	520	NA	NA	1000

...

# Diagram I412.10.1. Flat Bush: Precinct plan 1 – Sub-precincts Boundary

*Insert amended Precinct plan 1*



Amend **I417 Karaka North Precinct** as follows:

#### **I417.1. Precinct Description**

The purpose of the Karaka North precinct...

The zoning of land within this precinct is Business - Local Centre Zone, Residential - Mixed Housing Suburban Zone, Residential - Single House Zone, Rural - Mixed Rural Zone and Rural - Rural Coastal Zone.

...

#### **I417.4. Activity table**

The provisions in any relevant overlays, Auckland-wide provisions and the underlying zone apply in this precinct unless otherwise specified below.

Table I417.4.1 specifies the activity status of land use, development and subdivision activities in the Karaka North Precinct pursuant to section 9(3) of the Resource Management Act 1991.

A blank in Table I417.4.1 Activity table below means that the zone, overlay or Auckland-wide provisions apply.

**Table I417.4.1 Activity table**

Activity		Activity status		
		Sub-precinct A	Sub-precinct B	Sub-precinct C
<b>Use</b>				
Residential				
(A1)	.....	....	....	...
(A3)	Within the Rural - Mixed Rural or Rural - Rural Coastal Zones, dwellings outside the Rural Amenity Area or the Rural Character Area identified in Karaka North: Precinct Plan 1	....	....	....
...				
Rural				
(A7)	Equestrian Centre in the Rural – Mixed Rural or Rural – Rural Coastal Zone	....		
...				

...

#### **I417.5. Notification**

(1)...

(2) Any application for resource consent for any of the following activities will be considered without public or limited notification or the need to obtain the written approval from affected parties unless the Council decides that special circumstances exist under section 95A(4) of the Resource Management Act 1991:

- (a) restaurants in the Residential - Mixed Housing Suburban Zone; and
- (b) equestrian centre in the Rural – Mixed Rural or Rural – Rural Coastal Zones.

...

#### **I417.6. Standards**

The overlay...

##### **I417.6.6. Minimum site size**

- (1) The minimum site sizes for the Karaka North sub-precincts are set out in Table I417.1 Minimum site sizes below.

...

#### **I417.7. Assessment – controlled activities**

##### **I417.7.1. Matters of control**

- (1) subdivision ...
- (2) dwellings in the Residential – Single House, Residential – Mixed Housing Suburban Zones; and dwellings in the Rural – Mixed Rural, and Rural – Rural Coastal Zones:

...

##### **I417.7.2. Assessment criteria**

- (1) subdivision ...
- (2) dwellings in the Residential – Single House, Residential – Mixed Housing Suburban Zones; and dwellings in the Rural – Mixed Rural, and Rural – Rural Coastal Zones:

...

#### **I417.8. Assessment – restricted discretionary activities**

##### **I417.8.1 Matters of discretion**

- (1) restaurants ...
- (2) equestrian centre in the Rural - Mixed Rural or Rural - Rural Coastal Zones:

...

##### **I417.8.2 Assessment criteria**

- (1) restaurants ...
- (2) equestrian centre in the Rural - Mixed Rural or Rural - Rural Coastal Zones:

...

*Amend I418 Kingseat Precinct as follows:*

#### **I418.8.2. Assessment criteria**

(1)...

(16) Subdivision

(a) In addition to considering the relevant assessment criteria I418.8.2(1) - (15) above the Council will also consider:-

(i) whether the subdivision...

(17) Former Kingseat Hospital site and consistency with relevant precinct plans.

(a) The council in considering the relevant assessment criteria in I418.8.2(1) - (16) above for subdivision and development considered restricted discretionary activities within the former Kingseat hospital site, will also consider the following matters:

(i) the overall character

(19) Historic heritage places (former Kingseat Hospital site)

(a) Whether in...

(b) With reference to provision I418.8.2(19)(a) above and consideration of any scheduled building, structure, area or tree, assessment criteria in section I418.8.2(11)(c)(i) are relevant.

(c)...

...

*Amend I429 Pararēkau and Kōpuahingahinga Islands Precinct as follows:*

#### **I429.9. Special information requirements**

##### **I429.9.1 Landscape Plan**

(1) Applications for subdivision must provide a landscape plan for those parts of Pararekau and Kopuahingahinga Islands and include:

...

*Amend I430 Patamahoe Precinct as follows:*

#### **I430.6. Standards**

The overlay, zone...

##### **I430.6.4. Vehicle parking and access in sub-precincts B, C and D**

...

#### **I430.6.5. On-site stormwater mitigation in sub-precincts B, C and D**

...

#### **I430.6.6. Interface with Kingseat Road - all sites fronting Kingseat Road in sub-precincts B, C and D**

...

#### **I430.6.9. Landscape buffer in sub-precincts B, C and D**

...

#### **I430.6.10. Public open space in sub-precincts B, C and D**

...

#### **I430.6.11. Staging in sub-precincts B, C and D**

...

#### **I430.6.12. Stormwater management in sub-precincts B, C and D**

...

#### **I430.8. Assessment – restricted discretionary activities**

The Council will restrict its discretion to...

(1)...

(2) Subdivision and infringements of subdivision standards:

(a) consistency with Patumahoe: Precinct plan 1 and Patumahoe: Precinct plan 2 – Staging and stormwater sub-catchment plan;

...

(d) the layout and design of any roads, vehicle access ways or pedestrian walkways shown on Patumahoe: Precinct plan 1 and on Figures 1 – 4 below;

...

##### **I430.8.1. Assessment criteria**

The Council will consider the relevant assessment criteria...

(1) ...

(2) Subdivision and infringement of subdivision standards...

...

(e) *[deleted]*

(3) Additional assessment criteria for subdivision and infringement of subdivision standards in sub-precincts B, C and D

(a) Stormwater:

(i) *[intentionally blank]*

(ii) *[intentionally blank]*

(iii) *[intentionally blank]*

- (iv) Whether stormwater from sub-catchments “East” and “West 1” as identified in Patumahoe: Precinct plan 2 – Staging and stormwater sub-catchment plan is directed to the Main Stormwater Treatment/Detention Pond in Sub-precinct A
- (v) Whether stormwater flows from the western sub-catchments “West 2” and “West 3” as identified in Patumahoe: Precinct plan 2 – Staging and stormwater sub-catchment plan are maintained at pre-development levels.
- (vi) Whether a pond should be established on the northern corner of Sub-precinct D, primarily as a flood management system and landscape amenity feature but also as a stormwater quality improvement device if a pond in that location is required for the purpose of maintaining stormwater flows at a pre-development level.
- (vii) If a pond is established on Sub-precinct D, whether it is treated as an amenity feature and landscaped accordingly.
- (viii) Whether on-site stormwater detention is also required (such as soakage pits) except where it can be demonstrated that geotechnical conditions within sub-precincts B, C and D do not allow for on-site soakage.
- (x) Whether the development uses water sensitive design techniques, including swales, grey water rainwater harvesting for outdoor use, rain gardens, and/or permeable paving etc.
- (b) *[intentionally blank]*
- (c) *[intentionally blank]*
- (d) *[intentionally blank]*
- (e) *[intentionally blank]*
- (f) In the event development of the sub-precincts B, C and D is staged:
  - (i) Whether sub-catchments “East” and “West 1” comprising stage 1 should be developed first and drain to the main pond on Sub-precinct A.
  - (ii) Whether sub-catchments “West 2” and “West 3” comprising stage 2 should drain to the western pond in Sub-precinct A
- (g) The extent to which the subdivision maintains the natural landform of the Patumahoe Hill by ensuring that the grading of individual lots does not occur as part of the subdivision engineering works; rather, the formation of building platforms occurs at the time individual sites are developed and the modification of the natural gradient of the Patumahoe Hill is thereby minimised.
- (h) The extent to which lighting design for streets recognises the visually prominent hillside location of sub-precincts B, C and D by minimising all light pollution.
- (i) Whether design of lighting standards includes bollard style standards for street lighting which can be mixed with pedestrian scaled light standards.
- (j) The extent to which landscaping consists of ecologically sourced native plants (i.e. those that naturally occur in the Manukau Ecological District) which are appropriate to the site. (Examples of such species are set out in the typical plant palettes in Figure 5 and Tables 1–7 below).
- (k) Whether plantings and other landscape features will result in a maintenance free mature landscape, inasmuch as is practical.

...

*Amend I431 Pine Harbour Precinct as follows:*

#### **I431.4. Activity table**

...

#### **Table I431.4.2 Activity table – Sub-precinct D and E**

...

#### **I431.6. Standards**

The Auckland-wide and zone standards apply in this precinct unless specified below.  
All activities listed as permitted or restricted discretionary in Tables I431.4.1, I431.4.2, and I431.4.3 must comply with the following activity standards.

...

#### **I431.6.6.Site depth**

(1) The minimum site depth in Sub-precincts B and C must meet one of the following:

...

#### **I431.6.8 Maximum building coverage**

(1) .....

(2) For sub-precinct B, the maximum building coverage is 50 per cent of net site area for sites greater than 200m<sup>2</sup>.

(3) ....

(4) For sub-precinct C, the maximum building coverage is 40 per cent of net site area for sites greater than 300m<sup>2</sup>.

...

*Amend I432 Puhinui Precinct as follows:*

#### **I432.5. Notification**

(1) Any application for resource consent for an activity listed in Table.1 Activity table or Table.2 Activity table above will be subject to the normal tests for notification under the relevant sections of the Resource Management Act 1991.

...

#### **I432.8.2. Assessment criteria**

(1) .....

(2) for road infrastructure

The assessment criteria within I432.8.2(1)(g) - Maori cultural landscape values above also applies to road infrastructure.

(a) standard...

(b) standard I432.6.1.2(2) and I432.6.1.2(3) Road Infrastructure

(i) .....

(ii) whether compliance with Standard I432.6.1.2(2) and I432.6.1.2(3) is demonstrated by:

- an assessment of the traffic generation of the proposal including all modes of transport that would support the land uses proposed;
- an assessment of the performance of the local network as a result of the development showing compliance with performance criteria in Standard I432.6.1.2(2) and I432.6.1.2(3); and
- a location policy that ensures specified development takes place in locations that, where relevant, supports sustainable transport mode share.

.....

(5) for urupā

(a) .....

(c) visual effects on neighbouring sites or open spaces used for recreation:

(i) *[intentionally blank]*

(ii) the extent to which there are measures to mitigate visual effects on neighbouring sites or open sites used for recreation.

(6) for yards and landscaping

(d) whether the reduction of the Puhinui Road yard will compromise the future development of a rapid transit corridor

(e)...

Amend **I433 Pukekohe Hill Precinct** as follows:

#### **I433.6. Standards**

The standards applicable to the zone and Auckland-wide apply in this precinct, except for the following:

- Standard H3.6.9 Maximum impervious area;
- Standard H3.6.10 Building coverage; and
- Standard E38.8.2.3 Vacant sites subdivisions involving parent sites of less than 1 hectare.

...

#### **I433.6.4. Stormwater soakage**

(1) Pre-treated water must be diverted to a soakage system. The soakage system must comprise all of the following:

(a).....

(b) soakage trenches constructed with selected backfill and with sufficient volume to store the designed runoff and trench volume must be calculated at a rate of  $6\text{m}^3/100\text{m}^2$  of impervious area based on a sand porosity of 0.3;

(c) infiltration ponds constructed with sufficient volume to store the designed runoff and tested to demonstrate the ability to dispose of the runoff volume; and

(d) *[deleted]*

(e) Standard I433.6.4 does not apply to Sub-precinct D.

...

Amend **I434 Pukekohe Park Precinct** as follows:

#### **I434.6. Standards**

##### **I434.6.1. Motorsport activities noise**

...

(2) The use of the track for any motorsport activity, except for vehicles undertaking track or facility maintenance or repairs, may only take place between:

(a) Category A & B days between 7am to 7pm;

(b) *[deleted]*

(c) Category C, D and E days between 10am to 5pm.

...

### I434.6.3. General noise

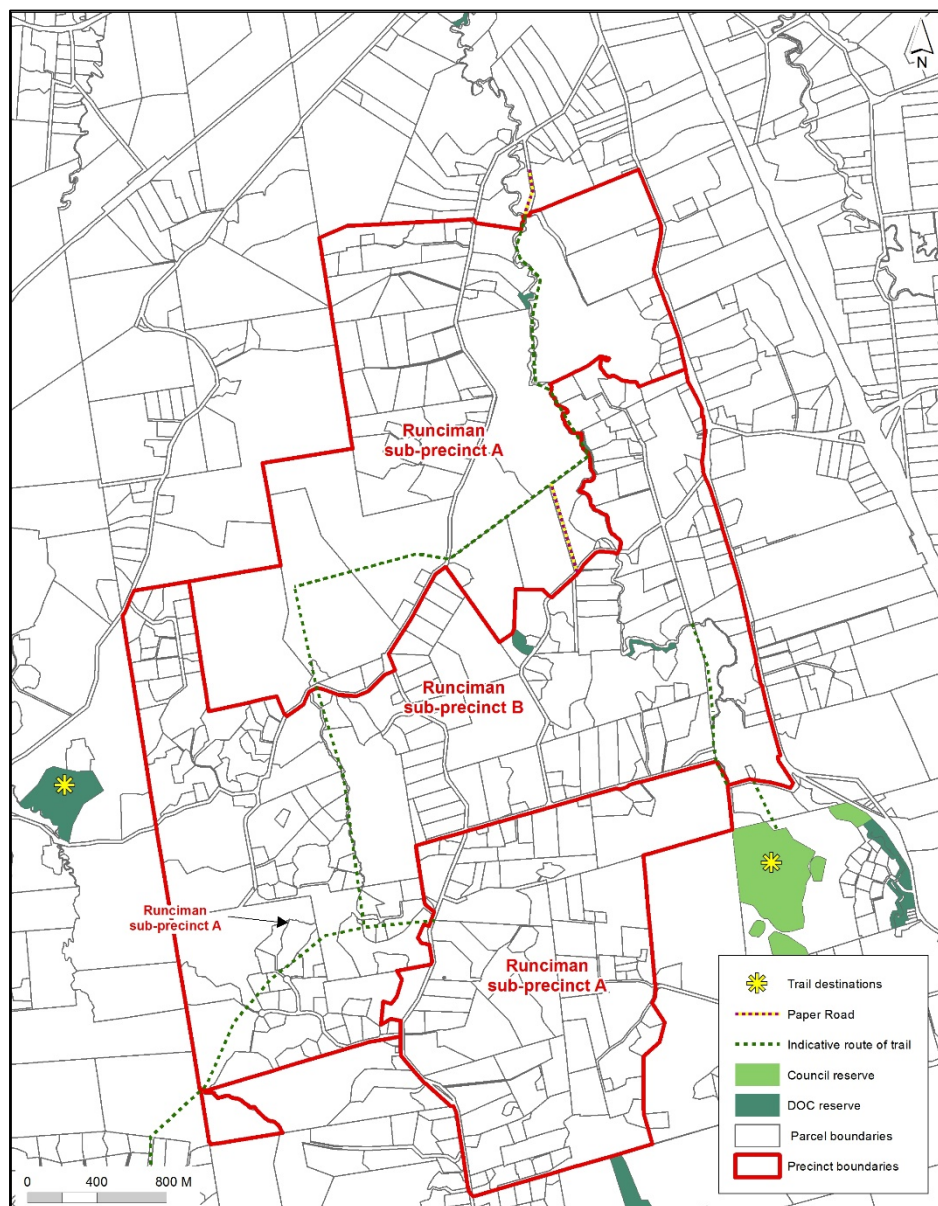
(1) The noise (rating) level from any activity (other than activities provided for in rules I434.6.1 and I434.6.2) as measured at any notional boundary must not exceed the noise limits in Table I434.6.3.1.

...

*Amend I437 Runciman Precinct as follows:*

### I437.10.2. Runciman Precinct: Precinct plan 2 – reserves and connections

*Insert Amended I437.10.2 Precinct plan 2.*



...

*Amend I438 Takanini Precinct as follows:*

### **I438.1. Precinct Description**

The zoning of land...

The Takanini Precinct applies to some 263 hectares of land. The precinct...

...

The precinct contains standards in response to known geotechnical limitations.

#### **I438.1.1. Sub-precinct A**

Takanini Precinct: Sub-precinct A applies to some 55 hectares of land between the Papakura Stream, Takanini School Road, Manuroa Road and Porchester Road.

...

#### **I438.1.2. Sub-precinct B**

Takanini Sub-precinct B applies to some 4.4 hectares of land with frontage to Porchester Road.

...

#### **I438.1.3. Sub-precinct C**

Takanini Precinct: Sub-precinct C applies to some 177 hectares of land throughout the wider precinct, and covers the largest land area of the four sub-precincts.

...

#### **I438.1.4. Sub-precinct D**

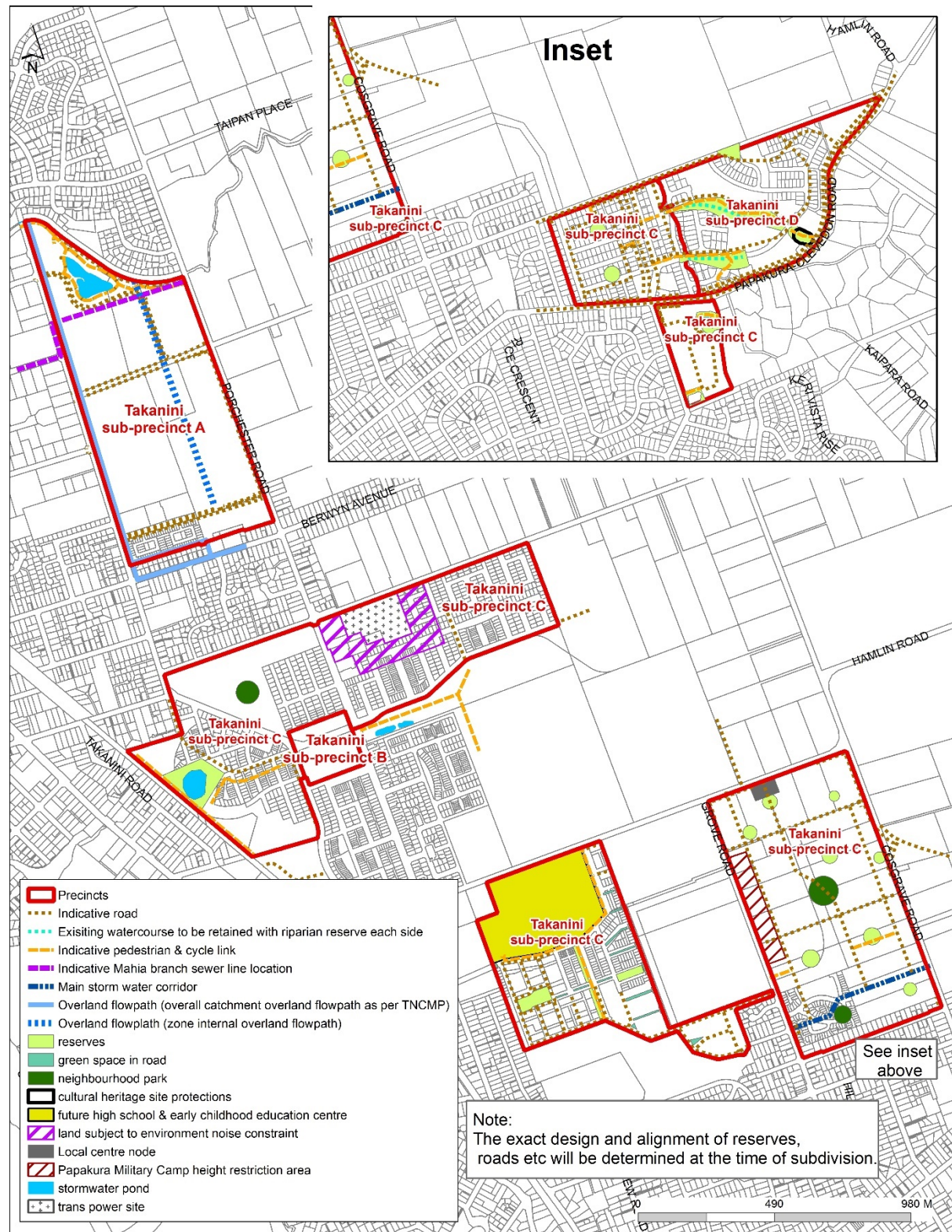
Takanini Precinct: Sub-precinct D applies to some 27 hectares of land between Papakura-Clevedon and Old Wairoa Roads.

...

## I438.10. Precinct plans

### I438.10.1. Takanini Precinct: Precinct plan 1

*Insert Amend Precinct plan 1 - sub-precinct D*



...

## North

Amend **I509 Greenhithe Precinct** as follows:

### I509.4. Activity table

**Table I509.4.1 Activity table**

Activity		Activity status
Subdivision		
(A1)	Subdivision as listed in E38.4 Activity table (Chapter E38, Subdivision – Urban)	
(A2)	[deleted]	
(A3)	[deleted]	
(A4)	Subdivision listed in (A1) which does not comply with Standard I509.6.5.	NC

...

### I509.6. Standards

The overlay, Residential - Large Lot Zone and Auckland-wide standards apply to development in this precinct, except for the following:

- H1 Residential – Large Lot Zone – H1.6.4 (Yards);
- H1 Residential – Large Lot Zone – H1.6.5 (Impervious surfaces); and
- H1 Residential – Large Lot Zone – H1.6.6 (Building coverage).

The Auckland-wide standards in E38 Subdivision – Urban applies to subdivision in this precinct, except for the following:

- Standard E38.8.2.3 (2) and Table E38.8.2.3.1 Minimum net site area for subdivisions involving parent sites of less than 1 hectare; and
- Standard E38.8.3.1 (2).

All activities in Table I509.4.1 Activity table, unless they are discretionary or non-complying activities, must comply with the following standards.

...

#### I509.6.2. Yards

- (1) A building or parts of a building must be set back from the relevant boundary by the minimum depth listed in Table I509.6.2.1 Yards.

**Table I509.6.2.1 Yards**

Yard	Minimum depth		
	Sites less than 1,499m <sup>2</sup>	Sites between 1,500m <sup>2</sup> and 3999m <sup>2</sup>	Sites over 4,000m <sup>2</sup>
Front yard	5m	5m	10m
Side and rear yards	1.2m	3m	6m

...

## Subdivision

### I509.6.5. Minimum net site area

**Table I509.6.5.1 Minimum net site area**

Minimum net site area	Requirements
Between 500m <sup>2</sup> and 2499m <sup>2</sup>	.....
Between 2500m <sup>2</sup> and 1ha	.....
Over 1ha	No minimum requirements

...

## I509.8. Assessment – restricted discretionary activities

...

### I509.8.2. Assessment criteria

The Council will....

(1) Effects associated ...

(2) Effects associated with the location and development of building platforms and accessways:

(a) whether building platforms, access ways and development are located to:

...

Amend **I510 Gulf Harbour Marina Precinct** as follows:

**Table I510.4.1 Activity table – use on land and associated occupation of the common marine and coastal area**

Activity		Activity status			
		Sub-precinct A		Sub-precinct B	Sub-precinct C
		Land [dp]	CMA [rcp]	Land [dp]	Land [dp]
<b>Use</b>					
...					
<b>Industry</b>					
(A12)	Manufacture of vessels and boating/marine equipment	P	C	NC	NC
...					

...

Amend **I516 Kumeū Precinct** as follows:

#### **I516.6. Standards**

##### **I516.6.2. Maximum retail/commercial gross floor area**

(1) .....

(2) *[deleted]*

.....

##### **I516.6.4. Yards**

(1) A building or parts of a building must be setback from the relevant boundary by the minimum depth as listed below:

(a) riparian yard...

(b) front yard:

(i) 2 metres in Sub-precincts A and B where the front of a site or part of the site frontage is occupied by a car park or car park building

...

...

## **I516.8. Assessment – restricted discretionary activities**

### **I516.8.1. Matters of discretion**

The Council will restrict...

(7) for buildings and external alterations and additions to existing buildings in addition to any matters specified for the activity itself:

(i)...

(ii) the matters of discretion in Residential – Mixed Housing Urban Zone H5.8.1(2) for dwellings apply to applications for 3 or more dwellings per site in Sub-precinct C;

...

...

### **I516.8.2. Assessment criteria**

The Council will consider...

(7) for buildings and external alterations and additions to existing buildings in addition to any matters specified for the activity itself:

(a) ...

(b) the assessment criteria in Residential – Mixed Housing Urban Zone H5.8.2(2) for dwellings apply to applications for 3 or more dwellings per site in Sub-precinct C;

...

*Amend I519 Long Bay Precinct as follows:*

**I519.6.5. Height in relation to boundary**

(1) ...

(2) Development that does not comply with Standard I519.6.5(1) above is a restricted discretionary activity where located in Sub-precincts F to I.

...

*Amend I530 Ōrewa 2 Precinct as follows:*

**I530.6.5. Yards**

(1)...

(2) In the case of rear sites between 450m<sup>2</sup> and 650m<sup>2</sup> only one yard of a minimum of 6m will be required. All other yards are deemed to be side yards, only one of which will be required to be a minimum of 3m.

(3) [deleted]

...

*Amend I532 Pinewoods Precinct as follows:*

**I532.4. Activity table**

Table I532.4.1 Activity table specifies...

**Table 1532.4.1 Activity table**

Activity		Activity status
<b>Use</b>		
<b>Residential</b>		
(A1)	....	....
(A2)	Dwellings	P

...

Amend **I537 Silverdale 3 Precinct** as follows:

#### I537.4. Activity table

The provisions...

**Table I537.4.1 Silverdale 3 Precinct (all of precinct)**

...

#### Note for Vehicle movement in the PM peak:

Activity A2 is based on traffic analysis and modelling demonstrating that this level of development within this precinct can occur without collectively generating more than 136 vehicle trips from this precinct on to East Coast Road and the Hibiscus Coast Highway in any one hour of the PM Peak (4pm to 6pm week days).

Activity A3 is based on traffic analysis and modelling demonstrating that this level of development can occur within this precinct without collectively generating more than 227 vehicle trips onto East Coast Road and the Hibiscus Coast Highway from this precinct in any one hour of the PM Peak (4pm to 6pm week days). Hibiscus Coast Bus Station is a public transport interchange on land with legal title: Section 1 SO 469067.

Activity A4 is based on traffic analysis and modelling demonstrating that subject to the above road network improvements greater than 227 vehicle trips in any one hour of the PM Peak (4pm to 6pm week days) but not more than 461 vehicle trips collectively onto East Coast Road and the Hibiscus Coast Highway in any one hour of the PM Peak from this precinct is acceptable in terms of effects on the external road network.

The additional third eastbound lane should be designed to maximise lane utilisation. The purpose of the short exclusive left-turn lane into Brian Smith Road is to avoid left turn vehicles blocking through vehicles.

Activity A5 does not oblige the Council to fund, or Auckland Transport to construct, Penlink in any particular timeframe.

**Table I537.4.2 Silverdale 3 Precinct Sub-precinct A – Gateway Business and Sub-precinct C – Work / Live**

Activity		Activity status
<b>Use</b>		
Accommodation		
(A10)	.....	.....
Commerce		
(A10A)	Commercial services	P
(A11)	.....	....
(A11A)	Dairies	P
(A12)	.....	.....

(A13)		.....
(A13A)	Food and beverage	P
(A14)	.....	.....
(A17)	.....	.....
(A17A)	Service stations	RD
(A18)	Trade suppliers	RD
(A19)	Industrial activities except waste management	RD
(A20)	.....	.....
<b>Community</b>		
(A21)	.....	.....
(A21A)	Emergency services	RD
(A21B)	Recreation facility	P
(A21C)	Marae complex	P
<b>Development</b>		
(A22)	.....	.....

...

### I537.6. Standards

The standards applicable to the zone, overlays and Auckland-wide apply in this precinct, unless as specified below:

...

### I537.6.2. Indicative Roads

In addition to the Auckland-wide subdivision standards the following apply:

(1)...

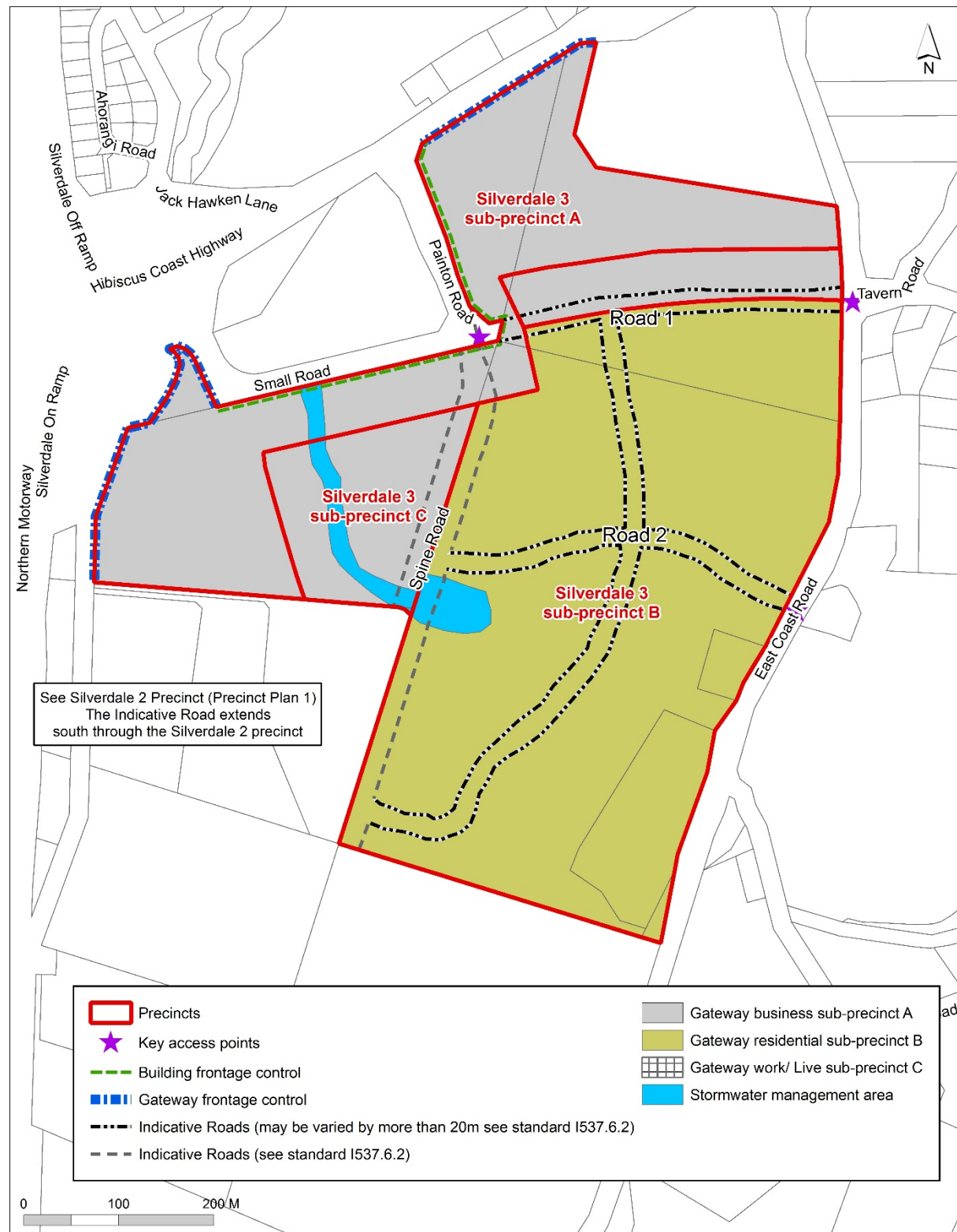
(2) With the exception of Standard I537.6.2(1) above the alignment of those indicative roads specifically identified on I537.10.1 Silverdale 3: Precinct plan 1 may be varied by more than 20m.

...

## I537.10. Precinct plans

### I537.10.1 Silverdale 3: Precinct plan 1

*Insert amended Precinct plan 1*



...

*Amend I541 Te Arai North Precinct as follows:*

## **I541.8.2. Assessment criteria**

### **I541.8.2.1. Subdivision for the creation of up to 43 new house sites in addition to the 3 sites existing at 30 September 2013**

- (1) .....
- (2) .....

Note: Where the measures in (1) – (2) are not provided, the subdivision will be considered inappropriate.

- (3) *[deleted]*

- (4) Whether the subdivision maintains the special character and amenity of the Rural - Rural Coastal zone including whether the subdivision will avoid adverse effects, including cumulative effects, on the rural character anticipated in the zone.

- (5) The extent to which the subdivision, including provision for access and utilities, avoids extensive landform modification and appropriately manages potential adverse effects on the landscape and amenity values of the particular area. Where this is not achievable, the subdivision will be considered to be inappropriate.

- (6) The extent to which the subdivision and site development, including provisions for access and utilities, uses the existing landform as far as is practicable so that adverse effects on the landscape and discharge of silt are avoided or appropriately mitigated.

- (7) The extent to which the subdivision and associated works avoids adverse effects on the natural quality of any waterbodies, including streams flowing to the sea and the sea itself.

- (8) Whether specified building areas identified in the subdivision allow for any house or structure to be built below the brow of any ridge or hill on which it would be sited so that the highest point of any building or structure is below the landform or any existing trees or bush screening the building site, when the site (or sites) is viewed from any public road or public land including any beach or the sea, but excluding any areas of reserve proposed to be vested or regional park. From the latter areas of reserve or regional park, whether specified building areas for future buildings will to be integrated into the landscape as far as practicable to avoid adverse visual amenity effects. Where avoidance is not practicable, whether effects will be remedied or mitigated. Where this is not achievable, the specified building area/s will be considered inappropriate.

- (9) *[deleted]*

- (10) The extent to which exterior lighting, including any street lighting, is to be provided so as to not be prominent, particularly against a dark background, when viewed from any public place including the coast, and the extent to which such lighting avoids adversely affect nesting shorebirds.
- (11) Whether the subdivision ensures the protection or enhancement of the high landscape values of the area having regard to the local landscape's ability to absorb change in respect of other factors, including the nature and variability of local terrain, the extent and distribution of vegetation cover, and the location and nature of existing development and structures in it.
- (12) Whether the subdivision, including the location of specified building areas, ensures the protection or enhancement of the natural character of the coastal environment, and avoids, remedies or mitigates adverse effects on the natural landforms and vegetation cover that contributes to such character and values having regard to: (a) current levels of naturalness and the integrity of that part of the coastal environment; and, (b) screening and integration potential afforded by natural landforms and vegetation.
- (13) The extent to which the subdivision and development protects and does not adversely affect in a more than minor way the natural functioning of coastal processes.
- (14) The extent to which the subdivision does not have significant adverse effects on wildlife, flora and ecological values and any such effects are avoided or effectively mitigated.
- (15) The extent to which the subdivision and subsequent development does not adversely affect any flora or fauna species including threatened or endangered species on the site or in the surrounding area, including the area of land that extends down to the mean high water springs.
- (16) The extent to which the subdivision avoids, remedies or mitigates adverse effects on: threatened or at risk species; indigenous ecosystems and vegetation types that are threatened in the Auckland Region or are naturally rare; and areas containing nationally and regionally significant examples of indigenous community types.
- (17) Whether the subdivision avoids significant adverse effects and avoids, remedies or mitigates other adverse effects of activities on: areas of predominantly indigenous vegetation in the coastal environment; habitats that are important during the vulnerable life stages of indigenous species; and indigenous ecosystems and habitats that are found only in the coastal environment and which are particularly vulnerable to modification, including estuaries, lagoons, coastal wetlands, dunelands, intertidal zones and saltmarsh, and ecological corridors.
- (18) The extent to which vehicle access to sensitive areas is avoided and walkway access limited to a small number of defined walking paths to ensure that any adverse effects on the quality and/or remote character of the precinct and beach environment and the adverse effects on the ecological values of the dunes are avoided. This includes measures to prevent vehicle access to the beach from the site except for emergency responses or management purposes.

(19) Whether the subdivision retains a rural character and does not create an urban character.

(20) The extent to which measures at the time of subdivision ensure that buildings on the new site created in Area A on I541.10.1 Te Arai North: Precinct plan 1 as “Areas In Which Rural Residential New Sites Can Be Created” are not visible from Te Arai Point Road, Te Arai beach, and existing local and regional reserve land (excluding any new public reserve on land in the Precinct). Where this occurs, buildings will be considered inappropriate.

Note: In circumstances where one or more of the above criteria are not met, the proposal may be considered inappropriate and the Council in its discretion may refuse consent, or grant consent to a lesser number of sites, and/or to a different design of subdivision.

(21) *[deleted]*

(22) Whether traffic is to be managed to ensure that the local road network will function safely and efficiently when subjected to the increased traffic movements associated with any subdivision of the site.

(23) Whether stormwater runoff from roof and paved areas is to be discharged in a manner that is hydrologically neutral by excess flows, volumes and timing of runoff in excess of pre-development runoff, being discharged to ground through suitable storage and soakage systems.

(24) Whether the measures to be implemented to ban pest plants are adequate and appropriate to achieve the policies of the precinct.

(25) Whether the density of the proposed subdivision provides for the sustainable land management of the precinct.

(26) Whether the proposed subdivision includes legally binding mechanisms to ensure adherence of owners and their successors in title to the CSMP

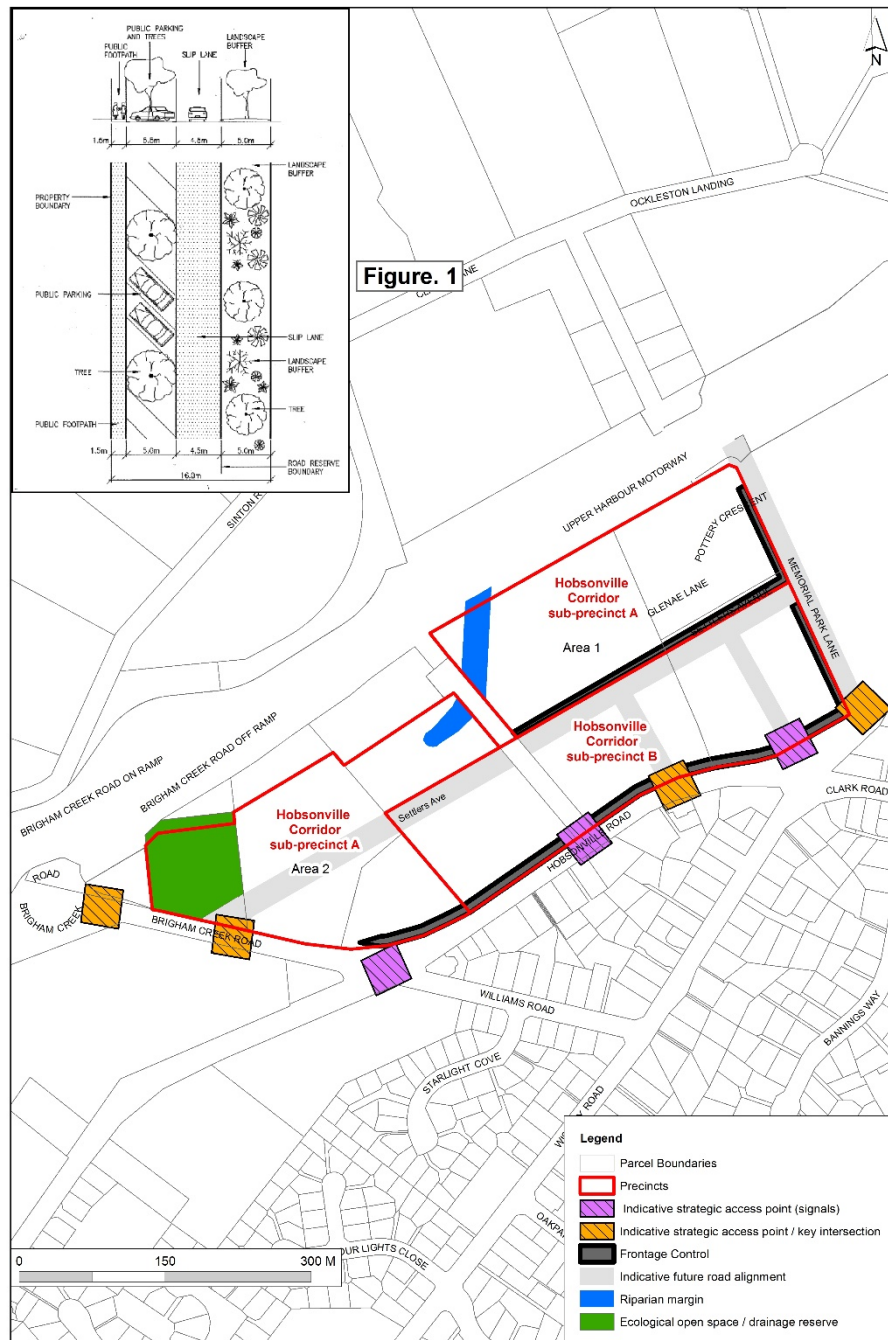
...

## West

Amend as a consequential change, diagrams in **I603 Hobsonville Corridor Precinct** as follows:

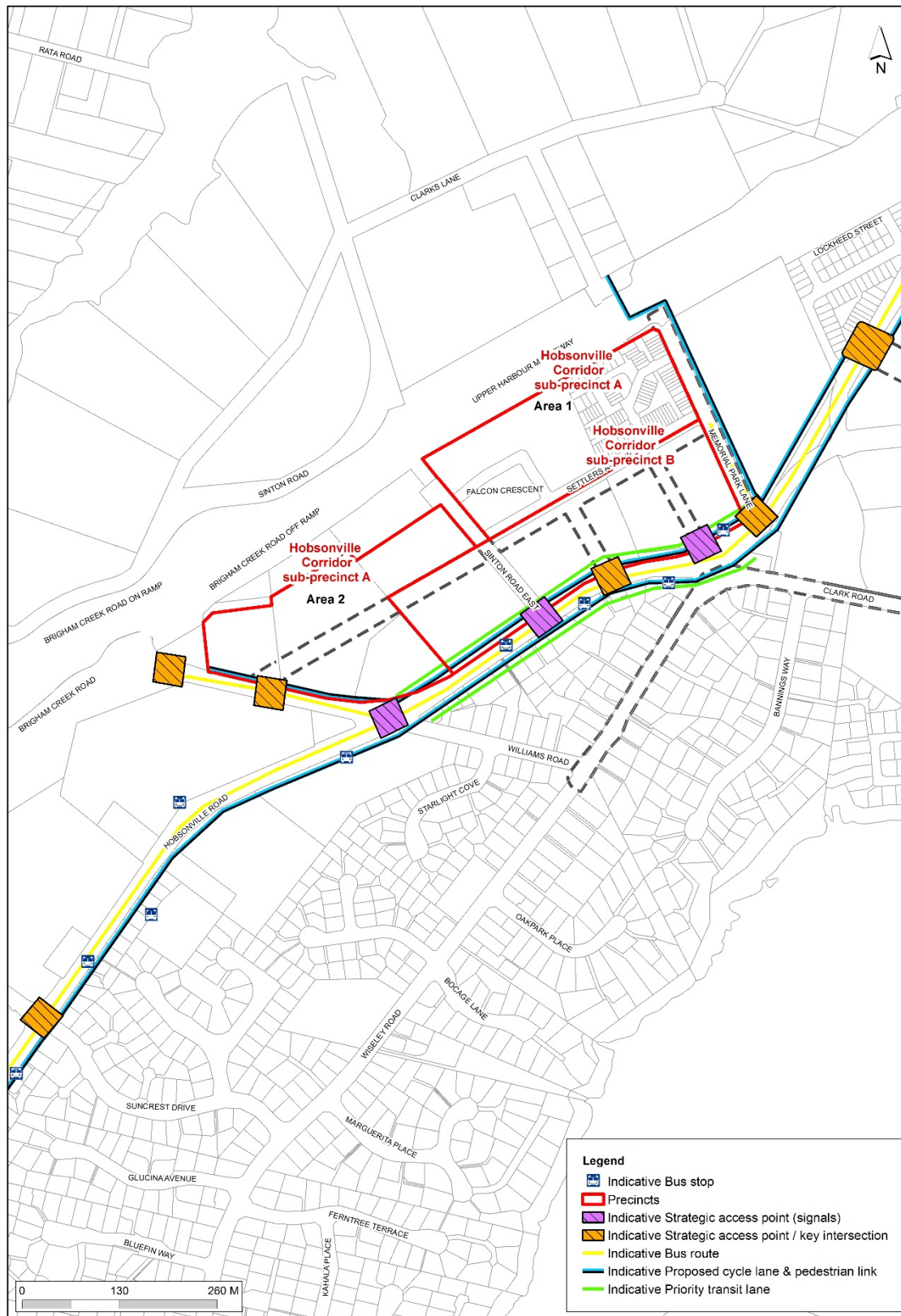
### Diagram I603.10.1 Hobsonville Corridor: Precinct plan 1

Insert amended I603.10.1 Hobsonville Corridor: Precinct plan 1



## Diagram I603.10.2 Hobsonville Corridor: Precinct plan 2 – transport plan

*Insert amended I603.10.2 Hobsonville Corridor: Precinct plan 2- transport plan*



Amend **I605 Hobsonville Point Precinct** provisions as follows:

**Table I605.4.1 Activity Table – Sub-precincts A-E (Residential Zones)**

Activity		Activity status				
		Hobsonville Point Village Sub-precinct (Sub-precinct A)	Buckley Sub-precinct (Sub-precinct B)	Sunderland Sub-precinct (Sub-precinct C)	Airfields Sub-precinct (Sub-precinct D)	Catalina Sub-precinct (Sub-precinct E)
<b>Use</b>						
Commerce...						
(A16)	Three or more dwellings per site within the Residential - Mixed Housing Urban Zone	....	....	....	....	....
...						

...

**Table I605.4.2 Activity table – Sub-precinct F (Mixed Use Zone)...**

Note 5

For the avoidance of doubt, 'demolition' does not include the removal and replacement of cladding, roofing, doors, windows, gutters and spouting and the like.

...

## **I605.6. Standards...**

All subdivision that is a controlled, restricted discretionary or discretionary activity must comply with the standards I605.6.3, I605.6.5.8, I605.6.8, and I605.6.9.1.

...

### **Table I605.6.4.5.1 Outdoor living space**

*(sitting under the table)*

\* Refer to definition of 'small house' in Note 1 for Table I605.6.4.7.1 Outlook space and building separation

...

### **Table I605.6.4.9.2 Apartments**

...

#### **I605.6.9. Subdivision - Landing Sub-precinct (Sub-precinct F)**

(1) The subdivision standards for the Landing Sub-precinct (Sub-precinct F) are those applying to the underlying Business - Mixed use zone and listed...

...

#### **I605.8.2.9. Infrastructure ...**

(5) [deleted]

...

*Amend I610 Redhills Precinct provisions as follows:*

#### **I610.4. Activity table**

.....

Table I610.4.1 specifies the activity status of land use, subdivision and development and the associated provision of transport, wastewater disposal and water supply in the Redhills Precinct. pursuant to sections 9(3) and 11-of the Resource Management Act 1991.

Activities (A1) to (A8) inclusive apply only to the Residential – Terrace Housing and Apartment Buildings zone adjacent to Fred Taylor Drive between Dunlop Road and the Don Buck Road roundabout.

...

#### **I610.8.2. Assessment criteria**

The council will.....

(8) Subdivision and development which does not comply with Standard I610.6.1 Infrastructure Upgrades and Timing of Development - Transport or Standard I610.6.2 Infrastructure Upgrades and Location of Development - Transport but proposes alternative measures to achieve required transport access, capacity and safety, shall:

- (a) demonstrate that all necessary transport infrastructure services external to the precinct are available and can be connected in a timely and co-ordinated manner to service the precinct;
- (b) demonstrate that sufficient evidence of capacity in the roading networks exists;
- (c) [deleted]
- (d) demonstrate the extent to which any staging of subdivision will be required due to the co-ordination of the provision of infrastructure; and
- (e) where roading infrastructure is required to be upgraded, undertake the preparation of an infrastructure funding agreement or other such measure that must be agreed with all relevant service providers to ensure that the infrastructure required to service the subdivision can be funded and provided in a timely manner.

...

Amend **I614 Wainamu Precinct** provisions as follows:

## **I614. Wainamu Precinct**

### **I614.1. Precinct Description**

The Wainamu Precinct covers a large site located at 32A-C and 34A-C Te Aute Ridge Road, Bethells in the Waitākere Ranges Heritage Area, as defined by the Waitākere Ranges Heritage Area Act 2008.

...

### **I614.6. Standards**

The overlay, Auckland-wide and underlying zone standards apply in this precinct unless otherwise specified.

All activities listed in Table I614.4.1 must comply with following standards.

...

#### **I614.6.6. Minor dwellings**

- (1) .....
- (2) .....
- (3) .....
- (4) [deleted]
- (5) The minor dwelling must share the same driveway access as the principal dwelling.

...

### **I614.8. Assessment – restricted discretionary activities**

#### **I614.8.1. Matters of discretion**

The Council will.....

- (5) Minor dwellings
  - (a) location of minor dwelling

#### **I614.8.2. Assessment criteria**

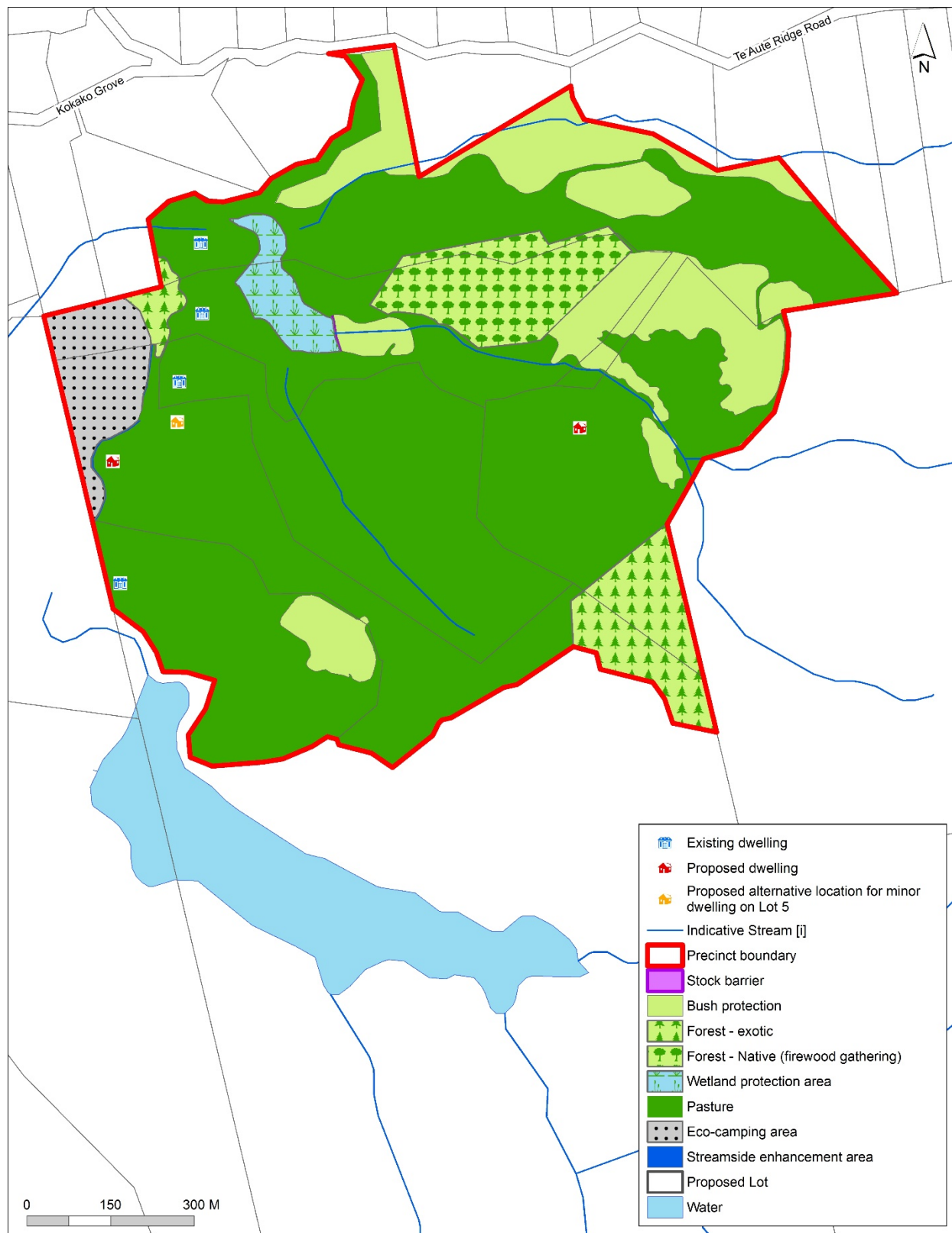
...

- (5) Minor dwellings:
  - (a) The extent to which minor dwellings are located to avoid significant adverse landscape and visual effects.

...

## I614.10.1. Wainamu: Precinct plan 1

*Insert amended Wainamu: Precinct Plan 1*



*Amend I615 Westgate Precinct provisions as follows:*

**I615.4 Activity table**

The provisions ...

...

**I615.8. Assessment – restricted discretionary activities**

**I615.8.2. Assessment criteria**

The Council will ...

(2) Integrated development:

...

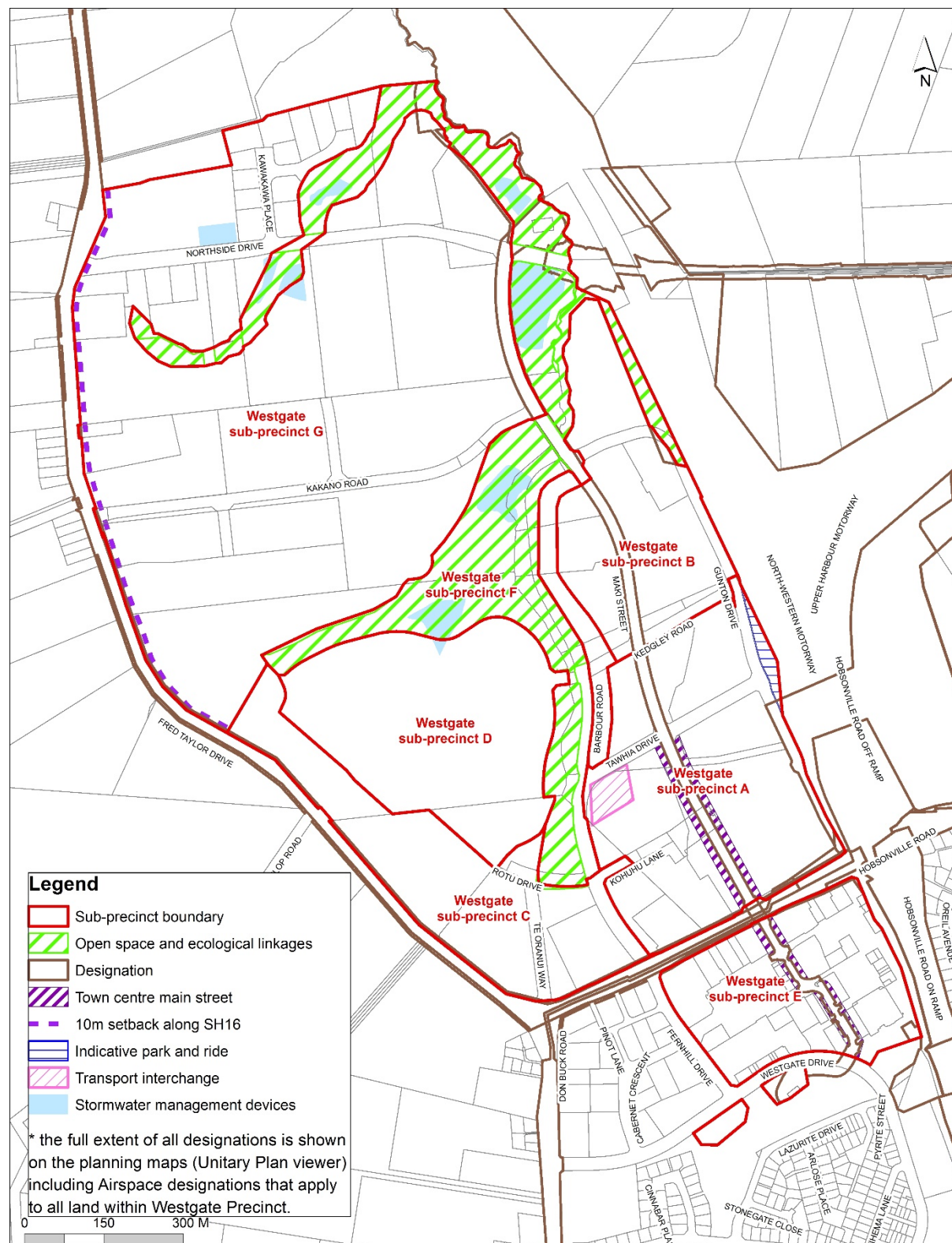
(k) Whether community facilities are located in a place that offers visual prominence and is easily accessible for pedestrians and public transport users;

...

## I615.10. Precinct plans

### I615.10.1. Westgate Precinct plan 1

*Insert amended Westgate Precinct plan 1*



## Special Housing Areas

*Amend Hingaia 1 Precinct provisions as follows:*

### 4. Development controls

The development controls in the Mixed Housing Urban zone...

#### 4.5 On-site Stormwater Management – new impervious surfaces

1. In catchments draining to intermittent or permanent streams (as indicated on Hingaia 1 – Precinct Map) all new impervious surfaces of 50m<sup>2</sup> and over are to be designed to achieve the following:

...

*Amend Hingaia 3 Precinct provisions as follows:*

### 4. Development Controls

The underlying zones development controls and Auckland-wide controls apply in this precinct unless otherwise specified below:

#### 4.1 Building height – Mixed Housing Suburban and Mixed Housing Urban and Mixed Use zones

1. ....
2. ....
3. Buildings in the Mixed Use zone must not exceed 13.0m in height.

*Amend Huapai Triangle Precinct provisions as follows:*

### Precinct Description

The Huapai Triangle precinct...

...

The Mixed Housing Suburban zone, with appropriate modifications for the Huapai Triangle precinct, is applied to the majority of the precinct to enable the development of a new neighbourhood. The Neighbourhood Centre zone provisions are applied to the central neighbourhood centre. The Green Infrastructure Corridor Zone, with appropriate modifications is applied to the northern and eastern periphery of the precinct containing stormwater management areas, susceptible to flooding, green linkages, and potential car parking close to Huapai station for future rail passenger services.

...

## Chapter J Definitions

*Amend J1 Definitions as follows:*

### J1.4. Definitions

...

#### Building

Any permanent or temporary structure.

On land for the purposes of district plan provisions, “building” includes the following types of structures listed in Table J1.4.1, only where they meet the qualifying dimensions or standards:

**Table J1.4.1: Buildings**

Table J1.4.1: Buildings Type of structure	Qualifying dimension or standard
...	
Stacks or heaps of materials	Over 2m high. In existence for more than one month
...	

...

#### Community facilities

Facilities for the well-being of the community, generally on a not for profit basis. Includes:

- .....
- Citizens Advice Bureaux;
- community correction facilities; and
- justice facilities.

...

#### Gross floor area

(1) For all purposes other than for the calculation of floor area ratio (FAR):

the sum of the area of all floors of all buildings measured from the exterior faces of the exterior walls, or from the centre lines of walls separating two adjoining activities, but excluding:

- .....
- voids and
- .....

(2) For the purposes of calculating floor area ratio (FAR):

the sum of the total floor area of all buildings on a site as measured:

...

## Height

Height is the ....

Excludes:

(1) In all zones, projections (other than those listed in (2)-(4) below) that are up to:

- a) 2m in width on any elevation; and
- b) 1.5m above the maximum permitted activity height or the height in relation to boundary standard for the site, whichever is the lesser height;

(2) In all zones:

- a) Steeples...
- b) Chimneys that do not exceed 1.1m width on any elevation or that do not exceed 1.5m above the permitted activity for the site;
- c) Flagpoles...

...

## Sediment Control Protection Area

(a) 100m either side of a foredune or 100m landward of the coastal area (whichever is the more landward of mean high water springs); or

(b) 50m landward of the edge of a lake, river or stream, or the edge of a wetland of 1,000m<sup>2</sup> or greater.

.....

## Site

Any area of land which meets one of the descriptions set out below:

(a) ...

(b) an area of land which is composed of two or more contiguous lots held in two or more certificates of title where such titles are:

- (i) subject to a condition imposed under section 75 of the Building Act 2004 or section 643 of the Local Government Act 1974; or

...

## Yard

The part of a site.....

Excludes:

- eaves of any building and any roof, gutter or downpipe that projects over any yard by not more than 750mm
- fire escapes required under the NZ Building Act 1991; and
- any crop support structures, artificial crop protection structures, hedges, or shelter belts.

See also: Front yard, Side yard, Rear yard, Lakeside yard and Riparian yard

...

### **Pest plant removal**

The alteration or removal of any tree or vegetation listed as a plant pest within the Auckland Regional Pest Management Strategy or the National Pest Plant Accord (excluding research organisms) under the Biosecurity Act 1993.

Excludes:

- the removal of notable trees.

....

## Chapter L Schedules

### Schedule 6 Outstanding Natural Features Overlay Schedule

Remove Outstanding Natural Feature Overlay ID 80 from **Schedule 6 Outstanding Natural Features Overlay schedule** as follows:

#### Schedule 6: Outstanding Natural Features Overlay Schedule [rcp/dp]

ID	Name	Location	Site Type	Description	Unitary Plan Criteria
...					
80	[deleted]				
...					

## Schedule 10 Notable Trees Schedule

Correct the number of trees in ID 554 of Schedule 10 as follows:

ID	Botanical Name	Common Name	Auckland district	Number of Trees	Location/ Street Address	Legal Description
1	...					
554	<i>Quercus palustris</i> <i>Populus nigra 'italica'</i>	Pin Oak, Lombardy Poplar (2)	Isthmus	3	Jordan Avenue 9, Onehunga	Lot 2 DP 190524
...						

## Schedule 12 Sites and Places of Significance to Mana Whenua Schedule

Amend **Schedule 12 Sites and Places of Significance to Mana Whenua Schedule** as follows:

(1) *Macrons are missing from some of the words within Schedule 12, as follow:*

- Amend Ngati to Ngāti
- Amend Pa to Pā
- Amend Urupa to Urupā
- Amend Mangere to Māngere
- Amend Papakainga to Papakāinga
- Amend Ngati Whatua o Orakei to Ngāti Whātua o Ōrākei
- Amend Tamaki to Tāmaki
- Amend Kokota to Kōkota
- Amend Te To to Te Tō
- Amend Poutukeha to Poutūkeha

*The inclusion of macrons does not change the intent of the Schedule or Overlay.*

Affected Schedule ID(s)	003, 011, 020, 021, 030, 031, 032, 033, 047, 048, 052, 054, 057, 058, 059, 064, 065, 072, 073, 074
-------------------------	--

(2) *The site name and/or location description for 37 sites within Schedule 12 are incorrect or unclear.*

Affected Schedule ID(s)	001, 005, 007, 009, 010, 011, 013, 014, 015, 018, 019, 021, 022, 023, 024, 029, 030, 034, 035, 036, 037, 043, 044, 048, 049, 050, 052, 053, 054, 055, 058, 059, 060, 061, 072, 074, 075
-------------------------	---

(3) *The nominating Iwi is missing for many of the sites.*

Affected Schedule ID(s)	001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 012, 013, 014, 015, 016, 017, 018, 019, 020, 021, 022, 023, 024, 025, 026, 027, 028, 029, 030, 031, 032, 033, 034, 035, 036, 037, 038, 039, 040, 041, 042, 043, 044, 045, 046
-------------------------	---

**Amend Schedule 12 Sites and Places of Significance to Mana Whenua**  
**Schedule as follows:**

**Schedule 12 Sites and Places of Significance to Mana Whenua Schedule**

All provisions in this schedule are regional coastal plan and district plan [rcp/dp]

\* Denotes that the site exception rule applies.

Schedule ID	Name	Location	Description	Nominated by Mana Whenua
001	Tukituki Muka	Cox's Creek Walkway adjoining rear boundaries of 47 and 49 Webber Street, Grey Lynn		
002	Te Tokaroa headland and Te Ara Whakapekapeka a Ruarangi	Coyle Park, Point Chevalier	Rock outcrop	Ngāti Whātua o Ōrākei
003	Rangimatarau	16 Joan Street and cliff top properties extending northwards along Point Chevalier Road to, and including a portion of Coyle Park		Ngāti Paoa
004	Nga Kauaewhati	Old Mill Road extending from old zoo entrance westerly to toe of bank		
005	One-Maru	Point Erin Park, between 117-121 Shelley Beach Road and Northern Motorway		
006	Te Koraenga Oka	Point Erin Park		
007	Ko Takerehaea	Point Erin Park, end of St Marys Road		
008	Wai Orea	Western Springs main lake		
009	Nga Wharau a Tako	87-89 Albert Street, 4 and 6-12 Kingston Street, and 60, 65-71 Federal Street		
010 *	Te Horo Roa	Road reserve at intersection of Anzac Avenue and Beach Road	Former position of a Pā, part of which	

Schedule ID	Name	Location	Description	Nominated by Mana Whenua
			slipped away, killing many people.	
011 *	A) Wai Kōkota B) Te Tō	Victoria Park bordered by Victoria Street West, Halsey Street, Fanshawe Street and Beaumont Street; plus Fanshawe Street between Daldy Street and Halsey Street; plus Beaumont Street beneath Viaduct over-pass	A) Shell fish gathering area during low tide B) Headland canoe hauling area below site of significant event	Ngāti Paoa
012 *	Pari Tuhu	Federal Street and Wolfe Street (intersection)	Ancient Pā site	
013 *	Te Paneiriiri	North-eastern corner of land bordered by Fanshawe Street and Hardinge Street (includes four properties); plus Hardinge Street between Fanshawe Street and Graham Street	Ceremony of conquest	
014 *	Te Hika a Rama	–(Hobson Street and Fanshawe Street intersection; plus the immediately adjacent portion of Sturdee Street)	Gathering place	
015 *	Ngahu Wera	A small portion of Albert Street southward and bordering Customs Street West	Site of significant event. Exercise of traditional tribal justice	
016 *	Horotiu	Queen Street 301-303 (Town Hall Site); plus Aotea Square; plus the foot of Greys Avenue adjacent	Pā site located above Waihorotiu	
017 *	Te Whatu	Shortland Street/Queen	Canoe mooring site	

Schedule ID	Name	Location	Description	Nominated by Mana Whenua
		Street/Swanson Street (intersection)		
018 *	Te Toangaroa	Majority on land enclosed by Stanley Street, Churchill Street and Parnell Rise; plus the adjacent portion of the Stanley Street road reserve; plus intersection of Stanley Street and Parnell Rise; plus the adjacent portion of Parnell Rise	Site of significant event - scene of early battle	
019 *	Te Tara Karaehe	Swanson Street between Hobson Street and Federal Street; plus property adjacent to, and south of, Swanson Street; plus intersection of Federal Street and Swanson Street, and a portion of Federal Street south of Swanson Street; plus intersection of Hobson Street and Swanson Street	Canoe landing site	
020 *	Te Koranga	Victoria Street/Halsey Street (intersection)	Fish drying area	
021 *	Te Reuroa Pā	Old Government House; plus majority of land enclosed by Parliament Street, Symonds Street and Waterloo Quadrant; plus eastern corner of land bordered by Parliament Street and Eden Crescent	Major Pā site and Papakāinga	Ngāti Whātua o Ōrākei
022	Urupā	189R Burswood Drive, East Tamaki	Urupā	
023	Urupā	15 Blackburn Road, East	Urupā	

Schedule ID	Name	Location	Description	Nominated by Mana Whenua
		Tamaki 43 Crooks Road (located on Blackburn Road), East Tamaki		
024	Urupā	83 Greenmount Drive, East Tamaki	Urupā	
025	Te Naupata	20 Musick Point Road, Bucklands Beach	Musick Point	
026	Urupā	27 Church Road, Mangere Bridge	Urupā	
027	Urupā	22 Waipouri Road, Mangere	Urupā	
028	Urupā	Pukaki Marae 98 Pukaki Road, Mangere	Urupā	
029	Otuataua/Puke Taapapa (Pukeiti)	14R Quarry Road, 56 Ihumatao Quarry Road and 303 Ihumatao Road		
030	Māngere Mountain	Māngere Domain, 17R Domain Road, Māngere	Māngere Mountain	
031	Ambury Park Stonefields	66 Wellesley Road, Māngere Bridge	Ambury Park Stonefields	
032	Puketutu Island	600 Island Road, Māngere Bridge		
033	Maunga Taketake	290, 292 & 296 Ihumatao Road, Māngere	Ellett's Mountain	
034	Matukuturua stonefields	58 McLaughlins Road, 5R Wilco Place & 20 Hautu Drive, Manukau	Matukuturua Stonefields	
035	Wiri South Stonefields and Lava Cave	166 and 172 Roscommon Road	Waahi Tapu Area Wiri South Stonefields and Lava Cave	
036	Maunga Matukuturua	McLaughlins Road, Wilco Place, Stonehill Drive & 20 Hautu Drive, Manukau	McLaughlins Mountain	
037	Wiri North Stonefields	149 & 220 Wiri Staton Road, Wiri	Wiri North Stonefields	
038	Urupā	37 Kawakawa Bay Coast	Urupā	

Schedule ID	Name	Location	Description	Nominated by Mana Whenua
		Road, Kawakawa Bay		
039	Urupā	33 Kawakawa Bay Coast Road, Kawakawa Bay	Urupā	
040	Urupā	29 Kawakawa Bay Coast Road, Kawakawa Bay	Urupā	
041	Urupā	1415 Clevedon – Kawakawa Road, Kawakawa Bay	Urupā	
042	Urupā	172R Maraetai Coast Road, Umupuia	Urupā	
043	Urupā	600 <del>666</del> R Orere - Matingarahi Road	Urupā	
044	Whakakaiwhara	933R North Road, Clevedon		
045	Oue Pā	829 North Road, Clevedon	Pā	
046	Tauwhare Pā	80 Davidson Road, Kiwitahi Pt Mblk Tauwhare ML 3424	Pā	
047	Wai Ariki	Between 16 Waterloo Quadrant and 15 Eden Crescent); Auckland University Law Library Carpark	Waiora – A water supply having the status of untainted life blood. Historic natural spring that fed surrounding Papakāinga and Pā such as Rangi Puke (Albert Park) and Te Reuroa (High Court area).	Ngāti Whātua o Ōrākei / Ngāti Paoa
048	Onehunga (especially the location of a 19th Century village at the foot of Princes St)	55, 57-60 Princes Street, 120 Onehunga Mall, 126 Onehunga Mall, and including a portion of Onehunga Mall and Princes Street, Onehunga.	Waahi whakahirahira. Historic Te Taou, Nga Oho, Te Uringutu (Ngāti Whātua o Ōrākei) village site. Village was in	Ngāti Whātua o Ōrākei

Schedule ID	Name	Location	Description	Nominated by Mana Whenua
			extensive use by Ngāti Whātua o Ōrākei and their allies in early Auckland. John Logan Campbell is recorded as visiting Ngāti Whātua o Ōrākei chief, Te Kawau here to negotiate the purchase of land.	
049	Te Pūpū o Kawau (Tāhuna Tōrea);	Tāhuna Tōrea Reserve, including sandspit, 338 & 340 West Tamaki Road, Glendowie	Waahi whakahirahira	Ngāti Whātua o Ōrākei
050	Te Wai o Rakataura	Valonia Reserve, 1, 25 & 25A Valonia Street, New Windsor	Wetlands to south of Ōwairaka / Mt Albert	Ngāti Whātua o Ōrākei
051	Mataharehare	Bottom of Brighton Road, Parnell	Waahi whakahirahira	Ngāti Whātua o Ōrākei
052	Kohimaramara / Bastion Rock Takaparawha Point	Tāmaki Yacht Club, Tāmaki Drive, Ōrākei	Waahi tapu, Wai tapu	Ngāti Whātua o Ōrākei
053	Tokiwhatinui	Auckland Hospital, 2 Park Road, Grafton	Waahi whakahirahira. Battle site in the grounds of the present day Auckland Hospital	Ngāti Whātua o Ōrākei
054	Ōpoutūkeha	Cox's Bay Reserve, Westmere	Waahi whakahirahira. Named after the ancestor Poutūkeha. The creek is an ancient	Ngāti Whātua o Ōrākei

Schedule ID	Name	Location	Description	Nominated by Mana Whenua
			boundary line between Ngāti Huarere and Ngāti Pou.	
055	Te Tō Waka Ōtāhuhu portage	Head of Tāmaki River at Ōtāhuhu, near Canal Reserve and Portage Road, Ōtāhuhu	Ōtāhuhu portage Waahi tapu, Wai tapu. May be nationally Significant portage for waka including ancestral waka.	Ngāti Whātua o Ōrākei
056	Pou Hawaiki - Owhatihue	Mt Eden, Auckland College of Education carpark building	Waahi whakahirahira	Ngāti Whātua o Ōrākei
057	Urupā	5 Woodside Road, Mt Eden	Urupā, burial site	Ngāti Whātua o Ōrākei
058	Urupā	209 St Andrews Road, Three Kings	Urupā. Historic burial site related to the use and occupation of Te Tātua a Riukiuta - the 3 Kings Pā complex.	Ngāti Whātua o Ōrākei
059	Waahi whakahirahira	Emily Place Reserve	Waahi whakahirahira. The birth of Auckland on September 18, 1840 occurred in this area. Involved the signing of a land deed by Ngāti Whātua o Ōrākei chiefs gifting 3,500 acres of the modern CBD to establish	Ngāti Whātua o Ōrākei

Schedule ID	Name	Location	Description	Nominated by Mana Whenua
			Auckland City.	
060	Te Ana Rua a Rangimarie	Melville Park grounds, between the cricket pavilion and 22 St Andrews Road	Waahi whakahirahira	Ngāti Whātua o Ōrākei
061	Waitaramoa	Waitaramoa Reserve - Portland Road, Hobson Bay, Remuera		Ngāti Whātua o Ōrākei
062	Te Rōutu o Ureia	Point Erin, Auckland Harbour Bridge	Wāhi tapu. Ureia is the renowned taniwha of the Marutuahu tribes of Hauraki.	Ngāti Paoa
063	Urupā	16 George Bourke Drive, Mt Wellington	Urupā for the fallen from a battle.	Ngāti Paoa
064	Ō Peretu	Vauxhall Road, Takapuna	Former Pā kāinga, urupā, battle site.	Ngāti Paoa
065	Te Pane o Horoiwi	Foreshore behind properties at 665-697 Riddell Road, Glendowie	Former Pā pā. Above above Karaka Bay (Ōrohe)	Ngāti Paoa
066	Urupā Fraser Road	Northern portion of 5-7 Fraser Road and the land on the western and south-western corners of the intersection of Fraser Road and Morrin Road including both grass berm and footpath	Settlement, terracing and urupā	Ngāti Paoa
067	Karaka Taupo	Within road reserve in front of 42 Kawakawa Bay Coast Road	Traditional urupā near Ngāti Paoa settlement	Ngāti Paoa
068	Karaka Taupo	42 Kawakawa Bay Coast Road. North East portion of Karaka Taupo block extending toward the	Traditional grave	Ngāti Paoa

Schedule ID	Name	Location	Description	Nominated by Mana Whenua
		Karaka stream.		
069	Urupā at Karaka Taupo on foreshore	On foreshore opposite 29 Kawakawa Bay Coast Road, Kawakawa Bay	Urupā	Ngāti Paoa
070	Urupā at Karaka Taupo, Kawakawa Bay	Rautawa Stream entrance and foreshore	Urupā	Ngāti Paoa
071	Te Ana o Kahumauroa	Cave inlet at north eastern foreshore of Maungauika, North Head. Section 1 SO 454837	Location where Kahumauroa was held. Battle site	Ngāti Paoa
072	Te Tauoma Purchas Hill	Maunga known as Te Tauoma or Purchas Hill, 84 & 100 Morrin Road, St Johns	Former Pā	Ngāti Paoa
073	Karaka Bay (Ōrohe)	Foreshore area below Peacock Street, Glendowie	Located below the Pā Te Pane o Horoiwi. Site of several battles. Location of signing of Te Tiriti o Waitangi.	Ngāti Paoa
074	Te Reuroa	Albert Park, Auckland Central	Part of extent of Te Reuroa Pā	Ngāti Paoa
075	Waiatarua Reserve	Abbotts Way, Remuera	Key cultural marker within the landscape of Te Tauoma	Ngāti Paoa

## Schedule 14.1 Schedule of Historic Heritage

Amend **Schedule 14.1 Schedule of Historic Heritage** as follows:

### Schedule 14.1 Schedule of Historic Heritage [rcp/dp]

#### Introduction

The factors...

**Table 1 Places**

ID	Place Name and/or Description	Verified Location	Verified Legal Description	Category	Primary Feature	Heritage Values	Extent of Place	Exclusions	Additional Rules for Archaeological Sites or Features	Place of Maori Interest or Significance
...										
00255	Railway workers' residences	43 and 45 Newington Road, Henderson	LOT 1 DP 201335; LOT 5 DP 201335; LOT 6 DP 201335	B	Residences	A,B,F,H	Refer to planning maps	Interior of building(s); all buildings that are not the primary feature(s)		
...										
00830	[deleted]									
...										
01117	Fort Takapuna (Operetu)/Fort Cautley military complex R11_1723	Fort Takapuna Reserve, R170 Vauxhall Road, Narrow Neck	SEC 1 SO 355498; SEC 2 SO 355498; SEC 3 SO 355498; SEC 3 SO 69845	A	All military associated installations including: 1. Main Fort Takapuna complex and gun pits; 2. Observation posts; 3. Gun batteries; 4. Engine/ generator room; 5. Tunnel systems; 6. Officers Mess; 7. Two barracks; 8. Guard house/ hut; 9. Pillboxes	A,B,D,E,F,G,H	Refer to planning maps		Yes	
...										

ID	Place Name and/or Description	Verified Location	Verified Legal Description	Category	Primary Feature	Heritage Values	Extent of Place	Exclusions	Additional Rules for Archaeological Sites or Features	Place of Maori Interest or Significance
01596	St Benedict's Catholic Church and Presbytery	5 Alex Evans Street (also known as 1 St Benedicts Street), Newton	LOT 30 DEEDS 1332; LOT 31 DEEDS 1332; LOT 32 DEEDS 1332; LOT 33 DEEDS 1332; LOT 34 DEEDS 1332; PART LOT 35 DEEDS 1332; LOT 36 DEEDS 1332; LOT 37 DEEDS 1332; road reserve	A	Church; presbytery	A,B,F,G,H	Refer to planning maps	Interior of presbytery; accessory buildings; car parking areas and gardens		
...										
01625	Whare Tane	26 Clive Road, Mount Eden	LOT 2 DP 18407	A	Residence; garage	A,F	Refer to planning maps			
...										
01679	Engineer's House	805 Great North Road, Western Springs	Lot 1 DP 88398	B	Engineer's House	A,F	Refer to planning maps	Interior glass partitions of Engineer's House; buildings and structures that are not the primary feature; vegetation		
...										
01684	Remuera Railway Station and signal box	Adjacent to 130 Great South Road, Remuera	Railway reserve	A	Railway station; signal box	A,B,F,G	Refer to planning maps			
...										
01709	Holy Sepulchre Church and hall	2-10 Burleigh Street, Grafton	PART ALLOT 2 SEC 6 SBRS OF AUCKLAND	A	Church; hall	A,B,F,G,H	Refer to planning maps			
...										
01730	Stoneways/William Henry Gummer's House (former)	46 Mountain Road, Epsom	LOT 2 DP 60602	A	Residence	A,F,G,H	Refer to planning maps			
...										
01770	Shot tower	24 Normanby Road, Mount Eden	Lot 3 DP 312430	A	Tower	A,B,D,F,G,H	Refer to planning maps		Yes	
...										

ID	Place Name and/or Description	Verified Location	Verified Legal Description	Category	Primary Feature	Heritage Values	Extent of Place	Exclusions	Additional Rules for Archaeological Sites or Features	Place of Maori Interest or Significance
1789	St John Baptist Church and Convent	212 Parnell Road, Parnell	LOT 6 ALLOT 73 SEC 1 SBRS OF AUCKLAND; LOT 7 ALLOT 73 SEC 1 SBRS OF AUCKLAND; LOT 8 ALLOT 73 SEC 1 SBRS OF AUCKLAND; LOT 9 ALLOT 73 SEC 1 SBRS OF AUCKLAND; road reserve	A		A,F	Refer to planning maps	Interior of convent building		
.....										
01823	Marivare	60 Ranfurly Road, Epsom	LOT 1 DP 193674	A	Residence	A,H	Refer to planning maps	Interior of building(s)		
...										
01857	St John's College historic campus	188-226 St Johns Road, Meadowbank	LOT 1 DP 487854	A	Chapel; Dining Hall/Waitoa Room	A,B,D,F,G,H	Refer to planning maps		Yes	
...										
01892	Pearson House	10 Titoki Street, Parnell	LOT 7 DP 362696; LOT 8 DP 362696	A	Building	A,F,G	Refer to planning maps	Interior of building(s)		
...										
02038	Strand Arcade	233-237 Queen Street, Auckland Central	LOT 1 DP 317828	A	Building	A,F,G,H	Refer to planning maps			
...										
02048	Myers Park historic landscape, including trees and caretaker's cottage R11_2195 and R11_2669	381 Queen Street and 72 Greys Avenue, Auckland Central	LOT 9 DP 16124; LOT 2 DP 326131; LOT 1 DP 44754; LOT 16 DP 2816; PART LOT 15 DP 2816; LOT 2 DP 9036; LOT 3 DP 84867; PART ALLOTS 8, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52 SEC 29 AUCKLAND CITY; ALLOT 15 SEC 29 AUCKLAND CITY; ALLOT 15A SEC 29 AUCKLAND CITY; ALLOT 68 SEC 29 AUCKLAND CITY	A	Kindergarten building; landscape	A,D,F,G,H	Refer to planning maps	Interior of cottage	Yes	
...										

ID	Place Name and/or Description	Verified Location	Verified Legal Description	Category	Primary Feature	Heritage Values	Extent of Place	Exclusions	Additional Rules for Archaeological Sites or Features	Place of Maori Interest or Significance
02054	St Patricks Cathedral complex	1 St Patricks Square, Auckland Central	ALLOT 33 SEC 18 AUCKLAND CITY; ALLOT 34 SEC 18 AUCKLAND CITY; ALLOT 35 SEC 18 AUCKLAND CITY; SEC 1 SO 352517; St Patricks Square; road reserve	A	Cathedral	A,F,G,H	Refer to planning maps			
...										
02073	Campbell Free Kindergarten	203-271 Victoria Street West, Auckland Central	LOT 23 DEEDS CITY 37; PART FREEMANS BAY RECLAMATION DEEDS PLAN CITY 37; PART AUCKLAND HARBOUR BOARD GRANT SURVEY OFFICE PLAN 46845; PART LOT 24 DEEDS CITY 37; PART LOT 25 DEEDS CITY 37	A	Kindergarten building	A,F,H	Refer to planning maps	Interior of building(s), except the front room and Arts and Craft staircase; viaduct		
...										
02074	City Destructor Buildings (former), including boiler room, depot perimeter buildings, generator room, battery house, chimney, stables, and destructor building	210-218 Victoria Street West, Auckland Central	Lot 1 DP 440201	A	Destructor building; chimney	A,F,G,H	Refer to planning maps	Interior of building(s), except destructor building and stables		
...										

ID	Place Name and/or Description	Verified Location	Verified Legal Description	Category	Primary Feature	Heritage Values	Extent of Place	Exclusions	Additional Rules for Archaeological Sites or Features	Place of Maori Interest or Significance
02735	Queens Wharf	Quay Street, Auckland Central	Pt Lot 37 DP 131568	B	Substructure and deck including shed platforms; Shed G (also known as Shed 10); ferry shelter; electricity substation building; railway tracks; crane rails; weighbridge	A,B,D,E,F,H	Refer to planning maps	1. Fendering 2. Cast iron bollards 3. Any works associated with repair and maintenance to ensure the integrity of the wharf structure for port purposes. The repair and maintenance methodology for piles includes the removal of defective concrete either by mechanical means or hydrodemolition, replacement of corroded reinforcement, coating of reinforcement and reinstatement with new concrete either by spraying or recasting with concrete or mortar.		
...										

...

## Schedule 14.2 Historic Heritage Areas – Maps and statements of significance

Amend  
Schedule

**14.2 Historic Heritage Areas – Maps and statements of significance** section as follows:

### Map 14.2.12.1 Historic Heritage Area: Karangahape Road

Insert amended Map 14.2.12.1 (showing 19 Beresford Square, containing St James Church (former), as a contributing site to the Karangahape Road Historic Heritage Area) as follows.



## Schedule 15 Special Character Schedule, Statements and Maps

Amend  
Schedule

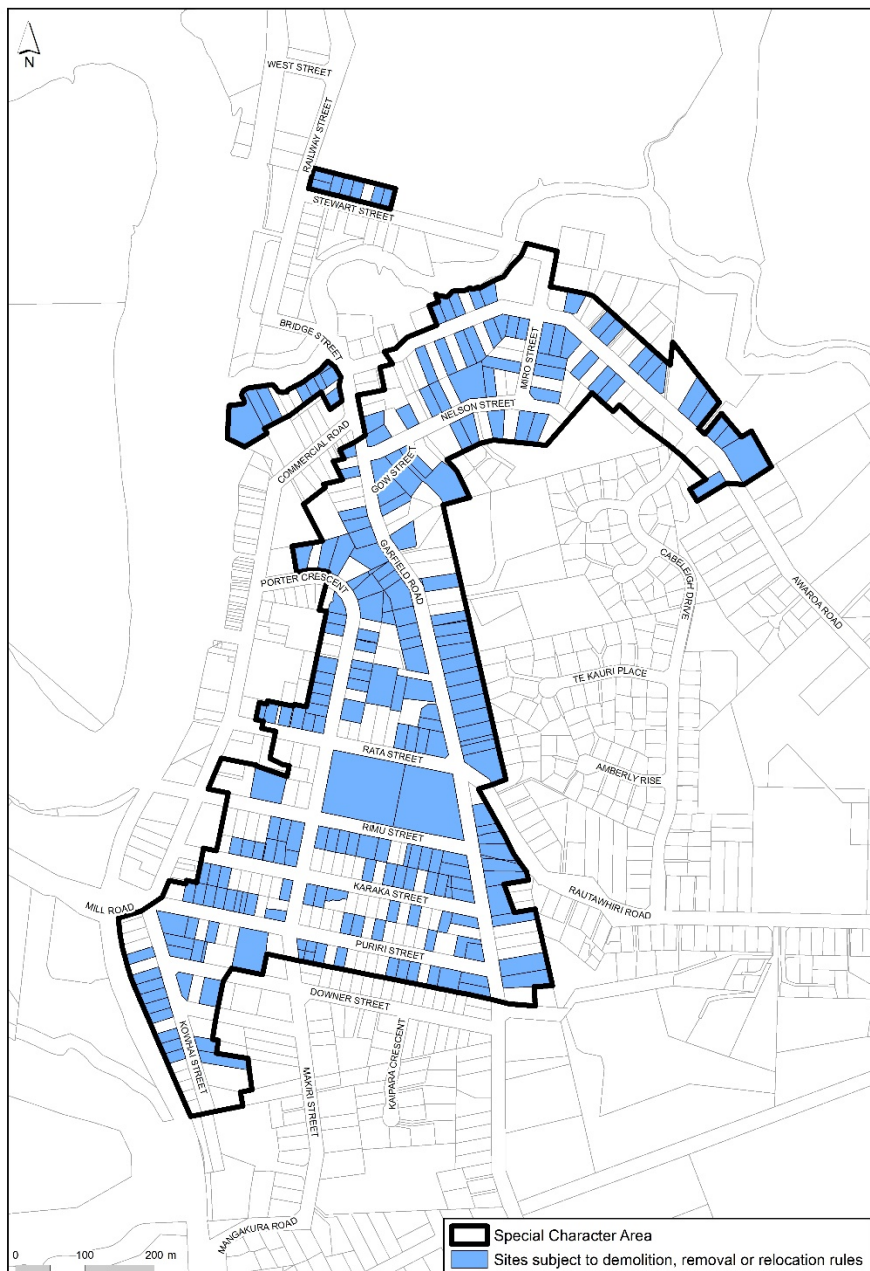
15 Special Character Schedule, Statements and Maps section as follows:

### 15.1.7 Special Character Areas Overlay – Residential: Helensville

#### 15.1.7.1 Extent of area

#### Special Character Area Map:

Amend the Special Character Area Map legend as follows:



## **Attachment One**

I410.11.1: Attachment 5 (Drury South Industrial Appendix)



### **PURPOSE OF APPENDIX I410.11.1**

Within the I410 Drury South Industrial Precinct, applications for any subdivision or any development of land which precedes a subdivision being undertaken which complies with Standard I410.6.3 as a restricted discretionary activity will be assessed in terms of a series of matters to which the Council will restrict the exercise of its discretion. One of the matters which the Council will have regard to as set out in I410.8.2(1)(d) is:

*the extent to which subdivision design and layout gives effect to the objectives and policies identified for the Drury South Industrial Precinct and the subdivision design assessment criteria set out in Appendix I410.11.1.*

In addition, the criteria will also be used in the consideration of discretionary applications for subdivision, as appropriate.

This appendix sets out assessment criteria under a number of “Design Elements”. Accompanying illustrations are intended to support the text and represent good design solutions, but are not intended to represent the only design solution. All illustrations are indicative only.

Each Design Element includes an explanation, which summarises the rationale for the particular Design Element and expands on the individual criteria. The explanation may be used as further guidance in interpreting the intention of the criteria and assessing the extent to which the proposal accords with them.

### **INFORMATION REQUIREMENTS**

The applicant shall provide a written assessment describing how the criteria for each Design Element are addressed. Applicants will have to demonstrate that the provisions of the criteria have been acknowledged.

It is recognised that certain proposals will not achieve absolute accord with all criteria. Where necessary, in regard to a criterion demonstrably not met, the applicant shall explain with reference to the explanation for the particular Design Element:

- whether site constraints inhibit the ability to address the criterion, and/or;
- how the intention of the criterion is met by the proposal, and/or ;
- whether the proposal represents a better design solution than that suggested by the criterion.

Planting plans and maintenance plans for recreation and esplanade reserves and stormwater management areas will need to be submitted with applications for subdivision consent and approved by the Council.

## Design Element 1: Road, Reserve and Access Networks:

1. Earthworks should be undertaken principally at the initial subdivision stage, and where appropriate the creation of reasonably flat sites should occur at the bulk earthworks stage (in order to avoid creating retaining walls at site development stage).

2. Road patterns should maximise convenient / direct access to the spine road and limit connection to existing rural roads (such as Ararimu Road) except where this relates to the wider essential network.

3. The road pattern should facilitate access to and accessibility within 'commercial service precincts'.

4. Road patterns should be logical and contribute to the legibility of and ease of wayfinding within the area (refer Diagrams 1 and 2 for generic legibility and proposed street hierarchy).

5. Subdivision layout designs should achieve protection and enhancement of all significant streams / tributaries to be retained and their riparian corridors (20m minimum either side from edge of stream) and concentrate open space as part of the riparian network (refer Diagram 3).

6. Subdivision layout design should achieve an interconnected open space and movement network.

7. Safe pedestrian and cycle routes through the structure plan area should be integrated with the riparian, reserve and road design.

8. Equestrian bridle trails should be integrated with riparian reserve development and provide access to the large centrally located public open space / stormwater management area.

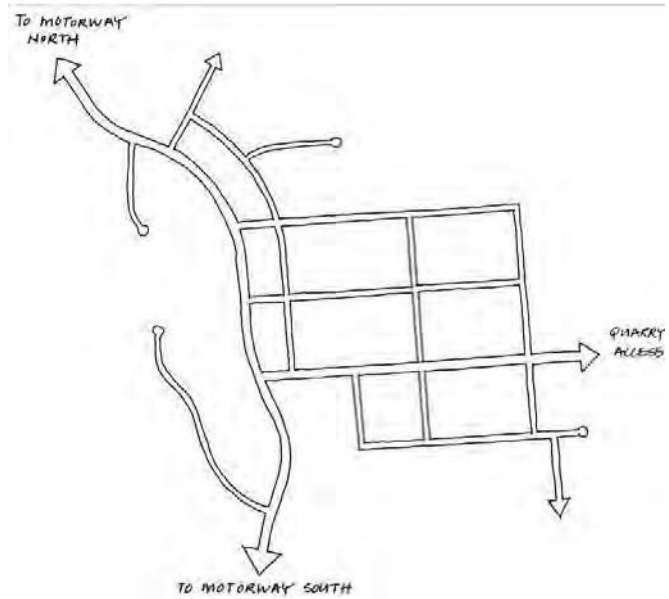


Diagram 1: Legible road hierarchy to assist wayfinding



Diagram 2: Road hierarchy

9. Layouts should retain mature trees within the riparian corridors, particularly those of indigenous species.

10. In Motorway Edge Sub-Precinct areas access to sites off the spine road should be combined wherever practicable.

11. In Motorway Edge Sub-Precinct areas access to sites off the spine road should be combined wherever practicable.

*Explanation:*

Design Element 1 pertains to the overall site topography and the general layout of the networks of roads, reserves and other access linkages that make up the public space of the Drury South Industrial Precinct. These should be considered in an integrated fashion together with the development blocks that they create.

The existing site topography within the proposed Industrial Precinct is relatively flat although bulk earthworks including cut and fill will be required to establish levels for future development above the flood plain and appropriate falls across the land.

The riparian corridors of the Hingaia and Maketu Streams and their significant tributaries will remain an important feature of the site topography once the Precinct is established. Vegetation associated with these corridors is also important to the structuring, screening and ecology of the area and its proposed activities.

The riparian corridors also provide a focus for future recreation and open space development and form part of the enhancement framework for the Precinct.

The road network and hierarchy (refer Diagrams 1 and 2), as illustrated in the Drury South Industrial Precinct Plan has been designed to efficiently direct traffic into and out of the Precinct connecting to the Southern Motorway (SH1) at both the Ramarama (south) and Drury (north) interchanges. The proposed spine road link is important to the legibility and traffic efficiency of the Precinct; this route will provide the primary connection into and out of the area with other streets connected to the spine road through corridor.

The proposed street network has also been designed to limit the impact of vehicles destined for the Precinct on existing rural residential and community roads such as the road accessing and adjacent to the Ramarama School. Implementation of the street network to achieve the beneficial improvements to heavy vehicle (including quarry truck) and other Precinct related traffic movement is imperative as a part of delivery of the zone.



By its nature the Commercial Services Sub-Precinct will require a finer grain street network with smaller street blocks, greater walkability, good service access and parking.

A legible road pattern (refer Diagram 1) is one that is easily understandable for the people that use it and that provides cues for first time users as well as those habitual users. Consistent road design and landscape themes can further emphasise the position of each street in the road hierarchy and in the pattern of streets in the wider area. Road patterns that are logical and easy to comprehend and navigate make an area feel more comfortable and help to provide a sense of identity.

## DesignElement2:BlockSize,LotTypeandOrientation:

1. Blocks should be of a scale and shape to achieve a permeable street layout suited to the industrial landuse.
2. All lots should front onto and be accessed directly from a legal road. Rear lots are to be avoided (refer Diagram 4).
3. Through lots (with dual road frontage) are permissible (refer Diagram 4).

### Explanation:

Design Element 2 describes the principles for consideration in the layout of blocks and lots within the proposed business zone area.

Blocks within an industrial area can be larger than those within finer grain residential or Commercial Services areas. A good permeable and well connected street network is however still required to facilitate access, provide an appropriate street address and reduce traffic volumes on side streets.

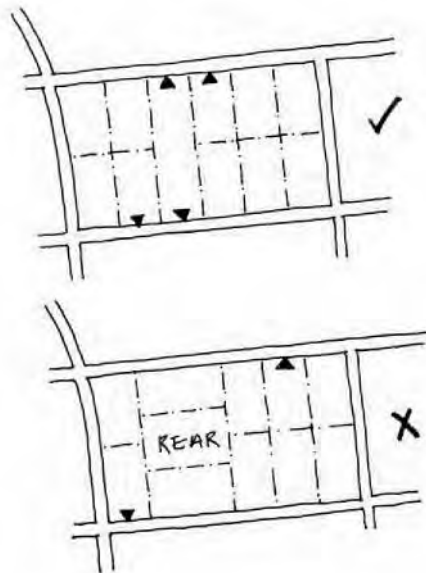


Diagram 4: All lots should front onto a legal road; through lots are permissible

Lots need to be of a size and shape to accommodate large scale, land extensive landuses and flexible to enable reasonable long term growth. At the same time rear lots are considered undesirable with a preference for development to address the street.

## DesignElement3:RoadsandAccessways:

1. In addition to Auckland Transport Code of Practice and Council's Development Code requirements, road cross sections should be appropriate to the nature of the function that they provide and also reflect urban design legibility considerations—i.e. wayfinding. Refer typical cross sections (Attachment 1) for road hierarchy comprising; Arterial (i.e. Spine Road); Parkway Road (i.e. New Quarry Access Road); Motorway Edge Precinct Road; and Typical (Indicative) Road typologies (refer also Diagram 2 for street hierarchy).
2. Cyclists should be accommodated on the street carriageway.
3. A consistent palette of traffic management tools should be used across the Drury South Industrial Precinct. Traffic management devices such as chicanes, speed humps and other such restrictive management devices are not expected, however the use of thematic planting and measures such as localised narrowing to create thresholds or define changes in the street environment could be used.

4. All streets are required to accommodate strong avenue specimen tree planting. Refer Cross Sections Attachment 1. This planting is required to achieve the breaking up of the overall scale of the development particularly as seen from elevated locations, as well as to establish the enhanced amenity and character of the Precinct.

5. In addition to the street avenue planting a planted central median is also required on the roads identified as 'Arterial' and 'Parkway' - refer Attachment 1 Cross Sections.

*Explanation:*

Design Element 3 pertains to principles for the design of roads and other access routes within the zone. Road design should be appropriate to function and provide practical widths for vehicular access, including for emergency vehicles, parking, planting and services. Useful minimum dimensions are:

• Four traffic lanes on arterial road	15.2m
• Two traffic lanes on local road	8.2m
• Cycle lane	1.5m
• Parallel parking lane	2.5m
• Service/utilities strip	3.0m
• Footpath	1.5m to 3.0m

The use of parallel kerbside parking is efficient in using the road as circulation area and reducing the need for onsite visitor parking. Kerbside parking lanes may be defined and delineated with planting bays if desired as illustrated in the road Cross Sections in Attachment 1.

Pedestrian and cycle paths should generally be integrated with road and reserve design. Paths which are separated from vehicle routes should be designed for safety.

**Design Element 4: Reserves, Stormwater Management Areas and Riparian Planting:**

1. Stormwater detention and treatment reserves should be located in general accordance with the locations shown in the Drury South Industrial Precinct Plan and in accordance with the relevant stormwater discharge consents, the Council's Development Code and relevant technical publications. The Cross Sections (Attachment 2) illustrate the Typical Wetland Stormwater Pond and Typical Stream Corridor Cross Sections.

2. Stormwater ponds should be designed to fit in with the surrounding landscape and appear as an integrally designed infrastructural component of the overall setting.

3. Vegetated buffers, not less than 40m in total width for any retained permanent or diverted stream, should be provided on the margins of streams, ponds and wetlands and should:

- Include native species as identified in Attachment 3;
- Include native trees on the lower and upper banks of ponds predominantly to the north and west to provide shade;
- Provide a minimum of 10m of native planting either side of the stream corridor including shallow water rushes and sedges;
- Avoid vegetation that will exacerbate flooding and the blockage of water flood flows along the immediate riparian corridor.

The only exception to these requirements is the retained permanent stream in the northwest of the structure plan area (adjacent to the Transpower site) which will be subject to a minimum requirement of 10m of native planting either side of the stream corridor only.

Note: Attachment 5 sets out 'Stream and Wetland Rehabilitation Guidelines (June 2013) for the DSSP area.

4. Walkways / cycleways along riparian corridors and through buffer planting should be designed to minimise any impacts on ecological function and give due consideration to personal safety and Crime Prevention Through Environmental Design (CPTED) principles.

5. Edge buffer reserves should be located in accordance with the Drury South Industrial Precinct Plan, be a minimum of 30m in width and be planted in generally accordance with Diagram 5 below. Planting should be fast growing rural shelter belt species capable of attaining a minimum height of 6 metres at maturity.



**Diagram 5: Typical landscape buffer cross section**

6. Suitable mechanisms to ensure the establishment and ongoing maintenance of landscaping of reserves and stormwater management areas until those areas are vested in the Council will be required to ensure the long term success of any landscaping.

*Explanation:*

Design Element 4 pertains to matters for consideration for locating, sizing and designing reserves stormwater management areas and riparian planting. These areas will be generally located in accordance with the locations shown in the Drury South Industrial Precinct Plan; regard should also be given to Design Element 5 when designing reserves within the Precinct.

The principal reserve network within the Precinct, as illustrated in the Drury South Industrial Precinct Plan, is structured around riparian protection and enhancement as well as stormwater management including detention and treatment. The reserve network is however designed for multiple functions and values including passive and active recreation, pedestrian/cycle commuter access, ecological values, visual screening/separation and aesthetic amenity.

The Precinct Plan also includes buffer reserves the main purpose of which is to physically and visually screen and separate adjacent existing landuses and residents from the Precinct. These reserves are planted to maintain a robust rural character with a woodlot/ shelter belt form of land management. Whilst providing multiple functions including biodiversity and aesthetic values, their primary function will remain as that of a buffer to landuses outside of the Precinct.

### **Design Element 5: Reserve Interface Design:**

1. Reserves intended for public recreation and uses should be designed to be bounded by public roads as much as possible given topographical and natural feature constraints. (Note proposed buffer reserves are not intended to be bounded by public roads)
2. Where reserves or riparian buffer areas adjoin lots, the boundary should be securely delineated and fenced to avoid encroachment (refer Diagram 5).

#### *Explanation:*

Reserves intended for public use that are well fronted by public roads are more secure because of the informal surveillance from the road and activities that interface with the road across the carriageway. Ideally not less than half the total length of legal boundary of any reserve should adjoin a legal road.

### **Design Element 5a: Earthworks and Retaining Walls**

1. Changes of level adjoining streets and open space corridors should be achieved by gently battering and contouring land.
2. Where retaining walls are required, they should be screened from public view. This may be achieved by planting and breaking up the vertical extent of walls through physical stepping.

### **Additional Sub-Precinct Criteria**

In the case of subdivision within the Motorway Edge Sub-Precinct and the Commercial Service Sub-Precinct, the following criteria shall also apply and take precedence over the general assessment criteria for subdivision stated above, where this is inconsistency or conflict.

### **Additional Design Element 6: Subdivision within Motorway Edge Sub-Precinct**

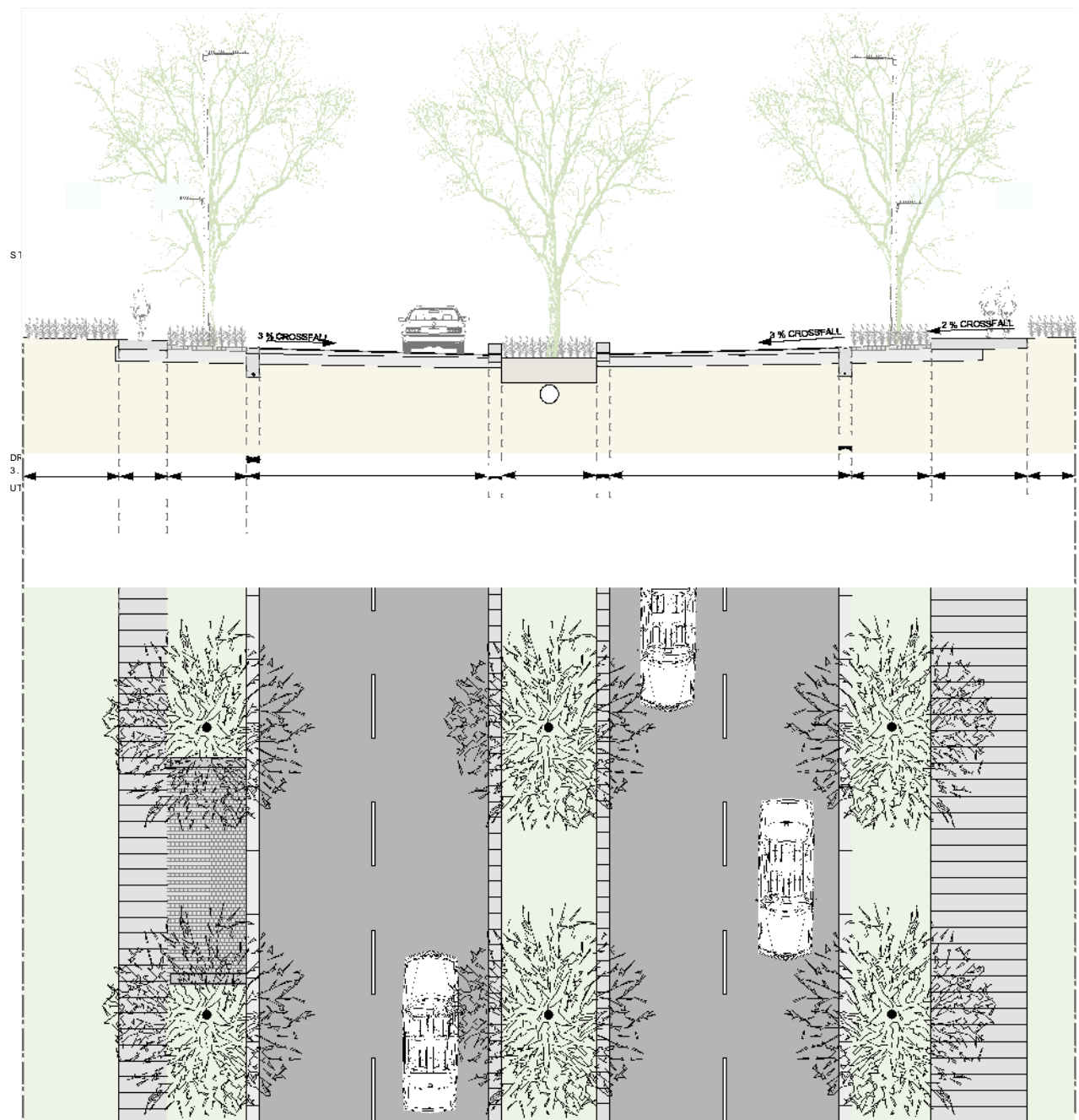
1. Earthworks should be designed to retain a more natural, undulating topography and character outside of building platforms and other areas required through function to retain a flat topography.
2. Intersections between public roads serving the sub-precinct and the Arterial Road (Spine Road) should be minimised.
3. Specimen tree planting should be provided on all public and internal private access roads within the Motorway Edge Sub-Precinct. Refer Attachment 1 Typical Road Cross Section for Motorway Edge Sub-Precinct.

### **Additional Design Element 7: Subdivision within Commercial Services Sub-Precinct**

1. Where through lots with dual street frontage are created, these should provide frontage to both street edges (i.e. no rear elevations to the street). The primary frontage should be to the Spine Road.

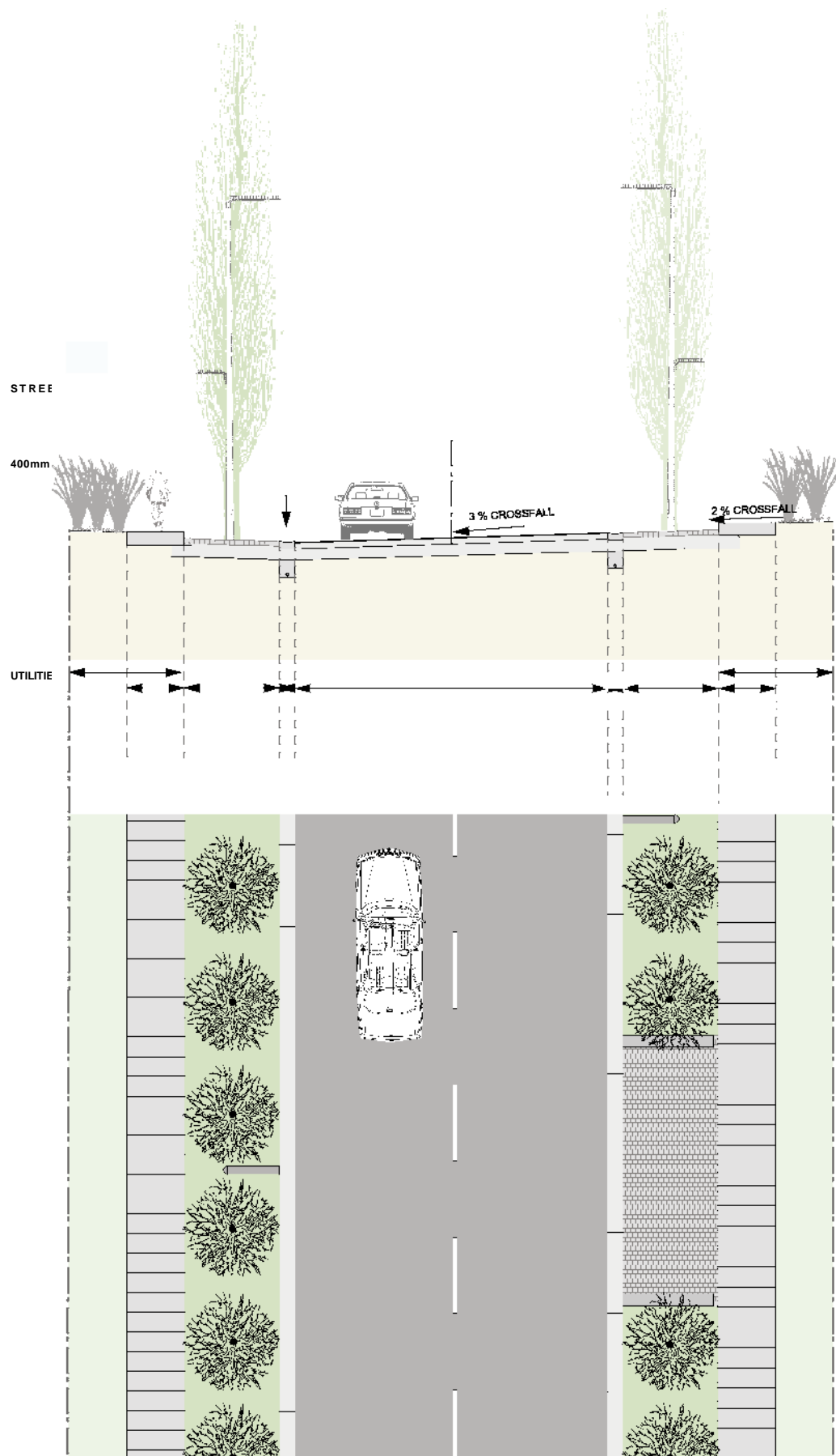
## **Attachment 1**

### **Typical Road Cross Sections**

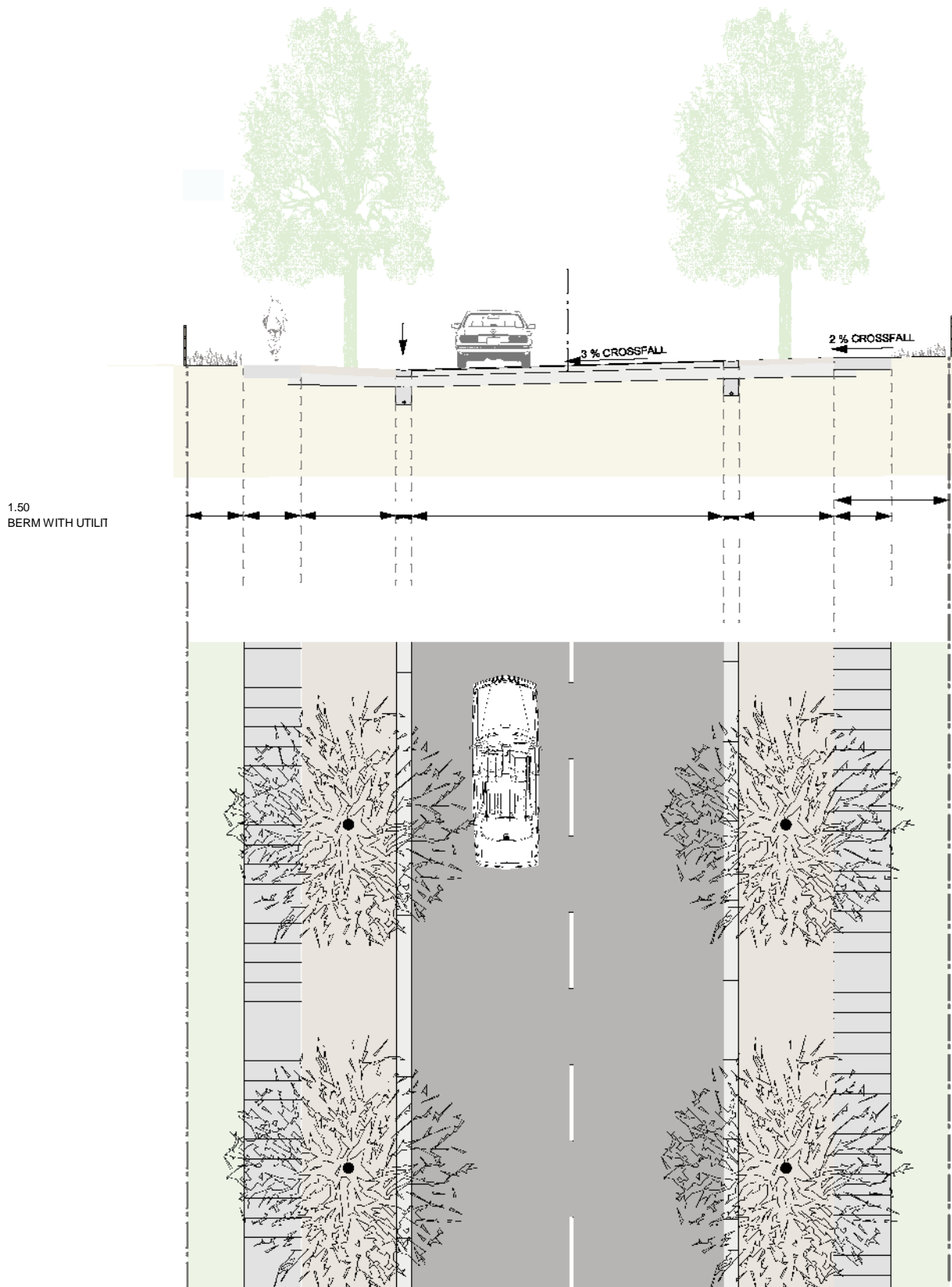


INDICATIVE ARTERIAL CROSS SECTION  
(Spine Road)





INDICATIVE ROAD CROSS SECTION



INDICATIVE MOTORWAY EDGE PRECINCT ROAD CROSS SECTION

## **Attachment 2**

### **Typical Wetland Stormwater Pond and Typical Stream Corridor Cross Sections**



Location	Botanical Name	Common Name
Esplanade / Wetland Edges	<i>Salix babylonica</i>	Weeping Willow
	<i>Dacrycarpus darydiodes</i>	Kahikatea
	<i>Carex testacea</i>	Cabbage palm Purei
Zone 1 Wetlands (0 to -10cm)	<i>Carex geminata</i> <i>Cyperus ustulatus</i> <i>Cordaderia fulvia</i>	Toetoe Kopupu /
Zone 2 Wetlands (-20 to -30cm)	<i>Schoenoplectus validus</i> <i>Eleocharis acuta</i> <i>Juncus gregiflorus</i> <i>Bolboschoenus fluviatilis</i> <i>Leptocarpus similis</i>	kuta Spike rush Wiwi rush Ririwaka Oioi /Jointed Rush
Zone 3 Wetlands (-50 to -100cm)	<i>Baumea rubiginosa</i> <i>Baumea articulata</i> <i>Baumea teretifolia</i> <i>Eleocharis sphacelata</i> <i>Juncus pallidus</i>	Ngawha / Great spike rush Giant rush

0

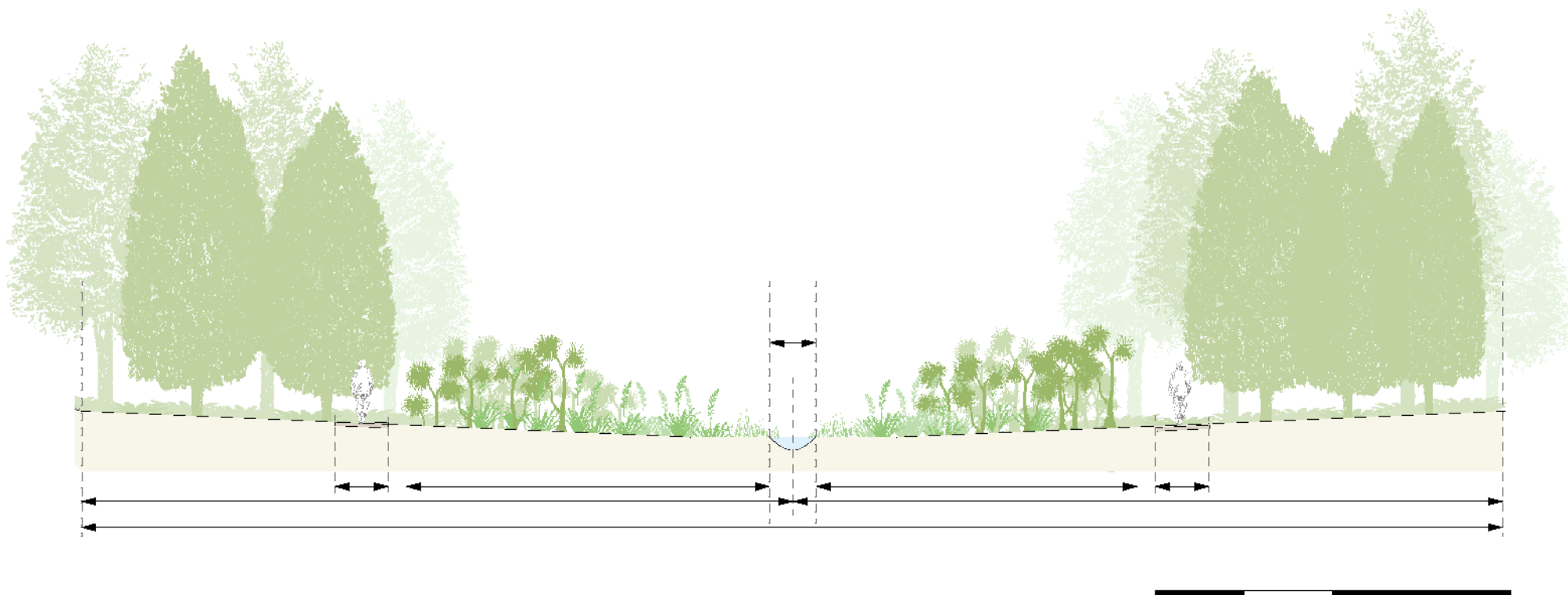
Scale

5m

10m

20m

INDICATIVE WETLAND EDGE DETAIL







INDICATIVE ONE SIDED RIPARIAN BUFFER FOR STREAM BEDS 3m AND GREATER

## Attachment 3

### Drury South Industrial Precinct

#### Indigenous Species Plant List

*Note: The species underlined are recognised as being rare / uncommon in the Auckland region.*

#### Wetland Species

Schoenoplectus tabernaemontani also Eleocharis sphacelata	Multiple Māori names include kukuta and kutakuta.
Carex virgata and Carex secta	pukio
Baumea articulata	jointed twig-rush
Typha orientalis	raupo
Myriophyllum robustum	stout water milfoil
Baumea tenax	
Isachne glabosa	swamp grass
Phormium tenax 'Muka' - soft for weaving	particularly the variety known to Maori as

#### Riparian Marginal Species

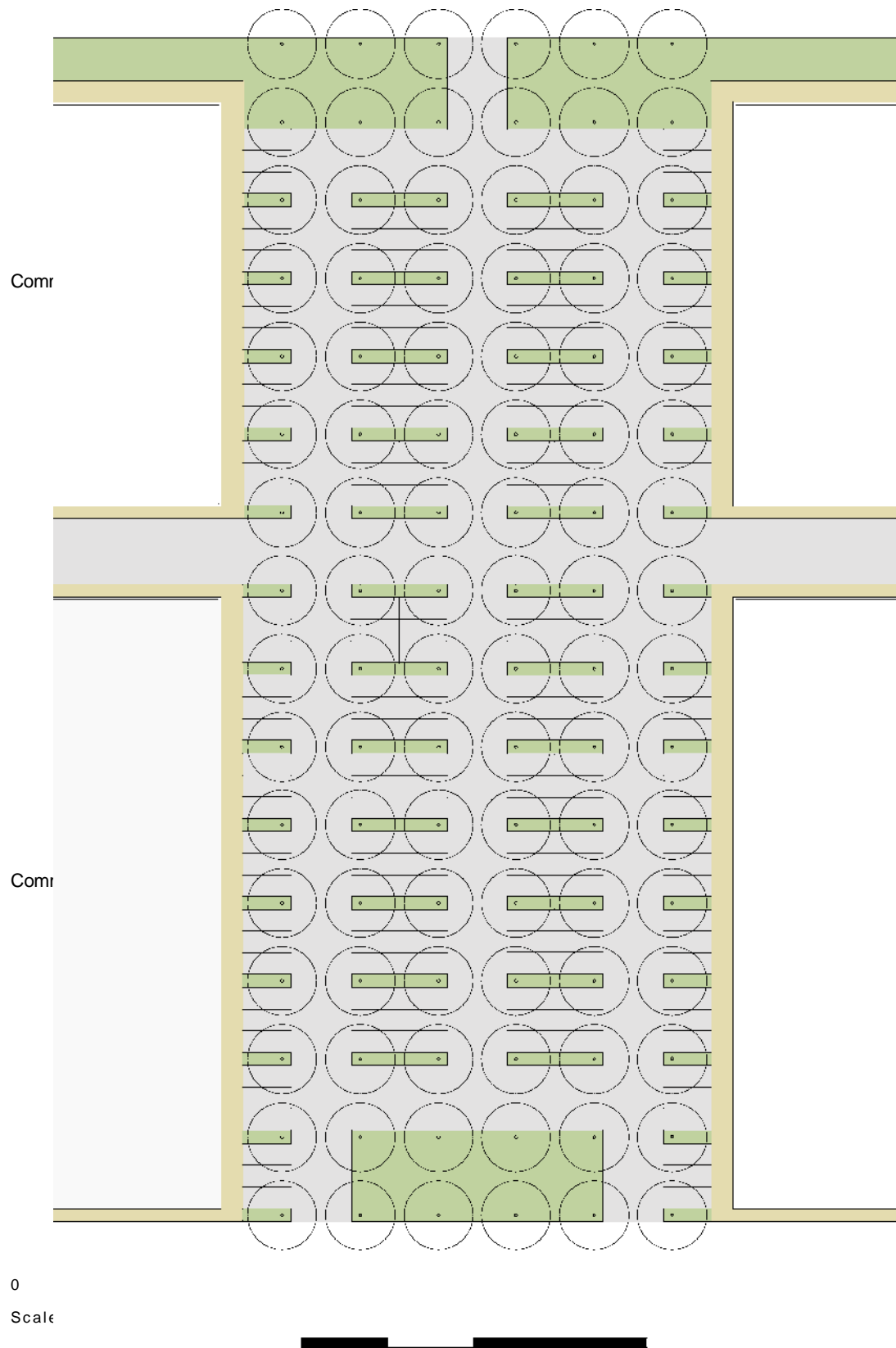
Freycinetia baueriana	kie kei
Alectryon excelsa	titoki
Vitex lucens	puriri
Prumnopitys taxifolia	matai
Sophora microphylla	kowhai
Rhopalostylis sapida	nikau
Hoheria populnea	lacebark
Corynocarpus laevigatus	karaka
Plagianthus betulinus	manatu
Pennantia corymbosa	kaikomako
Hedycarya arborea	pigeonwood
Aristotelia serrata	makomako
Kunzea ericoides	kanuka
Cordyline australis	ti whanake
Dysoxylum spectabile	kohekohe
Coprosma grandifolia	kanono
Streblus banksii	towai
Streblus microphylla	turepo
Myrsine divaricata	weeping matipo
Marrattia salicina	king fern

## Swamp Forest Species

Syzygium maire	maire, tawake
Laurelia novae-zelandiae	pukatea
Carpodetus serratus	putaputaweta
Phormium tenax	harakeke
Coprosma tenuicaulis	hukihuki
Dacrycarpus dacrydioides	kahikatea
Blechnum novae-zelandiae	swamp kiokio
Cortaderia fulvida	toetoe
Astelia grandis	swamp astelia
Schefflera digitata	pate
Podocarpus totara	totara

## **Attachment 4**

### **Typical Commercial Services Sub-Precinct Access and Car Park Layout**



TYPICAL COMMERCIAL LAYOUT

## **Attachment 5**

**Drury South Industrial Precinct: Stream and Wetland Rehabilitation Guidelines  
(June 2013)**

# Drury South Industrial Precinct

## Stream and Wetland Rehabilitation Guidelines

June 2013



Boffa Miskell



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# 1.0 Introduction

## 1.1 Purpose of this Document

The Drury South Industrial Precinct (DSIP) Stream and Wetland Rehabilitation Guidelines provide a summary of proposed stream and wetland works associated with the DSIP project. This includes all stream corridors to be removed, realigned, or restored, and wetlands created associated with stormwater management. The purpose of this document is to achieve the following:

1. To provide technical input to the planning process (to be read in conjunction with the Ecological and Landscape Assessments, Assessment of Environmental Effects (AEE) and Infrastructure Assessment report (IAR).
2. To provide the project team with a set of principles for treatment of riparian (stream and wetland) areas within the DSIP area.

## 1.2 Proposed Stream and Wetland Rehabilitation Works

In line with the proposed Drury South Industrial Precinct, the existing Hingaia and Maketu streams will be protected and enhanced by corridors of riparian restoration 40 metres in width (20m on each bank). Dense riparian planting will also occur along SH1 in association with the Roslyn Stream realignment and along the northern boundary of the site in association with a newly formed northern stream realignment.

Some streams and farm drains within the DSIP area will be filled. Piped infrastructure or vegetated swales will direct these modified catchments to the Hingaia Stream. These systems, as well as stormwater runoff from business activities will be treated for water quality in extensive wetland areas associated with the Hingaia stream corridor. These wetland areas will function for stormwater quality and quantity, ecosystem function and values, landscape amenity, natural character, and recreation.

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## Drury South Industrial Precinct Stream and Wetland Rehabilitation Guidelines

# 2.0 Streams of the Project Area

## 2.1 Existing Streams and Proposed Mitigation

The Hingaia Stream flows through the DSIP area from south to north before continuing through the Drury Township to discharge to Drury Creek and eventually the Pahurehure Inlet to the Manukau Harbour. The Maketu Stream flows into the site at the south eastern corner of the DSIP area, and joins with the Hingaia Stream. The Roslyn Stream flows from the west under the State Highway and joins a further tributary to the Hingaia Stream. The remainder of streams traversing the site do not have officially recorded names, are smaller, highly modified, and in some cases have been piped.

An assessment of the existing surface water network and receiving environment has been carried out as part of the Hingaia Stream ICMP. This included a stream ecology study, "The Hingaia Catchment Environmental Assessment, Golder Associates, August 2009". This study included field survey of streams within the DSIP area with respect to water quality, and aquatic flora and fauna. Each stream potentially affected by the DSIP has been evaluated by the 'stream ecological valuation' method (SEV) in accordance with the technical publication ARC TP302:2008.

Existing watercourses and modified farm drains between Stevensons Quarry and SH1 will need to be filled or re-aligned to accommodate the DSIP earthworks footprint. This includes intermittent and permanent streams (refer Figure 2). Many of the existing overland flowpaths are farm drains, constructed for active drainage. All streams to be affected by the proposed DSIP have been heavily modified by farming or roading operations, including dredging, spraying, straightening, and ongoing impact by stock. In general all of these streams have low to moderate functional values for stream ecology.

Proposed mitigation for stream loss includes the restoration of riparian zones along the length of the Hingaia and Maketu Streams within the DSIP Area. This includes a 40m wide planted riparian buffer along all streams. In addition, streams to be re-aligned will have an appropriate stream profile and riparian planting to provide for sustainable stream function.



One of many existing intermittent farm drains showing evidence of earthworks, spraying and access by stock environment, with low ecological values



LOCATION A (FIGURE 2) - The northern stream is directed along Quarry Road in a highly constrained and modified



## Drury South Industrial Precinct Stream and Wetland Rehabilitation Guidelines

A tributary to the northeast of Stevenson Quarry is currently dammed in its headwaters for quarry operations before being reticulated to a channel (refer Figure 2, Location B below). The northeastern stream also receives stormwater from the quarry via adjacent treatment facilities (Location C). As part of the works to accommodate the DSIP, the upper catchment of this stream will be directed to the existing northern stream corridor (Location D).

This northern stream will be rehabilitated with an enhanced stream profile, and restored streambank and floodplain vegetation. The northern re-alignment will be 1,800m in length, comprising 1,500m of new channel and 300m of rehabilitated channel.



LOCATION through mix



LOCATION D(FIG2)-The existing northern stream channel will be enhanced to receive there – aligned north- eastern tributary



LOCATION E (FIG 2) - The northern stream at the base of the northern escarpment will be rehabilitated as part of the proposed works

2.1.2 Southern Streams

The streams to be filled between the quarry and the Hingaia Stream are relatively small, with low gradient catchments that do not extend beyond the project area. A stream from the southeast of the site (refer Figure 2 and Photos Location F and G) conveys a number of intermittent stream tributaries from the centre of the project area, before joining with the existing northern stream and northeastern tributary previously mentioned (Location H). The southeastern stream and its tributaries have no vegetation cover beyond aquatic macrophytes and pasture species. These watercourses have been heavily modified by pastoral land use.

Drury South Industrial Precinct Stream and Wetland Rehabilitation Guidelines

5 of 23



LOCATION F (FIG2)-The southeastern stream ponding behind a road culvert, 50 metres downstream of the proposed Willow Road Re-alignment



LOCATION G (FIG2)-The southeastern stream wends through the middle of the project area before combining with the northern stream

At least 230 metres of the headwaters of the southeastern stream will be retained, enhanced, and linked westward to the Maketu Stream via an 180m section of new channel (the Willow Road Realignment). This realignment will be planted with a riparian buffer. The remaining watercourses between the Hingaia Stream and quarry will be filled.

### 2.1.3 3 Eastern Streams

The Roslyn Stream (Location I) to the west of the Hingaia Stream will be re-aligned toward the SH1 corridor. The current stream is an open farm channel with low summer flows and dense growth of the exotic reed sweet grass (*Glyceria maxima*). The re-alignment will include filling of 450m of the upper reach of this stream, and formation of 1,600m of newly aligned channel. The realigned channel will be formed with an appropriate profile and rehabilitated for enhanced ecological function, with a 20 metre wide riparian corridor on both sides.



LOCATION H (FIG2)-The channel flowing to the Hingaia, containing the combined flows of the south-eastern, northern, and north-eastern streams following a rain event



LOCATION I (FIG2) – The Roslyn Stream (mid-ground), a farm channel with low flows, is to be realigned and rehabilitated

## 2.2 Existing Streambank Erosion

Streambank erosion has been identified in the ICMP studies as an existing issue at a number of locations. The Hingaia Stream is subject to extensive bank erosion, identified near the Quarry Road bridge on the Hingaia Stream and near Davies Road Bridge on the Maketu Stream.

Stormwater wetlands prior to the Hingaia channel are proposed for the DSIP in order to detain any additional flows that may adversely impact stream erosion (refer Section 3.5). Riparian vegetation is proposed along the Maketu and Hingaia and for all re-aligned stream channels to stabilise banks in the short term and reach a sustainable stream equilibrium in the long term.



A lack of riparian vegetation and active erosion along the Hingaia channel



The Maketu channel with erosion scour at the outside bank

## 2.3 Existing Aquatic Ecology

As part of the Hingaia Stream ICMP, Golder and Associates undertook SEV surveys of representative stream reaches (Golder 2009). Most of the stream environments in the project area had poor functional values due to extensive modification by agriculture.

The Hingaia ICMP surveyed thirteen sites within the DSIP Area. The best quality site was on the Maketu Stream, with higher scores across all functional categories. Another site, located on the lower Hingaia Stream, also scored relatively high. The best value site for the tributaries was located on the northeastern quarry stream. Full descriptions of functional ecology values can be found in the DSIP Assessment of Ecological Effects (Boffa Miskell 2010).

A total of 6 species of fish were recorded across the project area. Shortfin eels were the most common species, with occurrences of longfin eel, common bully, inanga and cran's bully. Five of the seven tributary sites had no fish, or mosquito fish only. The mosquito fish is an exotic pest fish classified as 'Unwanted' under Biosecurity legislation. These sites had very low fish community values.

Macroinvertebrate communities indicated low environmental quality at most sites. Except for the northeastern stream, tributary sites were characterised by worms, dipteran flies, leaches, and flatworms, suggesting nutrient enrichment and fine sediment. The Maketu site had a notable portion of mayflies (*Zephlebia* spp.), possibly due to better water quality (e.g. lower water temperature).

## 3.0: Stream and Wetland Rehabilitation

### 3.1 Rehabilitation Principles

The following rehabilitation principles are intended to inform the rehabilitation of streams and wetlands in the DSIP area. The principles have been prepared by an inter-disciplinary project team, including landscape architects, planners, ecologists, and engineers. Principles seek to enhance the landscape and ecology values of the riparian systems, while providing appropriate design responses for hydraulic flow and stormwater management.

#### 3.1.1 Landscape Values

There is significant opportunity to improve the natural character values within the DSIP area. Stream and wetland environments will also be integrated within a wider open space network, providing opportunities for enhanced recreation and landscape buffers. The following landscape principles apply to proposed stream and wetland rehabilitation:

- Contribute to landscape amenity values
- Provide vegetated buffers to specific land use activities as appropriate
- Integrate stream and wetland rehabilitation with streetscape and open space planning
- Provide for visual and physical access to rehabilitated natural areas
- Optimise natural character values through the planting of representative native communities
- Provide a diversity of natural habitats and plant communities to achieve a variety of landscape and spatial character, and to demonstrate a legible sequence of habitat types.
- Structure riparian vegetation to screen/define undesirable views, offer broad views to wetland environments, and frame distant views to eastern Hunua hills from SH1
- Apply appropriate standards for CPTED and IPTED for public or maintenance access
- Place pedestrian bridges as necessary to ensure landscape connections, and investigate opportunities to use existing stream spans (infrastructure) for this function
- Identify opportunities to involve the community in stream restoration planting
- Liaise with relevant representatives and apply appropriate protocols for any archaeological sites or heritage elements associated with rehabilitation works
- Enhance Cultural Value through the re-establishment of indigenous species and investigating cultural harvest opportunities

Enhancing ecological functions within the DSIP area will require a combined response to aquatic and terrestrial environments, in order to restore target species, representative habitats, and ecological processes. The following ecology principles apply to stream and wetland rehabilitation:

- Plant stream margins, banks and floodplain areas to achieve not less than 40m total width (10m min width either side of stream corridor)
- Utilise species sourced from the Manukau Ecological District that are representative of natural vegetation communities as predicted by LENZ
- Restore representative in-stream heterogeneity, providing for pool, riffle, run and cascade sequences as appropriate.
- Provide fish passage to the extent possible, including bullies and inanga to within their natural range
- Preserve groundwater influence and inundation regimes for existing floodplain forest in proposed stream corridors
- Provide appropriate transitional edge vegetation to remnant mature vegetation
- Optimise site coalescence between remnant vegetation areas along the Hingaia Stream
- Provide for breeding populations of water and wetland birds species
- Provide for appropriate staging and construction techniques to avoid potential impacts to downstream environments and in-stream aquatic habitat.

## 3.1.3

## Hydrology and Hydraulics (H&amp;H)

Stream and wetland rehabilitation will provide opportunities for water quality treatment for the DSIP, and appropriate hydraulic flows, and hydrologic capacity for the catchment. The following H&H principles apply to the rehabilitation areas:

- Use biotechnical stream stabilisation to restore a sustainable stream bank morphology
- Apply a cross sectional profile that resembles a natural staged channel, including a permanent flow channel, a stream channel based on a bankfull (approximate two year average recurrence interval (ARI)), and associated floodplains and berms to hold the one hundred year ARI.
- Provide for an appropriate stream meander patterns for the floodplain extent, longitudinal stream profile, flow velocities, and expected bankfull event.
- Provide for hydraulic connections and fish passage to stormwater wetlands wherever extended detention is not required
- Place all forebay devices for stormwater wetlands outside of the 5 year ARI flood extent.



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### 3.2 Open Space Network

The stream and wetland rehabilitation concepts (refer Figure 3) integrate with a broader open space network to optimize specific requirements for public use and access, to ensure diverse representative habitats, and to enhance environmental services for the DSIP.

The open space network reinforces existing features and patterns of the project area. The Hingaia Stream corridor will be reinforced by wide riparian margins of representative planting of early successional forest, as well as kahikatea floodplain forest. In the north a substantial open space buffer is set aside to reinforce the natural escarpment separating the DSIP basin from the Fitzgerald Road ridgeline. This occurs in conjunction with the northern stream realignment and associated riparian rehabilitation works. In the south west of the project area, riparian planting along there – aligned Roslyn stream will form a landscape buffer to SH1.

Larger remnants of existing vegetation will be coalesced along the Hingaia Stream. Planting in association with stormwater wetland areas will further buffer and augment the conservation values of these remnants.

### 3.3 Stream Rehabilitation

The land use change associated with the DSIP provides a significant opportunity to restore the Hingaia Stream, a low gradient moderate order stream, which retains remnant kahikatea floodplain forest. The project also provides the opportunity to coalesce modified drainage channels across the site into a larger order stream channel and floodplain, with supporting streambank and floodplain vegetation. Stream rehabilitation proposals are the result of an iterative design process between ecologists, landscape architects, and engineers to optimise the principles of these guidelines.

#### 3.3.1 Hingaia Stream

The Hingaia Stream is a significant watercourse, with a wide, actively meandering channel across the floodplain. The stream currently runs through pastoral and agricultural land uses, and receives runoff from existing farm drains in the project area. The rehabilitation of the Hingaia stream is a key objective of the DSIP, with a 40 metre vegetated buffer proposed along the corridor where it corresponds with the project area. The width of the riparian buffer would extend to accommodate a stormwater treatment swale proposed along a northern reach, and stormwater wetlands proposed within the Hingaia Stream's extended floodplain.

The rehabilitation of the Hingaia Stream will include:

1. The coalescence of the floodplain forest remnants (including significant natural areas) already occurring within Hingaia floodplain
2. The restoration planting of streambanks along the length of the stream within the Project Area, with the potential for specific interventions to restore the stream profile at erosion hot spots
3. The planting of banks and proposed riparian buffers with simple lowland plant communities with the expectation that these communities will secede with time to include more diverse species
4. Planting of feature areas of flax-cabbage tree and broadleaf species on extended floodplains
5. Hydrological connections and fish passage to stormwater wetlands where practical

A number of farm drains and watercourses will be replaced with overland flow paths and reticulated networks associated with the proposed development. In addition, some headwaters will be realigned to newly formed watercourses along the boundaries of the DSIP area. The Hingaia and the Maketu Streams will not be altered beyond restoration activities.

A detailed description of the potential effects on stream ecology and the proposed mitigation measures is presented in Boffa Miskell, 2010, "Drury South Business Project Assessment of Ecological Effects Associated with the Proposed Plan Change". These guidelines inform the potential design response to optimise the flood management function of the rehabilitated streams, and their landscape and ecology values.

#### 3.3.2.1 DesignParameters

The profile of each re-aligned stream channel is based on the cross-sectional area to accommodate a 1.5 to 2 year average recurrence interval (ARI). This flow is traditionally associated with a 'bank-full' event with active stream erosion and re-deposition.

The morphology of realigned streams is also based on their substrate, longitudinal gradient, and association with their floodplain. These functions can be used to prescribe channel sinuosity and width to depth ratio (Rosgen 1994). The bankfull width is used as a function to predict the stream meander wavelength and the radius of curvature for bends (Leopold 2003 and Thorne et al 2003). Refer to Figure 4 below.

Proposed stream morphology is intended to minimise friction within the channel to prevent active erosion, and also to provide a floodplain width that can accommodate the stream in equilibrium.

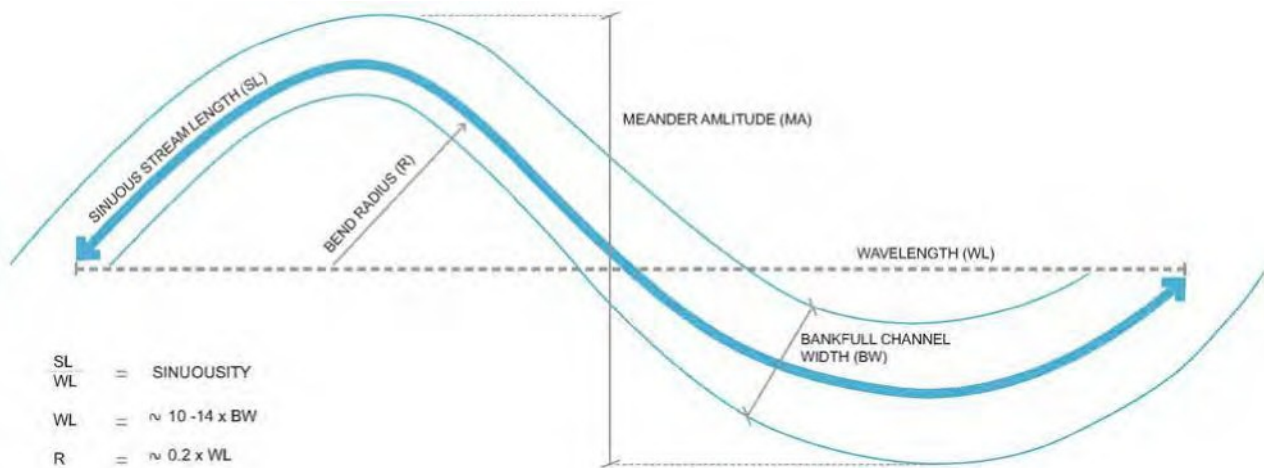


FIGURE 4: (above) The indicative relationship between channel width, and meander pattern

BELOW: A natural meander occurring as an overland flow event during flood conditions in the project area





Construction of the realigned channels is intended to occur off-line where possible, or to be staged to avoid potential impacts to downstream environments and in-stream aquatic habitat. Material selection is expected to be inert and where possible to be the equivalent of materials expected in these stream environments in their natural state.

It will be possible to utilize 'natural' materials through the application of biotechnical construction, which utilises a combination of persistent and biodegradable materials to retain channel shape until plants can establish. In general biotechnical responses for stream stabilisation can include:

- Stream profiling to respond to specific flow events
- Floodplains to dissipate flood velocities
- Stabilised bank toe and outside bends with hard materials such as rock, root vanes etc
- Directing flows and forming riffles through rock vanes
- Reinforcement of stream banks through planting established in erosion control blankets
- Stabilising the crown of banks with appropriate vegetation
- Provision of appropriate pool-riffle-run sequences.
- Grade control structures that accommodate fish passage
- Specific biotechnical treatments to accommodate 'nick' erosion points and stormwater outlets

## 3.3.2.3

## Planting

Plant species selection will provide ecological functional values and representative plant communities. Stream planting objectives may include:

- Shade for temperature moderation
- Weed suppression
- Slope stabilization
- Tolerance to inundation
- Growth form to accommodate/obstruct views
- Stature to accommodate hydraulic flow rates
- Inherent aesthetic or spatial qualities of single plants or grouping of vegetation.

Based on LENZ predicted natural vegetation layers, representative plant communities for the DSIP area include lowland alluvial floodplain species, generally consisting of kahikatea forest. Other communities include tawa and pukatea, while matai, rimu and totara are generally restricted to better-drained soils. Titoki and puriri are locally abundant, with the potential for other broadleaf such as taraire, occurrence of kauri on the flanks of the basin, and occasional rimu and pukatea.

The project area extending into the flanks of the project basin and the hills beyond would be expected to support kauri, kahikatea, rimu and/or totara emergent over a diverse canopy dominated by varying mixtures of taraire and kohekohe. Other widespread tree species might include hinau, pukatea, rewarewa, and miro. Puriri is locally abundant at lower elevations, particularly on alluvial surfaces and tanekaha would be locally abundant, particularly on disturbed sites.

Where basalt occurs at the surface of the project area there may occur unique basalt forest environments, with an expected predominance of mahoe, karaka, kohekohe, totara, puriri, and titoki.

Until climax communities establish, it is expected that large areas of the riparian corridors will be planted with early succession and hardy species, such as riparian shrubs, kanuka, and totara to rapidly establish cover and to act as a nurse crop for later succession species. It is expected that certain low vegetation types will be applicable in places along the riparian corridors to accommodate hydraulic flows, to preserve viewshafts, and provide useable open space areas. Such planting may involve mown grass areas, sedge-rushlands, and flax-cabbage tree communities.

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### Stream and Wetland Rehabilitation Guidelines

### 3.3.3 Northern Stream

A stream is proposed along the northern boundary of the DSIP area at the base of the northern escarpment. An existing section of this northern stream receives flows from three tributaries. A fourth tributary, previously described as the 'northeastern stream' (refer Section 2.1.1 and Figure 2) will also be directed to this channel from the quarry zone. The northern stream will accommodate the flow from these four tributaries, as well as localised catchments before discharging to the Hingaia Stream west of the proposed Link Road.

A typical northern stream cross section is shown in Figure 5, where a 'bankfull' channel represents the 1.5 year ARI event, and the associated floodplain conveys a 100 year ARI event with 500mm freeboard to the proposed development. Detailed design will provide pool-riffle and run sequences with adapted profiles. Biotechnical construction techniques will form narrower riffle sections, shallower point bars, and steeper outside bends.

The proposed sinuosity of the northern stream is relatively high, close to 1.5 times the wavelength (refer Figure 7). This is appropriate, based on the cross section of the bank full channel (with a low width to depth ratio) the longitudinal profile of the floodplain (a relatively flat lowland environment), and the general character of the bed materials and banks (being generally resistant but somewhat erodible).

The sinuosity is expected to reduce the longitudinal profile of the channel, reduce erosion of stream banks, provide strong connections to floodplain environments, and increase the overall length and diversity of stream habitat. Some stream reaches have constrained floodplains, where riffle sequences with local rock may be appropriate.

The northern re-alignment follows the northern boundary to combine stream environments with adjacent open space and to form a buffer to adjacent land use. The stream corridor and floodplain will be densely vegetated as indicated in figure 7. Planting will be dominated by early succession kanuka-totara forest. Kahikatea forest planting is proposed beside the Link Road entrance to act as a natural threshold at the DSIP entrance. Pockets of broadleaf forest are proposed to add diversity to the northern riparian corridor. Low areas of sedge-rushlands, grass areas, and flax-cabbage tree associations could provide views into the stream corridor from select locations.

### 3.3.4 Roslyn Stream Realignment

There is an existing water course running south to north through Roslyn Farm at the south west corner of the project area, which picks up flow from two culverts. Site assessment also revealed an existing spring feeding the stream. This stream will be realigned for part of its length whilst retaining links to the existing spring and culvert in flows, the realigned corridor will provide a stronger vegetated element adjacent to SH1 (refer Section 2.1.3 and Figure 2).

A typical Roslyn Stream diversion cross section is shown in Figure 6, where a dedicated 'bankfull' channel contains the 1.5 year ARI event, and the associated floodplain conveys a 100 year ARI event with 500mm freeboard to the proposed development. The Roslyn channel has a wide stream base with a lower depth to create a combined wetland/overland-flow-path appropriate for the small catchment, the low longitudinal gradient, and a strong groundwater influence.

Because the Roslyn channel is a lower energy environment than the northern re-alignment, with less likelihood of erosion, it is reasonable to expect a less sinuous character. Therefore a low sinuosity of 1.1 times the wavelength has been applied.

Planting along the Roslyn stream is proposed to be a combination of sedge-rushland planting and large swathes of flax-cabbage tree associations to create a wide wetland environment. Kanuka-totara forest may occur in existing knoll areas beside SH1 to frame views to the eastern Hunua foothills. Kanuka forest may continue along mid reaches of the stream and groups of kahikatea may occur alongside of a stormwater wetland to frame views from boardwalk locations and to shade permanent water features.

## Drury South Industrial Precinct Stream and Wetland Rehabilitation Guidelines

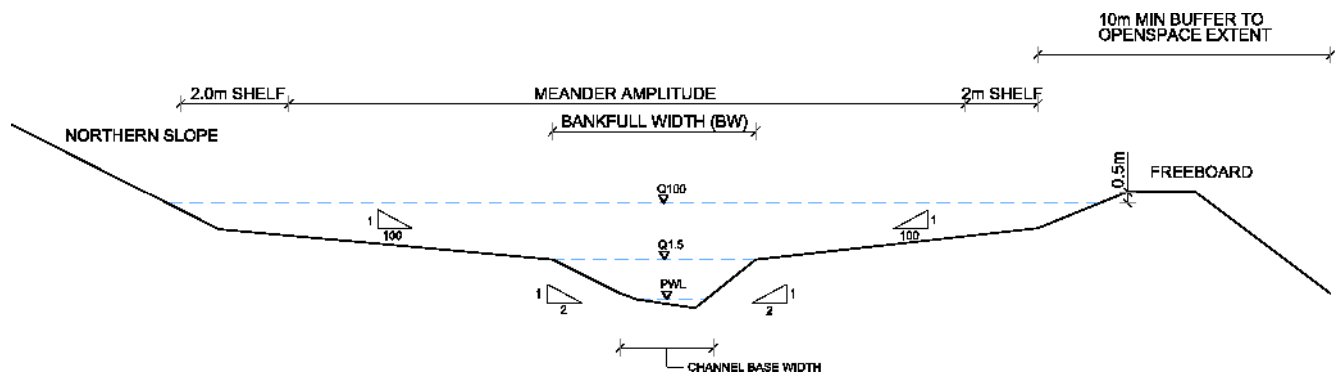


FIGURE 5: Typical section of the northern realignment in terms of flooding profiles

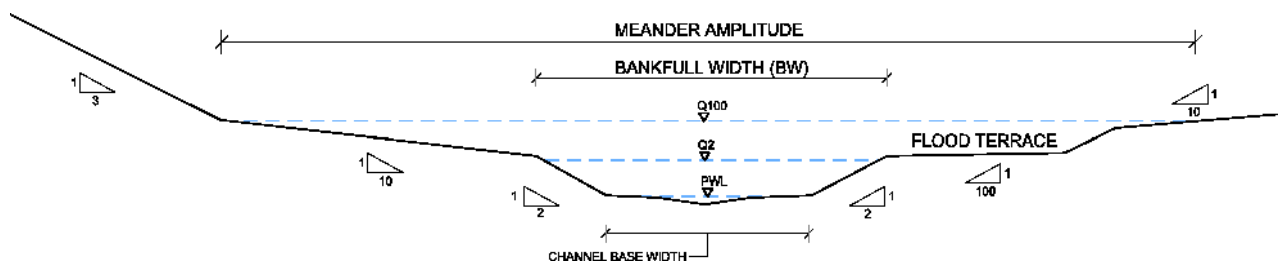


FIGURE6: Typical section of the Roslyn Stream realignment in terms of flooding profiles

3.3.5 Willow Road Realignment

There is a small roadside drain running east to west along Willow Road. The stream currently crosses Willow Road through a culvert near the intersection with Ramarama Road and continues north through the proposed DSIP area, eventually joining the Hingaia Stream. As discussed previously, this stream is heavily modified by pastoral land use and is largely unvegetated. It is proposed to divert this roadside drain directly west to the Maketu Stream along a vegetated riparian corridor that provides for a 1.5 year stream profile and accommodates a 100 year ARI event.

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Stream and Wetland Rehabilitation Guidelines





FIGURE 7: Proposed DRAFT planting plan for the Northern Re-alignment



FIGURE 8: Proposed DRAFT planting plan for the Roslyn Realignment

## 3.4 Riparian Revegetation Guidelines

### 3.4.1 Introduction

Riparian revegetation is proposed for the main stems of the Hingaia and Maketu Streams. In addition the Northern and Roslyn realignments will also be restored with riparian vegetation (as depicted in Figures 7 – 8). The progressive planting of these realignments as well as the present grasslands alongside the Hingaia and Maketu Streams will ultimately provide a greater extent of riparian bush, increasing the habitat opportunities and potential carrying capacity of the DSIP area as well as providing vegetated riparian corridors within the local landscape.

The following revegetation guidelines outline an accepted industry-wide approach to large scale revegetation programmes that should inform the development of the final detailed planting plans for the DSIP riparian margins.

### 3.4.2 General Procedure

The general procedure for the proposed revegetation plantings should be as set out below.

- Slope stabilization
- Seed should be sourced as is available from the Manukau Ecological District. However, notwithstanding the desire to use only genetic material sourced from this specific area in the revegetation programme, additional source material from the wider Auckland Ecological Region may be used.
- Planting of species into existing pasture should require pre-planting repeat herbicide applications to reduce the potential for grasses to compete with the seedlings planted.
- Blanket spraying in close proximity to the existing native bush areas needs to be avoided or very carefully managed so as to avoid by-kill. Herbicide should be carefully applied at least 2 weeks before planting.
- Where the earth has been previously compacted the areas to be revegetated should have a single treatment of earth tilling, in order to loosen the sub-soil and encourage successful rooting.
- Planting should be undertaken in favourable conditions, at the earliest opportunity during the planting season, preferably over the autumn months.
- The revegetation plantings should be supplemented with weed and browsing pest control to allow good establishment of the planted material. Ongoing weed control should be carried out until canopy closure is sufficient to suppress weed growth. Browsing pest control may be required over the longer term in order to allow the vegetated areas to progress in good health. However, once pest numbers are reduced to a minimal level, continued control should require a reduced effort.
- All planting and maintenance operations should be carried out by an approved contractor, experienced in native revegetation planting programmes.

### 3.4.3 Plant Material

- The plant material needs to be of the specified size and condition. All plants will have well developed root systems and a well-shaped stem and head free of disfigurements or injury, pests and disease.
- The plant material should have been sufficiently “hardened off” at the nursery prior to being passed on to the planting contractors.

## Drury South Industrial Precinct Stream and Wetland Rehabilitation Guidelines

### 3.4.3 Planting Methods

- Planting should follow an approved planting plan, indicating set-out, species, size, density and spacing.
- A dual system of planting is proposed, involving the establishment of a nurse crop of hardy pioneer species such as kanuka. These will be enriched with appropriate native tree species when the nurse crop has sufficiently established, which should be at approximately 3 years age.
- Nurse plant stock should be set out at appropriate spacing and percentages, and according to each species niche preferences.
- Once a good cover of the nurse plantings is established, enrichment plantings should be implemented. Enrichment species trees should be distributed (at wider centres) amongst nurse planting and according to site preferences in copses/groves spread further apart in subsequent seasons.
- The enrichment plantings may include the pruning or removal of modest numbers of nurse shrubs in order to create the necessary light wells.
- Plants should be set out and appropriately spaced in an informal manner avoiding straightlines and regular geometric patterns, while ensuring an even cover across the planting area. Species should be distributed at appropriate percentages and according to each species niche preferences, microclimate and ground conditions.
- Planting holes should be dug out to spade depth and seedlings located next to pre-dug holes in the correct species mix. Actual planting should be by hand only. The base of the planting hole should be filled evenly without compaction to a level where the top of the plant root ball is level with surrounding ground. The plant should be plumb and orientated so that the weathered face of the main stem faces north. When the backfilling is complete the plant should be gently firmed in. All plants should be encouraged to grow to maturity as naturally as possible to achieve their desired character and form, through sound management practices including weeding, and other accepted horticultural practises.
- Slow release fertiliser should be used within the proposed planting operation, with at least one tablet of 20-4-4(N-P-K) that is designed to last at least 12 months (preferably 24 months). The controlled release fertilizer tablets need to be inserted into each planting hole approximately half way up the back fill material, ensuring placement of the fertilizer on the upper slope side of each plant
- Approved chipped tree mulch or post-peeling bark mulch could be spread around the base of individual plants used in the mass revegetation plantings, but only in areas outside of the floodplain (to avoid mulch being washed away in floods).

## Stormwater Management

Stormwater design is discussed in greater detail in the DSIP Infrastructure Assessment Report (BECA 2010). The general approach is to utilize the large floodplains associated with the Hingaia Stream to accommodate stormwater wetlands. Each wetland would include a forebay and accommodate the water quality volume. There is also allowance for extended detention to limit potential effects of stormwater volumes on downstream erosion.

Wetlands have been placed above the stream invert to not unduly effect ground water levels, and forebays have been placed above the 5 year flooding event to prevent re-suspension of contaminants stored in these areas.

Safety considerations have allowed for benching around the perimeter of each wetland and a reverse bench along each embankment. Appropriate maintenance access will be provided to forebays and to the base of wetlands for restorative maintenance if required.

Biotechnical approaches similar to those described for stream realignment works will be considered during detailed design, with specific consideration for the formation of access and outlets to the Hingaia, with fish passage possible to wetlands that are not required to detain extended detention volumes.

Planting would be exclusively sedges, rushes, and small riparian shrubs around wetlands for water quality treatment, to stabilize the wetland profile, and to allow ease of maintenance. Trees and taller shrubs would be expected at the edges of wetlands, at their interface with stream environments, and around the northern edges of forebays for shade.

### Stormwater Wetland One

Stormwater Wetland One has been designed as a landscape amenity feature through an iterative design process between landscape architects, engineers, and ecologists. This has driven the design of forebays, the shape and extent of the permanent pools and wetland planting, the integration of multiple public access structures, and a pedestrian circulation path that crosses the Hingaia stream corridor (refer figure 9). Wetland One has been tiered to suit the local topography and the bathymetric design directs flows along three separate treatment paths.

### Northern Swale

A swale is proposed for stormwater management along the western edge of the lower Hingaia Stream. The total width of the swale and vegetated buffer contributes an additional 25m of vegetation to the riparian buffer. The length of swale is significantly longer than required for water quality and is expected to exceed regulatory expectations at the entry point to the Hingaia.

Planting will be selected with the ability to sustain temporary ponding and saturated soils, and will allow appropriate hydraulic flows and residence time.



FIGURE 9: Proposed Planting Plan for Stormwater Wetland One

## 4.0: Summary

The DSIP area is traversed by the main stems of the Hingaia and Markeu Streams and several other permanent and intermittent streams and farm drains. Watercourses other than the Hingaia and Maketu Streams will be modified or re-aligned in order to facilitate the proposed land use. Stormwater management will also lead to the creation of additional naturalised wetland areas in association with the Hingaia Stream corridor.

All streams affected by the proposed DSIP have been previously modified by farming or roading operations, including dredging, spraying, straightening, and ongoing impact by stock. Stream bank erosion has been identified in the Hingaia ICMF as an existing issue at a number of locations. In general all of these streams have low to moderate functional values for stream ecology. Five of the seven tributaries to the Hingaia were observed as having very low to absent fish community values.

The DSIP Stream and Wetland Rehabilitation Guidelines establish a set of principles to enhance the landscape and ecology values of riparian systems in the DSIP area. The document is intended to provide technical input to the planning process and to provide guidance to ongoing more detailed design and implementation. The guidelines apply an inter-disciplinary approach to riparian rehabilitation.

Stream rehabilitation is proposed for the length of the Hingaia and Maketu Streams within the DSIP Area, including a 40m wide planted riparian buffer along the streams. In addition, streams to be realigned will have appropriate stream profiles and riparian planting to provide for sustainable stream function. Riparian rehabilitation will contribute to a wider open space network and enhanced natural character.

## 5.0: References

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